NOAA Tide Predictions

NEWPORT BEACH, NEWPORT BAY ENTRANCE, CA,2019

The NOAA Tide Predictions application provides predictions in both graphical and tabular formats, with many user selected options, for over 3000 stations broken down by key areas in each state. Users can also access stations via the Google map interface. Additional information can be found in the help page.

Station Types: The NOAA Tide Predictions application provides predictions from 2 distinct categories of stations at over 3000 locations:
Harmonic - The predicted height values for Harmonic stations are conducted by combining the harmonic constituents into a single tide curve.
Subordinate - The high and low height values for Subordinate stations are obtained by means and differences, and ratios applied to the full harmonic constant predictions at a specific Harmonic station (a Reference station).

Disclaimer: The official Tide prediction tables are published annually on October 1, for the following calendar year. Tide predictions generated prior to the publishing date of the official tables are subject to change. The predictions from the web based NOAA Tidal Predictions are based upon the latest information available as of the date of your request. Tide predictions generated may differ from the official published predictions if information for the station requested has been updated since the publishing date of the official published tables.

NEWPORT BEACH, NEWPORT BAY ENTRANCE, CA,2019

(33 36.2N / 117 53.0W)

Times and Heights of High and Low Waters

January

Day	Time (h m)	Height (ft)	Height (cm)
1 Tu	05:50 AM	5.7	174
	12:58 PM	0.0	0
	07:07 PM	3.5	107
2 W	12:02 AM	1.8	55
	06:28 AM	5.9	180
	01:41 PM	-0.4	-12
	07:59 PM	3.6	110
3 Th	12:43 AM	1.9	58
	07:03 AM	6.0	183
	02:18 PM	-0.7	-21
	08:41 PM	3.7	113
4 F	01:20 AM	2.1	64
	07:37 AM	6.1	186
	02:52 PM	-0.8	-24
	09:18 PM	3.7	113
5 Sa	01:54 AM	2.1	64
	08:09 AM	6.0	183
	03:24 PM	-0.8	-24
	09:52 PM	3.7	113
6 Su ●	02:26 AM	2.2	67
	08:40 AM	5.9	180
	03:56 PM	-0.7	-21
	10:25 PM	3.7	113
7 M	02:58 AM	2.2	67
	09:12 AM	5.8	177
	04:27 PM	-0.6	-18
	10:59 PM	3.7	113
8 Tu	03:32 AM	2.3	70
	09:43 AM	5.5	168
	04:59 PM	-0.3	-9
	11:35 PM	3.7	113
9 W	04:08 AM	2.4	73
	10:16 AM	5.2	158
	05:32 PM	-0.1	-3
10 Th	12:14 AM	3.7	113
	04:51 AM	2.5	76
	10:51 AM	4.8	146
	06:05 PM	0.3	9
11 F	12:56 AM	3.7	113
	05:44 AM	2.6	79
	11:30 AM	4.3	131
	06:41 PM	0.6	18
12 Sa	01:43 AM	3.8	116
	06:59 AM	2.6	79
	12:21 PM	3.7	113
	07:19 PM	1.0	30
13 Su	02:32 AM	4.0	122
	08:42 AM	2.4	73
	01:40 PM	3.2	98
	08:04 PM	1.4	43
14 M ◐	03:21 AM	4.3	131
	10:23 AM	1.9	58
	03:35 PM	2.9	88
	08:59 PM	1.7	52
15 Tu	04:08 AM	4.7	143
	11:30 AM	1.2	37
	05:19 PM	2.9	88
	10:01 PM	1.9	58
16 W	04:54 AM	5.2	158
	12:19 PM	0.5	15
	06:32 PM	3.1	94
	11:00 PM	2.0	61
17 Th	05:38 AM	5.7	174
	01:01 PM	-0.3	-9
	07:25 PM	3.4	104
	11:55 PM	2.0	61
18 F	06:22 AM	6.2	189
	01:42 PM	-0.9	-27
	08:10 PM	3.7	113
19 Sa	12:46 AM	1.9	58
	07:07 AM	6.6	201
	02:23 PM	-1.4	-43
	08:51 PM	3.9	119
20 Su	01:34 AM	1.8	55
	07:52 AM	6.9	210
	03:05 PM	-1.7	-52
	09:33 PM	4.1	125
21 M ○	02:22 AM	1.6	49
	08:38 AM	7.0	213
	03:47 PM	-1.7	-52
	10:14 PM	4.3	131
22 Tu	03:12 AM	1.5	46
	09:25 AM	6.8	207
	04:29 PM	-1.6	-49
	10:58 PM	4.4	134
23 W	04:05 AM	1.5	46
	10:13 AM	6.3	192
	05:12 PM	-1.2	-37
	11:44 PM	4.5	137
24 Th	05:03 AM	1.5	46
	11:04 AM	5.6	171
	05:56 PM	-0.6	-18
25 F	12:34 AM	4.6	140
	06:11 AM	1.6	49
	12:02 PM	4.8	146
	06:42 PM	0.1	3
26 Sa	01:28 AM	4.7	143
	07:35 AM	1.6	49
	01:12 PM	3.9	119
	07:32 PM	0.8	24
27 Su ◑	02:28 AM	4.8	146
	09:13 AM	1.4	43
	02:47 PM	3.3	101
	08:30 PM	1.4	43
28 M	03:30 AM	4.9	149
	10:47 AM	0.9	27
	04:43 PM	3.0	91
	09:40 PM	1.9	58
29 Tu	04:31 AM	5.1	155
	11:58 AM	0.4	12
	06:18 PM	3.1	94
	10:52 PM	2.1	64
30 W	05:24 AM	5.3	162
	12:50 PM	-0.1	-3
	07:21 PM	3.4	104
	11:52 PM	2.2	67
31 Th	06:11 AM	5.5	168
	01:31 PM	-0.4	-12
	08:03 PM	3.6	110

