Australian Government

Bureau of Meteorology

Report on Queensland Floods

February 2008

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1. Damage to boats in Airlie Beach. (John Webster)
2. High velocity flow in the Don River at the Bruce Highway Bridge in Bowen. (Burdekin Shire Council)
3. Flash flooding in Rockhampton on the 25th February. (Courier Mail Website)
4. A picture taken by the RACQ Central Queensland Rescue helicopter crew shows Mackay heavy floodwaters.
5. Hospital Bridge in Mackay during Mackay flash flood event. (ABC Website)
6. Burdekin River at Inkerman Bridge at Ayre/Home Hill. (Burdekin Shire Council)

Note:

1. Data in this report has been operationally quality controlled but errors may still exist.

2. This product includes data made available to the Bureau by other agencies. Separate approval may be required to use the data for other purposes. See Appendix 1 for DNRW Usage Agreement.

3. This report is not a complete set of all data that is available. It is a representation of some of the key information.

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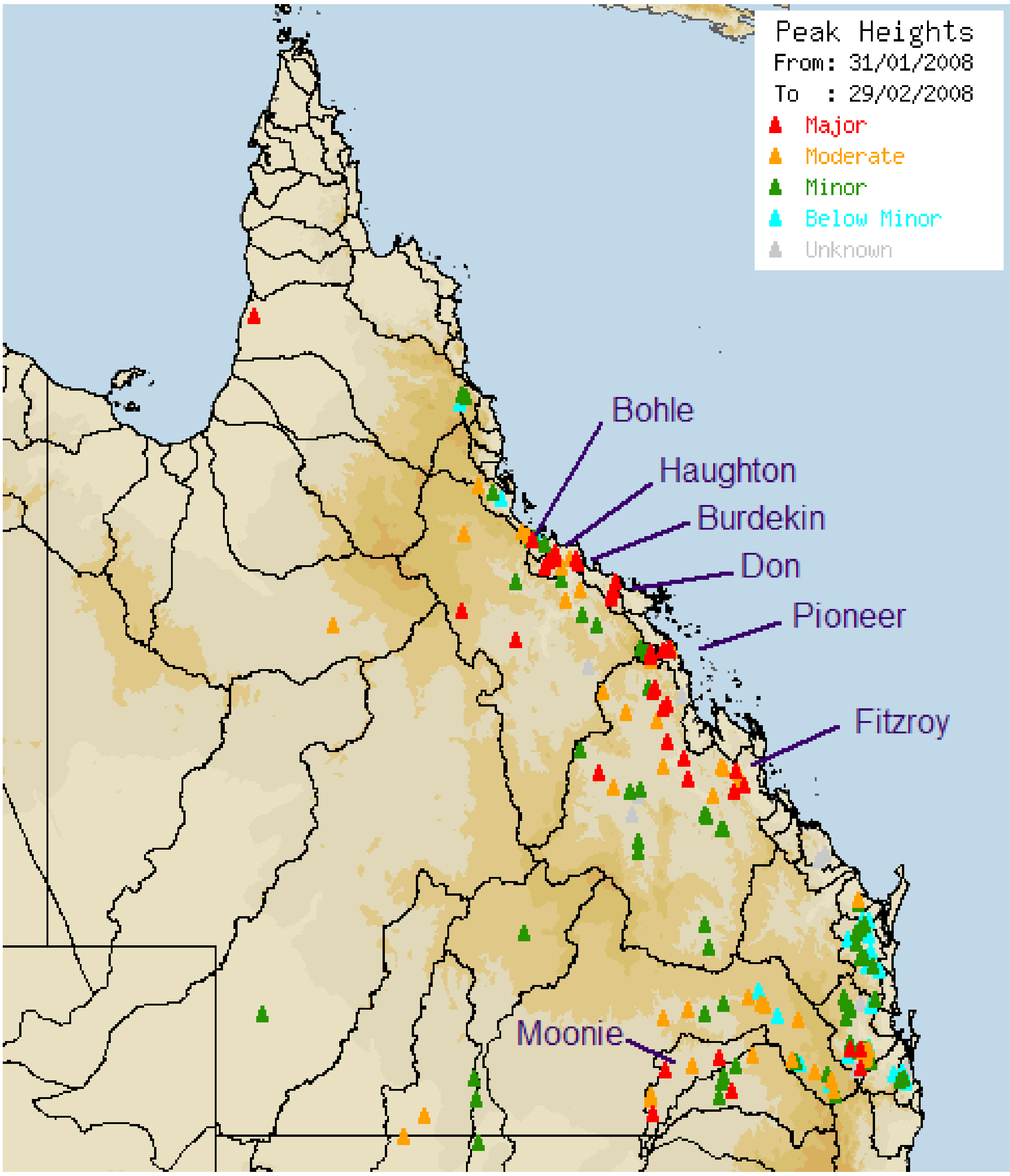
Report on Queensland Floods
February 2008

1. Introduction

February 2008 was another significant month of Severe Weather and Flooding in Queensland. River and flash floods occurred in many catchments during the month with the most significant period being between the 10th and 18th February along the Central Coast. During this time, floods affected many rivers and towns between Townsville and Bundaberg with the most significant damage occurring in the Mackay area on the 15th February where up to 4000 houses were flooded by a phenomenally intense and quite rare rainfall event.

This is a Technical Report on the meteorology and hydrology of the events and mostly comprises technical data as tables and figures.

Figure 1.1 Peak Flood Height Map for February 2008 - Queensland



2. Meteorological Summary

This analysis will concentrate on the period between the 11th and 18th February 2008 when Severe Weather and intense rainfall affected the Central Coast of Queensland. This followed a Severe Weather Event in January that brought flood rains to a similar region and also other parts of Queensland.

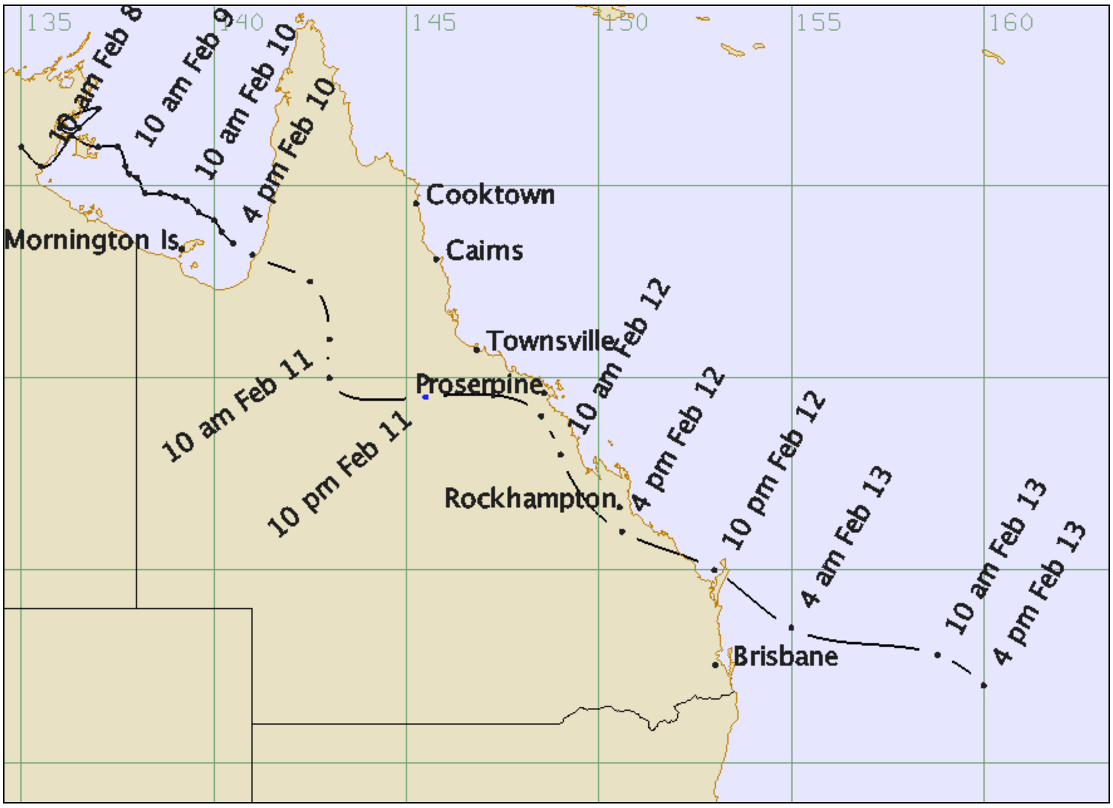
In an active phase of the monsoon trough, a low, originating in the Gulf of Carpentaria, traced a path southeast across southern Cape York Peninsula to intensify over land to the near west of Proserpine. The system brought with it localised severe winds to Airlie Beach and heavy rainfall to areas between Townsville and Rockhampton. The low quickly moved out to sea allowing a strong high-pressure ridge to develop along the Queensland coast south of the monsoon trough. This brought about stable conditions to most parts of the state except the far north, where the monsoon trough remained active and about the Central Coast on the leading edge of the strengthening ridge. Conditions in Mackay deteriorated early on the 15th of February producing phenomenally intense rainfalls in the area and severe flash flooding. The northward movement of the rainfall trigger during the day of the 15th of February brought about intense rainfalls in the Townsville region that night.

This chapter presents a discussion and analysis of the meteorological conditions that led to flood producing rainfalls for areas between Townsville and Rockhampton, particularly Mackay where some stations received over 600 mm of rainfall in just 6 hours.

2.1 Meteorological Analysis

An active phase of the monsoon saw the trough extending across far northern Australia linking low-pressure systems over the Indian Ocean to a low in the Gulf of Carpentaria. The Gulf of Carpentaria low moved inland over southern Cape York Peninsula by 10am on the 11th of February and tracked southeast to be positioned just southwest of Mackay by 10am on the 12th of February. Figure 2.1.1 shows the path taken by the tropical low.

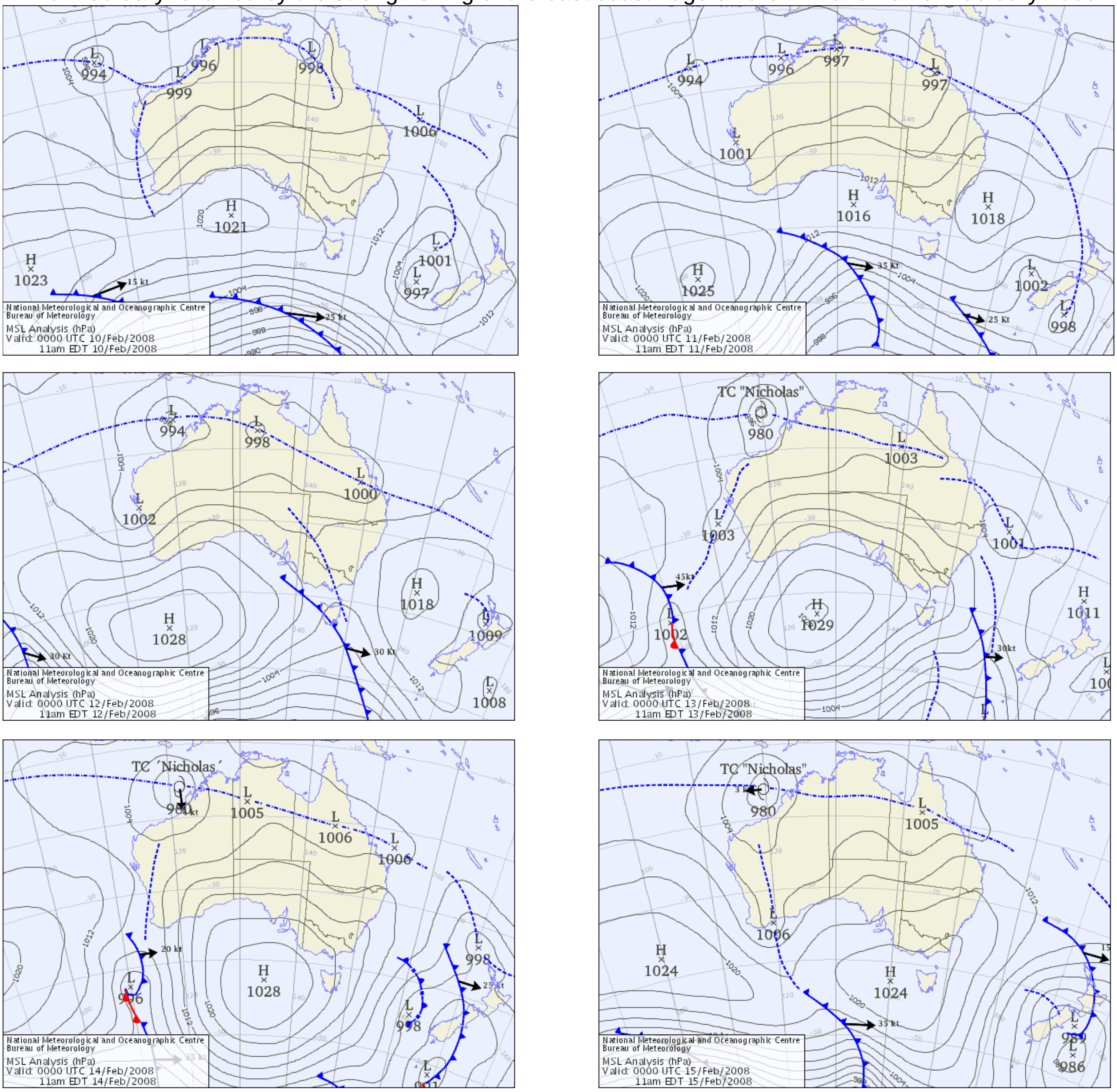
Figure 2.1.1 Track of Tropical Low Pressure System from the 8th to the 13th of February 2008.



A sequence of Mean Sea Level Pressure Charts from the 10th to the 17th of February 2008, shown at Figure 2.1.2, describes the movement and intensification of the low -pressure system. However, the Mean Sea Level Pressure chart for 10am on the 12th of February does not show the development of a small and intense secondary low near Airlie Beach by 3am on the 12th of February. This is clearly visible in the high resolution 3am Mean Sea Level analysis around Airlie Beach, as shown in Figure 2.1.3. Gale force northerly winds on the coast between Airlie Beach and just north of Mackay resulted, inflicting major wind damage to marine craft in the region.

Figure 2.1.2 Mean Sea Level Pressure Charts for Australia at 10 am from the 10th to the 17th of February 2008.

The sequence of charts include the intensification of the tropical low over north Queensland between the 11th and 12th of February followed by the strengthening of the east coast ridge on the 14th and 15th of February 2008.



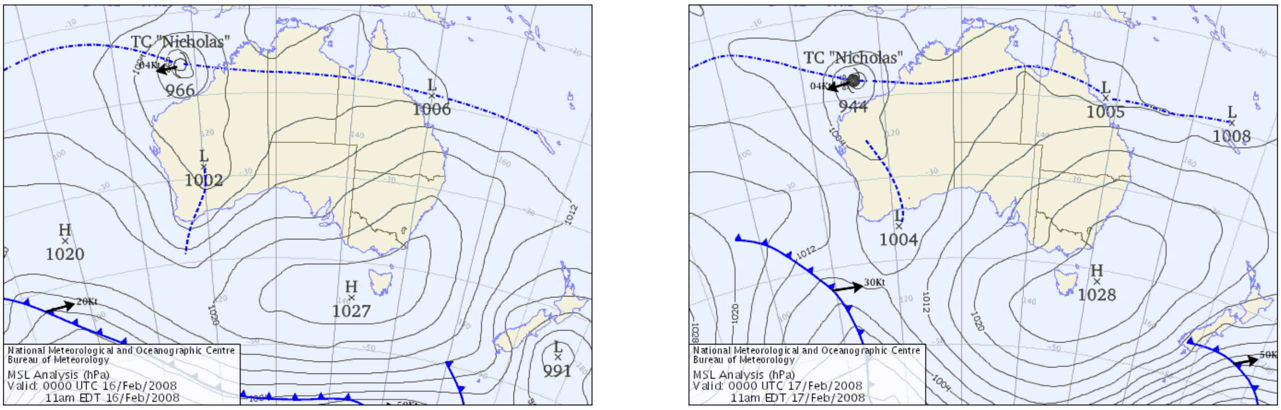
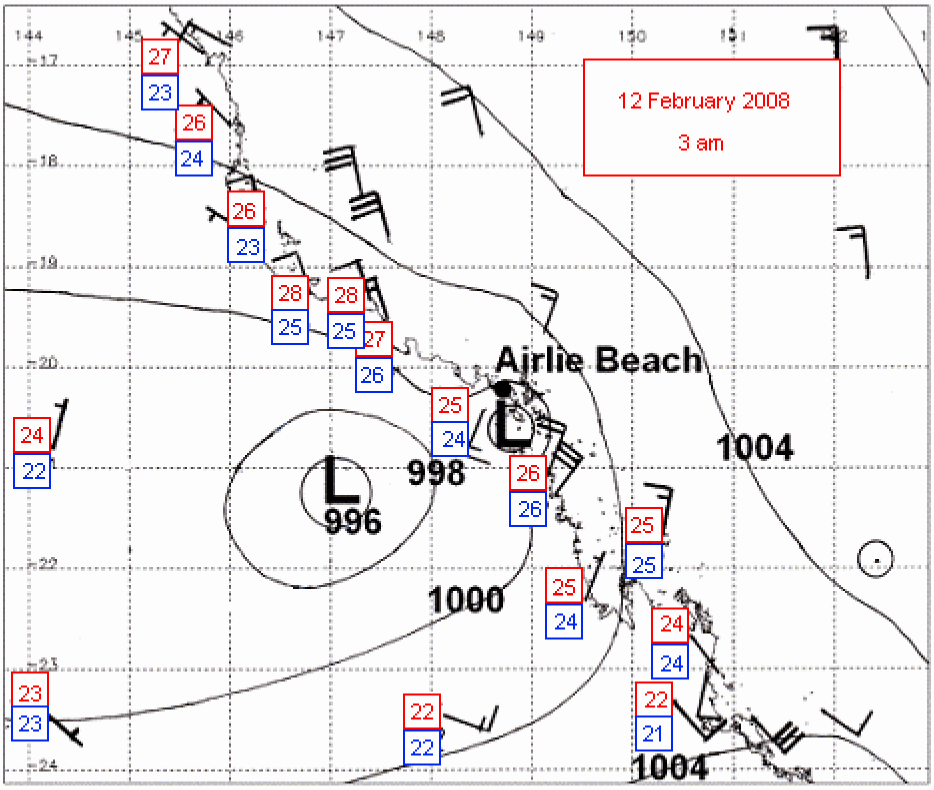


Figure 2.1.3 Mean Sea Level Analysis near Airlie Beach at 3am on the 12th of February 2008.

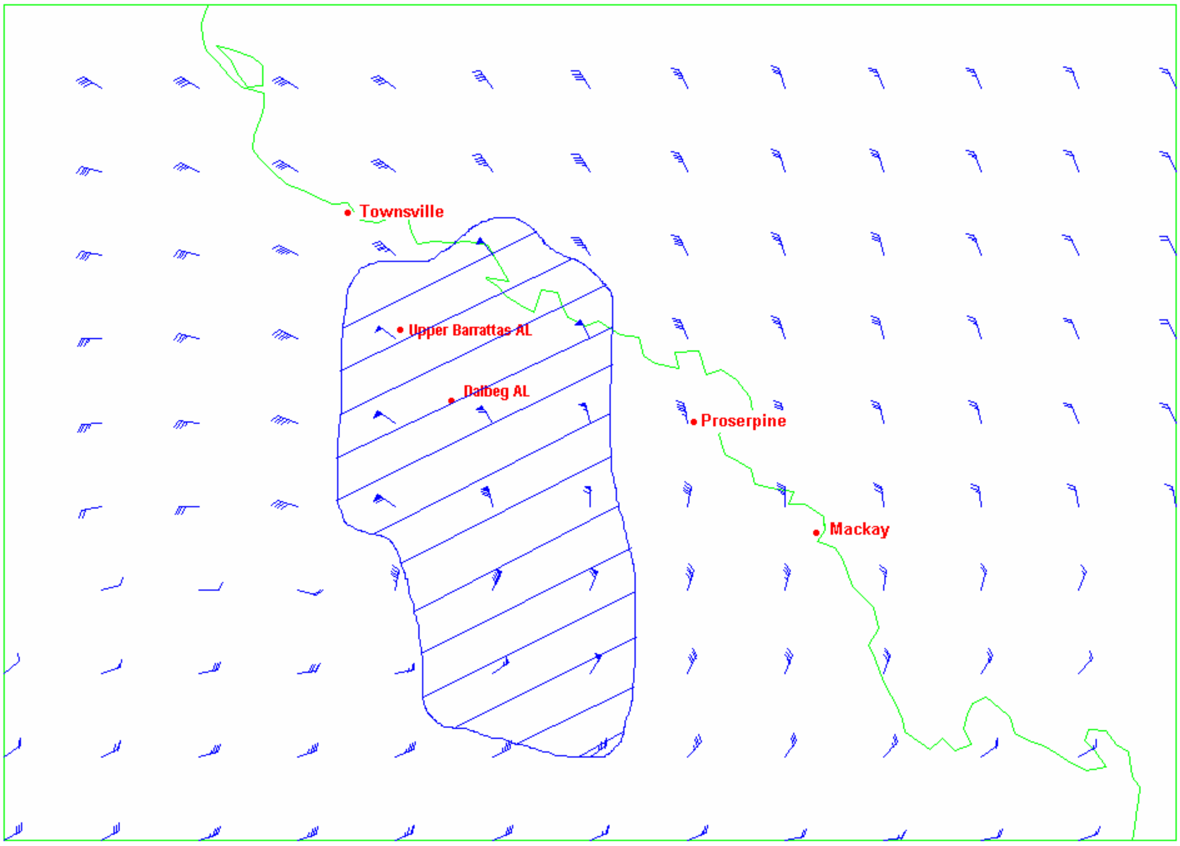
Observations plotted include wind barbs in knots, temperature °C (red) and dewpoint temperature °C (blue).



Observations from Proserpine through the morning of the 12th of February indicated dropping pressures at the surface signalling low development, though the network did not record any significantly strong winds. (Hamilton Island Automatic Weather Station was faulty and not reporting at this time). However, the wind analysis at 1500 metres above the surface at 10pm on the 11th of February, as shown in Figure 2.1.4, indicates winds in excess of 50 knots to the east of the low centre. This region of maximum winds subsequently moved eastward and over the coast between Airlie Beach and Mackay. The result was major damage to a significant number of marine craft moored in the region and a major rescue operation to remove six people from a stricken yacht.

Figure 2.1.4 Wind analysis at 1500 metres above Mean Sea Level at 10pm on the 11th of February 2008.

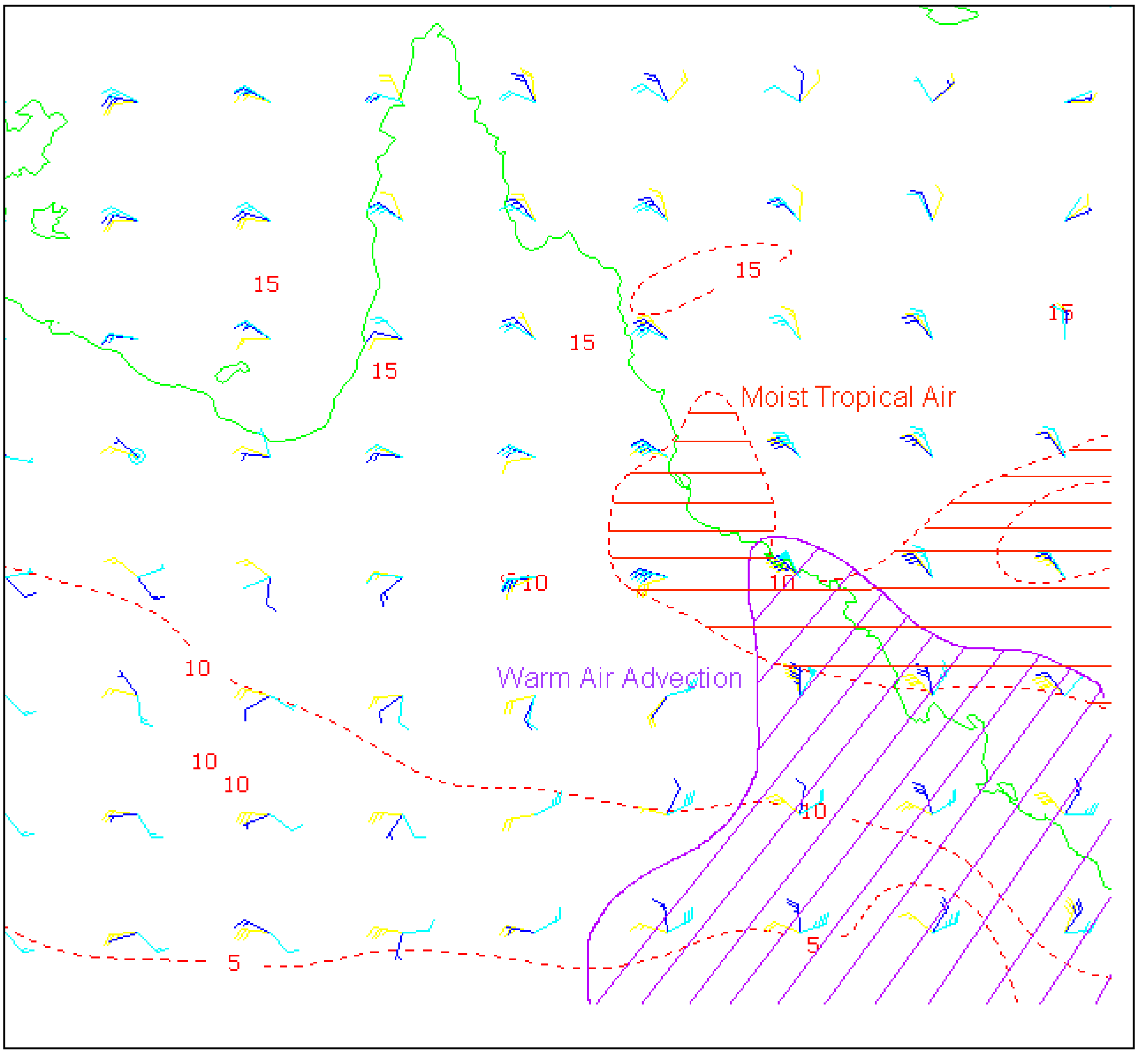
Wind Barbs are plotted in knots. The blue shaded region denotes the maximum wind zone where winds are 50 knots or above. This maximum wind zone subsequently moved east and over the coast between Airlie Beach and Mackay.



The passage of the main low west of Mackay and the intensification that occurred overnight on the 11th February brought about heavy rain to the region between Townsville and Rockhampton with widespread falls between 100 mm and 200 mm recorded in the 24 hour period ending at 9am on the 12th of February. Among these falls were numerous heavier falls in excess of 200 mm and isolated falls greater than 300 mm in the 24-hour period. An analysis of the rainfall data suggests that peak rainfall intensities occurred between 7pm and 9pm on the 11th of February, over the Haughton and Burdekin river basins, coincident with the wind maximum at 1500 metres moving through the area. A full analysis of the wind profile up to 5500 metres at 10pm on the 11th of February, during the time of intensification and peak rainfall intensity, indicates winds turning anti-clockwise with height, as shown in Figure 2.1.5. Such a profile is associated with large-scale ascent of air and studies by Bonell, Callaghan and Connor (2005) reveal that this is a typical wind structure that will produce intense rainfall over Queensland. Typically, where winds were onshore at low levels and turned anti-clockwise through 90 degrees or less between 1500 metres and 5500 metres, the most intense rainfalls are recorded. An inspection of the vertical wind profile, as shown in Figure 2.1.5, reveals that winds turned through less than 90 degrees in the intense rainfall region and although the surface winds were not onshore, low-level moisture in the region was high.

Figure 2.1.5 Areas of Warm Air Advection (WAA) and Moist Tropical Air at 10pm on the 11th of February 2008.

The most intense rainfall occurred between 7pm and 9pm on the 11th of February (3 hours prior to this analysis) through the Haughton and Burdekin River Basins. Winds barbs, displayed in knots, at 1500m, 3000m and 5500m are denoted by the colours light blue, dark blue and yellow respectively. Moisture is displayed in units of grams per kilogram.



Rainfall from this low pressure system extended further southward to the Fitzroy River catchment producing rainfall totals for the 3 day period from 9am on the 10th of February to 9am on the 13th of February in the range of 50 to 150 millimetres over the Connors and Isaac River catchments. An analysis of hourly rainfall totals over this time, indicate rainfall was at its most intense between 2am and 6am on the morning of the 12th of February as the low-pressure system was to the near northwest and the vertical wind profile in the area was at its most favourable for producing widespread rainfall.

Rainfall also occurred over coastal regions from Rockhampton to the Sunshine Coast with three-day rainfall totals for this area averaging close to 100 millimetres. Isolated heavier falls of just over 100 millimetres in 24 hours were also recorded in the region. The intensity of this rainfall was sufficient to produce localised flooding to coastal streams between Rockhampton and Maryborough.

The low-pressure system moved rapidly southeast during the 12th of February to clear the coast around the northern end of Fraser Island by 10 pm on the 12th of February as can be seen from the track displayed in Figure 2.1.1. This caused the rain to ease.

As the system moved well offshore a strong ridge developed along the east Queensland coast extending northward to Mackay and pushing the monsoon trough northward to Townsville by 10pm on the 14th of February. The extension of the strengthening ridge along the Queensland coast is shown in the sequence of 10am Mean Sea Level pressure analysis at Figure 2.1.2. The vertical wind profile between 1500 metres to 5500 metres above the surface again indicated a favourable rainfall environment over the Central Coast region ahead of the ridge, with winds turning anti-clockwise with height, associated with large scale ascent of air. The monsoon trough at this time was still located well to the north and did not provide any triggering mechanism for rainfall development. However, moving ahead of the strengthening ridge was a narrow band of intense southeast winds, often referred to as a surge. Another feature of the atmosphere about Mackay at this time early on the 15th of February was the presence of a trough at the 5500 metres level. These elements, combined with very moist air at the surface, where dewpoint temperatures were about 24^{o} C, were sufficient to produce extreme rainfall in excess of 500 millimetres around Mackay between 5am and 10am on the 15th of February. A map displaying the 24-hour rainfall distribution over the Pioneer River basin to 10am on the 15th of February is shown in Figure 2.1.6. The mean sea level analysis around Mackay at 9am on the 15th of February is shown in Figure 2.1.7, and clearly indicates very moist air and stronger southeast winds around Mackay.

Figure 2.1.6 Map of the Pioneer River basin displaying 24 hour rainfall totals to 10 am on the 15th of February.

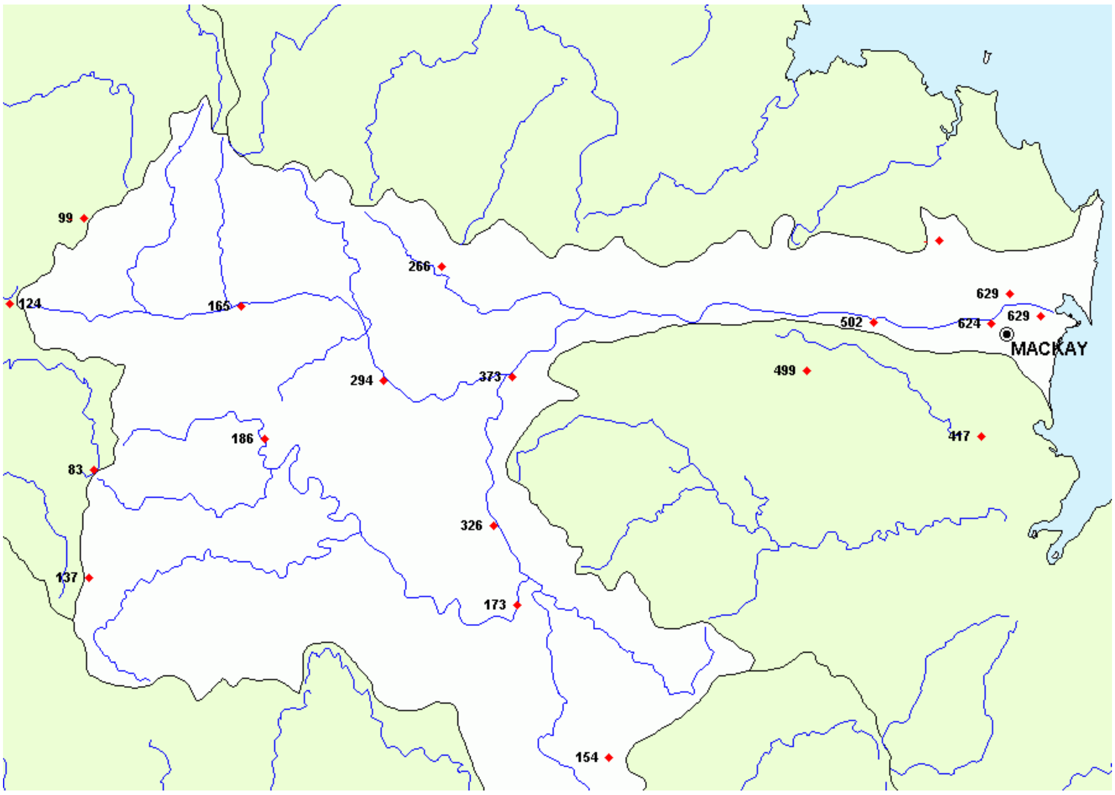
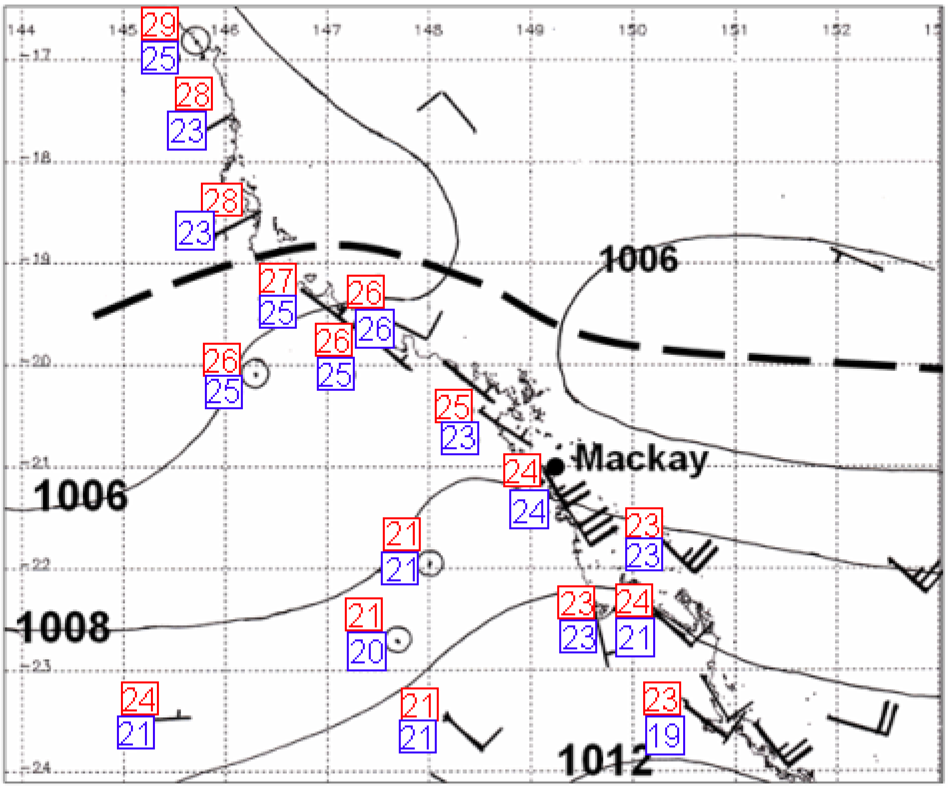


Figure 2.1.7 Mean Sea Level pressure analysis around Mackay at 9am on the 15th of February 2008.

Observations plotted include wind barbs in knots, temperature °C (red) and dewpoint temperature °C (blue). Dashed line indicates the position of the Monsoon Trough.



Rainfall from this system also fell over the top end of the Fitzroy catchment with 24-hour totals of between 50 millimetres and 130 millimetres recorded at 9am on the 15th of February 2008. This rainfall caused renewed rises in the Connors and Isaac rivers, along with localised flooding around Yaamba.

The ridge pushed further northward during the day to be positioned near Townsville by 10pm on the 15th of February. The extension northward of the coastal ridge is shown in the sequence of mean sea level analysis at Figure 2.1.2. Warm air advection and wide spread ascent of air again evident in the vertical wind profile, moist low level air and the presence of a surge in the south-easterly winds associated with the strengthening coastal ridge provided favourable conditions for further intense rainfall. The intense rain fell between 7pm on the 15th of February and 1am on the 16th of February with some reports of close to 400 millimetres recorded during this time.

The surge slowly weakened during the 16th of February and although the vertical wind profile still indicated favourable conditions for rainfall with winds turning anti-clockwise with height, the environment lacked a triggering mechanism. Somewhat lighter rain persisted, heavier about the coast around Proserpine.

Rainfall generally eased about the Fitzroy River basin by the 18th of February, however river flooding persisted for another week or more (with the flood peak at Rockhampton occurring on the 25th of February 2008). 24-hour rainfall totals throughout the region from the 18th to 24th of February were generally less than 10 millimetres across the catchment. However, very localised thunderstorm activity in Rockhampton and to the near west of the town on the morning of the 25th of February produced 165 millimetres of rain and caused flashed flooding to occur in conjunction with peak river flooding.

The vertical wind profile around Rockhampton at 10pm on the 24th of February indicated an environment favourable for rainfall with winds turning anti-clockwise with height, indicating widespread accent of air. By 10am on the 25th, following the heavy rainfall, winds through this layer increased in strength providing an even more favourable environment for precipitation. A comparison of the temperature at 3000 metres at 10pm on the 24th and 10am on the 25th of February indicated cooling and further destabilisation of the environment. The vertical temperature and moisture profile at 10 am on the 25th of February 2008, again following the heavy rainfall, indicated a moist and positively buoyant atmosphere favourable for the development of convection. By 2am on the 25th of February, localised thunderstorms had developed over Rockhampton. The thunderstorm cells remained near stationary over Rockhampton for up to two hours producing more than 150 millimetres of rain

2.2 Radar Imagery Analysis

Volumetric radar imagery from the Mackay, Bowen, Townsville and Gladstone radars was available to monitor this flood producing rainfall event. The heaviest rainfall associated with the low pressure system on the 11th and 12th of February fell over the Burdekin and Haughton catchments between 2pm and 10 pm on the 11th of February 2008. Extensive rain bands with embedded thunderstorms were detected on radar during this time. Upper Barrattas Alert station and Dalbeg Alert station received the highest rainfalls to 9am on the 12th of February with 24-hour totals of 366 millimetres and 343 millimetres respectively. An analysis of the hourly rainfall data from both sites in the 24 hour period to 9am on the 12th of February is shown in Table 2.2.1 and indicates that the most intense rainfall at Upper Barrattas Alert fell in the one-hour period to 8pm and at Dalbeg Alert in the one-hour period to 9pm on the 11th of February.

Table 2.2.1 Hourly Rainfall totals for Upper Barrattas Alert and Dalbeg Alert for the 24 hours ending at 9am on the 12th of February 2008.

Bold indicates the hour of most intense rain.

