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AUSTRALIA, EAST COAST – TOWNSVILLE

LAT 19° 15' S LONG 146° 50' E

Times and Heights of High and Low Waters

2014

Time Zone -1000

JANUARY

Time	m	Time	m
1	0217 0.14	16	0246 0.82
	0855 3.94		0926 3.31
WE	1535 0.90	TH	1552 1.45
●	2043 3.14	○	2057 2.56
2	0259 0.13	17	0306 0.88
	0940 3.99		0954 3.25
TH	1623 0.90	FR	1616 1.49
	2135 3.07		2121 2.51
3	0343 0.25	18	0328 0.99
	1026 3.90		1023 3.16
FR	1716 0.97	SA	1644 1.55
	2228 2.93		2147 2.44
4	0431 0.50	19	0348 1.13
	1114 3.69		1054 3.03
SA	1814 1.07	SU	1721 1.61
	2325 2.73		2220 2.35
5	0526 0.85	20	0408 1.31
	1205 3.40		1126 2.89
SU	1922 1.17	MO	1809 1.66
			2307 2.24
6	0032 2.52	21	0428 1.52
	0639 1.23		1204 2.73
MO	1306 3.07	TU	1912 1.67
	2038 1.20		
7	0209 2.40	22	0017 2.13
	0827 1.54		0456 1.76
TU	1429 2.79	WE	1252 2.58
	2157 1.14		2028 1.62
8	0402 2.49	23	0213 2.12
	1021 1.63		0838 1.94
WE	1607 2.65	TH	1403 2.46
●	2308 1.01		2148 1.48
9	0527 2.73	24	0447 2.35
	1151 1.55		1042 1.87
TH	1722 2.62	FR	1536 2.45
		●	2249 1.27
10	0003 0.89	25	0536 2.67
	0624 2.96		1148 1.67
FR	1252 1.43	SA	1644 2.55
	1814 2.61		2335 1.03
11	0047 0.80	26	0612 3.01
	0703 3.13		1236 1.45
SA	1338 1.35	SU	1735 2.72
	1852 2.62		
12	0123 0.76	27	0016 0.76
	0735 3.24		0647 3.34
SU	1415 1.32	MO	1318 1.22
	1924 2.61		1820 2.91
13	0151 0.76	28	0054 0.51
	0803 3.31		0723 3.66
MO	1446 1.33	TU	1358 1.01
	1951 2.61		1904 3.11
14	0212 0.77	29	0131 0.29
	0831 3.34		0801 3.92
TU	1510 1.37	WE	1437 0.85
	2015 2.60		1949 3.27
15	0229 0.79	30	0210 0.15
	0858 3.34		0840 4.09
WE	1531 1.41	TH	1517 0.76
	2036 2.58		2035 3.37
		31	0249 0.13
			0921 4.12
			FR 1559 0.75
		●	2122 3.36