February

Day	Time (h m)	Height (ft)	Height (cm)
1 F	12:40 AM	2.2	67
	06:51 AM	5.6	171
	02:06 PM	-0.6	-18
	08:36 PM	3.7	113
2 Sa	01:18 AM	2.1	64
	07:26 AM	5.7	174
	02:37 PM	-0.7	-21
	09:03 PM	3.8	116
3 Su	01:51 AM	2.0	61
	07:59 AM	5.8	177
	03:06 PM	-0.7	-21
	09:28 PM	3.9	119
4 M ●	02:22 AM	1.9	58
	08:30 AM	5.8	177
	03:32 PM	-0.7	-21
	09:53 PM	3.9	119
5 Tu	02:52 AM	1.8	55
	09:01 AM	5.7	174
	03:59 PM	-0.5	-15
	10:19 PM	4.0	122
6 W	03:24 AM	1.7	52
	09:31 AM	5.5	168
	04:25 PM	-0.3	-9
	10:46 PM	4.0	122
7 Th	03:58 AM	1.7	52
	10:02 AM	5.2	158
	04:50 PM	0.0	0
	11:15 PM	4.1	125
8 F	04:35 AM	1.7	52
	10:34 AM	4.7	143
	05:16 PM	0.3	9
	11:46 PM	4.1	125
9 Sa	05:19 AM	1.8	55
	11:10 AM	4.2	128
	05:42 PM	0.7	21
10 Su	12:21 AM	4.2	128
	06:15 AM	1.9	58
	11:54 AM	3.6	110
	06:09 PM	1.2	37
11 M	01:03 AM	4.2	128
	07:34 AM	1.8	55
	01:02 PM	3.0	91
	06:43 PM	1.6	49
12 Tu ◐	01:56 AM	4.4	134
	09:22 AM	1.5	46
	03:10 PM	2.6	79
	07:33 PM	2.1	64
13 W	03:01 AM	4.6	140
	10:56 AM	0.9	27
	05:28 PM	2.7	82
	09:03 PM	2.4	73
14 Th	04:10 AM	4.9	149
	11:57 AM	0.2	6
	06:38 PM	3.1	94
	10:38 PM	2.4	73
15 F	05:11 AM	5.4	165
	12:44 PM	-0.5	-15
	07:20 PM	3.5	107
	11:47 PM	2.2	67
16 Sa	06:06 AM	5.9	180
	01:26 PM	-1.0	-30
	07:57 PM	3.8	116
17 Su	12:43 AM	1.8	55
	06:57 AM	6.4	195
	02:06 PM	-1.4	-43
	08:32 PM	4.2	128
18 M	01:33 AM	1.4	43
	07:44 AM	6.7	204
	02:45 PM	-1.6	-49
	09:07 PM	4.5	137
19 Tu ○	02:21 AM	1.0	30
	08:31 AM	6.7	204
	03:24 PM	-1.6	-49
	09:43 PM	4.7	143
20 W	03:09 AM	0.8	24
	09:18 AM	6.5	198
	04:02 PM	-1.3	-40
	10:21 PM	4.9	149
21 Th	03:59 AM	0.6	18
	10:05 AM	5.9	180
	04:39 PM	-0.8	-24
	11:01 PM	5.0	152
22 F	04:53 AM	0.7	21
	10:54 AM	5.2	158
	05:17 PM	-0.1	-3
	11:43 PM	5.0	152
23 Sa	05:53 AM	0.8	24
	11:50 AM	4.3	131
	05:55 PM	0.6	18
24 Su	12:29 AM	4.9	149
	07:05 AM	0.9	27
	12:58 PM	3.5	107
	06:37 PM	1.3	40
25 M	01:24 AM	4.8	146
	08:37 AM	0.9	27
	02:40 PM	2.9	88
	07:31 PM	2.0	61
26 Tu ◑	02:31 AM	4.6	140
	10:17 AM	0.7	21
	05:00 PM	2.9	88
	09:01 PM	2.4	73
27 W	03:48 AM	4.6	140
	11:35 AM	0.3	9
	06:32 PM	3.2	98
	10:46 PM	2.6	79
28 Th	04:58 AM	4.7	143
	12:29 PM	0.0	0
	07:17 PM	3.5	107
	11:54 PM	2.4	73

March

Day	Time (h m)	Height (ft)	Height (cm)
1 F	05:53 AM	4.9	149
	01:10 PM	-0.3	-9
	07:47 PM	3.7	113
2 Sa	12:40 AM	2.2	67
	06:37 AM	5.1	155
	01:43 PM	-0.4	-12
	08:10 PM	3.9	119
3 Su	01:14 AM	1.9	58
	07:14 AM	5.3	162
	02:11 PM	-0.5	-15
	08:31 PM	4.0	122
4 M	01:44 AM	1.6	49
	07:46 AM	5.4	165
	02:36 PM	-0.5	-15
	08:52 PM	4.1	125
5 Tu	02:13 AM	1.4	43
	08:17 AM	5.4	165
	03:00 PM	-0.4	-12
	09:13 PM	4.3	131
6 W ●	02:42 AM	1.2	37
	08:47 AM	5.4	165
	03:23 PM	-0.3	-9
	09:35 PM	4.4	134
7 Th	03:12 AM	1.0	30
	09:17 AM	5.2	158
	03:46 PM	-0.1	-3
	09:59 PM	4.5	137
8 F	03:45 AM	0.9	27
	09:48 AM	4.8	146
	04:08 PM	0.2	6
	10:24 PM	4.6	140
9 Sa	04:21 AM	0.9	27
	10:22 AM	4.4	134
	04:30 PM	0.6	18
	10:51 PM	4.6	140
10 Su	06:02 AM	0.9	27
	12:00 PM	3.9	119
	05:53 PM	1.0	30
11 M	12:21 AM	4.6	140
	06:52 AM	1.0	30
	12:49 PM	3.3	101
	06:17 PM	1.5	46
12 Tu	12:58 AM	4.6	140
	08:00 AM	1.1	34
	02:05 PM	2.8	85
	06:45 PM	1.9	58
13 W	01:49 AM	4.5	137
	09:37 AM	0.9	27
	04:31 PM	2.5	76
	07:29 PM	2.4	73
14 Th ◐	03:04 AM	4.5	137
	11:19 AM	0.5	15
	06:43 PM	2.9	88
	09:42 PM	2.7	82
15 F	04:34 AM	4.7	143
	12:28 PM	0.0	0
	07:27 PM	3.3	101
	11:40 PM	2.5	76
16 Sa	05:51 AM	5.1	155
	01:19 PM	-0.5	-15
	08:00 PM	3.7	113
17 Su	12:50 AM	2.0	61
	06:53 AM	5.6	171
	02:02 PM	-1.0	-30
	08:31 PM	4.2	128
18 M	01:43 AM	1.4	43
	07:47 AM	5.9	180
	02:41 PM	-1.2	-37
	09:02 PM	4.6	140
19 Tu	02:31 AM	0.9	27
	08:36 AM	6.1	186
	03:18 PM	-1.2	-37
	09:35 PM	5.0	152
20 W	03:17 AM	0.4	12
	09:23 AM	6.1	186
	03:53 PM	-1.0	-30
	10:08 PM	5.3	162
21 Th ○	04:04 AM	0.0	0
	10:10 AM	5.8	177
	04:28 PM	-0.6	-18
	10:43 PM	5.5	168
22 F	04:51 AM	-0.2	-6
	10:57 AM	5.2	158
	05:02 PM	-0.1	-3
	11:18 PM	5.5	168
23 Sa	05:40 AM	-0.2	-6
	11:47 AM	4.6	140
	05:36 PM	0.6	18
	11:55 PM	5.4	165
24 Su	06:34 AM	0.0	0
	12:42 PM	3.9	119
	06:10 PM	1.3	40
25 M	12:35 AM	5.1	155
	07:37 AM	0.3	9
	01:53 PM	3.2	98
	06:45 PM	1.9	58
26 Tu	01:22 AM	4.7	143
	08:56 AM	0.5	15
	03:43 PM	2.9	88
	07:32 PM	2.5	76
27 W	02:24 AM	4.4	134
	10:32 AM	0.5	15
	06:11 PM	3.0	91
	09:29 PM	2.8	85
28 Th ◑	03:53 AM	4.1	125
	11:54 AM	0.4	12
	07:17 PM	3.4	104
	11:43 PM	2.7	82
29 F	05:21 AM	4.2	128
	12:51 PM	0.2	6
	07:48 PM	3.6	110
30 Sa	12:48 AM	2.4	73
	06:26 AM	4.4	134
	01:32 PM	0.0	0
	08:11 PM	3.9	119
31 Su	01:29 AM	2.0	61
	07:14 AM	4.6	140
	02:05 PM	-0.1	-3
	08:31 PM	4.1	125

