

Highest tides for year 2015

| Place | Highest Summer Tide | | | Highest Winter Tide | | |
|---|---------------------|-------|--------|---------------------|-------|--------|
| | Date | Time | Height | Date | Time | Height |
| Gold Coast Seaway HAT 1.91 | 21/01/2015 | 08:50 | 1.84m | 18/05/2015 | 20:42 | 1.81m |
| Brisbane Bar HAT 2.73 | 19/02/2015 | 08:31 | 1.84m | 01/08/2015 | 21:09 | 1.81m |
| Mooloolaba HAT 2.17 | 21/01/2015 | 10:11 | 2.69m | 01/08/2015 | 22:29 | 2.63m |
| Noosa Head HAT 2.28 | 21/01/2015 | 08:39 | 2.12m | 18/05/2015 | 20:29 | 2.06m |
| Urangan HAT 4.28 | 19/02/2015 | 08:19 | 2.12m | 01/08/2015 | 20:58 | 2.06m |
| Fraser Island (Waddy Point) HAT 2.37 | 21/01/2015 | 08:37 | 2.25m | 18/05/2015 | 20:22 | 2.20m |
| Bundaberg (Burnett Heads) HAT 3.67 | 19/02/2015 | 08:55 | 4.20m | 30/08/2015 | 21:14 | 4.08m |
| Gladstone HAT 4.83 | 21/01/2015 | 08:26 | 2.28m | 18/05/2015 | 20:25 | 2.18m |
| Port Alma HAT 5.98 | 19/02/2015 | 08:49 | 3.52m | 30/08/2015 | 21:05 | 3.35m |
| Roslyn Bay HAT 5.14 | 19/02/2015 | 09:27 | 4.73m | 30/08/2015 | 21:46 | 4.52m |
| Hay Point HAT 7.14 | 19/02/2015 | 09:26 | 5.82m | 29/08/2015 | 21:02 | 5.58m |
| Mackay Outer Harbour HAT 6.58 | 19/02/2015 | 09:17 | 5.06m | 29/08/2015 | 20:49 | 4.83m |
| Shute Harbour HAT 4.33 | 19/02/2015 | 09:17 | 5.06m | 29/08/2015 | 20:49 | 4.83m |
| Bowen HAT 3.73 | 19/02/2015 | 09:27 | 4.73m | 30/08/2015 | 21:46 | 4.52m |
| Abbot Point HAT 3.60 | 19/02/2015 | 09:26 | 5.82m | 29/08/2015 | 21:02 | 5.58m |
| Townsville HAT 4.11 | 19/02/2015 | 09:17 | 5.06m | 29/08/2015 | 20:49 | 4.83m |
| Lucinda Offshore HAT 3.96 | 19/02/2015 | 11:00 | 7.04m | 29/08/2015 | 22:36 | 6.74m |
| Mourilyan Harbour HAT 3.50 | 19/02/2015 | 11:03 | 6.49m | 29/08/2015 | 22:39 | 6.20m |
| Cairns HAT 3.50 | 19/02/2015 | 11:03 | 6.49m | 29/08/2015 | 22:39 | 6.20m |
| Port Douglas HAT 3.36 | 19/02/2015 | 10:56 | 4.22m | 17/05/2015 | 22:30 | 3.97m |
| Twin Island HAT 3.80 | 18/02/2015 | 09:22 | 3.62m | 31/07/2015 | 22:55 | 3.97m |
| Thursday Island HAT 3.86 | 18/02/2015 | 09:22 | 3.62m | 29/08/2015 | 21:38 | 3.37m |
| Goods Island HAT 4.07 | 18/02/2015 | 09:09 | 3.48m | 29/08/2015 | 21:24 | 3.24m |
| Booby Island HAT 4.31 | 18/02/2015 | 09:09 | 3.48m | 29/08/2015 | 21:24 | 3.24m |
| Weipa HAT 3.38 | 19/02/2015 | 09:14 | 4.08m | 29/08/2015 | 20:51 | 3.82m |
| Karumba HAT 4.88 | 19/02/2015 | 09:18 | 3.93m | 29/08/2015 | 20:55 | 3.66m |
| Mornington Island HAT 3.87 | 19/02/2015 | 09:18 | 3.47m | 29/08/2015 | 20:54 | 3.23m |
| | 19/02/2015 | 09:31 | 3.41m | 29/08/2015 | 21:07 | 3.17m |
| | 19/02/2015 | 09:20 | 3.33m | 29/08/2015 | 20:58 | 3.07m |
| | 18/02/2015 | 11:47 | 3.66m | 29/08/2015 | 23:58 | 3.58m |
| | 18/02/2015 | 12:24 | 3.62m | | | |
| | 29/01/2015 | 11:20 | 3.94m | | | |
| | 28/01/2015 | 10:45 | 4.26m | | | |
| | 21/01/2015 | 16:30 | 3.18m | | | |
| | 05/01/2015 | 20:01 | 4.37m | | | |
| | 27/12/2015 | 20:58 | 4.38m | | | |
| | 21/01/2015 | 22:21 | 3.63m | | | |

The highest tides listed - often referred to as king tides - are the highest spring tides that occur during summer and winter. Boat owners and people living along the waterfront should be vigilant at the times of these highest tides particularly in the summer, as storms and cyclones may elevate tidal levels significantly above the predicted tide heights.

Tidal notes

Tidal datum epoch

Australian tidal authorities have adopted the 20 year Tidal Datum Epoch 1992 to 2011 (inclusive) as the basis for calculating tidal datum and the associated tidal planes.

Accordingly in the 2010 edition the standard ports' semidiurnal and diurnal tidal planes were updated - to incorporate the latest available tidal observations, prediction information and allowance for sea level rise. It is intended that the 2010 tidal plane values will now remain fixed until the tidal datum epoch review in 2018 unless significant change occurs.

The mean sea levels listed in the table 'Mean Sea Level Used for the Tidal Predictions' will change over the course of the tidal epoch as they include the most recent observations and an allowance for sea level rise.

Datum of tidal heights

The height of the tide (expressed as metres and decimals) is referred to the port datum (LAT datum). When a low water falls below datum, it is marked with a minus sign (-).

When utilising a navigational chart, tidal height should be added to chart depth. If preceded by a minus sign, it should be subtracted.

Standard port

Standard ports are those provided as daily tables of the predicted times and heights of high and low waters. The tide times are referred to Australian Eastern Standard Time and the tide heights are referred to LAT datum.

Secondary places

Secondary places are those for which daily predictions are not provided in the Queensland Tide Tables. These locations are grouped and associated to the adjacent standard port with a similar tidal pattern. Data sufficient for calculating their times and heights is supplied following the standard port prediction tables.

Tidal Levels

A list of tidal levels referred to LAT datum for standard ports and selected secondary places is given in the following tables: -

- Standard Port Datum Levels
- Semidiurnal Tidal Planes
- Diurnal Tidal Planes

In addition, the tables for semidiurnal and diurnal tidal planes provide the factors necessary to calculate tidal predictions at the selected secondary places (referred to LAT datum at each secondary place) from the tidal predictions of the standard ports.

Rise

The rise of the tide is the height of the high water above port datum.

Range

The range of the tide is the difference between the height of high water and the next succeeding or last preceding low water.

Semidiurnal tide

Semidiurnal tide refers to a tide which has a period or cycle of approximately half of one tidal day (about 12.5 hours). Semidiurnal tides usually have two high and two low tides each day. The tides at Brisbane Bar are a typical example of semidiurnal tides.

Diurnal tide

Diurnal tide refers to a tide which has a period or cycle of approximately one tidal day (about 25 hours). Diurnal tides usually have one high and one low tide each day. The tides at Karumba are a typical example of diurnal tides.

Highest tides for year

King tide is a non-scientific term, but the popular concept is that it is the higher high waters which occur around Christmas time. Equally high tides occur in the winter months during the night.

Meteorological effects on tides

Meteorological conditions which differ significantly from the seasonal averages, will cause corresponding differences between the predicted and the actual tide.

Variations in tidal heights are mainly caused by strong or prolonged winds and by unusually high or low barometric pressure. Tidal predictions are computed for average barometric pressure.

Low pressure systems tend to raise sea levels, and high pressure systems tend to lower them. However, the water does not adjust itself immediately to a change of pressure, but responds to the average change in pressure over a considerable area.

The effect of wind on sea level, and therefore on tidal heights and times, is variable and depends on the topography of the area in question. In general, it can be said that wind will raise the sea level in the direction towards which it is blowing.

A strong wind blowing straight onshore will cause the water to "pile up" resulting in high waters to be higher than predicted. Winds blowing off the land will have the reverse effect.

Tidal definitions

LAT (lowest astronomical tide)

HAT (highest astronomical tide)

These are the lowest and highest levels which can be predicted to occur under average meteorological conditions and any combination of astronomical conditions.

These levels will not be reached every year. LAT and HAT are not the extreme levels which can be reached, as storm surges may cause considerably lower and higher levels to occur.

LAT has been used as port and chart datum since 1994.

MSL (mean sea-level)

The mean level of the sea over a long period (preferably 18.6 years) or the mean level which would exist in the absence of tides.

AHD (Australian height datum)

This datum has been adopted by the National Mapping Council as the datum to which all vertical control for land based mapping is to be referred.

MHWS (mean high water springs)

The long term mean of the heights of two successive high waters during those periods of 24 hours (approximately once a fortnight) when the range of tide is greatest during the full and new moon.

MLWS (mean low water springs)

The long term mean of the heights of two successive low waters over the same periods as defined for MHWS.

MHWN (mean high water neaps)

The long term mean of the heights of two successive high waters when the range of tide is the least at the time of first and last quarter of the moon.

MLWN (mean low water neaps)

The long term mean of the heights of two successive low waters over the same periods as defined for MHWN.

MHHW (mean higher high water)

The mean of the higher of the two daily high waters over a long period of time. When only one high water occurs on a day, this is taken as the higher high water.

MLHW (mean lower high water)

The mean of the lower of the two daily high waters over a long period of time. When only one high water occurs on most days, no value is printed in the MLHW column, indicating that the tide is usually diurnal.

MHLW (mean higher low water)

The mean of the higher of the two daily low waters over a long period of time.

When only one low water occurs on most days, no value is printed in the MHLW column, indicating that the tide is usually diurnal.

MLLW (mean lower low water)

The mean of the lower of the daily low waters over a long period of time. When only one low water occurs a day, this is taken as the lower low water.

MHW (mean high water)

The mean of all high waters observed over a sufficiently long period (preferably over the current tidal datum epoch).

For those stations with shorter series, simultaneous observational comparisons are made with a control tide station in order to derive the equivalent datum.

MLW (mean low water)

The mean of all low waters observed over a sufficiently long period (preferably over the current tidal datum epoch).

For those stations with shorter series, simultaneous observational comparisons are made with a control tide station in order to derive the equivalent datum.

LWD (Low Water Datum)

The mean height of the lower low waters at springs.

This was a local plane which usually satisfied the criterion that the tide seldom fell below it.

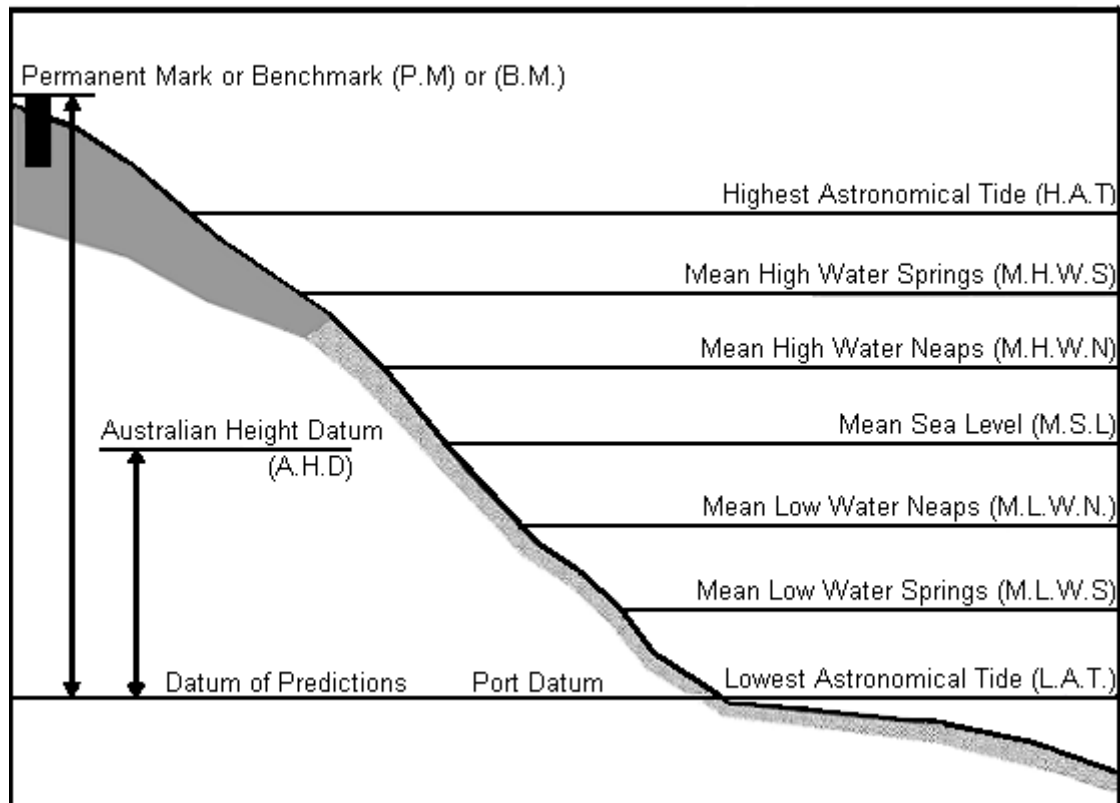
In the past, this was generally chosen for port and chart datum in Queensland waters however it was superseded by LAT datum in 1994.

Guide to tidal planes

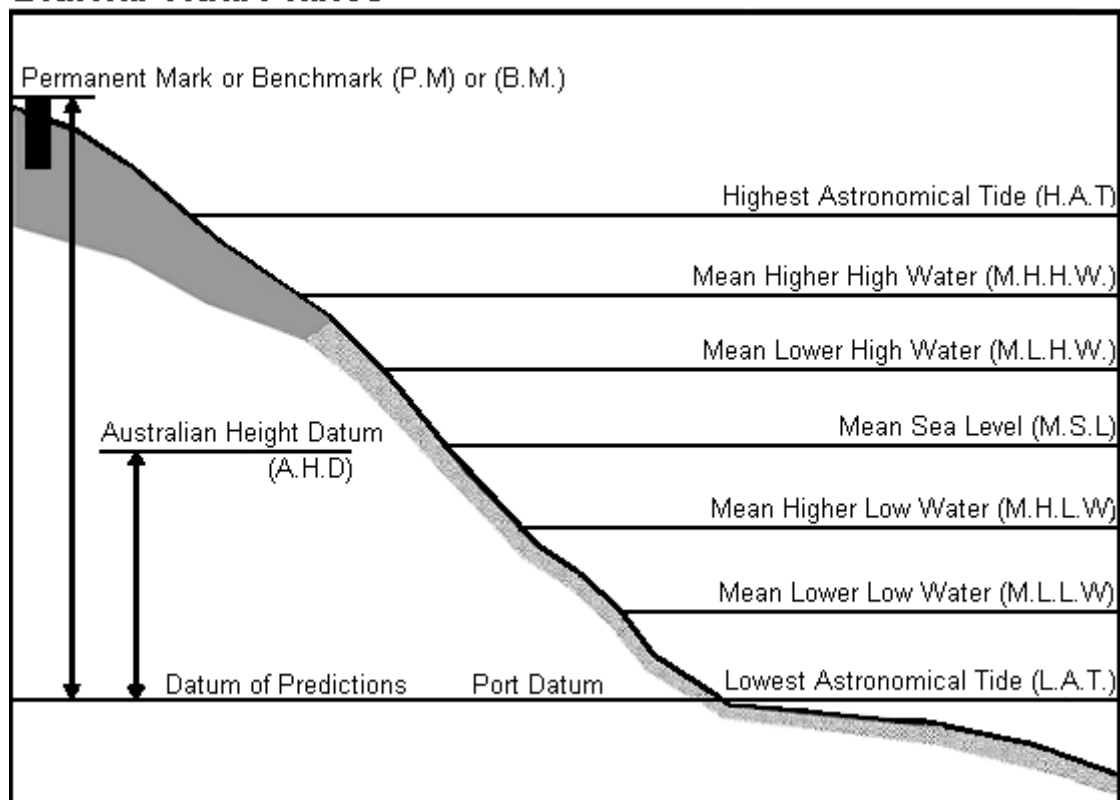
Tidal datum epoch

The Queensland standard ports' semidiurnal and diurnal tidal planes were updated for the current tidal datum epoch 1992 – 2011, using the latest available tidal observations, prediction information and allowance for sea level rise. It is intended to maintain the standard port datum planes until 2018 when the current tidal datum epoch will be subject to review. The secondary place tidal planes have also been updated to match the new values adopted at the standard ports.

Semidiurnal Tidal Planes



Diurnal Tidal Planes



Standard port datum levels

Height above Lowest Astronomical Tide (LAT)

| Standard Port | Benchmark Number | Level Above LAT | AHD Above LAT | Standard Port | Benchmark Number | Level Above LAT | AHD Above LAT |
|-----------------------------|------------------|-----------------|---------------|----------------------|------------------|-----------------|---------------|
| Gold Coast Seaway | PM QGS564 | 6.688 | 0.760 | Abbot Point | PM 66022 | 8.740 | 1.626 |
| Brisbane Bar | PM 21764 | 3.102 | 1.243 | Townsville | PM 10011 | 9.025 | 1.856 |
| Mooloolaba | PM 14102 | 3.131 | 0.990 | Lucinda (Offshore) | PM H&M 14 | 5.543 | 1.844 |
| Noosa Head | PM 19728 | 3.781 | 1.123 | Mourilyan Harbour | PM 4855 | 5.037 | 1.729 |
| Waddy Point (Fraser Island) | PM NMV/B/417 | 3.165 | 1.007 | Cairns | PM 96052 | 5.008 | 1.643 |
| Urangan | PM 11028 | 5.835 | 2.040 | Port Douglas | PM 10077 | 6.058 | 1.581 |
| Bundaberg (Burnett Heads) | PM 3853 | 6.061 | 1.693 | Leggatt Island | Mean Sea Level | 1.691 | N.A. |
| Gladstone | PM 10855 | 5.660 | 2.268 | Twin Island | PM NMV/B/463 | 2.990 | N.A. |
| Port Alma | PM 22966 | 6.706 | 2.854 | Thursday Island | PM 10078 | 6.375 | 1.769 |
| Rosslyn Bay | PM 47784 | 6.640 | 2.360 | Goods Island | PM NMV/B/477 | 5.330 | N.A. |
| Hay Point | PM 38627 | 18.040 | 3.340 | Booby Island | PM BM1 | 10.770 | N.A. |
| Mackay Outer Harbour | PM 20035 | 10.595 | 2.941 | Weipa (Humbug Point) | PM 15094 | 7.287 | 1.752 |
| Bugatti Reef | PM BM. No. 1 | 2.330 | N.A. | Karumba | PM 10222 | 6.808 | 2.184 |
| Shute Harbour | PM 8295 | 5.103 | 1.907 | Mornington Island | PM RM3 | 4.894 | 2.000 |
| Bowen | PM 10009 | 8.689 | 1.776 | | | | |

The elevation of AHD datum above LAT datum applies at the standard port benchmark only and will vary at secondary locations.

Mean Sea level used for the tidal predictions – 2015

An allowance of 2.0 mm per year for sea level change has been made in the mean sea level (MSL) estimate. The allowance is calculated from the central date of the observation period to the central date of the prediction year. The heights are referred to Lowest Astronomical Tide datum.

| Place | Observation Period | MSL | Place | Observation Period | MSL |
|-----------------------------|----------------------|-------|----------------------|----------------------|-------|
| Gold Coast Seaway | Jan 1993 to Feb 1999 | 0.789 | Abbot Point | May 1985 to Dec 1995 | 1.718 |
| Brisbane Bar | Jan 1985 to Dec 2012 | 1.298 | Townsville | Jan 1985 to Dec 2011 | 1.975 |
| Mooloolaba | Jan 1987 to Dec 2012 | 0.982 | Lucinda (Offshore) | Jan 1985 to Dec 2011 | 1.919 |
| Noosa Head | Dec 1970 to Dec 1971 | 1.124 | Mourilyan Harbour | Jan 1985 to Dec 2011 | 1.769 |
| Waddy Point (Fraser Island) | Oct 1976 to Feb 1978 | 1.157 | Cairns | Jan 1985 to Dec 2011 | 1.726 |
| Urangan | Sep 1986 to Dec 2012 | 2.111 | Port Douglas | Jan 1987 to Dec 2011 | 1.628 |
| Bundaberg (Burnett Heads) | Jan 1985 to Dec 2012 | 1.747 | Leggatt Island | Sep 1995 to Apr 1996 | 1.700 |
| Gladstone | Jan 1985 to Dec 2012 | 2.367 | Twin Island | Jul 1974 to Jul 1975 | 1.775 |
| Port Alma | Jan 1986 to Dec 2012 | 2.930 | Thursday Island | Jan 1985 to Dec 2002 | 1.896 |
| Rosslyn Bay | Jan 1993 to Dec 2012 | 2.452 | Goods Island | Jan 1990 to Dec 2011 | 2.168 |
| Hay Point | Jan 1985 to Dec 2012 | 3.400 | Booby Island | Jan 1990 to Dec 2011 | 2.450 |
| Mackay Outer Harbour | Jan 1988 to Dec 2011 | 3.045 | Weipa (Humbug Point) | Jan 1985 to Dec 2011 | 1.870 |
| Bugatti Reef | Oct 1996 to Mar 1997 | 1.544 | Karumba | Dec 1985 to Dec 2011 | 2.147 |
| Shute Harbour | Jan 1987 to Dec 2011 | 1.947 | Mornington Island | Jun 2007 to Dec 2012 | 2.124 |
| Bowen | Jan 1986 to Dec 2011 | 1.789 | | | |