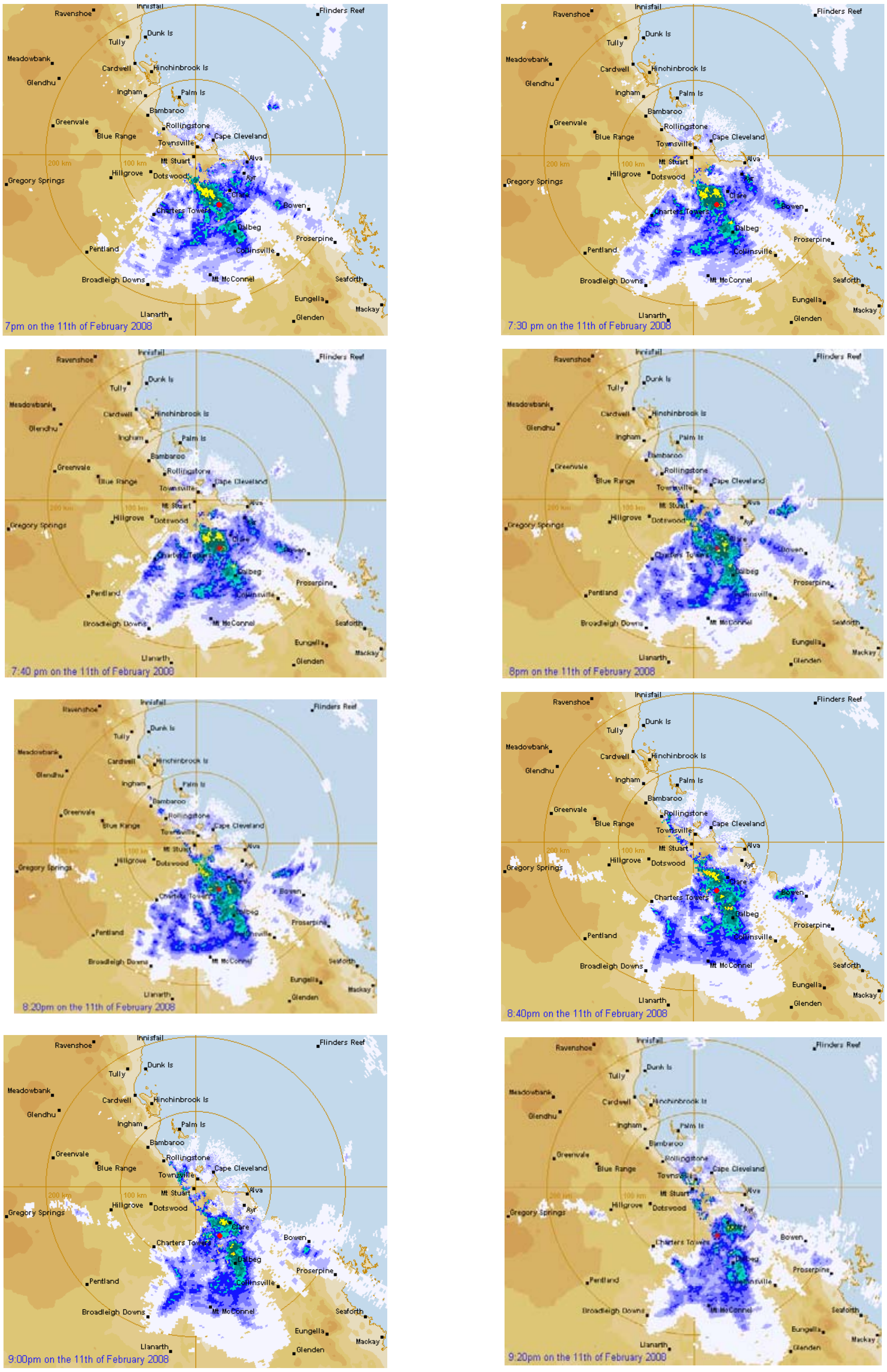
Time (Local)	Upper Barrattas Alert	Dalbeg Alert
10am 11 Feb 2008	9.3	15.5
11am 11 Feb 2008	4.0	5.2
Midday 11 Feb 2008	3.1	4.2
1pm 11 Feb 2008	6.5	1.7
2pm 11 Feb 2008	13.9	3.0
3pm 11 Feb 2008	27.1	9.6
4pm 11 Feb 2008	47.8	17.8
5pm 11 Feb 2008	60.1	21.6
6pm 11 Feb 2008	56.9	20.8
7pm 11 Feb 2008	33.8	39.6
8pm 11 Feb 2008	**74.6**	62.6
9pm 11 Feb 2008	22.2	**97.0**
10pm 11 Feb 2008	5.8	37.2
11pm 11 Feb 2008	0.4	7.7
Midnight 12 Feb 2008	0.4	0.0
1am 12 Feb 2008	0.2	0.0
2am 12 Feb 2008	0	0.0
3am 12 Feb 2008	0	0.0
4am 12 Feb 2008	0	0.0
5am 12 Feb 2008	0	0.0
6am 12 Feb 2008	0	0.0
7am 12 Feb 2008	0	0.0
8am 12 Feb 2008	0	0.0
9am 12 Feb 2008	0	0.0

See http://www.bom.gov.au/hydro/flood/qld/brochures/burdekin/map.shtml for locations on network map.

An inspection of the radar data for this 2-hour period from 7pm to 9pm clearly shows thunderstorms travelling from north to south through this region during this time period, passing through the Upper Barrattas Alert site before reaching Dalbeg Alert. A sequence of imagery over this 2-hour period is shown at Figure 10.

Figure 2.2.1 Sequence of Radar Imagery from Mt Stuart from 7pm to 9:20 pm on the 11th of February 2008.

This is the period of most intense rainfall over the Haughton and Burdekin River basins. Upper Barrattas Alert is located at the red dot and Dalbeg is labelled.

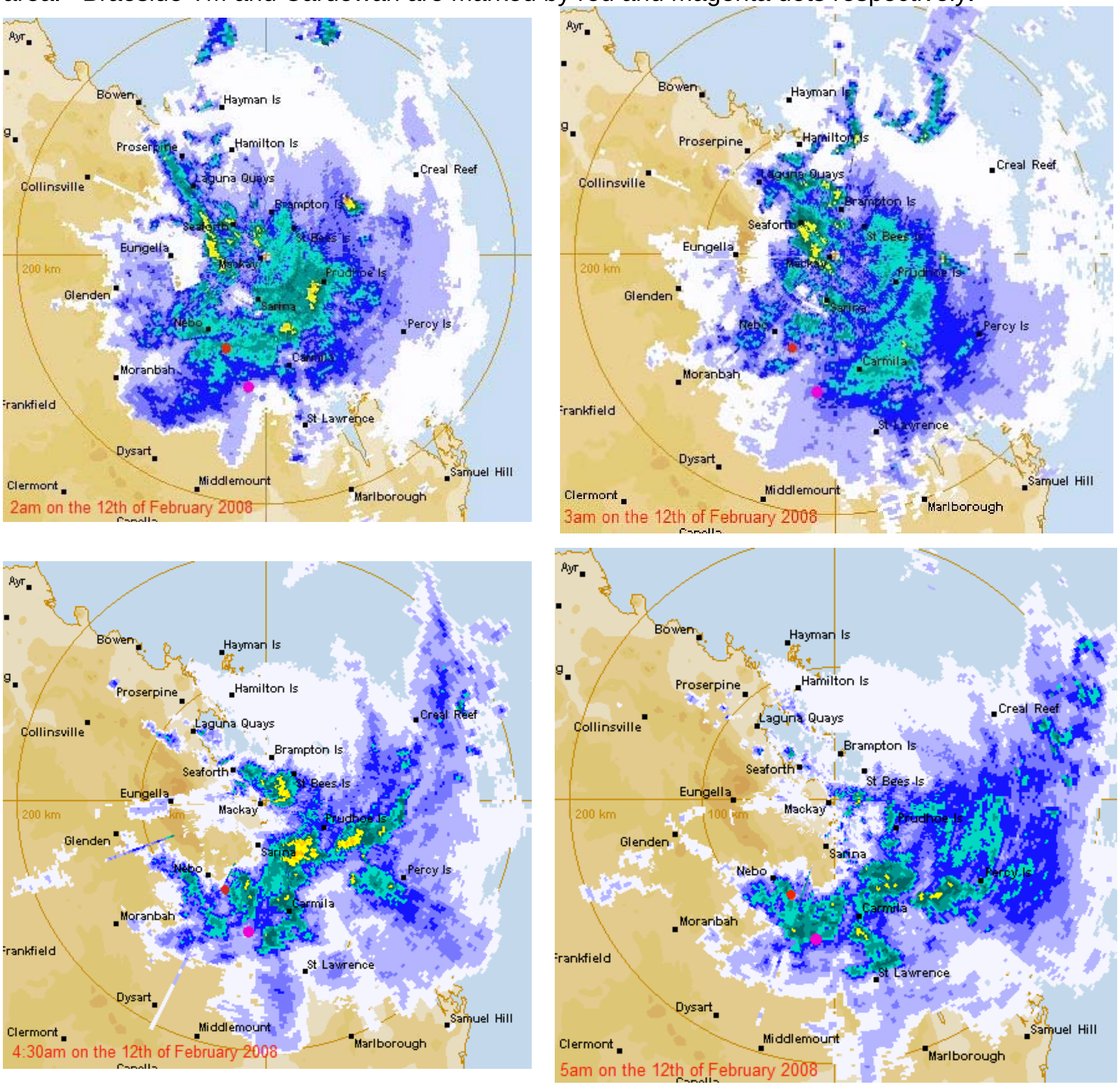


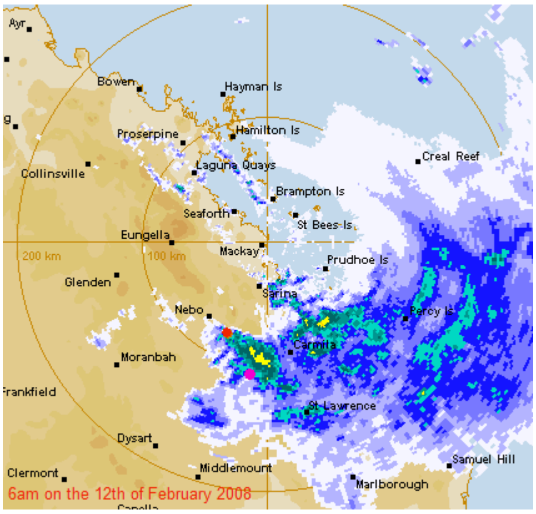
Rain and thunderstorms tracked southeast across the Don, Proserpine and Pioneer River catchments as detected on the Bowen radar, producing average 24-hour rainfall totals across the catchment at 9am on the 12th of February of between 150 and 170 millimetres with localised higher falls of over 200 millimetres. These rainfalls caused major flooding in the Don River, and localised minor flooding in the Proserpine and Pioneer Rivers.

Rainfall over the Fitzroy catchment produced smaller average totals to that which fell further north, however it fell over an already saturated catchment and was sufficient to produce moderate to major flooding in the Connors and Isaac Rivers. A sequence of radar imagery during the period of most intense rainfall is shown in Figure 2.2.3. Note images are half hourly and clearly display the rain band with embedded thunderstorms moving through the area. Braeside TM, which recorded 93 millimetres to 9am on the 12th of February and Cardowan, which recorded 127 millimetres to 9am on the 12th of February are both marked on the map.

Figure 2.2.2 Sequence of radar imagery from Gladstone from 2am to 6am on the 12th of February.

This is the period of most intense rainfall over the Connors and Isaac River Catchments. Images are hourly and clearly display the rain band with embedded thunderstorms moving through the area. Braeside TM and Cardowan are marked by red and magenta dots respectively.





Imagery from both the Bowen and Mackay radars was available to analyse the phenomenal rainfalls in the Pioneer River basin during the morning of the 15th of February. Figure 2.1.6, referred to earlier, shows the 24-hour rainfall distribution in the basin and it is evident that the most intense rainfall, with falls in excess of 450 millimetres, fell within 20 kilometres of the radar. Rainfall of such intensity is difficult to analyse when positioned over the radar as this was, as you are unable to see the full depth and structure of the rain. Imagery from Bowen radar, positioned at least 180 kilometres to the northeast of Mackay, provided more information of the horizontal structure of the rain and thunderstorms however, did not provide a true reflection of the intensity due to loss of the signal at such distances. Figure 2.2.3 shows the distribution of rainfall in the 6 hours to 10 am on the 15th of February. It is evident from Figure 2.1.6 and Figure 2.2.2, the most intense rainfall around Mackay occurred in the 6-hour period to 10 am on the 15th of February.

Figure 2.2.3 Map of the Pioneer River basin displaying 6-hour rainfall totals to 10 am on the 15th of February.

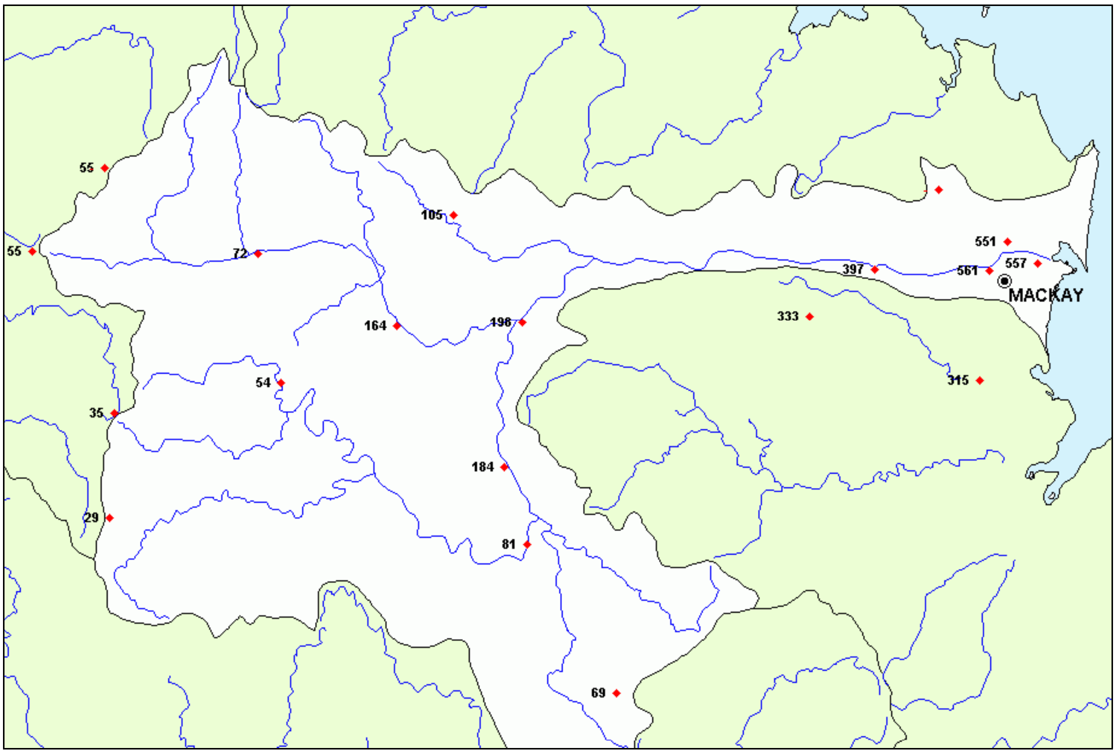


Table 2.2.2 provides the hourly rainfall data from Mackay Alert, Gooseponds Alert and Hospital Bridge Alert for the 24-hour period ending at 10am on the 15th of February. All sites recorded more than 600 millimetres of rainfall in this time. The most intense hourly rainfall period for each station is highlighted in bold.

Table 2.2.2 Hourly Rainfall totals for Mackay Alert, Gooseponds Alert and Hospital Bridge Alert for the 24 hours ending at 10am on the 15th of February 2008.

Bold indicates hour of most intense rain for each site.

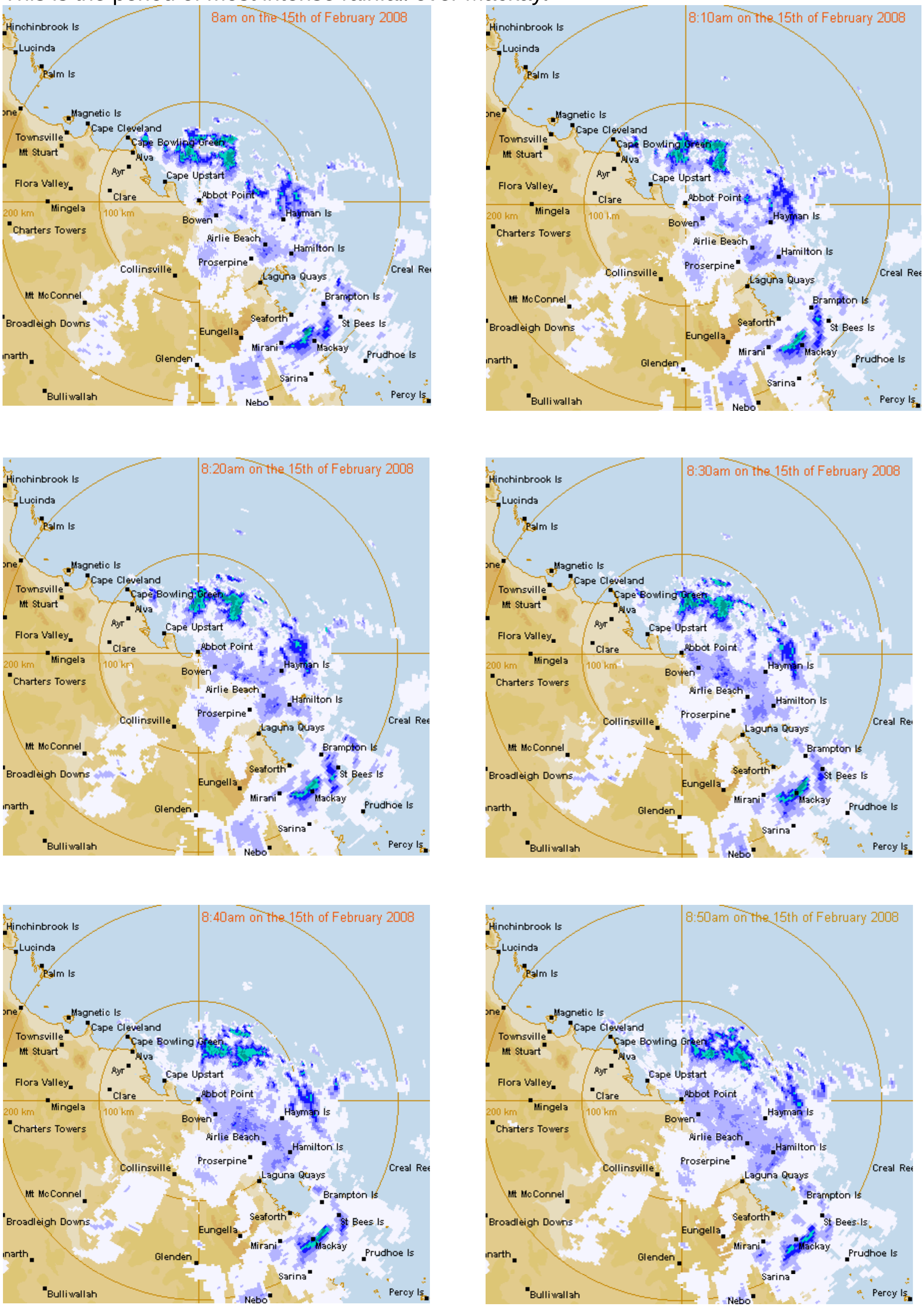
Time (Local)	Mackay Alert	Gooseponds Alert	Hospital Bridge Alert
11am 14 Feb 2008	0.0	0.0	0.0
Midday 14 Feb 2008	0.0	0.0	0.0
1pm 14 Feb 2008	0.0	0.0	0.0
2pm 14 Feb 2008	0.0	0.0	0.0
3pm 14 Feb 2008	0.0	0.3	0.0
4pm 14 Feb 2008	1.0	0.5	0.0
5pm 14 Feb 2008	1.0	0.3	0.9
6pm 14 Feb 2008	0.7	0.6	0.9
7pm 14 Feb 2008	11.4	13.9	11.2
8pm 14 Feb 2008	0.9	2.1	1.8
9pm 14 Feb 2008	4.3	4.6	2.4
10pm 14 Feb 2008	4.7	4.4	5.0
11pm 14 Feb 2008	3.4	2.9	3.3
Midnight 15 Feb 2008	1.6	1.7	2.7
1am 15 Feb 2008	0.4	0.7	0.6
2am 15 Feb 2008	8.6	13.1	10.3
3am 15 Feb 2008	1.0	0.9	2.5
4am 15 Feb 2008	33.6	32.8	21.6
5am 15 Feb 2008	41.4	43.1	44.4
6am 15 Feb 2008	132.3	**139.5**	115.0
7am 15 Feb 2008	98.6	115.4	**134.7**
8am 15 Feb 2008	85.6	111.5	116.3
9am 15 Feb 2008	**180.1**	126.6	131.1
10am 15 Feb 2008	18.6	13.2	19.2
24 Hour Total	**629.2**	**628.1**	**623.9**

See http://www.bom.gov.au/hydro/flood/qld/brochures/pioneer/map.shtml for locations on network map.

An analysis of the radar imagery during the six-hour period to 10am on the 15th indicates persistent thunderstorm activity over the region throughout this time. The thunderstorms are first detected around 4am on the 15th of February to the near northwest of Mackay. Numerous cells then continued to develop and weaken in the area of Mackay for the next four hours, with cells typically showing little or no horizontal structure. However, by 8am thunderstorms had formed into a clear organised line about 40 kilometres in length. This line persisted for the following two hours, remaining near stationary for almost an hour before moving slowly southeast. This line of thunderstorms produced 180 millimetres of rainfall in the hour to 9am at Mackay Alert, the heaviest hourly rainfall recorded for the event. The sequence of radar imagery from Bowen radar from 8am to 8:50am on the 15th of February is shown in Figure 2.2.4. The rain around Mackay then eased by midday on the 15th of February.

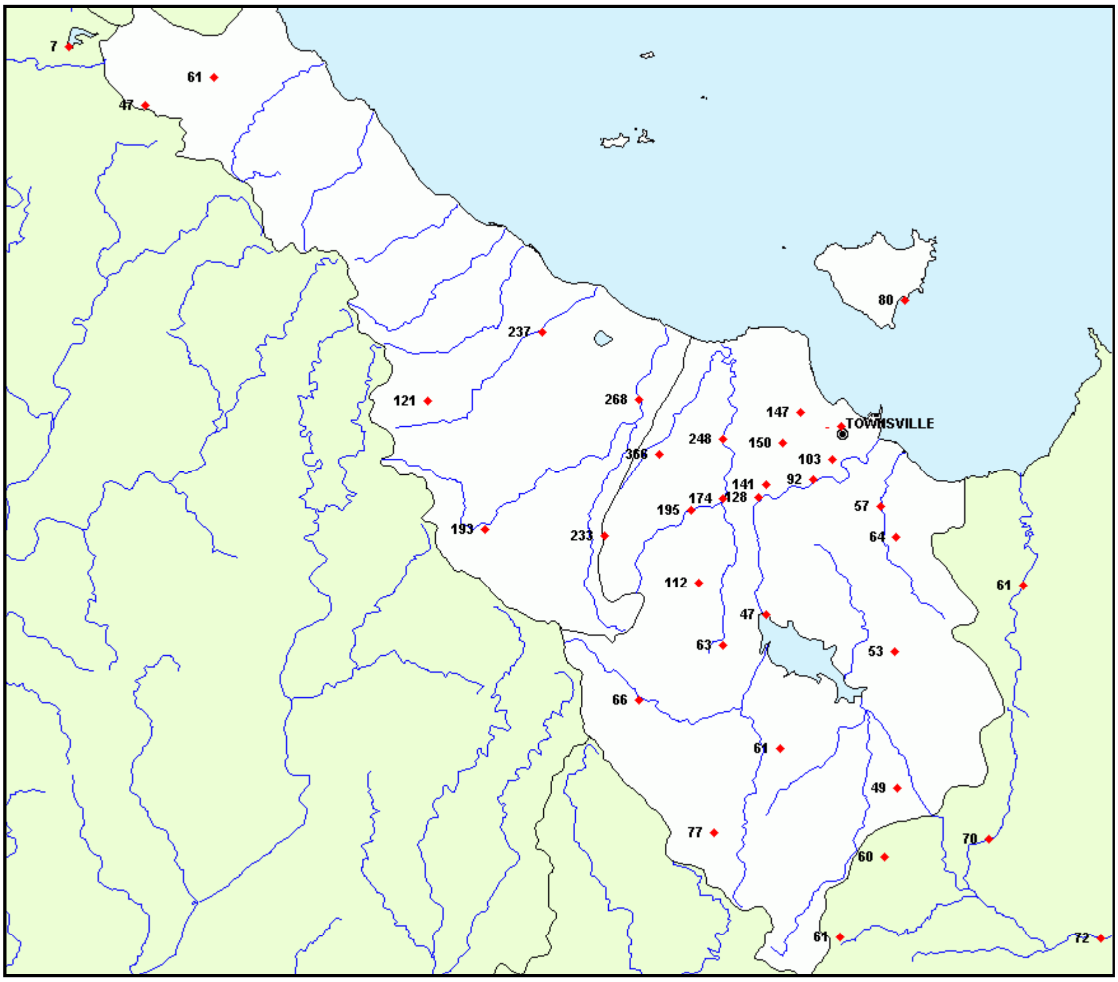
Figure 2.2.4 Sequence of Radar Imagery from Bowen from 8am to 8:50am on the 15th of February 2008.

This is the period of most intense rainfall over Mackay.



An analysis of the Townsville volumetric radar data for the evening of the 15th revealed thunderstorm activity in the region to the west of Townsville. This activity persisted throughout the evening and brought about rainfall totals in excess of 250 millimetres to areas 15 to 20 kilometres west of Townsville. Figure 2.2.5 shows the distribution of rainfall in the 6 hours to 1am on the 16th of February.

Figure 2.2.5 Map of the Townsville and Thuringowa displaying 6-hour rainfall totals to 1am on the 16th of February.



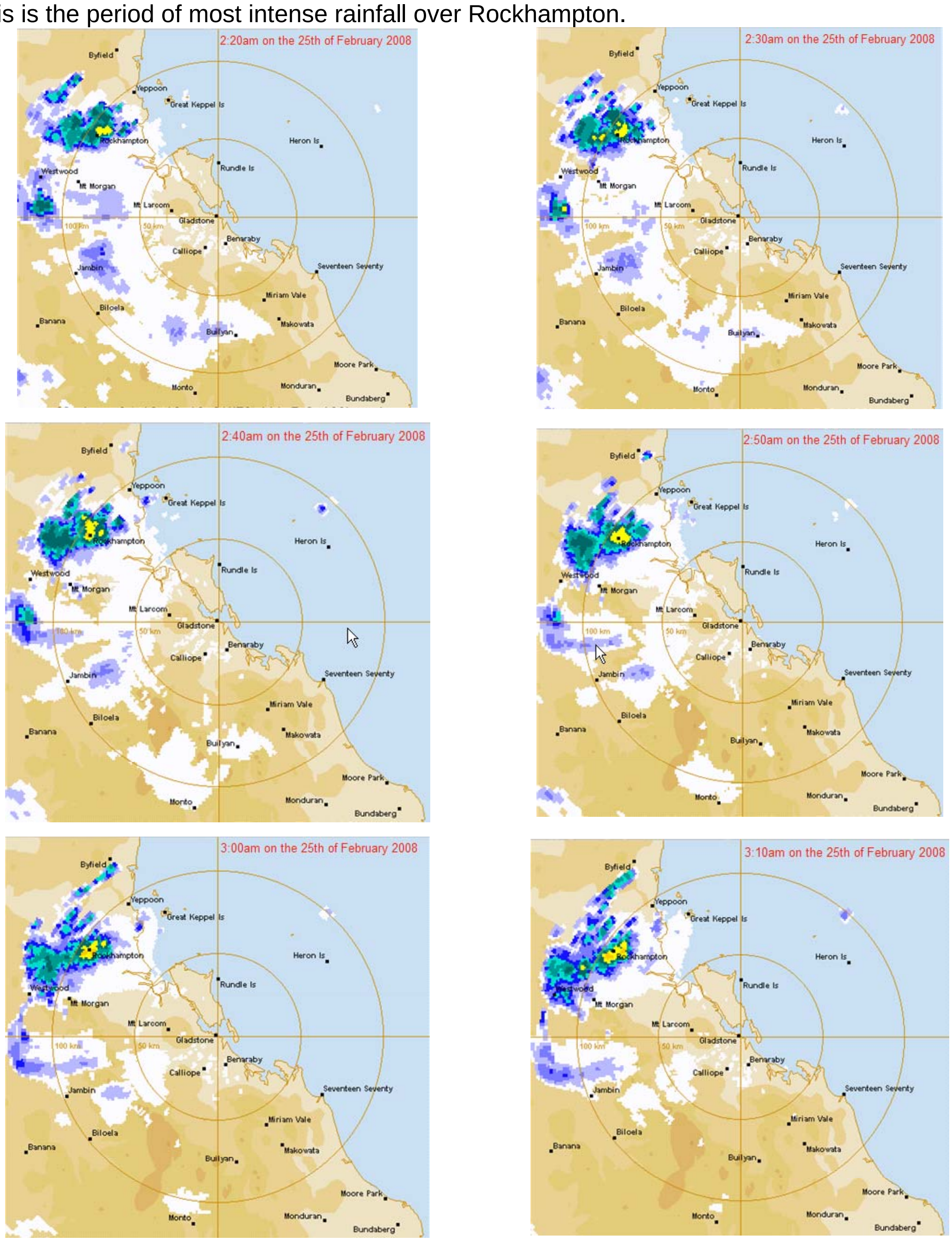
The sequence of radar imagery from Gladstone on the morning of the 25th of February shows a persistent and stationary thunderstorm cell positioned over Rockhampton. An analysis of the observations from Rockhampton Airport, as shown in Table 2.2.3, indicate that the most intense rain of 105 millimetres fell in the hour to 3:30 am on the 25th of February. Figure 2.2.6 shows the sequence of imagery from the Gladstone radar for the most intense rainfall period from 2:20am to 3:30am on the 25th of February 2008.

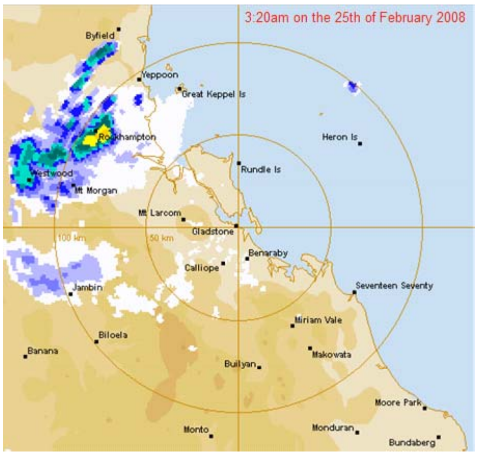
Table 2.2.3 30 Minute Rainfall Observations from Rockhampton Airport on the 25th of February 2008.
The most intense hour of rainfall is marked in bold.

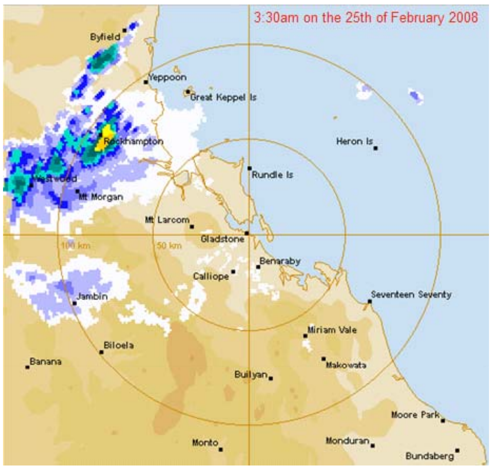
Time (Local)	Rockhampton Airport (mm)	Accumulated Rainfall since 9 am on 24th Feb (mm)
2am 11 Feb 2008	0.8	1.6
2:30am 25 Feb 2008	21.8	23.4
3am 25 Feb 2008	**51.8**	75.2
3:30am 25 Feb 2008	**54.0**	129.2
4am 25 Feb 2008	21.4	150.6
4:30am 25 Feb 2008	10.4	161.0
5am 25 Feb 2008	4.4	165.4

Figure 2.2.6 Sequence of Radar Imagery from Gladstone from 2:20am to 3:30am on the 25th of February 2008.

This is the period of most intense rainfall over Rockhampton.







2.3 Conclusion

The week commencing the 11th of February saw parts of the Central Coast of Queensland between Mackay and Townsville experience severe weather conditions with damaging winds and flood rains. A low that developed on the monsoon trough over northern Queensland to the east of Townsville tracked southeast and intensified to produce severe winds around Airlie Beach causing damage to more than 60 boats moored in the harbour. This system also brought about heavy rainfall and caused flooding in the Haughton, Burdekin and Don catchments. A strong coastal ridge pushed northward along the east Queensland coast following the clearance of this low to the east. Ridging brought about mostly stable conditions along the coast apart from again areas between Townsville and Mackay. Though conditions in general became more stable at the surface the layer of air between 1500 metres and 5500 metres still maintained favourable conditions for the widespread ascent of air. A surface wind surge ahead of the coastal ridge posed as a sufficient trigger to destabilise conditions in its vicinity and caused areas of localised phenomenal rainfall over a period of six hours, firstly around Mackay and then further north to the west of Townsville as the surge moved northward.

Rainfall over the northern parts of the Fitzroy river basin during the week of the 11th to the 18th of February caused a flood peak at Rockhampton more than a week later. River heights at Rockhampton peaked on the 25th of February at major flood level, but were somewhat complicated by very localised heavy rainfall of 150 mm between 2am and 4am on the 25th of February caused by a near stationary thunderstorm cell developing over the town.

This event marks the second major flood episode in the region for 2008 with significant flooding occurring in January following the intensification and movement southward of a tropical low that was the remnants of tropical cyclone Helen.

3. Hydrology

This chapter provides a technical summary and analysis of the hydrology of the event. As can be seen from Table 3.0.1, the river flooding during the month was very significant and several locations had record peaks or at least the highest peak for many years.

It was the flash flooding during the period that caused the most damage to property and the loss of two lives to flood related accidents. The most significant damage from flash flooding occurred at Mackay and Rockhampton.

Table 3.0.1 Peak Flood Height Comparison to Records

Gauging Station	Highest Feb 2008 Peak (metres)	Start of Record	Ranking	Highest Since	Highest on Record
Haughton River at Mt Piccaninny	10.51	1971	1st	New Record	New Record
Haughton River at Powerline	12.12	1971	1st	New Record	New Record
Haughton River at Giru	3.03	1978	1st	New Record	New Record
Burdekin River at Dalbeg	18.85	1976	2nd	Feb 1991 (17 years)	19.95m Feb 1991
Burdekin River at Clare	16.44	1976	2nd	Feb 1991 (17 years)	18.25m Feb 1991
Burdekin River at Inkerman Bridge	11.80	1911	13th	Feb 1991 (17 years)	12.62m Apr 1958
Bogie River at Strathbogie	11.41	1968	1st	New Record	New Record
Don River at Mt Dangar	9.40	1990	1st	New Record	New Record
Don River at Reeves	9.16	1980	2nd	Jan 1980 (28 years)	10.38m Jan 1980
Don River at Bowen Pump Station	6.50	1970	4th	Feb 1979 (29 years)	7.25m Jan 1970
Pioneer River at Mirani Weir	11.29	1978	13th	Feb 1991 (17 years)	15.52m April 1989
Pioneer River at Hospital Bridge	9.95	1918	4th	Jan 1970 (38 years)	11.84m Jan 1918 and Jan 1970
Pioneer River at Mackay	7.00	1884	28th	Feb 2007 (1 year)	9.14m Feb 1958
Connors River at Mt Bridget	16.77	1967	5th	Jan 1991 (17 years)	20.18m Mar 1988
Fitzroy River at Riversleigh	21.68	1918	15th	Jan 2008 (1 month)	31.48m Jan 1918
Fitzroy River at Yaamba	14.15	1918	23rd	Jan 2008 (1 month)	17.32m Jan 1918
Fitzroy River at Rockhampton	7.75	1859	28th	Feb 1991 (17 years)	10.11m Jan 1918
Moonie River at Southwood	6.25	1983	3rd	Aug 1998 (10 years)	6.35m Jan 1996
Moonie River at Mt Driven	6.59	1954	7th	Aug 1998 (10 years)	7.81m 1954
Moonie River at Thallon	5.25	1950	11th	Sep 1998 (10 years)	5.43m Feb 1976
Yarrill Ck at Medpark Bridge	5.43	1997	2nd	Aug 1998 (10 years)	5.80m Aug 1998

Figure 3.0.1 Peak Flood Height Map for February 2008 - Queensland

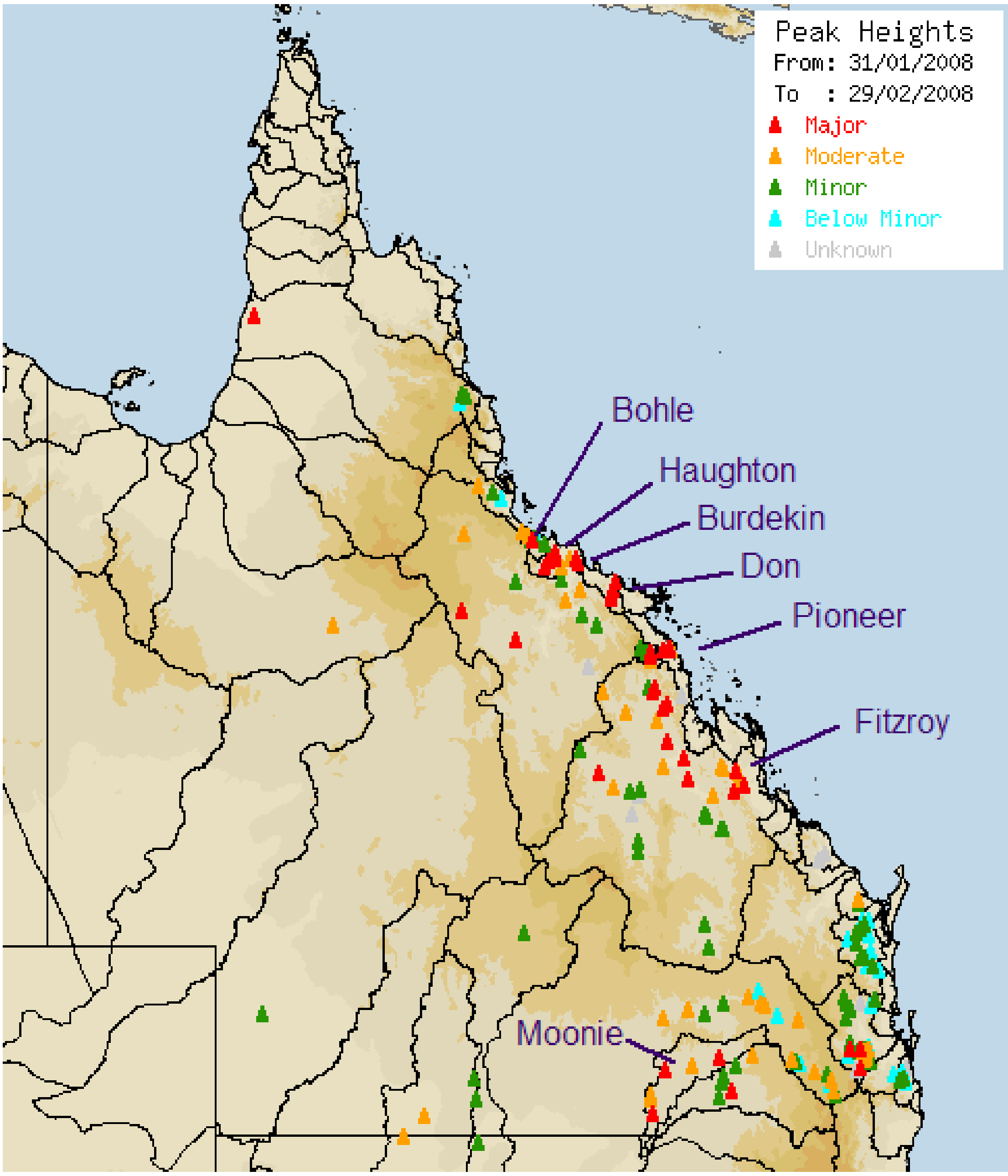
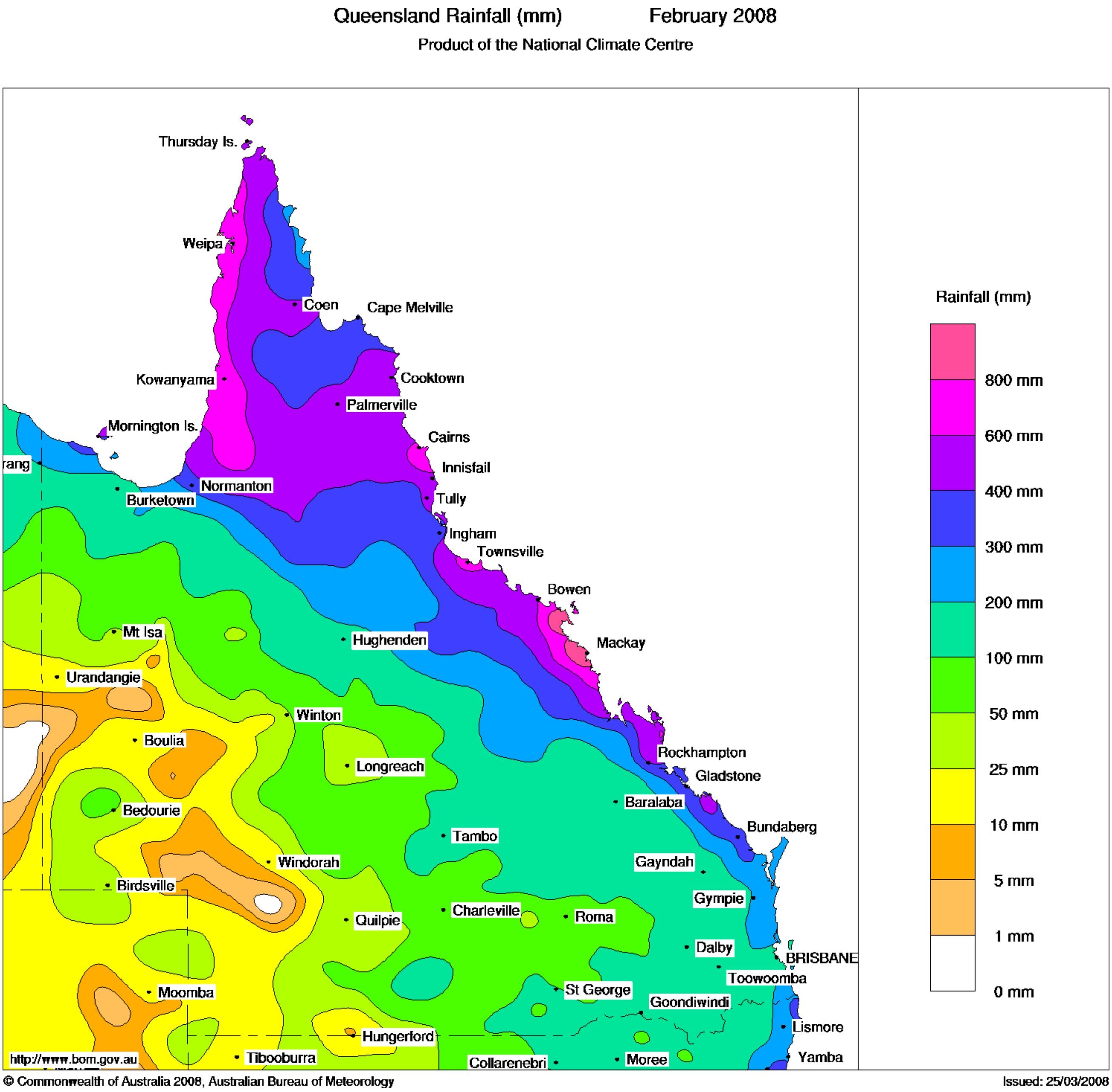


Figure 3.0.2 Queensland Isohyetal Rainfall Map – February 2008



The above map (Figure 3.0.2) shows the total rain recorded in Queensland for the month of February. The next section provides a more detailed analysis of the rainfall.