StationId: 9410580
Source: NOAA/NOS/CO-OPS
Station Type: Primary
Time Zone: LST_LDT
Datum: MLLW

NOAA Tide Predictions

NEWPORT BEACH, NEWPORT BAY ENTRANCE, CA,2019

(33 36.2N / 117 53.0W)

Times and Heights of High and Low Waters

April

Day	Time (h m)	Height (ft)	Height (cm)
1 M	02:01 AM	1.6	49
	07:52 AM	4.8	146
	02:32 PM	-0.1	-3
	08:50 PM	4.3	131
2 Tu	02:30 AM	1.2	37
	08:26 AM	4.9	149
	02:56 PM	-0.1	-3
	09:09 PM	4.5	137
3 W	02:59 AM	0.9	27
	08:59 AM	4.9	149
	03:19 PM	0.0	0
	09:30 PM	4.7	143
4 Th	03:28 AM	0.6	18
	09:31 AM	4.8	146
	03:41 PM	0.2	6
	09:52 PM	4.9	149
5 F ●	03:59 AM	0.3	9
	10:04 AM	4.6	140
	04:04 PM	0.4	12
	10:15 PM	5.1	155
6 Sa	04:33 AM	0.2	6
	10:39 AM	4.3	131
	04:26 PM	0.7	21
	10:40 PM	5.2	158
7 Su	05:09 AM	0.1	3
	11:18 AM	4.0	122
	04:50 PM	1.1	34
	11:07 PM	5.2	158
8 M	05:51 AM	0.1	3
	12:04 PM	3.5	107
	05:15 PM	1.5	46
	11:39 PM	5.1	155
9 Tu	06:41 AM	0.2	6
	01:03 PM	3.1	94
	05:42 PM	1.9	58
10 W	12:17 AM	5.0	152
	07:46 AM	0.3	9
	02:34 PM	2.8	85
	06:16 PM	2.3	70
11 Th	01:10 AM	4.8	146
	09:11 AM	0.3	9
	04:52 PM	2.8	85
	07:27 PM	2.7	82
12 F ◐	02:30 AM	4.6	140
	10:41 AM	0.1	3
	06:15 PM	3.2	98
	10:03 PM	2.8	85
13 Sa	04:08 AM	4.5	137
	11:52 AM	-0.2	-6
	06:54 PM	3.7	113
	11:46 PM	2.4	73
14 Su	05:33 AM	4.8	146
	12:45 PM	-0.5	-15
	07:27 PM	4.2	128
15 M	12:50 AM	1.7	52
	06:40 AM	5.0	152
	01:29 PM	-0.6	-18
	07:58 PM	4.6	140

Day	Time (h m)	Height (ft)	Height (cm)
16 Tu	01:41 AM	1.0	30
	07:37 AM	5.2	158
	02:08 PM	-0.6	-18
	08:29 PM	5.1	155
17 W	02:28 AM	0.3	9
	08:28 AM	5.3	162
	02:44 PM	-0.5	-15
	09:01 PM	5.5	168
18 Th	03:13 AM	-0.2	-6
	09:17 AM	5.2	158
	03:19 PM	-0.1	-3
	09:33 PM	5.8	177
19 F ○	03:58 AM	-0.6	-18
	10:04 AM	4.9	149
	03:52 PM	0.3	9
	10:06 PM	5.9	180
20 Sa	04:42 AM	-0.8	-24
	10:53 AM	4.5	137
	04:25 PM	0.8	24
	10:40 PM	5.8	177
21 Su	05:28 AM	-0.7	-21
	11:43 AM	4.0	122
	04:57 PM	1.3	40
	11:14 PM	5.6	171
22 M	06:17 AM	-0.5	-15
	12:41 PM	3.5	107
	05:29 PM	1.8	55
	11:50 PM	5.3	162
23 Tu	07:12 AM	-0.2	-6
	01:52 PM	3.2	98
	06:04 PM	2.3	70
24 W	12:31 AM	4.8	146
	08:17 AM	0.1	3
	03:35 PM	3.0	91
	06:51 PM	2.8	85
25 Th	01:24 AM	4.3	131
	09:35 AM	0.4	12
	05:34 PM	3.2	98
	08:51 PM	3.0	91
26 F ◑	02:45 AM	3.9	119
	10:53 AM	0.4	12
	06:30 PM	3.5	107
	11:15 PM	2.8	85
27 Sa	04:23 AM	3.8	116
	11:53 AM	0.4	12
	07:00 PM	3.8	116
28 Su	12:23 AM	2.4	73
	05:41 AM	3.9	119
	12:38 PM	0.4	12
	07:23 PM	4.0	122
29 M	01:05 AM	1.9	58
	06:37 AM	4.0	122
	01:12 PM	0.4	12
	07:43 PM	4.3	131
30 Tu	01:39 AM	1.5	46
	07:22 AM	4.1	125
	01:41 PM	0.4	12
	08:03 PM	4.6	140

May

Day	Time (h m)	Height (ft)	Height (cm)
1 W	02:11 AM	1.0	30
	08:02 AM	4.2	128
	02:07 PM	0.5	15
	08:24 PM	4.9	149
2 Th	02:42 AM	0.5	15
	08:39 AM	4.3	131
	02:32 PM	0.6	18
	08:46 PM	5.2	158
3 F	03:13 AM	0.1	3
	09:16 AM	4.2	128
	02:56 PM	0.8	24
	09:10 PM	5.4	165
4 Sa ●	03:47 AM	-0.2	-6
	09:55 AM	4.1	125
	03:22 PM	1.0	30
	09:36 PM	5.6	171
5 Su	04:22 AM	-0.5	-15
	10:36 AM	3.9	119
	03:49 PM	1.3	40
	10:05 PM	5.7	174
6 M	05:02 AM	-0.6	-18
	11:22 AM	3.7	113
	04:18 PM	1.6	49
	10:37 PM	5.7	174
7 Tu	05:46 AM	-0.6	-18
	12:16 PM	3.4	104
	04:50 PM	1.9	58
	11:14 PM	5.6	171
8 W	06:38 AM	-0.5	-15
	01:23 PM	3.2	98
	05:29 PM	2.3	70
	11:59 PM	5.4	165
9 Th	07:39 AM	-0.4	-12
	02:49 PM	3.1	94
	06:25 PM	2.6	79
10 F	12:56 AM	5.0	152
	08:50 AM	-0.2	-6
	04:21 PM	3.3	101
	08:06 PM	2.9	88
11 Sa	02:14 AM	4.6	140
	10:04 AM	-0.2	-6
	05:26 PM	3.7	113
	10:12 PM	2.7	82
12 Su ◐	03:48 AM	4.4	134
	11:10 AM	-0.2	-6
	06:11 PM	4.2	128
	11:42 PM	2.1	64
13 M	05:15 AM	4.4	134
	12:04 PM	-0.1	-3
	06:48 PM	4.7	143
14 Tu	12:46 AM	1.3	40
	06:27 AM	4.4	134
	12:50 PM	0.0	0
	07:23 PM	5.2	158
15 W	01:39 AM	0.6	18
	07:29 AM	4.4	134
	01:31 PM	0.2	6
	07:56 PM	5.6	171