Semidiurnal Tidal Planes - 2015

Height above lowest astronomical tide

| Place | Latitude | Longitude | Time Difference | | MHWS | MHWN | MLWN | MLWS | AHD | MSL | Ratio | Cons | HAT | |
|---------------------------------------|--|-----------|-----------------|-------|------|------|------|------|-------|------|-------|-------|------|----|
| | South | East | HW | LW | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| Tidal Datum Epoch 1992 - 2011 | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | | | | H M | H M | m | m | m | m | m | m | | | mm |
| Gold Coast Seaway | 27 57 | 153 25 | Standard Port | | 1.42 | 1.13 | 0.39 | 0.11 | 0.760 | 0.76 | 1.00 | 0.00 | 1.91 | |
| North Coast New South Wales - | | | | | | | | | | | | | | |
| Ballina (Richmond River) | 28 53 | 153 35 | +0 06 | +0 06 | 1.4 | 1.1 | 0.5 | 0.2 | | 0.80 | | | 1.9 | |
| Brunswick Heads | 28 32 | 153 33 | +0 07 | +0 07 | 1.5 | 1.2 | 0.5 | 0.2 | | 0.86 | | | 2.0 | |
| Kingscliff | 28 16 | 153 35 | +0 09 | +0 09 | 1.4 | 1.1 | 0.4 | 0.2 | | 0.76 | | | 1.9 | |
| Tweed River Breakwater | 28 10 | 153 33 | -0 04 | +0 00 | 1.47 | 1.22 | 0.55 | 0.29 | 0.86 | 0.91 | 0.92 | +0.04 | 1.91 | |
| Gold Coast Beaches - | | | | | | | | | | | | | | |
| Snapper Rocks (Coolangatta) | 28 10 | 153 33 | -0 26 | -0 15 | 1.64 | 1.32 | 0.49 | 0.20 | 0.98 | 0.97 | 1.10 | 0.00 | 2.11 | |
| Ocean Beaches | Jumpinpin Bar to Snapper Rocks tides occur 20 mins earlier than Gold Coast Seaway. | | | | | | | | | | | | | |
| Broadwater & Nerang River- | | | | | | | | | | | | | | |
| Isle of Capri | 28 00 | 153 25 | +0 41 | +0 56 | 1.17 | 0.90 | 0.28 | 0.08 | 0.59 | 0.67 | 0.72 | +0.24 | 1.60 | |
| Gold Coast Bridge | 27 59 | 153 25 | +0 10 | +0 20 | 1.51 | 1.23 | 0.51 | 0.24 | 0.79 | 0.83 | 0.97 | +0.13 | 1.98 | |
| Grand Hotel Jetty | 27 57 | 153 25 | +0 16 | +0 31 | 1.39 | 1.11 | 0.38 | 0.11 | 0.79 | 0.80 | 0.98 | 0.00 | 1.87 | |
| Nerang Township | 28 00 | 153 20 | +1 53 | +2 39 | 1.08 | 0.87 | 0.17 | 0.03 | 0.48 | 0.58 | 0.78 | 0.00 | 1.49 | |
| Paradise Point | 27 53 | 153 24 | +1 01 | +1 25 | 1.20 | 0.93 | 0.23 | 0.05 | 0.61 | 0.64 | 0.87 | 0.00 | 1.66 | |
| Runaway Bay | 27 55 | 153 24 | +0 31 | +0 52 | 1.18 | 0.91 | 0.22 | 0.05 | 0.62 | 0.62 | 0.86 | 0.00 | 1.65 | |
| Coomera River (Saltwater Creek) | 27 52 | 153 20 | +1 44 | +2 21 | 1.23 | 0.99 | 0.37 | 0.13 | 0.56 | 0.67 | 0.84 | +0.04 | 1.64 | |
| Sanctuary Cove | 27 51 | 153 22 | +1 34 | +2 06 | 1.23 | 0.99 | 0.37 | 0.13 | 0.56 | 0.67 | 0.84 | +0.04 | 1.65 | |
| Couran Cove | 27 49 | 153 25 | +1 19 | +1 20 | 1.34 | 1.06 | 0.35 | 0.09 | 0.78 | 0.76 | 0.96 | -0.02 | 1.81 | |
| The Bedroom | 27 46 | 153 26 | +1 14 | +1 06 | 1.34 | 1.06 | 0.35 | 0.09 | | 0.76 | 0.96 | -0.02 | 1.81 | |
| Brisbane Bar | 27 22 | 153 10 | Standard Port | | 2.17 | 1.78 | 0.76 | 0.37 | 1.243 | 1.27 | 1.00 | 0.00 | 2.73 | |
| Pimpama River (Kerkin Rd Weir) | 27 48 | 153 20 | +0 57 | +1 27 | 1.36 | 1.05 | 0.30 | 0.15 | 0.60 | 0.73 | | | 1.78 | |
| Albert River - | | | | | | | | | | | | | | |
| Junction Logan River | 27 42 | 153 14 | +1 22 | +2 14 | 2.05 | 1.66 | 0.54 | 0.33 | 0.98 | 1.12 | | | 2.59 | |
| Pacific Highway Bridge | 27 44 | 153 13 | +1 37 | +2 42 | 1.90 | 1.50 | 0.44 | 0.25 | 0.91 | 0.94 | | | 2.45 | |
| Wolffdene | 27 47 | 153 11 | +2 12 | | 1.32 | 0.98 | | | 0.91 | | | | 1.79 | |
| Logan River - | | | | | | | | | | | | | | |
| Rocky Point (Mouth Logan River) | 27 42 | 153 21 | +0 40 | +0 55 | 2.09 | 1.72 | 0.74 | 0.37 | 1.10 | 1.21 | 0.96 | +0.01 | 2.63 | |
| Junction Albert River | 27 42 | 153 14 | +1 22 | +2 14 | 2.05 | 1.66 | 0.54 | 0.33 | 0.98 | 1.12 | | | 2.59 | |
| Slacks Creek (Mouth) | 27 40 | 153 10 | +2 13 | +3 05 | 1.79 | 1.45 | 0.40 | 0.21 | 0.82 | 0.96 | | | 2.27 | |
| Waterford | 27 42 | 153 09 | +2 39 | +3 34 | 1.59 | 1.27 | 0.28 | 0.11 | 0.66 | 0.81 | | | 2.03 | |
| Brisbane River - | | | | | | | | | | | | | | |
| Boat Passage | 27 24 | 153 10 | +0 00 | +0 00 | 2.17 | 1.78 | 0.76 | 0.37 | 1.24 | 1.27 | 1.00 | 0.00 | 2.73 | |
| Pinkenba | 27 26 | 153 07 | +0 10 | +0 10 | 2.22 | 1.82 | 0.78 | 0.38 | 1.24 | 1.27 | 1.02 | 0.00 | 2.79 | |
| Cairncross Dock | 27 27 | 153 05 | +0 20 | +0 20 | 2.30 | 1.89 | 0.81 | 0.39 | 1.24 | 1.34 | 1.06 | 0.00 | 2.89 | |
| New Farm | 27 28 | 153 03 | +0 25 | +0 25 | 2.30 | 1.89 | 0.81 | 0.39 | 1.24 | 1.34 | 1.06 | 0.00 | 2.89 | |
| Port Office (Edward St Ferry) | 27 28 | 153 02 | +0 30 | +0 30 | 2.30 | 1.89 | 0.81 | 0.39 | 1.24 | 1.32 | 1.06 | 0.00 | 2.89 | |
| Tennyson (Long Pocket) | 27 32 | 153 00 | +0 50 | +0 50 | 2.37 | 1.94 | 0.83 | 0.40 | 1.15 | 1.38 | 1.09 | 0.00 | 2.98 | |
| Indooroopilly | 27 31 | 152 59 | +1 10 | +1 10 | 2.34 | 1.92 | 0.82 | 0.40 | 1.15 | 1.37 | 1.08 | 0.00 | 2.95 | |
| Seventeen Mile Rocks | 27 33 | 152 58 | +1 20 | +1 20 | 2.30 | 1.89 | 0.81 | 0.39 | 1.05 | 1.30 | 1.06 | 0.00 | 2.89 | |
| Jindalee | 27 32 | 152 56 | +1 20 | +1 20 | 2.32 | 1.90 | 0.81 | 0.39 | 1.05 | 1.30 | | | 2.92 | |
| Wacol (Wolston Creek) | 27 34 | 152 54 | +1 55 | +1 55 | 2.18 | 1.83 | 0.56 | 0.27 | 1.00 | 1.20 | | | 2.69 | |
| Goodna (Woogaroo Creek) | 27 36 | 152 54 | +2 00 | +2 10 | 2.10 | 1.76 | 0.50 | 0.24 | 1.00 | 1.13 | | | 2.60 | |
| Moggill Ferry | 27 36 | 152 51 | +2 20 | +2 30 | 2.13 | 1.77 | 0.39 | 0.12 | 0.95 | 1.09 | | | 2.64 | |
| Kholo Creek | 27 32 | 152 51 | +2 30 | +2 50 | 2.14 | 1.79 | 0.37 | 0.18 | 0.90 | 1.09 | | | 2.65 | |
| Bremer River | | | | | | | | | | | | | | |
| Warrego Highway Bridge | 27 35 | 152 49 | +2 30 | +2 55 | 2.34 | 1.96 | 0.61 | 0.40 | 0.95 | 1.31 | | | 2.89 | |
| Ipswich (Bremer River) | 27 35 | 152 47 | +2 40 | +3 10 | 2.16 | 1.76 | 0.71 | 0.30 | 0.95 | 1.30 | | | 2.81 | |
| Moreton Bay Area - | | | | | | | | | | | | | | |
| Ocean Beaches | Cape Moreton to Snapper Rocks tides occur 1hr 30min earlier than Brisbane Bar. | | | | | | | | | | | | | |
| Woogoompah Island | 27 47 | 153 24 | +0 14 | +0 02 | 1.50 | 1.23 | 0.52 | 0.26 | | 0.82 | 0.69 | -0.02 | 1.88 | |
| Jacobs Well | 27 47 | 153 22 | +0 28 | +0 18 | 1.59 | 1.29 | 0.49 | 0.19 | 0.74 | 0.86 | 0.78 | -0.10 | 2.03 | |
| Cabbage Tree Point | 27 44 | 153 22 | +0 30 | +0 29 | 1.84 | 1.50 | 0.61 | 0.27 | 0.89 | 1.03 | 0.87 | -0.05 | 2.33 | |
| Kalinga Bank | 27 44 | 153 26 | -0 34 | -0 47 | 1.49 | 1.22 | 0.53 | 0.26 | | 0.87 | 0.68 | +0.01 | 1.87 | |

Semidiurnal Tidal Planes - 2015

Height above lowest astronomical tide

| Place | Latitude South | Longitude East | Time Difference | | MHWS 3 | MHWN 4 | MLWN 5 | MLWS 6 | AHD 7 | MSL 8 | Ratio 9 | Cons 10 | HAT 11 |
|---------------------------------|-------------------|-------------------|-----------------|---------|-----------|-----------|-----------|-----------|----------|----------|------------|------------|-----------|
| | | | HW 1 | LW 2 | | | | | | | | | |
| Tidal Datum Epoch 1992 - 2011 | | | | | | | | | | | | | |
| Brisbane Bar continued | | | | | | | | | | | | | |
| Moreton Bay Area continued | | | | | | | | | | | | | |
| Oak Island | 27 42 | 153 24 | +0 15 | -0 30 | 1.71 | 1.41 | 0.60 | 0.29 | | 0.96 | 0.79 | 0.00 | 2.16 |
| Koureyabba | 27 42 | 153 24 | +0 30 | +0 06 | 1.76 | 1.44 | 0.62 | 0.30 | | 1.00 | 0.81 | 0.00 | 2.21 |
| Russell Island (Canaipa Point) | 27 39 | 153 25 | +0 31 | +0 42 | 2.30 | 1.89 | 0.81 | 0.39 | 1.39 | 1.33 | 1.06 | 0.00 | 2.89 |
| Macleay Island (Southern Jetty) | 27 38 | 153 22 | +0 30 | +0 42 | 2.25 | 1.83 | 0.73 | 0.31 | 1.29 | 1.25 | 1.08 | -0.09 | 2.86 |
| Redland Bay | 27 37 | 153 18 | +0 30 | +0 45 | 2.37 | 1.94 | 0.83 | 0.40 | 1.41 | 1.35 | 1.09 | 0.00 | 2.98 |
| Victoria Point | 27 35 | 153 19 | +0 14 | +0 18 | 2.38 | 1.97 | 0.91 | 0.50 | 1.41 | 1.39 | 1.04 | +0.12 | 2.96 |
| Macleay Island (Potts Point) | 27 35 | 153 22 | +0 15 | +0 23 | 2.28 | 1.87 | 0.80 | 0.39 | | 1.32 | 1.05 | 0.00 | 2.87 |
| Toondah Harbour (Cleveland) | 27 32 | 153 17 | +0 13 | +0 16 | 2.21 | 1.82 | 0.78 | 0.38 | 1.25 | 1.29 | 1.02 | 0.00 | 2.78 |
| Cleveland Point | 27 31 | 153 18 | +0 13 | +0 16 | 2.21 | 1.82 | 0.78 | 0.38 | 1.25 | 1.29 | 1.02 | 0.00 | 2.78 |
| Peel Island | 27 30 | 153 21 | +0 10 | +0 17 | 2.21 | 1.82 | 0.78 | 0.38 | | 1.23 | 1.02 | 0.00 | 2.78 |
| Dunwich | 27 30 | 153 24 | +0 11 | +0 16 | 2.15 | 1.76 | 0.75 | 0.37 | 1.30 | 1.22 | 0.99 | 0.00 | 2.70 |
| Raby Bay (Canals Entrance) | 27 30 | 153 16 | +0 02 | +0 02 | 2.27 | 1.86 | 0.81 | 0.41 | 1.36 | 1.32 | 1.03 | +0.03 | 2.84 |
| Tingalpa Creek (Mouth) | 27 28 | 153 13 | +0 02 | +0 06 | 2.34 | 1.92 | 0.82 | 0.40 | 1.29 | | 1.08 | 0.00 | 2.95 |
| Wellington Point | 27 28 | 153 14 | -0 06 | -0 03 | 2.26 | 1.85 | 0.79 | 0.38 | 1.33 | 1.26 | 1.04 | 0.00 | 2.84 |
| Lota | 27 28 | 153 11 | +0 02 | +0 07 | 2.24 | 1.83 | 0.78 | 0.38 | 1.29 | 1.27 | 1.03 | 0.00 | 2.81 |
| Huybers Light | 27 27 | 153 15 | +0 12 | +0 03 | 2.17 | 1.78 | 0.76 | 0.37 | | 1.26 | 1.00 | 0.00 | 2.73 |
| Manly | 27 27 | 153 11 | +0 02 | +0 07 | 2.24 | 1.83 | 0.78 | 0.38 | 1.29 | 1.27 | 1.03 | 0.00 | 2.81 |
| D'Arcy Light | 27 26 | 153 12 | +0 02 | +0 07 | 2.17 | 1.78 | 0.76 | 0.37 | | 1.26 | 1.00 | 0.00 | 2.73 |
| Rous Light | 27 24 | 153 20 | +0 09 | +0 06 | 2.17 | 1.78 | 0.76 | 0.37 | | 1.21 | 1.00 | 0.00 | 2.73 |
| Amity Point | 27 24 | 153 26 | -0 40 | -0 54 | 1.78 | 1.46 | 0.62 | 0.30 | 1.02 | 1.09 | 0.82 | 0.00 | 2.24 |
| Saint Helena (South) | 27 24 | 153 13 | +0 00 | +0 00 | 2.28 | 1.87 | 0.80 | 0.39 | | 1.32 | 1.05 | 0.00 | 2.87 |
| Nudgee Beach | 27 21 | 153 06 | +0 01 | -0 01 | 2.08 | 1.71 | 0.73 | 0.36 | 1.31 | 1.19 | 0.96 | 0.00 | 2.62 |
| Cabbage Tree Creek (Mouth) | 27 20 | 153 06 | +0 01 | -0 01 | 2.08 | 1.71 | 0.73 | 0.36 | 1.31 | 1.19 | 0.96 | 0.00 | 2.62 |
| Shorncliffe and Sandgate | 27 20 | 153 05 | +0 01 | -0 01 | 2.08 | 1.71 | 0.73 | 0.36 | 1.31 | 1.19 | 0.96 | 0.00 | 2.62 |
| Woody Point | 27 16 | 153 06 | +0 00 | +0 02 | 2.06 | 1.69 | 0.72 | 0.35 | 1.23 | 1.15 | 0.95 | 0.00 | 2.59 |
| Measured Mile-Rear Recip. Lead | 27 15 | 153 15 | -0 25 | -0 23 | 2.04 | 1.67 | 0.71 | 0.35 | | 1.14 | 0.94 | 0.00 | 2.57 |
| Margate | 27 15 | 153 07 | +0 00 | +0 02 | 2.06 | 1.69 | 0.72 | 0.35 | 1.23 | 1.15 | 0.95 | 0.00 | 2.59 |
| Redcliffe | 27 14 | 153 07 | +0 00 | +0 00 | 2.08 | 1.71 | 0.73 | 0.36 | | 1.11 | 0.96 | 0.00 | 2.62 |
| East Channel | 27 14 | 153 20 | -0 09 | -0 13 | 2.06 | 1.69 | 0.72 | 0.35 | | 1.20 | 0.95 | 0.00 | 2.59 |
| Scarborough Boat Harbour | 27 12 | 153 06 | +0 05 | +0 05 | 1.93 | 1.58 | 0.68 | 0.33 | 1.17 | 1.11 | 0.89 | 0.00 | 2.43 |
| Tangalooma | 27 11 | 153 22 | -0 23 | -0 27 | 2.00 | 1.65 | 0.73 | 0.38 | | 1.15 | 0.90 | +0.05 | 2.51 |
| Beachmere(Caboolture River) | 27 08 | 153 02 | +0 06 | +0 18 | 2.08 | 1.71 | 0.73 | 0.36 | 1.26 | 1.21 | 0.96 | 0.00 | 2.62 |
| Bulwer Wrecks | 27 05 | 153 22 | -0 25 | -0 30 | 1.76 | 1.44 | 0.62 | 0.30 | | 1.02 | 0.81 | 0.00 | 2.21 |
| North West Channel Fairway | 26 51 | 153 09 | -1 30 | -1 40 | 1.63 | 1.34 | 0.57 | 0.28 | 0.99 | 0.95 | 0.75 | 0.00 | 2.05 |
| North Pine River - | | | | | | | | | | | | | |
| Deepwater Bend | 27 18 | 153 02 | +0 13 | +0 41 | 2.17 | 1.78 | 0.78 | 0.40 | 1.24 | 1.28 | 0.98 | +0.04 | 2.72 |
| Petrie | 27 17 | 152 58 | +0 24 | +0 52 | 2.26 | 1.85 | 0.79 | 0.38 | 1.26 | 1.27 | 1.04 | 0.00 | 2.84 |
| Pumicestone Passage-Bribie | | | | | | | | | | | | | |
| Bribie Beacon (South Point) | 27 06 | 153 09 | -0 09 | -0 13 | 1.91 | 1.57 | 0.69 | 0.36 | | 1.09 | 0.86 | +0.04 | 2.39 |
| Bongaree | 27 05 | 153 09 | +0 00 | -0 15 | 1.87 | 1.53 | 0.65 | 0.32 | 1.10 | 1.06 | 0.86 | 0.00 | 2.35 |
| Woorim | 27 05 | 153 12 | -0 22 | -0 34 | 1.71 | 1.41 | 0.60 | 0.29 | | 0.93 | 0.79 | 0.00 | 2.16 |
| Toorbul | 27 02 | 153 06 | +0 30 | +0 20 | 1.95 | 1.60 | 0.68 | 0.33 | 1.10 | 1.13 | 0.90 | 0.00 | 2.46 |
| Donnybrook | 27 00 | 153 04 | +1 00 | +0 56 | 1.88 | 1.55 | 0.69 | 0.35 | 1.12 | 1.11 | 0.85 | +0.04 | 2.36 |
| Hussey Creek (Mouth) | 26 56 | 153 04 | +2 04 | +2 56 | 1.35 | 1.04 | 0.40 | 0.32 | | | | | 1.80 |
| The Skids | 26 54 | 153 04 | +1 48 | +2 05 | 0.98 | 0.66 | 0.28 | 0.14 | 0.41 | 0.51 | | | 1.38 |
| Halls Creek (Mouth) 'The Farm' | 26 52 | 153 07 | +0 47 | +1 33 | 0.87 | 0.62 | | | 0.46 | 0.59 | | | 1.21 |
| Golden Beach (Caloundra) | 26 48 | 153 07 | -0 53 | -0 11 | 1.12 | 0.82 | 0.43 | 0.32 | 0.66 | 0.77 | | | 1.52 |