3.1 Rainfall Maps

Figure 3.1.1 Rainfall Map of Queensland - February 2008

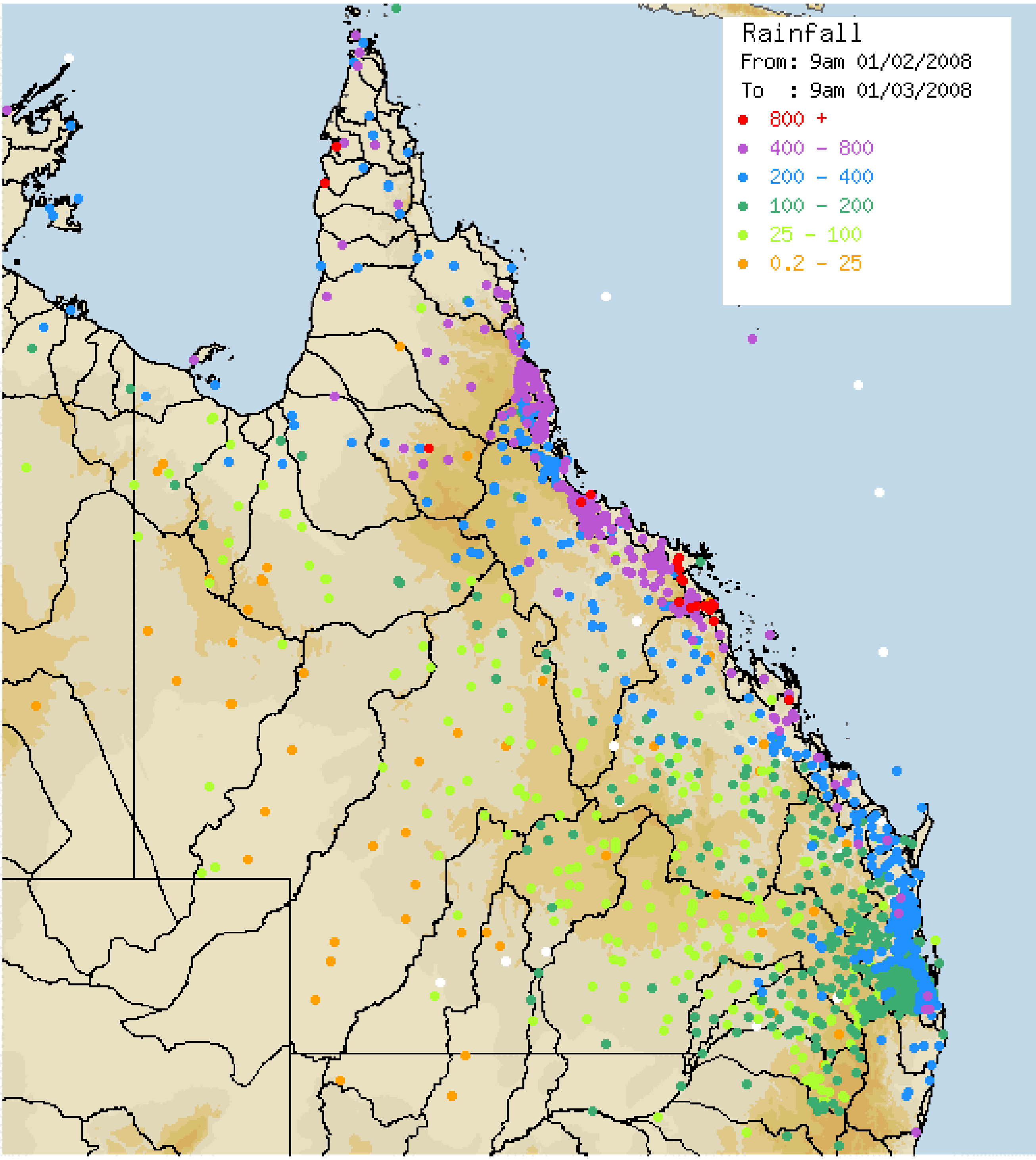
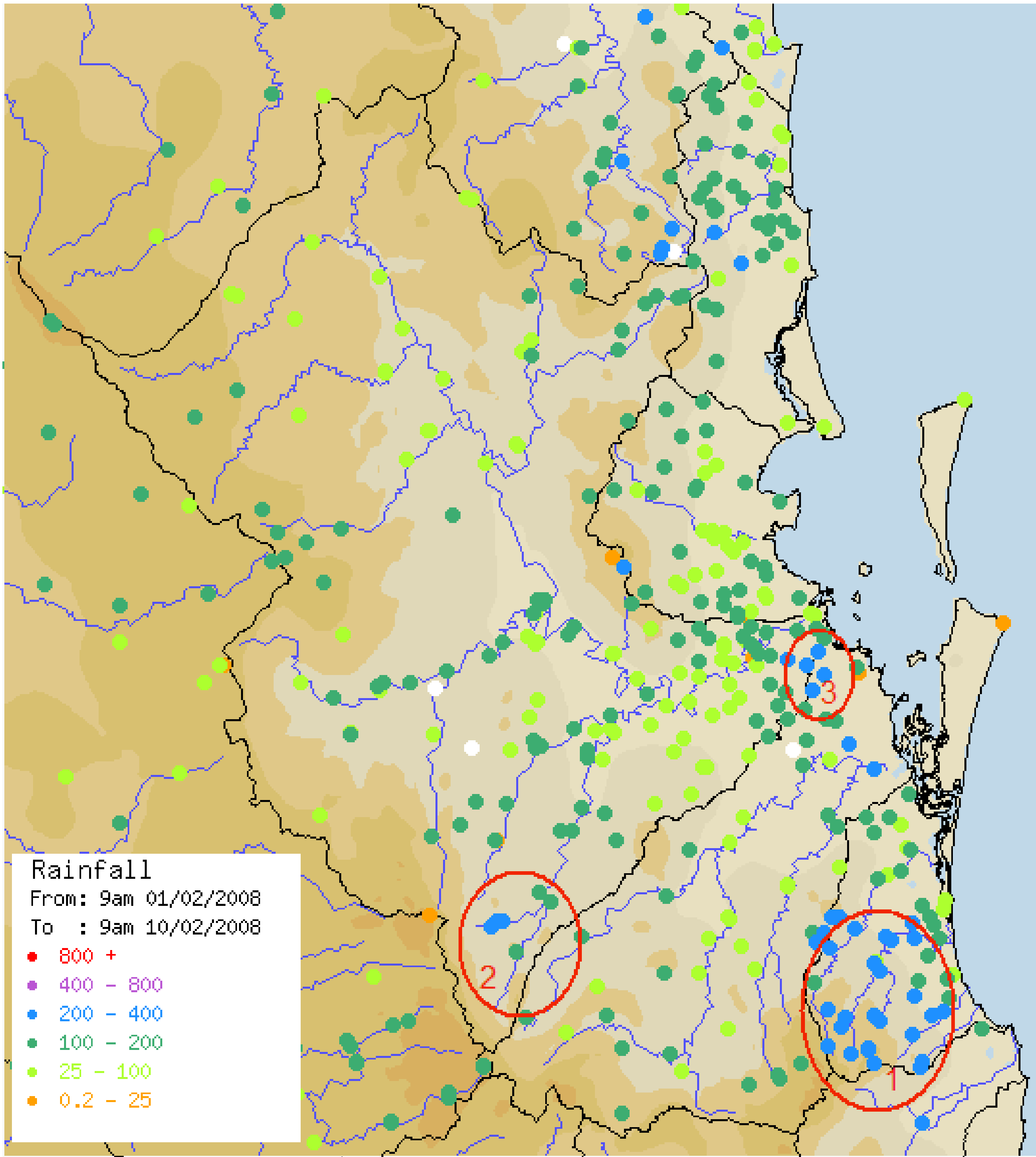


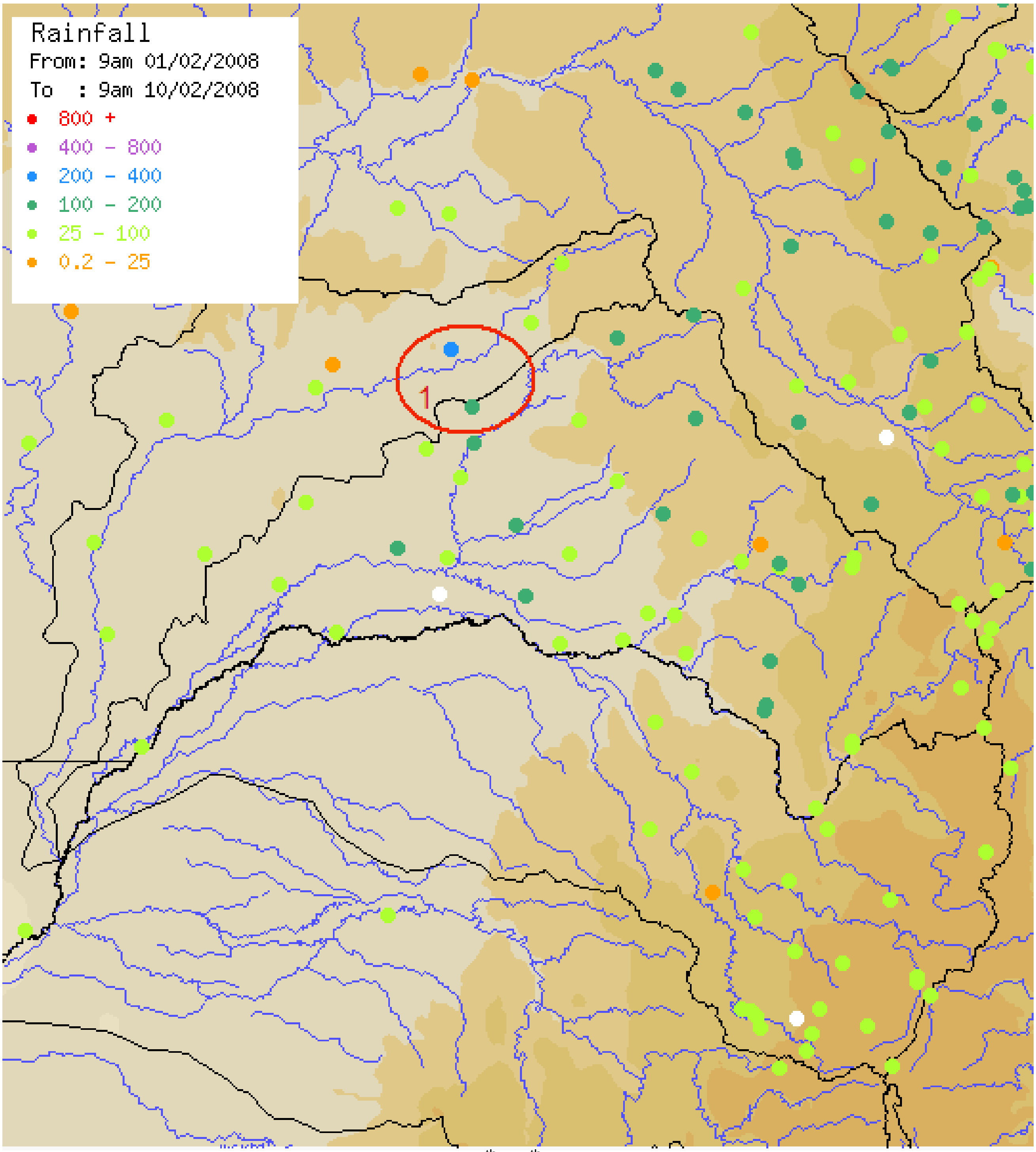
Figure 3.1.1 illustrates the location and amount of total rainfall recorded in February at stations which provide reports to the Bureau, either from a daily reporting rainfall station or an automatic station.

Figure 3.1.2 Rainfall Map for the Brisbane Basin for 10 days to 09:00 10/2/2008



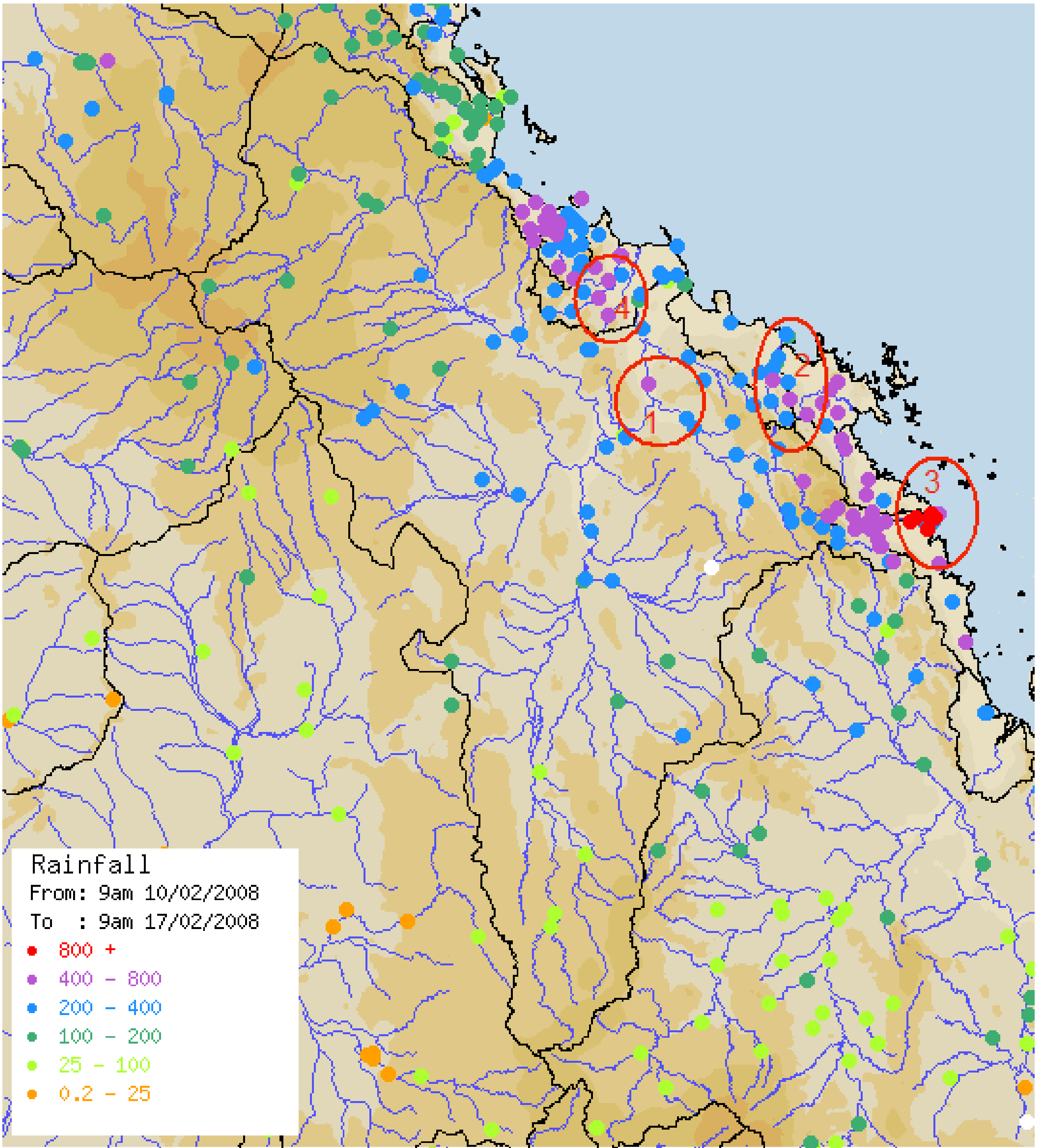
1. Heavy rainfall on Sunday night 3rd February caused rises and some local flash flooding in the Nerang and Coomera Rivers and Mudgeeraba Creek.
2. Heavy rainfall on the 3rd and 4th caused areas of moderate to major flooding in Laidley and Warrill Creeks and the Bremer River.
3. Flash flooding in Bulimba Ck (Capalaba area) on Wed 6th February tragically resulted in one lost life

Figure 3.1.3 Rainfall Map for the Border Rivers for 10 days to 09:00 10/2/2008



1. Heavy rainfall fell in the Southwood area during 4th – 6th February with nearly 300mm being recorded in 3 days. This caused major flooding at Southwood and moderate to major flooding downstream to Thallon. There was also significant local flooding in the Tara area.

Figure 3.1.4 Rainfall Map for Townsville to Mackay for 7 days to 09:00 17/2/2008



1. Rainfall of over 300mm in 3 hours was recorded in the Dalbeg area on 11th and resulted in a near major flood at Inkerman Bridge on the 12th.
2. Heavy rainfall on a saturated catchment caused a major flood in the Don River at Bowen and strong winds and wave action caused major damage to boats in the Airlie beach area.
3. Record rainfalls of over 600mm in 6 hours during the morning of the 15th caused disastrous flash flooding in the Mackay area.
4. Very heavy rainfall on the 11th and 12th caused record major flooding in the Haughton River at Giru. Heavy rainfall on the 16th caused another major flood in the Haughton River at Giru, the third major flood in this wet season at Giru.

Figure 3.1.5 Rainfall Map for Townsville to Mackay for the 24 hours to 09:00 12 February 2008

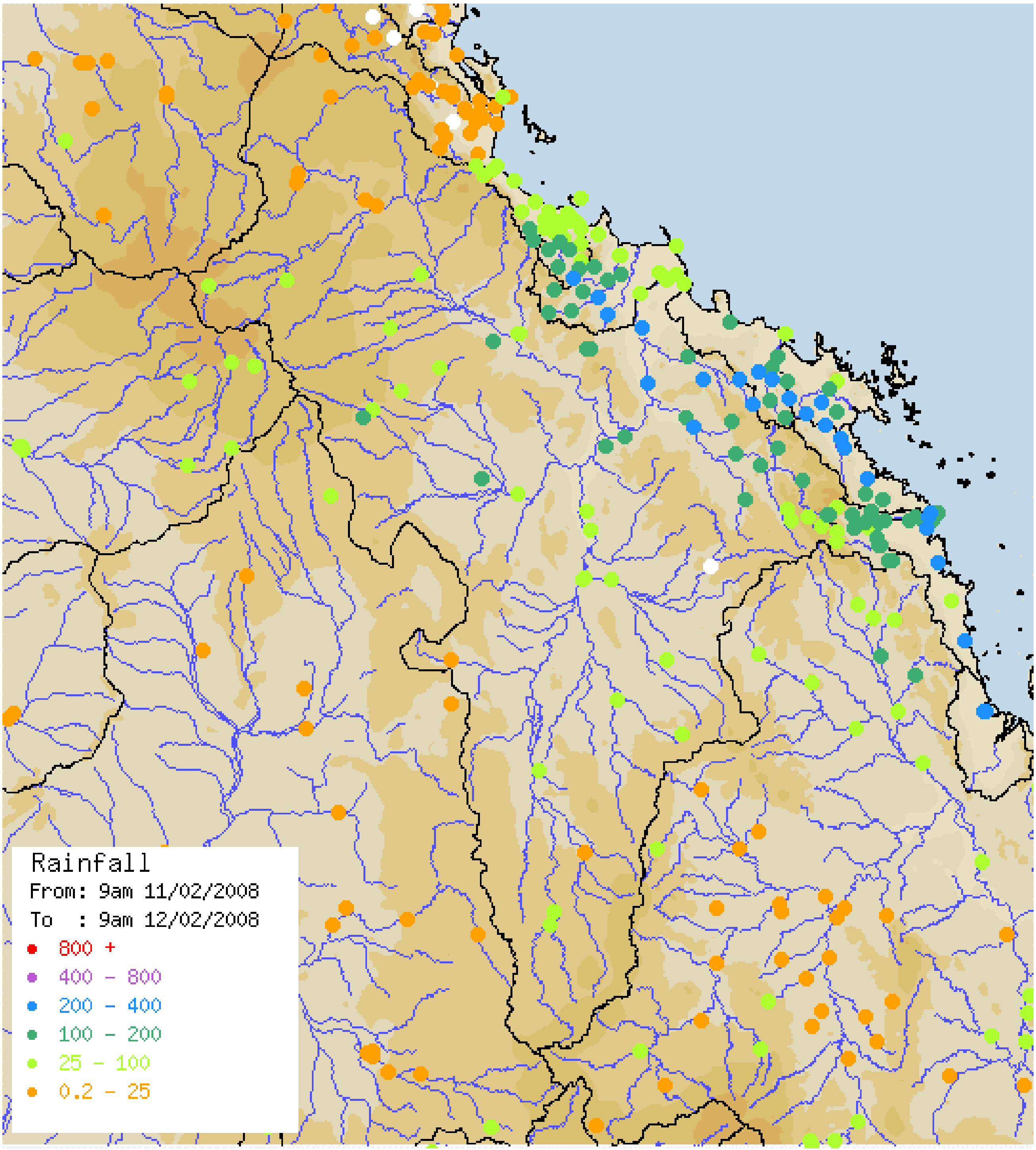


Figure 3.1.6 Rainfall Map for Townsville to Mackay for the 24 hours to 09:00 15 February 2008

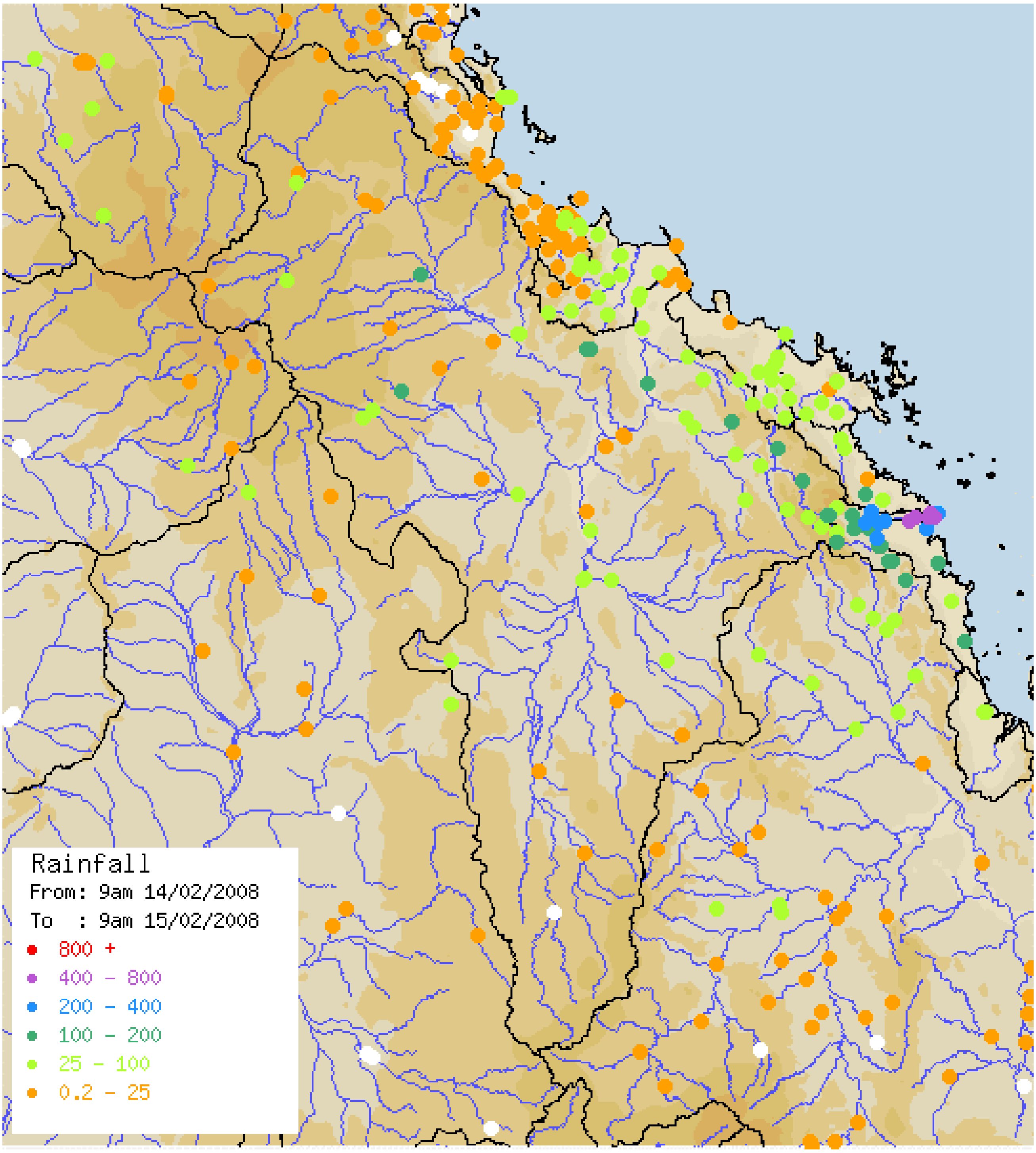
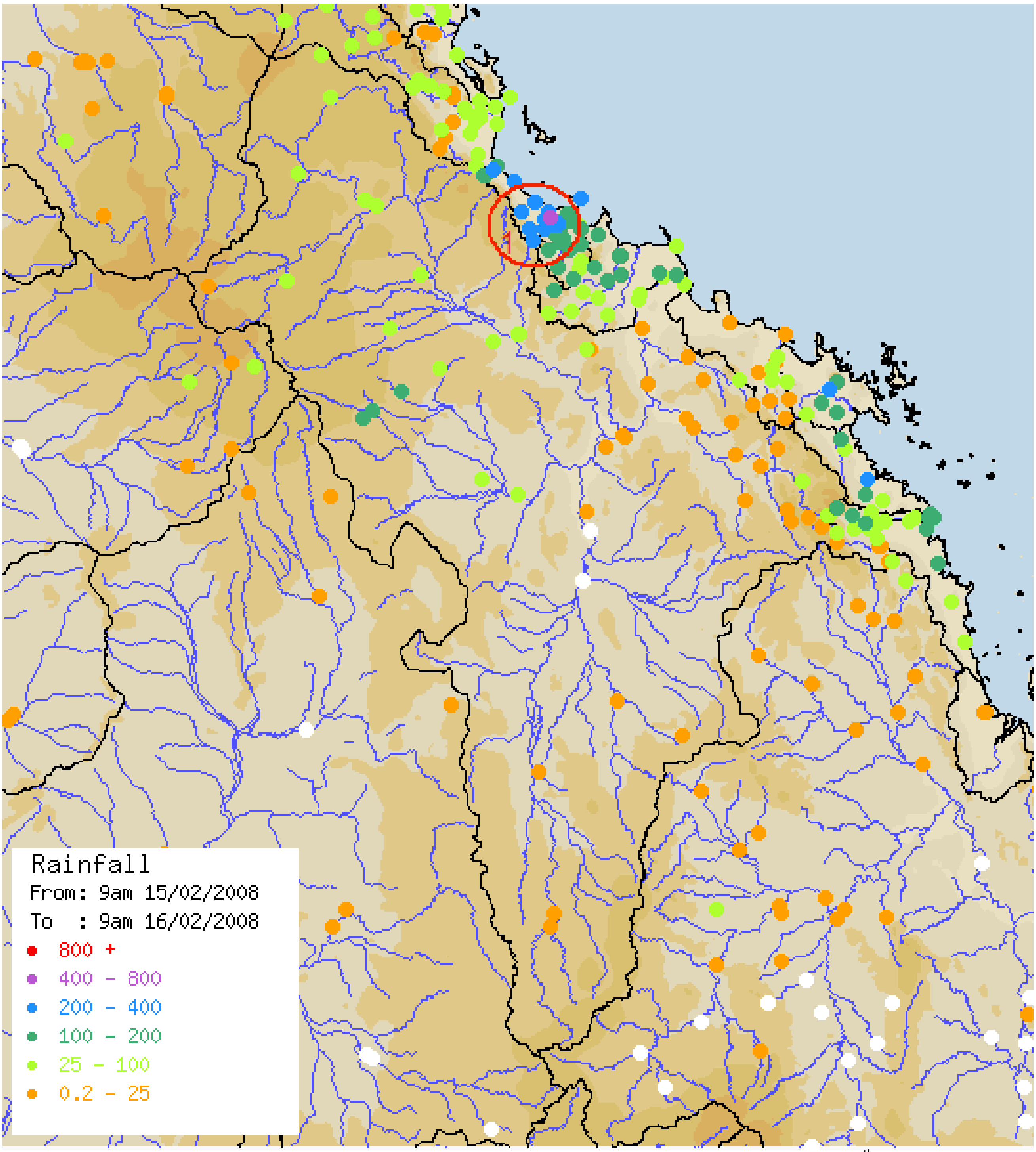
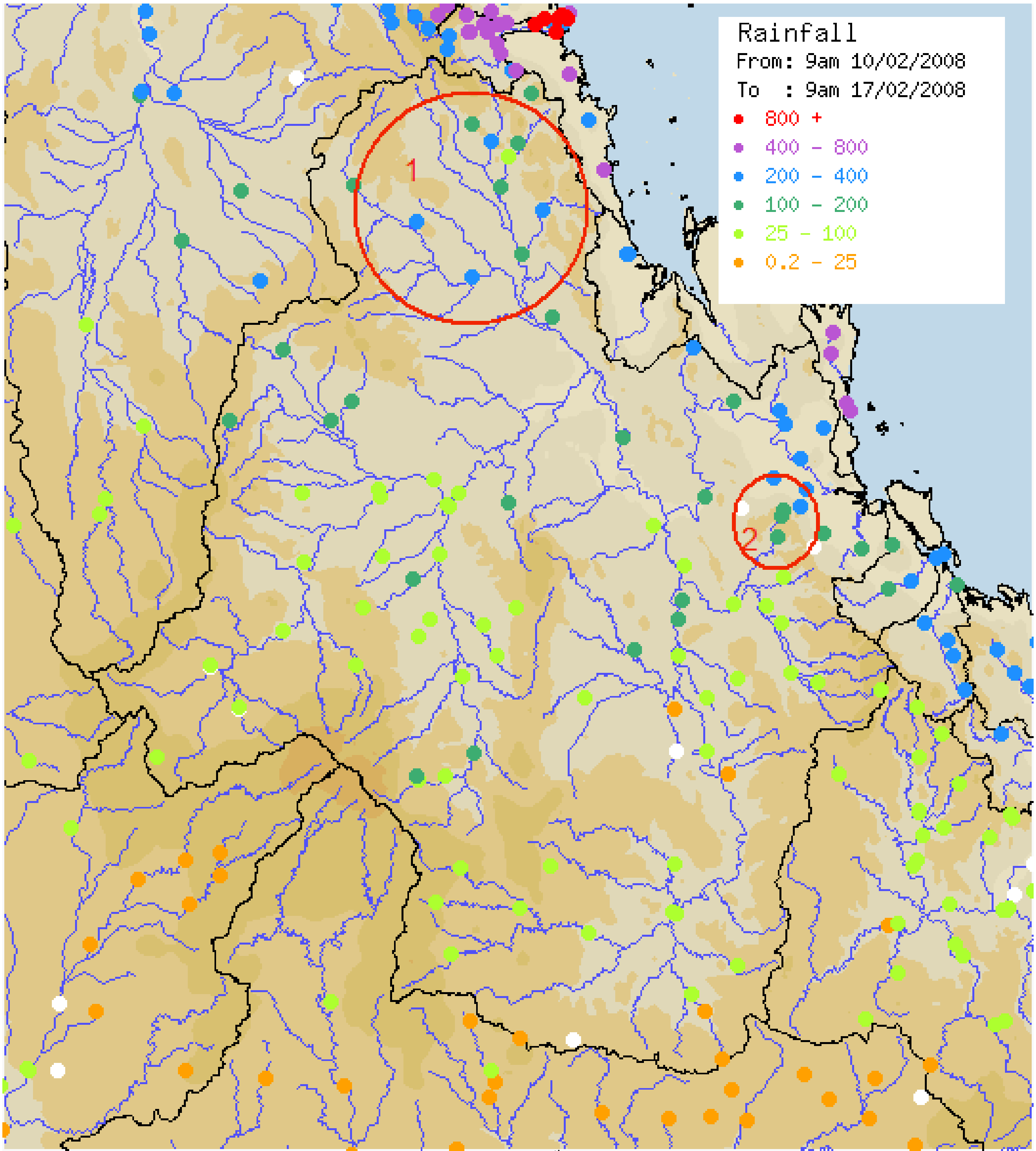


Figure 3.1.7 Rainfall Map for Townsville to Mackay for the 24 hours to 09:00 16 February 2008



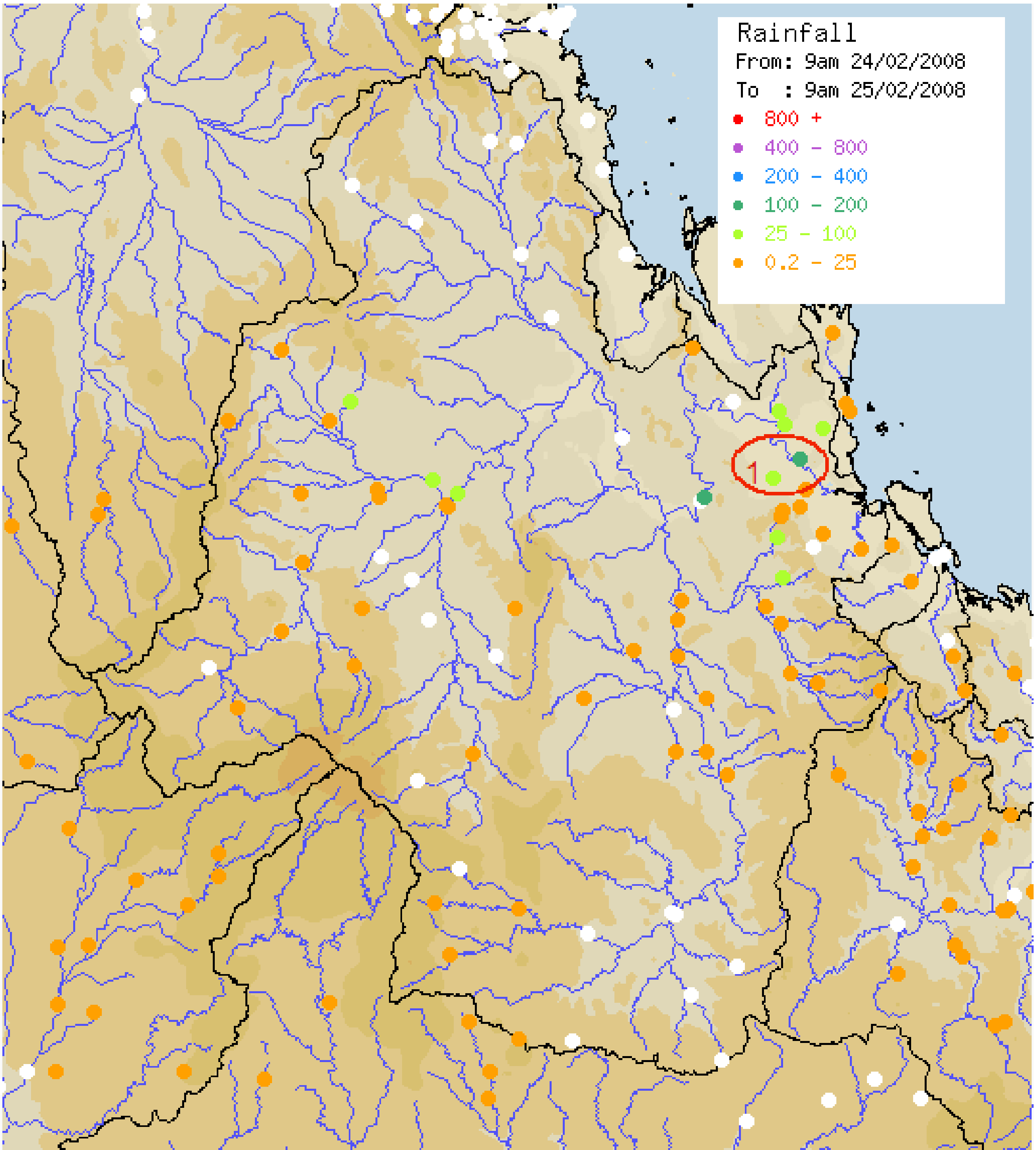
1. Rainfall of over 400mm in 24 hours caused flash flooding in the Townsville Area on the 16th February 2008.

