

# 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
<b>Gold Coast Seaway</b>	27 57	153 25	Standard Port		1.42	1.13	0.39	0.11	0.760	0.76	1.00	0.00	1.91
<b>North Coast New South Wales -</b>													
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
<b>Gold Coast Beaches -</b>													
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.												
<b>Broadwater &amp; Nerang River-</b>													
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
<b>Brisbane Bar</b>	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
<b>Albert River -</b>													
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
<b>Logan River -</b>													
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
<b>Brisbane River -</b>													
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
<b>Bremer River</b>													
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
<b>Moreton Bay Area -</b>													
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	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
<b>Brisbane Bar continued</b>														
<b>Moreton Bay Area continued</b>														
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	
<b>North Pine River -</b>														
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	
<b>Pumicestone Passage-Bribie</b>														
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
<b>Mooloolaba</b>	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
<b>Maroochy River -</b>													
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
<b>Noosa Head</b>	26 23	153 06	Standard Port		1.78	1.45	0.71	0.38	1.123	1.08	1.00	0.00	2.28
<b>Noosa River -</b>													
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
<b>Noosa Beaches -</b>													
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
<b>Waddy Point (Fraser Island)</b>	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									
<b>Urangan</b>	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
<b>Bundaberg (Burnett Heads)</b>	24 46	152 23	Standard Port		2.88	2.30	1.14	0.56	1.693	1.72	1.00	0.00	3.67
<b>Great Sandy Strait -</b>													
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
<b>Mary River -</b>													
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	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
<b>Bundaberg (Burnett Heads) cont.</b>														
<b>Hervey Bay -</b>														
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	
<b>Gladstone</b>	<b>23 50</b>	<b>151 15</b>	<b>Standard Port</b>		<b>3.96</b>	<b>3.11</b>	<b>1.57</b>	<b>0.72</b>	<b>2.268</b>	<b>2.34</b>	<b>1.00</b>	<b>0.00</b>	<b>4.83</b>	
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	
<b>Port Alma</b>	<b>23 35</b>	<b>150 52</b>	<b>Standard Port</b>		<b>4.93</b>	<b>3.83</b>	<b>1.98</b>	<b>0.88</b>	<b>2.854</b>	<b>2.90</b>	<b>1.00</b>	<b>0.00</b>	<b>5.98</b>	
<b>Rosslyn Bay</b>	<b>23 10</b>	<b>150 48</b>	<b>Standard Port</b>		<b>4.23</b>	<b>3.24</b>	<b>1.60</b>	<b>0.62</b>	<b>2.360</b>	<b>2.42</b>	<b>1.00</b>	<b>0.00</b>	<b>5.14</b>	
<b>Hay Point</b>	<b>21 16</b>	<b>149 18</b>	<b>Standard Port</b>		<b>5.80</b>	<b>4.48</b>	<b>2.25</b>	<b>0.94</b>	<b>3.340</b>	<b>3.37</b>	<b>1.00</b>	<b>0.00</b>	<b>7.14</b>	
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	
<b>Mackay Outer Harbour</b>	<b>21 06</b>	<b>149 14</b>	<b>Standard Port</b>		<b>5.29</b>	<b>4.07</b>	<b>1.96</b>	<b>0.74</b>	<b>2.941</b>	<b>3.02</b>	<b>1.00</b>	<b>0.00</b>	<b>6.58</b>	
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	m	m	m	m	m	m			mm
			H M	H M									
<b>Bugatti Reef</b>	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
<b>Shute Harbour</b>	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
<b>Bowen</b>	20 01	148 15	Standard Port		2.83	2.21	1.31	0.67	1.78	1.76	1.00	0.00	3.73
<b>Abbot Point</b>	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
<b>Townsville</b>	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
<b>Lucinda (Offshore)</b>	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
<b>Mourilyan Harbour</b>	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
<b>Cairns</b>	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
<b>Port Douglas</b>	<b>16 29</b>	<b>145 28</b>	<b>Standard Port</b>		<b>2.49</b>	<b>1.83</b>	<b>1.37</b>	<b>0.70</b>	<b>1.581</b>	<b>1.60</b>	<b>1.00</b>	<b>0.00</b>	<b>3.36</b>
<b>Leggatt Island</b>	<b>14 32</b>	<b>144 51</b>	<b>Standard Port</b>							<b>1.70</b>	<b>1.00</b>	<b>0.00</b>	<b>3.4</b>
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
<b>Shute Harbour</b>	<b>20 17</b>	<b>148 47</b>	<b>Standard Port</b>						<b>1.907</b>	<b>1.92</b>	<b>1.00</b>	<b>0.00</b>	<b>4.33</b>
Molle Island	20 15	148 50	-0 01	-0 01	3.5	2.2	1.5	0.2		1.81			4.1
<b>Bugatti Reef</b>	<b>20 05</b>	<b>150 18</b>	<b>Standard Port</b>							<b>1.56</b>	<b>1.00</b>	<b>0.00</b>	<b>3.5</b>
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
<b>Townsville</b>	<b>19 15</b>	<b>146 50</b>	<b>Standard Port</b>						<b>1.856</b>	<b>1.94</b>	<b>1.00</b>	<b>0.00</b>	<b>4.11</b>
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
<b>Mourilyan Harbour</b>	<b>17 36</b>	<b>146 07</b>	<b>Standard Port</b>		<b>2.79</b>	<b>1.85</b>	<b>1.63</b>	<b>0.69</b>	<b>1.729</b>	<b>1.74</b>	<b>1.00</b>	<b>0.00</b>	<b>3.50</b>
South Barnard Island	17 44	146 09	-0 05	-0 05	2.7	1.7	1.5	0.6		1.62			3.4
<b>Cairns</b>	<b>16 56</b>	<b>145 47</b>	<b>Standard Port</b>		<b>2.74</b>	<b>1.81</b>	<b>1.58</b>	<b>0.65</b>	<b>1.643</b>	<b>1.70</b>	<b>1.00</b>	<b>0.00</b>	<b>3.50</b>
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
<b>Port Douglas</b>	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
<b>Leggatt Island</b>	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
<b>Twin Island</b>	10 28	142 26	Standard Port		2.97	1.97	1.51	0.51		1.74	1.00	0.00	3.80
<b>Thursday Island</b>	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
<b>Goods Island</b>	10 34	142 09	Standard Port		3.72	2.67	1.59	0.54		2.13	1.00	0.00	4.07
<b>Booby Island</b>	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
Bampfild 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
<b>Weipa (Humbug Point)</b>	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
<b>Karumba</b>	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
<b>Mornington Island</b>	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.