



NOAA Tide Predictions

Columbia River entrance (N. Jetty), Washington, 2014

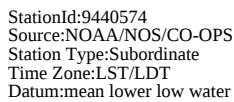
The NOAA Tide Predictions application provides predictions in both graphical and tabular formats, with many user selected options, for over 3000 stations broken down by key areas in each state. Users can also access stations via the Google map interface. Additional information can be found in the help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



January					February					March																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Time		Height			Time		Height			Time		Height			Time		Height																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm		h	m	ft	cm																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
1 W ●	12:38 AM	7.3	223		16 Th ○	01:07 AM	7.0	213		1 Sa	01:45 AM	8.2	250		16 Su ●	12:33 AM	8.0	244		16 Su ○	01:27 AM	7.3	223																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	05:47 AM	2.9	88			11:54 AM	9.4	287			06:45 PM	-1.2	-37			2 Th	01:26 AM	7.6	232			17 F	01:42 AM	7.1	216		2 Su	07:22 AM	1.6	49		17 M	02:04 AM	7.5	229		2 Su	01:13 AM	8.3	253		17 M	01:55 AM	7.5	229		06:41 AM	2.7	82		12:45 PM	9.4	287		07:31 PM	-1.2	-37		3 F	02:12 AM	7.9	241		18 Sa	02:14 AM	7.2	219		3 M	03:08 AM	8.5	259		18 Tu	02:31 AM	7.7	235		18 Tu	02:23 AM	7.7	235		07:34 AM	2.5	76		01:37 PM	9.1	277		08:15 PM	-0.9	-27		4 Sa	02:57 AM	8.1	247		19 Su	02:43 AM	7.3	223		4 W	09:05 AM	1.2	37		19 W	03:08 AM	1.6	49		19 W	08:34 AM	0.7	21		19 W	02:51 AM	7.9	241		08:28 AM	2.3	70		02:30 PM	8.6	262		08:59 PM	-0.5	-15		5 Su	03:43 AM	8.2	250		20 M	02:43 AM	7.3	223		5 Th	03:50 AM	1.3	40		20 Th	02:59 AM	7.8	238		20 Th	03:35 PM	6.7	204		20 Th	03:22 AM	8.0	244		09:24 AM	2.2	67		03:25 PM	7.9	241		09:44 PM	0.2	6		6 M	04:29 AM	8.2	250		21 Tu	03:12 AM	7.4	226		6 F	04:33 AM	8.2	250		21 F	03:32 AM	7.9	241		21 F	03:09 AM	8.3	253		21 F	03:58 AM	8.0	244		10:23 AM	2.1	64		04:25 PM	7.1	216		10:30 PM	1.0	30		7 Tu	05:17 AM	8.2	250		22 W	03:42 AM	7.5	229		7 Sa	10:55 AM	1.4	43		22 Sa	04:11 AM	7.9	241		22 Sa	03:31 AM	8.5	259		22 Sa	04:47 PM	6.1	186		22 Sa	03:58 AM	8.0	244		11:26 AM	2.1	64		05:32 PM	6.4	195		11:21 PM	1.7	52		8 W ●	06:09 AM	8.1	247		23 Th	04:16 AM	7.6	232		8 Su	05:20 AM	7.9	241		23 Su	04:17 PM	6.0	183		23 Su	04:17 PM	6.0	183		23 Su	04:47 PM	6.1	186		23 Su	04:47 PM	6.1	186		12:35 PM	1.9	58		06:46 PM	5.8	177						9 Th	12:17 AM	2.4	73		24 F ●	04:56 AM	7.7	235		9 M	06:13 AM	7.6	232		24 M	05:01 AM	7.8	238		24 M	05:05 PM	5.6	171		24 M	05:05 PM	5.6	171		24 M	05:33 AM	7.5	229		07:03 AM	8.1	247		01:45 PM	1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91		25 Sa	11:24 AM	2.3	70		10 Tu	07:12 AM	7.4	226		25 Tu	05:01 AM	7.8	238		25 Tu	05:18 AM	7.5	229		25 Tu	05:18 AM	7.5																																																																																																			
	11:54 AM	9.4	287			06:45 PM	-1.2	-37			2 Th	01:26 AM	7.6	232				17 F	01:42 AM		7.1		216		2 Su	07:22 AM		1.6	49		17 M		02:04 AM	7.5	229			2 Su	01:13 AM	8.3	253			17 M	01:55 AM	7.5	229		06:41 AM	2.7	82		12:45 PM	9.4	287		07:31 PM	-1.2		-37		3 F	02:12 AM		7.9	241		18 Sa		02:14 AM	7.2	219			3 M	03:08 AM	8.5	259			18 Tu	02:31 AM	7.7	235		18 Tu	02:23 AM	7.7	235		07:34 AM	2.5	76		01:37 PM		9.1	277		08:15 PM		-0.9	-27		4 Sa		02:57 AM	8.1	247			19 Su	02:43 AM	7.3	223			4 W	09:05 AM	1.2		37		19 W	03:08 AM	1.6	49		19 W	08:34 AM	0.7	21		19 W	02:51 AM	7.9	241			08:28 AM	2.3	70			02:30 PM	8.6	262			08:59 PM	-0.5	-15			5 Su	03:43 AM	8.2		250		20 M	02:43 AM		7.3	223		5 Th	03:50 AM	1.3	40		20 Th	02:59 AM	7.8	238		20 Th	03:35 PM	6.7		204		20 Th	03:22 AM		8.0	244		09:24 AM		2.2	67		03:25 PM		7.9	241		09:44 PM		0.2	6		6 M		04:29 AM	8.2	250		21 Tu	03:12 AM	7.4	226		6 F	04:33 AM	8.2	250		21 F	03:32 AM		7.9	241		21 F		03:09 AM	8.3	253			21 F	03:58 AM	8.0	244			10:23 AM	2.1	64			04:25 PM	7.1	216			10:30 PM	1.0	30			7 Tu	05:17 AM	8.2	250		22 W	03:42 AM	7.5	229		7 Sa	10:55 AM	1.4	43			22 Sa	04:11 AM	7.9	241			22 Sa	03:31 AM	8.5		259		22 Sa	04:47 PM		6.1	186		22 Sa		03:58 AM	8.0	244			11:26 AM	2.1	64			05:32 PM	6.4	195		11:21 PM	1.7	52		8 W ●	06:09 AM	8.1	247		23 Th	04:16 AM	7.6		232		8 Su	05:20 AM		7.9	241		23 Su		04:17 PM	6.0	183			23 Su	04:17 PM	6.0	183			23 Su	04:47 PM	6.1		186		23 Su	04:47 PM		6.1	186		12:35 PM	1.9	58		06:46 PM	5.8	177						9 Th		12:17 AM	2.4	73			24 F ●	04:56 AM	7.7	235			9 M	06:13 AM	7.6		232		24 M	05:01 AM		7.8	238		24 M		05:05 PM	5.6	171		24 M	05:05 PM	5.6	171		24 M	05:33 AM	7.5	229		07:03 AM	8.1	247		01:45 PM	1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91		25 Sa	11:24 AM	2.3	70		10 Tu	07:12 AM	7.4	226		25 Tu	05:01 AM	7.8	238		25 Tu	05:18 AM	7.5	229		25 Tu	05:18 AM	7.5																																															
	06:45 PM	-1.2	-37			2 Th	01:26 AM	7.6	232				17 F	01:42 AM			7.1		216				2 Su	07:22 AM		1.6		49		17 M			02:04 AM	7.5	229				2 Su	01:13 AM	8.3		253			17 M	01:55 AM	7.5	229		06:41 AM	2.7	82		12:45 PM	9.4	287			07:31 PM	-1.2		-37			3 F	02:12 AM			7.9	241		18 Sa			02:14 AM	7.2	219				3 M	03:08 AM	8.5	259			18 Tu	02:31 AM	7.7	235		18 Tu	02:23 AM	7.7		235		07:34 AM	2.5		76		01:37 PM			9.1	277		08:15 PM			-0.9	-27			4 Sa		02:57 AM	8.1		247			19 Su	02:43 AM	7.3	223			4 W	09:05 AM	1.2		37		19 W		03:08 AM	1.6	49			19 W	08:34 AM	0.7	21			19 W	02:51 AM	7.9		241			08:28 AM		2.3	70				02:30 PM	8.6	262			08:59 PM	-0.5	-15			5 Su	03:43 AM	8.2		250			20 M	02:43 AM		7.3		223		5 Th	03:50 AM		1.3	40		20 Th		02:59 AM	7.8	238			20 Th	03:35 PM	6.7			204		20 Th	03:22 AM		8.0	244		09:24 AM		2.2	67		03:25 PM		7.9		241		09:44 PM			0.2	6		6 M			04:29 AM	8.2	250			21 Tu	03:12 AM	7.4		226		6 F	04:33 AM		8.2	250		21 F		03:32 AM		7.9	241		21 F		03:09 AM	8.3	253			21 F	03:58 AM	8.0	244				10:23 AM	2.1		64			04:25 PM		7.1	216				10:30 PM	1.0	30				7 Tu	05:17 AM	8.2		250		22 W	03:42 AM		7.5	229		7 Sa	10:55 AM	1.4	43			22 Sa	04:11 AM	7.9	241			22 Sa		03:31 AM	8.5		259			22 Sa	04:47 PM			6.1	186		22 Sa			03:58 AM	8.0	244				11:26 AM	2.1		64			05:32 PM		6.4	195		11:21 PM	1.7	52		8 W ●	06:09 AM	8.1	247		23 Th	04:16 AM	7.6			232		8 Su	05:20 AM			7.9	241			23 Su		04:17 PM	6.0		183			23 Su		04:17 PM	6.0	183				23 Su	04:47 PM	6.1		186		23 Su	04:47 PM		6.1	186		12:35 PM	1.9	58		06:46 PM	5.8	177						9 Th		12:17 AM	2.4	73			24 F ●	04:56 AM	7.7	235			9 M	06:13 AM	7.6		232		24 M	05:01 AM		7.8	238		24 M		05:05 PM	5.6	171		24 M	05:05 PM	5.6	171		24 M	05:33 AM	7.5	229		07:03 AM	8.1	247		01:45 PM	1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91		25 Sa	11:24 AM	2.3	70		10 Tu	07:12 AM	7.4	226		25 Tu	05:01 AM	7.8	238		25 Tu	05:18 AM	7.5