Figure 3.1.8 Rainfall Map for the Fitzroy Basin for 7 days to 09:00 17/2/2008



1. Heavy rainfall on a saturated catchment during the 10-17th February caused significant flooding in the Connors and Isaac Rivers and this eventually caused major flooding in the Fitzroy River with the peak arriving in Rockhampton on the 25th February.
2. Heavy rainfall to the west of Rockhampton on the 14th caused water on the Capricorn Highway and tragically resulted in one lost life.

Figure 3.1.9 Rainfall Map for the Fitzroy Basin for 24 hours to 09:00 25/2/2008



1. Very heavy rainfall on the morning of the 25th caused flash flooding in the Rockhampton area. The rainfall coincided with the peak of the river flood which also reached the major flood level.

3.2 Rainfall Intensity

The most intense rainfall during February occurred in the Haughton, lower Burdekin, Don, Pioneer, Bohle and lower Fitzroy and Moonie catchments. Some key stations from these catchments have been chosen for Intensity Frequency Duration (IFD) analysis and the results can be found in Figures 3.2.2 to 3.2.6.

The most statistically significant rainfall was in the lower Pioneer River around Mackay on the morning of the 15th February with over 600mm being recorded in around 6 hours at three automatic flood warning stations at Mackay, Gooseponds and Hospital Bridge. The Intensity-Frequency-Duration analysis of the rainfalls at Mackay and Gooseponds is available in Figure 3.2.4 and indicates that rainfall intensities for all durations from 30 minutes to 72 hours significantly exceeded 1% AEP (100 year Average Recurrence Interval) intensities.

The CRC-FORGE Point Estimates for Mackay Alert are available in Table 3.2.1 and indicate that the observed intensities for the 24hour duration (698 mm) are greater than 0.5% AEP (200 year ARI) intensities. By looking at the behaviour of observed intensities (Figure 3.2.4) over the durations 1 hour to 12 hours, it is reasonable to assume that ARIs for durations below 24 hours, especially around 6 hours, will be considerably greater than 0.5% AEP (200 Year ARI).

Table 3.2.1 CRC-FORGE estimates for Mackay Alert (33303) (millimetres)

Duration/ AEP/ARI	2% (50 year)	1% (100 year)	0.5% (200 year)	0.2% (500 year)	0.01% (1000 year)	0.05% (2000 year)
24 hours	491	575	669	812	935	1072
48 hours	702	819	946	1133	1290	1462
72 hours	801	942	1100	1337	1541	1770

NOTE. These estimates were derived using the software 'Rainfall IFD – version 1.0: Application of CRCFORGE/ARF for Queensland', August 2005. This software was produced by Queensland Department of Natural Resources and Water.

Very intense rainfall has previously been recorded in the Mackay area and in the Pioneer catchment. On the 17th November 2000 Gooseponds Alert recorded 110mm between 1 and 2am and nearly 250mm in the 3 hours to 4am. A report on this Flash Flood event is available at

http://www.bom.gov.au/hydro/flood/qld/fld_reports/mackay_nov2000.pdf

In the record Pioneer River flood of February 1958 the Mt Charlton station recorded 589mm in just over 10 hours and Elaroo had 538mm in around 5 hours. A report on the Mackay 1958 Storm is now available at

http://www.bom.gov.au/hydro/flood/qld/fld_reports/mackay_feb1958.pdf

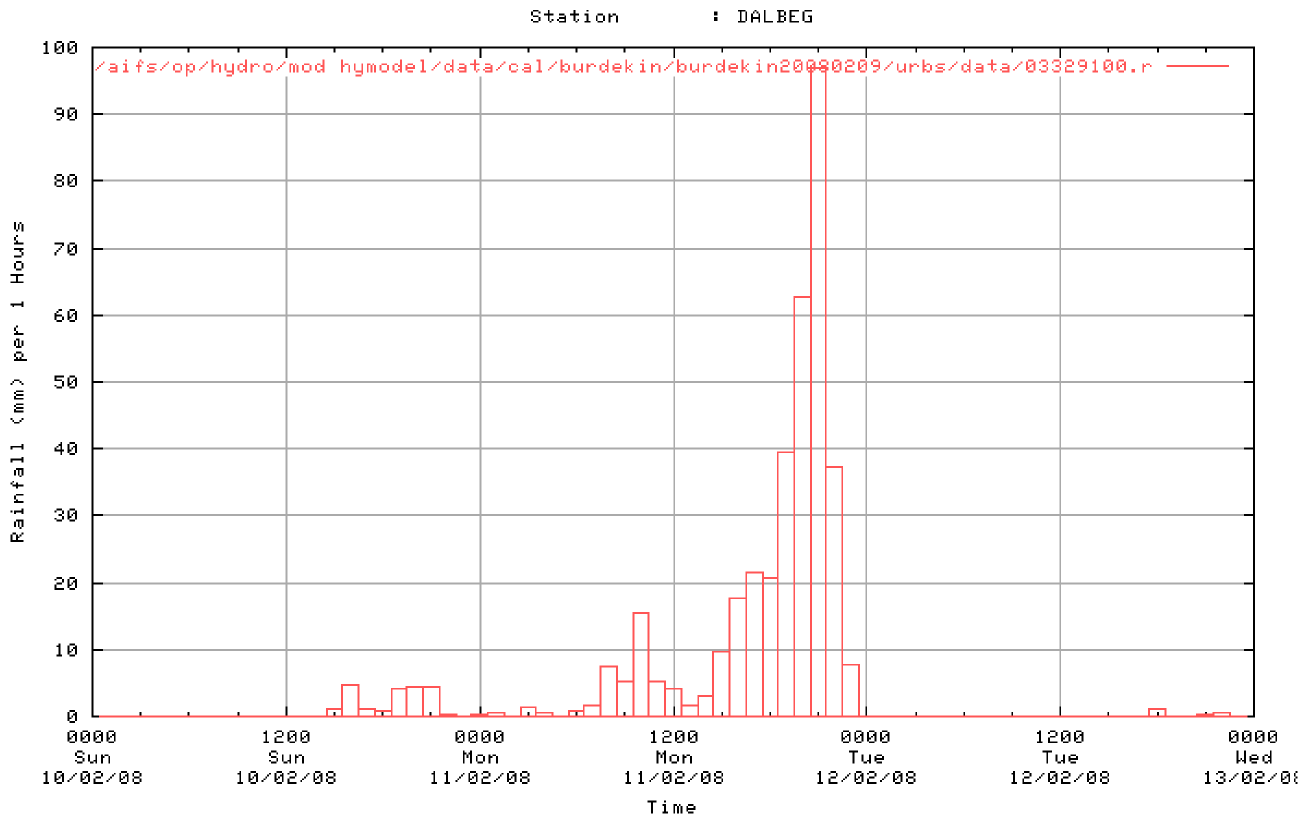
The rainfall during the evening on the 11th and morning of the 12th in the Haughton and Lower Burdekin Rivers was also very significant with IFD analysis indicating that it exceeded 1% AEP (100 year ARI) intensities for durations between 2 and 24 hours (Figure 3.2.2). This same rainfall event affected the Don River on the 12th but IFD analysis indicates the rainfall was only around the 2% to 5% AEP (20-50 years ARI) for the 2 hour duration and less significant for other durations. (Figure 3.3.4)

The rainfall in the Southwood area of the Moonie River was also assessed as exceeding 1% AEP (100 year ARI) for the 24 and 48 hour durations. Higher resolution data is not available for this area. (Figure 3.2.9)

The rainfall intensities for the flash floods in Townsville and Rockhampton were also assessed as being greater than the 1% AEP (100 year) intensities. (Figure 3.2.8)

Note: A flood frequency analysis would be required to assess the probability of flood levels reached at each location. The frequency analysis in this report is for rainfall only.

Figure 3.2.1 Hourly Hyetographs for Dalbeg (Burdekin R) and Upper Barrattas (Haughton R)



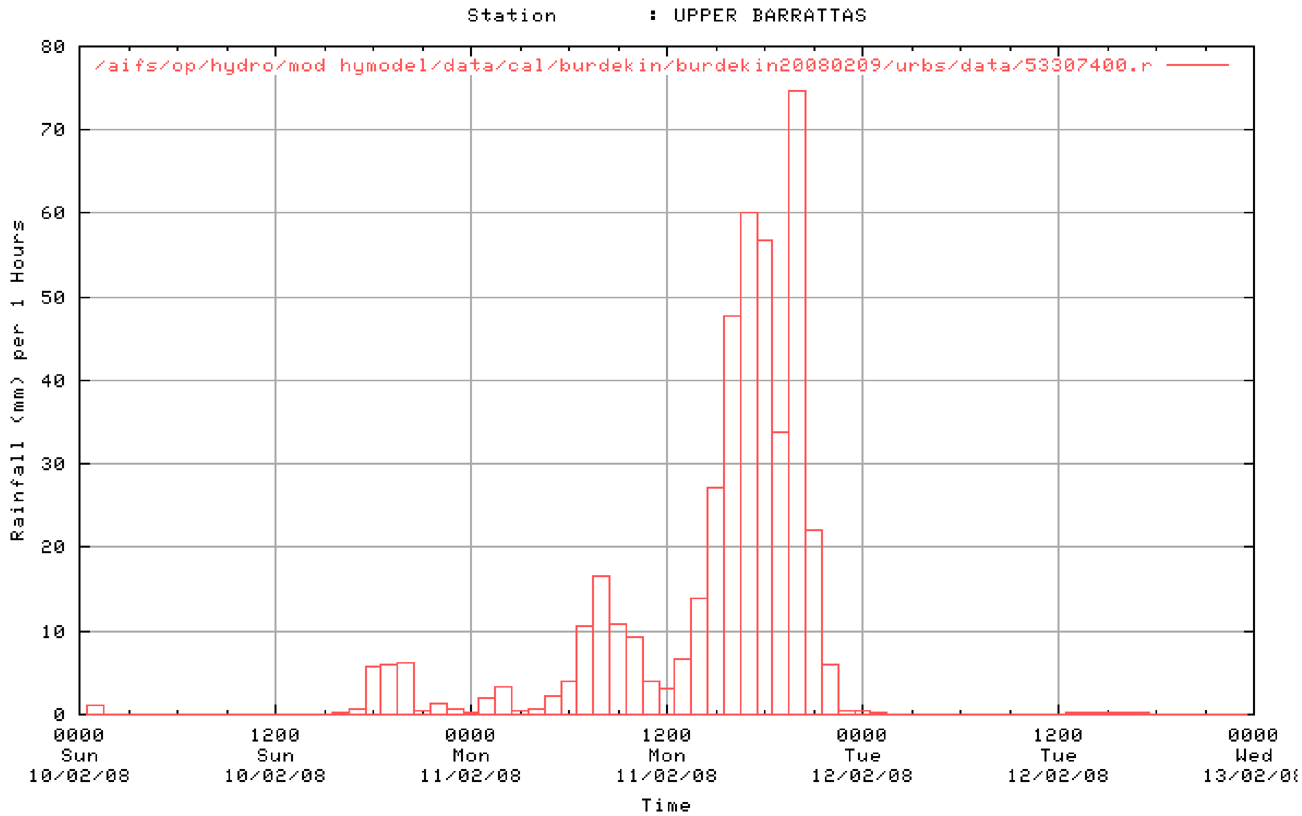


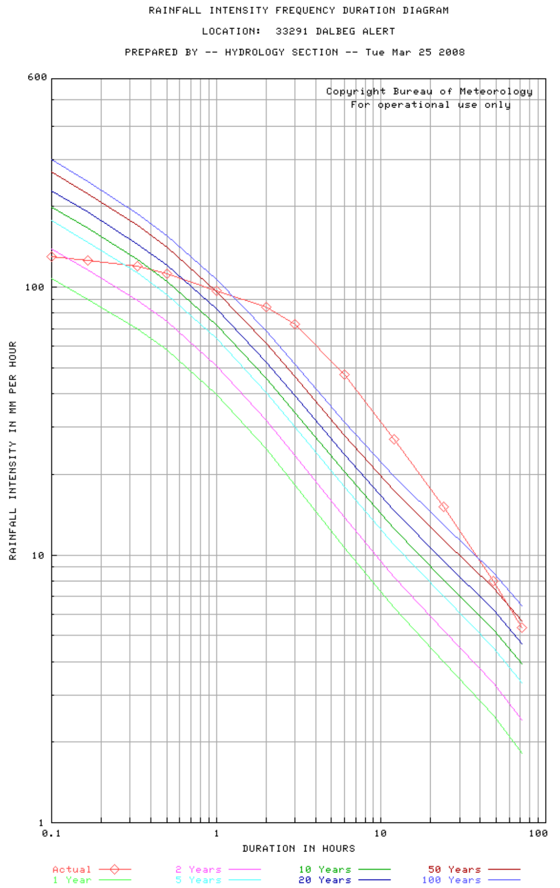
Figure 3.2.2 Intensity Frequency Duration Rainfall Analysis for Dalbeg (Burdekin R) and Upper Barattas (Haughton R)

RAINFALL INTENSITY FREQUENCY DURATION ANALYSIS

LOCATION: 33291 DALBEG ALERT

Analysis of the rainfall for the 284 hours to Fri Feb 22 08:14:33 2008

Rain (mm)	Period Ending	ARI (years)
11	5 mins ending at 20:59:58 11/02/2008	1-2
13	6 mins ending at 20:59:58 11/02/2008	2
21	10 mins ending at 20:59:58 11/02/2008	2-5
40	20 mins ending at 20:59:58 11/02/2008	5-10
56	30 mins ending at 21:09:58 11/02/2008	10-20
97	60 mins ending at 21:01:26 11/02/2008	50-100
169	2 hours ending at 21:20:30 11/02/2008	> 100
219	3 hours ending at 21:20:30 11/02/2008	> 100
282	6 hours ending at 21:22:54 11/02/2008	> 100
323	12 hours ending at 21:22:54 11/02/2008	> 100
362	24 hours ending at 22:52:18 11/02/2008	> 100
383	48 hours ending at 11:15:28 12/02/2008	50-100
385	72 hours ending at 11:15:28 13/02/2008	20-50



RAINFALL INTENSITY FREQUENCY DURATION ANALYSIS

LOCATION: 533074 UPPER BARRATTAS ALERT

Analysis of the rainfall for the 284 hours to Fri Feb 22 06:30:25 2008

Rain (mm)	Period Ending	ARI (years)
12	5 mins ending at 17:11:50 11/02/2008	2
14	6 mins ending at 17:11:53 11/02/2008	2
23	10 mins ending at 17:11:46 11/02/2008	2-5
41	20 mins ending at 17:12:16 11/02/2008	5-10
57	30 mins ending at 17:22:35 11/02/2008	10-20
89	60 mins ending at 17:23:08 11/02/2008	20-50
136	2 hours ending at 17:26:27 11/02/2008	50-100
175	3 hours ending at 19:48:28 11/02/2008	> 100
300	6 hours ending at 20:04:07 11/02/2008	> 100
360	12 hours ending at 21:06:27 11/02/2008	> 100
417	24 hours ending at 00:30:36 12/02/2008	> 100
438	48 hours ending at 15:30:41 12/02/2008	50-100
439	72 hours ending at 17:12:20 13/02/2008	20-50

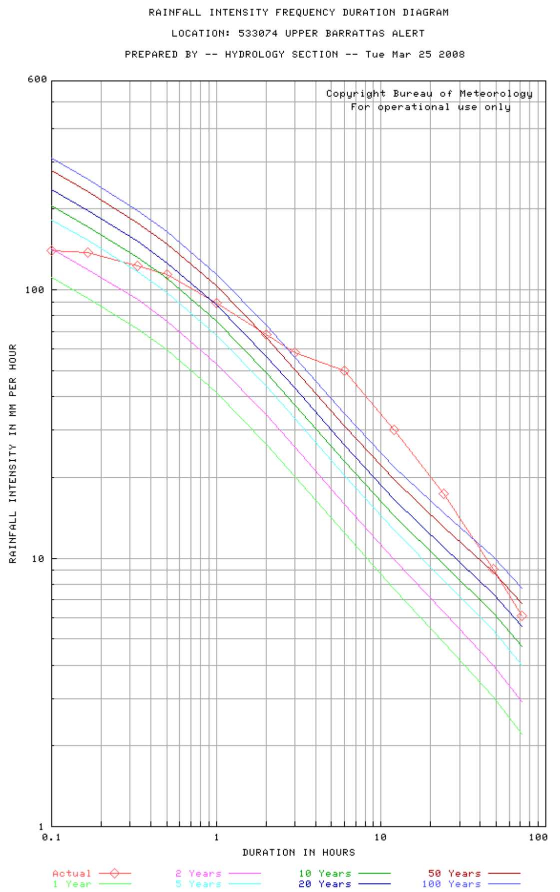
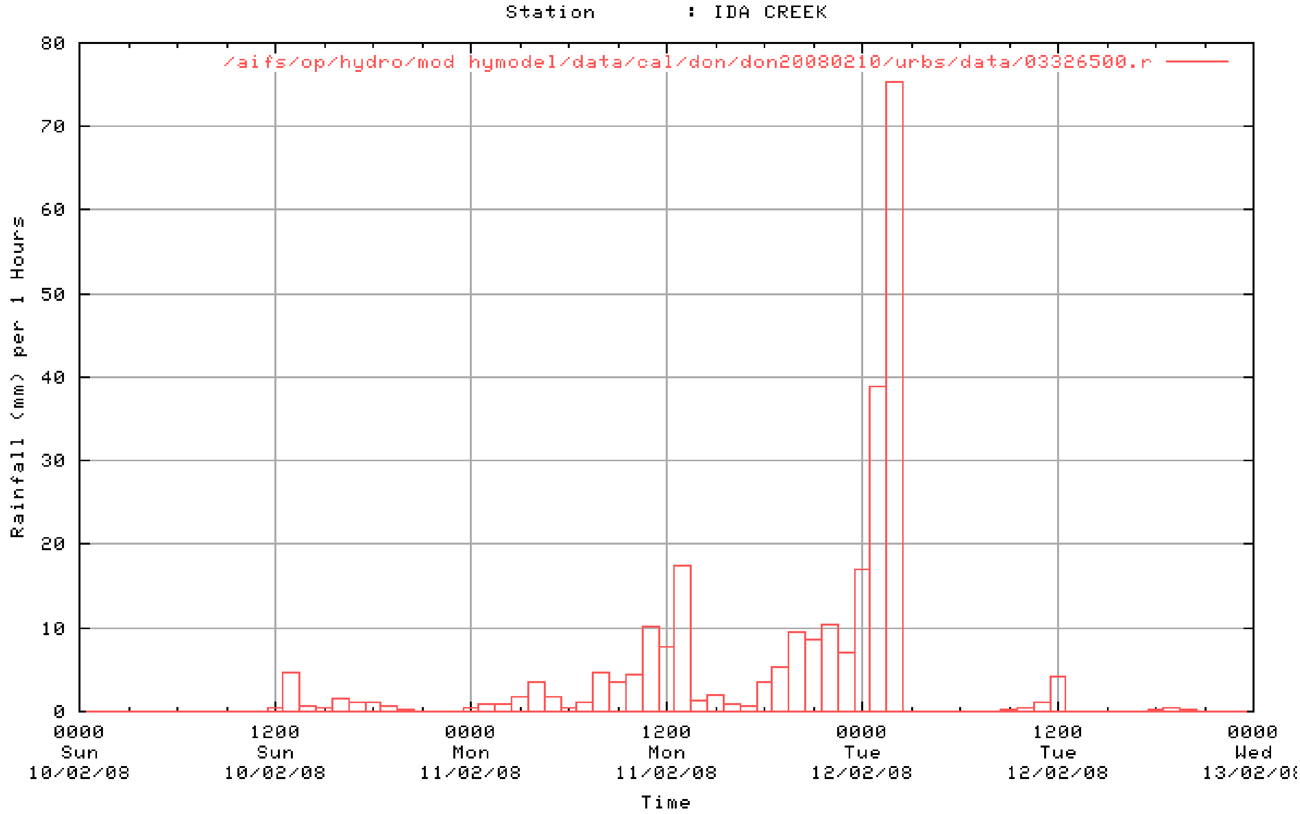


Figure 3.2.3 Hourly Hyetographs for Ida Creek and Emu Creek (Don R)



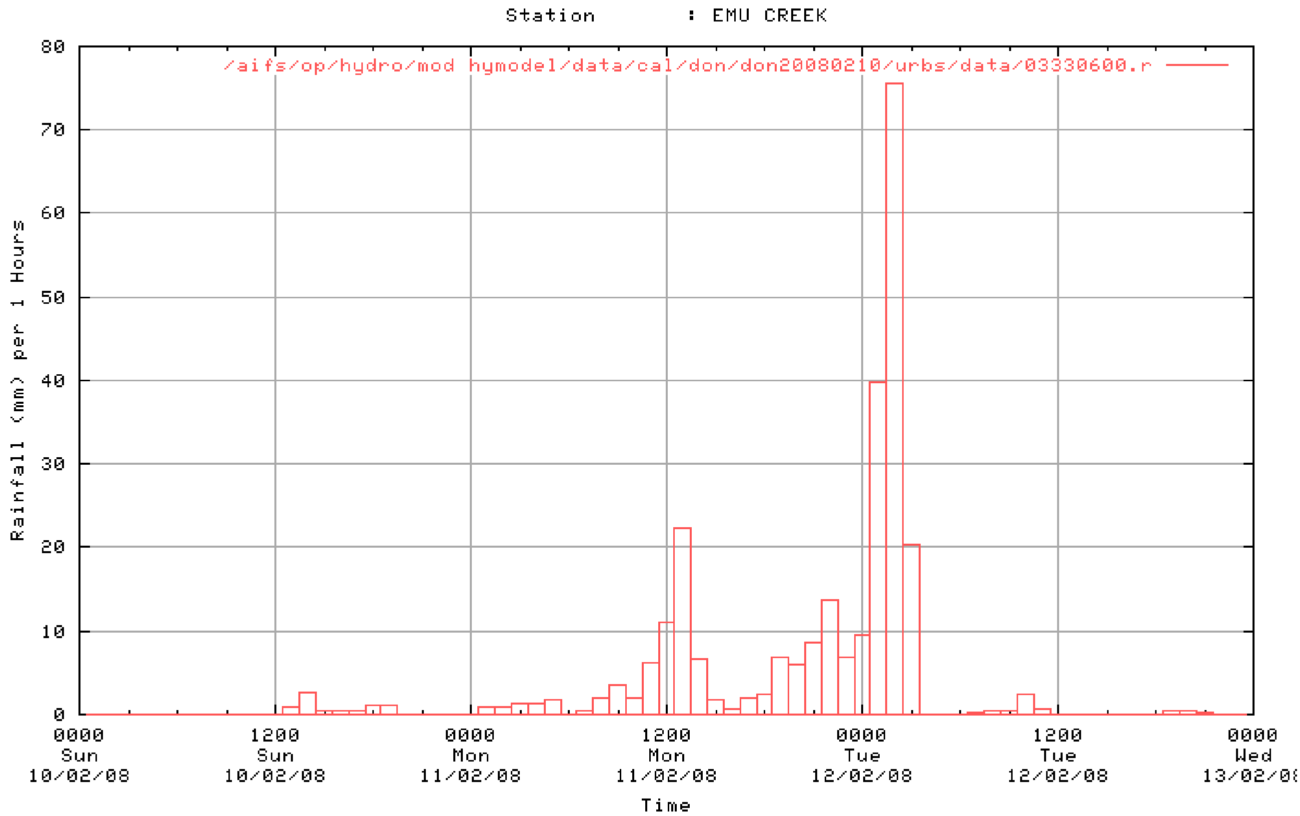


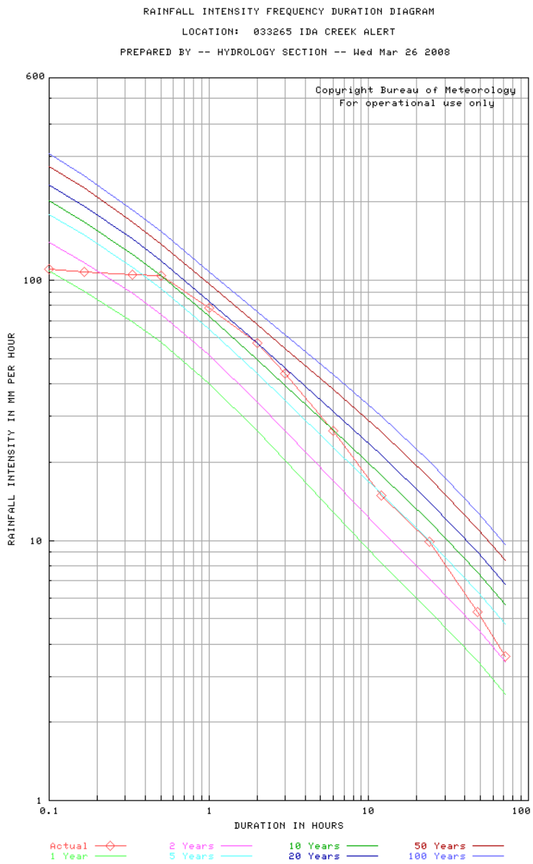
Figure 3.2.4 Intensity Frequency Duration Rainfall Analysis for Ida Creek and Emu Creek (Don R)

RAINFALL INTENSITY FREQUENCY DURATION ANALYSIS

LOCATION: 33265 IDA CREEK ALERT

Analysis of the rainfall for the 236 hours to Wed Feb 20 08:28:27 2008

Rain (mm)	Period Ending	ARI (years)
10	5 mins ending at 01:29:52 12/02/2008	1-2
11	6 mins ending at 01:20:06 12/02/2008	1-2
18	10 mins ending at 01:24:06 12/02/2008	1-2
35	20 mins ending at 01:30:21 12/02/2008	2-5
52	30 mins ending at 01:31:23 12/02/2008	10
78	60 mins ending at 01:33:58 12/02/2008	10-20
115	2 hours ending at 01:55:11 12/02/2008	20-50
131	3 hours ending at 01:55:11 12/02/2008	10-20
158	6 hours ending at 01:55:11 12/02/2008	5-10
179	12 hours ending at 01:55:11 12/02/2008	2-5
237	24 hours ending at 01:55:11 12/02/2008	2-5
255	48 hours ending at 11:43:48 12/02/2008	2-5
257	72 hours ending at 11:28:29 13/02/2008	2-5



RAINFALL INTENSITY FREQUENCY DURATION ANALYSIS

LOCATION: 33306 EMU CREEK ALERT

Analysis of the rainfall for the 285 hours to Fri Feb 22 06:15:29 2008

Rain (mm)	Period Ending	ARI (years)
13	5 mins ending at 01:34:59 12/02/2008	2-5
15	6 mins ending at 01:34:59 12/02/2008	2-5
22	10 mins ending at 01:38:07 12/02/2008	2-5
37	20 mins ending at 01:16:43 12/02/2008	5
52	30 mins ending at 01:41:25 12/02/2008	10
96	60 mins ending at 01:42:25 12/02/2008	20-50
127	2 hours ending at 02:28:04 12/02/2008	20-50
138	3 hours ending at 02:28:04 12/02/2008	10-20
167	6 hours ending at 02:28:04 12/02/2008	10-20
192	12 hours ending at 02:45:47 12/02/2008	2-5
251	24 hours ending at 02:45:47 12/02/2008	2-5
265	48 hours ending at 10:48:06 12/02/2008	2-5
305	72 hours ending at 16:42:26 13/02/2008	2-5

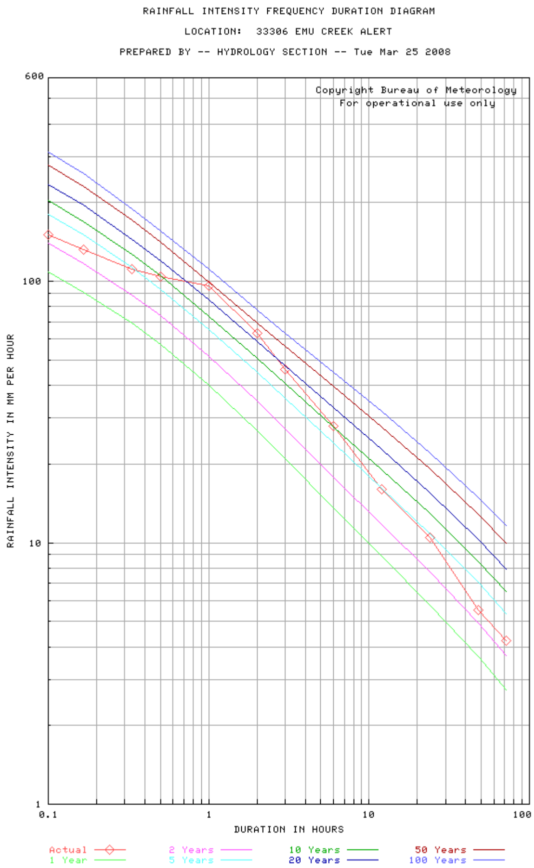
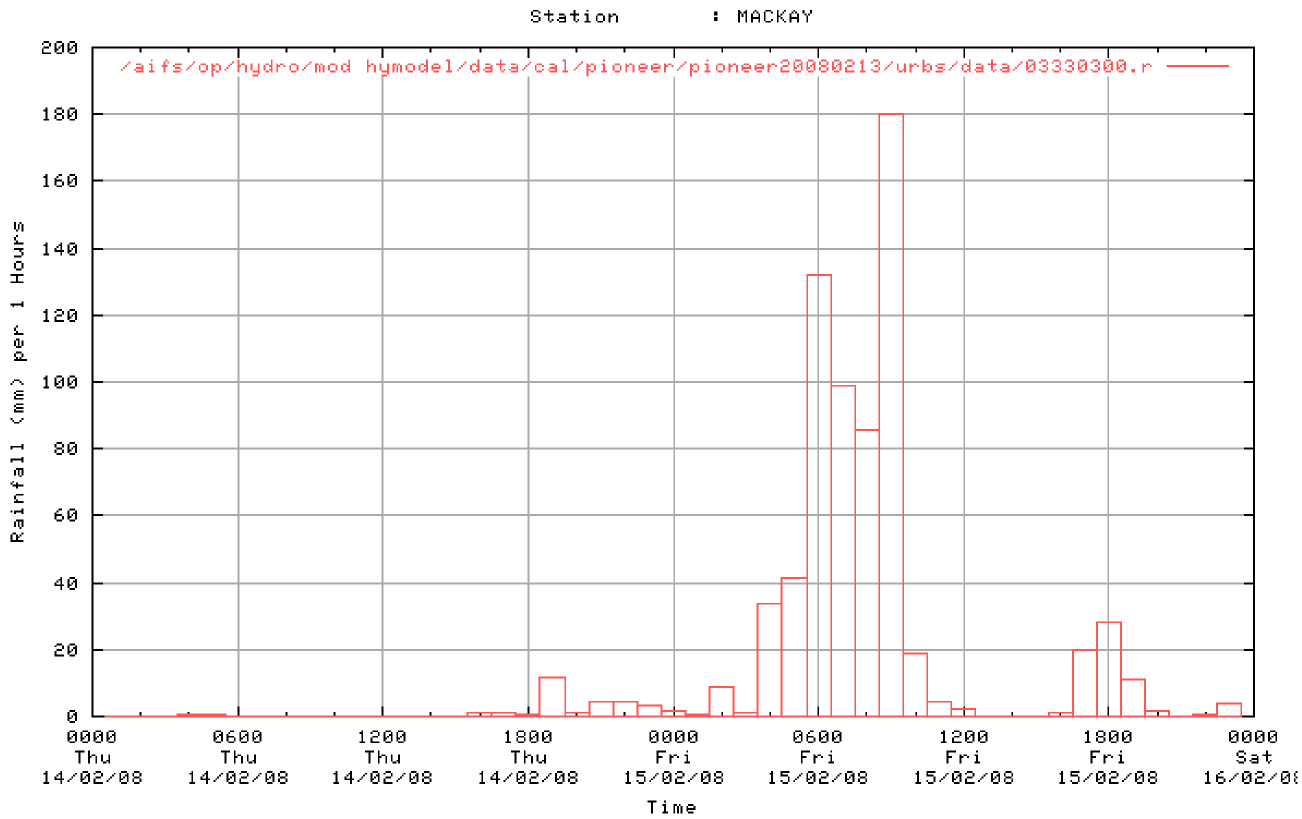


Figure 3.2.5 Hourly Hyetographs for Mackay and Goosepands (Pioneer R)



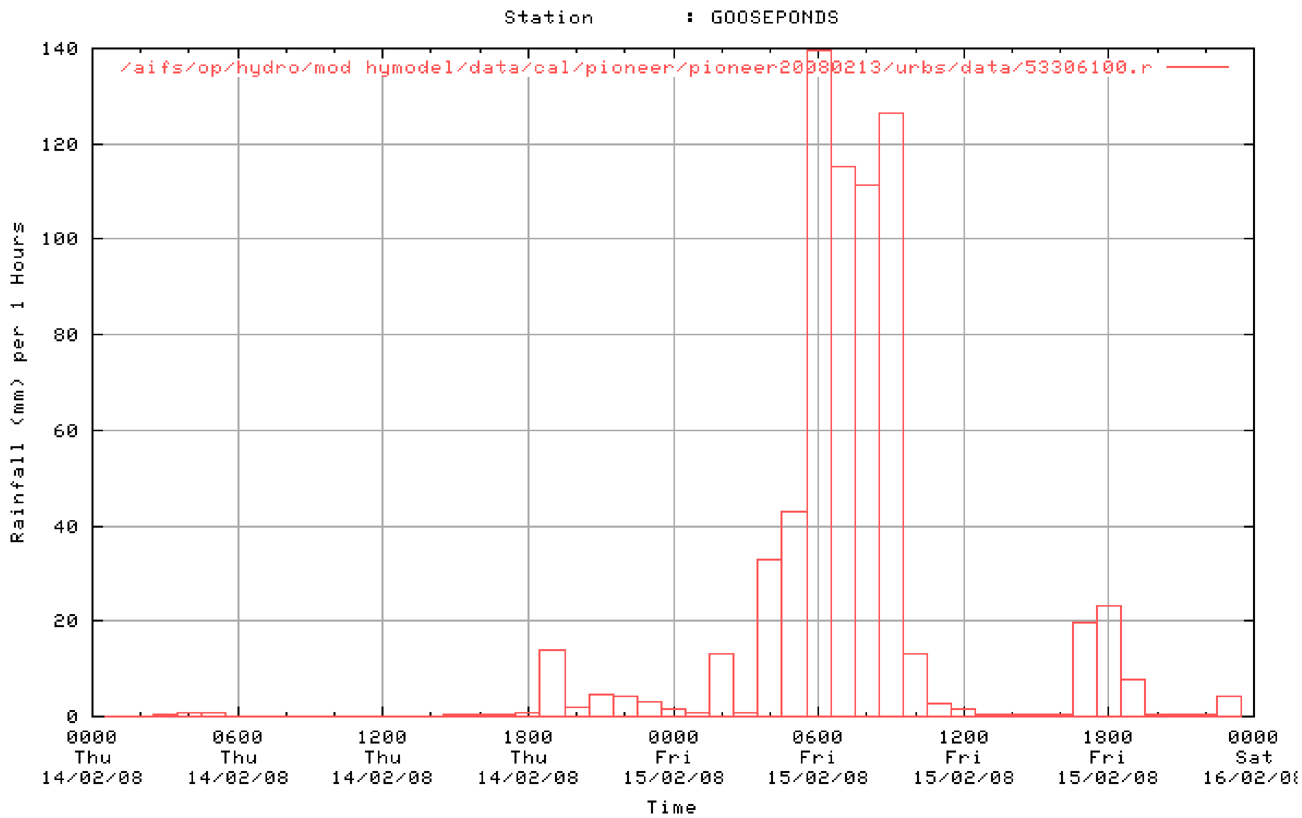


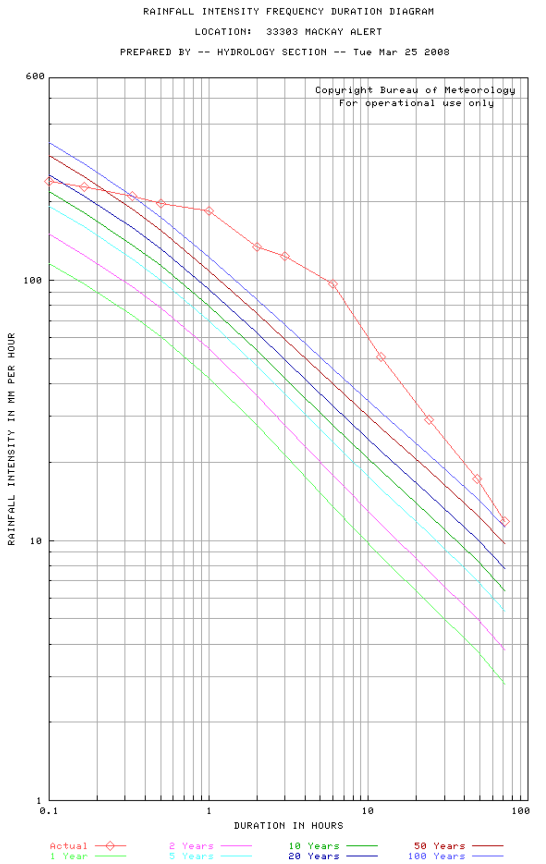
Figure 3.2.6 Intensity Frequency Duration Rainfall Analysis for Mackay and Goosponds (Pioneer R)

RAINFALL INTENSITY FREQUENCY DURATION ANALYSIS

LOCATION: 33303 MACKAY ALERT

Analysis of the rainfall for the 284 hours to Fri Feb 22 06:44:39 2008

Rain (mm)	Period Ending	ARI (years)
21	5 mins ending at 08:47:20 15/02/2008	10-20
24	6 mins ending at 08:47:55 15/02/2008	10-20
38	10 mins ending at 08:49:42 15/02/2008	20-50
70	20 mins ending at 08:28:25 15/02/2008	100
99	30 mins ending at 08:47:20 15/02/2008	> 100
184	60 mins ending at 08:54:56 15/02/2008	> 100
268	2 hours ending at 08:55:41 15/02/2008	> 100
371	3 hours ending at 08:50:02 15/02/2008	> 100
580	6 hours ending at 09:28:40 15/02/2008	> 100
607	12 hours ending at 11:58:51 15/02/2008	> 100
698	24 hours ending at 03:10:36 16/02/2008	> 100
824	48 hours ending at 18:24:31 16/02/2008	> 100
849	72 hours ending at 15:28:32 17/02/2008	> 100



RAINFALL INTENSITY FREQUENCY DURATION ANALYSIS

LOCATION: 533061 GOOSEPONDS ALERT

Analysis of the rainfall for the 285 hours to Fri Feb 22 08:24:28 2008

Rain (mm)	Period Ending	ARI (years)
16	5 mins ending at 08:13:45 15/02/2008	2-5
19	6 mins ending at 08:14:45 15/02/2008	5
31	10 mins ending at 08:13:35 15/02/2008	10-20
62	20 mins ending at 08:19:00 15/02/2008	20-50
89	30 mins ending at 08:24:10 15/02/2008	> 100
157	60 mins ending at 06:21:10 15/02/2008	> 100
255	2 hours ending at 07:14:15 15/02/2008	> 100
396	3 hours ending at 08:20:50 15/02/2008	> 100
572	6 hours ending at 09:15:40 15/02/2008	> 100
601	12 hours ending at 09:43:30 15/02/2008	> 100
677	24 hours ending at 18:23:50 15/02/2008	> 100
752	48 hours ending at 12:51:45 16/02/2008	> 100
772	72 hours ending at 13:09:50 17/02/2008	50-100

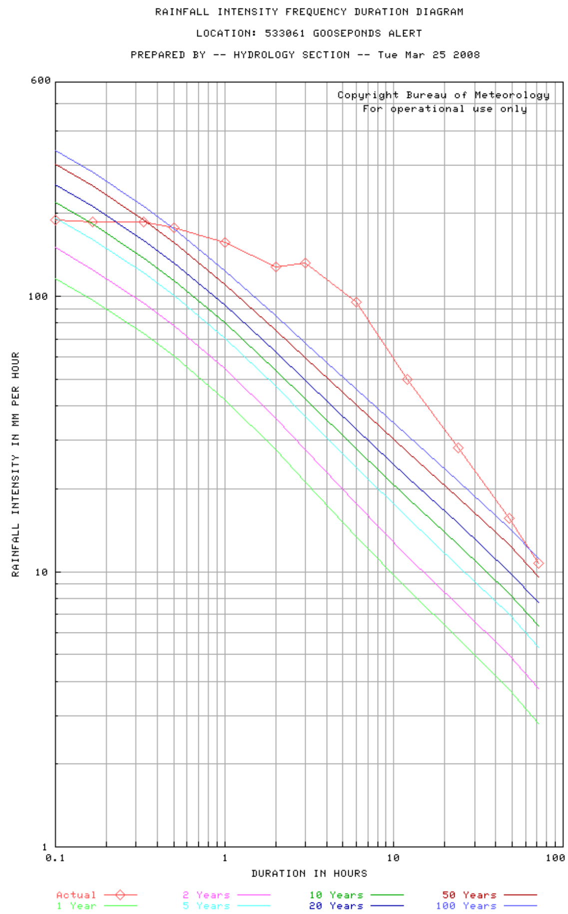
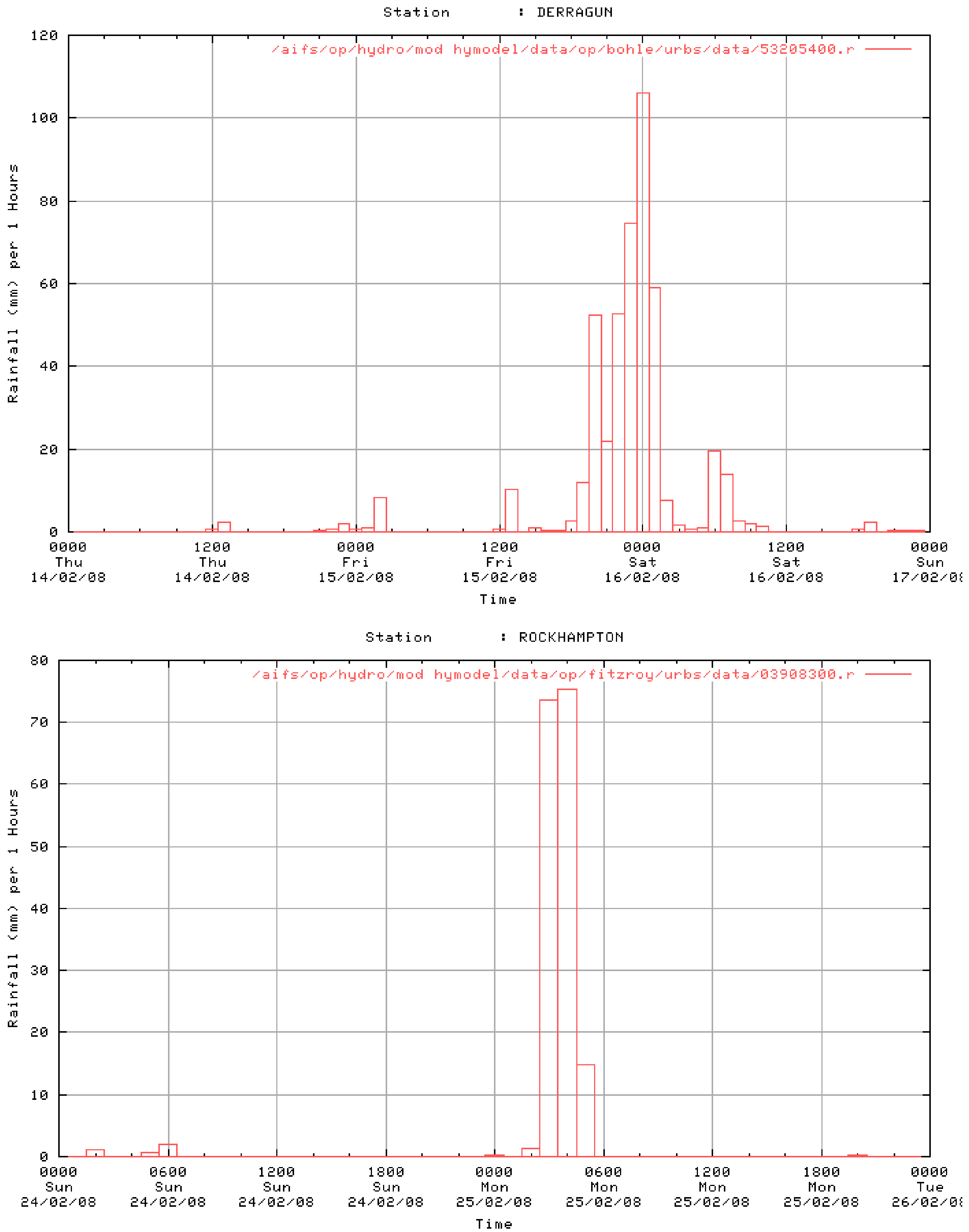


Figure 3.2.7 Hourly Hyetographs for Deeragun (Bohle R) and Rockhampton (Fitzroy R)



Note: Rainfall at Rockhampton is for the flash flood on the 25th Feb and not related to the event that caused the rainfall on the 16th at Derragun.