Semidiurnal Tidal Planes - 2015

Height above lowest astronomical tide

| Place | Latitude South | Longitude East | Time Difference | | MHWS 3 | MHWN 4 | MLWN 5 | MLWS 6 | AHD 7 | MSL 8 | Ratio 9 | Cons 10 | HAT 11 |
|------------------------------------|-------------------|-------------------|-----------------|---------|-----------|-----------|-----------|-----------|----------|----------|------------|------------|-----------|
| | | | HW 1 | LW 2 | | | | | | | | | |
| Tidal Datum Epoch 1992 - 2011 | | | H M | H M | m | m | m | m | m | m | | | mm |
| Mooloolaba | 26 41 | 153 08 | Standard Port | | 1.66 | 1.33 | 0.58 | 0.26 | 0.990 | 0.96 | 1.00 | 0.00 | 2.17 |
| Caloundra Head | 26 48 | 153 09 | +0 00 | +0 00 | 1.63 | 1.34 | 0.57 | 0.28 | 0.99 | 0.95 | | | 2.05 |
| Parrearra (Mooloolah River) | 26 43 | 153 07 | +0 23 | +0 44 | 1.67 | 1.23 | 0.55 | 0.20 | 0.93 | | 0.94 | 0.00 | 2.21 |
| Mooloolaba Beach | 26 41 | 153 06 | +0 00 | +0 00 | 1.66 | 1.33 | 0.58 | 0.26 | 0.99 | 0.97 | 1.00 | 0.00 | 2.17 |
| Maroochydore Beach | 26 40 | 153 06 | +0 00 | +0 00 | 1.66 | 1.33 | 0.58 | 0.26 | 0.99 | 0.97 | 1.00 | 0.00 | 2.17 |
| Coolum | 26 31 | 153 06 | +0 00 | +0 00 | 1.66 | 1.33 | 0.58 | 0.26 | 0.99 | 0.97 | 1.00 | 0.00 | 2.17 |
| Maroochy River - | | | | | | | | | | | | | |
| Picnic Point | 26 39 | 153 05 | +1 02 | +1 52 | 0.93 | 0.65 | 0.27 | 0.13 | 0.46 | 0.52 | | | 1.36 |
| David Low Bridge | 26 38 | 153 03 | +1 35 | +2 27 | 0.90 | 0.66 | 0.30 | 0.19 | 0.44 | 0.53 | | | 1.28 |
| Dunethin Rock | 26 35 | 153 02 | +2 09 | +3 06 | 1.03 | 0.78 | 0.28 | 0.15 | 0.44 | 0.53 | | | 1.41 |
| Junction North Maroochy River | 26 34 | 152 58 | +2 18 | +3 12 | 1.15 | 0.88 | 0.34 | 0.22 | 0.49 | 0.60 | | | 1.57 |
| Noosa Head | 26 23 | 153 06 | Standard Port | | 1.78 | 1.45 | 0.71 | 0.38 | 1.123 | 1.08 | 1.00 | 0.00 | 2.28 |
| Noosa River - | | | | | | | | | | | | | |
| Munna Point | 26 24 | 153 04 | +0 42 | +1 35 | 0.78 | 0.65 | 0.29 | 0.17 | 0.42 | 0.45 | 0.40 | +0.13 | 1.10 |
| Tewantin | 26 24 | 153 02 | +1 07 | +1 49 | 0.61 | 0.53 | 0.28 | 0.20 | 0.34 | 0.38 | 0.31 | +0.09 | 0.89 |
| Noosa Beaches - | | | | | | | | | | | | | |
| Noosa Beach | 26 23 | 153 05 | +0 00 | +0 00 | 1.78 | 1.45 | 0.71 | 0.38 | 1.12 | 1.06 | 1.00 | 0.00 | 2.28 |
| Teewah Sands | 26 16 | 153 04 | +0 00 | +0 00 | 1.78 | 1.45 | 0.71 | 0.38 | 1.12 | 1.06 | 1.00 | 0.00 | 2.28 |
| Cooloola | 26 11 | 153 04 | +0 00 | +0 00 | 1.78 | 1.45 | 0.71 | 0.38 | 1.12 | 1.06 | 1.00 | 0.00 | 2.28 |
| Double Island Point | 25 55 | 153 11 | +0 00 | +0 00 | 1.78 | 1.45 | 0.71 | 0.38 | 1.12 | 1.06 | 1.00 | 0.00 | 2.28 |
| Rainbow Beach | 25 54 | 153 05 | +0 00 | +0 00 | 1.78 | 1.45 | 0.71 | 0.38 | 1.12 | 1.06 | 1.00 | 0.00 | 2.28 |
| Waddy Point (Fraser Island) | 24 58 | 153 21 | Standard Port | | 1.75 | 1.45 | 0.81 | 0.50 | 1.007 | 1.13 | 1.00 | 0.00 | 2.37 |
| Wide Bay Bar (Ocean Side) | 25 49 | 153 03 | +0 00 | +0 00 | | | | | | | | | |
| Eurong | 25 30 | 153 07 | +0 00 | +0 00 | | | | | | | | | |
| Happy Valley | 25 20 | 153 12 | +0 00 | +0 00 | | | | | | | | | |
| Indian Head | 25 00 | 153 22 | +0 00 | +0 00 | | | | | | | | | |
| Orchid Beach | 24 58 | 153 19 | +0 00 | +0 00 | | | | | | | | | |
| Urangan | 25 18 | 152 55 | Standard Port | | 3.49 | 2.80 | 1.38 | 0.68 | 2.040 | 2.09 | 1.00 | 0.00 | 4.28 |
| Kingfisher Bay | 25 24 | 153 06 | +0 11 | +0 18 | 3.73 | 3.00 | 1.48 | 0.73 | | 2.26 | 1.07 | 0.00 | 4.58 |
| Bundaberg (Burnett Heads) | 24 46 | 152 23 | Standard Port | | 2.88 | 2.30 | 1.14 | 0.56 | 1.693 | 1.72 | 1.00 | 0.00 | 3.67 |
| Great Sandy Strait - | | | | | | | | | | | | | |
| Tin Can Bay (Snapper Creek) | 25 54 | 153 00 | +0 44 | -0 16 | 2.31 | 1.84 | 0.91 | 0.45 | 1.36 | 1.36 | 0.80 | 0.00 | 2.94 |
| Elbow Point | 25 48 | 153 01 | +0 15 | -0 03 | 2.14 | 1.71 | 0.85 | 0.42 | | 1.28 | 0.74 | 0.01 | 2.73 |
| Snout Point | 25 42 | 152 59 | +0 55 | +0 29 | 2.34 | 1.86 | 0.92 | 0.45 | | 1.39 | 0.81 | 0.00 | 2.97 |
| Big Tuan | 25 41 | 152 53 | +0 55 | +1 05 | 2.16 | 1.73 | 0.86 | 0.42 | 1.19 | 1.37 | 0.75 | 0.00 | 2.75 |
| Boonooroo | 25 39 | 152 54 | +0 55 | +1 05 | 2.16 | 1.73 | 0.86 | 0.42 | 1.19 | 1.37 | 0.75 | 0.00 | 2.75 |
| Boonlye Point | 25 34 | 152 56 | +1 09 | +0 57 | 3.14 | 2.51 | 1.24 | 0.61 | | 1.89 | 1.09 | 0.00 | 4.00 |
| Ungowa Jetty | 25 30 | 152 59 | +0 51 | +0 49 | 3.83 | 3.06 | 1.52 | 0.74 | | 2.39 | 1.33 | 0.00 | 4.88 |
| Mary River - | | | | | | | | | | | | | |
| Bingham (River Heads) | 25 26 | 152 55 | +1 13 | +1 11 | 3.70 | 3.05 | 1.19 | 0.64 | 2.17 | 2.17 | | | 4.60 |
| Baumgarts | 25 30 | 152 44 | +2 00 | +3 10 | 3.30 | 2.56 | 0.62 | 0.31 | 1.49 | | | | 4.39 |
| Maryborough | 25 33 | 152 43 | +1 57 | +3 00 | 3.22 | 2.55 | 0.53 | 0.14 | 1.40 | | | | 4.10 |
| Copenhagen Bend | 25 31 | 152 39 | +2 46 | +3 53 | 3.24 | 2.50 | 0.37 | 0.22 | 1.22 | | | | 4.22 |
| Barrage | 25 37 | 152 37 | +3 03 | +5 09 | 2.92 | 2.24 | 0.18 | 0.09 | 0.86 | | | | 3.79 |

Semidiurnal Tidal Planes - 2015

Height above lowest astronomical tide

| Place | Latitude South | Longitude East | Time Difference | | MHWS 3 | MHWN 4 | MLWN 5 | MLWS 6 | AHD 7 | MSL 8 | Ratio 9 | Cons 10 | HAT 11 |
|--|-------------------|-------------------|----------------------|---------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|
| | | | HW 1 | LW 2 | | | | | | | | | |
| | | | H M | H M | | | | | | | | | |
| Tidal Datum Epoch 1992 - 2011 | | | | | | | | | | | | | |
| Bundaberg (Burnett Heads) cont. | | | | | | | | | | | | | |
| Hervey Bay - | | | | | | | | | | | | | |
| Point Vernon | 25 15 | 152 48 | -0 10 | -0 10 | 3.23 | 2.58 | 1.28 | 0.63 | 1.89 | 1.90 | 1.12 | 0.00 | 4.11 |
| Burrum Heads | 25 11 | 152 37 | +0 12 | +0 30 | 3.05 | 2.42 | 1.17 | 0.54 | 1.82 | 1.78 | 1.08 | -0.06 | 3.90 |
| Woodgate (Theodolite Creek) | 25 04 | 152 33 | -0 15 | -0 15 | 3.06 | 2.44 | 1.21 | 0.59 | 1.77 | 1.78 | 1.06 | 0.00 | 3.89 |
| Wathumba Creek (Fraser Island) | 24 58 | 153 14 | -0 12 | +0 36 | 3.03 | 2.43 | 1.18 | 0.55 | | 1.86 | 1.06 | 0.00 | 3.88 |
| Elliott River Entrance | 24 55 | 152 30 | -0 09 | -0 09 | 2.96 | 2.35 | 1.13 | 0.52 | 1.70 | 1.73 | 1.05 | -0.07 | 3.78 |
| Burnett River (Town Reach) | 24 52 | 152 21 | +0 32 | +0 57 | 3.17 | 2.53 | 1.25 | 0.62 | 1.79 | 1.83 | 1.10 | 0.00 | 4.04 |
| Bargara | 24 49 | 152 27 | +0 00 | +0 00 | 2.88 | 2.30 | 1.14 | 0.56 | 1.69 | 1.73 | 1.00 | 0.00 | 3.67 |
| Kolan River (Booyan Bridge) | 24 42 | 152 11 | +0 23 | +1 30 | 2.60 | 2.02 | 0.86 | 0.66 | 1.31 | 1.51 | 0.89 | 0.00 | 3.37 |
| Baffle Creek (Winfield) | 24 32 | 152 02 | +1 05 | +1 56 | 2.22 | 1.74 | 1.02 | 1.02 | 1.32 | 1.56 | | | 2.83 |
| Lady Elliot Island | 24 07 | 152 43 | -0 21 | -0 21 | 2.07 | 1.64 | 0.78 | 0.35 | | 1.19 | 0.74 | -0.06 | 2.67 |
| Gladstone | 23 50 | 151 15 | Standard Port | | 3.96 | 3.11 | 1.57 | 0.72 | 2.268 | 2.34 | 1.00 | 0.00 | 4.83 |
| Seventeen Seventy | 24 11 | 151 53 | -0 35 | -0 22 | 2.79 | 2.20 | 1.12 | 0.52 | 1.61 | 1.60 | 0.70 | 0.00 | 3.58 |
| Pancake Creek | 24 01 | 151 44 | -0 35 | -0 35 | 2.97 | 2.33 | 1.18 | 0.54 | | 1.74 | 0.75 | 0.00 | 3.62 |
| Clews Point | 24 01 | 151 45 | -0 45 | -0 45 | 2.9 | 2.2 | 1.1 | 0.4 | | 1.64 | | | 3.5 |
| Lady Musgrave Island | 23 55 | 152 23 | -0 52 | -0 52 | 2.2 | 1.7 | 0.9 | 0.4 | | 1.30 | | | 2.9 |
| Gatcombe Head | 23 53 | 151 22 | -0 17 | -0 16 | 3.45 | 2.71 | 1.37 | 0.56 | | 2.08 | 0.87 | 0.00 | 4.29 |
| South Trees Wharf | 23 51 | 151 19 | -0 11 | -0 10 | 3.80 | 2.99 | 1.51 | 0.69 | 2.21 | 2.20 | 0.96 | 0.00 | 4.63 |
| Fishermans Landing | 23 47 | 151 11 | +0 15 | +0 12 | 4.20 | 3.30 | 1.66 | 0.76 | 2.43 | 2.41 | 1.06 | 0.00 | 5.12 |
| Graham Creek | 23 45 | 151 11 | +0 19 | +0 10 | 4.34 | 3.41 | 1.72 | 0.79 | 2.55 | 2.58 | 1.10 | 0.00 | 5.30 |
| The Narrows (Boat Creek) | 23 39 | 151 06 | +0 31 | +0 26 | 4.58 | 3.59 | 1.79 | 0.79 | | 2.68 | 1.17 | -0.05 | 5.60 |
| The Narrows (Ramsay Crossing) | 23 38 | 151 05 | +0 19 | +0 22 | 5.08 | 4.01 | 2.07 | 1.00 | | 3.01 | 1.26 | 0.09 | 6.17 |
| Sea Hill | 23 30 | 150 59 | -0 01 | -0 07 | 4.47 | 3.51 | 1.77 | 0.81 | | 2.63 | 1.13 | 0.00 | 5.45 |
| Polmaise Reef | 23 34 | 151 39 | -0 29 | -0 29 | 3.0 | 2.3 | 1.1 | 0.4 | | 1.71 | | | 3.7 |
| Heron Island | 23 27 | 151 55 | -0 33 | -0 33 | 2.69 | 2.09 | 0.99 | 0.39 | | 1.46 | 0.71 | -0.12 | 3.31 |
| Rockhampton | 23 23 | 150 31 | +1 23 | +2 31 | 5.18 | 4.16 | 1.63 | 0.95 | 2.52 | 2.86 | | | 6.42 |
| Tryon Island | 23 14 | 151 46 | -0 18 | -0 18 | 2.9 | 2.2 | 1.1 | 0.4 | | 1.63 | | | 3.6 |
| Great Keppel Island | 23 11 | 150 56 | +0 05 | +0 03 | 4.16 | 3.27 | 1.65 | 0.76 | | 2.43 | 1.05 | 0.00 | 5.07 |
| Cape Manifold | 22 41 | 150 50 | +0 17 | +0 29 | 4.36 | 3.42 | 1.73 | 0.79 | | 2.52 | 1.10 | 0.00 | 5.31 |
| Port Clinton | 22 32 | 150 45 | +0 34 | +0 34 | 4.3 | 3.3 | 1.6 | 0.5 | | 2.44 | | | 5.2 |
| Gannet Cay | 21 59 | 152 28 | -0 09 | -0 09 | 2.1 | 1.6 | 0.8 | 0.4 | | 1.23 | | | 2.8 |
| Port Alma | 23 35 | 150 52 | Standard Port | | 4.93 | 3.83 | 1.98 | 0.88 | 2.854 | 2.90 | 1.00 | 0.00 | 5.98 |
| Rosslyn Bay | 23 10 | 150 48 | Standard Port | | 4.23 | 3.24 | 1.60 | 0.62 | 2.360 | 2.42 | 1.00 | 0.00 | 5.14 |
| Hay Point | 21 16 | 149 18 | Standard Port | | 5.80 | 4.48 | 2.25 | 0.94 | 3.340 | 3.37 | 1.00 | 0.00 | 7.14 |
| Marquis Island | 22 20 | 150 27 | -0 26 | -0 26 | 6.5 | 5.0 | 2.5 | 1.0 | | 3.73 | | | 7.5 |
| McEwen Islet | 22 09 | 149 36 | +0 24 | +0 24 | 7.4 | 5.6 | 2.6 | 0.8 | | 4.13 | | | 9.1 |
| High Peak Island | 21 57 | 150 41 | -0 45 | -0 45 | 4.8 | 3.7 | 1.8 | 0.7 | | 2.75 | | | 5.9 |
| Bell Cay | 21 49 | 151 15 | -0 58 | -0 58 | 3.6 | 2.7 | 1.3 | 0.4 | | 2.00 | | | 4.3 |
| Middle Island (Percy Isles) | 21 39 | 150 15 | -0 27 | -0 27 | 5.67 | 4.42 | 2.30 | 1.05 | | 3.34 | 0.95 | 0.16 | 6.94 |
| Cullen Islet | 21 25 | 149 29 | -0 03 | -0 03 | 6.09 | 4.70 | 2.36 | 0.99 | | 3.51 | 1.05 | 0.00 | 7.50 |
| Penrith Island | 21 00 | 149 54 | -0 07 | -0 07 | 4.6 | 3.5 | 1.6 | 0.5 | | 2.56 | | | 5.6 |
| Scawfell Island | 20 52 | 149 37 | -0 04 | -0 04 | 4.4 | 3.4 | 1.7 | 0.6 | | 2.51 | | | 5.4 |
| Mackay Outer Harbour | 21 06 | 149 14 | Standard Port | | 5.29 | 4.07 | 1.96 | 0.74 | 2.941 | 3.02 | 1.00 | 0.00 | 6.58 |
| Thirsty Sound | 22 08 | 150 02 | -0 26 | -0 37 | 6.08 | 4.68 | 2.25 | 0.85 | | 3.45 | 1.15 | 0.00 | 7.57 |
| Keswick Island | 20 55 | 149 26 | -0 03 | +0 04 | 4.71 | 3.62 | 1.74 | 0.66 | | 2.69 | 0.89 | 0.00 | 5.86 |
| Halliday Bay | 20 54 | 148 59 | +0 09 | +0 23 | 5.03 | 3.73 | 1.69 | 0.56 | 2.63 | 2.65 | 0.92 | 0.00 | 6.14 |
| Finlayson Point | 20 53 | 148 56 | +0 20 | +0 20 | 5.40 | 4.15 | 2.00 | 0.75 | | 3.07 | 1.02 | 0.00 | 6.71 |
| Carlisle Island | 20 47 | 149 17 | +0 02 | -0 02 | 4.44 | 3.42 | 1.65 | 0.62 | | 2.53 | 0.84 | 0.00 | 5.53 |
| Laguna Quays Marina | 20 36 | 148 40 | +0 30 | +0 25 | 4.74 | 3.74 | 1.87 | 0.88 | 2.81 | 2.74 | 0.91 | +0.02 | 6.30 |

Semidiurnal Tidal Planes - 2015

Height above lowest astronomical tide

| Place | Latitude | Longitude | Time Difference | | MHWS | MHWN | MLWN | MLWS | AHD | MSL | Ratio | Cons | HAT | |
|-------------------------------|----------|-----------|-----------------|-------|------|------|------|------|-------|------|-------|-------|------|------|
| | South | East | HW | LW | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| Tidal Datum Epoch 1992 - 2011 | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | | | | H M | H M | m | m | m | m | m | m | | | mm |
| Bugatti Reef | 20 05 | 150 18 | Standard Port | | 2.6 | 2.0 | 1.1 | 0.5 | | 1.56 | | | | 3.5 |
| Rib Reef | 18 28 | 146 52 | -0.45 | -0.45 | 2.8 | 1.9 | 1.4 | 0.6 | | 1.68 | | | | 3.6 |
| Cato Island | 23 15 | 155 32 | -2.03 | -2.03 | 1.6 | 1.3 | 0.7 | 0.3 | | 0.99 | | | | 2.2 |
| Creal Reef | 20 32 | 150 22 | +0.20 | +0.20 | 3.2 | 2.5 | 1.1 | 0.4 | | 1.80 | | | | 4.1 |
| Shute Harbour | 20 17 | 148 47 | Standard Port | | 3.30 | 2.57 | 1.27 | 0.54 | 1.907 | 1.92 | 1.00 | 0.00 | 4.33 | |
| East Repulse Island | 20 35 | 148 53 | +0.15 | +0.15 | 4.5 | 3.5 | 1.7 | 0.8 | | 2.64 | | | | 5.7 |
| Lindeman Island | 20 28 | 149 03 | +0.06 | +0.08 | 3.78 | 2.95 | 1.49 | 0.66 | | 2.32 | 1.13 | +0.05 | 4.94 | |
| Hamilton Island | 20 21 | 148 57 | +0.02 | +0.02 | 3.80 | 2.97 | 1.51 | 0.68 | | 2.10 | 1.13 | +0.07 | 4.96 | |
| Abel Point (Airlie Beach) | 20 16 | 148 43 | -0.07 | -0.06 | 3.00 | 2.34 | 1.16 | 0.49 | 1.75 | 1.75 | 0.91 | 0.00 | 3.94 | |
| Cid Harbour | 20 15 | 148 55 | -0.02 | -0.02 | 3.3 | 2.5 | 1.3 | 0.5 | | 1.87 | | | | 4.2 |
| Double Bay | 20 11 | 148 38 | -0.20 | -0.20 | 3.0 | 2.4 | 1.2 | 0.6 | | 1.77 | | | | 3.9 |
| Nara Inlet | 20 10 | 148 54 | -0.12 | -0.12 | 3.26 | 2.55 | 1.29 | 0.58 | | 1.89 | 0.97 | +0.06 | 4.26 | |
| Hayman Island | 20 04 | 148 53 | -0.24 | -0.24 | 3.3 | 2.6 | 1.3 | 0.6 | | 1.93 | | | | 4.3 |
| Hook Island | 20 04 | 148 56 | -0.13 | -0.13 | 2.9 | 2.3 | 1.1 | 0.5 | | 1.69 | | | | 3.8 |
| Bowen | 20 01 | 148 15 | Standard Port | | 2.83 | 2.21 | 1.31 | 0.67 | 1.78 | 1.76 | 1.00 | 0.00 | 3.73 | |
| Abbot Point | 19 51 | 148 05 | Standard Port | | 2.70 | 2.07 | 1.30 | 0.67 | 1.626 | 1.69 | 1.00 | 0.00 | 3.60 | |
| Oyster Rocks (Burdekin River) | 19 44 | 147 35 | -0.03 | +0.32 | 2.54 | 1.95 | 1.22 | 0.63 | 1.47 | 1.59 | 0.94 | 0.00 | 3.38 | |
| Townsville | 19 15 | 146 50 | Standard Port | | 3.11 | 2.26 | 1.63 | 0.77 | 1.856 | 1.94 | 1.00 | 0.00 | 4.11 | |
| Rocky Ponds Creek | 19 50 | 147 39 | +0.58 | +1.14 | 2.47 | 1.93 | 1.23 | 0.70 | 1.41 | 1.50 | | | | 3.38 |
| Cape Ferguson | 19 17 | 147 03 | +0.00 | -0.01 | 2.89 | 2.09 | 1.49 | 0.67 | 1.69 | 1.76 | 0.95 | -0.06 | 3.84 | |
| Cape Pallarenda | 19 11 | 146 47 | +0.02 | +0.03 | 3.10 | 2.24 | 1.61 | 0.75 | 1.88 | | 1.01 | 0.00 | 4.10 | |
| Magnetic Island | 19 09 | 146 52 | +0.06 | +0.02 | 3.01 | 2.17 | 1.57 | 0.75 | 1.84 | 1.91 | 0.96 | 0.00 | 3.98 | |
| Townsville Fairway Beacon | 19 08 | 146 54 | -0.04 | -0.06 | 2.99 | 2.17 | 1.56 | 0.74 | | 1.86 | 0.96 | 0.00 | 3.95 | |
| Britomart Reef | 18 15 | 146 43 | -0.15 | -0.20 | 2.67 | 1.94 | 1.40 | 0.66 | | 1.69 | 0.86 | 0.00 | 3.53 | |
| Goold Island | 18 10 | 146 09 | -0.02 | -0.02 | 2.9 | 2.2 | 1.6 | 0.8 | | 1.88 | | | | 3.8 |
| Dunk Island | 17 56 | 146 08 | -0.02 | -0.02 | 2.8 | 2.1 | 1.5 | 0.8 | | 1.79 | | | | 3.6 |
| Flinders Reef | 17 43 | 148 27 | -0.25 | -0.15 | 2.31 | 1.72 | 1.28 | 0.69 | | 1.48 | 0.69 | +0.16 | 3.00 | |
| Lucinda (Offshore) | 18 31 | 146 23 | Standard Port | | 2.98 | 2.18 | 1.60 | 0.80 | 1.844 | 1.89 | 1.00 | 0.00 | 3.96 | |
| Albino Rock | 18 47 | 146 43 | +0.01 | +0.01 | 2.7 | 1.9 | 1.3 | 0.5 | | 1.56 | | | | 3.5 |
| Cardwell | 18 16 | 146 02 | +0.01 | -0.05 | 3.14 | 2.28 | 1.68 | 0.81 | 1.86 | 1.94 | 1.06 | 0.00 | 4.13 | |
| Mourilyan Harbour | 17 36 | 146 07 | Standard Port | | 2.65 | 1.98 | 1.49 | 0.83 | 1.729 | 1.74 | 1.00 | 0.00 | 3.50 | |
| Clump Point | 17 51 | 146 06 | +0.01 | +0.01 | 2.72 | 2.01 | 1.49 | 0.79 | 1.68 | 1.73 | 1.06 | -0.09 | 3.62 | |
| Nathan Reef | 17 32 | 146 30 | -0.07 | -0.04 | 2.39 | 1.78 | 1.34 | 0.74 | | 1.61 | 0.90 | 0.00 | 3.15 | |
| Innisfail | 17 31 | 146 02 | +0.25 | +0.55 | 1.97 | 1.31 | 1.12 | 0.83 | 0.96 | 1.06 | 0.98 | -0.63 | 2.80 | |
| Flying Fish Point | 17 30 | 146 05 | +0.05 | +0.15 | 2.62 | 1.96 | 1.48 | 0.82 | 1.63 | 1.69 | 0.99 | 0.00 | 3.47 | |
| Peart Reef | 17 29 | 146 25 | -0.08 | -0.02 | 2.51 | 1.86 | 1.49 | 0.83 | | 1.64 | 0.95 | 0.00 | 3.47 | |
| Cairns | 16 56 | 145 47 | Standard Port | | 2.62 | 1.94 | 1.46 | 0.78 | 1.643 | 1.70 | 1.00 | 0.00 | 3.50 | |
| Saxon Reef | 16 28 | 145 59 | +0.17 | +0.11 | 2.30 | 1.70 | 1.28 | 0.68 | | | 0.88 | 0.00 | 3.08 | |
| Low Islets | 16 23 | 145 34 | +0.00 | +0.00 | 2.37 | 1.83 | 1.34 | 0.81 | | 1.55 | 0.93 | 0.00 | 3.25 | |
| Cooktown | 15 28 | 145 15 | -0.02 | +0.06 | 2.40 | 1.77 | 1.32 | 0.71 | 1.48 | 1.49 | 0.92 | 0.00 | 3.20 | |
| Cape Flattery | 14 57 | 145 19 | -0.10 | -0.10 | 2.38 | 1.71 | 1.32 | 0.65 | | 1.48 | 0.89 | 0.00 | 3.08 | |
| Morris Island | 13 29 | 143 42 | +0.14 | +0.14 | 2.5 | 1.8 | 1.4 | 0.7 | | 1.58 | | | | 3.3 |
| Portland Roads | 12 36 | 143 25 | +0.19 | +0.08 | 2.62 | 1.94 | 1.46 | 0.78 | | 1.63 | 1.00 | 0.00 | 3.50 | |
| Cape Grenville | 11 58 | 143 16 | +0.51 | +0.51 | 2.6 | 1.8 | 1.3 | 0.5 | | 1.53 | | | | 3.3 |

Semidiurnal Tidal Planes - 2015

Height above lowest astronomical tide

| Place | Latitude South | Longitude East | Time Difference | | MHWS 3 | MHWN 4 | MLWN 5 | MLWS 6 | AHD 7 | MSL 8 | Ratio 9 | Cons 10 | HAT 11 |
|-------------------------------|-------------------|-------------------|-----------------|---------|-----------|-----------|-----------|-----------|----------|----------|------------|------------|-----------|
| | | | HW 1 | LW 2 | | | | | | | | | |
| Tidal Datum Epoch 1992 - 2011 | | | | | | | | | | | | | |
| | | | H M | H M | m | m | m | m | m | m | | | mm |
| Port Douglas | 16 29 | 145 28 | Standard Port | | 2.49 | 1.83 | 1.37 | 0.70 | 1.581 | 1.60 | 1.00 | 0.00 | 3.36 |
| Leggatt Island | 14 32 | 144 51 | Standard Port | | | | | | | 1.70 | 1.00 | 0.00 | 3.4 |
| Normanby River | 14 26 | 144 09 | +0 05 | +0 05 | 2.5 | 1.6 | 1.2 | 0.3 | | 1.39 | | | 3.4 |
| Flinders Island | 14 10 | 144 14 | +0 11 | +0 11 | 2.5 | 1.7 | 1.4 | 0.6 | | 1.52 | | | 3.3 |
| Eden Reef | 14 04 | 143 54 | -0 10 | -0 10 | 2.8 | 2.0 | 1.5 | 0.7 | | 1.77 | | | 3.6 |
| Pelican Island | 13 55 | 143 50 | +0 07 | +0 07 | 3.0 | 2.2 | 1.7 | 0.9 | | 1.93 | | | 3.9 |
| Fife Island | 13 39 | 143 43 | +0 03 | +0 03 | 2.6 | 1.8 | 1.4 | 0.7 | | 1.63 | | | 3.3 |
| Round Point | 11 54 | 143 06 | +0 42 | +0 42 | 2.8 | 1.9 | 1.4 | 0.5 | | 1.67 | | | 3.6 |
| Hannibal Islands | 11 36 | 142 56 | +0 56 | +0 56 | 3.0 | 2.1 | 1.5 | 0.6 | | 1.78 | | | 3.8 |
| Collette Reef | 11 14 | 142 56 | +0 34 | +0 34 | 2.7 | 1.9 | 1.3 | 0.5 | | 1.60 | | | 3.5 |

The secondary place time differences and tidal planes are based on short observation sets and are updated as new observations become available.

