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HARDEN UP

PROTECTING QUEENSLAND



ARCHIVE: Known Impacts of East Coast Lows, 1846 – 2009

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Date	Impact
19 Aug 1846	Vessel <i>Coolangatta</i> driven ashore at North Kirra Beach (just to the north of Tweed River) in easterly to northeasterly gale. Strong SW winds following day. Locality subsequently named after the vessel.
June July 1864	Tremendous gale off Queensland coast.
14-17 June 1869	Steamers unable to leave Brisbane due to tempestuous state of sea. Continuous rain in Brisbane; creeks swollen and communication with Gympie cut off; mail coach at the Durramboy Lagoon washed away and three horses drowned.
14-20 July 1876	Very heavy gales (14th), SS <i>City of Brisbane</i> attempted to enter Moreton bay without success. Another ship narrowly escaped shipwreck in the Bay. Exceedingly furious gales on the coast between Brisbane and Sydney (18th to 20 th). Heavy rain and floods (14 th) Myall Creek bridge at Dalby almost destroyed and part of the railway near Gowrie swept away. High seas on the coast with heavy gales. Several lives lost in different places also large numbers of stock and sheep. Disastrous floods and loss of life at Grafton.
3 June 1878	Unprecedented heavy gales very general on the southern coast.
15 May 1879	Very heavy gale along southeast coast of Qld with some casualties. Very heavy rain on the coast (9 th) , Coffey Dam at the Brisbane dry docks destroyed. Three men drowned while attempting to cross the Thomson River.
24-27 Jun 1879	Thunderstorm 24th developed into cyclone 25th with much roof damage in Brisbane. Cyclone in Sth Qld 27th with great damage.
27 Aug 1879	Catholic Church at Charters Towers blown down (27 th). Very severe and unprecedented floods in parts of the colony (27 th) in Dalby many were forced to leave their houses. The Brisbane River was upwards of 8 feet above the high water mark. The floods reached their highest mark on the 30 th . The Victoria baths were washed down the Brisbane River; thirty tons of Yengarie sugar were destroyed at Bundaberg Wharf.
8-11 Oct 1888	Cyclone moving eastward across Coral Sea. SE gales and heavy Seas in SE Qld and north and central coasts of NSW. Very heavy rain on the coast.
17-19 Jul 1889	Cyclone near Rockhampton 17th, Brisbane 18th then moved east. Gales and heavy seas on north and Central coasts of NSW. Vessels lost Fraser Island to Coffs Harbour.
8 Jun 1891	Hurricane at Brisbane did considerable damage. Floods Brisbane and Gympie. Gales N NSW coast.

10-12 Jun 1893	Cyclone moved SE from Central Qld coast and then east. Gales and very heavy rain SE Qld coast and north coast NSW.
26 Jul 1897	The schooner <i>Heroine</i> , a wooden vessel of 122 tons and with 130 tons of coal on board was driven ashore at North Kirra near the mouth of Coolangatta Creek. On the 25 th the schooner was at anchor off Tweed Heads and on the morning of the 26 th heavy seas were breaking over her and staving in the hatches. The Captain had to slip her cables and the vessel was driven ashore. The captain and crew landed safely. Also on the 26 th the ketch <i>Candidate</i> was driven ashore at Byron Bay at the height of the gale. The captain and crew were landed by means of ropes.
23-24 Jun 1912	Very severe E to NE gales along sub tropical coast of Qld. Shipping delayed. Masters of vessels reported that night of 24th was the worst they had encountered.
15-16 Aug 1912	A depression off SE coast of Qld produced gales and high seas south of Sandy Cape.
24-25 Jun 1914	Cyclone off north coast. Gales between Mackay and Rockhampton.
21-23 Sep 1914	Cyclone on north coast. Gales east of Brisbane.
8-10 Oct 1914	Cyclone passing down off coast caused gales and torrential rains. Wrecked two ships off south coast.
23-28 Sep 1916	Cyclone passed from interior ESE out to sea producing very heavy rain and gales along southeast coast.
28 Jul 1919	Cyclone passed southwards between New Caledonia and Queensland. Ships driven on Barrier Reef southeast of Mackay.
22-24 July 1921	Cyclone from NE struck northern NSW coast causing gales and shipping disruptions before recurving to SE. Disastrous floods SE Qld and northern NSW. Goondiwindi, Warwick and Roma flooded. Several houses washed away and 2 men drowned at Texas. A man drowned at Inglewood. Heavy stock and crop losses and damage to roads and bridges.
2-6 Oct 1921	A cyclone passed southwards between New Caledonia and Qld producing severe gales.
18-23 Jun 1925	Cyclone crossed central coast at Port Clinton on 19th. Some damage to buildings at Yeppoon and Taranganba Station. It recurved over Gayndah and Double Island Point.
17-20 May 1926	Cyclone passed just east of Double Island Pt on 17th and moved SE to Norfolk Is while intensifying. SS <i>Wanganella</i> adrift for a week and <i>Eastern Moon</i> in similar difficulties. Local flooding in Burnett, Dawson and Balonne Rivers.
29-30 Nov 1927	Cyclone off Sandy Cape moving south. Heavy weather along south coast.
15-17 Jun 1929	Cyclone recurved to SE off Central Coast with gales reported. Local flooding Fitzroy R.
29-30 Jun 1929	Cyclone recurved to SE just to NE of Cape Moreton with gales and heavy rain. Much damage at Sandgate. Flooding in Pine and Nerang Rivers.
7 July 1931	Cyclone developed SE Qld and moved towards the SE. High winds Brisbane.
10-11 Jul 1933	Cyclone recurved over Broadsound and Rockhampton towards southeast. Floods Central Q.
1-2 Sep 1934	Cyclone passed to east of Brisbane. SS <i>Montoro</i> damaged.
7-10 July 1935	Cyclone recurved over Shoalwater Bay and moved towards SE. Gales. SS <i>Maheno</i> driven ashore. Heavy rain Central Q.

30 May 1941	Cyclone crossed coast near Town of 1770 and then moved back out to sea. Gales Central Coast 30th and 31st. Local heavy rain and hail.
14-16 Jun 1948	Complex cyclonic system moved from Double Island Pt to Coolangatta and then seawards. Gale force winds . Flooding on South Coast and Condamine.
15-26 Jun 1950	<p>On the 23rd a cyclone moved westward towards the Gold Coast and then turned slowly back out to sea and down the NSW coast. Wind over 50 knots in Moreton Bay and northern NSW where 10 to 15 m waves reported. Houses were unroofed at Cleveland, Southport and Coolangatta. 40 launches at Southport were damaged or destroyed. 24 hr rainfall totals to 368 mm(Springbrook). Extensive damage in SE Qld due to flooding and 2 lives were lost. Winds to hurricane force and waves to 15 metres off the NSW coast. For the 24 hours to 9am 24th Dorrigo recorded 636 mm of rain. Serious flooding in N NSW rivers and the Clarence River forced a new path to the sea. Grafton, Kempsey and Maitland badly affected with large scale evacuations (estimated 9000) and 4 lives lost. Navy ship <i>Fair Wind</i> lost with crew of 17. 648 ton freighter <i>Bangalow</i> driven ashore at Coff s Harbour. Tornado at Cudgen wrecked 4 homes and damaged others. At Grafton 3000 people were made homeless with 6 houses washed away. At Maitland 3200 were made homeless. Aerial surveys from Newcastle to Queensland revealed hundreds of blocks swept clear of homes. Millions of pounds (1950) damage to NSW train and tram tracks. Cronulla surf club collapsed into sea and extensive damage to other foreshore installations along the NSW coast. When rain cleared southward from the Maitland area westerly gales caused wave damage to submerged houses in an inland sea south and east of Maitland.</p> <p>The event began on the 15th/16th when a low developed east of Newcastle. Several houses and flats collapsed in the Sydney area by foundations being undermined by heavy rain. 300 families were evacuated in the Hunter Region. Similar evacuations in the Woy Woy Tuggerah area. Main roads out of Sydney were cut by landslides and flooded bridges. Five lives were lost. A second low developed near Ballina on the 19th and at Rathmines Met Office SE wind gusts to 61 knots were recorded.</p>
16 Nov 1950 12.5(17.5) C	Tropical low moved seawards near Brisbane and caused considerable structural damage with one life lost .
8-9 Jun 1951	Cyclone crossed coast Coffs Harbour and then moved over Darling Downs. Heavy rain.
29 Aug 1953	Cyclone made landfall at Rockhampton and then moved back out to sea. Gusts to 50 knots recorded at Rockhampton.
11-13 Jul 1954	Complex cyclonic system crossed coast near Bundaberg and then recurved towards SE. Winds to hurricane force left a trail of damage along the coast south from Bundaberg. Woman killed at Nambour Houses when shed was lifted by wind and hurled into her . House, shops , jetties and boats were badly damaged. 200 people were left homeless, hundreds of small craft were wrecked. Many houses unroofed including 50 at Caloundra. Hurricane force winds in Moreton Bay with widespread property and boat damage at Redcliffe, Sandgate and Wynnum. The Redcliffe jetty was badly damaged by large waves with most of the decking forced upwards and ripped off. The Dutch naval sloop <i>Snellius</i> reported waves to 21 metres off the South Coast.
8-12 Jun 1958	Large intense cyclone passed to east of south coast. Waves over 10m were reported off the South Coast out to a distance of 640 km. The schooner <i>Venturer</i> was wrecked near Lady Musgrave Is. Other ships sustained damage. Floods cut roads in SE Qld. There was severe beach erosion along the coast.
24-26 May 1960	Small deep low developed off the south coast on the 25 th north of a vigorous high in the Tasman Sea- 457 mm of rain fell in 3.5 hours at Cawarral (near Rockhampton)- Flash flood damage to crops and communications - Extensive sea damage to Gold Coast Beaches and interruptions to shipping.
5-7 Jun 1961	Deep complex low developed with centre east of Brisbane and another near Lord Howe Island. Gales and large seas along south coast with harbours closed.

6- 7 October 1961	1040 hPa high near Tasmania and an upper low forced a deep trough or small low to move off the Central Coast. A house was blown down at Rosedale. Heavy flooding in the Curtis. And heavy damage to roads. Crop and stock losses. 356 mm of rain was recorded in 9 hours at Wonbah (near Mt Perry.)
9-11 Jul 1962	Cyclone developed NE of Fraser Island and moved past Gold Coast. 60 to 70 knot winds reported from Tweed Heads to Yamba in the 24 hours to 9am 11th. Local Flash floods Brisbane to Gold Coast. Fruit trees damaged buildings flattened Sunnybank. Small boats wrecked, buildings flattened, extensive beach erosion and roads damaged Gold Coast. Radio Mast wrecked Lytton. Widespread flooding Nerang, Albert and Logan Rivers. In NSW Small craft lost or damaged at North Coast harbours. Bad floods Murwillumbah, Lismore, Bellingen and Grafton with many evacuations and people drowned. At 1pm 9th 2 waterspouts came ashore at Port Macquarie and left a trail of destruction. 3 men were killed when a 2 story building they were building was wrecked. 30 house were damaged. Largest 24 hr rain totals 265mm Springbrook and 227mm Lismore.
7-8 May 1963	Small cyclone developed near Tewantin and the moved southeastwards out to sea. Gales brought down trees and power lines. Big tides and heavy rain caused severe local flooding at Redcliffe, Wynnum, the Sunshine Coast and the Gold Coast. There was waist deep water in Sutton St Redcliffe and other streets were under 5 feet of water. Families were evacuated at Lota. The Pacific Highway was cut by a landslide at Kirra. The Casino to Tenterfield road was washed away west of Casino leaving a 1000 feet sheer drop. Lismore had a major flood with water entering the city. Grafton then flooded with 700 families evacuated from their homes.
25-28 June 1965	Cyclone developed off Sunshine Coast and moved out to New Caledonia. Maximum average winds 44 knots at Double Island Point. Ship reported S'ly winds averaging 60 knots east of Fraser Island as cyclone intensified while moving seawards. Heavy to flood falls Mary R. Catchment and in Moreton. Maximum 24 hr registration 242 mm at Tewantin.
18-21 Jul 1965	Cyclone developed east of Brisbane, moved up to Fraser Island and then turned southwards over Brisbane, then down to Yamba and then seawards. Wind gusts to 60 knots recorded at the Bureau in Brisbane. There was much damage to small structures in the metropolitan area and 3 houses were unroofed. Trees were uprooted, plate glass windows smashed and telephone and power lines downed. Along the Bay many small craft were damaged. There was much crop damage in surrounding areas. Fallen trees and floods blocked roads. 24 hour rainfall rain totals in Brisbane were up to 236mm on th 20th. And 510 mm fell in 24 hrs at Springbrook. The upper trough associated with the development of the cyclone brought snow into the tropics for the first time on record. Scattered falls were reported on the 19th from the Central Highlands through the northern Warrego to the Darling Downs and Maranoa. Further north snow fell west of Mackay at Dalrymple Heights and Blue Mountain. Sleet was observed at Nebo and Clermont and on the 20th Thangool reported snow.
9-13 Jun 1966	Cyclone developed near Fraser Island and then moved south and passed to the east of Brisbane and the Gold Coast. Average winds to fifty knots along the S Qld coast. 24 hr rainfall totals:- 388mm Springbrook; 213mm Caboolture; 197mm Beenleigh and 163mm Brisbane Airport.
8-13 Jun 1967	Cyclone developed near Willis Is and moved down to Bundaberg on the 10th ,passed over Fraser Is and then moved into Moreton Bay on the 11th before moving over Gold Coast and then out to sea on the 13th. Cape Moreton reported gales from 9am 9th to 9am 11th with the strongest winds (gusts to 80 knots) at 6pm 10th. Very heavy rain 11th to 12th. Bureau in Brisbane recorded 282mm in 24 hours to 9am 12th. 140mm fell in the 3 hours to 10pm 11th. Springbrook recorded 621 mm in 24 hours to 9am 12th including 276mm in 6 hours to 3am 12th. A woman was killed when her car overturned into Mary R at Gympie. A youth was killed in an intersection crash in blinding rain at Clayfield. Two men were rescued from flooded vehicles at Doboy Ck and Wickham St in the Valley. Five hundred people were evacuated from flooded homes, fourteen people were rescued by boat. Fifteen cars were swept into Enoggera Creek and the occupants either escaped or were rescued. A car plunged into a washout at Chapel Hill. Hundreds of homes and shops in the Valley , Ashgrove,

	<p>Moorooka, Hemmant, Breakfast Creek, Newstead, New Farm, Woolloongabba, Stones Corner, Greenslopes, Coorparoo, Fairfield, Annerley, Milton, Toowong, Newmarket, Windsor and Albion had water pouring through them. Three yachts were wrecked in Breakfast Creek by the floods. Caravans were washed away from the Newmarket Caravan Park. Landslides cut Brisbane rail services and there was much damage to roads and bridges.</p> <p>On the Gold Coast water entered ground floors in Cavill Av. The worst hit areas were the canal estates west of Broadbeach where hundreds of houses were isolated. Fifty families were evacuated from homes on the Gold Coast. At Southport houses were washed away or undermined. Many boats were set adrift by the gales and were badly damaged. Huge seas added to the severe beach erosion left over from the summer cyclones.</p> <p>Over the border in NSW there were two deaths and 400 people were evacuated from their homes in Grafton. Sixty families were evacuated from homes in the Kyogle region.</p>
21-22 Jun 1967	<p>Cyclone moved from Willis Island down to Fraser Island and then turned towards the SE and passed over Lord Howe Island. Average winds to 40 knots along the S Qld coast. Rainfall in Brisbane to 60mm produced minor flooding.</p>
26-28 Jun 1967	<p>Cyclone developed just to the east of Brisbane (26th) and moved slowly north to the east of Double Island Pt (27th) and then turned slowly towards the SE. Hurricane force winds were reported from Cape Moreton from 9am 26th to 3pm 27th. A man was killed when his car crashed into a creek at Nerang in bad weather on the night of the 26th. Some houses and buildings were unroofed at Burleigh and Surfers Paradise. At Mudgeeraba a building was blown off its stumps and wrecked. Boats were swept from their moorings. Two houses at Mermaid Beach were lost to the sea (26th). Large sections of the esplanade at Surfers was lost to the sea and lanes and streets collapsed at Palm Beach (26th). The swimming pool from the Beach Lodge resort was lost to the sea at Surfers. By the 28th the esplanade at Main Beach fell into the sea and 5 houses were wrecked at Nobby's and Palm Beach. Many houses were badly damaged by the sea along the Gold Coast however a volunteer army of 5000 people placed around 100,000 sandbags along the foreshore helping to prevent many houses being lost to the sea. Wreckage of the Prawn Trawler <i>Sydney J</i> was found at Tewantin with no trace of the owner skipper who was believed to have drowned.</p>
5-8 Jul 1973	<p>Cyclone developed east of Mackay (5th) and moved down just seawards of the Sunshine Coast by 7th. It then moved back up north to the east of Yeppoon. Four people drowned on the evening of the 8th. Two near Nambour when the car went into a creek and two near Yandina after their car became stranded. Average winds of 40 to 55 knots were reported along the South Coast from 8 am 5th until 10pm 8th. A ship reported average winds of 60 knots off Stradbroke Island at 3pm 6th while another ship reported winds of 74 knots off the Gold Coast at 3pm 7th. Trees and power line were brought down throughout southeast Qld causing widespread blackouts. Some houses were unroofed at Kingaroy and near Warwick. The South Nobby wave recording station on the Gold Coast reported significant wave heights to 5.2 metres and maximum wave heights to 8.7 metres.</p> <p>The 1600 ton cargo ship <i>Cherry Venture</i> was driven ashore 1.5 km south of Double Island Point on the afternoon of the 8th after foundering in "forty foot waves".</p> <p>Twenty four rainfall totals recorded 9am 8th included 384mm Nambour; 349mm Woodford; 340 Mapleton; 335mm Maleny and 328mm Springbrook(7th). Many roads in southeast Qld were cut by floods and in Gympie 6 feet of water was over Mary St on the night of the 8th. The Mary R at Gympie peaked at 19.6 metres at 2am on the 9th with houses shops and factories under 2 m of water.</p>
29-30 Jul 1979	<p>Cyclone developed to the NE of Fraser Island moved down just to the east of Brisbane and then turned eastwards out to sea. Gales along the Gold Coast. The Brisbane wave recording station (7 km east of Point Lookout) recorded significant (peak) wave heights of 4.7m (8.7m) on 30 July.</p>
6-9 May 1980	<p>Cyclone developed near Fraser Island, moved east and then turned back and crossed the coast to the north of Brisbane. Average winds along the south coast to 45 knots. The Brisbane wave recording station recorded significant (peak) wave heights of 5.2m (8.1m) on 8 May. Six houses at Labrador (Gold Coast) were flooded by 1 metre of water (6th). Floods cut roads in Brisbane and power lines were brought down causing blackouts in some suburbs (6th). Vehicle swept off road by floods in the Gold Coast Hinterland though driver escaped injury (8th).</p>

	Roads flooded in the Waterford Marsden area (9th).
21-22 May 1981	Major low pressure system developed near Mt Isa and moved down to NW NSW. Small secondary cyclone developed on the coast near Cairns and ran right down the east coast with gale force winds. Extensive sugar cane damage Cairns to Home Hill. 16 homes damaged at Darling Heights (Toowoomba). Two small yachts wrecked. Local flooding Rockhampton to Proserpine. Two boys drowned at Rockhampton and one near fatality at Proserpine when motor vehicles were washed off creek crossings. The Brisbane wave recording station recorded significant (peak) wave heights of 3.8m (5.2m) on 22 May.
3-5 Jun 1983	Small low formed northeast of Cape Moreton while major low developed near New Caledonia with a central pressure of 1000 hPa (4th) and north of a large 1040 hPa high. Storm force winds South Coast 3pm 3rd to 9 pm 4th with gusts to 70 knots at Cape Byron. The Brisbane wave recording station recorded significant (peak) wave heights of 5.3m (10.0m) on 8 May.
20-23 Jun 1983	A cyclone developed in the Coral sea and moved down through Hervey Bay across the Sunshine Coast and back out to sea. Maximum sustained winds of 60 knots were reported from a ship ENE of Noosa. Gusts to 56 knots were recorded at the Brisbane City Bureau (22nd). 350 mm of rain was recorded in the 24 hours to 9am 22nd at Nambour including 229mm in 4 hours. A boy was drowned at Pomona after being sucked into a flooded drain. A man was killed at Gatton when a tree fell on him. In Brisbane winds brought down trees and powerlines and landslides closed the Southeast freeway and Settlement Road. Brisbane creeks were flooded. On the Sunshine Coast many centres were isolated as floods and landslides cut roads, trees and power lines were down and 15 yachts were damaged at Mooloolaba. Eleven caravans were washed away and destroyed from raging floodwaters at Yandina Caravan Park. In Nambour shops were flooded including a Mercedes dealership where cars were washed away. Floodwaters inundated houses and shops in the lower parts of Mary Street Gympie. On the God Coast trees and power lines were blown down and tiles were lifted off roofs. A boat was sunk in one of the canals and many roads were cut by floods trees and landslides. There was widespread crop damage in SE Qld. Eleven houses were evacuated at Roma. Major flooding occurred at Dalby with 13 houses evacuated. There was severe beach erosion along the South Coast and the Brisbane wave recording station recorded significant (peak) wave heights of 5.1m (7.1m) on 22 Jun.
8-10 Jul 1985	A 1009 hPa low developed on the Sunshine Coast by 3pm 8th and moved south while intensifying to a 1001 hPa low over southern suburbs of Brisbane at 3am 9th. Maximum sustained winds NE/38 knots at Cape Moreton and ENE/50 knots with gusts to 65 knots at Cape Byron. Caloundra recorded 239 mm of rain in 24 hours. At 9am 9th low was 1001 hPa and just to the north of Yamba after which it deepened and moved to the SE. Lord Howe Is at 3pm 9th had 40 knot winds from ESE with gusts to 54 knots.
2/3 Sep 1985	A large low pressure area developed in the Tasman Sea with the main 990 hPa centre east of Sydney on the 2nd. It then moved SE and deepened below 988 hPa. On the 2nd westerly wind gusts uprooted trees, damaged buildings and crops and blacked out 9000 homes in Brisbane. The maximum wind gust recorded in Brisbane was 97 km/hr (52 knots) at 11.12 am on the 2nd. Waves to 3 metre high were reported on Moreton Bay.
9-10 May 1987	Small low on the Gold Coast with large 1037 hPa high in the Tasman Sea. 345mm of rain in the 24 hr to 9am 10th at Springbrook with flash flooding on the Gold Coast. Road collapsed at Bundall. A woman was drowned when the motor cycle she was a pillion passenger rained into a metre of water at Nerang. A man was drowned when swept away by flood waters at Tallebudgera Caravan Park. A man was missing believed drowned by a flash flood on his Mullumbimby property. There was one other death (source Lucinda Coates). Many other people were rescued from flood waters and hundreds of houses were flooded. Three boats were sank at Southport.
4-7 Apr 1988	Small low moved out to sea from Sunshine Coast, then up to Fraser Is, back to Gympie, out to sea again and then back overland west of Brisbane. Springbrook rain 24 hrs:- to 9am 4th 228mm; to 9am 5th 246mm; to 9am 6th 302mm. 161 mm at Dayboro in 24 hr to 9am 6th causing flash floods. In SE

	<p>Qld flooding closed schools, swept people off bridges, uprooted trees, caused landslides and closed roads and highways.</p> <p>Landslides blocked the Western Freeway and roads at Samford. People at Cecil Plains were isolated by floods for a week. Ipswich SES had more than 200 calls for help. 400 residents were stranded in their homes at Kholo. Sandbagging was required to save homes at Tarragindi and Logan.</p> <p>The Crop damage in the Lockyer Valley and Darling Downs reached 20 million (1988\$). Floods also cut roads and isolated communities in NE NSW. Gold Coast wave recording station recorded significant wave heights to 4.28 m on 5 Apr.</p>
10-11 Apr 1988	<p>Small low developed SE of Fraser Island and moved onto Sunshine Coast.</p> <p>24 hr rainfalls :- Springbrook 215mm to 9am 11th and 337mm to 9am 12th; Cooroy 239mm to 9am 11th; Eumundi 203mm to 9am 11th</p> <p>Gales were reported from Double Is Pt to Yamba. Wind gust to 50 knots at the Gold Coast uprooted trees, flipped small craft, and ripped bigger boats from their moorings. SES repaired roofs, cleared trees from houses and sandbagged houses on Gold Coast. Crop damage expected to reach 100 \$million in SE Qld from the series of lows. Communities continued to be isolated by floods in SE Qld. Huge seas on Gold Coast with 1 metre waves on Broadwater. Brisbane wave recording station recorded significant wave heights to 4.1 m on 11 Apr.</p>
14-16 Sep 1988	<p>A low developed 100 km east of Cape Moreton and then moved slowly out to sea. Gales affected the Gold and Sunshine Coasts and the N Coast of NSW. Large swells hit the Gold Coast and N NSW. Brisbane wave recording station recorded significant wave heights to 4.62m on 15 Sept.</p>
14-18 Dec 1988	<p>A tropical low developed near Willis Island and initially moved towards the SSE before turning S and then SW before crossing the coast south of Gladstone. Gales were reported from near the low and along the Sunshine Coast. Central Business area of Gladstone badly flooded. One metre of water swept through shops in Goondoon St on the 18th. There were four deaths from road accidents over southeast Queensland in bad weather on the 18th. Brisbane wave recording station recorded significant wave heights to 4.98m on 18 Dec.</p>
24-26 Apr 1989	<p>Tropical low developed near Yeppoon 24th moved down the coast over the Sunshine Coast on the evening of the 25th and east of the Gold Coast on the morning of the 26th. Gale to storm force winds on the Sunshine Coast with 15 houses suffering roof damage and 5 houses damaged by falling trees.</p> <p>One person was drowned at a creek crossing on the Gold Coast and another was electrocuted on the Sunshine Coast. Heavy rains caused widespread flooding. At the high tide early on the 26th some roads in Brisbane were under a metre of water. There was a 0.5m storm surge recorded on the Brisbane tide gauge. Landslides blocked city streets, walls collapsed and power lines were brought down. Flooding occurred at Gympie and several houses on the Sunshine coast were flooded. Large seas caused severe beach erosion along the Sunshine and Gold Coasts. The Brisbane wave recording station recorded significant wave heights to 6.11 m on 25 April.</p>
21 -22 Feb 1992	<p>Monsoon low crossed the coast near Rockhampton as it formed a secondary centre near Maryborough. Very heavy flood rains SE Qld. A motorist lost his life when he attempted to cross a barricaded crossing on the Stanley River. 225 homes were inundated by depths up to 800 mm in the Maroochy system. There was a flash flood component to this flooding.</p> <p>30 to 40 houses and 110 business premises were flooded at Gympie. There was flash flooding at Bundaberg and on the Cherwell River near Howard where 60 houses and Caravans were inundated and around 20 people evacuated. 732mm in 24h at Tewantin.</p>
14-16 Feb 1995	<p>Low developed off the central coast and deepened to 997 hPa early on the 15th before making landfall on the Sunshine Coast. Winds to storm force south of the centre. Flash floods occurred at Hervey Bay though fortunately at low tide. The Brisbane wave recording station recorded significant wave heights to 6.42 m on the 15th..</p>
14-17 Feb 1996	<p>A tropical low developed near New Caledonia and moved past Brisbane and brought storm force southerly winds to waters off the Gold Coast. A storm surge brought some flooding up the Brisbane River at Newstead. A storm surge of 0.59m was measured at The Gold Coast Seaway. The luxury</p>

	<p>vessel <i>Queen Elizabeth II</i>, travelling from Brisbane to Sydney, was battered by average winds of 26 ms⁻¹ and very short and very steep 10 metre waves just off the northern New South Wales coastal town of Yamba around 1900 UTC 15 February 1996 resulting in injuries to passengers. The Brisbane wave recording station recorded significant wave heights to 6.19 m on the 15th.</p>
1-5 May 1996	<p>Low developed east of Townsville and intensified as it moved down to waters just off Brisbane. Wind, sea and flood damage SE Qld - 3 drowned in small craft and in rivers. Boy swept down drain-1 traffic accident death - 16 houses were damaged by wind at Tamborine and there was wind damage on the Gold Coast. Landslides blocked roads and fallen trees brought down power lines. The maximum wind gust of 65 knots was recorded at Cape Moreton AWS. Storm tides flooded the Sandgate foreshore at Flinders Parade. The Gold Coast Seaway was 0.51m above the predicted high tide on the 2nd which was 0.18 m above HAT. The Brisbane wave recording station recorded significant wave heights to 6.9 m on the 2nd.</p>
4-5 Feb 1999	<p>A low developed east of Fraser Island and moved south. Hpeak and Hsig on the Southport wave rider bouy on the 4th were 6.7 m and 3.5 m. Two men were lost when a 8.1 m fishing boat was wrecked by a large wave on Breaksea Spit north Fraser Island early on th 6th.</p>
8-10 February 1999	<p>Small low developed near Double Island Point. In the lead up rains a girl drowned at Samford on the 6th. A man and a woman in a Campervan swept into creek at Kennilworth when bank collapsed on afternoon of the 8th. The man drowned. On the 8th at the Sunshine Coast flooding and landslips closed dozens of roads. Wind blew power lines down causing blackouts and several houses had roof damage. SES sandbagged homes against flash flooding in Nambour, Palmwoods, Coolum, Mudjimba and Pacific Paradise. Landslides affected the Obi Range Road between Mapleton and Kennilworth, Jimna Creek Road, Cedar Pocket Road and Tin Can Bay Road. Kilcoy was isolated by floodwaters. At Brookfield a schoolgirl was rescued from Mogill Creek. In the Valley a landslide closed off Ivory Street. The road to Bribie Island was cut. SES volunteers attended wind and flood damage operations in the Laidley and Gatton area. Fallen trees cut several roads. Double Island Point automatic weather station (AWS) recorded a gust of 63 knots at 0047 UTC 8th, while the AWS at Cape Moreton registered a gust of 56 knots at 0119 UTC 8th. A peak wave height of 8 metres was measured on the waverider buoy off Main Beach Southport at 1300 UTC 8th.</p> <p>On the 9th top 24 hour rainfall totals to 9am were Maleny 404 mm, Mary Cairncross 370mm Nambour 332 mm. In Brisbane Strathpine recorded 182 mm. A boy was drowned when he was swept into a stormwater drain at Palmwoods. Another boy was rescued after being swept from a park in Nambour. A man was drowned when he was swept over a weir while boogie-boarding in the Caboolture and a man was trapped by the rapidly rising South Pine River at Albany Creek and drowned. North of Brisbane 160 roads were cut with the Bruce Highway being the worse affected with the road cut in several key locations. 17,800 houses were without power in southeast Queensland. A man drowned in a creek on the Gold Coast.</p> <p>On the 10th the body of a man was found in a creek just outside Conondale. The Mary River at Gympie peaked at 21.95 metres (The highest level this century). 150 business and 20 houses were inundated.</p>
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	<p>m. Finally, as the system moved rapidly south-southeastward on 26 May, it passed over a drifting buoy near 52.5 S, 169.0 E which reported a minimum pressure of 975.2 hPa at 1249 UTC.</p>
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Tropical low 30- 31 October 2000	<p>A small low developed just south of Mackay on the tropical east coast of Australia around 0000 UTC 30 October 2000.</p> <p>Rainfall Many locations between Brisbane and Mackay registered rainfall totals in excess of 100 mm for the 24 hours to 2300 UTC 30 October 2000 (9am 31st local). The top registrations were:- BAROON PCKT DAM 235.0mm, MALENY 211.6mm, PALMWOODS 187.0 mm, NAMBOUR 173.6mm, CARMILA 172.2mm, LANDSBOROUGH 161.8mm, MT LARCOM 159.0mm</p> <p>Long drought conditions led up to this events and the run off from this heavy rain was not excessive enough to produce stream flooding. However there was some local flooding in Bundaberg and Gympie. Flooding on the Sunshine Coast north of Brisbane closed more than a dozen roads. Heron Island reported NE winds gusting to 46 knots switching to westerly winds at 41 knots gusting to 51 knots between 1232 UTC and 1250 UTC 30th as the developing low moved over the station. The pressure was then still only 1008 hPa. Lady Elliot Island (24.6S 152.7E) reported easterly gales between 0722 UTC 30th and 0845 UTC 30th. The maximum average wind was 37 knots and the max gust was 50 knots.</p> <p>Double Island Point AWS (25.9S 153.2E) reported gales from 1200 UTC 30th to 0800 UTC 31st with the wind direction gradually backing from easterly to southerly as the low went past the station. Max average wind was southerly at 43 knots gusting to 50 knots which occurred when the lowest MSL pressure of 1001.7 hPa was recorded at 0338 UTC 31st.</p> <p>Cape Moreton AWS (27.0S 153.5E) reported gales from 0200 UTC 30th to 1202 UTC 31st. Max average wind was 45 knots and the max gust was 55 knots.</p> <p>Seas Maximum wave heights recorded at the Brisbane wave recording station (27.4S 153.6E) were Hsig 5.1 metres and Hmax 10.7 metres.</p> <p>Impact</p> <p>The wind brought down trees and power lines with power blackouts in Brisbane suburbs and on the Sunshine Coast just north of Brisbane. There was traffic chaos in Brisbane and other centres in</p>

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31 January- 2 February 2001.	<p>Another mid to upper level trough began forming over NSW on 31 January 2001 forming an upper low just to the west of Brisbane by 1200 UTC 1 February 2001. The sea level reflection was a 1001 hPa low near Rockhampton. This low was complex extending a trough down to the Brisbane area as a large strengthening sea level high moved into the Tasman Sea producing an intense pressure gradient over Southern Queensland and Northern New South Wales. Winds reached storm force on the open coast near Brisbane with Cape Moreton recording easterly storm force winds between 1553 UTC and 1900 UTC 1 February 2001 with the maximum 10 minute average wind 080/51 knots. The gales extended well inland into the Tablelands where Toowoomba recorded 10 minute winds to 38 knots at 1739 UTC 1st. Tenterfield on the Tablelands just south of the Queensland border, sustained widespread wind damage. On the exposed coast the winds brought down many trees in elevated areas and power blackouts were widespread. Seas rapidly developed with peak wave heights reaching just over 10 metres on wave rider buoys near Brisbane. Rainfall was very heavy with 24 hour rainfall totals in Southeast Queensland as an example:- Springbrook 384.8mm, Mount Glorious 341mm and Natural Bridge 320 mm. There was flooding in southeast Queensland however this was reduced by a prolonged dry period leading up to this event, however over the border in NSW there was major flooding in the Lismore area with many people were evacuated. In southeast Queensland, there were several near escapes when people drove into flooded stream crossings and their vehicles were swept away. However in all cases the drivers managed to scramble to safety. One man was drowned when he dived into a flooded river just north of Brisbane.</p>
8 March 2001	<p>A low pressure system developed in the sub-tropics off the east coast of Australia and made landfall on the Northern New South Wales coast. At landfall 10 minute average winds speeds exceeding 50 knots (26ms^{-1}) accompanied the low making it equivalent to a category 2 tropical cyclone. Late in its life the low displayed some characteristics that are reminiscent of tropical cyclones. The low moved northwest while deepening and by 2300 UTC 5 March 2001 was east of Brisbane . A large high in the Tasman Sea then moved east towards New Zealand weakening the pressure gradient and winds along the coast south of Brisbane. However the low continued to slowly deepen. Severe weather and ocean gale warnings were being issued for the Southeast Coast of Queensland where large swells, wind and big tides caused beach erosion and salt water inundation.</p> <p>On 7 March 2001 the low slowed its movement towards the coast and rainbands, which were circulating around the western flank of the low, broke away from the circulation and moved onto</p>

	<p>the coast and the low weakened.</p> <p>On 8 March 2001 the low began to accelerate and intensify again as it moved south-westward into the New South Wales.</p> <p>Impacts</p> <p>Queensland. There was serious beach erosion at Noosa and Maroochydore on the Sunshine coast on the Gold Coast there was a 0.45m storm surge on the Gold Coast with scarping on the northern beaches from between 0.5 and 1.5 m.</p> <p>New South Wales. The most extensive wind damage occurred along the coastal region between Evans Head and Brooms Head (under rainbands separate and some distance from the eye of the storm). There was much less damage near the eye of the storm which passed between Byron Bay and Ballina. At Evans Head AWS the strongest wind of 170/54 knots (28ms^{-1}) with gusts to 75 knots (39ms^{-1}) was recorded at 0615 UTC 8 March 2001. Evans Head AWS is located near the northern boundary of the Bundjalung National Park, which extends southwards almost down to Iluka. Extensive tree damage was reported in the Park. The most extensive structural damage was reported from the town of Yamba where around 100 buildings were damaged. Around 100 houses were also unroofed at Iluka just over the river from Yamba. In the Tweed, four houses suffered some roof damage.</p>
4-7 July 2001	<p>A severe low pressure system brought heavy seas onto the Queensland and New South Wales coastlines. The low originally formed to the south of Noumea, New Caledonia, equatorward of a large blocking high pressure system over New Zealand as an upper-level trough crossed the Tasman Sea.</p> <p>Computer UK analysis around the time of peak intensity (1200 UTC 4 July 2001) showed a cyclonic circulation up to 500 hPa and strongest in the 850 to 700 hPa layer. Above 400 hPa the system was an open trough. Scatterometer winds from satellite data at 0615 UTC 4 July 2001, revealed a low with gales almost completely surrounding it and with a huge area of gale to storm-force winds on the poleward side. The low tracked to the east of Norfolk Island where the lowest MSLP of 990.3 hPa occurred at 1500 UTC on the 4 July 2001. At Norfolk the maximum 10-min mean wind recorded was 100/43 knots, gusting to 63 knots and occurred at 0230 UTC. 4 July 2001 and the mean sea level pressure at that time was 1001.3 hPa. Balloon flight wind calculations from Norfolk indicated winds to hurricane force a short distance above the surface.</p> <p>Heavy swells affected the Australian coastline. The most exposed wave rider buoy (just east of Brisbane) recorded a peak wave height of 7.9 metres. The peak wave period was 15.9 seconds--a long period swell. The long period swells produce a larger breaking wave height than shorter period swells do. The 11-metre cruiser "Just Cruising" was found wrecked on Spitfire Bank near the entrance to Moreton Bay and just southwest of Cape Moreton. The boat had been flipped over by the large breakers on 6 July 2001 and the crew of four were never found. A yacht was wrecked by large waves on a sandbar near Fraser Island and the lone yachtsman was never found. Also, a woman was reported missing after being swept off her dinghy on the 7th July near Jumpinpin Bar (which separates North and South Stradbroke Islands) halfway between Brisbane and the Gold Coast. Farther east, a French yachtsman was found drowned near his stricken yacht in the Norfolk Island area.</p> <p>In New South Wales 2 rock fisherman were swept to their deaths, one at Twofold Bay and the other near Cronulla.</p>
14-17 Feb 1996	<p>A tropical low developed near New Caledonia and moved past Brisbane and brought storm force southerly winds to waters off the Gold Coast. A storm surge brought some flooding up the Brisbane River at Newstead. A storm surge of 0.59m was measured at The Gold Coast Seaway. The luxury vessel <i>Queen Elizabeth II</i>, travelling from Brisbane to Sydney, was battered by average winds of 26ms^{-1} and very short and very steep 10 metre waves just off the northern New South Wales coastal town of Yamba around 1900 UTC 15 February 1996 resulting in injuries to passengers. The Brisbane wave recording station recorded significant wave heights to 6.19 m on the 15th.</p>

1-5 May 1996	<p>Low developed east of Townsville and intensified as it moved down to waters just off Brisbane. Wind, sea and flood damage SE Qld - 3 drowned in small craft and in rivers. Boy swept down drain-1 traffic accident death - 16 houses were damaged by wind at Tamborine and there was wind damage on the Gold Coast. Landslides blocked roads and fallen trees brought down power lines. The maximum wind gust of 65 knots was recorded at Cape Moreton AWS. Storm tides flooded the Sandgate foreshore at Flinders Parade. The Gold Coast Seaway was 0.51m above the predicted high tide on the 2nd, which was 0.18 m above HAT.</p> <p>The Brisbane wave recording station recorded significant wave heights to 6.9 m on the 2nd.</p>
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8 March 2001	<p>A low pressure system developed in the sub-tropics off the east coast of Australia and made landfall on the Northern New South Wales coast. At landfall 10 minute average winds speeds exceeding 50 knots (26ms^{-1}) accompanied the low making it equivalent to a category 2 tropical cyclone. Late in its life the low displayed some characteristics that are reminiscent of tropical cyclones. The low moved northwest while deepening and by 2300 UTC 5 March 2001 was east of Brisbane . A large high in the Tasman Sea then moved east towards New Zealand weakening the pressure gradient and winds along the coast south of Brisbane. However the low continued to slowly deepen. Severe weather and ocean gale warnings were being issued for the Southeast Coast of Queensland where large swells, wind and big tides caused beach erosion and salt water inundation.</p> <p>On 7 March 2001 the low slowed its movement towards the coast and rainbands, which were circulating around the western flank of the low, broke away from the circulation and moved onto the coast and the low weakened.</p> <p>On 8 March 2001 the low began to accelerate and intensify again as it moved south-westward into the New South Wales.</p>

	<p>Impacts</p> <p>Queensland. There was serious beach erosion at Noosa and Maroochydore on the Sunshine coast on the Gold Coast there was a 0.45m storm surge on the Gold Coast with scarping on the northern beaches from between 0.5 and 1.5 m.</p> <p>New South Wales. The most extensive wind damage occurred along the coastal region between Evans Head and Brooms Head (under rainbands separate and some distance from the eye of the storm). There was much less damage near the eye of the storm which passed between Byron Bay and Ballina. At Evans Head AWS the strongest wind of 170/54 knots (28ms^{-1}) with gusts to 75 knots (39ms^{-1}) was recorded at 0615 UTC 8 March 2001. Evans Head AWS is located near the northern boundary of the Bundjalung National Park, which extends southwards almost down to Iluka. Extensive tree damage was reported in the Park. The most extensive structural damage was reported from the town of Yamba where around 100 buildings were damaged. Around 100 houses were also unroofed at Iluka just over the river from Yamba. In the Tweed, four houses suffered some roof damage.</p>
4-7 July 2001	<p>A severe low pressure system brought heavy seas onto the Queensland and New South Wales coastlines. The low originally formed to the south of Noumea, New Caledonia, equatorward of a large blocking high pressure system over New Zealand as an upper-level trough crossed the Tasman Sea.</p> <p>Computer UK analysis around the time of peak intensity (1200 UTC 4 July 2001) showed a cyclonic circulation up to 500 hPa and strongest in the 850 to 700 hPa layer. Above 400 hPa the system was an open trough. Scatterometer winds from satellite data at 0615 UTC 4 July 2001, revealed a low with gales almost completely surrounding it and with a huge area of gale to storm-force winds on the poleward side. The low tracked to the east of Norfolk Island where the lowest MSLP of 990.3 hPa occurred at 1500 UTC on the 4 July 2001. At Norfolk the maximum 10-min mean wind recorded was 100/43 knots, gusting to 63 knots and occurred at 0230 UTC. 4 July 2001 and the mean sea level pressure at that time was 1001.3 hPa. Balloon flight wind calculations from Norfolk indicated winds to hurricane force a short distance above the surface.</p> <p>Heavy swells affected the Australian coastline. The most exposed wave rider buoy (just east of Brisbane) recorded a peak wave height of 7.9 metres. The peak wave period was 15.9 seconds--a long period swell. The long period swells produce a larger breaking wave height than shorter period swells do. The 11-metre cruiser "Just Cruising" was found wrecked on Spitfire Bank near the entrance to Moreton Bay and just southwest of Cape Moreton. The boat had been flipped over by the large breakers on 6 July 2001 and the crew of four were never found. A yacht was wrecked by large waves on a sandbar near Fraser Island and the lone yachtsman was never found. Also, a woman was reported missing after being swept off her dinghy on the 7th July near Jumpinpin Bar (which separates North and South Stradbroke Islands) halfway between Brisbane and the Gold Coast. Farther east, a French yachtsman was found drowned near his stricken yacht in the Norfolk Island area.</p> <p>In New South Wales 2 rock fisherman were swept to their deaths, one at Twofold Bay and the other near Cronulla.</p>
2-4 June 2002	<p>A low in the middle atmosphere developed overland in southeast Queensland by 2 June 2002. At the surface a large high moved across southeast Australia Tasman while a trough developed to the east of the upper low generating gale force winds along the south coast of Queensland. The trough developed east of Bowen between Marion Reef and Frederick Reef and because of the large high over southeast Australia it had the same effect as a deep east coast low. The gales extended northwards up to the Capricorn Coast by 4 June 2002. The low level onshore flow and the upper low combined to produce areas of very heavy rain.</p> <p>On Tuesday 4 June 2002 torrential rain and flash flooding occurred in the Yeppoon area with falls between 80mm and 100mm of rain in the 24 hours to 2300 UTC 3 June 2002. Very heavy rain (with thunder) began falling at about 2230 UTC and continued until 0030 UTC 4 June 2002. Reports of</p>

	<p>amounts in that 2 hour period ranged from 120mm to 320mm. The heaviest areas seemed to be around Kinka Beach (halfway between Yeppoon and Emu Park, Emu Park itself, and at Zilzie just south of Emu Park.</p> <p>Some of the reports received were Kinka Beach, 359mm in total, 70mm of it before 2100 UTC. Another Kinka Beach resident reported 322mm total, 102mm before 2300 UTC and 220mm after 2300 UTC, while a report from a resident 1 km inland from Kinka Beach indicated 305mm in total and 75mm before 2300 UTC. At Barlows Hill, just north of Yeppoon 150mm was recorded in 90 minutes and at Kemp Beach 330mm was recorded in total, with 240mm after 2300 UTC. Emu Park reported 290mm in the 7 hours to 0500 UTC 4 June 2002. Zilzie recorded 380mm in total, 320mm after 2100 UTC. The Keppel Sands Coastguard, 245mm up to 0200UTC.</p> <p>There was one report of 446mm at Kinka Beach for the whole event. A number of houses were inundated by stormwater at Emu Park and motor vehicles were abandoned.</p> <p>Gales generated large seas and near Lady Musgrave Island 5 yachtsmen were rescued off two yachts, <i>Banshee</i> and <i>Moonfleet</i>. Both yachts were destroyed by the seas. Rundle Island automatic weather station (AWS) reported gales from 1700UTC 3 June 2002 to 0900UTC 4 June 2002. The strongest 10 minute average wind recorded at the AWS was 45 knots. The strongest 10 minute average wind recorded at Double Island Point AWS was 39 knots, Lady Elliot Island AWS 35 knots, Frederick Reef 38 knots, Gannet Cay AWS 41 knots and Cape Moreton AWS 45 knots.</p>
26 June 2003	<p>At 1600 UTC on 24 June a LOW was centred about 150 nm east- northeast of Townsville. The system moved generally southeastward fairly quickly and by 0600 UTC on the 26th had reached a position approximately 325 nm east-southeast of Brisbane and sustained winds to 53 knots (the lowest MSL pressure there was 991.5hPa) were recorded at Lord Howe Island as the storm passed just to the west of that station on the 26th. Another interesting feature of this storm system was a small trough system which circulated around the parent LOW. This small cyclonic eddy moved inland into northeastern New South Wales and southeastern Queensland where it caused localized severe wind damage and brought torrential rain.</p> <p>The heaviest 24h rainfall to 2300UTC 25 June was Ballina Airport, NSW 190 mm. The heaviest 24h rainfall to 2300UTC 26 June was Byron Bay, NS 176 mm.</p> <p>Six fishermen from the 25-metre, 80-ton vessel "Tan Sula" were rescued 32 nm east of Cape Byron on the northern NSW coast on 27 June by being winched onto two helicopters from Brisbane and Lismore. Seas on the Gold Coast of Queensland were large with significant wave heights to 4.3 m at the Brisbane wave rider buoy on 26 June. In NSW significant heights reached 5.5 m on the 27th at Coffs Harbour. Surfers were injured by the large waves and there were six major rescues off the NSW coast by lifeguards.</p> <p>Rivers overflowed in northern NSW causing flooding around Murwillumbah, Mullumbimby and Byron Bay. Police rescued a 14-year old boy at Stokers Siding, 50 km from Byron Bay, who tried to save a calf from rising waters and became trapped in a tree. A fire brigade helped to evacuate children from two schools in the Brunswick region because buses were unable to cross the flooded roads. The large waves made river entrances in northern NSW and southern Queensland virtually impassable.</p> <p>The small trough system circulating around the larger LOW caused localized severe wind damage on the southern Gold Coast. Trees were brought down and a dozen homes were damaged by fallen trees, which also caused power outages. The Coolangatta AWS recorded 10-min avg winds to 34 kts for a brief period of less than 30 minutes.</p>
Hybrid low 5 March 2004	<p>Very large long-period waves were generated by the storm. Waves with significant wave heights of 7.1m and maximum heights 14.3m were recorded on the the buoy off Stradbroke Island around 05/0700 UTC, coming from the east-northeast. The peak height measured on the Tweed Buoy was just over 14 m and this occurred at 1700 UTC on 6 March, when the significant wave height was between 5 and 6 metres. The wave periods were almost 13 seconds and approached from the east-northeast. Even in Moreton Bay a maximum wave height of over 3.5 metres was measured around 1500 UTC on 5 March. The worst effect from storm surge appears to have been in association with the Friday night's high tide at Currumbin on the Gold Coast when cars were floating around the car park. This was not a big tide (0.74 m below the Highest Astronomical Tide--HAT) and</p>

	<p>therefore the wave effects appear to have added over a metre to the tide. Northeasterly gales in Moreton Bay early on Saturday raised the level of the Bay 0.7 metres. Cape strongest winds were at 05/0500 UTC-- 30/56 knots (10-min mean) and peak gust 67 knots.</p> <p>Twenty-four hour rainfall totals from 04/2300 to 05/2300 UTC reached 284.0 mm. Up to 106,000 customers lost power during the passage of the subtropical storm through the greater Brisbane Metropolitan area, the Sunshine Coast, and the Gold Coast with tree and associated minor structural damage reported throughout the area and extending into northern New South Wales. There/were 3 fatalities associated with this event. A man is missing in the flooded Mary River near Gympie, a 10-year-old boy who was drowned after being swept away from his family when they tried to cross a creek in the Tweed River catchment; and an elderly woman drowned in a creek near Nambucca Heads (South of Coffs Harbour). Two people were rescued from a 4WD in a flooded creek on the northern Gold Coast. Five people were rescued from the top of their car in a flooded stream near Caboolture north of Brisbane. At Bundamba near Ipswich two girls fell into strong rapids and were rescued by Police. At Murphy's Creek near Toowoomba fire-fighters rescued a stranded motorist. Five people were rescued after they were swept into the sea by the run up from large waves. In Moreton Bay a French yachtsman was rescued after an air and sea search.</p> <p>The State Emergency Services (SES) says its crews were called out to about 200 jobs across the Brisbane area, 80 on the Gold Coast and 70 on the Sunshine Coast. Most were minor roof damage and sandbagging requests. Police say there were many trees and power lines down across Brisbane, the Gold Coast, the Sunshine Coast, Ipswich and Toowoomba. On the Gold Coast, police say some cars became bogged in flooded roadways, although there are no reports of any injuries. The Warrego highway at Cunningham's Gap, west of Brisbane, was closed due to rockslides. Four metres of roadway were washed away on Sydney Street at Brassall in Ipswich as a bus passed over it.</p>
29/30 June 2005	<p>During the morning of 30 June 2005 (local time) the heaviest rainfall occurred in this event as a trough system had developed just inland from the coast in Northern New South Wales and extended up to a small low centre just to the north of Brisbane. The flow onto the coast was warm and very moist with dewpoints reaching nineteen or twenty degrees Celsius. This was also the period of the strongest winds with gale force northeast winds indicated and this was consistent with the largest waves on the wave rider buoys (significant wave heights reaching 5 metres) around 2300UTC 29 June 2005. There was widespread severe flooding along the whole Gold Coast strip with hourly rainfall totals up to 145mm and 12 hour rainfall totals to 503mm. There were three deaths with a young couple swept off a bridge in their vehicle and a man drowned at Byron Bay about 55km south of Tweed Heads. Insured costs 78,900,000 (AUD 2005). 3000 people affected- 3142 people evacuated.</p>
3-5 March 2006	<p>By 0800UTC 2 March a large area of strong to gale force winds had developed in the onshore flow off the southern Queensland coast. This occurred as a low pressure system formed ENE of Rockhampton and a large high moved into the Tasman Sea. By 2000UTC 2 March the low had deepened and moved down to the east of Fraser Island while high pressures were maintained over northern New South Wales. Wave heights began to increase during Friday the 3 March on the south Queensland buoys and at this stage more rapidly on the Sunshine Coast than on the buoys further south. Twenty four hours later at 2000UTC 3 March the low did not noticeably deepen but moved closer towards the higher pressure, which was maintained at 1018 hPa over the period at Coffs Harbour. As a result an intense pressure gradient with gale to storm force onshore winds had developed off the south Queensland Coast. Later that evening at 0800UTC 4 March the quikscat data indicated gale force winds extending out at least 400km east of the coast.</p> <p>The maximum wind averaged over 10minutes was from Cape Moreton 53knots at 1430UTC 3 March 2006. Wind damage affected many areas of Southeast Queensland. A Counter Disaster and Rescue Service spokeswoman said volunteers had been "flat out" as trees crushed houses and cars. A nursing home at Kirra was evacuated when a tree fell on a unit. No residents were injured. In Brisbane, residents of a unit block in Woolloowin and a house in Chermside were lucky to escape when trees fell on their properties. Traffic accidents kept police busy and one vehicle crashed into a house at St Lucia. Energex staff were braced for action as blackouts hit about 100,000 homes and businesses from Friday morning to Sunday afternoon. At Mt Tamborine and Bonogin boggy grounds</p>

	<p>hampered restoration efforts and in Beaudesert trees and branches continued to damage wires. In Moreton Bay on Sunday 5 March boats were damaged and ripped from their moorings. One of these yachts was found later in the week at Noosa Heads.</p> <p>The second highest significant wave height since 1976 was recorded at the EPA's Brisbane wave recording station on Saturday (4 March). Significant wave heights up to 7.2m were recorded by an EPA wave monitoring buoy located 10km southeast of Point Lookout, North Stradbroke Island while individual waves up to 15.0m (and possibly 16.7m) were also recorded. Significant wave heights of 5.4m, 5.3m and 5.5m were also recorded respectively at the Sunshine Coast, Gold Coast and Tweed Heads wave recorders. These waves were the second, fifth and third highest wave events at these sites."</p> <p>A significant storm surge occurred with stormwater outlets blocked by surging waves and this caused localised flooding of low lying coastal areas such as Flat Rock Creek and Marine Parade Kirra. The mayor of Redcliffe said there was a significant storm surge in Moreton Bay though following the first Severe Weather Warning sand bagging was carried out and this prevented large-scale erosion.</p>
21-25 August 2007	<p>The initial development of a low pressure centre occurred over the period from the 20 to 21 August 2007. A large high pressure ridge which built up along the NSW coast nudged the low centre up towards Fraser Island which brought gale to storm force wind to areas along the coast between the border and Fraser Island. The maximum wind gust reported was 67 knots from Cape Moreton at 1318 UTC 21 August or 1118pm 21st local time. The main affect of these winds was to bring trees down causing power blackouts to 34,000 houses and damaging houses and cars. A new low centre east of Fraser Island by 1100 UTC 23 August with a very strong pressure gradient along the coast to the south. This was around the time that the extreme rainfall began about the Northern Sunshine Coast. Rainfall rates reached 313mm in 6hrs and 527mm in 12 hours along the Northern Sunshine Coast.</p> <p>Large waves impacted on the Southeast Coast with an Indonesian Naval "Tall Ship" being driven ashore at Rainbow Beach. An experienced surfer was badly injured with serious spinal injuries at Kirra on 25 August when dumped by a large wave after high energy swell arrived.</p>
2 June 2008	<p>Wild seas and flooding in Southeast Queensland early on 2 June 2008 were associated with a weather phenomenon called an East Coast Low. On the Sunshine Coast after six people were rescued from floodwaters. Up to 140 mm of rain fell in some parts of the coast in just three hours. Two teenage girls who were stuck in a tree near Cooroy, west of Noosa, are safe and well after been rescued about an hour ago. Earlier, four people were pulled to safety from the top of their car. The rain has also been kept SES volunteers busy across Brisbane, with 40 home owners needing help. Among the worst-hit areas were the bayside suburbs of Manly and Balmoral, where 15 homes were damaged by leaking roofs. Large seas caused erosion on the Gold Coast. L:a</p>
13-15 Feb 2009	<p>A low over southern inland Queensland developed a secondary centre on the coast near Rockhampton on 13 February. By 14 February the coastal low was near Cape Moreton and moved past the Gold Coast that night before intensifying and moving out to sea off the Northern NSW coast. Significant wave heights reached 4 metres on the Brisbane Buoy and just over 6 metres on the Byron Buoy.</p>
30 March- 3 April 2009	<p>A low developed out to sea from the Sunshine Coast on 30 March before moving down the coast just offshore from Yamba on 31 March. The low then moved back north to be just east of Fraser Island on the 2nd April. Significant wave heights reached just over 4 metres on the Tweed buoy late on the 30 April before easing and then increased again to reach 4.8 metres on 2 April when the Gold Coast buoy reached 5 metres significant wave height.</p>
East Coast Low 19-23 May 2009	<p>19 -2 3 May 2009 This east coast low produced the worst beach erosion on the Gold Coast since May 1996.</p> <p>As the low developed flood rains affected the Brisbane region. The low became complex with several transient centres. On 20 May gales developed on the Gold Coast and a man was killed at Surfers Paradise in his office as flying debris crashed through his office window. By 6am 21 May a small low developed north of Byron Bay where mean winds to 62knots were reported.</p>

Significant wave heights readings from the Brisbane Buoy (off the Northern tip of North Stradbroke Island) increased during the 20 May and reached 5 metres around 3pm EST. The Gold Coast Buoy reached 5 metres later at 10pm while there were some problems with the Tweed buoy. NSW buoys at, Byron Bay, Coffs Harbour and Crowdy Heads all reached 5 metres earlier in the day.

During the day on 21 May the low moved south and the pressure gradient increased east of the NSW coast and this was when some of the largest waves were recorded. The Tweed buoy reached 6.2metres significant wave height at 8am 21 May while the buoy at Byron reached 7.4 metres later at 6pm. The Gold Coast buoy failed to report over this period.

Over the 24 hour period up to 10am 23 May 2009 the low had weakened by 10am 22 May but quickly reformed out to sea and then a small centre moved towards the Gold Coast where it stalled. Quikscat observations at 6am 23 May 2009 indicated a very extensive area of gales off the coast. The Buoy at Coffs recorded its peak significant wave height of 6.4metres around 10am 23rd while Crowdy reached 6.1metres at 7am. A redevelopment of waves occurred off the Gold Coast with the Buoy there recording a significant wave height of 6.2metres at 4am 23 May.

ARCHIVE: Severe East Coast Tropical Cyclones, 1887 – 2011

By Mr Jeff Callaghan, Retired Senior Severe Weather Forecaster, Bureau of Meteorology, Brisbane

CORAL SEA

21 January 1887 TC hit the coast near Brisbane.
24 March 1890 TC crossed coast near Cardwell
2 Apr 1892 TC passed near Brisbane: two deaths.
1 February 1893 TC hit Yeppoon.
26 January 1896 TC Sigma passed just to northeast of Townsville.
4 February 1898 TC Eline passed near Mackay.
5 March 1899 TC Mahina crossed the coast at Princess Charlotte Bay.
9 March 1903 TC Leonta re-curved over Townsville.
27 January 1906 TC crossed the coast at Cairns. Half of Chinatown was completely wrecked.
16 March 1911 TC crossed coast near Port Douglas.
23 March 1911 TC wrecked the ship Yongala (3664 tons) just to the east of Townsville.
31 January 1913 TC crossed the coast near Cairns.
9–11 February 1915 TC moved parallel to the coast south of Townsville and passed over Fraser Island with a central pressure of 970 hPa.
27 December 1916 TC crossed the coast near Dent Is. The pressure dropped to 958 hPa.
21 January 1918 TC crossed coast just north of Mackay. Lowest pressure of 932.6 hPa recorded near the eye.
10 March 1918 TC crossed the coast and passed directly over Innisfail. A barometer reading of 926 hPa was recorded at the Mourilyan Mill.
3 February 1920 TC crossed the coast near Port Douglas. Pressure dropped to 962 hPa.
5 April 1921 TC passed to the east of Bustard Heads.
9 February 1927 TC crossed the coast just to the north of Cairns.
14 February 1928 TC crossed the coast at Brisbane. Subsequent serious floods in south-east Queensland with 5 people drowned.
12 March 1934 TC crossed the coast near Cape Tribulation.
18 February 1940 TC crossed the coast near Cardwell.
17–18 March 1945 A small TC crossed the coast south of Cooktown.
10 February 1949 TC crossed the coast north of Cooktown.
2/3 March 1949 TC struck Gladstone at 2 pm on the second and then passed over Rockhampton.
11 March 1950 TC crossed the coast at Carmilla (S of Mackay) with severe structural damage.
20 February 1954 TC crossed the coast at Coolangatta. Pressure was recorded at 973 hPa.
7 March 1955 TC crossed coast just south of Mackay.
6 March 1956 TC Agnes passed over Townsville. Meteorological office recorded pressure reading 961 hPa.

16 February 1959 TC Connie crossed the coast at Guthalungra.
28–30 January 1967 TC Dinah.
17 January 1970 Small TC Ada passed through Whitsunday Group.
24 December 1971 TC Althea crossed the coast just north of Townsville.
11 February 1972 TC Daisy made landfall on Fraser Island.
2 April 1972 TC Emily crossed the coast in a sparsely populated area just to the south-east of Gladstone.
19 January 1976 TC David crossed to the north of St Lawrence.
39–24 February 1980 TC Simon made landfall in a remote part of the coast north of Yeppoon.
1 February 1986 TC Winifred crossed the coast just south of Innisfail.
4 April 1989 TC Aivu crossed the coast near Ayr.
19 March 1990 TC Ivor crossed the coast near Princess Charlotte Bay.
11 February 1999 TC Rona made landfall just to the north of Cow Bay near the Daintree River mouth.
10 March 2005 TC Ingrid made landfall on a remote part of the east coast of Cape York Peninsula as a severe tropical cyclone.
March 2006 TC Larry
April 2006 TC Monica made landfall on a remote part of the east coast of Cape York Peninsula.
March 2010 TC Ului.
Feb 2011 TC Yasi.

GULF OF CARPENTARIA

5 Mar 1887 The 1887 cyclone
1923 Douglas Mawson Cyclone
1948 Bentinck Island cyclone
2–9 Feb 1964 Dora
5–6 Dec 1964 Flora
Feb 1971 Fiona
April 1982 Dominic
22-Mar-1984 23-Mar Kathy
6–14 Feb 1987 Jason
15–16 Dec 1989 Felicity
24-Dec-1992 Nina
5–6 Jan 1996 Barry
26 Feb 2001 Abigail.

HARDEN UP

PROTECTING QUEENSLAND



ARCHIVE: Known Impacts of Tropical Cyclones, East Coast, 1858 – 2008

By Mr Jeff Callaghan

Retired Senior Severe Weather Forecaster, Bureau of Meteorology, Brisbane

The date of the cyclone refers to the day of landfall or the day of the major impact if it is not a cyclone making landfall from the Coral Sea.

The first number after the date is the Southern Oscillation Index (SOI) for that month followed by the three month running mean of the SOI centred on that month.

This is followed by information on the equatorial eastern Pacific sea surface temperatures where:

W means a warm episode i.e. sea surface temperature (SST) was above normal;

C means a cool episode and

Av means average SST

Date	Impact
January 1858	From the Sydney Morning Herald 26/2/1866: an article featuring a cruise inside the Barrier Reef describes an expedition's stay at Green Island near Cairns. "The wind throughout our stay was principally from the south-east, but in January we had two or three hard blows from the N to NW with rain; one gale uprooted some of the trees and wrung the heads off others. The sea also rose one night very high, nearly covering the island, leaving but a small spot of about twenty feet square free of water."
Middle to late Feb 1863	A tropical cyclone (TC) brought damaging winds and seas to region between Rockhampton and Hervey Bay. Houses unroofed in several centres with many trees blown down. Ketch driven onto rocks near Rockhampton. Severe erosion along shores of Hervey Bay with 10 metres lost to sea along a 32 km stretch of the coast. Twenty acres of forrest were also lost to the sea. From 'Below these Mountains' By Lyall Ford published by Taipan Press Freshwater Qld.- At noon on Friday 13 th February 1863 two emigrant ships , the 'Everton' and 'Wanata', were struck by a cyclonic gale while anchored off the northern end of Moreton Bay and both had to run out to sea. The winds eased by noon the next day and they were able to return to the Bay. On the 16 th February the schooner 'Bounaparte' arrived in Moreton bay badly damaged. It had encountered the cyclone 60miles north of Breaksea Spit and lost both masts and sustained much damage to its bulwarks. A major flood then occurred in the Brisbane River with one ship coming adrift from its moorings and others had to be removed from wharves. Some stores in the town were flooded several feet deep.
17-19 Mar 1864	Long period of gales in Brisbane. Finished and unfinished houses, stores, sheds, awnings, and signs blown down; roofs and portion of roofs carried away; trees blown down and gardens devastated. Tremendous gales off the coast on 18th. Stone jetty washed away at Cleveland. Considerable wind and rain damage at Toowoomba and trees down at Gladstone. Severe flood at Maryborough reached 27 feet (8.2m) above low water. Water reached the eaves of cottages and one homestead was swept away. The barque <i>Panama</i> , 414 tons, was wrecked on the 18th on Breaksea Spit near Sandy Cape with 10 people on board. At 4 am on 19th wind shifted from ESE to NW with increased violence. The ship was then driven onto the beach and broke in two. One of the crew drowned and ten were lost and never seen again.
2-3 Mar 1867	A tropical cyclone brought gales for 24 hrs at Bowen (2nd) with many buildings unroofed, verandahs carried away and windows smashed. Boats smashed. Townsville hit (3rd) with almost

	every building blown down.
8 Mar 1867	Cleveland Bay Townsville. A strong gale from the WSW prevailed in the morning. At noon the wind strengthened and the rain became very heavy. The wind backed around to the SSW and continued to steadily shift around the compass. At 2pm the hurricane was at its greatest with pieces of 8 foot (2.4 metres) galvanised iron being whisked away like feathers and from 2 pm to 4 pm it was dangerous to walk the streets. Tents were blown down first, then the roofs and afterwards the houses. The town was a complete wreck. Rain fell in torrents..
21 April 1867	Severe flood and gale at Brisbane and Ipswich; loss of life occurred ; houses were unroofed and damage was done to the new Victoria Bridge works.
26-28 April 1867	Heavy gales and floods southeast Queensland. Wind lasted several hours at Ipswich (27th) and trees uprooted in all directions with some houses and cattle killed or maimed by falling branches. Great damage done to crops and railway embankments. At Logan (27th), trees uprooted in all directions. At Warwick verandah coverings torn to ribbons. Lowest wharves covered by floods in Brisbane. Many dwelling houses flooded. Fences were blown in all directions, windows were smashed and verandahs carried away. Trees were blown out of the ground. Wind lifted house off its foundations and carried it 9 metres. Barometer down to 993 hPa at sea level in Brisbane. Floods destroyed the bridge at Ipswich.
30 Jan 1870	Cyclonic southeasterly winds during the afternoon and evening at Bowen and then turned northerly. Much damage in the town. Assembly rooms and 2 houses blown down. Old telegraph office unroofed. In Herbert street all verandahs down, roofs partially stripped and windows smashed. One man was killed by falling house. Heavy floods south of Bowen. Disastrous flood at Clermont with 5 feet of water over town carrying away houses, furniture and fences. Five lives were lost at Peak Downs and four children were drowned at Lilyvale. In all 15 lives were lost. Thousands of sheep were lost.
20 Feb 1870	A TC hit Townsville lasting 10 hours. A steamer <i>Black Prince</i> and schooner <i>Wonder</i> wrecked. Nearly every house damaged and some completely unroofed . Large trees torn up by roots and streams flooded. Telegraph lines down. Heavy Floods.
5 Mar 1870	Early on 5th at Maryborough wind veered from S to NW and reached hurricane force by daybreak. Weaker houses were levelled to ground. Heavy rain fell. The wind veered to NE and eased but rain came down heavier. By 2pm 5th floods covered the wharf. Severe flood followed and the town cut off from communication with outside world. 13.9 inches (353mm) fell at Maryborough in the 24 hours to 9am on the 6th. Flood level exceeded 1864 level by 4 feet . Many people were rescued and one woman drowned . At Gympie 4 houses were badly damaged by the winds and many trees were blown down. Floods there came up quickly on the 6th and flooded many buildings.
28 Dec 1873	A TC hit Bundaberg and Maryborough. The worst began at Bundaberg at 5am 28 th and 13 houses were blown down and some entirely destroyed . Hotels and commercial buildings were unroofed and farm houses were blown flat to the ground. Window panes were blown out of buildings. At Maryborough a Southerly gale started Saturday night and blew all Sunday (28 th) but no damage was mentioned. The vessel <i>James Patterson</i> encountered strong SE wind Wide Bay and wind veered to E and N ending in NW gale. Hove to off Wide Bay Bar for 24 hours and crossed bar at 3.00 pm 28 th . Schooner James Nash still missing 26th January 1874 with 7 on board. They left Baffle Creek for Maryborough on the 29 th December 1873.
22 Jan 1874	A furious gale along the northern coast destroyed much property. At St Lawrence a new wharf disappeared, the Post Office and miles of telegraph lines were blown down and several stores were wholly or partially destroyed . Trees for miles around were uprooted. The schooner <i>Countess of Belmore</i> was badly damaged. At Keppel Bay some of the houses were partially unroofed and the jetty was washed away. Although it was neap tides the sea rose 3 feet higher than ever before. The ketch <i>Hibernia</i> was driven ashore on Northwest Island (all safe). The <i>James Patterson</i> grounded on Masthead Island (all rescued).The S.S. <i>Lord Ashley</i> was caught in it and was almost wrecked.
25 Feb 1874	The ship <i>Southern Belle</i> encountered a furious gale off Frazer's Bay and narrowly escaped shipwreck. She was eventually towed into Keppel Bay on 5 March. The schooner <i>Chance</i> returned to Maryborough on 26 th Feb disabled. It was 200 nm on its way to Noumea when it encountered

	a gale which lasted for 2 weeks. The schooner <i>Io</i> struck SE gales on the 21 st at Refuge Bay and NE gales off Gladstone on the 24 th / 25 th .
24 Feb 1875	Steamer <i>Gothenberg</i> wrecked off Cape Upstart (near Ayr) in TC 102 lives lost . On the 23rd NE gales and 8 inches (203mm) at Rockhampton. Gales and heavy rain at Maryborough. Winds at Maryborough were stronger on the 24 th with flood rains. Flood there reached it highest point on the 28 th at 28 feet (8.5m) above normal low water. At Pinalba on 25th wind shifted from NE to SE and increased to a heavy gale with continuous rain. Heavy erosion on the beach. On the 26th gales shifted to NE. On the 1 st March R.M.S. <i>Brisbane</i> experienced a very heavy gale on the voyage from Sydney. Both saloon and second class cabins were flooded, the deck planks were damaged and several horses and sheep drowned.
16 Mar 1875	Gales and heavy rain at Maryborough. Verandahs were blown down. A vessel at sea reported:- SE gale off Wide Bay bar on the 16th. 17th E and stronger gale with huge seas washing boat off deck.. 4pm 17th wind lulled and turned W. 7pm 17th hurricane force WNW winds. Midnight moderating weather.
17 Feb 1876	Severe gale at Townsville with much damage in the town. On the 16 th at Bowen a child was killed and a number of people were injured. In Bowen several buildings including the hospital were blown down while others including the Council Chambers and the Lands Office were shifted or greatly damaged. The hurricane was of short duration in Bowen (where there was 2 fatalities) with many injured by flying debris and a horse was cut in two by a flying sheet of iron.
21 Mar 1876	Heavy gale at Townsville. SSBanshee wrecked at Hinchinbrook Is with seventeen persons drowned.
8 Mar 1878 -15.5(-15.2) End W	TC hit Cairns. Iron roofing flying through air many properties destroyed. Steamer Louise, and sailing vessels Merchant, Kate Conley and Hector Miss were sunk in Cairns inlet with no survivors ever found. See "Ships and cedar cargo caught" from Johnstone Shire Story.
2 Feb 1882 -1.3(-1.0) Start C	TC hit Cardwell with considerable damage. Wind commenced Thur 2 nd and blew all night and throughout Fri there were many squalls. Shewroft's Hotel and 3 houses were blown down and a number of other houses unroofed.. There were sheets of iron flying all over town. A boatshed was demolished, the boats were broken up and the jetty was swept away. The vessel Victory heading south anchored under South Barnard Island near Innisfail for shelter, but after losing both anchors headed for Cardwell. At Dungeness near Hinchinbrook, the steamer Kent was blown over the mangroves into the scrub. The Gunga heading south took refuge in Mourilyan Harbour. Plantations in the Herbert were badly damaged.
30 Jan 1884 -12.5(-10.9) Start W	TC hit Bowen gale commenced Tue night 29 th . On the 30 th an Auctioneers premises, A Merchants premises, the R.C. church, a brick primary school and 2 Banks were blown down . The brick 2 story Supreme Court, Immigration Depot, Magistrates Quarters, 'Times' Office, Bank of NSW and all the hotels were unroofed and badly damaged . Numerous other buildings in the town and country were blown down and 100 people were left destitute . Only 3 houses were left standing . The wind drove the sea on shore to the fences of the telegraph office (50 yards from the shore) . The sea broke over the jetty . The Steamer <i>Fiado</i> was taking on board a cargo of frozen meat from the Poole Island Meatworks and the jetty there was washed away and the <i>Fiado</i> was beached. Reports of an estimated 3 metre storm surge at Poole Is from Holthouse's book <i>Cyclone</i> . The steamer launch and all punts disappeared. The Pilot Shed was flattened and all pilot boats and the cutter were swept away. All boats were broken up. Many cattle and horses were killed by falling trees. Further inland at Ravenswood on the 30 th the R.C. church was levelled, the priest's house partially blown away and the Anglican parsonage and a shop were unroofed. Many private houses were unroofed and a few entirely blown down. There was a heavy flood at Mackay.
21 Jan 1887 12.2 (12.5)	Heavy gale and rains over southern part of Queensland with intense damage. 19th-21st - W to NW gale off Double Island Point with telephone lines down along the coast. A ship, 43 km ENE of Noosa at 8pm 20 th read bar 1002 hPa had SE winds and heavy NE swell. Bar 998 hPa at midnight with hurricane force winds then a lull with bar down to 992 hPa . Then the wind turned NE with gales at 8pm 21 st moderating by 8am 22 nd . At 9am Friday 21 st 2 inches or 51mm of rain past 24 hours in Brisbane and then 8 inches (203mm) in succeeding 12 hours with gales. No major wind damage though easterly gales at Sandgate had seas breaking over the jetty and all the bathing houses were washed away - large trees were blown down in different directions. A man was drowned at Woolloongabba and another at South Brisbane . At Goodna

	<p>flooded houses were under water. Rail lines cut out of Brisbane - Bowen Bridge 5 feet (1.5m) under water 4pm a large number of people were rescued from Breakfast Creek and a house floated into the Creek. Many people were rescued from the South Pine River and 2 miles of railway was washed away between Toombul and Bald Hills.</p> <p>On Saturday 22nd there was little rain in Brisbane with the low overland to the west. Many people rescued from floodwaters around Breakfast Creek.</p> <p>Two men were missing at Gold Creek reservoir believed drowned when water in the form of a large bore came over the by-wash . The baths were carried away at Ipswich. Three girls aged 7 to 10 were missing believed drowned. 23rd - Very high flood Brisbane crewman of barque Afton drowned after the boat was swamped in fast flowing Brisbane River. 24th - 18 inches (457mm) in 24 hours at Brisbane - railway line washed away Laidley- boats rescuing people South Brisbane- two men drowned- enormous amount of timber lost to sea - There was fearful loss of property on the Logan River with the destruction of the railway Bridge. At Logan a family of five were drowned, two men were drowned, a man and his son were drowned crossing a creek and 60 to 70 families were washed out of their homes. 25th - The steamer <i>Barrabool</i> ran aground in Brisbane River and two sailors drowned. Flooding also at Bundaberg, Maryborough and Gympie (river 40 feet (12.2 m) above normal). There were stock losses in the thousands in the Warwick area. One newspaper (Maryborough <i>Chronicle</i>) had the loss of life around Brisbane as 70.</p>
8 Feb 1887 11.0 (11.1)	SE to ESE gale with shipping halted and a 17 ton ketch lost on Wide Bay Bar.
22 Feb 1887 11.0(11.1)	Cyclone off Bloomsbury (north of Mackay) 23rd. SE gale off Woody Island (Hervey Bay) 22nd with floods Gympie, Maryborough and Tewantin. Maryborough 13 inches (335mm) in 24 hours on the 26th. Heavy floods at Maryborough and Bundaberg on the 27th.
17 Feb 1888 -2.2(-5.6) C	TC recurved just east of Mackay. <i>Geelong</i> ran aground 2 drowned . <i>Youyang</i> dismasted. Several Mackay houses completely demolished. Wharves awash at Rockhampton (20th). Flooding at Pialba with water three feet over the road at Stockyard Creek and rising and trees blown down in all directions. Enormous Breakers were raging outside of Fraser Island
28 Jan to 1 Feb 1890 20.8 (21.9) C	TC off North Coast 28 th (the bar at Townsville on the 28 th was 995.6 hPa), Central Coast 30 th and South Coast 1 st . Floods at Maryborough 28 th , the wharves were under a foot of water and a man drowned in Alice Street . In Bundaberg there was one known death and Plantations, Sawmills, a Foundry and farms were badly damaged by floods and 200 houses were affected some submerged to the roofs. Easterly gales reported at Burnett Heads. There were floods at Gympie and Brisbane peaking on the 25 th with 4 to 7 feet of water over Mary Street at Gympie. At Mackay gales and heavy seas disrupted shipping on the 29 th .
11 Mar 1890 14.3(10.4) C	<p>TC crossed S Qld coast. Brisbane River Flood. 24 hour rainfall totals to 360 mm. Barometer at Maryborough 996 hPa 9.30 pm 9th with freshening and veering SW to NW winds bar down to 985 hPa 7 am 10th. Flood at Gympie 47 feet (14.3 m) above normal. Cyclonic affects Gungalda 9th/10th.</p> <p>Storm surge Sandgate 9/10th. Record flood Lockyer Valley 83feet above normal Lowood Bridge 11th, Brisbane flood 5.33m (13th) with 5 people drowned. The <i>Agnes</i> which survived the July 1889 winter cyclone foundered north of Brunswick heads with all hands lost. 3 bodies were washed ashore on the 12th and the other 5 bodies were never found.</p> <p>01Z 10 Mar 0.52m Surge Moreton Bay</p>
24 Mar 1890 14.3(10.4) C	<p>TC crossed coast near Cardwell 24th and recurved over Fraser Island 28th bringing disastrous floods over much of Queensland and northern NSW. At South Barnard Island: two men were drowned when their boat was swept away after losing its jib. The house on the Island was blown down and the wife of one of the men was stranded for 2 days with her 4 children. Two aboriginal beche de mere fishermen were drowned.</p> <p>Cardwell: the winds started 7pm Sunday 23rd and were at their worst until 7am Monday 24th. Only 4 houses were left standing, the rest were wholly blown down, unroofed or destroyed. Two Govt. boathouses were destroyed, the jetty was wrecked, the Schoolhouse blown down, and the Courthouse almost blown away. The tide came up over the bank.</p> <p>Dungeness: (mouth of Herbert R.) The sea came up high over town and all people left the town. All buildings were more or less damaged with houses and shops blown down and Customs House unroofed. The schooner <i>Mary Ellen</i> was wrecked in the Herbert R. and 4 punts were wrecked. At Halifax a man was killed when a house blew down on him and a man was drowned at Victoria</p>

	<p>plantation. At Ingham the C. of E. was levelled to the ground.</p> <p>Townsville: a gale blew all Sunday 23rd night until 9pm Monday 24th with 15 small houses wrecked by the wind, 30 homes blown off their blocks, 40 verandas wrecked and 3 or 4 houses washed away. 110 people were homeless with the whole of Hermit Park under water. Heavy seas rolled over the top of the Breakwater which was 6 feet above high water spring tides. Two boats sank in Ross Creek, the Launch Eleanor was lost, the ketch Snowdrop lost and the Customs launch sank. A man was washed off a cart and drowned and a woman was killed when her house caved in.</p> <p>Burdekin: 431 mm in 24 hours at Ravenswood. A man drowned at Sellheim, several houses disappeared, a man drowned at Sandy creek and a rescuer drowned. Ayr: Church razed to the ground and the Police building unroofed. Mackay: man drowned.</p> <p>Emu Park: Wednesday 26th 15 inches (381mm) in 12 hours and man killed by lightning 6.30 am Wed. Schooner <i>Matha Reid</i> dismasted and captain knocked senseless and thought to have died..Darling Downs: 2 policeman missing in floods near Dalby and at Roma 100 people were evacuated from floods. Beaudesert: man drowned in creek 28th. Stanthorpe: Numerous buildings washed away, man drowned and a large number of stock lost.</p>
2 Apr 1892 6.9(9.3) C	<p>TC recurved over Brisbane with 2 deaths. Wind raged from 8am to 4pm Sat 2nd and the lowest bar at Brisbane (corrected to sea level) was 991.5 hPa at 2.30 pm. Clement Wragge quoted the wind strength in Brisbane 60 to 70 knots. 4.94 inches (125mm) of rain fell in Brisbane during the storm.</p> <p>Details of damage in inner parts of Brisbane: City - Fences down, glass cracked, iron structure blown over and landslide at North Quay. New Farm area -Several houses partially unroofed, balconies badly damaged and a chimney crashed through a house at Bowen Tce. Chimney blown over at Teneriffe. Sth Brisbane- Sheds and outhouses unroofed, fences down, house unroofed Julia St and Church destroyed on top of Highgate Hill. A house was badly damaged at Coorparoo. Kangaroo Pt. - Several houses destroyed and unroofed, St Marys C. of E. (stone building) badly damaged. Spring Hill- Roof from house hit horse and killed it. Another house unroofed in Upper Edward Street and fences down. Botanic Gardens- Large shade trees levelled, snapped off close to roots. Red Hill- Shop badly damaged in Caxton Street, two shops completely demolished Musgrave Rd, a veranda blown away in Cairns Sr and a house destroyed corner of Latrobe Tce and Enoggera Tce. Toowong- Large trees uprooted, sheds blown off stumps and badly stripped. Brisbane River- wind blew funnel of <i>Bonito</i> three of the crew blown overboard and one drowned. Moreton Bay- A steamer on a reef near Mud Island. Samford Rd -Farmer killed in when cart overturned trying to dodge fallen trees. Breakfast Creek - rose rapidly at high tide at noon and kept rising during the afternoon flooding low parts. House blown over Eildon Hill and some houses partially unroofed and verandas wrecked at Hamilton. Runcorn- Bone Mill unroofed. Beenleigh - A great deal of damage iron ripped from many roofs, windows blown in, trees uprooted and fences blown down. Southport- at 8pm Fri 1st SW wind turned SE by daylight and at 10.30 am from the east. The worst wind was from 1pm to 2pm Sat 2nd. Immense tree were blown down, kitchen removed from house in Nerang St, a house on the Esplanade lost most of its roof, a stable was unroofed, the windows of the hotel were blown in, the veranda of a shop was wrecked and a house was partly unroofed. The sea came up over the Esplanade in places and 7 chains of the seawall was washed away. Tweed Heads- 2 hotels and the Police Station badly damaged, two houses were dismantled, hardly any building escaped some damage. 3 sea vessels were grounded. Some of the worst damage was Saturday night 2nd with a tornado. Redland- Every house suffered, a house on the Esplanade was unroofed, stables and outhouses were unroofed or blown down and a cutter was grounded. Schooner <i>Bellringer</i> with cargo of 49,000 feet of cedar driven ashore at Stradbroke Island.</p>
21 Jan 1893 11.3(7.4) C	<p>TC passed just east of Brisbane where mslp was down to 985.1hPa at 3am 22nd. At 5.30 p.m., Saturday- Barometer at Double Island Point was 983.7hPa, whole gale from south with tremendous seas. Many trees uprooted, signboards carried away and a few houses in the suburbs demolished. At Maryborough on the 21st winds were southerly in the morning, west in the afternoon and turned cyclonic northwesterly in the evening with the greatest force at night. There were 2 deaths N NSW. The 285 ton wooden steamship <i>Tweed</i> was destroyed by waves on the 21st at Byron Bay having been grounded 2 weeks earlier by large seas. 0.58m surge Moreton Bay 2000UTC 21st.</p>