FEBRUARY

Time	m	Time	m
1	0330 0.26	16	0310 1.00
	1003 3.99		0947 3.25
SA	1644 0.83	SU	1554 1.34
	2211 3.24		2132 2.77
2	0413 0.54	17	0330 1.12
	1046 3.73		1013 3.14
SU	1733 0.99	MO	1614 1.37
	2301 3.03		2204 2.71
3	0501 0.93	18	0351 1.30
	1129 3.37		1040 2.99
MO	1831 1.17	TU	1639 1.43
	2358 2.77		2246 2.62
4	0604 1.37	19	0415 1.51
	1219 2.96		1113 2.80
TU	1944 1.33	WE	1720 1.50
			2341 2.50
5	0116 2.54	20	0448 1.77
	0756 1.74		1158 2.59
WE	1325 2.57	TH	1854 1.58
	2113 1.38		
6	0332 2.51	21	0057 2.39
	1017 1.82		0808 1.97
TH	1543 2.37	FR	1307 2.40
	2242 1.29		2029 1.56
7	0524 2.73	22	0346 2.46
	1156 1.65		1028 1.88
FR	1725 2.41	SA	1500 2.31
●	2348 1.15		2204 1.42
8	0619 2.96	23	0511 2.78
	1251 1.47		1139 1.63
SA	1819 2.50	SU	1637 2.45
		●	2312 1.17
9	0035 1.03	24	0555 3.12
	0652 3.13		1225 1.37
SU	1330 1.35	MO	1734 2.68
	1854 2.58		
10	0111 0.95	25	0001 0.89
	0721 3.24		0631 3.44
MO	1402 1.30	TU	1306 1.12
	1921 2.64		1819 2.94
11	0139 0.90	26	0043 0.63
	0746 3.31		0706 3.73
TU	1427 1.29	WE	1343 0.90
	1944 2.69		1901 3.20
12	0200 0.89	27	0121 0.41
	0810 3.35		0742 3.95
WE	1447 1.31	TH	1419 0.73
	2005 2.73		1942 3.41
13	0217 0.88	28	0159 0.29
	0834 3.37		0819 4.06
TH	1503 1.32	FR	1455 0.64
	2024 2.76		2025 3.54
14	0233 0.88	29	0233 0.88
	0858 3.36		0858 3.36
FR	1519 1.33		1519 1.33
	2043 2.79		2043 2.79
15	0251 0.92	30	0251 0.92
	0922 3.32		0922 3.32
SA	1536 1.33		1536 1.33
○	2106 2.80		2106 2.80

MARCH

Time	m	Time	m
1	0237 0.30	16	0235 1.02
	0857 4.03		0845 3.30
SA	1531 0.64	SU	1458 1.11
●	2109 3.56		2051 3.04
2	0317 0.46	17	0255 1.07
	0936 3.86		0907 3.24
SU	1609 0.73	MO	1513 1.08
	2153 3.46	○	2119 3.07
3	0357 0.75	18	0317 1.18
	1014 3.56		0933 3.14
MO	1649 0.91	TU	1534 1.08
	2239 3.25		2154 3.04
4	0443 1.13	19	0343 1.34
	1054 3.17		1002 2.99
TU	1735 1.15	WE	1601 1.13
	2330 2.98		2236 2.96
5	0547 1.54	20	0417 1.55
	1134 2.75		1039 2.78
WE	1834 1.39	TH	1637 1.24
			2328 2.83
6	0033 2.71	21	0612 1.79
	0739 1.86		1129 2.53
TH	1228 2.36	FR	1738 1.40
	2010 1.57		
7	0241 2.55	22	0037 2.70
	1019 1.87		0809 1.89
FR	1521 2.13	SA	1245 2.30
	2203 1.56		1932 1.51
8	0506 2.71	23	0240 2.67
	1151 1.64		1012 1.74
SA	1730 2.25	SU	1450 2.22
●	2322 1.42		2121 1.46
9	0557 2.91	24	0436 2.91
	1236 1.45		1120 1.48
SU	1814 2.41	MO	1634 2.41
		●	2247 1.26
10	0012 1.27	25	0529 3.20
	0627 3.06		1207 1.21
MO	1309 1.33	TU	1731 2.68
	1843 2.55		2345 1.02
11	0049 1.16	26	0609 3.46
	0653 3.16		1247 0.97
TU	1337 1.26	WE	1814 2.97
	1908 2.66		
12	0118 1.09	27	0031 0.80
	0718 3.24		0644 3.66
WE	1358 1.23	TH	1324 0.77
	1930 2.74		1854 3.24
13	0139 1.04	28	0111 0.64
	0740 3.29		0718 3.79
TH	1416 1.22	FR	1358 0.63
	1949 2.82		1934 3.45
14	0158 1.01	29	0149 0.57
	0802 3.31		0754 3.82
FR	1430 1.20	SA	1431 0.56
	2007 2.90		2015 3.59
15	0216 1.00	30	0228 0.61
	0823 3.32		0830 3.73
SA	1443 1.16	SU	1503 0.58
	2027 2.98		2056 3.62
		31	0308 0.78
			0907 3.53
		●	1536 0.67
			2139 3.53