Diurnal Tidal Planes - 2015

Height above lowest astronomical tide

| Place | Latitude South | Longitude East | Time Difference | | MHHW 3 | MLHW 4 | MHLW 5 | MLLW 6 | AHD 7 | MSL 8 | Ratio 9 | Cons 10 | HAT 11 |
|-------------------------------|-------------------|-------------------|-----------------|---------|-----------|-----------|-----------|-----------|----------|----------|------------|------------|-----------|
| | | | HW 1 | LW 2 | | | | | | | | | |
| Tidal Datum Epoch 1992 - 2011 | | | | | | | | | | | | | |
| | | | H M | H M | m | m | m | m | m | m | | m | m |
| Shute Harbour | 20 17 | 148 47 | Standard Port | | | | | | 1.907 | 1.92 | 1.00 | 0.00 | 4.33 |
| Molle Island | 20 15 | 148 50 | -0 01 | -0 01 | 3.5 | 2.2 | 1.5 | 0.2 | | 1.81 | | | 4.1 |
| Bugatti Reef | 20 05 | 150 18 | Standard Port | | | | | | | 1.56 | 1.00 | 0.00 | 3.5 |
| Pith Reef | 18 13 | 147 01 | -0 59 | -0 59 | 2.6 | 1.6 | 1.5 | 0.5 | | 1.55 | | | 3.3 |
| Mellish Reef | 17 25 | 155 52 | -1 43 | -1 43 | 1.5 | 0.9 | 0.8 | 0.2 | | 0.85 | | | 1.7 |
| Willis Island | 16 13 | 150 01 | -1 06 | -1 06 | 2.2 | 1.3 | 1.3 | 0.5 | | 1.32 | | | 2.7 |
| Townsville | 19 15 | 146 50 | Standard Port | | | | | | 1.856 | 1.94 | 1.00 | 0.00 | 4.11 |
| Unnamed Reef No2 | 19 37 | 149 50 | -0 03 | -0 03 | 2.5 | 1.6 | 1.3 | 0.4 | | 1.48 | | | 3.2 |
| Jaguar Reef | 18 59 | 148 25 | -0 13 | -0 13 | 2.4 | 1.5 | 1.3 | 0.4 | | 1.36 | | | 2.9 |
| Shrimp Reef | 18 56 | 148 04 | -0 04 | -0 04 | 2.5 | 1.5 | 1.3 | 0.3 | | 1.41 | | | 3.0 |
| John Brewer Reef | 18 38 | 147 03 | +0 04 | +0 04 | 2.5 | 1.6 | 1.4 | 0.4 | | 1.48 | | | 3.4 |
| Unnamed Reef No1 | 17 52 | 146 43 | -0 08 | -0 08 | 2.6 | 1.7 | 1.5 | 0.5 | | 1.58 | | | 3.3 |
| Mourilyan Harbour | 17 36 | 146 07 | Standard Port | | 2.79 | 1.85 | 1.63 | 0.69 | 1.729 | 1.74 | 1.00 | 0.00 | 3.50 |
| South Barnard Island | 17 44 | 146 09 | -0 05 | -0 05 | 2.7 | 1.7 | 1.5 | 0.6 | | 1.62 | | | 3.4 |
| Cairns | 16 56 | 145 47 | Standard Port | | 2.74 | 1.81 | 1.58 | 0.65 | 1.643 | 1.70 | 1.00 | 0.00 | 3.50 |
| Russell Island | 17 13 | 146 06 | -0 17 | -0 17 | 2.4 | 1.5 | 1.4 | 0.6 | | 1.48 | | | 2.8 |
| High Island | 17 10 | 146 00 | -0 10 | -0 10 | 2.6 | 1.7 | 1.5 | 0.6 | | 1.59 | | | 3.2 |
| Sudbury Cay | 16 57 | 146 08 | -0 06 | -0 06 | 2.6 | 1.6 | 1.5 | 0.6 | | 1.57 | | | 3.0 |
| Fitzroy Island | 16 55 | 146 00 | -0 09 | -0 09 | 2.6 | 1.6 | 1.5 | 0.5 | | 1.57 | | | 3.2 |
| Green Island | 16 45 | 145 58 | -0 05 | -0 05 | 2.5 | 1.6 | 1.4 | 0.6 | | 1.54 | | | 3.1 |
| Palm Cove | 16 44 | 145 40 | -0 07 | -0 07 | 2.5 | 1.6 | 1.4 | 0.5 | | 1.52 | | | 3.1 |
| Michaelmas Cay | 16 36 | 145 59 | -0 11 | -0 11 | 2.5 | 1.6 | 1.5 | 0.6 | | 1.52 | | | 3.1 |
| Bailay Creek | 16 12 | 145 27 | +0 16 | +0 16 | 2.2 | 1.3 | 1.2 | 0.3 | | 1.27 | | | 2.6 |
| Cape Bedford | 15 13 | 145 20 | +0 04 | +0 04 | 2.3 | 1.4 | 1.3 | 0.5 | | 1.38 | | | 2.8 |
| Low Wooded Isle | 15 05 | 145 23 | -0 04 | -0 04 | 2.5 | 1.5 | 1.5 | 0.4 | | 1.47 | | | 3.0 |
| Lizard Island | 14 39 | 145 27 | -0 09 | -0 09 | 2.31 | 1.50 | 1.30 | 0.50 | | 1.40 | 0.87 | -0.07 | 2.98 |

Diurnal Tidal Planes - 2015

Height above lowest astronomical tide

| Place | Latitude | Longitude | Time Difference | | MHHW | MLHW | MHLW | MLLW | AHD | MSL | Ratio | Cons | HAT |
|--------------------------------|----------|-----------|-----------------|-------|------|------|------|------|-------|------|-------|-------|------|
| | South | East | HW | LW | | | | | | | | | |
| Tidal Datum Epoch 1992 - 2011 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | | | H M | H M | m | m | m | m | m | m | | m | m |
| Port Douglas | 16 29 | 145 28 | Standard Port | | 2.62 | 1.70 | 1.49 | 0.58 | 1.581 | 1.60 | 1.00 | 0.00 | 3.36 |
| East Hope Island | 15 44 | 145 28 | -0 11 | -0 11 | 2.5 | 1.5 | 1.4 | 0.4 | | 1.47 | | | 3.1 |
| Leggatt Island | 14 32 | 144 51 | Standard Port | | 2.7 | 1.8 | 1.6 | 0.7 | | 1.70 | 1.00 | 0.00 | 3.4 |
| North Direction Island | 14 45 | 145 30 | -0 06 | -0 06 | 2.4 | 1.5 | 1.4 | 0.5 | | 1.44 | | | 3.0 |
| East Petherbridge Island | 14 44 | 145 06 | -0 01 | -0 01 | 2.6 | 1.6 | 1.5 | 0.6 | | 1.57 | | | 3.2 |
| Pipon Island | 14 07 | 144 30 | -0 02 | -0 02 | 2.5 | 1.5 | 1.4 | 0.5 | | 1.48 | | | 3.1 |
| Creech Reef | 13 38 | 144 05 | +0 01 | +0 01 | 2.5 | 1.5 | 1.5 | 0.5 | | 1.50 | | | 3.1 |
| Unnamed Reef No3 | 13 20 | 143 58 | -0 04 | -0 04 | 2.4 | 1.6 | 1.5 | 0.6 | | 1.51 | | | 3.1 |
| Suchen Reef | 13 18 | 143 47 | -0 01 | -0 01 | 2.5 | 1.6 | 1.5 | 0.6 | | 1.57 | | | 3.3 |
| Night Island | 13 11 | 143 34 | +0 01 | +0 01 | 2.5 | 1.6 | 1.4 | 0.5 | | 1.50 | | | 3.0 |
| Jubilee Reef | 13 10 | 143 46 | +0 00 | +0 00 | 2.5 | 1.6 | 1.5 | 0.6 | | 1.55 | | | 3.2 |
| Ham Reef | 13 02 | 143 52 | -0 07 | -0 07 | 2.3 | 1.5 | 1.4 | 0.5 | | 1.42 | | | 3.0 |
| Restoration Island | 12 38 | 143 27 | +0 12 | +0 12 | 2.4 | 1.4 | 1.3 | 0.4 | | 1.36 | | | 2.9 |
| Piper Island | 12 15 | 143 14 | +0 18 | +0 18 | 2.7 | 1.7 | 1.5 | 0.4 | | 1.58 | | | 3.3 |
| Sir Charles Hardy Island | 11 55 | 143 26 | +0 27 | +0 27 | 2.7 | 1.6 | 1.5 | 0.4 | | 1.57 | | | 3.3 |
| Raine Island | 11 36 | 144 03 | -0 10 | -0 10 | 2.3 | 1.4 | 1.4 | 0.5 | | 1.42 | | | 2.9 |
| Shadwell Reef | 11 27 | 143 46 | -0 01 | -0 01 | 2.3 | 1.4 | 1.2 | 0.3 | | 1.30 | | | 2.8 |
| Twin Island | 10 28 | 142 26 | Standard Port | | 2.97 | 1.97 | 1.51 | 0.51 | | 1.74 | 1.00 | 0.00 | 3.80 |
| Thursday Island | 10 35 | 142 13 | Standard Port | | 3.07 | 2.36 | 1.38 | 0.68 | 1.769 | 1.87 | 1.00 | 0.00 | 3.86 |
| Red Island Point (Bamaga) | 10 51 | 142 22 | +0 00 | +0 00 | 2.8 | 2.2 | 1.0 | 0.4 | | 1.56 | | | 3.2 |
| Goods Island | 10 34 | 142 09 | Standard Port | | 3.72 | 2.67 | 1.59 | 0.54 | | 2.13 | 1.00 | 0.00 | 4.07 |
| Booby Island | 10 36 | 141 55 | Standard Port | | 4.24 | 2.81 | 2.01 | 0.58 | | 2.41 | 1.00 | 0.00 | 4.31 |
| Crab Island | 10 58 | 142 07 | -0 12 | -0 12 | 3.7 | 2.4 | 1.7 | 0.5 | | 2.10 | | | 3.7 |
| Bampfield Head | 10 42 | 142 06 | -0 09 | -0 09 | 4.3 | 3.0 | 1.9 | 0.6 | | 2.44 | | | 4.3 |
| Merauke | 08 29 | 140 24 | -2 50 | -2 50 | 5.5 | 3.2 | 2.9 | 0.6 | | 3.04 | | | 5.7 |
| Weipa (Humbug Point) | 12 40 | 141 52 | Standard Port | | 2.95 | 2.21 | 1.46 | 0.72 | 1.752 | 1.83 | 1.00 | 0.00 | 3.38 |
| Aurukun (Archer River) | 13 22 | 141 43 | +0 14 | +0 23 | 2.33 | 1.75 | 1.15 | 0.57 | 1.18 | 1.50 | 0.79 | 0.00 | 2.67 |
| Archer River (Worbody Point) | 13 20 | 141 39 | +0 25 | +0 25 | 2.1 | 1.7 | 0.8 | 0.4 | | 1.26 | | | 2.2 |
| Pennefather River | 12 18 | 141 42 | -0 33 | -0 33 | 3.13 | 2.34 | 1.55 | 0.76 | | 1.87 | 1.06 | 0.00 | 3.58 |
| Karumba | 17 30 | 140 50 | Standard Port | | 3.77 | 3.38 | 0.83 | 0.45 | 2.184 | 2.11 | 1.00 | 0.00 | 4.88 |
| Sweers Island Offshore | 16 52 | 139 36 | +0 13 | +0 13 | 3.8 | 3.7 | 0.9 | 0.8 | | 2.27 | | | 4.7 |
| Inscription Point (Sweers Is.) | 17 07 | 139 36 | +0 52 | +0 36 | 3.71 | 3.33 | 0.86 | 0.49 | | 2.06 | 0.97 | +0.05 | 4.78 |
| Mornington Island | 16 40 | 139 10 | Standard Port | | 3.12 | 2.84 | 1.09 | 0.81 | 2.00 | 1.96 | 1.00 | 0.00 | 3.87 |

The secondary place time differences and tidal planes are based on short observation sets and are updated as new observations become available.

Tide calculations for places other than standard ports

Find the required locality in the table Semidiurnal Tidal planes or the table Diurnal Tide planes and note its standard port.

Time of High Water

1. Note the time difference in column 1;
2. Add or subtract (as indicated by + or -) this time difference to the predicted time of high water at the standard port.

Time of Low Water

1. Note the time difference in column 2;
2. Add or subtract (as indicated by + or -) this time difference to the predicted time of low water at the standard port.

The result is the approximate time of the tide at the required locality.

Height of High water

1. Find the height of the predicted high water at the standard port;
2. Multiply the height by the figure in column 9;
3. Add or subtract (as indicated by the + or -) the figure in column 10.

Height of Low Water

1. Find the height of the predicted low water at the standard port;
2. Multiply the height by the figure in column 9;
3. Add or subtract (as indicated by the + or -) the figure in column 10.

The result is the approximate height of tide at the required locality.

Extract from the table Semidiurnal Tidal Planes

Height above lowest astronomical tide

| Place | Latitude | Longitude | Time Difference | | MHWS | MHWN | MLWN | MLWS | AHD | MSL | Ratio | Cons | HAT |
|-----------|----------|-----------|-----------------|-------|------|------|------|------|-------|------|-------|-------|------|
| | South | East | HW | LW | | | | | | | | | |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | | | H M | H M | m | m | m | m | m | m | | | m |
| Standard | 27 05 | 152 07 | Standard Port | | 2.16 | 1.76 | 0.75 | 0.35 | 1.243 | 1.27 | 1.00 | 0.00 | 2.71 |
| Secondary | 27 12 | 152 15 | -0.25 | -0.20 | 1.75 | 1.25 | 0.55 | 0.15 | | 0.84 | 0.81 | +0.04 | 2.35 |

Example calculation

Find the time and height of high and low tide at a secondary place on the morning of March 16.

Information from Semidiurnal tidal planes table

Extract from tidal prediction tables for standard ports

Ports

| | | |
|-----------------|----------------------|-------|
| Standard port | "Standard" | |
| Secondary Place | Time difference H. W | -0.25 |
| | Time difference L. W | -0.20 |
| | Column 9 | 0.81 |
| | Column 10 | +0.04 |

March

| | |
|----------------|------|
| Time | m |
| 0428 | 0.41 |
| 16 1033 | 2.35 |
| 1658 | 0.40 |
| 2257 | 2.21 |

| | | |
|------------------------------------|----------------------|---------|
| Predicted H.W. at standard port | 2.35m at 10:33 | |
| Time of H.W. at secondary place | = 10:33 - 25 minutes | = 10:08 |
| Height of H.W. at secondary place | = (2.35*0.81) + 0.04 | |
| | = 1.90 + 0.04 | = 1.94m |
| Predicted L.W. at standard port | 0.41m at 04:28 | |
| Time of L.W. at secondary place | = 04:28 - 20 minutes | = 04:08 |
| Height of L. W. at secondary place | = (0.41*0.81) + 0.04 | |
| | = 0.33 + 0.04 | = 0.37m |

Tide calculations between high and low water

Example Calculations – Standard Port
Required: Tidal height at 0840 hours

1. Obtain the tidal predictions from the tables.

| | | |
|---|------|------|
| Extract from tidal prediction tables for standard ports | Time | m |
| | 0428 | 0.41 |
| 16 | 1033 | 2.35 |
| | 1658 | 0.40 |
| | 2257 | 2.21 |

2. High water 2.35
Low water -0.41
Range (Height difference) 1.94

3. Required time 0840 hours, which is 1 hour and 53 minutes before high water. Enter the appropriate Standard Tidal Curves (or interpolated graph) for the 1.94m range to 1 hour 53 minutes before high water. Read off the height at this point, which in this case is approximately 1.6m

4. Add the height obtained in step three above to the height of low water.

L.W 0.4m (rounded off)
 +1.6m
 2.0m (approx.) at 08:40

Example Calculations – Secondary Place
Required: Tidal height at 0840 hours

1. Calculate the high and low water times and heights for the secondary place

| | | |
|------------|-------|-------|
| Low water | 04:08 | 0.37m |
| High water | 10:08 | 1.94m |

2. High water 1.94
Low water -0.37
Range (Height difference) 1.57

3. Required time 0840 hours, which is 1 hour and 28 minutes before high water. Enter the appropriate Standard Tidal Curves (or interpolated graph) for the 1.57m range to 1 hour 28 minutes before high water. Read off the height at this point, which in this case is approximately 1.4m

4. Add the height obtained in step three above to the height of low water.

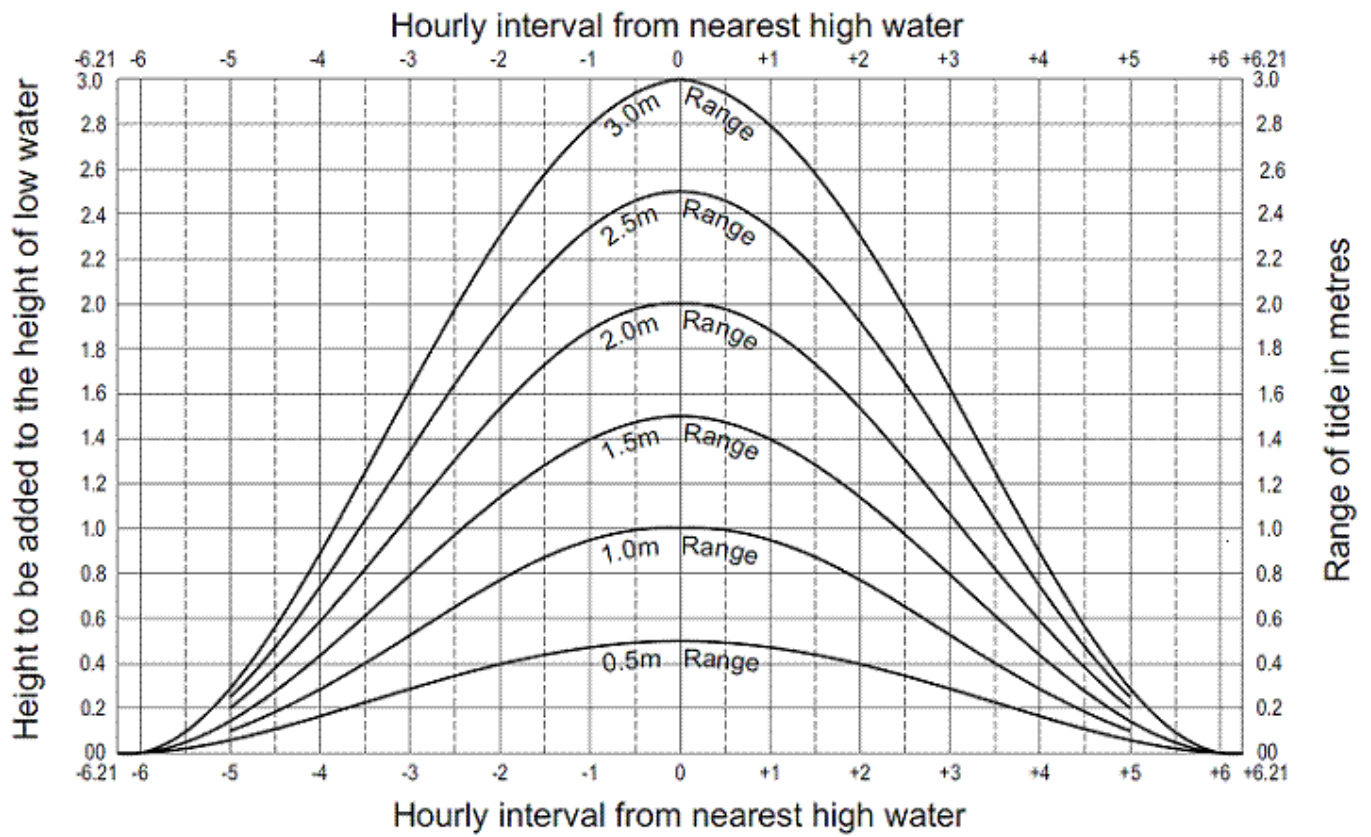
L.W 0.4m (rounded off)
 +1.4m
 1.8m (approx.) at 08:40