2 Th	01:26 AM	7.6	232		17 F		01:42 AM	7.1	216			2 Su		07:22 AM	1.6		49			17 M	02:04 AM			7.5		229			2 Su				01:13 AM	8.3	253					17 M	01:55 AM		7.5		229																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	06:41 AM	2.7	82				12:45 PM	9.4	287					07:31 PM	-1.2	-37			3 F		02:12 AM	7.9		241			18 Sa	02:14 AM				7.2	219		3 M	03:08 AM	8.5				259		18 Tu		02:31 AM		7.7	235		18 Tu	02:23 AM	7.7	235		07:34 AM	2.5	76		01:37 PM	9.1	277			08:15 PM	-0.9		-27			4 Sa	02:57 AM	8.1		247			19 Su	02:43 AM	7.3	223				4 W	09:05 AM		1.2		37		19 W	03:08 AM		1.6	49		19 W	08:34 AM	0.7	21		19 W	02:51 AM	7.9		241		08:28 AM	2.3	70			02:30 PM	8.6	262				08:59 PM	-0.5	-15		5 Su			03:43 AM	8.2	250				20 M	02:43 AM		7.3	223			5 Th	03:50 AM	1.3	40			20 Th	02:59 AM	7.8	238			20 Th	03:35 PM	6.7	204			20 Th	03:22 AM	8.0	244			09:24 AM	2.2	67			03:25 PM	7.9	241			09:44 PM		0.2	6			6 M	04:29 AM		8.2		250		21 Tu	03:12 AM		7.4	226		6 F	04:33 AM		8.2	250		21 F	03:32 AM	7.9		241			21 F	03:09 AM	8.3		253			21 F	03:58 AM	8.0		244		10:23 AM	2.1		64		04:25 PM	7.1	216			10:30 PM	1.0	30				7 Tu	05:17 AM	8.2	250			22 W	03:42 AM	7.5	229			7 Sa	10:55 AM	1.4	43			22 Sa	04:11 AM		7.9	241				22 Sa	03:31 AM	8.5	259				22 Sa	04:47 PM	6.1		186		22 Sa	03:58 AM	8.0		244		11:26 AM	2.1	64			05:32 PM	6.4	195			11:21 PM	1.7		52		8 W ●	06:09 AM	8.1		247		23 Th	04:16 AM	7.6		232		8 Su	05:20 AM			7.9	241			23 Su		04:17 PM	6.0	183			23 Su	04:17 PM		6.0		183		23 Su	04:47 PM		6.1		186		23 Su	04:47 PM	6.1		186		12:35 PM	1.9	58			06:46 PM	5.8	177							9 Th	12:17 AM	2.4	73			24 F ●		04:56 AM	7.7	235			9 M		06:13 AM	7.6	232				24 M	05:01 AM	7.8	238				24 M	05:05 PM	5.6	171			24 M		05:05 PM	5.6		171			24 M		05:33 AM	7.5	229		07:03 AM	8.1	247		01:45 PM	1.6	49		08:02 PM	5.7	174				10 F	01:18 AM	3.0			91		25 Sa		11:24 AM		2.3	70			10 Tu		07:12 AM		7.4	226				25 Tu	05:01 AM	7.8	238			25 Tu	05:18 AM	7.5		229		25 Tu	05:18 AM	7.5																																		
	12:45 PM	9.4	287				07:31 PM	-1.2	-37		3 F			02:12 AM	7.9	241		18 Sa			02:14 AM	7.2		219		3 M		03:08 AM			8.5	259		18 Tu		02:31 AM	7.7	235				18 Tu		02:23 AM	7.7		235		07:34 AM		2.5	76		01:37 PM	9.1	277		08:15 PM	-0.9	-27		4 Sa	02:57 AM	8.1	247			19 Su	02:43 AM		7.3	223			4 W	09:05 AM		1.2	37		19 W		03:08 AM		1.6	49			19 W	08:34 AM		0.7		21		19 W		02:51 AM	7.9	241			08:28 AM	2.3	70		02:30 PM	8.6	262		08:59 PM	-0.5	-15		5 Su	03:43 AM		8.2	250		20 M	02:43 AM		7.3		223		5 Th	03:50 AM	1.3			40		20 Th	02:59 AM		7.8		238		20 Th	03:35 PM			6.7	204		20 Th			03:22 AM	8.0	244		09:24 AM		2.2	67		03:25 PM	7.9	241		09:44 PM	0.2	6		6 M	04:29 AM	8.2	250			21 Tu	03:12 AM	7.4	226				6 F	04:33 AM	8.2	250				21 F	03:32 AM	7.9		241			21 F	03:09 AM		8.3	253			21 F	03:58 AM		8.0	244			10:23 AM	2.1		64		04:25 PM	7.1	216		10:30 PM	1.0	30		7 Tu	05:17 AM	8.2	250		22 W	03:42 AM	7.5		229			7 Sa	10:55 AM	1.4	43				22 Sa	04:11 AM	7.9			241		22 Sa	03:31 AM			8.5	259		22 Sa	04:47 PM		6.1		186		22 Sa	03:58 AM		8.0		244		11:26 AM	2.1	64			05:32 PM	6.4	195		11:21 PM	1.7	52		8 W ●	06:09 AM	8.1	247		23 Th	04:16 AM	7.6		232			8 Su	05:20 AM		7.9	241			23 Su		04:17 PM	6.0		183			23 Su	04:17 PM	6.0	183				23 Su	04:47 PM	6.1	186				23 Su	04:47 PM	6.1	186				12:35 PM	1.9	58			06:46 PM	5.8	177						9 Th	12:17 AM	2.4	73		24 F ●	04:56 AM	7.7	235				9 M	06:13 AM	7.6		232			24 M	05:01 AM	7.8		238			24 M	05:05 PM	5.6	171				24 M	05:05 PM	5.6	171				24 M	05:33 AM	7.5	229				07:03 AM	8.1	247		01:45 PM			1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91		25 Sa	11:24 AM	2.3	70			10 Tu		07:12 AM	7.4	226			25 Tu		05:01 AM	7.8		238		25 Tu	05:18 AM			7.5	229		25 Tu	05:18 AM		7.5																																																	
	07:31 PM	-1.2	-37			3 F	02:12 AM	7.9	241				18 Sa	02:14 AM	7.2	219					3 M	03:08 AM	8.5	259				18 Tu		02:31 AM	7.7	235				18 Tu	02:23 AM	7.7	235					07:34 AM	2.5	76		01:37 PM	9.1		277		08:15 PM	-0.9	-27		4 Sa	02:57 AM	8.1	247			19 Su	02:43 AM	7.3	223			4 W		09:05 AM	1.2	37			19 W		03:08 AM	1.6	49			19 W		08:34 AM	0.7	21			19 W		02:51 AM	7.9	241				08:28 AM	2.3	70			02:30 PM	8.6	262		08:59 PM	-0.5	-15		5 Su	03:43 AM	8.2	250			20 M	02:43 AM	7.3	223				5 Th	03:50 AM	1.3	40			20 Th	02:59 AM		7.8	238			20 Th	03:35 PM		6.7	204			20 Th		03:22 AM	8.0	244				09:24 AM	2.2	67		03:25 PM		7.9	241		09:44 PM	0.2	6		6 M	04:29 AM	8.2	250			21 Tu	03:12 AM	7.4	226			6 F	04:33 AM		8.2	250			21 F	03:32 AM		7.9	241			21 F		03:09 AM	8.3	253				21 F	03:58 AM	8.0	244				10:23 AM	2.1	64		04:25 PM	7.1		216		10:30 PM	1.0	30		7 Tu	05:17 AM	8.2	250			22 W	03:42 AM	7.5		229		7 Sa	10:55 AM	1.4			43		22 Sa	04:11 AM		7.9		241		22 Sa		03:31 AM	8.5		259			22 Sa	04:47 PM	6.1		186		22 Sa		03:58 AM	8.0		244		11:26 AM		2.1	64		05:32 PM	6.4		195		11:21 PM	1.7	52		8 W ●	06:09 AM	8.1		247		23 Th	04:16 AM		7.6	232		8 Su	05:20 AM			7.9	241		23 Su		04:17 PM		6.0	183			23 Su	04:17 PM	6.0		183		23 Su		04:47 PM	6.1		186		23 Su		04:47 PM	6.1		186		12:35 PM		1.9	58		06:46 PM	5.8	177							9 Th	12:17 AM	2.4		73		24 F ●	04:56 AM		7.7	235		9 M	06:13 AM			7.6	232		24 M		05:01 AM		7.8	238		24 M		05:05 PM		5.6	171		24 M	05:05 PM			5.6	171		24 M	05:33 AM			7.5	229		07:03 AM		8.1	247		01:45 PM	1.6	49			08:02 PM	5.7	174		10 F	01:18 AM	3.0		91		25 Sa	11:24 AM		2.3	70		10 Tu	07:12 AM			7.4	226		25 Tu	05:01 AM			7.8	238		25 Tu	05:18 AM		7.5		229		25 Tu	05:18 AM		7.5																																																			
3 F	02:12 AM	7.9	241		18 Sa		02:14 AM	7.2	219			3 M		03:08 AM	8.5	259				18 Tu		02:31 AM	7.7	235					18 Tu	02:23 AM	7.7	235																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	07:34 AM	2.5	76				01:37 PM	9.1	277					08:15 PM	-0.9	-27			4 Sa			02:57 AM	8.1	247			19 Su			02:43 AM	7.3	223			4 W		09:05 AM	1.2	37		19 W		03:08 AM	1.6	49		19 W	08:34 AM	0.7	21		19 W	02:51 AM	7.9	241			08:28 AM	2.3	70				02:30 PM	8.6	262				08:59 PM	-0.5	-15		5 Su			03:43 AM	8.2	250			20 M		02:43 AM	7.3	223		5 Th			03:50 AM	1.3	40		20 Th		02:59 AM	7.8	238		20 Th	03:35 PM	6.7	204		20 Th	03:22 AM	8.0	244			09:24 AM	2.2	67				03:25 PM	7.9	241			09:44 PM		0.2	6			6 M		04:29 AM	8.2	250			21 Tu		03:12 AM	7.4	226			6 F		04:33 AM	8.2	250			21 F	03:32 AM	7.9	241		21 F	03:09 AM	8.3	253		21 F	03:58 AM	8.0	244			10:23 AM	2.1	64				04:25 PM	7.1	216				10:30 PM	1.0	30			7 Tu		05:17 AM	8.2	250			22 W		03:42 AM	7.5	229			7 Sa	10:55 AM		1.4	43			22 Sa	04:11 AM	7.9	241		22 Sa	03:31 AM	8.5	259		22 Sa	04:47 PM	6.1	186			22 Sa	03:58 AM	8.0		244			11:26 AM		2.1	64			05:32 PM	6.4		195			11:21 PM	1.7	52			8 W ●		06:09 AM	8.1	247			23 Th	04:16 AM		7.6	232			8 Su		05:20 AM	7.9	241			23 Su	04:17 PM	6.0	183		23 Su	04:17 PM	6.0	183		23 Su	04:47 PM	6.1	186			23 Su	04:47 PM		6.1	186				12:35 PM	1.9	58			06:46 PM		5.8	177								9 Th	12:17 AM		2.4	73			24 F ●		04:56 AM	7.7	235			9 M		06:13 AM	7.6	232			24 M	05:01 AM	7.8	238		24 M	05:05 PM	5.6	171		24 M	05:05 PM	5.6	171			24 M	05:33 AM		7.5	229				07:03 AM	8.1	247			01:45 PM		1.6	49			08:02 PM	5.7		174		10 F		01:18 AM	3.0		91		25 Sa		11:24 AM	2.3		70		10 Tu		07:12 AM	7.4		226		25 Tu	05:01 AM	7.8	238		25 Tu	05:18 AM	7.5	229		25 Tu	05:18 AM	7.5																																																																																										
	01:37 PM	9.1	277				08:15 PM	-0.9	-27		4 Sa			02:57 AM	8.1	247		19 Su				02:43 AM	7.3	223		4 W				09:05 AM	1.2	37		19 W			03:08 AM	1.6	49			19 W	08:34 AM	0.7	21			19 W	02:51 AM	7.9	241			08:28 AM	2.3	70			02:30 PM	8.6	262			08:59 PM	-0.5	-15		5 Su		03:43 AM	8.2	250			20 M		02:43 AM	7.3	223		5 Th			03:50 AM	1.3	40			20 Th		02:59 AM	7.8	238			20 Th	03:35 PM	6.7	204			20 Th	03:22 AM	8.0	244			09:24 AM	2.2	67			03:25 PM	7.9	241			09:44 PM	0.2	6		6 M	04:29 AM		8.2	250		21 Tu			03:12 AM	7.4	226		6 F			04:33 AM	8.2	250		21 F			03:32 AM	7.9	241		21 F		03:09 AM	8.3	253			21 F	03:58 AM	8.0	244			10:23 AM	2.1	64			04:25 PM	7.1	216			10:30 PM	1.0	30		7 Tu		05:17 AM	8.2	250		22 W			03:42 AM	7.5	229		7 Sa			10:55 AM	1.4	43		22 Sa		04:11 AM		7.9	241		22 Sa		03:31 AM	8.5	259			22 Sa	04:47 PM	6.1	186			22 Sa	03:58 AM	8.0			244		11:26 AM	2.1		64		05:32 PM	6.4	195			11:21 PM	1.7	52		8 W ●		06:09 AM	8.1	247		23 Th			04:16 AM	7.6	232		8 Su		05:20 AM		7.9	241		23 Su			04:17 PM	6.0	183		23 Su		04:17 PM	6.0	183			23 Su	04:47 PM	6.1	186			23 Su	04:47 PM	6.1			186		12:35 PM	1.9		58		06:46 PM	5.8	177							9 Th		12:17 AM	2.4	73		24 F ●		04:56 AM		7.7	235		9 M			06:13 AM	7.6	232		24 M			05:01 AM	7.8	238		24 M		05:05 PM	5.6	171			24 M	05:05 PM	5.6	171			24 M	05:33 AM	7.5			229		07:03 AM	8.1		247		01:45 PM	1.6	49			08:02 PM	5.7	174		10 F		01:18 AM	3.0	91		25 Sa			11:24 AM	2.3	70		10 Tu			07:12 AM	7.4	226		25 Tu			05:01 AM	7.8	238		25 Tu		05:18 AM	7.5	229			25 Tu	05:18 AM	7.5																																																																																														