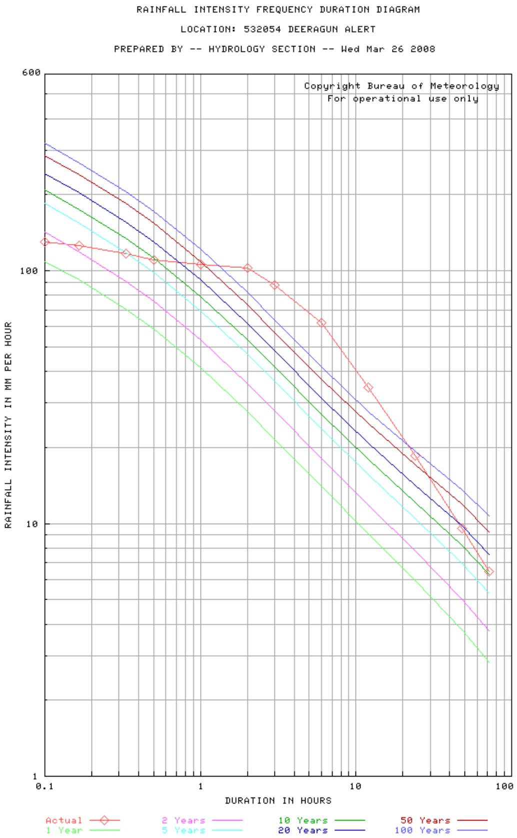
Figure 3.2.8 Intensity Frequency Duration Rainfall Analysis for Deeragun (Bohle R) and Rockhampton (Fitzroy R)

RAINFALL INTENSITY FREQUENCY DURATION ANALYSIS

LOCATION: 532054 DEERAGUN ALERT

Analysis of the rainfall for the 282 hours to Fri Feb 22 08:21:48 2008

Rain (mm)	Period Ending	ARI (years)
11	5 mins ending at 23:54:11 15/02/2008	1-2
13	6 mins ending at 23:22:53 15/02/2008	1-2
21	10 mins ending at 00:21:40 16/02/2008	2-5
39	20 mins ending at 23:23:54 15/02/2008	5
55	30 mins ending at 23:32:38 15/02/2008	5-10
106	60 mins ending at 00:01:22 16/02/2008	20-50
205	2 hours ending at 00:27:48 16/02/2008	> 100
264	3 hours ending at 00:30:10 16/02/2008	> 100
372	6 hours ending at 00:42:20 16/02/2008	> 100
416	12 hours ending at 06:31:34 16/02/2008	> 100
444	24 hours ending at 09:42:25 16/02/2008	50-100
460	48 hours ending at 09:42:13 16/02/2008	10-20
464	72 hours ending at 19:00:56 16/02/2008	10-20

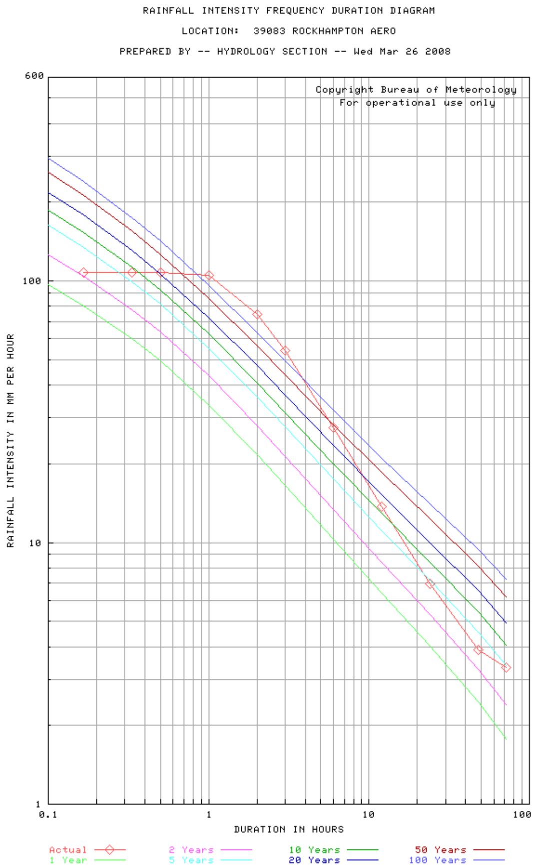


RAINFALL INTENSITY FREQUENCY DURATION ANALYSIS

LOCATION: 39083 ROCKHAMPTON

Analysis of the rainfall for the 408 hours to Tue Feb 26 09:00:00 2008

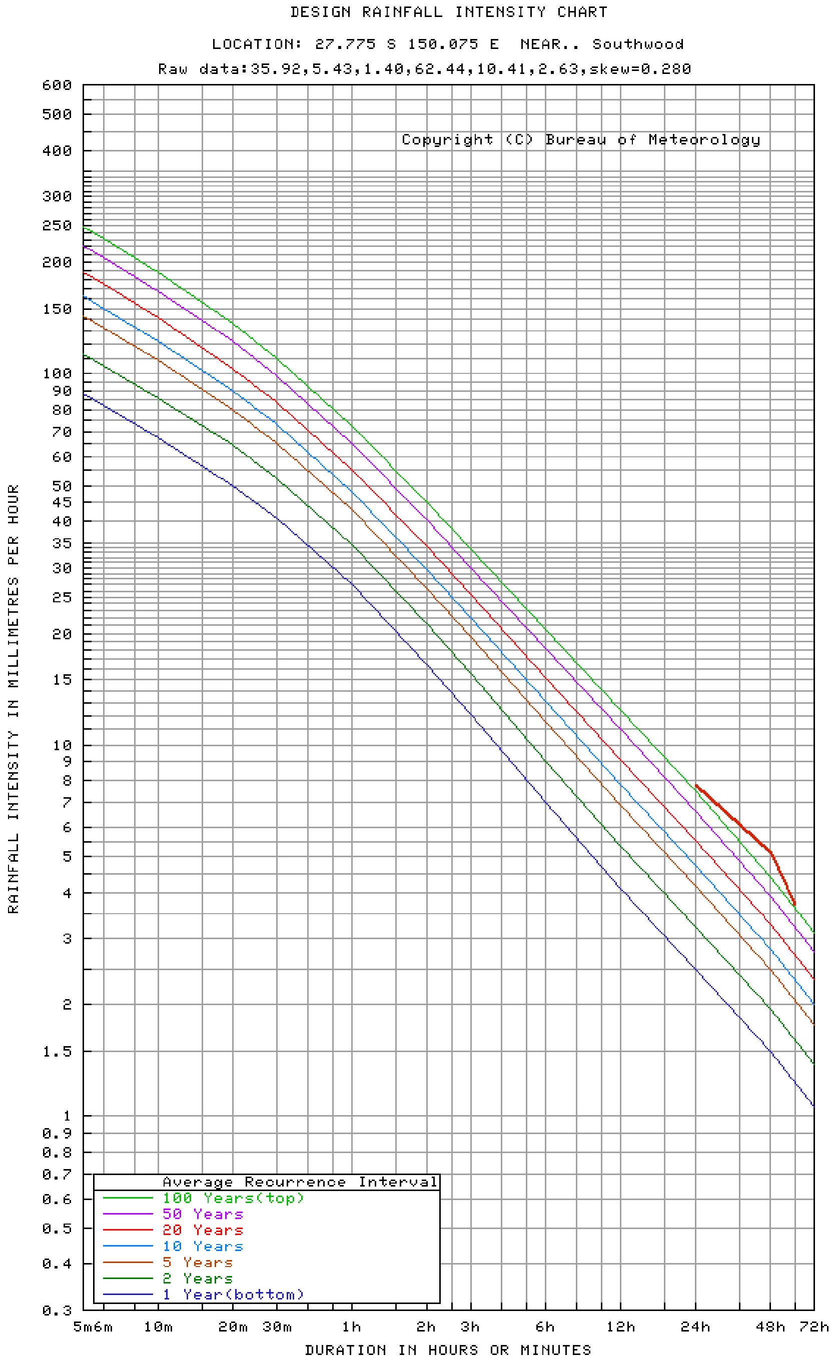
Rain (mm)	Period Ending	ARI (years)
18	10 mins ending at 03:10:00 25/02/2008	2-5
36	20 mins ending at 03:20:00 25/02/2008	5-10
54	30 mins ending at 03:30:00 25/02/2008	20-50
105	60 mins ending at 03:30:00 25/02/2008	> 100
149	2 hours ending at 04:00:00 25/02/2008	> 100
163	3 hours ending at 05:00:00 25/02/2008	> 100
165	6 hours ending at 05:00:00 25/02/2008	20-50
165	12 hours ending at 05:00:00 25/02/2008	10-20
167	24 hours ending at 05:00:00 25/02/2008	2-5
186	48 hours ending at 14:30:00 12/02/2008	2-5
239	72 hours ending at 00:30:00 14/02/2008	2-5



Note: Data in red is interpolated from 30 minute data and should be ignored. Minimum data resolution was 30 minutes.

Figure 3.2.9 Intensity Frequency Duration Rainfall Analysis for Southwood (Moonie R)

RAINFALL INTENSITY FREQUENCY DURATION ANALYSIS LOCATION: 042100 Southwood		
Rain (mm)	Period Ending	ARI (years)
213	24 hours ending at 09:00 04/02/2008	>100
282	48 hours ending at 09:00 05/02/2008	>100
299	72 hours ending at 09:00 06/02/2008	>100



3.3 Rainfall Totals

The abbreviations used in the following tables include :

AL - ALERT Radio Telemetry
TM - Telephone Telemetry
AWS - Automatic Weather Station
SYN - Bureau Synoptic Station

Note: * signifies automatic station.

Table 3.3.1 Rainfall Totals for the South East Coast 2nd-8th February 2008

Station Name	24 hours to 9am							Total
	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	
Nerang								
Natural Bridge		49	109	23	12	11		204
Numinbah AL *	0	30	156	17	11	7	0	221
Upper Springbrook AL *	1	72	171	42	19	9	0	314
Springbrook		58	158	26	11	11		264
Lower Springbrook AL *	0	42	144	23	11	9	0	229
Mt Nimmel AL *	0	45	172	23	6	14	1	261
Bonogin Creek AL *	0	58	70	53	9	25	0	215
Little Nerang Dam AL *	0	38	165	20	6	16	0	245
Numinbah Valley TM *	0	9	169	5	9	7	0	199
Numinbah Valley AL *	0	36	190	16	8	8	1	259
Hinze Dam AL *	0	74	226	22	3	16	0	341
Tallai AL *	0	80	114	20	7	13	0	234
Nerang		117	94	51	10	18		290
Clearview TM *	0	86	67	47	5	27	0	232
Clearview AL *	0	91	83	23	5	25	0	227
Carrara AL *	0	105	25	26	1	50	0	207
Molendinar AL *	0	135	40	18	4	53	0	250
Mudgeeraba AL *	0	56	55	41	4	34	0	190
Boobegan Creek Lock AL *	0	66	41	30	2	44	0	183
Evandale AL *	0	56	25	25	2	36	0	144
Biggera Ck Dam AL *	0	108	19	23	4	41	0	195
Loder Creek AL *	0	52	12	20	2	31	0	117
Southport		79	22	27	5	34		167
Air Sea Rescue AL *	0	36	13	10	0	21	0	80
Gold Coast Seaway AWS *	0	32	15	15	1.4	20	0	83.4
Burleigh Waters AL *	3	53	29	20	2	57	0	164
Miami			92	31	4.4	56		183.4
Tallebudgera Ck Dam AL *	0	69	88	41	5	20	0	223
Tallebudgera Ck Rd AL *	0	84	57	40	7	78	4	270
Coplicks Bridge AL *	0	100	45	31	8	53	4	241
Oyster Creek AL *	0	58	35	23	6	65	1	188
Tomewin AL *	1	74	137	40	6	11	0	269
Tallowood	0.4	93	135	47	7	10		292.4
Coolangatta AWS *	0.6	103	26	9	8.8	26	0	173.4
Murwillumbah SYN	0	78	129	39	7	5	0	258
Numerical Average	**0**	**68**	**89**	**28**	**6**	**27**	**0**	**218**
Maximum	**3**	**135**	**226**	**53**	**19**	**78**	**4**	**341**

Station Name	24 hours to 9am							Total
	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	
Coomera								
Binna Burra AL *	0	28	121	28	16	8	0	201
Tyungun AL *	0	21	90	16	9	15	0	151
Canungra Army AL *	0	53	247	18	7	16	0	341
Beechmont AL *	0	32	137	20	8	9	0	206
Mt Tamborine		56	184	23	6.4	9.8	0.2	279.4
Mt Tamborine AL *	0	54	154	22	6	10	0	246
Clagiraba Road AL *	0	58	142	4	0	2	0	206
Wongawallan AL *	0	45	25	13	2	13	0	98
Oxenford			70	37	4.8	34		145.8
Oxenford Weir AL *	0	73	16	12	6	32	1	140
Coomera			53	11	15	59		138
Monterey Keys AL *	0	62	8	24	8	52	0	154
Coomera Shores AL *	0	53	3	25	7	55	0	143
Numerical Average	**0**	**49**	**96**	**19**	**7**	**24**	**0**	**188**
Maximum	**0**	**73**	**247**	**37**	**16**	**59**	**1**	**341**

Station Name	24 hours to 9am							Total
	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	
Pimpama								
Luscombe AL *	0	41	58	12	6	18	0	135
Hotham Creek AL *	0	33	8	10	2	73	0	126
Stewarts Road AL *	0	29	19	12	3	89	0	152
Norwell AL *	0	24	5	11	3	75	0	118
Kerkin Road AL *	0	27	3	12	1	52	1	96
Steiglitz Wharf AL *	0	23	11	18	0	77	0	129
Numerical Average	**0**	**30**	**17**	**13**	**3**	**64**	**0**	**126**
Maximum	**0**	**41**	**58**	**18**	**6**	**89**	**1**	**152**

Station Name	24 hours to 9am							Total
	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	
Logan-Albert								
Darlington TM *	0	10	39	26	5.2	24	0.2	104.4
Darlington AL *	0	11	39	25	5	24	0	104
Darlington		11	35	26	5.8	20		97.8
O'reillys AL *	1	24	60	29	8	16	0	138
Lumeah AL *	0	13	32	21	3	12	0	81
Benobble AL *	0	42	100	20	7	15	0	184
Laheys Lookout AL *	0	49	153	20	6	7	0	235
Bromfleet AL *	0	23	22	16	3	9	0	73
Bromfleet TM *		4	18		2	7		31
Wolffdene AL *	0	37	53	10	5	25	0	130
Canungra		47	139	21	7	18		232
Forest Home TM *	0	3	11	48	9	3		74
Maroon Dam		2.6	23	40	5.6	20		91.2
Palen Creek AL *	0	0	13	63	19	15	0	110
Rathdowney AL *	0	4	11	37	3	34	0	89
Rathdowney TM *	0	2	11	33	4	26	0	76
Dieckmans Bridge AL *	0	3	9	32	2	36	0	82
Dieckmans Bridge TM *	0	2	10	32	2	35	0	81

Foxley AL *	0	3	28	34	2	36	0	103
Rudds Lane AL *	0	5	21	28	14	16	0	84
Knapps Peak AL *	0	2	21	46	25	27	0	121
Cannon Cove TM *	0	0.2	26	37		24	0	87.2
Kooralbyn AL *	0	10	21	53	5	22	0	111
Round Mountain TM *	0	5	7	33	5	9	0	59
Round Mountain AL *	0	7	9	37	6	12	0	71
Bromelton Weir Hw TM *	0	12	7	36	6	14	0	75
Beaudesert		15	13	26	5.4	15		74.4
Beaudesert AL *	0	12	7	40	8	19	0	86
Wilsons Peak AL *	0	1	57	64	1	15	0	138
Wilsons Peak AL-P *	0	2	60	67	2	13	1	145
Croftby TM *	0	0	47	37	6	2	0	92
Croftby AL *	0	1	51	49	6	39	0	146
Boonah AL *	0	1	24	53	23	22	0	123
The Overflow AL *	0	16	8	75	8	12	0	119
Romani TM *	0	9.6	7	60	11	9.4	0	97
Romani AL *	0	11	7	64	13	11	0	106
Yarrahappini TM *	0	11	5	42	9	9	0	76
Yarrahappini AL *	0	20	5	46	9	10	0	90
Maclean Bridge		14	5	34	4.4	8.2		65.6
Maclean Bridge AL *	0	15	5	37	5	9	0	71
Waterford AL *	0	31	19	18	5	32	4	109
Stretton(Gowan Rd) AL *	0	44	10	24	5	17	0	100
Underwood(Millers Rd) AL *	0	53	20	13	3	96	0	185
Logan City SYN	0.2	25	50	11		126	3.2	215.4
Hillcrest(Wine Glass) AL *	0	33	8	21	6	8	4	80
Slacks Ck(Loganlea Rd AL *	0	54	25	8	3	102	3	195
Carbrook AL *	0	26	61	20	4	143	0	254
Carbrook(Riedel Road) AL *	0	27	38	17	2	132	4	220
Priestdale AL *	0	54	30	17	2	59	3	165
Burbank AL *	0	106	40	20	2	63	2	233
Mt Cotton West AL *	0	29	25	17	4	65	2	142
Rochedale South AL *	0	82	39	15	4	44	0	184
Leslie Harrison Dam AL *	0	151	57	18	3	102	0	331
Numerical Average	**0**	**22**	**31**	**33**	**6**	**30**	**1**	**124**
Maximum	**1**	**151**	**153**	**75**	**25**	**143**	**4**	**331**

Table 3.3.2 Rainfall Totals for the Brisbane River Basin 2nd-8th February 2008

Station Name	24 hours to 9am							Total
	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	
Stanley/Upper Brisbane								
Peachester	2.3	24	70	15	24	5.8	8	149.1
Peachester AL *	2	13	49	23	20	8	6	121
Ferris Knob AL *	3	6	48	18	15	8	8	106
Woodford	4	12	35	35	18	5	11	120
Woodford AL-P *	2	10	26	42	22	7	9	118
Woodford AL-B *	2	6	27	41	23	12	8	119
Lindfield	10	6.2	19	26	48	17		126.2
Mt Kilcoy Weir TM *	1	8	8	30	24	18	7	96
Kilcoy			34	34	32	16	12	128
Kilcoy AL *	1	15	13	30	17	11	21	108
Somerset Dam		5.8	18	27	20	11		81.8
Somerset Dam Hw AL-B *	0	4	18	25	15	9	8	79
Top Of Brisbane AL *	0	6	15	18	14	12	10	75
Blackbutt			22	31	27	6.8	2	88.8
Yarraman			11	20	17	4.2		52.2
Yarraman AL *	0	0	9	18	17	3	0	47
Cooyar Creek TM *	0	7	11	41	29	7	0	95
Cooyar Creek AL *	0	7	9	34	23	6	0	79
Linville TM *		0	11	18	33	8	0	70
Devon Hills AL *	1	1	7	27	48	7	1	92
St Aubyns AL *	0	0	13	45	41	6	1	106
Mt Binga		4.6	6.6	46	63	6.8	0.4	127.4
Nukinenda AL *	0	0	12	36	37	4	0	89
Boat Mountain TM *	0	0	16	30	45	3	0	94
Boat Mountain AL *	0	0	17	29	40	3	1	90
Gregor Ck AL-P *	0	1	5	17	42	2	0	67
Crows Nest		0.4	47	56	13	17	0.6	134
Crows Nest AL *	0	0	7	69	25	16	1	118
Perseverance AL *	0	0	30	56	11	13	1	111
Ravensbourne AL *	0	3	40	40	20	22	0	125
Cressbrook Dam AL *	0	0	40	85	11	10	7	153
Rosentreters Bridge TM *	0	0	10	27	31	6	0	74
Rosentreters Bridge AL *	0	0	9	25	26	5	1	66
Toogoolawah			9	25	13	12		59
Toogoolawah AL *	0	0	9	28	12	11	0	60
Caboonbah AL *	0	1	10	29	37	6	15	98
Esk		2.8	32	39	74	8.4	1.6	157.8
Wivenhoe Dam		2	26	62	31	18	2.6	141.6
Wivenhoe Dam Hw AL-B *	0	2	23	61	31	19	3	139
Wivenhoe Dam Tw TM *	0	1	30	66	25	20	3	145
Wivenhoe Dam Tw AL-P *	0	3	28	63	24	17	2	137
Numerical Average	**1**	**4**	**21**	**36**	**28**	**10**	**4**	**103**
Maximum	**10**	**24**	**70**	**85**	**74**	**22**	**21**	**157.8**

Station Name	24 hours to 9am							Total
	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	
Lower Brisbane								
Toowoomba AL *		4	7					11
Helidon TM *	0	0	8	41	6	21	0	76
Helidon AL *	0	0	7	39	4	17	0	67
Upper Sandy Creek AL *	0	5	12	46				63
Sandy Creek Road AL *	0	0	15	106	4	35	2	162
West Woodbine AL *	0	0	9	34	2	27	0	72
Tenthill TM *	0	0	8	74	3	23	0	108
Tenthill AL *	0	1	9	10	1	20	0	41
Gatton			10	86		18	4.4	118.4
Gatton AL *	0	1	9	60	4	18	0	92
Gatton AWS *	0	0	41	74	6.6	11	1.2	133.8
Mt Castle AL *	0		2		7	4	0	13
Thornton AL *	0	2	27	52	19	19	0	119
Showground Weir AL *	0	0	21	40	4	20	0	85
Glenore Grove AL *	0	0	26	82	34	24	1	167
Mt Tarampa			32	48	40	29		149
Lyons Bridge AL-P *	0	1	54	28	23	23	0	129
Lyons Bridge AL-B *	0	1	61	31	24	26	0	143
O'reilly's Weir TM *	0	0	18	33	18	11	2	82
O'reilly's Weir AL *	0	1	17	44	28	12	3	105
Lowood Pump Stn AL-B *	0	1	16	24	22	14	0	77
Lowood			18	29	32	17	0.6	96.6
Lowood AL-P *	0	1	15	25	16	11	0	68
Fernvale		0.6	30	37	24	21		112.6
Savages Crossing AL *	0	2	30	56	18	21	0	127
Marburg AL *	0	0	11	42	4	21	0	78
Lake Manchester			27	38	10	25		100
Lake Manchester AL *	0	3	26	5	4	12	1	51
Mt Crosby AL *	0	3	18	21	7	19	0	68
Karalee	0.1	1.6	18	57	9.8	24		110.5
Adams Bridge TM *	0	1	47	52	6	2	0	108
Stokes Crossing AL *	0	2	31	46	10	23	0	112
Spressers Bridge AL *	0	11	19	63	5	16	0	114
Grey's Plains Road AL *	0	1	51	43	15	29	0	139
Franklyn Vale AL *	1	1	61	50	5	23	0	141
Kuss Road AL *	0	6	14	62	1	10	0	93
Tallegalla AL *	0	8	13	50	4	17	0	92
Rosewood Wwtp AL *	0	13	13	67	4	18	0	115
Rosewood AL-B *	0	11	13	60	5	19	0	108
Rosewood AL *	0	9	13	53	4	17	0	96
Walloon AL-B *	0	10	14	56	3	22	0	105
Tarome		6	122	95	30	28		281
Tarome AL-P *	0	3	112	82	28	26	0	251
Moogerah Dam			80	53				133
Toohills Crossing TM *	0	20	76	75	15	27	0	213
Kalbar TM *	0	5	55	86	1.4	21	1	169.4
Kalbar Weir AL *	0	5	67	89	1	22	1	185
Harrisville		2.4	29	81	6.8	20		139.2
Harrisville AL *	0	1	34	81	4	18	0	138
Harrisville AL-B *	0	1	38	94	5	21	0	159

Churchbank Weir AL *	0	1	40	82	2	20	0	145
Amberley AL-P *	0	2	14	62	4	18	0	100
Amberley (Dnr) TM *	0	3	17	56	6	21	0	103
Amberley AWS *	0	0.8	24	50	4.6	18	0	97.4
Washpool AL *	0	1	9	77	36	13	1	137
Peak Crossing AL *	0	0	16	79	5	15	0	115
Loamside AL *	0	0	7	57	3	18	0	85
One Mile Bridge AL *	0	1	13	32	34	8	3	91
Brassall(Hancocks Br) AL *	0	13	20	72	6	17	0	128
Moggill AL-P *	0	1	17	31	8	11	0	68
Jindalee AL *	0	9	28	33	7	7	0	84
Brisbane City AL *	0	22	36	10	5	42	0	115
Numerical Average	**0**	**4**	**28**	**54**	**11**	**19**	**0**	**113**
Maximum	**1**	**22**	**122**	**106**	**40**	**42**	**4.4**	**281**

Station Name	24 hours to 9am							Total
	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	
Ipswich/Brisbane Creeks								
Churchill AL *	0	0	16	48	4	14	0	82
Lyons AL *	0	3	10	56	9	9	0	87
Bundamba (Barclay St) AL *	0	1	13	53	5	17	0	89
Bellbird Park AL *	0	8	13	41	8	16	0	86
Opossum AL *	0	6	13	26	7	15	0	67
Carole Park AL *	0	19	16	19	6	8	0	68
Wacol AL *	0	2	30	25	8	10	0	75
Jingle Downs AL *	0	8	18	26	8	8	0	68
Greenbank(Thompson Rd AL *	0	9	8	20	6	10	0	53
Greenbank		17	7	18	5.2	11		58.2
Calamvale AL *	0	46	12	37	4	16	0	115
Archerfield AWS *	0	21	25	23	4.8	10	1.4	85.2
Inala AL *	0	20	21	20	5	10	0	76
Corinda High AL *	0	9	38	20	5	11	0	83
Mt Gravatt AL *	0	69	27	17	4	18	1	136
Greenslopes		69	22	11	5.6	25		132.6
Brisbane Rpa Hospital			67	20				87
East Brisbane AL *	0	41	38	23	4	46	0	152
Brisbane AWS *	0	42	42	11	5.2	42	0	142.2
Eight Mile Plains AL *	0	87	22	13	5	62	0	189
Wishart(Greenwood St) AL *	0	100	24	8	4	25	3	164
Chandler AL *	0	115	47	15	3	91	0	271
Bulimba AL *	0	38	35	14	5	45	0	137
Carindale AL *	0	75	39	13	4	92	0	223
Camp Hill AL *	0	63	26	12	4	66	0	171
Lytton AL *	0	22	13	9	2	37	0	83
Hemmant AL *	0	36	18	13	3	46	0	116
Caltex Lytton	0.5	24	14	12	2.6	37		90.1
Ormiston		31	17	3.2	6.2	47		104.4
Ransome AL *	0	112	60	12	2	69	0	255
Manly		62	11		0.8	47		120.8
Manly AL *	0	34	43	9	1	51	0	138
Wynnum Bowls Club AL *	0	58	30	9	3	41	0	141
Pullenvale AL *	0	12	24	38	9	8	0	91
Kenmore Hills AL *	0	27	19	39	10	7	0	102
Gold Ck Reservoir AL *	0	47	21	24	11	5	0	108

Indooroopilly AL *	0	4	19	17	8	12	0	60
Long Pocket	11	11	31	15	8	10		86
Toowong AL *	0	27	17	23	8	9	0	84
Brisbane (Bcc) AL *	0	21	25	10	4	29	0	89
Three Ways AL *	0	19	24	35	13	5	0	96
Enoggera Dam AL *	0	92	15	33	10	7	0	157
Mt Coot-tha AL *	0	55	23	39	9	7	0	133
Kelvin Grove	0.2	23	25	27	6.4		32/2	111.6
Alderley AL *	0	46	17	25	6	60	0	154
Bowen Hills AL *	0	18	28	10	5	48	0	109
Numerical Average	**0**	**37**	**24**	**22**	**6**	**29**	**0**	**116**
Maximum	**11**	**115**	**67**	**56**	**13**	**92**	**3**	**271**

Table 3.3.3 Rainfall Totals for the Weir and Moonie Rivers 2nd-8th February 2008

Station Name	24 hours to 9am							Total
	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	
Weir								
Dunmore Exchange TM *	0	2.4	17	37	44	19	0.4	119.8
Langley TM *	0	0	54	82	4	16	0	156
O'connor TM *	0	0	63	38	24	15	0	140
Avoca TM *	0	0	47	12	12	11	0	82
Ripple Downs	2.4	18	77	69	5	8		179.4
Ballymena TM *	7	1	74	0.8	5	15	0	102.8
Gunn Bridge (Dnr) TM *	11	0	26	26	0	11	0	74
Wyaga TM *	0	0	0.2	34				34.2
Medpark Bridge TM *	12	0	67	3	30	11	0	123
Bybera TM *	0	0	45	57	14	17	0	133
Kerimbilla TM *	20	0	49	3.2	13	14	0	99.2
Giddi Giddi South TM *	2	0	18	15	6	21	0	62
Hartmann Bridge TM *	32	0	16	40	0	31	0	119
Lundavra TM *	0	2.4	18	17	0	18	0	55.4
Arden Downs TM *	5.8	0	28	44	0.2	7.2	0	85.2
Talwood	28		15			26		69
Evergreen	18		3	46	8.6	4.4		80
Mungindi SYN	10	0	15	21	8	21	0	75
Numerical Average	**8**	**1**	**35**	**32**	**11**	**16**	**0**	**99**
Maximum	**32**	**18**	**77**	**82**	**44**	**31**	**0.4**	**179.4**

Station Name	24 hours to 9am							Total
	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	
Moonie								
The Deep Crossing			5.4	24	2.6	4.4		36.4
Traighli			45	36		14		95
Southwood			213	69		17	0	299
Caithness	3	3	15					21
Mt Driven	23		4	15		4.8		46.8
Nindigully			25	15	4	12		56
Thallon			25	46		21		92
Numerical Average	**13**	**3**	**47**	**34**	**3**	**12**	**0**	**92**
Maximum	**23**	**3**	**213**	**69**	**4**	**21**	**0**	**299**

Table 3.3.4 Rainfall Totals for the Fitzroy and Adjacent Rivers 11-18th February 2008

Station Name	24 hours to 9am – 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Baffle Creek									
Miriam Vale	6.6	55	120	161					343
Captain Creek TM *	4.2	52	61	89	2.6	0	0.8	1.6	211
Makowata	4	30	133	125	3		0.6	0.6	296
Mimdale TM *	1	40	118	108	3	0	0	1	271
Rosedale (1)	12	28	134		87	0.2		0.4	250
Town Of 1770	3	38	23	122	9.6	0	0	0	196
Numerical Average	**4**	**41**	**98**	**115**	**5**	**0**	**0**	**1**	**261**
Maximum	**12**	**55**	**134**	**161**	**9.6**	**0.2**	**0.8**	**1.6**	**343**

1. Rainfall on 11th is 2 day value

Station Name	24 hours to 9am - 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Boyne									
Builyan	1.4	36	72	95	1				205
Nagoorin TM *	4	50	75	93	0				222
Milton TM *	3	56	72	123	0	0	0	0	254
Marlua TM *	4	44	100	77	1	0			226
Benaraby		70		65					135
Gladstone AWS *	4.6	108	64	126	5.8	0	3	0	311
Gladstone AWS *	5.4	100	121	120	6.6	0.4	5	0	358
Numerical Average	**4**	**66**	**84**	**100**	**2**	**0**	**3**	**0**	**245**
Maximum	**5**	**108**	**121**	**126**	**7**	**0**	**5**	**0**	**358**

Station Name	24 hours to 9am – 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Calliope									
Hazeldean		61	39	92					192
Castlehope TM *	4	40	54	104	1		1		204
Mount Larcom (1)	9.2	70		58	5.6	0.5		9.2	153
Numerical Average	**7**	**57**	**47**	**85**	**3**	**1**	**1**	**9**	**183**
Maximum	**9.2**	**70**	**54**	**104**	**6**	**1**	**1**	**9**	**204**

1. Rainfall on 11th is 2 day value

Station Name	24 hours to 9am - 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Dawson									
Cockenzie TM *	42	101	4						147
Westgrove TM *	1	26	2	1.8	1.2	0.2	0	0	32
Boxvale TM *	2	25	2	4	0	0	0	0	33
Waddy Brae TM *	0.6	35	4.2	2.4	1.2	0		0	43
Injune SYN	0.2	34	0.8	8.8	0.8	0	0	0	45
Injune TM *	0	38				0		0	38
Utopia Downs TM *	0	22	9	12	8	0	0	0	51
Wandoan		7		11					18
Windamere TM *	0	5	1	17	2	0	0	0	25
Bungaban TM *	0.6	7.6	3.6	14	9.4	0	0	0	35
The Sandstone		38	2	20	3.4				63
Taroom SYN	0.4	8	3.8	32	4.4	0	0	0	49
Taroom TM *	0	8	4	33	5	0	0	0	50

La Palma TM *			12	16					28
Theodore		10	5.8	8.4					24
Woodleigh TM *	1	28	8	7	0	0	0	0	44
Moura	4.4	30	7	12					53
Bauhinia Downs	2	16	2.8	21	7.4				49
Redcliffe TM *	6	28	3	41	24	0	3	0	105
Roundstone Creek TM *	0	17	2	5	0	0	0	0	24
Bindaree TM *	2	29	4	13	6	0	2	0	56
Banana		23	3	14					40
Baralaba SYN	10	51	8.6	33	10	0.4	2.2	Tr	115
Beckers TM *	1	42	3	49	3	0	3	0	101
Blue Hills TM *	2	22	15	35	1	0	0	0	75
Thangool SYN	38	12	7	26	7	0	1.4	0	91
Red Hill TM *	2	13	9	21	3	0	3	0	51
Kingsborough TM *	1	17	7	51	7	0	1	1	85
Jambin	2.6	16		38	7.5		1.4		66
Goovigen TM *	2	21	6	25	12	0	2	0	68
Upper Dee TM *	26	65	53	82	14	4	7	1	**252**
Mt Morgan (1)	23	48	57	77	6.2				211
Kenbula TM *	10	36	46	66	3	4	7	0	172
Wura TM *	3	32	15	86	3	0	10	0	149
Rannes TM *	1	27	5	29	9		2		73
Duaringa	43	14	39						96
Numerical Average	**7**	**27**	**11**	**28**	**6**	**0**	**2**	**0**	**74**
Maximum	**43**	**101**	**57**	**86**	**24**	**4**	**10**	**1**	**252**