Conversion – Metres to Feet

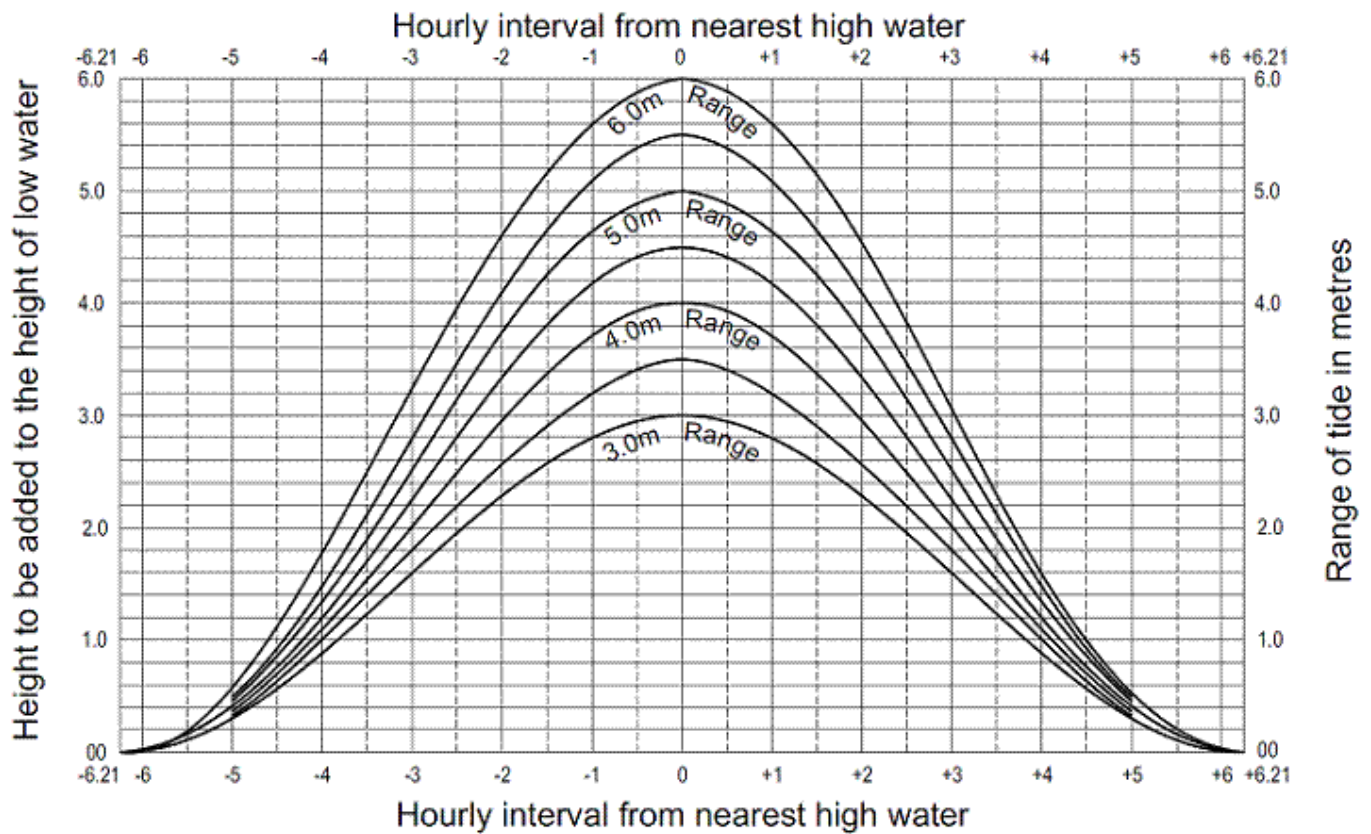
| Metres | 0.00 | 0.10 | 0.20 | 0.30 | 0.40 | 0.50 | 0.60 | 0.70 | 0.80 | 0.90 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Feet | | | | | | | | | |
| 0 | 0.00 | 0.33 | 0.66 | 0.98 | 1.31 | 1.64 | 1.97 | 2.30 | 2.62 | 2.95 |
| 1 | 3.28 | 3.61 | 3.94 | 4.27 | 4.59 | 4.92 | 5.25 | 5.58 | 5.91 | 6.23 |
| 2 | 6.56 | 6.89 | 7.22 | 7.55 | 7.87 | 8.20 | 8.53 | 8.86 | 9.19 | 9.51 |
| 3 | 9.84 | 10.17 | 10.50 | 10.83 | 11.15 | 11.48 | 11.81 | 12.14 | 12.47 | 12.80 |
| 4 | 13.12 | 13.45 | 13.78 | 14.11 | 14.44 | 14.76 | 15.09 | 15.42 | 15.75 | 16.08 |
| 5 | 16.40 | 16.73 | 17.06 | 17.39 | 17.72 | 18.04 | 18.37 | 18.70 | 19.03 | 19.36 |
| 6 | 19.69 | 20.01 | 20.34 | 20.67 | 21.00 | 21.33 | 21.65 | 21.98 | 22.31 | 22.64 |
| 7 | 22.97 | 23.29 | 23.62 | 23.95 | 24.28 | 24.61 | 24.93 | 25.26 | 25.59 | 25.92 |
| 8 | 26.25 | 26.57 | 26.90 | 27.23 | 27.56 | 27.89 | 28.22 | 28.54 | 28.87 | 29.20 |
| 9 | 29.53 | 29.86 | 30.18 | 30.51 | 30.84 | 31.17 | 31.50 | 31.82 | 32.15 | 32.48 |
| 10 | 32.81 | 33.14 | 33.46 | 33.79 | 34.12 | 34.45 | 34.78 | 35.10 | 35.43 | 35.76 |
| 11 | 36.09 | 36.42 | 36.75 | 37.07 | 37.40 | 37.73 | 38.06 | 38.39 | 38.71 | 39.04 |
| 12 | 39.37 | 39.70 | 40.03 | 40.35 | 40.68 | 41.01 | 41.34 | 41.67 | 41.99 | 42.32 |
| 13 | 42.65 | 42.98 | 43.31 | 43.64 | 43.96 | 44.29 | 44.62 | 44.95 | 45.28 | 45.60 |
| 14 | 45.93 | 46.26 | 46.59 | 46.92 | 47.24 | 47.57 | 47.90 | 48.23 | 48.56 | 48.88 |
| 15 | 49.21 | 49.54 | 49.87 | 50.20 | 50.52 | 50.85 | 51.18 | 51.51 | 51.84 | 52.17 |

Standard tidal curves

Tide ranges up to three metres



Tide ranges up to six metres



Calculation of overhead clearance

With the introduction of the tidal datum epoch 1992-2011, the semidiurnal and diurnal tidal planes information was updated.

At some localities, this had a minor impact on the highest astronomical tide values. The clearance value assigned to overhead structures across tidal waters is being reviewed.

Mariners are advised to refer to this publication, boating safety charts, the Beacon to Beacon Directory and the respective management authority signage for warnings and clearance information.

Highest astronomical tide values for standard ports and secondary locations are tabulated on pages 101 to 107.



Extract from the Beacon to Beacon Directory – edition 9

Overhead clearance

This is defined as the vertical distance between the lowest under-surface of the overhead structure and the water level at the highest astronomical tide.

For electricity cables, this also incorporates an additional mandatory safety margin to satisfy electrical regulations.

The difference in elevation between the highest astronomical tide value and the predicted tide height at the time of passing under the structure, can be added to the nominated minimum clearance shown on the chart/directory so as to derive the total clearance available.

A further safety margin should be included to provide a guaranteed air space above the uppermost part of the vessel and the under-surface of the overhead structure, therefore further reducing available overhead clearance.

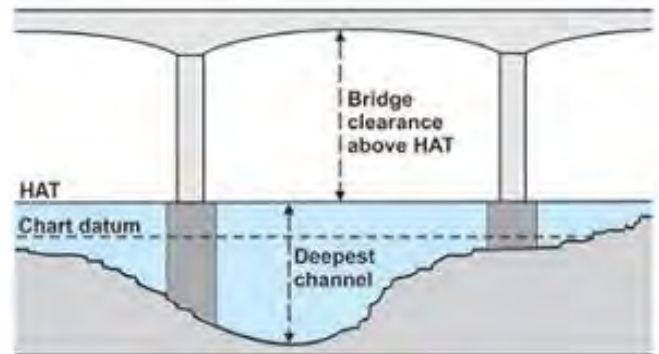
Weather conditions, storm surge, flood runoff, current, wave action or wash from other vessels should be considered as factors that can cause an additional reduction of your calculated clearance.

Consult your chart first, the deepest part of a channel may not occur at the maximum point of clearance.

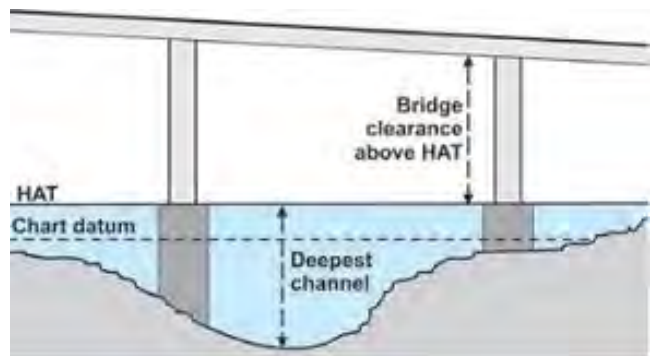
To ensure the safety of your vessel and persons onboard, know the maximum height of your vessel above the waterline, its maximum draught, always keep a proper lookout, and navigate beneath the overhead structure at an appropriate speed.

Bridges and overhead pipelines

The value shown is the maximum clearance above HAT (highest astronomical tide).



For a bridge that slopes continuously downwards from one bank to the other, the clearance value shown is for the position beneath the lowest part of the span. For an example, refer to NTM 630 of 2009 for details of the Kurilpa Bridge across the Brisbane River.

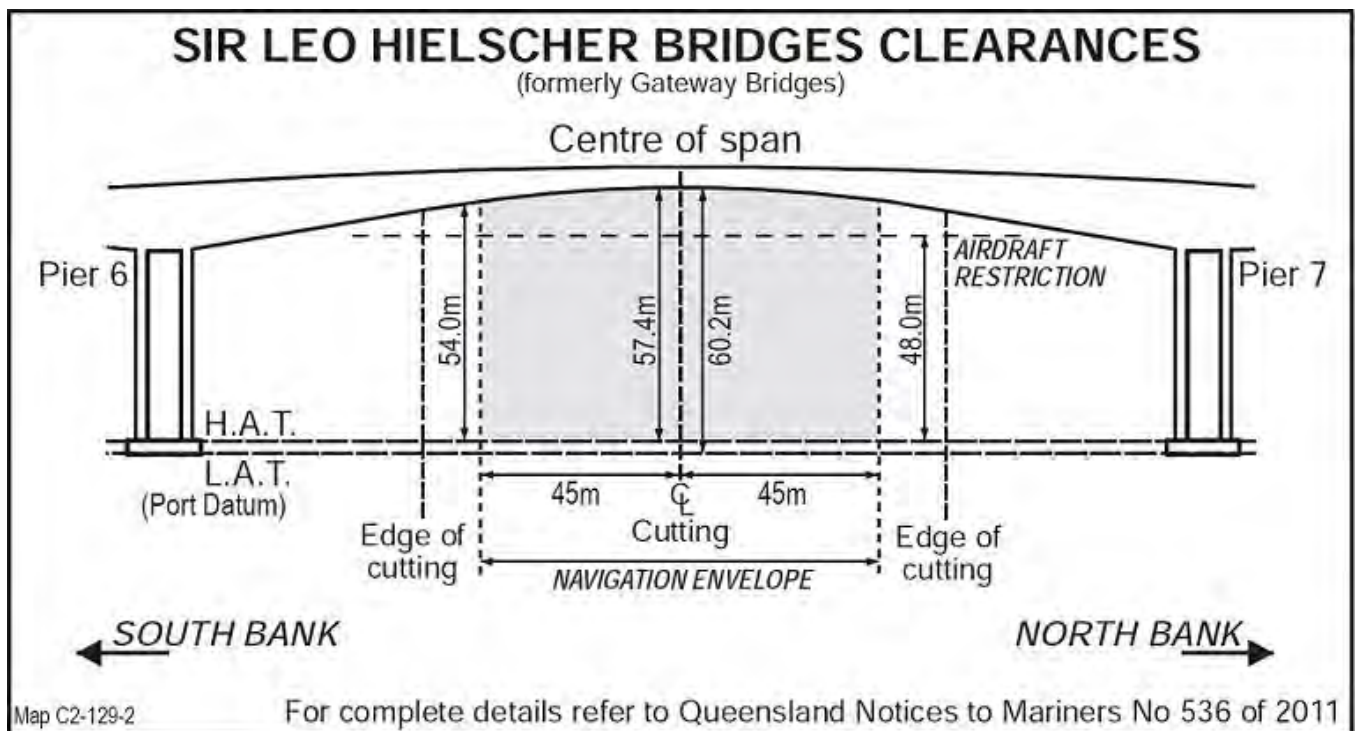
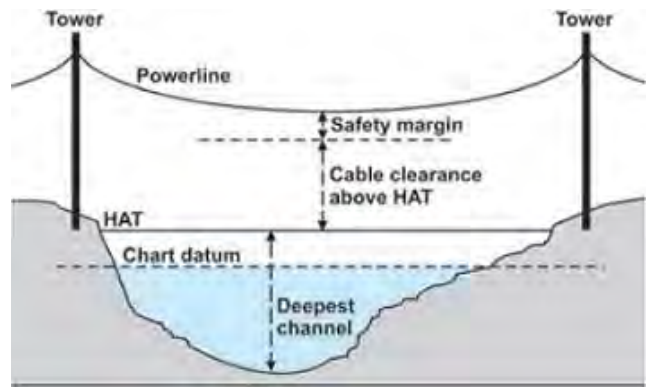


In all instances, the deepest part of the navigation channel may not occur at the point of maximum clearance.

Overhead cable clearance

The value shown indicates the maximum height of a vessel which may pass beneath the cable and are given for the lowest point of the sag. Allowances have been made for safety margins required to satisfy the electricity regulations. Clearances are given with respect to HAT. The deepest part of the navigation channel may not occur at the point of maximum clearance.

Boat operators should always be responsible for maintaining a proper lookout at all times for crossings which may not be shown on the chart or those which have altered in some way.



No anchoring zone - a vessel must not be anchored within 50 metres of an underwater cable or pipeline that is accompanied by warning signage from the management authority.



Note - it is prohibited to anchor, berth, moor or operate a vessel within 100 metres of a dam wall, spillway or weir; or near infrastructure nominated by the management authority.

Flood debris warning

Mariners are advised that the safest areas are in the middle third of the waterway. Known submerged hazards adjacent to the banks have been found by survey (March - June 2011). Hazards can move. Navigate carefully.

2015 Phases and apsides of the moon

| New Moon d h m | First Quarter d h m | Full Moon d h m | Last Quarter d h m | Perigee d h m | Apogee d h m |
|-------------------|------------------------|--------------------|-----------------------|------------------|-----------------|
| Jan 20 23:14 | Jan 27 14:48 | Jan 05 14:53 | Jan 13 19:46 | Jan 22 06:07 | Jan 10 04:18 |
| Feb 19 09:47 | Feb 26 03:14 | Feb 04 09:09 | Feb 12 13:50 | Feb 19 17:31 | Feb 06 16:27 |
| Mar 20 19:36 | Mar 27 17:43 | Mar 06 04:05 | Mar 14 03:48 | Mar 20 05:39 | Mar 05 17:36 |
| Apr 19 04:57 | Apr 26 09:55 | Apr 04 22:05 | Apr 12 13:44 | Apr 17 13:54 | Apr 01 23:00 |
| May 18 14:13 | May 26 03:19 | May 04 13:42 | May 11 20:36 | Apr 17 13:54 | Apr 29 13:56 |
| Jun 17 00:05 | Jun 24 21:02 | Jun 03 02:19 | Jun 10 01:42 | May 15 10:24 | May 27 08:14 |
| Jul 16 11:24 | Jul 24 14:04 | Jul 02 12:20 | Jul 09 06:24 | Jun 10 14:40 | Jun 24 03:02 |
| Aug 15 00:53 | Aug 23 05:31 | Jul 31 20:43 | Aug 07 12:03 | Jul 06 04:55 | Jul 21 21:03 |
| Sep 13 16:41 | Sep 21 18:59 | Aug 30 04:35 | Sep 05 19:54 | Aug 02 20:12 | Aug 18 12:34 |
| Oct 13 10:06 | Sep 21 18:59 | Sep 28 12:50 | Oct 05 07:06 | Aug 31 01:25 | Sep 14 21:29 |
| Nov 12 03:47 | Oct 21 06:31 | Oct 27 22:05 | Nov 03 22:24 | Sep 28 11:47 | Oct 11 23:18 |
| Dec 11 20:29 | Nov 19 16:27 | Nov 26 08:44 | Dec 03 17:40 | Oct 26 23:00 | Nov 08 07:50 |
| | Dec 19 01:14 | Dec 25 21:11 | | Nov 24 06:07 | Dec 06 00:57 |
| | | | | Dec 21 18:54 | |

The moon phases given in this table are the times when the sun, moon, and earth lie approximately in the same line (180°) at full and new moon and at first and last quarter when the moon is (90°) to the line of the sun and earth.

Times are Australian Eastern Standard Time

2015 Seasons and apsides of the earth

| Perihelion d h m | Vernal Equinox d h m | Summer Solstice d h m | Aphelion d h m | Autumnal Equinox d h m | Winter Solstice d h m |
|---------------------|-------------------------|--------------------------|-------------------|---------------------------|--------------------------|
| Jan 04 17:00 | Mar 21 08:45 | Jun 22 02:38 | Jul 07 05:00 | Sep 23 18:20 | Dec 22 14:48 |

Equinox and Solstice named by Northern Hemisphere convention

Times are Australian Eastern Standard Time

Using the moonrise and moonset table

The average time between the rising and setting of the moon is 12 hours 25 minutes. It follows that successive rises (or sets) of the moon will be 24 hours and 50 minutes apart or in other words the moon will rise (or set) on average 50 minutes later each successive day of the year.

As a consequence of the above – unlike the sun which always rises in the morning and sets in the afternoon of the same day – the moon will frequently set on the day after it has risen.

Occasionally there is no entry in the table for the moon set time, this means that the moon will set on the next day.

Occasionally there is no entry in the table for the moonrise time, this means the moon rose on the previous day.

Sun and moon rise and set tables

The tables of moon and sun rise and set have been prepared by Maritime Safety Queensland using information from Geoscience Australia. The tables detail the times of the rise and set phenomena for an observer at sea level for the following tidal stations:-

- Brisbane Bar
- Gladstone
- Mackay Outer Harbour
- Townsville
- Cairns
- Karumba
- Weipa

The time of the rise and set varies from place to place. However for adjacent places the variation is small and as a result the entries in the table may be used for adjacent tidal stations.

The times of moon rise and set are given for every day of the month. The times of sunrise and set are given for every 5th day of the month.

The following groupings are applicable:-

- | | |
|---------------------------|---|
| • Brisbane representing | Gold Coast Seaway, Brisbane Bar and Mooloolaba. |
| • Gladstone representing | Bundaberg, Gladstone, Port Alma and Rosslyn Bay. |
| • Mackay representing | Hay Pt, Mackay, Shute Harbour, Bowen and Abbot Point. |
| • Townsville representing | Townsville and Lucinda. |
| • Cairns representing | Mourilyan, Cairns and Port Douglas. |
| • Karumba representing | Karumba and Mornington Island. |
| • Weipa representing | Weipa and Thursday Island. |

It should be noted that:-

- The grouping introduces an approximation which does not exceed 10 minutes;
- atmospheric refraction that is different from the standard refraction; and,
- the height of eye of the observer (above sea level), will affect the time at which the sun and moon appear to rise and set.

Definitions:-

- **Sun rise** is defined as the instant in the morning under ideal meteorological conditions, with standard refraction of the sun's rays, when the upper edge of the sun's disk is coincident with an ideal horizon.
- **Sun set** is defined as the instant in the evening under ideal meteorological conditions, with standard refraction of the sun's rays, when the upper edge of the sun's disk is coincident with an ideal horizon.
- **Moon rise** is defined as the instant when, in the eastern sky, under ideal meteorological conditions, with standard refraction of the moon's rays, the upper edge of the moon's disk is coincident with an ideal horizon.
- **Moon set** is defined as the instant when, in the western sky, under ideal meteorological conditions, with standard refraction of the moon's rays, the upper edge of the moon's disk is coincident with an ideal horizon.

An ideal horizon exists when the surface forming the horizon is at a right angle to the vertical line passing through the observer's position on the earth. If the terrain surrounding the observer was flat and all at the same height above sea level, the horizon seen by the observer standing on the earth would approximate the ideal horizon.