Day	Time (h m)	Height (ft)	Height (cm)
16 Th	02:26 AM	-0.1	-3
	08:24 AM	4.4	134
	02:09 PM	0.5	15
	08:29 PM	6.0	183
17 F	03:10 AM	-0.6	-18
	09:15 AM	4.3	131
	02:44 PM	0.8	24
	09:02 PM	6.2	189
18 Sa ○	03:53 AM	-0.9	-27
	10:04 AM	4.1	125
	03:18 PM	1.2	37
	09:35 PM	6.2	189
19 Su	04:35 AM	-1.0	-30
	10:53 AM	3.9	119
	03:52 PM	1.5	46
	10:08 PM	6.1	186
20 M	05:17 AM	-1.0	-30
	11:44 AM	3.7	113
	04:25 PM	1.9	58
	10:42 PM	5.8	177
21 Tu	06:01 AM	-0.7	-21
	12:38 PM	3.5	107
	04:59 PM	2.3	70
	11:18 PM	5.4	165
22 W	06:48 AM	-0.4	-12
	01:41 PM	3.3	101
	05:38 PM	2.6	79
	11:56 PM	5.0	152
23 Th	07:40 AM	-0.1	-3
	02:56 PM	3.3	101
	06:29 PM	2.9	88
24 F	12:42 AM	4.5	137
	08:39 AM	0.2	6
	04:16 PM	3.4	104
	08:00 PM	3.1	94
25 Sa	01:43 AM	4.1	125
	09:40 AM	0.5	15
	05:16 PM	3.6	110
	10:07 PM	2.9	88
26 Su ◑	03:07 AM	3.7	113
	10:38 AM	0.6	18
	05:54 PM	3.9	119
	11:36 PM	2.5	76
27 M	04:35 AM	3.5	107
	11:27 AM	0.7	21
	06:23 PM	4.2	128
28 Tu	12:32 AM	2.0	61
	05:48 AM	3.5	107
	12:07 PM	0.9	27
	06:49 PM	4.5	137
29 W	01:13 AM	1.5	46
	06:47 AM	3.6	110
	12:41 PM	1.0	30
	07:13 PM	4.9	149
30 Th	01:49 AM	0.9	27
	07:37 AM	3.6	110
	01:12 PM	1.1	34
	07:38 PM	5.2	158
31 F	02:24 AM	0.4	12
	08:23 AM	3.7	113
	01:43 PM	1.3	40
	08:05 PM	5.6	171

June

Day	Time (h m)	Height (ft)	Height (cm)
1 Sa	02:58 AM	-0.2	-6
	09:07 AM	3.7	113
	02:13 PM	1.4	43
	08:34 PM	5.9	180
2 Su	03:35 AM	-0.6	-18
	09:51 AM	3.7	113
	02:46 PM	1.6	49
	09:06 PM	6.1	186
3 M ●	04:13 AM	-0.9	-27
	10:37 AM	3.7	113
	03:20 PM	1.8	55
	09:41 PM	6.3	192
4 Tu	04:55 AM	-1.1	-34
	11:26 AM	3.6	110
	03:59 PM	2.0	61
	10:20 PM	6.3	192
5 W	05:41 AM	-1.1	-34
	12:20 PM	3.6	110
	04:42 PM	2.2	67
	11:03 PM	6.1	186
6 Th	06:30 AM	-1.0	-30
	01:21 PM	3.6	110
	05:35 PM	2.4	73
	11:53 PM	5.8	177
7 F	07:25 AM	-0.8	-24
	02:27 PM	3.6	110
	06:45 PM	2.6	79
8 Sa	12:52 AM	5.3	162
	08:24 AM	-0.5	-15
	03:34 PM	3.9	119
	08:19 PM	2.7	82
9 Su	02:04 AM	4.7	143
	09:25 AM	-0.2	-6
	04:34 PM	4.3	131
	10:04 PM	2.4	73
10 M ◐	03:29 AM	4.3	131
	10:25 AM	0.1	3
	05:25 PM	4.7	143
	11:32 PM	1.8	55
11 Tu	04:58 AM	3.9	119
	11:21 AM	0.5	15
	06:09 PM	5.2	158
12 W	12:40 AM	1.0	30
	06:19 AM	3.8	116
	12:11 PM	0.8	24
	06:49 PM	5.6	171
13 Th	01:36 AM	0.3	9
	07:28 AM	3.8	116
	12:56 PM	1.1	34
	07:26 PM	6.0	183
14 F	02:24 AM	-0.3	-9
	08:28 AM	3.8	116
	01:37 PM	1.4	43
	08:02 PM	6.2	189
15 Sa	03:07 AM	-0.7	-21
	09:21 AM	3.8	116
	02:16 PM	1.6	49
	08:38 PM	6.3	192

Day	Time (h m)	Height (ft)	Height (cm)
16 Su	03:48 AM	-0.9	-27
	10:09 AM	3.8	116
	02:53 PM	1.9	58
	09:12 PM	6.3	192
17 M ○	04:27 AM	-1.0	-30
	10:54 AM	3.7	113
	03:29 PM	2.1	64
	09:46 PM	6.1	186
18 Tu	05:05 AM	-0.9	-27
	11:38 AM	3.7	113
	04:05 PM	2.3	70
	10:21 PM	5.9	180
19 W	05:43 AM	-0.7	-21
	12:22 PM	3.6	110
	04:41 PM	2.4	73
	10:56 PM	5.6	171
20 Th	06:22 AM	-0.4	-12
	01:08 PM	3.6	110
	05:21 PM	2.6	79
	11:33 PM	5.2	158
21 F	07:03 AM	-0.1	-3
	01:59 PM	3.6	110
	06:09 PM	2.8	85
22 Sa	12:13 AM	4.8	146
	07:45 AM	0.2	6
	02:52 PM	3.6	110
	07:13 PM	2.9	88
23 Su	12:59 AM	4.3	131
	08:30 AM	0.5	15
	03:45 PM	3.8	116
	08:43 PM	2.9	88
24 M	01:58 AM	3.9	119
	09:17 AM	0.9	27
	04:33 PM	4.0	122
	10:25 PM	2.6	79
25 Tu ◑	03:19 AM	3.4	104
	10:04 AM	1.2	37
	05:13 PM	4.3	131
	11:46 PM	2.2	67
26 W	04:50 AM	3.2	98
	10:50 AM	1.4	43
	05:48 PM	4.7	143
27 Th	12:42 AM	1.6	49
	06:12 AM	3.2	98
	11:35 AM	1.6	49
	06:21 PM	5.1	155
28 F	01:26 AM	0.9	27
	07:19 AM	3.2	98
	12:17 PM	1.8	55
	06:54 PM	5.5	168
29 Sa	02:05 AM	0.3	9
	08:13 AM	3.4	104
	12:59 PM	1.9	58
	07:29 PM	5.9	180
30 Su	02:43 AM	-0.3	-9
	09:01 AM	3.6	110
	01:40 PM	1.9	58
	08:06 PM	6.3	192