1 Feb 1893 7.7(5.9) C	TC crossed the coast near Yeppoon smashing buildings and uprooting trees. Bar dropped to 969 hPa when TC passed over the <i>Buninyong</i> near the Northumberland Group. Wrecked 225 ton steamer Dickey on Dickey Beach Caloundra. TC headed south and Crohamhurst (on Stanley R) recorded 907 mm of rain in 24 hrs to 9am 3 Feb. A 15.2 m high wall of water was observed to roar down a Stanley R gorge. More than 150 houses washed down Brisbane R. Indooroopilly Railway Bridge and the Victoria Bridge both washed away. Flood height reached 9.25 m on Port Office Gauge. Seven men drowned in an Ipswich Colliery. Four children drowned on the 3rd and a policeman drowned in a rescue attempt. On the 4th a man drowned after rescuing his father at South Brisbane. On the 6th a man was found drowned at O'Connell Terrace, a boy drowned at Petrie Terrace, a man was drowned at Rosalie and two men were drowned when a punt capsized at West End. On the 7th two men were found drowned at the Valley and Bowen Bridge and three men were lost when a boat capsized in the Brisbane River. At Maryborough two men were drowned and a family missing believed drowned while trying to cross the river. Unprecedented flooding at Maryborough with the Mary river Bridge washed away. The river peaked there at 4pm on the 5th with more than 130 families homeless after more than 130 homes were swept away. At Gympie numerous houses were washed away with a large number of homeless. There were other deaths in outlying areas.
11 Feb 1893	Short lived TC crossed the coast at Bustard Heads adding to Brisbane Floods. Schooner (150 tons) wrecked at Inskip Point and a body of a man washed ashore. Bar dropped to 982 hPa on the <i>Fitzroy</i> in Hervey Bay on the night of the 10th/11th. 11Z 11 Feb 0.64m Surge Moreton Bay
17 Feb 1893	TC crossed the coast at Bundaberg. Floods in Brisbane R rose again and at 1020 am 19 Feb came within 25 cm of peak reached a fortnight earlier. Two children drowned. TC induced tornado in Moreton Bay levelled 20 m wide path in forest and lifted boats out of water. Blew down several houses. House at Redcliffe blown along some distance and buggies lifted into trees. Floods from Rockhampton to Grafton. 05Z 17 Feb 0.61m Surge Moreton Bay
19 Feb 1894 10.0(11.0) C	TC passed east of Brisbane. 0.58 m storm surge Moreton Bay tide gauge. There was an exceptionally high tide Monday (19 th) morning at Southport-The low lying lands along the Esplanade were inundated, several bathing houses were destroyed. There was a very high tide at Cleveland with water flowing over the point. Also high tides in the Brisbane River with low lying wharves under water and ferry landings unapproachable.
13 March 1894	TC passed east of Cape Moreton with severe gales.
6-8 Apr 1894 -3.0 (-0.8)	The western edge of tropical disturbance <i>Zeta</i> (named by Clement Wragge) struck the coast in the vicinity of Cape Tribulation at 4.30pm 6 April. Unspecified damage was reported at Cooktown by the Courier Mail. Herberton reported 8.13 inches of rain in the 24h to 9am 7 April and Ingham 5.27 inches in the same period. During 7 April the Wild River poured over the bridge at Herberton. On the night of the 7 th the Burdekin rose 20 feet over the railway bridge and was still rising. At Charters Towers the Burdekin rose 45 feet in 24h and was 40 feet over the rails, which was the highest for 13 years. At Townsville on the night of the 6 th the winds increased to gale force and the next morning waves broke over the eastern edge of the jetty. At Geraldton (Innisfail) the river on the 7 th reached a record level for the time. 3 feet of water came into in the Goondi Mill and the wharf, which was 40 feet above the level of the stream was submerged by 4 feet. All the lower parts of the Geraldtonj were under water on the morning of the 7 th . 130 people took refuge in Public Buildings and several houses were almost completely covered by water. One man lost his life during rescue work while his mate had a narrow escape. 300 bunches of bananas were washed away. The gales blew down large areas of sugar cane.
<i>Sigma</i> 26 Jan 1896 1.3(0.9) W	TC passed just to northeast of Townsville . Bar at Townsville dropped to 991 hPa . Ships were wrecked in the harbour, fences were laid flat and verandahs stripped off houses. Trees 6 ft in circumference were blown down. Seas were enormous and 510 mm of rain fell in Townsville during the cyclone. Floods and storm surge flooded the lower parts of Townsville with over 1.8 m of water. 3 miles of suburbs became an inland sea with large waves breaking on the banks. Seventeen people drowned as a result and one sailor was killed .
<i>Eline</i> 4 Feb 1898 6.3(10.5) C	TC recurved over Mackay. Queen's, Riverview and Belmore Arms Hotels were unroofed and their verandas were blown away. The Courthouse was blown down, two churches, the blacksmith's shop, the Brewery, a stable, a shop and the Newspaper office were wrecked and another church was forced off its blocks. A store, a wharf, the Railway offices and many houses

	were damaged. Two houses collapsed. Other buildings lost balconies, roofing iron and outhouses were blown down. The 24 hour rainfall in Mackay to 9am 5 th was 12 inches (305 mm) . Floods shortened the path of the Pioneer R to the sea by 4.8 km (its present course). Lowest bar reading was 984 hPa . All the buildings on Flat Top Island were destroyed except the lighthouse.
12 14 Feb 1898 6.3 (10.8) C	Cyclone of monsoon origin tracked from the continent over Brisbane and down the NSW coast. The bar (at sea level) in Brisbane at 4pm Sunday 13 th was 997.7 hPa. The brig Amy (220 tons) after leaving Woolongong at 9am 14th was driven ashore near Bulli and the crew of 8 all drowned. Another man died on the beach from shock. The brigantine <i>Malcolm</i> foundered at Bulli and the crew of 6 hands were lost and 500 feet of the Bellambi jetty was washed away. The ship <i>Atocama</i> was abandoned on the 12 th 500 nm off the coast and the Captain and 3 of the crew were saved but 13 of the crew were lost at sea . The Schooner <i>Mary Peverill</i> was beached in the Whitsunday Passage though the crew survived. Two men drowned at Bungendore (near Canberra) in floods on the 15 th . In Sydney trees were uprooted, verandas were carried away and the ferries were suspended. The yacht <i>Greyland</i> was capsized (crew saved) in the harbour. There were 30 known deaths associated with this event.
6- 7 Mar 1898 19.2(12.2) C	TC <i>Luita</i> passed east of Brisbane and recurved towards SE. 508 mm of rain recorded in 48 hours at Crohamhurst. Water 4 feet (1.2m) over wharfs at Maryborough. Gales and very high seas along the South Coast. 3.27m Flood Brisbane.
<i>Mahina</i> 5 Mar 1899 13.8(9.1) End C	TC crossed the coast at Princess Charlotte Bay. Barometer read at 914 hPa in the eye . 307 known fatalities (295 Asian and Island origin and 12 European origin). Additionally about 100 Aborigines were swept out to sea or killed by widespread falling trees in Forest country. 55 schooners or other large vessels were lost. 55 luggers were lost and 12 badly damaged. 42 other vessels were wrecked and 12 badly damaged. There was a huge storm surge of 14.6 m on Barrow Point. On Flinders Island porpoises were found 15.2 m up on the cliffs.
<i>Leonta</i> 9 Mar 1903 17.6 (8.1) End W	TC recurved over Townsville. Bar read down to 965 hPa . Hurricane force winds were SW to S. Much severe wind damage with flying roofing iron, buildings blown over and verandahs wrenched away. The Townsville Hospital with 36 cm thick brick walls was wrecked by the wind and the brick Grammar School was destroyed . Eight people were killed in the hospital and there were 10 deaths in total .
27 Jan 1906 -3.5(-8.0) End W	TC crossed the coast at Cairns. The wind commenced at 2.30pm and reached hurricane force until 9pm the town with iron was flying all directions. Wind moderated around 4am Sunday (28 th). Sheets of roofing iron off houses, parts of verandas and branches off trees were strewn about the town. The storm was most severely felt in Chinatown, half of which was completely wrecked. Rhodes Hotel was unroofed and had several doors and windows blown in. The Crown Hotel stables were completely destroyed. The Newmarket Hotel had its roof lifted off. A boarding house was unroofed. The Methodist Church was blown off its stumps and the back of the building was destroyed. The Commercial premises of Preston and Co. was destroyed. The Commercial premises of Smellie and Co. lost its veranda and sustained serious roof damage. The Commercial premises of Newell suffered considerable damage. The 'Morning Post' lost its veranda. Till's sawmill was badly damaged. Private dwellings suffered damage and all old buildings suffered some damage. Many buildings destroyed in Innisfail and widespread damage to canefields and banana plantations.
TC 4 Mar 1906 - 5.2 (-7.1)	TC crossed the coast near Cairns and wrecked the town of Croydon. At 7am 4 th cyclonic winds began at 10 am there was a lull and then the winds resumed from the opposite quarter. Two churches were wrecked and another was blown off its stumps. The Post office lost part of its roof and the Court House was damaged. Three hotels were severely damaged and only portions of another two were left standing. Two houses were wrecked and all buildings more or less suffered with scores of people homeless. Severe damage also in surrounding towns. At Normanton the wind started Saturday night 3 rd and continued overnight though damage was slight with only portions of roofs dislodged. There were gales at Mackay on the 3 rd and the 5 th with the river in flood. A bridge was washed away at Cattle Creek.
19 Jan 1907 5.1(3.8) C	TC crossed the coast just to the north of Cooktown. Many buildings were totally wrecked including 3 churches, two schools, 4 halls, 3 hotels, several shops and a large number of houses . There were 9 deaths .
12 Mar 1908 0.2(8.2) C	TC crossed the coast near St. Lawrence. Widespread damage to trees, buildings, fences and telegraph lines between St Lawrence and Nebo. 3.59m Flood 15 March Brisbane. Floods also

	Fitzroy, Burnett, Mary, Logan and Albert. Serious flood at Rosewood.
28 Jan 1910 5.6(8.5) C	TC crossed the coast to the north of Cairns on the 27 th , then recurved west of Cairns before passing back out to sea on the 30 th . On the 26 th Strong gale at Cooktown from the SSE bar 994.9 hPa, two boats blown ashore. On the 27 th W to NW Gale at Cooktown SE gale at Cairns. All the pleasure craft along the Esplanade at Cairns were swamped. Heavy gale and tremendous seas at Cairns. <i>Bombala</i> ran aground. On the 28 th Heavy rains in Townsville and Ross Creek and Ross River in flood. Banked up by a 10 foot tide the river covered large portions of Hermit Park and South Townsville. 30 th at 9am bar at Mackay 990.9 hPa with strong SW winds. At 9pm a whole gale from ESE at Sandy Cape. There were washout and railway line flooding in the Rockhampton area. There was a major flood at Mackay with damage to the bridges and the railway and stock losses.
11 Jan 1911 3.2(6.9) C	TC passed from Gulf south through inland Qld. Severe damage at Marburg and whole gale SE Qld coast. Landslide blocked No. 10 Tunnel on Cairns to Kuranda railway. Rail washaways on Cloncurry line and in the Mackay district. Sea-baths damaged at Sandgate. Ships unable to enter Moreton Bay.
10 Feb 1911 1.6(2.8) C	TC passed to the east of Pt Douglas. 3 buildings partially unroofed. Sugar cane damaged. Another landslip blocked No. 10 Tunnel on the Cairns to Kuranda rail line. 17 inches (432 mm) of rain in 24 hours at Redlynch near Cairns.
16 Mar 1911 3.5(2.4) End C	TC crossed the coast near Pt Douglas. Bar read at 959.7 hPa by ship at Low Woody Is (9 nm south of Cape Flattery). Two lives were lost at Pt Douglas and most buildings in the town were levelled only 7 out of 57 houses left standing with 100 persons left homeless. Similar damage at Mossman . At Cairns balconies stripped off buildings and roofing iron lost and verandahs collapsed. The Empire Hotel had the Balcony torn off and one wall stove in. The cargo sheds on the wharf were badly damaged and one shed was wrecked. Considerable damage was done to houses, outhouses and stables in the suburbs with one house lifted completely off its stumps. The Chillagoe Company Warehouse and the Harbourmasters office were unroofed. Two boarding houses were badly damaged. A whole row of shops in Spence Street were badly damaged by one terrific gust. At Nelson on the Mulgrave, the hotel was wrecked, the ventilating roof of the Mulgrave Mill was taken away and a great deal of damage was done to the residences. Widespread damage to plantations near Cooktown by winds and floods.
23 Mar 1911 3.5(2.4) End C	TC wrecked Yongala , 3664 tons, just to east of Townsville 120 lives lost. One of the searchers reported that a few miles south of Cape Bowling Green a vast swathe was cut through the bush with every tree uprooted or snapped off. Another searched found the northern side of Cape Upstart swept clean of trees, snapped off 8 feet (2.5 m) from the ground.
7 April 1912 -21.2(-14.3) End W	TC recurved east of Cairns. Several houses badly damaged at Innisfail. Crop suffered badly, 40 % loss of banana and sugar crops. 4 boats lost.
16 17 Jan 1913 -3.5(-5.5) C	TC recurved seaward of Bowen. Shipping delayed along the Queensland coast South of Bowen due gales and huge seas. Floods and rail washouts Bundaberg area. Rosedale recorded 19 inches (483mm) and Bundaberg recorded 30.75 inches (781mm) in 41 hours including 10 inches (254mm) in 8 hours. A man was drowned in Childers. A child was drowned at Baffle Creek when a tree fell on a boat containing a family of 5.
22 Jan 1913 -3.5(-5.5) C	A cyclone moved eastward north of Cooktown. Cyclonic winds at Cairns. Big seas on Cape Grafton, the breakers on Barron Spit were visible for miles and all low parts of the town submerged. The Harbour Board flats were a sea of water.
31 Jan 1913 -3.5(-5.5) C	TC crossed the coast near Cairns. Front of Stock Exchange blown in , the Rice Mill on the Esplanade was severely damaged, balconies were stripped off buildings, two houses were lifted completely off their stumps, a sawmill was unroofed and other sheds were unroofed. Many trees were blown down. The sea came onto the land with a strong easterly gale on the morning of the 31 st damaging many boats and smashing the seawall. Banana plantations were destroyed at Freshwater near Cairns. All trees were blown down on Green Island and it was denuded of vegetation. Seas broke right over Upola Bank and thousands of dead birds were found lying on the sandbanks. At Yarrabah the boy's Quarters were blown down, the girl's Quarters were badly damaged and out buildings were unroofed and a baby died . At Innisfail balconies and roofs were

	lost though most damage was caused by severe floods. Goods and Buildings washed down River. Four lives lost. In the district 90% of banana crop lost and there was severe damage to other crops. <i>SS Innamincka</i> grounded. Record floods Cairns and Malanda districts with much damage to roads and bridges and railway lines. Schooner <i>Dancing Wave</i> missing. At Innisfail 100 houses were under water , at Ingham 25 feet of water was over the bridge and at Cairns the Mulgrave was 20 feet over the railway bridge.
9-11 Feb 1915 -2.2(-14.6) Start C	TC moved parallel to the coast south of Townsville. At Bundaberg SE gales blew all night 8 th /9th and on the 9 th veered to westerly reaching hurricane force and the bar there went down to 983.1 hPa at 1pm. A number of houses suffered considerable damage there. The roof of a shop blew into the main street and a new building (almost erected) was blown down. There was much damage to orchards and many trees were blown down in the surrounding country. There were cyclonic conditions at Hervey Bay on the 10 th with the school being blown down at Pialba. Moderate flooding in the Mary River and local flooding in coastal districts south of Mackay. Two men drowned in the Stanley River at Woodford where they recorded 1146 points (291 mm) in the 12 hours to 9pm 9 th . At Eumundi a large number of trees were downed and stock were lost. On the 9 th at Manly gales and rough seas swept boats from their moorings and a wall was damaged. There was a 0.58 metre storm surge on the Old Pile Light tide gauge in Moreton Bay at 0907 UTC 11 February.
27 Dec 1916 15.4(10.1) C	TC crossed the coast near the Whitsunday Is. Dent Is recorded 958 hPa . Lighthouse installations at Dent Is and Flat Top Island were badly damaged. TC then moved into the Clermont area causing disastrous floods and the loss of 62 lives.
15 Dec 1917 22.5(19.3) End C	TC crossed coast south of Bowen. Gales heavy rain.
21 Jan 1918 14.6(17.9) C	A TC crossed the coast just north of Mackay. The lowest pressure of 932.6 hPa was recorded at 7.30 am 21 st by a private observer (T. Croker) about 5 km from Mackay north of the river. Before the reading the winds were cyclonic south-easterly then there was a sudden lull and the winds turned northerly in a very short space of time the winds reached cyclonic strength. The Post Office barograph fell to 944.8 hPa at 4am 21 st but was prevented by the flange from falling below 944.8 hPa.. The wind changed from the southeast to the north around 8am 21 st with no abatement and increased in violence. The Harbour and Rivers Engineer's to Parliament stated that the cyclone was accompanied by an elevation in sea surface in the form of a wave which at Mackay slowly rose for about an hour reaching a height of 7 foot 9 inches (2.36 metres) above the highest spring tide level. Hardly any building in Mackay escaped damage and a thousand were destroyed. Three steamers were sunk and three were grounded. The cyclone brought a 3.6 m storm surge into Mackay. An account by a Miss Moreton stated that the tidal water reached her house at 4.45 am and she drifted on floating debris until 8.50 am. One observer saw a wall of water 7.6 m high sweep over the beaches towards the town at 5 am 21 January at the height of the cyclone. In 1987 a survivor recalled seeing waves 2.4 to 2.7 m high breaking in the centre of Mackay. Severe storm surge damage was also experienced at Slade Point, Blacks Beach and Eimeo Beach north of Mackay. The cyclone was very large in size and destructive winds extended down to Rockhampton with the worst damage occurring after the winds shifted from SE to NE . Several houses were unroofed in North Rockhampton and along Lakes Creek Road. Trees were uprooted including large jacaranda trees. Many houses had verandas blown off and lost portion of their roofs. Two men were drowned at Rockhampton. At Yeppoon, a man drowned, trees were uprooted, three buildings were badly damaged or unroofed and several houses were lifted off their blocks. At Emu Park many houses were badly damaged and the fishing suffered severely. At Mt Morgan roofing iron was lifted off buildings and at Clermont thousands of trees were uprooted along all the surrounding roads and buildings lost roofing iron. Widespread flooding occurred in Central Queensland including a record flood at Rockhampton with widespread property damage. In Mackay the death tally was 20 on the 31 st January 1918 and it is now though that a total loss of thirty people lost their lives in the cyclone and the subsequent floods in Central Queensland.
10 Mar 1918 -2.0(10.5) C	This cyclone is widely regarded as the worst cyclone to hit a populated area of Queensland. It crossed the coast and passed directly over Innisfail. Pen on Post Office barograph was prevented from registering below 948 hPa by flange on bottom of drum. 926 hPa read at the Mourilyan

	<p>Sugar mill at 7 pm 10 Mar. The eye wall reached Innisfail at 9 pm. In Innisfail, then a town of 3,500 residents, only around 12 houses remained intact the rest being blown flat or unroofed. A report from the Harbours and Marine Engineer indicated that at Maria Creek the sea rose to a height of about 3m above high water (If this refers to HAT the water was 4.65m above the tide for that day). Around 4.40pm 10 Mar at Bingil Bay a tidal wave was seen surging in from the east into Bingil Bay taking the bridge over the creek 400 m inland. Mission Beach was covered by 3.6 m water for hundreds of metres inland, the debris reached a height of 7m in the trees. All buildings and structures were destroyed by the storm surge in the Bingil Bay Mission beach area. The surge was 2.6m at Flying Fish Point. Babinda also had many buildings destroyed and some reports suggest that not one building was left standing. There was widespread damage at Cairns and on the Atherton Tablelands. Recent reports suggest that 37 people died in Innisfail while 40 to 60 (mostly aborigines) lost their lives in nearby areas.</p>
3 Mar 1919 -12.8(-9.0) W	TC crossed the coast at Maryborough. Serious washaway on Mary Valley line.
3 Feb 1920 -1.7(-1.4) W	<p>Disastrous TC crossed the coast north of Cairns. Barometer at Pt Douglas dropped to 962 hPa and the town was practically demolished.</p> <p>At Cairns the bar dropped to 29.17 inches or 987.8 hPa and the southeasterly winds were strongest from 2.30am Tues 3rd to daybreak. A Café was razed to the ground, most of the houses along the waterfront were unroofed, 2 hotels were badly damaged, a building was overturned, street trees were blown down and windows were blown in including two of plate glass. There were many heroic rescues including an old man plucked from a house just before it toppled over and a girl ran through the storm at 2am to get assistance for a cyclist with a broken leg. A number of the rescuers were injured by flying debris. One hour after dawn the wind shifted to north-easterly gales which swept a high tide over the seawall and into the streets becoming 4 feet deep over the Esplanade and 2 feet deep in other parts. In the Main Street in town one side of the roadway and the footpath were flooded by the sea. The seawater subsided at 10am. Many people took refuge from the sea on the upper portions of their homes and several people were rescued including 2 women who gave birth during the night. The sea baths and the attached house were washed out to sea. Boats and boatsheds were badly damaged. And ships anchored in the harbour were destroyed. A large valuable quantity of cedar logs were lost from the wharves to the sea.</p> <p>Nearly every house in Kuranda was unroofed. At Mt Molloy, with the exception of one small house, all houses including the Post Office were blown down. At Chillagoe, between early Tues and midday, the Hotel, Butcher Shop, C. of E., The Theatre, Bakery, School of Arts and several houses were destroyed. At Mareeba several houses and the Nurses Quarters were unroofed. A few places were unroofed at Herberton. A man drowned in the Russell River. Widespread floods in NQ and enormous cattle losses inland.</p>
1 April 1921 -7.1(1.3) C	TC crossed Cape York. Sank two boats and dismasted others in Princess Charlotte Bay area. Heavy floods.
5 April 1921 -7.1(1.3) C	<p>This tropical cyclone passed close to the vessel <i>Camira</i>, which was hove to near North Reef (120km east of Yeppoon). The vessel was in cyclonic conditions for 16 hours and 500 rams were swept overboard. Large seas would have affected Yeppoon but we have no record of the impact. The cyclone then passed to the east of Bustard Heads whose bar dropped to 979 hPa. It passed over Bundaberg where numerous houses lost their roofs. It then passed between Maryborough and Hervey Bay. Bathing houses were washed away at Pialba and 2 men were badly injured by a storm surge. A storm surge was also reported at the Forestry rail head at Wunggoolba Creek on the west coast of Fraser Island. The loco drivers house was isolated by the sea and the railway was undermined by the sea. 0.46m surge Moreton Bay 11Z 6th</p>
28 Mar 1923 8.9(7.3) Start W	TC crossed Cape York and became very severe in Gulf.
26 Feb 1925 13.8(11.4) C	TC crossed the coast between Cooktown and Cairns. At Cooktown two hotels were slightly damaged and many outhouses and fences were blown down. At Mossman several small buildings were unroofed though most damage was done to the sugar cane which was flattened..
9 Feb 1926 -14.5(-11.1) W	TC recurved east of Townsville. Floods Herbert and Tully rivers. Damage to banana crop.

9 Feb 1927 1.1(8.1) C	TC crossed the coast just to the north of Cairns . The lowest pressure reading at Cairns was 971 hPa . Many buildings were unroofed or damaged and some 16 totally destroyed . Considerable damage to hotel and houses at Malanda. Sea wall at Cairns broken in several places. TC turned into a disastrous rain depression. Unprecedented floods occurred in North Coast Rivers. Halifax, Ingham, Innisfail and Tully were partly submerged. There were many drownings 23 at Ingham, 15 at Cardwell and 1 at Townsville. 2,500 cattle and 1,500 horses drowned at Ingham. Losses to crops stock and property in the Herbert reached 300,000 pounds (1927). Rail damage with washaways and many bridges carried away. Also flooding in south of state, with Surat under water and a drowning fatality at Toowoomba. Seven persons were also drowned near Miles and crops in West Moreton badly damaged. A large dam at Koorboora was wrecked. A total of 47 people lost their lives .
2 Apr 1927 6.9(10.3) C	Severe TC east of Gold Coast. Flash flooding and heavy seas and erosion at Coolangatta on the 1 st . King tides stopped Tweed River Ferries. Record high tide Gold Coast. One drowning and shipping disrupted.
14 Feb 1928 10.5(4.7) C	TC crossed the coast at Brisbane. Subsequent serious floods in SE Qld with 8 people drowned. Around 6am to 7am Tuesday 14/2/1928 a severe gale hit Coolangatta and Tweed Heads suddenly. The winds veered from NE to E to SE. Tweed Heads:- Pacific and Wells Hotels badly damaged. Heavy timber from front balconies became missiles damaging many buildings in town which then suffered water damage. A whole section of roof with hardwood battens and 22 sheets of iron lifted and carried 120 yards. Buildings also unroofed near the Railway Station. Coolangatta:- Hotel Grande had its balcony destroyed. House unroofed in Rainbow Bay. House lifted off its stumps in Dixon St and wrecked. Trees uprooted on Greenmount Hill. Bilinga:- Several houses and buildings damaged. Murwillumbah:- Roofing iron torn off a number of houses. Several chimneys toppled over. Trees uprooted. Mullumbimby, Byron Bay and Bangalow:- Houses unroofed and trees blown down. Tweed Valley:- House unroofed Barneys Point and crops badly damaged Two houses completely unroofed at Durambah and farm buildings damaged. House unroofed at Bingham Point. Cudgen Headland (now Kingscliff):- Trees uprooted and house lifted off blocks. Casino:- Damage to buildings with sheets of iron torn off roofs. Water damage to most premises. Lismore:- Damage to telephone lines and crops. Glen Innes:- Immense damage to crops from wind and rain. Trees also down. Grafton:- South Grafton flooded. Killarney:- 9.5 inches in one hour - Condamine River rose 17 feet in 40 minutes.
21 Apr 1928 11.9(7.7) C	TC recurved near Mackay and over Broadsound. Floods with extensive damage Callide, Dawson and Dee Valleys. Houses washed away and 9 people drowned. Extensive flooding south to border with extensive crop losses and thousands of cattle lost. Low parts of Brisbane flooded with one drowning.
22-23 Jan 1929 16.0(15.3)C	TC moved towards coast and recurved away northeast of Townsville. Floods between Mackay and Townsville and south of Gladstone. In Bundaberg several shops and houses flooded. Youth drowned at Abercorn. Major flood Proserpine River.
22-23 Feb 1929 18.0(13.0) C	TC moved towards coast and recurved away east of Bowen. 31.33 inches (795mm) of rain in 65 hours at Rockhampton. Fitzroy River peaked at Rockhampton pm Sat 23 rd (reached just over 25 feet (7.6m))and Two men drowned in Rockhampton area. Bridges and crops badly damaged around Rocky.
26 Feb 1929 18.0(13.0) C	TC crossed the coast near Mossman. Low lying parts of Cairns flooded. Man drowned in Little Mitchell River near Mareeba. Cairns Harbour anemometer read 32 miles in the hour from 9.30pm to 10.30pm. Mon 25 th . Floods in the Herbert and Man drowned in Mossman River on 28 th . Another person drowned giving a total of three deaths .
28- 29 Feb 1929 18.0(13.0) C	Above cyclone recurved towards southeast and redeveloped off the Central Coast. Bar down to 986.1hPa at Double Island Point 8pm 28 th . Huge seas off the south coast. A Passenger Ship was disabled and just made it into Brisbane. Seas came up into the surf club at Kirra with much sand erosion and the rocks on the point moved. Buildings and roads damaged in Coolangatta. The seas broke over the jetty at Byron Bay. Farms were flooded at Southport and 100 houses vacated at Lismore.

5 Jan 1930 12.7(8.7) Start W	TC crossed the coast at Cape Flattery. Two luggers wrecked at Torres Strait. Launch wrecked on Sudbury Reef near Cairns though crew escaped and reached Cairns in small boats. Island Steamer <i>Morinda</i> struck heavy weather at Cooks Passage (NNE of Cape Flattery) on the 4 th and was buffeted for 24 hours with winds estimated at 74 knots and bar down to 987 hPa. as they hove to 40 nm off Osprey Reef. From 5th to 9th heavy flooding of practically all rivers between Townsville and Cooktown. Complete dislocation of rail and road traffic, causing serious delays to mail, and much loss of crops. Innisfail isolated and some wharves submerged. A man drowned in Liverpool Creek.
20 Jan 1930 12.7(8.7) Start W	TC crossed coast near Mossman. Bar down to 1000 hPa at Cairns with rivers between Cairns and Ingham in flood. From 20 th to 31 st floods over greater part of the State. Traffic between Townsville and Cairns again completely disorganised and low lying portions of Cairns inundated. Other districts experienced serious traffic interruptions and mail delays. These included Mackay-Townsville. Three railway passengers drowned whilst being ferried across the Burdekin River and drowning fatalities occurred in the Warrego, Pioneer and Houghton rivers. In Mackay damage costs were high and low lying parts of the city were submerged.
28 Jan 1930 12.7(8.7) W	TC recurved east of Mackay. Floods see above.
1-8 Feb 1931 -14.9(-0.8)W	TC entered Coral Sea near Cooktown and moved down to Hervey Bay. Initially serious flooding in NQ chiefly between Cairns and Ingham and a man drowned in the Russell River. Then major floods in SE Qld with 1300 homes inundated in Brisbane on 5 Feb with two drownings. Storm surge of 0.76m on Moreton Bay tide gauge. Most of the flooding was in Breakfast Creek where 1056 houses were flooded (396 above floor level). Around noon 5 Feb before the heavy rain in the creek catchment, high tide at the mouth of Breakfast Creek tide level was 1.1 m above ordinary high water spring. The subsequent flood levels above Bowen Bridge exceeded the 1893 flood levels. Severe beach erosion, Currumbin Creek mouth breached. Large storm surge at Wynnum Manly and Hemmant on the 5 th .
19 Jan 1932 1.8(1.0) End W	TC tracked from Gulf to east of Townsville. Disastrous flooding between Mackay and Cairns. Two people drowned. Rail line washouts and bridge destroyed over Elliot River. Stock drowned and considerable crop damaged and houses inundated in Innisfail and Tully.
23 Jan 1934 6.5(4.9) C	TC crossed coast between Cairns and Innisfail in the early morning 23 January 1934. Much damage at Innisfail, particularly buildings on the Esplanade. Commonwealth Hotel had balcony blown away. Commonwealth Bank damaged and Exchange Hotel and Advocate Office lost parts of their roof. Most outbuildings unroofed or damaged and many trees uprooted with branches strewn everywhere. Innisfail was isolated with the river in flood. Wind and rain struck the Tablelands at 4am 23 rd with railway washaways, crop damage, and two serious landslides over railway line. At Malanda 3 shops had awnings blown away and trees were blown down from Atherton to Yungaburra.. Cairns Ingham railway cut several places. Cardwell recorded 22 inches of rain from 4pm 22 nd to 7pm 23 rd . Serious flooding over large part of state with one drowning.
1 Feb 1934 6.5(4.9) C	TC tracked from Gulf down to NSW coast. Serious flooding along Central Highlands (Man drowned) and in SE Qld (child drowned). Considerable wind damage Hervey Bay in N'y gales. Widespread shed and tree damage in Brisbane. Flooding from storm surges and large waves in Moreton and Hervey Bays. 1.16 m storm surge on Moreton Bay tide gauge (largest on record).
12 Mar 1934 0.2(2.1) C	TC crossed the coast near Cape Tribulation with a 9.1 m storm surge at nearby Bailey Creek destroying banana plantations. The Pearling fleet just off the coast near Cape Tribulation was devastated with many luggers and 75 lives lost . Banana plantation settlers in the Cape Tribulation area stated that the centre of the cyclone was over Bailey's Creek where huge trees 4 feet across were snapped like carrots. The plantations were destroyed and the worst damage was in a six mile wide swathe. The damage extended from Bloomfield to Snapper Island. At Daintree the bar dropped to 978 hPa at 10 am 12 th and by 12.30 pm huge trees were snapped and all vegetation was defoliated. Three houses were totally demolished , one house had its veranda torn off, one house was torn in half and one half blown away, another house was lifted and turned upside down and the sawmill was unroofed. At Mossman the cyclone struck at 10am 12 th and a hotel lost its balcony and main roof. The front veranda of a Café was torn off and the

	windows smashed. Windows of the Post Office were smashed. Roads were strewn with iron timber and other debris. At Mossman Beach a number of houses were damaged and one house was lost to the sea . Not much damage at Port Douglas though there was a 1.8 m storm surge there . At Cairns limbs snapped from trees and a large tree was uprooted however most damage was from huge seas which damaged rowing boats beached along the Esplanade. Rail services were cut by floods between Cairns and Innisfail. Large washaways on the Cairns to Mossman road by landslides and huge seas .
22 Mar 1936 1.8(8.0) C	TC recurved seawards of Fraser Island. Extensive erosion Gold Coast, the Southport Spit was breached and protective timber walls were constructed at Coolangatta, Kirra, Narrowneck and Currumbin. Ships showed a very large cyclonic circulation northeast of Fraser Island at 9am Sunday 22 March 1936. <i>Merkur</i> near 24.5S 154E bar 992 hPa wind SE 48-65 knots <i>Malatta</i> near 21S 155E bar 992 hPa wind NW 23-40 knots <i>Cape Leeuwin</i> Sheltering in lee of Sandy Cape wind SE 48-55 knots <i>Ormiston</i> near 23S 152.7 wind S 48-55 knots. Captain of the <i>Merkur</i> said it was hard to estimate wave heights but they towered 50 feet above him in the troughs. Coolangatta:- Damage to old Kirra SLSC club. New Club protected by bringing boulders and sandbags in. Several people seriously injured in Car park when wave surged up into car park and floated a pile of logs which were to be used for a retaining wall. Storm tide kept flood waters inland flattening cane and maize crops. Southport:- New channel cut through to sea from Broadwater just north of Jubilee Bridge (between Southport SLSC and Sheraton Mirage). Channel 40 feet wide and one foot deep at high tide. On Sunday night (22 nd) sea came 100 yards further inland from normal high tide mark. Moreton Bay:- Storm tide came over retaining walls at Cribb Island, Nudgee Beach, Shorncliffe and Flinders Parade Sandgate. Houses were wrecked at Cribb Island. At Sandgate the sea flooded along 9 th Avenue, Griffith St and Murray St. At Redcliffe Sea walls and beach buildings were damaged. The sea broke over the sea walls at Wynnum and flooding the Esplanade and damaged boats. At Cleveland the tide flooded the road to Cleveland Point. Yeppoon:- Waves came over the sea wall and entered a beach Cafe.
16-21 February 1937	The Stinson cyclone. Intense cyclone approached North Coast from New Hebrides and moved south to the NSW coast. The ocean vessel, <i>Babinda</i> , was caught off Double Island Point on Friday the 19th. Her intermediate propeller shaft broke, and in response to her S.O.S. she was towed to Brisbane. Her crew said it was the worst weather they had ever encountered. The Stinson Mail aeroplane, <i>City of Brisbane</i> , crashed on the Lamington Plateau on the 19 th . Conditions then near the crash site on Lamington Plateau were southerly winds strong enough to blow down quite a number of large trees.
15 16 Mar 1937 6.2(1.1) C	TC tracked from Kimberleys to SE Qld causing widespread major floods and gales along east coast with ship foundering. Goods train wrecked near Bundaberg when railway lines were undermined. Hotel and shop washed away at Childers . Steamer <i>Haiping</i> abandoned in heavy seas near Sandy Cape. The crew were rescued by an escorting ship. The sea broke over a retaining wall at Manly. A youth was drowned at Grafton , Warwick was isolated, a bridge near Bishop Street Kelvin Grove was swept away and there were landslides in the Maleny area.
19 Jan 1938 7.5(5.9) C	Monday 17 th Large cyclone heading towards Queensland Air and sea services disrupted. 7foot 11 inch tide and sea came right over southern parts of Stradbroke Is. 18 th At 9pm wind destroyed 3 huts at Burleigh Camping Reserve. Waves breaking a mile off Kirra Point. Waves coming over retaining walls in Moreton Bay. 19 th Buildings washed off beaches at Hervey Bay. Bar reading of 992 hPa read at Bundaberg at 9am. High tide inundation at Sandgate and Cribb Island with backyards flooded- Also inundation at Fairfield, Stones Corner and Bowen Bridge and along the Pacific Highway. Streams flooded and the Kyogle railway washed away. 20 th Water 10 feet deep in Main Street of Kyogle. Some houses completely submerged. A man was drowned. A house was washed away at Casino. Pile Light tide gauge measured a .52 metre storm surge at noon 20 th when the predicted tide was 2.07 metre. Severe beach erosion Gold Coast.
27 Mar 1938 -3.6(1.3) C	TC recurved east of Bowen Gales, high seas and torrential rains. Harbour works damage and bridges washed away at Mackay. Severe Beach erosion Gold Coast.
27-29 Jan 1939	Low moved offshore between Rockhampton and Mackay and became slow moving TC. Shipping delayed by gales and high seas. Flooding with stock losses and towns isolated in Dawson Valley.

17.0(12.8) C	
6 Mar 1939 11.6(9.6) End C	TC crossed coast near Cape Byron.
18 Feb 1940 -4.1(-4.9) Start W	<p>TC crossed the coast near Cardwell where the pressure dropped to 965 hPa. Huge seas left a trail of damage along the strand in Townsville. Three open baths, a Memorial Park, and a seawall were destroyed. Flood waters driven back by storm surge isolated many parts of the city streets under 1 to 1.5 metres of water. A horse was found drowned with rider missing. Sea high up on residential land and fishermen at mouth of Ross River suffered much damage to boats gear and houses. Waves 3 feet above flooring wrecked a house. Bayview Hospital damaged by wind. Giant fig trees uprooted. Houses in the Stanton and Melton Hills suffered the most damage with roofing iron torn off and outhouses blown over. Trees were defoliated.</p> <p>Ingham:- Police house, Church and 2 hotels unroofed and badly damaged. Italian Club lifted and carried 90 metres down the street. Nearly every building in town damaged. At the coast large slice of Esplanade and the road were swept away. Tanks all over town moved hundreds of metres.</p> <p>Innisfail:- Mother and child injured by falling tree and another child injured by wind. Many trees down.</p> <p>Tully:- Wind torn down fences, outhouses and unroofed sawmill.</p> <p>Palm Island:- Two dormitories unroofed concrete jail flattened, Breakwater (hulk of ship) torn to pieces by the sea. Waves caused tremendous changes to sea front.</p> <p>Region:- Flooding caused much damage to crops and infrastructure.</p>
6 Mar 1940 -10.6(-7.9) W	TC crossed the coast north of Cooktown. Cooktown recorded 1374 points (349 mm) of rain in 24 hours. The Laura railway bridge was washed away. The Cooktown baths were badly damaged by the seas. The Endeavour River was 7 feet over the bridge. The railway line was washed away between Kuranda and Mareeba. Flooding in Northern Interior.
17 Mar 1940 -10.6(-7.9) W	TC crossed the coast near Mackay with little damage. The bar was down to 990.5 hPa at Mackay and the lowest bar at St. Lawrence was 996.6 hPa at 5.25 am 18 th . There were floods southeast Queensland and a farmer drowned in a flooded creek at Maryvale near Warwick. Gales uprooted trees and blew them over the railway line near Grafton.
23 Mar 1940 -10.6(-7.9) W	TC crossed Cape York Peninsula. Flooding in Gulf Country and Far North Coast.
7 April 1940 -9.6(-11.6)W	<p>TC crossed the coast near Townsville. From a railway crew the worst damage was between Clevedon and Cromarty (32 km southeast of Townsville) where trees both sides of the line were snapped off, a signal was snapped and railway houses unroofed. A little further to the southeast at Giru, 12 miles of telephone poles were blown down. The lowest bar at Townsville was 993.2 hPa at 11.50 am 7th. A woman was killed at Townsville when a chimney was blown down and came through the roof.</p> <p>Part of the roof was blown off the bus depot at Townsville and several houses at North Ward lost verandas. 70 tents in an army camp at Bowen were blown down and 14 inches of rain(356mm) of rain fell in 18 hours. Man was drowned at Mirani and a man died of shock at Home Hill.</p> <p>Disastrous flooding Central Coast. Damage worst in Ayr district and estimated to be up to \$1 million 1940 dollars. Peak heights recorded were at Mt McConnell on the Sellheim River on 8th and at Ayr on the Burdekin River on 8th. Saltbush Park on Funnel Creek peaked on 9th, as did Connors River.</p>
8 Feb 1942 -3.6(-7.5) End W	<p>TC crossed the coast north of Rockhampton. Trees uprooted, fences blown down and iron ripped off roofs. Main grandstand at the Show-grounds was unroofed. The city was blacked out from downed power lines.</p> <p>Extensive damage and loss of life occurred from flooding in the Burnett River and Dawson and Callide Valleys. In the Dawson Valley and Callide head waters the towns of Rannes and Wowan were evacuated with much loss. The following towns suffered extreme flooding. Bundaberg (3rd highest), Gayndah (3 metres higher than 1893 record), Wallaville (probably equal to or higher than 1890 and 1893). The death toll was 6 (maybe7) - 2(maybe 3) in Bundaberg, 1 Monto, 1 Mundubbera and, 1 Boyne Island and 1 in Chinchilla. In Mundubbera 10 houses were swept away and 30 others inundated. In Bundaberg wharf sheds and cranes were lost, sugar sheds and many houses were damaged, an island disappeared, cane farms were damaged and</p>

	500 people were evacuated. 4000 sheep drowned in the Condamine.
16 18 Feb 1942 -3.6(-7.5) End W	TC crossed coast near Cardwell and moved back out to sea north of Mackay on the 18 th .
31 Jan 1943 9.4(11.2) C	TC crossed coast near Rockhampton. Flooding along the coast between Mackay and Maryborough.
16 Dec 1943 -8.6(-4.3) Start W	TC crossed the coast at Princess Charlotte Bay causing gales and shipping delays. Severe structural damage at Coen.
28 Mar 1944 5.6(1.3) W	TC crossed the coast near Townsville. Floods along North Coast caused considerable traffic delays.
31 Jan 1945 5.1(5.2) End W	TC crossed the coast near Cooktown.
17 18 Mar 1945 13.2(4.1) C	<p>A small but deep TC crossed the coast south of Cooktown after incidents with ships off Port Douglas. Before landfall a ship 195 km ESE of Cooktown at 10am 17th reported a pressure of 978 hPa and 80 knot winds. A Netherlands Merchant ship, the <i>Sibigo</i>, which escaped to Perth before the Japanese invasion of the Dutch East Indies became attached to the Allied shipping pool and made many trips between Australia and New Guinea. As the cyclone approached the coast the <i>Sibigo</i> was bashed by huge seas and developed engine trouble and could only steer into the wind. Seas broke right over the top of the vessel. At 5.30 pm Friday 16 March 1945 the Captain gave the order to abandon ship and minutes later the <i>Sibigo</i> sunk. Extensive air and sea searches rescued 13 of the 85 crew though 72 seaman were lost at sea. Two ships heard the <i>Sibigo's</i> S.O.S, and one ship got within 30 nm of her but could not get much closer and by 6am Saturday 17 March 1945 the bar was dropping and the wind reached 80 to 100 knots. The captain stated it was impossible to see the sea from the bridge as the air was full of spray and spume. This ship just made in back to port with little fuel left. Shipping damage included the wrecking of a a ketch. Details of the coastal affects of the cyclone are sketchy due to the large war coverage in the press at the time and communication from Cairns northwards was lost.</p> <p>A Bureau report mentions "Storm damage at Mossman on the 17th .</p> <p>There were widespread floods in N Qld.up to Cooktown with 4 rail bridges under water between Cairns and Innisfail. In Cairns the wind uprooted trees. High seas and winds destroyed part of the jetty at Green Island while a mine floated ashore at the Island and exploded causing damage there. A beacon in Grafton Passage was washed away.</p>
8 Feb 1946 4.4(0) Start C	<p>TC crossed coast near Cardwell around noon Saturday 9 February 1946.</p> <p>Winds at Babinda unroofed 12 houses and flattened telegraph poles. At Tully the wind smashed plate glass windows, tore down awnings in Main Street and unroofed Grandstand at Show-grounds. Flood rains North Coast.</p>
2 Mar 1946 -2.0(-2.4) C	<p>TC recurved over Cairns and Townsville. Pressures of 983 hPa were read at Cairns and Innisfail. Heavy seas pounded the Cairns waterfront with part of the jetty washed away. At Innisfail the wind ripped off some roofs and blew down fences. The Goondi Mill lost roofing iron and the Newspaper Office was damaged. There were washaways, landslides and trees across the road in the Palmerston area. Record flooding occurred in the Burdekin.</p> <p>The cyclone hit Townsville Saturday (2nd) night and lightning struck the Powerhouse leaving the city without Power and light. Water entered many houses in Townsville and two houses were swept away at Hermit Park. There was much property damage from wind and flood in Townsville. The airspeed indicator at Garbutt Airport failed at 61 knots. 8 people died in Townsville, 3 drowned and one died from shock when told relative drowned. Total death toll was 8. A family of 4 drowned when the Don broke its banks at Merinda near Bowen. Water was waist deep in Home Hill and at Sellheim the gauge at 8pm on the 3rd reached 78 feet 6 inches (a record). At Mackay a 30 foot launch was swept out to sea. Railway lines were cut in many places and the Alligator Creek Bridge near Townsville was washed away.</p>
23-25 Mar 1946 -2.0(-2.4) C	<p>TC accompanied by flood rains crossed the coast near Double Island Pt and passed over Moreton Bay and just inland of Southport at 3pm 25th. 0.73 m storm surge recorded on Moreton Bay tide gauge (fortunately at low tide).</p>

4 April 1946 -9.6(-7.7) C	Passed just to the east of Fraser Island and brought heavy to flood rains to SE Qld.
23 Jan 1947 -4.9(-4.8) C	<p>TC crossed the coast near Caloundra with heavy gales and high seas. The Roof and veranda were torn from a house at Caloundra. A steel roof was torn from a 2 story block of flats at Burleigh. Many tents were destroyed at Caloundra, Southport Burleigh and Coolangatta. Waves broke into the beach pavilion at Coolangatta and flooded campers at Kirra. Navy tug <i>Woree</i> was wrecked on the Clarence River bar.</p> <p>For the 4 days ended 9am 26th Springbrook recorded 1392mm, with 695mm for 24 hours to 9am 25th, the highest since 1931. In the same 4 days Mt Tamborine recorded 995mm and Nerang 695mm. Tamborine was isolated by landslides. Waterford bridge washed away. Record floods in SE Qld with water up to telephone wires. Two lives were lost and widespread damage occurred from floods and high winds.</p> <p>0.55 m storm surge on Moreton Bay tide gauge. 1200m of 3.5m seawall was washed away at Margate. Fences were torn down by the sea near McDonald Creek Margate.</p>
10 Feb 1947 - 4.1(0.9) C	TC crossed the coast at Broomsound. Floods in most east coast rivers. Some loss of life occurred as well as much damage to infrastructure.
7 Jan 1948 -3.0(-0.2) Start W	TC moved towards SE across Cape York with heavy floods between Cooktown and Cardwell. Structural damage Thursday Island and possible devastating storm surge Saibai Island.
28 Jan 1948 -3.0(-0.2) Start W	Severe TC passed to east of Brisbane and produced a 96 knot gust at Lord Howe Island . 0.46 m storm surge on tide gauge in Moreton Bay, 1.5 m surge on foreshore .
24 Mar 1948 -4.1(-1.4) W	TC recurved over Fraser Island. Gales and high seas caused severe beach erosion over South Coast Beaches and local structural damage in adjacent areas. Tewantin reported the worst erosion ever experienced . Flooding in coastal streams.
10 Feb 1949 2.0(0.1) Start C	<p>TC crossed the coast North of Cooktown with much devastation. Only 12 of the towns 125 houses intact with 30 flattened, 40 badly damaged and others requiring repairs. There were 300 left homeless out of a population of 420. Five business houses out of the 25 were wrecked with the others damaged, some extensively. Main part of hospital OK but surrounding buildings wrecked. Shire Office was flattened and the Railway Station and Wharf sheds were extensively damaged. Wind was estimated to have increased from SE/60 knots to ESE at 80 knots. People sheltered in the stone Bank of NSW building. At Laura the only store in towns was demolished.</p> <p>Big seas washed away part of the Cairns to Mossman Road and a 35 foot launch was wrecked at Turtle Bay near Cairns on the 9th. Cairns to Mareeba road cut and Mossman isolated by floods. Three stockmen missing Normanton Area. Widespread floods in the south Peninsula across to the Normanton areas. There were 250 to 375mm totals between 10th and 13th in the far north coast from Cooktown to Cardwell and Tully areas, which were responsible for the suspension of rail, road and air traffic.</p> <p>On 15th TC moving from Gulf towards Townsville, gusts to 43 knots at Cairns with big seas. Women rescued from houseboat. Man drowned in Townsville.</p>
2/3 Mar 1949 5.6(2.9) C	<p>TC made stuck Gladstone at 2pm on the 2nd and then passed over Rockhampton. Widespread damage in 15 towns. Two men died, one in Rockhampton and the other in Gladstone as they were blown from the roofs of their homes while making repairs. Another man was killed in Rockhampton after being struck by a falling branch. A child was killed in Bundaberg by a falling gum tree. A dairy farmer was drowned in the Biloela district and another man was drowned near Thangool. Barometer in Rockhampton dropped to 960 hPa and the maximum wind gust on the airport anemometer was 87 knots just after 7pm on the 2nd. In Rockhampton 1000 houses were damaged, 500 were wrecked. Most of the 1500 homes in Gladstone were damaged and many buildings were extensively damaged. 12 homes were badly damaged in Yeppoon and 25 inches (635mm) of rain was recorded there in 24h which flooded business premises. In Emu Park most of the 200 houses were damaged while the Yeppoon to Emu Park scenic road was devastated with trees littering the whole highway. Heavy seas closed the ports of Rockhampton, Gladstone, Bundaberg and Maryborough while a lightship was grounded on Breaksea Spit. There were severe floods in the Central Qld and 3 drovers were drowned.</p>

15 Jan 1950 5.1(10.1) C	TC recurved near Cooktown with gales and floods in most coastal districts. Railway line to Cairns cut and the main road cut at Kuranda. Mountainous seas at Cairns on the 15 th with additional lines attached to 3 ships in port. By the 17 th a 300 yard section of the Esplanade at Cairns in danger of collapsing at high tide.
16/19 Jan 1950 5.1(10.1) C	TC tracked from Gulf to Sydney. High winds uprooted trees at station near Julia Creek. NE gales Moreton Bay and 2 metre waves. Storm surge of 0.58m on Moreton Bay gauge. Flinders Pde awash Shops and houses flooded at Sandgate. Two houses evacuated at 9.30am 18 th (high tide) and 2.5 feet of water in one and houses 10 th Av and Claytons St in 2.5ft deep lake. Sea water inundation at Wynnum with damage to boats. Small tornado at Hendra on the 18 th unroofed house and move house next door off stumps. Big seas at Kirra smashing against seawall. Postman electrocuted by fallen power line at Ipswich on the 18th. A man was killed in car accident in blinding rain at the Gabba. A boy drowned in the flooded Bremer River on the 20 th . 3 horseman were drowned on the 18th when Washpool Creek (80 km from Grafton) rose rapidly. Another 4 lives lost in NSW from cyclone including girl swept by storm surge and waves off Esplanade at Cronulla, a boy electrocuted by fallen power lines at Gordon in Sydney, a man drowned near Goulburn and another man drowned in the Macleay River at Kempsey. Seven yachts completely wrecked in Sydney Harbour. Record pressure reading of 988 hPa in Sydney. 10 lives lost in total.
27-28 Feb 1950 17.6(13.4) C	TC recurved over Gladstone and Hervey Bay. Sea water flooding at Hervey Bay. Floods SE Qld including northeastern suburbs of Brisbane .
11 Mar 1950 17.6(17.3) C	TC crossed the coast at Carmilla (S of Mackay) with severe structural damage. At Carmilla one girl was killed and 4 others injured. Trees a metre in diameter were uprooted. 400 people live in the area and only 8 buildings left standing. At 10pm 11 th gales started and at 2am 12 th the first homes was unroofed and the strongest winds were from 3.30am to 4.15am. In one house the walls moved in and out before it collapsed. The Hall and 3 houses were completely wrecked. 15 business houses and the school residence were uninhabitable. Every other house in town was unroofed. 20 farmhouses within 16 km of Carmilla were battered with windmills destroyed. Rail and farm buildings damaged between Kalarka and West Hill.
10- 24 Jan 1951 16.5(16.4) C	TC crossed SE Gulf near Karumba early on the 10 th and then looped around and entered the SW Gulf and made landfall again near Karumba again on the 22 nd . Heavy rain at Cairns 6 th to 17 th with 430 mm recorded at Cairns Airport. There was a major landslide at Ellis Beach on the 12th. Major flood in the Burdekin with the railway bridge closed for 3 weeks . Houses evacuated.
25-30 Jan 1951 16.5 (16.4) End C	TC slow moving around Fraser Island. 50 to 60 knot winds Moreton Bay. Extensive damage to boats and structural damage to buildings. Several houses undermined by sea. One life lost at Caloundra. Severe erosion Gold Coast with Southport Spit breached and had to be closed with bulldozer. Floods from rain and storm surge caused evacuation of residents on Macintosh Island, one house on the Island was blown off its stumps. Breakers were observed on the Nerang River. The road at Mermaid Beach was "feet under water", the Burleigh skating rink and pool were smashed and great boulders were flung across the road at Currumbin. 367mm at Tewantin in 24 hours flood in Noosa River.
19 Mar 1951 -1.4(3.2) Start W	TC crossed the coast near Maryborough. Heavy flood rains South Coast and Darling Downs.
7 Feb 1954 -3.6(0.5) Start C	TC crossed the coast south of Townsville. The system went on to produce heavy flooding.
20 Feb 1954 -3.6(0.5) Start C	TC crossed the coast at Coolangatta where there was about a 10 minute calm. The barometer there fell to 28.7 inches or 971.9hPa. Some reports from the Coolangatta/Tweed Heads area had pressure readings to 962 hPa. Worst damage in that area around the Cudgen in NSW where some houses were blown apart and trees more than 1 metre in diameter were twisted out of the ground. Record mean sea level pressure readings of 982.7 hPa at Brisbane, 981.8hPa at Brisbane Airport and 978.5hPa at Cape Moreton were recorded. Widespread structural damage Gold and Sunshine Coasts and around Brisbane. 0.64 m storm surge on Moreton Bay gauge however much worse on foreshore with boats in the tree tops at Beachmere. Waves at Kirra brought 2 metre of water onto highway picking up cars. 900 mm of rain were recorded at Springbrook in the 24 hour period up to landfall and floods combined with storm surge on the Nerang River caused evacuations of families and a

	dramatic rescue of people from Macintosh Is. The floods and cyclone then hit the Lismore district with gales whipping up large waves on the then 11.3 km wide Richmond River. 30 people tragically died from these unprecedented effects. The outer section of the jetty was swept away at Byron Bay taking with it all 22 vessels comprising the fishing fleet. The sea broke through and flooded parts of the town in Byron Bay. Report from Richard Everingham 195 Newnham Rd Mt Gravatt who was working at the time at the Condong Sugar Mill. There were two barometers at the mill, one an aneroid registered 28.8 inches (975 hPa) while the other read 973 hPa. The eye took two hours to pass over the mill. The eye passed over around 11pm. Further south Dorrig reported 809mm in the 24 hours to 9am 21 February.
22 - 26 Feb 1955 15.2(4.2) C	Deep monsoon depression developed in the Southeastern Gulf Country near Normanton and moved down through Queensland into Central NSW. Unprecedented floods in NSW and 25 people lost their lives. 120,000 sheep and 2000 cattle were drowned. At Maitland 30 houses and at Singleton 26 houses were washed away. At Dubbo 5 houses were destroyed and 250 badly damaged. At Gilgandra a wall of water several feet high wrecked 35 % of the buildings. Twenty four houses were totally destroyed and 350 badly damaged.. 800 houses were damaged at Moree and at Inverell 300. Many other houses were damaged in other centres.
7 Mar 1955 2.9(5.1) C	TC crossed coast just south of Mackay with eye passing over Sarina and bar down to 963 hPa. Lugger Barrier Princess lost with 8 hands. Widespread structural damage and heavy flood rains. Bar down to 957 hPa on vessel Cape Hawke just off Mackay at 2pm 7 th with SW wind Force 12 and over. 50 to 80 knot winds affected the coast between Cape Capricorn and Mackay and several buildings were unroofed at Yeppoon. Major floods Flinders Burdekin and Fitzroy Rivers.
27 Mar 1955 2.9(5.1) C	TC crossed the coast at Bundaberg causing some structural damage there. TC induced tornado caused considerable damage to houses and churches at Yandina in a 300 m wide swath. A record flood occurred in the Mary River while a life was lost in Brisbane River Floods.
<i>Agnes</i> 6 Mar 1956 9.4(11.0) C	TC passed right over Townsville Met Office with bar down to 961 hPa. Moved up to Ingham and then westward into the Interior. Widespread damage between Cairns and Mackay. Maximum wind gusts 73 knots at Townsville and 79 knots at Cairns. Damage at Cairns similar to that at Townsville due to extremely gusty westerly winds. Four deaths occurred from floods in the Interior.
5-19 Feb 1957 -2.2(0.8) Start W	Long lived TC which produced 109 knot gust at Willis Island and went on to cross the NSW coast south of Pt Macquarie. Severe erosion by huge waves and high tides on South coast. Extensive damage to shipping harbours and foreshores in NSW.
15-18 Feb 1958 -6.9(-8.2) W	Long lived TC crossed the coast south of Ayr and moved back out to sea. Near record floods in the lower Burdekin. Heavy floods Central Coast and Highlands. Exceptional 24 hr rainfall totals:- 878 mm at Finch Hatten and 864 mm at Mt Pelion where 292 mm fell in 2.5 hrs and 589 mm in 6.75 hrs. Record Pioneer Flood with 3 lives lost and much damage in Mackay with 20 houses washed away.
1 April 1958 1.2 (-2.7) W	Small intense TC hit Bowen. Gusts to 98 knots observed at Bowen until anemometer disabled. 77 houses and various buildings at Bowen were destroyed. Many other buildings were damaged. A 2 metre storm surge arrived at Bowen with the cyclone. Tornadic outbreaks at Proserpine, Mackay and Sarina.
20 Jan 1959 -8.7(-9.7) W	TC from Gulf moved into Coral Sea between Cooktown and Cairns then moved ESE. Flooding occurred in the Burdekin while the TC was in and near the Gulf. Homesteads were isolated and hundreds of acres of cane were flooded. Wind damaged banana crops along the north coast. Considerable damage to grape crop at Herberton. Power lines torn down at Cairns and boats damaged at Cairns and Green Island.
<i>Beatrice</i> 21 Jan 1959 -8.7(-9.7) W	TC crossed the NSW coast near Lismore. Severe beach occurred in S Qld and N NSW- buildings and equipment were damage at Jack Evan's pool at Pt Danger - 90 m of a concrete wall was undermined at Coolum . Flooding caused damage in northern NSW. Earth dam burst at Stanthorpe causing damage to bridges livestock and Machinery. Steamer <i>Natonei</i> founded off Double Island Point on the 24th.
<i>Connie</i> 16 Feb 1959 -14.0(-4.8) W	TC crossed the coast at Guthalungra where pressure in the eye was recorded at 948 hPa. Severe wind damage occurred at Ayr Home Hill and Bowen. A man was killed at Ayr when a shop fell on him. At Ayr 33% of homes severely damaged, Buffalo Hall wrecked, schools and hotels unroofed. At Home Hill 100 persons homeless and no building escaped damage with every

	<p>window broken in the main shopping area. 700 wind-mills destroyed in the Ayr Home Hill area. The anemometer at Bowen recorded wind gusts up to 100 knots over a 2 hour period with forty homes totally destroyed, 190 badly damaged and 300 partly wrecked. Severe damage to Powerhouse, Salt works, coke works and railways - dozens of boats swamped. Wind also caused considerable damage at Proserpine with 50 houses and the Hospital badly damaged. There was even damage at Rockhampton as the cyclone moved south. Flood waters at Mackay caused evacuations and damage - Floods swept away the Mirani railway bridge and under- mined the Forgan Bridge. Clermont had the worse floods since the 1916 cyclone. Laidley had its worst flood on record with 50 shops under 8 feet of water - 200 families were evacuated and 50 people were rescued from the roof tops. Killarney also had a record flood with 2 bridges swept away. In Allora people were evacuated from their homes. On the 18th Brisbane had wind gusts to 48 knots with minor damage and power lines down. Floods extended down to NE NSW where a man was killed by fallen power lines..</p>
<p><i>Annie</i> 1 Jan 1963 9.4(4.3) W</p>	<p>Rapidly developing TC crossed Sunshine Coast. Houses were unroofed at Buderim, Landsborough, Mt Mellum, Flaxton and Maleny and banana plantations suffered considerably. Falling trees cut power and telephone lines. Campers lost tents and caravans were capsized and small craft wrecked. Luckily it crossed at low tide as the Moreton Bay tide gauge indicated a 0.76m storm surge. Flooded streams submerged road bridges.</p>
<p>24 Apr 1963 6.1(5.4) W</p>	<p>TC stayed more than 500 km off the South Coast however system generated very large swells with 1000km of the easternmost Australian coast suffering varying degrees of beach erosion. American Navy vessel suffered damage off South Coast in 13 m waves. Couple were swept offshore by southerlies at Hervey Bay resulting in one death. Winds brought down power lines on Sunshine Coast.</p>
<p><i>Audrey</i> 13- 14 Jan 1964 -4.0 (-5.3) End W</p>	<p>TC tracked from the Gulf down to Coffs Harbour. There were extensive flooding and stock losses in SW Qld and northern NSW with wind damage in the western Darling Downs. The cyclone hit St George at 8am 14th where 52 houses lost all or part of their roofs and 22 of the business houses were badly damaged - 38 mm of rain was recorded in 15 min. At Goondiwindi 50 buildings were unroofed, the railway goods shed was destroyed and a church hall was flattened. Telegraph poles were snapped off. At nearby Boggabilla every building was partially or completely unroofed. Building, were also badly damaged at Windorah, Quilpie, Cheepie, Charleville, Talwood, Toobeah, Pittsworth, Glen Innes and Grafton. Very heavy rain accompanied the cyclone with major flooding. Up to 294 mm of rain was recorded in southwest Queensland towns including 181 mm in 12 hours at Eulo.</p>
<p><i>Gertie</i> 15/16 Apr 1964 +13.5 (8.2) Start C</p>	<p>TC recurved to NE of Whitsunday Group. Heavy coastal rain with sugar cane damaged around Cairns and Innisfail. Flood waters damaged railway lines and bridges and a few cars were lost in swollen creeks.</p>
<p><i>Flora</i> 6 Dec 1964 -3.0(-1.4) End C</p>	<p>TC from Gulf entered Coral Sea near Innisfail and moved towards ESE. Cape Cleveland reported 75 knot gusts with tree damage and paint stripped off lighthouse. At Palm Is power lines were blown down, coconut trees snapped and uprooted and small craft were destroyed. Lucinda lost power. Severe flooding occurred with the main northern railway line washed away in several places. Cardwell was isolated by flooding.</p>
<p><i>Judy</i> 30 Jan 1965 -4.0(-1.8) Start W</p>	<p>Long lived TC came from Gulf into Coral sea near Innisfail and brought flood rains to North Coast. Flood waters entered shops in Townsville. Severe flooding occurred at Bluewater. The TC moved down off the South Coast and large swells caused severe beach erosion.</p>
<p><i>Dinah</i> 28/30 Jan 1967 14.6(7.8) Start C</p>	<p><i>Dinah</i> caused severe damage at Heron Island initially from inundation from large NE swells and a day later from winds. It recurved and passed over Sandy Cape which recorded a central pressure of 944.8 hPa and high water 10 metres above normal. Although well off the coast many trees were blown down from Rockhampton to Grafton. Houses were unroofed at Bundaberg Maryborough and along the Sunshine and Gold Coasts. Banana and cane crops were wiped out on the Tweed Coast and a severe wind gust overturned a car at Evans Head. Huge seas and storm surge caused severe erosion at Emu Park, Yeppoon, and in the Maryborough Bundaberg area. Storm surge inundated cane farms at Bli Bli and was knee deep in Hastings St Noosa. Around Sandgate seawater 1.5 metres deep came into houses. More than one hundred homes were flooded and at Cribb Island one house was washed into the sea. Storm surge also affected the Gold Coast and water lapped the decking of the Jubilee Bridge which is about 1.5 metres above highest astronomical tide. A similar storm occurred on</p>

	the Tweed River isolating Fingal. A section of the esplanade collapsed at Surfers Paradise The hardest hit area of northern NSW was around Brunswick Heads where several banana plantations were wiped out and hundreds of acres of sugar cane in the Tweed Valley were blown over. A wind gust overturned a car at Evans Head.
<i>Barbara</i> 22 Feb 1967 12.9(11.1) C	TC crossed coast near Lismore. There was wind damage in the Coolangatta area with tents down and power disrupted by falling trees and flying sheets of roof iron.
<i>Elaine</i> 18 Mar 1967 7.8(5.9) C	TC moved SSE past the South Coast. Severe flooding occurred in the Brisbane Creeks and in the Logan River. Further beach erosion As <i>Elaine</i> was developing into a cyclone from the 14 th to the 16 th just to the east of Cairns, torrential rain fell in the North Coast Herbert and Barron Divisions. The major feature of the months flooding was the record flooding in the Herbert. Falls of up to 1321 mm in 4 days in the Barron and Herbert districts produced the highest flood on record in the Herbert River. The Bureau's river height observer at Glen Eagle station was forced to evacuate his homestead , shortly before it was washed away in a flood which reached the level of 6.85 metres above the previous record in 1927. The bridge at Long Pocket linking Abergowrie and Ingham was washed away after being almost 15metres under water , and the population of Abergowrie was isolated for weeks. Ingham itself was almost completely submerged in the flood-waters which were 17 kilometres wide at the peak. Road and rail traffic were brought to a stand-still , and Hinchinbrook Shire Council is reported to have estimated road and bridge damage alone at about \$7.5 million. Near record flooding was also reported in the Barron , Johnstone and Tully The damage to sugar mill tramlines and bridges was severe. Huge fields of sugar cane were washed out and in some places cane has been covered by 2 metres of silt. Cars were washed into raging flood-waters and costly farm machinery inundated. Thousands of people had the heart-breaking experience of flood damage due to knee deep water in their homes and when this receded , 300mm of mud. Some people were rescued from roof tops and there were many reports of bravery under very difficult conditions. Helicopters were used in some of the rescue work.
<i>Glenda</i> 2/4 Apr 1967 -3.0(+0.4) C	TC moved south 500 km east of Brisbane. Gold Coast beaches completely eroded by large waves. <i>Glenda</i> was last of a series of cyclones and beaches along the south coast of Queensland were further eroded. The erosion came within 20 yards of the new Coolangatta SLSC and the patio was damaged by subsidence. 6 men lost their lives in two separate boat incidents in waves to 16 m off the S Qld Coast. The <i>Maranui</i> at 1520UTC 4 April 1967 was located at 30.0°S 158.5°E wind turned southerly/75 knots MSLP 985.4hPa. At 2000UTC located at 29.6°S 158.0°E wind SW/70knots MSLP 981.6hPa . On 2300UTC 1 April the 9000 ton <i>White Ocean</i> was 100 mi south of the centre in waves generally less than 20 feet in height. But occasionally waves were much higher and crashed into the superstructure 50 feet above the waterline. The Capt and 3 rd officer were caught on the forecastle on one of these waves. The third officer was killed and the Capt badly injured. The 33ft <i>Beagle</i> was anchored in the lee of Double Island Point at 0830UTC 2 April when the boat was caught broadside by a huge wave and broken up with 5 of the crew of 6 were drowned. The previous day the <i>Malveena</i> reported waves to 50feet along the open coast near here.
<i>Ada</i> 17 Jan 1970 -10.1(-5.7) W	Small TC passed through Whitsunday Group and hit mainland, with a radar eye diameter of 20 km , at Airlie Beach where a central pressure of 962 hPa was recorded. 14 lives were lost. Tourist resorts were destroyed and 80% of the buildings at Airlie Beach were badly damaged and sea water entered shops there. Flooding was severe along the coast from Mackay to Bowen with major floods in the Pioneer and Don Rivers.
<i>Gertie</i> 16 Feb 1971 15.7(12.5) C	TC crossed the coast at Cardwell. Damage was confined to trees and power lines. There was also some sugar cane damage. Flooding closed some bridges but damage was minimal.
<i>Dora</i> 17 Feb 1971 15.7(12.5) C	TC crossed the coast north of Brisbane. There was fairly widespread structural damage at Redcliffe the worst case being a roof removed from a block of home units. Trees and powerlines were down. Some flooding caused traffic disabilities.
<i>Fiona</i> 20 22 Feb 1971	<i>Fiona</i> tracked from the Gulf and entered the Coral Sea near Rockhampton. Flooding in the Burdekin and Fitzroy Basins varied from minor to major with severe damage to infrastructure.

15.7(12.5) C	Motorists were cut off for days. A house was destroyed by a tornado near Sarina with trees down . Paw Paw crops were lost near Gladstone by wind and rain effects. A 0.6 m to 0.9 m storm surge was observed at Gladstone and Bundaberg respectively.
<i>Althea</i> 24 Dec 1971 2.1(4.3) End C	<i>Althea</i> crossed the coast just north of Townsville with a 106 knot gust being reported at the Townsville Met Office. There were three deaths in Townsville and damage costs in the Townsville region reached 50 million 1971 dollars. Many houses were damaged or destroyed (including 200 Housing Commission homes) by the winds. On Magnetic Island 90% of the houses were damaged or destroyed. Two tornadoes damaged trees and houses at Bowen. There was a major flood in the Burdekin but coastal floods were short lived. A 2.9 m storm surge was recorded in Townsville Harbour, however the maximum storm surge of 3.66m was to the north at Toolakea . This storm surge occurred at low tide, however the surge and large waves caused extensive damage along the Strand and at Cape Pallarenda.
<i>Bronwyn</i> 8/9 Jan 1972 3.7(4.7) Start W	TC from Gulf moved southwards through state. Half of state received more than 50 mm of rain and Paluma had 1270 mm in 48 hrs. Serious flooding occurred and Giru was isolated. 0.9 m of water entered Ingham. The Burdekin flooded Ayr and Home Hill.
<i>Daisy</i> 11 Feb 1972 8.2(4.8) Start W	<i>Daisy</i> made landfall on Fraser Island and the bar at Sandy Cape dropped to 968.8 hPa. 200 homes were damaged at Pialba and more houses were unroofed in widely scattered townships. Forestry officials reported serious damage to forests near Maryborough and on Fraser Island. Flooding occurred throughout SE Qld with severe floods in Brisbane creeks . There was much damage to commercial stock in Brisbane. On the Gold Coast the mouth of Tallebudgera Creek silted up causing severe flooding upstream to commercial and domestic properties. Peak swell heights to 8.3 m were read at the Sth Nobby wave recording station on the Gold Coast. Severe erosion occurred down to Brunswick Heads and on the western side of Fraser Island where a 3 m storm surge was reported. A noticeable storm surge at time of high tide was observed at; Sandy Cape, North Stradbroke, Woorim, Coolum, Tangalooma, Torquay, Sunshine Beach, and Brunswick Heads. At Tweeds Heads the surge brought high water an extra 2 ft (0.6 m) whilst Pumicestone reported a 2 ft 8in surge (0.8m). A 10 foot (3m) surge was reported on the western side of Fraser Island
<i>Emily</i> 2 Apr 1972 -5.5(-6.1) W	<i>Emily</i> crossed the coast just to the SE of Gladstone while rapidly weakening. Wind damage was confined to trees and sheds. The cyclone had been very severe and generated huge seas. It claimed the lives of 8 seaman in three separate incidents off the southern and central Queensland coasts. Flooding occurred with Kingaroy being isolated for a time and Breakfast Creek flooded some houses in Brisbane.
<i>Madge</i> 4 Mar 1973 0.8(-4.9) End W	<i>Madge</i> crossed the coast just north of Cooktown. The only impact from the cyclone was flooding and the road from Cooktown to the aerodrome was 1.8 m under water. The Bruce Highway was cut in 6 places between Townsville and Cairns.
<i>Una</i> 19 Dec 1973 16.9(23.1) C	<i>Una</i> crossed the coast just to the east of Townsville and was rapidly intensifying at landfall. Wind damage was confined to trees and street signs at Ayr and Townsville. There were power failures at Ayr and Home Hill. A house was unroofed at Home Hill, power poles were down and Palm trees snapped off. Mango crops were ruined. Major Flooding occurred at Theresa Ck, and in the Pioneer, Dawson, Fitzroy and Burnett Rivers. Two adults and Two children were drowned in Floodwaters . The maximum storm surge was 0.8m.
<i>Wanda</i> 24 January 1974 20.8(18.0) C	<i>Wanda</i> was a weak cyclone when it crossed the coast near Maryborough. The winds were strongest in the night after landfall when a high strengthened in the Tasman Sea. Tewantin and Caloundra then had average 50 knot easterlies and Cape Moreton had average 56 knot easterlies. Torrential rain followed and in the 5 days to 9am 29 Jan falls reached 900 mm in the Brisbane area. Mt Glorious had 1318 mm. The Bureau in Brisbane recorded 314 mm in the 24 hours to 9am 26 Jan and the 1931 flood was exceeded at 9am 27 Jan . Heavy rain in the 24 hours to 3pm 27 Jan caused the major flood. In the Brisbane Ipswich region 6007 houses were flooded. 56 of these were destroyed or condemned . Damage on a large scale was 200 million 1974 dollars. 12 People were drowned in Brisbane and Ipswich. Additionally several elderly people suffered fatal heart attacks while being evacuated and a 2yr old child drowned in a Brisbane creek . Major floods also affected the Gold Coast and NE NSW. 700 people were evacuated from caravan parks in the Broadbeach area. Around 1000 people were evacuated from the canal estates of Miami Keys, Moana Park, Rialto,

	<p>Mermaid Waters, Florida Gardens and Burleigh Waters. Houses were swamped from water up to 1.5m deep. Evacuations also occurred along the coastal strip at Surfers (where waist deep water flooded streets near the river), Miami, Nobbys (where water came up to window sills and to the tops of caravans) and Bundall Rd Southport where floods spread over the Isle of Capri and Sorrento. Evacuations were carried out at Biggera Waters, Hollywell and Paradise Point. 200 people were stranded on Hope Island and Nerang was completely isolated. In total 2500 Gold Coast people were evacuated. The Nerang River rose to a record level of 9.91 m. Heavy swells caused severe beach erosion along southern Qld and NE NSW. The Sth Nobby station recorded significant swell heights to 4.5 metres. Maximum heights were probably nearly double this. The maximum storm surge associated with <i>Wanda</i> was 1.0 m between Noosa and Double Island Pt.</p>
<p><i>Pam</i> 6 Feb 1974 16.2(19.1) C</p>	<p><i>Pam</i> was a very large intense cyclone which passed 500 km to the east of Brisbane. However a 0.68m storm surge was recorded on the Moreton Bay gauge and combined with a king tide, the high tide of 7 Feb on the gauge reached 3.13 m (a record). This rise in sea level flooded Brisbane creeks at high tide and caused cancellation of some bus services. Along the open coast the beaches were already severely eroded due to earlier cyclones and this amplified the effects of run up from the large waves generated by <i>Pam</i>. At Palm Beach residents had to abandon their houses and units as seawater drove over 6.2 metre boulder walls and surged through these premises. The Sth Nobby Wave Station recorded long period swells (13.1 sec) with a significant wave height of 3.8 m. Large waves also entered Botany Bay and badly damaged a restaurant on the foreshore.</p>
<p><i>Yvonne</i> 10 Feb 1974 16.2(19.1) C</p>	<p><i>Yvonne</i> crossed the coast near Dunk Island. On Dunk Island the wind tore roofing iron loose, uprooted large trees and brought down power lines. Bloodwood trees up to 1 metre in diameter were uprooted or snapped off. The area affected was 50 to 60 km wide embracing Cardwell and El Arish. On the mainland trees up to 1.5 m were uprooted.</p>
<p><i>Zoe</i> 13 Mar 1974 20.3(15.5) C</p>	<p><i>Zoe</i> crossed the coast at Coolangatta and then recurved back out to sea. There was no significant wind damage however flooding was extensive with major floods in Brisbane creeks cutting main roads and some houses were flooded. Major flooding occurred in N NSW and 200 people were evacuated in Murwillumbah and 500 families were evacuated at Lismore. Landslides cut the main railway line in 4 places between Casino and Coffs Harbour. There was severe erosion along the Gold coast beaches and the significant wave height at Sth Nobby reached 3.8 m.</p>
<p><i>Gloria</i> 16 Jan 1975 -4.9(-0.2) C</p>	<p><i>Gloria</i> developed close to the coast and moved towards the SE. The only impact was flooding at Lucinda and Mackay with many roads cut including the Bruce Highway.</p>
<p><i>David</i> 19 Jan 1976 11.8(14.7) C</p>	<p><i>David</i> crossed to the north of St Lawrence. It passed over Gannet Cay AWS where a central pressure of 970 hPa was recorded. It was intensifying right up to the time of landfall. A feature was its huge size with gales extending from PNG waters down to Lord Howe Is. It generated huge swells and these combined with large tides caused extensive damage to Heron Island as it passed to the north. It crossed the coast in a sparsely populated area however winds unroofed 30 buildings in Yeppoon and several in Mt Morgan. Wind gusts reached 95 knots at Pine Islet and 84 knots at the Gladstone Met Office. Large seas combined with high tides caused considerable damage to breakwaters, retaining walls and other structures especially at Rosslyn Bay Harbour (Yeppoon) where the Breakwater was destroyed along with yachts and trawlers. Storm tides flooded houses and shops at Urangan, Noosa and Kirra. Storm surge at Beachmere on Moreton Bay cut all roads into the town. The Port of Brisbane was closed. At wave recording stations the significant wave (peak) height reached 5.8 m (8.9 m) at Double Island Pt and 3.8 m (8.7 m) at Yeppoon. Tides were up to one metre above predicted levels.</p>
<p><i>Alan</i> 1 Feb 1976 12.9(12.6) End C</p>	<p><i>Alan</i> crossed the NQ coast near Bloomfield R Mission and caused no structural damage. During the next ten days it became an intense monsoon depression and had a central pressure of 989 hPa near Tennant Ck. It recurved and passed near Birdsville and moved out to sea near Byron Bay. In its traverse of the inland it caused widespread flooding and in particular record flooding in the Condamine near Warwick.</p>
<p><i>Beth</i> 22 Feb 1976 12.9(12.6) End C</p>	<p><i>Beth</i> crossed the coast near and to the north of Bundaberg. The cyclone was very asymmetric with a band of hurricane force winds on the southern flank where it interacted with an intensifying high to the south. Widespread damage occurred in the Maryborough Bundaberg area with 200 homes unroofed, two aircraft damaged and rainfall up to 200 mm caused flash</p>

	flooding and cut roads for 18 hours. Heavy swell pounded the south coast and The wave recording station at Double Island Pt. recorded a significant wave (peak) height of 5.4 m (10.0 m) .
<i>Colin</i> 4 Mar 1976 13.2(9.3) End C	<i>Colin</i> moved southwards and was 220 km east of Fraser Island at one point. By far the greatest impact was from the large waves it generated and extensive beach erosion occurred along South Queensland Beaches. The wave recording station at Double Island Pt recorded a significant wave (peak) height of 6.4 m (9.6 m) . Further south waves off Sydney Heads were estimated at 12 m in height and several launches were destroyed when 2 m waves penetrated into Botany Bay. A woman was killed at Tathra (S NSW) when swept off a cliff top by a large wave. Scores of Houses were unroofed at Swansea near Newcastle.
<i>Dawn</i> 5/6 Mar 1976 13.2(9.3) End C	<i>Dawn</i> developed on the N Qld coast and moved down the coast crossing Fraser Island. Two homes were unroofed in N Mackay and tree were uprooted on Heron Is. Rainfalls up to 230 mm between Proserpine and Bundaberg caused flash flooding .
<i>Otto</i> 6 10 Mar 77 -9.5(-3.8) W	<i>Otto</i> moved from the Gulf into the Coral Sea near Cape Tribulation and made landfall again near Bowen. There was no significant wind damage however it severely aggravated already serious floods between Cairns and Ingham which resulted in \$6 (1977) million crop and property damage . Heavy seas destroyed 1200m of the esplanade at Machans Beach Cairns. Hay Point also suffered some sea damage. The wave station at Double Island Pt. recorded a significant wave (peak) height of 3.8 m (6.3 m) .
<i>Keith</i> 31 Jan 1977 -4.0(0.2) W	<i>Keith</i> first hit the coast east of Cairns, then moved back over the ocean and crossed the coast again at Cape Cleveland. Extensive wind damage to the tropical rain forest east of Babinda over the Graham Range as noted in the Hydrological experimental catchments. Large trees were uprooted and some snapped off above the roots. Elsewhere only minor wind damage occurred, however wind and rain combined to cause extensive losses to the banana and sugar crop . Floods cut the highway between Cairns and Townsville. Two men were killed when a yacht smashed into rocks on the western side of Acheron Is.
<i>Gwen</i> 27 Feb 1978 -24.4(-11.1)	<i>Gwen</i> passed directly over Edward River Mission in the Gulf and maintaining its movement towards the SE it became a rain depression. In sections of the Herbert district extremely heavy rain fell and up to 500 mm in 24 hr from a farm in the Palm Creek area. The Herbert at Gairloch rose 4.2 m in 11 hrs. Gales were reported near Townsville with a gust to 59 knots there.
<i>Peter</i> 1-2 Jan 1979 -4.0(0.6) Start W	<i>Peter</i> moved from the Gulf to the Cairns region where it moved back overland. There was no significant wind damage, however there was record rainfall. On 5 Jan Mt Bellenden Ker (1554 m elevation) recorded 1947 mm of rain in 48 hours . Serious flooding occurred from Tully to Cooktown especially around Cairns. Flood damage was estimated at \$10 (1979 million) and there were two deaths .
<i>Greta</i> 11 Jan 1979 -4.0(0.6) W	<i>Greta</i> moved from the Gulf and then crossed Princess Charlotte Bay before making landfall again. The only impact was flood rains over Northern Cape York Peninsula.
<i>Kerry</i> 1 Mar 1979 -3.0(-0.6) W	<i>Kerry</i> crossed the coast near Proserpine. In Mackay one house suffered extensive damage and 26 houses lost parts of their roofs. A large section of roof was torn off a warehouse and caravans were damaged. Power lines were blown down. At Seaforth 16 m trees were uprooted. The Mackay Met Office recorded a maximum wind gust of 76 knots while the highest 10 minute mean wind was 50 knots . Huge seas caused 1 million 1979 dollars damage to boats in the harbour. On Brampton Is. the staff's quarters were unroofed and many trees were blown down and a storm surge there brought the sea one metre above the highest recorded tide level . Hayman Is also reported a one metre storm surge . The Mackay Eungella road was cut by fallen trees and landslides and floods cut the Bruce Highway. The Mackay wave recording station measured significant wave heights to 4.02 metres maximum height 5.91metres and peak energy period 9.19 seconds
<i>Paul</i> 7 8 Jan 1980 3.2(-1.4) W	<i>Paul</i> moved from the Gulf to enter the Coral Sea near St Lawrence. Heavy rain caused a record flood in the Don R. which changed its course in the lower reaches near Bowen. Two houses were washed away. Severe damage resulted in the market garden industry. Large swells affected the south coast. The Brisbane wave recording station recorded significant (peak) wave heights of 4.3m (9.8m) on 8 Jan.
<i>Ruth</i> 12 14 Feb 1980	<i>Ruth</i> remained over the ocean between Australia and New Caledonia. The highest astronomical tides for 10 yr combined with large NE swells caused damage at Heron Is. The big tides and heavy

1.1(-1.4) W	swells caused extensive foreshore erosion along the Gold and Sunshine Coasts. The Brisbane wave recording station recorded significant (peak) wave heights of 4.0m (6.3m)
<i>Simon</i> 24 Feb 1980 1.1(-1.4) W	<i>Simon</i> was rapidly intensifying and moving towards the coast when it recurved seawards over Port Clinton with a radar eye diameter of 35 km. In this remote area it caused extensive damage to vegetation . It passed slowly to the north of Heron Is which experienced wind gusts to 93 knots and a great deal of damage. Neap tides saved the Island from swell damage. Huge swells were observed but their energy was dissipated on the exposed fringing reef. A yacht ran up onto Lady Elliot Island and a rescue helicopter turned over but there were no casualties. As the cyclone passed to the east of Fraser Island a ship near Indian Head reported wind gusts greater than 100 knots . Sandy Cape Lighthouse reported winds gusting to 92 knots . Houses lost roofing iron at Hervey Bay where there was flooding. The Burnett Heads wave recording station recorded significant (peak) wave heights of 4.5m (8.9m)
<i>Eddie</i> 10 Feb 1981 -3.2(-5.7) Av	It crossed the coast at Princess Charlotte Bay with only minor impact. Cooktown had a 0.64m storm surge. There was minor flooding.
<i>Cliff</i> 15 Feb 1981 -3.2(-5.7) Av	<i>Cliff</i> crossed Fraser Island and made landfall near Bundaberg. Sugar cane crops were damaged around Bundaberg and several houses were damaged further south. A storm surge brought water into the streets at Urangan. There was a 0.7m storm surge on the Gold Coast with a large swell. A large wave train brought a surge of water into Currumbin Creek which swept a man off the bank drowning him . The Brisbane wave recording station recorded significant (peak) wave heights of 4.3m (7.2m)
<i>Freda</i> 26 Feb 1981 -3.2(-5.7) Av	<i>Freda</i> developed near Cooktown and moved away from the coast. There was flooding in the Barron, Herbert, Tully and Johnstone rivers. A 10 m trawler capsized 300 km east of Mackay. The crew of 4 were rescued.
<i>Elinor</i> 3 4 Mar 1983 -28.0(-26.0) W	<i>Elinor</i> crossed the coast near Carmila. 2 yachts were wrecked near the coast. A one metre storm surge was reported at Collins Is (Broadsound). Wind blew down 0.75 diam trees, power lines and caused minor house damage along the Central Coast and Islands. Heavy rain Yeppoon area.
<i>Jim</i> 8 Mar 1984 -5.8(0.6) Av	<i>Jim</i> crossed the Peninsula Coast near Cape Grenville uprooting moderate to large trees.
<i>Kathy</i> 19 Mar 1984 -5.8(0.6) Av	<i>Kathy</i> crossed the Peninsula Coast near the mouth of the Pascoe River with only slight tree damage.
<i>Lance</i> 7/9 Apr 1984 2.0(-1.4) Av	<i>Lance</i> underwent rapid extra tropical transition near and east of Brisbane. Sustained winds reached at least 60 knots. There was damage to boats on the western side of offshore Islands in storm force westerlies and 20 boats were driven ashore on Moreton Island. On the Gold Coasts SES estimated 250 houses were unroofed and another 2000 houses damaged with many houses losing roofing and sustaining rain damage. Wind drove rain into high rise buildings. Huge seas hit the Gold Coast. On Moreton Bay the 14m motor cruiser <i>Shadrack III</i> sunk at 10.10 am 8 th and the crew of 4 were rescued by helicopter. At 6am 9 th the crew of two on the yacht <i>Igor</i> were rescued by helicopter off Stradbroke Island. At 7am 9 th the crew of four on the trimaran <i>St Therese</i> were rescued by helicopter off Stradbroke. At 10am 9 th the crew of 6 on the trimaran <i>Kindara</i> were rescued by helicopter off Brunswick Heads. The yacht <i>Hussar</i> was wrecked but the crew of two scrambled to safety on Moreton Island on the 9 th . The Brisbane wave recording station recorded significant (peak) wave heights of 5.1m (8.8m) on 9 Apr. There was significant wind damage to state forests in the Warwick region of the Darling Downs.
<i>Pierre</i> 22 Feb 1985 6.7(0.4) Av	<i>Pierre</i> moved from Cape York to make landfall a Shoalwater Bay and then moved out to sea. Only minor temporary flooding.
<i>Tanya</i> 1 April 1985 14.4(5.1) Av	<i>Tanya</i> crossed the Peninsula Coast near Coen. Minor damage to vegetation.