1. Rainfall on 11th is 2 day value

Station Name	24 hours to 9am – 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Mackenzie									
Rewan	10	78	5.8	11	2.6				107
Rewan TM *	13	52	4	11	1	0	0	0	81
Wyseby	5.4	42	10	13	2.2				73
Lake Brown TM *	4	25	18	52	1	0	0	0	100
Rolleston SYN	2.5	14	20	30	Tr	0	Tr	0	67
Katrina Downs TM *	1	12	9	5	0	0	4	0	31
Somerby		10	14	3	3.8				31
Red Rock TM *	1	16	18	14	8	0	2	0	59
Orion	5	20	51	9.2	4.2				89
Helen Downs TM *	3	11	13	2	1	0	0	0	30
Springsure SYN	18	33	24	5	4.6	0.2	1.4	0	86
Springsure TM *	15	32	24	4.8	3.4	0	1	0.2	80
Cowley TM *	3	19	56	7	5	0	12	0	102
Springsure Ck Jnction TM *	1	18	36	9	3		3	0	70
Glenora Road TM *	7	15	41	4	3	1	1	0	72
Comet Weir TM *	1	11	17	7	6	5	4	0	51
Comet	1.4	11	15	7.4	6.2	5	3.6		50
Mt Playfair	51	8							59
Mantuan Downs		37	2	16	13				68
Wharton Creek		16	2	21	15				54
Raymond TM *	8.4	21	2.8	9.6	1.2	0.2	3.2	0.2	47
Penjobe TM *	8	35	8	25	0	1	1.8	0	79
Craigmore TM *	4	20	16	11	2	2	2	0	57
Emerald AWS *	6.4	16	13	14	41	0.6	2	0	93

Emerald TM *	7	17	15	25	29	2.2	1.6	0	97
Peakvale	27	37	28	13	19				124
Clermont SYN	45	24	6	70	13	1.8	11	0	171
Valeria TM *	12	18	28	32	8	9	1		108
Capella	15	17	15	29	20				96
Anakie	4	24	7	6.4	25	30			96
Duckponds TM *	2	11	21	15	3	4	3	0	59
Riley’s Crossing TM *	1	12	7	61	3	2	3	0	89
Blackwater SYN (1)	7	13	14	91	1.3	0.5	2.8	1	131
Moranbah SYN	128	62	7.9	36	67	1.7	0.9	Tr	304
Deverill TM *	35	70	4	60	37	5	3	0	214
Carfax	36	89	2	72	57	5.8	4.8		267
Sarina	74	225	10	18	108	117	56	36	**644**
Carmila TM *	129	231	6	28	105	98	14	21	632
Cardowan	42	127	10	40	86	12			317
Doraville	89	113	16	40	131	27	13	10	439
Blue Mountain (2)				264	117	44	26	22	473
Funnel Creek TM *	24	67	4	41	31	6	1	3	177
Nebo TM *	32	76	7	42	26	14	2	3	202
Braeside TM *	48	93	13	58	38	16	3	1	270
Pink Lagoon TM *	22	54	4	34	33	7	1	0	155
St Lawrence SYN (3)	65	213	195	32	40	14	4.2	0.6	564
St Lawrence AWS *	67	210	13	31	44	16	4	0.6	386
Yatton TM *	14	60	2	50	22	5	8	0	161
Coolmaringa TM *	10	58	15	39	7	0	0	0	129
Numerical Average	**30**	**52**	**19**	**27**	**25**	**12**	**6**	**3**	**162**
Maximum	**129**	**231**	**195**	**91**	**131**	**117**	**56**	**36**	**644**

1. Rainfall on 11th is 2 day value
2. Rainfall on 14th is 5 day value
3. Rainfall on 13th is 2 day value

Station Name	24 hours to 9am - 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Fitzroy									
Riverslea TM *	34	46	13	43	6	1	3	0	146
Marlborough TM *	31	72	12	62	24	1.2	0.8	0.2	203
The Gap TM *	24	79	32	34	12	0	1	0	182
Yaamba	69	136	65	31	9.2		0.6		311
Hedlow Airfield TM *		96	132	79	9.2	0.6	7.4	0.2	324
Samuel Hill AWS *	57	139	64	133	52	46	28	22	**541**
South Yaamba TM *	81	144	52	26	5	0	0	0	308
Stanwell TM *	44	51	40	83	2	0	0	0	220
Glenlands	29	54	46	104					233
Rockhampton AWS *	94	74	46	31	5.2	1	1.6	0.2	253
Rockley	5.4	45	68	29	7	7.6	13		175
Raglan Ck TM *	4	38	36	87	1	0	7	0	173
Byfield	83	130	110	76	50	43	19	13	524
Pacific Heights	92	139	136	37	51	4.6	8.8	1.2	470
Yeppoon AWS *	100	130	152	36	39	3	8.4	0.4	469
Numerical Average	**53**	**92**	**67**	**59**	**19**	**8**	**7**	**3**	**302**
Maximum	**100**	**144**	**152**	**133**	**52**	**46**	**28**	**22**	**541**

Table 3.3.5 Rainfall Totals for the Central Coast Rivers Rivers 11-18th February 2008

Station Name	24 hours to 9am - 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Pioneer									
Septimus TM *	27	92	7	11	134	94	37	6	408
Greenmount AL *	106	158	12	5	494	61	85	20	941
Plevna AL *	23	75	49	26	137	17	24	14	365
Ridgelands AL *	12	84	25	21	82	54	32	26	336
Teemburra Dam Hw TM *	10	121	18	15	185	50	31	7	437
Teemburra Dam AL *	9	119	18	14	186	50	32	5	433
Whiteford's TM *	63	119	13	18	163	17	13	3	409
Whiteford's AL *	71	122	16	18	170	16	12	2	427
Hannaville AL *	73	101	20	27	147	15	9	6	398
Sarich's AL *	29	135	10	9	322	30	29	5	569
Clarke Range AL *	3	99	38	24	98	116	157	144	679
Dalrymple Heights	17	125	21	26	126	66	47	38	466
Eungella AL *	20	125	26	31	124	65	48	41	480
Finch Hatton AL *	7	113	12	15	165	129	75	35	551
Gargett AL *	29	154	8	15	293	117	57	8	681
Dow's Creek AL *	26	163	7	6	265	64	70	12	613
Mirani Weir TM *	28	143	18	7	332	29	34	4	595
Mirani Weir AL *	31	156	22	7	372	33	40	3	664
Mirani	50	150	26	8	356	36	48	5	679
Dumbleton Rocks AL *	39	168	32	9	499	84	75	15	921
Te Kowai SYN (1)	42	188	24	5.8				747	
Hospital Bridge AL *	34	230	14	3	604	149	83	15	**1132**
Mackay AL *	36	167	14	1	610	162	73	9	1072
East Mackay	49	185	10	3	625	136	56	12	1076
Gooseponds AL *	27	227	13	2	615	129	25	3	1041
Bakers Creek AL *	56	220	20	10	389	111	54	17	877
Mount Charlton (2)	18	177		5	102	199		85	
Forbes Road TM *	32	245	31	61	64	90	104	12	639
Mt Roy TM *	6	124	7	1	77	69	58	22	364
Stafford Crossing TM *	35	242	22	28	56	105	120	25	633
Calen TM *	21	202	6	2	23	216	76	8	554
Numerical Average	**33**	**153**	**19**	**14**	**261**	**84**	**55**	**18**	**636**
Maximum	**106**	**245**	**49**	**61**	**625**	**216**	**157**	**144**	**1132**

1. Rainfall on the 11th is 3 day value and 18th is a 4 day value.
2. Rainfall on the 11th and 18th are 2 day values.

Station Name	24 hours to 9am – 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Proserpine									
Hecate	14	245	12	34	73	59		34	471
Crystal Brook	14	121	59	4.2	20	212	183	186	**799**
Proserpine AWS *	63	197			68	195	147	56	726
Lower Gregory TM *	13	66	4	4	26	163	185	198	659
Jocheims TM *	17	218							235
Numerical Average	**24**	**169**	**25**	**14**	**47**	**157**	**172**	**119**	**578**
Maximum	**63**	**245**	**59**	**34**	**73**	**212**	**185**	**198**	**799**

Station Name	24 hours to 9am - 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Don									
Upper Don AL *	17	178	40	6	56	18	35	6	356
Boundary Creek AL *	16	198	12	2	54	24	24	22	352
Emu Creek AL *	19	243	6	44	46	18	29	35	440
Ida Creek AL *	29	221	7	4	53	61	27	27	429
Moss Vale AL *	31	203	8	3	46	12	32	26	361
Mt Dangar AL *	35	138	1	1	45	27	38	40	325
Warden Bend	49				70	21	52	70	262
Roma Peak	27	168	2	2.8	43	77	70	74	**464**
Roma Peak AL *	25	158	2	3	41	76	60	69	434
Reeves AL *	48	120	1	0	94	29	69	72	433
Bowen Pump Station AL *	76	73	2	1	53	15	49	68	337
Bowen SYN (1)	84		53	1		82	65	103	388
Guthalungra TM *	56	108	5	3	23	5	27	19	246
Numerical Average	**39**	**164**	**8**	**6**	**52**	**32**	**44**	**49**	**371**
Maximum	**84**	**243**	**40**	**44**	**94**	**77**	**70**	**103**	**464**

1. Rainfall on the 13th and 16th are 2 day values.

Station Name	24 hours to 9am – 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Burdekin									
Glen Harding (1)	38	3.5		11.0	5	76	37	2	173
Lucky Springs	44	24	4		26				98
Greenvale Township	50	23		3.2	20	30	0.6		127
Blue Range TM *	25	12	3	0	10	50	5		105
Gregory Springs	23	46	15	2	20	17	1.6		125
Wando Vale	18	36	3.6	1	48	60			167
Mt Fullstop TM *	27	13	2	2	8	64	4	0	120
Paluma AL *	65	23	2	5	12	107	16	22	252
Paluma	72	27	2	7	14	116	23	32	293
Paluma Dam AL *	48	25	0	11	14	28	15	17	158
Hillgrove		38	28	6.6	103	50	2	0.2	228
Toomba				0.6	14	53			68
Charters Towers SYN	13	114	0.8	8.2	2.8	92	0.6	Tr	231
Sellheim	23	99			58	81			261
Sellheim AL *	25	80	0	0	54	73	0	0	232
Ravenswood AL *	58	180	0	2	122	23	2	3	390
Ravenswood	50	158		6	101	25	2.2	4.4	347
Alpha	20	26	9	11		1.6			68
Violet Grove TM *	15	26	4	12	0	1	0	0	58
Ulcanbah		23		12	54				89
Winvic	124	26	6	60	13	11			240
Frankfield	25	25	14	65	7	14			150
Mt Douglas		43	5.8	68	59	0	0	0	176
Belyando Crossing TM *	5	36	17	108	57				223
Dooruna Downs		40	4						44
St Anns TM *	7	51	5	43	30				136
St Anns AL *	8	56	7	90	98				259
Eaglefield TM *	0	0	0	65	55	0	4	0	124
Bowen Development Rd TM *	11	37	43	69	59	0	5	0	224
Scartwater AL *	10	63	5	96	21	15	4	0	214

Mount Mcconnell	19	152	13	30	12	5.2			231
Pentland TM *	7	77	26	28	66	115	2	0	321
Pentland	7	101	26	13	46	135			328
Broadleigh Downs		123	22	62	18	96			321
Homestead	14			8.6	107	128			258
Balfes Creek	13	56	17	4.2	19	57			166
Taemas AL *	15	81	17	58	14	38	8	0	231
Taemas		64		101	29	7			201
Taemas TM *	9	72	9	56	13	35	10	0	204
Burdekin Dam	14				21	5	2		42
Burdekin Dam AL *	10	135	3	43	16	3	1	0	211
Turrawalla	13	87	57	39		5.4		4.2	206
Blenheim AL *	15	91	72	82	93	10	4	2	369
Old Racecourse TM *	14	74	31	33	90	22	14	14	292
Eungella Dam AL *	10	88	32	50	80	19	10	4	293
Urannah TM *	16	186	39	48	105	28	28	1	451
Sutherland AL *	9	129	9	41	136	17	42	2	385
The Stonewall AL *	9	129	28	45	98	14	21	1	345
Jacks Creek AL *	8	186	13	31	81	14	11	2	346
Weetalaba AL *	7	123	34	25	29	4	1	0	223
Collinsville SYN	14	159	4	12	131	14	13	4.6	352
Myuna AL *	18	227	3	18	82	10	1	1	360
Red Hill Creek TM *	26	193	3	3	68	5	0	1	299
Dalbeg AL *	40	343	2	1	160	7	1	1	**555**
Upper Bogie AL *	16	217	25	1	53	23	15	15	365
Mt Pleasant AL *	22	231	3	0	39	32	13	16	356
Eton Vale AL *	30	225	1	1	50	13	4	10	334
Strathbogie AL *	46	171	5	0	43	5	7	6	283
Millaroo AL *	52	215	1	0	47	16	5	4	340
Clare	52				48	57	2.4	4.2	164
Clare AL *	47	91	0	1	42	69	9	5	264
Inkerman Bridge AL *	93	46	1	3	20	91	19	11	284
Rita Island AL *	92	52	0	12	11	112	14	18	311
Groper Creek AL *	71	48	1	3	12	42	12	13	202
Home Hill (2)	168	55		3	23			161	
Ayr AWS *	108	53	0	2	27	103	27	20	340
Alva Beach AWS *	165	37	0	12	21	82	34	64	415
Numerical Average	**32**	**90**	**12**	**27**	**47**	**42**	**10**	**7**	**243**
Maximum	**165**	**343**	**72**	**108**	**160**	**135**	**42**	**64**	**555**

1. Rainfall on the 14th is 2 day value
2. Rainfall on the 11th is 3 day value.

Station Name	24 hours to 9am - 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Haughton									
Mingela	43	115			60	74	5.6	5.2	303
Mingela AL *	41	112	0	11	56	68	3	4	295
Upper Reid AL *	46	131	3	1	13	146	9	18	367
Cameron Hill AL *	47	195	2	0	24	84	1	9	362
Four Mile AL *	55	183	12	2	25	90	19	7	393
Mt Piccaninny TM *	97	271	5	1	32	84	3	4	497
Mt Piccaninny AL *	93	261	5	1	30	83	2	3	478
Donnington Airpark AL *	66	128	3	0	40	97	8	11	353
Upper Major Creek AL *	89	137	0	0	44	129	10	36	445

Major Creek AL *	101	184	1	0	35	140	12	4	477
Major Creek TM *	97	185	0	1	35	138	12	1	469
Powerline TM *	64	114	1	0	32	112	37	2	362
Powerline AL *	67	116	1	0	31	114	35	6	370
Giru	97	77			60	139	66	12	451
Giru AL *	95	67	2	0	57	150	46	3	420
Upper Barrattas AL *	72	366	1	2	46	66	2	6	561
Numerical Average	**73**	**165**	**3**	**1**	**39**	**107**	**17**	**8**	**413**
Maximum	**101**	**366**	**12**	**11**	**60**	**150**	**66**	**36**	**561**

Station Name	24 hours to 9am – 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Ross/Bohle									
Alligator Creek AL *	119	53	0	0	36	132	14	1	355
Stuart AL *	146	67	0	0	39	110	8	7	377
Stuart Creek AL *	143	61	1	0	38	97	8	5	353
Calcium AL *	77	262	44	1	24	166	3	2	579
Nettlefield AL *	71	157	23	1	19	177	8	2	458
Woodlands AL *	78	108	3	2	14	106	6	4	321
Brabons AL *	98	103	7	3	19	148	18	2	398
Mcdonalds AL *	73	70	0	1	37	81	4	13	279
Cormacks AL *	104	67	0	1	13	106	5	0	296
Gleesons Mill AL *	95	106	4	1	3	135	14	1	359
Ross River Dam AL *	86	85	4	5	20	114	4	0	318
The Pinnacles AL *	109	86	7	1	5	192	17	2	419
Black Weir (Riverway) AL *	101	68	1	0	30	176	11	2	389
Kirwan AL *	101	60	1	0	22	195	7	1	387
Aplin Weir AL *	103	43	0	1	24	143	5	3	322
Mysterton AL *	132	41	0	0	23	163	4	6	369
Louisa Creek AL *	108	40	0	0	26	182	6	4	366
Mt Margaret AL *	100	70	10	2	6	294	11	3	496
Deeragun AL *	112	58	4	1	16	443	5	2	641
Little Bohle River AL *	103	91	9	4	9	263	6	1	486
Bohle River AL *	112	73	3	2	17	239	7	1	454
Bohle River TM *	96	72	3	3	17	232	7	2	432
Yabulu	120	39	23	3.4	10	310	10	2.8	518
Townsville AWS *	132	35	0	Tr	24	192	5.6	7	396
Nelly Bay AL *	181	46	0	0	12	166	15	18	438
Numerical Average	**108**	**78**	**6**	**1**	**20**	**182**	**8**	**4**	**408**
Maximum	**181**	**262**	**44**	**5**	**39**	**443**	**18**	**18**	**641**

Station Name	24 hours to 9am - 8 days								Total
	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	
Black R to Crystal Ck									
Upper Black River AL *	97	100	2	14	23	251	15	8	510
Black River AL *	113	51	1	1	20	341	6	4	**537**
Black River TM *	93	53	2	1	20	359	5	3	536
Upper Bluewater AL *	101	76	12	7	19	204	19	4	442
Bluewater AL *	129	41	1	2	7	286	6	4	476
Bluewater TM *	126	34	1	3	6	281	7	2	460
Woolshed AWS *	102	143	6.6	12	12	208	6.8	13	503
Paradise Lagoon AL *	81	37	1	18	16	215	11	7	386
Rollingstone	105	31			1	210	15		362
Mutarnee	57	45		22	1	176	28	5	334
Numerical Average	**100**	**61**	**3**	**9**	**13**	**253**	**12**	**6**	**455**
Maximum	**129**	**143**	**12**	**22**	**23**	**359**	**28**	**13**	**537**

3.4 Peak Flood Heights

Figure 3.4.1 Peak Flood Height Map for South East Queensland for February 2008

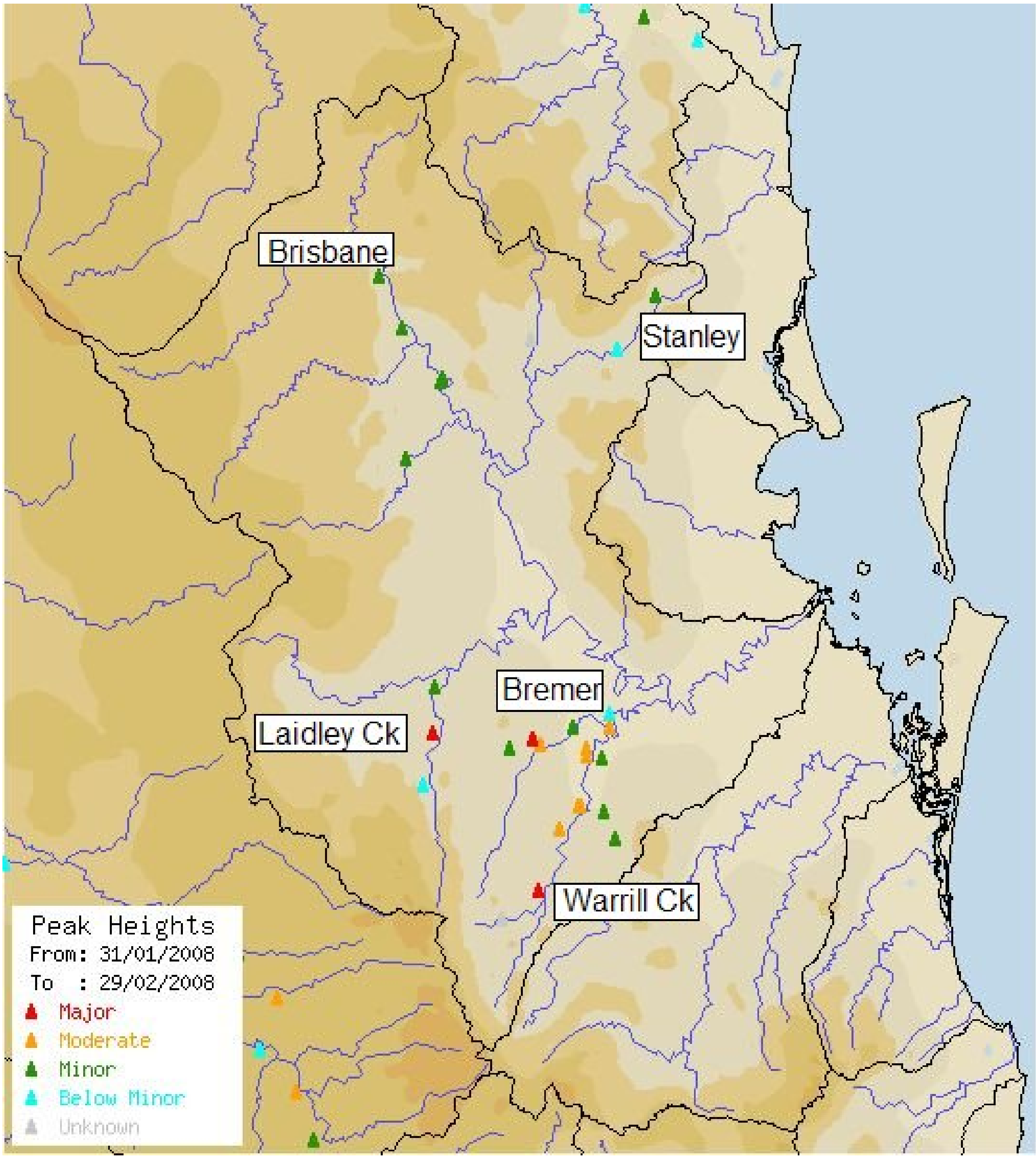


Table 3.4.1 Peak Flood Heights for South East Queensland for February 2008

Station No.	Station Name	Date	Height (metres)	Flood Class
SOUTH COAST				
Nerang R				
540054	LITTLE NERANG DAM ALERT	3/02/2008 19:43	1.72	Minor
40847	HINZE DAM ALERT	4/02/2008 03:56	1.72	Below Minor
540374	HINZE DAM ALERT-B	4/02/2008 08:35	1.82	Below Minor
40416	CLEARVIEW TM	3/02/2008 20:50	4.36	Below Minor
40846	CLEARVIEW ALERT	3/02/2008 20:52	4.4	Below Minor
540254	MUDGEERABA ALERT	3/02/2008 21:17	3.32	Minor
540360	BIGGERA CK DAM ALERT	3/02/2008 11:41	7.55	Unknown
540366	TALLEBUDGERA CK DAM ALERT	3/02/2008 18:33	1.3	Unknown
540355	TALLEBUDGERA CK RD TM	3/02/2008 19:30	3.43	Below Minor
540356	TALLEBUDGERA CK RD AL	3/02/2008 19:07	3.36	Below Minor
Coomera R				
540228	CANUNGRA ARMY TM	3/02/2008 21:10	3.94	Below Minor
BRISBANE				
Stanley R to Somerset Dam				
540046	PEACHESTER WRC TM	4/02/2008 13:40	5.69	Minor
540059	PEACHESTER ALERT	4/02/2008 13:30	5.68	Minor
540337	WOODFORD ALERT-P	5/02/2008 22:40	4.7	Below Minor
540373	MT KILCOY WEIR TM	6/02/2008 01:00	4.74	Unknown
Brisbane R to Wivenhoe				
540040	LINVILLE TM	6/02/2008 23:10	2.91	Minor
540261	LINVILLE ALERT	6/02/2008 22:42	2.89	Minor
540188	DEVON HILLS ALERT	5/02/2008 20:08	3.52	Minor
540188	DEVON HILLS ALERT	7/02/2008 03:02	2.97	Minor
40822	GREGOR CREEK TM	5/02/2008 23:40	4.35	Minor
540139	GREGOR CK ALERT-P	5/02/2008 22:17	4.33	Minor
540140	GREGOR CK ALERT-B	5/02/2008 23:20	4.01	Minor
40823	ROSENTRETERS BRIDGE TM	5/02/2008 21:10	3.41	Minor
540148	ROSENTRETERS BRIDGE AL	5/02/2008 21:08	3.32	Minor
Lockyer Ck to Lyons Br				
40835	MULGOWIE TM	5/02/2008 10:00	4.42	Below Minor
540047	SHOWGROUND WEIR HW TM	7/02/2008 01:30	9.13	Major
540158	SHOWGROUND WEIR ALERT	7/02/2008 01:26	8.92	Major
540050	WARREGO HIGHWAY TM	5/02/2008 23:00	4.59	Minor
Bremer R to Ipswich				
40701	KUSS ROAD	5/02/2008 09:00	7	Moderate
540194	KUSS ROAD ALERT	5/02/2008 08:45	6.75	Minor
540313	ROSEWOOD WWTP ALERT	5/02/2008 11:53	6.6	Major
540388	ROSEWOOD AL-B	5/02/2008 13:28	5.37	Moderate
540193	ROSEWOOD ALERT	5/02/2008 13:17	5.09	Moderate
540196	WALLOON ALERT-B	5/02/2008 18:51	5.46	Minor
540365	TOOHILLS CROSSING TM	5/02/2008 00:40	3.41	Unknown
540151	KALBAR WEIR ALERT	5/02/2008 04:37	4.05	Major
540058	KALBAR WEIR HW TM	5/02/2008 05:00	3.81	Moderate
540057	KALBAR WEIR TW TM	5/02/2008 05:10	8.22	Moderate
40440	KALBAR	5/02/2008 09:00	9.4	Major
540154	HARRISVILLE ALERT	5/02/2008 18:38	4.98	Moderate
540387	HARRISVILLE AL-B	5/02/2008 17:54	4.8	Moderate

540217	CHURCHBANK WEIR TM	5/02/2008 19:00	2.76	Moderate
540316	CHURCHBANK WEIR ALERT	5/02/2008 17:43	2.6	Moderate
540180	AMBERLEY ALERT-P	6/02/2008 00:10	5.9	Moderate
40816	AMBERLEY (DNR) TM	6/02/2008 09:00	6.8	Moderate
540195	WASHPOOL ALERT	6/02/2008 18:20	3.15	Minor
540065	PEAK CROSSING ALERT	6/02/2008 21:24	2.8	Minor
540210	LOAMSIDE TM	4/02/2008 20:20	6.08	Minor
40836	ONE MILE BRIDGE ALERT	5/02/2008 23:41	12.78	Moderate
540250	BRASSALL(HANCOCKS BR) AL	6/02/2008 02:16	7.68	Below Minor
MARY				
Mary R u/s Gympie				
40781	DAGUN POCKET TM	6/02/2008 04:00	6.24	Below Minor
40781	DAGUN POCKET TM	14/02/2008 17:45	5.39	Below Minor
540327	LAKE MACDONALD DRIVE AL	5/02/2008 11:50	3.6	Below Minor
540327	LAKE MACDONALD DRIVE AL	13/02/2008 00:55	3.9	Below Minor
40782	COORAN TM	6/02/2008 06:00	5.76	Below Minor
40782	COORAN TM	13/02/2008 16:37	6.61	Minor
540326	COORAN ALERT	6/02/2008 05:27	5.72	Below Minor
540326	COORAN ALERT	13/02/2008 07:45	6.52	Minor
540215	GYMPIE WEIR TM	6/02/2008 12:15	6.68	Minor
540215	GYMPIE WEIR TM	14/02/2008 18:30	6.67	Minor
40776	GYMPIE TM	6/02/2008 15:00	6.53	Minor
40776	GYMPIE TM	14/02/2008 08:34	6.13	Minor
Mary R d/s Gympie				
40824	FISHERMANS POCKET TM	6/02/2008 17:20	7.69	Minor
40824	FISHERMANS POCKET TM	14/02/2008 18:00	7.75	Minor
40688	MIVA	14/02/2008 12:00	7.5	Minor
40826	MIVA TM	14/02/2008 15:30	7.27	Below Minor
40825	MARODIAN TM	15/02/2008 10:20	6.36	Below Minor
40833	HOME PARK TM	14/02/2008 21:40	7.82	Minor
40203	TIARO	15/02/2008 15:30	6.5	Minor
540039	THE BARRAGE TM	14/02/2008 19:30	5.45	Below Minor
540288	TAGIGAN ROAD TM	13/02/2008 07:00	4.28	Below Minor
40679	BAUPLE EAST TM	15/02/2008 04:30	8.16	Below Minor
40896	TEDDINGTON WEIR HW TM	13/02/2008 05:49	10.08	Minor
540027	TINANA BARRAGE HW TM	12/02/2008 21:30	4.27	Below Minor

Figure 3.4.2 Peak Flood Height Map for the Fitzroy River and adjacent Streams for February 2008

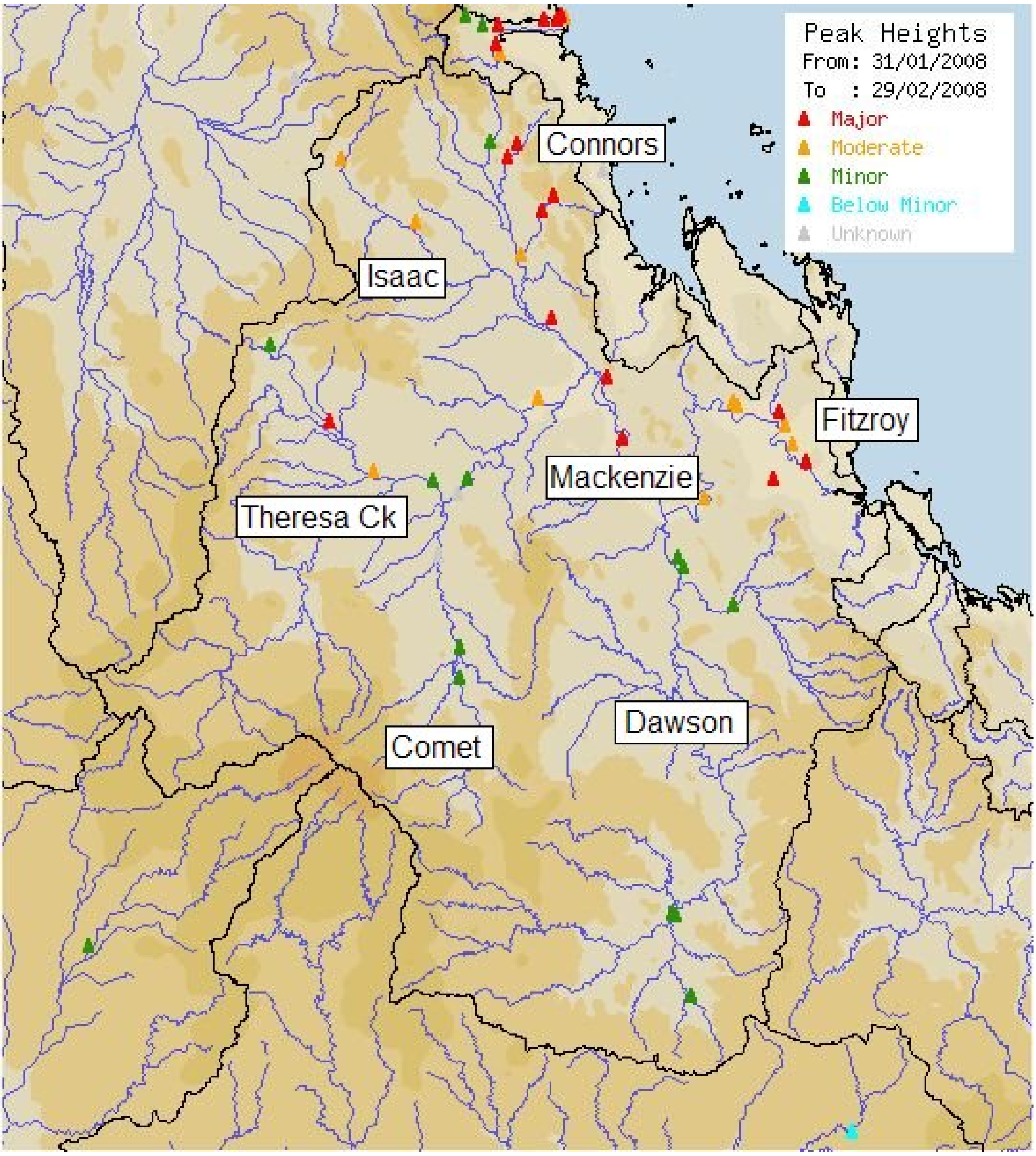


Table 3.4.2 Peak Flood Heights for the Fitzroy River and adjacent Streams for February 2008

Station No.	Station Name	Date	Height (metres)	Flood Class
BURRUM				
Cherwell/Burrum R				
40907	HOWARD ALERT	12/02/2008 18:51	6.36	Minor
40903	PACIFIC HAVEN ALERT	6/02/2008 01:50	3.15	Moderate
40903	PACIFIC HAVEN ALERT	13/02/2008 00:04	3.35	Moderate
BAFFLE				
39267	ESSENDEAN BRIDGE	14/02/2008 09:00	10.8	Unknown
39246	BARNETTS ROAD	14/02/2008 17:00	3	Unknown
FITZROY				
Dawson R				
535013	WINDAMERE TM	5/02/2008 12:50	4.82	Minor
35115	TAROOM	8/02/2008 06:00	3.85	Minor
35282	TAROOM TM	7/02/2008 20:20	3.84	Minor
Don R				
39308	RANNES	14/02/2008 18:00	6	Minor
539057	RANNES TM	14/02/2008 21:20	6.45	Minor
35270	NEWLANDS	20/02/2008 09:00	6.55	Minor
539090	KNEBWORTH TM	16/02/2008 04:15	6.61	Minor
539090	KNEBWORTH TM	20/02/2008 22:00	8.24	Minor
Comet R				
35145	ROLLESTON	13/02/2008 13:00	3.7	Minor
35145	ROLLESTON	14/02/2008 15:00	3.7	Minor
535010	THE LAKE TM	15/02/2008 04:00	10.47	Minor
535056	SPRINGSURE CREEK JUNCTION TM	14/02/2008 12:00	8.68	Unknown
Nogoa R				
535028	CLERMONT TM	14/02/2008 05:50	4.17	Minor
535018	VALERIA TM	15/02/2008 23:50	9.44	Major
535017	GREGORY HIGHWAY TM	17/02/2008 12:00	9.54	Moderate
535020	DUCKPONDS TM	18/02/2008 11:50	9.5	Minor
Mackenzie R				
535046	RILEY'S CROSSING TM	6/02/2008 16:00	9.72	Unknown
535046	RILEY'S CROSSING TM	19/02/2008 01:00	12.83	Unknown
35269	YAKCAM	6/02/2008 15:00	8.8	Below Minor
35269	YAKCAM	19/02/2008 09:00	12.83	Minor
35266	BINGEGANG	18/02/2008 07:45	8.55	Moderate
Connors R				
534006	GOONYELLA TM	12/02/2008 14:30	5.54	Minor
534006	GOONYELLA TM	15/02/2008 11:50	6.72	Moderate
534003	DEVERILL TM	12/02/2008 21:00	8.32	Minor
534003	DEVERILL TM	15/02/2008 20:10	10.89	Moderate
533014	CARMILA TM	12/02/2008 06:10	5.48	Unknown
533014	CARMILA TM	15/02/2008 13:30	3.38	Unknown
533091	MT BRIDGET TM	12/02/2008 12:20	16.77	Major
533091	MT BRIDGET TM	15/02/2008 03:30	10.17	Minor
33083	CARDOWAN	12/02/2008 16:00	15.05	Major
33083	CARDOWAN	15/02/2008 07:00	11	Moderate
34083	WAITARA	12/02/2008 15:00	10.1	Major
34083	WAITARA	16/02/2008 06:00	9.85	Major
534005	FUNNEL CREEK TM	12/02/2008 21:00	9.54	Major

534005	FUNNEL CREEK TM	16/02/2008 03:40	9.54	Major
533030	BRAESIDE TM	12/02/2008 09:40	7.11	Minor
533030	BRAESIDE TM	15/02/2008 15:50	7.46	Minor
534004	PINK LAGOON TM	13/02/2008 15:00	14.05	Moderate
534004	PINK LAGOON TM	17/02/2008 00:50	14.04	Moderate
534004	PINK LAGOON TM	29/02/2008 06:00	9.29	Moderate
534014	YATTON TM	16/02/2008 02:40	16.61	Major
Fitzroy R d/s Riverslea				
34096	TARTRUS TM	17/02/2008 19:00	15.69	Major
535024	COOLMARINGA TM	19/02/2008 00:20	19.88	Major
39044	RIVERSLEA TM	21/02/2008 06:30	21.68	Moderate
33285	THE GAP TM	23/02/2008 09:50	14.93	Moderate
533029	WATTLEBANK TM	23/02/2008 06:30	17.77	Moderate
33076	YAAMBA	15/02/2008 09:00	10.13	Moderate
33076	YAAMBA	23/02/2008 12:00	14.15	Major
33310	SOUTH YAAMBA TM	15/02/2008 05:40	6.66	Below Minor
33310	SOUTH YAAMBA TM	24/02/2008 02:00	10.03	Moderate
39347	LAUREL BANK TM	24/02/2008 12:10	6.28	Moderate
539078	STANWELL TM	11/02/2008 16:50	3.99	Minor
539078	STANWELL TM	12/02/2008 16:50	4.78	Minor
539078	STANWELL TM	13/02/2008 22:00	8.03	Major
539078	STANWELL TM	25/02/2008 09:50	4.18	Minor
39264	ROCKHAMPTON	25/02/2008 06:00	7.75	Major

Figure 3.4.3 Peak Flood Height Map for the Central Coast Streams for February 2008