StationId: 9410580
Source: NOAA/NOS/CO-OPS
Station Type: Primary
Time Zone: LST_LDT
Datum: MLLW

NOAA Tide Predictions

NEWPORT BEACH, NEWPORT BAY ENTRANCE, CA,2019

(33 36.2N / 117 53.0W)

Times and Heights of High and Low Waters

July

Day	Time (h m)	Height (ft)	Height (cm)
1 M	03:22 AM	-0.8	-24
	09:46 AM	3.7	113
	02:22 PM	2.0	61
	08:45 PM	6.6	201
2 Tu ●	04:02 AM	-1.1	-34
	10:31 AM	3.8	116
	03:06 PM	2.0	61
	09:27 PM	6.7	204
3 W	04:44 AM	-1.3	-40
	11:16 AM	3.9	119
	03:52 PM	2.0	61
	10:11 PM	6.7	204
4 Th	05:28 AM	-1.3	-40
	12:03 PM	4.0	122
	04:42 PM	2.1	64
	10:58 PM	6.5	198
5 F	06:14 AM	-1.1	-34
	12:53 PM	4.1	125
	05:40 PM	2.2	67
	11:49 PM	6.1	186
6 Sa	07:01 AM	-0.8	-24
	01:47 PM	4.3	131
	06:48 PM	2.2	67
7 Su	12:45 AM	5.4	165
	07:51 AM	-0.3	-9
	02:43 PM	4.5	137
	08:10 PM	2.2	67
8 M	01:52 AM	4.7	143
	08:44 AM	0.2	6
	03:41 PM	4.8	146
	09:46 PM	2.0	61
9 Tu ◐	03:14 AM	4.0	122
	09:40 AM	0.8	24
	04:37 PM	5.1	155
	11:18 PM	1.5	46
10 W	04:50 AM	3.6	110
	10:38 AM	1.2	37
	05:30 PM	5.4	165
11 Th	12:32 AM	0.8	24
	06:23 AM	3.4	104
	11:36 AM	1.6	49
	06:19 PM	5.8	177
12 F	01:31 AM	0.2	6
	07:39 AM	3.5	107
	12:31 PM	1.9	58
	07:03 PM	6.0	183
13 Sa	02:20 AM	-0.3	-9
	08:39 AM	3.6	110
	01:20 PM	2.1	64
	07:44 PM	6.2	189
14 Su	03:02 AM	-0.6	-18
	09:27 AM	3.8	116
	02:04 PM	2.2	67
	08:22 PM	6.2	189
15 M	03:39 AM	-0.7	-21
	10:06 AM	3.9	119
	02:43 PM	2.2	67
	08:58 PM	6.2	189
16 Tu ○	04:14 AM	-0.7	-21
	10:42 AM	3.9	119
	03:19 PM	2.2	67
	09:33 PM	6.1	186
17 W	04:47 AM	-0.6	-18
	11:15 AM	3.9	119
	03:54 PM	2.3	70
	10:06 PM	6.0	183
18 Th	05:19 AM	-0.5	-15
	11:48 AM	3.9	119
	04:29 PM	2.3	70
	10:39 PM	5.8	177
19 F	05:50 AM	-0.2	-6
	12:21 PM	3.9	119
	05:05 PM	2.4	73
	11:13 PM	5.4	165
20 Sa	06:22 AM	0.1	3
	12:57 PM	3.9	119
	05:47 PM	2.4	73
	11:48 PM	5.0	152
21 Su	06:53 AM	0.4	12
	01:35 PM	4.0	122
	06:36 PM	2.5	76
22 M	12:26 AM	4.5	137
	07:26 AM	0.8	24
	02:16 PM	4.1	125
	07:40 PM	2.6	79
23 Tu	01:13 AM	4.0	122
	08:00 AM	1.2	37
	03:02 PM	4.2	128
	09:07 PM	2.5	76
24 W	02:19 AM	3.4	104
	08:40 AM	1.6	49
	03:51 PM	4.4	134
	10:47 PM	2.2	67
25 Th ◑	04:01 AM	3.0	91
	09:28 AM	1.9	58
	04:41 PM	4.7	143
26 F	12:07 AM	1.6	49
	05:53 AM	3.0	91
	10:28 AM	2.2	67
	05:30 PM	5.1	155
27 Sa	01:01 AM	0.9	27
	07:14 AM	3.2	98
	11:32 AM	2.4	73
	06:16 PM	5.5	168
28 Su	01:45 AM	0.3	9
	08:09 AM	3.4	104
	12:31 PM	2.4	73
	07:02 PM	6.0	183
29 M	02:25 AM	-0.3	-9
	08:52 AM	3.7	113
	01:23 PM	2.2	67
	07:47 PM	6.5	198
30 Tu	03:05 AM	-0.8	-24
	09:32 AM	4.0	122
	02:12 PM	2.1	64
	08:32 PM	6.8	207
31 W	03:45 AM	-1.1	-34
	10:10 AM	4.2	128
	03:00 PM	1.9	58
	09:17 PM	7.0	213