	08:15 PM	-0.9	-27			4 Sa	02:57 AM	8.1	247				19 Su	02:43 AM	7.3	223					4 W	09:05 AM	1.2	37				19 W		03:08 AM	1.6	49				19 W	08:34 AM	0.7	21				19 W	02:51 AM	7.9	241				08:28 AM	2.3		70		02:30 PM	8.6	262		08:59 PM	-0.5	-15		5 Su	03:43 AM	8.2	250			20 M	02:43 AM	7.3	223				5 Th	03:50 AM	1.3	40				20 Th	02:59 AM	7.8	238				20 Th	03:35 PM	6.7	204				20 Th	03:22 AM	8.0	244				09:24 AM	2.2		67		03:25 PM	7.9	241		09:44 PM	0.2	6		6 M	04:29 AM	8.2	250			21 Tu	03:12 AM	7.4	226				6 F	04:33 AM	8.2	250				21 F	03:32 AM	7.9	241				21 F	03:09 AM	8.3	253				21 F	03:58 AM	8.0	244				10:23 AM	2.1		64		04:25 PM	7.1	216		10:30 PM	1.0	30		7 Tu	05:17 AM	8.2	250			22 W	03:42 AM	7.5	229				7 Sa	10:55 AM	1.4	43				22 Sa	04:11 AM	7.9	241				22 Sa	03:31 AM	8.5	259				22 Sa	04:47 PM	6.1	186				22 Sa	03:58 AM		8.0		244		11:26 AM		2.1	64		05:32 PM	6.4	195		11:21 PM	1.7	52		8 W ●	06:09 AM	8.1	247			23 Th	04:16 AM	7.6	232				8 Su	05:20 AM	7.9	241				23 Su	04:17 PM	6.0	183				23 Su	04:17 PM	6.0	183				23 Su	04:47 PM	6.1	186				23 Su	04:47 PM		6.1		186		12:35 PM		1.9	58		06:46 PM	5.8	177						9 Th	12:17 AM	2.4	73			24 F ●	04:56 AM	7.7	235				9 M	06:13 AM	7.6	232				24 M	05:01 AM	7.8	238				24 M	05:05 PM	5.6	171				24 M	05:05 PM	5.6	171				24 M	05:33 AM		7.5		229		07:03 AM		8.1	247		01:45 PM	1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91			25 Sa	11:24 AM	2.3	70				10 Tu	07:12 AM	7.4	226				25 Tu	05:01 AM	7.8	238				25 Tu	05:18 AM	7.5	229				25 Tu	05:18 AM	7.5																																																																																																			
4 Sa	02:57 AM	8.1	247		19 Su		02:43 AM	7.3	223			4 W		09:05 AM	1.2	37				19 W		03:08 AM	1.6	49					19 W	08:34 AM	0.7	21					19 W	02:51 AM	7.9	241																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	08:28 AM	2.3	70				02:30 PM	8.6	262					08:59 PM	-0.5	-15			5 Su			03:43 AM	8.2	250			20 M			02:43 AM	7.3	223			5 Th			03:50 AM	1.3	40				20 Th	02:59 AM	7.8	238			20 Th	03:35 PM	6.7	204		20 Th	03:22 AM	8.0	244		09:24 AM	2.2	67			03:25 PM	7.9	241				09:44 PM	0.2	6				6 M	04:29 AM	8.2	250				21 Tu	03:12 AM	7.4	226				6 F	04:33 AM	8.2	250				21 F	03:32 AM	7.9	241			21 F	03:09 AM	8.3	253		21 F	03:58 AM	8.0	244		10:23 AM	2.1	64			04:25 PM	7.1	216				10:30 PM	1.0	30				7 Tu	05:17 AM	8.2	250				22 W	03:42 AM	7.5	229				7 Sa	10:55 AM	1.4	43				22 Sa	04:11 AM	7.9	241			22 Sa	03:31 AM	8.5	259		22 Sa	04:47 PM	6.1	186		22 Sa	03:58 AM	8.0		244		11:26 AM	2.1			64		05:32 PM	6.4		195			11:21 PM	1.7	52				8 W ●	06:09 AM	8.1	247				23 Th	04:16 AM	7.6	232				8 Su	05:20 AM	7.9	241				23 Su	04:17 PM	6.0		183		23 Su	04:17 PM	6.0	183		23 Su	04:47 PM	6.1	186		23 Su	04:47 PM	6.1		186		12:35 PM	1.9			58		06:46 PM	5.8		177									9 Th	12:17 AM	2.4	73				24 F ●	04:56 AM	7.7	235				9 M	06:13 AM	7.6	232				24 M	05:01 AM	7.8		238		24 M	05:05 PM	5.6	171		24 M	05:05 PM	5.6	171		24 M	05:33 AM	7.5		229		07:03 AM	8.1			247		01:45 PM	1.6		49			08:02 PM	5.7	174				10 F	01:18 AM	3.0	91				25 Sa	11:24 AM	2.3	70				10 Tu	07:12 AM	7.4	226				25 Tu	05:01 AM	7.8		238		25 Tu	05:18 AM	7.5	229		25 Tu	05:18 AM	7.5																																																																																																																																													
	02:30 PM	8.6	262				08:59 PM	-0.5	-15		5 Su			03:43 AM	8.2	250		20 M				02:43 AM	7.3	223		5 Th				03:50 AM	1.3	40		20 Th				02:59 AM	7.8	238		20 Th			03:35 PM	6.7	204		20 Th		03:22 AM	8.0	244			09:24 AM	2.2	67		03:25 PM	7.9	241			09:44 PM	0.2	6			6 M	04:29 AM	8.2	250		21 Tu			03:12 AM	7.4	226		6 F			04:33 AM	8.2	250		21 F			03:32 AM	7.9	241		21 F			03:09 AM	8.3	253		21 F		03:58 AM	8.0	244			10:23 AM	2.1	64		04:25 PM	7.1	216			10:30 PM	1.0	30			7 Tu	05:17 AM	8.2	250		22 W			03:42 AM	7.5	229		7 Sa			10:55 AM	1.4	43		22 Sa			04:11 AM	7.9	241		22 Sa			03:31 AM	8.5	259		22 Sa		04:47 PM	6.1	186			22 Sa	03:58 AM	8.0	244			11:26 AM		2.1	64		05:32 PM	6.4		195		11:21 PM	1.7	52			8 W ●	06:09 AM	8.1	247		23 Th			04:16 AM	7.6	232		8 Su			05:20 AM	7.9	241		23 Su			04:17 PM	6.0	183		23 Su			04:17 PM	6.0	183		23 Su		04:47 PM	6.1	186			23 Su	04:47 PM	6.1	186			12:35 PM		1.9	58		06:46 PM	5.8		177							9 Th	12:17 AM	2.4	73		24 F ●			04:56 AM	7.7	235		9 M			06:13 AM	7.6	232		24 M			05:01 AM	7.8	238		24 M			05:05 PM	5.6	171		24 M		05:05 PM	5.6	171			24 M	05:33 AM	7.5	229			07:03 AM		8.1	247		01:45 PM	1.6		49		08:02 PM	5.7	174			10 F	01:18 AM	3.0	91		25 Sa			11:24 AM	2.3	70		10 Tu			07:12 AM	7.4	226		25 Tu			05:01 AM	7.8	238		25 Tu			05:18 AM	7.5	229		25 Tu		05:18 AM	7.5																																																																																																																																																		
	08:59 PM	-0.5	-15			5 Su	03:43 AM	8.2	250				20 M	02:43 AM	7.3	223					5 Th	03:50 AM	1.3	40				20 Th		02:59 AM	7.8	238				20 Th		03:35 PM	6.7	204			20 Th		03:22 AM	8.0	244				09:24 AM	2.2	67			03:25 PM	7.9	241		09:44 PM	0.2	6		6 M	04:29 AM	8.2	250		21 Tu		03:12 AM	7.4	226			6 F		04:33 AM	8.2	250			21 F		03:32 AM	7.9	241			21 F		03:09 AM	8.3	253			21 F		03:58 AM	8.0	244				10:23 AM	2.1	64			04:25 PM	7.1	216		10:30 PM	1.0	30		7 Tu	05:17 AM	8.2	250		22 W		03:42 AM	7.5	229			7 Sa		10:55 AM	1.4	43			22 Sa		04:11 AM	7.9	241			22 Sa		03:31 AM	8.5	259			22 Sa		04:47 PM	6.1	186				22 Sa	03:58 AM	8.0	244				11:26 AM	2.1		64		05:32 PM	6.4	195		11:21 PM	1.7	52		8 W ●	06:09 AM	8.1	247		23 Th		04:16 AM	7.6	232			8 Su		05:20 AM	7.9	241			23 Su		04:17 PM	6.0	183			23 Su		04:17 PM	6.0	183			23 Su		04:47 PM	6.1	186				23 Su	04:47 PM	6.1	186				12:35 PM	1.9		58		06:46 PM	5.8	177						9 Th	12:17 AM	2.4	73		24 F ●		04:56 AM	7.7	235			9 M		06:13 AM	7.6	232			24 M		05:01 AM	7.8	238			24 M		05:05 PM	5.6	171			24 M		05:05 PM	5.6	171				24 M	05:33 AM	7.5	229				07:03 AM	8.1		247		01:45 PM	1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91		25 Sa		11:24 AM	2.3	70			10 Tu		07:12 AM	7.4	226			25 Tu		05:01 AM	7.8	238			25 Tu		05:18 AM	7.5	229			25 Tu		05:18 AM	7.5																																																																																																																																																								