TIMES OF MOONRISE AND MOONSET – BRISBANE 2015

LAT 27° 22' S LONG 153° 10' E TIME ZONE 1000E

R = Moonrise time S = Moonset time

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 01 | S 0134 R 1506 | S 0246 R 1632 | S 0134 R 1515 | S 0255 R 1550 | S 0321 R 1534 | S 0443 R 1606 | S 0519 R 1626 | S 0639 R 1816 | S 0733 R 2019 | S 0742 R 2114 | S 0901 R 2248 | S 0934 R 2255 |
| 02 | S 0220 R 1603 | S 0337 R 1717 | S 0226 R 1557 | S 0346 R 1625 | S 0413 R 1609 | S 0539 R 1652 | S 0615 R 1723 | S 0726 R 1921 | S 0818 R 2124 | S 0832 R 2215 | S 0956 R 2335 | S 1028 R 2333 |
| 03 | S 0308 R 1657 | S 0430 R 1758 | S 0317 R 1637 | S 0436 R 1659 | S 0505 R 1647 | S 0635 R 1742 | S 0708 R 1825 | S 0812 R 2026 | S 0904 R 2227 | S 0924 R 2313 | S 1051 R 0018 | S 1120 R 0009 |
| 04 | S 0358 R 1748 | S 0522 R 1837 | S 0409 R 1714 | S 0527 R 1734 | S 0558 R 1727 | S 0731 R 1837 | S 0759 R 1927 | S 0856 R 2130 | S 0952 R 2327 | S 1018 R 0006 | S 1145 R 0058 | S 1212 R 0044 |
| 05 | S 0450 R 1835 | S 0613 R 1913 | S 0500 R 1749 | S 0619 R 1810 | S 0653 R 1811 | S 0824 R 1935 | S 0847 R 2031 | S 0940 R 2233 | S 1041 R 0025 | S 1112 R 0055 | S 1237 R 0134 | S 1302 R 0118 |
| 06 | S 0543 R 1919 | S 0704 R 1948 | S 0550 R 1824 | S 0711 R 1848 | S 0748 R 1858 | S 0916 R 2036 | S 0932 R 2134 | S 1023 R 2335 | R 0025 S 1132 | R 0055 S 1205 | R 0134 S 1328 | R 0118 S 1353 |
| 07 | S 0636 R 2000 | S 0755 R 2022 | S 0641 R 1858 | S 0804 R 1929 | S 0843 R 1949 | S 1004 R 2137 | S 1016 R 2237 | S 1108 S 1108 | R 0120 S 1224 | R 0139 S 1258 | R 0209 S 1419 | R 0153 S 1444 |
| 08 | S 0728 R 2037 | S 0845 R 2057 | S 0732 R 1933 | S 0858 R 2013 | S 0937 R 2044 | S 1050 R 2239 | S 1058 R 2339 | R 0036 S 1155 | R 0210 S 1317 | R 0220 S 1351 | R 0244 S 1509 | R 0229 S 1535 |
| 09 | S 0819 R 2113 | S 0936 R 2132 | S 0823 R 2010 | S 0953 R 2101 | S 1028 R 2142 | S 1133 R 2341 | S 1140 S 1140 | R 0134 S 1244 | R 0257 S 1410 | R 0258 S 1442 | R 0318 S 1600 | R 0307 S 1628 |
| 10 | S 0910 R 2147 | S 1028 R 2209 | S 0915 R 2048 | S 1047 R 2153 | S 1118 R 2242 | S 1118 S 1215 | R 0040 S 1224 | R 0230 S 1335 | R 0340 S 1503 | R 0334 S 1533 | R 0353 S 1651 | R 0348 S 1722 |
| 11 | S 1000 R 2221 | S 1121 R 2249 | S 1009 R 2130 | S 1140 R 2249 | S 1205 R 2343 | R 0043 S 1257 | R 0141 S 1309 | R 0323 S 1427 | R 0420 S 1555 | R 0408 S 1624 | R 0430 S 1743 | R 0433 S 1816 |
| 12 | S 1051 R 2256 | S 1215 R 2332 | S 1103 R 2215 | S 1231 R 2348 | S 1231 S 1249 | R 0145 S 1340 | R 0241 S 1356 | R 0413 S 1520 | R 0457 S 1646 | R 0443 S 1714 | R 0510 S 1836 | R 0522 S 1909 |
| 13 | S 1143 R 2332 | S 1310 R 0021 | S 1157 R 2305 | S 1249 R 1320 | R 0045 S 1333 | R 0247 S 1424 | R 0339 S 1446 | R 0458 S 1614 | R 0533 S 1737 | R 0517 S 1805 | R 0552 S 1929 | R 0615 S 2001 |
| 14 | S 1236 R 0011 | S 1407 R 0114 | R 2359 R 0153 | S 1320 R 0049 | R 1343 R 0148 | S 1415 S 1511 | S 1538 S 1538 | S 1707 S 1707 | S 1828 S 1828 | S 1856 S 1856 | S 2022 S 2022 | S 2050 S 2050 |
| 15 | S 1330 R 0054 | S 1503 R 0212 | S 1345 R 0058 | S 1452 R 0257 | S 1459 R 0355 | S 1601 R 0548 | S 1632 R 0616 | S 1759 R 0657 | S 1918 R 0716 | S 1948 R 0711 | S 2114 R 0820 | S 2137 R 0908 |
| 16 | S 1427 R 0141 | S 1558 R 0315 | S 1437 R 0200 | S 1537 R 0402 | S 1543 R 0458 | S 1653 R 0643 | S 1726 R 0701 | S 1851 R 0732 | S 2009 R 0752 | S 2040 R 0754 | S 2204 R 0916 | S 2222 R 1009 |
| 17 | S 1525 R 0233 | S 1651 R 0421 | S 1527 R 0304 | S 1621 R 0507 | S 1630 R 0601 | S 1747 R 0735 | S 1821 R 0743 | S 1942 R 0806 | S 2100 R 0830 | S 2133 R 0840 | S 2252 R 1014 | S 2304 R 1110 |
| 18 | S 1623 R 0331 | S 1741 R 0528 | S 1616 R 0411 | S 1707 R 0613 | S 1719 R 0702 | S 1842 R 0822 | S 1914 R 0821 | S 2032 R 0840 | S 2152 R 0911 | S 2225 R 0931 | S 2337 R 1114 | S 2346 R 1211 |
| 19 | S 1721 R 0433 | S 1829 R 0635 | S 1702 R 0517 | S 1753 R 0717 | S 1811 R 0801 | S 1936 R 0906 | S 2006 R 0857 | S 2123 R 0916 | S 2244 R 0956 | S 2316 R 1025 | S 0021 R 1215 | S 0028 R 1313 |
| 20 | S 1815 R 0539 | S 1915 R 0742 | S 1748 R 0624 | S 1842 R 0820 | S 1905 R 0855 | S 2030 R 0945 | S 2057 R 0932 | S 2214 R 0952 | S 2337 R 1044 | S 0006 R 1122 | S 0104 R 1317 | S 0111 R 1415 |
| 21 | S 1907 R 0645 | S 2000 R 0847 | S 1833 R 0730 | S 1933 R 0919 | S 1959 R 0944 | S 2123 R 1022 | S 2148 R 1006 | S 2305 R 1032 | S 2305 R 1032 | R 1122 S 0053 | R 1317 S 0147 | R 1415 S 0156 |
| 22 | S 1955 R 0752 | S 2045 R 0951 | S 1919 R 0835 | S 2025 R 1014 | S 2054 R 1029 | S 2214 R 1058 | S 2238 R 1040 | S 2358 R 1115 | S 0030 R 1122 | S 0053 R 1222 | S 0147 R 1420 | S 0156 R 1518 |
| 23 | S 2041 R 0857 | S 2130 R 1052 | S 2006 R 0937 | S 2118 R 1105 | S 2148 R 1110 | S 2305 R 1132 | S 2329 R 1116 | R 1234 S 0052 | R 1234 S 0212 | R 1324 S 0225 | R 1525 S 0315 | R 1621 S 0334 |
| 24 | S 2125 R 1000 | S 2216 R 1151 | S 2055 R 1037 | S 2212 R 1152 | S 2240 R 1148 | S 2356 R 1206 | S 0052 R 1206 | R 1202 S 0146 | R 1334 S 0301 | R 1428 S 0309 | R 1630 S 0403 | R 1722 S 0429 |
| 25 | S 2207 R 1102 | S 2303 R 1248 | S 2145 R 1133 | S 2305 R 1234 | S 2332 R 1224 | S 0047 R 1224 | R 1155 S 0114 | R 1253 S 0240 | R 1438 S 0349 | R 1533 S 0354 | R 1735 S 0454 | R 1820 S 0525 |
| 26 | S 2250 R 1203 | S 2353 R 1340 | S 2237 R 1225 | S 2357 R 1313 | S 0023 R 1313 | S 0139 R 1313 | S 0209 R 1322 | S 0333 R 1450 | S 0435 R 1649 | S 0440 R 1746 | S 0548 R 1939 | S 0622 R 2004 |
| 27 | S 2334 R 1301 | S 0043 R 1430 | S 2329 R 1312 | S 0049 R 1350 | S 0113 R 1333 | S 0232 R 1359 | S 0304 R 1412 | S 0425 R 1554 | S 0521 R 1756 | S 0528 R 1852 | S 0644 R 2035 | S 0719 R 2049 |
| 28 | S 0019 R 1358 | S 0019 R 1358 | S 0021 R 1356 | S 0140 R 1425 | S 0204 R 1408 | S 0327 R 1444 | S 0400 R 1508 | S 0514 R 1700 | S 0607 R 1903 | S 0618 R 1957 | S 0741 R 2127 | S 0815 R 2129 |
| 29 | S 0106 R 1453 | S 0106 R 1453 | S 0113 R 1436 | S 0230 R 1459 | S 0256 R 1444 | S 0423 R 1532 | S 0455 R 1608 | S 0602 R 1807 | S 0654 R 2009 | S 0711 R 2058 | S 0838 R 2213 | S 0909 R 2207 |
| 30 | S 0155 R 1544 | S 0155 R 1544 | S 0204 R 1514 | S 0349 R 1523 | S 0349 R 1523 | S 0349 R 1523 | S 0548 R 1711 | S 0648 R 1913 | S 0805 R 2156 | S 0805 R 2156 | S 1002 R 2243 | S 1002 R 2243 |

TIMES OF MOONRISE AND MOONSET – GLADSTONE 2015

LAT 23° 50' S LONG 151° 15' E TIME ZONE 1000E

R = Moonrise time S = Moonset time

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 01 | S 0240 R 1411 | S 0409 R 1526 | S 0254 R 1414 | S 0337 R 1531 | S 0324 R 1555 | S 0355 R 1715 | S 0411 R 1750 | S 0554 R 1909 | S 0752 R 2007 | S 0844 R 2021 | S 1023 R 2143 | S 1037 R 2214 |
| 02 | S 0336 R 1458 | S 0456 R 1618 | S 0339 R 1505 | S 0413 R 1621 | S 0400 R 1645 | S 0440 R 1811 | S 0507 R 1845 | S 0658 R 1957 | S 0855 R 2054 | S 0946 R 2113 | S 1114 R 2238 | S 1118 R 2306 |
| 03 | S 0431 R 1548 | S 0540 R 1709 | S 0420 R 1556 | S 0449 R 1710 | S 0438 R 1737 | S 0529 R 1906 | S 0606 R 1938 | S 0801 R 2043 | S 0958 R 2141 | S 1045 R 2206 | S 1159 R 2331 | S 1156 R 2357 |
| 04 | S 0524 R 1639 | S 0621 R 1800 | S 0459 R 1646 | S 0524 R 1800 | S 0517 R 1830 | S 0622 R 2001 | S 0707 R 2029 | S 0904 R 2128 | S 1059 R 2230 | S 1141 R 2300 | S 1241 R 2300 | S 1233 R 2300 |
| 05 | S 0613 R 1731 | S 0659 R 1850 | S 0536 R 1736 | S 0601 R 1851 | S 0600 R 1924 | S 0718 R 2054 | S 0809 R 2117 | S 1007 R 2213 | S 1158 R 2321 | S 1232 R 2353 | R 0023 S 1320 | R 0046 S 1308 |
| 06 | S 0659 R 1823 | S 0736 R 1939 | S 0613 R 1825 | S 0639 R 1943 | S 0646 R 2019 | S 0817 R 2145 | S 0911 R 2202 | S 1108 R 2258 | S 1254 R 2300 | S 1319 R 2300 | S 1357 R 2300 | S 1343 R 2300 |
| 07 | S 0742 R 1915 | S 0812 R 2029 | S 0648 R 1914 | S 0719 R 2036 | S 0736 R 2113 | S 0917 R 2233 | S 1013 R 2246 | S 1208 R 2345 | R 0013 S 1347 | R 0046 S 1402 | R 0203 S 1433 | R 0225 S 1420 |
| 08 | S 0822 R 2005 | S 0847 R 2118 | S 0724 R 2004 | S 0803 R 2129 | S 0829 R 2206 | S 1018 R 2318 | S 1114 R 2330 | R 0105 S 1307 | R 0138 S 1435 | R 0253 S 1443 | R 0315 S 1508 | R 0315 S 1458 |
| 09 | S 0900 R 2055 | S 0923 R 2208 | S 0800 R 2055 | S 0849 R 2223 | S 0925 R 2257 | S 1118 S 1118 | S 1214 S 1214 | R 0034 S 1404 | R 0158 S 1521 | R 0228 S 1521 | R 0342 S 1544 | R 0407 S 1538 |
| 10 | S 0936 R 2145 | S 1000 R 2259 | S 0839 R 2147 | S 0939 R 2316 | S 1023 R 2346 | R 0002 S 1219 | R 0014 S 1314 | R 0124 S 1458 | R 0250 S 1603 | R 0318 S 1557 | R 0432 S 1621 | R 0459 S 1622 |
| 11 | S 1011 R 2234 | S 1039 R 2352 | S 0920 R 2240 | S 1033 S 1033 | S 1123 S 1123 | S 1319 S 1319 | S 1413 S 1413 | S 1549 S 1549 | S 1643 S 1643 | S 1633 S 1633 | S 1700 S 1700 | S 1710 S 1710 |
| 12 | S 1047 R 2324 | S 1122 R 0046 | S 1004 R 2333 | R 0009 S 1130 | R 0033 S 1223 | R 0129 S 1420 | R 0146 S 1512 | R 0309 S 1637 | R 0432 S 1720 | R 0457 S 1708 | R 0614 S 1742 | R 0646 S 1801 |
| 13 | S 1123 R 0015 | S 1208 R 0142 | S 1052 R 0028 | S 1230 R 0149 | S 1324 R 0203 | S 1520 R 0301 | S 1608 R 0327 | S 1756 R 0454 | S 1744 R 0611 | S 1744 R 0636 | S 1827 R 0759 | S 1855 R 0829 |
| 14 | S 1201 R 0108 | S 1259 R 0238 | S 1144 R 0122 | S 1331 R 0236 | S 1426 R 0247 | S 1620 R 0350 | S 1703 R 0420 | S 1804 R 0546 | S 1832 R 0701 | S 1822 R 0727 | S 1915 R 0851 | S 1951 R 0918 |
| 15 | S 1243 R 0203 | S 1355 R 0334 | S 1240 R 0215 | S 1433 R 0323 | S 1528 R 0333 | S 1720 R 0442 | S 1754 R 0514 | S 1843 R 0636 | S 1907 R 0750 | S 1902 R 0818 | S 2006 R 0942 | S 2050 R 1005 |
| 16 | S 1328 R 0259 | S 1455 R 0429 | S 1340 R 0307 | S 1536 R 0409 | S 1630 R 0420 | S 1817 R 0535 | S 1841 R 0608 | S 1920 R 0726 | S 1944 R 0840 | S 1944 R 0910 | S 2100 R 1032 | S 2148 R 1050 |
| 17 | S 1419 R 0357 | S 1559 R 0522 | S 1443 R 0358 | S 1640 R 0455 | S 1732 R 0509 | S 1910 R 0629 | S 1925 R 0700 | S 1956 R 0816 | S 2022 R 0931 | S 2029 R 1002 | S 2157 R 1119 | S 2248 R 1133 |
| 18 | S 1514 R 0455 | S 1704 R 0612 | S 1547 R 0446 | S 1744 R 0542 | S 1834 R 0600 | S 2000 R 0723 | S 2006 R 0752 | S 2031 R 0905 | S 2102 R 1022 | S 2118 R 1054 | S 2255 R 1205 | S 2347 R 1216 |
| 19 | S 1614 R 0552 | S 1810 R 0701 | S 1652 R 0534 | S 1848 R 0631 | S 1933 R 0653 | S 2047 R 0817 | S 2044 R 0842 | S 2107 R 0954 | S 2145 R 1114 | S 2210 R 1144 | S 2354 R 1250 | S 0047 R 1300 |
| 20 | S 1717 R 0646 | S 1916 R 0748 | S 1757 R 0621 | S 1950 R 0722 | S 2029 R 0747 | S 2129 R 0909 | S 2120 R 0932 | S 2144 R 1045 | S 2232 R 1207 | S 2305 R 1234 | S 0054 R 1334 | S 0148 R 1345 |
| 21 | S 1823 R 0738 | S 2020 R 0834 | S 1902 R 0708 | S 2051 R 0814 | S 2121 R 0841 | S 2208 R 1000 | S 2156 R 1021 | S 2223 R 1136 | S 2323 R 1259 | S 2323 S 0003 | R 1334 S 0155 | R 1345 S 0250 |
| 22 | S 1928 R 0826 | S 2123 R 0920 | S 2006 R 0756 | S 2148 R 0907 | S 2209 R 0935 | S 2245 R 1050 | S 2231 R 1111 | S 2304 R 1229 | R 1259 S 0017 | R 1259 S 0103 | S 0155 R 1418 | S 0250 R 1433 |
| 23 | S 2032 R 0826 | S 2225 R 0920 | S 2108 R 0756 | S 2241 R 0907 | S 2252 R 0935 | S 2321 R 1050 | S 2307 R 1111 | S 2350 R 1229 | R 1351 S 0017 | R 1409 S 0103 | R 1504 S 0257 | R 1523 S 0352 |
| 24 | R 0912 S 2135 | R 1006 S 2324 | R 0845 S 2209 | R 1000 S 2330 | R 1027 S 2333 | R 1139 S 2357 | R 1201 S 2345 | R 1322 S 2345 | S 0115 R 1442 | S 0204 R 1455 | S 0401 R 1552 | S 0453 R 1616 |
| 25 | R 0956 S 2236 | R 1054 S 0021 | R 0935 S 2306 | R 1053 S 0015 | R 1118 S 0011 | R 1229 S 0032 | R 1253 S 0026 | S 0039 S 0134 | S 0216 S 0319 | S 0307 S 0411 | S 0505 S 0608 | S 0552 S 0649 |
| 26 | R 1040 S 2336 | R 1143 S 0115 | R 1026 S 2359 | R 1145 S 0057 | R 1208 S 0047 | R 1319 S 0110 | R 1346 S 0110 | R 1511 S 0232 | R 1619 S 0424 | R 1628 S 0516 | R 1736 S 0710 | R 1809 S 0741 |
| 27 | R 1125 S 0035 | R 1233 S 0206 | R 1118 S 0050 | R 1236 S 0136 | R 1258 S 0123 | R 1410 S 0150 | R 1440 S 0159 | R 1604 S 0333 | R 1707 S 0529 | R 1716 S 0622 | R 1831 S 0808 | R 1905 S 0829 |
| 28 | R 1210 S 0132 | R 1323 S 0206 | R 1209 S 0136 | R 1326 S 0212 | R 1347 S 0158 | R 1504 S 0233 | R 1536 S 0252 | R 1655 S 0437 | R 1754 S 0635 | R 1806 S 0726 | R 1928 S 0903 | R 2001 S 0912 |
| 29 | R 1257 S 0227 | R 1323 S 0206 | R 1301 S 0219 | R 1415 S 0248 | R 1437 S 0235 | R 1558 S 0320 | R 1631 S 0350 | R 1745 S 0542 | R 1842 S 0740 | R 1859 S 0829 | R 2025 S 0952 | R 2055 S 0953 |
| 30 | R 1345 S 0319 | R 1352 S 0259 | R 1352 S 0259 | R 1505 S 0259 | R 1528 S 0314 | R 1654 S 0314 | R 1726 S 0451 | R 1833 S 0647 | R 1931 S 0928 | R 1953 S 0928 | R 2120 S 0928 | R 2147 S 1030 |
| 31 | R 1435 S 0319 | R 1442 S 0259 | R 1442 S 0259 | R 1505 S 0259 | R 1528 S 0314 | R 1654 S 0314 | R 1726 S 0451 | R 1833 S 0647 | R 1931 S 0928 | R 1953 S 0928 | R 2120 S 0928 | R 2147 S 1030 |