APRIL

Time	m	Time	m
1	0350 1.03	16	0318 1.23
	0943 3.23		0900 3.07
TU	1609 0.85	WE	1509 0.80
	2222 3.36		2147 3.31
2	0440 1.34	17	0359 1.36
	1019 2.88		0938 2.91
WE	1642 1.08	TH	1543 0.86
	2308 3.12		2232 3.25
3	0545 1.65	18	0508 1.52
	1056 2.52		1024 2.70
TH	1722 1.34	FR	1625 1.00
			2324 3.13
4	0001 2.86	19	0631 1.65
	0728 1.87		1124 2.45
FR	1143 2.19	SA	1728 1.18
	1828 1.58		
5	0121 2.65	20	0028 2.98
	1001 1.83		0806 1.67
SA	1422 1.95	SU	1244 2.25
	2051 1.72		1902 1.35
6	0357 2.64	21	0203 2.90
	1128 1.62		0944 1.51
SU	1716 2.10	MO	1442 2.22
	2235 1.65		2047 1.41
7	0512 2.79	22	0353 3.01
	1207 1.44		1052 1.27
MO	1755 2.29	TU	1618 2.42
●	2335 1.52	●	2221 1.31
8	0548 2.91	23	0456 3.19
	1238 1.32		1143 1.03
TU	1823 2.45	WE	1719 2.69
			2329 1.15
9	0017 1.39	24	0542 3.34
	0616 3.01		1226 0.83
WE	1302 1.23	TH	1805 2.96
	1847 2.59		
10	0048 1.30	25	0021 1.01
	0640 3.08		0620 3.44
TH	1323 1.17	FR	1304 0.68
	1909 2.72		1847 3.20
11	0114 1.23	26	0106 0.92
	0702 3.13		0655 3.46
FR	1339 1.12	SA	1337 0.59