<p><i>Winifred</i> 1 Feb 1986 -10.7(-0.6) Start W</p>	<p><i>Winifred</i> crossed the coast with a radar eye diameter of 41 km just south of Innisfail. The worst affected areas were between Babinda and Tully. Instrumentation at Cowley Beach, which was near the southern eye wall at landfall, showed the maximum 10 min average wind was between 68 knots and 83 knots. Further to the north the maximum gust at Cairns was 64 knots. Central pressures of 958 hPa were observed at both Cowley Beach and South Johnstone. Some extreme wind effects were observed to the north in the westerly winds. A house severely damaged on a 70 m ridge north of Innisfail was calculated (By James Cook Uni) to have been hit a 145 knot gust. Other structural Damage: Innisfail- 190 houses damaged ranging from extensive to minor; Mourilyan 20 houses unroofed every other house damaged 12 vessels sunk in harbour; South Johnstone- 30 houses unroofed 50 damaged; El Arish - one house destroyed, 15 unroofed and most others damaged; Babinda -16 buildings (shops, churches, houses) damaged severely, 50 houses unroofed and 500 houses in district damaged; Silkwood -25 houses severely damaged 25 partly damaged ;Mirriwinni-50 houses damaged; Kurrimine Beach- 25 houses severely damaged 51 partly damaged; Cairns - 5 houses unroofed and 10 damaged; Millaa Millaa- 12 houses damaged 150 to 300 farm buildings damaged; Malanda -30 houses damaged 20 farm buildings severely damaged.</p> <p>A near record flood occurred in the Herbert R. and a major flood occurred in the Tully R. The total cost of Damage reached 130 million 1986 dollars of which \$87M was agricultural damage. There was a 1.6m storm surge on the gauge at Clump Pt. There were 3 deaths two from wind effects and one drowning.</p>
<p><i>Charlie</i> 1 Mar 1988 2.4(-1.3) Start C</p>	<p><i>Charlie</i> made landfall with an average radar eye diameter of 37 km at Upstart Bay near Ayr while rapidly intensifying. The lowest pressure reading was 981 hPa at Cape Bowling Green at the time of landfall. Cape Bowling Green recorded a maximum 1 minute average wind of 75 knots. Twenty four hours before landfall an instrumented ship recorded a gust of 80 knots when the cyclone passed over it. At Ayr 2m deep water flooded many houses. 4 houses were partly unroofed and others had windows smashed. The area where it made landfall is sparsely populated which limited structural damage however there was widespread sugar cane damage. Total crop losses were \$15 (1990) million most of which was caused by flooding. Large seas were generated by <i>Charlie</i> and the Abbot Point wave recording station measured significant (peak) wave heights to 3.1m (5.6m). Beach erosion occurred between Bowen and Townsville and the most serious was at Beachmont where a dune breach caused tidal inundation over 1800 hectares of grazing land. A stockman was drowned in flooded Marian Creek south of Sarina on the 1st. There was an unofficial rainfall report of 912 mm in the 24 hours to the 1st from Gibberland Station in the Connors Ranges. Nearby there was an official report from Carmila of 804 mm in the 24 hours to the 2nd.</p>
<p><i>Aivu</i> 4 Apr 1989 21.0(13.5) C</p>	<p><i>Aivu</i> crossed the coast with a radar eye diameter 30 km of near Ayr. Just before landfall the diameter was 22 km. A pressure of 959 hPa was read in the eye at Fredericksfield which is 20 km inland from the coast. Insurance pay out (1990 \$) for Buildings cars boats etc were \$26 million. Total damage was about \$40 (1990)million. Agricultural damage was also around \$40 million and infrastructure losses were about \$10 million. Wind destroyed some houses however mostly it caused loss of roofing iron or awnings etc. A 3 metre storm surge destroyed numerous beachfront properties in Upstart Bay and drowned one man. Major flooding occurred in the Pioneer and Proserpine Rivers. As <i>Aivu</i> approached the coast during 2 April flood rains affected SE Qld and NE NSW. Seven people were lost presumed drowned (Two in Brisbane, Two in the Gold Coast Hinterland and three in NE NSW).</p>
<p><i>Nancy</i> 3 Feb 1990 -17.3(-9.0) Start W</p>	<p><i>Nancy</i> crossed the coast near Byron Bay and then moved seawards again. The strongest wind report was a mean wind of 60 knots gusting to 73 knots at Cape Moreton Lighthouse near Brisbane. The lighthouse also recorded the lowest pressure reading of 982.7 hPa while it was experiencing the strongest wind speeds. There was some structural damage to houses on the offshore Islands and elevated areas near the coast however the major impact was from flooding. Heavy rain (up to 530mm in 24 hrs and 132mm in 3 hours) occurred between the coast and ranges south from Brisbane causing flash floods and drowning six people (5 in NSW and one in Qld). Damage costs from flooding in Qld and NSW reached \$36 million.</p>
<p><i>Ivor</i> 19 Mar 1990 -8.5(-8.8) End W</p>	<p><i>Ivor</i> crossed the coast near Princess Charlotte Bay. There was some structural damage to sheds and light damage to the main buildings in Coen. There was evidence of a tornado track from a swath of damaged trees 100m wide extending as far as the eye could see 40 km south of Coen. David Ambrose (07 38471847) was on board the vessel <i>Mustique</i>, which encountered sustained</p>

	<p>winds of 114.5 knots (maximum reading on the anemometer). They spent the period steaming between Flinders and Stanley Islands in Princess Charlotte Bay. David Curnock , a dentist in Cairns was one of the crew and he recalled the ship's barometer falling to 928hPa The windward side of trees were stripped of bark.</p> <p>There was extensive damage to Coral along the coast.</p> <p>The cyclone retained its identity as a monsoonal low and moved through the eastern Gulf and back down the east coast with heavy rain south of its centre. As it moved down the Central Coast unofficial 24 hr falls of 1000mm were reported near Yeppoon and this caused flash flooding and extensive damage in the Yeppoon area. 572.4mm in 24h to 9am 27 Mar at Pacific Heights Yeppoon.</p>
<p><i>Joy</i> 22 25 Dec 1990 -2.4(-0.8) W</p>	<p><i>Joy</i> intensified as it approached Cairns and late on 22 Dec it developed a circular radar eye 50 km in diameter 200 km NE of Cairns. It then became slow moving and developed the concentric eye pattern of the very severe tropical cyclone. The strongest winds at Cairns with gusts to 67 knots were recorded late on 23 Dec when <i>Joy</i> was 130 km NE of Cairns. An AWS on Green Island recorded a gust of 97 knots. The cyclone gradually lost intensity after 24 Dec and crossed the coast near Townsville as a much weaker system. Destructive winds buffeted the Coasts and Tablelands between Cape Tribulation and Innisfail. There was structural damage to buildings however large economic losses resulted from damage to crops , road surfaces, power lines and water supplies. On Boxing Days gales caused extensive damage to boats in the Whitsunday Group. Early on 27 Dec a tornado at Mackay demolished 2 houses, damaged another 40 and caused extensive damage in a seaside caravan park. 6 lives were lost, 5 were drowned in swollen rivers (1 at Bowen and 4 at Rockhampton) and a man drowned while surfing in cyclone generated seas at Mackay. Exceptional flood rains fell and over the period 23 Dec to 7 Jan and some stations in the Pioneer catchment received 2 metres of rain. Damage coast reached \$62 (1990) million.</p>
<p><i>Betsy</i> 13 Jan 1992 -25.4(-17.1) W</p>	<p><i>Betsy</i> passed 450 km seawards of Fraser Island but being an exceptionally large cyclone generated very large swells which caused severe beach erosion particularly at Noosa where all sand has been washed away. Forty people were rescued at the normally safe beach at Noosa. A yacht off Fraser Island had to be rescued by the coastguard.</p>
<p><i>Fran</i> 16 Mar 1992 -24.2(-17.5) W</p>	<p><i>Fran</i> crossed the coast neat the Town of 1770. The maximum anemometer wind gust recorded was 76 knots on Great Keppel Island (just off the coast from Yeppoon).In Bundaberg 40 houses were unroofed, one was blown off its stumps and at Bargara the caravan Park was evacuated. Heavy damage to fruit and vegetable crops occurred in the Bundaberg district. At Burnett Heads the marina and 3 yachts were damaged and there was extensive damage to pontoons and yachts forced against a rock wall. Powerlines, trees, and roofs were damaged at Gympie. There was roof damage along the Sunshine Coast when <i>Fran</i> crossed Fraser Island on its way back out to sea. A storm surge inundated 20 business premises, 100 houses and 50 caravans at St Hervey Bay. People were evacuate from the Caravan Parks. One house had seawater through lower levels at Burrum Heads. There was major flooding in the Kolan R and moderate flooding in the Burnett R. Heavy swells caused damage on Heron Island and severe erosion on the Gold and Sunshine Coasts. In total there were 2,624 insurance claims for property damage. It has been estimated that the total damage bill (with flood damage) was 8 to 10 million 1992 dollars.</p>
<p><i>Roger</i> 17 Mar 1993 -8.5(-12.5) W</p>	<p><i>Roger</i> came within 250 km of Fraser Island before turning back out to sea. The cyclone had a very large circulation and came near the coast as a ridge built up along the NSW coast. This developed an extensive area of gale to storm force winds. Six houses sustained roof damage on the Sunshine Coast There were large blackouts in SE Qld due to fallen trees. Banana growers in SE Qld lost about 50 % of their crop as winds twisted and uprooted the trees. In N NSW fallen trees closed the 64 km Tweed Range Scenic Road. The winds and seas closed the Port of Brisbane for the first time since <i>David</i> in 1976. A man drowned in the surf at Agnes Waters. Seas were still large on 20 Jan and a man was drowned at Surfers Paradise and more than 60 people were rescued. A storm surge of 0.74m was measured on the Gold Coast Seaway gauge on 17 Mar and the peak water level reached 0.16m above highest astronomical tide(HAT). There was serious beach erosion along the Sunshine coast. The Brisbane wave recording station recorded significant (peak) wave heights to 7.5m(13.2m) on 17 Mar. Ship observations off Brisbane indicated that the larger swells came from the north, northeast and east.</p>
<p><i>Rewa</i> 19/20 Jan 1994</p>	<p><i>Rewa</i> came within 100 km of the coast as it was recurving away from Australia. Two men were rescued from a fishing trawler near Yeppoon by an army Blackhawk helicopter. The upper trough</p>

-1.6 (0.2) C	system interacting with <i>Rewa</i> as it recurved generated severe flash flood thunderstorms over Brisbane which resulted in four deaths. Three died in traffic accidents and a boy was swept down a drain. A man was also rescued by a SES helicopter when his car was swept into a flooded creek. 100 homes were damaged by the floodwaters.
<i>Violet</i> 8 Mar 1995 3.5(-5.1) End W	<i>Violet</i> came close to the coast near Byron Bay while weakening below tropical cyclone intensity. Earlier it passed close to Lord Howe Island where gusts reached 68 knots with tree damage across the island. Heavy swells caused severe beach erosion near Evans Head.
<i>Barry</i> 9 Jan 1996 8.4(1.3) Weak C	<i>Barry</i> tracked from the Gulf through Central Qld. A surface trough extended from the centre to the east coast and was associated with wind gusts to 70 knots as it moved down the coast from Sarina to Hervey Bay. This resulted in pockets of structural and tree damage along this part of the coast along with tides of up to a metre above normal.
<i>Celeste</i> 27 Jan 1996 8.4(1.3) Weak C	<i>Celeste</i> very rapidly developed near the coast and came close to Bowen as it was moving southeastwards out to sea. With a radar eye diameter of 40 km it was 24 km north of the town when the airport reported an average wind 50 knots with gusts to 64 knots. Queensland emergency services reported 18 houses damaged in Bowen of which only 3 sustained major damage. There was \$300,000 (1995 dollars) damage at Hayman Island as the cyclone passed 25 km north of the Island. The Hayman Is wave recording station measured significant (peak) wave heights to 3.2m (6.7m)
<i>Ethel</i> 12 Mar 1996 6.2(5.0) End weak C	<i>Ethel</i> moved across Cape York from the Gulf and then turned rapidly back towards the east coast of Cape York Peninsula and then intensified again before making landfall near Cape Melville. Many vessels were sheltering in nearby Princess Charlotte Bay and maximum sustained winds of up to 50 60 knots were reported.
<i>Ita</i> 24 Feb 1997 +13.3 (+3.0)	<i>Ita</i> crossed the coast near Cunggella in Bowling Green Bay around 1200 UTC on the 24th. The strongest wind reports were from the Alva Beach AWS with a 10 minute wind of 42 knots from the east with gusts to 50 knots at 1030 UTC on the 24th. Power lines were brought down. Flooding occurred in the vicinity of Alva Beach and in coastal streams to the south, in particular the Pioneer. A tornado was observed at Yukun, 13km south of Sarina at 0530 UTC 24th. A 25 metre high tree was uprooted by the vortex. It cut a 20 to 30 metre strip through sugar cane. Flooding caused \$450,000 damage to roads in the Mirani Shire. The highest 24 rainfall total was 375 mm at Dalrymple Heights.
<i>Justin 1</i> 9 Mar 1997 -8.5(-4.0) Start W	<i>Justin</i> lay well out to sea but was a very large cyclone and tides exceeded HAT at most centres between Bundaberg and Cooktown. The highest overall tide gauge recordings in relation to HAT were 0.4 m above HAT at Shute Harbour and 0.5 metres above HAT Mackay. The Mackay wave station recorded significant (peak) heights to 4.8m (8.45m) . Wind observations showed a large area of gales of relatively constant direction over open waters extending from around Hayman Island to the Capricorn Channel, a distance of some 500 km for more than 36 hours. The large waves and high tides resulted in severe beach erosion and inundation along coast and offshore Islands between Townsville and Bundaberg. There was some wind damage over the Whitsunday Group and sea damage to retaining walls, marinas and yachts. A Canadian couple were rescued from a 15 metre ferro concrete yacht by helicopter 1 hour 20 minutes out from Townsville.
<i>Justin II</i> 22 Mar 1997 -8.5(-4.0) Start W	<i>Justin</i> crossed the coast near Cairns while rapidly intensifying and with a radar eye diameter of about 25 km . The maximum winds reported were from Green Island AWS with average winds to 55 knots and gusts to 69 knots . The lowest pressure there was 994.6 hPa in the eye . Two people were killed as <i>Justin</i> passed over the area. A lady was killed by a landslide at Paluma near Townsville. A boy was electrocuted by a fallen power line at Innisfail 70 km south southeast of Cairns. The total horticultural and sugar cane damage bill is expected to reach \$150,000,000 . Damage to roads and bridges etc are expected to exceed \$20,000,000. Cairns harbour wall was badly damaged and 50 berths in the marina were destroyed. There was widespread tree damage which brought down power lines and caused massive blackouts. Large landslides covered roads leading up into the Atherton Tablelands.. In the Tablelands fifteen homes were damaged by trees smashing through roofs. There was also wind damage in the Townsville area. Thirteen flooded homes were evacuated in Dimbulah. Major flooding occurred in the Johnstone, Tully and Herbert Rivers. Ten houses were inundated at Innisfail. Four houses were inundated at Cardwell. At Deeragun in Townsville 60cm of water covered the suburb and several houses were

	evacuated. At Giru the town was covered by 25 cm of water.
<i>Sid</i> 10-11 Jan 1998 -23.5 (-17.3) W	<p>Ex TC <i>Sid</i> crossed the Peninsula from the Gulf and intensified to a severe monsoon low near Townsville. Townsville recorded 549 mm of rain in the 24 hr period to 2300 UTC on the 10th. Included in this period was 120.6 mm in one hour and 205.2 mm in two hours. A man was drowned when his car was washed off a creek crossing in Townsville. In Townsville around 100 residences had substantial over floor flooding with hundreds more sustaining property flooding. Numerous cars were damaged by flooding, and up to 50% of the houses in Townsville lost power at some stage. Damages to local Government infrastructure were high. On Magnetic Island a huge landslide caused major damage to a tourist complex. The small communities of Black River and Bluewater suffered extensive damage from flash flooding. Flooding impacted on 48 houses with the majority rendered uninhabitable. 14 were totally destroyed with 8 washed away. One hundred houses experienced over floor flooding in Halifax and Ingham. There was also extensive damage to the rural sector. Wave action and storm surge inflicted severe damage and erosion to coastal areas around Townsville with damage from these effects quoted as reaching \$19 million. The sea reached a level just below HAT at 2221 UTC 10 January and the Townsville wave recording station recorded waves with Hsig of 2.93 metres and Hmax of 5.41 metres at 0500 UTC 10th Jan. Seven vessels sunk in Townsville Harbour. The total damage bill was well in excess of \$100 million.</p>
<i>Yali</i> 26 Mar 1998 -28.5 (-21.0)	<i>Yali</i> passed 500 km east of Brisbane on a southerly track. Wind gusts to 54 knots were recorded at Cape Moreton and Double Island Point. The Brisbane wave recording station recorded significant (peak) wave heights to 6.0m(11.5m) on 26 Mar. A storm surge of 0.3m coincided with high spring tides. There was beach erosion from the Sunshine coast to Northern NSW beaches. There were tree damage and power blackouts on the Sunshine coast.
<i>Rona</i> 11 Feb 1999 8.6(10.9)	<i>Rona</i> made landfall just to the north of Cow Bay which is near the Daintree River Mouth. The main wind damage extended from Newell Beach to Cape Tribulation with the major damage between Cape Kimberley and Cape Tribulation. Some trees in the Cape Tribulation area which survived the 1934 cyclone were felled by <i>Rona</i> . The maximum wind speeds were recorded by the Low Isle automatic weather station with 10 minute average winds to 71 knots and a maximum wind gust of 85 knots. The lowest pressure of 983.0 hPa (not in the eye) was recorded at Low Isle. A 1 metre storm surge was recorded at Port Douglas (at low tide) and a 1.4 m surge was recorded at the mouth of the Mossman River. These sites were south of the maximum wind zone where the largest storm surge would be expected. Major flooding occurred between Cairns and Townsville. Despite the confined wind fetch inside the Barrier Reef, <i>Rona</i> generated some large waves as indicated from wave recording stations run by the Beach Protection Authority. At the Low Islet station the peak significant wave height (the average of the one-third highest waves in a 26.6 minute period) exceeded 3.5 m and the maximum wave height exceeded 6.3 m. The Cairns station recorded significant wave heights to 2.49 m and a peak height of 4.65 m. These were record heights (since recordings commenced in 1975) for Cairns although readings were missed when tropical cyclone <i>Justin</i> made landfall near Cairns in March 1997. At Dunk Island the corresponding readings were 3.06 m and 5.69 m. There was major damage to crops and infrastructure in the Douglas Shire and major damage to crops between Townsville and Cairns.
<i>Steve</i> 27 -28 February 2000 12.9 (9.1)C	Tropical cyclone <i>Steve</i> crossed the coast at the Cairns Northern Beaches around 7 pm Sunday 27/2/00. It was named at 7 am that morning while near the Holmes Reef, which is located 230 km east-northeast of Cairns. Cairns Airport reported its lowest MSL pressure 991 hPa at 6.39 pm Sun (not in the eye.) Max gust was 77 knots at 6.45 pm and 6.50 pm Sun. The maximum 10 min average wind was 120/56 knots at 6.51 pm. At Green Island the lowest MSL pressure was 984.6 at 5.53 pm Sun (not in eye). Max gust there was 85 knots around 6.30 pm. The highest significant wave at the Cairns Wave recording Station was 2.75 m around 8pm Sunday and the maximum wave height was 5.0 m after this at midnight. The maximum storm surge at Cairns (1 metre) was at 7.30pm Sun. As <i>Steve</i> developed a monsoon rainband extended from it towards Cairns and Cairns Airport recorded 237 mm in the 24 hours to Sat 26 Feb 2000 which caused flooding of some houses. The rain increased in the Barron River Catchment around the time of landfall. Emerald Crest recorded 256mm in the 12 hours to 6.25 am Monday 28 February 2000 . This resulted in Major flooding at Mareeba in the early hours of Monday and in Cairns during Monday. At Mareeba 90 people were evacuated including 20 by helicopter evacuation from roof tops. A

	<p>railway bridge was washed away. The flood level reached 12.4m at Mareeba (a record) at 4.37 am Monday morning. Many buildings in Cairns suffered severe water damage including the Cairns Hospital. Powerlines were down throughout the district with more than 40.000 without power. A 17 yr old youth drowned in a flooded stream south of Cairns the day after the cyclone made landfall. Many buildings in Cairns suffered roof damage including the Cairns Yacht club with lost a large section of the roof. Kuranda township on the Atherton tableland west of Cairns suffered high wind damage with hundreds of trees uprooted. Twelve houses were extensively damaged when large trees fell on them. The two highways to the Atherton Tablelands were closed by fallen trees and landslides. The Gillies Highway was closed for a week. Crop damage from rain and wind was severe and the sugar cane damage has been quoted at 20 million AUD.</p>
<p>Tropical low 17 Mar 2000 9.4 (13.0) C</p>	<p>The low originated as a circulation south of Honiara. It moved west and Gales were reported from a ship at 0000 UTC 16th at 18.6S 149.6E Willis Island reported northeasterly gales on the 16th .Satellite derived winds at 0851 UTC 16th showed winds in the easterlies to 45 knots near the coast south of 17S. Gales on the mainland were reported from Lucinda (northeasterly winds averaging 34 knots) at 1316 UTC 16th and Cardwell (northeasterly winds averaging 35 knots at 2000 UTC 16th . Rainfall: max 24 hour total 300mm in 24 hour to 2300 UTC 16th Flooding: One of the highest floods on record at Giru (town just south of Townsville)</p>
<p><i>Tessi</i> 2 Apr 2000 16.8 (9.8) C</p>	<p>The cyclone formed a small compact radar eye (diameter 10 to15 km) near the coast after 1800 UTC 2 April 2000. It appears the worst wind damage was just outside this eye in the area around Mutarnee (a small village 60 km northwest of Townsville). Here many large trees were uprooted and the roof of a farmhouse was lifted off, battens and all, and deposited 50 metres away in a cane field. The most extensive tree damage was further east in the normally uninhabited beach areas where some isolated beach huts were unroofed. The eye wall cloud passed over this uninhabited area consisting mostly of marsh land. An anemometer on Magnetic Island (about 15 km or 8 nm northeast of the Townsville measured a 10-min average easterly wind of 59 kts at 1600 UTC 2nd which, in conjunction with some other data, indicated that <i>Tessi's</i> centre was about 40 km from Townsville at its closest approach. <i>Tessi</i> was responsible for setting new weather records for April at the Townsville Meteorological Office; highest wind gust (70 knots), highest daily rainfall (271.6mm) and the highest monthly rainfall (539mm to 27 April 2000). However official daily rainfall is measured up to 9am local (2300 UTC) and 423.4 mm was measured in the 24 hours up to 1500 UTC 3 April 2000. The maximum wind gust at Townsville occurred at 1540 UTC 2 April 2000 when the centre of cyclone was 40 km away. The cyclone caused widespread wind damage in Townsville mainly to trees and power lines. Most structural damage was due to falling trees though there were isolated reports of roof damage attributed to the wind itself. Widespread flooding occurred with the associated downpour, which also led to a severe landslide in one of the more affluent residential areas of Townsville on Castle Hill. There was also wave damage along the Strand at Townsville with several boats destroyed. Gales extended down the coast to Gumlu (120 km southeast of Townsville). Here an anemometer failed at 60 knots. The extent of the gales on the northern side was 30 km.</p>
<p><i>Abigail</i> 24 Feb 2001 11.9(9.2)</p>	<p>During the first phase of its life <i>Abigail</i> was a tropical cyclone for only three hours. The cyclone crossed the coast about 30 km northwest of Cairns over the northern Cairns beaches (Palm Cove and Ellis Beach) around local noon on the 24th. The maximum 10-min avg sustained wind was 40 kts, recorded at the Green Island AWS, with the lowest sea level pressure there 992.7hPa. The impact in the Cairns area was minimal. There was some local flooding and trees downed at Edge Hill and in the northern suburbs</p>
<p><i>Sose</i> 5- 12 Apr 2001 0.3(-0.7)</p>	<p>Although Tropical Cyclone <i>Sose</i> remained far from Australia's shores, the large size of the circulation in combination with a high centred near New Zealand resulted in gales which generated huge waves that battered portions of Australia's East Coast. The significant wave height at the Brisbane wave rider buoy reached 4.8 m with the wave period reaching 16 seconds. The large seas combined with large tides caused beach erosion. There were two drownings on the Queensland coast near the Town of 1770 on the 8th when large E swells came into an area usually protected from the prevailing SE swells.</p>
<p><i>Beni</i> 2-5 Feb 2003 -7.4(-5.4)</p>	<p><i>Beni</i> weakened below tropical cyclone intensity before it reached the Queensland coast, however it had some impact. On the 2nd Maximum wave height on the Brisbane wave rider buoy reached 4.8m Hsig and 8.5m Hmax. Many beaches were closed on the Sunshine and Gold Coast and 12 members were rescued from two outrigger canoes in Moreton Bay. The only impact from wind</p>

	<p>appears to be the loss of power at Agnes Waters and Town of 1770 late on 5 February 2003 (local time).</p> <p>On 6 February 2003, 160 people were stranded by floodwaters at Wowan (80km west of Rockhampton). Buildings were flooded in Wowan with the school completely flooded.. The Town of 1770 and Agnes Waters were still isolated by floodwaters on 8 February 2003. Many Peaks was also isolated. A deluge at Kabra (west of Rockhampton) early on 6 February 2003 flooded a house with a metre of water. In the Banana shire one person was rescued from a roof a man was washed away in a car and drowned while another woman was rescued. The floods are thought to have caused 10 Million dollars worth of damage to Public Infrastructure.</p>
<p><i>Fritz</i> 11 Feb 2004 8.6(-1.1)</p>	<p>Fritz crossed the far northern Queensland early on 11 just to the south of Cape Melville. "Fallen trees caused water and power outages at the remote communities of Wujal Wujal, Bloomfield and Ayton north of Cairns. Landslides closed the Gillies Highway near Cairns, and a landslide caused major damage to properties at Yorkeys Knob (northern beach suburb of Cairns). Rainfalls in the 24 hours to 9 AM 11 February reached 204 mm at Weipa and 173 mm at Saddle Mountain (near Cairns). Further south totals on the 12th reached 309 mm at Upper Murray and 292 mm at Paluma. There was flash flooding in the Innisfail/South Johnstone region with falls of 74 mm in one hour.</p>
<p><i>Hybrid cyclone</i> 5 March 2004 0.2(-2.5)</p>	<p>Very large long-period waves were generated by the storm. Waves with significant wave heights of 7.1m and maximum heights 14.3m were recorded on the the buoy off Stradbroke Island around 05/0700 UTC, coming from the east-northeast. The peak height measured on the Tweed Buoy was just over 14 m and this occurred at 1700 UTC on 6 March, when the significant wave height was between 5 and 6 metres. The wave periods were almost 13 seconds and approached from the east-northeast. Even in Moreton Bay a maximum wave height of over 3.5 metres was measured around 1500 UTC on 5 March. The worst effect from storm surge appears to have been in association with the Friday night's high tide at Currumbin on the Gold Coast when cars were floating around the car park. This was not a big tide (0.74 m below the Highest Astronomical Tide--HAT) and therefore the wave effects appear to have added over a metre to the tide. Northeasterly gales in Moreton Bay early on Saturday raised the level of the Bay 0.7 metres. Cape Moreton's strongest winds were at 05/0500 UTC-- 30/56 knots (10-min mean) and peak gust 67 knots. Twenty-four hour rainfall totals from 04/2300 to 05/2300 UTC reached 284.0 mm. Up to 106,000 customers lost power during the passage of the subtropical storm through the greater Brisbane Metropolitan area, the Sunshine Coast, and the Gold Coast with tree and associated minor structural damage reported throughout the area and extending into northern New South Wales. There/were 3 fatalities associated with this event. A man is missing in the flooded Mary River near Gympie, a 10-year-old boy who was drowned after being swept away from his family when they tried to cross a creek in the Tweed River catchment; and an elderly woman drowned in a creek near Nambucca Heads (South of Coffs Harbour). Two people were rescued from a 4WD in a flooded creek on the northern Gold Coast. Five people were rescued from the top of their car in a flooded stream near Caboolture north of Brisbane. At Bundamba near Ipswich two girls fell into strong rapids and were rescued by Police. At Murphy's Creek near Toowoomba fire-fighters rescued a stranded motorist. Five people were rescued after they were swept into the sea by the run up from large waves. In Moreton Bay a French yachtsman was rescued after an air and sea search.</p> <p>The State Emergency Services (SES) says its crews were called out to about 200 jobs across the Brisbane area, 80 on the Gold Coast and 70 on the Sunshine Coast. Most were minor roof damage and sandbagging requests. Police say there were many trees and power lines down across Brisbane, the Gold Coast, the Sunshine Coast, Ipswich and Toowoomba. On the Gold Coast, police say some cars became bogged in flooded roadways, although there are no reports of any injuries. The Warrego highway at Cunningham's Gap, west of Brisbane, was closed due to rockslides. Four metres of roadway were washed away on Sydney Street at Brassall in Ipswich as a bus passed over it.</p>
<p><i>Grace</i> 19-24 March 2004 0.2(-2.5)</p>	<p>During its formative stages and due to its proximity to the coastline, the initial tropical low-pressure complex that eventually consolidated into Tropical Cyclone Grace caused widespread flooding and damage to roads and property along the far north Queensland coast, mainly between Cooktown and Cairns. Topaz recorded 759mm in the 72 hours to 2300UTC 20 March</p>

	<p>2004 (the highest 24hour total was 372mm). Winds and waves brought tide levels above the highest tides of the year (HAT) and this was particularly evident at Cooktown where a 0.4 m storm surge was recorded on the morning high tide (0.3 m above HAT) on 19 March. Many boats were upturned in the harbour and washed away. Further south storm surges caused the flooding around the northern beach suburbs of Cairns and required the closing of some roads. The strongest winds were recorded from Green Island AWS with average winds reaching 120/41knots and gusting to 49 knots. The strongest winds from Low Isle were 140/39knots gusting 50 KTS. Floodwaters closed all major roads into Cairns. In addition, a large section of one lane of the Captain Cook Highway north of Cairns collapsed after a landslide consisting of nearly 20 metres of rock and boulders the size of cars destroyed the ocean-side road. The scenic coastal highway and link between Cairns and Port Douglas was closed for several days. Residents were evacuated from the Whitfield range area due to landslides. An estimated \$20,000,000 (US) damage to the Cairns region. On Saturday (19 March), SES workers were rescuing motorists who had driven around the closure signs only to be swept from the roads. Also, a man was rescued clinging to the roof of his car in floodwaters north of Cairns after being trapped there for four hours. Gales and large wave then affected the central and south coasts. Heron Island recorded gales with gusts to 48 knots and Cape Moreton recorded gusts to 54 knots. On 23 March a helicopter and coastguard rescued a stricken craft near the Gold Coast Seaway.</p>
<p>Tropical Cyclone <i>Kerry</i> 3-15 Jan 2005 1.8 (-11.8)</p>	<p><i>Kerry</i> remained offshore in the Coral Sea although there was an impact from long period waves (Hsig to 3metres) along the southern Qld and N NSW coasts. There were many rescues on the Gold and Sunshine Coasts and unfortunately one surfer drowned.</p>
<p>Cape York and Coral Sea Hybrid 19-25 January 2005 1.8 (-11.8)</p>	<p>A tropical low moved from the Coral Sea onto Cape York Peninsula before moving back into the Coral Sea and then down into the Tasman Sea. Two cars collided with a truck near Yalboroo, south of Proserpine, in heavy rain 23 Jan 2004, resulting in two deaths and three injuries. A farmer drowned in floods in the Burdekin District. There was a rescue in the Townsville region with this event when a truck driver became stranded on his vehicle There was an unofficial though reliable report of 642mm of rain in 24 hours just to the west of Townsville on Sunday morning 23 Jan 2004. More than 10 people have been rescued from floodwaters south of Charters Towers in north Queensland overnight. Rivers and creeks have flooded, isolating the mining town after a weekend of relentless rain in the region. Ten tourists have been rescued in the Whitsundays, in north Queensland, after being caught by rising floodwaters. Maximum average winds at land stations Hayman Island 100/42 knots 241234UTC. Five people drowned between Newcastle and Woolongong over the weekend. 29/30 Jan 2005. The tropical low intensified off the NSW coast over the weekend and developed a long fetch of gales between it and a high near NZ. Hsig on the Crowdy Head and Port Kembla buoys were only 2-3m but significantly over the weekend peak energy periods increased from 10sec to 13 secs.</p>
<p><i>Ingrid</i> 10 March 2005. SOI -13.5 0.2 (-13.3)</p>	<p><i>Ingrid</i> made landfall on a remote part of the east coast of Cape York Peninsula as a severe tropical cyclone. It was a small system in size and severe damage was confined to a 40km wide swathe close to the coastal crossing near Bombardt Point. A storm surge survey measured a surge of 2.8metres. Trees were blown down across the Cape as it continued westward after crossing the east Coast damage. Long period waves (10sec) with Hsig 1m came through the reef and were measured on the waverider bouy near Clifton Beach on the 8th. This caused inundation there on the high tide. It was estimated that (AUS) \$2 million worth of damage was caused in Queensland from <i>Ingrid</i>, with the Cook Shire Council estimating that damage of up to \$1 million had occurred to shire roads and the Douglas Shire reporting up to \$300,000 of road damage.</p>
<p>Tropical Cyclone Jim 26 Jan 2 Feb 2006. 12.7 (4.5)</p>	<p>Jim developed near Lucinda. Heavy rain was driven on-shore between Ingham and Townsville, causing flooding of coastal rivers and streams. The heaviest falls in the 24 hours to 9:00 AM on 27 January were 258 mm at Home Hill, 211 mm at Lucinda, 189 mm at Alva Beach and 188 mm at Townsville. A barge being used in the reconstruction of the Willis Island Meteorological Station (mid Coral Sea) was damaged during the storm and lost the loading ramp on its front.</p>

<p>Tropical Cyclone <i>Kate</i> 22 –24 Feb 2006 0.1 (8.9)</p>	<p>Kate developed east of Torres Strait and became a tropical cyclone <i>Kate</i> at 1809 UTC 22 February 2006 and further it reached maximum intensity around 2300UTC 22 February. <i>Kate</i> had a big impact on Torres Strait Islands where it washed away a jetty and added to the erosion damage caused by the gales last July and <i>Ingrid</i> and the Port Moresby cyclone last summer.</p>
<p>Hybrid low pressure system 3-5 March 2006 13.8 (9.7)</p>	<p>By 2000UTC 2 March a tropical low had deepened and moved down to the east of Fraser Island while high pressures were maintained over northern New South Wales. This increased the pressure gradient and observed winds between Fraser Island and Coolangatta. Wave heights began to increase during Friday the 3 March on the south Queensland buoys and at this stage more rapidly on the Sunshine Coast than on the buoys further south. Twenty four hours later at 2000UTC 3 March the low did not noticeably deepen but moved closer towards the higher pressure, which was maintained at 1018 hPa over the period at Coffs Harbour. As a result an intense pressure gradient with gale to storm force onshore winds had developed off the south Queensland Coast. Later that evening at 0800UTC 4 March the quikscat data indicated gale force winds extending out at least 400km east of the coast.</p> <p>The maximum wind averaged over 10minutes was from Cape Moreton 53knots at 1430UTC 3 March 2006. Wind damage affected many areas of Southeast Queensland. A Counter Disaster and Rescue Service spokeswoman said volunteers had been "flat out" as trees crushed houses and cars. A nursing home at Kirra was evacuated when a tree fell on a unit. No residents were injured. In Brisbane, residents of a unit block in Woolloowin and a house in Chermside were lucky to escape when trees fell on their properties. Traffic accidents kept police busy and one vehicle crashed into a house at St Lucia. Energex staff were braced for action as blackouts hit about 100,000 homes and businesses from Friday morning to Sunday afternoon. At Mt Tamborine and Bonogin boggy grounds hampered restoration efforts and in Beaudesert trees and branches continued to damage wires. In Moreton Bay on Sunday 5 March boats were damaged and ripped from their moorings. One of these yachts was found later in the week at Noosa Heads.</p> <p>The second highest significant wave height since 1976 was recorded at the EPA's Brisbane wave recording station on Saturday (4 March). Significant wave heights up to 7.2m were recorded by an EPA wave monitoring buoy located 10km southeast of Point Lookout, North Stradbroke Island while individual waves up to 15.0m (and possibly 16.7m) were also recorded. Significant wave heights of 5.4m, 5.3m and 5.5m were also recorded respectively at the Sunshine Coast, Gold Coast and Tweed Heads wave recorders. These waves were the second, fifth and third highest wave events at these sites."</p> <p>A significant storm surge occurred with stormwater outlets blocked by surging waves and this caused localised flooding of low lying coastal areas such as Flat Rock Creek and Marine Parade Kirra.</p> <p>The mayor of Redcliffe said there was a significant storm surge in Moreton Bay though following the first Severe Weather Warning sand bagging was carried out and this prevented large-scale erosion.</p>
<p>Tropical cyclone Larry 17-21 March 2006 13.8 (9.7)</p>	<p>Severe Tropical Cyclone Larry crossed the tropical north Queensland coast near Innisfail during the morning of 20 March, 2006. Major damage to homes and other buildings was caused by Larry as well as extensive damage to local crops. Larry reached Category 5 for a time just before landfall.</p> <p>As at 30/10/2006 there were 30,594 insurance claims for a total of 14,000 houses of which 500 were written off. Building costs estimated at 1.5 billion 2006AUD. Sugar industry losses were around 200millionAUD with total crop losses exceed 0.5 billion 2006AUD. The worst town affected being Silkwood with 99% of the houses damaged. Examples of the extreme wind damage were 4 high voltage transmission towers blown down along the Palmerston Highway and another north of Babinda. An Australian record wind gust of 293.7km/h was recorded on the eastern slope of Mt Bellenden Ker from a C.S.I.R.O. anemometer. Very large storm surges (debris lines to 5m above MSL) were measured in the Bingil Bay area.</p>
<p>Tropical cyclone Monica 17-21 April 2006 15.2</p>	<p><i>Monica</i> made landfall on a remote part of the east coast of Cape York Peninsula south of Lockhart River as a severe tropical cyclone. Lockhart River reported a maximum wind gust of 109 km/h gust at Lockhart River, 3pm EST 19 April and a lowest MSL pressure of 986.0 hPa. Highest rain totals were 215 mm at Lockhart River in the 24 hours until 9am on 19 April.</p>

(6.4)	<p>239 mm at Violet Vale in the 24 hours until 9am on 20 April 282 mm at Musgrave in the 24 hours until 9am on 21 April</p> <p>Flood Damage</p> <p>Strathmay Station (Western Cape) recorded 800 mm on top of an already large wet resulting in 25cm of water running through the house and a wall of water 5k wide and up to 4 metres deep running across the property. Owners state that the local aboriginals had confirmed that the land around the house had never previously flooded (approx. 100 years).</p> <p>Lotus Bird Lodge (Eastern Cape) experienced 3 metre deep floodwaters through its 4 star accommodation Lodge.</p> <p>There was little structural damage from the cyclone (except for around Lockhart River where Cyclone Monica struck). Damage and impact was largely flood related – decimated roads, significant stock losses, buildings water damage, contents, trees down, flooded plant and equipment.</p>
28 Dec 2007- 5 Jan 2008	<p>Between 0000UTC and 1200UTC 28 December 2008 a tropical low deepened as it moved towards the southwest to be located northeast of Fraser Island . At the same time a high built up east of New Zealand so that an intense pressure gradient developed south of the low with Automatic Weather Station (AWS), ship and Quikscat satellite observations indicating an extensive area of gale to storm force winds in this zone between the low and the high.</p> <p>The resultant large waves affected the open coast along Fraser Island and to a lesser extent the Gold and Sunshine Coasts. 3000 campers were evacuated off Fraser Island.</p> <p>By 0000UTC 30 December 2007 gales were affecting the coast between Sandy Cape and the Queensland New South Wales Border bringing down trees causing roof damage and power blackouts over an extensive area. A large area of gales, were directed towards the whole southeast Queensland coast maintaining large waves which peaked at 6.2 metres significant wave height on the Brisbane buoy during the day. The peak energy period was 12 seconds, which ensured extensive beach erosion especially on Fraser Island.</p> <p>Between 0000UTC 2 January 2008 and 0000UTC 3 January 2008 the low became organised into a complex system with two centres and with a centre developing east of Brisbane the large wave energy created began being directed more towards the Gold Coast. The southern low approached southeast Queensland on the 4 January where by 1100UTC the pressure gradient and gale force winds contracted to the Queensland/New South Wales Border area. Extreme rainfall fell on both sides of the border in the Springbrook with totals to 364mm most of which fell in the four hours to 1400UTC 4 January 2008. This caused major floods in both Qld and NSW.</p>
13-18 Jan 2008	<p>A low moved east from the Gulf of Carpentaria and then moved out into the Coral Sea and the heaviest rainfall over the 24 hours up to 9am 14 January was 353mm at Proserpine. The low then turned back towards Townsville and appeared to reach tropical cyclone intensity soon after landfall. Trees were blown down at Cape Cleveland as it came ashore. The heaviest 24 hour totals occurred further down the coast where Crystal Brook recorded 245mm in the 24 hours to 9am 15 January 2008.</p> <p>Later there were widespread areas of fallen trees between Townsville and Charters Towers as it moved inland and intensified. From radar (Fig. 8) it appeared to reach maximum intensity around 0150UTC 15 January (11.50 am EST) while located between Townsville and Charters Towers. It passed to the east of Charters Towers at 3pm EST where average winds of 52 knots were estimated with a MSL pressure of 993hPa which indicated that the central pressure was near 988hPa at this time. Torrential rain fell at Charters Towers causing severe flash flooding and 147mm was reported there as the low passed the station. The low then passed southwards through Central Queensland. Totals inland Queensland reached 313mm in the 24 hours to 9am 17 January with the heavy rain over a vast area. This also continued over the following 24 hours with totals inland to 219mm.</p>
11-12 February 2008	<p>A tropical low moved from the Gulf of Carpentaria towards the Townsville area and spectacularly intensified over land between 0000UTC and 1200UTC 11 February (10am and 10 pm 11th EST). Subsequently this maximum wind zone moved over the coast inflicting major damage to over 60 marine craft at Airlie Beach and other areas and one of the worst areas hit was the Bucasia Beach area north of Mackay. Extremely heavy rainfall formed near Townsville where the heaviest rain</p>

	fell between 0500UTC and 1200UTC 11 February. 24 hour rainfall totals reached 400mm.
15 February 2008	<p>A ridge strengthened along the east coast south of the monsoon trough. This trough with an embedded low was initially located near Mackay but was pushed northwards by the ridge. The low was northeast of Mackay region at 9am 15 February 2008 around the time of the extreme rainfall with a very moist airmass (dew points to 25 degrees Celsius). The monsoon trough was well to the north of Mackay and the rainfall occurred near the leading edge of a surge in the southeasterly trades associated with the strengthening coastal ridge to the south. Extremely heavy rain fell at Mackay with 562mm between 3am and 9am 15 February 2008 including 177mm in the last hour. There were heavier reports from around Mackay. Devastating flooding resulted in Mackay with damage caused by the floods reaching hundreds of millions of dollars.</p>

ARCHIVE: Known Impacts of Tropical Cyclones Gulf of Carpentaria, 1885 – 2007

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The date of the cyclone refers to the day of landfall or the day of the major impact.

The first number after the date is the Southern Oscillation Index (SOI) for that month followed by the three month running mean of the SOI centred on that month.

Date	Impact
19 Jan 1885 -16.3(-9.1)	A Gale at Normanton; hospital unroofed from the 1914 Bureau publication <i>Results of Rainfall Observations made in Qld.</i>
Tropical Cyclone (TC) 5 Mar 1887 +10.0 (+10.1)	From all reports the storm surge from the disastrous 1887 cyclone flooded almost all of Burketown. Only the highest part of town near where the Council Office is currently located, escaped the waters from the Gulf. A copy of a 1918 report to the Queensland Parliament from the Department of Harbours and Rivers Engineer refers to the sea rising to 5.5 metres above the highest spring tide level at the Albert River Heads. This level is about 8 metres above Australian Height Datum (AHD). 7 people out of a population of 138 died in the cyclone. Storm force winds commenced at 11 am from the SE and backed to the E and the NE increasing in violence until 10 pm when virtually the whole of Burketown was devastated. The storm surge arrived at 7pm.
28 Dec 1892 +3.7(+4.8)	A terrific cyclone at Normanton did considerable damage to the town from the 1914 Bureau publication <i>Results of Rainfall Observations made in Qld.</i>
TC 4 Mar 1906 -5.2 (-7.1)	TC crossed the coast near Cairns and wrecked the town of Croydon. At 7am 4 th cyclonic winds began at 10 am there was a lull and then the winds resumed from the opposite quarter. Two churches were wrecked and another was blown off its stumps. The Post office lost part of its roof and the Court House was damaged. Three hotels were severely damaged and only portions of another two were left standing. Two houses were wrecked and all buildings more or less suffered with scores of people homeless. Severe damage also in surrounding towns. At Normanton the wind started Saturday night 3 rd and continued overnight though damage was slight with only portions of roofs dislodged. There were gales at Mackay on the 3 rd and the 5 th with the river in flood. A bridge was washed away at Cattle Creek.
<i>Normanton cyclone</i> 4 Feb 1909 -3.2(+2.0)	The track shows cyclone coming from the Gulf and passing over Normanton on the 4th. It then moved down through western Queensland. A fierce cyclonic storm passed about 4 miles south of Normanton at 4.30 pm on the 5th. The path was 400 metres in width; many trees blown down; six-roomed house blown off blocks and wrecked; kitchen of powder magazine blown away. From the 1914 Bureau publication <i>Results of Rainfall Observations made in Qld.</i> May have been a cyclone spawned tornado.
TC 12-13 Mar 1909, -0.3(-6.0)	Cyclonic weather at Borroloola and at mouth of McArthur River(From <i>Big Blow up North K Murphy</i>).
TC 3-5 Jan 1911	TC crossed the coast near Mornington Island.

+3.2(+6.9)	
TC 21-22 Jan 1913 -3.5 (-5.5)	TC crossed the coast south of Weipa. Severe gales Torres St.
TC 1-2 Jan 1914	TC crossed the coast near Gove. Damage occurred at Thursday Island in late December and severe damage occurred at Roper River on 2 Jan with trees blown down and buildings unroofed at the Mission.
TC 6-11 Mar 1919 -12.8(-9.0)	TC tracked from Darwin towards SW Gulf. Hurricane force winds reported near Pellew Group.
TC 2-5 Feb 1920 -1.7(-1.3)	TC crossed the coast north of Cairns and moved into the SE Gulf Country. Major flooding with record flood at Normanton (water 20 feet over the railway line). Leichhardt River 16 feet over the rails.
TC 18-20 Dec 1920 +9.8 (+6.8)	TC tracked from Torres Strait to north of Gove.
TC 8-9 Jan 1921 +10.8 (+9.1)	TC crossed the coast near Groote Eylandt. Vanderlin Island reported 17 hours of hurricane force winds which demolished gardens, fences buildings and boats. The cutter Avis was driven ashore and its dingy was hurled high up into the tops of the mangroves. Stations around Borrooloola were out of stores until word reached Darwin of the disaster on 21 March, 10 weeks later.
TC 2-4 Apr 1921 - 7.1 (-1.3)	TC crossed the coast near Burketown. Major flooding in SE Gulf rivers.
<i>The Douglas Mawson Cyclone</i> Mar 1923 +8.9(+7.3)	This cyclone tracked directly from Coen towards Groote Eylandt at 5 to 6 knots. Large waves hit Karumba and a storm surge inundated the flats for miles on 30th and 31st. At Burketown a storm surge of 9 feet was reported and at Pt McArthur a storm surge of between 18 feet and 8 feet was reported . A more accurate storm surge height was obtained from the Mission house on Groote Island . At 9am 30th they recorded 6.4 inches (163 mm) of rain over the previous 24 hr. At 4pm the wind turned S=ly and increased to force 8 and reached hurricane force SWly at 6pm with torrential rain. At this time flooding combined with storm surge caused the water to reach the top of the river bank (12 feet above both the mean tide level and the predicted tide level) . By 9 pm the roof and the front wall blew off and the rain gauge overflowed (more than 10 inches of rain) . At 10 pm the east wall was blown out and the water reached up stairs (20 feet above mean tide level and 18.5 feet above predicted tide) . At midnight the water level peaked at 23 feet above the mean and 21.5 feet above that predicted . The wind then turned Wly with stronger gusts. At 4 am the building collapsed as the water receded. At 6am the wind was down to gale force and the water level was 15 feet above mean. The ground became visible at 10 am. Few trees were left standing. At Roper River roofs were blown off and trees felled. The abnormal sea conditions in the Gulf led to the loss of a well-found Gulf steamer, the Douglas Mawson, with the loss of 20 lives . The eastern islands of Torres Strait (usually cyclone free) were badly damaged. Darnley, Coconut, Mabuiag and Murray Islands suffered much damage - houses unroofed, trees down, gardens damaged, luggers dismasted and Darnley settlement was virtually destroyed and banks of living coral 4 to 5 feet high were dashed up by the waves .
TC 27-28 Feb 1929 +16.0 (+15.3)	TC crossed the Gulf from Gilbert River to Roper River. Gales and torrential rain at Groote Eylandt and Roper River. Ketch washed ashore at Groote.
TC 5-8 Jan 1930 +12.7 (+8.7)	TC crossed southern Gulf from Karumba to Pellew Group. Two luggers wrecked at Thursday Island. Strong winds and heavy rain at Roper River and strong winds at Groote Eylandt (from <i>Big blow up North K. Murphy</i>).

TC 30-31 Jan 1931 +7.0 (-3.1)	TC made landfall near Edward River. Heavy Flooding Carpentaria. Rail line washouts on Mt Isa Line and rail traffic delays between Croydon and Georgetown. On Monday 26 January 1931 heavy rain and hurricane force winds at Emerald River Mission on Groote Eylandt 22 inches of rain was reported in 3 days. The river became a flood and washed away the bridge and the sawmill (also 30 cypress pine logs) – pumping plant – also the hydraulic ram and fluming were badly damaged. Fences were down, bark roofs blown off and many trees blown down. ‘ This represented a storm surge of 15 feet. From H L Perriman who was stationed at Groote Island Mission (Emerald River) from 1921 to 1936.
TC 7 April 1931 +8.6 (+9.3)	From H L Perriman who was stationed at Groote Island Mission (Emerald River) from 1921 to 1936. On 7 April 1931 a storm blew up and lasted all day. The river rose rapidly. The wind and rain increased during the night and continued all the next day. The river kept rising until it reached within a foot of the 1923 level.” The bridges, fences, a ketch, the sawmill were all washed away but the wind damage was less than January. The 1923 storm surge was 23 feet so the river level in this event was 22 feet above the mean.
TC 18 Jan 1932 +1.8 (+1.0)	TC made landfall near Edward River.
TC 18-19 Jan 1935 +6.5(-0.2)	Made landfall west of Mornington Island with very heavy rain at Burketown (306 mm in 24hr). Major floods Burketown to Camooweal. Transport seriously affected and heavy stock losses.
TC 20 Feb 1936 +0.6 (+0.1)	TC passed directly over Mornington Island. Rev R.H. Wilson of the Mornington Island Mission reported that one barometer (an aneroid in the Missions lugger) dropped to 953.3 hPa . The other barometer (a household aneroid) registered 949.7 hPa . The household barometer usually sat on 1010 to 1012 hPa so it was not reading low. At 7am on the 20th the house bar dropped to 989 hPa. The bar then dropped rapidly and then interest was lost in monitoring the bar due to the ferocious wind. The barometer was not observed again until after a 1.5hours lull when the 949.7 hPa reading was made. The renewed wind was worse than before. Most of the buildings were demolished and there was a storm surge estimated at 5 foot or so.
4 Feb 1938 (no TC in data base) +3.4(+2.4)	Cyclonic winds and torrential rain at Borroloola and Vanderlin Islands. 300 mm in 24 hr at Borroloola.
Rain Depression (not in data base) 4-8 Jan 1940 -0.1 (-4.3)	Gales and torrential rain Roper Valley. Roper Mission destroyed. Roper Police Station severely damaged, many homesteads marooned.
TC 23-24 Mar 1940 -10.6(-8.1)	TC crossed the Gulf from Edward River to Port Roper. Gales and heavy rain at Groote Eylandt with a measured gust of 57 knots.
TC 16-17 Dec 1943 -8.6(-4.3)	TC passed just south of Coen (where it caused heavy wind damage) and entered the SE Gulf, later making landfall near the NT border. The weather was described as cyclonic at Vanderlin Island on the 17th.
TC 10-12 Feb 1946 +4.4(0)	TC traversed westward across the southern Gulf making landfall near the Pellew Group.
TC 6 Jan 1948 -3.0(-0.2)	TC moved eastwards towards Thursday Island causing structural damage there. Possible devastating storm surge Saibai Island.
TC 12-13 Jan 1948	TC made landfall in the SE corner of the Gulf bringing heavy local rain.

-3.0(-0.2)	
TC 23 Feb 1948 -2.7(-3.3)	TC moved from the Groote Eylandt area and made landfall to the west of Mornington Island. Aborigines described a storm surge covering all but the highest parts of Bentinck Island. The water deeply covered places where they were accustomed to live and where they obtained their water. This caused wells and springs to go salty and eventually the inhabitants were forced to abandon the Island. It was later estimated that on Mornington Island the rise in sea water was 12 feet above the highest normal tide mark. On Mornington Island the surge caused large eucalypts to die and had caused a change in vegetation to salt loving species in some areas. It was assessed that the water on Bentinck Island also rose 12 feet above high water. After landfall, the town of Borroloola was badly damaged. The hotel was wrecked and a number of other buildings were destroyed.
TC 6 Mar 1948 Not in data base -4.1(-1.3)	TC flattened the Johnston homestead on Vanderlin Island. The storm raged for 4 hours with flying debris. Trees were uprooted or stripped of foliage and the sea rose 3.7 metres above normal and caused Vanderlin Island to be separated into three islets. (See P47 <i>Big Blow up North</i> by Kevin Murphy).
TC 15 Jan 1950 +5.1(+10.1)	TC made landfall near Mornington Island.
TC 10-11 Dec 1950 +23.0 (+17.3)	TC passed overland to the west of Groote Eylandt where hurricane force Nly winds generated a storm surge which washed away the rain gauge at the north end of the Island. The gauge on the southern end overflowed but it was estimated that 250mm fell in 12 hr.
TC 19-21 Jan 1951 +16.5 (+16.5)	TC made landfall near Karumba. Major flooding Gulf Country.
TC 20 Jan 1952 -9.2(-6.7)	TC made landfall near Weipa and then turned and passed over Normanton. Thursday Island had wind gusts to 70 knots on 19th and 20th. Buildings were unroofed at Mt Isa and winds gusts at Alexandria Downs were estimated at nearly 80 knots. On the 19th, gales and high tides were reported from Groote Eylandt.
1-2 Dec 1952 -12.6 (-3.7)	Small TC (50miles wide) struck Thursday Island from the west just before midnight (1 st) damaging most buildings with roofing iron flying through the town. Power lines were blown down and four hotels were partly unroofed and two had verandas blown away. The pearling lugger <i>Naianga</i> was smashed and sunk and three other luggers were blown ashore. Several other vessels were damaged by the pounding they received.
TC 14 Jan 1953 +2.2 (-5.5)	TC crossed the coast near Mornington Island bringing floods to the Gulf Country. There was considerable structural damage on Mornington Island with wind gusts estimated at 70 knots.
26-29 Mar 1953 -5.8(-4.1)	TC tracked southwards over Groote Eylandt which recorded 20 inches in 24 hours to 9am 28 th .
TC 15-17 Apr 1953 -0.5(-12.7)	TC tracked from Torres St to the North Coast of NT where it caused damage to gardens, crops and woodlands at Goulburn Island.
10-12 Jan 1955 -5.4(+7.5)	Tropical cyclone near Stationary Gulf Coast just to the north of Weipa. Heavy rain and gales. Thursday Island recorded a gust of 56 knots on the 11 th and a gust of 48 knots on 12 th .
TC 16-17 Jan 1956 +11.3 (+11.0)	TC crossed the coast in the SE corner of the Gulf and Burketown reported ESE winds averaging 45 knots. On the 17th flood rains from 100 mm to 275mm fell along the eastern Gulf Country resulting in widespread flooding.
TC 25 Mar 1956 +9.4(+11.0)	TC made landfall near Gove. Groote Eylandt reported gusts to 60 knots. Calvert Hills recorded 275mm of rain and Burketown 165mm. Major flooding with serious stock losses occurred from the Gulf Country to SW Queensland.

TC 16 Apr 1958 +1.2 (-2.8)	TC crossed the coast near Port Roper. As the centre passed over Groote Eylandt gusts to 66 knots were recorded before and after the passage of the centre. Rose River Mission reported gusts to 70 knots. The rain gauge was blown away at Groote Eylandt.
TC 16-19 Jan 1959 -8.7(-9/7)	TC entered the Gulf near Mornington Island, then looped up past Groote Eylandt before crossing the SE Gulf Coast near the Gilbert River. Winds damaged an orchard at Dunbar Station.
TC 25-26 Dec 1959 +8.2 (+6.5)	TC crossed the Gulf from Gove to Edward River Mission. At 9am 26th Thursday Island recorded wind gusts to 69 knots and 63 knots at 3pm. At Thursday Island fences were flattened, trees uprooted and 3 luggers crashed into a jetty. A number of pearl culture oyster beds were destroyed along the NE Gulf coast when large waves sank oyster pontoons. The <i>MV Windarra</i> in the Gulf reported injuries to the crew from large waves. Considerable flooding occurred in the Gulf Country when the cyclone crossed the Peninsula and water entered some homesteads.
TC 2-3 Mar 1961 -20.9 (-1.7)	TC crossed the coast near Weipa and there was slight wind damage to homesteads in the area and trees were uprooted.
<i>Audrey</i> 7-11 Jan 1964 -4.0 (-5.3)	<i>Audrey</i> moved from Thursday Island (TI) and made landfall near Mornington Island. Wind gusts reached 53 knots at TI on the 7th, 57 knots on the 8th, 60 knots on the 9th and 55 knots on the 11th. Wind gusts reached 61 knots at Mornington Island. A storm surge of 5 ft (1.5m) was sustained at Karumba between 3 am and 1 pm on the 11 th. Very heavy rain was recorded at Bamaga (492 mm in 4 days).
<i>Dora</i> 2-9 Feb 1964 -0.3 (+1.4)	<i>Dora</i> made landfall on the eastern Gulf coast and devastated the Edward and Mitchell River missions on the 3rd. Trees over a wide area of western Cape York Peninsula were blown down or completely defoliated in winds of around 100 mph (87 knots). The eye passed directly over Rutland Plains which experienced a 3 hour calm and gave the eye diameter as 12 nm . The winds at Edward River Mission reached hurricane force E=lies at noon on the 3rd. These winds backed to the NW and maintained hurricane force before decreasing after midnight. At Mitchell River E=ly winds reached hurricane force at 3.30 pm on the 3rd thereafter veering to the SE and increasing in force. A near calm period was observed there between 8.30 pm and 10.30 pm after which the wind veered SW, then W, slackening in speed at 3.30 am on the 4th. Rutland Plains experienced destructive E=ly winds from 3pm to 10.30 pm on the 3rd with the strongest winds between 8pm and 10 pm. A complete calm then occurred until 1.30 am on the 4th after which W=ly winds of slightly less speed persisted until 6.30 am. Damage was reported as far north as Aurukun Mission, extending to Miranda Downs and Karumba in the south.- a strip almost 480 km in length . Maximum damage was a 130 km strip from near Edward River to the Nassua River . The Edward River Mission reported little damage 8km east of the mission- the strip was therefore very narrow in the north and widened to about 48 km in the south . In this maximum damage zone one quarter of the trees were blown down and those left standing were defoliated with major limb damage . At Wallaby Island at the mouth of the Mitchell River extensive and dense belts of Mangrove 10 metres high were completely destroyed and flattened like grass . The two mission stations and Rutland Plains all suffered severe damage. For the two mission stations the damage was estimated at 300,000 pounds(1964) . <i>Dora</i> was accompanied by torrential rainfall over a long period. Example of large 24 hour totals were Yirrkala 248mm on the 1st, Edward River 197mm 4th, Croydon 368mm 5th, Mary Kathleen 228mm 7th, Disraeli 320mm 8th and Iffley 247 mm 9th. The Norman, Flinders, Leichhardt and Gregory experienced record floods with river levels in many instances breaking records. The total discharge was estimated at nearly double the average annual discharge of the Murray/Darling systems. The Norman River was 8 inches higher than the 1951 record at Normanton. A large storm surge came ashore with the cyclone - the Superintendent reported the sea came right over the beach ridge, a rise of approximately 18 feet . The beach was left strewn with many dead marine creatures like porpoises and sea snakes.
<i>Flora</i> 5-6 Dec 1964 -3.0 (-1.4)	<i>Flora</i> crossed the southern Gulf passing to the north of Mornington Island and making landfall near Inkerman Station at 9pm. The station (7 km inland) felt the full effects and the natives quarters, the butcher shop and a 2 room house were demolished. The northeast side of the homestead was lifted, 2-way radio aerials disappeared and rain penetrated all buildings. Large

	<p>trees were snapped off or blown down. A surge of sea water accompanied the winds and The sea came up the creek with a terrific rush. The bridge weighing approximately 2 tons was lifted and carried upstream about 800 metres and dumped approximately 90 metres up a ridge. Further north and 95km inland, Dunbar Station was subjected to damaging winds between 6.30 pm and 7.25pm. Mango trees were blown over in a strip 200 metres wide, houses were flattened, while roofing iron was deposited 800 metres away and twisted beyond use. Vanrook Station (80 km inland) estimated hurricane ESE winds followed by a lull between 2.30 am and 3.30 am and then storm force SW winds. Buildings were unroofed and structures badly damaged and trees uprooted. At Miranda wireless aerials were blown down, roofing iron lifted, trees stripped of branches and many birds were found dead. There was heavy flooding and around Burketown about 100 stations were isolated.</p>
<p>Unnamed 14 Jan 1965 -4.0(-1.8)</p>	<p>Cyclone made landfall just south of Thursday Island who reported gale force winds. No damage reported.</p>
<p><i>Judy</i> 28-29 Jan 1965 -4.0 (-1.8)</p>	<p><i>Judy</i> crossed the SE Gulf coast between Vanrook Station and Miranda Downs early on the 29th. Extensive damage to trees and foliage occurred in the SE Gulf country. It passed very close to Delta Downs (NE of Karumba and 30 km inland from the Gulf) and an observer from the station gave the following report:- Many trees were damaged. What were not blown over were severely damaged although the damage was not as noticeable, as the trees had very little on them after <i>Flora</i>. Quite a number were blown over@</p>
<p><i>Cynthia</i> 15-18 Mar 1967 +7.8 (+5.9)</p>	<p><i>Cynthia</i> passed over and looped around Groote Eylandt. The main area of damage due to sea and swell was about Groote Eylandt. Two steel barges and two coastal launches owned by the Groote Eylandt Mining Company were washed ashore, filled with sand and water and badly damaged. Three small boats at Angurugu were also beached and damaged. Very heavy rain fell over Groote Eylandt with the largest 24 hour total of 1675 points (425 mm) at Angurugu to 9am on the 15th. Flooding on Groote Eylandt resulted in the loss of a new steel and concrete bridge over the Angurugu River, leaving only 60 feet of a total length of 170 feet. Timber bridges over the rest of the Island were severely damaged.</p>
<p><i>Dixie</i> 27-28 Jan 1968 +4.1 (+2.7)</p>	<p><i>Dixie</i> made landfall near Burketown where most of the buildings were damaged. The material replacement costs were estimated at \$(1968) 4000. Telephone and telegraph lines were cut and took a week to restore communications. Station properties in the vicinity had trees uprooted, outbuildings blown down and one windmill was twisted. The 50 foot trawler <i>Maroochy Star</i> valued at \$(1968)30,000 was driven ashore on Sth Bountiful Island on the 27th by high winds and heavy seas and was a write off. The crew were rescued 2 days later.</p>
<p><i>Dawn</i> 11 Feb 1970 -10.7(-6.3)</p>	<p><i>Dawn</i> crossed the coast near Weipa. Thursday Island reported a gust of 52 knots. There was minor vegetation damage and telephone lines were down. Weipa recorded 443 mm of rain over 6 days.</p>
<p><i>Cindy</i> 17-18 Mar 1970 +1.8 (-13.5)</p>	<p><i>Cindy</i> crossed the Gulf and made landfall near Port Roper. The wharf was damaged on Groote Eylandt. 24 hr rainfall totals reached 240 mm in the Burketown area. Unofficial 3 day totals reached 910mm. There was flooding about the Southern Gulf country and several evacuations were carried out.</p>
<p><i>Aggie</i> 2-3 Feb 1971 +15.7 (+12.5)</p>	<p><i>Aggie</i> was a short lived cyclone which made landfall near Vanderlin Island. In this sparsely populated area no damage was reported. The strongest recorded wind gust was 61 knots at Vanderlin Island and the strongest mean wind was 44 knots at Borroloola.</p>
<p><i>Fiona</i> 19 Feb 1971 +15.7 (+12.5)</p>	<p><i>Fiona</i> was a continuation of <i>Gertie</i> which crossed the east coast and Peninsula and entered the SE Gulf. It looped back and crossed the coast at the Nassua River mouth while rapidly intensifying. From the extensive defoliation and damage to the few buildings there, it was most</p>

	likely accompanied by hurricane force winds . From satellite imagery before landfall the cyclone had a very clear well shaped eye with a small bright convective ring surrounding it and a bright overcast cloud canopy surrounding this three latitude degrees in diameter. An outstation of Inkerman Station is located at the Nassua River mouth and a brief calm was noted at 0930 UTC preceded by ESE winds and followed by WNW winds. Damaging winds lasted about 2 hours and flattened timber and demolished buildings. About 50 % of the trees were left standing and these were damaged, some stripped of bark. The wharf was destroyed and 4 four 55,000 litre fuel tanks lifted and scattered up to a mile away. Forty four gallon drums were scattered widely like confetti. The caretaker of the outstation observed A tidal wave was seen to come up from the mouth of the Nassua River and split at Cattle Creek. The wave came over the flats and washed away 3m high walls. It was 4.6 m high and travelled inland for approximately 2 km. At Edward River Mission the sea washed out a road on one of the sand ridges 2.7 m above sea level. At Aurukun a tidal surge of 0.9 m was observed in the river about 5 miles from the Gulf.
<i>Bronwyn</i> 6 Jan 1972 +3.7 (+4.7)	<i>Bronwyn</i> crossed the coast near Mapoon and no wind damage was reported. This cyclone was a rain producer and 80 % of Queensland received more than 50 mm of rain during its life. Flooding was widespread.
<i>Faith</i> 13 Apr 1972 -5.5 (-6.4)	<i>Faith</i> crossed the coast just south of Weipa. Gales were reported from Aurukun and these caused some tree damage. Aurukun registered 256 mm of rain in 24 hrs.
<i>Adeline</i> 29 Jan 1973 -3.0 (-9.5)	<i>Adeline</i> rapidly intensified to central pressure 970 hPa as it crossed the coast near Vanderlin Island.
<i>Leah</i> 1 Mar 1973 +0.8 (-4.9)	<i>Leah</i> (lowest central pressure 994 hPa) crossed the coast near Groote Eylandt. Launch wrecked at Numbulwar.
<i>Madge</i> 5-6 Mar 1973 +0.8 (-4.9)	<i>Madge</i> crossed the Gulf from Edward River Mission to Groote Eylandt (lowest central pressure 985 hPa). Severe damage occurred at Angurugu and elsewhere on Groote Eylandt and also at Numbulwar. Buildings badly damaged, trees uprooted, a jetty washed away and a barge sunk.
<i>Bella</i> 25 Mar 1973 +0.8 (-4.9)	<i>Bella</i> (lowest central pressure 998 hPa) crossed the coast near the Sir Edward Pellew Group.
<i>Yvonne</i> 11-14 Feb 1974 +16.2 (+19.1)	<i>Yvonne</i> entered the Gulf near Karumba and made landfall near Centre Island and became slow moving near Borroloola. The highest 24 hour rainfall was 160mm at Burketown while the cyclone was near stationary near Borroloola. There were reports of damaging winds in the Borroloola area.
<i>Jenny</i> 17 Mar 1974 +20.3 (+15.9)	<i>Jenny</i> crossed the coast at Gove with central pressure 995 hPa.
<i>Kim</i> 10 Dec 1975 +19.5 (+15.0)	<i>Kim</i> crossed the coast near Edward River Mission. There were reports of slight wind damage at Nhulunbuy.
<i>Ted</i> 19 Dec 1976 -3.0 (+0.9)	<i>Ted</i> crossed the coast near Mornington Island and passed directly over Burketown where a central pressure of 950 hPa was recorded. Damage in its path was almost total. Mornington Islands 700 inhabitants were rendered homeless with 95% of its buildings damaged and Burketown was similarly affected. A large storm surge accompanied the cyclone and it extended 20 km inland near Burketown where logs were piled 2-3 m high and a small wharf was destroyed. Tides at Karumba were 2 metres above normal and badly damaged the wharf and prawn processing installations. Magowra Station (SW of Normanton) reported that the sea came 30 km inland. Extensive flooding and wind damage occurred in stations inland from Burketown. The hurricane force winds extended a long way inland, for example Cowan Downs near the Burke and Wills Roadhouse had out buildings unroofed, windows blown out of the

	main building, telephone posts bent to ground level and trees 4 feet in diameter snapped. Livestock losses caused by drowning and low temperatures were estimated to be 250,000.
<i>Otto</i> 7 Mar 1977 -9.5 (-3.8)	<i>Otto</i> crossed the coast between Aurukun and Weipa. The only damage reported was tree damage at Weipa. Messmate trees (shallow rooted) with girths to 6 ft were blown down
<i>Gwen</i> 27 Feb 1978 -24.4(-11.1)	<i>Gwen</i> passed directly over Edward River Mission where wind gusts to 70 knots were reported. A house lost section of roofing iron and waves brought the sea over the first sand dunes. At Kowanyama strongest winds were from the ESE. Many trees there were blown over (girths to 2 metres). Quite a few blown over at ground level.
<i>Hal</i> 7 Apr 1978 -7.9 (+0.9)	<i>Hal</i> crossed the coast about 80 km S of Aurukun. No damage was reported.
<i>Peter</i> 32 Dec 1978 -0.9(-2.3)	<i>Peter</i> crossed the coast near Edward River Mission. There was little significant wind damage.
<i>Greta</i> 10 Jan 1979 -4.0 (+0.6)	<i>Greta</i> crossed the coast 20 km south of Weipa. Weipa recorded a maximum wind gust of 42 knots and a 30 min calm in the eye where a central pressure of 986 hPa was recorded. Little damage was experienced.
<i>Rosa</i> 26 Feb 1979 +6.7 (-0.1)	<i>Rosa</i> crossed the coast 30 km NNW of Bing Bong homestead (NT) at maximum intensity (central pressure estimated at 955 hPa). A NOAA research aircraft flew a single mission over the cyclone and at the point of closest approach at 0440 UTC 26th, the maximum wind encountered was 91 knots at 540m elevation and 37 km NE from the centre of the eye (eye diameter was 37km) . Coastal and riverside stations in the SW Gulf reported large tides. The water level at Bing Bong rose 2 metres above the spring high tide mark. A tide gauge on Groote Eylandt was washed away. There was thousand of dollars of structural damage to stations in the SW Gulf together with the felling of extensive tracts of forests . A light aircraft stranded on North Island was destroyed.
<i>Stan</i> 14 Apr 1979 -5.5 (-1.6)	<i>Stan</i> crossed the coast 40 km N of Weipa and no damage or significant flooding occurred. At no time was an eye discernable on satellite imagery. A 0.5 storm surge was reported at Weipa. 24 hour rainfall totals were 233mm Iron Range, 127 mm Moreton and 84 mm Weipa.
<i>Doris</i> 17 Mar 1980 -8.5(-6.8)	<i>Doris</i> crossed the coast between Gove and Groote Eylandt. Extensive though minor damage occurred on the Gove Peninsula and Groote Eylandt. The mining companies incurred direct damage costs of \$(1981)150,000 while total community costs were \$500,000.
<i>Eddie</i> 10-11 Feb 1981 -3.2 (-5.7)	<i>Eddie</i> crossed the southern Gulf coast near the Qld/NT border. Wentworth Station reported a 1.5 metre storm surge and after it crossed the coast Elliot in the NT reported a gust to 77 knots.
Unnamed 20 Dec 1981 +4.7 (+5.6)	This cyclone made landfall at Gove at 11.30 pm (1400 UTC) with 10 minute average winds of 62 knots recorded with gusts to 88 knots at 1am (1530 UTC). Extensive tree damage occurred in the Gove area with some damage to ships berthed at the Nabalco Wharf.
<i>Dominic</i> 7 Apr 1982 -3.8 (-3.2)	<i>Dominic</i> crossed the coast near Cape Keerweer. Just prior to landfall satellite imagery showed a clear eye around 40 km in diameter surrounded by cloud tops colder than -70°C (7.0 on the Dvorak T scale). There was damage to buildings and power lines at Edward River Mission. At Aurukun damage was assessed at \$(1982)200,000. Tides were 1 m above normal at Weipa and 1.5 m above normal at Karumba. A detailed report of the damage in the remote Cape Keerweer

	area was provided by the log of The Round Australia Kayak expedition. Tree damage commenced at Wallaby Island (mouth of Archer R.) And extended south of Edward River Mission. The most extensive damage was from Love River To Holyrod River. There, all seashore Casuarinas were killed presumably due to salt water in root system. North of Cape Keerweer tree damage suggested onshore winds. One mile north of Cape Keerweer was an area devoid of all vegetation (no grass or trees) - the area appeared like a ploughed field for one mile inland.
<i>Jim</i> -10 Mar 1984 -5.8 (+0.7)	<i>Jim</i> crossed the coast near Port Roper . There was evidence of a storm surge south of the Roper River Mouth. A 15m fishing boat was beached an estimated 3 to 6 metres above the tide level and an observer at Alyangula reported an estimated storm surge of 1.5 metres. There was wind damage to trees at Roper River Mission.
<i>Kathy</i> 23 Mar 1984 -5.8 (+0.7)	<i>Kathy</i> crossed the coast near Borroloola and Centre Island on the morning of the 23rd. The cyclone was very small with a radius of maximum wind speed of 15 km and the eye radius 10 km . Gales extended out to 65km. The anemometer at Centre Island was blown away however before this it recorded a 10 minute average wind speed of 100 knots with gusts to 125 knots . The eye passed over Centre Island and a pressure of 940 hPa was recorded there. A nearby trawler recorded a verified 938 hPa . 20 prawn trawlers were sheltered in the Pellew Islands and one sunk, 3 ran aground and most of the others were scattered over a large area with some damage. One crewman from the sunken trawler drowned . The cyclone made landfall during a spring high tide and a 3 metre storm surge was estimated from debris lines on the eastern side of Vanderlin Island. Sea turtles were stranded up to 7km inland near the McArthur River mouth. The cyclone caused devastation to woodland vegetation in the Pellew Group and inland for 250 km. Several holiday camps in the islands were destroyed or badly damaged. At Borroloola, 45km inland, several buildings were wrecked and many others damaged.
<i>Rebecca</i> 22 Feb 1985 +6.7(+0.4)	<i>Rebecca</i> crossed the coast just to the north of Weipa. Tree damage at Weipa with trees with girths to 60 cm blown down.
<i>Sandy</i> 24 Mar 1985 -2.0 (+7.7)	<i>Sandy</i> passed to the north of the Sir Edward Pellew Group and Centre Island recorded a minimum pressure of 973 hPa, 10 min average winds to 92 knots (47 m/s) and gusts to 130 knots (67 m/s) . 968 hPa at North Is. Two trawlers, the Hayman and Sea Fever, were beached after experiencing gusts over 118 knots and swells (measured by their depth sounders) to 12 metres . A Bureau survey team measured a storm surge of 3 to 3.5 metre at Centre Island and a pilot whale was swept 1km inland. Storm surge measured up to 3.5m in Pellew Is. Surge also along mainland coast between Bing bong and Roper mouth. Flooding was extensive along the southern Gulf coast with 860 mm recorded at Centre island in 4 days. <i>Sandy</i> then made landfall near Roper bar. Trawlers sheltering in the Roper River suffered damage and reported a calm eye lasting 1 hour. Bing Bong homestead severely damaged. Severe vegetation damage from Pellew Islands to Roper River area.
<i>Irma</i> 20 Jan 1987 -6.3 (-10.8)	<i>Irma</i> crossed the coast near Roper Bar where a pressure of 989.9 hPa was recorded. The maximum recorded wind was 60 knots (31m/s) from a ship west of Groote Eylandt just prior to landfall. There was only slight wind damage though a number of people were evacuated from Birrimba Station as floodwaters threatened the homestead. Storm surge of 0.8m recorded at Alyangula. Lowest observed pressure of 984 hPa by a ship northwest of Groote Eylandt on 20th. Ketch grounded at Bickerton Is. and some sheds destroyed at Numbulwar.
<i>Jason</i> 9-13 Feb 1987 -12.6(-11.9)	<i>Jason</i> crossed the NT coast near Groote Eylandt. It destroyed most of the buildings in the NT community of Baniyalla (100 km SW of Nhulunbuy). The 60 residents sheltered in the school as all houses were destroyed. Some houses lost roofs at Gapuwiyak (20 km W of Baniyalla). Gove radar showed an eye of around 20 km diameter on the 8th and 9th . It then moved back into the Gulf and crossed the Qld coast about 40 km ENE of Burketown. An anemometer at Burketown recorded a 10 min average wind of 64 knots with gusts to 85 knots (from the SSE) . The cyclone was moving S at 17 km/hr (9 knots) so that winds on the eastern side of the cyclone were stronger. Lowest pressure at Burketown was 983 hPa at 3pm 13th (at the time of the

	strongest winds). The bar dropped to 981 hPa (10 min max wind 50 knots) at Mornington Island. There was structural damage at Burketown and Mornington Island and tree damage throughout the SE Gulf Country. A 2.04 metre storm surge was measured at Karumba at 0500 UTC 13th. The maximum storm tide was 4.7 metres (lowest astronomical tide datum) at 0700 UTC which was 0.11 metres above highest astronomical tide.
<i>Felicity</i> 15 Dec 1989 -5.0 (-2.7)	<i>Felicity</i> was very rapidly developing as it made landfall near the Gilbert River mouth in the SE Gulf. Infrared satellite imagery showed a clear eye had formed right at landfall surrounded by cold cloud tops (T5.5 on the Dvorak satellite cloud top temperature intensity scale). A Barramundi fisherman has his house 12 feet above the high tide level and the sea came up to within 4 feet of the house which is an 8 ft(2.5m) surge . The house remained in offshore winds so that the surge would have been greater to the north. The strongest winds were from the SE and 80% of the trees were blown down and all trees were stripped of leaves . The wind was of sufficient strength to blow over a heavy stove which took 4 men to lift .
<i>Greg</i> 5 Mar 1990 -8.5(-8.7)	<i>Greg</i> crossed the coast near Normanton. Sweers Island recorded a gust of 50 knots. Normanton recorded 80 mm of rain in 24 h.
<i>Mark</i> 10 Jan 1992 -25.4(-17.1)	<i>Mark</i> crossed the coast near Weipa, Weipa suffered widespread minor damage with falling trees largely responsible for house damage and power line damage. Wave action caused \$3.5 (1994 million) damage to the Kaolin loading facility at the Port . The maximum wind gust at Weipa Met Office was 63 knots from the NW. A maximum gust of 75 knots was recorded from an anemometer located at Lorim Point. Weipa wave rider buoy Hsig 4.68m Hmax 6.16m Tp 10.22 seconds.
<i>Nina</i> 25 Dec 1992 -5.5 (-7.3)	<i>Nina</i> crossed the coast near Cape Keerweer. Aurukun reported 4 houses structurally damaged, widespread tree damage and the VHF aerial lost from the Council roof. Archer River reported severe flooding with 4 people isolated at the Roadhouse. Severe tree damage , heavy rain and one house was unroofed at Porwmpuraaw.
<i>Sadie</i> 30 Jan 1994 -1.6 (+0.2)	<i>Sadie</i> crossed the SE Gulf coast near Inkerman Station and no injuries or damage was reported. It produced very heavy drought breaking rain to NE inland Qld.
<i>Warren</i> 6 Mar 1995 +3.5 (-5.1)	<i>Warren</i> crossed the coast near Mornington Island early on 6 March 1995. The barometer at Mornington Island Mission (Gununa) dropped to 966 hPa when the centre of the cyclone was 20 km away. The radius of the eye was around 20 km and at 2am the wind went calm at Gununa. In the band of maximum winds the hand anemometer there went off the scale at 125 km/hr. Seawater at this time (low tide) was dead level with the top of the jetty (2.5 m above normal) . 2 houses were badly damaged and another 32 had some damage. Many trees were uprooted and power lines were downed. A Cessna at the airport was blown over. Tides were 1.5 m above normal at Sweers Island. A 1.5 m surge was measured at Karumba. Karumba wave recording station recorded Hsig to 1.8m and Hmax to 3.5m. Westmoreland Station suffered minor roofing iron damage. Hells Gate suffered extensive flooding (\$1.6million damage to roads).
<i>Barry</i> 5 Jan 1996 +8.4 (+1.3)	Cyclone <i>Barry</i> made landfall around 1100 UTC 5 January 1996 between the mouths of the Staaten and Gilbert Rivers, a stretch of coastline that is sparsely inhabited. The eye of the cyclone was clearly visible on by combining data from weather watch radars located on Mornington Island and at Weipa. The eye passed directly over a professional fishermen's camp, said to be about 4 metres above high water mark, and it was wrecked by wind and storm surge. A field survey by helicopter indicated the occurrence of a storm surge which travelled up to 7 km inland , after topping the frontal dunes, in an area near and south of the Staaten River mouth. It was assessed as being a storm surge of at least 4 metres .
<i>Jacob</i> (unnamed while in the Gulf) 28 Jan 1996 +8.4	The low rapidly developed while approaching the southwest coast of the Gulf of Carpentaria and produced wind gusts of 26ms^{-1} at Centre Island for a four hour period including a peak wind gust of 34ms^{-1} . The lowest pressure recorded at Centre Island was 988.3 hPa and the

(+1.3)	central pressure at the time was estimated at 986 hPa. It made landfall near Bing Bong, an ore-loading port 50 km west northwest of Centre Island.
<i>Ethel</i> 9 Mar 1996 +6.2 (+4.7)	<i>Ethel</i> made landfall 13 km north of Duyfken Point and 33 km west northwest of Weipa. The time of landfall was at 1700 UTC 9 March 1996. The eye passed over the Ely Mining Camp and a central pressure of 980 hPa was recorded in the eye. Bark was stripped from trees and trees up to one metre in diameter were uprooted. Strips of up to 2 km wide were completely defoliated. The beach area about the point of landfall was completely changed exposing objects never seen before by the miners and was obviously affected by large waves and storm surge. The strongest wind gust of 28 ms ⁻¹ at Weipa Meteorological Office was recorded at 1030 UTC 9 March 1996 when an outer rainband passed through the station. This was at the time the peak storm surge of 1.18 metres was recorded at Weipa. The water level exceeded the highest astronomical tide at Weipa by .26 metres. Around this time a waverider buoy located 8 km west southwest of Weipa recorded a significant wave height of 3.76m and a peak wave height 6.69 m. The peak height reading is the largest wave observed at the Weipa wave recording station in 16 years of operation. At the time <i>Ethel</i> made landfall the winds at Weipa were offshore and a peak negative storm surge of 0.8 metres was recorded.
<i>Phil</i> 26 Dec 1996 +7.2 (+3.8)	<i>Phil</i> made landfall near Groote Eylandt causing moderate tree damage though no structural damage was reported. A ship reported a mean wind of 35 knots. There was no report of significant storm surge. Alyangula reported 116 mm of rain in 24 h.
<i>Sid</i> 27-28 Dec 1997 -9.1 (-15.6)	<i>Sid</i> passed over the town of Nhulunbuy as it moved into the Gulf. Damage caused by gale force winds was limited to falling trees. Two craft dragged their moorings and one was washed against rocks at the Nhulunbuy Yacht club. A maximum wind gust of 46 knots (85 km/hr) and minimum MSL pressure of 989.5 hPa were recorded at Nhulunbuy Airport. As <i>Sid</i> passed Groote Eylandt, trees were uprooted there and powerlines damaged. It made landfall just to the west of Mornington Island on the 28th as a weak system. Wollongorang registered 341 mm of rain in the 24 hr to 9 am 29th.
<i>Les</i> 25 Jan 1998 - 23.5 (-17.3)	<i>Les</i> crossed the southern part of Groote Eylandt early on the 25th. The MV <i>Sea Sparkle</i> anchored west of Groote Eylandt about 27 km west of Angurugu recorded a pressure of 979 hPa at 1930 UTC 24 January and a maximum gust of 92 knots (47.4 m/s) at 2030 UTC 24 January. A 10 minute mean wind of 43 knots was recorded on an AWS at Alyangula. A 55 knot gust was recorded at Centre Island at 0400 UTC 24 Jan. Gale force winds were recorded at the North East Island AWS for 6 hours from 1230 UTC 25 January. It was estimated that the radius of gales was 110 km, the radius of storm force winds 35 km and the radius of calm winds 7 km. <i>Les</i> passed directly over Numbulwar on the mainland coast where roofs were blown off houses and trees blown down. There were power outages there and at the communities on Groote Eylandt. There was a metre rise in the sea at the Groote Eylandt Port. After making landfall heavy rain brought major flooding to Katherine and Daly Rivers. Thousands of residents from the towns of Katherine, Mataranka, Daly Waters and Beswick were evacuated. Three people drowned, damage (excluding Government facilities and many insured properties) was 70 million dollars.
<i>May</i> 26 Feb 1998	<i>May</i> crossed the coast in the vicinity of Bayley Pt (south of Mornington Island). It had a central pressure of 990 hPa and a clear radar eye was visible. 44 buildings were damaged by the wind on Mornington Island and the costs of repairs was \$(1998) 375,745. The remnants of <i>May</i> remained about the Southern Gulf country until early March which resulted in extensive flooding. The highest rainfall was recorded at Burketown with 1065 mm recorded over the 7 day period commencing 26 February 1998. Severe flooding to major flood level occurred in the lower reaches of the Nicholson, Albert, Gregory, Leichhardt and lower Flinders Rivers.
<i>Steve</i> 28 Feb- 1 March 2000	After making landfall near Cairns on 27 February 2000 tropical cyclone <i>Steve</i> crossed the base of Cape York Peninsula and <i>Steve</i> reformed in the southeastern Gulf of Carpentaria a day after crossing the Queensland east coast and almost as soon as it moved over water in the southeastern Gulf. <i>Steve</i> moved northwest along the southern Gulf of Carpentaria coast,

	<p>crossing the coast north of Port McArthur on 1 March as a category 1. Steve passed over the uninhabited Sir Edward Pellew Group of islands prior to coastal crossing with gale force winds recorded by the Centre Island Automatic Weather Station. Crossing the islands weakened Steve and only a brief period of strong winds and a 45 minute calm were observed at Bing Bong Port on the mainland coast north of Port McArthur. No damage was reported from Bing Bong port near where the cyclone crossed the coast, and Borroloola township, about 60 km inland from Bing Bong reported some uprooting of small trees. Minimum mean sea level pressure recorded: 987 hPa 2252Z 29/2/00 Centre Island AWS. Maximum sustained (10 min average) wind speed recorded wind speed: 38 knots 2224 UTC 29/02/2000 at Centre Is AWS with gusts to 50 knots at 2145 UTC.</p> <p>Sea levels up to 1.5 metres above normal tide levels at Port McArthur.</p>
<p><i>Winsome</i> 10/11 February 2001</p>	<p>The cyclone due to its large size generated large seas and storm surge across wide areas of the Gulf. A barge taking supplies from Karumba to Pormpurraw capsized at the Gilbert River Mouth at 4am (EST) 11 February 2001. The crew of 2 were rescued by a fishing boat. A fisherman was missing near Eagle Bay in the Northern Territory while trying to search for a missing punt. There were large areas of storm surge of between 1 to 2.5 metres at various locations about the southwest Gulf of Carpentaria. Coastal erosion and damage to shoreline facilities were reported from Groote Eylandt, Bickerton Island and along the mainland coast. At Nhulunbuy, the sea level rose 0.5 metres above highest astronomical tide (HAT), covering the Perkins Wharf and inundating areas not previously known to have been covered by the sea. At Alyangula the storm surge reached 1.3 m above highest astronomical tide (HAT). A small boat drifted from its moorings and was lifted ashore on to the Golf course. A car was washed off Shoreline Road and a lot of sand was deposited on the golf course.</p> <p>At Bickerton Island, the storm surge caused some beach and dune erosion, undermining Casuarina trees. At Numbulwar the majority of the estimated \$1 million damage bill was caused by the storm surge which was estimated at 2.5m (1 metre above HAT) with about another metre of wave action above that level. Workshops, roads, plant and equipment were damaged and inundated with seawater. Shipping containers and beached boats were shifted inland and the road to the barge landing was damaged. A 2 metre surge was also reported at Bing Bong Port (Port McArthur), raising the water level over the wharf at high tide.</p> <p>Observations</p> <p>The strongest 10 minute average winds of 130/41 knots were recorded at Centre Island AWS at 1207 UTC 10 February 2001. Gales were reported from Centre Island from 1100 UTC 10 February 2001 to 2023 UTC 10 February 2001. The maximum 10 minute average wind speed recorded at buoy 52625 (-14.6S 138.8E) was 050/30 knots (MSLP 994.4 hPa) at 1909 UTC 10 February 2001.</p>
<p><i>Wylva</i> 16 February 2001</p>	<p>Wylva was crossed the southern Gulf of Carpentaria coastline on the 16 February 2001 just west of the Northern Territory-Queensland border as a weak Category 1 cyclone. The cyclone decayed into a tropical LOW which moved steadily across the Northern Territory for the next few days, finally decaying over the Pilbara region of Western Australia on the 22nd. Like Winsome before it and Abigail afterwards, Wylva maintained its cloud structure quite well over the Australian continent.</p> <p>The strongest winds at Centre Island AWS were 0100 UTC 16th 260/30 knots QNH 998.6, 0200 UTC 16th 270/29 knots QNH 998. Lowest QNH 994.6 hPa 0700 UTC 16th.</p> <p>The strongest winds at the buoy 52625 moored near 14.6S 138.5 E were at 1851 UTC 15th and were 280/28 knots (10 min) with the lowest bar there 995.3 hPa from 1736 UTC to 1809 UTC on 15 February 2001.</p> <p>The lowest bar at Mornington Is was 997.1 at 1800 UTC 15th</p> <p>Quikscat satellite data showed 40 knot westerlies north of Centre Island near 15S at 2100 UTC 15th.</p> <p>Heavy rain from ex- Wylva produced a record flood in the upper Victoria River which inundated the Kalkarindji, Daguragu, Mistake Creek and Pigeon Hole communities. Around 700 people were evacuated to a tent city in Katherine for several weeks. Damage estimated at \$13 million was caused to infrastructure, including access roads and bridges, many houses and the power</p>

	station, police station and health clinic at Kalkarindji. Many areas were isolated by the floods requiring food drops.
<i>Abigail</i> 26 February 2001.	<p>On 24 February 2001 Abigail crossed the coast near Cairns as a weak tropical cyclone. It then crossed the base of Cape York Peninsula and was upgraded once more to Tropical Cyclone Abigail at 1800 UTC on 25 February with the centre located about 60 nm northeast of Mornington Island. The eye passed over Mornington Island Township around 7.00 pm (EST) Monday 26 February 2001.</p> <p>Central Pressure A barograph (located about 2km west of the AWS) read the pressure in the eye at 968.5 hPa around 7.00 pm. The Mornington Island AWS (badly exposed for wind) read the lowest bar (MSL) at 0820 UTC 26 February 2001 of 973.7 hPa The strongest wind gust recorded by the AWS was 64 knots at 1020 UTC 26 February 2001. Estimated wind gusts exceeded 80 knots. At Mornington Island. The storm surge reached 0.5 m above Highest Astronomical Tide (HAT) and predicted high tide was 0.8m below HAT. Further east at Karumba there was a 1.2m storm surge.</p> <p>Description of Damage Sustained -Total Estimated cost -\$245,000 Estimated building damage -\$221,500 includes additional cost for transport to remote communities .Government Residences -15. Government Facilities -12 . Numerous trees were downed; . Severe roof damage to modular building -roof severely damaged and side walls blown out;. Solar panels and hot water storage unit lifted from roof of a residence which also damaged the roof and gutters; Various levels of damage to roofs -sheets blown off, sheets buckled, gutters blown off, roof flashings blown off or damaged, Repairs to ceilings due to water entry; Water tank blown off tank stand; Damaged electrical services due to water entry through roofs, Damaged floor coverings due to water entry; Numerous TV aerials blown away; . Numerous aluminium louvred sun shades ripped from nearly all buildings; . A number of garage doors were blown in; Damage caused by flying debris -punctured fibro cement sheets, ceveats, fascias; A number of cloths hoists were damaged.</p>
<i>Bernie</i> +2.7(+0.4)	<p><i>Bernie</i> tracked southward throughout its lifetime and crossed the coast near the NT border at 11 pm on 4 January 2002 by which time it had weakened to a category 1 cyclone. The remaining low then straddled the coast for a following 12 hours before dissipating. The buoy 52627 in the Gulf of Carpentaria near 15.0S 139.0E recorded maximum 10 minute mean winds 260/43 knots at 1451UTC 3 January 2002 and the lowest mean sea level pressure of 985.1 hPa at 1813UTC 3 January 2002 when the wind was 280/35knots. At 6:37 pm on 3 January 2002, Quikscat data indicated SE to SW winds 40 to 55 knots on the western side of the storm 70 to 140 kilometres from the centre. Maximum Storm Surge Height (m) 0.4m at 6:33pm on 3 January 2002 at Weipa and 0.3m at 11:47pm on 5 January 2002 at Karumba. Maximum 24 Hour Rainfall (mm) 335mm at Mornington Island to 9am on 4 January 2002.</p> <p>Beachfront washaways and sand loss occurred around Karumba. The boat ramp sustained some damage as a result of wave action. All roads around Burketown and Doomadgee were closed due to flooding. Some environmental damage occurred but no structural damage was reported. Some environmental damage occurred on Mornington Island and Sweers Islands but no structural damage was reported.</p>
Tropical low 4-16 Jan 2003	<p>A long-lived monsoon low formed in the Arafura Sea on 4 January. The system moved southward and inland along the Top End of the Northern Territory on the 5th and by the 11th was located in the Gulf south-southeast of Groote Eylandt. The low never reached tropical cyclone intensity in the Gulf however gales and sustained winds to 52 knots were recorded as the low approached Elcho Island where a minimum MSLP reading of 989.8 hPa occurred at 1040UTC 5 January 2003. Extensive tree damage occurred at Elcho Island.</p> <p>In and around the Gulf of Carpentaria the monsoon low caused wind gusts to 52 knots at Sweers Island on 16 January. Centre Island (15.7S, 136.8E) recorded a peak gust of 47 kts on the 14th.</p> <p>Moderate to major flooding occurred in the Nicholson River catchment. Rainfall rates in or near the catchment over the period 2300UTC 7 January 2003 to 2300UTC 22 January 2003 were:- Redbank Mine 1103mm,</p>

	<p>Woollogorang 880mm and Westmorland 889mm. Maximum 24 h rainfall totals were 298 mm at Mornington Island (470mm in 48h), 162mm at Sweers Island, 159mm at Centre Island, 140mm at Groote Eylandt and 179mm at Borroloola. Sweers Island reported tides of 60 to 90cm above astronomical levels.</p>
<p><i>Craig</i> 7-12 March 2003</p>	<p>Tropical cyclone Craig was able to sustain tropical cyclone intensity as it tracked along the northcoast of the Northern Territory until it moved into the Gulf of Carpentaria near Gove at 2000 UTC on 11 March. Craig accelerated and ultimately moved at 22 knots toward the southeast and finally south-southeast whilst crossing the Gulf. It developed an asymmetric wind and rain structure and satellite data showed that strong winds under the rainband were restricted mostly to the western flank with a 70-knot south-southeast wind indicated near 15.5S, 140.7E. As the cyclone approached the eastern coast of the Gulf of Carpentaria, the apparent centre visible on radar continued moving towards the southeast. However, the low-level centre came to a halt and remained virtually stationary over the next 12 hours. This asymmetry near the centre in all likelihood gave the low-level circulation a northwesterly component of motion. At Nhulunbuy the peak gust of 46 kts along with a 33-kt sustained wind was recorded at 11/2134 UTC. The minimum SLP of 992.2 hPa occurred earlier at 2000 UTC. A marine pilot from Brisbane was guiding vessel C6OZ3, anchored 130 nm west of Booby Island (10.6S/141.9E) from 11/1400 through 12/0700 UTC. The pilot stated that he experienced sustained winds of 55 kts with gusts over 60 kts and a 10-metre swell. The vessel was apparently located under a rain band well east of Craig's centre. Some minor damage was also reported to small craft in the northwestern Gulf of Carpentaria and to the Alcan Plant at Nhulunbuy. On the Queensland coast, Craig's effects were restricted to widespread but minor damage to native vegetation and moderate to locally heavy rainfalls. At Kowanyama an uprooted tree damaged one house, and numerous trees and branches fell in Kowanyama and Pormuraaw. Roads were cut throughout the region. Weipa, which was well to the north of the cyclone's centre, recorded a storm surge of 1.1 metres, significant wave heights of 3 metres, and peak wave heights of 5 metres.</p>
<p><i>Monsoon low</i> 10-17 Jan 2004</p>	<p>A significant monsoon LOW formed over land in the Arnhem Land district of the Northern Territory on 10/11 January 2004. By 12 January 2004, the LOW had generated heavy rain with Limmen River, near the southwest corner of the Gulf of Carpentaria, recording 187.2 mm in the 24 hours ending at 9 AM. Nearby on the north coast, Jabiru recorded 101.2 mm and Oenpelli 94.8 mm. The LOW gave general falls of between 100 mm to 300 mm to the northern parts of the Territory, with moderate flooding in the middle reaches of the Daly River in the Territory's northwest. The monsoon LOW deepened to 998 hPa and by 13/0600 UTC was tracking inland close to the southeastern Gulf of Carpentaria on a south-southeasterly path. By 15/0600 UTC the LOW had moved slowly through the northwestern and inland central regions of Queensland maintaining intensity at 996 hPa. On 15 January Mount Isa, Queensland, reported its highest daily rainfall record of 198 mm in the 24 hours to 9 AM since observations commenced in 1926 (previous record was 157.5 mm on 14 January 1957). The highest 24-hour report was 246 mm at Moondarra.</p>
<p><i>Fritz</i> 12 Feb 2004</p>	<p>Fritz moved across Cape York Peninsula and reformed in the southeast corner of the Gulf. At Mornington Island trees were uprooted but there was no structural damage. The lowest barometer reading at Mornington Island was 993.3 hPa at 0330 UTC, 12 February. Sweers Island (17.2S/139.6E) estimated 10-minute mean winds of 45 knots in a special report at 2330 UTC, 11 February 2004, when a rainband south of the centre passed over the Island. Fritz, after crossing the mainland coast near Mornington Island maintained a clear satellite signature as it travelled across inland Northern Territory and Western Australia.</p>
<p><i>Harvey</i> 5-14 February 2005</p>	<p>As Harvey developed it moved generally in a south- southwesterly direction, intensifying slowly at first. However, upon its approach to land, Harvey intensified rapidly into a severe cyclone. Harvey reached a peak intensity of 965 hPa in the hours just prior to making landfall 50 nm north-northwest of Woollogorang (Northern Territory) at 0600 UTC 7 February 2005.</p> <p>Gulf communities cyclone damage</p> <p>(Calvert River) Pungalina Station, 130km southeast of Borroloola and not far from the Gulf of Carpentaria coast, was in the direct path of the cyclone. Station manager Owen Davies said wind gusts stronger than 100km/h hit the homestead just before midnight and the cyclone</p>

	<p>dumped 60mm of rain in a few hours and winds had uprooted many trees. It dumped 63mm of rain on Borroloola, with some other remote areas recording higher falls - the heaviest was 200mm at Kiana Station, 150km south of Borroloola. All unsealed roads within Burke Shire were closed with flooding isolating Burketown, Doomadgee and numerous rural properties in the Gulf area. The road west to Doomadgee and other roads were damaged. Mornington Island reported that an unmoored dinghy was washed away but has since been located. A storm tide was experienced that just exceeded the normal high tide but posed no problems. At Karumba sand washed from the foreshore near the Council boat ramp and Sunset Tavern, There may be some further beach erosion that was caused by the storm tide.</p>
<i>Ingrid</i> <i>March 2005</i>	<p>Ingrid crossed the east coast of Cape York Peninsula south of Lockhart River as a severe tropical cyclone and re emerged as a severe tropical cyclone in the Gulf of Carpentaria passing just to the north of Gove who reported 192mm in the 24 hours until 9am on 12 March. Maximum wind gust at Gove Airport was from the ESE at 109 km/h.</p>
<i>Monica</i> <i>April 2006</i>	<p><i>Monica</i> crossed the east coast of Cape York Peninsula south of Lockhart River as a severe tropical cyclone and re emerged as a severe tropical cyclone in the Gulf of Carpentaria passing just to the north of Gove who reported 118 mm in the 24 hours until 9am on 24 April. Maximum wind gust at Gove Airport was from the SE at 81 km/h.</p>
<i>Nelson</i> <i>February 2007</i>	<p>Tropical Cyclone Nelson developed from a tropical low which tracked through the western Gulf of Carpentaria towards the southwest before turning eastwards across the southern Gulf and intensifying. The system was named tropical cyclone Nelson on 5th February 2007. The cyclone intensified to a Category 2 on 6th February and peaked while crossing the southeast Gulf of Carpentaria coast. Nelson generated large seas and 10 crew members from a 5,000-tonne zinc carrier that had taken on water while traveling north near Karumba were safely evacuated by helicopter to the town of Normanton, in north Queensland. The highest significant wave heights measured at Weipa were 3.1 metres (3rd highest on record) and the peak wave height 5.6 metres also ranked 3rd in the long term statistics.</p> <p>A couple were winched to safety by a rescue helicopter from Dinah station 150km north of Karumba. A fallen tree badly damaged their homestead and they took shelter in a shipping container until flooding forced them to seek higher ground.</p>

HARDEN UP

PROTECTING QUEENSLAND



ARCHIVE: Major Storm Surge Events South Eastern Gulf of Carpentaria, 1887-1987

The 1887 cyclone, David (1976), Jason (1987) and The 1948 Bentinck Island cyclone

By Mr Jeff Callaghan

Retired Senior Severe Weather Forecaster, Bureau of Meteorology, Brisbane

The 1887 cyclone 5 Mar 1887

From all reports the storm surge from the disastrous 1887 cyclone flooded almost all of Burketown. Only the highest part of town, which we understand to be near the hotel, escaped the waters from the Gulf. A copy of a 1918 report to the Queensland Parliament from the Department of Harbours and Rivers Engineer is held in this office. This report refers to the sea rising to 5.5 metres above the highest spring tide level at the Albert River Heads during the 1887 event. This level is about 8 metres above Australian Height Datum (AHD). Seven people out of a population of 138 died in the cyclone. Storm force winds commenced at 11 am from the SE and backed to the E and the NE increasing in violence until 10 pm when virtually the whole of Burketown was devastated. The storm surge arrived at 7pm. From a 1979 Main Roads survey map the high point is near the hotel at Burketown at 5.6 metres above AHD. A plan of the town drawn from this survey map is shown in Figure 1.