5 Su	03:43 AM	8.2	250		20 M		02:43 AM	7.3	223			5 Th		03:50 AM	1.3	40				20 Th		02:59 AM	7.8	238					20 Th	03:35 PM	6.7	204					20 Th	03:22 AM	8.0	244																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	09:24 AM	2.2	67				03:25 PM	7.9	241					09:44 PM	0.2	6			6 M			04:29 AM	8.2	250			21 Tu			03:12 AM	7.4	226			6 F			04:33 AM	8.2	250				21 F	03:32 AM	7.9	241			21 F	03:09 AM	8.3	253		21 F	03:58 AM	8.0	244		10:23 AM	2.1	64			04:25 PM	7.1	216				10:30 PM	1.0	30				7 Tu	05:17 AM	8.2	250				22 W	03:42 AM	7.5	229				7 Sa	10:55 AM	1.4	43				22 Sa	04:11 AM	7.9	241			22 Sa	03:31 AM	8.5	259		22 Sa	04:47 PM	6.1	186		22 Sa	03:58 AM	8.0	244			11:26 AM	2.1	64				05:32 PM	6.4	195				11:21 PM	1.7	52				8 W ●	06:09 AM	8.1	247				23 Th	04:16 AM	7.6	232				8 Su	05:20 AM	7.9	241			23 Su		04:17 PM	6.0	183			23 Su	04:17 PM	6.0	183		23 Su	04:47 PM	6.1	186		23 Su	04:47 PM	6.1	186			12:35 PM	1.9	58				06:46 PM	5.8	177										9 Th	12:17 AM	2.4	73				24 F ●	04:56 AM	7.7	235				9 M	06:13 AM	7.6	232			24 M		05:01 AM	7.8	238			24 M	05:05 PM	5.6	171		24 M	05:05 PM	5.6	171		24 M	05:33 AM	7.5	229			07:03 AM	8.1	247				01:45 PM	1.6	49				08:02 PM	5.7	174				10 F	01:18 AM	3.0	91				25 Sa	11:24 AM	2.3	70				10 Tu	07:12 AM	7.4	226			25 Tu		05:01 AM	7.8	238			25 Tu	05:18 AM	7.5	229		25 Tu	05:18 AM	7.5																																																																																																																																																																																																			
	03:25 PM	7.9	241				09:44 PM	0.2	6		6 M			04:29 AM	8.2	250		21 Tu				03:12 AM	7.4	226		6 F				04:33 AM	8.2	250		21 F				03:32 AM	7.9	241		21 F			03:09 AM	8.3	253		21 F		03:58 AM	8.0	244			10:23 AM	2.1	64		04:25 PM	7.1	216			10:30 PM	1.0	30			7 Tu	05:17 AM	8.2	250		22 W			03:42 AM	7.5	229		7 Sa			10:55 AM	1.4	43		22 Sa			04:11 AM	7.9	241		22 Sa			03:31 AM	8.5	259		22 Sa		04:47 PM	6.1	186			22 Sa	03:58 AM	8.0	244			11:26 AM	2.1		64		05:32 PM	6.4		195		11:21 PM	1.7	52			8 W ●	06:09 AM	8.1	247		23 Th			04:16 AM	7.6	232		8 Su			05:20 AM	7.9	241		23 Su			04:17 PM	6.0	183		23 Su			04:17 PM	6.0	183		23 Su		04:47 PM	6.1	186			23 Su	04:47 PM	6.1	186			12:35 PM	1.9		58		06:46 PM	5.8		177							9 Th	12:17 AM	2.4	73		24 F ●			04:56 AM	7.7	235		9 M			06:13 AM	7.6	232		24 M			05:01 AM	7.8	238		24 M			05:05 PM	5.6	171		24 M		05:05 PM	5.6	171			24 M	05:33 AM	7.5	229			07:03 AM	8.1		247		01:45 PM	1.6		49		08:02 PM	5.7	174			10 F	01:18 AM	3.0	91		25 Sa			11:24 AM	2.3	70		10 Tu			07:12 AM	7.4	226		25 Tu			05:01 AM	7.8	238		25 Tu			05:18 AM	7.5	229		25 Tu		05:18 AM	7.5																																																																																																																																																																																																								
	09:44 PM	0.2	6			6 M	04:29 AM	8.2	250				21 Tu	03:12 AM	7.4	226					6 F	04:33 AM	8.2	250				21 F		03:32 AM	7.9	241				21 F		03:09 AM	8.3	253			21 F		03:58 AM	8.0	244				10:23 AM	2.1	64			04:25 PM	7.1	216		10:30 PM	1.0	30		7 Tu	05:17 AM	8.2	250		22 W		03:42 AM	7.5	229			7 Sa		10:55 AM	1.4	43			22 Sa		04:11 AM	7.9	241			22 Sa		03:31 AM	8.5	259			22 Sa		04:47 PM	6.1	186				22 Sa	03:58 AM	8.0	244				11:26 AM	2.1		64		05:32 PM	6.4	195		11:21 PM	1.7	52		8 W ●	06:09 AM	8.1	247		23 Th		04:16 AM	7.6	232			8 Su		05:20 AM	7.9	241			23 Su		04:17 PM	6.0	183			23 Su		04:17 PM	6.0	183				23 Su	04:47 PM	6.1	186				23 Su	04:47 PM	6.1	186				12:35 PM	1.9		58		06:46 PM	5.8	177						9 Th	12:17 AM	2.4	73		24 F ●		04:56 AM	7.7	235			9 M		06:13 AM	7.6	232			24 M		05:01 AM	7.8	238			24 M		05:05 PM	5.6	171				24 M	05:05 PM	5.6	171				24 M	05:33 AM	7.5	229				07:03 AM	8.1		247		01:45 PM	1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91		25 Sa		11:24 AM	2.3	70			10 Tu		07:12 AM	7.4	226			25 Tu		05:01 AM	7.8	238			25 Tu		05:18 AM	7.5	229				25 Tu	05:18 AM	7.5																																																																																																																																																																																																														
6 M	04:29 AM	8.2	250		21 Tu		03:12 AM	7.4	226			6 F		04:33 AM	8.2	250				21 F		03:32 AM	7.9	241					21 F	03:09 AM	8.3	253					21 F	03:58 AM	8.0	244																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	10:23 AM	2.1	64				04:25 PM	7.1	216					10:30 PM	1.0	30			7 Tu			05:17 AM	8.2	250			22 W			03:42 AM	7.5	229			7 Sa			10:55 AM	1.4	43				22 Sa	04:11 AM	7.9	241			22 Sa	03:31 AM	8.5	259		22 Sa	04:47 PM	6.1	186		22 Sa	03:58 AM	8.0	244			11:26 AM	2.1	64				05:32 PM	6.4	195				11:21 PM	1.7	52				8 W ●	06:09 AM	8.1	247				23 Th	04:16 AM	7.6	232				8 Su	05:20 AM	7.9	241			23 Su		04:17 PM	6.0	183			23 Su	04:17 PM	6.0	183		23 Su	04:47 PM	6.1	186		23 Su	04:47 PM	6.1	186			12:35 PM	1.9	58				06:46 PM	5.8	177										9 Th	12:17 AM	2.4	73				24 F ●	04:56 AM	7.7	235			9 M		06:13 AM	7.6	232			24 M		05:01 AM	7.8	238			24 M	05:05 PM	5.6	171		24 M	05:05 PM	5.6	171		24 M	05:33 AM	7.5	229			07:03 AM	8.1	247				01:45 PM	1.6	49				08:02 PM	5.7	174				10 F	01:18 AM	3.0	91				25 Sa	11:24 AM	2.3	70			10 Tu		07:12 AM	7.4	226			25 Tu		05:01 AM	7.8	238			25 Tu	05:18 AM	7.5	229		25 Tu	05:18 AM	7.5																																																																																																																																																																																																																																																									
	04:25 PM	7.1	216				10:30 PM	1.0	30		7 Tu			05:17 AM	8.2	250		22 W				03:42 AM	7.5	229		7 Sa				10:55 AM	1.4	43		22 Sa				04:11 AM	7.9	241		22 Sa			03:31 AM	8.5	259		22 Sa		04:47 PM	6.1	186			22 Sa	03:58 AM	8.0	244			11:26 AM	2.1		64		05:32 PM	6.4		195		11:21 PM	1.7	52			8 W ●	06:09 AM	8.1	247		23 Th			04:16 AM	7.6	232		8 Su			05:20 AM	7.9	241		23 Su			04:17 PM	6.0	183		23 Su			04:17 PM	6.0	183		23 Su		04:47 PM	6.1	186			23 Su	04:47 PM	6.1	186			12:35 PM	1.9		58		06:46 PM	5.8		177							9 Th	12:17 AM	2.4	73		24 F ●			04:56 AM	7.7	235		9 M			06:13 AM	7.6	232		24 M			05:01 AM	7.8	238		24 M			05:05 PM	5.6	171		24 M		05:05 PM	5.6	171			24 M	05:33 AM	7.5	229			07:03 AM	8.1		247		01:45 PM	1.6		49		08:02 PM	5.7	174			10 F	01:18 AM	3.0	91		25 Sa			11:24 AM	2.3	70		10 Tu			07:12 AM	7.4	226		25 Tu			05:01 AM	7.8	238		25 Tu			05:18 AM	7.5	229		25 Tu		05:18 AM	7.5																																																																																																																																																																																																																																																														
	10:30 PM	1.0	30			7 Tu	05:17 AM	8.2	250				22 W	03:42 AM	7.5	229					7 Sa	10:55 AM	1.4	43				22 Sa		04:11 AM	7.9	241				22 Sa		03:31 AM	8.5	259			22 Sa		04:47 PM	6.1	186				22 Sa	03:58 AM	8.0	244				11:26 AM	2.1		64		05:32 PM	6.4	195		11:21 PM	1.7	52		8 W ●	06:09 AM	8.1	247		23 Th		04:16 AM	7.6	232			8 Su		05:20 AM	7.9	241			23 Su		04:17 PM	6.0	183			23 Su		04:17 PM	6.0	183				23 Su	04:47 PM	6.1	186				23 Su	04:47 PM	6.1	186				12:35 PM	1.9		58		06:46 PM	5.8	177						9 Th	12:17 AM	2.4	73		24 F ●		04:56 AM	7.7	235			9 M		06:13 AM	7.6	232			24 M		05:01 AM	7.8	238				24 M	05:05 PM	5.6	171				24 M	05:05 PM	5.6	171				24 M	05:33 AM	7.5	229				07:03 AM	8.1		247		01:45 PM	1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91		25 Sa		11:24 AM	2.3	70			10 Tu		07:12 AM	7.4	226			25 Tu		05:01 AM	7.8	238				25 Tu	05:18 AM	7.5	229				25 Tu	05:18 AM	7.5																																																																																																																																																																																																																																																																				