TIMES OF MOONRISE AND MOONSET – MACKAY 2015

LAT 21° 06' S LONG 149° 14' E TIME ZONE 1000E

R = Moonrise time S = Moonset time

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 01 | S 0245 R 1423 | S 0413 R 1539 | S 0258 R 1427 | S 0343 R 1541 | S 0332 R 1602 | S 0407 R 1720 | S 0424 R 1754 | S 0605 R 1914 | S 0759 R 2016 | S 0849 R 2033 | S 1027 R 2156 | S 1042 R 2225 |
| 02 | S 0341 R 1511 | S 0500 R 1630 | S 0343 R 1517 | S 0420 R 1630 | S 0409 R 1652 | S 0452 R 1815 | S 0520 R 1849 | S 0708 R 2003 | S 0902 R 2104 | S 0951 R 2126 | S 1118 R 2250 | S 1124 R 2316 |
| 03 | S 0435 R 1601 | S 0545 R 1721 | S 0425 R 1607 | S 0457 R 1718 | S 0448 R 1743 | S 0542 R 1910 | S 0618 R 1943 | S 0811 R 2051 | S 1004 R 2153 | S 1049 R 2219 | S 1204 R 2343 | S 1203 |
| 04 | S 0527 R 1652 | S 0626 R 1811 | S 0505 R 1656 | S 0533 R 1808 | S 0528 R 1835 | S 0635 R 2005 | S 0719 R 2034 | S 0913 R 2137 | S 1104 R 2243 | S 1145 R 2312 | S 1247 | R 0006 S 1240 |
| 05 | S 0617 R 1744 | S 0705 R 1900 | S 0543 R 1745 | S 0611 R 1857 | S 0612 R 1929 | S 0731 R 2058 | S 0820 R 2123 | S 1014 R 2223 | S 1202 R 2334 | S 1236 | R 0034 S 1327 | R 0055 S 1316 |
| 06 | S 0704 R 1835 | S 0743 R 1949 | S 0620 R 1834 | S 0650 R 1948 | S 0659 R 2023 | S 0830 R 2149 | S 0922 R 2209 | S 1114 R 2309 | S 1258 | R 0006 S 1324 | R 0124 S 1404 | R 0143 S 1353 |
| 07 | S 0747 R 1926 | S 0819 R 2037 | S 0656 R 1922 | S 0731 R 2040 | S 0749 R 2117 | S 0929 R 2238 | S 1022 R 2254 | S 1213 R 2357 | R 0026 S 1351 | R 0058 S 1407 | R 0213 S 1441 | R 0232 S 1430 |
| 08 | S 0828 R 2016 | S 0856 R 2126 | S 0733 R 2011 | S 0815 R 2133 | S 0842 R 2210 | S 1029 R 2325 | S 1122 R 2339 | S 1311 | R 0118 S 1440 | R 0149 S 1448 | R 0301 S 1517 | R 0321 S 1509 |
| 09 | S 0906 R 2105 | S 0932 R 2215 | S 0811 R 2101 | S 0902 R 2227 | S 0938 R 2302 | S 1128 | S 1221 | R 0046 S 1408 | R 0210 S 1526 | R 0239 S 1527 | R 0349 S 1554 | R 0412 S 1550 |
| 10 | S 0943 R 2154 | S 1010 R 2305 | S 0850 R 2152 | S 0952 R 2320 | S 1035 R 2351 | R 0010 S 1227 | R 0024 S 1320 | R 0137 S 1502 | R 0302 S 1608 | R 0328 S 1604 | R 0438 S 1632 | R 0504 S 1635 |
| 11 | S 1019 R 2242 | S 1050 R 2357 | S 0931 R 2244 | S 1046 | S 1134 | R 0054 S 1327 | R 0110 S 1418 | R 0229 S 1553 | R 0352 S 1649 | R 0417 S 1641 | R 0528 S 1712 | R 0556 S 1722 |
| 12 | S 1056 R 2331 | S 1134 R 0051 | S 1016 R 2338 | R 0013 S 1143 | R 0039 S 1234 | R 0139 S 1426 | R 0158 S 1516 | R 0321 S 1642 | R 0442 S 1727 | R 0505 S 1717 | R 0619 S 1754 | R 0649 S 1814 |
| 13 | S 1133 | S 1221 | S 1105 | R 0104 S 1241 | R 0125 S 1334 | R 0225 S 1526 | R 0248 S 1612 | R 0414 S 1727 | R 0531 S 1804 | R 0554 S 1754 | R 0711 S 1839 | R 0742 S 1908 |
| 14 | R 0021 S 1212 | R 0146 S 1312 | R 0032 S 1157 | R 0154 S 1342 | R 0211 S 1434 | R 0313 S 1625 | R 0340 S 1707 | R 0505 S 1809 | R 0620 S 1840 | R 0643 S 1833 | R 0803 S 1928 | R 0834 S 2004 |
| 15 | R 0113 S 1254 | R 0242 S 1408 | R 0126 S 1253 | R 0243 S 1443 | R 0256 S 1535 | R 0402 S 1724 | R 0433 S 1758 | R 0556 S 1849 | R 0708 S 1917 | R 0732 S 1913 | R 0855 S 2019 | R 0923 S 2101 |
| 16 | R 0208 S 1341 | R 0338 S 1508 | R 0220 S 1352 | R 0330 S 1545 | R 0343 S 1636 | R 0454 S 1821 | R 0526 S 1845 | R 0646 S 1927 | R 0757 S 1954 | R 0823 S 1956 | R 0946 S 2113 | R 1011 S 2159 |
| 17 | R 0304 S 1431 | R 0434 S 1611 | R 0312 S 1454 | R 0417 S 1648 | R 0431 S 1737 | R 0548 S 1914 | R 0620 S 1930 | R 0735 S 2003 | R 0846 S 2033 | R 0914 S 2042 | R 1036 S 2209 | R 1056 S 2258 |
| 18 | R 0401 S 1527 | R 0527 S 1715 | R 0403 S 1557 | R 0505 S 1751 | R 0520 S 1838 | R 0642 S 2005 | R 0712 S 2011 | R 0824 S 2040 | R 0936 S 2114 | R 1006 S 2131 | R 1124 S 2306 | R 1141 S 2356 |
| 19 | R 0459 S 1627 | R 0619 S 1820 | R 0453 S 1701 | R 0553 S 1854 | R 0612 S 1937 | R 0736 S 2051 | R 0802 S 2050 | R 0912 S 2116 | R 1027 S 2158 | R 1058 S 2223 | R 1211 | R 1225 |
| 20 | R 0556 S 1730 | R 0708 S 1925 | R 0542 S 1805 | R 0643 S 1955 | R 0706 S 2033 | R 0828 S 2134 | R 0852 S 2128 | R 1001 S 2154 | R 1118 S 2245 | R 1149 S 2318 | S 0004 R 1257 | S 0055 R 1310 |
| 21 | R 0651 S 1834 | R 0756 S 2028 | R 0630 S 1909 | R 0734 S 2055 | R 0800 S 2125 | R 0920 S 2214 | R 0941 S 2204 | R 1050 S 2234 | R 1211 S 2336 | R 1239 | S 0103 R 1342 | S 0155 R 1356 |
| 22 | R 0743 S 1938 | R 0843 S 2130 | R 0718 S 2012 | R 0826 S 2152 | R 0854 S 2213 | R 1010 S 2252 | R 1029 S 2240 | R 1141 S 2316 | R 1303 | S 0015 R 1327 | S 0203 R 1427 | S 0255 R 1444 |
| 23 | R 0833 S 2042 | R 0930 S 2230 | R 0807 S 2114 | R 0920 S 2245 | R 0947 S 2257 | R 1059 S 2329 | R 1118 S 2317 | R 1233 | S 0030 R 1355 | S 0114 R 1415 | S 0304 R 1514 | S 0356 R 1535 |
| 24 | R 0920 S 2143 | R 1018 S 2329 | R 0857 S 2213 | R 1013 S 2335 | R 1038 S 2339 | R 1148 | R 1207 S 2356 | S 0002 R 1326 | S 0128 R 1447 | S 0214 R 1502 | S 0407 R 1603 | S 0457 R 1629 |
| 25 | R 1005 S 2244 | R 1106 S 0025 | R 0947 S 2310 | R 1105 | R 1129 | S 0005 R 1236 | R 1258 | S 0052 R 1420 | S 0228 R 1537 | S 0316 R 1549 | S 0510 R 1654 | S 0556 R 1725 |
| 26 | R 1050 S 2342 | R 1155 | R 1039 | S 0020 R 1157 | S 0017 R 1218 | S 0042 R 1326 | S 0038 R 1350 | S 0146 R 1515 | S 0330 R 1626 | S 0419 R 1637 | S 0613 R 1748 | S 0653 R 1821 |
| 27 | R 1136 | S 0119 R 1245 | S 0004 R 1130 | S 0102 R 1247 | S 0054 R 1306 | S 0120 R 1416 | S 0123 R 1444 | S 0244 R 1608 | S 0433 R 1715 | S 0523 R 1727 | S 0714 R 1844 | S 0745 R 1918 |
| 28 | S 0040 R 1222 | S 0210 R 1336 | S 0054 R 1222 | S 0142 R 1336 | S 0131 R 1355 | S 0201 R 1509 | S 0212 R 1540 | S 0345 R 1700 | S 0538 R 1803 | S 0627 R 1818 | S 0812 R 1941 | S 0833 R 2013 |
| 29 | S 0136 R 1309 | S 0210 R 1336 | S 0141 R 1313 | S 0219 R 1425 | S 0207 R 1444 | S 0245 R 1603 | S 0305 R 1635 | S 0448 R 1751 | S 0642 R 1852 | S 0731 R 1911 | S 0907 R 2037 | S 0918 R 2106 |
| 30 | S 0231 R 1358 | S 0224 R 1403 | S 0224 R 1403 | S 0256 R 1513 | S 0245 R 1535 | S 0332 R 1658 | S 0402 R 1730 | S 0552 R 1840 | S 0746 R 1942 | S 0833 R 2005 | S 0956 R 2132 | S 0959 R 2157 |
| 31 | S 0323 R 1448 | S 0304 R 1452 | S 0304 R 1452 | S 0325 R 1627 | S 0325 R 1627 | S 0503 R 1823 | S 0656 R 1928 | S 0932 R 2101 | S 1037 | S 1037 | S 1037 | S 1037 |

TIMES OF MOONRISE AND MOONSET – TOWNSVILLE 2015

LAT 19° 15' S LONG 146° 50' E TIME ZONE 1000E

R = Moonrise time S = Moonset time

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 01 | S 0252 R 1435 | S 0420 R 1552 | S 0305 R 1439 | S 0352 R 1552 | S 0342 R 1612 | S 0419 R 1728 | S 0437 R 1801 | S 0617 R 1923 | S 0809 R 2027 | S 0857 R 2045 | S 1034 R 2209 | S 1050 R 2237 |
| 02 | S 0348 R 1524 | S 0508 R 1643 | S 0351 R 1529 | S 0429 R 1640 | S 0420 R 1701 | S 0505 R 1822 | S 0533 R 1856 | S 0720 R 2012 | S 0911 R 2115 | S 0958 R 2138 | S 1125 R 2303 | S 1132 R 2328 |
| 03 | S 0442 R 1614 | S 0552 R 1733 | S 0433 R 1619 | S 0506 R 1728 | S 0459 R 1751 | S 0555 R 1917 | S 0631 R 1950 | S 0822 R 2100 | S 1012 R 2205 | S 1057 R 2232 | S 1212 R 2355 | S 1212 R 2355 |
| 04 | S 0534 R 1705 | S 0634 R 1822 | S 0513 R 1708 | S 0544 R 1817 | S 0540 R 1843 | S 0648 R 2012 | S 0731 R 2042 | S 0923 R 2147 | S 1112 R 2255 | S 1152 R 2325 | S 1255 R 2355 | S 1249 R 2355 |
| 05 | S 0624 R 1757 | S 0714 R 1911 | S 0552 R 1756 | S 0621 R 1906 | S 0624 R 1936 | S 0744 R 2106 | S 0832 R 2131 | S 1023 R 2234 | S 1210 R 2346 | S 1210 R 2346 | S 1210 R 2346 | S 1210 R 2346 |
| 06 | S 0711 R 1848 | S 0752 R 1959 | S 0629 R 1844 | S 0701 R 1957 | S 0711 R 2030 | S 0842 R 2157 | S 0933 R 2218 | S 1123 R 2321 | S 1305 R 2346 | S 1243 R 2346 | S 1335 R 2355 | S 1326 R 2355 |
| 07 | S 0755 R 1938 | S 0829 R 2047 | S 0706 R 1932 | S 0743 R 2048 | S 0801 R 2124 | S 0941 R 2246 | S 1032 R 2304 | S 1221 R 2304 | R 0038 S 1358 | R 0110 S 1415 | R 0223 S 1451 | R 0241 S 1441 |
| 08 | S 0836 R 2028 | S 0906 R 2135 | S 0743 R 2020 | S 0827 R 2141 | S 0855 R 2217 | S 1040 R 2334 | S 1131 R 2350 | R 0009 S 1319 | R 0131 S 1447 | R 0201 S 1457 | R 0311 S 1527 | R 0330 S 1520 |
| 09 | S 0915 R 2116 | S 0943 R 2224 | S 0822 R 2110 | S 0914 R 2234 | S 0950 R 2309 | S 1139 S 1139 | S 1230 S 1230 | S 1415 S 1415 | R 0059 S 1533 | R 0223 S 1536 | R 0359 S 1605 | R 0420 S 1602 |
| 10 | S 0952 R 2204 | S 1021 R 2314 | S 0901 R 2200 | S 1005 R 2327 | S 1048 R 2359 | R 0019 S 1238 | R 0035 S 1328 | R 0149 S 1509 | R 0314 S 1616 | R 0339 S 1614 | R 0447 S 1643 | R 0511 S 1647 |
| 11 | S 1029 R 2252 | S 1102 R 2340 | S 0943 R 2252 | S 1059 S 1059 | S 1146 S 1146 | S 1336 S 1336 | S 1426 S 1426 | S 1601 S 1601 | R 0404 S 1657 | R 0427 S 1651 | R 0536 S 1723 | R 0604 S 1735 |
| 12 | S 1106 R 2340 | R 0005 S 1146 | S 1029 R 2345 | R 0020 S 1155 | R 0047 S 1245 | R 0150 S 1435 | R 0211 S 1523 | R 0334 S 1649 | R 0454 S 1736 | R 0515 S 1728 | R 0627 S 1806 | R 0656 S 1826 |
| 13 | S 1144 R 0030 | S 1233 R 0153 | S 1117 R 0039 | S 1254 R 0202 | S 1344 R 0220 | S 1534 R 0325 | S 1620 R 0353 | S 1735 R 0517 | S 1813 R 0630 | S 1805 R 0651 | S 1852 R 0810 | S 1920 R 0841 |
| 14 | S 1224 R 0121 | S 1325 R 0249 | S 1210 R 0133 | S 1354 R 0251 | S 1444 R 0307 | S 1633 R 0415 | S 1714 R 0446 | S 1817 R 0608 | S 1850 R 0718 | S 1844 R 0741 | S 1941 R 0902 | S 2016 R 0931 |
| 15 | S 1307 R 0215 | S 1421 R 0345 | S 1306 R 0227 | S 1454 R 0339 | S 1544 R 0354 | S 1731 R 0507 | S 1805 R 0539 | S 1857 R 0657 | S 1927 R 0806 | S 1925 R 0831 | S 2032 R 0953 | S 2113 R 1019 |
| 16 | S 1353 R 0311 | S 1521 R 0441 | S 1405 R 0320 | S 1556 R 0427 | S 1645 R 0442 | S 1828 R 0601 | S 1853 R 0632 | S 1936 R 0746 | S 2005 R 0854 | S 2008 R 0922 | S 2126 R 1043 | S 2211 R 1105 |
| 17 | S 1444 R 0408 | S 1623 R 0535 | S 1506 R 0412 | S 1658 R 0515 | S 1745 R 0533 | S 1921 R 0655 | S 1938 R 0723 | S 2013 R 0834 | S 2044 R 0944 | S 2054 R 1013 | S 2221 R 1132 | S 2308 R 1150 |
| 18 | S 1540 R 0506 | S 1727 R 0627 | S 1609 R 0502 | S 1800 R 0604 | S 1845 R 0625 | S 2012 R 0748 | S 2020 R 0814 | S 2050 R 0921 | S 2126 R 1034 | S 2143 R 1105 | S 2318 R 1219 | S 2318 R 1219 |
| 19 | S 1640 R 0604 | S 1831 R 0717 | S 1712 R 0551 | S 1902 R 0655 | S 1944 R 0719 | S 2059 R 0841 | S 2059 R 0903 | S 2127 R 1010 | S 2210 R 1126 | S 2236 R 1156 | S 2318 R 1305 | S 2318 R 1305 |
| 20 | S 1742 R 0659 | S 1935 R 0806 | S 1815 R 0640 | S 2003 R 0746 | S 2040 R 0813 | S 2142 R 0932 | S 2137 R 0951 | S 2205 R 1059 | S 2258 R 1218 | S 2330 R 1246 | S 2411 R 1351 | S 2411 R 1407 |
| 21 | S 1846 R 0752 | S 2038 R 0854 | S 1918 R 0729 | S 2102 R 0839 | S 2132 R 0906 | S 2223 R 1021 | S 2214 R 1039 | S 2246 R 1149 | S 2348 R 1310 | S 2348 R 1310 | S 2411 R 1438 | S 2411 R 1456 |
| 22 | S 1950 R 0842 | S 2139 R 0942 | S 2021 R 0819 | S 2159 R 0932 | S 2220 R 0959 | S 2301 R 1110 | S 2251 R 1127 | S 2329 R 1241 | S 2329 R 1241 | S 2329 R 1241 | S 2411 R 1351 | S 2411 R 1407 |
| 23 | S 2052 R 0929 | S 2238 R 1030 | S 2122 R 0909 | S 2252 R 1025 | S 2305 R 1050 | S 2339 R 1157 | S 2328 R 1216 | S 2328 R 1216 | R 1403 S 0140 | R 1424 S 0226 | R 1525 S 0415 | R 1548 S 0505 |
| 24 | S 2153 R 1016 | S 2337 R 1118 | S 2221 R 1000 | S 2342 R 1118 | S 2347 R 1140 | S 2347 R 1140 | S 2347 R 1140 | R 1334 S 0015 | R 1454 S 0240 | R 1511 S 0327 | R 1615 S 0518 | R 1642 S 0603 |
| 25 | S 2253 R 1101 | S 2351 R 1208 | S 2317 R 1051 | S 2317 R 1051 | S 2317 R 1051 | S 2317 R 1051 | S 2317 R 1051 | R 1246 S 0008 | R 1306 S 0240 | R 1428 S 0327 | R 1559 S 0518 | R 1738 S 0603 |
| 26 | S 2351 R 1147 | S 0033 R 1208 | S 0033 R 1208 | S 0028 R 1209 | S 0026 R 1229 | S 0053 R 1334 | S 0050 R 1358 | S 0159 R 1522 | S 0342 R 1635 | S 0429 R 1648 | S 0620 R 1801 | S 0700 R 1834 |
| 27 | S 0048 R 1234 | S 0217 R 1349 | S 0101 R 1235 | S 0150 R 1347 | S 0141 R 1405 | S 0213 R 1516 | S 0224 R 1547 | S 0358 R 1708 | S 0444 R 1813 | S 0532 R 1724 | S 0721 R 1738 | S 0752 R 1857 |
| 28 | S 0144 R 1322 | S 0217 R 1349 | S 0148 R 1325 | S 0228 R 1435 | S 0218 R 1453 | S 0257 R 1610 | S 0318 R 1642 | S 0500 R 1800 | S 0651 R 1903 | S 0739 R 1923 | S 0914 R 2050 | S 0926 R 2117 |
| 29 | S 0238 R 1411 | S 0313 R 1501 | S 0232 R 1415 | S 0305 R 1523 | S 0256 R 1543 | S 0345 R 1705 | S 0415 R 1737 | S 0603 R 1849 | S 0755 R 1954 | S 0841 R 2018 | S 1004 R 2144 | S 1007 R 2208 |
| 30 | S 0330 R 1501 | S 0415 R 1551 | S 0336 R 1504 | S 0415 R 1551 | S 0400 R 1536 | S 0485 R 1701 | S 0515 R 1733 | S 0706 R 1849 | S 0939 R 1954 | S 1046 R 2114 | S 1213 R 2257 | S 1213 R 2257 |
| 31 | S 0415 R 1551 | S 0500 R 1641 | S 0415 R 1551 | S 0500 R 1641 | S 0485 R 1701 | S 0570 R 1751 | S 0600 R 1801 | S 0791 R 1912 | S 1024 R 2023 | S 1157 R 2134 | S 1334 R 2245 | S 1334 R 2245 |

TIMES OF MOONRISE AND MOONSET – CAIRNS 2015

LAT 16° 56' S LONG 145° 47' E TIME ZONE 1000E

R = Moonrise time S = Moonset time

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 01 | S 0254 R 1442 | S 0421 R 1600 | S 0306 R 1447 | S 0354 R 1558 | S 0347 R 1615 | S 0426 R 1729 | S 0445 R 1802 | S 0624 R 1925 | S 0813 R 2032 | S 0859 R 2053 | S 1035 R 2217 | S 1052 R 2244 |
| 02 | S 0349 R 1531 | S 0509 R 1650 | S 0352 R 1537 | S 0433 R 1645 | S 0425 R 1704 | S 0512 R 1823 | S 0541 R 1857 | S 0726 R 2015 | S 0914 R 2121 | S 0959 R 2146 | S 1126 R 2310 | S 1134 R 2334 |
| 03 | S 0443 R 1622 | S 0554 R 1740 | S 0435 R 1625 | S 0510 R 1732 | S 0505 R 1753 | S 0602 R 1918 | S 0639 R 1952 | S 0827 R 2104 | S 1014 R 2212 | S 1058 R 2239 | S 1213 R 2333 | S 1215 R 0022 |
| 04 | S 0535 R 1713 | S 0636 R 1829 | S 0516 R 1714 | S 0548 R 1820 | S 0547 R 1845 | S 0656 R 2013 | S 0739 R 2044 | S 0927 R 2152 | S 1113 R 2302 | S 1153 R 2333 | R 0002 S 1257 | R 0022 S 1253 |
| 05 | S 0625 R 1804 | S 0716 R 1917 | S 0555 R 1801 | S 0627 R 1909 | S 0631 R 1937 | S 0752 R 2107 | S 0839 R 2134 | S 1027 R 2239 | S 1211 R 2354 | S 1244 R 0026 | R 0052 S 1338 | R 0110 S 1331 |
| 06 | S 0712 R 1855 | S 0755 R 2004 | S 0633 R 1848 | S 0707 R 1959 | S 0719 R 2031 | S 0850 R 2159 | S 0938 R 2222 | S 1125 R 2327 | S 1306 R 0046 | S 1332 R 0117 | S 1417 R 0228 | S 1408 R 0244 |
| 07 | S 0756 R 1945 | S 0833 R 2052 | S 0711 R 1936 | S 0749 R 2050 | S 0809 R 2125 | S 0948 R 2249 | S 1037 R 2309 | S 1223 R 0016 | S 1358 R 0138 | S 1417 R 0208 | S 1455 R 0315 | S 1447 R 0332 |
| 08 | S 0838 R 2034 | S 0910 R 2139 | S 0749 R 2024 | S 0834 R 2142 | S 0903 R 2218 | S 1046 R 2336 | S 1135 R 2355 | R 0016 S 1320 | R 0138 S 1448 | R 0208 S 1459 | R 0315 S 1532 | R 0332 S 1527 |
| 09 | S 0918 R 2122 | S 0948 R 2227 | S 0827 R 2112 | S 0922 R 2235 | S 0958 R 2310 | S 1144 R 0023 | S 1233 R 0041 | S 1416 R 0157 | S 1534 R 0321 | S 1539 R 0344 | S 1610 R 0450 | S 1609 R 0512 |
| 10 | S 0956 R 2209 | S 1027 R 2316 | S 0908 R 2202 | S 1013 R 2328 | S 1055 R 0001 | S 1242 R 0109 | S 1331 R 0129 | S 1510 R 0249 | S 1618 R 0411 | S 1617 R 0432 | S 1649 R 0539 | S 1655 R 0605 |
| 11 | S 1033 R 2256 | S 1109 R 2344 | S 0950 R 2253 | S 1107 R 0021 | S 1153 R 0050 | S 1340 R 0155 | S 1428 R 0218 | S 1601 R 0342 | S 1659 R 0459 | S 1655 R 0519 | S 1730 R 0628 | S 1743 R 0657 |
| 12 | S 1111 R 2344 | R 0007 S 1153 | S 1036 R 2346 | S 1203 R 0113 | S 1251 R 0138 | S 1438 R 0243 | S 1525 R 0309 | S 1650 R 0433 | S 1739 R 0547 | S 1733 R 0606 | S 1814 R 0719 | S 1834 R 0750 |
| 13 | S 1149 R 0033 | S 1241 R 0154 | S 1125 R 0040 | S 1301 R 0204 | S 1350 R 0224 | S 1536 R 0331 | S 1620 R 0401 | S 1736 R 0524 | S 1817 R 0634 | S 1811 R 0654 | S 1900 R 0811 | S 1928 R 0842 |
| 14 | S 1230 R 0123 | S 1333 R 0250 | S 1218 R 0134 | S 1400 R 0254 | S 1448 R 0312 | S 1634 R 0422 | S 1714 R 0454 | S 1819 R 0614 | S 1855 R 0722 | S 1850 R 0743 | S 1948 R 0903 | S 2024 R 0932 |
| 15 | S 1313 R 0217 | S 1429 R 0346 | S 1313 R 0228 | S 1500 R 0343 | S 1547 R 0359 | S 1732 R 0515 | S 1806 R 0547 | S 1900 R 0703 | S 1932 R 0809 | S 1932 R 0832 | S 2040 R 0954 | S 2120 R 1021 |
| 16 | S 1401 R 0312 | S 1528 R 0442 | S 1412 R 0321 | S 1600 R 0432 | S 1647 R 0449 | S 1828 R 0608 | S 1854 R 0639 | S 1939 R 0751 | S 2011 R 0857 | S 2016 R 0923 | S 2133 R 1045 | S 2217 R 1108 |
| 17 | S 1452 R 0409 | S 1630 R 0537 | S 1513 R 0414 | S 1701 R 0520 | S 1747 R 0540 | S 1922 R 0702 | S 1939 R 0730 | S 2017 R 0838 | S 2051 R 0946 | S 2102 R 1014 | S 2228 R 1134 | S 2314 R 1154 |
| 18 | S 1548 R 0507 | S 1734 R 0630 | S 1615 R 0505 | S 1803 R 0610 | S 1847 R 0633 | S 2013 R 0756 | S 2022 R 0820 | S 2055 R 0925 | S 2133 R 1036 | S 2151 R 1106 | S 2325 R 1222 | S 0011 R 1239 |
| 19 | S 1648 R 0605 | S 1837 R 0721 | S 1717 R 0555 | S 1904 R 0701 | S 1945 R 0726 | S 2100 R 0848 | S 2102 R 0908 | S 2133 R 1012 | S 2218 R 1127 | S 2243 R 1157 | R 1222 S 0021 | R 1239 S 0108 |
| 20 | S 1750 R 0701 | S 1940 R 0811 | S 1820 R 0645 | S 2004 R 0754 | S 2041 R 0821 | S 2144 R 0938 | S 2140 R 0956 | S 2211 R 1101 | S 2305 R 1219 | S 2338 R 1247 | R 1309 S 0119 | R 1326 S 0207 |
| 21 | S 1853 R 0754 | S 2041 R 0859 | S 1922 R 0735 | S 2103 R 0847 | S 2133 R 0914 | S 2225 R 1027 | S 2218 R 1043 | S 2252 R 1151 | S 2356 R 1311 | S 2356 R 1311 | R 1355 S 0218 | R 1413 S 0306 |
| 22 | S 1956 R 0845 | S 2142 R 0948 | S 2023 R 0825 | S 2200 R 0940 | S 2222 R 1006 | S 2305 R 1115 | S 2256 R 1130 | S 2336 R 1242 | R 1311 S 0051 | R 1311 S 0132 | R 1442 S 0317 | R 1503 S 0406 |
| 23 | S 2057 R 0933 | S 2241 R 1036 | S 2123 R 0916 | S 2253 R 1033 | S 2307 R 1057 | S 2342 R 1202 | S 2334 R 1218 | R 1404 S 0022 | R 1404 S 0148 | R 1426 S 0231 | R 1531 S 0418 | R 1555 S 0506 |
| 24 | S 2158 R 1021 | S 2338 R 1126 | S 2222 R 1007 | S 2343 R 1125 | S 2349 R 1146 | S 0020 R 1249 | S 0014 R 1308 | R 1334 S 0113 | R 1456 S 0247 | R 1515 S 0332 | R 1621 S 0520 | R 1650 S 0604 |
| 25 | S 2256 R 1107 | S 0034 R 1216 | S 2318 R 1059 | S 0029 R 1216 | S 0029 R 1234 | S 0058 R 1337 | S 0057 R 1359 | S 0207 R 1523 | S 0348 R 1638 | S 0348 R 1638 | S 0621 R 1809 | S 0701 R 1842 |
| 26 | S 2354 R 1154 | S 0127 R 1306 | S 0012 R 1151 | S 0112 R 1305 | S 0107 R 1321 | S 0138 R 1427 | S 0143 R 1453 | S 0305 R 1617 | S 0450 R 1728 | S 0450 R 1728 | S 0722 R 1905 | S 0753 R 1938 |
| 27 | S 0050 R 1241 | S 0218 R 1357 | S 0102 R 1242 | S 0153 R 1353 | S 0145 R 1409 | S 0219 R 1518 | S 0232 R 1547 | S 0405 R 1710 | S 0552 R 1818 | S 0638 R 1837 | S 0820 R 2001 | S 0842 R 2032 |
| 28 | S 0145 R 1329 | S 0218 R 1357 | S 0149 R 1333 | S 0231 R 1440 | S 0223 R 1457 | S 0304 R 1611 | S 0326 R 1643 | S 0506 R 1802 | S 0655 R 1909 | S 0740 R 1931 | S 0915 R 2057 | S 0928 R 2124 |
| 29 | S 0239 R 1419 | S 0239 R 1419 | S 0233 R 1422 | S 0309 R 1528 | S 0302 R 1546 | S 0353 R 1706 | S 0423 R 1738 | S 0609 R 1853 | S 0757 R 2000 | S 0842 R 2026 | S 1005 R 2151 | S 1010 R 2214 |
| 30 | S 0331 R 1509 | S 0331 R 1509 | S 0315 R 1510 | S 0342 R 1637 | S 0342 R 1637 | S 0434 R 1706 | S 0523 R 1833 | S 0711 R 1943 | S 0940 R 2122 | S 0940 R 2122 | S 1050 R 2302 | S 1050 R 2302 |