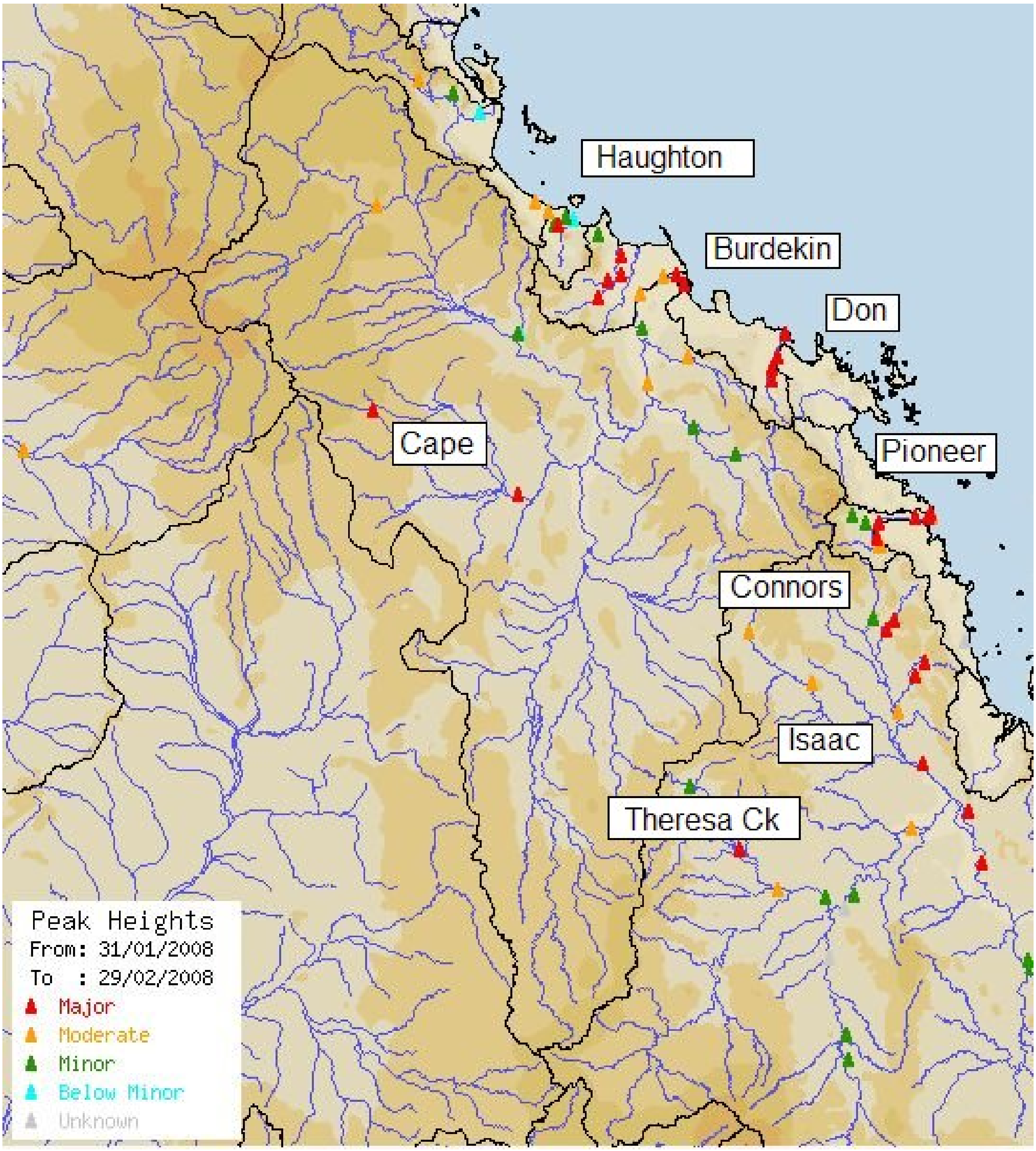


Table 3.4.3 Peak Flood Heights for the Central Coast Streams for February 2008

Station No.	Station Name	Date	Height (metres)	Flood Class
PIONEER				
Pioneer R				
533026	WHITEFORD'S TM	12/02/2008 06:00	5.73	Minor
533026	WHITEFORD'S TM	15/02/2008 08:50	7.4	Moderate
33301	WHITEFORD'S ALERT	12/02/2008 05:30	5.67	Minor
33301	WHITEFORD'S ALERT	15/02/2008 08:45	7.37	Moderate
33282	SARICH'S TM	12/02/2008 05:50	9.11	Moderate
33282	SARICH'S TM	14/02/2008 20:00	8.69	Moderate
33282	SARICH'S TM	15/02/2008 09:00	10.99	Major
33299	SARICH'S ALERT	12/02/2008 05:40	9.1	Moderate
33299	SARICH'S ALERT	14/02/2008 19:50	8.7	Moderate
33299	SARICH'S ALERT	15/02/2008 08:50	11	Major
533092	FINCH HATTON TM	12/02/2008 03:10	3.54	Minor
533092	FINCH HATTON TM	16/02/2008 06:50	3.63	Minor
533092	FINCH HATTON TM	25/02/2008 05:00	2.99	Below Minor
33281	GARGETT TM	12/02/2008 04:50	5.44	Below Minor
33281	GARGETT TM	15/02/2008 07:10	6.94	Minor
33281	GARGETT TM	15/02/2008 17:50	5.46	Below Minor
33304	GARGETT ALERT	12/02/2008 04:35	5.55	Below Minor
33304	GARGETT ALERT	15/02/2008 07:05	7.15	Minor
33304	GARGETT ALERT	15/02/2008 18:13	5.6	Below Minor
533069	MIRANI WEIR HW TM	12/02/2008 06:15	49.64	Minor
533069	MIRANI WEIR HW TM	15/02/2008 09:15	51.36	Major
33277	MIRANI WEIR TM	12/02/2008 06:50	8.32	Minor
33277	MIRANI WEIR TM	15/02/2008 09:10	11.29	Major
33302	MIRANI WEIR ALERT	12/02/2008 06:10	8.32	Minor
33302	MIRANI WEIR ALERT	15/02/2008 09:00	11.27	Major
33283	DUMBLETON ROCKS TM	12/02/2008 08:30	17.91	Minor
33283	DUMBLETON ROCKS TM	15/02/2008 10:20	19.58	Major
533060	HOSPITAL BRIDGE ALERT	12/02/2008 10:11	7.35	Minor
533060	HOSPITAL BRIDGE ALERT	15/02/2008 10:37	9.95	Major
33303	MACKAY ALERT	15/02/2008 11:23	7	Moderate
33303	MACKAY ALERT	17/02/2008 08:22	6.15	Minor
533061	GOOSEPONDS ALERT	15/02/2008 08:28	7.8	Major
DON				
Don R				
33265	IDA CREEK ALERT	12/02/2008 03:50	7.9	Major
33267	MT DANGAR ALERT	12/02/2008 04:45	9.4	Major
33267	MT DANGAR ALERT	16/02/2008 05:30	3.05	Minor
33268	REEVES ALERT	12/02/2008 05:00	9.16	Major
33268	REEVES ALERT	16/02/2008 06:20	3.56	Minor
33264	BOWEN PUMP STATION ALERT	12/02/2008 06:30	6.5	Major
BURDEKIN				
Upper Burdekin R to BFD				
532016	MT FULLSTOP TM	12/02/2008 07:00	9.49	Minor
532016	MT FULLSTOP TM	16/02/2008 10:00	11.92	Moderate
34085	SELLHEIM	16/02/2008 18:30	13.45	Minor
533075	SELLHEIM ALERT	12/02/2008 01:30	7.55	Below Minor
533075	SELLHEIM ALERT	15/02/2008 07:40	7.4	Below Minor

533075	SELLHEIM ALERT	16/02/2008 21:35	14	Moderate
Suttor R to BFD				
534016	EAGLEFIELD TM	13/02/2008 01:40	11.07	Unknown
534016	EAGLEFIELD TM	15/02/2008 13:40	10.75	Unknown
Cape R to BFD				
530003	PENTLAND TM	11/02/2008 22:30	4.77	Minor
530003	PENTLAND TM	16/02/2008 01:00	6.67	Major
534010	TAEMAS ALERT	14/02/2008 13:00	8.09	Major
Lower Burdekin R d/s BFD				
533102	JACKS CREEK TM	15/02/2008 04:50	9.6	Minor
533015	JACKS CREEK ALERT	12/02/2008 11:20	14.3	Minor
33292	MYUNA ALERT	15/02/2008 12:00	5.01	Minor
33291	DALBEG ALERT	12/02/2008 05:05	18.85	Moderate
33291	DALBEG ALERT	15/02/2008 19:00	15.25	Moderate
33289	STRATHBOGIE ALERT	12/02/2008 05:00	11.41	Moderate
33287	MILLAROO ALERT	12/02/2008 07:45	17	Major
33287	MILLAROO ALERT	15/02/2008 13:13	12.7	Minor
33286	CLARE ALERT	12/02/2008 08:44	16.44	Moderate
33286	CLARE ALERT	15/02/2008 13:50	12.44	Minor
33288	INKERMAN BRIDGE ALERT	12/02/2008 10:29	11.8	Moderate
33288	INKERMAN BRIDGE ALERT	15/02/2008 17:35	9.4	Minor
533057	RITA ISLAND ALERT	12/02/2008 08:59	3.7	Major
533057	RITA ISLAND ALERT	15/02/2008 23:40	2.3	Moderate
533049	GROPER CREEK ALERT	12/02/2008 11:40	4.54	Major
533049	GROPER CREEK ALERT	15/02/2008 20:35	3.64	Moderate
HAUGHTON				
Haughton R				
533027	MT PICCANINNY TM	11/02/2008 21:30	10.52	Major
533027	MT PICCANINNY TM	16/02/2008 04:15	5.95	Major
533055	MT PICCANINNY ALERT	11/02/2008 21:17	10.51	Major
533055	MT PICCANINNY ALERT	16/02/2008 04:00	5.96	Major
533072	MAJOR CREEK ALERT	12/02/2008 04:40	11.32	Major
533072	MAJOR CREEK ALERT	16/02/2008 12:43	9.02	Moderate
533016	MAJOR CREEK TM	12/02/2008 05:20	11.39	Major
533016	MAJOR CREEK TM	16/02/2008 13:30	9.08	Moderate
533056	POWERLINE ALERT	12/02/2008 00:40	12.12	Major
533056	POWERLINE ALERT	16/02/2008 08:08	7.92	Moderate
33253	GIRU	11/02/2008 23:59	3.03	Major
33253	GIRU	16/02/2008 09:30	2.79	Major
ROSS				
Ross R				
532034	ALLIGATOR CREEK ALERT	11/02/2008 17:35	5.15	Minor
532037	MYSTERTON ALERT	11/02/2008 08:36	3.07	Below Minor
532032	LOUISA CREEK ALERT	11/02/2008 05:36	5.18	Minor
532032	LOUISA CREEK ALERT	15/02/2008 22:15	5.73	Minor
532044	LITTLE BOHLE RIVER ALERT	11/02/2008 14:35	3.01	Minor
532043	BOHLE RIVER ALERT	11/02/2008 19:03	6.54	Moderate
532043	BOHLE RIVER ALERT	16/02/2008 02:10	7.54	Major
BLACK				
Black River				
532046	BLACK RIVER ALERT	16/02/2008 02:25	6.86	Moderate
532048	BLUEWATER ALERT	16/02/2008 02:00	7.1	Moderate
HERBERT				
Herbert R d/s Glen Eagle				

32170	NASH'S CROSSING ALERT	17/02/2008 07:55	6.35	Moderate
32091	ELPHINSTONE PKT	17/02/2008 15:00	8.3	Minor
32091	ELPHINSTONE PKT	19/02/2008 09:00	8.5	Minor
32094	GAIRLOCH	19/02/2008 09:00	7.6	Below Minor
BARRON				
Barron R				
531033	MAREEBA ALERT	17/02/2008 00:45	4.93	Below Minor
531036	BILWON ALERT	17/02/2008 06:30	6.58	Minor
531037	BOLTON ROAD ALERT	17/02/2008 22:20	4.23	Minor

Figure 3.4.4 Peak Flood Height Map for the Border Rivers for February 2008

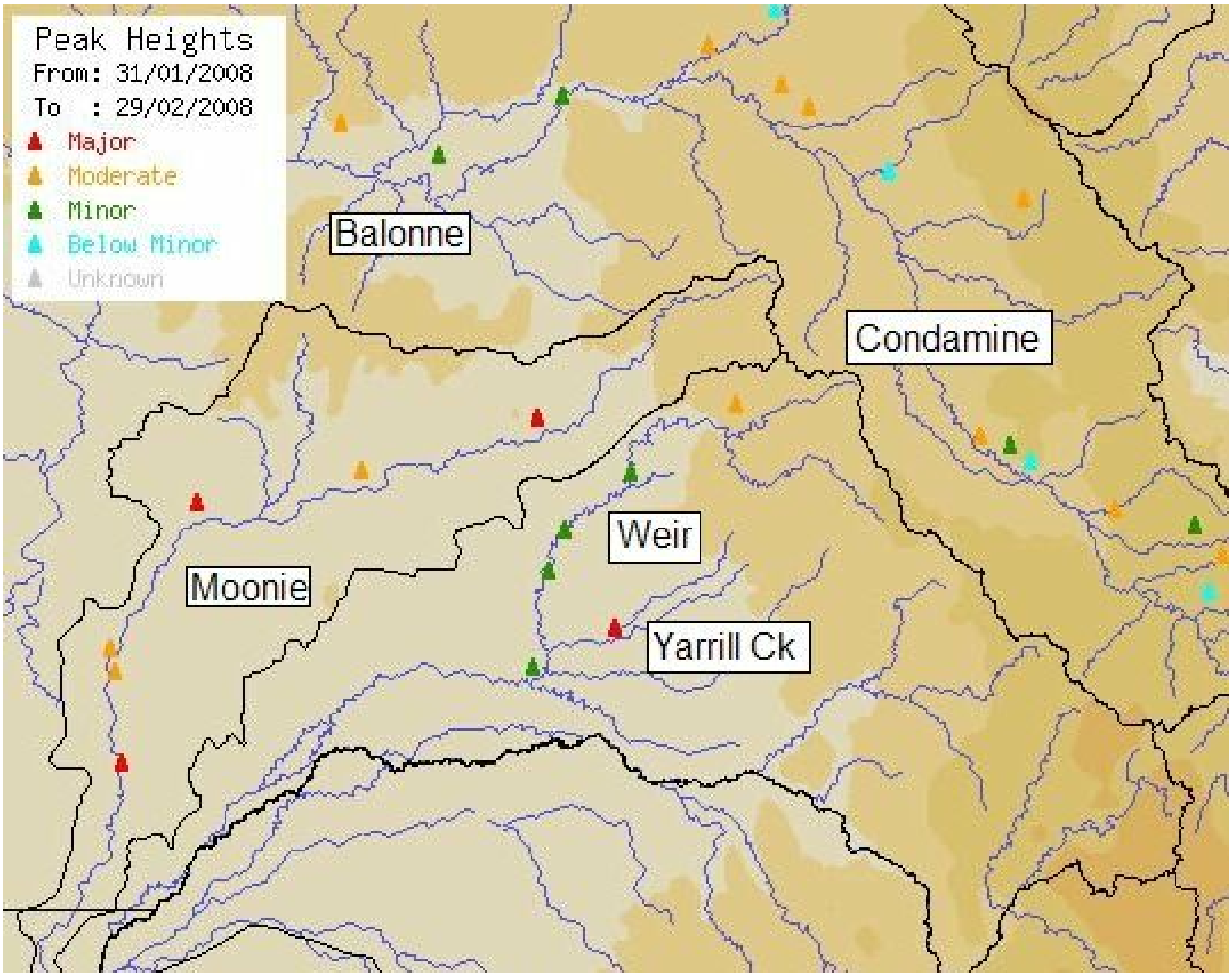


Table 3.4.4 Peak Flood Heights for the Border and Gulf Rivers for February 2008

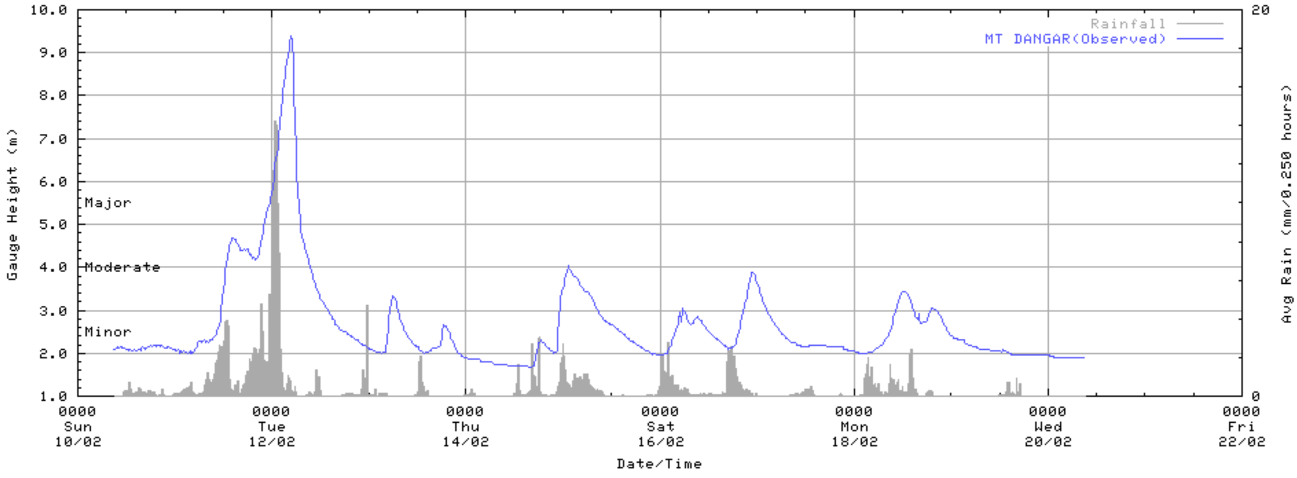
Station No.	Station Name	Date	Height (metres)	Flood Class
CONDAMINE-BALONNE				
Condamine R u/s Warwick				
41535	ELBOW VALLEY ALERT	7/02/2008 08:13	3.13	Minor
41536	MURRAYS BRIDGE ALERT	6/02/2008 22:45	6.1	Moderate
41534	WARWICK ALERT	7/02/2008 04:30	4.69	Below Minor
Condamine R..Warwick to Loudoun Br				
41531	GLENGALLAN CREEK ALERT	7/02/2008 00:30	4.5	Moderate
541038	TALGAI WEIR TW TM	7/02/2008 22:20	5.12	Moderate
41345	ALLORA	7/02/2008 00:20	4.2	Minor
41499	TUMMAVILLE TM	9/02/2008 10:45	4.93	Below Minor
541040	YARRAMALONG TM	9/02/2008 13:00	3.57	Minor
41472	CENTENARY BRIDGE	9/02/2008 18:30	6.05	Moderate
Myall Ck				
541043	CLYDESDALE ALERT	7/02/2008 06:14	3.33	Moderate
Condamine..Ranges-Cotswold				
41346	RANGES BRIDGE	8/02/2008 17:00	4.6	Below Minor
41486	WARRA-KOGAN RD BR	5/02/2008 18:00	8.42	Moderate
41490	BRIGALOW BRIDGE TM	7/02/2008 11:10	9.89	Moderate
41517	CHINCHILLA WEIR TM	8/02/2008 08:50	9.03	Moderate
41020	SEVEN OAKS TM	6/02/2008 00:00	3.58	Below Minor
42048	CONDAMINE	10/02/2008 14:50	6.5	Minor
42098	COTSWOLD TM	11/02/2008 12:40	8.74	Minor
42098	COTSWOLD TM	12/02/2008 14:00	8.71	Minor
Balonne R..Cotswold-Beardmore				
43052	WARKON	13/02/2008 14:00	8.77	Moderate
43063	SURAT	16/02/2008 09:00	7.5	Moderate
543005	SURAT TM	15/02/2008 23:00	7.4	Moderate
BORDER RIVERS				
Weir R				
41508	O'CONNOR TM	5/02/2008 17:10	8.98	Moderate
41485	RETREAT BRIDGE TM	7/02/2008 03:30	7.61	Minor
41488	BALLYMENA TM	8/02/2008 04:20	6.98	Minor
542004	GUNN BRIDGE (DNR) TM	8/02/2008 21:30	5.84	Minor
41489	MEDPARK BRIDGE TM	6/02/2008 17:50	5.43	Major
41112	GIDDI GIDDI SOUTH TM	11/02/2008 02:00	4.97	Minor
MOONIE				
Moonie R				
42100	SOUTHWOOD	5/02/2008 01:00	6.25	Major
42053	FLINTON	6/02/2008 06:00	4.86	Moderate
42103	MT DRIVEN	8/02/2008 09:00	6.59	Major
44194	NINDIGULLY	10/02/2008 18:00	3.55	Moderate
42105	NINDIGULLY TM	11/02/2008 08:00	5.44	Moderate
42076	THALLON	12/02/2008 16:45	5.25	Major
WARREGO				
Warrego R u/s Charleville				
544011	AUGATHELLA TM	9/02/2008 04:10	4.19	Minor
Warrego R d/s Charleville				
544019	CUNNAMULLA WEIR TM	9/02/2008 20:00	6.18	Minor

44210	ROCKY	6/02/2008 15:00	3.63	Minor
44210	ROCKY	17/02/2008 09:30	2.71	Minor
44210	ROCKY	24/02/2008 09:00	2.44	Below Minor
548003	BARRINGUN NO 2 (TM)	10/02/2008 13:45	3.36	Minor
PAROO				
Paroo R				
544015	CAIWARRO TM	9/02/2008 20:00	2.81	Moderate
44181	HUNGERFORD	12/02/2008 15:30	1.67	Moderate
COOPER CREEK				
Cooper Ck				
45005	DURHAM DOWNS	4/02/2008 09:00	2.15	Minor
FLINDERS				
Flinders R				
30045	RICHMOND	15/02/2008 21:00	6.45	Moderate
30045	RICHMOND	17/02/2008 21:00	6	Moderate
MITCHELL				
29038	KOWANYAMA AP	17/02/2008 08:00	3.95	Moderate
29038	KOWANYAMA AP	26/02/2008 08:00	4.4	Major

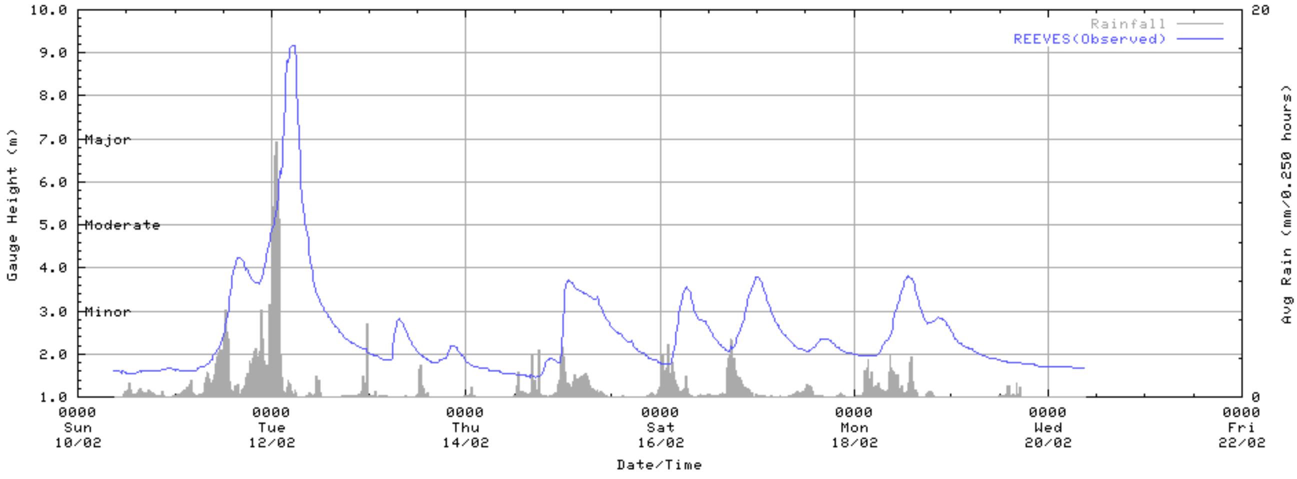
3.5 Flood Hydrographs

Figure 3.5.1 River Heights - Don River

Don River at Mt Dangar



Don River at Reeves



Don River at Bowen Pump Station

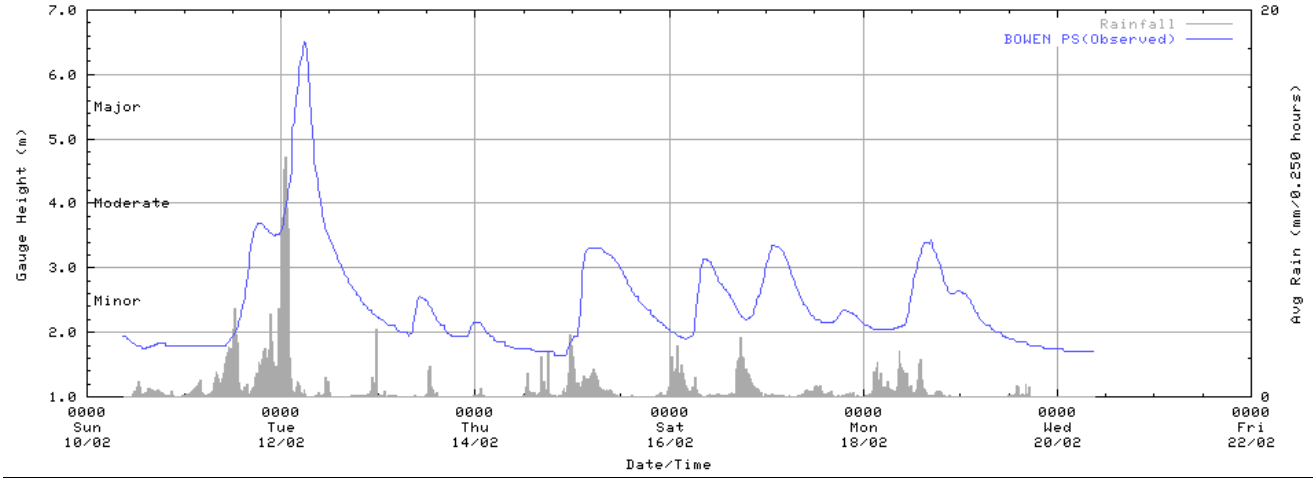
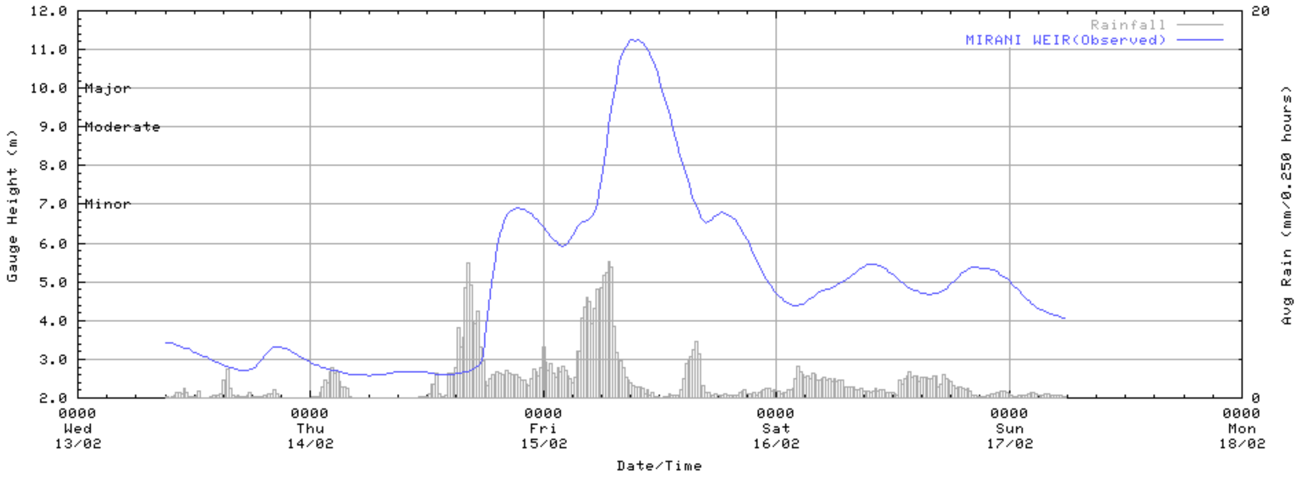
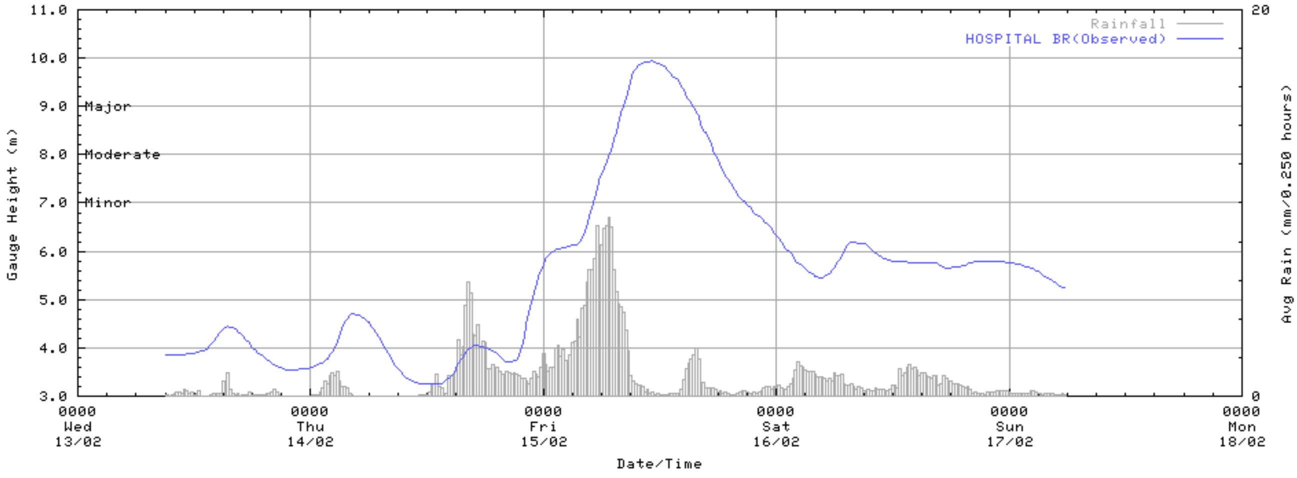


Figure 3.5.2 River Heights - Pioneer River

Pioneer River at Mirani Weir



Pioneer River at Hospital Bridge



Pioneer River at Mackay (Forgan Smith Bridge)

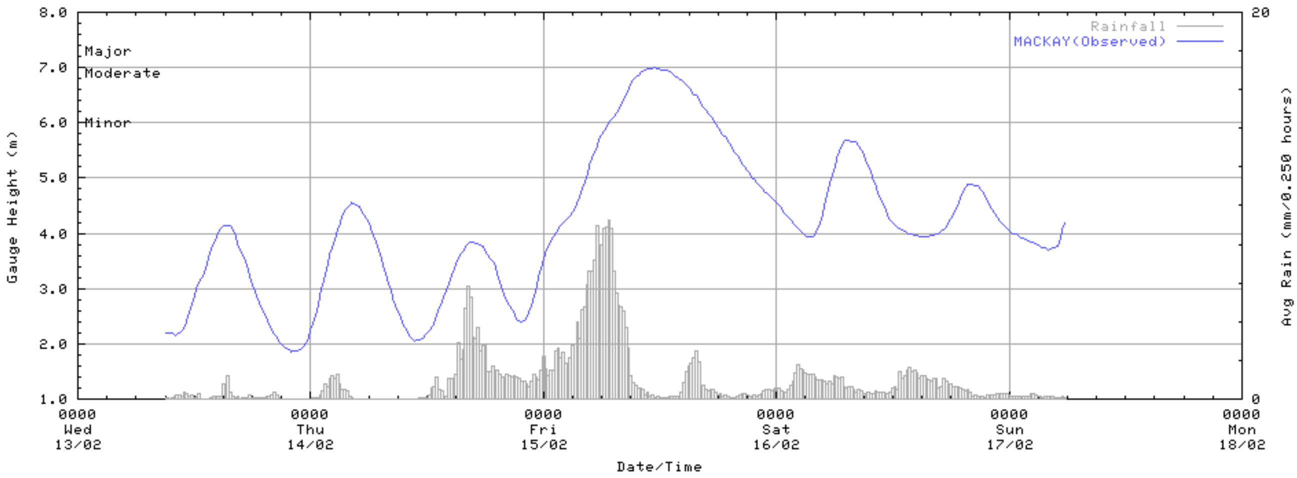
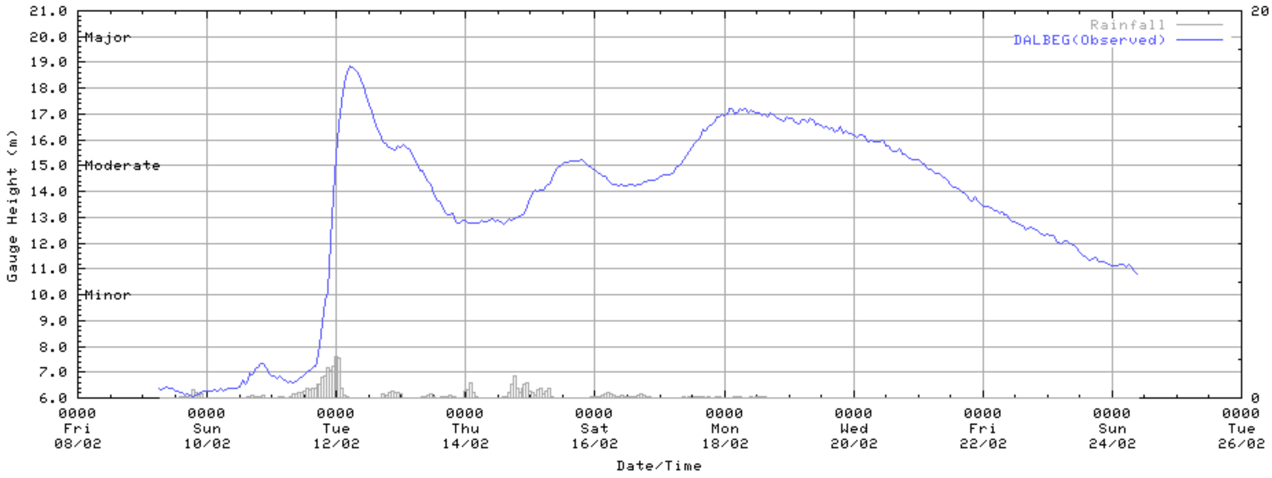
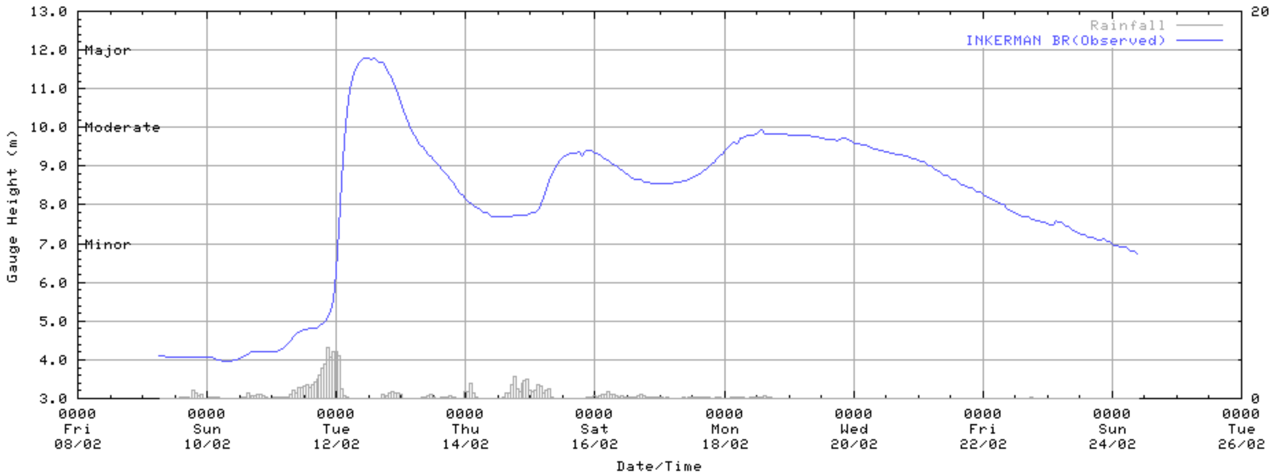


Figure 3.5.3 River Heights - Burdekin River

Burdekin River at Dalbeg



Burdekin River at Inkerman Bridge



Burdekin River at Groper Creek

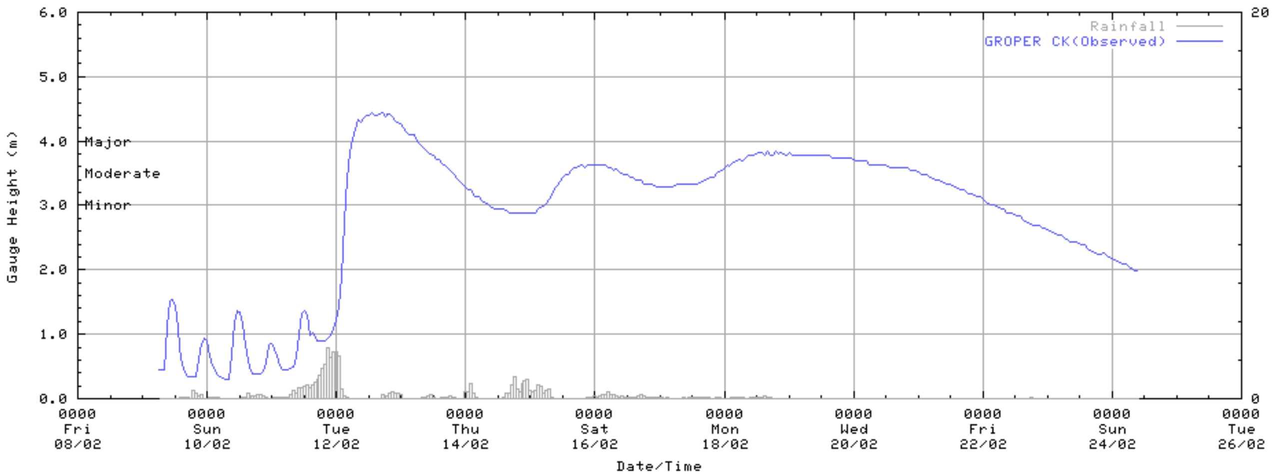
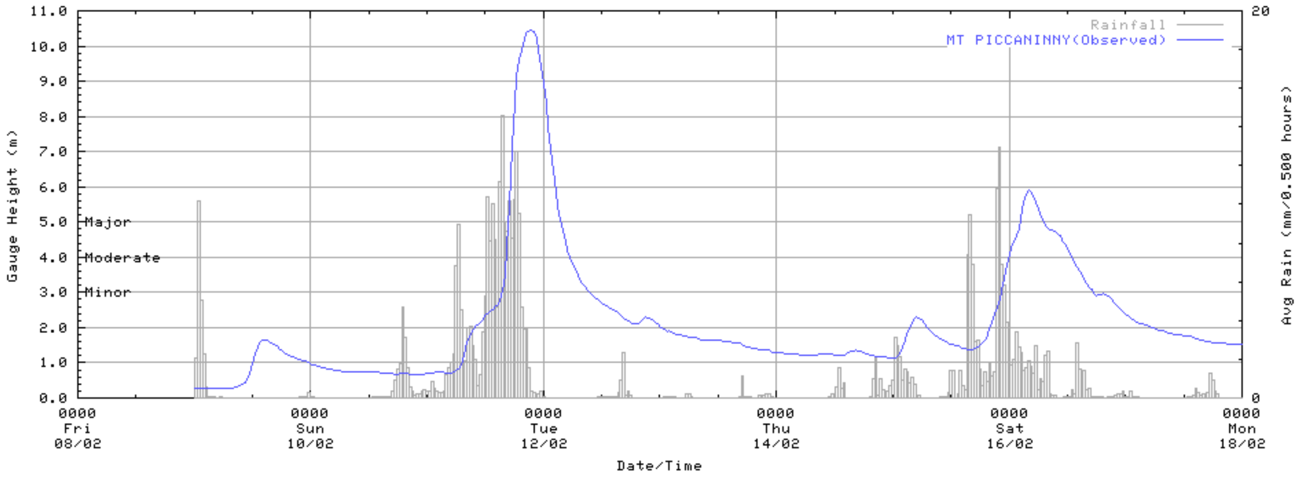
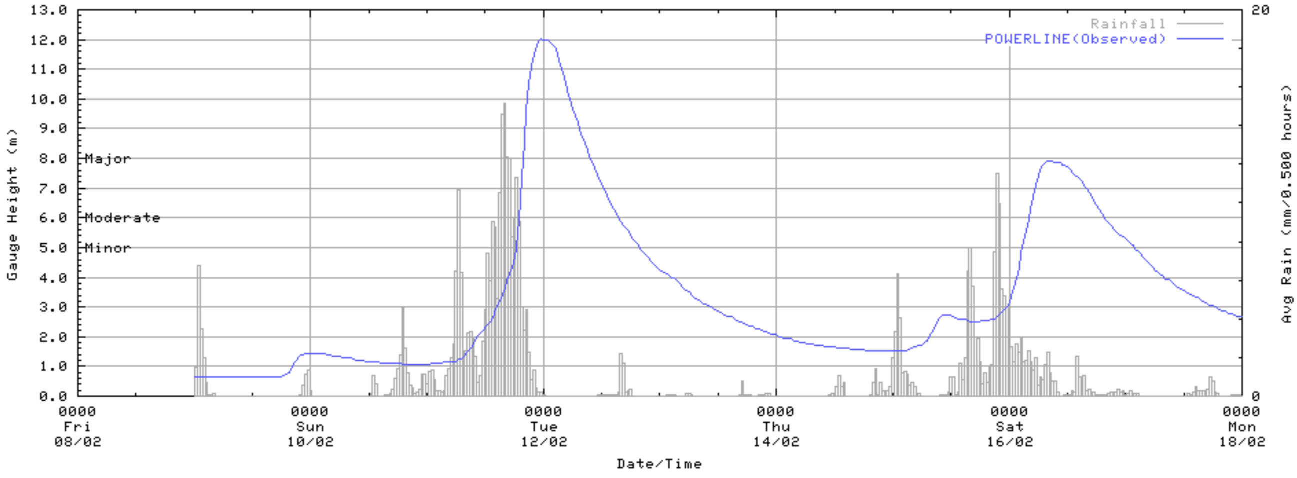