August

Day	Time (h m)	Height (ft)	Height (cm)
1 Th ●	04:25 AM	-1.3	-40
	10:49 AM	4.4	134
	03:49 PM	1.7	52
	10:03 PM	7.0	213
2 F	05:05 AM	-1.2	-37
	11:30 AM	4.6	140
	04:40 PM	1.6	49
	10:51 PM	6.6	201
3 Sa	05:47 AM	-0.9	-27
	12:13 PM	4.8	146
	05:36 PM	1.6	49
	11:41 PM	6.1	186
4 Su	06:29 AM	-0.4	-12
	01:00 PM	4.9	149
	06:39 PM	1.6	49
5 M	12:36 AM	5.3	162
	07:13 AM	0.2	6
	01:50 PM	5.0	152
	07:53 PM	1.6	49
6 Tu	01:42 AM	4.5	137
	08:00 AM	0.9	27
	02:46 PM	5.1	155
	09:24 PM	1.5	46
7 W ◐	03:07 AM	3.7	113
	08:54 AM	1.5	46
	03:48 PM	5.2	158
	10:59 PM	1.2	37
8 Th	04:56 AM	3.4	104
	10:02 AM	2.1	64
	04:53 PM	5.4	165
9 F	12:20 AM	0.7	21
	06:40 AM	3.4	104
	11:18 AM	2.4	73
	05:54 PM	5.6	171
10 Sa	01:21 AM	0.2	6
	07:52 AM	3.6	110
	12:27 PM	2.5	76
	06:47 PM	5.7	174
11 Su	02:08 AM	-0.1	-3
	08:40 AM	3.9	119
	01:21 PM	2.4	73
	07:33 PM	5.9	180
12 M	02:47 AM	-0.3	-9
	09:16 AM	4.0	122
	02:04 PM	2.3	70
	08:12 PM	6.0	183
13 Tu	03:21 AM	-0.4	-12
	09:46 AM	4.1	125
	02:40 PM	2.2	67
	08:48 PM	6.1	186
14 W	03:52 AM	-0.4	-12
	10:12 AM	4.2	128
	03:12 PM	2.1	64
	09:20 PM	6.0	183
15 Th ○	04:19 AM	-0.3	-9
	10:37 AM	4.3	131
	03:43 PM	1.9	58
	09:52 PM	5.9	180
16 F	04:46 AM	-0.1	-3
	11:02 AM	4.3	131
	04:15 PM	1.9	58
	10:22 PM	5.7	174
17 Sa	05:11 AM	0.1	3
	11:29 AM	4.4	134
	04:48 PM	1.8	55
	10:54 PM	5.4	165
18 Su	05:37 AM	0.4	12
	11:56 AM	4.4	134
	05:25 PM	1.9	58
	11:27 PM	5.0	152
19 M	06:02 AM	0.8	24
	12:26 PM	4.5	137
	06:07 PM	1.9	58
20 Tu	12:02 AM	4.5	137
	06:27 AM	1.2	37
	12:59 PM	4.5	137
	06:58 PM	2.0	61
21 W	12:46 AM	3.9	119
	06:53 AM	1.6	49
	01:37 PM	4.5	137
	08:08 PM	2.0	61
22 Th	01:49 AM	3.4	104
	07:23 AM	2.0	61
	02:27 PM	4.6	140
	09:46 PM	1.9	58
23 F ◑	03:42 AM	3.0	91
	08:07 AM	2.5	76
	03:31 PM	4.7	143
	11:26 PM	1.4	43
24 Sa	06:03 AM	3.0	91
	09:32 AM	2.8	85
	04:41 PM	5.0	152
25 Su	12:32 AM	0.8	24
	07:16 AM	3.4	104
	11:12 AM	2.8	85
	05:46 PM	5.4	165
26 M	01:20 AM	0.2	6
	07:58 AM	3.7	113
	12:23 PM	2.6	79
	06:42 PM	5.9	180
27 Tu	02:02 AM	-0.3	-9
	08:32 AM	4.1	125
	01:19 PM	2.2	67
	07:33 PM	6.4	195
28 W	02:41 AM	-0.7	-21
	09:05 AM	4.4	134
	02:08 PM	1.8	55
	08:20 PM	6.8	207
29 Th	03:19 AM	-1.0	-30
	09:39 AM	4.7	143
	02:56 PM	1.4	43
	09:07 PM	6.9	210
30 F ●	03:57 AM	-1.0	-30
	10:14 AM	5.0	152
	03:43 PM	1.0	30
	09:54 PM	6.8	207
31 Sa	04:35 AM	-0.8	-24
	10:51 AM	5.3	162
	04:33 PM	0.8	24
	10:42 PM	6.3	192

September

Day	Time (h m)	Height (ft)	Height (cm)
1 Su	05:13 AM	-0.3	-9
	11:30 AM	5.4	165
	05:26 PM	0.7	21
	11:32 PM	5.7	174
2 M	05:51 AM	0.3	9
	12:11 PM	5.5	168
	06:25 PM	0.8	24
3 Tu	12:28 AM	4.9	149
	06:30 AM	1.0	30
	12:57 PM	5.4	165
	07:33 PM	0.9	27
4 W	01:36 AM	4.1	125
	07:14 AM	1.7	52
	01:51 PM	5.3	162
	08:58 PM	1.0	30
5 Th	03:11 AM	3.5	107
	08:09 AM	2.3	70
	02:56 PM	5.1	155
	10:34 PM	0.9	27
6 F ◐	05:17 AM	3.4	104
	09:37 AM	2.8	85
	04:15 PM	5.1	155
	11:58 PM	0.6	18
7 Sa	06:53 AM	3.7	113
	11:21 AM	2.9	88
	05:31 PM	5.1	155
8 Su	12:59 AM	0.3	9
	07:46 AM	4.0	122
	12:35 PM	2.7	82
	06:32 PM	5.3	162
9 M	01:45 AM	0.1	3
	08:21 AM	4.2	128
	01:24 PM	2.4	73
	07:20 PM	5.5	168
10 Tu	02:21 AM	0.0	0
	08:48 AM	4.4	134
	02:01 PM	2.1	64
	07:59 PM	5.6	171
11 W	02:52 AM	0.0	0
	09:11 AM	4.5	137
	02:32 PM	1.9	58
	08:33 PM	5.7	174
12 Th	03:18 AM	0.0	0
	09:32 AM	4.6	140
	03:01 PM	1.6	49
	09:05 PM	5.7	174
13 F	03:42 AM	0.1	3
	09:53 AM	4.7	143
	03:30 PM	1.4	43
	09:35 PM	5.6	171
14 Sa ○	04:05 AM	0.3	9
	10:15 AM	4.8	146
	04:00 PM	1.3	40
	10:05 PM	5.4	165
15 Su	04:27 AM	0.6	18
	10:38 AM	4.9	149
	04:32 PM	1.2	37
	10:37 PM	5.1	155
16 M	04:49 AM	0.9	27
	11:02 AM	5.0	152
	05:06 PM	1.2	37
	11:11 PM	4.7	143
17 Tu	05:11 AM	1.2	37
	11:28 AM	5.0	152
	05:45 PM	1.2	37
	11:49 PM	4.2	128
18 W	05:33 AM	1.6	49
	11:56 AM	5.0	152
	06:32 PM	1.3	40
19 Th	12:37 AM	3.7	113
	05:56 AM	2.1	64
	12:30 PM	4.9	149
	07:34 PM	1.4	43
20 F	01:50 AM	3.2	98
	06:21 AM	2.5	76
	01:17 PM	4.8	146
	09:03 PM	1.4	43
21 Sa	04:08 AM	3.0	91
	07:00 AM	2.9	88
	02:28 PM	4.7	143
	10:44 PM	1.1	34
22 Su ◑	06:21 AM	3.3	101
	09:11 AM	3.2	98
	04:00 PM	4.9	149
	11:57 PM	0.6	18
23 M	07:03 AM	3.7	113
	11:15 AM	3.0	91
	05:21 PM	5.2	158
24 Tu	12:49 AM	0.1	3
	07:33 AM	4.1	125
	12:25 PM	2.5	76
	06:25 PM	5.7	174
25 W	01:32 AM	-0.3	-9
	08:02 AM	4.5	137
	01:18 PM	1.9	58
	07:20 PM	6.1	186
26 Th	02:11 AM	-0.5	-15
	08:33 AM	4.9	149
	02:05 PM	1.3	40
	08:10 PM	6.3	192
27 F	02:48 AM	-0.6	-18
	09:04 AM	5.4	165
	02:51 PM	0.7	21
	08:58 PM	6.3	192
28 Sa ●	03:24 AM	-0.4	-12
	09:38 AM	5.7	174
	03:37 PM	0.2	6
	09:45 PM	6.1	186
29 Su	03:59 AM	-0.1	-3
	10:12 AM	6.0	183
	04:25 PM	0.0	0
	10:34 PM	5.7	174
30 M	04:35 AM	0.4	12
	10:48 AM	6.1	186
	05:15 PM	-0.1	-3
	11:26 PM	5.0	152