TIMES OF MOONRISE AND MOONSET – WEIPA 2015

LAT 12° 40' S LONG 141° 52' E TIME ZONE 1000E

R = Moonrise time S = Moonset time

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 01 | S 0305 R 1504 | S 0431 R 1622 | S 0317 R 1509 | S 0408 R 1616 | S 0404 R 1630 | S 0447 R 1740 | S 0507 R 1812 | S 0645 R 1937 | S 0828 R 2050 | S 0911 R 2114 | S 1045 R 2239 | S 1103 R 2304 |
| 02 | S 0400 R 1554 | S 0519 R 1712 | S 0403 R 1558 | S 0447 R 1702 | S 0443 R 1718 | S 0534 R 1833 | S 0603 R 1908 | S 0745 R 2029 | S 0928 R 2141 | S 1010 R 2208 | S 1137 R 2332 | S 1147 R 2353 |
| 03 | S 0453 R 1644 | S 0605 R 1801 | S 0446 R 1646 | S 0526 R 1748 | S 0524 R 1806 | S 0625 R 1928 | S 0701 R 2002 | S 0845 R 2120 | S 1027 R 2232 | S 1108 R 2302 | S 1225 R 0023 | S 1229 R 0040 |
| 04 | S 0545 R 1735 | S 0648 R 1849 | S 0528 R 1733 | S 0605 R 1835 | S 0607 R 1856 | S 0718 R 2023 | S 0800 R 2056 | S 0943 R 2209 | S 1125 R 2324 | S 1203 R 2355 | S 1309 R 0012 | S 1308 R 0126 |
| 05 | S 0635 R 1826 | S 0729 R 1936 | S 0609 R 1819 | S 0645 R 1922 | S 0652 R 1948 | S 0814 R 2117 | S 0859 R 2147 | S 1041 R 2258 | S 1221 R 0016 | S 1254 R 0048 | S 1351 R 0159 | S 1347 R 0212 |
| 06 | S 0723 R 1917 | S 0809 R 2022 | S 0648 R 1905 | S 0727 R 2011 | S 0741 R 2041 | S 0911 R 2210 | S 0957 R 2236 | S 1139 R 2347 | R 0016 S 1316 | R 0048 S 1343 | R 0159 S 1431 | R 0212 S 1426 |
| 07 | S 0808 R 2006 | S 0848 R 2108 | S 0727 R 1951 | S 0810 R 2101 | S 0832 R 2135 | S 1009 R 2301 | S 1054 R 2325 | S 1235 R 0037 | R 0109 S 1409 | R 0139 S 1429 | R 0245 S 1510 | R 0258 S 1506 |
| 08 | S 0850 R 2053 | S 0927 R 2154 | S 0806 R 2038 | S 0856 R 2152 | S 0925 R 2228 | S 1106 R 2350 | S 1151 R 0012 | S 1331 R 0128 | S 1458 R 0201 | S 1511 R 0228 | S 1549 R 0331 | S 1547 R 0345 |
| 09 | S 0931 R 2140 | S 1006 R 2241 | S 0846 R 2125 | S 0944 R 2245 | S 1020 R 2321 | S 1203 R 0038 | S 1247 R 0100 | S 1426 R 0220 | S 1545 R 0342 | S 1552 R 0402 | S 1628 R 0503 | S 1630 R 0523 |
| 10 | S 1010 R 2226 | S 1047 R 2328 | S 0928 R 2214 | S 1035 R 2338 | S 1035 R 2338 | S 1259 R 0126 | S 1343 R 0149 | S 1520 R 0312 | S 1630 R 0431 | S 1632 R 0448 | S 1708 R 0551 | S 1716 R 0615 |
| 11 | S 1049 R 2312 | S 1129 R 0018 | S 1011 R 2304 | S 1129 R 0031 | S 1213 R 0103 | S 1355 R 0213 | S 1439 R 0239 | S 1612 R 0404 | S 1712 R 0518 | S 1711 R 0534 | S 1751 R 0640 | S 1805 R 0707 |
| 12 | S 1128 R 2358 | S 1214 R 0110 | S 1058 R 2356 | S 1225 R 0124 | S 1310 R 0152 | S 1451 R 0302 | S 1535 R 0331 | S 1701 R 0455 | S 1753 R 0605 | S 1750 R 0620 | S 1835 R 0730 | S 1857 R 0800 |
| 13 | S 1208 R 0046 | S 1303 R 0204 | S 1147 R 0050 | S 1322 R 0216 | S 1407 R 0240 | S 1548 R 0352 | S 1631 R 0423 | S 1747 R 0545 | S 1832 R 0651 | S 1829 R 0707 | S 1922 R 0821 | S 1951 R 0852 |
| 14 | S 1250 R 0136 | S 1355 R 0300 | S 1240 R 0144 | S 1420 R 0307 | S 1504 R 0329 | S 1646 R 0444 | S 1724 R 0516 | S 1831 R 0634 | S 1911 R 0737 | S 1910 R 0755 | S 2011 R 0913 | S 2046 R 0943 |
| 15 | S 1334 R 0228 | S 1451 R 0356 | S 1336 R 0238 | S 1519 R 0358 | S 1602 R 0418 | S 1743 R 0537 | S 1816 R 0609 | S 1913 R 0721 | S 1950 R 0823 | S 1952 R 0843 | S 2102 R 1004 | S 2141 R 1033 |
| 16 | S 1422 R 0322 | S 1551 R 0453 | S 1434 R 0333 | S 1617 R 0448 | S 1700 R 0509 | S 1838 R 0631 | S 1905 R 0700 | S 1954 R 0808 | S 2030 R 0910 | S 2037 R 0933 | S 2156 R 1055 | S 2237 R 1121 |
| 17 | S 1515 R 0419 | S 1652 R 0549 | S 1534 R 0426 | S 1717 R 0538 | S 1759 R 0601 | S 1932 R 0725 | S 1951 R 0750 | S 2033 R 0854 | S 2111 R 0957 | S 2124 R 1024 | S 2250 R 1145 | S 2332 R 1209 |
| 18 | S 1611 R 0517 | S 1754 R 0643 | S 1634 R 0519 | S 1817 R 0630 | S 1858 R 0655 | S 2023 R 0817 | S 2034 R 0839 | S 2112 R 0940 | S 2154 R 1047 | S 2214 R 1116 | S 2345 R 1234 | S 0028 R 1256 |
| 19 | S 1710 R 0615 | S 1856 R 0736 | S 1735 R 0611 | S 1916 R 0722 | S 1955 R 0749 | S 2111 R 0909 | S 2116 R 0926 | S 2151 R 1026 | S 2239 R 1137 | S 2306 R 1207 | S 0041 R 1323 | S 0124 R 1343 |
| 20 | S 1812 R 0712 | S 1957 R 0827 | S 1836 R 0702 | S 2016 R 0815 | S 2051 R 0843 | S 2156 R 0958 | S 2155 R 1012 | S 2231 R 1113 | S 2328 R 1229 | S 2359 R 1258 | R 1323 S 0137 | R 1343 S 0221 |
| 21 | S 1914 R 0807 | S 2057 R 0917 | S 1936 R 0754 | S 2114 R 0909 | S 2143 R 0936 | S 2238 R 1046 | S 2234 R 1058 | S 2313 R 1202 | S 2313 R 1202 | S 2313 R 1202 | S 0019 R 1349 | S 0055 R 1459 |
| 22 | S 2015 R 0859 | S 2155 R 1007 | S 2036 R 0845 | S 2210 R 1003 | S 2232 R 1028 | S 2319 R 1132 | S 2313 R 1144 | S 2357 R 1252 | R 1321 S 0113 | R 1349 S 0152 | R 1459 S 0332 | R 1524 S 0417 |
| 23 | S 2115 R 0949 | S 2253 R 1057 | S 2135 R 0937 | S 2303 R 1056 | S 2318 R 1117 | S 2358 R 1218 | S 2353 R 1231 | R 1414 S 0044 | R 1439 S 0209 | R 1549 S 0250 | R 1617 S 0431 | R 1617 S 0516 |
| 24 | S 2214 R 1038 | S 2349 R 1147 | S 2233 R 1029 | S 2353 R 1147 | S 2353 R 1147 | S 0002 R 1205 | S 0037 R 1304 | R 1345 S 0135 | R 1507 S 0308 | R 1529 S 0349 | R 1641 S 0532 | R 1712 S 0614 |
| 25 | S 2311 R 1126 | S 0044 R 1238 | S 2329 R 1122 | S 0040 R 1237 | S 0042 R 1252 | S 0116 R 1351 | S 0118 R 1410 | S 0230 R 1533 | S 0407 R 1652 | S 0448 R 1711 | S 0632 R 1831 | S 0711 R 1904 |
| 26 | S 0007 R 1214 | S 0137 R 1329 | S 0022 R 1213 | S 0124 R 1325 | S 0122 R 1338 | S 0157 R 1439 | S 0204 R 1503 | S 0327 R 1628 | S 0507 R 1744 | S 0549 R 1803 | S 0732 R 1927 | S 0804 R 1959 |
| 27 | S 0102 R 1302 | S 0228 R 1419 | S 0112 R 1304 | S 0206 R 1412 | S 0201 R 1424 | S 0240 R 1530 | S 0255 R 1557 | S 0426 R 1722 | S 0608 R 1835 | S 0650 R 1857 | S 0830 R 2024 | S 0854 R 2052 |
| 28 | S 0156 R 1351 | S 0249 R 1441 | S 0200 R 1354 | S 0245 R 1458 | S 0240 R 1511 | S 0325 R 1622 | S 0348 R 1653 | S 0526 R 1815 | S 0709 R 1927 | S 0752 R 1952 | S 0925 R 2119 | S 0940 R 2143 |
| 29 | S 0249 R 1441 | S 0341 R 1532 | S 0245 R 1442 | S 0325 R 1544 | S 0320 R 1559 | S 0415 R 1716 | S 0445 R 1749 | S 0627 R 1908 | S 0810 R 2020 | S 0852 R 2048 | S 1016 R 2213 | S 1023 R 2232 |
| 30 | S 0341 R 1532 | S 0402 R 1649 | S 0327 R 1530 | S 0402 R 1649 | S 0402 R 1649 | S 0402 R 1649 | S 0545 R 1844 | S 0728 R 1959 | S 0950 R 2144 | S 0950 R 2144 | S 1104 R 2319 | S 1104 R 2319 |

TIMES OF MOONRISE AND MOONSET – KARUMBA 2015

LAT 17° 30' S LONG 140° 50' E TIME ZONE 1000E

R = Moonrise time S = Moonset time

| DAY | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 01 | S 0315 R 1502 | S 0442 R 1619 | S 0328 R 1507 | S 0415 R 1618 | S 0407 R 1636 | S 0446 R 1750 | S 0504 R 1823 | S 0644 R 1946 | S 0834 R 2052 | S 0920 R 2112 | S 1057 R 2236 | S 1113 R 2304 |
| 02 | S 0410 R 1551 | S 0530 R 1710 | S 0413 R 1556 | S 0453 R 1705 | S 0445 R 1725 | S 0532 R 1844 | S 0600 R 1919 | S 0746 R 2036 | S 0935 R 2142 | S 1021 R 2206 | S 1148 R 2330 | S 1155 R 2354 |
| 03 | S 0504 R 1641 | S 0615 R 1800 | S 0456 R 1645 | S 0531 R 1753 | S 0525 R 1814 | S 0622 R 1939 | S 0659 R 2013 | S 0847 R 2125 | S 1035 R 2231 | S 1119 | S 1234 | S 1235 |
| 04 | S 0556 R 1733 | S 0657 R 1849 | S 0537 R 1734 | S 0609 R 1841 | S 0607 R 1906 | S 0716 R 2034 | S 0759 R 2105 | S 0948 R 2212 | S 1135 R 2322 | S 1214 R 2353 | R 0022 S 1318 | R 0042 S 1314 |
| 05 | S 0646 R 1824 | S 0737 R 1937 | S 0616 R 1821 | S 0647 R 1930 | S 0651 R 1959 | S 0812 R 2128 | S 0859 R 2155 | S 1047 R 2300 | S 1232 | S 1306 | S 1359 | S 1351 |
| 06 | S 0733 R 1915 | S 0816 R 2025 | S 0653 R 1909 | S 0727 R 2020 | S 0738 R 2052 | S 0909 R 2220 | S 0959 R 2243 | S 1146 R 2347 | R 0014 S 1327 | R 0045 S 1353 | R 0201 S 1437 | R 0217 S 1428 |
| 07 | S 0817 R 2005 | S 0853 R 2112 | S 0731 R 1956 | S 0809 R 2111 | S 0829 R 2146 | S 1008 R 2310 | S 1058 R 2329 | S 1244 | R 0106 S 1420 | R 0137 S 1438 | R 0248 S 1515 | R 0305 S 1507 |
| 08 | S 0859 R 2054 | S 0931 R 2159 | S 0809 R 2044 | S 0854 R 2203 | S 0922 R 2240 | S 1107 R 2357 | S 1156 | R 0036 S 1342 | R 0158 S 1509 | R 0227 S 1520 | R 0335 S 1552 | R 0353 S 1547 |
| 09 | S 0938 R 2142 | S 1008 R 2248 | S 0847 R 2133 | S 0942 R 2256 | S 1018 R 2332 | S 1205 | R 0015 S 1254 | R 0126 S 1437 | R 0250 S 1556 | R 0316 S 1559 | R 0423 S 1630 | R 0443 S 1629 |
| 10 | S 1016 R 2229 | S 1047 R 2337 | S 0928 R 2223 | S 1033 R 2350 | S 1115 | R 0044 S 1303 | R 0101 S 1352 | R 0217 S 1531 | R 0341 S 1639 | R 0405 S 1638 | R 0511 S 1709 | R 0534 S 1714 |
| 11 | S 1054 R 2316 | S 1129 | R 2314 | S 1126 | R 0022 S 1213 | R 0129 S 1401 | R 0149 S 1449 | R 0309 S 1623 | R 0431 S 1720 | R 0452 S 1715 | R 0600 S 1750 | R 0626 S 1803 |
| 12 | S 1131 | R 0028 S 1213 | S 1056 | R 0043 S 1223 | R 0111 S 1311 | R 0215 S 1459 | R 0238 S 1546 | R 0401 S 1711 | R 0519 S 1759 | R 0539 S 1753 | R 0650 S 1833 | R 0719 S 1854 |
| 13 | R 0004 S 1209 | R 0121 S 1300 | R 0007 S 1145 | R 0135 S 1321 | R 0158 S 1410 | R 0303 S 1557 | R 0328 S 1642 | R 0453 S 1757 | R 0607 S 1837 | R 0627 S 1831 | R 0741 S 1919 | R 0811 S 1948 |
| 14 | R 0054 S 1250 | R 0215 S 1352 | R 0101 S 1237 | R 0225 S 1420 | R 0245 S 1509 | R 0351 S 1656 | R 0420 S 1736 | R 0544 S 1840 | R 0655 S 1915 | R 0715 S 1910 | R 0832 S 2008 | R 0903 S 2044 |
| 15 | R 0145 S 1333 | R 0311 S 1449 | R 0155 S 1333 | R 0315 S 1520 | R 0332 S 1608 | R 0442 S 1754 | R 0513 S 1827 | R 0634 S 1921 | R 0742 S 1952 | R 0804 S 1952 | R 0924 S 2059 | R 0953 S 2140 |
| 16 | R 0238 S 1420 | R 0408 S 1548 | R 0249 S 1432 | R 0404 S 1621 | R 0420 S 1708 | R 0534 S 1850 | R 0607 S 1915 | R 0723 S 2000 | R 0830 S 2031 | R 0853 S 2035 | R 1016 S 2153 | R 1042 S 2237 |
| 17 | R 0333 S 1512 | R 0504 S 1650 | R 0343 S 1533 | R 0452 S 1722 | R 0509 S 1808 | R 0628 S 1944 | R 0659 S 2000 | R 0811 S 2038 | R 0918 S 2111 | R 0944 S 2122 | R 1106 S 2248 | R 1129 S 2334 |
| 18 | R 0431 S 1608 | R 0558 S 1754 | R 0435 S 1635 | R 0541 S 1824 | R 0600 S 1908 | R 0722 S 2034 | R 0750 S 2043 | R 0858 S 2115 | R 1007 S 2153 | R 1035 S 2211 | R 1155 S 2345 | R 1214 |
| 19 | R 0529 S 1707 | R 0651 S 1857 | R 0526 S 1738 | R 0630 S 1925 | R 0652 S 2006 | R 0815 S 2121 | R 0840 S 2123 | R 0946 S 2153 | R 1057 S 2237 | R 1127 S 2303 | R 1243 | S 0032 R 1300 |
| 20 | R 0626 S 1810 | R 0742 S 2000 | R 0616 S 1840 | R 0721 S 2026 | R 0746 S 2102 | R 0907 S 2205 | R 0928 S 2201 | R 1033 S 2231 | R 1148 S 2325 | R 1218 S 2358 | S 0042 R 1329 | S 0129 R 1346 |
| 21 | R 0722 S 1913 | R 0831 S 2102 | R 0705 S 1943 | R 0813 S 2125 | R 0840 S 2154 | R 0958 S 2246 | R 1016 S 2238 | R 1122 S 2312 | R 1240 | R 1309 | S 0140 R 1416 | S 0228 R 1433 |
| 22 | R 0815 S 2016 | R 0920 S 2203 | R 0755 S 2044 | R 0907 S 2221 | R 0934 S 2243 | R 1047 S 2325 | R 1103 S 2316 | R 1212 S 2355 | S 0016 R 1333 | S 0054 R 1358 | S 0238 R 1503 | S 0327 R 1523 |
| 23 | R 0906 S 2118 | R 1008 S 2302 | R 0845 S 2145 | R 1000 S 2315 | R 1026 S 2328 | R 1135 | R 1151 S 2354 | R 1303 | R 0110 R 1425 | R 0152 R 1447 | R 0338 R 1551 | R 0427 R 1615 |
| 24 | R 0954 S 2218 | R 1056 S 2359 | R 0936 S 2243 | R 1053 | R 1117 | S 0003 R 1222 | R 1239 | S 0042 R 1356 | S 0207 R 1517 | S 0252 R 1535 | S 0439 R 1641 | S 0527 R 1709 |
| 25 | R 1041 S 2317 | R 1146 | R 1027 S 2340 | S 0004 R 1145 | S 0010 R 1206 | S 0040 R 1310 | S 0034 R 1329 | S 0133 R 1450 | S 0307 R 1608 | S 0352 R 1624 | S 0541 R 1734 | S 0626 R 1805 |
| 26 | R 1127 | S 0055 R 1235 | R 1119 | S 0050 R 1236 | S 0050 R 1254 | S 0118 R 1358 | S 0116 R 1421 | S 0227 R 1544 | S 0408 R 1659 | S 0454 R 1713 | S 0643 R 1828 | S 0722 R 1902 |
| 27 | S 0015 R 1214 | S 0149 R 1326 | S 0033 R 1211 | S 0133 R 1325 | S 0128 R 1342 | S 0157 R 1448 | S 0202 R 1514 | S 0324 R 1638 | S 0510 R 1749 | S 0556 R 1804 | S 0744 R 1925 | S 0815 R 1957 |
| 28 | S 0111 R 1301 | S 0239 R 1416 | S 0123 R 1302 | S 0213 R 1413 | S 0205 R 1429 | S 0239 R 1539 | S 0252 R 1609 | S 0425 R 1731 | S 0613 R 1839 | S 0659 R 1856 | S 0842 R 2021 | S 0904 R 2052 |
| 29 | S 0206 R 1349 | S 0210 | S 0210 R 1352 | S 0252 R 1501 | S 0243 R 1517 | S 0324 R 1633 | S 0346 R 1704 | S 0527 R 1823 | S 0716 R 1929 | S 0802 R 1951 | S 0936 R 2117 | S 0949 R 2144 |
| 30 | S 0300 R 1438 | S 0300 | S 0254 R 1442 | S 0330 R 1548 | S 0322 R 1607 | S 0412 R 1728 | S 0443 R 1800 | S 0629 R 1914 | S 0818 R 2020 | S 0903 R 2046 | S 1026 R 2211 | S 1031 R 2234 |
| 31 | S 0352 R 1529 | S 0336 | S 0336 R 1530 | S 0402 | R 1658 | S 0543 | R 1854 | S 0732 R 2003 | S 1002 | R 2141 | S 1110 | R 2322 |