AUSTRALIA, EAST COAST – TOWNSVILLE

LAT 19° 15' S LONG 146° 50' E
Times and Heights of High and Low Waters

2014

Time Zone -1000

SEPTEMBER

OCTOBER

NOVEMBER

DECEMBER

Time m		Time m		Time m		Time m									
1	0030 2.17 0802 1.39 MO 1505 2.25 2207 1.77	16	0456 2.08 1048 1.14 TU 1727 2.81 ☉	1	0208 1.96 0851 1.31 WE 1606 2.66 2301 1.36	16	0535 2.17 1112 1.26 TH 1729 2.83 ☉	1	0456 2.46 1055 1.04 SA 1715 3.18	16	0013 1.05 0613 2.41 SU 1201 1.37 1746 2.79	1	0534 2.80 1144 1.16 MO 1735 3.08	16	0619 2.52 1210 1.56 TU 1728 2.65
2	0217 2.04 0930 1.28 TU 1647 2.52 ☉ 2323 1.53	17	0014 1.19 0551 2.25 WE 1145 1.02 1807 2.95	2	0412 2.13 1015 1.13 TH 1703 2.94 ☉ 2346 1.08	17	0021 1.05 0607 2.34 FR 1157 1.16 1800 2.91	2	0002 0.71 0543 2.76 SU 1149 0.90 1755 3.30	17	0036 0.96 0638 2.57 MO 1235 1.31 1810 2.82	2	0024 0.56 0621 3.05 TU 1240 1.09 1816 3.08	17	0020 0.99 0641 2.71 WE 1246 1.47 1755 2.70
3	0414 2.14 1039 1.07 WE 1732 2.82	18	0052 1.05 0626 2.38 TH 1228 0.93 1838 3.03	3	0509 2.40 1113 0.91 FR 1743 3.20	18	0050 0.97 0633 2.48 SA 1233 1.10 1828 2.95	3	0040 0.52 0624 3.03 MO 1236 0.80 1831 3.36	18	0055 0.89 0659 2.72 TU 1305 1.27 1833 2.84	3	0102 0.45 0702 3.26 WE 1328 1.06 1854 3.03	18	0041 0.85 0704 2.91 TH 1319 1.39 1822 2.76
4	0008 1.27 0513 2.36 TH 1131 0.83 1809 3.13	19	0123 0.98 0654 2.48 FR 1302 0.89 1904 3.08	4	0026 0.83 0551 2.69 SA 1200 0.69 1819 3.42	19	0113 0.92 0657 2.59 SU 1302 1.07 1851 2.98	4	0116 0.39 0703 3.26 TU 1321 0.76 1907 3.35	19	0111 0.81 0721 2.86 WE 1333 1.24 1854 2.85	4	0136 0.41 0742 3.41 TH 1413 1.07 1930 2.95	19	0102 0.71 0728 3.12 FR 1352 1.30 1852 2.83
5	0047 1.01 0556 2.61 FR 1214 0.58 1844 3.42	20	0149 0.96 0718 2.56 SA 1328 0.88 1928 3.10	5	0102 0.61 0630 2.97 SU 1243 0.53 1854 3.57	20	0131 0.89 0719 2.69 MO 1325 1.06 1913 2.98	5	0148 0.32 0743 3.41 WE 1403 0.79 1944 3.26	20	0128 0.71 0744 3.01 TH 1402 1.22 1916 2.87	5	0207 0.41 0820 3.49 FR 1455 1.12 2008 2.83	20	0125 0.56 0758 3.33 SA 1427 1.22 1925 2.90
6	0123 0.78 0636 2.87 SA 1254 0.37 1919 3.66	21	0208 0.97 0739 2.62 SU 1348 0.89 1951 3.10	6	0135 0.44 0709 3.21 MO 1323 0.44 1930 3.64	21	0146 0.86 0739 2.78 TU 1348 1.07 1932 2.97	6	0220 0.32 0824 3.49 TH 1448 0.89 2022 3.09	21	0144 0.61 0810 3.15 FR 1433 1.21 1944 2.87	6	0237 0.47 0900 3.49 SA 1538 1.21 ☉ 2044 2.68	21	0153 0.42 0832 3.51 SU 1506 1.15 2006 2.94
7	0158 0.59 0717 3.11 SU 1332 0.22 1956 3.81	22	0223 0.98 0758 2.67 MO 1406 0.91 2013 3.08	7	0208 0.34 0750 3.38 TU 1403 0.45 2007 3.60	22	0158 0.81 0800 2.87 WE 1411 1.09 1951 2.94	7	0251 0.39 0907 3.46 FR 1536 1.05 ☉ 2059 2.86	22	0205 0.53 0842 3.26 SA 1509 1.22 ☉ 2017 2.83	7	0305 0.59 0939 3.41 SU 1621 1.32 2119 2.51	22	0225 0.34 0910 3.63 MO 1549 1.13 ☉ 2051 2.91
8	0233 0.45 0800 3.28 MO 1413 0.18 2034 3.85	23	0235 0.97 0818 2.71 TU 1424 0.95 2033 3.03	8	0241 0.31 0833 3.45 WE 1447 0.57 ☉ 2045 3.43	23	0210 0.75 0824 2.95 TH 1435 1.13 2013 2.90	8	0323 0.55 0952 3.35 SA 1630 1.25 2137 2.58	23	0233 0.49 0920 3.33 SU 1555 1.26 2058 2.74	8	0332 0.75 1018 3.28 MO 1708 1.45 2154 2.32	23	0303 0.35 0954 3.67 TU 1638 1.14 2142 2.83