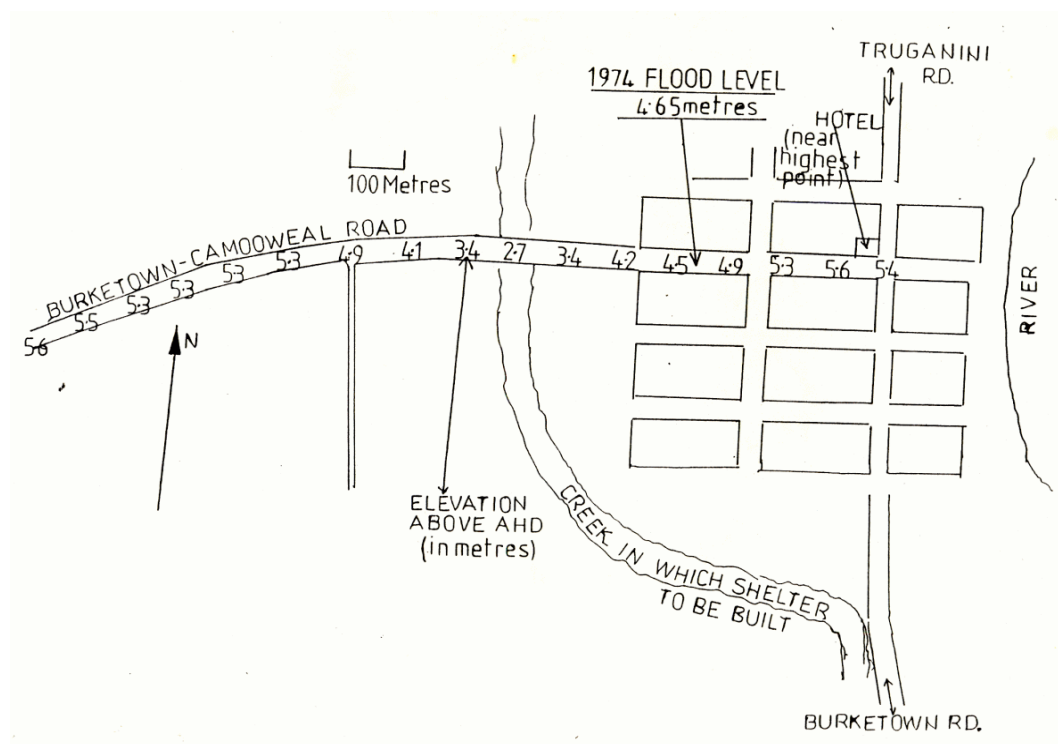


Figure 1 A plan of Burketown with Department of Main Roads surveyed elevations shown.
Tropical cyclone Ted 19 December 1976

The last significant storm surge near Burketown was associated with tropical cyclone *Ted* just before Christmas in 1976. Reportedly the surge from this event extended 20 km inland where it piled mangroves and logs 2 to 3 metres high and badly damaged the Truganini wharf just out of town. Right in Burketown our observer reported that the tide "came higher than any normal flood". We understand that normally under flood conditions the low point on the Burketown- Camooweal Road (2.7 metres AHD in Figure 1) is covered by water. We have assumed that the surge from *Ted* also covered the road at this point.

Ted passed directly over Burketown during the evening of 19 December 1976 and the town experienced the calm winds inside the eye between 7.15 pm and 8.50 pm. Immediately before the period of calm the wind was blowing from a north-northeast direction. The strongest winds occur in tropical cyclones just outside the calm eye and north-northeasterly winds blow at right angles to the open coast near Burketown. Such intense winds normal to the coast generate the larger storm surges and the major contribution to the inundation around Burketown would have developed around 7pm that evening. Our records show that the high tide at Karumba (the standard tide port for the southeast Gulf region) that evening was at 7pm. The nearest secondary tide port is Sweers Island which lies 40 km off the open coast north of Burketown. High tide at Sweers Island occurs 20 minutes before Karumba so the inundation near Burketown would have been developing just after high tide. The predicted high tide at Karumba that evening was 3.3 metres which is one of the smaller peak tides to be experienced there. The highest tides in the southeast Gulf coincide with maximum lunar declination when they average 3.7 metres at Karumba. The highest tide expected at Karumba under average meteorological conditions is 4.75 metres. Obviously the tide adds to the

storm surge effect so the inundation accompanying *Ted* could have been worse if it coincided with one of these higher tides.

Meteorological factors also make *Ted* a somewhat less than extreme storm surge event. *Ted* passed to the west of Mornington Island before making landfall near Bayley Point. It then moved southeastwards towards Burketown. Fortunately this was a track which reduced its efficiency in generating storm surge. Additionally satellite photographs indicated it was weakened as it approached landfall (Figure 2). It is not unusual for tropical cyclones in the Gulf of Carpentaria to intensify right up to the time of landfall. It largely depends on the type of weather systems in the upper atmosphere passing across Central Australia at the time. Additionally some of these cyclones have approached the Southern Gulf Coast from the north-northeast. This direction of approach would produce the worst storm surge in the Burketown region.

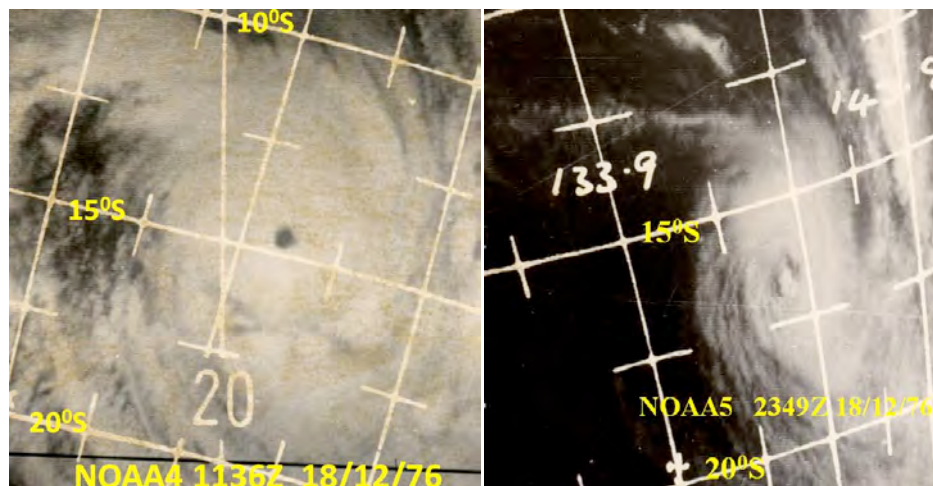


Figure 2 Satellite imagery of *Ted* with a clear compact eye some 18hours before reaching Burketown (left frame) only to have a ragged eye shortly before landfall (right frame).

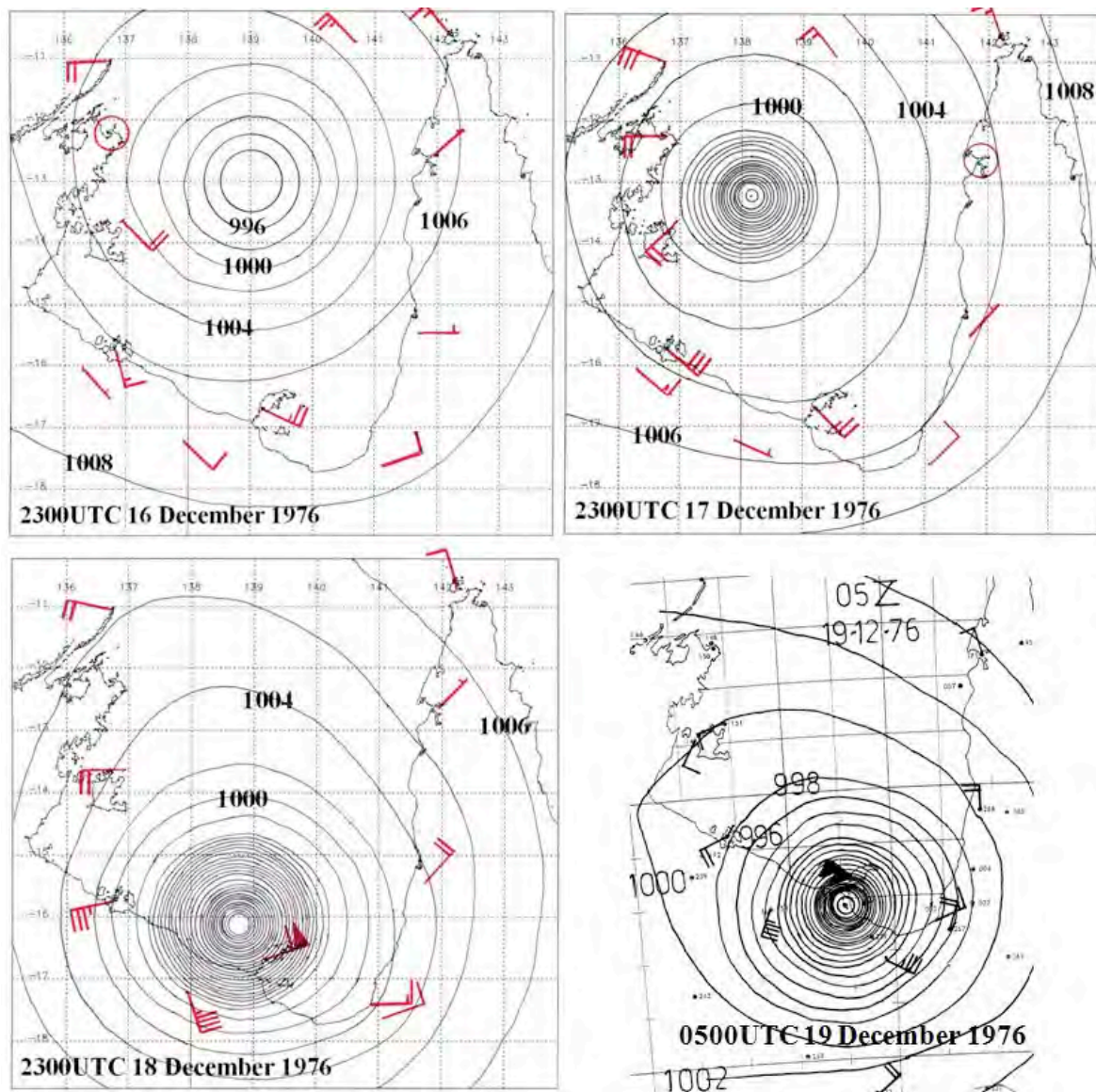


Figure 3 Mean sea level analysis with some wind observations for the period 2300UTC 16 December 1976 to 0500UTC 19 December 1976.

Ted crossed the coast near Mornington Island (Figure 3) and passed directly over Burketown where a central pressure of 950 hPa was recorded (Figures 4 and 5). Damage in its path was almost total. Mornington Islands 700 inhabitants were rendered homeless with 95% of its buildings damaged and Burketown was similarly affected. A large storm surge accompanied the cyclone and it extended 20 km inland near Burketown where logs were piled 2-3 m high and a small wharf was destroyed. Tides at Karumba were 2 metres above normal and badly damaged the wharf and prawn processing installations. Magowra Station (SW of Normanton) reported that the sea came 30 km inland. Extensive flooding and wind damage occurred in stations inland from Burketown. The hurricane force winds extended a long way inland, for example Cowan Downs near the Burke and Wills Roadhouse had out buildings unroofed, windows blown out of the main building, telephone posts bent to ground level and trees 4 feet in diameter snapped. Livestock losses caused by drowning and low temperatures were estimated to be 250,000.



Figure 4 Track of Ted through the Gulf Country with detail of damage.

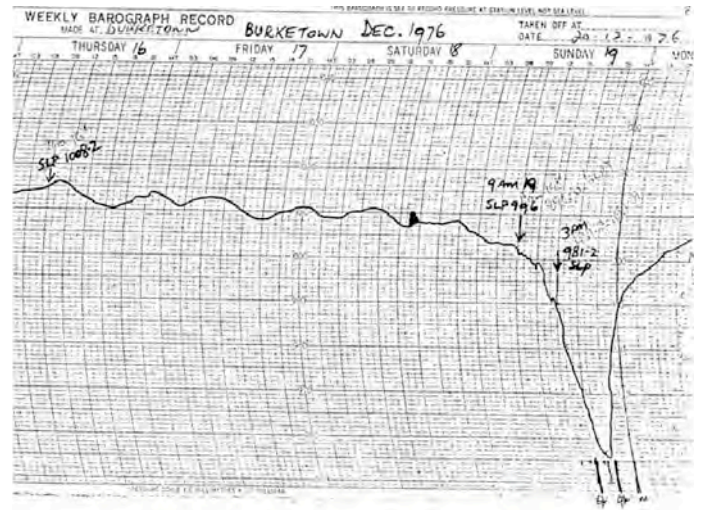


Figure 5 Barograph at Burketown.

Tropical cyclone Jason, 6-14 February 1987

Jason 13 Feb crossed the Qld coast about 40 km ENE of Burketown (Figures 6 and 7)). An anemometer at Burketown (Figure 8) recorded a 10 minute average wind of 64 knots with gusts to 85 knots (from the SSE). The cyclone was moving S at 17 km/hr (6 knots) so that winds on the eastern side of the cyclone were stronger. Lowest pressure at Burketown (Figure 8) was 983 hPa at 3pm 13th (at the time of the strongest winds). The bar dropped to 981 hPa (10 min max wind 50 knots) at Mornington Island. There was structural damage at Burketown and Mornington Island and tree damage throughout the SE Gulf Country. A 2.04 metre storm surge was measured at Karumba at 0500 UTC 13th. The maximum storm tide was 4.7 metres (lowest astronomical tide datum) at 0700 UTC which was 0.11 metres above highest astronomical tide.

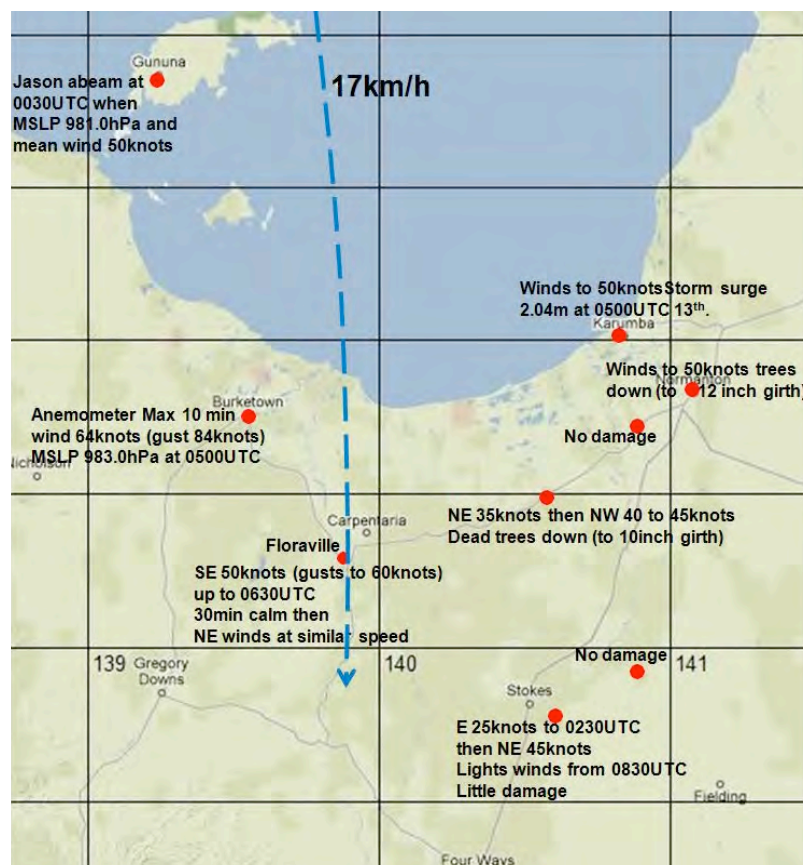


Figure 6 Track of Jason through the Gulf Country with details of impact.

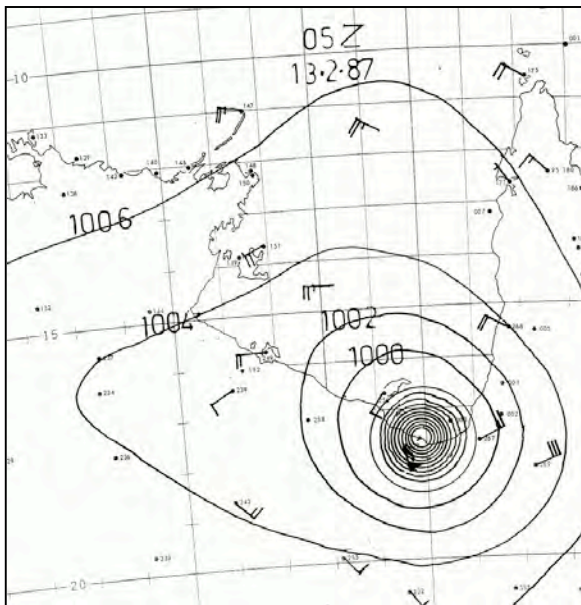
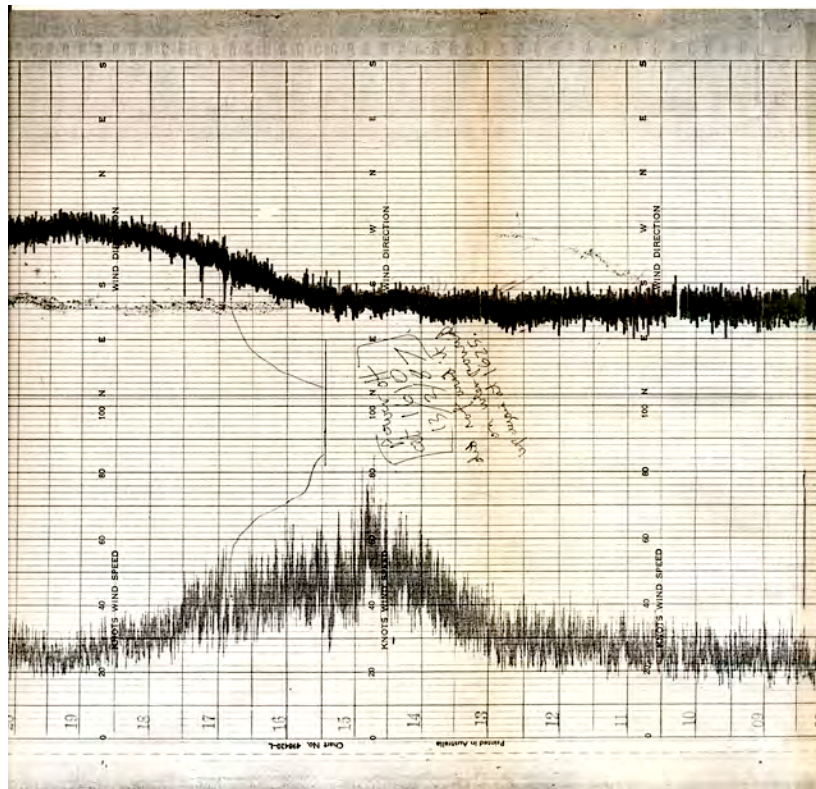


Figure 7 Mean sea level analysis with some wind observations for 0500UTC 13 February 1987



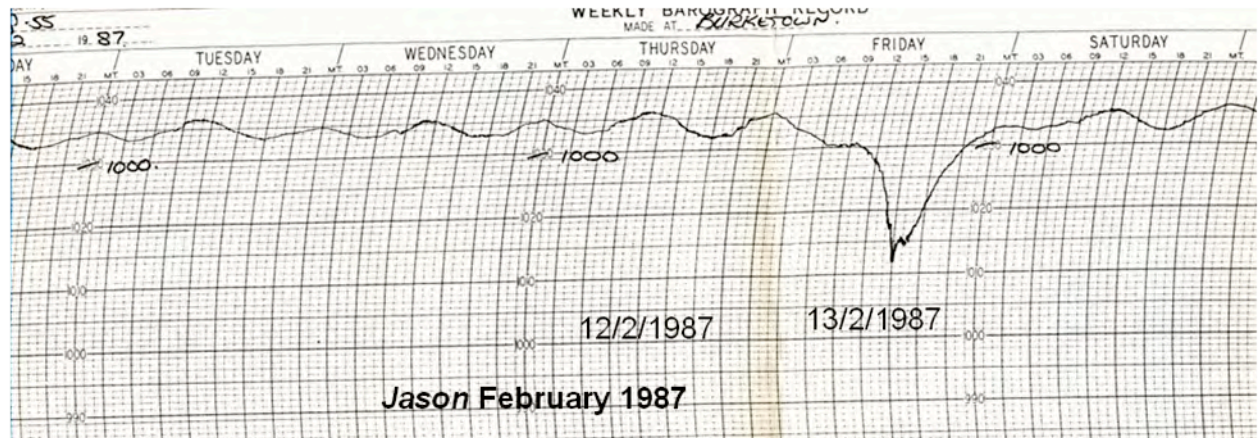


Figure 8 Anemometer and barograph charts for Jason at Burketown.

The 1948 Bentinck Island cyclone

This cyclone moved from the Groote Eylandt area and made landfall just to the west of Mornington Island (Figure 9). Aborigines described a storm surge covering all but the highest parts of Bentinck Island. The water deeply covered places where they were accustomed to live and where they obtained their water. This caused wells and springs to go salty and eventually the inhabitants were forced to abandon the Island. It was later estimated that on Mornington Island the rise in sea water was 12 feet above the highest normal tide mark. On Mornington Island the surge caused large eucalypts to die and had caused a change in vegetation to salt loving species in some areas. It was assessed that the water on Bentinck Island also rose 12 feet above high water. After landfall, the town of Borroloola was badly damaged. The hotel was wrecked and a number of other buildings were destroyed.

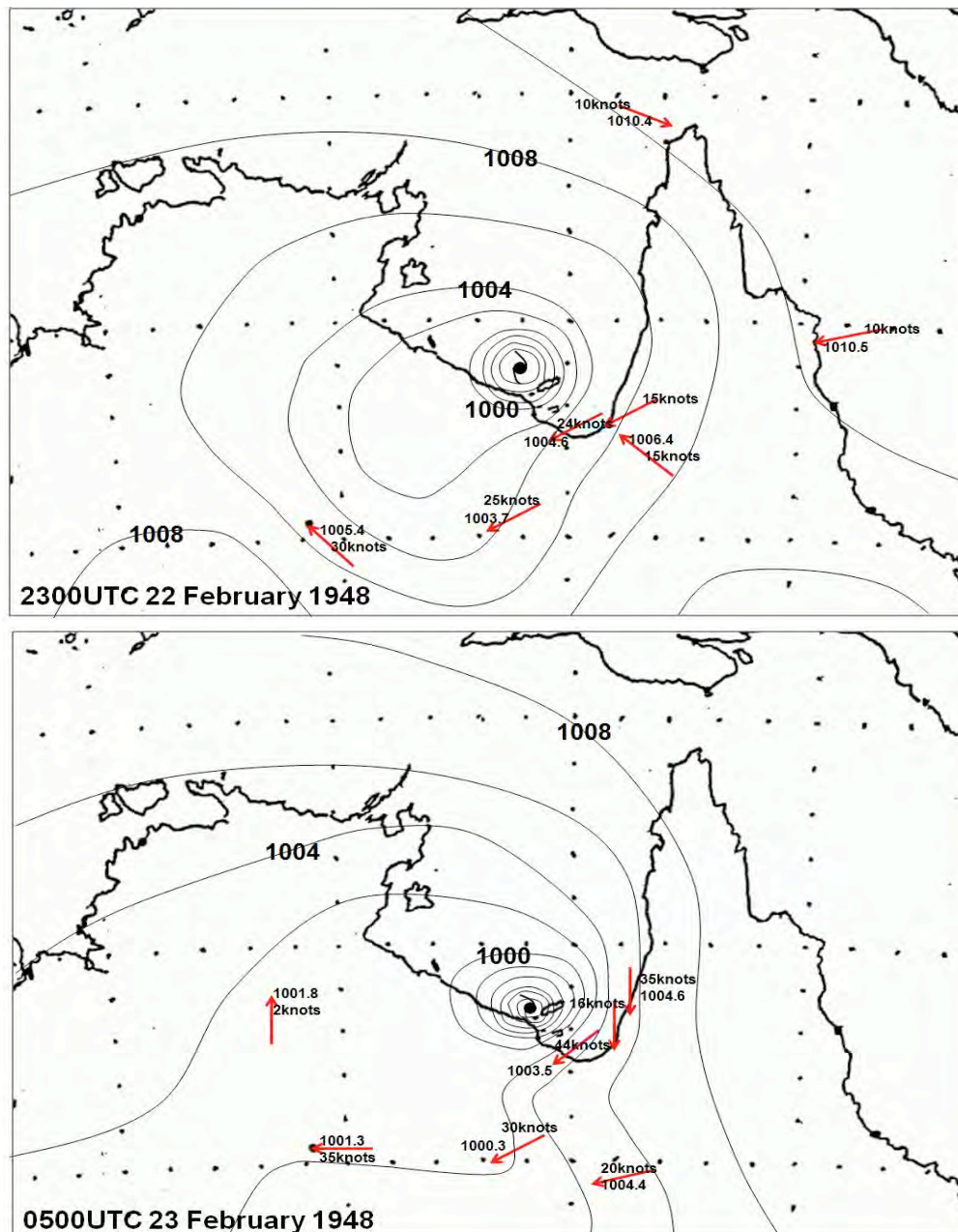


Figure 9 Mean sea level analysis with some wind observations for the period 2300UTC 22 February 1948 to 0500UTC 23 February 1948. Reliable pressure analyses down to 1000hPa.

ARCHIVE: Major Storm Surge Events, Eastern Gulf of Carpentaria, 1964-1996

Tropical cyclones *Dora* (1964), *Flora* (1964), *Fiona* (1971), *Dominic* (1982), *Felicity* (1989) and *Barry* (1996)

By Mr Jeff Callaghan

Retired Senior Severe Weather Forecaster, Bureau of Meteorology, Brisbane

***Dora*, 2-9 February 1964**

Storm surge data

The movement of *Dora* at landfall was 305°/9km per hr. A large storm surge came ashore with the cyclone near the Edward and Mitchell Rivers – It was reported that the sea came right over the beach ridge, a rise of approximately 18 feet. (5.5metres).

Other impact data

Dora made landfall on the eastern Gulf coast and devastated the Edward and Mitchell River missions on the 3rd (see Figures 1,2 and 3). The missions are now known as Pormpuraaw and Kowanyama. Trees over a wide area of Western Cape York Peninsula were blown down or completely defoliated in winds of around 100 mph (87 knots). The eye passed directly over Rutland Plains which experienced a 3 hour calm and gave the eye diameter as 12 nm. The winds at Edward River Mission reached hurricane force easterlies at noon on the 3rd. These winds backed to the NW and maintained hurricane force before decreasing after midnight. At Mitchell River easterly winds reached hurricane force at 3.30 pm on the 3rd and thereafter veering to the SE and increasing in force. A near calm period was observed there between 8.30 pm and 10.30 pm after which the wind veered SW, then W, slackening in speed at 3.30 am on the 4th. Rutland Plains experienced destructive easterly winds From 3pm to 10.30 pm on the 3rd with the strongest winds between 8pm and 10 pm. A complete calm then occurred until 1.30 am on the 4th after which westerly winds of slightly less speed persisted until 6.30 am.

Damage was reported as far north as Aurukun Mission, extending to Miranda Downs and Karumba in the south.- a strip almost 480 km in length. Maximum damage was a 130 km strip from near Edward River to the Nassua River. The Edward River Mission reported little damage 8km east of the mission- the strip was therefore very narrow in the north and widened to about 48 km in the south. In this maximum damage zone one quarter of the trees were blown down and those left standing were defoliated with major limb damage. At Wallaby Island at the mouth of the Mitchell River extensive

and dense belts of Mangrove 10 metres high were completely destroyed and flattened like grass. The two mission stations and Rutland Plains all suffered severe damage. For the two mission stations the

damage was estimated at 300,000 pounds(1964). Dora was accompanied by torrential rainfall over a long period. Example of large 24 hour totals were Yirrkala 248mm on the 1st, Edward River 197mm 4th, Croydon 368mm 5th, Mary Kathleen 228mm 7th, Disraeli 320mm 8th and Iffley 247 mm 9th. The Norman, Flinders, Leichhardt and Gregory experienced record floods with river levels in many instances breaking records. The total discharge was estimated at nearly double the average annual discharge of the Murray/Darling systems. The Norman River was 8 inches higher than the 1951 record at Normanton.

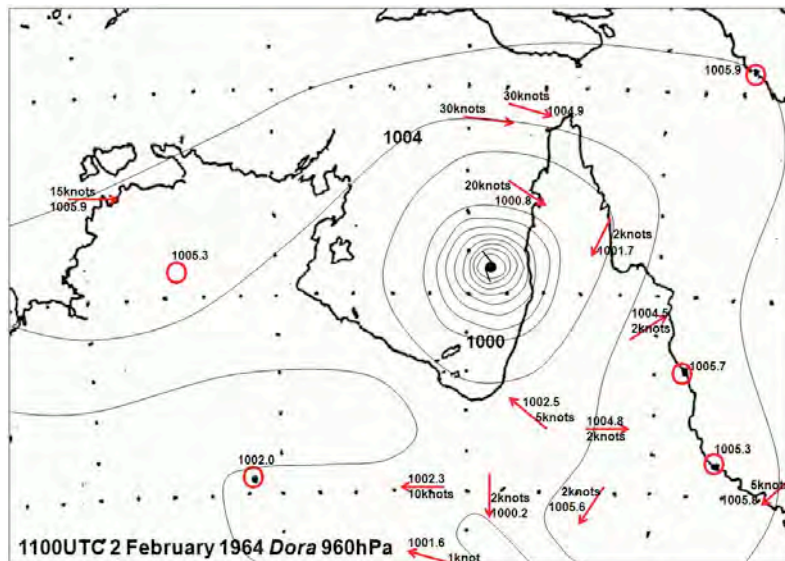
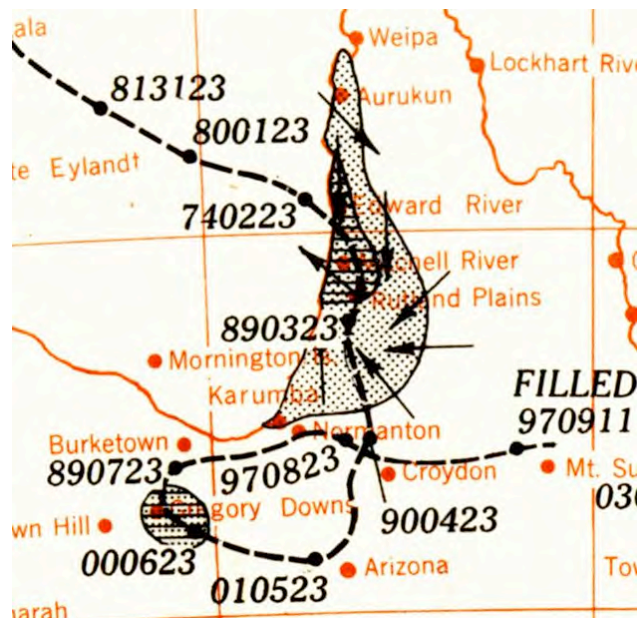


Figure 1 Mean sea level analysis with some wind observations for 1100UTC 2 February 1964. Pressure contours every 2hPa down to 1000hPa.

Figure 2 Best Track of Dora where 740223 means 974hPa 2 February 2300UTC. Hatching denotes areas of wind damage-Horizontal hatching marks areas of maximum wind damage (20% of timber down.)Arrows show reported direction of tree fall.



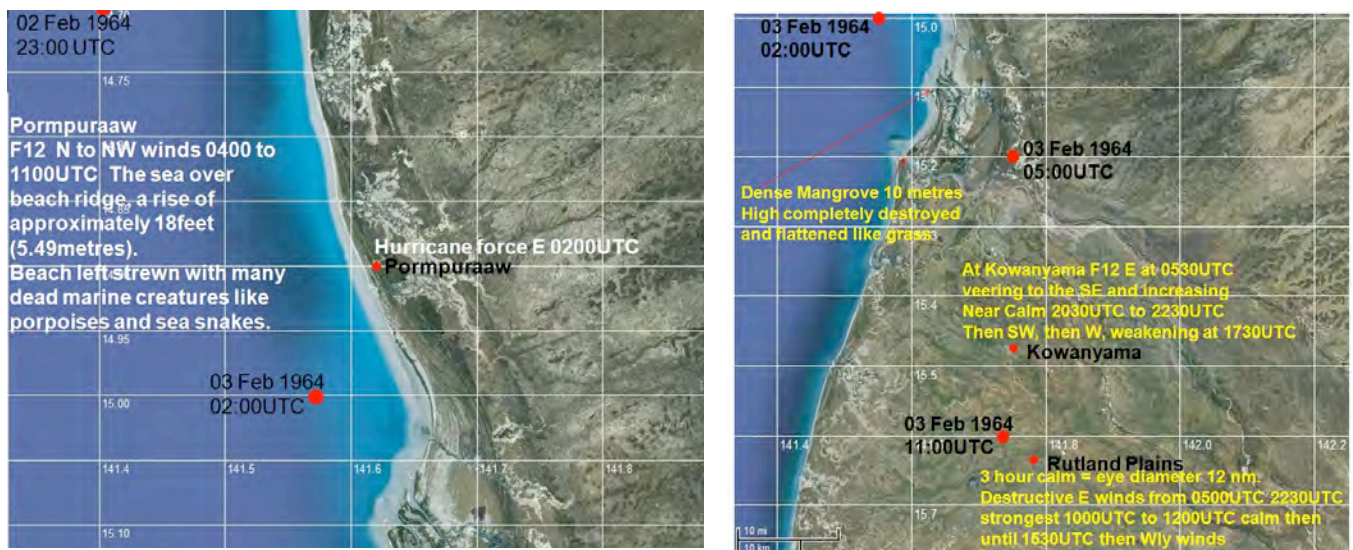


Figure 3 Storm surge and other impacts from Dora.

Flora, 5-6 December 1964

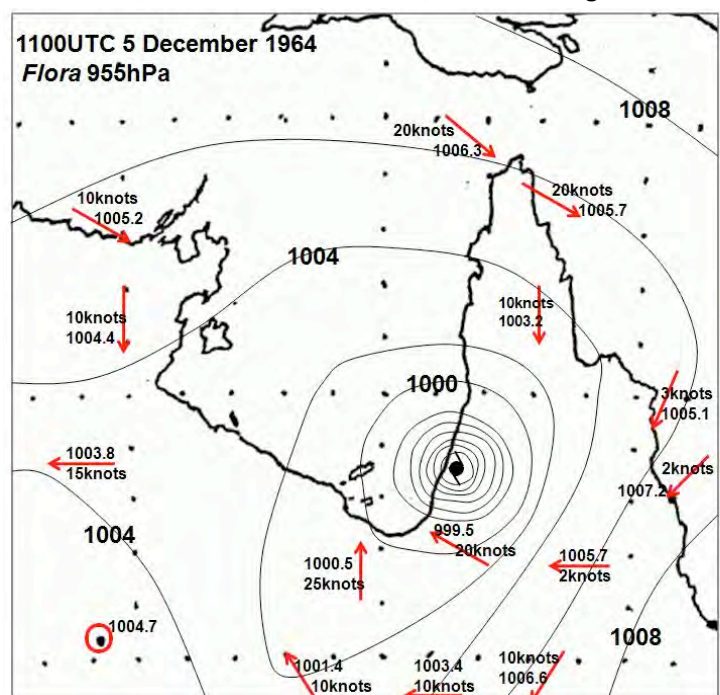
Storm surge data

The movement of *Flora* at landfall was $283^{\circ}/26\text{km}$ per hr. A storm surge accompanied the cyclone with the sea coming up the creek with a terrific rush. The bridge weighing approximately 2 tons was lifted and carried upstream about 800 metres and dumped approximately 90 metres up a ridge.

Other Impact data

Flora crossed the southern Gulf passing to the north of Mornington Island and making landfall near Inkerman Station at 9pm (Figures 4 and 5). The station (7 km inland) felt the full effects and the natives quarters, the butcher shop and a 2 room house were demolished. The northeast side of the homestead was lifted, 2-way radio aerials disappeared and rain penetrated all buildings. Large trees were snapped off or blown down. A surge of sea water accompanied the winds. Further north and 95km inland, Dunbar Station was subjected to damaging winds between 6.30 pm and 7.25pm. Mango trees were blown over in a strip 200 metres wide, houses were flattened, while roofing iron was deposited 800 metres away and twisted beyond use. Vanrook Station (80 km inland) estimated hurricane ESE winds followed by a lull between 2.30 am and 3.30 am and then storm force SW winds. Buildings were unroofed and structures badly damaged and trees uprooted. At Miranda wireless aerials were blown down, roofing iron lifted, trees stripped of branches and many birds were found dead. There was heavy flooding and around Burketown about 100 stations were isolated.

Figure 4 Mean sea level analysis with some wind observations for 1100UTC 5 December



1964. Pressure contours every 2hPa down to 1000hPa.

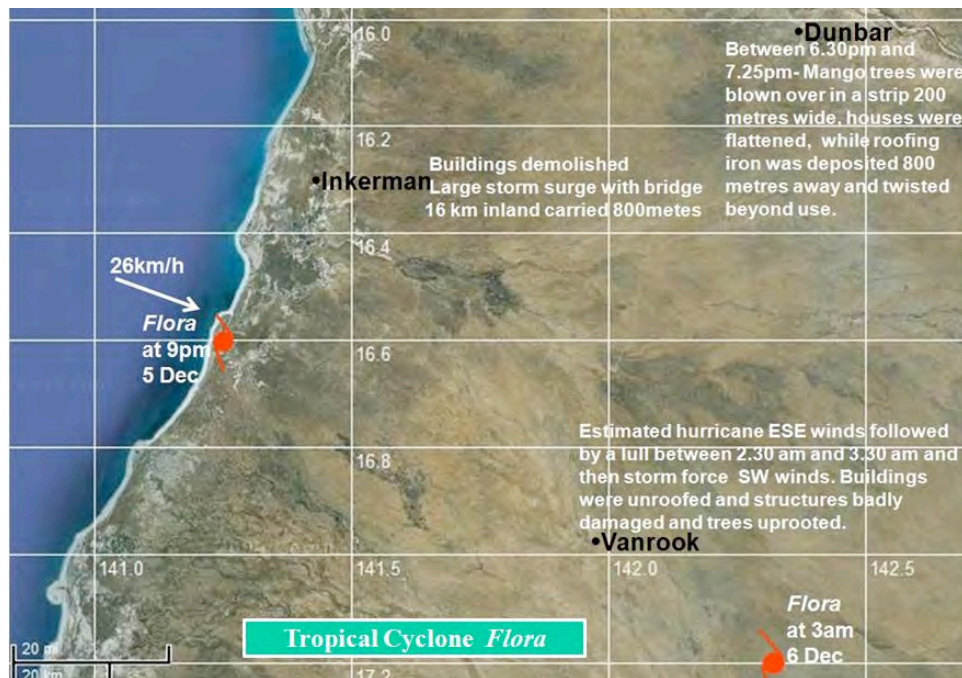


Figure 5 Position of Flora at landfall at 1200UTC 5 December 1964 and 6 hours later together with damage areas.

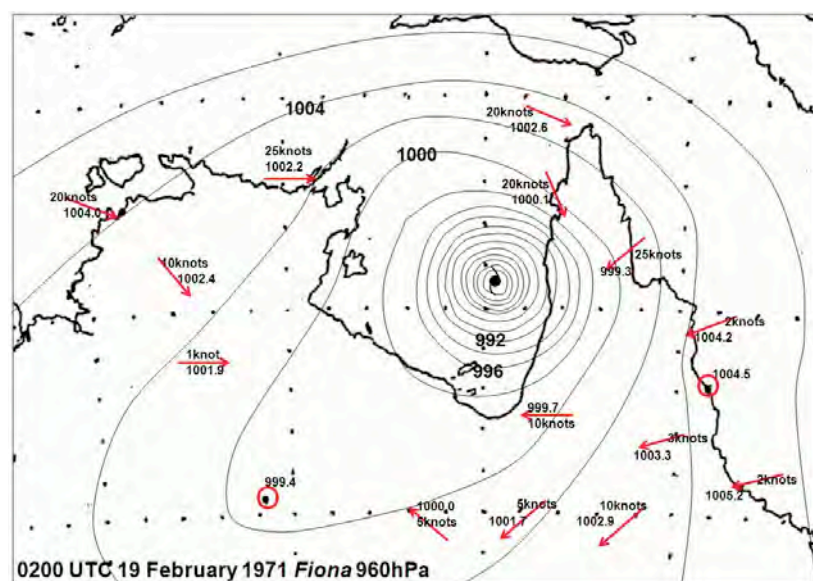
***Fiona*, 19-20 February 1971**

Storm surge data

Fiona 19 Feb 1971 +12.5. Movement at landfall $318^{\circ}/26\text{km}$ per hr. A tidal wave 4.6 metres high came 2km up the Nassua River washing away 3m high walls. At Edward River Mission the sea washed out a road on one of the sand ridges 2.7 m above sea level. At Aurukun a tidal surge of 0.9 m was observed in the river about 5 miles from the Gulf.

Other Impact data

Fiona was a continuation of *Gertie* which crossed the east coast and Peninsula and entered the SE Gulf (Figure 6). It looped back and crossed the coast at the Nassua River mouth while rapidly intensifying. From the extensive defoliation and damage to the few buildings there (Figure 7), it was

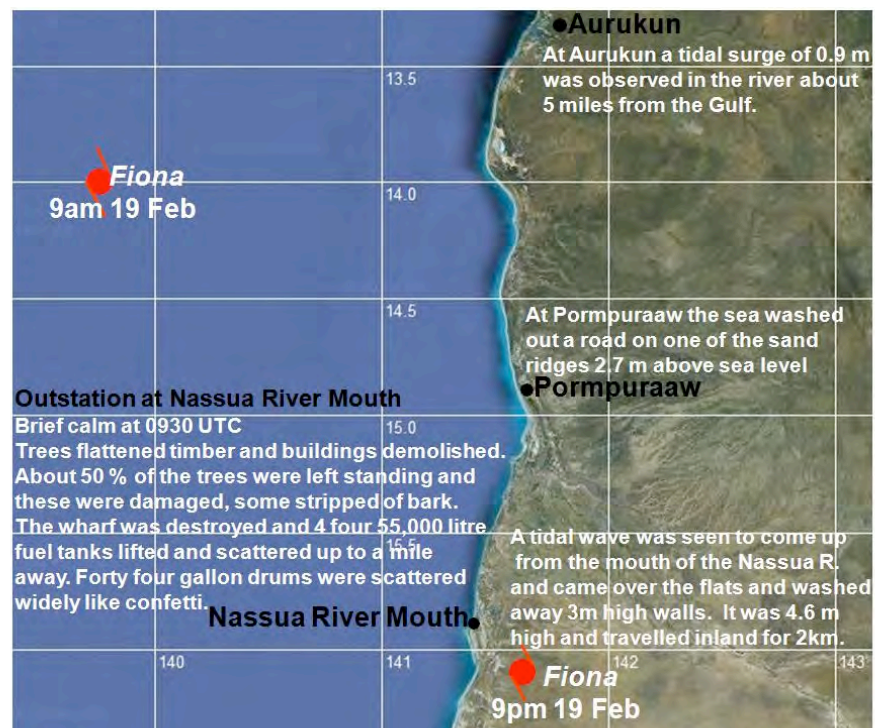


most likely accompanied by hurricane force winds. From satellite imagery before landfall the cyclone had a very clear well shaped eye with a small bright convective ring surrounding it and a bright overcast cloud canopy surrounding this three latitude degrees in diameter. An outstation of Inkerman Station is located at the Nassua River mouth and a brief calm was noted at 0930 UTC preceded by ESE winds and followed by WNW winds. Damaging winds lasted about

2 hours and flattened timber and demolished buildings. About 50 % of the trees were left standing and these were damaged, some stripped of bark. The wharf was destroyed and 4 four 55,000 litre fuel tanks lifted and scattered up to a mile away. Forty four gallon drums were scattered widely like confetti. The caretaker of the outstation observed

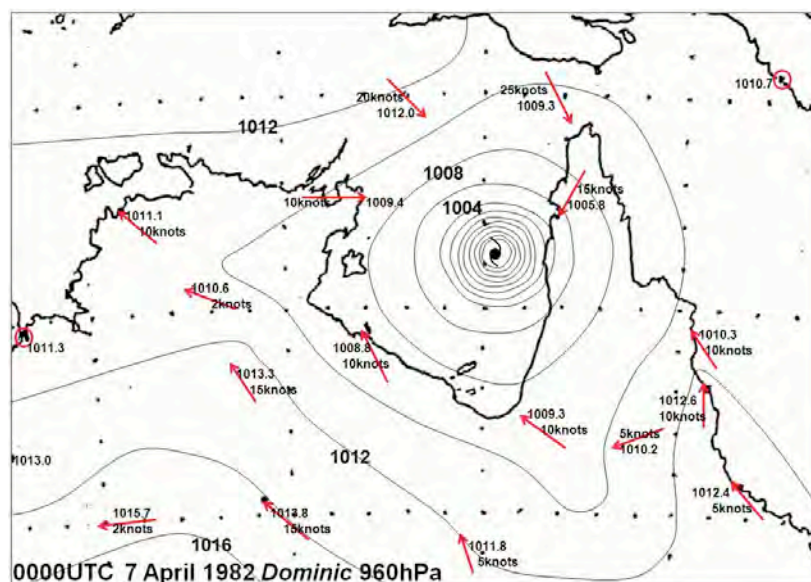
Figure 6 Mean sea level analysis with some wind observations for 0200UTC 19February 1971. Pressure contours every 2hPa down to 992hPa.

Figure 7 Position of Fiona at landfall at 1200UTC 9 February 1971 together with damage areas.



Dominic, 7-8 April 1982.

Dominic 7 Apr 1982 -3.2. Movement at landfall $288^{\circ}/11\text{km per hr}$. One mile north of Cape Keerweer was an area devoid of all vegetation (no grass or trees) - the area appeared like a ploughed field for one mile inland. Tides were 1 m above normal at Weipa and 1.5 m above normal at Karumba. The most extensive damage was from Love River to Holyrod River. There, all seashore Casuarinas were killed presumably due to salt water in root system



Dominic crossed the coast near Cape Keerweer (Figure 8). Just prior to landfall satellite imagery showed a **clear eye around 40 km in diameter** surrounded by cloud tops colder than -70°C (7.0 on the Dvorak T scale) (Figure 9). There was damage to buildings and power lines at Edward River Mission (Pormpuraaw). At Aurukun damage was assessed at \$(1982)200,000\$. A detailed report of the damage in the remote Cape Keerweer area

was provided by the log of The Round Australia Kayak expedition (Figure 10). Tree damage commenced at Wallaby Island (mouth of Archer River) and extended south of Edward River Mission. The most extensive damage was from Love River to Holyrod River. There, all seashore Casuarinas were killed presumably due to salt water in root system. North of Cape Keerweer tree damage suggested onshore winds. One mile north of Cape Keerweer was an area devoid of all vegetation (no grass or trees) - the area appeared like a ploughed field for one mile inland.

Figure 8 Mean sea level analysis with some wind observations for 0000UTC 7April 1982. Pressure contours every 2hPa down to 1000hPa.

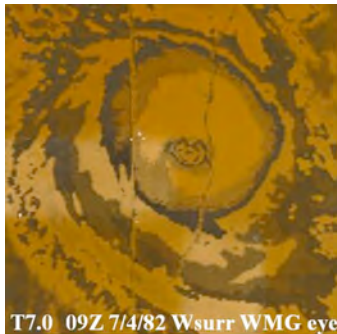
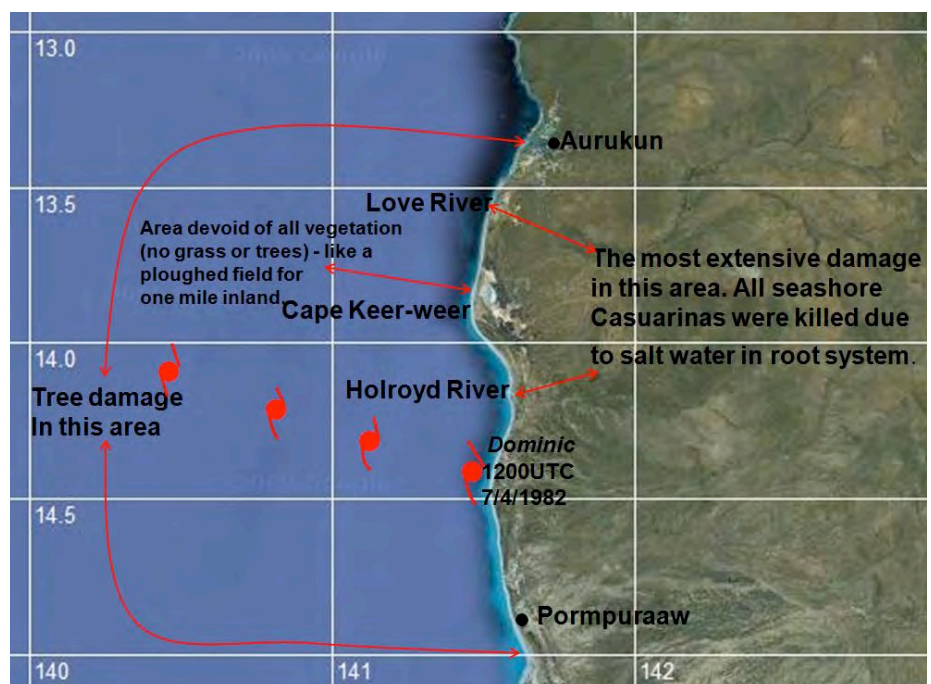


Figure 10 Three hourly positions of Dominic up to landfall at 1200UTC 7 April 1982 together with damage areas.

Figure 9 Dvorak enhancement of infrared satellite imagery at 0900UTC 7 April 1982 from the Japanese geostationary satellite imagery.



Felicity, 15-16 December 1989

Felicity 15 Dec 1989 -2.7. Movement at landfall 288°/22km per hr. The sea came up to within 1.1m of a fisherman's house (3.6m above HAT) i.e. a storm tide 2.5m above HAT. The house remained in offshore winds so that the surge would have been greater to the north. The strongest winds were from the SE.

Figure 11 shows the rapid development of *Felicity* with a Dvorak analysis of T5.5 (lower right frame) at landfall. The surrounding cloud tops are the pink colour (-54°C to -63°C) with the dark green (-31°C to -41°C) which yields and eye number 5.0. For the eye correction the surrounding cloud is the blue (-70°C to -75°C) which adds 0.5 resulting in a T number of 5.5. The impact was severe. A Barramundi fisherman, Gordon Bell, has his house 12 feet above the high tide level and the sea came up to within 4 feet of the house which is an 8 ft(2.5m) surge (Figure 12). The house remained in offshore winds so that the surge would have been greater to the north. The strongest winds were from the SE and 80% of the trees were blown down and all trees were stripped of leaves. The wind was of sufficient strength to

blow over a heavy stove which took 4 men to lift. Mr Bell was in Townsville during the landfall of tropical cyclone *Althea* and his impression was that *Felicity* was more intense.

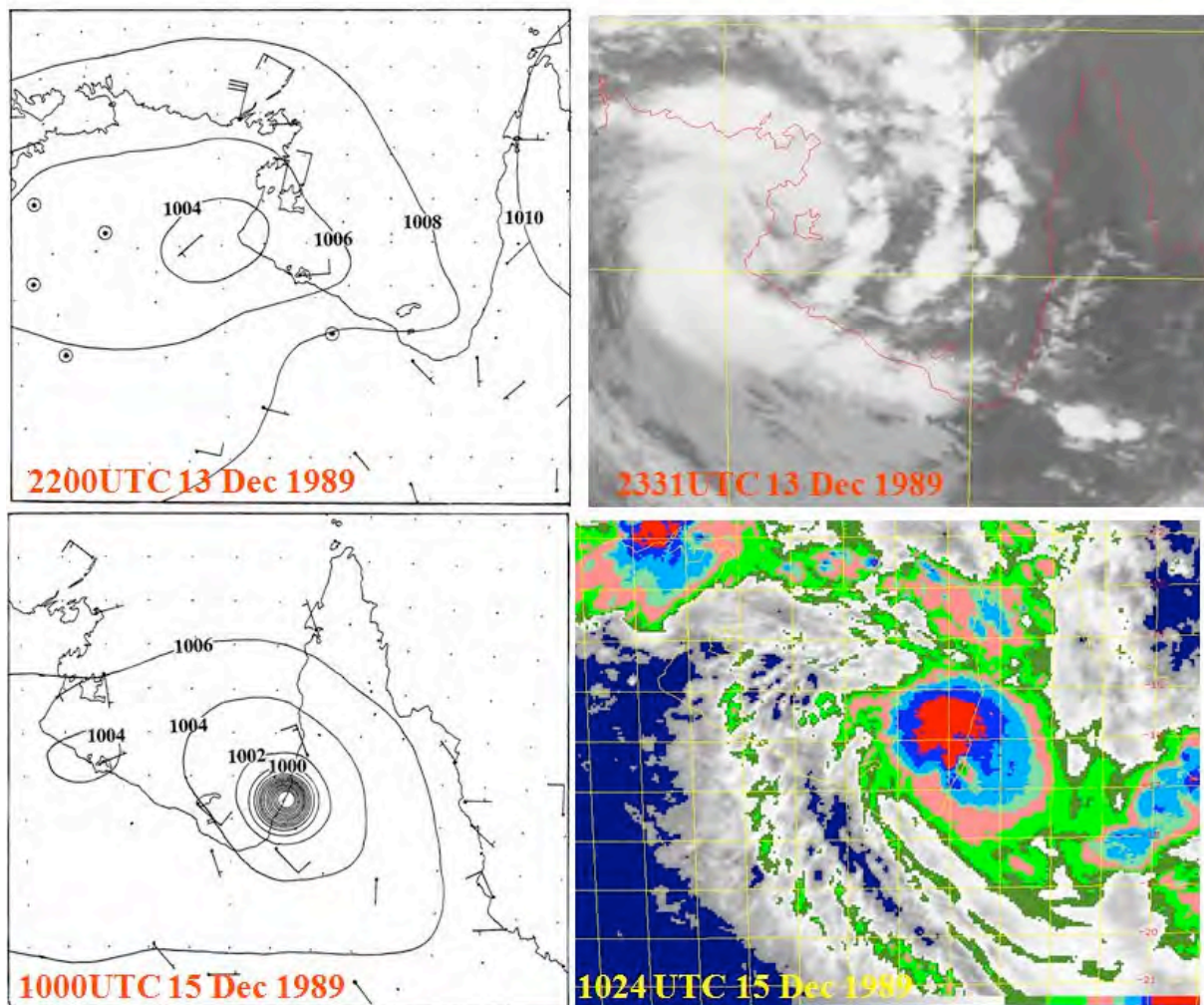


Figure 11 Depiction of rapid intensification of tropical cyclone Felicity. Mean sea level analyses on left and Japanese geostationary satellite imagery on the right with the lower right image a coloured Dvorak enhancement.



Figure 12 Positions of Felicity at landfall at 1024UTC 15 December 1989 together with position of Gordon Bell's camp.

Barry, 5-6 January 1996

Barry was another rapidly developing cyclone (Figure 13) and it was moving $315^{\circ}/10\text{km}$ per hr at landfall and caused a massive storm surge. An area of coastline 6 to 10 km in length between Duck Creek and the Gilbert R. was badly affected by storm surge with debris in trees indicating a storm tide of 6 to 6.5m. A camp 4m above high water was wrecked by storm surge which from a helicopter survey traveled 7km inland and was "at least" 4metres high (Figure 14). The storm surge again destroyed Gordon Bell's Camp and several others see below in Figure 15.

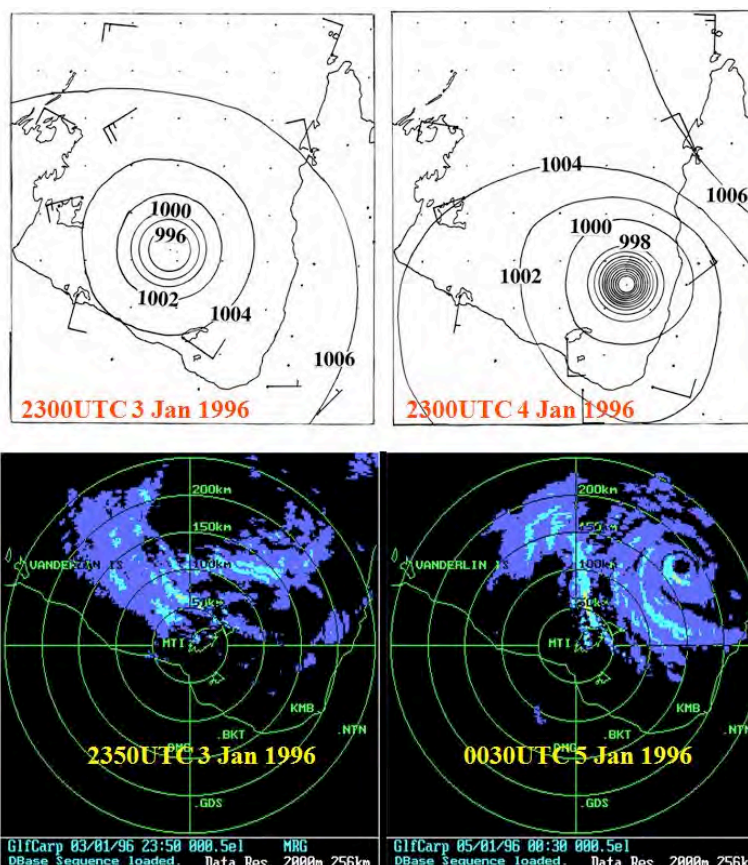


Figure 13 Depiction of rapid intensification of tropical cyclone Felicity. Mean sea level analyses in the

top frames and radar images in the bottom frame.

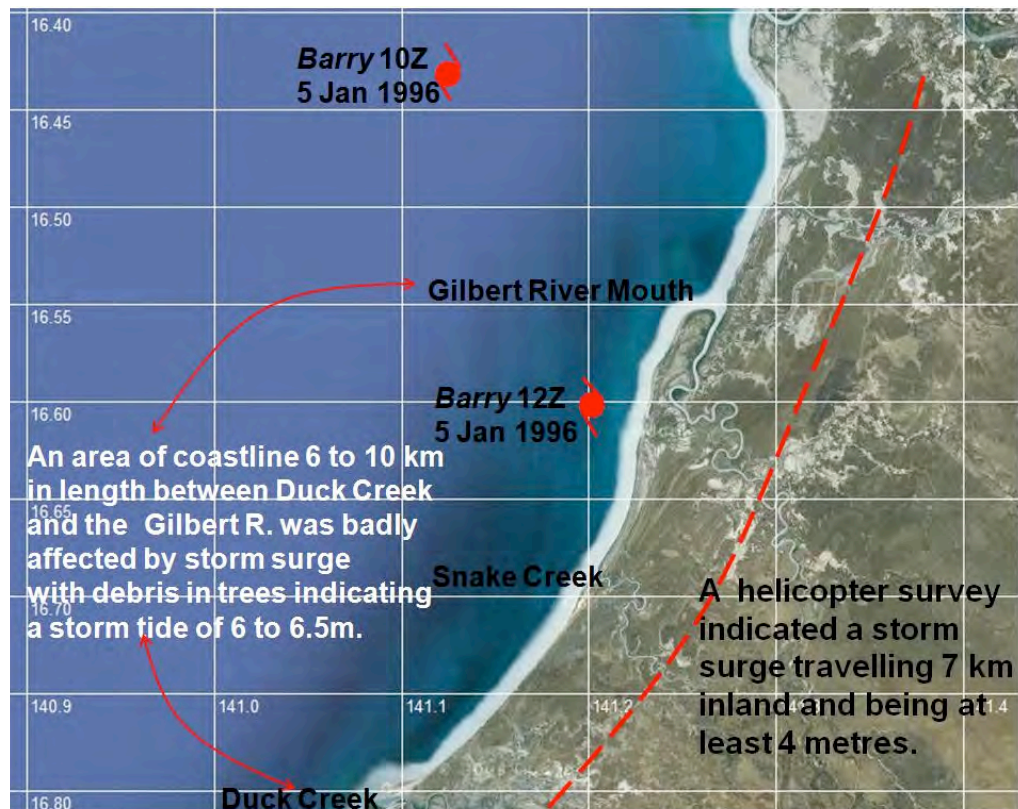


Figure 14 Positions of Barry leading up to landfall during January 1996 with storm surge details.



Gordon Bell's Camp mouth of the Gilbert

Figure 15 Two of the Barramundi fishers' camps affected by Barry.



ARCHIVE: Queensland Severe Thunderstorms, 1850 – 2007

By Mr Jeff Callaghan and Mr John Butler

Retired Senior Severe Weather Forecaster, Bureau of Meteorology, Brisbane

1850

13-10-1850. Severe thunderstorms occurred in Moreton Bay district. At Brisbane lumps of ice weighing a quarter of a pound and 9.5 inches in circumference fell.

1859

20-10-1859. A terrific hailstorm in Brisbane.

1860

3-12-1860. Severe hailstorm during the afternoon in Brisbane; pieces of ice fell with great violence from the northwest quarter and did much damage.

1861

27-04-1861. During the afternoon a terrific squall passed over the Pilot Station at Moreton Island. It came from the SSW and did much damage. Several buildings were unroofed and trees were torn up by the roots.

25-12-1861. A man was killed by lightning on Jingi Jingi Station (near Dalby) during a severe thunderstorm. A violent thunderstorm occurred at Maryborough on Christmas day.

1862

27-01-1862 (about)...GLADSTONE -a man was paralysed by lightning near Gladstone.

21-02-1862. Toowoomba- a heavy thunderstorm during the evening.

02-03-1862. (about). A man was struck by lightning while sleeping under a tree.

25-05-1862. A severe storm of thunder and lightning and rain passed over the Downs, especially heavy at Toowoomba and Warwick.

24-07-1862. A perfect hurricane occurred soon after 6pm and lasted for more than half an hour. The wind came from the west and southwest. Several houses were stripped of a good many of their shingles. A man on one of the ships in the Bay was swept over board and drowned. The wind caused a great deal of damage to storekeepers.

28-09-1862. IPSWICH. A man was struck dead by lightning while passing through the Peak Mountain Station.

28-10-1862. IPSWICH. A young man travelling along the Warwick road was struck dead, near the Mount Flinders Station, by lightning. His body was mangled and his clothes torn to shreds.

5-11-1862. GAYNDAH.- very large hail.

24-11-1862. WARWICK. Hailstones so large that three of them would more than fill a tumbler.

03-12-1862. A violent thunderstorm, accompanied by heavy rain overtook the *Moggil* on her way down to Brisbane.

14-12-1862. TOOWOOMBA. Post Office struck by lightning, trees struck and cattle killed by lightning.

22-12-1862. Warwick-rather severe storm which lasted about 3 hours.

27-12-1862. Toowoomba- heavy thunderstorm which lasted several hours; all creeks flooded.

1863

06-02-1863. GAYNDAH. Severe storm preceded by a barometric fall of nearly one inch. Heavy rain and fierce wind at its worst at 8pm. Houses were unroofed and trees levelled with the ground. Several persons suffered severe losses.

20-02-1863. GAYNDAH. 150 hoggets were destroyed by lightning on the Ideraway run.

21-02-1863. WARWICK. Tornado with a great deal of rain occurred during the afternoon.

26,27-02-1863. GAYNDAH. Furious wind with rain. Great damage on the night of the 27th; large ironbark tree uprooted; canvas house torn to shreds; zinc roofs torn off and fencing blown down. Flooding with Burnett River 40 feet above normal.

24-11-1863. Goondiwindi-several terrific thunderstorms occurred, accompanied by great wind and rain.

06-11-1863.. BRISBANE. Heavy hail, rain and thunder in the early morning; lightning and thunder at intervals all day; average length of hail stones along the Ipswich road and at Ipswich was 2 inches; a good deal of damage done at Ipswich.

08-11-1863...DALBY. Severe storm of wind and rain; several cottages unroofed and other damage inflicted.

11-11-1863 ...CONDAMINE...Many trees uprooted or broken.

11-11-1863 ...MARYBOROUGH. Several storms occurred and hail larger than any previously seen fell.; one stone measured 5.5 inches in circumference.

23-11-1863. A storm of more than usual violence with very heavy rain.

11-12-1863 ...NANANGO. Limbs of trees broken off; child injured.

1864

18-10-1864. ROCKHAMPTON and WOODEND. Hail storms as large as marbles at Woodend.

14-11-1864. BRISBANE. Hailstorm with vivid lightning caused horses to bolt which caused damage. Large pieces of hail came down at a tremendous rate.

23-11-1864 ...WARWICK. A violent storm from the west was accompanied by torrential rain which came through the roofs of almost every building in town.

12-12-1864 ...BENDEMERE. Heavy hailstorm lasted 3/4 hour and caused creek to rise 8 feet in 2 hours. Birds were killed, trees stripped of foliage and gardens laid waste. In some of the windows not a pane was left whole.

18-12-1864 ...GAYNDAH. Hailstorm of unprecedented violence.

19-12-1864 ...TOOWOOMBA. A man was killed by lightning.

22-12-1864 ...GAYNDAH. Violent storm preceded by dust cloud. Scarcely a tenement escaped damage and the RC church was totally destroyed.

1865

06-01-1865 ...Lightning partially destroyed stables at Four-mile Swamp, South Brisbane.

04-02-1865. Boggo -hailstones as large as hen's eggs fell.

07-11-1865...CONDAMINE. Violent storm passed over township during the evening and caused extensive damage to frail roofs of many of the houses.

19-11-1865..ROPER'S CREEK (on Peak Downs road). Hail the size of an egg. Hail pierced the bark roofs of houses and stripped trees. Fowls were killed and melons and cucumbers cut to pieces.

02-12-1865 ...WARWICK. A hail storm approached from the west. The stones increased in size until they were larger than pigeon's eggs and the wind drove them with great force. Windows facing west were smashed in every direction, houses were blown down and trees torn out by the roots. The storm lasted 8 minutes by which time the streets were entirely covered by hail. An estimated 500 squares of glass were broken in the town. Gardens were damaged, fruit trees stripped, vines cut to pieces and vegetables destroyed.

09-12-1865 ...GIN GIN . A valuable imported horse was struck by lightning and killed instantly.

11-12-1865...ROMA. Hail storm with stones weighing 4 ounces or more.

16-12-1865 ...ROCKHAMPTON. Heavy storm with limbs of trees scattered over the roadway.
GLADSTONE. Severe wind storm. Lightning caused a great deal of damage to trees near Munduberra.

17-12-1865 ...GLADSTONE. Hailstorm, windows smashed, houses drenched and in many instances, unroofed; Court House and National School considerably damaged; hail pieces of irregularly shaped ice fell. *Lombard* forced to return to port due to gales.

BRISBANE. Lightning did a great deal to various houses and completely destroyed one house and its contents at German Station.

20-12-1865 ...SANDY CREEK. Large hail damaged Murphy's camp. Storm was of a whirlwind nature and branches were torn off trees blocking roads.

1866

29-03-1866 ...WARWICK. Several bullocks killed by lightning and a large tree destroyed.
October 1866

27-03-1866...UPPER MARY. Hail storm with hail the size of nuts.

26-10-1866 ...BRISBANE. A very severe wind and rain storm occurred about 3pm. The rain fell in sheets and the wind blew at hurricane violence for upwards of half an hour. Some buildings were unroofed; On the Bowen Bridge a two

story wooden building was blown down. At South Brisbane a coach was blown off the road and a man was killed. At Nudgee houses were flooded to depths of 3 to 4 feet.

27-10-1866...BRISBANE. A terrific storm with the town flooded and some buildings unroofed. Loss of life occurred due to the upsetting of Cobb's coach at South Brisbane. Heavy hailstorm on the Upper Mary, many of the hailstones were as large as nuts.

09-11-1866 IPSWICH. A most violent storm broke over the town and caused considerable damage. Two houses were struck by lightning and the Episcopalian Church was damaged.

Heavy showers of rain and hail lasting for about an hour and a half at Toowoomba.

30-11-1866 WARWICK. Storm caused much damage; a brick store in course of erection was almost destroyed.

18-12-1866 ...BRISBANE. Hail storm with the majority of stones the size of hen's eggs.- some measured 2.5 to 3 inches in diameter. Windows all over the city were smashed and several zinc and galvanised roofs were perforated. Some of the stones were very irregular in form and of distinct crystalline structure., while others were rounded and much the shape of a Flat China peach. All were alike in that the centres were composed of white opaque ice while the outsides were clear and translucent.

OXLEY CREEK. Large hailstorm. Great quantity of corn, melons, cucumbers etc completely destroyed.

1867

19-01-1867 ...WARWICK. Severe storms accompanied by hailstones of immense size. The wind broke branches from trees and carried them a tremendous distance. The storm extended over 10 miles of country.

24-01-1867 ...GOONDIWINDI. A violent whirlwind occurred about 5pm. Houses were unroofed and trees destroyed. The storm lasted 20 minutes and was accompanied by rain.

07-02-1867 ...ROMA. Tremendous storms of thunder and hail in district. Trees were shivered into splinters by lightning. At Bindebanga large lumps of ice fell and thickly covered the ground.

29-03-1867 ...ROMA. Hailstorm and severe gale occurred with much damage done.

10-10-1867 ...TAROOM. A terrific storm did considerable damage to houses, huts and humpies and also to the telegraph line. The wind blew a hurricane from the west.

10-11-1867. Warwick-heavy storm of hail.

11-11-1867. Dalby- heavy shower of hailstones.

07-12-1867...ROCKHAMPTON. Severe storm of wind and rain. Rain penetrated almost every room in the town. The wind partially unroofed several houses.

1868

07-01-1868 ...TOOWOOMBA. Heavy easterly gale. Considerable damage among fruit trees and small shanties. Thermometer dropped from 100° to 65°.

10-01-1868 ...TOOWOOMBA. Heavy hail storm with a great deal of damage to fruit trees.

11-01-1868 ...DARLING DOWNS. One of the strongest gales of wind, hail and rain in the Toowoomba District. Roofs were blown off buildings and trees were uprooted. At Jondaryn five trucks were blown off the railway line. A horse was killed by lightning at Toowoomba. The roof of the Gatton railway Goods shed was blown off and numerous humpies were destroyed. Trains were delayed by trees and branches across the lines.

IPSWICH. Hail as large as eggs damaged crops and gardens at Booval and Redbank

04-04-1868 ...BRISBANE. A violent storm struck Brisbane at 8 pm. Roofs and verandahs of several houses in exposed areas were blown off. In the outskirts several unprotected buildings were blown down. Limbs were torn off trees and some trees were uprooted.

05-10-1868 ...(about) Degilbo Station. A very severe hailstorm occurred.

09-11-1868 ...BRISBANE. A storm with southwesterly gales and heavy rain occurred during the afternoon. Captain W. Cooley drowned while attempting to cross the river in the Bulimba Ferry. Iron roof and railings of small tower on the Treasury Hotel were blown down.; part of the roof of a saw mill on Kangaroo Point was blown across the river to Bowen Terrace; A wooden house at Kangaroo Point was lifted and carried a few feet and another wooden house was blown over. Several other houses in Brisbane and suburbs were damaged. At Ipswich a boy was killed and two houses were destroyed by lightning.

Gympie- one of the severest hailstorms known in the colony occurred about 4.30pm. The ground was laterally covered with hail about the size of pigeon's eggs, while lumps averaging an inch and a half in diameter were very plentiful. Rain set in after the hail ceased.

16-12-1868 .TOOWOOMBA. Very strong winds accompanied a thunderstorm which did considerable damage to fruit gardens.

1869

16-01-1869 ...Cape River, Townsville. Heavy thunderstorm gale and rain. In fifteen minutes the river was impassable. Many buildings unroofed and tents blown down.

21-01-1869 ...WARWICK. Thunderstorm in the evening with heavy snowballs (hail?) to 9 inches in circumference which caused great damage to fruit trees and crops. A horse was killed by one of these stones. BRISBANE. Evening thunderstorm with gales and torrential rain. Many buildings flooded and in some cases heavy losses sustained. Three and a half inches fell within one hour (heaviest rainfall so far recorded in the colony).

22-01-1869...JIMNA. Fiercest storm ever experienced occurred in the evening; Every tree in a track 7 or 8 miles long and 400 yard wide was blown down. Loud lightning and vivid thunder. (Note:-this may be major tornado)

27-01-1869. Warwick- on the evening a shower of heavy snowballs occurred. Some of the balls were 9 inches in circumference, and did great damage to crops, fruit trees, &c. A horse was struck in the forehead by one of the stones and died shortly afterwards.

28-01-1869 ...(about) JONDARYAN. Terrific storm huge trees torn up bodily by the roots and smaller trees and saplings snapped like twigs. The west end of the engine room at the wash pool on the Jondaryan Station was completely blown in and several sheets of roofing iron blown off.

10-02-1869...TOOWOOMBA. Storm accompanied by lightning, thunder and gales unroofed many buildings.

05-03-1869 ...WARWICK. Heaviest thunderstorm for some years during the evening. Very heavy rain with streets inches deep in water.

02-10-1869.ENOGGERA. Hail and rain storm of terrific violence - severe damage to vines, melons, cotton plants etc mutilated beyond recovery. Nearly 4 inches of rain in 25 minutes.

07-10-1869. Warwick- one of the most terrific rainstorms ever experienced set in, preceded by a dust storm.

16-10-1869...DONNYBROOK. Terrible thunderstorm in the Maranoa. Torrential rain accompanied by startling lightning which broke down several large trees and killed a calf.

31-10-1869 ...ST. GEORGE. Hail caused a great deal of damage to gardens.

09-11-1869 ...BRISBANE. Severe thunderstorm with hail. For 2 or 3 miles on the Brisbane side of Cabbage Tree Creek the wind strewn the road with boughs and branches of trees, some of them 6 to 8 inches in diameter. The wind blew like a tornado in the Bay for a short time. Hail reached the size of hens eggs at Sandgate. In the Logan and Albert districts hail caused much damage to crops and cotton plants.

13-11-1869 ...DALBY. Hail the size and shape of walnuts in the evening completely covered the ground and caused considerable damage to plants and trees.

01-12-1869 ...GYMPIE. An evening hailstorm did great damage to windows, gardens etc.

02-12-1869...TOOWOOMBA. A great storm over the country between Glenallan and Clifton and caused considerable damage to the Warwick railway line.

03-12-1869 ...GRANTHAM. Very severe hailstorm with lumps of ice as large as cricket balls pierced galvanised iron roofs. Fifty eight holes were made in an iron roof 50 by 18 feet in size and each hole or tear was 3 inches in diameter. Several horses severely injured and some dogs killed..

03-12-1869 and 04-12-1869 ...WIDE BAY BURNETT. Violent thunderstorm with pigeon egg sized hail and hurricane force winds blew down long avenues of trees.

03-12-1869 ...MARYBOROUGH. Thunderstorm at 4 am in Maryborough trees destroyed by both lightning and uprooted by wind with very heavy rain

10-12-1869 ...GILBERTON. Terrific storm in the afternoon, preceded by a small hurricane. Many stores unroofed; the courthouse was completely raised to the ground. Tents were blown down and torn to pieces. Many trees were struck by lightning. Heavy hail and rain which caused rivers and creeks to rise rapidly.

17-12-1869. Goondiwindi- violent hailstorm.

22-12-1869 ...ALLORA. Very heavy rains and violent thunderstorms occurred during the month with fencing washed away and 400 sheep drowned.

31-12-1869 ...THE CALLIOPE. Vivid lightning struck several trees, one ironbark was denuded of every bit of bark and split in the direction of the bark.

1870

15-01-1870 ...WARWICK. Terrific rainstorm 5pm lasting 1 hour and causing considerable damage. The rain driven by a fierce wind from the southwest deluged the streets, stores and private houses in a few minutes. Some buildings were blown down while others had their roofs blown off. The Condamine rose some feet. The rainfall amounted to 3.47 inches. The wind gauge registered a speed of over 100 miles an hour. The storm also raged with great violence at Glenallan, Eton Vale, Drayton, Toowoomba and Gowrie. A man was killed by lightning after he took shelter under a tree.

GOWRIE CREEK.(The path of this storm closely followed the Warwick rail line). The storm came from the southwest and brought trees and large branches to the ground. The hail was as large as hens eggs and smashed windows, beat bark from the tree and ruined vegetable and corn crops. The hurricane lasted 10 to 12 minutes and the width of its course was about a mile and a quarter. One house was totally destroyed, a new house was blown to pieces and the roofing iron was later found wrapped around a tree. The greatest amount of destruction was found in hollows both on the windward and leeward sides.

KILKIVAN. A violent storm passed over the town; the roof of the courthouse was blown off and carried a considerable distance; two stores were blown down and a butchers shop was blown across the creek.

03-10-1870 ...Doughboy Creek (Brisbane). Severe hailstorm worst in years, with crops destroyed, vegetables reduced to a pulp and driven into the ground. Fruit trees stripped of leaves and crops, roofs stripped, windows broken and branches covered the ground. Unprecedented violence when the storm hit Moreton Bay.

16-10-1870. Ipswich- - a severe storm accompanied by hail occurred.

17-10-1870...TOOWOOMBA. Violent thunderstorm with streets flooded.

03-11-1870 ...CONDAMINE. Severe thunderstorm so heavy was the rain that in less than a minute the streets were flooded.

1871

24-02-1871 ...OXLEY. Heaviest thunderstorm of the year with creeks and roads flooded.

18-03-1871 ...EIGHT MILE PLAINS. A violent storm of short duration; fences and trees torn up and crops laid flat.

12-04-1871 ...SANDGATE. Lightning struck a house, split the rafters and set the roof on fire; whilst some fowls that took shelter under the house were killed.

10-10-1871 ...IPSWICH. Unprecedented hailstorm occurred at Warrill Creek along a track ½ mile wide.. Hail lay about a foot thick on the ground. Hail also fell in great quantities at Fernie Lawn and other places.

26-11-1871 ...IPSWICH. During a storm two boys were struck by lightning and died shortly afterwards.

1872

10-10-1872 ...Heavy hailstorm, accompanied by violent wind in the Moggill District. Large trees and fencing brought down and fruit and other crops considerably damaged.

IPSWICH. Hailstorm at Ipswich, marble sized hail caused a great deal of damage to windows.

11-10-1872. A heavy hailstorm occurred down the Severn, about 12 miles from Stanthorpe.

09-11-1872 ...WEST MORETON. A furious storm of hail did much damage in the district.

11-11-1872 ...ROCKHAMPTON. Storm with hail and wind, broke over the town; considerable damage to several houses in different parts of the town caused by the wind.