Figure 3.5.4 River Heights - Haughton River

Haughton River at Mt Piccaninny



Haughton River at Mt Powerline



Haughton River at Giru

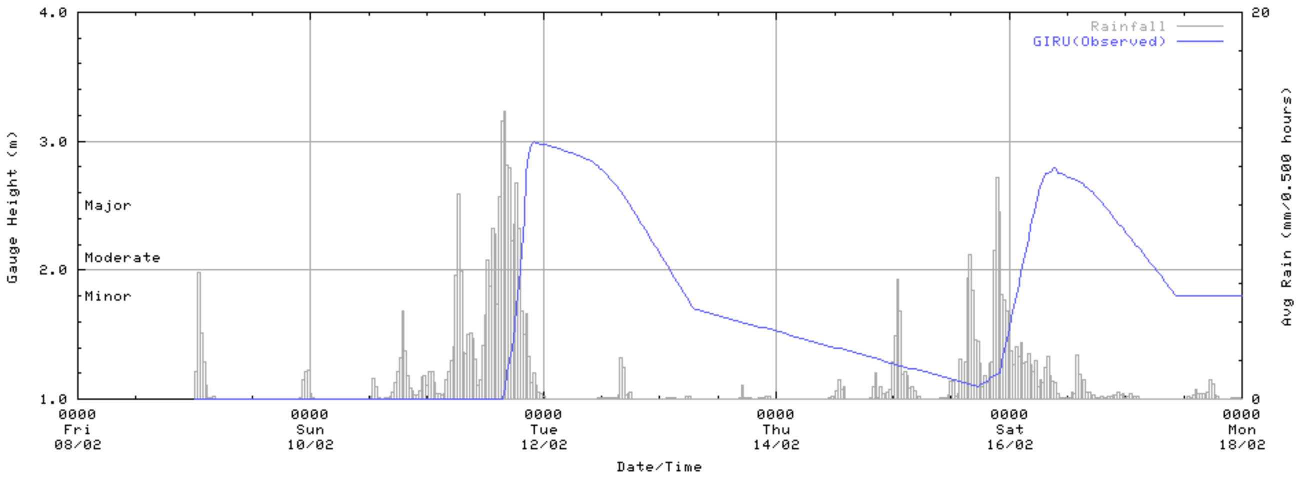
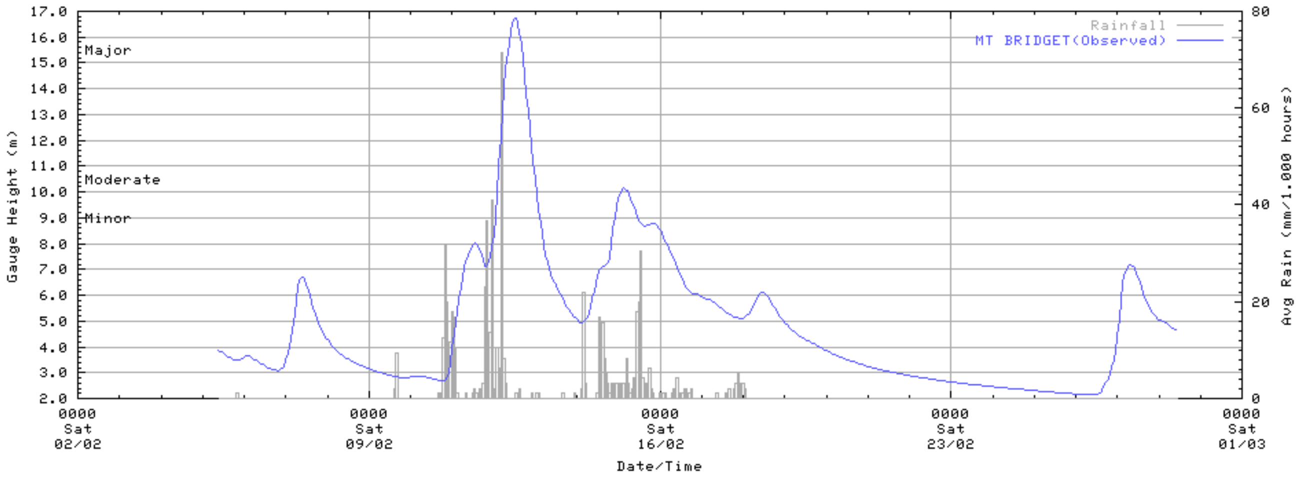
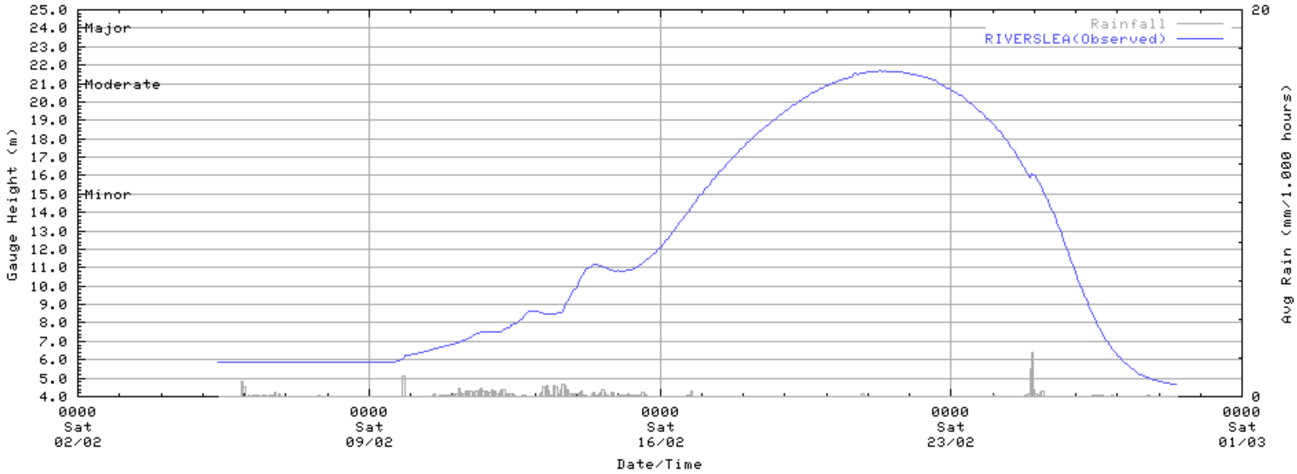


Figure 3.5.5 River Heights - Fitzroy River

Connors River at Mt Bridget



Fitzroy River at Riverslea



Fitzroy River at Rockhampton

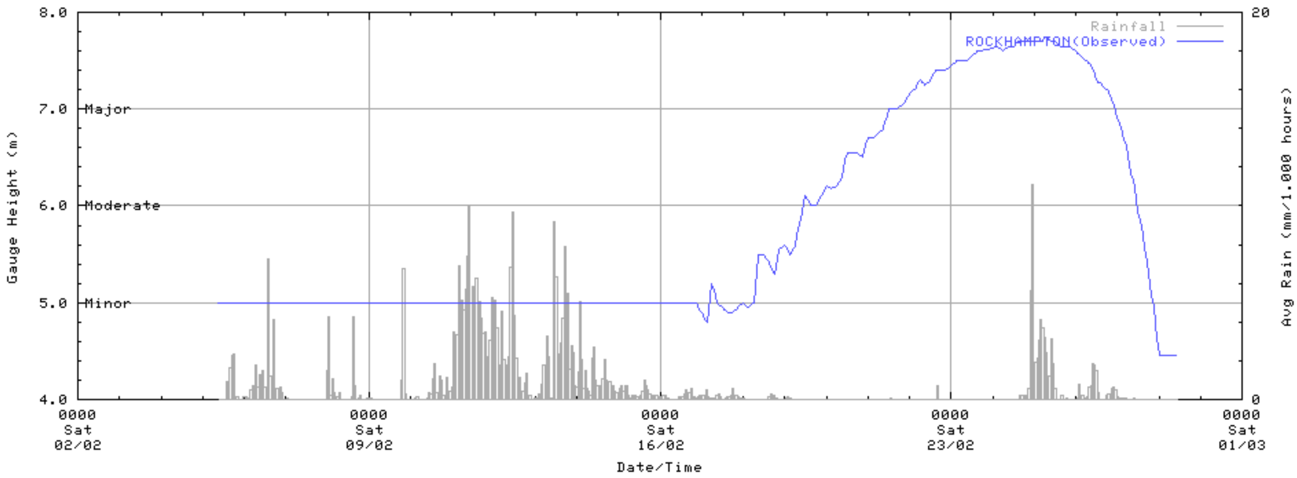
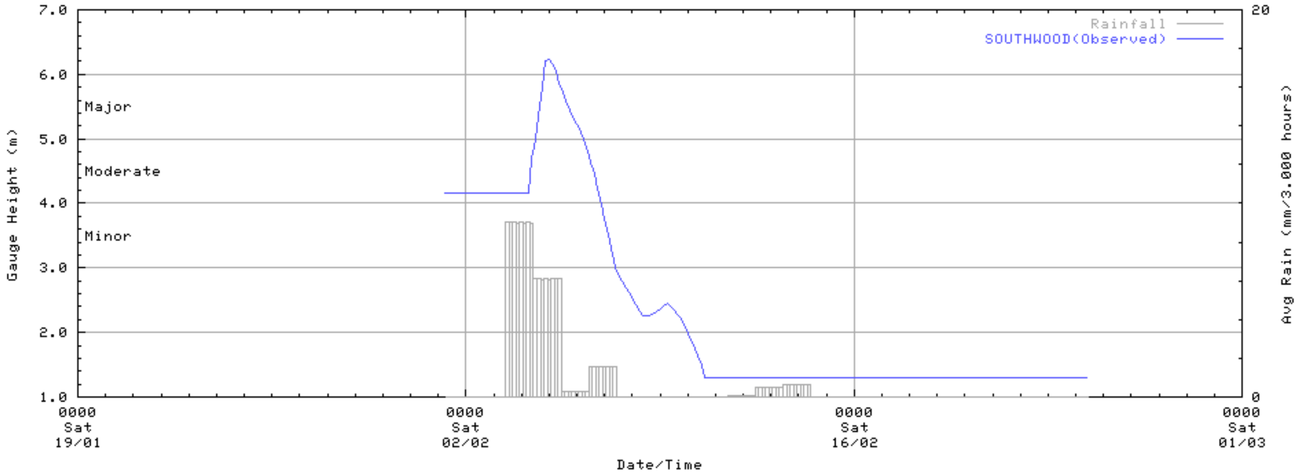
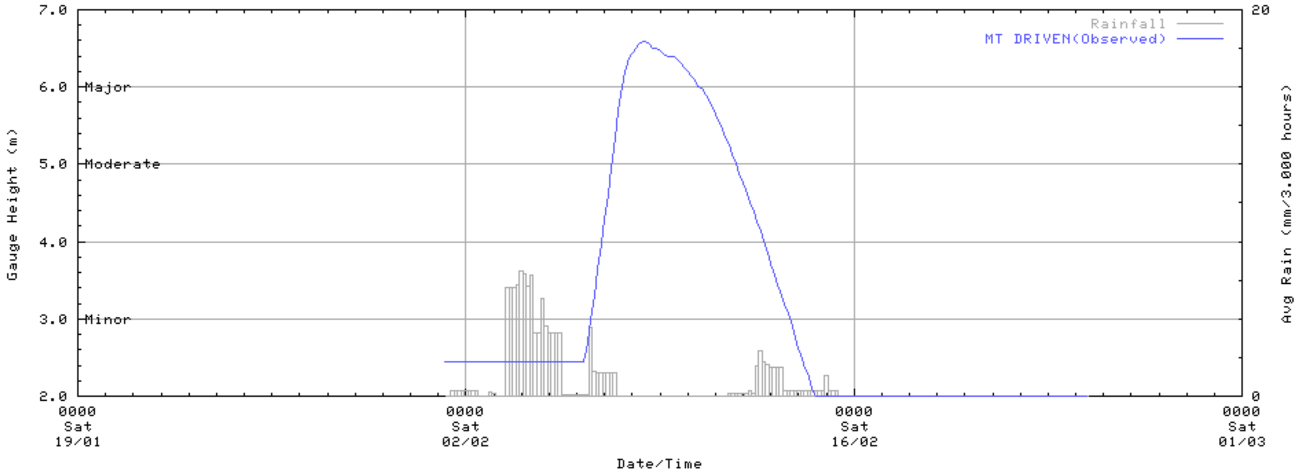


Figure 3.5.6 River Heights - Moonie River

Moonie River at Southwood



Moonie River at Mt Driven



Moonie River at Nindigully

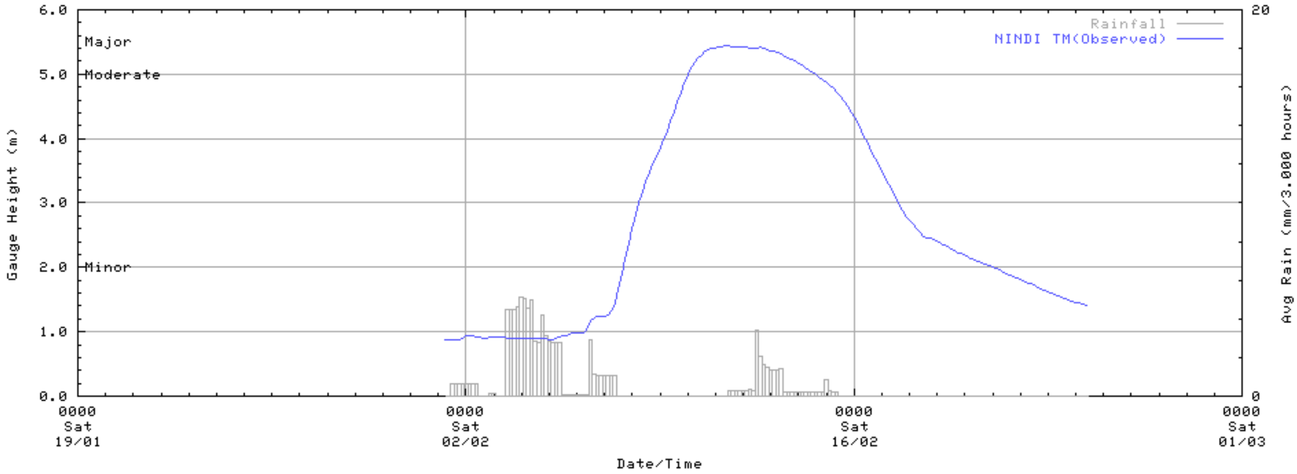
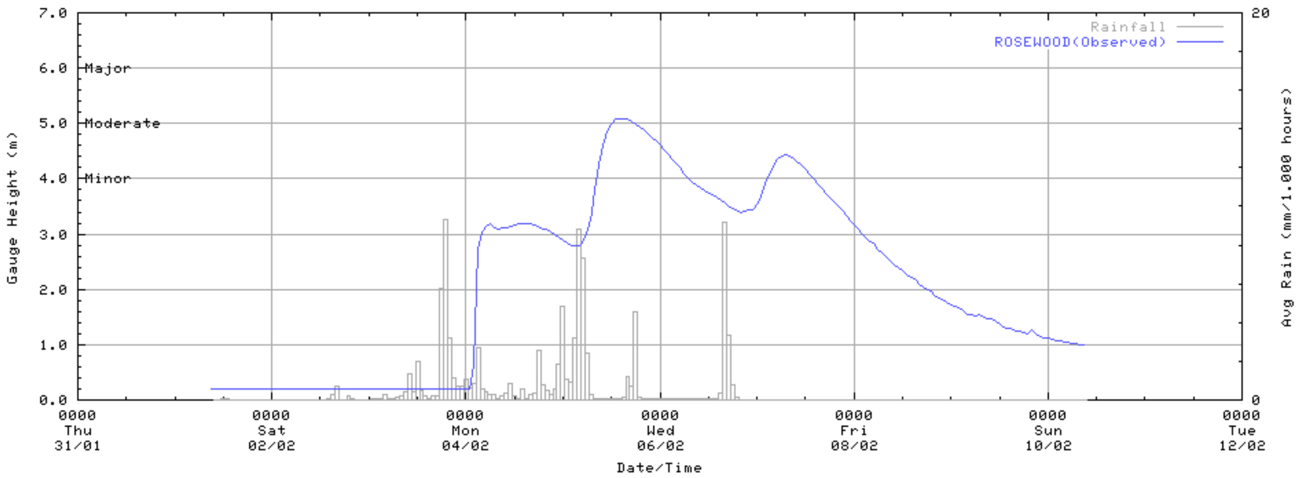
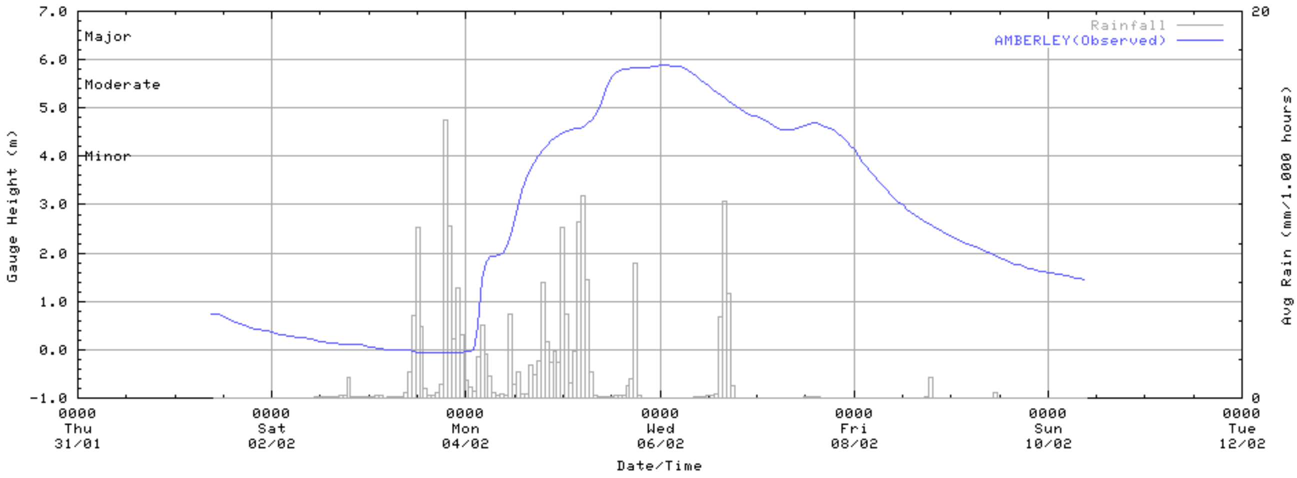


Figure 3.5.7 River Heights - Bremer River

Bremer River at Rosewood



Warrill Ck at Amberley



Bremer River at One Mile Bridge

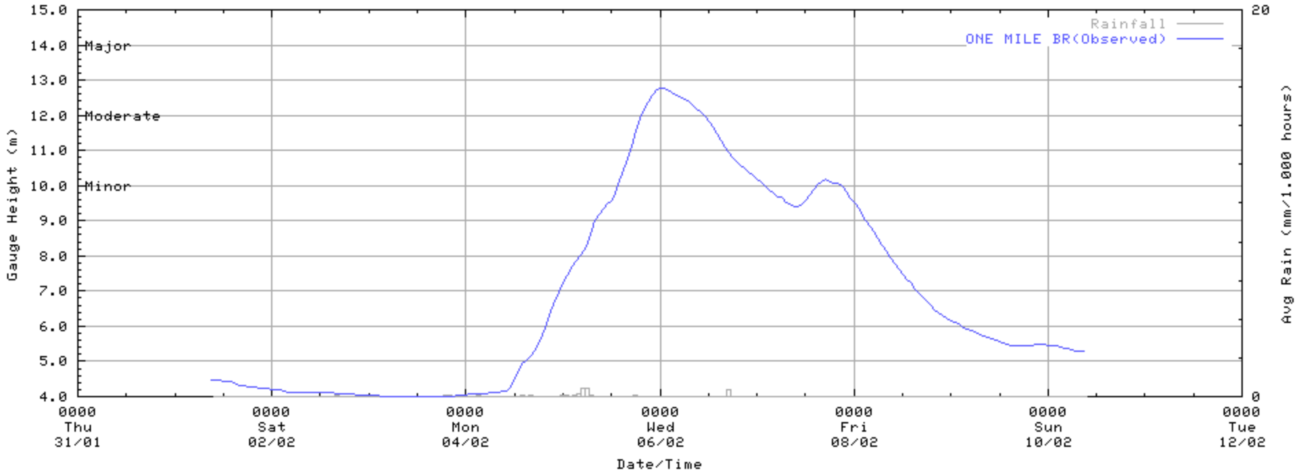
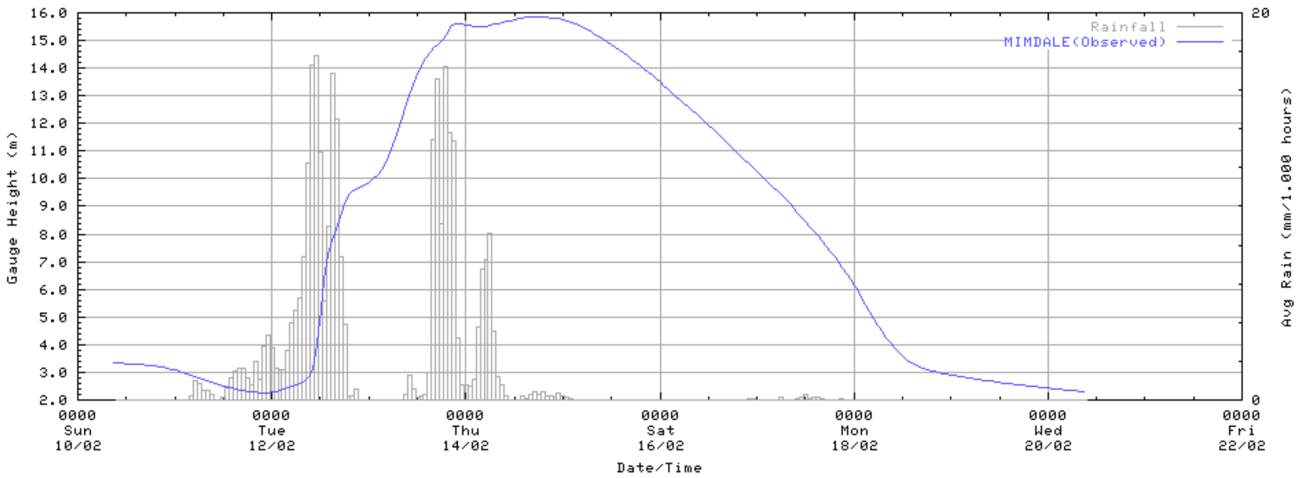
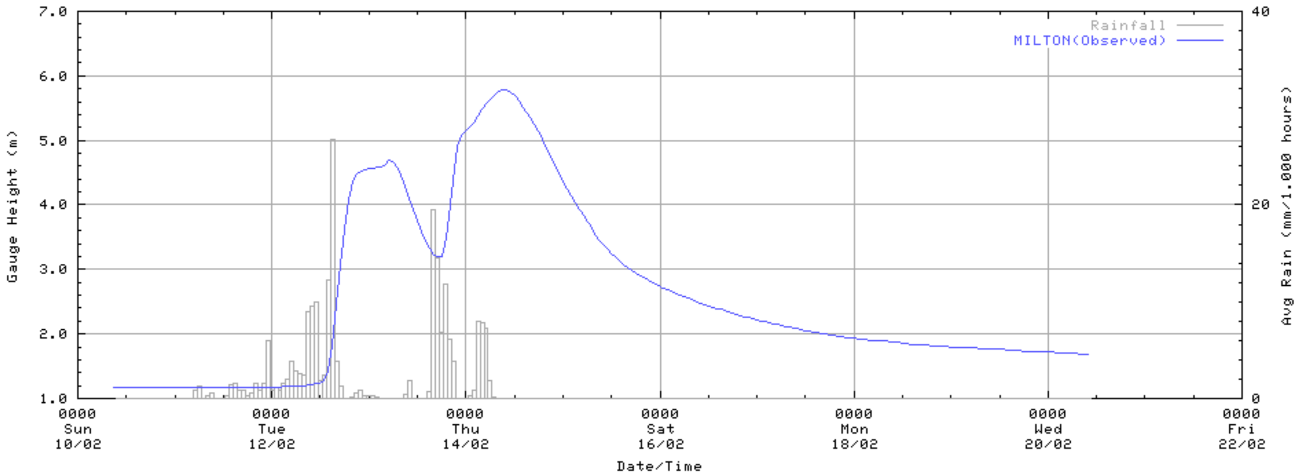


Figure 3.5.8 River Heights - Coastal Streams between Rockhampton to Bundaburg

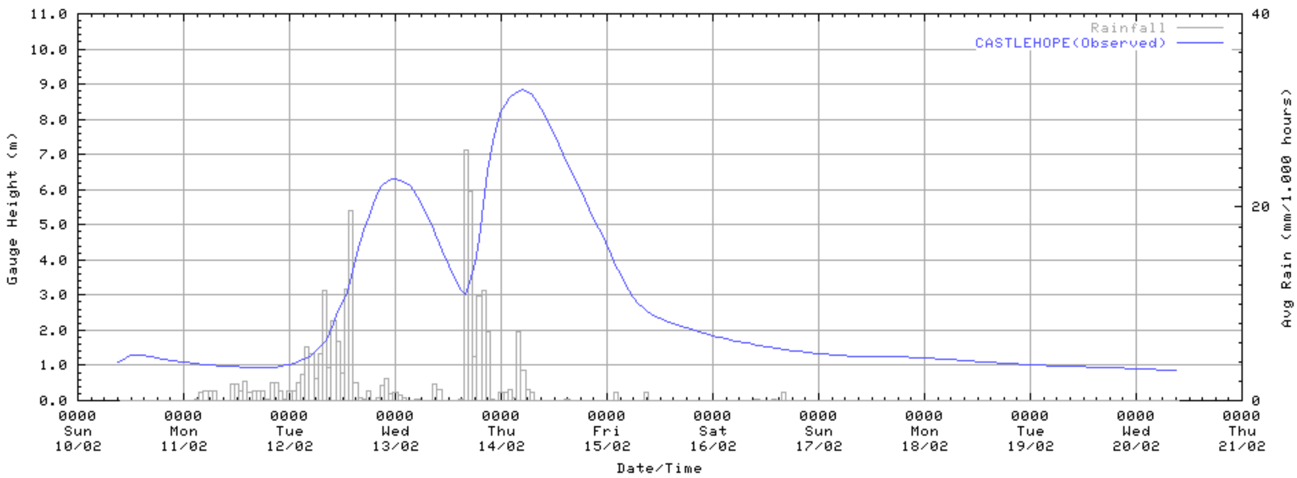
Baffle Creek at Mimdale



Boyne River at Milton



Calliope River at Castlehope



4 Warning Services

Table 4.1 Flood Warnings and River Height Predictions issued in February 2008

River Basin	Number of Warnings	Number of Major Warnings	Number of Predictions	Number of Locations
South Coast	2	0	0	0
Brisbane	4	0	0	0
Burrum	2	0	1	1
Fitzroy	29	24	12	2
Pioneer	13	5	7	2
Don	15	5	9	1
Burdekin	20	7	8	4
Haughton	14	10	5	1
Ross, Bohle	5	2	0	0
Herbert	4	0	2	1
Barron	3	0	0	0
Condamine-Balonne	15	3	8	3
Border Rivers	6	3	1	1
Moonie	14	9	10	4
Warrego	1	0	0	0
Paroo/Bulloo	14	2	1	1
Cooper Creek	7	5	0	0
TOTALS	**168**	**75**	**64**	**21**

Table 4.2 Summary of Severe Weather Warnings for Flash Flooding issued in February 2008

Severe Weather Event with Heavy Rainfall	No. of Severe Weather Warnings Issued
Upper trough through SE Queensland	8
Tropical Low Townsville to Sunshine Coast	12
Southeast Surge on the Central Coast	22
Thunderstorm producing Flash Floods at Rockhampton.	3
Forecast Flash Flood Event for North Tropical Coast and Peninsula	6

Table 4.3 Severe Weather Warnings for Flash Flooding issued in February 2008

Severe Weather Warnings for Flash Flooding – Total of 51 Warnings (Headers (title, date, time) only – text of warning not included)
SEVERE WEATHER WARNING for Flash Flooding For people in the Southeast Coast district Issued at 10:00 am on Sunday 3 February 2008
SEVERE WEATHER WARNING for Flash Flooding CANCELLATION of Severe Weather Warning for the Southeast Coast district Issued at 2:50 pm on Sunday 3 February 2008
SEVERE WEATHER WARNING for Flash Flooding For people in parts of the Maranoa, Darling Downs and Southeast coast districts Issued at 6:00 pm on Sunday 3 February 2008
SEVERE WEATHER WARNING for Flash Flooding For people in parts of the Maranoa, Darling Downs and Southeast coast districts Issued at 4:10 am on Monday 4 February 2008
SEVERE WEATHER WARNING for Flash Flooding For people in parts of the Maranoa, Darling Downs and Southeast coast districts Issued at 7:45 am on Monday 4 February 2008
SEVERE WEATHER WARNING for Flash Flooding For people in parts of the Maranoa, Darling Downs and Southeast Coast districts Issued at 11:50 am on Monday 4 February 2008
SEVERE WEATHER WARNING for Flash Flooding For people in parts of the Maranoa, Darling Downs and Southeast Coast districts Issued at 3:50 pm on Monday 4 February 2008
SEVERE WEATHER WARNING for Flash Flooding This warning is cancelled for people in parts of the Maranoa, Darling Downs and Southeast Coast districts. Issued at 5:00 pm on Monday 4 February 2008
SEVERE WEATHER WARNING for Damaging Winds, Flash Flooding For people in the following forecast districts: Peninsula south of Weipa, Gulf Country north of Karumba, northern parts of Northern Goldfields and Upper Flinders. Issued at 2:30 pm on Sunday 10 February 2008
SEVERE WEATHER WARNING for Damaging Winds, Flash Flooding For people in the following forecast districts: Peninsula south of Weipa, Gulf Country north of Karumba, northern parts of Northern Goldfields and Upper Flinders. Issued at 2:40 pm on Sunday 10 February 2008
SEVERE WEATHER WARNING for Damaging Winds, Flash Flooding For people in the following forecast districts: Peninsula south of Weipa, Gulf Country to the north and to the east of Karumba, northern parts of Northern Goldfields and Upper Flinders. Issued at 4:40 pm on Sunday 10 February 2008
SEVERE WEATHER WARNING for Damaging Winds and Flash Flooding For people in the following forecast districts: Peninsula south of Weipa, Gulf Country to the north and to the east of Karumba, northern parts of Northern Goldfields and Upper Flinders. Issued at 11:20 pm on Sunday 10 February 2008
SEVERE WEATHER WARNING for Damaging Winds and Flash Flooding For people in the following forecast districts: Southern Parts of the Peninsula, Far eastern parts of the Gulf Country, The Northern Goldfields and

Upper Flinders, Western Parts of the Atherton Tablelands, The Herbert and Lower Burdekin, Northern Parts of the Central Highlands, Central Coast and Whitsundays
Issued at 4:35 am on Monday 11 February 2008

SEVERE WEATHER WARNING
for Damaging Winds and Flash Flooding
For people in the following forecast districts:
Northern Goldfields and Upper Flinders, North Tropical Coast and Tablelands, Herbert and Lower Burdekin, Central Highlands and Coalfields, Central Coast and Whitsundays, Capricornia, Wide Bay and Burnett, Southeast Coast.
Issued at 10:25 am on Monday 11 February 2008

SEVERE WEATHER WARNING
for Damaging Winds and Flash Flooding
For people in the following forecast districts:
the eastern Northern Goldfields and Upper Flinders, North Tropical Coast and Tablelands, Herbert and Lower Burdekin, Central Highlands and Coalfields, Central Coast and Whitsundays, Capricornia, Wide Bay and Burnett, Southeast Coast.
Issued at 4:50 pm on Monday 11 February 2008

SEVERE WEATHER WARNING
for Damaging Winds and Flash Flooding
For people in the following forecast districts:
North Tropical Coast and Tablelands, Herbert and Lower Burdekin, Central Highlands and Coalfields, Central Coast and Whitsundays, Capricornia, Wide Bay and Burnett, Southeast Coast.
Issued at 11:10 pm on Monday 11 February 2008

SEVERE WEATHER WARNING
for Damaging Winds and Flash Flooding
For people in the following forecast districts:
Central Highlands and Coalfields, Central Coast and Whitsundays, Capricornia, Wide Bay and Burnett, Southeast Coast.
Issued at 4:25 am on Tuesday 12 February 2008

SEVERE WEATHER WARNING
for Damaging Winds, Flash Flooding, and Large Waves
For people in the following forecast districts:
Central Highlands and Coalfields, Central Coast and Whitsundays, Capricornia, Wide Bay and Burnett, Southeast Coast.
Issued at 10:20 am on Tuesday 12 February 2008

SEVERE WEATHER WARNING
for Damaging Winds, Flash Flooding, and Large Waves
For people in the following forecast districts:
Capricornia, Wide Bay and Burnett, Southeast Coast.
Issued at 4:30 pm on Tuesday 12 February 2008

SEVERE WEATHER WARNING
for Damaging Winds, Flash Flooding, and Large Waves
For people in the following forecast districts:
Capricornia, Wide Bay and Burnett, Southeast Coast.
The warning is CANCELLED.
Issued at 11:15 pm on Tuesday 12 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in the northern Capricornia and the southern Central Coast districts.
Issued at 4:30 pm on Thursday 14 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in the northern Capricornia and the Central Coast districts.
Issued at 6:35 pm on Thursday 14 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in the Herbert & Lower Burdekin, Central coast, Whitsundays and northern Capricornia.
Issued at 9:35 pm on Thursday 14 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in the Herbert & Lower Burdekin, Central coast, Whitsundays.
Issued at 3:40 am on Friday 15 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in the Herbert & Lower Burdekin, Central coast, Whitsundays.
Issued at 8:30 am on Friday 15 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in the Central coast, Whitsundays.
Issued at 9:15 am on Friday 15 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in the Central coast, Whitsundays and southern parts of the Herbert and Lower Burdekin districts.
Issued at 2:30 pm on Friday 15 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in the Central coast, Whitsundays and southern parts of the Herbert and Lower Burdekin districts.
Issued at 3:05 pm on Friday 15 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in the Central coast, Whitsundays and southern parts of the Herbert and Lower Burdekin districts.
Issued at 4:05 pm on Friday 15 February 2008

SEVERE WEATHER WARNING
for Flash Flooding
For people in northern parts of the Central coast, Whitsundays and southern parts of the Herbert and Lower Burdekin districts.
Issued at 4:35 pm on Friday 15 February 2008

SEVERE WEATHER WARNING
for Flash Flooding and damaging winds
For people in southern parts of Tropical coast, Herbert and Lower Burdekin and northern parts of the Central coast and Whitsundays.
Issued at 8:40 pm on Friday 15 February 2008

SEVERE WEATHER WARNING
for Flash Flooding and damaging winds
For people in the following forecast districts:
Herbert and Lower Burdekin south of Rollingstone, Central coast and Whitsundays north of Sarina, far southeast parts of the Northern Goldfields and Upper Flinders.
The warning for southern parts of the North Tropical Coast is CANCELLED.
Issued at 1:25 am on Saturday 16 February 2008

SEVERE WEATHER WARNING
for Flash Flooding and damaging winds
For people in the following forecast districts:
Herbert and Lower Burdekin south of Rollingstone, Central coast and Whitsundays north of Sarina, far southeast parts of the Northern Goldfields and Upper Flinders.
Issued at 4:55 am on Saturday 16 February 2008

SEVERE WEATHER WARNING
for Flash Flooding and Damaging Winds
For people in the following forecast districts:
Herbert and Lower Burdekin south of Rollingstone, Central coast and Whitsundays.
Issued at 10:45 am on Saturday 16 February 2008

SEVERE WEATHER WARNING
for Flash Flooding and Damaging Winds
For people in the following forecast districts:
Herbert and Lower Burdekin south of Rollingstone, Central Coast and Whitsundays.
Issued at 4:40 pm on Saturday 16 February 2008

SEVERE WEATHER WARNING
for Flash Flooding and Damaging Winds
For people in the following forecast districts:
North Tropical Coast, Herbert and Lower Burdekin and Central Coast.
Issued at 10:35 pm on Saturday 16 February 2008

SEVERE WEATHER WARNING
for Flash Flooding and Damaging Winds
For people in the following forecast districts:
North Tropical Coast, Herbert and Lower Burdekin and Central Coast.
Issued at 5:05 am on Sunday 17 February 2008

SEVERE WEATHER WARNING
for Damaging Winds
For people in the following forecast districts:
Central Coast and Whitsundays, Capricornia north of Gladstone.

Issued at 11:05 am on Sunday 17 February 2008

SEVERE WEATHER WARNING
for Damaging Winds and Dangerous waves causing erosion and inundation and Flash Flooding.
For people in the following forecast districts:
Central Coast and Whitsundays, Capricornia, Wide Bay and Burnett, Southeast Coast District.
Issued at 12:55 pm on Monday 18 February 2008

SEVERE WEATHER WARNING
for Damaging Winds and Dangerous waves causing erosion and inundation and Flash Flooding.
For people in the following forecast districts:
Central Coast and Whitsundays, Capricornia, Wide Bay and Burnett, Southeast Coast District.
Issued at 5:00 pm on Monday 18 February 2008

SEVERE WEATHER WARNING
for Damaging Winds and Dangerous waves causing erosion and inundation and Flash Flooding.
For people in the following forecast districts:
Central Coast and Whitsundays, Capricornia, Wide Bay and Burnett, Southeast Coast District.
Issued at 5:15 pm on Monday 18 February 2008

SEVERE WEATHER WARNING
for Damaging Winds and Dangerous waves causing erosion and inundation and Flash Flooding.
For people in the following forecast districts:
Central Coast and Whitsundays, Capricornia, Wide Bay and Burnett, Southeast Coast District.
Issued at 11:25 pm on Monday 18 February 2008

SEVERE WEATHER WARNING
for Flash Flooding.
For people in the following forecast districts:
Capricornia
Issued at 3:45 am on Monday 25 February 2008

SEVERE WEATHER WARNING
for Flash Flooding.
For people in the following forecast districts:
Capricornia
Issued at 4:35 am on Monday 25 February 2008

SEVERE WEATHER WARNING
for Flash Flooding.
For people in the following forecast districts:
Capricornia
Issued at 6:20 am on Monday 25 February 2008

SEVERE WEATHER WARNING
for Flash Flooding.
For people in the following forecast districts:
North Tropical Coast and Tablelands, Herbert and Lower Burdekin and eastern parts of the Northern Goldfields and Upper Flinders districts.
Issued at 10:50 pm on Monday 25 February 2008

SEVERE WEATHER WARNING
for Flash Flooding.
For people in the following forecast districts:
North Tropical Coast and Tablelands, Herbert and Lower Burdekin and eastern parts of the Northern Goldfields and Upper Flinders districts.
Issued at 4:00 am on Tuesday 26 February 2008

SEVERE WEATHER WARNING
for Flash Flooding.
For people in the following forecast districts:
North Tropical Coast and Tablelands north of a line Innisfail to Mt Garnett.
Issued at 5:05 pm on Wednesday 27 February 2008

SEVERE WEATHER WARNING
for Flash Flooding.
For people in the following forecast districts:
North Tropical Coast and Tablelands north of a line Innisfail to Mt Garnet, Northern Goldfields and Upper Flinders north of Georgetown, Gulf Country east of Normanton.
Issued at 7:45 pm on Wednesday 27 February 2008

SEVERE WEATHER WARNING
for Flash Flooding.
For people in the following forecast districts:
North Tropical Coast and Tablelands north of a line Innisfail to Mt Garnet, Northern Goldfields and

Upper Flinders north of Georgetown, Gulf Country east of Normanton.
Issued at 10:50 pm on Wednesday 27 February 2008

CANCELLATION OF SEVERE WEATHER WARNING
for Flash Flooding.
For people in the following forecast districts:
North Tropical Coast and Tablelands north of a line Innisfail to Mt Garnet, Northern Goldfields and Upper Flinders north of Georgetown, Gulf Country east of Normanton.
Issued at 3:40 am on Thursday 28 February 2008

Appendix 1. DNRW Usage Agreement

Queensland Government
Natural Resources and Water

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