7 Tu	05:17 AM	8.2	250		22 W		03:42 AM	7.5	229			7 Sa		10:55 AM	1.4	43				22 Sa		04:11 AM	7.9	241					22 Sa	03:31 AM	8.5	259					22 Sa	04:47 PM	6.1	186					22 Sa	03:58 AM	8.0	244																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	11:26 AM	2.1	64				05:32 PM	6.4	195					11:21 PM	1.7	52			8 W ●			06:09 AM	8.1	247			23 Th			04:16 AM	7.6	232			8 Su			05:20 AM	7.9	241				23 Su		04:17 PM	6.0	183				23 Su	04:17 PM	6.0	183			23 Su	04:47 PM	6.1	186		23 Su	04:47 PM	6.1	186		12:35 PM	1.9	58			06:46 PM	5.8	177										9 Th	12:17 AM	2.4	73				24 F ●	04:56 AM	7.7	235				9 M	06:13 AM	7.6	232				24 M	05:01 AM	7.8	238				24 M	05:05 PM	5.6	171			24 M	05:05 PM	5.6	171		24 M	05:33 AM	7.5	229		07:03 AM	8.1	247			01:45 PM	1.6	49				08:02 PM	5.7	174				10 F	01:18 AM	3.0	91				25 Sa	11:24 AM	2.3	70				10 Tu	07:12 AM	7.4	226				25 Tu	05:01 AM	7.8	238				25 Tu	05:18 AM	7.5	229			25 Tu	05:18 AM	7.5																																																																																																																																																																																																																																																																																																																			
	05:32 PM	6.4	195				11:21 PM	1.7	52		8 W ●			06:09 AM	8.1	247		23 Th				04:16 AM	7.6	232		8 Su				05:20 AM	7.9	241		23 Su				04:17 PM	6.0	183		23 Su				04:17 PM	6.0	183		23 Su			04:47 PM	6.1	186		23 Su		04:47 PM	6.1	186			12:35 PM	1.9	58		06:46 PM	5.8	177								9 Th	12:17 AM	2.4	73			24 F ●		04:56 AM	7.7	235			9 M		06:13 AM	7.6	232			24 M		05:01 AM	7.8	238		24 M			05:05 PM	5.6	171		24 M			05:05 PM	5.6	171		24 M		05:33 AM	7.5	229			07:03 AM	8.1	247		01:45 PM	1.6	49			08:02 PM	5.7	174			10 F	01:18 AM	3.0	91			25 Sa		11:24 AM	2.3	70			10 Tu		07:12 AM	7.4	226		25 Tu			05:01 AM	7.8	238		25 Tu			05:18 AM	7.5	229		25 Tu			05:18 AM	7.5																																																																																																																																																																																																																																																																																																																									
	11:21 PM	1.7	52			8 W ●	06:09 AM	8.1	247				23 Th	04:16 AM	7.6	232					8 Su	05:20 AM	7.9	241				23 Su		04:17 PM	6.0	183				23 Su		04:17 PM	6.0	183			23 Su			04:47 PM	6.1	186			23 Su		04:47 PM	6.1	186				12:35 PM	1.9	58			06:46 PM	5.8	177						9 Th	12:17 AM	2.4	73		24 F ●		04:56 AM	7.7	235		9 M			06:13 AM	7.6	232		24 M			05:01 AM	7.8	238		24 M			05:05 PM	5.6	171			24 M		05:05 PM	5.6	171			24 M		05:33 AM	7.5	229				07:03 AM	8.1	247			01:45 PM	1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91		25 Sa		11:24 AM	2.3	70		10 Tu			07:12 AM	7.4	226		25 Tu			05:01 AM	7.8	238			25 Tu		05:18 AM	7.5	229			25 Tu		05:18 AM	7.5																																																																																																																																																																																																																																																																																																																																
8 W ●	06:09 AM	8.1	247		23 Th		04:16 AM	7.6	232			8 Su		05:20 AM	7.9	241				23 Su		04:17 PM	6.0	183					23 Su	04:17 PM	6.0	183					23 Su	04:47 PM	6.1	186					23 Su	04:47 PM	6.1	186																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	12:35 PM	1.9	58				06:46 PM	5.8	177										9 Th			12:17 AM	2.4	73			24 F ●			04:56 AM	7.7	235			9 M			06:13 AM	7.6	232				24 M		05:01 AM	7.8	238				24 M	05:05 PM	5.6	171			24 M	05:05 PM	5.6	171		24 M	05:33 AM	7.5	229		07:03 AM	8.1	247			01:45 PM	1.6	49				08:02 PM	5.7	174				10 F	01:18 AM	3.0	91				25 Sa	11:24 AM	2.3	70				10 Tu	07:12 AM	7.4	226				25 Tu	05:01 AM	7.8	238				25 Tu	05:18 AM	7.5	229			25 Tu	05:18 AM	7.5																																																																																																																																																																																																																																																																																																																																																																																
	06:46 PM	5.8	177								9 Th			12:17 AM	2.4	73		24 F ●				04:56 AM	7.7	235		9 M				06:13 AM	7.6	232		24 M				05:01 AM	7.8	238		24 M				05:05 PM	5.6	171		24 M			05:05 PM	5.6	171		24 M		05:33 AM	7.5	229			07:03 AM	8.1	247		01:45 PM	1.6	49			08:02 PM	5.7	174			10 F	01:18 AM	3.0	91			25 Sa		11:24 AM	2.3	70			10 Tu		07:12 AM	7.4	226			25 Tu		05:01 AM	7.8	238		25 Tu			05:18 AM	7.5	229		25 Tu			05:18 AM	7.5																																																																																																																																																																																																																																																																																																																																																																																						
						9 Th	12:17 AM	2.4	73				24 F ●	04:56 AM	7.7	235					9 M	06:13 AM	7.6	232				24 M		05:01 AM	7.8	238				24 M		05:05 PM	5.6	171			24 M			05:05 PM	5.6	171			24 M		05:33 AM	7.5	229				07:03 AM	8.1	247			01:45 PM	1.6	49		08:02 PM	5.7	174		10 F	01:18 AM	3.0	91		25 Sa		11:24 AM	2.3	70		10 Tu			07:12 AM	7.4	226		25 Tu			05:01 AM	7.8	238		25 Tu			05:18 AM	7.5	229			25 Tu		05:18 AM	7.5																																																																																																																																																																																																																																																																																																																																																																																													
9 Th	12:17 AM	2.4	73		24 F ●		04:56 AM	7.7	235			9 M		06:13 AM	7.6	232				24 M		05:01 AM	7.8	238					24 M	05:05 PM	5.6	171					24 M	05:05 PM	5.6	171					24 M	05:33 AM	7.5	229																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	07:03 AM	8.1	247				01:45 PM	1.6	49					08:02 PM	5.7	174			10 F			01:18 AM	3.0	91			25 Sa			11:24 AM	2.3	70			10 Tu			07:12 AM	7.4	226				25 Tu		05:01 AM	7.8	238				25 Tu	05:18 AM	7.5	229			25 Tu	05:18 AM	7.5																																																																																																																																																																																																																																																																																																																																																																																																																																													
	01:45 PM	1.6	49				08:02 PM	5.7	174		10 F			01:18 AM	3.0	91		25 Sa				11:24 AM	2.3	70		10 Tu				07:12 AM	7.4	226		25 Tu				05:01 AM	7.8	238		25 Tu				05:18 AM	7.5	229		25 Tu			05:18 AM	7.5																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	08:02 PM	5.7	174			10 F	01:18 AM	3.0	91				25 Sa	11:24 AM	2.3	70					10 Tu	07:12 AM	7.4	226				25 Tu		05:01 AM	7.8	238				25 Tu		05:18 AM	7.5	229			25 Tu			05:18 AM	7.5																																																																																																																																																																																																																																																																																																																																																																																																																																																										
10 F	01:18 AM	3.0	91		25 Sa		11:24 AM	2.3	70			10 Tu		07:12 AM	7.4	226				25 Tu		05:01 AM	7.8	238					25 Tu	05:18 AM	7.5	229					25 Tu	05:18 AM	7.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