06-12-1872 ...INGLEWOOD. Thunderstorm with hail at Coolmunda; branches were blown off trees and houses were drenched inside with water.

09-12-1872 ... WARWICK. Thunderstorm with very heavy rain lasted an hour and flooded streets.

STANTHORPE. Thunderstorm with hail ; several trees blown down and the frailer buildings were damaged.

1873

20-10-1873 ...WARWICK. Hailstorm caused much damage in the district.

18-11-1873 ...Heavy hailstorm in the Albert District.

1874

18-07-1874. A fierce storm passed over Cardwell.

27-09-1874 ...A storm with hurricane force winds passed over part of the East and West Moreton districts. Some houses were destroyed and others were unroofed.

02-10-1874 ...A great storm of hail, wind and snow occurred at Stanthorpe and in the surrounding districts. Similar storms on the 3rd and 4th.

28-11-1874 ...Terrific hailstorm at Taroom.

1875

11-10-1875 to 13-10-1875 ...STANTHORPE. Three thunder and hail storms over 48 hours; great damage to fruit trees and crops by the hail.

15-10-1875 ...Heavy storms with hail at many places.

16-10-1875 ...WIDE BAY. Heavy hail STORM.

17-10-1875 ...Heavy storms with hail, very general. BRISBANE. A thunderstorm lasted 2 hours and a wooden house was struck by lightning causing considerable damage. Hurricane westerly winds followed and trees were blown across the roads.

24-10-1875 ...ROCKHAMPTON. Heavy hail storm

28-10-1875 ...BRISBANE. Very large hail.

30-11-1875 ...Great storm of rain and wind at Goondiwindi; where the Presbyterian Church was blown out of perpendicular.

04-12-1875 ...Whirlwind at St George raised the water in the river 100 feet and caused much damage.

06-12-1875 ...A great storm in the southern part of the colony. Heavy losses at many places. The school at Pine Mountain was destroyed. A violent storm at Peak Downs caused much damage to property there.

1876

10-01-1876 ...COPPERFIELD. Heavy storm passed over Copperfield and did great damage to property. National School levelled to the ground. Temperature fell from 108°F to 77°F in 15 min..
GYMPIE. Furious storm with much damage to property.

17-01-1876 ... BRISBANE. Man killed by lightning at Victoria Park.

18-01-1876 ...GLADSTONE. Severe thunderstorm.

22-01-1876 ...BRISBANE. A very severe storm of hail, lightning and wind with much property destroyed.

22-01-1876 ...BOWEN. Terrific tornado destroyed many houses. (On 26th 100 pounds was sent from Brisbane).

18-06-1876 ... COOKTOWN. Violent hurricane.

16-10-1876 ...WOOLOOGO (Wide Bay). Severe hailstorm, a number of wild animals, goats etc killed. 18th, 24th and 25-10-1876 ...BRISBANE. Severe thunderstorms one person killed and several others injured.

23-10-1876 ...MAYTOWN. A severe storm unroofed several buildings.

25-10-1876 ... TOOWOOMBA and WARWICK. Terrible hail storm.

1877

18-01-1877... ACKLAND FARM (near Toowoomba). Fierce hurricane destroyed in a few minutes buildings and crops.

02-02-1877 ... Fearful hurricane passed over Canongarie Creek and Albert River and did great damage

10-04-1877. Extraordinary whirlwind at Oxley, much damage done.

14-05-1877. Heavy storm of wind and rain at Brisbane.

20-05-1877...COOKTOWN. Tremendous gale.

02-10-1877 and 03-10-1877... Heavy thunderstorms with hail in several parts of the colony.

19-11-1877...Great thunderstorms at Warwick, Gympie and other places with a girl killed by lightning.

21-11-1877... Severe thunderstorm in the Northern Districts.

22-11-1877... BRISBANE. A very heavy thunderstorm with one man killed by lightning.

27-11-1877... CATTLE CREEK. Residence of schoolmaster struck by lightning and considerably damaged; servant wounded in the head; two cats found dead under the house with zig zag marks on their bodies.

03-12-1877 ...IPSWICH. Hails storm at 4pm with hail 1 inch in diameter. Many windows broken, vineyards severely damaged, and cattle badly cut and injured. Heaviest storm in living memory.

04-12-1877 ...Exceedingly heavy hailstorms in many parts of the colony.

07-12-1877 ...THARGOMINDAH. Post office levelled by storm and several houses unroofed.

25-12-1877 ...MT PERRY. Great hailstorm.
A fearful storm at Dalby with very heavy rain between there and Moraby with flooding.

28-12-1877 ... BRISBANE. A severe thunderstorm broke thousands of panes of glass and destroyed a great deal of property. The Meteorological Observers report indicated that many of the hailstones exceeded 2 inches in diameter and weighed 1 to 2 ounces.

1878

24-01-1878 IPSWICH. Severe hailstorm.

25-02-1878...BRISBANE. Severe storm with a house in South Brisbane struck by lightning.

26-02-1878...IPSWICH. Very large hail at Ipswich Reserve.

16-08-1878 ...BRISBANE. Severe thunderstorm.

15-09-1878...Severe hailstorm at Mt. Esk.

26-09-1878 ...BRISBANE. Severe thunderstorm with a man killed by lightning at Kangaroo Point

27-09-1878 ...ARAMAC. Severe thunderstorm with destructive results.

26-10-1878 ...BRISBANE. Severe thunderstorm with a house in Gregory Terrace struck by lightning.

1879

23-01-1879 ...BRISBANE. Terrific thunderstorm the Wesleyan Church at Paddington was struck by lightning and burnt down.

27-08-1879. Roman Catholic Church at Charters Towers blown down.

18-11-1879 ...Terrible hail storm at Ipswich damaged many buildings and broke all the windows at the Ipswich Grammar School. Railway Workshops badly damaged.

26-11-1879...TOWNSVILLE. Storm with furious gale and lightning caused much damage.

07-12-1879 ...ROMA. Fearful storm.

08-12-1879 and 11-12-1879...DALBY. Fearful storms of hurricane strength.

22-12-1879 and 23-12-1879 Terrible storms of wind and rain did considerable damage to property in many parts of the colony.

1880

12-10-1880. Heavy thunderstorm with hail and rain at Dalby.

25-10-1880. A most severe storm of hail and rain, which lasted half an hour, occurred in Brisbane.

29-12-1880. Heavy hailstorm at Toowoomba.

1881

21-08-1881. Heavy thunderstorm passed over Brisbane; two hours rain.

22-12-1881. A storm of heavy rain, accompanied by much thunder and lightning passed over Brisbane .

1882

16-04-1882. A thunderstorm accompanied by heavy rain passed over Ipswich.

1883

28-01-1883. Heavy storm passed over Toowoomba; houses struck by lightning; sheep killed by hailstones, some of which measured 3 inches by 2 inches.

1884

26-02-1884. Tents of a telegraph camp at Tambo blown to pieces during a violent hailstorm. The ridge pole of one of the tents struck one of the men and killed him.

31-10-1884. Much damage to wheat caused by hail during a severe storm at Gladfield near Warwick.

31-12-1884. Heaviest hailstorm known occurred at Toowoomba; Botanic gardens almost wrecked.

1886

23-11-1886. Fearful hailstorm in western suburbs of Brisbane; great damage done. Heavy hailstorm at Corinda.

1887

30-09-1887. Walkerston - A hailstorm which lasted an hour occurred. Stones between the size of a marble and a walnut fell, and destroyed great numbers of young fruit trees.

02-10-1887. Weribone- Surat. Large hailstones fell a short distance from Weribone during a very heavy thunderstorm.

1889

26-11-1889. Hailstorm at Roma damaged gardens.

29-11-1889. Very heavy hailstorm in Brisbane, hail 9.5cm by 6.5cm. One piece at Coorparoo weighed 5 ounces.

1890

21-11-1890. Terrific hailstorm at Laidley.

18-12-1890. Corinda- a very severe hailstorm broke over the district at 3.55pm. Hail fell for 10 minutes and some of the stones were large. After the rain ceased, a stone was picked up which measured 3 inches long by 2 inches wide, and very jagged in appearance. Rainfall from 3.55pm to 4.10pm was exactly 1.00inch.

1891

26-10-1891. Great damage done to the fruit crop in the Toowoomba district by hailstones.

1892

01-01-1892CROWS NEST and GEHAM. Hail as large as tea cups pierced iron roofs, killed fowls and destroyed fruit trees.

02-01-1892 ...BRISBANE... Gardens and grape vines damaged. St Pauls C. of E. East Brisbane badly damaged.

1893

17-02-1893. A waterspout seen between Dunwich and Redland Bay.

22-10-1893. A hailstorm destroyed all crops, fruit trees, and vineyards at Gowrie Junction.

27-11-1893. Heavy thunderstorm, accompanied by strong wind and hailstones, accompanied by strong wind and hailstones, did considerable damage about Toowong and Goodna.

1896

06-11-1896. Heavy hailstorm at Roma.

21-12-1896. Heavy storm at Croydon.

1897

25-01-1897. Cyclonic hailstorm at Bundaberg.

25-09-1897. Severe hailstorm at Maryborough.

01-11-1897 or 02-11-1897 ...Unprecedented hailstorm in Brisbane caused much damage. One stone was 15 cm in diameter and weighed 0.5 kg.

28-12-1897. An unusually violent storm passed over Brisbane.

1899

22--02-1899. A terrible storm at Mitchell.

17-07-1899. North Pine- a very severe thunder and hail storm occurred; exceptionally large hailstones; considerable damage done to fruit and flower gardens.

1900

03-02- 1900. Destructive hurricane at Birdsville.

08-04-1900. A terrible cyclone broke over Barcaldine.

07-11-1900. Severe hailstorm at Rockhampton.

1902

18-08-1902. Heavy hailstorm in Brisbane and suburbs.

25-10-1902. Stanthorpe-a heavy hailstorm occurred in parts of the district, and did some damage to the fruit and vegetable crops. The hail did not reach the town but was very heavy in the Kyoomba and Sugarloaf districts; at Sugarloaf it lay 2 feet deep in places.

10-11-1902. Gympie- heavy hailstorm during the afternoon. Colinton- heavy rain and hail.

28-11-1902. Corona- Longreach area. A tremendous windstorm unroofed all buildings except the new quarters and rendered windmills useless. The storm was accompanied by rain and hail. Rainfall 2.00 inches.

29-11-1902. Hermitage state farm- severe hailstorm damaged fruit crops.

08-12-1902. Esk- Storm occurred, accompanied by very heavy hail.

12-12-1902. Brookville, near Ravenswood- a cyclone struck Brookville at 4pm. And caused universal devastation. Numbers of houses levelled. Hailstones as large as teacups fell; every pane of glass in the track of the storm broken. Rainfall estimated at 5 inches. Cowley Creek and tributaries overflowed.

1903

01-06-1903. Heavy storm in the Brisbane district; some damage at Sandgate.

09-1903 Cyclonic storm in eastern suburbs of Brisbane.

26-10-1903. Terrific hailstorm at Charters Towers.

1905

29-09-1905. Heavy storm at Brisbane some warehouse stocks damaged.

29-11-1905. Heavy storm at Brisbane.

16-12-1905. Storm at Brisbane; some buildings damaged.

1906

08-01-1906 ...DALBY. Windstorm at night with considerable damage. Cordial Factory almost demolished. Boarding house and Blacksmith's Shop partially unroofed. Veranda of a shop shifted. 1.4 inch falls though 4 inches in the district with flooding.

1907

02-11-1907. Heavy hailstorm at Brisbane

1908

03-04-1908. Destructive hailstorm at Gympie

02-12-1908 Courier (UN) × A terrific storm of wind and rain struck Winton. The wind blew with hurricane force and some damage was done in the suburbs.

21-12-1908 Daily Mail (PO-) ✓ (Harricksville)

Several shops and private dwellings were unroofed by the fierce winds and the nearly completed church was twisted out of shape.

1909

01-01-1909. Severe hailstorm at Crow's Nest.

05-01-1909. Hailstorm at Normanton.

06-01-1909 Courier (PR) ✓ (Normanton) The wind blew at a terrific rate with volumes of dust for about 20 minutes. A house was lifted off its piles and fell heavily, but kept upright. Wind in narrow line.

23-01-1909 Courier × As a result of a windstorm at Avilalah, the schoolhouse there was wrecked.

08-02-1909. Tremendous storm at Charleville, accompanied by blinding rain and hail.

18-02-1909. Kynuna- a terrific hailstorm accompanied by heavy wind occurred at the Combo mail change (6miles from Kynuna on the Winton road during the night; the hailstones were the size of pigeons' eggs.

19-02-1909. Thargomindah-terrific storm at 6pm. Many buildings damaged by strong winds and 160 points of rain fell.

22-02-1909 Daily Mail (UN+) × The cyclonic wind caused damage to buildings throughout the town (Thargomindah). Adavale- a storm accompanied by hail the size of pigeon's eggs occurred during the night.

23-02-1909. Esk- a severe storm with strong winds and hail struck the country between Esk and Ottaba. Dozens of trees were uprooted and a large number of telegraph posts blown down.

27-03-1909. A terrific hailstorm occurred at Cordalba about 6pm and did terrible damage to houses and crops. Not a house in town escaped some damage or other. At Mount Beppo the storm was very heavy. A thunderstorm hit Pittsworth in the afternoon. Considerable damage done to roofs of buildings and 114 points of rain were registered in 10 minutes.

15-09-1909. Hailstorms at Inglewood and Allora.

22-09-1909. Hailstorm at Yeppoon.

17-10-1909. Cooroy- severe wind, rain, and thunderstorm during the night; trees uprooted; several buildings unroofed, and every house deluged. Roads blocked by fallen timber.

25,26-10-1909. Destructive hailstorms occurred at Yateville and Rosewood. At the latter station the hailstones were at times as large as billiard balls. Many windows smashed and crops damaged.

29 to 31-10 1909. Hail at places in eastern Darling Downs and southeast coastal regions.

31-10-1909. Aramac- Large hail did considerable damage to property.

02-11-1909 (Aramac) (PO-) × The wind blew with great force. Several put houses were blown down and sheds up roofed.

14-11-1909. A terrific hail storm moved from the Emu Vale district over the range to Boonah, Harrisville, Ipswich and Brisbane. The storm was accompanied by hurricane force winds from the south to southeast and hail as large as hen's eggs. Not only were plants and windows damaged but also iron roofs and tanks. The western suburban district was particularly badly hit.

16-11-1909 (Cooran) (PO-) × The wind blew for sometime with cyclonic force and was accompanied by hail. Every road was littered with broken limbs of rubbish, while huge trees were uprooted and snapped off like carrots.

17-11-1909. Heavy hailstorm at Beaudesert

23-11-1909. A violent hailstorm passed over Toogoolawah at about 7pm. The stones were as large as over 2 inches in diameter. Nearly every window in the town was broken and the roofs were all dented.

17-12-1909. A heavy thunderstorm accompanied by heavy rain broke over the district. At Gin Gin hail fell which damaged the peach and grape crops. Another storm hit the Crows Nest area. The storm came from the south and was

preceded by a roaring sound. Large hail of all shapes fell for about half an hour; large number of windows broken and great damage to crops. The fall at Peechey and Hampton was heavier still. Cyclonic hail storm at Moonmera, near Mount Morgan, 280 points registered.

30-12-1909. Aramac- a terrific storm occurred at about 3pm. Very strong winds many outhouses, fences and trees blown down. Fifty-five points of rain.

1910

21-01-1910. A terrific storm passed over Aramac at 4pm. The wind blew with hurricane force and was accompanied by large hail.

07-02-1910. Laidley and Lockyer valley- a violent storm hit at about 6.30pm and caused much damage to roofs, shop windows and trees.

04-11-1910. Cyclone of hurricane violence at Richmond. Much damage done, telegraph poles bent nearly double.

26-11-1910. Hailstorm at Pittsworth, lasting 20 minutes, with hail stones as large as hen's eggs.

04-12-1910. General and severe wind and hailstorms in eastern Queensland south from tropic. Considerable damage done by wind in suburbs of Brisbane, particularly Kelvin Grove. Lowood- a series of heavy hail and rain storms occurred; total rainfall 142 points.

05-12-1910. A peculiar hailstorm passed close to the town at 2pm today. The noise of falling hail was distinctly heard, and caused some commotion in various houses in the town. Scattered hail fell on the roofs while the sun was shining overhead.

06-12-1910. Bluff- (Central railway) hail as large as cricket balls; six lumps weighed after the storm, averaged one half a pound. Each.

17-12-1910. Crow's Nest - hail did much damage to crops and caused some loss of stock. The storm hit Southbrook at about 3.30pm and hailstones fell thick and heavy for about 25 minutes. Some of the specimens were nearly as big as hen's eggs. Window panes were broken in all directions, but the worst damage was done on the farms. Gowrie Junction and district was visited by a terrific hailstorm, but it was between Kingsthorpe and Gowrie Junction that the fall was most severe. Wellcamp-hail fell in quantity as it did at Glencoe- where the most terrific hailstorm, accompanied by wind of hurricane force, ever witnessed by the oldest inhabitant passed over the Glencoe at 5pm.

18 or 19-12-1910 Sunday, probable tornado found through Lake Clarendon and Tarampa localities between 2pm and 3pm. The greatest havoc was wrought in a strip of country about 20 miles long by less than half a mile wide. Much damage was done to stock and property.

19-12-1910 (Brisbane) (PR-) The wind at one time was very boisterous, although confined to a very narrow strip and pursuing a rather tortuous course. Most damage done to two farm dairies.

1911

04-05-1911. Severe thunderstorms with hail, in the southeast Queensland. At Brisbane a sharp thunderstorm, accompanied in some of the suburbs, by strong wind, rain and heavy fall of hail, passed over early in the afternoon. At New Farm and Bowen Hills there was a heavy fall of small hail which drifted in places to a depth of 18 inches.

28-08-1911. Hailstorm in Brisbane shortly before midday in places. At Enoggera, lumps of ice the size of large marbles fell thickly for about half an hour. Grandchester- a storm passed over the district about 12.30pm and was particularly severe at Summerhill where there was a heavy fall of hail for half an hour.

Laidley - several thunderstorms passed over the town, the first at about midday was accompanied by hail and heavy rain. Toowoomba- a slight shower of hail occurred about 1pm.

17-11-1911 Daily Mail (Brisbane) (?) × The gale which blew must have been a terrific one for the pressure had caused the walls to collapse. Several lightning constructed sheds suffered from the gale, one having its roof removed and carried some yards away.

1912

24-01-1912. Miles- a heavy thunderstorm and wind of hurricane force occurred during the night. Several trees were leveled. Rainfall 60 points.

09-02-1912. Hailstorms on the Downs; very heavy at Crow's Nest, Woodford and Yarraman.

A terrific hailstorm occurred this afternoon, and in a quarter of an hour 80 points of rain fell. The hail was very large and jagged.

At Delaney's Creek and D'Aguilar hail as large as pullets' eggs; great damage was done to fruit trees and vines.

Yarraman - a very heavy hailstorm broke over the town during the evening. Old residents state that it was the heaviest ever experienced. The hail was the size of hen's eggs.

13-02-1912. Beaudesert-a violent storm of hail, heavy rain, thunder and vivid lightning passed over the town and district about 3pm.

14-02-1912. Tambo- cyclonic squalls occurred, accompanied by heavy rain and little hail. Rainfall 111 points.

02-03-1912. Large hail stones hit Gargett (Mackay district) and some of the stones were larger than a man's fist, and pierced large holes in new iron roofs.

16-03-1912. Beaudesert- violent cyclonic storm broke over Beaudesert and district. Rain fell in torrents.

27-03-1912. A violent hailstorm hit the Toowoomba area. Hail did great damage to crops in the Petrie's Creek, Pinelands, Mount Walker, and Ebenezer areas.

21-06-1912. Kynuna- a storm from the southwest occurred at 10pm, and hailstones like pigeon's eggs fell.

28-06-1912. At Dick's Creek -Winton a terrific hailstorm occurred, and the total rainfall was 8 inches.

13,14-08-1912. Thunderstorms with strong winds and some hail, on Darling Downs and in southeast districts. Thunderstorm, with some light hail in Brisbane.

28-08-1912. Severe hailstorm in Dalby.

31-08-1912. Thargomindah- thunderstorm and a little hail occurred.

12-10-1912. Mount Morgan-heavy storm; hail, thunder and lightning.

10-11-1912. Two boys struck by lightning at Aldingham, near Winton - one boy and his horse killed.

25-11-1912 Telegraph (Brisbane) (UN) × Wherever the wind was able to get a leverage on protruding eaves and awnings, it ripped them off mercilessly and strewed roofs and verandah covering around in a fury.

26-11-1912 Courier (Beaudesert) (PO+) × The wind blew with hurricane force during the early part of the storm, uprooting large numbers of trees.

26-11-1912 Courier (Goondooindi) (UN) × Several buildings in various parts of the town were unroofed by a heavy gale of wind.

26-11-1912 Courier (Gatton) (PO-) × The wind did considerable damage uprooting trees and unroofing sheds.

26-11-1912 Courier, Toogoolawah (PR) × A violent wind storm passed over on Saturday evening, trees and branches being blown down in every direction.

27-11-1912. On the Bingera road near Bundaberg a man and his horse were struck by lightning.

11-12-1912. Severe thunderstorms in the southeast districts. In Brisbane the storm was accompanied by hail of unusual size; Brisbane General Hospital struck by lightning; many windows broken, tanks pierced and gardens destroyed. Rockhampton- heavy shower with hail at 10.30am.

24-12-1912. Vergemont (Longreach district)- 201 points of rain fell in a very short time. A big flood occurred in the Vergemont Creek. Nocatunga Station, Thargomindah -a severe thunderstorm completely destroyed the store and bachelor's quarters.

28-12-1912. Winton- a man was struck dead by lightning during a storm; second case of death by lightning in the district within two months.

1913

20-01-1913. Inglewood- severe storm at Moogoon Station a boy killed, and two men injured by lightning.

19-02-1913. A man was killed by lightning at Blenheim.

20-02-1913 Daily Mail, Laidley (UN) × Sheets of iron were blown away and trees were uprooted. The town clock was blown from its stand at the post office.

17-09-1913. Maryborough- hail and rain fell heavily in various parts of the district.

26,27-09-1913. At Miles a man was killed by lightning.

25-10-1913. Gatton- heavy hail did considerable damage to standing wheat crops in the Ma Ma Creek and Grantham districts.

Helidon- during the evening, large hail broke some window panes, damaged gardens and trees and pierced the roofs of some houses.

04-11-1913. Hail storms hit the Brisbane city and suburbs including (Bald Hills) and the Gold Coast (Southport) causing significant damage to gardens, crops and some windows.

17-11-1913 Courier, Bundaberg (UN) ? The wind blew with great force and did a great deal of damage. At a plantation, a windmill was blown to the ground, and its frame was twisted up like paper.

18/11/1913 Daily Mail, Tummaville (UN) × A heavy windstorm occurred locally, much damage was done to the roofs of buildings.

22/11/1913 Courier, Laidley (PO-) ✓ A cyclone of a serious nature occurred at Mulgavie. The force of the storm was felt for a width of 5 miles.

22/11/1913 Daily Mail, Beaudesert (PO-) × The wind was terrific and full in its strength and was felt at Noodoombah. 200 pounds damage was done.

28/11/1913 Courier, Sapphire town (PO-) × A terrific cyclone swept over the fields on Friday night. Houses were unroofed, trees uprooted and tents torn to ribbons.

04/12/1913 Courier, Maryborough (UN) × The wind blew with terrific force enveloping streets in dust and carrying every loose portion of buildings, signs etc.

06/12/1913 Daily Mail, Clifton (UN-) × The wind blew with cyclonic force, but there was little rain. Some damage was done at Elphistone.

15/12/1913 Courier, Mowen, (PO+) × A severe storm and gale hit here on Friday, several houses were partially unroofed and others blown down.

17/12/1913 Courier, Winton (PO+) ? A terrific cyclone struck this afternoon. It only lasted a few minutes, but did a great amount of damage.

1914

08/01/1914 Daily Standard, Kaumkillenbun (CE) ? A cyclonic storm of great violence struck this township on Saturday afternoon. The storm followed a narrow track. In fact, that portion of it calculated to cause damage did not exceed two or three hundred yards in width.

20/01/1914 Daily Mail, Bundaberg (PR+) ✓ A sharp tornado passed over the bullyard district situated 22 miles from Bundaberg. Several houses were unroofed, and a large number of trees torn up.

29/01/1914 Courier, Brisbane (PO-) × The feature of the storm was the wind, advertising signs were blown over, iron roof from stables removed and iron went swirling some distance away.

17/02/1914 Courier, Cloncurry, ? A cyclone struck on Friday, overturned outhouses and wrecked the police station stables.

24/02/1914 Courier, Laylwen (PO+) ✓ A cyclonic storm was experienced here this afternoon. Several buildings were unroofed, many trees were destroyed.

28/02/1914 Courier, Barcaldine (PO-) ×? A cyclonic storm from the north occurred here last evening.

04/04/1914 Daily Mail, Toowoomba (PR) A terrific storm of wind dust and rain swept over the city. The tornado for it was nothing less, spared practically nothing.

04/04/1914 Courier, Helidon (PR-) ✓ The hurricane struck the town on the southern end with all the force of its pent up energy. They were alerted of the storm by the sound of falling broken and uprooted trees, and the dint of the iron shoots as they were ripped from roofs.

04/04/1914 Daily Mail, Cambooya (PR-) ✓ The gale reached the velocity of a tornado there, and portions of the town were almost completely demolished in the space of ten minutes.

04/04/1914 Daily Mail, Warwick (PR-) ? Yesterdays cyclonic visitation wrought great havoc in parts of this district. At rosehill, sheds and outhouses were blown to pieces, and dwellings unroofed. At Lynhurst sheds etc were torn to pieces and many rolled over in the paddocks.

04/04/1914 Daily Mail, Bundamba (PO+) ✓ A heavy storm occurred here yesterday. Two chimney stacks were blown across the engine room at Boothat. Other buildings were blown down.

20/11/1914 Courier, Georgetown, (PR+)✓ A tornado struck here about 7:30 last night. A gust of wind resembling the bursting of an explosive shell hit the town.

29/12/1914 Courier, Helidon, (UN) × A very heavy storm accompanied by strong winds and vivid lightning passed over the town this evening.

30/12/1914 Courier, Toowoomba (PO-) × A storm of unprecedented severity swept over here causing several thousands of pounds damage. A heavy wind blew throughout.

1915

02/01/1915 Courier, Maryborough (PR+/CE+) ✓ A cyclonic storm passed over the city this afternoon. In the former area a whirlwind swept a long from Albert St and culminated at the corner of Terry and Alice St's where it carried away a verandah.

06/01/1915 Courier, Chillagoe (PO-) × A rain squall accompanied by wind of almost hurricane force passed over here last evening doing considerable damage.

One of the most severe storms yet experienced in Esk occurred yesterday afternoon. Rain and hail fell in torrents, accompanied by lightning, thunder and a heavy wind. A number of sheds and outhouses were blown down. [(PO-) ×] At Woodford yesterday afternoon, a storm broke accompanied by wind of cyclonic force. The great force of the wind was felt in Daguiar where trees were uprooted and branches of 2 feet in diameter were snapped like twigs. [(PO) ?]

09/01/1915 Courier, Marburg (PO-) × A terrific thunderstorm broke over the centre on Wednesday. About midway between Marburg and Rosewood, rain fell in torrents and the wind blew down trees and branches.

22/01/1915 Courier, Oakey (UN) × On Wednesday the heat was very oppressive. Towards the evening, lightning could be seen to the north, and gradually began to work nearer, accompanied by a hurricane of wind.

04/02/1915 Courier, Wungallon (CE) ✓ A severe whirlwind here lifted the roof off the kitchen of a residence and hurled it against the wall of a house.

08/02/1915 Daily Mail, Clifton (UN/ND) × A gale from the SE sprung up yesterday just after sundown and continued with cyclonic violence for about half an hour. A good deal of damage on a minor nature was done.

11/02/1915 Courier, Roma (UN) × A storm accompanied by heavy winds passed over here last night.

13/02/1915 Courier, Pomona (CE) ✓ <waterspout come ashore?> After the wind had ceased a little, it was noticed from Bareen Pt. For a little distance inland and about 2 chains wide, all trees had been leveled to the ground. Two houses narrowly escaped being wrecked.

15/02/1915 Daily Mail, Longreach (UN) × A storm was experienced here last night with very severe winds and scattered showers.

15/02/1915 Daily Mail, Barcaldine (PO-) × A storm of cyclonic nature occurred last night. It came from the east and was accompanied by a violent wind.

05/03/1915 Daily Mail, Charters Towers (UN) × A terrific wind accompanied the downpour and a fair amount of damage was done.

21/06/1915 Courier, Helidon (UN) × A storm accompanied by a strong wind broke over the town today, but little rain fell.

02/11/1915 Courier, Pialba (PO-) × A terrific northerly gale blew this afternoon. About 3pm it increased in violence and lifted the balcony off the pub bodily over a building at the rear.

15/11/1915 Daily Mail, Marburg (PO-) × A severe storm passed over here today, doing great damage, part of a bakery was blown away.

15/11/1915

Daily Mail, Lowood (PO) × A thunderstorm accompanied by heavy winds came on yesterday afternoon. A roof was blown off and taken for some distance.

15/11/1915 Courier, Blackbutt (UN) × A severe storm passed over the town yesterday afternoon, the wind blowing with hurricane force for about 15 minutes and doing some damage.

15/11/1915 Courier, Chinchilla, (PO-) × A very strong wind accompanied the storm but no damage was done. A few miles out the wind blew with cyclonic force, blowing down a windmill and carrying a tank to a nearby town.

15/11/1915 Daily Mail, Mindin (PO-) × The storm was accompanied by a severe cyclone which uprooted trees and did considerable damage to fences.

19/11/1915 Telegraph, Wallumbulla (PO+) × At sundown of Sunday we were visited by a cyclone. Empty tanks were torn off their stands and hurled some distance away. Showing the strength of the wind, a sulky was carried away for some two hundreds yards.

23/11/1915 Courier, Longreach (PR+) ✓ Severe whirlwinds have been very much in evidence in the past few days.

24/11/1915 Daily Mail, Clifton, (PO-) × A hurricane came up from the NW to W. The wind did a lot of damage to outbuildings and unroofed a few factories.

24/11/1915 Daily Mail, Harrisville (UN) × A strong wind was accompanied by heavy rain.

24/11/1915 Daily Mail, Killkarney (PO) × A bad dust storm took possession of the town, for fully half an hour unroofing hay sheds and blowing down trees.

24/11/1915 Daily Mail, Rosewood (UN) × A wind storm and lightning occurred about 5pm, but no rain fell.

23/11/1915 Courier, Maryvale (UN) × A severe windstorm occurred yesterday raising clouds of dust for miles, paddocks of wheat were stripped of grain.

29/11/1915 Courier, Clermont (PO) × The damage by the windstorm yesterday included partial unroofing of the town hall, the railway station and church. Several business places lost a lot of roofing.

29/11/1915 Courier, Tandowai (UN) ?×? The recent windstorm caused considerable damage to beehives resulting in hundreds of bees being lost.

29/11/1915 Courier, Woodford (PR-) × Tuesday's storm was more severe than at first thought, one residence was blown out of position and all roofing iron was lost.

04/12/1915 Daily Mail, Wondai (UN+) × A heavy storm accompanied by strong wind passed over the district on Wednesday afternoon. When a lot of damage was done and several roofs were blown off.

08/12/1915 Courier, Longreach (UN) × A terrific windstorm was experienced here last night. The storm worked up from the west and the wind blew with great violence.

16/12/1915 Daily Mail, Brisbane (CE) ✓ The strong wind which accompanied the storm turned into a willy willy in the botanical gardens. The wind blew at a terrific velocity. The damage done in ten minutes was remarkable.

16/12/1915 Courier, Clifton (UN) × A severe gale passed over this afternoon accompanied by heavy soaking rain. The gale caught a church and the roof on one side was blown off.

16/12/1915 Courier, Grantham (UN+) × A record wind and dust storm struck here today. A good deal of damage was done by the wind.

16/12/1915 Courier, Rosewood (UN-) × A storm occurred today. The storm was preceded by a strong cyclonic wind resulting in minor damage to some buildings.

16/12/1915 Courier, Warwick (PO-) × The storm was preceded by a strong blow, which raised dense clouds of dust. Several trees were blown down and damage was reported from many outside areas.

16/12/1915 Daily Mail, Laidley (UN) × A cyclone struck here today. During the storm a good deal of damage was done, buildings were unroofed.

17/12/1915 Daily Mail, Killarney × As the wind increased, loose sheets of iron and timber got on the move. When the rain began to fall the wind decreased.

17/12/1915 Daily Mail Grantham (UN) × The wind around Grantham blew a hurricane lifting roofs off and blowing portions of buildings away.

17/12/1915 Daily Mail, Danderoo (PR) × A tremendous dust storm broke over at midday. Large trees were leveled and sheds were unroofed. The iron was taken long distances.

24/12/1915 Daily Mail, Longreach (PO+) × The wind blew in hurricane force, uprooting trees and ripped the verandah off a house.

1916

01/01/1916 Courier, Roma (UN) × A heavy thunderstorm with a violent wind occurred at six o'clock tonight.

14/01/1916 Daily Mail, St. George (PO+) ? A cyclone passed over Gleneavin station on Tuesday afternoon. Two homesteads had their roofs removed and fences were leveled to the ground.

20/01/1916 Courier, Allora (PO-) × A thunderstorm preceded by an exceptional heavy flow enveloped the country between Allora and Hendon in a cloud of dust. Several sheds were unroofed by the wind. At Glengallon, where the storm was most severe, one church was unroofed and another almost taken off its stumps.

20/01/1916 Daily Mail × The winds raised clouds of dust making the landscape obscure. The storm lasted about an hour, and did a lot of minor damage, especially to outbuildings and fences.

04/02/1916 Daily Mail, Mt Walker (UN) × The wind blew with considerable force leveling trees to the ground and also damaging some milking and hay sheds.

07/03/1916 Daily Mail, Lowood (UN) × A very heavy windstorm came on yesterday afternoon followed half an hour later by heavy rain. A good deal of damage was done by the wind on outside farms, roofs being blown off in several cases.

1917

26/09/1917 Courier, Walmul (PO) ? A heavy storm here leveled the goods shed to the ground, blowing away the wooden frame and iron out of sight. Iron was wrapped around trees like paper.

24/10/1917 Courier, Charleville (PO) × A fierce dust storm struck here this afternoon, unroofing some of the houses.

02/11/1917 Courier, Winton (PR+) The wind, cyclonic in force, started in the SW during the night and veered NE. There was a veritable waterspout at Vindex Station yesterday.

01/12/1917 Courier, Pittsworth (PO+) × A cyclonic storm occurred here this afternoon. All crops in the path of the storm were leveled and many buildings unroofed.

1918

06/01/1918 Courier, Ipswich (UN) × A storm arrived here about midday. Although there was a strong wind and clouds of dust only little rain fell.

15/01/1918 Courier, Esk (CE) ? A cyclonic storm occurred here on Sunday afternoon. Trees were flattened, buildings demolished. The track of the cyclone was very narrow, and passed from the south in the direction of Kilcoy.

16/01/1918 Courier, Rosewood (PO-) × A heavy storm, accompanied by a fierce gale occurred here on Sunday afternoon. The force of the wind uprooted trees etc.

25/01/1918 Courier, Barcaldine (UN) × The wind blew with hurricane force, but the only damage done was to trees, many being broken.

29/01/1918 Daily Mail, Mackay (CE) ✓ The Mackay disaster: The rain squalls were added to the terror of a tornado. Accounts of the time refer to tornadoes/waterspouts down the coast, with the passage of the 1918 Mackay TC.

13-03-1918 Courier, Atherton (UN) × A heavy wind prevailed yesterday afternoon, strengthening into cyclonic force from the north during the evening. Much damage was done to business places and residences in and around Atherton.

31/10/1918 Courier, Gympie (PO-) × A heavy thunderstorm occurred at 4pm this afternoon. It only lasted 20mins but considerable damage was done with buildings being unroofed and the verandah of the New Zealand hotel was blown away.

09/11/1918 Courier, Hughenden (UN-) × A wind and rain storm but here at 7pm last night. The wind was violent but only 20pts of rain fell.

03/12/1918 Courier, Adavale (PO+/PR-) ? A cyclonic windstorm passed over here yesterday, and unroofed the shire council's offices, stores kept by Chinese and several private houses.

10/12/1918 Courier, Toogoolawah (NO) × A heavy wind storm accompanied by light hail, and very heavy rain passed over here about 6pm on Friday.

13/12/1918 Courier, Chinchilla (NO) × A heavy thunderstorm passed over easily last night, preceded by a violent wind. No damage is reported.

18/12/1918 Courier, Childers (NO) × A thunderstorm accompanied by a violent wind broke over the town shortly after 2pm but very little rain fell.

31/12/1918 Courier, Longreach (PO) × A very severe thunderstorm occurred here last evening. Then wind blew with hurricane force, unroofing outhouses and uprooting trees.

1919

04/01/1919 Courier, Samoonvale (PR+) ? A hailstorm of extreme severity visited here on Boxing day. The area of disturbance comprised an area of about half a mile square. The timekeeper and paymasters house was unroofed and the chief accountants house was blown off its stumps. The men's tents were all blown into the air as if it were a charge of dynamite.

14/01/1919 Telegraph, Toowoomba (CE) ✓ Advices from Clifton received last night state that an extraordinary whirlwind was experienced there yesterday afternoon, unroofed a 60ft grain shed in 30 seconds.

17/01/1919 Daily Mail, Clifton An official report of the blow at Clifton states that both sides and half one end of grain shed were stripped of iron, the sheets being scattered some hundred yards away.

17/01/1919 Daily Mail, Sandgate (PR-) × A terrific cyclonic storm broke over the town early last night heralded by crashing thunder and vivid lightning. A cyclonic wind sprang up and damage was done to the trees, great limbs being torn off and blown great distances like sheets of paper. The wind roared for ten minutes.

17/01/1919 Daily Mail, Lowood (NO) × A heavy thunderstorm came on yesterday evening accompanied by a very strong wind. The wind caused little damage to property.

17/01/1919 Courier, Grandchester (UN+) ? During the progresses of the storm the wind unroofed many outbuildings and limbs of trees were snapped and twisted off.

17/01/1919 Courier, Bald Hills (PO) ? A thunderstorm broke here yesterday and caused a great deal of damage. Several sheds were flattened while others lost their roofs. During the storm, iron was blown about and in some cases, descended on houses where more damage was caused.

17/01/1919 Courier, Ipswich (PO-) × The wind which accompanied the storm attained hurricane force in places. Wooden sheds were unroofed.

20/01/1919 Courier, Theeline (PO) × A terrific storm raged here for 20 minutes. Several houses were unroofed by the wind.

04/03/1919 Telegraph, Arvilabah (PO) × A cyclonic storm struck here the wind blowing with terrific force, and unroofing houses. A fully loaded coach was blown head along the road for 50 yards.

29/03/1919 Courier, Hargalea (UN-) × A violent storm accompanied by lightning, thunder, hail and rain occurred here on Tuesday. The wind uprooted trees and played havoc with the township of Marburg. A the same also occurred at Ipswich and Harrisville.

06/10/1919 Daily Mail, St. George (PR-) A windstorm of cyclonic nature swept through a limited area near the town during the week, unroofing a hay shed and blowing down a couple of trees.

18/10/1919 Courier, Mackay (CE) ✓ A waterspout was visible to the north of flat-top yesterday morning and it created a great deal of interest along the water front. The streamer Jay arrived off flat-top as the waterspout passed. The captain reported that it carried a great deal of water. A second waterspout developed a few minutes later and it crossed the Jay but at that time it had no water. The suction created by the whirlwind lifted awnings and shifted several articles on the bridge.

29/10/1919 Courier, Childers (PR-) ? A violent storm accompanied by light hail and strong wind passed over here last night. The roof of the council hospital was blown off and couple of other buildings were unroofed. The track of the storm was no very wide.

05/12/1919 Courier, Cloncurry (PR) × As a result of yesterday's blow, 100 sheets of iron were taken off the railway station, the triangle hotel was partly wrecked. Shops were damaged and several residences were completely wrecked.

18/12/1919 Courier, Warwick (PR) ✓ A cyclonic storm passed over here this afternoon, and caused serious damage amounting to thousands of dollars. Torrential rain lasted for about 20 minutes after the cyclone, which appeared to be moving on a narrow front.

18/12/1919 Telegraph, Wavra (PO+) × A cyclonic storm struck here last night, numerous buildings and sheds were unroofed.

1920

03/01/1920 Courier, Helidon (PO+) A storm accompanied by strong winds caused damage here last night. Many buildings were unroofed.

09/02/20 Telegraph, Cairns (PR+) ? Cyclone in Cairns area: a resident from the Mossman and Herberton district was drowned in the Daintree River during the cyclone. Meager details to hand show that the man and a comrade were caught by a waterspout.

17/09/1920 Daily Mail, Charleville (CE) ✓ A waterspout broke over Baker Bros. Gowrie outstation and two inches of rain fell in minutes at Helvetia Park a kind of tornado passed over the place. Trees were blown down and uprooted.

30/09/1920 Courier, Rockhampton (CE) ✓ A whirlwind caused a fatal accident at Kalewa on Saturday. It took the roof off a house, causing the walls to collapse on the occupants inside.

04/11/1920 Courier, Ipswich (PO-) × The wind blew with cyclonic force. Buildings were unroofed, fences leveled and trees uprooted.

1921

25/05/1921 Courier, Redcliffe (CE) ✓ A cyclonic wind, a deluge of rain and a waterspout were features of a remarkable storm which swept across Moreton Bay. The storm appeared to come from the direction of Deception Bay and the wind cut several laneways about 30 feet in width through the bay, uprooting trees and sheds. Several houses which were in the track suffered considerable damage. Coincident with the storm a huge waterspout formed in the NW and traveled across Moreton Bay in a SE direction. Observers at Redcliffe, Sandgate and Bribie Island described it as being about 100 feet high and of considerable circumference and jet black in colour. Its roar could be heard in Sandgate.

1922

12/09/1922 Courier, Allora (CE) ✓ A disturbance akin to a waterspout developed suddenly and traveled several miles over the plains between Allora and Hendon on Friday. The out mass of the spout was in a state of violent agitation, not at all resembling the swirl of a whirlwind, but having a turning upward motion.

12/09/1922 Courier, Warwick (CE) ✓ A resident of Glangallan states that at about 3:30pm he noticed a formation like a black pillar pass over Willowvale. Sheets of iron could be seen flying a 100 feet in the air. The wind completely demolished a barn and hay shed on one property.

15/12/1922 Daily Mail, Wondai (PO-) × The rain was accompanied by wind of cyclonic force, which did considerable damage.

1923

04/01/1923 Daily Mail, Taroom (PO) × A storm of cyclonic violence passed over the town last night. The disturbance was accompanied by terrific lightning and torrential rain and hail. While no serious accidents, there were several escapes from falling timbers and swirling iron from collapsing houses.

06/01/1923 Daily Mail, Charleville (PO-) × A storm passed over Thargomindah, unroofing a number of dwellings and business places, followed by a dust storm and more rain.

06/01/1923 Daily Mail, Gatton (UN) × On Wednesday night a terrific storm passed over the township. The wind was terrific, the lightning was very vivid followed by loud peals of thunder. The severe gale did a good deal of damage to some parts of the district, shifting iron from roofs of sheds.

06/01/1923 Daily Mail, Surat (PO-) × The extraordinary lightning and the fury of the wind was remarkable. Three of four sheds about the town were wrecked and some houses were unroofed. Big tanks were lifted off their stands and blown away.

19/01/1923 Daily Mail, Laidley (PO-) × A violent wind storm which did considerable damage to hay sheds and buildings occurred at Forrest Hill this afternoon.

26/01/1923 Courier, Mowem (PO-) × A severe cyclonic storm struck the town at 5pm today. The top story of one hotel was completely wrecked and the roof was blown away and another hotel had been partly unroofed.

26/01/1923 Daily Mail, Charleville (PO) × A cyclonic storm passed over the town of Wygandra today and took the roof off one hotel and most of the roof of another. Several dwellings were wrecked and a great deal of damage was done.

25/01/1923 Daily Mail, Boonah (PO) × The recent violent storm did considerable damage between Roadsvale and Wilson's Plains, buildings being unroofed and trees uprooted. At Waval View the storm was accompanied by wind of cyclonic force. One house was completely wrecked and other buildings considerably damaged.

19/02/1923 Courier, Kingaroy (UN) × A heavy storm accompanied by a strong wind, clouds of dust, severe lightning and hail occurred here yesterday evening. Some 10 sheets of iron were blown off the roof of the hotel.

05/06/1923 Courier, Barcaldine (UN) × The wind blew with hurricane force and drove the rain, accompanied by some hail.

02/11/1923 Courier, Emerald (PO-) × A storm of unequaled velocity for many years passed over Blair Athol on Wednesday accompanied by terrific blasts of wind. These continued with cyclonic force for about 20 minutes accompanied by torrential rain and hail. Many buildings were entirely demolished.

06/11/1923 Daily Mail, Laidley (NO) × At Forest Hill the rain was accompanied by a strong wind, which lifted a portion of the roof of a produce shed.

07/11/1923 Daily Mail, Pittsworth (UN) × Violent wind and a terrific hailstorm swept here and surrounding areas last night. Wheat was ruined, trees uprooted and outhouses down.

07/11/1923 Courier, Grantham (PR) ? A severe cyclonic storm struck here at 5pm yesterday. The path of the storm was narrow and it lasted only a few minutes, but damage was severe.

09/11/1923 Standard (PO) × A severe thunderstorm accompanied by winds of cyclonic force struck North Aven. Fences were knocked over by the force of the wind which occasionally reached the intensity of a hurricane. Iron was torn off the roofs of houses and trees were uprooted.

17/11/1923 Courier, Normanton (PO-) × A storm gathered at noon yesterday accompanied by a very heavy wind. The roof of the hotel was blown off. Two houses were swept to the ground and a number of kitchens and out houses were blown down.

15/11/1923 Courier, Glamorgan (PO-) × The wind became cyclonic in force, trees were uprooted, houses unroofed and outhouses blown down.

22/11/1923 Daily Mail, Montville (NO) × Loud thunder and vivid lightning and a little hail, with a terrific driving wind. A lot of damage was done to buildings. Roofs were blown off outhouses.

1924

07/01/1924 Standard, Sandgate (CE) ✓ Yesterday afternoon a whirlwind raced along Flinders Parade and wrecked a bathing box and a boat, overturned a cab and unroofed a shed.

26/09/1924 Courier, Gatton (NO) × A heavy windstorm was experienced here last night resulting in hay sheds being unroofed. Rain also fell.

26/09/1924 Courier, Tenterfield (UN) × Considerable damage was done by the wind to small buildings, many roofs being blown off.

01/10/1924 Daily Mail, Ilfracombe (PR-) The full blast of the storm lasted about 5 minutes but during that time, hundreds of pounds of damage was done. Buildings were thrown out of alignment and unroofed.

22/10/1924 Courier, Miles (UN) An extremely severe wind and rainstorm with much lightning passed over here yesterday afternoon. Trees were blown over in the town and surrounding areas.

23/10/1924 Daily Mail, Baffle Creek (CE) ✓ In the neighborhood of Baffle Creek, a violent whirlwind suddenly developed. With a heavy roar, it rushed through a flat of ring barked ti-tree, tearing down the decaying saplings and scattering them in all directions.

30/10/1924 courier, Esk (NO) × A storm struck here with terrific force and outbuildings were damaged.

11/11/1924 courier, Cloncurry, (PO-) × A cyclonic storm which passed over Selwyn on Friday unroofed many places.

22/11/1924 Courier, Springsure (PR-) ? A cyclonic storm passed over the western side of the district last night, leveling outhouses and uprooting trees.

03/12/1924 Daily Mail, Ipswich (PO+) × A cyclonic storm occurred here this afternoon, resulting in places being unroofed and trees being uprooted. The wind blew with great velocity. Booval sustained the greatest damage.

08/12/1924 Telegraph, Blackall (PO+) × The wind blowing with the fury of a cyclone lasted about 20 minutes, buildings were unroofed and sheets of iron were carried along like paper.

31/12/1924 Daily Mail, Maryborough (UN+) × Although the wind and rain were severe in town, it was but tail of a fierce blow. The disturbance worked up from the south and later worked around to the west. Gayndah and Gostchie appeared to receive the full force of the cyclone. A fair amount of damage was done.

1925

03/01/1925 Courier, Winton (NO) × A violent windstorm started here at 7 O'Clock last night and continued for about half an hour.

13/01/1925 Daily Mail, Longreach (PR+) ✓ A whirlwind took the verandah and part of the roof off an outstation at Rosedale.

11/02/1925 Daily Mail, Beaudesert (PO+/PR-) × Much damage was done in the town by a terrific storm which occurred here yesterday afternoon. Trees were uprooted and in some cases blown great distances, while many town buildings were partially unroofed. Some buildings lost their roof completely. In the Courier it mentions the wind being hurricane force.

14/02/1925 Daily Mail Veresdale (UN) × A violent storm broke over the district Wednesday. The wind which was the severest experienced here, blew from the NE. Trees were uprooted and several sheets of iron were blown off the school.

23/02/1925 Telegraph, Chinchilla (PO-) ? The cyclone only lasted 3 minutes which is the best proof of its severity. A large wagon had its roof torn off and the roof was carried into the next street. Fences were blown down, much more damage was done.

24/02/1925 Telegraph, Longreach (PO-) × The velocity of the wind, lightning and thunder was terrifying. Roofs were lifted bodily and carried yards.

10/03/1925 Daily Mail, Cloncurry (PO) × On Saturday evening, a cyclonic storm struck here, and blew with terrific force for about 5 minutes. A church was blown off its stumps, two hotels were severely damaged and many houses were unroofed.

07/10/1925 Daily Mail, Karrar (UN) × A heavy dust storm swept through here on Tuesday afternoon. Several houses were unroofed by the wind during the storm.

08/10/1925 Daily Mail, Gatton (PR+) × A terrific wind and dust storm was experienced here late yesterday. Trees were blown down in all directions. In the Lake Clarendon district, a church was completely wrecked.

08/10/1925 Daily Mail, Brisbane, (UN) × At length, a particularly strong gust struck the house, and with a deafening noise, as the timbers tore away, the whole verandah was lifted bodily and piled up against the walls. At the same time, the iron roofing of the verandah was caught up by the wind and hurled in all directions.

13/10/1925 Charleville (UN) × Considerable damage was done by the high wind. Several sheds and other buildings lost their roofs.

22/10/1925 Daily Mail, Yangan (CE) ✓ On Monday morning, a whirlwind of unusual size developed in part of the main street of the township. The whistling whirlwind which remained almost stationary removed the roof from the eastern side of a building.

24/11/1925 Courier, Undulla Creek (PO-) × On Thursday afternoon, a thunderstorm accompanied by a wind of cyclonic force passed over the district, doing extensive damage.

25/11/1925 Daily Mail, Bauple (UN+) × A wind, hail and rain storm swept through parts of here last Friday. Roofs were torn off buildings, windows smashed and cane fields flattened. It lasted ½ an hour.

Howard (UN) × During a wind and rainstorm, much damage was done to two shops. A verandah was torn off one shop, and the other lost its roof and half its verandah.

08/12/1925 Courier, Clermont (UN) × A cyclonic storm occurred here last night accompanied by rain and hail. Considerable damage was done, a number of residences lost their roofs.

11/12/1925 Telegraph, Maryborough (CE-) ✓ A terrific whirlwind struck the Wrangan hotel during its ten minute duration, seven posts on the upper verandah were lifted. The structure did not fall but remained suspended in front of the hotel.

11/12/1925 Courier, Mubmerran (UN) × A severe storm passed over the district yesterday afternoon. Several buildings were unroofed.

15/12/1925 Daily Mail, Charleville (PO) ? The most disastrous storm ever witnessed here came up about 3pm yesterday. Big black clouds banked up, and were followed by a cyclonic wind with a velocity of 60 miles per hour. The greater part of one house being blown away and being twisted into all sorts of shapes. Other houses lost their roofs. Sky was a remarkable colour, first a rusty brown and then green. Broke with a fearful roar.

22/12/1925 Courier, Duchess (PO-) × A cyclonic disturbance was experienced here on Sunday afternoon. Several buildings were severely damaged and the back of the post office was unroofed.

22/12/1925 Daily Mail, Charleville (PO-) × A storm with wind of cyclonic force swept over Charleville on Saturday night. Verandah's and portions of roofs were blown off a number of houses.

1926

09/01/1926 Daily Mail, Gladstone (CE-/PR+) ? The most severe storm of recent years wrought considerable damage last night. It is described as a coastal tornado and was accompanied by terrific lightning.

18/01/1926 Courier, Redcliffe (CE) ✓ Holiday makers at Redcliffe and Sandgate witnessed an usual sight in Moreton Bay on Saturday afternoon when a huge waterspout formed during the rain storm and moved across the bay.

24/02/1926 Daily Mail (UN) × Considerable damage was done by a cyclonic storm which swept over the Darling Downs yesterday afternoon. A terrific wind blew raising clouds of dust, which together with the heavy rain clouds. At Clifton many houses were unroofed and trees uprooted while at Nobley a grain shed was partly unroofed.

09/03/1926 Courier, Gayndah × Cyclone at Hawkwood west of Gayndah, apparently the blow was severe there, for the post office, boarding house and blacksmith's shop were unroofed. Miles of trees uprooted, 50 points of rain fell.

16/03/1926 Courier, Mt Alford (PO-) × A cyclonic storm accompanied by rain, swept over the settlement, 9 miles from Boonah yesterday afternoon. The wind blew with such force that houses were unroofed and a cow was blown off its feet.

16/03/1926 Courier, Gatton (PO+) × In the Mt. Sylvia, Ropely and Woodlands district, the wind did much damage unroofing several buildings. Heavy rain and hail also fell.

06/12/1926 Daily Mail, Monto (PR-) × The wind, which blew the tops off several trees and snapped across saplings 10" in diameter were accompanied by a heavy fall of hail. Houses were also unroofed.

13/12/1926 Telegraph, Esk (PR-) ? With startling suddenness and with a deafening roar, the course was changed and Esk was experiencing one of the most violent visitations for a long time. Hail commenced to fall and a strong wind began to blow. Roofing was torn off, and taken some distance away.

24/12/1926 Courier, Grantham, (PO-) × A storm broke over here last night accompanied by heavy rain and a terrific wind. Trees were uprooted and a factory unroofed.

28/12/1926 Daily Mail, St. George (PR-/PO+) The cyclonic wind unroofed numerous buildings, uprooted hundreds of trees and blew down telegraph lines.

10/01/1927 Daily Mail, Cunnamulla (UN) × A violent wind and hailstorm at Wyandra uprooted many trees and broke down many small branches.

03/03/1927 Courier, Longreach (UN-) × A very severe windstorm struck here yesterday afternoon from the south. It only lasted a few minutes and little damage was done.

16/11/1927 Daily Mail, Monto (UN) Two buildings leveled and another building was lifted off its stumps by a terrific wind which swept through here yesterday.

07/12/1927 Telegraph, Rockhampton (UN-) × A violent thunderstorm broke over Mc Lacom district yesterday. The wind blew with hurricane force and hail the size of pigeons eggs fell. Much damage was done in all parts of the district to crops and property.

10/01/1928 Courier, Emerald (PO-) × A cyclonic disturbance occurred here on Saturday evening accompanied by torrential rain and winds. The storm was of short duration but caused serious damage while it lasted. Four residences were unroofed and another was almost demolished.

29/01/1928 Courier, St. George (PO-) × A cyclonic storm struck the town from the NW yesterday evening, the wind unroofing two verandahs and a stable, several trees were blown over.

04/02/1928 Courier, Surat (PO-) × A cyclonic storm struck the town unroofing two verandah's and several houses.

06/02/1928 Courier, Rockhampton (NO) A windstorm which blew with hurricane force for about a hour visited Longreach on Saturday night and caused a considerable amount of damage to property and buildings.

07/02/1928 Courier, Mowen (PO+/PR-) × A violent windstorm swept over the township on Saturday evening its path being littered with broken and uprooted trees.

28/11/1928 Courier, Aramac (UN) × Considerable damage was done to a number of buildings in the township late yesterday when a hailstorm accompanied by a cyclonic wind of terrific force passed over the town.

15/10/1929 Daily Mail, Emerald (PO) ? Within 15 minutes practically every building in town was damaged by the cyclone which struck the town yesterday afternoon.

30/10/1929 Daily Mail, Childers (UN) A storm broke over the town this afternoon and extended to Horton and South Isis. Strong winds accompanied the heavy downpour of rain and hail. The roofs of several houses were blown away.

11/11/1928 Courier, Winton (PO+) ? A cyclone was experienced at Kynuna on Friday night resulting in much damage. One hotel was practically demolished, while another was badly damaged. The state school was blown off its stumps and other buildings were unroofed.

Cloncurry, (PO) × The cyclonic flow which was of short duration caused damage estimated at 15,000 pounds. Many buildings were unroofed, others lost their verandahs.

14/11/1929 Courier, Milmerran (PO) × After great heat, a cyclonic hailstorm struck the town at 3pm today. The blow only lasted about 5 minutes. The wind blew with terrific force, uprooting trees and unroofing outbuildings, the streets being littered with sheets of twisted iron.

Marburg (PO+) × A severe storm of cyclonic nature passed to the south of here about 5pm today. So far as can be gathered, one property seemed to be the centre of the hurricane which lifted the roof off his residence. Other buildings on the property were wrecked. 25pts of rain fell.

15/11/1929 Daily Mail, Warwick, (PO-) × A cyclonic wind blew for about ten minutes along with the hailstorm at Emuval on Monday. The wind uprooted trees, more than 2" of rain fell.

19/11/1929 Courier, Dayboro (CE) ✓ A severe storm occurred here this afternoon accompanied by cyclonic wind. The gale was of short duration but during the ten minutes it lasted, a church was completely wrecked. The storm was confined to a narrow belt, its path being clearly defined by uprooted trees.

22/11/1929 Daily Mail, Toogoolawah (UN) × Accompanied by a violent gale, rain and hail a heavy storm partially unroofed several houses in the district near Outaba.

25/11/1929 Daily Mail, Brisbane (PO+/PR-) ✓ With cyclonic fury, a storm lashed Manly and adjacent districts yesterday afternoon in the most visitation for many years. In a quarter of an hour the gale unroofed houses, ripped the roof off a church at Tingalpa, uprooted trees and did considerable damage to the jetty, kiosk and bathing boxes at Manly. Appeared as a waterspout before hitting Manly, followed by a narrow path.

09/12/1929 Telegraph, Richmond (PO-) × A cyclone of intense severity passed over here at 6pm yesterday. Many business houses were unroofed.

10/12/1929 Telegraph, Kynuna (PO) × A cyclonic storm struck the town at 5:30pm yesterday. The hotel was partly blown down, the hospital and private houses were slightly damaged.

10/12/1929 Daily Mail, Surat (PR+/CE-) ✓ One of the severest whirlwinds experienced here struck the commercial hotel at about midday and about 30ft of verandah was carried away. Other damage to property was also done.

09/05/1930 Daily Mail, Emerald (PO+) × Houses were unroofed, outhouses and sheds blown over by a cyclonic storm which swept the town at 10am this morning.

14/09/1930 Sunday Mail, Brisbane (UN) × A strong wind following in the wake of a heavy shower on Saturday morning was responsible for minor damage in the suburbs. Trees were uprooted, one building was unroofed.

24/12/1931 Daily Mail, Nambour (PO-) Roofs were blown off, windows smashed and giant trees were uprooted as a result of a cyclonic blow which preceded a storm that broke over Nambour early on Tuesday night. Fortunately, the blow only lasted about 10 minutes, otherwise considerable damage would have resulted.

12/01/1932 Telegraph, Winton (PO-/UN+) A cyclonic storm struck here on Sunday afternoon attended by severe lightning, hail and thunder. A few houses were unroofed and others were partly unroofed. Telegraph poles were snapped off in the street and others blown over.

13/01/1932 Telegraph, Brisbane (UN) × A ton of iron was carried away by the wind from the roof of a shop in St. Pauls Tce.

23/04/1932 Courier, Gympie (CE) ✓ Heralding its approach with a tremendous whistling roar, the destructive progress of the tornado, as it tore a zig zag path through Gympie and its environs, was watched by a bystander as he sat on the verandah of the Northumberland hotel. Much damage was done.

10/11/1932 Courier, Quilpie (PO) ? The worst cyclonic storm experienced here broke over the town yesterday. The wind blew with terrible force and hail fell a few miles from town. Roofs were blown away and twisted. The storm did not last long, otherwise great damage would have been done.

15/02/1932 Daily Mail, Nambour (PO) × Torn bodily from its anchorage, the roof of Chadwicks Chambers a two story brick building, in Curvie St. Was hurled into the air to crash with a deafening roar in the middle of the street during a cyclonic storm which hit here this afternoon.

11/04/1932 Courier, Pittsworth (UN)× The town was visited by a severe hailstorm accompanied by a wind of hurricane force. The wind unroofed many buildings and tore branches from trees.

Since 1925, tornadoes chiefly of small intensity from a meteorological point of view have occurred at the following centres:

1925 – Cloncurry, Clermont and Charleville
1926 – Gladstone (Jan), Fossilbrook, west of Cardwell (Jan – the township was completely demolished), Clifton, Allora, Nobby (Feb)
1927 – Maryborough (Dec), Mutta, Bucca (1927), Mitchell (Nov)
1929 – Longreach (Feb – severe), Kynuna, Duchess, Cloncurry, Biggenden, Mt Morgan, Charters Towers, Manly(Brisbane) (Nov), Comet (Sept), Richmond (Dec)
1930 – Kin Kin (Jan), Ipswich, Wallangarra (Nov), Cunnumulla (Oct)
1931 – Praurie, Barcaldine (Jan), Quilpie (Nov), Nambour (Dec)
1932 – Nambour (Feb), Pittsworth (April)

18/10/1932 Daily Mail (PR+/CE-) ✓ A cyclonic squall came from the northwest and swept a long track about 100 yards wide throughout the centre of the city for two miles. Within a few minutes, many houses were unroofed, sheds were blown down and branches blown from trees.

01/11/1932 Daily Mail, Charleville (PO) × A dust storm passed over the town of Wyandra today. The heavy wind unroofed a large part of a goods shed. Roofs were blown off several swellings and other damage was done.

06/12/1932 Daily Mail, Gayndah, (PO-) × A storm of cyclonic violence here last night unroofed houses and damaged the roofs of two businesses. Hail broke windows in nearly every shop and residence in the town.

08/12/1932 Courier, Toogoolawah (PO) × At Toogoolawah a violent wind and dust storm swept the district, sheds and verandahs being unroofed while the roads radiating in all directions were strewn with fallen trees.

Woombye, (PO) ? Verandahs were wrecked, roofs torn away and roads littered with trees as a result of a storm which struck here yesterday. The force of the storm only lasted 10 minutes.

Nambour (PO) × Cyclonic winds, followed by heavy rains were features of a storm that passed over here this evening. The wind only lasted a few minutes.

Woodford (PO) × The storm was accompanied by a cyclonic wind. Several buildings were unroofed. Sheets of iron were blown about the street for about 300 or 400 yards.

19/12/1932 Telegraph, Maryborough (PO) ? Considerable damage was caused by a cyclonic storm which struck here yesterday. The true force of the storm was felt in the pocket section of the town where outbuildings, barns and trees suffered heavily.

22/12/1932 Courier, Ilfracombe (CE-) ? Lifted into the air, a shop and two houses were blown away and could not be located by residents of the town when a terrific cyclone struck the town yesterday at 1pm. Practically every house was unroofed, one person with a child in her arms had to cling to a fence to prevent herself from being blown away.

27/12/1932 Courier, Duvcanbande (PO+) × A violent cyclonic thunderstorm, the most severe ever experienced here occurred on Friday night, causing damage to nearly every building in town.

06/01/1933 Courier, Clifton + Allora (PO-) × Buildings were unroofed at Clifton and Allora yesterday by a cyclonic storm. The damage was most severe at Clifton where gardens were destroyed and fences flattened. It lasted only 15 minutes, but little rain fell.

16/01/1933 Courier, Clifton (UN) × Damage to the extent of hundreds of pounds was caused by a series of hail and wind storms which passed over the Clifton district late on Saturday night. The disturbance was one of the worst in the district.

18/01/1933 Daily Mail, Bell (PO+) × With a gale estimated at 50mph, a severe hail and thunderstorm broke over the district this afternoon. Houses and shops were unroofed, sheds were demolished and trees were stripped and uprooted.

19/01/1933 Courier, Pittsworth (PO) ? A heavy storm struck Brookstead yesterday evening doing a great deal of damage. The wind was almost cyclonic in force, huge trees being uprooted and flung about, and houses, sheds, dairies and other buildings suffered severely. Unlikely because iron sides of wheat dump at Pampan Railway station were blown inwards.

19/01/1933 Courier, Gympie (UN) × A severe storm struck Mooloo about 12 miles from here this afternoon causing considerable damage to outhouses and milking sheds.

19/01/1933 Courier, Gayndah (PO+) ? A severe storm swept over the district yesterday afternoon, the Woodmillar portion in particular suffered considerable damage. One house was demolished and sheds and windmills were blown over and unroofed.

20/01/1933 Courier, Toowoomba (PO-) × A series of severe thunderstorms passed over here tonight at Dalby. The storms were accompanied by a cyclonic wind, which although lasting only a few minutes, caused damage.

20/01/1933 Daily Mail, Cooroy (UN) × Considerable damage to property and crops was caused by a cyclonic blow which preceded a violent hail and rain storm which occurred at Cooroy today.

21/01/1933 Courier, Roma (PO-) Several houses were unroofed and outbuildings suffered extensively when a cyclonic storm struck Roma on Thursday.

26/01/1933 Courier, Roma × A severe cloudburst occurred at Ridgwell, 26 miles north of Roma last night. Heavy wind and terrific lightning accompanied the rain and was responsible for considerable damage. Huge trees were torn out of the ground, buildings which suffered extensive damage in a cyclonic storm on January 20 were demolished in this storm, and on one instance a verandah was torn off.

31/01/1933 Courier, Emerald (UN-) × A storm at midday yesterday was followed by another one last night, when torrential rain fell accompanied by strong wind. At Springswere a house was unroofed and another partially unroofed and trees were uprooted.

27/02/1933 Courier, Tandowie (UN) × A severe wind and hailstorm occurred about 6pm last evening. The roofs of railway cream trucks, as well as several sheds were blown off.

28/02/1933 Courier, Gatton (UN) × A severe thunderstorm accompanied by vivid lightning, passed over the district last night. The wind blew for a time with hurricane force.

1934

04/01/1934 Telegraph (PR-) ? Two storms, the second of which attained almost cyclonic violence passed over here last night. Throughout the city many trees were blown down and several chimneys were knocked down by the wind. From reports, it would appear that Toowoomba was only on the fringe of the hurricane, which apparently followed a narrow strip.

08/01/1934 Courier, Moggil (CE) ✓ A tornado swept a giant path about 2 miles long and half a mile wide through bush at Moggil last night. In its whirlwind fury, it destroyed farms valued at several hundreds of pounds.

16/01/1934 Courier, Charleville (CE) ✓ A house was partly unroofed by a whirlwind which swept along King St. Yesterday.

10/03/1934 Courier, Coorparoo (CE) ✓ A dairy was unroofed and tiles were torn off a house by a whirling wind which swept a narrow path across Coorparoo during a storm yesterday.

13/10/1934 Courier, Capella (PO+)_ × A severe cyclonic storm passed over here this afternoon and caused considerable damage. Buildings were unroofed and a number of outhouses were blown over.

15/11/1934 Courier, Grubb Island (PR) ? More than 20 houses were unroofed or blown off their stumps in a fierce cyclonic blow that struck here yesterday afternoon.

07/12/1934 Courier Galmorganvale, Ipswich (CE) ? The worst cyclone yet experienced in the Moreton district struck Glamorganvale about 10:30am this morning. Farm buildings were blown over, houses and shops were unroofed and trees uprooted. The blow was confined to a pathway of about a quarter of a mile and was accompanied by torrential rain.

07/12/1934 Courier, Marburg (PR+/CE-) ? Terrific wind accompanied a storm which broke over the district before midday today. Sheets of iron were torn off the roof of the school. The storm followed a narrow path and most of the damage was in the vicinity of the school.

07/12/1934 Telegraph, Rockhampton ✓ Waterspouts observed at Yeppoon. They were formed from a wall of water 100 yards long and 20ft high traveling very fast for about 10 miles.

11/12/1934 Courier, Coolongatta (PR-) ? During a heavy storm on the south coast this afternoon, the roof of a sea front house was lifted off by the wind. Little damage by the wind was done in other districts, and the path of the strong wind appears to be very narrow.

21/12/1934 Courier, Brisbane (PO-) × Thousands of pounds damage was done to a property last night when the worst storm Brisbane has experienced for many years swept the city and suburbs. The wind blew with cyclonic force reaching at times a velocity of 78mph and rain fell at the rate of 490pts/hr.

27/12/1934 Telegraph, Goondiwindi (PO) ? A terrific thunderstorm accompanied by a fierce gale, occurred in the district during the early hours of this morning. So fierce was the gale that raged, that thousands of trees were torn up by the roots or snapped off and hurled many yards away and many grazier's homes were unroofed.

27/12/1934 Telegraph, Roma (PO) × The rain was accompanied by a very strong wind that was responsible for unroofing several houses. About 20% of dwellings had sheets of iron blown off.

1935

01-01-1935. Howard - Thunderstorm and hailstorm, houses unroofed, trees uprooted, hail the size of pigeon eggs.

02-01-1935. .Kilkivan - Afternoon – thunderstorm with strong wind and hail.

14-01-1935. Yelarbon - Late afternoon, heavy rain with wind and light hail. No reports of damage.

20/1/1935 Brisbane and suburbs - Time – 5pm. Fierce storm with wind and hail. Comparatively little damage. Gardens suffered. Mt. Gravatt: Verandah unroofed. Valley: Store, water damaged stock. Oxley: Hailstones as large as hen's eggs. Wynnum: wind damaged trees and fences. Pinkenba, 5:30pm – fifty- year old fig tree uprooted.

29/1/1935

Ducklo to Kupunn - Afternoon storm with heavy rain, wind and large hail. Fairly large trees snapped in half. Duleen - (14 miles from Dalby). Two houses partly wrecked, garage damaged, windmill razed and sheds unroofed. Pomona - evening thunderstorm with heavy hail. Numerous abnormally large jagged pieces of ice picked up. Skyrings Creek – parts of the district report hailstones as large as hens eggs; a tree was struck by lightning. East of Kin Kin and north of Pinbarren, banana plantations damaged by large hail. Flying wood from tree cut wires. Cooran – Heavy hail, pony had its back cut by a large hail stone, hail up to hens eggs. On the Cooran-Kin Kin Road, a piece of ice 9X7 inches was picked up. Goomboorian, Sandy Creek & between Theebine and Paterson – Many trees uprooted and fences damaged. Bald Hills – shortly after midnight a fierce storm with wind damage and heavy hail went through – hail not mentioned.

30/1/1935

Irvingdale (near Dalby) – Flooding from storm, extensive areas of grass beaten down by heavy rain and hail. Gatton – Afternoon, trees uprooted. Murgon – Considerable damage to crops and buildings. Large areas of maize leveled by wind and heavy hail. Many trees uprooted and haystacks overturned. Garage roof lifted. Kilkivan – Afternoon; thousand gallon tank dislodged, many trees uprooted. Portion of house and sheds blown away. Waterford – Afternoon, sheds unroofed and trees struck by lightning. Murgon – Night, severe storm with a heavy fall of hail. Considerable damage due to wind. Part of house roof blown off. Two grain sheds considerably damaged; contents (cement and produce) slightly damaged by water. Trees uprooted. Caboolture – Afternoon, light hail. Wondai – 6pm, Severe thunderstorm with wind, rain and hail. Considerable damage, unroofed many buildings, huge trees down, grain shed and sawmill joinery works extensively damaged. Rain and hail damaged stocks and machinery, show pavilion unroofed. Peachester, Beerwah & Landsborough – Severe thunderstorm with rain, heavy hail and severe lightning; trees struck. Concussion of thunder cracked windows in Landsborough. Heavy hail killed fowls and injured cattle in Peachester. Brisbane – Early evening, storm. Mt. Gravatt – home partially unroofed. Wynnum – Cold stores struck by lightning. Oxley – Hail the size of hen eggs. Greenmount – Storm with light hail. Crows Nest – Afternoon severe thunderstorm with wind, dust and hail. Cooyar – Morning storm with wind and hail; trees fifty feet high and five feet in circumference uprooted. Several barns unroofed. Middle and Lower Clarence District – Hail up to 8 inches in circumference. Lawrence – Largest hail ever seen there. Brushgrove – Big hail to 5 inches in circumference, jagged and very brittle. Woodford Dale – Hail as big as cups, no damage reported.

31/01/1935

Allora – 2:30pm, rain and light hail.

Goomburra – hail much heavier, but no damage.

01/02/1935

Redlands – Late evening; torrential rain, hail the size of peas, considerable wash-aways occurred at farms and orchards.

11/2/1935

Yabba Vale and Bergins Pocket (near Gympie) – Very severe afternoon storm. Wind considerably damaged houses, barn and school; trees down. Resembled a “snow storm” – probably due to hail.

12/2/1935

Forest Hill – Late afternoon severe storm, cloudburst, heavy fall of hail; hail the size of hen eggs. Considerable damage done to crops.

13/2/1935

Howard – 3:15pm. Deluge, hail, some hail very jagged, some larger than hen eggs. Several windows broken, a little damaged caused to bird life.

14/2/1935

Cloyna (near Murgon) Heavy hailstorm, wind unroofed buildings and large hailstones and rain damaged furniture. Sawmill partially unroofed, several barns and sheds damaged. Many trees uprooted.

Wheat lands (near Murgon) – Maize and potato crops cut to shreds by hail. Cows bruised.

Wooroonden – Fowls killed by hail

Wondai – Heavy damage by hail

Chelmsford – Maize and cotton crops stripped.

Burrandowan – Large hail.

Pomona – Noon, 15 minutes. Fierce hailstorm, size of hen eggs, some very jagged, some storms 4 inches long. P.Q. roof pierced. Windows smashed, large holes in car hoods; windscreens smashed. Tanks pierced.

19/2/1935 Blanchview (near Toowoomba) – Severe storm with much damage.

Mt. Scarb – One farmer had 150 pounds damage. Large hail up to 8 oz, six young pigs killed and one had their leg broken. Cattle cut by hail. Roof and tank pierced. Crops practically ruined.

20/2/1935

Skyrings Creek – Night thunderstorm with heavy rain and hail. Wind blew down trees, cane twelve feet high flattened. Hail stripped leaves off banana plants, papaw and citrus trees and chopped young maize to pieces. Buildings unroofed.

24/2/1935 (unconfirmed date)

Moolboolaman Station (near Gin Gin) – Hailstones the size of hen eggs tore holes in tanks and smashed windows and battered some cane crops to the ground.

25/2/1935 (unconfirmed date)

Taroom – Hailstorm, narrow strip to the NW of town. Much damage. Hail the size of hen eggs, crops and fruit trees considerably damaged and shorn sheep cut by hail.

11/3/1935

Howard – Severe damage to citrus crops by recent hailstorm. Half the mandarin crop ruined. Large percentage of the crop is hail-marked and will not be marketable.

18/7/1935

Southport – 3pm, 10 minutes. Waterspout sighted, after it broke, hail fell on main beach area and heavy rain with heavy thunder 20 minutes later.

Stephens, Camp Hill, Holland Park – Heavy rain and 15 minutes of severe hail. Size of pigeon eggs. Hail drifts banked almost 1 foot deep on footpaths, slight damage.

Mt. Gravatt. – Hail, crops suffered.

15/10/1935

Wynnum and Manly – Early afternoon. Heavy rain with some hail.

Brisbane, Southern and Eastern suburbs – Just after 3:30pm, hail. Worst recorded for a considerable period with wind and heavy rain. Ice 1 to 2 feet deep.

Birkdale to Cleveland – 10,000 pounds damage to crops

Yerongapilly and Holland Park – Heavy hail; unusually large hailstones.

Annerly – Elderly man died from shock.

Wandall Rd. – building under construction collapsed and man pinned – injury to foot.

Hail reported at: Graceville, Chelmer, Sherwood, Holland Park, Thompson Estate, Greenslopes, Coorparoo, Camp Hill, Morningside, Woollongabba, Stephens, Yerongapilly, Annerly, St. Lucia, Kangaroo Pt. Stones not melted for five hours later in places. Wires blown down, fruit trees stripped, gardens ruined, windows broken, roof guttering blocked with resultant flooding of houses. Fences etc piled 4 to 5 feet high with ice. Hailstones large.

Woollongabba – Many shops flooded due to choked guttering, severe damage to newsagency.

Newton – Minor damage to shops.

Ipswich Rd – Hoardings down. Car hoods pierced.

St. Lucia – Potato and young maize crops ruined.

Clarence Corner – Much damage to gardens and windows. Hailstones 2 feet deep in backyard of shop.

Dutton Park – Windows broken, trees stripped, one house had 14 windows broken.

Graceville, Chelmer & Sherwood – maize crops flattened.

Pinkenba – Minor damage.

Myrtletown – Vineyards escaped damage.

Birkdale to Cleveland – Serious damage done to tomato, cucumber, beans and other vegetable crops – almost completely destroyed.

Wellington Point – Heavy damage.

Wynnum West – Tomatoes cropping severe damaged (ready to be harvested in a few weeks. Many hundreds of pounds worth of damage. Papaws suffered heavily, one grower lost many tons of first grade fruit.

Wynnum Road – Motor lorry had radiator pitted by hail

The hailstorm cut ice deliveries the next day by 25%. One glazing firm received 100 orders for window repairs

17/10/1935

Northern Road area, Roma – Hailstorm (probably at night) lasted for half an hour. Two vineyards lost 50%. Of their grape crops (had promised to be a record crop). Hailstones tore tomatoes, beans and other vegetables to shreds. Wheat crops damaged and some nearly ripe patches threshed out. A heavy crop of stone fruits was partly stripped and citrus trees damaged. Norwin, Bongeene & Irongate districts – Severe hailstorm at night. Several farms suffered heavy losses. One owner had 1200 out of 3300 acres affected. Portion of wheat crop knocked to the ground.

18/10/1935

Manager of State Wheat Board: Some of the wheat areas had been affected by hail, but it was not expected that the damage would be extensive. Evanslea and Ironstone districts suffered heavily.

November 1935

13/11/1935

Sunshine Coast – Afternoon thunderstorm with wind, rain and hail.

Eumundi – Sawmill smoke-stack blown down. Partially unroofed buildings, as well as homes and farms. Trees down; wires brought down by trees.

Yandina – Hail smashed windows.

North Arm – Damage worse. Stones the size of a man's fist. Windows broken and railway signal lights. Mine roof perforated. Vegetable crops and flowers chopped to pieces. Lumps of ice pierced car hoods.

Maroochy Shire – Banana trees damaged, maize crops flattened, windows smashed.

Mary Valley – heavy rain and hail.

Burleigh – Afternoon storm, lasted ten minutes. Hail of unusual size and heavy. But little wind.

15/11/1935

Mt. Fox (Ingham) – Heavy hailstorm, two types of hail – flat and size of hen eggs, jagged and size of a sixpence. Ridges and flats covered with ice, a foot thick in hollows.

9/12/1935

Stanthorpe – During the last three seasons, considerable damage has resulted from hailstorms, but this seasons losses due to hail have been negligible.

19/12/1935

Glen Aplin – Severe hailstorm. Serious damage to orchards and vineyards.

20/12/1935

Brisbane (Oxley, Corinda, Rocklea) – 1am, wind and hail. Many acres of corn and Lucerne crops leveled. Dairy buildings unroofed. Windows broken by hail. Sheds and bails razed by wind.

Corinda – Telegraph pole snapped. Tree uprooted and brought down lines. Home damaged by wind.

Other suburbs – Much damage was reported, but no mention of hail.

25/12/1935 Glen Aplin – Large hail, storm lasted a few minutes. No appreciable losses.

Warwick – Late afternoon; fierce storm with wind and hail. Many hailstones one inch in diameter. Stalls at show unroofed, trees down.

Maryvale – inches deep hail, half the size of hen eggs.

28/12/35

Eidsvold – Terrific storm with wind and light hail.

Yandina – North coast districts. Last night and early this morning, number thunderstorms, some accompanied by hail, wind, rain, a waterspout and severe lightning.

Obi Obi – Houses and sheds unroofed, maize crops flattened. Trees stripped and uprooted. Lightning smashed trees.

Cooroy – Roofs partially off. Farm buildings damaged, crops of maize and cane flattened. Trees down.

1936

17/1/36

Brisbane, coast, downs & northern NSW – Violent afternoon storms with wind, rain and hail.

Chermside & Aspley – Worst affected in Metropolitan area; 200 yards wide swathe cut by wind. Dwelling unroofed, other houses and church partially unroofed. Sheds wrecked, trees uprooted, large hail. Chermside Tannery lost 100 sheets of iron and considerable quantity of dried wool damaged.

Aspley – 100 pounds damage to a dairy.

Northgate – electric wires torn down.

Ipswich Road – Shed roof carried 50 yards and damaged joinery factory at a sawmill.

Bunyaville – 70 foot gum tree and other trees blown down in a narrow belt of country.

Eagle Farm, Pinkenba, Ascot, Hamilton – Heavy hail; gardens damaged. Up to one inch in diameter at Eagle Farm, up to two inches in diameter at Pinkenba.

Ashgrove – Light hail for 30 minutes.

Wynnum, Manly, Lota – Considerable hail, worst at Manly. Windows broken, cattle had backs gashed by jagged pieces of ice. Lightning smashed insulator at Wynnum substation.

Ipswich – Hailstones snapped 20 telephone lines at a butter factory. A hotel was struck by lightning.

Boonah – 2pm, hail largest ever seen there. One stone was 11 inches in circumference, several over 8 inches. Nine stones weighed 1.75 pounds. Windows broken, hoods of cars pierced. Hail bigger than large apples reported in 'F/68'.

Greenmount – 4pm. Wind did considerable damage. Unroofed buildings, windmill blown over, shed and barn razed, heavy hail did much damage to summer crops. Cheese factory damaged.

Nobby – Wind and hail, 40 acres of Japanese millet ready for heading, completely destroyed by hail. Hay shed had 50 pounds damage.

Selton, Pilton – Havoc to crops and buildings. Cheese factory partly unroofed.

Toogoolawah – 5pm, most severe storm since 1905. Church lifted off blocks, trees across wires, storm extended from Yimbun to Ootaba (14 miles). Scores of trees uprooted and windows broken by hail. A man was injured by flying iron.

Moore – Storm with hail. Home, barns and hay sheds unroofed. Trees uprooted.

22/1/36

Stanthorpe – Afternoon. Heaviest fall of hail for ten years, lasted 35 minutes, hail was the size of mothballs.

Broadwater – Heavy rain and hail, only a little wind and therefore damage to orchards not heavy.

Thulimbah – Not much hail, but larger – caused some damage.

Appletorpe – Heavy hail and strong wind. Considerable damage to orchards, plum crops had been harvested but apple crop (very good quality and quantity) received worst battering ever.

Cottonvale, The Summit, Glen Niven – Heavy hail.

Cottonvale – Half an hour, much damage.

The Summit – Apples, tomatoes, pears hit. One farmer's orchard lost 50% of crop.

Glen Niven – Apples, grapes, tomatoes seriously affected.

Allora – Storm with wind and little hail. Trees down, windmill down, sheds unroofed.

10/2/36

Leyburn – Thirty minute night storm with large hailstones. Dwellings and sheds unroofed, trees down, fences flattened, tree crashed on eight cows. Narrow strip affected.

21/2/36

Dirranbandi – Tornado, hail and heavy rain. Occurred at 3pm, lasted 30 minutes. Sheds, houses and shops unroofed. Plate glass windows blown in, rain damaged shop stocks.

22/2/36

Loganlea, Waterford, Logan Reserve Road, Springwood (near Eight Mile Plains) – 4pm, 30 minute tornado, thunder & hailstorm. Trees down, windows smashed, several people injured, several houses razed, two churches wrecked, another unroofed – thousands of pounds damage.

Between Wynnum and Tingalpa, crops worth thousands of pounds destroyed, trees uprooted, crops leveled, livestock maimed.

Loganlea – Railway station leveled and house carried 60 yards. Then, for one mile towards Beenleigh, telephone poles were 25 degrees from vertical. Cow scalped by hail, man injured by jagged lumps of ice.

Chambers Flat – House demolished, severe damage to stock, cow carried over fence, 86 of 90 chicks killed at one farm.

Wynnum to Tingalpa – Acres of tomatoes mutilated, farms with 20,000 to 60,000 strawberry plants under cultivation were completely lost.

12/3/36

Some of the apple growers in the vicinity of The Summit have suffered heavy losses from hail for two seasons in succession. Unfortunately their losses have not been covered by hail insurance and the demands made from time to time on the hail relief funds built up by the growers have been so heavy that these funds have been inadequate to provide any material assistance. A number of attempts has been made to inaugurate a scheme of hail insurance for the whole of the Granite Belt area, but the proposals put forward by insurance companies have not met with the approval of the requisite majority of growers. Growers in the southern end maintain that they are situated beyond the hail belt, and therefore a recent ballot on the question of a hail relief scheme, which was agreed to, was confined to the growers in the northern half of the district.

06-06-1936. Wellington Point to Ormiston – Narrow belt of damage. Occurred in the late afternoon, lasted 30 minutes, stripped crops and tomatoes, strawberries and small crops. Nearly 20 farms. 10,000 pounds damage.

Ormiston Hill – One farm had 3000 to 4000 pounds damage, 15 acres of tomatoes (12,000 cases expected).

Remainder of farms averaged 10 acres (1000 to 3000 pound damage). Crops were approaching maturity.

Wellington Point – 15 minutes, nearly dusk. Terrific hail, not more than a one mile wide strip. Inches deep hail, over twenty windows broken; 100% loss at some Ormiston tomato farms.

22/8/36 Bundaberg District – Thunderstorm with hail, some as large as pigeon eggs.

23/8/36 Yandina – Afternoon thunderstorm with heavy rain and hail in many parts of the Maroochy shire.

2-3/10/36 Downs and southern border – hail damage.

4/10/36 – East Greenmount – Afternoon hailstorm destroyed crops in an area 2 miles long by $\frac{3}{4}$ of a mile wide. Stock suffered severely. Fowls buried by hail. Driving wind and hail for over an hour. Hailstones mostly small, but some up to 1 and 1.5 inches in diameter. Hail two feet deep in some places. One farm had 50 acres of barley and 50 acres of canary seed destroyed. Hail five feet deep on water hole – five cattle frozen to death.

Jennings Mountain – Covered by hail, three to four feet deep at the foot.

5/10/36

Toowoomba – Manager State Wheat Board – Benefit from the rain over the major portion of the wheat area would outweigh the damage done by hail at Greenmount. Claims from Greenmount were: 100, 26, 26, 46, 50, 71, 18 and 30 acres. Claims state that the wheat crops have been badly damaged.

Brisbane – Between 4-5pm, hailstorm.

Annerly – Very large hail

Greenslopes, Holland Park – $\frac{1}{2}$ to 1 inch diameter. Lasted 15-30 minutes, minor damage to gardens.

Moorooka – Big stones

Coorparoo and Whites Hill – small hail.

Petrie – A little hail.

Boonah – Wind and hailstorm damaged gardens.

Southport – 2pm, heavy fall of small hail.

Burleigh Heads – 2pm, small hail

Eungella (3 miles from Murwillumbah) – 2am, small hail.

Landsborough – 7pm, heavy rain and hail

Kandanaga – Heavy rain and hail

21/10/36

Curra (near Gympie) – Light hail.

Imbil – hail.

24/10/36

Thargomindah – 11:30am, severe electric storm, dense dust, strong wind, some hail. Lasted over an hour. Roofs of sheds damaged, limbs off trees, car hood lifted off, lines interrupted.

22/11/36

Upper reaches of Alligator Creek (26 miles from Townsville) – Hailstones the size of pigeon eggs fell over a confined area.

7/12/36

Adavale – Hail.

8/12/36

Pittsworth – Evening storm with wind and light hail. Shop unroofed and rain damaged goods, fences blown over, storm covered narrow strip.

Newbold (Upper Clarence) – hail inches deep.

Plains Station – Hailstones

9/12/36

Kybong (Near Gympie) – Heavy rain, wind and hail.

Dagun – Midday, small hail, shed roof and rafters carried away by whirlwind.

15/12/36

Oakey district – one part had hail.

Boonah – night storm with light hail.

18/12/36

Thargomindah – 8pm, storm with occasional hail. Wind unroofed houses and shop, trees uprooted, lines down, cars damaged.

23/12/36

North of Roma – Heavy night storm.

Tambo – Afternoon, lasted half an hour. Some rain and hail. Wind unroofed several houses and partially wrecked them. Shop awnings, stables demolished, wind main damage.