StationId: 9410580
Source: NOAA/NOS/CO-OPS
Station Type: Primary
Time Zone: LST_LDT
Datum: MLLW

NOAA Tide Predictions

NEWPORT BEACH, NEWPORT BAY ENTRANCE, CA,2019

(33 36.2N / 117 53.0W)

Times and Heights of High and Low Waters

October

Day	Time (h m)	Height (ft)	Height (cm)
1 Tu	05:10 AM	1.0	30
	11:27 AM	6.0	183
	06:10 PM	0.1	3
2 W	12:24 AM	4.4	134
	05:47 AM	1.7	52
	12:08 PM	5.7	174
	07:12 PM	0.3	9
3 Th	01:37 AM	3.8	116
	06:28 AM	2.3	70
	12:57 PM	5.3	162
	08:29 PM	0.6	18
4 F	03:20 AM	3.5	107
	07:26 AM	2.9	88
	02:01 PM	4.9	149
	09:59 PM	0.7	21
5 Sa	05:28 AM	3.6	110
	09:24 AM	3.2	98
	03:29 PM	4.6	140
◐	11:21 PM	0.6	18
6 Su	06:40 AM	3.9	119
	11:25 AM	3.1	94
	04:59 PM	4.6	140
7 M	12:22 AM	0.5	15
	07:19 AM	4.2	128
	12:32 PM	2.7	82
	06:08 PM	4.7	143
8 Tu	01:07 AM	0.4	12
	07:47 AM	4.4	134
	01:15 PM	2.3	70
	06:58 PM	4.9	149
9 W	01:43 AM	0.3	9
	08:09 AM	4.6	140
	01:49 PM	1.8	55
	07:39 PM	5.1	155
10 Th	02:11 AM	0.4	12
	08:29 AM	4.8	146
	02:18 PM	1.5	46
	08:14 PM	5.1	155
11 F	02:36 AM	0.5	15
	08:49 AM	5.0	152
	02:47 PM	1.1	34
	08:46 PM	5.1	155
12 Sa	02:59 AM	0.6	18
	09:09 AM	5.2	158
	03:16 PM	0.8	24
	09:18 PM	5.0	152
13 Su	03:21 AM	0.8	24
	09:30 AM	5.4	165
	03:46 PM	0.6	18
○	09:51 PM	4.8	146
14 M	03:42 AM	1.0	30
	09:53 AM	5.5	168
	04:18 PM	0.5	15
	10:26 PM	4.6	140
15 Tu	04:04 AM	1.3	40
	10:17 AM	5.5	168
	04:52 PM	0.4	12
	11:04 PM	4.2	128
16 W	04:27 AM	1.7	52
	10:42 AM	5.5	168
	05:32 PM	0.4	12
	11:48 PM	3.8	116
17 Th	04:50 AM	2.0	61
	11:12 AM	5.4	165
	06:18 PM	0.5	15
18 F	12:46 AM	3.5	107
	05:14 AM	2.4	73
	11:47 AM	5.3	162
	07:17 PM	0.6	18
19 Sa	02:13 AM	3.2	98
	05:44 AM	2.8	85
	12:34 PM	5.0	152
	08:36 PM	0.7	21
20 Su	04:29 AM	3.2	98
	06:44 AM	3.2	98
	01:48 PM	4.8	146
	10:04 PM	0.6	18
21 M	05:52 AM	3.6	110
	09:27 AM	3.3	101
	03:28 PM	4.7	143
◑	11:16 PM	0.3	9
22 Tu	06:28 AM	4.0	122
	11:19 AM	2.9	88
	04:58 PM	4.9	149
23 W	12:11 AM	0.1	3
	06:58 AM	4.5	137
	12:24 PM	2.2	67
	06:09 PM	5.1	155
24 Th	12:56 AM	-0.1	-3
	07:28 AM	5.0	152
	01:15 PM	1.4	43
	07:08 PM	5.4	165
25 F	01:36 AM	-0.1	-3
	07:59 AM	5.5	168
	02:02 PM	0.7	21
	08:01 PM	5.5	168
26 Sa	02:13 AM	0.0	0
	08:31 AM	5.9	180
	02:47 PM	0.0	0
	08:51 PM	5.4	165
27 Su	02:48 AM	0.3	9
	09:04 AM	6.3	192
	03:32 PM	-0.4	-12
	09:40 PM	5.2	158
28 M	03:23 AM	0.7	21
	09:38 AM	6.5	198
	04:18 PM	-0.7	-21
●	10:31 PM	4.8	146
29 Tu	03:58 AM	1.2	37
	10:13 AM	6.5	198
	05:06 PM	-0.7	-21
	11:24 PM	4.4	134
30 W	04:33 AM	1.7	52
	10:49 AM	6.2	189
	05:56 PM	-0.5	-15
31 Th	12:23 AM	4.0	122
	05:09 AM	2.2	67
	11:28 AM	5.9	180
	06:52 PM	-0.2	-6