Page 2 of 5



StationId:9440574
Source:NOAA/NOS/CO-OPS
Station Type:Subordinate
Time Zone:LST/LDT
Datum:mean lower low water (MLLW) which is the chart datum of soundings

NOAA Tide Predictions

Columbia River entrance (N. Jetty),Washington,2014

Times and Heights of High and Low Waters

April					May					June				
Time		Height			Time		Height			Time		Height		
h	m	ft	cm		h	m	ft	cm		h	m	ft	cm	
1	02:16 AM	8.4	256		1	02:17 AM	8.1	247		1	03:00 AM	7.2	219	
Tu	08:36 AM	-0.5	-15		Th	08:58 AM	-0.7	-21		F	08:39 AM	-1.1	-34	
	03:00 PM	7.3	223			03:33 PM	6.6	201		Su	03:23 PM	6.6	201	
	08:37 PM	1.2	37			08:51 PM	2.4	73			08:32 PM	2.5	76	
2	02:52 AM	8.3	253		2	02:52 AM	7.7	235		16	01:50 AM	8.4	256	
W	09:20 AM	-0.4	-12		F	09:38 AM	-0.4	-12		17	02:33 AM	8.4	256	
	03:47 PM	6.9	210			04:18 PM	6.4	195		Sa	09:24 AM	-1.1	-34	
	09:16 PM	1.7	52			09:32 PM	2.7	82			04:11 PM	6.6	201	
3	03:28 AM	8.0	244		3	03:28 AM	7.4	226		17	02:33 AM	8.4	256	
Th	10:04 AM	-0.1	-3		Sa	10:18 AM	0.0	0		18	03:20 AM	8.1	247	
	04:35 PM	6.4	195			10:16 PM	3.0	91		Su	10:10 AM	-0.9	-27	
	09:57 PM	2.2	67								05:02 PM	6.6	201	
4	04:05 AM	7.6	232		4	04:07 AM	6.9	210		18	03:20 AM	8.1	247	
F	10:48 AM	0.3	9		Su	11:00 AM	0.4	12		19	04:13 AM	7.7	235	
	05:26 PM	6.0	183			11:05 PM	3.2	98		M	11:01 AM	-0.5	-15	
	10:41 PM	2.7	82								05:56 PM	6.6	201	
5	04:45 AM	7.1	216		5	04:52 AM	6.5	198		20	05:14 AM	7.1	216	
Sa	11:37 AM	0.7	21		M	11:46 AM	0.9	27		Tu	11:56 AM	0.0	0	
	06:22 PM	5.7	174			06:45 PM	5.8	177			06:53 PM	6.7	204	
	11:31 PM	3.1	94											
6	05:32 AM	6.6	201		6	12:03 AM	3.4	104		21	12:27 AM	2.6	79	
Su	12:33 PM	1.2	37		Tu	05:48 AM	6.0	183		21	06:26 AM	6.5	198	
	07:24 PM	5.5	168			12:38 PM	1.3	40		W	12:55 PM	0.4	12	
7	12:33 AM	3.4	104		7	01:09 AM	3.3	101		22	01:41 AM	2.2	67	
M	06:32 AM	6.1	184		W	06:58 AM	5.6	171		22	07:46 AM	6.1	186	
Mo	01:36 PM	1.4	43			01:34 PM	1.6	49		Th	01:57 PM	0.9	27	
	08:28 PM	5.5	168		Mo	08:32 PM	6.0	183			08:47 PM	7.3	223	
8	01:44 AM	3.5	107		8	02:18 AM	3.0	91		23	02:53 AM	1.6	49	
Tu	07:46 AM	5.8	177		Th	08:15 AM	5.4	165		F	09:04 AM	5.9	180	
	02:39 PM	1.5	46			02:31 PM	1.7	52			02:57 PM	1.2	37	
	09:26 PM	5.7	174			09:21 PM	6.4	195			09:39 PM	7.7	235	
9	02:55 AM	3.2	98		9	03:21 AM	2.4	73		24	03:59 AM	0.8	24	
W	08:59 AM	5.8	177		F	09:26 AM	5.5	168		Sa	10:14 AM	6.0	183	
	03:37 PM	1.5	46			03:24 PM	1.8	55			03:53 PM	1.5	46	
	10:16 PM	6.1	186			10:04 PM	6.8	207			10:27 PM	8.0	244	
10	03:57 AM	2.7	82		10	04:17 AM	1.7	52		24	03:59 AM	0.8	24	
Th	10:04 AM	6.0	183		Sa	10:28 AM	5.7	174		25	04:56 AM	0.1	3	
	04:26 PM	1.4	43			04:12 PM	1.9	58		Su	11:15 AM	6.2	189	
	10:58 PM	6.5	198			10:43 PM	7.1	216			04:45 PM	1.7	52	
11	04:50 AM	2.1	64		11	05:06 AM	1.0	30		25	11:12 PM	8.2	250	
F	10:59 AM	6.3	192		Su	11:23 AM	5.9	180		26	05:47 AM	-0.4	-12	
	05:08 PM	1.3	40			04:57 PM	2.0	61		M	12:11 PM	6.3	192	
	11:36 PM	6.9	210			11:20 PM	7.5	229			05:34 PM	2.0	61	
12	05:36 AM	1.4	43		12	05:50 AM	0.4	12		26	11:53 PM	8.3	253	
Sa	11:48 AM	6.5	198		M	12:13 PM	6.2	189		27	06:34 AM	-0.8	-24	
	05:46 PM	1.3	40			05:39 PM	2.1	64		Tu	01:02 PM	6.4	195	
13	12:09 AM	7.2	219			11:56 PM	7.8	238			06:20 PM	2.2	67	
Su	06:18 AM	0.9	27		13	06:33 AM	-0.2	-6		27	01:02 PM	6.4	195	
	12:34 PM	6.7	204		Tu	01:01 PM	6.4	195		28	06:34 AM	-0.8	-24	
	06:22 PM	1.4	43			06:21 PM	2.2	67		W	01:49 PM	6.5	198	
14	12:41 AM	7.5	229							Mo	07:04 PM	2.4	73	
M	06:58 AM	0.4	12		14	12:32 AM	8.1	247		28	12:33 AM	8.2	250	
	01:18 PM	6.8	207		W	07:15 AM	-0.6	-18		29	07:18 AM	-0.9	-27	
	06:57 PM	1.5	46		O	01:49 PM	6.5	198		Th	01:49 PM	6.5	198	
15	01:12 AM	7.8	238			07:03 PM	2.3	70			07:47 PM	2.6	79	
Tu	07:36 AM	0.0	0		15	01:10 AM	8.3	253		29	01:11 AM	8.1	247	
O	02:01 PM	6.8	207		Th	07:56 AM	-0.9	-27		30	07:59 AM	-0.9	-27	
	07:33 PM	1.7	52			02:35 PM	6.6	201		F	03:17 PM	6.4	195	
						07:47 PM	2.4	73			08:29 PM	2.8	85	
										31	02:24 AM	7.5	229	
										Sa	09:15 AM	-0.5	-15	
											03:58 PM	6.4	195	
											09:11 PM	2.9	88	