26/12/36

St. George – Morning storm lasted 30 minutes. Heavy rain, hail and wind. Worst for 20 years. Fruit crops ruined, hundreds of pounds damage. Roof off hotel, hail smashed windows, hail smashed melons, tore grapes from vines and damaged stone fruit, and knocked them to the ground. Large portion of crops unmarketable, several hundreds pounds loss to farmers. Hail did 800 pounds damage to furniture at hotel, another hotel's windows and rain damage came to fifty pounds.

27/12/36

Kia Ora (near Goomboorian) – Afternoon, strong wind and heavy hailstorm, garage damaged, tree down. Hail one foot deep.

Long Flat (Mary Valley) – Heavy hail, several trees down

30/12/36

Roma- Afternoon, second hailstorm in a week.

Roma Villa – Vineyards struck again – extensive damage done to the remainder of the grape crop.

1937

2/1/37

Southport – 4pm, heavy rain and hail.

31/1/37

Withcot (5 miles from Toowoomba) – Late afternoon, severe hailstorm. Considerable damage to crops and vegetables. Killed large numbers of fowls.

2/2/37

Tambo – Afternoon severe storm with wind and hail.

7/2/37

Goondiwindi – Morning light hailstorm.

7/3/37

Thulimbah, The Summit, Pikedale, Cottonvale (near Warwick) – Afternoon heavy storm with thick hail. Hail was small, fell heavily for twenty minutes, covered ground four inches deep. Minor damage to tomato and vegetable crops. No damage to apples as fruit had already been picked.

11/4/37 (unconfirmed date)

Nambour – Afternoon storm with hail.

19/4/37

Warwick – storm hail.

Emu Vale – Heavy hailstorm.

Tent Hill and Lake Clarendon – Hail damaged pumpkin crops.

23/4/37

Clermont – Morning, light hail.

28/4/37

Yangan – Afternoon severe hailstorm. Stripped maize, solidified blocks of ice eight inches thick still in sheltered spots the next afternoon.

Brisbane and suburbs – Late afternoon, hail, heavy in western suburbs.

Downs – Afternoon, hail in many places.

30/4/37

Yangan – Severe wind and hailstorm caused much damage. Resembled a snow scene.

11/5/37

Nambour and Kingaroy districts – Afternoon, heavy storms with hail in several places.

7/10/37

Greenmount – Night thunderstorm with hail.

8/10/37

Kilkivan – Night storm with hail at places.

Nobby – Night storm with light hail but no damage.

Rodgers Creek (South of Cunningham near Warwick) – 5pm to 5:30pm, fairly narrow area, little wind, few acres of young maize and gardens ruined but not serious damage reported. Hail one foot deep in places.

Killkarney – Rain and hail.

Maroochy District – 6:15pm to 7:30pm, storm with light hail.

Widgee – Hail for 20 minutes, heaviest for many years.

Kingaroy District – Hail.

Esk – 5pm, heavy hail, ground covered one inch deep.

Killkarney, Tannymorel and Mt. Collier – Small hail, no serious damage to wheat crops (majority not out in ear).

Gympie – Afternoon storm with hail, damage to bean and tomato crops.

Upper Glastonbury – Very large hail.

Kadanga – Heaviest hail for many years.

9/10/37

Toowoomba – 2:20pm. Heavy storm with heavy hail the size of marbles blocked gutters and drains. Slight damage to flower and vegetable gardens.

Warwick – 2pm, storm with light hail for 15 minutes.

Gambooya – Light hail.

Kanondi – Light hail.

11/10/37

Swanfells (near Warwick) – Heavy afternoon storm with rain, wind and slight hail. Hail did no damage to wheat.

Warwick – Storm chased flooding, some hail, little damage to wheat crops.

Pittsworth – Hail to East of town.

Broxburn – Hail not large enough to damage wheat crops.

Mulgowie – Very large hail.

Pimpama Island – Light hail.

Manager of State Wheat Board – Reports of damage by hail so far indicate that the storms have been only of isolated nature. Tannymorel, Clifton, Crows Nest affected. It is believed that the loss sustained will not have been very great.

16-17/10/37 Downs – Hail.

16/10/37

Glenoghar (near Muckadilla) – Afternoon storm with large hail.

Ipswich – Midnight severe hailstorms. Greatest intensity around Rosewood, but no damage reported.

27/10/37

Strip from Brisbane to Toobeah and around Woodford – Early night, rather heavy hail.

Beaudesert – Hailstorms.

Sherwood – Poultry killed by hail, weighed one pound, the size of jam tins. Market gardens suffered severe loss, especially tomato crops which were flattened. City and near suburbs escaped hail.

Oxley, Darra, Tennyson – Worse hit.

Sherwood – Iron roofs pierced and dented.

Oxley – Telephone lines out.

Redland Bay – Some crops suffered severely.

Victoria Point – Hail damage to some staked tomatoes. Damage very slight, hail the size of marbles, little wind.
Taringa – Hail the size of hen eggs.
Sherwood and Oxley – Streets littered with small branches and leaves torn by hail. Gardens stripped.
Nundah – Gardens suffered some damage, no high winds.
Brisbane – Thirty trunk lines and 136 subscribers had telephones interrupted. Hailstones to 3 inches square out wires.
Between Ipswich to Oxley – Many wires were out by hail the size of golf balls.
Southport – A number of circuits out by hail.
Holland Park to Goodna affected – Narrow strip, gardens battered, roofs and tanks pierced, hail fell for fifteen minutes, more than a foot deep in some places. Only a few market gardens were in this strip.
Richlands (near Darra) – Several market gardens badly battered. Probably a total loss.
Hendra – About 6pm, large hailstones.
Mooraka and Holland Park – Hail the size of golf balls.
Sherwood – Hail 2.5 inches across.
Grange, Bulimba, Camp Hill, Coorparoo, Nundah – small hail.
Bethania Junction and Loganlea – Heavy hail.
Beenleigh – light hail.
Boonah – Large hail.
Milford – Very large hail.
Goodna – Heavy fall of hail.
Beaudesert – Hail.
Barney View – Very heavy hail, crops damaged.

28/10/37

Nambour – Night, light hail.
Glenecho (near Miga) – Evening, hail as large as pullet eggs fell for 20 minutes. Beans, cucumber, passion fruit and other small crops battered to pulp. Leaves of pineapples and bananas torn to shreds. Small pineapples cut to pieces. Exposed bananas damaged. Hail a foot deep still the next day.
Glastonbury, Chatsworth, Tamaree (Gympie District) – Heavy rain, wind and hail. On Maryborough road, a shed was blown over, house roof lifted and large trees across the road.
Chatsworth – Tomatoes and other crops ruined. Houses damaged. Native apple trees stripped of bark and leaves and a number uprooted. Tree lifted over a fence and dumped across the road carrying away telephone wires. Sheds carried away or unroofed. Hail fell for a quarter of an hour. Verandah's carried away, barn wrecked, fencing destroyed, iron from fowl house carried 400 yards. Rain flooding eaves of house, one house blown 6 inches out of plumb.
Karara (Downs) – Gardens and crops damaged by hail lasting 10 minutes with a tornado and torrents of rain.
Everleigh Station – Several huts unroofed and damaged. Road between Raff's Crossing and Karara littered with uprooted trees and broken branches.
Tamaree – Heavy hail, 6 inches deep on ground. House and garages unroofed.
Yelarbon and Teelabar Station – Severe hailstorm, hail the size of hen eggs.
Teenbar – Hail ruined homestead garden.
Yelarbon – Late afternoon, hail bigger than hen eggs and far bigger than anything seen before in the district. Stripped trees, scrubs and flowers. Lay six inches deep on ground. Storm was isolated.

2/11/37

Manager of State Wheat Board – Mt. Russell and Irongate areas (Cecil Plane line) have received damage from hailstorms.
Toowoomba – Early morning, hail, not much damage.
Kureelpa (near Mapleton) – Wind and hailstorms unroofed house, flattened bamboo's, another house collapsed, shed blown into creek.
Nanango – Early night, hail caused damage to crops and tanks. Dense hail, water entered shops and dwellings damaging stock.
East Nanango – Large hail battered young maize and cut potatoes, cotton and other crops.
Yeulba – Hail.
Ducklo (near Glenmorgan) – Morning, heavy fall of hail.
Rock Creek (near Chinchilla) – Heavy fall of hail, one foot deep in places.
Caboolture – Afternoon with light hail.

Nambour – Wind rain and hailstorms, hail smashed windows, water poured into shops and dwelling. Fifty pounds damage to boot shop. House partially unroofed.
Barkers Creek (northwest of Nanango) – Hail the size of hen eggs, pierced tanks.
Hodgkiss (5 miles west of Nanango) – Light hail.
Cooroy – Heaviest hailstorm for many years. Large hailstones damaged cucumber and tomato crops.
Woombye – Light hail

3/11/37 Manager of state wheat board – Damage done by hailstorms have been more extensive and more severe than was thought up to Tuesday (2nd). Further damage had been caused to crops at Oakey and Dalby districts Tuesday night.

Gondiwindi – 6:30pm, light hail. But considerable hail on the East end outskirts of town. Several hundreds of pounds damage to market gardens.
Talwood District – Some hail.
Kumina (25 miles from Roma) – Storm with heavy hail. On one farm, 120 acres of wheat and 20 acres of grape vines was destroyed. Hail banked two feet in front of a dam.
Dayboro – Morning storm, hailstones frozen in masses several inches thick and still to be seen on hillsides 16 hours after the storm (on the 2nd).

5/11/37

Wowan District – Night storm with wind, rain and hail. Dairy cattle killed by hail, houses and sheds unroofed, crops destroyed, wires cut by trees. At 9am the next day, ice a foot deep in some places. Trees were stripped of bark.
Wowan Township – A little hail fell.
Stewart's Creek Station (near Roma) – Morning, two storms with heavy hail but little in the wheat paddocks where farmers were preparing for harvesting. At places between Yingerbay and Orallo there was hail.

8/11/37

Dalby – Many wheat crops ready for harvesting have been bleached by storm rains in the last fortnight. Hail accompanied the storm in a number of instances. The harm from this cause has not been so great as done by rain and surface water, although it has caused the loss of hundreds of bags of grain.
Hayfields – 65 acres flattened (8 bags to the sore). Another farmer had rain and hail damage and bleaching in a 8 bag crop.
Kupunn – Hail ruined ½ a small 6 bag crop.
Ducklo – Hail damaged a 200 acre crop.
Paxton, Pirrinuan – 300 acres of 8 bag crop bleached, another 200 acres bleached.
Evanslea – 500 acres ½ stripped from the heads by hail (8 bag crop).
Pittsworth – Very severe hailstorm, narrow strip of Pittsworth district at night. Number of claims for wheat hail insurance.
Kingora & Yarranlea – Considerable damage to wheat. One farmer in Kingora had 200 out of 240 acres destroyed. Also, 70 acres of sorghum and corn. Crop had been yielding 6 to 7 bags per acre. Another farmer had 250 acres badly damaged. Another farmer 150 acres almost completely ruined. Storm lasted ten minutes. Wheat, fruit trees and gardens damaged in Yarranlea.

8-9/11/37

Doonkami & Tucka Tucka stations – Severe hailstorm at night ruined gardens.

9/11/37

Wowan – Hailstorm at night, young cotton crops extensively damaged.
Deeford – Several houses unroofed, windows broken, maize crops flattened.

10/11/37

Manager of state wheat board – Hailstorms last week did considerable damage. Storm extended to every quarter of the wheat area from Rumins to the Roma district to Killarney in the extreme southwest.

12/11/37 Longreach – Hailstorms at Upshot and Clyde

14/11/37 Pittsworth – Wheat crops in Brookstead, Pittsworth and Millmerren districts badly damaged by hailstorms.

15/11/37

(Last week) Ulupna (60 miles northwest of Gondiwindi) – Hailstorm killed 200 lambs and 6 sheep.

Retreat – One hailstone fell on the verandah, weighed one pound.

Dalby (current) – Wheat crop would have been considerably greater, but rust and hail reduced this.

16/11/37 Dubbo – Wind and hail, several thousand pounds damage – all due to wind. Sheds and house unroofed, trees down, crops flattened along a two mile front.

17/11/37 Pelican – Severe hailstorm stripped trees.

18/11/37 Hailstorms have done considerable damage in several centres and the assessors are busy attending to claims under the State Wheat Boards for hail insurance cover. In the Lougon and Malakoff districts, many of the crops were practically wiped out by hailstorms. Many crops in Millmern, Brookstead and Pittsworth areas were badly damaged by hail and rust.

19/11/37 – Tambo – Afternoon, heavy hail.

Yhulba – Hail.

21/11/37 Between Texas and Yetman – Afternoon and night, heavy hail stripped trees, hail 2 feet deep in parts.

St. George – Heavy storm with wind, deluge, large hail. Several buildings unroofed, windows in nearly all houses broken by hail and fowls killed. Grapes, peaches and melon crops destroyed. One gardener had a 250 pound loss. Trees stripped, third year in succession that hailstones have destroyed the local fruit crop. A record crop had been expected.

Seaforth (20 miles from Texas) – Large hail killed many fowls, hail stacked (a few?) feet high against fences.

Bonshaw – hail.

5/12/37

Kilcoy – Wind and hail. Roofs off houses and sheds. Lines out trees down, gardens and maize damaged.

Caboonah – Severe hailstorm damaged crop. Hail larger than golf balls, one property hail chopped 10 acres of cobbling stage maize to pieces, 7 acres of bearing stage pumpkins. Tanks pierced.

Ropeley – Heavy hail.

Esk – Afternoon, grape and passion crops and gardens suffered heavily from hail. Lines blown down, hail as large as golf balls for 10 minutes, windows and roofs of churches and hotels damaged.

Boonah – Shop windows broken by hail.

Duggandan – Church windows broken, damage confined to 12 mile strip between Boonah and Milbong – Jagged hail 2.5 inches across.

Milbong – Vegetable crops smashed by hail, maize crop too far advanced to be affected.

Nerang – Post Office window broken by hail.

Upper Burnett – Heavy hailstorm and windstorm. Trees uprooted, windows smashed, part of house roof lifted, shop window flooded, crops escaped damage.

9/12/37 – Redcliffe – 3pm, hailstorm. House roof dented, crops damaged, chickens killed. Worst at Oyster Point and Reef Point, Scarborough. Windows broken, lettuce, tomatoes and flowers damaged. Hail several inches deep.

Beauresert – Afternoon, heavy hailstorm, little damage.

10/12/37 – Storm rains fell over most of the areas during the early and late parts of November. Some of these storm rains were accompanied by hail and in Wowan and Kingaroy areas, considerable damage was caused to early planted cotton. Affected acres had to be re-planted. Well over 1,500 acres were destroyed.

11/12/37 Harrisville – Evening, wind and hail. Houses and sheds partially unroofed. Windmills blown down, haystacks scattered. Crops and maize and panicum flattened.

12/12/37 Although cotton plants in the Upper Burnett received a severe check from recent hailstorms, it is likely that all areas will recover. Hail-affected plants can produce a prolific crop of cotton.

13/12/37 Oakey – 7pm, one of the worst storms ever. For 10 minutes hail the size of hen eggs considerably damaged roofs and windows. Tanks pierced. 17 train carriage windows smashed in one carriage.
Wyreema, Cambooya district – Wind, rain and hail. Goods train held up by rails being made slippery by hail and rain. Driver could not see for hail.
Biddeston – Hail.

14/12/37 Eumina (25 miles from Roma) – Afternoon storm with hail and wind, trees blown down.

19/12/37 Darling Downs = Night, hail destroyed crops of panicum. Sudan grass and maize at many centres.
Nobby – Grape vines and fruit gardens extensively damaged and windows broken by hail.
Oxley and Sherwood – Light hail.

20/12/37 Goomberidge – Night, a little hail.

21/12/37 There is still ice packed into a lagoon on property adjoining Gunyerwaraldi near Goondiwindi from hail that fell in a terrific storm four weeks ago last Saturday (20/11/37). Most severe storm ever experienced in the district. From 10 to 12 inches of hail and rain were recorded on Gunyerwaraldi Station near Warialda, 80 miles from Goondiwindi. Storm drowned 770 sheep and a mare.. Hail stripped trees and cut grass to pieces. Storm lasted one hour and 20 minutes, covered 4 or 5 miles of country. Hail fell on property adjoining lagoon. Grass and rubbish was on the top of hail stones which packed into an area one mile long, 50 feet wide and 10 to 15 feet deep. Man rode a horse over the hail. Hailstones were the size of marbles, flood waters spread to a mile and a half. It is estimated it would take another two weeks before the ice disappeared.

29/12/37 Wynnum – Afternoon or evening. Hail with heavy rain and wind, but no damage.
Contarf and Woody Point – Afternoon, light hail.

30/12/37 Loch/Lomand – Afternoon, fairly heavy hail, quarter of an hour. Crops escaped damage.
Killkarney – Light hail.
Tannymorel – A little small hail.

31/12/37 Woody Point and Scarborough – Night, heavy hail and wind. Tents razed and tree blown down

1938

29/1/38 Warwick – Afternoon severe hailstorm with wind damaged crops and broke windows. Jagged hail tore holes in tank. Shed collapsed.
Rosenthal – 12 fowls killed on one property and 5 acres of three feet high Sudan grass razed.

18/3/38

Clermont – Afternoon severe storm with hail. Furniture house and bulk store unroofed and flying sheets of iron broke a shop window.

14/4/38

Rosenthal (few miles south of Warwick) – Very severe storm. Windows smashed by hail, very heavy rain, hail a foot deep, jagged hail dented rooves and a car hood riddled. Trees denuded.
Warwick – Light hail but in southern areas, some larger stones.

17/4/38

Ipswich – Midnight storm with hail, no damage reported.

18/4/38 – A few hailstones fell in Ipswich the early hours of the morning.

21/4/38

Merinda (near Bowen) – Storm with wind and heavy hail for ½ an hour. Much damage to the early tomato crop and other vegetables.

Euri Creek – Damage to crops less.

Lower Don – Worst effected.

16/4/38

Beaudesert – 3:30pm, torrential rain, hail and wind. 60 houses partially unroofed, mainly electric feeder poles snapped. Shops – stock damaged by water. Railway goods shed unroofed. Flying iron cut wires, power house and shop plate glass windows smashed by wind pressure. Total damage 5000 pounds including power house, mains, and poles – 350 pounds, sale yards unroofed, 200 pounds and sawmill unroofed. Blow lasted a few minutes, strip ½ a mile wide through the centre of town.

25/5/38 Roma – Afternoon, heavy storm with sprinkling of hail.

6/7/38 East Brisbane – Afternoon, heavy hail.

14/7/38 Clifton – Light hail.

15/7/38 Hail in many places of Southern Queensland.

25/7/38 Toowoomba and Range – 10:30am, light snow, afternoon hail and at 4:45pm sleet.

Wallangarra – 10 falls of sleet.

23/7/38 Downs – Hail

Toowoomba – Sleet.

26/7/38 Clifton and Stanthorpe – Hail.

8/8/38 Wynnum and Manly – Morning, third hailstorm this winter. Stanthorpe and Wallangarra - Sleet

23/8/38 Quilpie – Afternoon severe hailstorm – hail was very large.

24/8/38 Toowoomba – Deluged with rain and hail at night.

25/8/38 Aramac – Heavy hail.

2/10/38

Beenleigh, Greenmount (Downs) & Beaudesert – Night, with hail.

Ipswich – 6pm, lightning struck hotel.

Harrisville – Worst storm in 50 years. Extensive damage on farms, large hail leveled about 100 acres of wheat and oats almost ready to harvest. Young maize and Lucerne damaged. Trees stripped.

Kalbar – Heavy hail, lines broken by hail in places.

6/10/38 Glen Aplin – Heavy hail.

Wybera – Ground covered by fine hail.

Applethorpe, Amies, Pozierres, Ballandean – Hail, but little at Ballandean.

Apricot, plum and peach blossoms had set and the marks might disappear by the time they are full size. Apple trees in bloom lost a number of blossoms. No damage to grape vines.

9/10/38 Pirrinuan (near Dalby) – Heavy night storm. Light hail damaged patches of wheat, no estimate of damage. Storm swept belt one mile wide.

9-10/10/38 Dalby to Millmerren – Heavy hailstones damaged a quantity of wheat, 60 acres on one property. Fruit trees and grapevines stripped. On another farm, rain flattened wheat.

Wallangarra District – Hail damaged several orchards between Bald Mountain and Wyberba.

Wyberba – Hailstones 9 inches deep.

10/10/38 Core and Karara (west of Warwick) – Worst storm in history. Poultry, wild birds and shorn sheep killed by hail. Horses struck by lightning, other drowned and hundreds of trees broken.

Karara – Track five miles wide by ½ a mile, on a quarter mile square patch all trees denuded of leaves and smaller branches and grass pounded into the ground. Marsupials badly injured. Kookaburras completely squashed flat.

Gore – trees stripped, gardens wrecked, poultry killed, fencing washed away, sheep killed by hail or drowned. Next day, hills appeared like snow.

Cecil Plains – Afternoon and night, hail damaged wheat crops adjacent to localities.

Mungindi – Hail.

Kingaroy district – Heavy hailstorm, heaviest around Cooinjah and Greystonlea. At Burrandoan there were windows and roofs damaged, trees stripped and limbs strewn over the ground.

11/10/38 Murgon – Light hail.

Centres Outside Toowoomba – Some hail damage.

Number reports of hail damage to wheat crops have been received by the Wheat Board of Toowoomba as a result of storms last night and at the weekend (8-9th). Districts affected: Millmerran, Bowenville, Dalby and isolated places on Western line as far as Muckadilla.

East Wooroolin and farms near the swamp – Severe hailstorm, hail lay two feet deep in places.

Jimna and Spring Meadows – Hail.

11-12/10/38 Hail in parts of Downs and Maranoa.

13/10/38 Neeworra (7 miles from Mungindi) – Heavy thunderstorms with severe hail. Sheds and trees damaged at Mungindi. Two cottages destroyed in Neeworra. Trees uprooted, one fell across bridge.

Doondunna – Sheds demolished, fowls and turkeys killed. Many gardens damaged.

14/10/38 Palmwoods – Night, heavy hail smashed windows, destroyed crops, cut and bruised stock.

Maleny, Montville, Mapleton – Jagged hail cut small crops to pieces, knocked much young citrus fruit off trees. Hail also blocked roof gutters and flooded houses.

Maleny – Afternoon, heavy rain and large hail.

Montville – Worst hailstorm for years. Cut gardens, damaged pineapples and young citrus fruits. Jagged hail fell for 15 minutes.

Witta – Hail smashed windows, slightly cut and bruised stock.

Toowoomba – Light hail.

Clontarf (near Millmerran) – Night. Wheat badly damaged by hail, one man lost 200 acres, another lost 100 acres.

15/10/38 Gympie – 3:30pm, heavy rain and very heavy hail at Jones Hill. At Normanby Bridge wind tore roof off house.

15-16/10/38 Rockhampton District – Hail in many places but no serious damage reported.

20/10/38 Millmerran District will have a record harvest notwithstanding the recent hail damage.

Manager of State Wheat Board – While loss by hail damage involved approximately 14,000 acres the accompanying rain would compensate to a large extent for the aggregate loss, although a large number of growers suffered severely. In one case, the estimated total loss was 5000 bags.

22/10/38 South of Dalby – Quite recently, one grower had 600 acres of wheat destroyed by hail.

5/11/38 Mt. Emlyn & Bringalily Areas (Millmerran district) – Night, heavy storms with worst hail for years. At one farm only two fowls survived and crops, trees and plants were stripped.

Inglewood – What damaged by hail.

Stanthorpe – Some hail damage.

10/11/38 Goondiwindi – Violent thunderstorms, large trees uprooted. Gardens destroyed by wind. Slight hail in town, but heavy outside districts where there was extensive damage.

13/11/38 Ipswich – 1:30pm, hailstorm. Damage was 5 to 10 thousand pounds. Houses unroofed, sawmill drying shed torn down (500 pounds damage) shops flooded, verandah torn off house, trees uprooted, man injured by flying iron,

stock and poultry drowned. Worse damage at North Ipswich, Tivoli and Brassall. High tension wires short circuited and fried poles, one man lost 40 chicks, another lost 100. 70 pounds damage to machinery in basement laundry.

25/11/38 Warra – Afternoon, large hail. Tanks pierced, windows broken, grape vines and vegetables and flower gardens cut to pieces. Worst storm for fifty years. Small area only. Wheat had been harvested.

26/11/38 Brisbane – 9am, violent thunderstorms, hail in northern suburbs.

29/11/38 Mt. Garnet – Hail, wind and rain. Damaged crops and building, man struck by lightning. Tree fell on cottage, another house blown down. Other building was flooded.

Sandgate – Afternoon, very large hail, smashed windows. Fruit trees and wireless masts blown down, boats dragged anchors and smashed on wall.

Clarence River District – Cowper – Trees uprooted, haystacks blown over, verandah blown off school. House demolished. Hail killed poultry and stampeded cattle. Young maize crop and vegetables ruined.

Swan Creek – Large hail. Extensive damage to crops. Pierced tanks and roofs.

Grafton – Wind and large hail, windows smashed.

Goondiwindi – Morning, great damage by hail to market gardens – eastern side. Mellons and seven tons of tomatoes ruined. Ice 6 inches deep in irrigation channels hours after.

Goomberrua (Darling Downs) – Hail and heavy rain.

Goodna – Afternoon, heavy rain, wind and light hail.

Surat – Afternoon, hail and heavy rain.

Sapphire – Heavy storms with hail and wind.

M Laura – House damaged.

Beaudesert – Storm with light hail.

5/12/38 Brisbane – 5pm, hail, little hail in some suburbs. Hail damaged windows and gardens in some suburbs – some flooding in the city.

Archerfield, Rainworth, Clayfield – Hailstones over an inch diameter.

Newmaker – Hail 2.5 inches in diameter.

Windsor – Hail the size of pullet eggs.

8/12/38 Brisbane – 2-4pm, heaviest hailstorm for years.

Albion – Up to 1.5 inches wide and ¼ inch thick

Ashgrove, Taringa, Indoropilly – About a dozen windows smashed. Little wind during storm.

East Ipswich – Jagged very large hail, roofs damaged, windows smashed and tanks pierced.

City – small hail.

Lower Nudgee and Pinkenba – Grapes slightly damaged by hail.

Brookfield & Mogil – Papaws damaged, vegetables and fruit trees stripped.

Archerfield – Hail one inch in diameter.

Ipswich – Worse hail for many years, especially East Ipswich, Booval, Silketone, Raceview, Blackstone, tanks pierced, roofs dented, tiles broken, windows smashed, car hoods riddled and gardens wrecked.

Queens Park – Glass house damaged, hail jagged and abnormal size for 15 minutes.

Dinmore – Large hail damaged roofs

Nambour – Large hail stones

Yandina – Severe hailstorms, very large hail

Gympie – Hail, damage to gardens and orchards.

1939

9/1/39 Severnlea, Broadwater, Amiens, Bapume, Nessines – Heavy hailstorm, considerable damage to orchards. Fruit trees uprooted, thousand cases of grapes stripped in one orchard. Grounded crops, especially tomatoes, badly damaged causing heavy loss due to high market price. Some of the orchardists have been hard hit three times in succession.

9/3/39 Blackall – Afternoon, storm with a heavy fall of hail for 15 minutes.

13/3/39 Central Highlands, Downs and South Coast – Hail accompanied some of the thunder rains on the weekend (11 + 12).

26/10/39 Yangan, Mt. Sturt, Swan Creek – Light hail, stones the size of marbles for half an hour.
Cambooya, Millmerran, Broburn – Light hail.
Stockyard creek (on Bialba Road) – Light hail.

8/11/39 Rockhampton – Heavy hail broke windows.
Berumbera (6 miles from Rockhampton) – Large hail stripped fruit trees, beat down crops, smashed windows. Potatoes harvested were bruised and unfit for sale. Hail went through shed wall, small shed blown over a fence.

9/11/39 Between Euramo and Murrigal (Tully District) – Large hail.
Murrigae – Wind uprooted trees two feet in diameter.
Laravale – Hail, but crops not severely damaged.
Towgong Range District (near Grafton) – Heaviest hailstorms for 25 years.
Esk – Light hail.

11/11/39 Wirribee Well (Blandensburg Station) & Colston Station – 2 hailstorms but hail was only small.

16/11/39 Darling Downs -Storms with hail last week – Warwick and Magalister most affected. State wheat board received claims for crops. Harvests were not seriously interrupted.

21/11/39 Emerald – late night, wind and light hail, slight damage to crops and vegetables.

22/11/39

Forest Hill, Lake Glarendon, Kentville, Glennope, Grove (near Laidley) – Worst storm ever. Ten to twenty thousand pounds worth of damage to crops. Thousands of pounds damage to houses and sheds.

Forest Hill – Nearly every window smashed, hail was one inch in diameter. Telephone wires out, trees stripped, low land flooded, crops damaged, shops flooded and stocks damaged. Car rear window smashed, roofs off sheds, sheds shifted on stumps.

Lake Claredon – Flying iron killed draft horse and cow. North of Forest Hill, wind collapsed a house, unroofed dwellings and wrecked hay sheds. Crops and gardens ruined.

Laidley – Lightning and light hail with heavy rain.

Lowood – Shortly after 5pm, terrific hailstorm with wind.

Mt. Tarampa – Hay sheds and dwellings unroofed. Hail the size of marbles, smashed windows and severely damaged crops.

Between Warwick and Mountains to the east, a terrific hailstorm on a 3 to 4 mile front. Junabee, Mount Sturt, Yangan and Emu Vale – Ripe wheat smashed, canary ruined. Sudan grass and young maize cut to ribbons. One farmer lost 60 acres of unharvested wheat.

Mt. Sturt – One farmer had 20 acres of canary seed ruined. Windows smashed, tanks pierced by large hail. Emu Vale – Tanks and roofs pierced. Many fowls killed.

Yangan – Almost every house windows and tanks pierced. One farmer had 200 pounds damage, hay shed unroofed. Over the whole area 50% of the crop had been harvested.

Theebine, Miva, Woollooga – Heavy hail and torrential rain. Wind blew down trees, severe lightning.

Hailstorm caused considerable damage to wheat crops in Allora, Berat, Yangan, Emu Vale, Warwick, Swan Creek & Killarney – in 1.5 hours, the state Wheat Board received 40 reports from wheat growers. Only the western areas around Hodgson, Roma, Wallumbilla have a completely harvesting. Remainder will not finish for a month or so.

26/11/39 (unconfirmed date) Gin Gin – Hailstones the size of cricket balls.

Kalonga Station – Sheep killed, stud pigs injured, cattle and horses hurt, out buildings damaged.

26/11/39 Roma – Afternoon storm with hail and wind. Roofs torn off houses, front of house blown in, fences down, hail ruined vegetable gardens but not much damage to vineyards.

28/11/39 Bald Hills and Petrie – Hail damaged crops. Heavy hail from Boondall to Wynnum.

3/12/39 Abercorn (18 miles from Eidsvold) – Afternoon, young crops ruined and houses damaged by 3 hailstorms. Hail 3 feet deep on the flats, ¾ hours of torrential rain, houses were unroofed. Maize, cotton and summer fodder crops beaten to the ground. Windows broken.

4/12/39 Proston – Hail.

5/12/39 Sunshine Coast – Late afternoon, storm with hail, heavy rain and wind. Uprooted trees in Woombye, Buderim and Mooloolaba. Mt. Beppo & Mt. Esk Pocket – 4:30pm, large hail. Strip a mile wide with houses unroofed, barns and sheds blown over and roofs blown off. Haystacks leveled, crops seriously damaged, trees blown down.

17/12/39 Blenheim – Late night, houses unroofed and another partly unroofed. Some hail.
Glencairn (Forest Hill district) – Houses and hay sheds unroofed, large hail broke windows.
Surat – Storms with hail in district.

25/12/39 Toowoomba – Jagged hail in violent storm, confined to the city.

26/12/39 Toowoomba – Heavy hail outside city.

Pittsworth – Night, severe hailstorm over a small area. Considerable damage to young crops, windows broken, orchards damaged, fruit trees and grape vines stripped. Tomato plants cut to pieces. Gardens damaged, one farmer lost 20 turkeys, tanks pierced, hoods of car damaged.

27/12/39 Lauriston (17 miles SE of Roma) – Night with large hailstones.
Richmond Downs Station – Shed unroofed, walls blown in, gardens cut to pieces by hail.

1940

4/1/40 Warwick, Pittsworth & Millmerran – Hailstorms during past week, 80% severe, hailstones penetrated two feet into haystacks, in some areas a number of stacks collapsed, particularly around Warwick. In many stacks, hay was wet and became heated. Many farmers had to dry and rebuild stacks.

19/1/40 Tweed Heads – Late night, wind and hail, wires severed, tents damaged.

31/8/40 Moggill – 9pm, hailstorm, farm 3 miles from Moggill had a block of ice 9 yards by several feet by one foot deep weighing over a ton six days after.

Roadvale – Near Boonah, 7:30-8pm, severe hail. Papaw crops badly damaged, a 4 foot wall of ice had to be cut away from the doors of business houses.

Beaudesert – 5-5:30pm, heaviest fall of hail ever. Gutters choked, gardens stripped.

Fassifern – Severe storm damage. Cattle and horses bruised, fowls and pigs killed by hail. Roadvale and Milbong where ice covered dam and paddocks. Children skated on ice choked gullies.

Kalgun – Hailstones as large as eggs. Area effected by storm was restricted.

17/9/40 (unconfirmed date) Roma – Hailstorm.

25/10/40 Caboolture – Night, light hail.

12/11/40 Stanthorpe – Night, some hail.

Blenheim – Midday, hail.

13/11/40 Brisbane – Heavy rain, wind and some hail in suburbs. Damage by water in shopping centres in the Valley and the City. Wind damage in Camp Hill.

Blenheim – Night, fairly large hail. Heavy rain and wind. Sheds unroofed, hay wagon blown out of shed. Cattle washed down creek. Fencing washed away. Hail stripped broom-millet crop and ruined seed onions.

Pittsworth – Some heavy hail and wind, but no damage reported.

Laidley Greek West – Hail smashed windows, damaged grapevines, knocked fruit off trees.

Forest Hill – Light hail, wind, heavy rain.

14/11/40 Boonah – Afternoon. Rain, wind and hailstorm. $\frac{3}{4}$ of an hour. Hail 2 feet deep in street, and 6 feet deep in other parts of district. Damage several thousand pounds. Houses, hotel and sheds unroofed, windows broken, shops flooded, hail buried poultry. Trees down, wires down, gardens wrecked, flying iron and timber smashed tank. One farmer lost all his crops and 11 cattle (several frozen to death). Store and draper had 1000 pounds damage, another 400 pounds damage. Hail had to be shoveled off roofs. Hundreds of pounds damage to pumpkin and maize crops. Cattle stood freezing which covered their legs. Pigs and poultry suffered severely. Orchard trees and grapevines stripped. Hoods blown off cars.

Buggandan (one mile from Boonah) – 2000 pounds damage to sawmill machinery.

Mt. French – Hail killed cattle and pigs.

Kalbar – One farmer lost 25 pounds of poultry. Houses damaged, whole roof and rafters off house. Next day hills appeared snow covered.

Tevictville – 200 pounds damage to store.

Clayfield, Cliftonvale, Willowvale Naryvale – Violent storm with wind and heavy hail.

Clifton – Hail.

Goodna, Darra, Moggil, Kenmore – Night, heavy rain, wind and hail. Homes unroofed, trees razed.

Darra – Man trapped under collapsed house.

Moggil – Pineapples washed out and homes flooded.

15/11/40 Chairman of Wheat Board – The hail damage to wheat this year is lighter than for some years passed.

23/11/40 Tewantin – 5pm, hail a foot deep on Cooroy-Tewantin road.

25/11/40 Buderim – Hail caused serious damage to growing crops and flowers. Roofs, hoods and tanks pierced. Windows smashed. Hailstones 4 X 3 inches and jagged and $\frac{1}{2}$ a pound in weight.

Maroochydore – Bananas and citrus damage.

Eudlo – Small crops beaten down.

1/12/40 Mitchell – Afternoon, severe hailstorms.

4/12/40 Toowoomba – Afternoon hailstorms flooded streets and damaged gardens.

Mary Valley – Heavy hail, flattened crops and wind unroofed buildings.

Haly Creek (near Kingaroy) – Hail piled in dam. Cow bogged and frozen to death, several cows injured by large hailstones, hail still present two days later.

Kingaroy – Wind, rain and hail. Flooding damaged shops, dwelling and shops unroofed. Tanks and wireless masts blown down. Trees uprooted.

Killkarney – Severe hail, $\frac{1}{2}$ hour smashed gardens.

One Mile – hail.

Mooloo – Heavy hail, flattened crops, damaged fruit trees, cultivation's washed out.

Toowoomba – Light hail.

1941

26/2/41 Millmerran – Early afternoon, large hailstones smashed windows.

26/4/41 Manly and Wynnum – Hundreds of pounds damage to tomatoes and small crops, worst damage at Manly. Trees stripped, one farmer on Wendall road lost 600 cases of tomatoes, roofs were punctured. Papaw trees badly cut, crop loss of 40%. Another farmer lost 50% of his tomato crop.

Wynnum – Windows broken, next day one block of ice weighed 28.5 pounds, another 9 feet long and 3 inches thick.

1/9/41 Proston – Hailstorm.

27/11/41 Yangan – Heavy hailstorm through a narrow strip. Tanks pierced, windows broken, flower and vegetable gardens flattened. Some flooding.

Mt. Sturt – Heavy hail, hail fell for 30 minutes, heavy rain for another 30 minutes. Hail piled 9 inches to a foot deep against fences etc. Grape vines, fruit trees, tomatoes and flowers cut to pieces. Hail the size of pigeon eggs and some the size of ping pong balls.

Dalby – Small hail.

Stanthorpe – Hail.

1942

4/4/42 Southport – Severe hailstorm at night for 15 minutes. Substantial damage to houses by wind and flying iron. Sheds unroofed, trees uprooted.

21/10/42 Childers – Heaviest fall of hail for many years. Some as large as hen eggs. Absence of wind saved buildings from severe damage.

26/10/42 Nambour – Early part of the month had some particularly severe thunder and hailstorms.

23/11/42 Bundaberg – Two storms accompanied by high winds and in some places hail.

1943

21/1/43 Muttaborra – Wind, torrential rain and large hail. Church and house wrecked, other houses unroofed and damaged, furniture smashed. Hardly a building escaped damage. Damage over 1000 pounds.

Longreach – Torrential rain and hail, minor damage to several buildings.

27/1/43 Stanthorpe & Wallangarra – Sleet and ice last week.

27/3/43 Warwick – Occurred at night. Most severe hailstorm for many years. Considerable damage to vegetable and flower gardens.

April 1943

14/4/43 Roma – Severe wind and hailstorms. 2000 pounds damage, several buildings unroofed, trees and fences blown down. Plate glass windows smashed.

3/10/43 Hattonvale – Heaviest hailstorm ever. Some dams frozen over, in places hail was 3 feet deep.

17/11/43 Goondiwindi – 7pm. Hail and wind, considerable damage to houses, some unroofed, one demolished. Poles down, garage wrecked, trees uprooted.

Boggabilla – Also suffered severely, roofs damaged, tanks riddled, windows broken, hail banked three feet against buildings.

21/11/43 Brisbane – Heavy hail. Train was derailed at Moorooka. Damage to vegetable crops at Rocklea and hail blocked watercourses.

22/11/43 Toowoomba – Many reports of recent hail damage, but most were small areas and total loss does not appear to be great.

25/11/43 Brisbane – Damage last night to military camps near Brisbane by high winds and hail. Some hail damage to suburban gardens.

Lismore – Afternoon. Worst hailstorm for many years, damage thousands of pounds. Hardly a building escaped. Thousands of windows shattered, five people injured. Water damaged shops and homes. Heavy tomato and bean crops damaged. Vegetable and flower crops flattened. Large jagged hailstones fell for ½ an hour. Hail mostly in town area, but maize crops flattened at Mokies Hill five miles from Lismore.

26/11/43 Lithgow & Marrangaroo (NSW) – Lightning hit 3 cows. Hail knocked out fowls and did much damage to fruit trees and vegetables.

2/12/43 Emerald Creek (Near Mareeba) – Hailstorm and winds. Lasted a few minutes, damage 27,500 pounds to the tobacco crop. 90 tons flattened. Wind tore leaves to shreds, stacks flattened, one farmer with crop ready for harvesting lost 2000 pounds in 5 minutes.

13/12/43 Holts Hill – 6pm, heavy hailstorm, considerably bigger than hen eggs. One stone was 8 inches in circumference, others over 2 inches across.

26/12/43 Dirrandandi – Afternoon, severe hailstorm, narrow strip only. Cut holes in tank and wind wrecked sheds.

27/12/43 Roma – Afternoon, hailstorm and wind. Trees and shrubs stripped. Stone fruit piled inches high under trees. Flowers flattened, hail lasted 20 minutes.

Romaville – 5000 pounds damage to grape crop, over ¾ destroyed. Wind unroofed sheds.

28/12/43 Townsville – Early night, hail, first in many years.

1944

4/4/44 Tweed Heads and Coolangatta – Afternoon hailstorms for 15 minutes. Hail was large and jagged, gardens damaged, storm water flooded shops.

15/5/44 Downs & South Coast – Storms at night, hail in some suburbs.

24/11/44 Cunnamulla – Hail the size of hen eggs, damaged fruit trees and gardens.

26/11/44 Nudgee – Night, flats covered with carpet of hail, hail wiped out suburban gardens.

1945

28/1/45 Brisbane & Lake Manchester – Afternoon, hail.
Crows Nest – hailstorm.

14/2/45 Brisbane – Small hail in City and some suburbs, but some wind and lightning damage.

17/9/45 Tara – hailstorm.

22/9/45 Bald Hills – Before 2.50pm, heavy hailstorm, hail inches deep, crops damaged.
Redcliffe – Before 3pm, hailstones 3 inches.

25/9/45 Ipswich – Afternoon. Hail inches deep on roofs and roads, no property damage reported, but crops damaged.
Storm lasted 25 minutes.

Amberly – Heavy hail.

Archerfield – 20 minutes, hail piled against fences.

Annerly, Holland Park, Moorooka – Moderate hail.

4/10/45 Chairman of State Wheat Board – Damage by hailstorms since September 17th over wheat areas was estimated to be from 10 to 50% and in isolated cases total destruction.

9/10/45 Ashgrove, Enoggera, Everton Park, Grange – Thunderstorm at night with hail.

10/10/45 Coolangatta – Night, hailstorm, slight damage.

15/10/45 Toowoomba – 7pm, heavy hail in parts of the city.

16/10/45 Nundah – Hail, some damage.

18/10/45 Chairman of state wheat board – As a result of this week's three hailstorms, an estimated loss of over 100,000 bushels has been suffered. On 15th a storm hit the Cecil Plains area. On the 16th Warwick and Freestone. Prior to that there were 4 hailstorms and the aggregate loss up to the 15th was about 100,000 bushels. From the claims being received it appears that the 16th and 17th storms caused a similar loss. 17th storm with hail was particularly severe at Nobby, Clifton and Pittsworth.

19/10/45 Lyndhurst (Carpentaria District) – Hailstorm at night, next morning hail still 6 inches deep. Trees stripped, hundreds of birds dead.

6/11/45 Esk – Night, hailstorm.

12/11/45 Sunnybank (Brisbane) – Worst hailstorm ever, hail as large as tennis balls. Hundreds of windows broken. Hail damaged homes and crops. 50,000 pounds damage. One paw plantation over a 1000 pounds damage (2000 cases)

Mt. Gravatt – Heavy damage, garage blown over. Nursery bus house collapsed under hail ruining hundreds of pot-plants. Hail 6 inches deep.

Sunnybank – One farmer (lost?) 1000 chickens. Trees uprooted, peas, beans, cucumber, tomatoes, pumpkins, paw paws, figs, mellons, flowers, pineapples damaged, 6 farmers lost 5000 pounds total. Damage to homes also. 5000 heads of lettuce lost by one farmer. 95% of paw paw crop lost. 90% of fig crop (Sunnybank practically the only supply). Almost complete destruction of paw paw trees. One farmer lost 3000 pounds in paw paws, figs, tomatoes, beans and 8 acres of pumpkin. Storm extended over a one mile front.

13/11/45 Yarwun (near Gladstone) – Evening, tornado lasted an hour, houses etc unroofed. Hail pierced iron roofs, tanks and damaged crops. Minor damage, roads blocked by fallen timber, trees stripped of leaves and small branches by hail.

4/12/45 Gatton – Afternoon or night. Heavy storm with hail.
Goondiwindi – Hail.

1946

8/3/46

Dalveen – hail.

9/3/46 Musket Flat (near Howard) & through Wallum Land between Isis Junction and Bootharli and on to Goodwood – Fierce storm at night cut a track a mile wide (commencing, traveling and concluding through all the places mentioned respectively). Wind and hail damaged buildings on Fairymead Sugar Co's, Goodwood plantation and nearby farms.

12/3/46 Amamoor, Upper Kandanga, Imbil – Thunderstorms with severe hail, rain and wind. Considerable damage to crops. Wind unroofed house and farm buildings.

5/10/46 (unconfirmed date) Goondiwindi – Hail the size of pigeons eggs caused 1200 pounds damage in a market garden. ½ a mile strip, ruined entire crop including hundreds of pounds worth of peas.

6/10/46 Toowoomba – Afternoon, very heavy hailstorm 1.5 miles west of town. Area 5 to 6 miles by 2 miles. Extended to Goombungee, hail six inches deep on Toowoomba-Oakey road. Practically no crops in the area.

14/11/46 Barcaldine – Afternoon, wind and hailstorms caused 4000 pounds damage. Houses and hotels unroofed, sheds blown away, large trees uprooted, fences blown down.

Maybield (6 miles away) – Homestead and buildings wrecked.

15/11/46 Caboolture – Heavy hail, damaged gardens and crops.

Birkdale, Wellington Point, Cleveland, Redland Bay, Eight mile plains – Hail and wind, 25000 pounds damage.

Wellington Point – Hail the size of cricket balls, many crops complete loss.

Redland Bay and Birkdale – Hail the size of hen eggs for half an hour. Glass broken, telephone wires down, car hoods etc damaged. One farmer had cucumbers, peas, water melons damaged and lost 100 pounds. Tomatoes, lettuce, strawberries, cabbage, beans also affected.

Redland Bay – Hail ruined fruit and vegetable crops, killed poultry, perforated tanks, roofs and windows – 20,000 pounds damage.

Storm swept a 2 mile strip from Thornlands to Belmont. One Ormiston farmer had 1000 pounds damage. Hail lasted for 15 minutes. Tomatoes, beetroot, passion fruit, cabbage, bananas, watermelons ruined. Hail 3 to 4 ounces in weight and the size of apples. One poultry farmer had 50 young poultry killed.

15/11/1946 Barcaldine. Between 3000 and 4000 pounds of damage is estimated to have been done by a local tornado which struck here yesterday afternoon. A local tornado at midnight yesterday almost wrecked the small township of Mallon about 35 miles from Cloncurry.

19/11/46 Caboolture – Hail the size of crick to golf balls smashed windows, pierced fibro roofs, tanks, hoods of cars, windscreens smashed. Occurred around 2-2:30pm

Morayfield – Hundreds of pounds damage to one farm, crops and produce flattened.

Tenterfield District (Bolovia Rd) – Hail covered one foot deep after a gigantic hailstorm. Fruit trees damaged as well as vegetable crops and windows.

16/11/46 (unconfirmed date) Ginbie and Springsure – Severe hailstorm and wind. Houses and sheds unroofed, tanks blown down. Hail piled feet deep in parts, trees uprooted, fences blown down.

19/11/46 Toombum & Caboolture – Afternoon. Crops severely damaged, stock had strips of hide torn off, buildings damaged, telephone wires cut. Heaviest hailstorm in living memory, lasted 20 minutes. Hail was large and jagged, size of tennis balls, roofs pierced by 8 inch holes, tanks also. Gardens, lawns, fruit trees (especially bananas and pawpaws stripped). Narrow strip 4 miles south of Caboolture.

Beechmere Road – Heavy damage to crops and dwellings.

21/11/46 Daymar (near Talwood) - Some time previously a violent storm unroofed buildings. Flood also occurred, and hail of extra-ordinary size killed many lambs and sheep in poor condition.

3/12/46 Brisbane – 4:35pm. Storm with wind, rain and hail. 40 people injured by glass. Shops and homes damaged by hail and flooding. Tens of thousands of pounds damage. One valley firm had 7,000 pounds damage. Hail larger than golf balls. Valley and New Farm worst hit. Hail broke City Hall clock face in 7 places. Woody Point was also affected.

Fruit and vegetable areas south and southwest of city not affected.

Nudgee – Damage to vineyards.

13/12/1946- Ilfracombe. Three rail vans loaded with sheep were derailed and overturned down an embankment near here by the force of a cyclonic wind that accompanied a heavy rainstorm last night.

15/12/1946. Gust (Anemometer reading) of 89mph (77 knots) recorded at Archerfield in Thunderstorm at 5.00pm.

1947

9/1/47 Redcliffe – Morning, hailstorm – heaviest for years.

11/1/47 Bajool (22 miles south of Rockhampton) – Afternoon, hail and wind, 10 houses unroofed, 2 empty thousand gallon tanks blown 700 yards. Gardens ruined, trees uprooted.

21/4/47 Bybera, Inglewood, Killarney, Dalveen, Wallangarra – Hail.

9/10/47 Brisbane – 4pm, hail, damage to houses in suburbs (wind and rain).

23/11/47 Nambour – Storm with wind and hail.

Charleville – 3 to 5pm. 17 minute hailstorm (& gale) practically every building damaged. Thousands of windows smashed, tanks riddled, hail 5 inches in circumference. 24 people injured, one man knocked unconscious, 150,000 pounds damage. Hail 5 inches deep, piled 5 feet against fences. Trees stripped of leaves and bark. Dogs and poultry killed, one farmer lost 400 birds. Crops lost, orange trees badly damaged.

26/11/47 Brisbane – Shortly before 2pm, hail in suburbs and city the size of pigeon eggs. Mainly southwest suburbs, particularly Chelmer, hail lasted 10 minutes in most suburbs.

Bingera Planation (near Bundaberg) – Afternoon, hail smashed windows, perforated roofs, hail was as large as hens eggs.

1/12/47 Brisbane – Shortly after 9pm.

Woollangabba – Hail, pigeon egg size for 10 minutes.

Allora – 6 miles from Allora hail the size of hen eggs.

6/12/47 Brisbane – Eastern suburbs (Holland Park to Gribb Island) at 4:30pm. Thunderstorm with wind and hail, worst hit Eagle Farm and Doomben. Wind damaged houses, trees, brick chimney, house roofs and verandah.

7/12/47 Beaudesert & Veresvale – Occurred at 3-4pm, hail as large as tea cups.

Ipswich – 5pm. Hail as large as cricket balls, but no damage from the hail. Not so large in North Ipswich. Heaviest at Blackstone and Eastern Heights.

Laidly & Gatton – Hail.

1948

20/1/48

Hailstorms since before Christmas have seriously cut the crop of apples, tomatoes, and most stone fruits yet to come from the Granite Belt. Three major storms swept the area, worst being Bapaume and Cottonvale. One of the Granny Smiths said losses were 25%. Peaches were marked by hail. Grape country appears to have missed major damage.

20/8/48 Clayfield – Heavy hail, several other suburbs had hail.

14/9/48 Miles - Severe hailstorm 46 miles west of Miles, caused plane to turn back to Roma. Hit Miles at 1.25pm, with gales and shire office was flooded.

Drillham (14 miles west) – Wheat crops damaged heavily, windows smashed, water tanks holed and poultry killed.

16/9/48 Brisbane – Fierce hailstorm at 6:20pm for 10 minutes. Ruined crops and gardens for a 20 mile strip south of the city. Fruit and vegetable crops between Beenleigh and Brisbane were flattened by hail. Hail was piled 6 inches deep in some places. Coorparoo, Fairfield, Dutton Park, Yeronga, Chelmer affected.

Lindum – Windows broken.

Sunnybank – Beans, peas, tomatoes and papaws ruined.

20/11/48 Warwick – Fruit and vegetable crops damaged in a late afternoon hailstorm. Roof was blown off shed and cottage. Suburb Mill Hill worst hit. Hail was golf and tennis ball size. Windows were smashed. 50% of one orchardist's apricot crop (ready for market) destroyed. Hail killed 65 fowls. East Warwick – Hail piled inches deep for hours. Wheat belt did not suffer.

11/12/48 (or the 12/12/48) Julia Creek – Hailstorm.

14/12/48 Toowoomba District (late afternoon) – Thunder and hailstorms. Homes and sheds damaged, machinery destroyed. Joomburra near Allora, buildings unroofed, crops destroyed, parts of church blown away, fowls and ducks killed by hail.

Cabarlah – Heavy hail and wind. Trees uprooted and stripped, roof of a house collapsed.

1949

22/5/49 Eagle Farm – Afternoon, hail, not extensive, no damage.

24/7/49 Toowoomba – Afternoon, heavy hail. Another hailstorm at 8pm. Parts of city looked like a snow field.

At 3pm on a Sunday

Hughenden- Tornado – twenty people injured- most building damaged and some completely destroyed.

28/10/49 Sherwood to Morooka – 3miles, at night. 10 minute hailstorm.

Swan River District (8 miles east of Warwick) – Valuable ripening wheat seriously damaged by hail, one farmer with 104 acres of crop damaged 3 to 4 bags to the acre. Fruit trees were stripped bare.

Swan Creek – Field of mature barley wrecked by hailstones the size of hen eggs.

Rosenthal (few miles south of Warwick) – Bean crop ruined and orchardist lost 10% of apricot crop.

Brisbane Suburbs (7pm and 10pm) – Lightning, wind, rain and hail. Hail particularly heavy in Woolloowin, Albion and Nundah. Small buildings blown down, homes damaged, gardens battered. No major damage.

Kingsthorpe & Biddeston – 6pm. 9 miles from Oakey severe storm. Hail killed young lambs, all wheat crops badly damaged, some flattened.

Neville Road District (between Aspley and Bald Hill) – Three hailstorms in one night. Many crops wiped out. Market fruit and vegetables worth over 10,000 pounds destroyed in one mile radius area. Other farms in Bald Hill and Strathpine area also suffered loss from hail. Hundreds of acres of lettuce, tomatoes, cucumber, beetroots, cabbage, pumpkin, rhubarb and carrots will be ploughed in. One farmer lost 19 acres, lost 1,500 bags of pumpkins. Another lost 2,000 pounds (Neville Road farmer). Hail covered 4 inches deep, worst storm in four years,

Hailstorms have caused many thousands of pounds damage to Darling Downs wheat crops. The board has received more than 300 claims for compensation, the greatest number ever received at one time. Areas very wide spread, Chinchilla, Toohoolawah, Kingaroy and Warwick.

10/11/49 Clifton – Some growers would not be harvesting their wheat at all. A few had lost their complete crops in recent weeks from hailstorms.

13/11/49 Marburg and Rosewood – 4-4:30pm, severe hailstorms damaged many hundreds of pounds. Crops ruined, poultry killed, windows shattered, tanks pierced, fibro walls broken. Hail as large as cricket balls. Storm extended from Goominya to Lanefield with Tallegalla and Marburg receiving full force. Hail from Lanefield to beyond Lowood. At Marburg the steel hood of a truck was dented, hail bounded 3 feet off the road. Telephone wires down, boys played cricket with hail at about 5pm. Maize in tassel stage heavily damaged tomatoes reduced to a pulp, grapes ripped from vines and vegetables ruined. Hail piled one foot deep against fences in drains etc. 20 glass windows from a Church smashed, and hundreds of panes of glass were also smashed at private homes. 40% of towns windows were destroyed.

Roseborough (5 miles from Lowood) – 700 out of 800 two month old chickens, 4 turkey hens and 50 small turkeys killed. 600 pounds of pumpkin crop chopped to pieces by hail the size of tennis balls. Dairy stock cut and bruised, 2 calves had to be destroyed. 25 acres of Lucerne ruined, also maize, tomatoes and melons. Turkeys not killed but had their wings broken and flesh torn out. Many bush birds killed.

Lower Cressbrook (near Toogoolawah) – Cattle blinded, pigs and fowls killed, roofs and tanks punctured by hail, accompanied by tornado and torrential rain. Crops cut to pieces, wind damaged farm buildings, damage 1000 pounds to one farm and 400 pounds to another.

15/11/49 Mareeba – 3pm, giant hailstones and tornado riddled tobacco crops and smashed windows. Trees and power poles blown down, damage 5,000 pounds. 70 acres of tobacco plants destroyed, damage mostly on Mareeba

area, south side of Barron River. Damage also done to irrigation systems. 3 farms on one of the road wiped out, no damage on other side of road.

18/11/49 Mitchell – Night, hailstorm.

21/11/49 Melbourne – Wind, rain and hailstorms. Crops in Mallee and Wimmera affected.

23/11/49 Tasmania – 859,118 bushels of apples and pears lost by hail and storms in last season's crop.

24/11/49 Yandina – Violent storm with wind, hail and torrential rain. Blew branch off tree with sank a motorboat. Partly unroofed houses, uprooted trees. Storm covered only a small area and whirled like a funnel (as seen from Blackall Range).

26/11/49 Wheat Belt – Light hail in parts of the wheat belt, no damage recorded.
Coorparoo – Light hail, damage to backyards.

27/11/49 Oakey – 2pm, heavy storm, small hail fell but no damage reported.
Ervis Bay – Nearby hail smashed windows and cut potato crops to pieces.

28/11/49 Clifton – Night, 25,000 pounds damage to wheat and other crops. One farmer lost his whole remaining crop of 40 acres in severe hail. Storm badly damaged wheat and maize crops, stripped fruit trees, flattened vegetable gardens, broke house windows. Several cases of total losses reported from Nevilton, Kihinstone and Talgai areas.

29/11/49 Dalby – Wind and hailstorm, blew down half finished house.
December 1949

7/12/49 Clifton – Tornado preceded by heavy rain and hail affected most of the western portion of the district causes further losses to unharvested wheat. House destroyed, another badly damaged, many outbuildings destroyed, windmills and fences demolished. 90 out of 100 bitumen drums blown away and not found.

1950

2/1/50 Thallon – Afternoon, windstorm with rain and heavy fall of hail that caused much damage. Repairs could cost 1,000 pounds. Damaged roofs and walls in nearly every house. 2,000gallon tank swept 200 yards.

St George – Also suffered damage.

22 to 23/6/50 Redland Bay & Wynnum – Vegetable growers suffered heavy losses. Severe hailstorm at 5:15am, broke windows, leveled crops and chopped crops to pieces. One grower lost 2,000 pounds. Production set back about 3 years. Caused 100,000 pounds damage in the district. Washed away topsoil and crops, sub-soil remaining will be too heavy to be cultivated.

28/8/50 Brisbane – small hail at 1pm.

4/10/50 Malanda – 6-7pm, severe storm with heavy hail.

8/10/50 Barcaldine – 3:15pm, fierce 5minute hailstorm. Wind damage, 800 pounds damage to buildings. Hail and wind stripped citrus and mangoes and damaged garden crops.

17/11/50 Carmila – Severe hailstorms at night. Windows were broken, aluminum roofs dented, telephones disrupted.

20/11/50 Broughton Area (Charters Towers) – Heavy hailstorm ruined 25-30% of the grape crop. Nearly all windmills blown down and most sheds unroofed. Trees snapped off and carried 20 to 30 yards. Lasted 10 minutes, hundreds of pounds damage to one property.

1951

2/2/51 (unconfirmed date) Between Brisbane & Toowoomba – Severe electrical hailstorms brought the Toowoomba to Brisbane road traffic to a standstill at night. Caused hundreds of pounds of property damage. Storms broke at Gatton at 6:59pm, Boonah 7:40pm, Esk 7:0pm. Lasted fifteen to twenty minutes. Hail inches deep on road, dented bodywork of car and smashed rear window.

23/2/51 Indooroopilly-Taringa Area – 3-4pm. Heavy thunderstorm with some hail. Wind damage about ten minutes before the storm, garden crops flattened and small trees uprooted.

10/3/51 Charleville – 1:30pm, tornado with winds of 70mph. Hundreds of pounds damage in ten minutes. Driving rain and hail fell for forty five minutes. Unroofed buildings and houses, blew down trees, cut wires. Railway goods sheds and hotel unroofed. Partly unroofed thirty houses, sheets of iron carried 250 yards.

3/4/51 Cooran-Traveston – Night, 15 minutes. Strip 20 miles by 10 miles. Hundreds of pounds damage. Wind ripped 20 feet high trees. Lightning and winds wrecked telephone, hail pierced roofs and tanks. Town covered by foot deep sheet of hail. Ten thousand acre hardwood forestry reserve at Woondum Tablelands between Traveston and Cooran badly hit. Huge trees cut rail communication with Brisbane.

11/4/51 Roma (nearby) – Aircraft at 9,500 feet flew through hailstorm and then snow, then electrical storm prior to reaching Brisbane.

8/11/51 Granite Belt – Night, disastrous hailstorms, cut a path from Ballandeen and The Summit to Cottonvale. Some growers lost 80% of crops. Plum trees stripped.

Stanthorpe – 7pm, hail. Growers and Poziers and Cottonvale lost 60% of crops. Hailstones as big as pigeon eggs. Some growers may lose 2000 cases of fruit worth 2000 pounds.

10/12/51 Beaudesert & Murwillumbah – Wild hail and rainstorms. Buildings unroofed, crops threatened. At Beaudesert 1:10am the roar of the hailstorm could be heard nine miles away. Near Murwillumbah hail cut a swathe through Dungay, Condong and Tottsville.

20/12/51 Applethorpe, The Summit, Pozierers, Amiens - Heavy hail and wind for 45 minutes. Damage was 1,000 pounds per minute. A third of the apple crop on the ground. 50% of those left cut and bruised. Storm flattened farm buildings and small crops and unroofed houses, cut telephone wires and uprooted gumtrees.

1952

18/1/52 Warwick - Killarney Area - Afternoon and night; hail damaged gardens.

14/3/52 Yandina - Rain, hail and wind. Unroofed ten houses, sliced half a mile swathe through cane-fields. Trees smashed down and acres of cane damage. House wrecked, shed and barns blown over.

August 1952 - Hail damage in the Granite Belt last season was said to be more than 500,000 pounds.

4/9/52 Nambour - 8:30am, small cloud gave light hail and heavy rain for seven minutes.

2/10/52 In November last year and again in early December, two hailstorms swept the apple producing area between Applethorpe and Dalveen and did tens of thousands of pounds damage.

3/10/52 North of Brisbane (69miles) - Late afternoon. Violent rain, wind and hail flattened hundreds of acres of cane. Two Maroochy River growers saw their whole cane crop flattened. Cut phones to Bli Bli.

17/10/52 Brisbane and Suburbs - Afternoon, heavy storm with some hail.
Nambour - Hail damaged house gardens and small crops.

2/11/52 Willowvale to Maryvale (Few miles NE of Warwick) - 3:30pm, strip of country battered by hail and windstorm. Hundreds of acres of ripe or nearly ripe wheat flattened and stripped by heavy hail lasting fifteen to twenty minutes. Feared lost would run to thousands of pounds.

9/11/52 Humberstone Station (12 miles from Capella) - 2:30pm wind and hailstorm. Hailstones half as big as cricket balls pierced roof and shearing shed. Parts of district wheat crop likely to be affected.

15/11/52 Ballandean and Lyra - Late, up to 50% of stone fruit crop and 10% of grape crops destroyed by severe hailstorm. Area 5 miles wide from Ballandean to Severnles. At Ballandean half a grower's peach crop damaged, hail punctured fourteen holes in fibro-cement shed roof. Hail biggest ever seen.
Killarney - Light hail fell, but not heavy enough to damage wheat.

20/11/52 Milmerran - 5pm to 7:30pm, five electrical storms with wind, rain and hail caused more than 3,000 pounds damage. Woolshed and cowshed demolished, house unroofed, telephone lines down.

29/11/52 The Springs & Armac - Worst blow for 30 years. Storm with hailstones the size of tennis balls, six inches deep on ground. Wind damaged the buildings (300 pounds) storm half a mile wide, leveled trees.

21/12/52 Gladstone - Damage by severe thunderstorm and hailstorm late night.

22/12/52 Southern Queensland - Fierce electrical storms, driving wind, torrents of rain and hail hit centres all over southern QLD. Tents blown down at holiday resorts. Telephone services from Brisbane to Coolangatta interrupted. Storm 11:30am.

Biggenden - 3:30pm, hailstorm. Child of ten injured and houses and buildings damaged. Roofs and windows of nearly every house was damaged. No wind and very little rain but hail fell in a sheet. Thirty windows smashed at hospital.
Yandina - Hailstorm damaged crops and stripped trees.

24/12/52 Yelarbon - 7pm, dust, wind, hail and rainstorm.

26/12/52 Blackall - Savage storm 6:30pm to 6:45pm. Wind, rain and hail. Destroyed Newspaper Office. Four buildings wrecked, forty homes unroofed, furniture damaged, new 3,000 pound home wrecked.

Toowoomba - 6pm, thunderstorm. Hail damaged windows and wind blew down several trees.

1953

17/1/53 North Rosewood and Perrys Knob - About 5pm, houses damaged, entire mountain area of Kerrys Knob blanketed by hailstones.

Tallegalla (2 miles from Rosewood) - 5pm, rain wind and hail. State school house almost unroofed, furniture saturated. Methodist Church almost unroofed. Several farm sheds unroofed and wrecked.

Cochranes Dam (2 miles away) - Hail so thick children able to walk across ice on dam. Ice still there the next morning. Storm swept a narrow swathe from Rosewood, 19 miles north to Lowood, unroofed homes, tearing down powerlines and uprooting big trees. Four houses unroofed at Rosewood, one at Lowood and several buildings damaged at Marburg,

20/9/53 Severe thunderstorms on the Sunshine Coast centres over a 50 square mile area. Scattered hail caused minor damage to small crops and fruit farms. Heaviest storm was at Buderim at 3pm. Maleny, Landsborough, Maroochydore, Nambour and Caloundra affected. Large trees down at Landsborough

15/10/53 Jinbour, Macalister, Proston, Dulagga – Violent hailstorms late afternoon.

Jimbour – 2:50pm, one mile of high tension lines blown down. Between Jimbour and Kuyura, six telegraph posts were smashed down. Six mile wide strip of wheat and other crops flattened. Roofs off houses, rain damaged contents. Several thousand acres of wheat ruined.

Macalister – Telephone line and two posts down.

Proston – Drapery store flooded. Hail destroyed wheat, barley, potato and onion crops. One farmer had 300 pounds damage, heaviest hail for 30 years. Three miles from Proston hail bruised and cut cattle and ruined fruit and vegetables.

Dulacca – 3:15pm, roofs punctured.

Bell District – Damage to wheat and buildings amounted to 50,000 pounds. Scores of windows broken, hail the size of golf balls battered wheat to dust. One farmer five miles from Bell had 1,000 pounds damage to crop. House was blown off stumps, another had a wall blown out and partly unroofed.

4/11/53 Brisbane – 5:15pm, severe hailstorm for 45 minutes. Hailstones 2 inches in diameter, car windscreens pierced, 40 sheets of iron torn from a Milton Church. Lightning struck a building in Ann St., shed at Wavell Heights and a home at Stafford. Hailstones 2 inches in diameter and 1.5 ounces in weight. Severe damage to vegetables.

Park Ridge (19 miles SW of Brisbane) – Large hailstones destroyed papaw, citrus and pineapple. One farmer had 1000 pounds damage. Hail tore oranges to pieces, killed 200 fowls, ruined 30,000 pineapple plants, stripped fruit off 400 citrus. Hail the size of golf balls and six inches deep on ground.

Eight Mile Plains – Four hailstorms this year.

24/11/53 Wallumbilla – Every house partly unroofed. Hail the size of golf balls killed many poultry and wild birds. Boy knocked unconscious.

25/11/53 Warwick District – Hailstorm and deluge.

Wujarra – Fowlshed unroofed and cockerels drowned. Wheat crops slightly damaged.

Upper Freestone, Maryvale, Campbell's Plains, Swan Creek – 35 claims lodged with State Wheat Board as a result of a severe hailstorm.

16/12/53 Ocean View – Severe hailstorm. Telephone exchange unroofed. Trees uprooted, vegetable crops damaged. 300 gallon tank lifted. Storm cut a severe mile strip.

Mt. Mee – Main roads office unroofed. Dairy shed unroofed, garage and front of house wrecked.

Mt. Pleasant – Buildings unroofed by wind.

Maleny – House unroofed.

25/12/53 Southport to Murwillumbah – Severe hailstorm, 20,000 pounds damage.

Coolangatta – 12 people injured by hail, one man unconscious for half an hour. Lines down.

North Kirra – Lifesaver's club house holed in fifteen places, surf skis riddled, windscreens of cars shattered, bodies dented, hoods torn to shreds.

Brisbane – Light hail from Annerly to Mt. Gravatt.

1954

27/12/1954 Courier, Warwick (CE) ✓ A tornado caused thousands of pounds damage in a narrow strip 10 miles long in the Karara district at 4pm on Saturday.

1955

07/01/1955 Courier, Augathella (CE) ✓ A giant whirlwind yesterday struck the township, almost completely unroofed 9 buildings in five minutes.

11/01/1955 Telegraph, Brisbane (PO+/PR-) ✓ Wind gusts of up to 60mph were recorded in a storm which swept here this afternoon. The wind swept dust along before rain fell. A willy willy slammed one of the glass doors of a store in Queen Street, smashed the glass and tossed the docket books and goods as it tore through the building.

20/12/1955 Courier, Ilfracombe (CE) Probable (?) A violent thunderstorm caused about 1,200 pounds damage in 30 furious seconds at 2:30pm yesterday. The 70mph winds a rainstorm cut a path 200 yards wide through the township.

1956

02-01-1956 Four people injured by lightning in surf along Gold Coast.

04-01-1956 Holiday camp wrecked at Coolumb by wind in storm - two people injured.

09-02-1956..Whirlwinds at Hervey Bay and Bundaberg did much structural damage and injured three people.

25-02-1956 ...Every building in Comet was damaged by winds in a thunderstorm.

28-02-1956 ...Thunderstorm at Jundah caused wind damage and dust storm.

16-04-1956...Hail and wind damage at Mt Tamborine.

17-04-1956 ..Hail and wind damaged crops and buildings in Brisbane, Laidley, Gatton and Grantham - Many people in Brisbane injured by flying glass and large hailstones associated with gusts to 56 knots.

07-10-1956...Winds unroofed a church and brought down power lines in a storm at Humphry (Burnett) - hail damage to fruit crops around Gayndah.

27-10-1956...Houses were unroofed and power line brought down at Mt Perry - 58 mm of rain fell in 30 min.

29-10-1956...Hail at Binbee.

30-10-1956 ...Wind gusts to 63 knots at Gladstone- 25 houses and buildings were damaged and power was lost. Lightning killed a man and injured two at Longford Creek near Proserpine.
Hail at Mirani.

14-11-1956...Storm unroofed houses at Cooroy - 75 mm in 1 hr.

01-12-1956...One third of houses in Georgetown unroofed in storm.

03-12-1956 ...Gusts to 74 knots at Charleville in storm - Buildings unroofed - poultry killed- 50,000 pounds (1956) damage.
Boy killed by lightning at Roma.

26-12-1956 Motel unroofed in storm at Coolangatta.

4/12/56

Hail did damage to orchards and small crops at Charters Towers, Homebush, Mackay, Proserpine, Georgetown, Bundaberg – Crops ruined, towns blacked out, communications cut, roofs lifted off.
December 1956

10th...30 houses unroofed and a cottage blown off its stumps at Redcliffe -100,000 pounds (1956) damage -3000 poultry killed by hail.
Crops damaged at Strathpine.
20 houses unroofed at Booval and 5 people injured by hail.

11/12/56

Craigian Jersey Stud, Strathpine, Redcliffe, Booval – Severe hailstorm buildings unroofed crops destroyed, one farmer lost 3000 chickens that were killed. Five people hurt at Booval.

30/12/56

Boonah – Lucerne Crops flattened by hailstorm at Cotswold and Maroon.

1957

8/1/57 Glenabon District – 40,000 pounds damage to tobacco crops. Jagged hailstones as big as bantam eggs.

Berat District – Maize and other crops destroyed.

Warwick – High tension wires down caused black-outs.

Stanthorpe – 12 Rockets fired against hail.

Westbrook – 2 cows killed by lightning. Roofs blown off.

7/1/57 Warwick – 5000 pounds damage to grape and vegetable farms. Home partly unroofed, garage blown down. 23 windows and tanks pierced by hail.

17/1/1957 Clifton – Hail which followed the tornado flattened hundreds of acres of young maize and mills. Houses & sheds unroofed, a parked utility bowled over for more than 100 yards across a farmyard.

26/1/57 Glenabon District – Hail flattened 100 acres of tobacco on 18 farms causing 50,000 pounds damage. Telephone lines cut by hail, hailstones stated to be as big as footballs. Trees uprooted and roofs torn off houses and sheds.

03-02-1957....73 knot gust Amberley- 4IP radio transmitter damaged - Power disrupted in Ipswich- lightning struck house at Oxley causing small fire - fireballs reported.

14-03-1957 Thunderstorm hit Brisbane between 4pm and 5pm- Church, golf clubhouse and ten houses unroofed in N and NW suburbs- trees uprooted and power lines down causing protracted blackouts- Centre passed over Enoggera, Windsor and Nundah- Bureau recorded 57 knot gust.

28/5/57 Toowoomba, Caloundra and Caboolture – At Caloundra 60mph winds tore down power lines and hurled trees across roads. Lightning struck trees at Caboolture and Wacol. At Toowoomba hail as big as pullet eggs smashed tiled roofs, stripped trees, flattened gardens and choked up gutters and storm drains. Hundreds of pounds worth of materials ruined at a Drapery store, other goods damaged and ruined at other stores. At Braesik, 10 miles from Warwick, a large area of country was covered inches deep with hail. It was estimated that thousands of pounds damage was done.

24/10/57 A plane was swept upward at 2000ft a minute when it became trapped in a turbulent high level hailstorm between Monto and Gayndah. The plane will be grounded for at least two days for repairs. The pilot's windscreen was smashed and a plastic bubble on the top of the plane was also shattered.

29/10/57 [Near] Gympie - Hailstones killed 30 sheep on Bischoff property and Woodlawn Station. Hailstones as large as golf balls.

4/12/57 Hail fell in some suburbs at Deagon. Hail stopped motorists with a heavy fall. High tension wire was brought down at Gympie Rd Bald Hills and blocked traffic.

12/12/57 Hailstones at Cooroy, Landsborough, Nambour, Caloundra, Maleny and Moomba (20 miles from Esk).

14/12/57 Moogerah (near Cunninghams Gap) – Heaviest hailstorm in 51 years for memory of oldest inhabitants. Hail bigger than golf balls, two hailstones melted to fill a cup with water.

16/12/57 Hail damaged small crops and lightning killed two valuable horses at Thornton, 20 miles south of Laidley.

26/12/57 Fruit growers used turrets (?) to break up early hailstorms that threatened their crops on the Granite Belt.

1958

13/1/58 Storms stretching from Casino to Caloundra including Brisbane and the South Coast. The storms unroofed buildings, smashed windows, tore down power and telephone lines, set fire to an electric light pole and flattened gardens.

21/1/58 Light hailstorms reported from Darling Downs, Maryborough District and a strip of Nambour through Cooroy to Tewantin. 10minute blackouts caused at Toowoomba, Warwick and Stanthorpe. Rockets fired at Stanthorpe to break up hail.

6/2/58 Heavy storm – rain and fierce hail cut a swathe of destruction through apple and pear orchards in The Summit district and the heart of the Granite Belt fruit country. Damage estimated at 60,000 pounds, farmers fired off 60 rockets in a vain attempt to scatter the storm as it built up at 2pm.

3/6/58 Terrific hailstorm at 10pm at Prospect Station (Gulf Country).

4/6/58 Thunderstorm with heavy rain and hail at Marsuba at 3-3:30pm. Terrific hailstorm also at Prospect Outpost via Cloncurry at 10pm.

4/9/58 Fairly heavy hailstorm, 11am still continues to Wallangarra.

11/9/58 Thunderstorm with hail at 12:30am at Stanthorpe. Heavy hailstorm at 2:30pm at Nanango.

10/11/58 Hailstorm, 2pm with no known damage at Garraman.

6/12/58 Hailstorm at 1pm, Byfield.

7/12/58 Hail at Kilcoy, light hail at Yandina during pm.
Amberly, some hail (7:30-8pm)

9/12/58 Hailstorm, 8:45pm to 9:25pm at Ipswich.

10/12/58 Warra – light hail.

12/12/58 Mt. Perry – Hail, pm.

12-12-58...Storm damaged houses and gardens in Brisbane -hail 6.3 cm in diameter shattered many windows and ruined gardens - Power lines down with prolonged blackouts - Lightning damaged a house at Oxford Park - 13.4 mm in 5 minutes at the Bureau - water entered business premises in the Valley with considerable damage to stock - Roads flooded.

3.8 cm hail at Kallangur smashed fibro roofs, destroyed crops and killed poultry.

17-12-1958 Hail storm hit Brisbane - houses unroofed, roads and bridges flooded and power lines down - wind tore roof off house at Chelmer and hurled it 70 yards - roof shattered by fling debris at Indooroopilly - water several feet deep swept through a flat at Paddington - two houses unroofed at Windsor with interiors ruined - two houses unroofed at Ashgrove - 2 houses struck by lightning- flash flooding caused much damage - 17 mm in 5 mins at the Bureau - 44 mm in 30 mins at the Bureau while 69 mm in 3/4 hour at Bardon.

18/12/58 Warra – hail.

22/12/58 Amberly – light hail (3-4pm)

28-12-1958 ..Storm southern suburbs of Brisbane - unroofed 15 homes, a factory, school, prison block and Rocklea show buildings - gusts to 61 knots at Archerfield, 50 knots at the Bureau and 48 knots at Eagle Farm - 80 ft wood and steel awning hurled 100 yds and awnings were torn from many shops - lightning strikes in 10 suburbs - Roads were flooded and Bureau recorded 15 mm in 5 min - power blackouts.

1959

03-01-1959...Storms in Brisbane produced local flooding in Northern suburbs- 14 homes flooded at Booval.

9/1/59 Wyandra – Hail, 1:30pm.

18/3/59 Stanthorpe – Hail, 3:45pm, 7:30pm, 11:30pm.

1960

03-02-1960...Lightning struck and burnt down a house at Indooroopilly - wind damage was reported at Coorparoo, Loamside and Fordlane - South side suburbs blacked out and trunkline circuits out - 115 mm of rain in 1 hour at Deagon.

23-10-1960...74 knot gust from Pressure tube anemometer at Coolangatta Airport.. Torrential rain and hail at the airport where 2 sheds were flattened. Storms caused flash flooding at Coolangatta/Tweed Heads - wind flattened sheds and structures at the airport- Banana crops damaged by hail in the district.

27-11-1960...Storms in Brisbane- houses unroofed at Rosalie and Auchenflower- trees uprooted along Coronation Drive blocking road - windows broken by hail especially in northern and western suburbs - damage to buildings and crops in the region from hail and wind - fireball seen - flash floods in city streets.

1961

25-02-1961... Storms with Flash flood Bundamba Ck. Car swept off culvert and 2 people killed - A man was struck by lightning. Lightning shattered 40 ft tree at Bald Hills.

17-11-1961...127 mm in 75 min in storm at Upper Brookfield -roads and bridges washed away and farmland damaged.

21-11-1961...75 mm in 45 min at Redland Bay damaged crops, washed away 15 cm of topsoil and caused local flooding.

18-12-1961 ...Storm in Brisbane -Power blackouts - Kedron Brook 6 feet over Sandgate Rd.

1962

19-10-1962...Record 81 knot wind gust at Amberley- Power blackouts and structural damage to buildings at Brisbane and Ipswich.

17-11-1962 ..Two men drowned in Moreton Bay when trawler capsized off Redcliff during storm - Roof blown off new school at Scarborough - In Brisbane buildings damaged by 60 knot winds - Buildings unroofed at Windsor and Redbank.

7-12-1962...Winds caused extensive damage to houses and buildings at Brisbane - Power and telephones disrupted - Heavy hail and rain resulted in flash floods - Worst affected suburbs Wynnum Manly, and Hawthorne Morningside - Manly Baths wrecked and Manly Memorial Hall unroofed - at least 50 homes seriously damaged at Morningside Hawthorne - waterspout sunk small craft in the Brisbane River.

11-12-1962 Wind damage to houses in Kenmore, Indooroopilly, Corinda, Sherwood, Oxley, Inala, Acacia Ridge, and Eight Mile Plains -Hail at Oxley reached 4 cm in diameter - Funnel cloud sighted - Pacific Highway at Slacks Creek blocked by fallen trees.

1963

31-10-1963...Very heavy hail Brisbane - hail drifts 4 ft deep Woolloongabba. Hail blocked drains and water damage to property and household belongings - wind damage to roofs at East Brisbane and Highgate Hill - power blackouts.

1964

2-01-1964 ...Wind gusts to 66 knots at Amberley - houses unroofed, buildings damaged and power lines down in Ipswich.

3-01-1964..Windows broken by hail at Ipswich - maximum gust 62 knots at Amberley.

29-12-1964 ...Very large hail (to 6.5 oz in weight) caused widespread to buildings, windows, gardens and crops at Petrie, Kallangur and Lawnton.

Hail and rain caused local flooding in eastern parts of Brisbane.

1965

26-01-1965 ...Storms with hail caused serious wind and water damage - The heaviest rain fell in a narrow swathe from Kenmore through Sth Brisbane and the CBD to Nundah - Severe wind damage from West End to Eagle Farm including Hawthorne-Morningside - houses and buildings were unroofed or damaged, trees uprooted or snapped and power lines downed - Water from hail blocked drains entered houses and buildings - Rail traffic halted when water caused signals to fail - Extensive power losses - Details:- Hamilton, sheds and buildings damaged, 2 ships torn from moorings, full 44 gal drums and 1 ton gangway blown along by the wind. Around Hawthorne and Morningside, 20 houses unroofed and buildings damaged. At Woolloongabba, Cricket Ground buildings damaged, homes and buildings damaged at New Farm, West End, Hendra, Newstead and The Valley. 59 knot gust recorded at the Bureau and 42 mm of rain in 20 min.

18-12-1965..Severe damage Kenmore, Toowong, Ashgrove, Bardon, and Enoggera - 20 houses unroofed - trees uprooted or snapped off - power lines downed - gusts to 44 knots recorded at the Bureau - Thick hail at Ashgrove.

1966

22/10/66. Mt. Mee – Severe thunderstorm 4:30 to 6:30pm. 465 points. Hail marble size with an over of 4 inches deep in parts, over 4 feet deep in other. Covered 215 acres. Hail still on the ground until the morning of Nov 2nd.

1967

19-12-65...Storms cut a swathe several miles wide from Coopers Plains to Chermside. Around 3000 insurance claims (mostly hail). Hail to cricket ball. One house had 123 holes in roof and some cars penetrated by hail. Some wind damage.

1970

20-01-1970... A 17 mile wide front of hail and wind damage in Southern suburbs. Almost all houses in the Slacks Creek-Rosedale area damaged with 70 badly damaged. 60 houses damaged at Wynnum, many unroofed. Widespread damage was reported across the city. SES statistics show 5 houses unroofed, 2000 houses damaged and 100 structurally unsafe.

20-02-1970... Insurance records show a significant loss this day with a 75knot gust recorded at Brisbane Airport.

1971

17-01-1971. Eight buildings were damaged at Jericho at about 2.30pm during a thunderstorm.

19-01-1971. Four buildings were damaged at Kaimkillenbun at about 2pm during a thunderstorm.

24-01-1971. One building and an aeroplane were damaged at Brendalla Station (12miles from Aramac).

26-03-1971. Heavy thunderstorms brought 220mm of rain to Innisfail in a 2hour period.

14-08-1971. Twenty-five buildings were damaged and 3 people killed when a tornado hit the town at about 9.30pm. Hail to about 4cm in size was also reported.

16-09-1971. Thunderstorms hit the Emerald, Mobray and Anakie districts at about 1.30pm. Heavy hail up to about 2.5 cm in size was reported and many trees were damaged and windows broken.

17-10-1971. Three aircraft were damaged at Mt Isa at about 5.30pm during a thunderstorm. Hail to 1cm in size was also reported.

18-10-1971. At least two buildings were damaged and cane crops were also damaged by severe thunderstorms that hit the Tully, Ingham and Innisfail areas around 3pm. Hail to 6cm in size was reported from Kairi at 3.30pm.

07-11-1971. A hailstorm (size up to 4cm) hit the Brisbane suburbs of Ascot, The Gap and Paddington. Another storm hit the town of Monto and damaged at least three buildings. Hail to 3cm in size was also reported from the town.

14-11-1971. Two buildings in the Brisbane suburb of Rocklea were damaged at around 5.30am by a thunderstorm.

18-11-1971. Two buildings were damaged in the Brisbane suburb of Boondall at about 3pm during a storm.

19-11-1971. Six buildings were damaged in the Rockhampton - Yeppoon areas at about 5pm during a thunderstorm. Hail to 2cm in size was reported from Rockhampton.

22-11-1971. Two buildings were damaged on Warenda Station (50miles south of Boulia).

26-11-1971. At least 20 buildings at Rockhampton were damaged by 6cm hail at Rockhampton at about 2.15pm. At least four buildings were damaged on Heron Island during a thunderstorm at about 7.30pm. Hail to about 3cm in size was also reported.

27-11-1971. Trees were blown down and 4cm sized hail damaged cars and crops around 6pm in Miles.

28-11-1971. Hail to 6cm in size damaged crops in the Gatton area at about 8pm. The storm also affected the Laidley and Upper Pilton areas.

29-11-1971. Three buildings and caravans were damaged at Noosa Heads at about 4am by a thunderstorm.

12-12-1971. A thunderstorm hit the Goomeri area at about 6pm. Hail to 4cm in size damaged many windows.

13-12-1971. A thunderstorm damaged at least one building and four caravans at about 6.45pm at Blackwater. Hail to about 2.5cm was also reported from the town. Another storm hit the Mundubbera, Childers, Riverleigh and Boynewood areas at about 5.45pm. Hail to 4cm in size damaged crops at Boynewood.

31-12-1971. A thunderstorm with 4cm hail hit Toowoomba at 6.50am. A few hours later at 10.45am nine buildings and many trees were damaged in the Gold Coast and Ipswich area. Hail to 2.5cm in size was observed at Ipswich.

1972

19-01-1972. A thunderstorm hit the Gold Coast, Beenleigh Cleveland and Brisbane region at about 5.30pm and damaged a number of caravans and many trees. Heavy rain (up to 75mm in 20 minutes) was recorded.

23-01-1972. Five buildings and many trees were damaged in the Brisbane suburbs of The Gap, and Mt Gravatt at around 6pm.

28-01-1972. A severe thunderstorm hit Canning Downs at about 2.20pm. Hail to 6cm in size damaged windows in the town.

26-10-1972. A thunderstorm hit the Miva area at about 3pm. Hail to 4cm in size damaged winds in the town as well as surrounding crops.

06-11-1972. A thunderstorm hit the Wellcamp, Warwick and Gowrie at around 3.30pm. Hail to 6cm in size damaged crops at Wellcamp. Another storm hit the Granite Belt at about 7pm and hail to 1.5cm damaged crops. A hailstorm also hit the Blackbutt- Benarkin area at about 7.30pm. Hail to 4cm in size damaged crops at Benarkin. The Gympie, Bauple and Hervey Bay were also hit by a hailstorm at about 4.30pm. At least ten buildings were damaged and hail to 5cm in size, damaged cars at Bauple.

09-11-1972. Two buildings were damaged in the Prairie area at about 5.30pm. Hail to 1cm in size was also reported from the town.

10-11-1972. At least 20 buildings were damaged at Bundaberg during a thunderstorm at about 15 minutes past midnight.

14-11-1972. Hail to 7cm in size damaged crops in the Kaimkillenbun area.

20-11-1972. Windows and tanks were damaged by 7cm size hail that hit Mt Perry at about 6pm.

26-11-1972. Two buildings at Tiara were damaged by a thunderstorm around 5pm.

16-12-1972. Winds to 100km/h were reported from Burketown during a thunderstorm at about 6.45pm.

27-12-1972. A thunderstorm brought 6cm size hail to Toowoomba at about 4.45pm. A thunderstorm also damaged ten buildings in the Clifton- Irvingdale area and produced hail to about 1cm in size. A severe thunderstorm caused wind damage from Oxley to Sunnybank. Tents were also flattened on North Stradbroke Island and at least six buildings were damaged in the suburbs of Wynnum and Manly.

27-12-1972. A particularly bad storm hit the Billambil Heights/Coolangatta region on 27 Dec 1972 when Seagulls Leagues Club (among other things) was badly damaged storm with the recent storm due to the much more sparsely developed region in those days.

29-12-1972. A caravan was damaged in Emerald at 10.15am during a thunderstorm.

1973

05-01-1973. At least seven buildings were damaged as well as crops when a thunderstorm moved through the Brookstead area around 11pm.