9	0309 0.40 0845 3.35 TU 1455 0.29 ☉ 2113 3.73	24	0246 0.95 0840 2.74 WE 1443 1.02 ☉ 2054 2.96	9	0316 0.38 0918 3.41 TH 1535 0.80 2124 3.16	24	0226 0.70 0853 3.01 FR 1503 1.20 ☉ 2040 2.82	9	0354 0.76 1037 3.17 SU 1730 1.45 2217 2.29	24	0307 0.53 1004 3.33 MO 1651 1.33 2146 2.59	9	0359 0.95 1059 3.10 TU 1803 1.57 2233 2.13	24	0347 0.46 1040 3.62 WE 1734 1.18 2238 2.69
10	0347 0.44 0932 3.30 WE 1541 0.53 2154 3.48	25	0258 0.93 0907 2.75 TH 1505 1.13 2116 2.86	10	0352 0.54 1005 3.26 FR 1632 1.09 2204 2.81	25	0248 0.69 0928 3.03 SA 1541 1.31 2112 2.69	10	0429 1.01 1127 2.95 MO 1849 1.59 2305 2.02	25	0349 0.66 1054 3.26 TU 1757 1.39 2245 2.40	10	0428 1.16 1143 2.92 WE 1918 1.65 2324 1.95	25	0437 0.66 1131 3.48 TH 1838 1.22 2341 2.52
11	0430 0.59 1022 3.14 TH 1635 0.87 2235 3.11	26	0316 0.94 0939 2.73 FR 1528 1.28 2141 2.72	11	0432 0.78 1055 3.04 SA 1740 1.39 2245 2.43	26	0317 0.74 1011 2.98 SU 1648 1.45 2152 2.50	11	0517 1.27 1226 2.75 TU 2031 1.59	26	0443 0.85 1151 3.15 WE 1911 1.40 2358 2.22	11	0503 1.40 1233 2.74 TH 2046 1.63	26	0539 0.94 1226 3.27 FR 1950 1.23
12	0518 0.81 1116 2.91 FR 1744 1.25 2319 2.69	27	0338 0.98 1020 2.66 SA 1559 1.46 2213 2.53	12	0522 1.05 1154 2.80 SU 1911 1.59 2338 2.07	27	0352 0.87 1103 2.90 MO 1807 1.57 2247 2.28	12	0028 1.80 0647 1.49 WE 1352 2.62 2211 1.47	27	0600 1.08 1257 3.03 TH 2035 1.31	12	0051 1.82 0623 1.62 FR 1339 2.60 2209 1.52	27	0056 2.38 0702 1.24 SA 1335 3.06 2107 1.15
13	0621 1.04 1221 2.67 SA 1918 1.55	28	0409 1.08 1113 2.57 SU 1801 1.67 2256 2.30	13	0641 1.30 1320 2.61 MO 2114 1.58	28	0443 1.05 1205 2.79 TU 1935 1.59	13	0347 1.83 0906 1.58 TH 1530 2.61 2310 1.30	28	0130 2.14 0737 1.25 FR 1424 2.97 2150 1.13	13	0406 1.89 0854 1.76 SA 1501 2.55 2300 1.38	28	0241 2.37 0847 1.44 SU 1502 2.90 2219 1.01
14	0013 2.27 0749 1.22 SU 1412 2.52 2128 1.62	29	0456 1.23 1219 2.47 MO 1943 1.75	14	0212 1.82 0841 1.41 TU 1524 2.60 2257 1.38	29	0005 2.06 0626 1.23 WE 1328 2.73 2117 1.45	14	0509 2.04 1023 1.53 FR 1634 2.67 2346 1.16	29	0323 2.26 0917 1.30 SA 1546 3.00 ☉ 2250 0.91	14	0524 2.10 1028 1.73 SU 1608 2.56 ☉ 2332 1.24	29	0419 2.56 1028 1.47 MO 1623 2.85 ☉ 2321 0.84
15	0241 1.98 0928 1.24 MO 1615 2.62 2319 1.41	30	0007 2.07 0707 1.34 TU 1404 2.46 2150 1.62	15	0444 1.96 1010 1.36 WE 1645 2.72 2346 1.19	30	0158 1.98 0814 1.29 TH 1517 2.83 2228 1.20	15	0545 2.24 1119 1.45 SA 1715 2.74 ☉	30	0438 2.51 1038 1.25 SU 1647 3.06 2341 0.71	15	0555 2.32 1127 1.65 MO 1654 2.60 2358 1.11	30	0529 2.82 1148 1.40 TU 1725 2.83
				31	0354 2.17 0947 1.20 FR 1627 3.01 ☉ 2320 0.94					31	0012 0.70 0622 3.08 WE 1249 1.30 1814 2.82				

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Datum of Predictions is Lowest Astronomical Tide
Moon Symbols

☉ New Moon ☽ First Quarter ☽ Full Moon ☾ Last Quarter

Bureau of Meteorology

National Tidal Centre