Disclaimer: These data are based upon the latest information available as of the date of your request, and may differ from the published tide tables.

Referenced to Station: ASTORIA (Tongue Point), Oreg. (9439040) Time offset in mins (high:-44 low:-60) Height offset in feet (high:-1.00 low:+0.10)



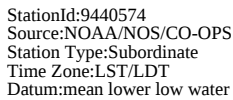
StationId:9440574
Source:NOAA/NOS/CO-OPS
Station Type:Subordinate
Time Zone:LST/LDT
Datum:mean lower low water (MLLW) which is the chart datum of soundings

NOAA Tide Predictions

Columbia River entrance (N. Jetty),Washington,2014

Times and Heights of High and Low Waters

July					August					September				
Time		Height			Time		Height			Time		Height		
	h m ft cm					h m ft cm					h m ft cm			
1 Tu	03:19 AM	6.8	207		1 F	04:25 AM	5.9	180		16 Sa	05:48 AM	5.8	177	
	09:53 AM	0.1	3			10:18 AM	0.9	27			11:22 AM	1.2	37	
	04:40 PM	6.4	195			04:56 PM	6.8	207			05:54 PM	7.3	223	
	10:11 PM	2.6	79			11:06 PM	1.6	49						
2 W	04:00 AM	6.4	195		2 Sa	05:15 AM	5.4	165		17 Su	12:31 AM	0.4	12	
	10:24 AM	0.4	12			10:54 AM	1.3	40			06:56 AM	5.2	158	
	05:14 PM	6.5	198			05:32 PM	6.8	207			12:16 PM	1.9	58	
	10:56 PM	2.5	76			11:59 PM	1.5	46			06:48 PM	7.0	213	
3 Th	04:46 AM	6.0	183		3 Su	06:18 AM	4.9	149		18 M	01:39 AM	0.5	15	
	10:58 AM	0.8	24			11:38 AM	1.9	58			08:08 AM	4.9	149	
	05:50 PM	6.6	201			06:18 PM	6.9	210			01:18 PM	2.4	73	
	11:47 PM	2.4	73						07:48 PM		6.7	204		
4 F	05:41 AM	5.5	168		4 Mo	01:03 AM	1.3	40		19 Tu	02:48 AM	0.5	15	
	11:37 AM	1.3	40			07:34 AM	4.6	140			09:20 AM	5.0	152	
	06:30 PM	6.7	204			12:34 PM	2.3	70			02:27 PM	2.7	82	
						07:13 PM	6.9	210			08:51 PM	6.6	201	
5 Sa	12:46 AM	2.2	67		5 Tu	02:15 AM	0.9	27		20 W	03:52 AM	0.3	9	
	06:48 AM	5.0	152			08:54 AM	4.6	140			10:23 AM	5.2	158	
	12:23 PM	1.8	55			01:43 PM	2.7	82			03:33 PM	2.7	82	
	07:16 PM	6.8	207			08:16 PM	7.1	216			09:51 PM	6.6	201	
6 Su	01:51 AM	1.8	55		6 W	03:25 AM	0.4	12		21 Th	04:46 AM	0.0	0	
	08:06 AM	4.8	146			10:06 AM	4.9	149			11:16 AM	5.6	171	
	01:18 PM	2.2	67			02:58 PM	2.8	85			04:32 PM	2.5	76	
	08:06 PM	7.0	213			09:21 PM	7.3	223			10:45 PM	6.7	204	
7 M	02:56 AM	1.2	37		7 Th	04:27 AM	-0.2	-6		22 F	05:32 AM	-0.2	-6	
	09:22 AM	4.8	146			11:07 AM	5.4	165			12:01 PM	5.9	180	
	02:21 PM	2.6	79			04:08 PM	2.6	79			05:23 PM	2.2	67	
	08:59 PM	7.3	223			10:24 PM	7.6	232			11:32 PM	6.8	207	
8 Tu	03:58 AM	0.6	18		8 F	05:22 AM	-0.8	-24		23 Sa	06:12 AM	-0.3	-9	
	10:29 AM	5.1	155			12:00 PM	5.9	180			12:40 AM	6.2	189	
	03:25 PM	2.7	82			05:10 PM	2.2	67			06:09 PM	1.9	58	
	09:52 PM	7.6	232			11:23 PM	8.0	244						
9 W	04:54 AM	-0.1	-3		9 Sa	06:13 AM	-1.2	-37		24 Su	12:15 AM	6.9	210	
	11:29 AM	5.5	168			12:48 PM	6.4	195			06:48 AM	-0.3	-9	
	04:26 PM	2.7	82			06:08 PM	1.7	52			01:15 PM	6.4	195	
	10:44 PM	8.0	244						06:50 PM		1.6	49		
10 Th	05:45 AM	-0.7	-21		10 Su	12:19 AM	8.2	250		25 Mo	12:56 AM	6.9	210	
	12:23 PM	5.9	180			06:59 AM	-1.4	-43			07:20 AM	-0.2	-6	
	05:25 PM	2.6	79			01:33 PM	6.9	210			01:48 PM	6.5	198	
	11:37 PM	8.3	253			07:03 PM	1.2	37			07:29 PM	1.3	40	
11 F	06:34 AM	-1.2	-37		11 M	01:13 AM	8.2	250		26 Tu	01:34 AM	6.8	207	
	01:13 PM	6.3	192			07:44 AM	-1.4	-43			07:51 AM	0.0	0	
	06:21 PM	2.4	73			02:17 PM	7.3	223			02:17 PM	6.6	201	
						07:56 PM	0.7	21			08:05 PM	1.1	34	
12 Sa	12:29 AM	8.5	259		12 Tu	02:06 AM	8.1	247		27 W	02:12 AM	6.7	204	
	07:21 AM	-1.5	-46			08:27 AM	-1.2	-37			08:19 AM	0.2	6	
	02:01 PM	6.7	204			02:59 PM	7.6	232			02:44 PM	6.8	207	
	07:15 PM	2.1	64			08:47 PM	0.4	12			08:41 PM	1.0	30	
13 Su	01:21 AM	8.5	259		13 W	02:59 AM	7.7	235		28 Th	02:50 AM	6.5	198	
	08:07 AM	-1.6	-49			09:09 AM	-0.8	-24			08:47 AM	0.5	15	
	02:47 PM	7.0	213			03:41 PM	7.7	235			03:10 PM	6.9	210	
	08:09 PM	1.8	55			09:39 PM	0.2	6			09:15 PM	0.8	24	
14 M	02:14 AM	8.3	253		14 Th	03:52 AM	7.1	216		29 F	03:29 AM	6.2	189	
	08:52 AM	-1.5	-46			09:52 AM	-0.2	-6			09:15 AM	0.8	24	
	03:31 PM	7.3	223			04:23 PM	7.7	235			03:37 PM	7.0	213	
	09:03 PM	1.5	46			10:33 PM	0.2	6			09:51 PM	0.7	21	
15 Tu	03:07 AM	8.0	244		15 F	04:48 AM	6.5	198		30 Sa	04:11 AM	5.8	177	
	09:35 AM	-1.2	-37			10:35 AM	0.5	15			09:45 AM	1.2	37	
	04:16 PM	7.5	229			05:07 PM	7.6	232			04:08 PM	7.0	213	
	09:57 PM	1.3	40			11:29 PM	0.3	9			10:31 PM	0.7	21	
16 W	04:02 AM	7.4	226		16 Sa	05:48 AM	5.9	180		31 Su	04:59 AM	5.4	165	
	10:20 AM	-0.6	-18			11:22 AM	1.2	37			10:22 AM	1.7	52	
	05:01 PM	7.6	232			04:56 PM	6.8	207			04:45 PM	7.0	213	
	10:55 PM	1.1	34			11:06 PM	1.6	49			11:20 PM	0.7	21	
17 Th	05:00 AM	6.7	204		17 Su	05:15 AM	5.4	165		1 M	05:59 AM	4.9	149	
	11:05 AM	0.0	0			10:54 AM	1.3	40			11:07 AM	2.1	64	
	05:47 PM	7.6	232			05:32 PM	6.8	207			05:31 PM	6.9	210	
	11:56 PM	1.0	30			11:59 PM	1.5	46						
18 F	06:05 AM	6.0	183		18 M	06:18 AM	4.9	149		2 Tu	12:23 AM	0.8	24	
	11:54 AM	0.8	24			11:38 AM	1.9	58			07:13 AM	4.7	143	
	06:37 PM	7.6	232			06:18 PM	6.9	210			12:07 PM	2.6	79	
									06:31 PM		6.7	204		
19 Sa	01:01 AM	0.9	27		19 Tu	01:03 AM	1.3	40		3 W	01:38 AM	0.7	21	
	07:15 AM	5.4	165			07:34 AM	4.6	140			08:32 AM	4.7	143	
	12:48 PM	1.5	46			12:34 PM	2.3	70			01:24 PM	2.8	85	
	07:31 PM	7.5	229			07:13 PM	6.9	210			07:45 PM	6.7	204	
20 Su	02:10 AM	0.7	21		20 W	02:15 AM	0.9	27		4 Th	02:54 AM	0.3	9	
	08:30 AM	5.1	155			08:54 AM	4.6	140			09:43 AM	5.1	155	
	01:48 PM	2.1	64			01:43 PM	2.7	82			02:46 PM	2.7	82	
	08:27 PM	7.4	226			08:16 PM	7.1	216			09:02 PM	6.8	207	
21 M	03:18 AM	0.4	12		21 Th	03:25 AM	0.4	12		5 F	04:00 AM	-0.1	-3	
	09:42 AM	5.1	155			10:06 AM	4.9	149			10:42 AM	5.7	174	
	02:51 PM	2.4	73			02:58 PM	2.8	85			03:58 PM	2.3	70	
	09:23 PM	7.4	226			09:21 PM	7.3	223			10:12 PM	7.2	219	
22 Tu	04:19 AM	0.0	0		22 F	04:27 AM	-0.2	-6		6 Sa	04:57 AM	-0.5	-15	
	10:46 AM	5.3	162			11:07 AM	5.4	165			11:33 AM	6.3	192	
	03:52 PM	2.6	79			04:08 PM	2.6	79			05:01 PM	1.6	49	
	10:15 PM	7.4	226			10:24 PM	7.6	232			11:14 PM	7.5	229	
23 W	05:12 AM	-0.3	-9		23 F	05:22 AM	-0.8	-24		7 Su	05:47 AM	-0.8	-24	
	11:41 AM	5.6	171			12:00 PM	5.9	180			12:19 PM	6.9	210	
	04:49 PM	2.6	79			05:10 PM	2.2	67			05:57 PM	0.9	27	
	11:04 PM	7.4	226			11:23 PM	8.0	244						
24 Th	05:59 AM	-0.5	-15		24 Sa	06:13 AM	-1.2	-37		8 M	12:12 AM	7.8	238	
	12:29 PM	5.9	180			12:48 PM	6.4	195			06:33 AM	-0.9	-27	
	05:40 PM	2.5	76			06:08 PM	1.7	52			01:02 PM	7.4	226	
	11:49 PM	7.4	226						06:50 PM		0.2	6		
25 F	06:40 AM	-0.6	-18		25 Su	12:19 AM	8.2	250		9 Tu	01:06 AM	7.8	238	
	01:11 PM	6.1	186			06:59 AM	-1.4	-43			07:17 AM	-0.8	-24	
	06:26 PM	2.4	73			01:33 PM	6.9	210			01:43 PM	7.7	235	
						07:03 PM	1.2	37			07:41 PM	-0.3	-9	
26 Sa	12:31 AM	7.3	223		10 M	01:13 AM	8.2	250		10 W	01:58 AM	7.7	235	
	07:17 AM	-0.6	-18			07:44 AM	-1.4	-43			07:59 AM	-0.5	-15	
	01:50 PM	6.3	192			02:17 PM	7.3	223			02:23 PM	8.0	244	
	07:10 PM	2.3	70			07:56 PM	0.7	21			08:30 PM	-0.6	-18	
27 Su	01:10 AM	7.2	219		11 Tu	02:06 AM	8.1	247		11 Th	02:49 AM	7.3	223	
	07:52 AM	-0.5	-15			08:27 AM	-1.2	-37			08:41 AM	0.0	0	
	02:25 PM	6.4	195			02:59 PM	7.6	232			03:03 PM	8.0	244	
	07:50 PM	2.2	67			08:47 PM	0.4	12			09:19 PM	-0.6	-18	
28 M	01:48 AM	7.1	216		12 W	02:59 AM	7.7	235		12 F	03:40 AM	6.9	210	
	08:23 AM	-0.3	-9			09:09 AM	-0.8	-24			09:22 AM	0.6	18	
	02:58 PM	6.4	195			03:41 PM	7.7	235			03:43 PM	7.8	238	
	08:28 PM	2.0	61			09:39 PM	0.2	6			10:08 PM	-0.5	-15	
29 Tu	02:26 AM	6.9	210		13 W	03:52 AM	7.1	216		13 Sa	04:33 AM	6.3	192	
	08:52 AM	-0.1	-3			09:52 AM	-0.2							