07-01-1973. Four buildings were damaged at Olio during a thunderstorm. Another storm hit the Gold Coast around 3.30pm and four buildings were damaged. At about this time a thunderstorm caused significant damage to trees in the Numinbah valley inland from the Gold Coast. Hail to 1.5cm in size was also reported to have fallen during the storm. A thunderstorm also damaged at least one building at Crediton at around 5pm.

08-01-1973. Four buildings were reported damaged at Emerald at about 2.30pm by a thunderstorm.

14-01-1973. A thunderstorm damaged at least two buildings in the Warwick- Clifton area at about 2.30pm. A severe thunderstorm also caused significant wind and rain damage in the area from Redbank through Darra to Tingalpa and Gumdale. 15 houses were unroofed and 1000 damaged. A thunderstorm also brought 1cm hail to Herberton at about 5pm.

14--3-1973. A thunderstorm brought 110mm of rain in 75minutes to Rockhampton.
A thunderstorm also damaged three buildings at Clermont.

04-06-1973. Hail up to 7cm in size damaged crops in the Kolan South area at about 9.30am. The storm also affected the Bullyard and Monduran areas.

03-11-1973. A hailstorm hit the Brisbane suburbs of Yeronga and Sunnybank at about 11.30am Hail to 3cm in size was reported from Yeronga.

4-11-1973. A tornado moved from Brookfield to Eight Mile Plains. The length of track was 51 km and between 100 m to 230 m wide. Altogether 500 houses were unroofed, 1390 damaged and 500 declared structurally unsafe.

06-11-1973. A severe thunderstorm hit the Brisbane suburbs of Bardon, Taringa, Alderley, Enoggera and Moorooka at about 2pm. At least three buildings were damaged and 2cm hail was reported.

08-11-1973. A thunderstorm hit the Withersfield area about 3pm. Hail to about 2.5cm in size was reported during the storm.

04-12-1973. Four buildings were damaged in Kilkivan and Moore at about 4pm. The storm also brought hail to 2.5 cm in size to the area.

05-12-1973. Hail to about 3cm in size was reported from Toogoolawah at around 9pm. Hail to 5cm in size was also reported from Warrill View at about 1pm. Another storm damaged eight buildings at Yuleba at about 5.45pm. Hail to 2cm in size was also reported from the town.

06-12-1973. A severe thunderstorm damaged 12 buildings at Moore at around 5pm. Another storm hit the Capalaba, Amberley, Ipswich and Brisbane areas and damaged at least three buildings. Hail to 3cm in size was reported from the Brisbane area.

07-12-1973. Hail to 7cm in size was reported from Blair Athol during a thunderstorm.

1974

27-08-1974. A thunderstorm hit Innisfail at about 5.30am. Two building were damaged and 1cm hail contributed to damaged cane.

06-10-1974. Hail to 3cm in size was reported from the Brisbane suburbs of Salisbury and Coorparoo during a storm around 6.30pm.

13-10-1974. A thunderstorm damaged five buildings and brought hail to 1cm in size as it moved through Wowan. Another storm hit the Brisbane area at about 7.30pm. Five buildings in the Banyo, Newmarket, Bulimba and Coorparoo areas were damaged.

04-11-1974. A thunderstorm hit Runaway Bay on the Gold Coast and the Oxenford area around 2.30pm. Hailstones to 4cm in size damaged cars and buildings at Runaway Bay.

06-11-1974. A severe thunderstorm hit the Maryborough and Yerra areas at about 5pm. Hail up to 5cm in size was reported from Yerra. Another cell hit the town of Childers at about the same time and damaged seven buildings. Hail to one cm in size was reported.

08-11-1974. A thunderstorm hit Bargara at 1.40pm. A total of 146mm of rain was recorded in a two-hour period. Another storm hit the Dimbulah and Mareeba areas at about 2.45pm. Hail to 4cm in size damaged crops in Dimbulah.

13-11-1974. A severe thunderstorm hit Mareeba at about 3pm and damaged at least two buildings. Hail to 1.5cm was also reported.

24-11-1974. A severe thunderstorm hit the Brooweena and Biggenden areas. Hail to 4cm in size damaged cars at Brooweena. A thunderstorm brought hail to 6cm in size at Kilkivan. The hail damaged many winds in the town.

25-11-1974. Hailstones to 5cm in size hit the Bundaberg area around 4pm during a thunderstorm. The hail caused significant damage to crops in the area.

27-11-1974. Two buildings were damaged in the Bundaberg, Gin Gin and Sharon areas by a thunderstorm around 9.30am. Hail to 1 cm in size was reported from Bundaberg.

12-12-1974. A severe thunderstorm hit the Brisbane suburbs of Moggil and Kenmore and the city of Ipswich around 5pm. Hail to 6 cm in size was reported from Ipswich.

1975

11-01-1975. A thunderstorm brought 82mm of rain to Brisbane city in two hours around 5pm. Brisbane Airport recorded 50mm in half an hour. Sixty houses were flooded at Goodna.

28-02-1975. Hail to 4cm in size was reported from the Goondiwindi area during a thunderstorm at about midday.

13-03-1975. Twenty buildings were damaged in the Brisbane suburbs of Rochedale and Woodridge at about 4.30pm. Hail to 1cm in size was reported from Woodridge.

31-03-1975. Thunderstorms in the Halifax area brought 125mm in a period of two hours at Halifax at around 11am.

22-04-1975. A Thunderstorm hit the Lockyer Valley - Felton area at about midday. Hail to 4cm in size damaged crops in the Lockyer Valley.

23-04-1975. A thunderstorm hit the Toogoolawah- Linville area around 2.15pm. Hail to 4cm in size was reported from Toogoolawah. A thunderstorm also hit the Sunshine Coast with 4cm hail and three buildings were damaged. Another cell hit the Redlands, Woodridge area and the southern suburbs of Brisbane at Carina and Coopers Plains. Altogether 13 buildings were damaged and hail to 2cm was reported from Redlands.

02-09-1975. Damage was done to at least one building and 10 caravans by 4cm hail that hit Blackwater at about 6pm.

1976

10-01-1976. A major hail storm at Toowoomba. Hail to 7cm in size hit Toowoomba at about 2.30am. As many as 1000 buildings suffered damage and a preliminary estimates suggested the damage bill would be \$15,000,000.

26-02-1976. Thunderstorms brought 109mm of rain to Meringandan in the 3 hours centred around 3pm.

04-03-1976. A thunderstorm at Carmila brought 88mm of rain in 2 hours and caused rapid rises in Nebo Creek

21-03-1976. A severe thunderstorm brought 3cm hail to Gatton and caused considerable damage to crops.

22-03-1976. A severe thunderstorm hit the Toowoomba area with 3cm hail and heavy rain that caused flash flooding.

15-09-1976. A thunderstorm hit the Gold Coast and Brisbane area at about 4pm. Hail to 2cm in size was reported from Calamvale and flash flooding was reported in the Mt Gravatt and Macgregor areas.

27-10-1976. Hail up to 4 cm in size was reported with a thunderstorm at Kingaroy at about 3.30pm. Another storm brought hail to 4cm in size to Burleigh Heads on the Gold Coast. Another cell hit the Mt Morgan to Rockhampton areas around 6pm and damaged at least one building.

28-10-1976. Hail to about 2.5 cm in size was reported with a thunderstorm at Wolfdene at about 3.30pm. Another thunderstorm brought a heavy fall of hail up to about 2cm in size to the Petrie area around 7.30pm.

31-10-1976. One building was reported damaged at Surat at about 9pm during a thunderstorm.

01-11-1976. A severe thunderstorm hit the Murgon- Wondai areas at about 6.30pm. Hail to 4cm in size damaged many windows.

03-11-1976. A severe thunderstorm damaged 50 buildings in the Redland Bay, Gold Coast and Brisbane area around 2.45pm.

09-11-1976. Three buildings were damaged in the Brisbane Kenmore, Chapel Hill area at about 8.40pm. Hail to 1cm was also reported.

13-11-1976. A wind gust to 97km/hr was recorded in Brisbane city at about 8.30am during a thunderstorm.

21-11-1976. Wind gusts to 120km/h hit the Bundaberg area at about 5.30pm and damaged 40 buildings.

30-11-1976. Thirty buildings were damaged by wind in Brisbane's northern suburbs and twelve houses were unroofed at Ipswich. Gusts to 49 knots were recorded in the City and 62 knots at Brisbane Airport. Another thunderstorm hit the Herberton - Atherton areas and caused significant damage to trees, hail to 1cm in size and 65 mm of rain in 35 minutes.

01-12-1976. A severe hailstorm hit the Emerald area with hail as large as 7cm. Thunderstorms also damaged four buildings in the Mulgundi and Monto areas at about 5.30pm.

04-12-1976. Eight buildings were damaged by a thunderstorm in Toowoomba at about 4.15pm. An eyewitness report suggests that a tornado may have touched down in the area. Another thunderstorm hit the Gold Coast, Redcliffe and Brisbane (Chermside) area with wind gusts to 100km/hr in Brisbane that damaged 20 buildings. A severe thunderstorm also hit Clermont at about 5pm. Wind gusts to 180km/hr damaged 20 buildings and hail to 6cm in size damaged many windows. Rainfall also was very heavy and 90mm fell in about 30 minutes.

07-12-1976. A tornado was reported associated with a thunderstorm at Torrens Creek at about 5.45pm. Seven buildings suffered damage from the storm.

1977

21-02-1977. At least 70 buildings were damaged in the Margate area at about 3pm. The damage has been attributed to an associated tornado.

12-09-1977 Severe wind gusts- Structural Damage at Burpengary – Morayfield during the evening.

03-11-1977. A hail storm with hail to about 2cm in size damaged orchards at Stanthorpe on the Granite Belt at about 4.20pm.

07-11-1977. A severe hail storm hit the Stanthorpe area of the Granite Belt at about 2pm and brought hail to 7cm in size. A storm also moved through the Laidley, Ipswich and Brisbane region during the early to mid afternoon. Three buildings in Laidley were damaged and hail to 3cm in size, damaged cars in the suburbs of Bald Hills, Aspley and Zillmere.

15-11-1977. A thunderstorm in the Sapphire, Reward and Rubyvale areas damaged ten buildings and brought hail to about 1.5cm in size at about 3pm.

18-11-1977. Six buildings and the drag line were damaged at Goonyella open cut mine by a thunderstorm around 7pm.

16-12-1977. A severe storm moved from Yeronga to Nundah with severe wind gusts. 150 houses damaged with 50 structurally unsafe.

1978

15-01-1978. Five buildings were damaged in Cunnamulla around 3pm during a thunderstorm. Hail to 1cm in size was also reported.

01-02-1978. Heavy rain (183mm in 2 hours) from thunderstorms caused a rapid rise in the Pioneer River.

14-02-1978. At least five buildings were reported damaged from Gatton, Lowood and the Lockyer Valley during a storm around 6pm.

21-03-1978. A hailstorm hit the Granite Belt region around 6pm. Hail to 3cm in size damaged orchards in Applethorpe.

23-03-1978. A storm hit the Tinana, Teddington, Maryborough areas and damaged at least two buildings and brought down trees around 6.40pm.

24-03-1978. At least one building was damaged and heavy rain brought local flash flooding during a thunderstorm in the Brisbane suburbs of Virginia, Redhill, Indooroopilly, Windsor and Yeronga at about 9pm.

25-03-1978. Wind gusts to 160km/hr hit Oakey at about 3pm and damaged sixteen aircraft. A storm also hit the Brisbane suburbs of Everton Park, Arana Hills, and Everton Hills and damaged at least 3 buildings. A thunderstorm moved through the Bli Bli area of the Sunshine Coast at about 8.50pm. At least one building was damaged and heavy rain caused considerable damage to fields of sugar cane.

26-03-1978. A thunderstorm moved through the Gold Coast and Mudgeeraba areas at about 8pm. At least one building and many trees were damaged on the coast but hail up to 7 cm in size did damage to crops in the Mudgeeraba area.

29-03-1978. Two buildings were damaged at Longreach at about 2pm during a thunderstorm.

30-03-1978. Three buildings were reported damaged in the Imbil area at about 5.30pm by a severe storm. Hail to 7cm in size damaged crops in the area.

01-06-1978. A hailstorm hit the Gympie- Miva area at about 7pm. Stones to 7cm in size damaged many buildings in Miva.

06-06-1978. A hailstorm hit the Beerwah and Sunshine Coast areas. Hail was reported up to almost 3cm in size and did considerable damage to crops in the Beerwah district.

07-11-1978. Egg size hail damage and some wind damage from Wacol across to Sunnybank. 16 houses unroofed and 1000 damaged.

08-11-1978. At least two buildings and many trees were damaged by a thunderstorm at Calliope.

01-12-1978. Ten buildings were reported damaged when a thunderstorm hit Gayndah at about 6pm. Hail up to about 3cm in size also damaged crops in the area.

03-12-1978. Fifteen buildings were damaged in the Winton area around 2.30pm during a thunderstorm.

13-12-1978. A storm hit the Texas, Granite Belt, Stanthorpe areas around 3pm. The storm brought hail to 4cm in size and damaged buildings and crops in the Texas area. Later, 25 homes were damaged in Ipswich, Riverview and the western Suburbs of Brisbane during a thunderstorm at around 6pm.

14-12-1978. A Total of 40 houses suffered from egg size hail in the Albany Creek, Brackenridge and Bald Hills suburbs during a thunderstorm.

16-12-1978. A hailstorm hit the Bundaberg and Miriamvale districts at about 5pm. Hailstones up to about 4cm in size damaged crops in the Bundaberg area.

17-12-1978. Wind gusts to 100km/h hit Rockhampton at about 3.30pm during a thunderstorm. At least one building suffered damage.

18-12-1978. A thunderstorm damaged at least three buildings and brought down trees and power lines in Mackay. A severe hailstorm hit the Blackbutt area at about 2pm. Hail to 7cm in size damaged houses and cars. A severe thunderstorm brought winds gusting to 112km/hr in the Rockhampton -Yeppoon areas. At least 4 buildings were damaged.

19-12-1978. Three buildings were damaged in the Bidwill, Magnolia and Maryborough areas by a thunderstorm around 5pm. A storm also hit the Isis area at about 4.30pm and damaged at least three buildings as well as many trees.

23-12-1978. Four buildings in the Kallangur area were damaged by a thunderstorm around 8.25pm.

27-12-1978. Thunderstorms brought 43mm of rain in 60 minutes to Mt Gravatt a suburb of Brisbane starting at about 8pm.

1979

23-01-1979. Four buildings were damaged at Kallangur at about 8.20pm during a thunderstorm.

15-03-1979. A thunderstorm that hit at about 5pm brought very heavy rain (146mm) to Killarney. Another cell brought 111km/h winds and damaged 9 buildings at Charleville.

23-03-1979. Wind and hail damage in the Ipswich area (60 knot gust Amberley). Caravans and 22 homes damaged.

27-04-1979. Extensive hail damage at Alderley, Dorrington, Enoggera and Newmarket with egg size hail and 36 unroofed houses. Other damage was reported from Stafford, Grange, Bardon and Northgate.

28-04-1979. Thunderstorms brought 100mm of rain during a two-hour period at Chinchilla.

03-10-1979. At least one building was damaged at St George at about 9pm during a thunderstorm. Hail to about 1cm in size was also reported.

04-10-1979. Two buildings were damaged in a thunderstorm at Gin Gin at about 4.30pm. Hail to 1cm in size was received as well as 51mm of rain in about 25minutes.

11-10-1979. A hailstorm hit the Brisbane suburbs of Annerley, Mt Gravatt, Ekibin, McGregor and The Gap. The hail was very heavy in places but only up to about 2cm in size

07-11-1979. A thunderstorm brought 160mm of rain in 60 minutes and 2.5cm sized hail to Tannymorel at around 7pm. The hail did considerable damage to crops in the area.

12-11-1979. Two buildings were reported damaged in the Brisbane suburb of Underwood at about 4pm during a thunderstorm.

14-11-1979. Thunderstorms brought 114mm of rain in about 60 minutes to the Loudoun Homestead resulting in significant rise in the Condamine River.

16-11-1979. Eight buildings were damaged at Boonah at about 6.30pm during a thunderstorm. Hail to 1cm in size was reported. A severe thunderstorm also hit Brisbane at about 7.45pm. Eleven buildings were reported damaged at Milton, Durack, Inala, Acacia Ridge and Fairfield. Hail to 4cm in size was also reported.

18-11-1979. A severe hailstorm hit the Yaralla- Dalby area at about 4pm. Hail to 5cm in size damaged crops in the Yaralla area.

20-11-1979. A total of 700 insurance claims for hail and wind, 10 houses lost their roofs, 500 were damaged and 5 structurally unsafe at Woodridge, Mt Gravatt, New Farm, Camp Hill, Carina, Wynnum, Capalaba, and Beenleigh.

21-11-1979. One house was destroyed and 30 damaged at Kallangur, Lawnton, Petrie and Brackenridge. Another thunderstorm brought wind gusts to 130km/hr at Rockhampton at about 8.20pm. As many as 20 buildings were reported damaged.

24-11-1979. Three buildings and many trees were damaged at about 9pm during thunderstorms in the Brisbane (Ashgrove, Balmoral, Chermside), Ipswich and Laidley areas.

26-11-1979. Winds gusting to 115km/hr damaged 45 buildings in the Gympie area at about 2.45pm during a thunderstorm.

09-12-1979. Five buildings were damaged in the Toowoomba, Laidley and Wellcamp areas during a thunderstorm. There was a report of a tornado being sighted at Wellcamp.

14-12-1979. Thunderstorms deluged the Boyneside, Kumbia area with 175mm of rain resulting in flash flooding in Haly Creek. Also, around 5pm two buildings and a considerable number of trees were damaged by a thunderstorm in the Moura area. Hail of about 1.5cm was reported and 93mm of rain fell in 60 minutes. Another cell hit the Dalby area around 5pm and damaged tree and brought down power lines. The Gold Coast also had 6 buildings damaged by thunderstorms.

20-12-1979. A 64 knot gust Amberley, with hail and wind damage in Ipswich and 36 homes damaged at Peak Crossing. Also a thunderstorm hit the Dalby, Cecil Plains area from about 2pm to 3.15pm. Hail to 3cm in size damaged crops, and 4 buildings also suffered damage. Three buildings were also damaged at Kenilworth at about 5pm during a thunderstorm. Fourteen buildings were damaged in Gympie at about 3pm, hail to 1cm in size was reported and 2 people were injured during the thunderstorm.

21-12-1979. Twelve buildings were damaged in Gympie by a thunderstorm that hit at about 5pm.

24-12-1979. Forty-six buildings in the Ipswich, Goodna and Redbank areas were damaged by thunderstorms around 6pm.

27-12-1979. Hail to 3cm in size was reported from the Phosphate Hill-Djarra area at about 6.30pm.

28-12-1979. Sixteen buildings in Cloncurry suffered damage at about 6pm during a thunderstorm.

1980

10-01-1980. A hail storm hit the Gold Coast, Mt Tamborine and Beaudesert areas at about 6pm. Hail to 4cm in size was reported from Mt Tamborine where considerable roof damage resulted.

- 12-01-1980. A storm hit the Gold Coast, Beaudesert and Ipswich area around 4pm. Five buildings were damaged and 1 cm size hail was reported from Beaudesert. A little later a cell hit the Sunshine coast and damaged 3 buildings in the Nambour- Cooroy area.
- 20-01-1980. Hail was reported from a wide area from Tennyson through to Sandgate to golf ball size. A 63knot gust was recorded at Brisbane airport. Homes at St Lucia, Alderley, Chermside, Geebung, Strathpine and Sandgate were damaged.
- 23-01-1980. Two buildings and 4 aircraft were damaged by a thunderstorm at Emerald at about 6.15pm.
- 07-02-1980. Heavy rain was reported in Charters Towers during a thunderstorm.
- 28-02-1980. A severe thunderstorm caused roof damage to 36 houses at Beenleigh.
- 01-06-1980. Heavy rain (76mm) was recorded at South Kolan during a thunderstorm around midnight. Hail to 4cm in size was also reported.
- 13-10-1980. Thirty-two buildings were damaged during a severe thunderstorm that hit the Brisbane suburb of Mt Gravatt at about 4pm.
- 19-10-1980. Three buildings were damaged during a thunderstorm at Surat at about 4.30pm. Hail to 1cm in size was also reported.
- 21-10-1980. Two buildings and many trees were damaged during a thunderstorm in the Sharon, South Kolan area. 75mm of rain was also recorded during the storm.
- 05-11-1980. Six buildings were damaged in Bollon by a thunderstorm at 4.15pm. 44mm of rain was recorded in 15 minutes and was preceded by dust.
- 10-11-1980. A hailstorm hit Brisbane at about 10.45am. Hail was mostly less than 2cm in size. A total of 66 mm of rain was recorded in 30 minutes. The temperature dropped from 23°C at 10.00am to 13°C at 10.45am.
- 22-11-1980. Widespread wind and hail damage with 67knot gust Brisbane Airport. Area affected was between Sunnybank to Wynnum. Most damage to housing was at Murarrie where 46 homes were unroofed. Other wind damage was reported from Cannon Hill and Nudgee with flash floods at Greenslopes and Browns Plains.
- 06-12-1980. 55mm of rain fell in 35 minutes during a thunderstorm at Gayndah.
- 15-12-1980. A severe thunderstorm hit Brisbane (Archerfield) at about 3.30pm and resulted in damage to 39 aircraft. Also a thunderstorm hit Warra and damaged 2 buildings. Hail to 1.5cm in size was also reported. A thunderstorm brought 150mm of rain to Toowoomba starting around 7.30pm.
- 16-12-1980. 900 homes were seriously hail damaged at Brighton. Tornado sighted at Hayes Inlet. 4000 tarps needed, 860 homes unroofed, 1600 damaged and 100 structurally unsafe. Another super cell passed from Ipswich to Coopers Plains with 70 homes unroofed and 150 damaged and 25 light aircraft destroyed at Archerfield from tornado.
- 19-12-1980. Two buildings were damaged by a thunderstorm that hit Bundaberg at 1.40pm.
- 26-12-1980. Five buildings were damaged in Camooweal during a severe thunderstorm.
- 27-12-1980. A severe hailstorm hit the Thane and Greymare area at about 5.30pm. Hail as large as 6cm in size damaged many buildings.
- 29-12-1980. A total of 212mm of rain fell during thunderstorms that commenced around 7pm. Hail to 1cm in size was also reported.

30-12-1980. Five buildings in Dysart were damaged by a thunderstorm that hit at about 4pm. Four buildings were damaged at Jambin at about 4pm.

1981

31-01-1981. Two building and trees were damaged by strong winds and heavy rain at Orange Grove at about 4pm.

22-02-1981. Brisbane experienced local flash flooding and 1 cm sized hail during a thunderstorm around 5.30pm.

10-03-1981. Many trees were damaged by strong winds during a thunderstorm on the Sunshine Coast particularly in the Noosa area at around 11.30pm.

01-04-1981. There was significant damaged to trees during a thunderstorm at Emerald around 8pm.

05-04-1981. Two girls were struck by lightning during a thunderstorm at Mirani.

08-04-1981. Trees and cane were damaged during a thunderstorm at Ayr at around 3pm.

25-04-1981. A severe thunderstorm hit the Lockyer Valley area including Gatton and Rockmount at around 3pm. Hail to 3cm in size damaged tomato crops.

21-05-1981. Wind gusting to 148km/hr damaged 30 buildings at Toowoomba at around 9pm.

22-05-1981. A thunderstorm damaged many trees and brought 55mm of rain at Mt Tamborine.

01-06-1981. A tornado hit the Mungar area along the path of a thunderstorm that affected the area between Maryborough to Pt Vernon. Fifteen buildings were damaged and 5 people were injured.

13-11-1981. A water spout came ashore at Maroochydore. Altogether 150 buildings suffered damage in the Maroochydore to Nambour area.

29-11-1981. A severe thunderstorm damaged 200 buildings in the Beaudesert and Jimboomba areas at around 2.30pm. A storm also hit the Sunshine Coast areas of Nambour and Palmwoods at about 4pm. Fifteen buildings were damaged and hail to about 1 cm in size was reported.

20-12-1981. Three buildings were damaged by a thunderstorm at Ipswich around 6pm.

22-12-1981. A severe thunderstorm hit Julia Creek at about 9.30pm and damaged 15 buildings.

23-12-1981. Heavy rain during a thunderstorm at Everton Park, a Brisbane suburb resulted in the local shopping centre being flooded at about 9pm.

29-12-1981. Wind gusts of up to 102km/hr caused considerable damage to sailing boats on Waterloo Bay. The thunderstorm hit around 3pm and affected the Gold Coast, Manly and Wellington Point areas.

30-12-1981. Large hail up to about 4cm in size damaged windows at Coominya as the storm moved through the Boonah and Mt Tarampa areas.

1982

05-01-1982. Two buildings were damaged at Wallumbilla at around 3pm during a thunderstorm.

21-02-1982. Five buildings were damaged at Ipswich and two men were electrocuted due to a thunderstorm at around 9pm.

02-03-1982. A thunderstorm brought 100mm of rain in 60 minutes, commencing around 3pm at Brooloo.

27-04-1982. A severe hailstorm with hail up to about 4cm in size damaged mostly cars and plants in the Currumbin Valley at about 6.30pm.

20-09-1982. A thunderstorm brought a heavy downfall of hail up to about 1.5cm in size to Brisbane at about 3pm.

26-09-1982. Hail to about 1.5cm in size damaged wheat at Canaga at around 3pm.

01-12-1982. Two buildings were reported as damaged during a thunderstorm at Muckadilla around 6pm.

05-12-1982. Five buildings were damaged as well as a caravan during a thunderstorm in Cairns at about 2.30pm. Two people were also injured due to the thunderstorm.

06-12-1982. Large hail up to about 7cm in size did extensive roof damage to buildings in the Ipswich area including Riverview and Redbank at around 5pm.

7-12-1982. A severe wind and hailstorm caused damage to 180 houses and one death at Beenleigh. A 53knot wind gust was recorded at Wickham Terrace in Brisbane.

08-12-1982. A severe thunderstorm brought 3cm sized hail and winds to 98km/hr in the Brisbane suburbs of Manly, Kenmore and Indooroopilly at around 4.15pm. Also on this day a severe thunderstorm damaged 6 buildings in the towns of Ingham and Trebonne. Hail to 4cm in size was also reported from Trebonne. At about 4pm one building was reported damaged due to strong winds associated with a dust/thunderstorm at Emerald.

09-12-1982. Hail to about 2cm in size was reported from the Brisbane suburb of Mt Gravatt at about 4.30pm. Also on this day 2 buildings were reported damaged from the 124km/h winds experienced by Gladstone during a thunderstorm at about 9pm.

12-12-1982. A severe hailstorm with hail to about 5cm in size hit the Jimbour, Bell and Jandowae areas and caused damage to crops.

15-12-1982. The Granite Belt was hit by a severe hailstorm at around 5pm. Hail to 4cm in size damaged crops. Another thunderstorm damaged 5 buildings at Charters Towers around 6pm.

17-12-1982. The Granite Belt was hit by a severe hailstorm at around 5pm. Hail to 4cm in size damaged crops.

19-12-1992. A hail storm hit the Granite Belt at about 9pm. Hail to about 4cm in size damaged orchards.

21-12-1982. Two buildings were reported damaged at Roma at about 8pm during a thunderstorm.

1983

10-01-1983. Seven buildings were damaged at Chinchilla and Tara by a severe thunderstorm at about 3pm. A little later at 3.30pm three buildings were damaged and 4cm hail damaged crops in the Murgon area.

16-01-1983. Hail up to about 4cm in size damaged orchards on the Granite Belt.

09-02-1983. Four buildings were damaged at Inglewood at about 5pm during a thunderstorm.

13-02-1983. A severe thunderstorm damaged 6 buildings at Helidon around 5.30pm.

20-03-1983. Two buildings were damaged and heavy rain produced local flooding during a thunderstorm at the Mudgeeraba-Gold Coast area.. A tornado was also reported

02-05-1983. A thunderstorm brought heavy rain (56mm in 60 minutes) during a thunderstorm at Gladstone around midnight.

03-05- 1983. At least one building was damaged at Biggenden and Dallarnil by a thunderstorm. Also thunderstorms brought heavy rain to the Brisbane and Gold Coast areas.

04-09-1983. Eight buildings were damaged in the Gympie-Monkland area by a severe thunderstorm around 5.45pm. Hail to 2cm in size was reported from Gympie.

08-09-1983. One house was reported damaged and 5 horses were killed by a thunderstorm in the Warwick area. Also many trees were brought down by a thunderstorm on the Lamington Plateau inland from the Gold Coast.

14-09-1983. Ten buildings were damaged in the Ipswich - Rosewood area by a severe thunderstorm around 11.30pm. Hail up to about 4cm in size was also reported from Ipswich.

04-10-1983. A thunderstorm brought heavy hail up to about 2cm in size to Brisbane suburbs of Nundah, Eagle Farm and Alderley around 3.15pm.

06-10-1983. Nineteen buildings damaged as well as caravans during a thunderstorm on the Sunshine Coast at Maroochydore. A tornado was reported. One person died and 7 were injured.

13-10-1983. A hailstorm (hail to 3cm in size) hit Toowoomba at about midday. The hail damaged cars.

24-10-1983. Hail up to about 3cm in size hit Pittsworth at around 4.25pm.

03-11-1983. A severe thunderstorm damaged 16 buildings on the Gold Coast at about 4.30pm. Hail to 4cm in size was also reported.

04-12-1983. One building was reported damaged during a thunderstorm at Rockhampton.

30-12-1983. A building was damaged and an aircraft overturned during a thunderstorm at Cloncurry.

1984

03-01-1984. Wind gusts to 107km/hr damaged 13 houses in Mt Isa around 4pm. Hail stones to 1cm in size was also reported.

04-01-1984. Five buildings were damaged and 100mm of rain fell in the 50 minutes starting around 5pm during a thunderstorm at Laidley. Six buildings were also damaged at Pickininnie. Hail to 3.5 cm in size was also reported.

17-01-1984. Eight buildings at Cloncurry were damaged during a thunderstorm at around 4pm.

22-01-1984. Five buildings were damaged and hail to 1 cm in size was reported from a thunderstorm on the Gold Coast at about 4.30pm.

08-02-1984. Two buildings were damaged at Gatton at around 5.30pm during a thunderstorm.

09-03-1984. Twenty-one buildings were damaged at the Gold coast. Hail to 4cm in size was also reported.

10-08-1984. Two buildings were damaged in Beenleigh at around 7pm during a thunderstorm.

04-09-1984. A thunderstorm hit Gladstone around 11.30pm and damaged 4 buildings.

04-11-1984. A severe thunderstorm damaged 14 buildings at the Gold Coast around 9.30pm.

06-11-1984. Hail to 3cm in size damaged crops in the Gayndah, Mundubbera area. Another thunderstorm hit Townsville and wind gusts to 100km/hr were recorded.

07-11-1984. Hail to 2cm in size damaged crops in the Gayndah, Mundubbera area.

08-11-1984. Hail to 2cm in size damaged tobacco crops in the Mareeba area.

14-12-1984. A severe thunderstorm hit Roma at about 3pm. A total of 157 buildings were damaged as well as 5 aircraft.

16-12-1984. A thunderstorm produced heavy rain in Mt Isa. Another thunderstorm hit Mt Morgan and damaged two buildings. 125mm of rain was recorded.

29-12-1984. Hail to 4cm in size hit the area just to the north of Biloela and damaged crops. Hail to 7cm in size hit Great Keppel Island.

1985

01-01-1985. 103 buildings (including caravans) were damaged in Rockhampton at around 3.40pm during a thunderstorm.

06-01-1985. Severe thunderstorm in the Brisbane (Manly, Lota, Clayfield), Gold Coast Birkdale, Wellington Point and Cleveland area around 4pm. Wind and 4 cm hail Manly area with 2 (one by lightning) deaths. 10 houses unroofed and 200 damaged.

07-01-1985. Hail to 3cm in size hit the Killarney area and damaged crops. Two buildings were also damaged during the storm.

18-01-1985 The major Brisbane hailstorm (SW and NE suburbs) with gusts to 101 knots at Brisbane Airport and hail up to cricket ball size. 2000 houses unroofed, 20000 damaged and 12 structurally unsafe. Damage track 8 to 12 km wide from Jamboree Heights to Banyo. Major damage Jamboree Heights, Corinda, Sherwood, Graceville area and a region bounded by Windsor, Chermside, Banyo, Eagle Farm and Hamilton.

24-01-1985. A thunderstorm hit Barcaldine at about 6pm and damaged at least one house.

28-02-1985. Kin Kin was hit by winds estimated to be 150km/hr. 50 buildings were damaged and hail to 1cm was reported in the area. Bald Hills in Brisbane also reported hail to 1cm in size during a storm around 4pm.

06-03-1985. A wind gust of 106km/hr was recorded in Brisbane in a thunderstorm around 4.45pm. Suburbs most affected were in the Wavell Heights, Milton, Moorooka and New Market areas. 46mm of rain fell in 45 minutes.

08-05-1985. A severe thunderstorm hit the Bald Hills, Strathpine area at about 5pm and caused damage to five buildings.

11-09-1985. A wind gust of 100km/hr was recorded in Brisbane from a thunderstorm. One house was reported damaged.

13-10-1985. Hail to the size of oranges damaged to 40 houses in NW suburbs of Brisbane.

17-10-1985. A severe thunderstorm hit the Chapel Hill, Kenmore, Springwood and The Gap area of Brisbane and damaged two buildings and did extensive damage to trees.

18-10-1985. Three buildings were damaged in Charters Towers during a thunderstorm.

20-10-1985. Hail to 2cm in size damaged crops in the Kennedy, Murray Upper, Tully River area.

25-10-1985. Hail to 4cm in size damaged tobacco crops in the Mareeba, Dimbulah area at about 1pm.

27-10-1985. A water spout came ashore in the Redcliffe, Margate area and damaged 21 buildings.

01-12-1985. A severe hail storm hit the Beenleigh to Manly area around 4pm. Hail to 3cm in size damaged cars in the Beenleigh area. Winds to 150km/hr damaged 6 buildings during a dust storm/thunderstorm at Birdsville.

02-12-1985. A severe thunderstorm damaged 4 buildings at Biloela. Another storm hit the Springsure area around 3pm. 12 buildings were damaged and hail to 1cm was reported. Hail of about 2cm in size also damaged sorghum at the Brigalow Research property.

05-12-1985. A wind gust of 124km/hr was recorded at Mt Isa airport at 2.45pm during a thunderstorm. The winds caused damage to at least one aircraft.

13-12-1985. Five buildings were damaged in the Gatton, Rosewood and Ipswich area around 4.30pm. Another thunderstorm hit the Thangool area around 5pm with hail to 4cm in size.

27-12-1985. Hail to 3 cm in size was observed in the Laidley area during a thunderstorm.

1986

01-01-1986. Five buildings in the Samford and Wavell Heights area of Brisbane were damaged during a severe thunderstorm around 3.30pm.

02-01-1986. Five buildings were damaged in the Gayndah at about 3.30pm by a thunderstorm.

14-01-1986. Five buildings were damaged in Dirranbandi at about 5pm by a thunderstorm.

24-01-1986. A thunderstorm caused extensive damage to a banana crop in Tully at about 6pm.

07-02-1986. Hail to 4cm in size caused damage to Granite Belt orchards from a storm that hit the area around 3.30pm.

11-02-1986. A hailstorm with hail to about 4 cm in size at about 11pm caused extensive damage to rock melons in the Chinchilla area.

9-03-1986. The Daisy Hill tornado caused extensive property damage from Ipswich to the southern suburbs of Brisbane. Altogether about 1000 homes were damaged.

October 1986 Ten buildings in the Brisbane, Redcliffe and Caboolture areas were damaged by a severe thunderstorm around 3pm. Hail to 2cm in size was reported from Caboolture.

01-11-1986. Extensive damage was done to tomato crops in the Bucca and Bullyard area by 3cm hail.

17-11-1986. Twenty buildings in the Dirranbandi area were damaged at about 5.30pm by a severe thunderstorm.

22-12-1986. A severe thunderstorm hit Biggenden at about 6.30pm and caused considerable damage to 22 buildings. On the same day a thunderstorm hit the Sunshine Coast and 4 buildings and caravans were damaged at Noosa.

25-12-1986. Eleven buildings were damaged in the Brisbane (Kenmore, Stafford, Albany Creek, Geebung) Samford and Cleveland (heavy rain) by a thunderstorm. Hail to 1 cm in size was reported. Other thunderstorms affected the Toowoomba, Dalby and Pittsworth area and damaged 20 buildings and 6cm hail also damaged crops in the area.

26-12-1986. A severe thunderstorm hit the Dalby area at about 9pm and caused damage to 3 hours. There were reports of hail to 2cm in diameter.

1987

03-01-1987. A hail storm with hail to about 3cm in size damaged orchards in the Granite Belt area.

20-01-1987. Five buildings were damaged in Toogoolawah by a thunderstorm. Hail to 3cm in size was also reported.

21-01-1987. Eight buildings and some caravans were damaged at Beenleigh at around 6pm.

20-03-1987. A severe thunderstorm hit the Brisbane suburb of Salisbury at about 2.30pm and caused damage to 4 buildings.

29-03-1987. Two buildings were damaged in the Boonah, Beaudesert area at about 6.15pm by a thunderstorm. Damage to two buildings was also reported from Clifton and Yangan at about the same time.

02-08-1987. Two buildings at Tummaville and Millmerran were damaged by a thunderstorm.

10-10-1987. Hail to 3cm in size was reported from Emerald at about 5pm during a thunderstorm.

13-10-1987. Two buildings were damaged at about 5pm in Westwood by a thunderstorm.

19-10-1987. A severe thunderstorm caused hail and wind damage. Hail damage was in the Ipswich area and wind damage was in the Clayfield Kedron Stafford area. 40 houses unroofed, 220 damaged and 2 structurally unsafe.

21-10-1987. Heavy hail up to about 2cm in size was reported from Millmerran.

23-10-1987. Thirty houses in the Sunshine Coast area including Nambour and Tewantin were damaged and 4cm hail was reported.

24-10-1987. A severe thunderstorm hit Bundaberg and caused damage to 24 buildings.

29-10-1987. A severe thunderstorm hit Roma and caused damage to one building six aircraft.

11-11-1987. At around 4.40pm a severe thunderstorm moved through the Toowong, Jindalee area and then to the South Bank of the Brisbane River. Wind gusts to about 100km/hr damaged the sails at the Expo site.

21-11-1987. A 91km/hr wind gust was recorded at Rockhampton during a thunderstorm. A revolving stage was damaged.

22-11-1987. Five buildings at Goondiwindi were damaged by a thunderstorm.

23-11-1987. Ten buildings in Windorah were damaged by a thunderstorm at about 5.15pm.

24-11-1987. Hail and wind damage with gusts to 87 knots Tennyson Power House (40 m elevation). Widespread damage was reported from the Ipswich/Goodna area. 270 houses were unroofed and 820 damaged. A thunderstorm also hit the Warwick and Killarney area at about 2.30pm causing damage to 3 buildings. Hail to 2 cm in size was reported from Warwick.

Further to the east a severe thunderstorm hit the Gold Coast at about 2pm. Five buildings and many trees were damaged. Hail to 1 cm in size was reported.

28-11-1987. A severe hail storm hit Sarina at about 5pm. Hail to 4cm in size damaged cars and 13 buildings were also damaged by the storm.

30-11-1987. A severe thunderstorm hit the town of Archer at about 11am and caused damage to one house.

30-12-1987. Local stream rises resulted from heavy rain at about 5pm in the Guthalungra area.

1988

19-01-1988. Hail to 3 cm in size and heavy rain affected Inglewood.

30-01-1988. At least one house in the Lockyer Valley to Toogoolawah area was damaged by thunderstorms around 6pm.

13-02-1988. Twenty buildings were damaged at Cooyar during a thunderstorm.

14-03-1988. A water spout caused damage to 5 buildings at Emu Park

25-10-1988. A thunderstorm brought heavy hail up to about 2cm in size and heavy rain (75mm in 45minutes) to Broweena and Bidwill at about 1.45pm. One house and many trees were damaged. Later in the day a severe thunderstorm hit Bakers Creek at about midnight. Trees and out buildings were damaged and 50mm fell in about 40minutes.

20-11-1988. Hail of about 1cm in size damaged trees in the Atherton area around 3pm.

21-11-1988. Emerald experienced 1 cm hail and heavy rain during a thunderstorm around 2pm. Another thunderstorm brought 1 cm hail to Mutchilba at around 3pm. The hail damaged tobacco crops.

22-11-1988. A hailstorm with hail to about 4cm hit the Gogango area at about 4pm.
Also 20 buildings were damaged by 6cm hail at Hervey Bay at 5.30pm.

27-11-1988. Eight buildings at Crows Nest were damaged by a thunderstorm that hit around 4.30pm.

01-12-1988. Seven buildings in Gympie were damaged at around 1pm by a severe thunderstorm.

1989

02-01-1989. A thunderstorm damaged a house at Maryborough at around 7pm. Another thunderstorm damaged buildings and produced hail to 1.5cm at 7pm in the Tara district.

07-01-1989. Five buildings were damaged and 1.5cm hail was reported from Greenmount at around 5pm.

12-01-1989. A wind gust recorded at 97km/hr damaged one building in Townsville at around 10pm.

19-01-1989. A severe thunderstorm damaged five buildings in the Toowoomba, Lockyer Valley and Laidley area at around 6pm.

22-01-1989. Two buildings were damaged and 2cm hail damaged crops at Jandowae and Macalister at 10pm.

31-01-1989. A thunderstorm brought wind gusts of 84km/hr and heavy rain (60mm in one hour) to the Raglan, Gladstone area around 7pm.

04-02-1989. Two buildings were damaged at Townsville by a thunderstorm.

12-02-1989. Two buildings were damaged at Rockhampton at around 6pm by a thunderstorm.

28-02-1989. One building was damaged at Port Curtis at 5pm by a thunderstorm.

24-03-1989. Twenty buildings were damaged at Mt Isa at around 2pm. Hail to 2cm was also reported.

26-04-1989. A thunderstorm brought heavy rain (87mm in one hour) to Brisbane.

18-08-1989. Heavy hail up to 2cm in size was reported from Rockhampton.

13-10-1989. One building was damaged and 1cm hail was reported from Richmond at about 3pm. This was the first report of hail from the town in 15 years.

24-10-1989. Flash flooding was reported from Roma.

26-10-1989. Six buildings on the Gold Coast were damaged by a thunderstorm.

08-11-1989. A thunderstorm damaged 2 buildings at Ipswich and Rathdowney at about 8.30pm. Hail to 1 cm in size was reported.

09-11-1989. One building was damaged and 1.5cm hail was reported in Emerald at around 5pm. One building in Wowan was damaged and 1.5cm hail was reported at 5pm.

24-12-1989. The Redcliffe tornado that also caused severe wind damage in Brisbane. A yacht at Newport Marina recorded winds in excess of 100 knots. Altogether, 500 homes were unroofed, 1000 damaged and 12 structurally unsafe.

1990

15-01-1990. A line of thunderstorms extended across eastern Queensland from the border to the Gulf of Carpentaria. The only reports of any severe weather was at Oakey where there was a wind gust of 45 knots (83 km/hr) recorded and there was minor flash flooding in some Brisbane suburbs.

30-01-1990. Severe Thunderstorm in Mt Isa produced a record maximum thunderstorm wind gust of 69 knots (128km/h).

09-02-1990. A thunderstorm affected the Toowoomba area and produced severe wind gusts. It caused some damage to dwellings and commercial premises and considerable damage to trees and most spectacularly blew down a 65 metre high voltage electricity transmission tower almost 12 kilometres NNE of Toogoolawah

07-03-1990. Severe Thunderstorm developing on the southern border ranges and moved to the northeast over Brisbane. The storm produced strong winds, heavy rain and marble size hail.

16-10-1990. Severe Thunderstorm developed to the southwest of Brisbane and moved northeast over Ipswich and Brisbane before moving out to sea near Redcliffe.

17-10-1990. A severe thunderstorm affected the Sunshine coast with estimated 80knot (148 km/hr) winds. One catamaran was overturned, and several other boats broke their moorings. Reports were received of pea to marble size hail. A roll cloud was observed from Maroochydore Airport.

19-10-1990. A line of thunderstorms crossed southeast Queensland and passed through the Brisbane suburbs during the evening.

02-11-1990. Severe thunderstorms in some Brisbane suburbs with golf ball size hail reported from Ipswich, Albany Creek, Samford and Ferny Grove. Reports were also received of hail to cricket ball size from Booval.

04-11-1990. A severe hailstorm in the Ipswich area produced hail stones the size of golf balls and caused damage to 25 homes with Booval being the worst affected area.

04-11-1990. A severe hailstorm at Toowoomba caused massive crop losses.

21-12-1990. Severe Thunderstorm through Harrisville, about 35 kilometres south of Ipswich. Storm spotters reported the cloud rotating, with the possibility of a funnel cloud.

23-12-1990. A severe thunderstorm at Yelarbon producing damaging winds. Three houses were unroofed and steel sheds were blown away. Another thunderstorm through Jimboomba unroofed several houses. Thunderstorms also affected the northern rivers district of New South Wales causing major damage. Minor damage was reported from the Gold Coast with wind gusts to 65 knots (120km/hr).

1991

20-01-1991. Severe thunderstorms moved through the Gold Coast and Brisbane suburbs and caused mainly superficial damage to structures. All together 37,000 homes suffered disruption to power as the Coomera substation was struck by lightning. The worst affected suburbs were Strathpine, Lawnton, West Moggill, Kenmore, Toowong Indooroopilly, Jindalee, Holland Park, Sherwood, West End and Moorooka.

21-01-1991. A severe thunderstorm developed over the Border Ranges and moved northward up through the Gold coast and on through Brisbane. The cell caused structural damage on the Gold Coast, Beaudesert and at Brisbane. Gust of 55 knot recorded at Coolangatta where 2 aircraft flipped over. Only light hail was reported.

22-01-1991. A storm cell also affected the Lowood area. Very little wind and rain, but tennis ball sized hail that caused extensive damage to cars and houses by smashing windows and piercing water tanks.

23-01-1991. A severe thunderstorm in the Toowoomba - Gatton area produced strong winds and golf ball size hail.

28-03-1991. Severe thunderstorms between Ipswich and Boonah produced hail and heavy rain.

25-10-1991. Severe Thunderstorm between Hannaford and Inglestone caused severe hail damage to ready to be harvested crops.

30-11-1991. Severe Thunderstorm in the Gold Coast and Brisbane Metropolitan areas. Hail and wind caused severe damage to many homes and cars. Estimated damage costs of close to \$2 million. One eyewitness in Sunnybank hills described saw what he thought to be a tornado at least 200 feet from the ground. From the damage evident it appears unlikely that a tornado occurred.

16-12-1991. A severe thunderstorms in the Nambour, Sunshine Coast region produced strong winds and hail. The storm damaged a shopping centre in Nambour and the Big Pineapple tourist attraction.

19-12-1991. Severe thunderstorms near Laidley, caused flash flooding in the Laidley Creek. A Long line of thunderstorms developed over the southern interior of the state and progressed very slowly eastwards during the evening. The cells collapsed as they moved off the escarpment and onto the coastal plains.

1992

01-01-1992. Severe thunderstorms moved through both northern and southern Brisbane suburbs. Some wind damage was reported as well as pea size hail in the southwest suburbs.

04-01-1992. A severe Thunderstorm occurred late in the night on the Gold Coast. The worst affected region was Coombabah where strong winds and heavy rain caused damage to more than 200 homes. 20 caravans were ruined and another 25 suffered moderate damage.

07-01-1992. Severe thunderstorms to the south and north of Brisbane caused minor hail and wind damage. Many power lines were brought down disrupting power supplies to several areas but otherwise generally there was just superficial damage.

29-01-1992. Severe Thunderstorm at Mt Isa caused local flooding and wind damage.

30-01-1992- Severe Thunderstorm Mt Isa with severe flash flooding with rates of 1000mm per hr recorded by Mt Isa Mines.

12-02-1992. Severe Thunderstorm at Yeppoon with the report of large hail. The event lasted about 20 minutes.

22-03-1992. A severe thunderstorm passed to the north of Brisbane affecting areas around Caboolture, Narangba and Deception Bay. The worst hit area was Narangba. The storm produced damaging hail and wind.

29-09-1992. Severe Thunderstorm over the Gold Coast causing widespread, extensive damage. The worst affected areas were the suburbs of Wardoo, Benowa, Ashmore Southport and Broadbeach.

04-11-1992. Severe thunderstorm in the southern suburbs of Brisbane, with the worst affected areas being Sunnybank Hills, Slacks Creek, Forrestdale, Rochedale and Kingston.

05-11-1992. Severe Thunderstorm in the Haden district, about 45 kilometres north of Toowoomba. One house was unroofed and a trail of trees uprooted, with shrubs stripped of their leaves. Hail stones the size of golf balls were also reported.

05-11-1992. A severe thunderstorm at Blackwater, unroofed the Blackwater hospital and caused damage to houses and trees.

18-11-1992. Thunderstorm in the Southern suburbs of Brisbane produced pea size hail and strong winds. Only minor wind damage reported with electricity supply disrupted to 45,000 homes on the Gold Coast and 21,000 homes in the Redland Bay - Logan area.

19-11-1992. A severe thunderstorm in the Glenwood - Gympie area with strong winds that caused structural damage to a few houses and uprooted trees. Hail caused damage to crops and vegetation from Chatsworth to Tamaree.

21-11-1992. A line of thunderstorms extended from northern Queensland to the Central New South Wales coast, with several severe thunderstorms in the line. Severe thunderstorms in the Roma area with one house at Yarrowonga completely unroofed, and 6 houses at Yuleba suffered moderate to severe roof damage.

21.11-1992. Lines of thunderstorms extended from northern Queensland to the Central New South Wales coast. These lines contained several associated severe thunderstorms. One cell in the Rockhampton region produced strong winds and caused damage to trees and sheds, but no structural damage to dwellings.

22-11-1992. A severe thunderstorm struck Great Keppel Island and produced wind gusts of 70 knots (129 km/hr).

25-11-1992. Two children were struck and killed by lightning as they undertook a school group bush-walk through the Lamington National Park.

25-11-1992. Severe Thunderstorm struck the Hervey Bay area around Torquay and Urangan and caused severe structural damage to several buildings. The event described by many locals as a tornado, describing an enormous noise, but no funnel cloud was sighted.

29-11-1992. This was a severe thunderstorm day across eastern Queensland that extended from the southern Queensland boarder to about Gladstone in the north. A severe thunderstorm in the Maroochydhore area caused wind and hail damage. There were no injuries reported although five catamarans were capsized and fourteen distressed

people had to be rescued. Cricket ball size hail punctured roofs. Also a large number of vehicles sustained hail damage. Wind squalls caused damage to about thirty small aircraft at Maroochydore airport. One severe thunderstorm cell passed over Brisbane in the early afternoon producing golf ball size hail and disrupting the first test Cricket match for the season at the Gabba. A cell developed to the southwest of Maryborough during the early afternoon. The cell then split with a left mover and right mover resulting. The right mover is not reported to have produced any damage. However the left mover moved northeast towards Maryborough, generated a tornado in the unpopulated area of Oakhurst, leaving a discontinuous path of destruction in its wake. One brick house was completely destroyed and several others suffered roof damage. Windows were smashed by hail up to golf ball in size. 3 cattle had to be destroyed due to injury sustained by flying debris. Hundred of acres of pine forest were flattened in the wake of the tornado. A severe thunderstorm through Bucca produced a tornado. This cell caused extensive wind and hail damage.

02-12-1992. A severe thunderstorm at Mt Isa caused major structural damage to the local soccer club.

05-12-1992. Thunderstorms produced hail and severe wind gusts in the Brisbane Suburbs. The worst hit areas were Ipswich and near Beenleigh. Several houses were unroofed and a dog was killed by debris when a tree struck by lightning fell onto the house.

08-12-1992. A severe hailstorm developing near Oakey and moved east over Brisbane.

09-12-1992. A line of thunderstorms extended from Brisbane to Rockhampton. Hail was reported in the northern suburbs of Brisbane, also at Pittsworth, Kingaroy, Gladstone, Rockhampton and Calliope, but the only damage was reported at Pittsworth and Kingaroy.

14-12-1992. Severe thunderstorms affected the Granite Belt district near Stanthorpe. The storm produced up to golf ball size hail and devastated vegetable crops in the region. In half an hour it cut a 2 kilometre wide trail of destruction through 20 kilometres of the Amiens and Bapaume Ridge districts causing crop damage estimated at \$5 to \$7 million. More than 300 ha of crops were lost including apple and stone fruit orchards.

26-12-1992. A severe thunderstorm moved through the northern suburbs of Brisbane and produced wind and small hail.

26-12-1992. Severe Thunderstorm affected the Gold Coast area. The storm that was described as a mini-cyclone produced hail, heavy rain and damaging winds and left more than 100 homes with structural damage.

28-12-1992. A severe thunderstorm moved through the northern suburbs of Brisbane. A funnel cloud was sighted at Samford/Ferny Hills but no damage was reported. Also several houses were damaged by falling trees and other flying debris in the Boondall area.

30-12-1992. A severe storm at Longreach that lasted about 15 to 20 minutes produced strong winds and hail. The storm caused minor structural damage.

1993

01-01-1993. Severe thunderstorm at Mt Isa produced wind gusts to 55 knots (102 km/hr) but no damage was reported.

06-01-1993. Severe thunderstorm in the Ipswich area produced strong winds and heavy rainfall with flash flooding.

08-01-1993. A severe thunderstorm to the north of Brisbane with only minor hail damage.

11-01-1993. A Severe thunderstorm at Sellheim, near Charters Towers produced very heavy rain..

05-02-1993. Thunderstorms developed in the southeast corner of the state, but the only severe weather reported was from a cell near Ipswich.

22-03-1993. A severe thunderstorm at Mt Isa with wind gusts to 47 knots (87 km/hr) and heavy rain.

28-03-1993. A severe thunderstorm in the Bribie Island region was described as a mini tornado as it cut a swathe of damage across a relatively narrow path.

02-09-1993. A single cell storm caused heavy rainfall and wind damage in the Kippa Ring area.

29-10-1993. Widespread thunderstorms through the Brisbane suburbs with hail in varying size from small hail to golf ball size hail in the northern suburbs.

05-12-1993. A severe thunderstorm in the Gatton region produced strong wind squalls, heavy rain and golf ball size hail that caused damage in excess of \$6,000,000 to local crops alone.

1994

10-10-1994. A wind gust of 56 knots (104 km/hr) was recorded at Jackson airport during a thunderstorm.

20-10-1994. A severe thunderstorm caused roof damage to 18 houses in the Ipswich area and southwest suburbs of Brisbane. The storm also disrupted power to about 2000 homes.

20-10-1994. Two homes lost roofs in the Bray Park area during a thunderstorm.

20-10-1994. A thunderstorm caused wind damage to several houses in Brisbane's northern suburbs.

20-10-1994. Thunderstorms in the Nambour district and Sunshine Coast hinterland caused 4 houses to lose their roofs and caused roof damage to several other houses. Other damage was caused to windows and cars mainly due to fallen trees and broken branches. All together 15000 homes lost power

02-11-1994. A thunderstorm cell developed to the northwest of Killarney and moved to the southeast over Marlborough producing hail in the Marlborough area causing car and window damage.

02-11-1994. A line of thunderstorms passed from southwest to northeast across the south central and the southern part of the north coast of the state during the afternoon. Embedded thunderstorm cells caused widespread damage to near coastal farming communities between Gladstone in the south and Mackay in the north. One of these cells passed through the Mackay Pioneer Valley region and produced golf ball size hail that damaged crops and caused minor house damage. Another cell developed to the west-southwest of Gladstone and moved through the Gladstone/Yarwun region and caused hail damage to fruit crops.

03-11-1994. A severe thunderstorm cell hit the Calen area. The storm was described as a "mini tornado". Hail and strong winds and minor flooding accompanied the storm that caused damage to trees, cars and buildings.

04-11-1994. A severe thunderstorm passed through the Kin Kin area, on the outskirts of Maryborough causing extensive hail and wind damage. The thunderstorm was described as a "mini tornado". One eyewitness described seeing rotation on the southern end of the cell, though no funnel was observed. Based on the eyewitness account it is believed damage was caused by straight-line winds and no tornado developed. A severe Thunderstorm developed over the Mt Tamborine area and moved to the southeast over the northern end of the Gold Coast. Golf Ball size hail caused extensive damage to cars, houses and gardens. Every car parked in the Movie World car park suffered hail damage. The theme park also suffered extensive damage to lighting and to trees that were heavily stripped of leaves. Several car yards suffered extensive damage to open air stock. Most of the damage to houses was due to skylights being smashed. Another cell rapidly intensified in the vicinity of Eight Mile Plains that caused damage to the immediate vicinity of Manchester Street Eight Mile Plains.

28-11-1994. Mt Isa experienced a severe thunderstorm and recorded wind gusts of 97km/hr at 1.55pm and in the three hours to 4.15pm a total of 54.4mm of rain fell on the city.

10-12-1994. On the morning of the 10th of December 1994 a Severe Thunderstorm occurred in the Nerangba, Burpengary, Morayfield areas to the north of Brisbane. Strong wind gusts caused structural damage to houses, sheds and fences, tore trees from the ground and broke branches from others. Penetration of wind driven rain under roof tiles and around closed windows caused considerable internal damage in some dwellings.

15-12-1994. A severe thunderstorm was reported from Coorabulka station. The storm came from the west and the gusts tore a light plane from its tie down wires and flipped it over and caused structural damage to a strongly constructed galvanised iron store shed by blowing in the bolted doors. A caravan belonging to the grader driver was blown over.

1995

02-01-1995. A violent storm raged across the southwest Queensland town of Bollon, about 100km west of St George at about 2 am. Although no one was injured strong winds snapped gum trees "like toothpicks" and scattered hail across the town. The storm raged around the town for about an hour and one garage was destroyed.

02-01-1995. A severe thunderstorm hit Grantham in the Lockyer Valley around 3.45pm and lasted up to 45 minutes. Roofs were blown off some buildings and trees were blown down.

05-01-1995. A severe thunderstorm hit the Longreach area and caused wind damage at the airport, but little if any damage to the town. Apparently three planes were damaged at the Longreach aerodrome in a late afternoon storm. A Cessna 172 was thrown upside down, a drifter ultra light was twisted into a mangled mess and a courier plane had a prop strike. Storm winds got up to 140km/h. Damage appears to have been sustained to the aerodrome area only with no reports from the town. Numerous buildings had windows smashed from blowing stones, with some also losing roofing iron. There have been reports over the last two days of structural damage to homes and schools along with vegetation damage in Aramac and Ilfracombe areas.

08-01-1995. A severe thunderstorm was reported in the Nanago-Coolabunia area which is located about 10 kilometres northwest of Nanago. The storm struck at 3.30pm and cut a damage swathe about 0.5 miles wide and tore a red gum tree 50 feet high right out of the ground roots and all. One shed was destroyed at Coolabunia.

09-01-1995. A severe thunderstorm passed through Mt Isa between 5.25pm and 7.00pm.

29-01-1995. A severe thunderstorm struck the western and near southern suburbs of Brisbane after causing wind damage to buildings and vegetation at Marburg and Mt Crosby. Considerable tree damage occurred in the near western suburbs while both vegetation and structural damage occurred along a line stretching from west end through Balmoral to the bay side suburbs of Wynnum and Manly.

25-03-1995. A severe thunderstorm hit the Jimboomba area with damaging hail and strong winds.

27-03-1995. A severe thunderstorm hit Kilcoy and caused roof damage to three houses. Marble size hail was also reported.

02-04-1995. A severe thunderstorm hit Brisbane airport and produced wind gust to 50 knots (92km/hr).

05-04-1995. A severe thunderstorm at Holland Park caused some tree and roof damage power disruption and pea size hail.

31-10-1995. A severe thunderstorm hit Gympie and produced golf ball size hail causing property damage in the area. Crops in some areas were completely destroyed. This was the same cell that produced Tennis ball size hail at Bauple north of Gympie. Hail the size of tennis balls caused damage to property, ripping holes in roofs and smashing car windows, and destroyed crops. This was actually the first of two thunderstorms passing over the area in the

afternoon. The second storm produced up to golf ball size hail. A second hail storm to pass over Bauple in the same afternoon. The first storm produced tennis ball size hail, but the hail associated with the second storm was only up to golf ball in size.

A severe thunderstorm moved over Ipswich and the Western Suburbs and produced golf ball size hail and flash floods in some areas. Many houses and cars suffered hail damage. About 50% of the Booval Shopping Centre suffered flood damage. The storms moved out over Moreton Bay and produced a 49knot (91km/hr) wind gust at Cape Moreton. Another severe thunderstorm at Rockhampton produced 51knot (94km/hr) wind gusts. No reports of any damage.

03-11-1995. Evidence of Severe Thunderstorm on the Darling Downs late at night caused extensive damage to wheat and cotton crops.

04-11-1995. Area of thunderstorms (MCC) developed near Miles and moved steadily southeast over Brisbane overnight. The storms produced wind damage at the Myora caravan park on Stradbroke Island as they moved through.

05-11-1995. An extensive line of thunderstorms developed over the Darling Downs and moved eastward across the southeast district. The storms produced large hail and wind gusts from Laidley through to the coast with the worst affected Brisbane suburbs to the south in the Logan City area.

06-11-1995. This was a day of widespread thunderstorm activity through the southeast district. One cell developed to the southeast of Esk and moved east-southeast out over Moreton Bay and Islands. This particular cell did not produce severe weather but killed a fisherman off Nudgee Beach, struck by lightning. Another cell moved from the Darling Downs to the coast and caused widespread wind and hail damage in the southern suburbs of Brisbane.

07-11-1995. A severe thunderstorm in the Capricornia district produced golf ball size hail near Ubobo and Nagorin.

08-11-1995. A severe thunderstorm moved through the Sunshine Coast and hinterland. The storm produced golf ball size hail between Maleny in the hinterland and Maroochydore on the Sunshine Coast, with hail up to cricket ball size at Palmwoods. A severe Thunderstorm was also reported at Curra near Gympie.

19-11-1995. An isolated severe thunderstorm in the Caboolture - Morayfield area caused extensive damage to property in the area.

21-11-1995. A thunderstorm in the Capricornia district produced heavy rain in the Raglan to Ambrose area.

22-11-1995. A severe thunderstorm was reported in the Sunshine Coast and hinterland.

01-12-1995. A thunderstorm over the Darling Downs with a suspected tornado sighted at Mt Kynock about 8 kilometres northeast of the Toowoomba Aerodrome.

04-12-1995. A severe thunderstorm at St George produced hail and wind gusts. One house was unroofed.

05-12-1995. A severe thunderstorm hit Roma with large hail and strong wind gusts.

Other severe thunderstorm hit Blackwater and Moranbah with strong wind gusts that caused considerable damage to private dwellings and public assets.

11-12-1995. A multi cell thunderstorm producing intense rain and minor flash flooding in the southwest suburbs of Brisbane.

16-12-1995. Severe Thunderstorm at Stanthorpe caused widespread damage to fruit crops. Another line of thunderstorms moved through the Gold Coast and southern suburbs of Brisbane ahead of a surface trough. The storms, moving at about 90kmph produced severe wind gusts between Beaudesert, Beenleigh and then out through Redland Bay and over Moreton Bay.

17-12-1995. Phenomenal day of severe thunderstorm activity with three lines of severe storms through the Southeast District alone. Also severe storms in the Wide Bay and Burnett and the Capricornia districts. First line of storms to pass through the Southeast district produced severe wind gusts at Amberley RAAF base and Archerfield Airport.

18-12-1995. A number of lines of thunderstorms developed on the 18th. A severe cell passed over Maroochydore producing strong wind and hail. A squall line developed to the west of the Capricornia district between Emerald and Taroom. The line moved eastward through the Capricornia district producing isolated pockets of damage. The third line of thunderstorms to pass through the southeast district with widespread thunderstorm activity but only one severe cell moved over the Caboolture-Morayfield area.

19-12-1995. A severe thunderstorm produced strong wind gusts in the northeast of Mt Isa in the Sunset area where most of the damage occurred at around 5pm. Damage to buildings include Mt Isa hospital lost two sections of roof (16m x 6m). One house was completely unroofed. Three other houses suffered partial roof damage. Other damage included five garden sheds, fallen power lines and considerable foliage damage. Hail was also reported from in the town.

23-12-1995. Observer at Rockhampton WSO sighted a suspected tornado. Funnel passed over a sparsely populated area and as a result no reports of damage or confirmation.

28-12-1995. Severe Thunderstorms developed over northern New South Wales and moved steadily northward to pass through the Gold Coast and adjacent hinterland, then through Brisbane to the Sunshine Coast. Wind and hail damage resulted along the Gold Coast and adjacent hinterland.

1996

26-01-1996. Severe Thunderstorm through the Beaudesert area with strong wind gusts. No reports of significant damage and not enough data to determine if wind gusts were severe.

28-01-1996. A severe thunderstorm moved through Ipswich and produced strong wind and hail and caused some property damage.

29-01-1996. Severe Thunderstorm near Gympie produced up to golf ball size hail and wind gusts to an estimated 44 knots. No damage reported.

01-02-1996. A storm spotter report of a severe thunderstorm at Injune with very heavy rain and strong winds but no reports of damage.

03-02-1996. Severe Thunderstorm passed through the southern suburbs of Brisbane and over southern Moreton Bay producing severe wind gusts. Widespread tree damage was reported from Karana Downs to Coochie Mudlo Island in Moreton Bay. Three houses suffered roof damage.

03-02-1996. A line of thunderstorms extending from Coolangatta to the Western Darling Downs moved across the Southeast district during the afternoon producing two areas of Severe Weather, namely Redland Bay (previous record) and Caboolture.

04-02-1996. Possible Severe Thunderstorm west of Charleville. Storm spotter report of hail up to marble size, heavy rain and strong wind gusts.

05-02-1996. Severe Thunderstorm at Mt Isa producing a wind gust of 51 knots at the WSO. No reports of damage.

09-02-1996. A line of thunderstorms moved through the southeast district. Only one suspected severe cell, reported from a storm spotter at Bribie Island who estimated wind gusts to be about 55 knots (102km/hr).

18-02-1996. Scattered thunderstorms developed in the southeast district and one cell in the Landsborough-Maleny area produced damaging wind gusts.

19-02-1996: A severe thunderstorm near Woodford produced very heavy rain.

23-04 1996. A thunderstorm cluster formed near an upper low and caused torrential rain and severe local flooding in the Yaamba area during the 23rd. The 24 hour total ending 9am on the 24th was 480mm, most of which fell in the 6hour period between 10am and 4pm.

27-07-96. A severe thunderstorm at Wishart, a Brisbane suburb damaged several houses. A newspaper estimate suggested that \$10,000 damage was done to one home.

19-09-1996. Three houses in Quilpie were damaged by a thunderstorm.

20-09-1996. A severe thunderstorm damaged 14 houses in the Gold Coast region, 5 houses were damaged at Bundall, 5 houses at the Isle of Capri, 2 houses at Burleigh Heads, 1 house at Coolangatta and 1 house at Palm Beach.

21/9/96. The passage of a trough produced thunderstorms with recorded gusts of 54 knots at Rockhampton M. O. Numerous waterspouts were reported from Yeppoon. Soft hail to 1.0 cm was reported. Minor roof damage in Rockhampton and some large trees blown over.

30/9/96: Severe thunderstorm in the Redcliffe area. Report from Qld Bureau RESM. 18' to 20' trees "snapped off" and lying to the south. House partly unroofed. Power pole leaning to south. Water spout out to sea from Brighton/Sandgate.

19/10/96. Damage to several houses at Redbank Plains from strong winds associated with a thunderstorm. Damage confined to an area 100 to 200 metres wide. Newspaper report of 1 house losing its roof, owner estimated damage at \$7000.

30-10-1996. Thunderstorms developed over NSW/QLD border ranges, southwest from the Gold Coast, at 1.30pm. The storms moved towards the northeast at about 30kmh. Winds of 58 to 78 knot were measured from a helium balloon tethered at 100ft at Robina. Crop damage resulted from extensive soft hail of pea size. There were also reports of golf ball size at Mudgeeraba.

31-10-1996. A severe thunderstorm was reported in the area 16 km southeast from Monto. One house lost its roof and the windows were broken by hail. The report said that a blanket of hail stones the size of 10 cent piece carpeted the ground.

6-11-1996. A thunderstorm deposited 25mm of rain in a 10 minute period just before 3pm at Wamuran. Also dense pea size hail and intense rainfall causing local flooding to a depth of 6 inches was reported from Kingaroy.

24-11-1996. Between 6.30pm and 8.00pm P&O Ports at Fisherman Islands Container Park at the mouth of the Brisbane River reported damage to several containers due wind associated with a thunderstorm.

29-11-1996. A mini tornado was reported from Ripley- a suburb of Ipswich. Winds from a freakish mini-tornado sucked up a horse at Ripley and hurled it 100m where it was impaled on a fence post. Residents yesterday completed the clean up of shredded garden sheds, a twisted windmill and a crushed caravan. The wind also stripped the roof from the stable belonging to the unfortunate horse.

3/12/96. Report in Courier Mail: Two houses damaged near Gympie. One house at Calico Creek lost its roof and one house in Eel Creek Rd had its roof damaged. Report also mentioned trees blown across roads and power lines down. Report in Gympie Times: from owner of house which lost its roof. mentions " a change in direction " (of wind ?): " ...scattered hail of a good size... ": "the main bedroom window was literally sucked out of its frame and the carpet throughout the house billowed up to 30 cms above the floor..."

3/12/96: Report of damage to a house at Gatton. Report of damage to trees and property from a Storm Spotter at Karalee. Report of 75mm of rain between 18:15 and 19:00 utc at Camp Hill. (1 in 7 year intensity)

3/12/96: Report of damage to a house at Gatton. Report of damage to trees and property from a Storm Spotter at Karalee. Report of 75mm of rain between 18:15 and 19:00 utc at Camp Hill. (1 in 7 year intensity)

9-12-1996. Jagged hail larger than golf ball size and very strong winds affected the Noosa area during a thunderstorm.

10-12-1996. A severe thunderstorm tracked from near Ipswich, across Archerfield aerodrome to Brisbane Airport. Gusts to 56 knots were recorded at Archerfield and gusts to 69 knots at Brisbane Airport. Hail severely damaged a fabric aircraft at Archerfield. Newspaper reported worst hit suburbs as Browns Plains, Coopers Plains, Durack, Salisbury, Rocklea, Norman Park and Mt Gravatt. Reports of knee deep flooding in backyards and hail to golf ball size. Storm spotter at Mt Gravatt reported hail covered yard to depth of 1 inch. A severe thunderstorm developed in the vicinity of Esk, then moved southeast to the Rosewood area. Newspaper report of a concrete block milking shed being destroyed with powerlines and trees down. Hail was reported to be up to 4cm wide.

11-12-1996. A severe thunderstorm developed just south of Beaudesert and then tracked NNE. Hook shaped structure observed on radar and S.E.S member reported rotation in the cloud just west of Beaudesert as well as "Vast amounts of mothball size hail. Trees were brought down in the Bromleton to Beaudesert to Tamborine area. Golfball size hail was reported at Jimboomba. An Army pilot reported that a funnel cloud to the ground approximately 1/4 to 1/2 mile south of heavy rain when the thunderstorm was just east of Dalby. The funnel cloud lasted about 15 minutes.

29-12-1996: Leyburn 28.0 151.6. Phone report of hail between marble and table tennis ball size.

30-12-1996. A line of thunderstorms passed over Kingaroy district between 7.20 and 8.20 pm.

31-12-1996: Kingscliffe/Coolangatta. Phone report of "big" hail at Kingscliff and marble size hail at Benora Point. "V-notch" echo observed on radar. As the line associated with this echo moved northeast, a second cell developed in Moreton Bay at the northwest end of the line, with intensity reaching rate six. A third cell developed north of Brisbane between 03:10 and 05:50 utc and tracked over Caloundra; where damage to unit windows and tree branches was reported.

1997

01-01-1997. 92.0 mm of rain fell between 3.30pm and 4.30 pm in The Caves area. (just to the north of Rockhampton) A reliable observer reported a swirling motion similar to a small tornado at the onset of the storm at Alton Downs.

11-02-1997. Report of 40 mm of rain in 25 minutes (approx) which would exceed the one in ten year hourly total. Also damage to farm shed, with part of the roof blown 75 metres away. Report from Oakvale (near Stanthorpe) Time of storm between 0930 - 1000 GMT.

31-03-1997. Large hail and strong wind gusts reported from the Gold Coast; where an old "Queenslander" styled house lost its roof. Great volume of hail causing blocked drains and subsequent flooding of shopping centre at Chermide (Brisbane northern suburb). Both cells associated with a northward moving surface trough and divergent upper pattern. Insurance Council of Australia State manager estimated total damage would not exceed \$2 million. Six houses damaged around Ningi, Beachmere and Bribie Is. Numerous branches and fallen trees cleared by SES.

08-08-1997. Thunderstorms developed in the Wide Bay Burnett District and the Southeast Coast District ahead of a trough system. Newspaper report of hail "the size of 20 cent piece" by Maryborough cane farmer.

20/09/97: Report by WCKNEWS: At Millmerran, two empty, 31 Tonne, livestock trucks were blown onto their sides by wind gusts associated with a thunderstorm. Report also stated: Wild winds and hail damaged shops in Millmerran's main street. A farmhouse near the above accident lost its roof and a 30 metre tall gum tree was blown from the ground. Hail the size of golf balls was reported. Cell movement towards 121degrees at 38 kts.

22/09/97 Ormeau: Damage consisted of limbs blown from eucalyptus trees. Minor roof damage eg. ridge capping lifted on concrete tile roof. A building under construction was extensively damaged with single thickness brick walls on the southern and eastern sides blown down. (However other complete buildings in the vicinity showed little damage.) A eucalyptus tree with an estimated diameter of 0.7 metres was snapped off.

24/09/97 Reports of large hail in the Rockhampton area. (1) Mrs Bass at Upper Ulam reported golf ball size hail, heavy rain, no wind. The hail stripped trees and dented a car. The only damage to her house was a cracked window pane. It

was the worst hail storm she could recall. (2) Mrs Davis at Archer Station reported golf ball to passionfruit size hail. No damage was reported. Hail came in two bursts- large hail with little rain; then rain; then large hail and rain. Storm appeared to move due east. (3) Roslyn Bay Boat Harbour reported hail the size of 10 cent pieces.

14-10-1997. Severe thunderstorms damaged two churches, unroofed several houses, uprooted large Cotton trees and Pepperinas and overturned a caravan in Clermont.

28/10/97: Report from the Warwick daily News published 29/10/97: Hail storm at 3:50pm on 28/10/97 over the west and southern areas of Warwick. Minor flooding reported in the Warwick's C.B.D. More than an inch of rain in 20 minutes caused local flooding when hail blocked gutters. Warwick stone fruit grower, David Skillington said 70% of his apricot crop was wiped out in 10 minutes. District police stations received no reports of damage.

30/10/97. Report from a storm spotter (Keith Lay G 0027) at Ballandean of 35 mm of rain in 20 minutes from a storm. Hail to 1 cm and wind gusts to an estimated 40 knots.

09/11/97 Hail storm with "heavy" winds reported in the Texas District by the "Border Post 13/11/97." Two storms crossed the Texas area at around 6:15 PM with hail slightly larger than marbles falling for 20 minutes" The report also mentions "...some vegetable growers have had their whole crop destroyed hundreds of trees were blown down or broken off by the gale force winds all trees on a Lookout called the Beacon were destroyed 48 mm of rain fell on the town creating flash flooding in low lying areas ... " 0800 utc Synoptic Observation from Texas reported hail of "large marble" size in Plain Language section.

15-11-1997. A severe thunderstorm hit Boothulla Station approximately 100 km due west of Charleville. Hail the size of a \$2 coin (2cm), and 12.5 mm of precipitation fell in about 15 minutes. The shearing shed roof was removed, with damage to three other buildings. Leaves stripped from trees by hail.

16-11-1997. A squall line passed through Greater Brisbane area between 5.10pm and 7.10pm. Strong winds caused widespread blackouts. Wind gusts up to 90 kph were reported. No hail was reported.

30-11-1997: Severe thunderstorms moved through the Walloon, Thagoona, Rosewood, Mt Walker, Pine Mountain and Ropley in the Gatton district Spokeswoman for Energex reported approximately 20,000 homes from the Gold Coast to Brisbane lost power. Hail to the size of a \$2 coin was reported from Samford.. Maximum wind gust at Amberley M.O. on 30/11/97 S 32 kts at 0714utc
Queensland Times (published 01/12/97) reported "... the roof of a two storey house at Walloon was uplifted by gale force winds from a thunderstorm...."

07-12-1997. A line of thunderstorms moved through the Greater Brisbane Area from south to north. The Courier Mail newspaper reported 3500 homes blacked out in southeast Qld. The Queensland Times reported strong winds at Boonah, which uprooted trees and flattened street signs. A farm shed was unroofed and a 5 tonne irrigator was damaged.

15-12-1997. A severe thunderstorm hit Gladstone during the afternoon and produced about 60 mm of rain in one hour.

20-12-1997. Severe thunderstorms in the Mary Valley on the afternoon and brought down trees and power lines, the worst hit areas were in the Kandanga and Imbil districts.

21-12-1997. Severe thunderstorms brought down trees and power lines during the afternoon in the Wide Bay Burnett district.

27-12-97. A line of thunderstorms moved across southeast Queensland during the afternoon. Strong winds brought down trees on to the gateway arterial road. Also heavy precipitation severely reduced visibility on Southeast Freeway. Pea size hail was reported at Deverton. (Southeast from Toowoomba)

1998

27-01-1998. Hail to \$2 coin size and 120mm of precipitation in 55 minutes resulted from a severe thunderstorm that moved through Nanango. Moderate tree damage was reported.

28-01-1998. A very heavy rain event over southeast Queensland. A line of thunderstorms developed during the late morning over the coastal strip between about Gympie and the Gold Coast. A second, broader, area of storms and rain approached from the west at midday. This had the effect of enhancing the initial line of storms near the coast. The two areas then merged, resulting in heavy precipitation. The heaviest precipitation was in Calamvale (154mm) and Stretton (141mm) suburbs, south of the city centre. Other areas of heavy precipitation were at Mt Kanigan (146mm) and Eumundi (152mm), north of Brisbane. Numerous flash floods were reported in the newspapers, together with uprooted trees in the Ipswich district. Newspaper report that strong winds snapped four power poles on the Darling Downs.

02-02-1998. A severe thunderstorm hit Rockhampton Airport and produced a wind gust of 57 knots (105 km/hr). The area to the northwest of the airport recorded 48 mm of precipitation and hail of cherry size. Many trees were damaged.

16-02-1998. Thunderstorms produced heavy rain and strong winds in the Brisbane and Sunshine Coast region particularly at Burpengary (northern Brisbane suburb). There was a report of roof damage to a house at Keperra. A thunderstorm produced a wind gust of 50 knots (92km/hr) at Charleville meteorological office at 4pm. Also another thunderstorm produced a gust of 51knots (94km/hr) at Longreach meteorological office at 10.35pm.

18-03-1998. At approximately 6:30 pm, five electricity towers were blown over near Harlin, at the top of the Brisbane valley by a thunderstorm gust. A Shell service station nearby was unroofed, and several other buildings damaged. A large number of thick branches were broken from numerous trees. Several large trees were blown completely over. In the hour before the damage, the storm was moving towards the NNE at 26 knots. Hail to 2cm in size was reported from Toogoolawah.

08-04-1998. Thunderstorm approximately 5 km east of Goovigen, (24.1S 150.4E) John Carl, the property owner, reported a Willy Willy with a damage track only 20 - 30 metres wide discernible through crops etc. The roof of the haystack was blown off. Although the farm rain gauge was blown over, surrounding properties reported 120 mm, 85 mm and 75 mm over approximately 2.5 - 3.0 hours. Some hail, mostly pea size with a little to marble size.

10-04-98. A severe thunderstorm was reported from Ipswich with a measured wind gust to 63 kts at Amberley Met office, a large quantity of hail and a sighting of a tornado protruding from the cloud base (not reaching the ground). Extensive damage resulted to buildings and vegetation. Three people were electrocuted by fallen power lines. The main cell changed direction to a more northerly track as it crossed the coast, travelling up Moreton Bay. The storm caused approximately 30 yachts in the Brisbane to Gladstone race to retire. 2 cm hail was reported from North Ipswich, Golf ball size hail was reported from Scarborough.

04-05-1998 Phone conversations of wind damage to the Bribie island school and hospital. Another phone conversation reported damage to horticultural shade houses. Marburg wf44 radar indicated a thunderstorm crossed the island between 11pm and 20 minutes past midnight. Brisbane airport 11z temp trace indicated an almost moist adiabatic atmosphere,---with a small "drier" region at about 7000 ft. Possibility of a "moist microburst" ? Maximum wind gust reported from Maroochydore from this period was 14kt and from Brisbane Airport, 16kt.

23-08-1998. Ferocious thunderstorms caused flash flooding, tree limbs to be downed and some hail in southwest Brisbane suburbs.

13-10-1998. Winds to 100km/h and golf ball sized hail caused extensive damage around Warwick at 11am. Many Buildings at the Warwick Show grounds were extensively damaged and 21 houses were reported as having lost their roofs. Many power lines were brought down by tree branches and flying sheets of iron. The hail caused widespread damage to crops on the Darling Downs, especially around Warwick and Pittsworth

13/10/98: Brisbane. Extensive damage to buildings. Worst damage in a swathe from Fortitude Valley through Breakfast Creek, Albion, Clayfield and Nundah. Damage also at Manly; a school unroofed at Wynnum and a large

number of large trees uprooted along the foreshore; damage also at Greenslopes and Coorparoo. Rotating base noticed with the possibility of a tornado. Damage to Railway overhead power lines by corrugated iron and tree branches brought most City rail services to a standstill.

26-11-1998. Severe thunderstorms demolished one house and caused roof damage to another fifteen in Julia Creek.

09/11/98: Proston. Three houses damaged; one house almost demolished and another had a veranda torn off and a catamaran smashed.

18/11/98: Storms partially unroofed 6 houses at Toowoomba. 37000 houses lost power. mainly in the towns of Laidley, Gatton and Esk Houses in the Brisbane suburbs of Kenmore and Chapel Hill had roofs damaged by falling branches.

24/11/98: Storms across southeast Qld. Reports in Courier Mail: " ... Energex stated almost 100,000 homes lost power." " roofs ripped (sic) off houses in Gatton, Dalby and Tara" " Reports in The Queensland Times: " ... powerlines down at North Ipswich, Walloon, Thagoona, Haigslea and Boona" ... "about 50 buildings lost roofs, including the Rosewood Anglican Church and Hall ". Water entered shops in Rosewood, causing substantial damage. Reports in the Sunshine Coast Daily: "... Brick duplex destroyed in Hume St Golden Beach Caloundra, with eight other houses damaged. Storm described as like a tornado. " ... " other roof damage reported at Glasshouse, Buderim and Perigian Beach. Three areas of damage to trees in softwood (pine) plantations near Beerburum --- trees pushed over or snapped off. Funnel cloud reported at Caloundra.

On the 25th a very large thunderstorm caused damage to several properties southwest of Tambo, with one having a shearing shed blown off its stumps whilst shearing was in progress.

30/11/98: At 11am thunderstorm just north of Rockhampton produced 58 mm of rain in 15 minutes. Small hail also reported. Hail of golf ball size reported at Gracemere (southwest of Rockhampton).

05/12/98: Hail larger than Golf ball size reported from the Ivory Rock Conference centre near Peak Crossing (south of Ipswich). Roofs and 30 cars damaged by hail. Hail to Golf ball size also reported from Manly West and Algeester.

16/12/98: [1] Near stationary thunderstorm over Natural Bridge, Gold Coast hinterland, produced 120mm in one hour. : [2] Thunderstorm with very large hail moved north across the Brisbane city area and eastern suburbs. Toyota Car dealership Leo Muller reported 600 vehicles damaged, with each losing between \$2000 and \$8000 in value. Suncorp, Queensland's major insurer, received more than 1500 claims with damage estimated at between \$10 million to \$12 million. RACQ-GIO Insurance Company reported 1000 calls from policy holders. The hailstorm was the worst since January 1985, when 10000 claims were received. Insurance Council of Australia reported the worst hit suburbs were Clayfield, Windsor, Wilston, Albion, Northgate and Wavell Heights. The total damage bill is estimated at \$60 million (Couier Mail 6/1/99). [3] Queensland Times newspaper reported a line of thunderstorms caused widespread damage in Ipswich and outlying areas. The newspaper stated "...Yamanto Woolworths closed shortly after 6PM, their bakery and Checkout flooded." A report from North Ipswich gave hail of marble and \$2 coin size, with a few of Golf ball size.

18/12/98: Wind gust of 57kts measured by Coolangatta airport AWS at 7.34pm. Further south at Pottsville Beach (Murwillumbah area) hail was reported to be golf ball size. Roofs off, power lines down, trees down, and a new hanger at Murwillumbah Airport collapsed, damaging light aircraft. estimated rainfall of 50-60 mm in 10 minutes.

19/12/98: Report in Gympie Times newspaper (published 22/12/98) of widespread damage caused by thunderstorms. "... at least two homes had large parts of their roofs torn off and a home (in Watson Road) suffered extensive damage when a tree crashed into its roof...." "... fallen power lines caused power outages to an estimated 16000 homes..." "...only pea sized hail was reported. ..." Report of hail of cricket ball size from Gatton and also from a location close to Toowoomba of hail to golf ball size.

1999

11/01/99: Wind gust of 60kts (190/35G60kt) recorded by Rockhampton during a thunderstorm. Small amount of pea size hail observed.

11/01/99: Report in the Courier Mail of damage at Ipswich about 11:00 utc. due to thunderstorm gusts. SES controller reported damage to 60 houses, with a total of 75 SES callouts to homes and businesses; The city's courthouse and the Tivoli sewage works were damaged. Approximately 12,000 homes blacked out. Damage to caravans at North Ipswich.

25/01/99: A report from a storm chaser of a thunderstorm with a rotating base in the Oakey region.

27-01-1999. Charleville recorded a maximum gust of 120km/h during a thunderstorm.

30/01/99: Damage to the structure and contents to at least one house in the township of Dirranbandi. Two cottages situated on the property "Beverley", approximately 5 km outside Dirranbandi almost destroyed by wind, hail and water. Trees and powerlines throughout the town were blown down.

30/01/1999. An eye witness report of severe damage to local buildings at Hebel, Qld due to a thunderstorm. Reported hail of cigarette box size and winds estimated to 180kmh. Hail and wind lasted only 10 minutes. 60 ft gumtree blown over, with other trees having limbs snapped. Report in Courier Mail newspaper of 15 houses losing their roofs, caravans being moved up to 40 metres and sheets of galvanised iron being found 5 km away.

31/01/99: Hailstorm in the Whetstone (near Inglewood Qld) State Forest stripped many trees. Many trees snapped by wind gusts.

31/01/99: Report in the Dalby Herald 2/2/99 of damage due to a thunderstorm. The local SES deputy controller, Keith Young, stated ... The Dalby South State School lost part of its roof. A number of trees and power lines were brought down. Reports also of local flooding in some businesses. Substantial damage to two sheds on a property near Bell. Damage to the Dalby Christian School pre- school.

01/02/99: A tree was blown onto a house and another into a front yard in the Redcliffe area..

26/02/99: Early morning storm at St George. Report that Hotel lost part of its roof. Local SES assisted about 8 families who had their roofs damaged. Many trees were blown down. Electrical Inspector reported four power lines snapped at their base with a transformer damaged by a lightning strike. Total of 40 homes had their connection torn away. St George AWS reported a gust of 55kts at 09:23 EST. Some hail reported. Local flooding due to blocked drains.

01/03/99: Approximately 06:30 am. Report in the Courier mail Newspaper of a "mini-tornado" causing severe damage to at least four homes and the Presbyterian Church at Eumundi. Several homes lost parts of their roofs and suffered structural damage. [Situation was more of a general rain situation with embedded cells.] Similar perhaps to tornadoes occurring in the rain bands of cyclones when they cross the coast?

Thunderstorms brought heavy rain and hail followed by a waterspout to the Bokarina/ Warana area of the Sunshine Coast on the 11th. Minor damage to several houses and more extensive damage to an industrial area including the unroofing of a gymnasium were reported.

01/05/99: 12.10 pm. Seven photos received from Springmount, a property near Goondiwindi, of a Tornado. Only damage mentioned was of small trees uprooted and large branches ripped off.

27/08/1999: Hail to the size of a 20 cent coin reported at Helidon by a Storm Spotter. Newspaper reports of hail to a depth of 15cm at Crows Nest (north of Toowoomba). Hail to a depth of 16cm, and crops destroyed at Haden (60km west of Toowoomba). At approx. 3 pm, strong winds brought down a kilometre of power lines at Cecil Plains (85km west of Toowoomba). Crops damaged by hail on the Darling Downs. Heavy rain and hail was reported from Toogoolawah.