November

Day	Time (h m)	Height (ft)	Height (cm)
1 F	01:36 AM	3.6	110
	05:50 AM	2.7	82
	12:12 PM	5.3	162
	07:56 PM	0.2	6
2 Sa	03:14 AM	3.5	107
	06:49 AM	3.1	94
	01:08 PM	4.8	146
	09:12 PM	0.4	12
3 Su	04:00 AM	3.7	113
	07:53 AM	3.4	104
	01:29 PM	4.3	131
	09:28 PM	0.6	18
4 M	05:01 AM	4.0	122
	10:03 AM	3.1	94
	03:06 PM	4.1	125
◐	10:29 PM	0.6	18
5 Tu	05:36 AM	4.3	131
	11:12 AM	2.6	79
	04:26 PM	4.1	125
	11:16 PM	0.6	18
6 W	06:02 AM	4.5	137
	11:56 AM	2.1	64
	05:25 PM	4.2	128
	11:53 PM	0.7	21
7 Th	06:25 AM	4.8	146
	12:31 PM	1.6	49
	06:11 PM	4.3	131
8 F	12:23 AM	0.8	24
	06:45 AM	5.0	152
	01:02 PM	1.2	37
	06:51 PM	4.4	134
9 Sa	12:49 AM	0.9	27
	07:06 AM	5.3	162
	01:32 PM	0.7	21
	07:29 PM	4.4	134
10 Su	01:13 AM	1.1	34
	07:28 AM	5.6	171
	02:02 PM	0.3	9
	08:05 PM	4.3	131
11 M	01:37 AM	1.3	40
	07:51 AM	5.8	177
	02:33 PM	0.0	0
	08:43 PM	4.2	128
12 Tu	02:01 AM	1.5	46
	08:16 AM	5.9	180
	03:07 PM	-0.2	-6
○	09:22 PM	4.1	125
13 W	02:26 AM	1.7	52
	08:43 AM	6.0	183
	03:43 PM	-0.3	-9
	10:05 PM	3.9	119
14 Th	02:54 AM	2.0	61
	09:13 AM	6.0	183
	04:24 PM	-0.3	-9
	10:55 PM	3.6	110
15 F	03:23 AM	2.3	70
	09:47 AM	5.9	180
	05:11 PM	-0.2	-6
	11:57 PM	3.4	104
16 Sa	03:58 AM	2.6	79
	10:27 AM	5.6	171
	06:07 PM	-0.1	-3
17 Su	01:17 AM	3.4	104
	04:47 AM	2.9	88
	11:19 AM	5.3	162
	07:12 PM	0.1	3
18 M	02:48 AM	3.5	107
	06:16 AM	3.2	98
	12:29 PM	4.9	149
	08:24 PM	0.2	6
19 Tu	03:56 AM	3.9	119
	08:29 AM	3.1	94
	02:02 PM	4.5	137
◑	09:31 PM	0.2	6
20 W	04:41 AM	4.4	134
	10:10 AM	2.5	76
	03:35 PM	4.4	134
	10:28 PM	0.2	6
21 Th	05:18 AM	4.9	149
	11:18 AM	1.7	52
	04:54 PM	4.5	137
	11:16 PM	0.3	9
22 F	05:53 AM	5.4	165
	12:12 PM	0.9	27
	06:00 PM	4.5	137
	11:59 PM	0.5	15
23 Sa	06:27 AM	5.9	180
	01:00 PM	0.1	3
	06:58 PM	4.5	137
24 Su	12:39 AM	0.8	24
	07:01 AM	6.3	192
	01:46 PM	-0.5	-15
	07:52 PM	4.5	137
25 M	01:16 AM	1.1	34
	07:36 AM	6.6	201
	02:30 PM	-0.9	-27
	08:43 PM	4.4	134
26 Tu	01:53 AM	1.4	43
	08:11 AM	6.7	204
	03:13 PM	-1.1	-34
●	09:33 PM	4.2	128
27 W	02:29 AM	1.7	52
	08:46 AM	6.6	201
	03:57 PM	-1.1	-34
	10:25 PM	4.0	122
28 Th	03:06 AM	2.1	64
	09:23 AM	6.3	192
	04:42 PM	-0.9	-27
	11:19 PM	3.8	116
29 F	03:44 AM	2.4	73
	10:01 AM	5.9	180
	05:30 PM	-0.5	-15
30 Sa	12:20 AM	3.6	110
	04:27 AM	2.8	85
	10:41 AM	5.4	165
	06:21 PM	-0.1	-3

December

Day	Time (h m)	Height (ft)	Height (cm)
1 Su	01:31 AM	3.6	110
	05:22 AM	3.0	91
	11:28 AM	4.8	146
	07:18 PM	0.2	6
2 M	02:48 AM	3.7	113
	06:50 AM	3.2	98
	12:27 PM	4.3	131
	08:18 PM	0.5	15
3 Tu	03:52 AM	3.9	119
	08:55 AM	3.1	94
	01:48 PM	3.9	119
	09:17 PM	0.8	24
4 W	04:35 AM	4.1	125
	10:29 AM	2.7	82
	03:20 PM	3.6	110
◐	10:08 PM	1.0	30
5 Th	05:07 AM	4.4	134
	11:27 AM	2.1	64
	04:38 PM	3.5	107
	10:50 PM	1.1	34
6 F	05:34 AM	4.7	143
	12:08 PM	1.6	49
	05:40 PM	3.6	110
	11:26 PM	1.3	40
7 Sa	05:59 AM	5.1	155
	12:44 PM	1.0	30
	06:32 PM	3.6	110
	11:58 PM	1.4	43
8 Su	06:24 AM	5.4	165
	01:17 PM	0.5	15
	07:17 PM	3.7	113
9 M	12:28 AM	1.6	49
	06:50 AM	5.7	174
	01:49 PM	0.0	0
	07:59 PM	3.8	116
10 Tu	12:58 AM	1.7	52
	07:18 AM	6.0	183
	02:23 PM	-0.4	-12
	08:40 PM	3.8	116
11 W	01:29 AM	1.8	55
	07:49 AM	6.2	189
	02:58 PM	-0.7	-21
	09:22 PM	3.8	116
12 Th	02:02 AM	2.0	61
	08:22 AM	6.3	192
	03:36 PM	-0.9	-27
○	10:06 PM	3.7	113
13 F	02:37 AM	2.1	64
	08:58 AM	6.3	192
	04:17 PM	-0.9	-27
	10:54 PM	3.7	113
14 Sa	03:17 AM	2.3	70
	09:38 AM	6.2	189
	05:02 PM	-0.8	-24
	11:48 PM	3.7	113
15 Su	04:04 AM	2.5	76
	10:22 AM	5.9	180
	05:51 PM	-0.7	-21
16 M	12:48 AM	3.7	113
	05:04 AM	2.7	82
	11:14 AM	5.5	168
	06:45 PM	-0.4	-12
17 Tu	01:52 AM	3.9	119
	06:27 AM	2.8	85
	12:19 PM	4.9	149
	07:43 PM	0.0	0
18 W	02:54 AM	4.2	128
	08:13 AM	2.6	79
	01:40 PM	4.3	131
	08:43 PM	0.3	9
19 Th	03:49 AM	4.6	140
	09:54 AM	2.0	61
	03:15 PM	3.9	119
◑	09:41 PM	0.6	18
20 F	04:36 AM	5.1	155
	11:11 AM	1.3	40
	04:46 PM	3.7	113
	10:36 PM	1.0	30
21 Sa	05:19 AM	5.6	171
	12:10 PM	0.5	15
	06:02 PM	3.7	113
	11:26 PM	1.2	37
22 Su	06:00 AM	6.0	183
	01:01 PM	-0.3	-9
	07:06 PM	3.8	116
23 M	12:12 AM	1.5	46
	06:39 AM	6.3	192
	01:46 PM	-0.8	-24
	08:01 PM	3.9	119
24 Tu	12:55 AM	1.7	52
	07:17 AM	6.5	198
	02:28 PM	-1.1	-34
	08:50 PM	3.9	119
25 W	01:36 AM	1.9	58
	07:54 AM	6.5	198
	03:08 PM	-1.2	-37
	09:35 PM	3.9	119
26 Th	02:15 AM	2.0	61
	08:31 AM	6.4	195
	03:47 PM	-1.2	-37
●	10:18 PM	3.9	119
27 F	02:53 AM	2.2	67
	09:07 AM	6.2	189
	04:26 PM	-1.0	-30
	11:01 PM	3.8	116
28 Sa	03:32 AM	2.3	70
	09:43 AM	5.9	180
	05:04 PM	-0.7	-21
	11:45 PM	3.8	116
29 Su	04:12 AM	2.5	76
	10:20 AM	5.4	165
	05:43 PM	-0.3	-9
30 M	12:31 AM	3.7	113
	04:58 AM	2.6	79
	10:59 AM	4.9	149
	06:23 PM	0.1	3
31 Tu	01:21 AM	3.7	113
	05:56 AM	2.8	85
	11:41 AM	4.4	134
	07:08 PM	0.5	15