October					November					December																			
Time		Height		Time		Height		Time		Height		Time		Height															
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm		h	m	ft	cm										
1 W o	06:59 AM	5.2	158		16 Th	01:17 AM	1.1	34		1 Sa	01:51 AM	0.8	24		16 Su	01:12 AM	2.0	61		1 M	01:19 AM	1.7	52		16 Tu	12:55 AM	2.8	85	
	11:57 AM	3.0	91			08:12 AM	5.6	171			08:47 AM	6.7	204			08:04 AM	6.7	204			08:06 AM	8.0	244			07:46 AM	7.4	226	
	06:04 PM	6.6	201			01:34 PM	3.2	98			02:33 PM	2.4	73			02:10 PM	2.6	79			02:29 PM	1.4	43			02:24 PM	2.2	67	
						07:33 PM	5.6	171			08:40 PM	6.2	189			08:13 PM	5.5	168			08:43 PM	6.2	189			08:39 PM	5.4	165	
2 Th	01:09 AM	0.5	15		17 F	02:20 AM	1.3	40		2 Su	01:56 AM	0.9	27		17 M	02:05 AM	2.2	67		2 Tu	02:19 AM	2.0	61		17 W	01:53 AM	3.1	94	
	08:12 AM	5.3	162			09:09 AM	5.8	177			08:41 AM	7.3	223			08:47 AM	7.1	216			08:57 AM	8.4	256			08:31 AM	7.7	235	
	01:19 PM	3.0	91			02:44 PM	2.9	88			02:42 PM	1.6	49			03:05 PM	1.9	58			03:30 PM	0.6	18			03:19 PM	1.5	46	
	07:26 PM	6.4	195			08:47 PM	5.5	168			08:55 PM	6.4	195			09:16 PM	5.7	174			09:50 PM	6.4	195			09:42 PM	5.7	174	
3 F	02:23 AM	0.5	15		18 Sa	03:17 AM	1.3	40		3 M	02:54 AM	1.0	30		18 Tu	02:54 AM	2.3	70		3 W	03:15 AM	2.2	67		18 Th	02:48 AM	3.3	101	
	09:17 AM	5.7	174			09:58 AM	6.2	189			09:30 AM	7.9	241			09:27 AM	7.5	229			09:44 AM	8.8	268			09:15 AM	8.1	247	
	02:41 PM	2.6	79			03:46 PM	2.4	73			03:42 PM	0.7	21			03:54 PM	1.2	37			04:24 PM	-0.1	-3			04:09 PM	0.8	24	
	08:50 PM	6.5	198			09:52 PM	5.7	174			09:59 PM	6.7	204			10:10 PM	6.0	183			10:48 PM	6.7	204			10:38 PM	6.1	186	
4 Sa	03:30 AM	0.3	9		19 Su	04:06 AM	1.3	40		4 Tu	03:46 AM	1.1	34		19 W	03:39 AM	2.4	73		4 Th	04:07 AM	2.4	73		19 F	03:41 AM	3.3	101	
	10:14 AM	6.4	195			10:40 AM	6.6	201			10:15 AM	8.3	253			10:03 AM	7.8	238			10:29 AM	8.9	271			09:58 AM	8.4	256	
	03:52 PM	1.9	58			04:38 PM	1.7	52			04:36 PM	-0.1	-3			04:37 PM	0.6	18			05:13 PM	-0.6	-18			04:54 PM	0.2	6	
	10:04 PM	6.8	207			10:47 PM	6.0	183			10:56 PM	7.0	213			11:00 PM	6.3	192			11:41 PM	6.9	210			11:28 PM	6.4	195	
5 Su	04:27 AM	0.1	3		20 M	04:49 AM	1.3	40		5 W	04:34 AM	1.3	40		20 Th	04:21 AM	2.5	76		5 F	04:57 AM	2.6	79		20 Sa	04:31 AM	3.3	101	
	11:02 AM	7.0	213			11:17 AM	7.0	213			10:57 AM	8.7	265			10:38 AM	8.1	247			11:11 AM	8.9	271			10:41 AM	8.7	265	

Page 5 of 5