29/08/1999: Newspaper report of a thunderstorm with a large amount of hail at Gracemere and Stanwell (southwest of Rockhampton).

04-10-1999. Severe thunderstorms Power lines brought down in the suburbs of Booval and Bundamba about 05.15 pm, disrupting traffic. Energex spokeswoman reported about 3100 homes lost power. Bundamba creek rose 1.5m in 30 minutes, flooding also at River View. Fallen tree damaged house in Pine Mountain. Severe flooding occurred in Durack and Inala. Roads also flooded near Helensvale at about 7pm.

14-10-1999. Two thunderstorms in the area 8km SE of Nanango between 7.30am and 8.15am produced rainfall totals of 65mm and 105mm during the period. Some light to medium hail was also reported.

20-10-1999. A thunderstorm produced heavy rain at Brisbane airport where 47mm was recorded between 00.25 am and 1.00am. Hail and tree damage was also reported from the suburbs south of the airport.

23-10-1999. Newspaper reports of a severe thunderstorm in the Granite belt of the Darling Downs, with estimates of damage to crops of between \$20---\$30 million. Towns mentioned include Stanthorpe, with fruit and vegetable losses up to 80% and with a value of up to \$20 million. Hail to golf ball size reported at Texas, damaging cars and windows. Orchardists at Severnlea lost crops. Rainfalls up to 60mm and gale force winds were also reported.

24-10-1999. Small hail was reported in the Ipswich and Sunshine Coast areas with 3500 homes lost power.

27-10-1999. A severe thunderstorm hit Bauhinia Downs (west of Moura), between 09.00 pm and 10.00 pm EST. Demountable buildings were unroofed or destroyed.

27-10-1999. Very heavy rain (165mm) was reported from Bundaberg between 10.30 pm and 1.00am. Unofficial reports give totals of 346mm at west Bundaberg and 218mm at 4BU radio station.

28-10-1999. Marble to golf ball size hail was reported from The Caves, 30km north of Rockhampton.

07-11-1999. A thunderstorm produced golf ball size hail at Chappel Hill, Zillmere and the Caboolture area. Other reports include 2cm at Indooroopilly, and 1cm at Samford, The Gap, Banyo, Wavell Heights and Northgate.

08-11-1999. At approximately 4.30pm a timber house at Cedar Pocket (approx. 6 km east of Gympie) was very badly damaged by winds associated with a thunderstorm. A witness described swirling debris lifted 300ft into the air, although no funnel was sighted. Another witness observed a V-shaped funnel cloud on the outskirts of Gympie. A storm chaser reported the pattern of tree damage suggested a tornado.

16-11-1999. Golf ball size hail caused extensive crop damage on the Darling Downs, from Cecil Plains to Pittsworth. One cotton grower estimated his loss could be as high as \$2million. The property "Tarcoola", reported damage to old cottages and sheds, tanks blown off stands and tree damage, due to wind. Power loss due to downed power lines. Funnel cloud reported in 3 PM Roma observation. Powerlines were also brought down in Brisbane, Gympie and Millmerran.

21-11-1999. A thunderstorm caused hail damage to an estimated 14,000 acres of cotton in the St George district. A severe storm produced golf ball size hail at Gatton and wind gusts estimated at approximately 150 km/h. A second severe storm with large hail was reported in a strip from Mulgowie, (12km south of Laidley), to Ipswich. A Lockyer Valley farmer lost pumpkin crop to hail.

23-11-1999. Another storm showed broad rotation under the cell in the Beenleigh area, at about 05.30 pm and violent winds were observed at Woolangabba (Brisbane suburb) causing the building to shake.

10-12-1999: Storm chasers reported a swathe of property and tree damage stretching from just south of Boonah to Redland Bay, due to strong winds associated with a thunderstorm. The following are storm spotter and newspaper reports of large hail. {5 cm at Brunswick Heads (NSW); 2---3 cm at Stephens (Gold Coast); Golf ball size at Park Ridge, Shailer Park and other areas south of Brisbane. [2 separate cells] Also on the 10th severe thunderstorms affected areas between Warwick on the Darling Downs and eastward through southern Brisbane to the Gold Coast area and around the Lowood area. The most severe cell moved from Warwick to Boonah and Beenleigh. Reports were received of hail to golf ball size, wind damage to eleven buildings in Boonah including \$500,000 damage to the local state high

school destroying computers and classrooms. Many trees were blown over and estimates of wind to 100 km/h were reported. Extensive damage was caused to power lines in inaccessible areas with power loss to more than 35,000 homes.

30-12-1999: The towns of Palmwoods, Chevallum, Forest Glen and Nambour (the Sunshine Coast hinterland) experienced building, crop and tree damage; mostly wind damage, but some hail damage to fruit. An Energex spokesperson stated that 20,000 homes lost power due to fallen powerlines. Large hail fell and strong winds felled trees and toppled 60 to 70 powerlines. Two houses lost parts of their roof, sheds, tanks and many crops on fruit farms were destroyed.

2000

01-01-2000: Strong winds and hail caused damage to crops in the Cooloola region. Golf ball size hail reported by a storm spotter at Booyal. At Bundaberg, a house lost part of its roof. Electricity supply spokesman stated debris and trees brought down powerlines at several locations. Hail was also reported. In Bundaberg a tornado caused a narrow path of damage with trees uprooted, a house lost part of its roof and the garage was destroyed. Local flooding occurred and other extensive wind damage including many trees felled occurred in other parts of Bundaberg. Hail and strong winds occurred on the same day in areas west of Gympie to Tin Can Bay. Marble to golf ball sized hail ruined squash, macadamia and other horticultural plantings. Strong winds destroyed a houseboat, damaged many others and caused many to drag anchor in Tin Can Bay. Coastguard equipment measured winds at 124 km/h with gusts over 130km/h. Damage was also done to skylights at the Tulloch House Nursing Home and the Kooltoopa Hospital at Crows Nest by large hail. Several cars were also damaged. Grazier at Ravensbourne reported crop damage and hail of almost golf ball size.

02-01-2000 and early in the morning of the 03-01-2000. Marble size hail and wind damage to buildings and trees reported at Calliope. The same cell was responsible for structural damage at Thangool.

05-01-2000. A severe thunderstorm in Brisbane southeast suburbs with reports of pea to marble size hail, very strong wind gusts and minor flooding at Wellington Point. Courier Mail newspaper reported 7 houses were damaged in the suburb of Capalaba, and 2 houses damaged in Birkdale, and 2 houses damaged in Wellington Pt. Damage to trees was also reported. A funnel cloud was reported from Annerley at 5.15pm looking towards Cleveland.

08-01-2000. On the 8th trees and powerlines were downed by strong winds and hail to golf ball size was reported at Roma.

17-01-2000. A series of thunderstorms developed on the Darling Downs causing power blackouts. Warwick reported gusts to 83 km/h and small hail was observed. Power lines were down in Warwick and Toowoomba, north Gold Coast and in southern Brisbane suburbs.

21-01-2000: Newspaper report [The Weekend Bulletin] of damage to buildings and caravans, with large trees uprooted, at Mt. Morgan due to strong winds associated with a thunderstorm. Small hail reported.

22-01-2000. A hailstorm stripped leaves from trees in the Goomboorian-Gympie area.

10-07-2000: A line of thunderstorms stretching from Rockhampton through to the NSW border swept across south-east Queensland yesterday in an unseasonal display of heavy rain, lightning and hail. No major damage was reported but hail fell at Gin Gin, Kingaroy, and Woodford. Wind gusts to 52 knots were recorded.

06-08-2000: A thunderstorm hit Emerald with several reports of damage. Reports described the event as a mini-tornado. A circus tent was shredded and the internal poles broken; powerlines were downed and some minor house damage was reported. The automatic weather stations was knocked out at the start of the event so there are no observations for verification.

25-10-2000: A band of storms tore through the Gympie region with fierce winds associated with it. A Caravan home was destroyed by a 'mini-tornado', with the 80yr old occupant hospitalised for cuts from flying debris. Other areas of

southeast QLD were affected by possible severe thunderstorms, Esk and Boonah though no data has been received to confirm this.

28-10-2000. A storm hit between Innot Hot Springs and the Silver Valley Rd on the Atherton Tablelands. Significant damage was reported over an approx 10 square km area, with trees defoliated and snapped off well above ground. The event was described as a 'mini-tornado' as one house lost its roof and an outhouse was destroyed. Hail was reported to be up to a foot deep in places.

02-11-2000: A severe storm tore a path of destruction through the suburbs of North Rockhampton with reports of up to 5 tornadoes (evidence of at least 1 confirmed by the Bureau). Estimated damage bill over \$200,000 with widespread tree damage and roofing damage to some houses. Golf ball sized hail was observed in the outer suburbs with wind estimates to 80kts but only 42kts actually measured at the Rockhampton airport. A large truck was lifted and thrown about 50m.

03/11/2000: Gatton Area. There was a report of a Funnel cloud to the west of Peaks crossing at 3:12pm. 2.5cm hail reported in Gatton with 3cm to the north. Damage was limited to large branches down and a few trees stripped of leaves. Exposed areas 10 to 15 km south of Stanthorpe, especially small crops, were damaged with estimates put at up to \$1 million

04/11/2000: Large hail (2.5 to 3.5cm) reported across the Gatton to Beaudesert Area. Flash flooding at reported at Beaudesert with 39mm in 35 min recorded at Hiddenvale (but hail blocked rain gauge). Wind gusts were estimated to be 80 km/h or more south of Peaks crossing.

05-11-2000. Residents of East Palmerston reported very strong gusting winds followed by heavy deluges of rain and a burst of hail about the size of marbles. Babinda also reported hail from the Boulders area.

07-11-2000. A thunderstorm at Raglan Station, near Rockhampton reported 20 cent sized hail with major damage to the homestead and property. The homestead roof had been lifted and dumped to the side of the house. There was extensive damage to a nearby farm residence and a machinery shed was completely destroyed.

12-11-2000. A thunderstorm in Mt Isa produced hail larger than 2cm in a number of suburbs. Heavy rain was reported and some trees were uprooted by the wind.

12-12-2000. Large cells on the southern border ranges, with a report of 90-100 km/hr wind gusts and hail 3-4cm diameter at the intersection of the New England and Cunningham Highways - Near Warwick?

18-12-2000. Severe Thunderstorm at Mt Isa dumped more than 60 mm of rain with winds up to 67 km/hr. Report from train near Kurbaya (40km south Mt Isa) stated very strong winds with hail 1/2 inch diameter with the odd large stone to golf ball size. Dry creek beds crossed before the storm were reported 1hr later to be only 1foot under the railway bridges. Driver could only just see the front of the train engine at height of storm.

25-12-2000. A severe thunderstorm was observed on radar in the Maleny-Jimna area at approx 7.00pm and a report of 72mm of rain in an hour was received.

2001

08/01/2001: Wild storms lashed the Toowoomba region, due to the development of a upper level cold pool over that area. Wind damage was reported from Murphy's Creek as well as parts of Toowoomba, with up to 50mm of rain in 1/2 hour reported.

11-01-2001. A severe thunderstorm at Birdsville produced wind gusts of 104 km/h, only 6.6 mm of rain was reported from this storm.

17-01-2001. Synoptic conditions resulted in 3 days of severe thunderstorms starting in northern New South Wales, then in southern Queensland finally dissipating in the far north Queensland. Super cell thunderstorms moved from

New South Wales north into Queensland during the evening, though they generally collapsed once they moved off the southern border ranges. These storms produced massive damage due to hail and severe wind squalls in the northern New South Wales area though damage was limited in QLD.

18-01-2001. The previous nights storms moved through southern parts of the southeast Queensland. Two storms, one at 4am the other at 7:30 am moved through the Gold Coast and Brisbane causing mostly wind damage on the Gold Coast and massive hail damage in Brisbane's northeast suburbs.

19-01-2001. A band of storms ripped through the Ayr/Home Hill area just after 6pm, flattening one house, ripping the roof off another, downing powerlines and causing widespread damage. This was a continuation of the storms that had battered the southeast of the state then central coast over the previous two days.

27-01-2001. A line of thunderstorms moved through the southern border ranges, collapsing once moving off the ranges. Reports of wind damaged were received though mainly to trees

28-01-2001. Thunderstorms appeared mostly in the southern area of the Wide Bay and Burnett. No reports of damage.

04-02-2001. At Mt Isa, there were two main thunderstorms events between 4 pm and 8.30 pm with the storm between 6.20 pm and 8.30 pm classified as severe due to rainfall intensity. A rainfall rate of 55.8 mm in 33 minutes was recorded at the Mt Isa Airport. The majority of damage reported was mainly water damage caused by local flash flooding. Areas such as Sunset were the worst affected. The rising waters from Breakaway creek inundated areas of Sunset, with levels rising quickly. Up to half a metre of water was reported under some residences and commercial industries adjacent to Sunset Bridge were badly affected by flood waters.

09-03-2001. A severe flash flooding event caused up to \$20 million of damage in the Brisbane area. The thunderstorms were produced north and south of Brisbane in convergent rain bands extending from a surface low over northeast New South Wales. These storms became almost stationary in a broken line paralleling the coast. Cars were flooded, roads closed, and houses inundated. Two people drowned in separate incidents in the floodwaters. The highest 24 hour totals were at Beenleigh 317mm, Logan City 284mm, Marsden 251mm, Cooroy Composite 232mm and Ball Lookout 218mm. Some houses in southern suburbs also experienced roof damage from squally winds.

19-03-2001. A line of thunderstorms extended from Rockhampton to Tin Can Bay, with several thunderstorms reaching severe intensity during the afternoon. Severe wind damage and pea sized hail was reported from a property near Calliope and flash flooding was reported along the Hervey Bay esplanade.

20-03-2001. Thunderstorms with several possibly characterised as severe developed during the afternoon in the Southeast Queensland area (excluding the SE District). Radar showed a severe cell near Monto, though due to the isolated area, have no reports of damage or phenomena.

On the 21st, a line of thunderstorms moved through the Brisbane area on the 21st with strong winds that brought down power lines and blacked out residents in Kallangur, Murarrie, Jimboomba, Upper Caboolture, Red Hill and Paddington. Flash flooding again affected the Brisbane area and highest 24hour rainfall totals included: Cleveland Bowls Club 95.2mm, Capalaba Water Treatment Plant 914mm and 91.6mm at Ormiston College.

24-04-2001. Golf ball sized hail and 70mm of rain was reported from Aips Creek (west of Rockhampton).

26-04-2001 On the 26th a severe thunderstorm affected the Gold Coast. Flash flooding, small hail and strong winds were reported from Mermaid Beach. Strong winds and lightning damaged more than 60 homes, brought down trees, power lines and caused traffic disruptions. Also on the 26th flash flooding and wind damage with an estimated 100 km/h gust was recorded west southwest of Nobby (40-50 km south of Toowoomba). A suspected tornado was reported from Jambin (near Biloela). Damage was confined to a one km track delineated by tree damage and 56mm of rain was recorded in 35 minutes.

06-05-2001 On the 6th a tornado with estimated wind gusts of 75-90 km/h occurred in north Yeppoon. Multiple waterspouts were also observed in Keppel Bay.

17-05-2001 On the 17th storms formed in the area west of Ipswich and moved across Brisbane and the Gold Coast hinterland during the afternoon and evening. The two most intense cells tracked rapidly southeast through Ipswich, Beaudesert and Lamington National Park. Hail 5cm in diameter and strong winds were reported from Ipswich. Trees were brought down and drifts of small hail up to 25cm deep were reported 10 kilometres south of Amberley.

21-05-2001 On the 21st 100mm of rain was reported from farming properties near Kalbar (northwest of Boonah) as a result of a thunderstorm. Severe hail damage to crops was reported.

June 2001 A cloud band associated with a trough linked to a slow moving low near Adelaide affected the southern interior of the state from the 6th to the 9th. The blanket of cloud resulted in record high overnight minima in several centres and thunderstorms in the southwest produced moderate to heavy falls with some record daily rainfall totals.

31-08-2001 On the 31st convection developed during the afternoon in an unstable air mass over the southeast coast. Hail to 2cm in diameter was reported from an isolated thunderstorm in the Yawalpah area (near Coomera/Dreamworld).

01-09-2001 On the 1st thunderstorms developed across the Southeast Coast, Wide Bay, Burnett and Capricornia districts ahead of a frontal change. A super cell tracked across the southern border ranges during the early evening, then a short squall line moved across parts of the Southeast Coast district which produced a 104 km/h wind gust at Oakey. Sheds were unroofed and trees twisted off near Biggenden. Trees were brought down at Rathdowney. A 12metre luxury yacht sank in Runaway Bay (Gold Coast) after being smashed against a jetty. Golf ball size hail was reported 13 kilometres north of Warwick and 1cm hail was reported from Deuchar, 20 kilometres north of Warwick with a ground covering of about 3cm.

05-09-2001 On the 5th widespread mostly high-based convection developed from late morning onward in an unstable air mass over southeast Queensland. A few heavier storms occurred in an area of enhanced low-level moisture around Wide Bay and Burnett. Hail 2-3 cm in diameter was reported from Cooloola Cove, northwest of Rainbow Beach. Hail mostly small was reported from Maryborough, Rainbow Beach, Beaudesert and the Gold Coast (Miami).

04-10-2001 On the 4th isolated thunderstorms developed east of an inland trough across the Southeast Coast and Wide Bay and Burnett districts. A small line of cells in the Tin Can Bay area was enhanced as a southeasterly wind surge moved up the coast. A caravan park in Boonooroo (southeast of Maryborough) reported damage from wind around 5pm, with trees twisted and/or snapped off, tents blown down, and caravans moved.

07-11-2001 On the 7th a squall line developed east of an inland trough and moved across the Southeast Coast and southern Wide Bay and Burnett districts. A 93km/h wind gust was recorded at Oakey and a tornado was observed near Grandchester. Damage included a house that was unroofed at Jimboomba and several small 5metre trees brought down in Ipswich.

09-11-2001 On the 9th a band of rain and thunderstorms moved across the eastern Darling Downs and the Southeast Coast district. A storm that produced 50mm of rain in an hour at Oakey went on to produce 80mm of rain in 30 minutes at Crow's Nest. A mini-tornado was reported to have unroofed a shed and caused other building damage at Clifton in the eastern Darling Downs.

11-11-2001 On the 11th widespread storms developed across all three districts east of a surface trough over eastern Queensland and in the wake of a clearing rain band. The most intense storms occurred in the Capricornia district, with separate large super cells affecting areas just west of Biloela (at about 3:30pm) and Gladstone (at about 6pm) respectively. Hail 3cm in diameter and wind damage was reported from the Marlborough area. Wind damage mostly to trees and heavy rainfall also occurred in the Southeast Coast district. Some building damage occurred near Warwick in the southeast Darling Downs.

16-11-2001 On the 16th a line of storms produced a 106km/h wind gust at Cannington Mine AWS (in the North West district, about 150 km southeast of Mt Isa).

18-11-2001 On the 18th storms formed east of a trough over the Maranoa and Warrego district and moved into eastern Queensland. Most of the stronger storms occurred near the southeast border where trees were uprooted, buildings unroofed, and walls blown over at a farm near Maroon. Also on the same day a 90km/h wind gust was recorded at Roma during the evening.

19-11-2001 On the 19th widespread showers and storms developed over eastern Queensland as the trough system from the previous day continued its eastward movement, while a strong southerly change moved northward from New South Wales. The strongest storms occurred in the Capricornia district that affected the Rockhampton and Gladstone areas. Trees were uprooted, power lines brought down, and minor building damage was sustained in Rockhampton, Gracemere, and Gladstone.

26-11-2001 On the 26th storms developed east of an inland trough over the Darling Downs and southern border ranges. Worst affected areas were the Maryvale and Gatton areas where heavy rain occurred and there were reports of minor flooding in the Deverton/Gatton area. Minor tree damage was also reported from Crow's Nest.

27-11-2001 On the 27th afternoon and evening storms occurred across eastern Queensland as they moved up the coast from northern New South Wales. A severe storm developed on the southern border ranges and moved northeast towards Beaudesert, eventually merging with a line of storms moving east from the Darling Downs to form a squall line which moved northeast across the Southeast Coast district. The line continued to develop northwards and ultimately moved through both the Wide Bay and Capricornia districts as well. Gusty winds and heavy rainfall were the predominant effects of the storms but hail up to 10 cent piece size was reported from some Brisbane suburbs and the Nanango area. Tree and power line damage was reported from northern Brisbane suburbs, and some tree and building damage from Rockhampton. Minor flooding was also fairly widespread in the Brisbane area.

06-12-2001. Storms developed over eastern Queensland through the southern Wide Bay and Burnett and northern Southeast Coast districts. The most severe storms occurred in the Wide Bay and Burnett district, affecting chiefly the Monto and Gayndah areas where houses were unroofed. Storm activity continued east to the coast from northern Capricornia into the tropics. Mackay was hit by a carry-over storm from the previous day's activity. A 113km/h gust was recorded at the airport. And caused a portable staircase to be blown onto an aircraft. Damage to roofing was sustained elsewhere in the town, and at least one large tree was blown over. During the afternoon widespread storm activity again developed east of the trough. The northern Capricornia district experienced some of the strongest storms. Yeppoon was affected by the right half of a splitting storm cell which produced 20 cent piece sized hail and wind gusts were estimated to have reached 80 km/h. Trees were also blown onto cars in the town. Further north, storm activity produced 97mm of rainfall in an hour in the Cardwell/Ingham area.

15-12-2001. A thunderstorm produced 56.4mm of rainfall in an hour at Charleville Airport of which 42.6mm occurred in 34 minutes.

22-12-2001 On the 22nd thunderstorms developed late in the afternoon along the southern border ranges of the Southeast Coast district and moved in an east-northeast direction. The most severe cell affected the Boonah and Gold Coast areas. Strong winds unroofed buildings, uprooted and snapped trees and signs. Damage is estimated between 2 and 5 million dollars for the Gold Coast and 1.5 million dollars for Boonah.

26-12-2001 On the 26th storms developed east of a westerly wind change in the Wide Bay and Burnett and Capricornia districts. The strongest storms occurred in the southern Wide Bay and Burnett district. Trees were snapped off by wind near Gootchie (northwest of Gympie), where a timber framed steel shed was also completely demolished. Hail, 2-2.5 cm in diameter was observed in the Childers/Maryborough area. A 95km/h wind gust was recorded at Double Island Point.

28-12-2001 There was widespread thunderstorm activity about central and northern Queensland on the 28th. A storm at Herberton in the North Tropical Coast and Tablelands district produced 2cm hail and considerable tree damage, including many large trees that were snapped in half.

29-12-2001 On the 29th storms developed east of an inland trough over the Southeast Coast, Wide Bay and Burnett, and Capricornia districts. A few stronger storms occurred across the area, causing a house to be unroofed in both Gracemere near Rockhampton and on the Gold Coast. A 78km/h wind gust was also recorded at the Gold Coast Seaway associated with the latter storm.

30-12-2001 On the 30th an inland trough generated a second day of storm activity over the Southeast Coast, Wide Bay and Burnett, and Capricornia districts. The first severe storm developed near Boonah and moved northeast, moving off the coast just south of Brisbane and dropping hail as large as 3cm along its track. Flash flooding and some structural wind damage was also reported from southern suburbs. Later, a second severe storm produced extensive damage in the Glasshouse Mountains and Caboolture areas which unroofed many houses. In Monto in the northern Wide Bay and Burnett district, winds associated with a storm wrapped a shed around a transformer pole. A number of trees were also blown down in the area.

31-12-2001 On the 31st widespread severe storms over southeast and central Queensland occurred when an area of storms developed over the eastern Darling Downs and moved across the southern Southeast Coast district, producing some flash flooding in southern Brisbane suburbs. Later in the morning torrential rain from an isolated thunderstorm produced significant flash flooding of roads in Gladstone. A third severe storm hit the Fraser Coast during the evening, producing significant flash flooding in Maryborough and roofing and tree damage in the Maryborough and Hervey Bay areas. Storms also unroofed houses in Allora (Darling Downs) and Taroom (Central Highlands and Coalfields) during the day.

2002

01-01-2002. An area of storms moving north along the Central Coast produced torrential rain and flash flooding in the Mackay harbour area during mid-morning including a cafe being inundated with water. Mackay recorded 99.8 mm of rainfall in 68 minutes.

04-01-2002. A group of near stationary embedded storm cells in the Emerald/Rolleston area produced huge rainfall totals during the evening. One storm remained in the Gindie (20 km south of Emerald) area for around 3 hours and produced significant flash flooding, with roads cut and several crops completely submerged. Unofficial rainfall totals as high as 347.5mm were recorded. Some damage to fences and railway lines was also reported.

08-01-2002 On the 8th wind gusts associated with two separate storms brought down trees in areas just to the west and south of Gympie during the mid-afternoon.

12-01-2002. A thunderstorm in the Mount Morgan/ Rockhampton area closed the Burnett Highway and other roads for more than 4 hours between 7pm and 12am. Damage included fallen trees, fallen rocks, mudslides and rising creeks.

14-01-2002 On the 14th a significant number of reports of waterspouts in Moreton Bay were received. The waterspouts were associated with a line of showers moving north through the Bay. A funnel cloud was reported from Brisbane Airport and another was reported from Wynnum raising debris from the mangrove swamp.

16-01-2002 On the 16th a line of severe storms associated with a vigorous southeast surge moved up the northern New South Wales coast into southern Queensland. The town of Kingscliff, south of Tweed Heads in New South Wales was battered by giant hail. The strongest storms in this line did not affect Queensland, however storms in Queensland produced some severe weather including 10cent piece sized hail at Lowood and a 105km/h wind gust at Bundaberg. A notable storm developed well ahead of the line and affected the Gympie and Cooloola areas, uprooting or snapping off many trees and unroofing several houses and sheds near Kadanga.

17-01-2002 On the 17th a long-lived storm formed about noon on the Central Coast north of St Lawrence and moved north through Sarina, Mackay, and the Whitsunday Islands. Torrential rain was reported from Mackay and Hamilton Island. Considerable flash flooding occurred in Mackay, where 68mm of rainfall in 30 minutes was reported at the height of the deluge.

31-01-2002 On the 31st scattered thunderstorms developed on and east of a trough across central and western Queensland aided by an upper thermal trough over the inland tropics. An evening thunderstorm produced hail and a 107km/h wind gust at Julia Creek.

01-02-2002 An afternoon thunderstorm on the 1st uprooted two historic bottle trees in Roma. Power lines were also brought down. Another thunderstorm affected the Julia Creek area and produced wind gusts of up to 100 km/h.

02-02-2002 On the 2nd widespread thunderstorms developed over southeast Queensland eventually moving off the coast in a broad slow-moving line. Very heavy rainfall and some instances of flash flooding were reported from parts of Ipswich and Brisbane, including a rainfall report of 70mm of rain falling in 45 minutes at Camp Mountain. A tree was brought down onto power lines at Leichardt (an Ipswich suburb).

03-02-2002 On the 3rd a thunderstorm occurring around dawn produced damage in the Hughenden area. Strong winds caused extensive tree damage that took 3 days to clean up. Some trees were uprooted in parks and many limbs were blown down. Many buildings were either partially or completely unroofed, including a stable, an old water tower, and sheep yards. Two large roller doors at the council depot were blown in.

05-02-2002 On the 5th an inland trough over eastern Queensland triggered the first of four days of thunderstorm activity over the southeast. A broad line of storms moved over the eastern Darling Downs, Southeast Coast, and southern Wide Bay and Burnett districts during the afternoon. A house was unroofed at Pittsworth, and a tree brought down onto a car at Kingaroy. However, the most intense cell in the line affected the Esk area. At least one house on the Gatton-Esk road had every window smashed by hail. Hundreds of trees, many of them large were also brought down, blocking the road.

06-02-2002 An area of thunderstorms developed over the northern Darling Downs and inland Wide Bay and Burnett districts on the 6th. Hail 2cm in diameter was observed from a cell west of Oakey.

07-02-2002 Wind gusts stripped the corrugated iron roof from a house at Eidsvold (south of Monto) between about midnight and 2am on the 7th. Large branches were also brought down. Further thunderstorms formed east of the inland trough during the afternoon. The strongest cell affected the Toogoolawah area, with the Watts Bridge Airfield sustaining very severe wind and hail damage to hangar structures.

08-02-2002 On the 8th a splitting storm west of Boonah produced a super cell that tracked through the Greenbank, Logan and Woodbridge areas before weakening and moving off the coast near Redland Bay. Hail to near golf-ball size was reported from Greenbank. At Woodridge 25mm of rain fell in 8-9 minutes.

Isolated thunderstorms formed late in the afternoon about the southern border ranges ahead of a southeast wind change on the 22nd. One of the storms produced hail to 3cm in diameter in the Fig Tree Pocket area. A few trees were also brought down onto houses at Mount Ommaney.

27-03-2002 Widespread thunderstorms developed over southeast Queensland ahead of a vigorous upper cold pool on the 27th. Golf ball sized hail was reported from Goondiwindi.

16-06-2002 On the 16th an unseasonable line of thunderstorms moved through the Darling Downs and Southeast Coast district. Houses and sheds were damaged by strong winds in Allora. In Dalby thunderstorm damage to power lines and poles cut power to 12,000 homes across the Darling Downs. Damage was also associated with the storms in northern New South Wales.

09-09-2002 On the 9th hailstorms were reported in the Capricornia district. Tennis ball sized hail fell at Westwood (near Rockhampton), 3cm diameter hail in south Rockhampton and 50 cent piece sized hail at Biloela and Calliope, the latter causing crop damage.

23-09-2002 On the 23rd a hailstorm at Cooroy/Pomona produced 20cent piece sized hail causing some roof and tree damage.

09-10-2002 On the 9th a super cell storm produced hail to the size of golf balls along a corridor running from the southeast border ranges through to the Beaudesert and Jimboomba areas. The storm weakened before reaching the coast.

26-10-2002 On the 26th storms situated on a vigorous southeast change produced hail up to 2.5cm in diameter at Kilcoy (southeast Queensland).

27-10-2002 On the 27th a large storm outbreak occurred across southeast and central Queensland. Storms flattened trees near Biggenden, while golf ball sized hail was reported from the Rockhampton area. Seven sheep were killed by hail near Moonie. Strong wind gusts from storms damaged trees and structures in Childers.

31-10-2002 On the 31st dry downdrafts from an afternoon thunderstorm produced strong wind gusts and significant raised dust in Mt Isa. At the airport recorded horizontal visibility was reduced to 100 metres with a recorded wind gust of 91 km/h.

04-11-2002. Thunderstorms formed over the eastern Darling Downs and moved into the Southeast Coast district. The strongest storm affected the Esk and Gatton areas where it downed trees and produced hail up to 3 cm in diameter. Hail to 2.5 cm was also reported from Clifton on the Darling Downs.

11-11-2002. Severe thunderstorms occurred across the eastern Darling Downs. One storm produced hail up to cricket ball size at Clifton at around 1 pm. There was considerable crop damage with over 70 hectares of barley and chick peas destroyed.

30-11-2002. Severe thunderstorms struck the Gold and Sunshine Coasts. On the Gold Coast, four people were injured by flying debris. Police reported trees and power lines had fallen at various locations. On the Sunshine Coast, Caloundra was battered by strong winds and golf ball sized hail, causing play in the Australian PGA golf championship to be called off. Other localities affected included the Glasshouse Mountains, Mountain Creek, Mooloolaba, Buderim, and Maroochydore.

01-12-2002. A severe hailstorm struck the Mt Morgan area, bringing down a number of power poles. Another severe storm struck Trebonne, west of Ingham, with wind squalls unroofing two buildings and bringing trees down. The Australian PGA golf championship at Coolumb was disrupted by thunderstorms for the second day running.

04-12-2002. Wind gusts from a thunderstorm produced considerable tree and roofing damage in the southern Brisbane suburbs of Logan, Springwood, and Underwood. A further line of thunderstorms produced damaging wind gusts over the eastern Darling Downs, with a 91km/h wind gust recorded at Oakey and minor structural damage reported from Toowoomba.

09-12-2002. Thunderstorms developed early over the western Darling Downs and progressed steadily east into the Southeast Coast district. Road closures due to fallen trees and mudslides occurred in the Laidley and Grandchester areas. Eight houses and sheds were severely damaged at Tara in the Darling Downs.

10-12-2002. A severe squall line affected much of southeast Queensland. Damaging wind gusts and intense rainfall were experienced in many areas. The worst damage occurred in the Brisbane area (a wind gust to 120 km/h was recorded at Brisbane airport), in the Gympie area, where several farmhouses were destroyed and in the Biloela area (Capricornia district). Damage was estimated at \$1.5 million.

23-12-2002. A thunderstorm produced wind gusts up to 124 km/h at Oakey.

24-12-2002. Severe thunderstorms affected the Southeast Coast district ahead of a weak trough moving up the New South Wales coast. There was damage to 120 homes across Brisbane, with the suburbs of Camira and Springfield, west of Ipswich, worst affected. Roofing damage and trees falling onto houses were the primary causes of damage.

25-12-2002. A pair of super cell thunderstorms produced large hail over a wide area in the western Southeast Coast district. Hail as large as cricket balls smashed car windows on the Warrego Highway. Tennis ball sized hail broke so

many roofs at Helidon, east of Toowoomba, that the SES ran out of tarpaulins. At Esk a watermelon crop worth \$50,000 was destroyed by hail.

26-12-2002. For the third consecutive day, a widespread severe thunderstorm outbreak occurred across southeast Queensland. Golf ball sized hail and flash flooding occurred in Toowoomba. In the Gin Gin/Childers area of the Wide Bay and Burnett district, strong winds unroofed houses while mango crops were destroyed by hail up to golf ball size. Rainfall of 41mm was recorded in 10 minutes from a storm at Maleny. A 107km/h wind gust was measured at Rundle Island.

29-12-2002. A thunderstorm produced a 98 km/h wind gust at Cloncurry.

2003

21-01-2003 On the 21st storms formed on the southeast Darling Downs and were steered northward through the Toowoomba area. Hail to 10cent piece size was reported from Toowoomba. Twelve houses were unroofed and hundreds of trees were snapped or uprooted.

22-01-2003 On the 22nd scattered thunderstorm activity occurred across the interior of the state. Winds from a severe storm at Charleville destroyed a shed at the airport. A farmhouse near Chinchilla on the Darling Downs was unroofed by another storm.

11-02-2003 On the 11th a thunderstorm produced a 102km/h wind gust at Julia Creek.

19-02-2003 On the 19th a severe thunderstorm tracked through eastern Ipswich, Bundamba, and the western Greater Brisbane area. Hail to 2 cm, very heavy rainfall, and wind damage to roofing was reported. Trees and power lines were also brought down. Bundamba Alert rainfall station recorded 132 mm in 1 hour.

16-03-2003 On the 16th storms developed over southeast Queensland associated with the passage of an upper thermal trough. Hail 2.5cm in diameter was observed near Warwick.

19-03-2003 On the 19th a thunderstorm produced a wind gust of 121 km/h at Cloncurry.

22-03-2003 On the 22nd a surface trough triggered thunderstorm outbreaks for several days across eastern Queensland. Strong thunderstorms were observed in the southeast of the State with isolated reports of damage from some Brisbane southern suburbs.

25-03-2003 On the 25th a strong storm occurred in the southeast Darling Downs and brought down several trees west of Killarney.

30-03-2003 On the 30th a small but intense storm produced hail up to golf ball size in the Roadvale area of the Southeast Coast district.

31-03-2003 On the 31st scattered thunderstorms developed over southeast and central Queensland, most notably in the Wide Bay and Burnett district. In the Bundaberg area a 2 storey house had its roof torn off and trees and power lines were also brought down, power was interrupted to 13,000 premises in the area. Reports of crop damage caused by hail were also received.

03-04-2003 On the 3rd scattered thunderstorms developed over southeast Queensland during the afternoon and early evening. Shortly after 4pm, a severe storm struck Landsborough on the Sunshine Coast. Large trees were uprooted, one crushing a caravan and causing the death of a 67 year old woman. Hail to golf ball size was also reported. Other severe storms affected Oakey, Toowoomba, and Crows Nest. Oakey recorded a wind gust of 107 km/h, while at Toowoomba hail up to golf ball size was reported. Approximately 15,000 homes in Brisbane, the Gold Coast, and the Sunshine Coast were blacked out due to storm damage.

15-05-2003 On the 15th a severe hailstorm struck Surat at about 12:30pm. Golf ball sized hail fell for 15 minutes. Many windows in the town were smashed. The mail truck was dented and its windscreen smashed. Several trees were uprooted and one house unroofed by wind gusts.

02-07-2003 On the 2nd a severe storm struck Goodwood, northeast of Childers in the Wide Bay and Burnett district at 1:30am. Wind gusts brought down power lines and flash flooding was also reported.

02-10-2003. A line of thunderstorms developed near Charleville and moved eastward across the Darling Downs and Southeast Coast districts. Damage, mostly due to fallen trees, was reported from Texas, Esk, Logan, Gold Coast and Sunshine Coast. A man was trapped when power lines fell onto his car in Logan.

20-10-2003. Storms developed over eastern Queensland and moved along the northern border of the Southeast Coast district in Oakey/Yarraman/Jimna area. A short squall line caused damage in the Capricornia district where sheds were destroyed at a property at Alton Downs, near Rockhampton and flying debris killed two cattle. The sails of a boat in Shoalwater bay were shredded by the wind.

24-10-2003. Large hail was reported from several storms around the southeast. Hail to tennis ball size was reported in the Kalbar area, golf ball size hail from Ipswich and 2.5cm diameter hail between Gympie and Nambour. Strong wind gusts from storms also brought down trees along the Capricorn Highway between Bluff and Dingo east of Emerald.

25-10-2003 On the 25th a severe multi cell storm produced large hail along the Sunshine Coast hinterland. Tennis ball sized hail smashed car windscreens at Mapleton and Witta, while golf ball to mandarin sized hail was reported from the Maleny area. In the early evening a super cell produced 2cm to golf ball sized hail in the Toowoomba area, then proceeded to track through the Coominya, Lake Wivenhoe and Esk areas where hail up to cricket ball size destroyed house roofs, smashed windscreens, punctured rainwater tanks and stripped trees. In the Wide Bay and Burnett district, a severe storm produced very large hail and brought down trees across the road between Proston and Murgon. Hail 2-3cm in diameter was reported in the Biggenden area. Six hectares of zucchinis were destroyed by hail and a silo damaged near Cloyna. Other storms on the day brought trees down at Redcliffe, destroyed sheds at Swanfels (near Warwick), and produced a 130km/h wind gust at Gatton.

26-10-2003 On the 26th a major hailstorm occurred on the Gold Coast with the worst affected areas being Currumbin, Palm Beach, and Coolangatta. Hail was golf ball to cricket ball sized. Many cars and 400 homes were damaged and many birds and animals at the Currumbin Wildlife Sanctuary were killed. A Qantas jet was damaged and forced to land shortly after taking off into the hailstorm.

Another major severe storm moved from the Samford/Mt Nebo area through Brisbane's northern suburbs and Redcliffe. This produced hail up to golf ball size and significant wind damage, particularly in the Samford/Mt Nebo area where 90 homes were damaged. Other severe storms occurred in the Esk / Laidley / Ipswich area where there was tree and power line damage and some roof damage. At south Burnett tree and roof damage at Eidsvold and Blackbutt, golf ball sized hail in the Nanango and Burnett Heads areas. At Baralaba golf ball sized hail was reported. At Warwick hail to 5cm with a 100km/h wind gust and some flash flooding occurred. As far north as Rockhampton a 94km/h wind gust occurred. Insurance claims for the event totalled \$15-20 million.

28-10-03 On the 28th a line of storms produced damaging wind gusts over a wide area of southern inland Queensland. At Charleville, trees were uprooted, 3 power lines brought down, and a railway building was unroofed. A wind gust of 100km/h was recorded. Other recorded wind gusts were 119km/h at Roma and 100km/h at St George. Trees were also brought down and houses unroofed in the Tara area. A block of flats was partially unroofed in Toowoomba.

31-10-03 On the 31st a line of storms moved through southeast Queensland and produced damage chiefly in the Wide Bay and Burnett district. Houses were unroofed at Kingaroy, Wondai, and Mundubbera. Fallen trees blocked roads and damaged fences from Wooroolin to Murgon.

23-11-2003. Thunderstorms were reported over eastern Queensland. At Caboolture caravans were overturned and houses unroofed. Gum trees were felled and a light aircraft was damaged east of Rockhampton.

24-11-2003. Large hail was observed over the southern Southeast Coast district. Golf ball sized hail was reported in the Nerang area with 3cm hail at Belmont and 2cm hail reported at Surfers Paradise.

05-12-03 On the 5th intense rainfall associated with storms produced flash flooding in Biloela (Capricornia district) and on the Sunshine Coast. In Biloela, floodwater entered shops in the CBD and a teenager was rescued after being sucked through a culvert. Water also entered homes in Maroochydore. At Yandina (Sunshine Coast) 110mm of rain was recorded in an hour.

Severe storms affected the Wide Bay and Burnett district on the 6th. A possible tornado struck the Rosedale area (50 kilometres northwest of Bundaberg) where houses were unroofed, trees snapped, and a shed was lifted and carried about a kilometre. Hail the size of cricket balls (7cm diameter) was reported from another storm near Boompa (southeast of Biggenden). Golf ball sized hail (4cm diameter) also accompanied the storm. Hail damage to mango and avocado crops was reported from Childers.

09-12-03 On the 9th thunderstorms produced very heavy rainfall during the early morning between Gladstone and Burnett Heads, with several falls of 200-300mm recorded. A severe hailstorm struck Gladstone during the late afternoon, with hailstones larger than cricket balls reported by several sources. Part of the roof of the Kin Kora Shopping Centre collapsed and the centre evacuated, 120 homes were damaged and car yards were also seriously affected. Damage was estimated at 1.5 to 2 million dollars. Elsewhere golf ball sized hail was reported from the Atherton area in the North Tropical Coast and Tablelands district during the afternoon, while wind gusts from storms unroofed a house in the Charters Towers area during the evening.

11-12-03 On the 11th thunderstorms produced damaging wind gusts in Emerald. Several sections of power lines were brought down and a number of large trees uprooted. Wind gusts to 102km/h were recorded at Emerald Airport. Storms also produced flash flooding in the Peak Downs (Capella) shire.

12-12-03 On the 12th heavy rain from thunderstorms produced flash flooding in the Peak Downs (Capella) shire. Two motorists had to abandon their vehicles after attempting to cross flooded roadways. One of the vehicles was swept away by floodwater.

14-12-03 A thunderstorm on the 14th produced 80mm of rain in 90 minutes at Coochiemudlo Island, Moreton Bay.

16-12-03 On the 16th a severe storm occurred at Warwick. Wind gusts brought down trees, and hail was also reported.

2004

24-01-2004. A severe storm affected the Gold Coast. Trees were felled in the Currumbin Valley area. The Coolangatta airport automatic weather station recorded a wind gust of 74km/h. The Gold Coast Seaway (AWS) recorded a gust of 87km/h. Storms then moved northwards through Ipswich and greater Brisbane. Heavy rainfall, flash flooding and wind damage to trees was reported from a number of areas. A few houses were unroofed by wind at Ipswich and golf ball sized hail was also reported. Flash flooding was reported from Fortitude Valley, Woolloongabba, Oxley and Coorparoo. Several motorists needed to be rescued from their cars in floodwater. Other areas to be affected by storms include Warwick where golf ball sized hail was reported from a storm in the area and Kenilworth in the far north of the Southeast Coast, where trees fell on caravans at a campsite.

25-01-2004. A severe storm developed southwest of Ipswich and moved through Ipswich, southern Brisbane suburbs and the Brisbane CBD. The AWS at Amberley RAAF base recorded a wind gust of 111km/h and sustained a wind of 100km/h for a 10minute period. At Bundamba (near Ipswich) a tornado and golf ball sized hail were reported. A partially built house in Bundamba was destroyed and there was considerable tree damage reported from Bellbowrie (northeast of Bundamba). A man survived after being struck by lightning in a park in Brisbane's inner south.

26-01-2004. Strong winds were reported from the Town of 1770 and 50 cent piece sized hail was reported from Calliope (southwest of Gladstone). Storms also developed in the Southeast Coast district where warnings were issued

for the Ipswich, Jimboomba and Beaudesert areas as well as areas immediately west of Greater Brisbane. Golf ball sized hail was reported from Ipswich.

27-01-2004. Marble to 20 cent piece sized hail was reported at Gatton during a thunderstorm.

28-01-2004 On the 28th severe thunderstorms in southeast Queensland caused widespread damage. Hundreds of trees and power lines were brought down and power losses were very severe with 90,000 houses losing power. In the Nanango region there was heavy rain with wind causing damage to trees. Severe wind gusts were: 148 km/h south of Toowoomba and 120 km/h at the Archerfield Aerodrome Tower. Other severe wind gusts included Archerfield 102 km/h, Double Island Point 98 km/h, Warwick 91 km/h, Toolara 91 km/h, Brisbane Airport 84 km/h, Kingaroy 81 km/h and Amberley 74 km/h. There were two reports of large hail from the Sunshine Coast region, one of golf ball size hail at Kawana Waters and the other cricket ball size hail near Caloundra.

30-01-2004 A series of storms affected the Southeast Coast and Wide bay districts during the early afternoon of the 30th. A man was killed (near Gympie) by a lightning strike. A man died in a traffic accident to the north of Maroochydore Airport and two nine year old students were injured by a falling tree at the University of Queensland's St Lucia campus. A block of units in inner-city New Farm lost its roof and an apartment building at Woodridge, south of Brisbane was also damaged. The storms uprooted trees and brought down power lines across Brisbane Redlands and Pine Rivers. Throughout the Brisbane area hundreds of houses were damaged by wind and falling trees and 121,000 homes lost power. The strongest winds were recorded from Banana Bank AWS on Moreton Bay near Cleveland with gusts to 122km/h. Brisbane recorded 83km/h, Brisbane Airport 89km/h, and Cape Moreton 102km/h.

31-01-2004 On the 31st large hail was reported at Maryborough with 15 houses and other buildings damaged. Wind gusts reached 84km/h at Double Island Point. Rockhampton recorded gusts to 104km/h which caused damage in the city.

16-02-2004 On the 16th a severe storm affected the Withcott, Blanchview and Toowoomba areas and a hotel was unroofed and trees brought down. Golf ball sized hail was reported from Withcott and 3cm hail from Toowoomba. Hail 2cm in diameter was reported from Nanango with some cars dented.

17-02-2004 On the 17th severe storm struck Cunnamulla and 16 homes were unroofed. Trees were brought down, farm sheds flattened and windows smashed by flying debris.

22-02-2004 On the 22nd a second severe storm struck Cunnamulla, unroofing at least one house. Also on the same day trees were brought down by wind gusts on the Sunshine Coast.

23-02-2004 On the 23rd severe storms struck Coomera and Nanango/Kingaroy. Golf ball sized hail was reported from Nanango and some damage from Kingaroy. One house was unroofed in Coomera and four others were damaged. A house was unroofed in Wondai. The highest wind gusts were: Gatton 70km/h, Toowoomba 69km/h and Amberley 61km/h.

September 2004: Widespread small hail occurred in the Brisbane area on the 4th, 5th and 20th of September.

01-10-2004 A thunderstorm produced a 135km/h wind gust at Oakey on the 1st.

17-10-2004 On the 17th severe storms affected the Chinchilla area, causing extensive damage to a property. Sections of shade in a cattle feedlot were destroyed. Crops were also damaged by hail. A tornado and hail to the size of hen's eggs were also reported from the region.

18-10-2004 On the 18th a hail storm struck Biloela. Golf ball hail was reported. Houses were unroofed and large trees brought down.

19-10-2004 On the 19th several trees were brought down in Rockhampton. One fell onto a power line, blacking out 1,100 homes. Tully was also struck by a severe storm, trees were uprooted banana trees were lost.

20-10-2004 On the 20th severe storms affected the Capricorn and central coast areas. A hailstorm affected the Yeppoon area. Hail from ping-pong ball to golf ball size was reported from Bungundarra, where it destroyed mango, lychee and apple crops. Several homes sustained roof damage. Large hail was also reported from Farnborough, while hail up to golf ball size also occurred in the Mackay area.

24-10-2004 On the 24th a severe storm affected the Cambooya area causing damage to 8 houses in the shire. A group of large trees was destroyed. At Oakey, a thunderstorm produced a 113km/h wind gust.

26-10-2004 On the 26th a severe storm caused considerable damage at Tara on the Darling Downs. Another storm produced golf ball sized hail at Millmerran. By 12.45pm a line of thunderstorms had developed from Cecil Plains to Millmerran to the Stanthorpe area with a particularly severe thunderstorm about 30km west of Warwick. Subsequently strong winds at Warwick uprooted trees and brought down power lines with hail up to 5 cm in diameter reported. The line was rapidly moving east and some weak thunderstorms developed in the Southeast Coast District ahead of the main line of storms. By 1.20pm one of these weak storms rapidly intensified as it moved from Beaudesert onto the ranges west of Nerang while the other storms ahead of the main line weakened. The storm west of Nerang continued to rapidly intensify and move very quickly to the southeast that took in into the Coolangatta Palm Beach area where more than 500 homes were damaged by large hail about golf ball size. The main line of storms by 2.30pm lay from Esk to Mt Nebo to Beaudesert. A possible tornado struck the Mt Nebo region where a 200metre wide damage track has been spotted in the forest from the air. Extensive wind damage occurred in the Mt Nebo Samford region and this storm continued on to cause damage at Sandgate and Redcliffe. Meanwhile the main line of storms reached the Gold Coast around 3pm and large hail stopped the Indy car race which was not affected by the Palm Beach Coolangatta storm.

27-10-2004. A severe hailstorm struck Taroom. The hail was as large as tennis balls and caused damage to cars and houses. A number of windows were broken.

04-11-2004. A line of active thunderstorms occurred in the Channel Country. Birdsville recorded a wind gust of 96 km/h.

07-11-2004. During the morning, heavy showers and thunderstorms produced intense rainfall and flash flooding over the Gold Coast and, later, southern suburbs of Brisbane. In the 24 hours to 9am Sunday 7th November, the highest totals were recorded in a relatively small area around Mt Tamborine. In the following 24 hours, the heavy rainfall was more widespread extending from Brisbane to the Gold Coast with the highest totals recorded in the area between Jacob's Well and Carbrook. The Rocklea and Archerfield areas were affected severely also. There were several new 24hour rainfall records set for November; including Mt Tamborine with 238mm compared with the previous record of 164mm (set in November 1959) and Coolangatta 207mm compared with 110mm (set in November 1984). The highest hourly rainfall recorded during the event was at Jacob's Well where 85mm of rain fell between 9.30 and 10.30 on the morning of the 7th.

08-11-2004. A super cell thunderstorm struck Boonah. Large hail (at least golf ball sized) was the predominant feature of the event and considerable damage occurred. A local school had almost every window smashed by the hail.

09-11-2004. An outbreak of severe storms produced large hail about the Brisbane region. Golf ball sized hail was reported from Salisbury and Moorooka, while there was an unconfirmed report of "orange sized" hail from the Pine Rivers shire. A 94km/h wind gust was measured at Double Island Point. A tornado was observed and photographed near Ournie, between Taroom and Wandoan in the Central Highlands and Coalfields district.

11-11-2004. A line of severe storms struck Dirranbandi in the southeastern Maranoa and Warrego district. Wind gusts from the storms unroofed houses, downed power poles and uprooted trees.

15-11-2004. Storms produced very heavy rainfall in parts of the Central Highlands and Coalfields district. At Boomba, north of Dingo, 287mm of rainfall was reported from a single storm. Hail was also reported with the storm. At another location 67 kilometres north of Dingo 92mm was reported from a storm.

16-11-2004. A severe storm was reported 10 kilometres north of Biloela in the Capricornia district. 75mm of rain was recorded in 30 minutes, and trees were uprooted. Elsewhere a severe storm struck a homestead near Pentland. A house and two sheds were partially unroofed and trees uprooted.

19-11-2004. A severe storm affected Mt Isa, the AWS recorded a wind gust of 96 km/h, trees were uprooted and an aircraft hangar was damaged.

02-12-2004. Hail of 1-2cm in diameter was reported at Oakey. Hail, the size of large marbles to small golf balls was reported between Oakey and Crows Nest. Wind and hail to golf ball size, unroofed sheds and damaged trees at Crows Nest. Hail 20 cent to the size of a 50cent piece was reported at Nanango and surrounds. On the same day, there was considerable wind damage to trees between Kingaroy and Nanango where many large trees were snapped off or uprooted.

04-12-2004. A severe hailstorm struck a property near Bollon in the Maranoa and Warrego district. Over 8,000 hectares of pasture were destroyed. Kangaroos were found dead or blinded by the hail. Every building on the property lost its roof.

06-12-2004. A severe hailstorm with golf ball sized hail struck Clermont in the Central Highlands and Coalfields district during the late evening. Roofs were damaged and windows and car windscreens smashed.

07-12-2004. A tornado was sighted near Glenmorgan in the western Darling Downs. The tornado was estimated to be 10-20 kilometres away and lasted 5-7 minutes. Thunderstorms also produced intense rainfall in Pittsworth, and in the Darling Downs, where 85mm was recorded. Falls of this intensity have an annual recurrence interval of more than 1 in 100 years. Heavy rainfall and flash flooding also occurred on the Gold Coast during the evening. Elsewhere in the state, the Julia Creek community centre was partially unroofed after a wind gust reached 95 km/h.

08-12-2004. Hail the size of 5cent pieces (2cm) reported from St George in the evening.

12-12-2004. Winds gusts to 102km/h were recorded at Coolangatta Airport.

13-12-2004. A severe squall line moved across southeast Queensland. The Brisbane bayside suburbs of Wynnum and Manly were the worst affected. Trees were uprooted, houses unroofed, power lines brought down, and \$5 million worth of damage was done to 20 luxury yachts in the Manly harbour. The Wynnum shopping centre was forced to close after much of it became flooded. In total 40,000 homes were blacked out by the event. A Sunshine Coast woman was hospitalised after being struck by lightning.

20-12-2004. Severe storms affected many areas in southeast Queensland. Golf ball sized hail was reported from Beaudesert, and trees were brought down at Cooroy. More than 7,000 homes were blacked out in the Maryborough, Gympie, and Bundaberg regions. Trees were felled on the Bruce Highway at Kybong.

21-12-2004. A severe storm struck Barcaldine in the Central West district. Powerlines were brought down and trees up to 50 years old were uprooted. The shire hall also lost a portion of its roof.

22-12-2004. A severe storm struck Roma in the Maranoa and Warrego district. Trees were uprooted and power lines brought down. The Grand Hotel lost part of its roof. A 100km/h wind gust was recorded by the Roma automatic weather station.

27-12-2004. Golf ball sized hail was reported from Gatton.

2005

17-01-2005 On the 17th, a line of thunderstorms over the Darling Downs produced a 100km/h wind gust at Oakey.

31-01-2005 On the 31st, an isolated severe thunderstorm developed over Rockhampton and produced a 94km/h wind gust. A tree was blown onto the monkey enclosure in the botanic garden, allowing the monkeys to escape.

23-02-2005. A 93 km/h wind gust was recorded at Century Mine automatic weather station during a thunderstorm.

25-02-2005. A 96 km/h wind gust was recorded at Mt Isa during a thunderstorm.

21-03-2005. Thunderstorms produced strong wind gusts estimated to be 100 km/h on the Bruce Highway near Noosa and some trees and power lines were brought down at Tewantin and Kenilworth. Double Island Point recorded a gust to 93 km/h. 2cm sized hail was reported from Tewantin and Kenilworth.

25-03-2005. Severe thunderstorms produced hail at Maryborough and Lady Elliot Island. Double Island Point Lighthouse recorded a gust to 104 km/h. 2cm sized hail was reported from Yeppoon.

26-03-2005. Large hail was reported from the Amberley area (near Ipswich, southwest of Brisbane). Hail 2-3cm in diameter with occasional golf ball sized hail was reported. Hail approximately 6cm in diameter was reported from the Mt Kanighan area (near Glenwood), causing car damage. Hail up to baseball size was reported from Glenwood where 18 homes received roof and window damage. Hail ranging from golf to cricket ball size was reported from the Deception Bay, Narangba, and Burpengary areas (adjacent suburbs north of Brisbane). Homes and cars were damaged. A 2-6 kilometre strip of tree damage was reported between Biggenden and Childers in the Wide Bay and Burnett district. A shed was unroofed and a cattle truck blown over at Bajool, southeast of Rockhampton. Small hail from the same storm was also reported from Rockhampton.

18-05-2005. A large quantity of small hail was reported in southeast Queensland at Benarkin during a thunderstorm.

19-05-2005. Severe thunderstorms affected western and northern suburbs of Brisbane during the late afternoon and evening of the 19th, bringing an exceptional coverage of small hail. The combination of hail and heavy rain led to extensive flash flooding and inundation of some properties. Hail was reported as deep as 15cm across roads causing considerable traffic disruptions. Brisbane airport was closed for about an hour. Rainfall reports were of the order of 40mm along the storm path from the southwest of the city through to the coast to the north of Brisbane. One school in the northern suburbs was closed because of water damage. Preliminary damage estimates were more than \$10 million dollars.

27-09-2005. Hail to 4cm in size was reported during a thunderstorm at Wilson Peak (south of Boonah in southeast Queensland) and approximately 5cm hail during another storm at Kingaroy.

30-09-2005. Thunderstorms in the Lockyer and Brisbane Valleys caused wind damage to houses, uprooted trees, brought down power lines and upturned a caravan through the Lockyer and Brisbane Valleys during the afternoon. Lockrose was the worst affected area. Three road accidents at the time of the storm brought the Ipswich Motorway and Warrego Highway to a standstill around 4pm.

12-10-2005. Severe thunderstorms produced large damaging hail on the northern Gold Coast and the northern Sunshine Coast. The main severe cell developed near Rathdowney early in the afternoon and moved northeast to impact the Gold Coast suburbs of Pacific Pines, Oxenford and Helensvale. Hail ranging up to 7cm in diameter (cricket ball size) was reported from all the above localities. The main damage was to 2,000 cars and many had windows broken. Traffic on the Gold Coast motorway came to a standstill after numerous accidents. Hail also damaged house roofs. Other storms brought rain, wind and hail to other parts from the border to north of the Sunshine coast. Double Island Point recorded a wind gust to 109 km/h from the south.

13-10-2005. Severe thunderstorms again developed across southeast Queensland. One developed near Crows Nest and moved through Esk. Others developed southwest of Toowoomba and moved northeast through Gatton where marble to golf ball sized hail was reported and in Laidley, hail was reported to be as big as tennis balls. Cars were damaged and windscreens were broken. Massive traffic delays and road vehicle accidents occurred and almost 500 homes were damaged. A wind gust to 85 km/h was recorded at Gatton. Heavy rainfalls were recorded along the storm's path, including the northern Pine River catchment. Also on the same day severe thunderstorms produced a large amount of hail, some as large as tennis balls at a property 74 kilometres northeast of Roma. A large amount of hail was reported at a property 45 kilometres southwest of Roma.

20-10-2005. A severe thunderstorm with large hail the size of 10cent pieces was reported at Wondecla (near Herberton in the Atherton Tablelands).

24-10-2005. Severe thunderstorms were widespread across eastern Queensland with many reports of large hail. A large area of storm activity produced hail in the Laidley area. Hail, larger than golf ball sized, fell at Gatton. Golf ball sized hail was reported near Dalby, and at Roma golf ball sized hail damaged a car yard. Extensive damage occurred to stone fruit orchards in the Stanthorpe/Pozieres area due to a prolonged fall of hail that collapsed hail nets onto fruit trees causing damage to a quarter of the crop. The damage bill is estimated at 20 million dollars. Near golf ball sized hail was reported in the Ban Ban Springs area (southeast of Gayndah). Hail was also reported in the Mackay area. Pea sized hail fell at Innisfail and other very large storm cells occurred in the Charters Towers and Rockhampton areas. Severe hail storms destroyed vegetable crops in Lockyer Valley, west of Brisbane.

25-10-2005. Severe thunderstorms unroofed 3 houses at Tara and golf ball sized hail fell at Greenbank.

27-10-2005. Severe thunderstorms caused flash flooding in some Brisbane suburbs with 60mm recorded in 1 hour at Amberley and wind gusts to 80km/h and 50mm of rain was recorded in 30 minutes at Mount Gravatt. Golf ball sized hail fell in Toowoomba and large hail was reported at Roma. Georgetown recorded a maximum wind gust of 94km/h during storm activity.

7-11-2005. A wind gust of 96 km/h was recorded at Birdsville in a thunderstorm.

9-11-2005. A severe thunderstorm produced numerous strong wind gusts at Winton the highest of these was 100 km/h. This was accompanied by 31 mm of rain in 30 minutes.

12-11-2005. Thunderstorms produced very heavy rain on the Gold Coast, 81 mm of rain fell in 60 minutes at Tallebudgera Creek and 85 mm in 60 minutes was recorded at Coplicks Bridge.

13-11-2005. A severe thunderstorm produced 107km/h wind gusts at Maroochydore and 3-4cm hail was reported between Maroochydore and Coolumb.

14-11-2005. Thunderstorms in the Sunshine Coast Hinterland produced some exceptional rainfall values. At Yandina, severe thresholds were met or exceeded for all time periods up to and including 6 hours. Values at Yandina Creek were: 26mm in 5 minutes, 28mm in 6 minutes, 38mm in 10 minutes, 61mm in 20 minutes, 83 mm in 30 minutes, 119 mm in 60 minutes, 135 mm in 2 hours and 137 mm in 3 hours.

15-11-2005. An extremely long lived thunderstorm began its life near Inglewood. It tracked steadily east-northeast for the next few hours, eventually becoming a supercell near Deverton. Around midday it reached Gatton, producing 2.5-3cm hail in the area. Wind gusts of 72 km/h were recorded at the observation site. At Mt Tarampa, 2cm hail fell and trees were brought down. Further east, the storm brought down trees in an area 10 to 15 kilometres south of Esk. After a brief period of weakening, the storm then reintensified over the D'Aguilar Ranges, before moving through the Sunshine Coast Hinterland, where it produced very heavy rainfall. At Ball Lookout (near Eumundi) 45mm fell in 20 minutes and 51mm in 30 minutes. At Mapleton, 26mm was recorded in 10 minutes and 44mm in 30 minutes. The storm eventually dissipated around 6 pm. Another severe thunderstorm caused considerable damage at Gympie. Trees were brought down and roofs torn off many homes. The maximum wind gust recorded at the AWS at Gympie was just 68 km/h, however, the worst of the storm passed to the south and south east of the town. It produced extremely heavy rain with Mt Elliot (near Toolara) recording 51mm in 20 minutes and 61mm in 30 minutes.

19-11-2005. Hail to 2.5cm in diameter was reported at Wondalli, near Goondiwindi.

20-11-2005. Afternoon storms resulted in more than 32,000 homes without power, some property damage and scattered debris along roadsides. The worst affected areas were Riverview, Goodna, Bundamba, Sherwood, Park Ridge, Moorooka, Ipswich, Beaudesert and Jimboomba.

22-11-2005. Very heavy rainfall and minor flash flooding (30mm in 12 minutes and 40mm in 25 minutes) were reported from Withcott (near Toowoomba). A wind gust of 90 km/h was recorded at Cloncurry in a thunderstorm.

23-11-2005. A slow moving thunderstorm formed in a deep, moist tropical airmass, producing heavy rainfall. Bonogin Creek in the Gold Coast Hinterland reported 77mm in 60 minutes, Devon Hills (near the township of Moore in the upper Brisbane River Valley) received 25mm in 10 minutes and Moorina (near Caboolture) received 48mm in 30

minutes. There was minor flash flooding and water damage. There was also minor flash flooding at Springfield, near Ipswich.

25-11-2005. A tornado was reported at Mulgildie, south of Monto, 12 homes were partially or completely unroofed, farm sheds demolished and a piggery flattened.

27-11-2005. An outbreak of severe thunderstorms was observed around Brisbane and Gladstone. A tornado was observed at Narangba, an outer northern suburb of Brisbane. Trees were completely sheared off and garden sheds blown away. A caravan was over-turned, tiles and iron sheets were torn off roofs. At Narangba Timbers, some exceptional damage was observed. Heavy timber beams were torn from the roof of the shed. Many reports of hail between 2-5 cm in diameter were received from around the Greater Brisbane area. Warrill View (near Aratula) reported 4-5 cm, Jindalee 4cm, Mango Hill golf ball sized, Murrumba Downs up to 2cm, Scarborough golf ball sized and Redcliffe up to 5cm in diameter. Also Nanango reported up to golf ball sized.

28-11-2005. Golf ball sized hail was reported from Proserpine.

29-11-2005. Hail larger than golf balls was reported from a site about 60 kilometres south southwest of Charters Towers. Hail 7cm in diameter was reported to the south west of Mackay. The majority of the damage occurred in Brisbane, however there were numerous reports of hail from the southern suburbs. Some of the hail exceeded 2cm in diameter. Many places also received large quantities of hail and some of the damage was due to the quantity (e.g. gutters being filled by hail). Reports of interest included Algeester with 2-3cm, Raceview golf ball sized, Redbank to golf ball sized, Sunnybank 2.5cm and Ipswich to 2cm. At Goodna, a wind gust of 100 km/h was recorded. North of the city, at least 2 supercells were observed. One of these produced very heavy rainfall in the northwest suburbs. Drapers Crossing, near Samford, reported 47mm in 20 minutes, 64mm in 30 minutes, and 84mm in 60 minutes.

30-11-2005 Severe thunderstorms on the Atherton Tablelands produced several reports of damage. At Atherton, one property reported much tree damage and the loss of their solar hot water system. At Tolga, an iron roof was stripped from a shed. Roofs were torn off, a water tank was rolled over, power poles brought down and hail the size of golf balls were reported. At Mungali Falls, near Millaa Millaa (also on the Atherton Tablelands), hail the size of 10cent pieces was reported, trees were brought down. Severe thunderstorms also occurred near Rockhampton, several reports of hail, from Westwood (westsouthwest of Rockhampton), Stanwell and Kalapa. At Kalapa, one farmer reported golf ball sized hail that damaged crops. Strong winds tore a third of the house's roof off and knocked over the water tank. Bark was also stripped from trees by the storm.

01-12-2005. Early morning thunderstorms produced very heavy rainfall in some bayside suburbs. At Manly, 51mm was recorded in 20 minutes, 62mm in 30 minutes and 83mm in 60 minutes. More severe thunderstorms developed in the southeast during the afternoon. Some of these included: Noosa Heads, 125mm in 60 minutes and 208mm in 3 hours; Palmwoods, 87mm in 60 minutes; Lake Cooroibah 46mm in 20 minutes, 108mm in 60 minutes and 124mm in 3 hours; Sippy Downs 54mm in 30 minutes; Top of Brisbane 80 mm in 60 minutes; Jimna 73mm in 30 minutes. The storms caused widespread damage. Shops in Noosa were swamped by flood waters a metre deep. This triggered a landslide in Noosa that removed two thirds of the width of the road to a depth of about 6 metres for approximately 12 metres. At Tewantin a woman was injured when struck by lightning while dining on the balcony of a restaurant, her spoon acted as lightning conductor. Further north, near Gympie, the Bruce Highway was one of many roads cut by floodwater. An unspecified number of homes were inundated by water, together with some businesses in Gympie. Wind damage was also reported in and around Gympie, with trees and power lines down and several homes and an Equestrian Centre losing part or all of their roofs. Birdsville also recorded a wind gust of 91 km/h during a thunderstorm.

02-12-2005. Severe thunderstorms produced heavy rain with Springbrook recording 78 mm in 60 minutes. Aramac, approximately 100 kilometres north east of Longreach, received major damage during a thunderstorm. Around 40 of the town's 170 homes were severely damaged, and almost every home suffered some damage from extreme wind gusts and hail. Some homes and sheds had roofs torn off, others were picked up and thrown, some totally destroyed. Very large trees were torn apart, some uprooted, others twisted off at their bases. The wind was so strong that an 18 tonne semi trailer was tipped over. There was millions of dollars worth of damage.

04-12-2005. Large tree branches were broken off trees in a thunderstorm near Gin Gin.

08-12-2005. A severe squall line formed on the border ranges and moved through the Brisbane area. Wind gusts of 89 km/h were reported from Banana Bank automatic weather station in Moreton Bay. Other reports of heavy rain and strong winds were received from the Goodna area. At Allora, in the eastern Darling Downs, winds estimated at 100-120km/h were reported. These winds brought down a number of trees, but there were no reports of property damage. Some of the heavy rain reports were: Hilltop Gardens, (Kelvin Grove area) recorded 32.4mm in 10 minutes; Rudds Lane, 47mm in 30 minutes; Kooralbyn, 19 mm in 6 minutes and 26mm in 10 minutes; Stretton 32mm in 10 minutes; 44mm in 20 minutes; Bundamba (Barclay Street) 24mm in 6 minutes and 44 mm in 20 minutes. A 91km/h wind gust was recorded in a thunderstorm at Normanton. Also a tornado was observed near Century Mine, north of Mt Isa, there was some tree damage reported.

10-12-2005. Severe thunderstorms were reported in the north west of the state. At Mt Isa, trees were uprooted in the city. At Cotswold Station, to the north-north-west of Cloncurry, very strong easterly winds associated with a thunderstorm uprooted a large tree, damaged a 6 metre sliding door and moved hay bales up to 300 metres from the shed they were in.

13-12-2005. Severe thunderstorms in southeast Queensland produced strong winds, large hail and very heavy rainfall. At Palen Creek (near Rathdowney), rainfall reports included 36mm in 20 minutes. Golf ball sized hail, large tree limbs broken and some roof damage at Rathdowney were also reported. Further north, golf ball sized hail was reported at Jimboomba, with the largest hail stones approximately 5 cm in diameter. At Gympie, 113 km/h wind gusts were recorded. Wind damage included trees down and sheds blown away.

14-12-2005. Widespread severe thunderstorms occurred in southeast Queensland. Golf ball sized hail was reported from Gympie and Canungra. At Maroochydore, 93 km/h wind gusts were reported. Significant wind gusts were also reported from Hervey Bay, with 91 km/h and 117 km/h at Town of 1770.

16-12-2005. Strong winds and heavy rain were accompanied with more severe thunderstorms in the south east. At Oakey 104 km/h was recorded. Nearer the coast, very heavy rain was recorded on the Gold Coast. At Oyster Creek (near Burleigh), 55mm of rainfall in 30 minutes and 76mm in 60 minutes.

17-12-2005. A severe thunderstorms in the Brisbane area brought down trees and power lines. The northern suburbs were worst hit. A block of units at Cooparoo was unroofed and at least 25 homes were damaged at Kangaroo Point, Ferny Hills, Arana Hills and Everton Hills (suburbs of Brisbane). One car was crushed at Shorncliffe when a large tree fell on it. A man was struck by lightning at Russell Island (in Moreton Bay), but sustained only minor injuries. Wind gusts of 91 and 93 km/h were recorded at Gatton, to the west of Brisbane. The storms continued north to the Sunshine Coast, where they brought down trees and power lines, crushing homes and cars in the Buderim and Mountain Creek areas. At Double Island Point, gusts between 93 and 96 km/h were recorded.

18-12-2005. A severe thunderstorm at Moore Park, north west of Bundaberg, brought down trees, damaged buildings and destroyed fences. A caravan at the Moore Park Caravan Park was destroyed and several others damaged.

25-12-2005. Widespread severe thunderstorms with large hail, damaging winds and very heavy rainfall were observed in southeast Queensland. Hail 3 cm in diameter was reported in Grandchester (near Ipswich). At Jimna, west of the Sunshine Coast, 45 mm of rain fell in the 30 minutes ending at 4:09 pm Wind gusts of 102 and 109 km/h were recorded at Redcliffe. Despite this, no significant reports of damage were received.

26-12-2005. A large severe thunderstorm was observed in the southern Burnett region. At Nanango, a storm spotter reported golf ball sized hail. Damage was done to cars, screen doors, windows and trees. Gusts of 109 km/h were recorded in a thunderstorm at Hughenden.

27-12-2005. A severe thunderstorm occurred in southeast Queensland damaging the roofs of two homes near Mulgowie, in the Lockyer Valley, with one of the roofs completely removed. Three hay sheds were also unroofed. A storm spotter reported a damage track about 1.5 kilometres wide, 3 kilometres west of Laidley.

2006

03-01-2006. A 93km/h wind gust was recorded in a thunderstorm at Warwick. Trees and power lines were brought down, sheds demolished and roofs ripped off. Much damage occurred as a result of flying debris. A tornado was also sighted to the east of Warwick. Severe thunderstorms also affected Brisbane late that evening, bringing down trees and power lines in the northern suburbs. Trees fell on two houses when strong winds lashed the Northeast corner of Murrumba Downs late on the 3rd.

04-01-2006. Severe thunderstorms in the Dalby area produced very heavy rainfall. Moffatt, east-northeast of Dalby, recorded 33mm in 20 minutes and 37mm in 30 minutes.

06-01-2006. More than 105,000 homes lost power, with 17,000 lightning strikes recorded in four hours as storm cells swept across the southeast. An early morning thunderstorm produced very heavy rain in the Boonah area with 37mm recorded in 20 minutes. Thunderstorms redeveloped during the afternoon and evening in southeast Queensland, producing large hail, very heavy rainfall and some strong winds. Other suburbs that reported hail included South Brisbane, East Brisbane, Morningside, Norman Park, Annerley, Kingston and Shailer Park and Logan.

07-01-2006. Thunderstorms continued moving up the east coast. A 102km/h wind gust was recorded at Double Island Point. Widespread severe thunderstorms redeveloped throughout the day in much of eastern Queensland. The Capricornia and nearby areas experienced the worst of the activity.

08-01-2006. Extremely humid conditions resulted in the formation of severe thunderstorms from the Atherton Tablelands down to the Sunshine Coast. Almost all the severe thunderstorms produced very heavy rainfall, with reports of large hail confined to the Atherton Tablelands.

09-01-2006. Thunderstorms that formed on the 8th continued to be active into the early hours of 9th. At The Pinnacles (15 kilometres south-southwest of Townsville), 59mm was recorded in 30 minutes and 89mm in 60 minutes. Hail was reported from Thangool and Charters Towers.

10-01-2006. Severe thunderstorms remained active in the Herbert and Lower Burdekin district. Bluewater, near Yabulu, reported 44mm in 20 minutes and 56mm in 30 minutes.

11-01-2006. Rain areas formed over the North Tropical Coast and Herbert and Lower Burdekin districts. Jarra Creek, near Tully, reported 170mm in 2 hours.

18-01-2006. Severe thunderstorms produced very heavy rainfall in the Lockyer Valley. Reports included: 46mm in 30 minutes and 62mm in 60 minutes at Franklyn Vale (near Grandchester). At Showground Weir, near Laidley 48mm in 20 minutes was recorded.

22-01-2006. A wind gust of 94km/hr was recorded at Birdsville during a thunderstorm.

25-01-2006. A wind gust of 93km/hr was recorded at Birdsville during a thunderstorm.

27-01-2006. A low which formed into tropical cyclone *Jim* produced very heavy rain and embedded thunderstorms along the North Tropical Coast. At Bolinda Estate, near Tully, 89mm was recorded in 60 minutes and 131mm in 2 hours.

01-02-2006. A 96km/h wind gust was recorded at Winton in a thunderstorm.

02-02-2006. Widespread severe thunderstorms occurred in the north of the state. These thunderstorms produced severe wind gusts. Some of these include: Richmond 119 km/h and Cloncurry 102 km/h. Severe gusts were also recorded at Julia Creek and Mt Isa.

06-02-2006. Widespread severe thunderstorms occurred in the Darling Downs and Granite Belt, Maranoa and Warrego and Central West districts. The worst damage was reported in Surat, where sheds were blown away, roofs torn off, power lines downed and trees uprooted. One building had its roof blown off and a hospital lost part of its roof. A wind gust of 96 km/h was recorded at Blackall. There were reports of damage to the north and south of Roma, a wind gust of 94 km/h was recorded and power lines were brought down about 60 kilometres north of Roma.

12-02-2006. Very heavy rain was associated with widespread thunderstorms in the Southeast coastal region. Clearview on the Gold Coast reported 115mm of rain in 2 hours. At Grandchester near Ipswich 87mm of rain fell in 60 minutes.

13-02-2006. Severe thunderstorms produced damaging wind gusts in the Gulf Country. A 93km/h wind gust was recorded at Burketown. Further south at Century Mine 117 km/h wind gust was recorded.

19-02-2006. Destructive wind gusts were recorded in the Northern Goldfields and Upper Flinders district. Several wind gusts exceeding 93km/h were recorded at Julia Creek with the highest gusts reaching 117 km/h.

21-02-2006. Thunderstorms formed in a very unstable southeast stream. One of these thunderstorms produced very heavy rainfall at Tarome, near Aratula in the Southeast Coast district where 28mm of rain was recorded in 10 minutes, 43mm in 20 minutes and 48mm in 30 minutes.

08-03-2006. Thunderstorms formed over a large part of central Queensland, bringing heavy rain. At St Anns (230 kilometres west of Mackay) in the Suttor River catchment, 62mm of rain was reported in 30 minutes. There were some high rainfall totals reported from Mackay through to the Richmond area from the storms around that day and the next morning.

09-03-2006. Very heavy rain and flash flooding was reported around Mackay in the early hours of the morning, resulting in some road closures in the area. Mackay reported 93mm in 60 minutes and 109mm in 2 hours.

May 2006

28-05-2006. Thunderstorms formed in the south east of the state under a middle level cold pool. Hail of up to 2cm in diameter was reported at Greenbank, south of Brisbane.

10-09-2006. A mid level cold pool caused thunderstorms to develop in the southeast. The Tewantin-Noosa area received heavy rain and strong winds blew down some trees.

27-09-2006. At least one severe thunderstorm affected southeast Queensland in the afternoon of the 27th with the Toowoomba area reporting hail. About 15,000 homes lost power, mainly near Ipswich and Gatton. An associated wind gust of 91 km/h was recorded at the University of Queensland Gatton observing site. Albany Creek in Brisbane's west was also badly affected with 3,500 homes left without power at the height of the storm. Hail was also reported from some centres on the Sunshine Coast. Heavy rainfall was recorded at Moorina Alert (near Caboolture). Thunderstorms in the early evening produced marble to golf ball sized hail at Warwick.

31-10-2006. A thunderstorm in the Central Highlands caused damage to properties just out of Emerald. Damage included the roofs being blown off stables and pergolas blown down by winds.

08-11-2006. Severe thunderstorms formed in the southeast corner of the state ahead of a trough system. Two super cells were observed among the thunderstorms in the greater Brisbane area, with a third moved through the area between Moura and Biloela and almost reaching Gladstone. The super cells moved through the Esk and Woodford areas. At Esk, reports were received of hail varying from golf ball to cricket ball size in the town itself and the size of tennis balls 15kilometres to the northeast. The thunderstorm continued to Caboolture and the Sunshine Coast Hinterland, where golf ball sized hail was reported at Caboolture, Maleny and surrounding areas. At Woodford, strong winds unroofed houses, brought down trees and power lines and 28mm of rain fell in 10 minutes. Roofs were also damaged at Nambour. The second cell moved through the Gold Coast. Marble sized hail and flash flooding were reported from Ashmore while a woman was struck by lightning at Carrara. Some other rainfall reports include: Palmwoods 41mm in 20 minutes, Numinbah (Gold Coast) 41mm in 20 minutes, Evandale (Gold Coast) 28 mm in 10 minutes, Loder Creek Dam (Gold Coast) 35mm in 10 minutes and The Overflow (Gold Coast) 40mm in 20 minutes.

13-11-2006. A severe thunderstorm in the Wandoan area produced 30mm of rain in 10 minutes. Strong winds also tore iron sheeting from roofs.

15-11-2006. Severe thunderstorms formed to the east of a very strong frontal system. The first thunderstorms occurred in the Wide Bay and Burnett region in the morning, producing cricket ball sized hail at Tin Can Bay and Mt

Perry and golf ball sized hail on Fraser Island. At Tinana, near Maryborough, large branches were brought down and trees uprooted. The worst affected area was the central Burnett region, where three quarters of the citrus farms sustained tree damage with a total value estimated in the millions of dollars. In the Brisbane area a severe thunderstorm produced large hail in several suburbs including Ferny Grove (3cm), Norman Park (2cm) and Wynnum (to golf ball size). The main damage was inflicted by strong winds, which tore off roofs and downed trees and power lines. Four cars in total were destroyed by falling trees in Northgate, Toowong and Paddington. Roofs were lost from buildings. There was also damage to the Airport in Brisbane. A home at The Gap was crushed by a falling tree. A total of 54 buildings in the northern suburbs sustained damage. Train services were suspended for a short time due to a combination of debris on tracks and power outages at Roma Street caused by lightning strikes. Estimated wind gusts at Wavell Heights was 111 km/h. At Biggenden, a severe thunderstorm produced hail ranging 1.5cm to 3cm in diameter and brought down small to medium sized branches.

29-11-2006. A hot, dry and windy day ahead of an inland trough produced a severe thunderstorm that moved through the Toogoolawah area. A house was completely unroofed, sheds damaged, a horse killed and many large trees were uprooted or snapped off about halfway up. A person was also injured. Another thunderstorm that moved through the western and southern suburbs of Brisbane produced 2 cm hail at Corinda and hail to golf ball size at Ipswich.

02-12-2006. Several farm workers were injured by a lightning strike at St George. A wind gust of 98 km/h was recorded at St George airport.

03-12-2006. At Holland Park West (southern suburb of Brisbane), 17 mm of rain was recorded in 5 minutes, 28 mm in 10 minutes and 50 mm in 30 minutes.

12-12-2006. Severe thunderstorms in the area around Millmerran produced hail the size of 20 cent pieces, felled trees and damaged sheds and buildings. Further east at Withcott near Toowoomba, 2-3 cm hail was reported.

15-12-2006. Severe thunderstorms in the eastern Darling Downs produced a wind gust of 107 km/h at Oakey. Trees were also uprooted at Toowoomba.

16-12-2006. A severe storm caused damage to communities in the Brisbane Valley and Sunshine Coast Hinterland. Two intense cells formed in the Wide Bay and Burnett region, one moving through the Tiaro region and the other through Childers. Other storms eventually formed in the central and northern Wide Bay and Burnett district. In the southeast, extensive damage was reported, homes unroofed, sheds demolished and aircraft hangars were blown over at Toogoolawah Airport. Trees were felled and power lines were brought down in settlements from Toogoolawah and Esk in the Brisbane Valley, to Kilcoy then right across the Sunshine Coast Hinterland to Double Island Point. Cooroy and Pomona were the worst hit and exceptional rainfall intensities were experienced. A woman was hit by lightning at the Glass House Mountains camping ground. A wind gust of 196 km/h was recorded at Double Island Point as the storm passed just to the south. This is the highest wind gust ever recorded in Australia from a thunderstorm. The following rainfall totals were recorded: Tallegalla (west of Marburg) 18mm in 5 minutes and 63mm in 30 minutes; Crows Nest 35mm in 20 minutes; Moy Pocket (near Kenilworth) 20mm in 5 minutes, 46mm in 30 minutes; Cooroy 23mm in 5 minutes and 53mm in 30 minutes and Boreen Point 21mm in 5 minutes and 60mm in 30 minutes. To the west of the super cell a thunderstorm produced a 120km/h wind gust at Gympie. Further north, two thunderstorms formed at the southern end of the Wide Bay and Burnett district and moved north. One storm passed through Tiaro during the afternoon and produced 2.5 cm hail as well as causing significant wind damage in and around the town. Roofs were blown off, sheds were damaged and trees uprooted. The main road was closed during the night by fallen tree debris. The second thunderstorm moved through Childers producing significant wind damage from a possible tornado.

2007

02-01-2007. A severe thunderstorms in the central west of the state produced a 91 km/h wind gust at Winton.

10-01-2007. A thunderstorm occurred at Bell (about 40kilometres northeast of Dalby), bringing trees and a windmill down and tearing roofs off homes. A tornado was sighted in the area. A slow moving heavy thunderstorm formed in a deep, moist tropical air mass at Camooweal, producing 52mm of rain in 26 minutes on the 11th.

13-01-2007. Widespread severe thunderstorms in the central west and southeast produced a storm at Warwick with 4cm hail reported. Further west trees and power lines were brought down and homes were damaged at Dalby and Tara.

14-01-2007. The previous day's thunderstorms continued into the night and early hours of the 14th. A 104km/h wind gust was recorded at Winton and a 100 km/h wind gust was recorded at Longreach.

26-01-2007. Several thunderstorms in the south east of the state moved through Laidley producing winds estimated to 100 km/h. Hail averaging 3 cm in diameter and a tornado were sighted from Mulgowie Oval. Many trees were blown down, roofs torn off homes and a large section of roof was blown off the Laidley show grounds. Sheds were demolished and road signs were ripped out of the ground and bent around trees. Winds at Mulgowie were estimated at 111km/h. Further west at Dalby another severe thunderstorm struck with the worst damage occurring on the southern and eastern sides of town. At least 20 homes sustained roof damage, sheds were demolished and a primary school had several classrooms damaged. Many trees were brought down. At Blaxland (13 kilometres from Dalby) empty coal wagons were found lying on their sides after the storm.

29,30-01-2007. A number of thunderstorm cells formed late on the 29th along the coastline from the Sunshine Coast to the Brisbane area in a moist low level northeast flow as a mid level trough moved through the area. Very heavy rainfall was recorded early on the 30th in a number of Brisbane suburbs including 79mm at Gordon Park and 74mm at Hemmant. A wind gust of 87 km/h was recorded at Archerfield Airport.

11-02-2007. A severe thunderstorm occurred at Texas producing strong winds, large hail and very heavy rainfall. Tree branches were brought down, the main street was awash and hail 2cm in diameter was reported.

12-02-2007. A super cell thunderstorm moved through the Gracemere and Rockhampton area, producing golf ball sized hail. Many large trees were brought down which caused traffic chaos. Hail to 3cm in diameter was also reported just west of Ipswich.

14-02-2007. Thunderstorms brought very heavy rainfall (50mm in 30 minutes) at Bilwon, approximately 15kilometres north of Mareeba.

16-02-2007. A thunderstorm complex in the Carnarvon Ranges produced severe flash flooding in the Carnarvon Gorge area that exceeded the previous record highest flood in 1990-91 and left around \$1 million in damage to park facilities along an 11 kilometre section of the gorge.

18-02-2007. Thunderstorms produced very heavy rainfall (53mm in 30 minutes) at Wallaman, about 20 kilometres west of Abergowrie.

22-02-2007. Thunderstorms produced very heavy rainfall (59mm in 30 minutes) at Crawfords Lookout, located between South Johnstone and Ravenshoe.

08-03-2007. Thunderstorms occurred in the southeast and northwest of the state. Reports of strong winds and very heavy rain were reported from the eastern Darling Downs. Wind damage occurred at Coominya. Further north 23 mm was recorded in 10 minutes at Perseverance (near Crows Nest). Damage was also reported from Bethania, in the southern suburbs of Brisbane. In the northwest, traffic disruptions were experienced on the Barkly Highway near Mt Isa when a shed was blown across the road. A 91km/h wind gust was recorded at Mt Isa. Soft hail to the size of a 5cent piece was reported which marked the first occurrence of hail in Mt Isa in March.

09-03-2007. Further thunderstorm activity was recorded in the southeast of the state ahead of an advancing trough line on the Sunshine Coast region. A 107km/h wind gust was recorded at Double Island Point.

12-03-2007. A severe thunderstorm was reported in Mt Isa. Soft marble sized hail fell blocking gutters. The thunderstorm was also accompanied by damaging winds, removing veranda roofs, damaging fencing, bringing down trees and power lines and upending water tanks. The worst affected areas were around Breakaway Creek, on the eastern side of Mt Isa.

13-03-2007. The most extensive outbreak of severe thunderstorms occurred in Queensland for some time. Cold air in the middle levels from two separate systems, one in the north of the state and one in the south of the state, combined with a strong surface trough resulting in reports of severe thunderstorms from the Northwest, Northern Goldfields and Upper Flinders, North Tropical Coast and Darling Downs districts. In the Northwest, a severe thunderstorm with gusts of at least 100 km/h and 25 mm of rain in 15 minutes was recorded at the Mount Isa Mines site. Large trees were brought down, carports blown away and shade sail support poles snapped and twisted. At least two homes were damaged by falling trees as well as several vehicles and a number of buildings on the Mount Isa mines site. Minor flash flooding occurred as a result of the storm. Small hail and winds were also reported from Cloncurry. On the North Tropical Coast, thunderstorms with very heavy rain were reported mid afternoon where 51 mm was recorded in 30 minutes at Bolinda Estate (about 25kilometres northwest of Tully) and 73 mm in 60 minutes at Bolton Road (about 15kilometres northeast of Mareeba). The most severe thunderstorm of the afternoon occurred near Tara. Very strong winds, heavy rain and large hail were reported. Damage was extensive, with 12 homes and numerous sheds substantially damaged. A severe thunderstorm occurred at Julia Creek recording a 96 km/h wind gust.

22-04-2007. A thunderstorm produced very heavy rainfall at Calamvale, in the southern suburbs of Brisbane where 27mm of rain was recorded in 10 minutes.