Cristobal, Caribbean Sea
Times and Heights of High and Low Waters - year 2019

January

Day	Hour (h m)	Height (ft)	Height (cm)	Day	Hour (h m)	Height (ft)	Height (cm)
1 Tue	146	-0.1	-3	16 Wed	39	-0.1	-3
	915	1.3	40		822	1.2	37
	1651	0.0	0		1607	0.0	0
	2133	0.2	6		2006	0.2	6
2 Wed	210	0.0	0	17 Thu	103	-0.1	-3
	957	1.3	40		900	1.3	40
	1801	-0.1	-3		1704	-0.1	-3
	2301	0.1	3		2112	0.1	3
3 Thu	226	0.0	0	18 Fri	133	-0.1	-3
	1039	1.3	40		942	1.3	40
	1906	-0.2	-6		1758	-0.2	-6
					2226	0.0	0
4 Fri	1121	1.3	40	19 Sat	209	-0.1	-3
	2005	-0.2	-6		1029	1.4	43
					1850	-0.2	-6
					2350	0.0	0
5 Sat	1202	1.2	37	20 Sun	255	-0.1	-3
	2056	-0.2	-6		1119	1.4	43
					1939	-0.3	-9
6 Sun ●	1243	1.2	37	21 Mon ○	117	0.1	3
	2139	-0.2	-6		356	0.0	0
					1213	1.4	43
					2024	-0.3	-9
7 Mon	1322	1.1	34	22 Tue	233	0.2	6
	2214	-0.2	-6		521	0.1	3
					1310	1.3	40
					2107	-0.4	-12
8 Tue	1401	1.0	30	23 Wed	333	0.3	9
	2242	-0.2	-6		704	0.2	6
					1408	1.2	37
					2147	-0.4	-12
9 Wed	1439	1.0	30	24 Thu	424	0.5	15
	2304	-0.2	-6		849	0.2	6
					1509	1.0	30
					2226	-0.4	-12
10 Thu	1518	0.9	27	25 Fri	510	0.7	21
	2322	-0.2	-6		1025	0.2	6
					1611	0.8	24
					2304	-0.3	-9
11 Fri	651	0.5	15	26 Sat	555	0.9	27
	1014	0.4	12		1151	0.1	3
	1559	0.8	24		1714	0.7	21
	2336	-0.1	-3		2340	-0.3	-9
12 Sat	652	0.6	18	27 Sun ◐	638	1.0	30
	1143	0.4	12		1308	0.0	0
	1641	0.6	18		1817	0.5	15
	2350	-0.1	-3				
13 Sun	704	0.8	24	28 Mon	15	-0.2	-6
	1258	0.3	9		721	1.1	34
	1727	0.5	15		1418	-0.1	-3
					1921	0.4	12
14 Mon ◑	4	-0.1	-3	29 Tue	48	-0.2	-6
	724	0.9	27		803	1.2	37
	1405	0.2	6		1524	-0.1	-3
	1816	0.4	12		2024	0.3	9
15 Tue	20	-0.1	-3	30 Wed	119	-0.1	-3
	750	1.0	30		846	1.2	37
	1508	0.1	3		1626	-0.2	-6
	1908	0.3	9		2129	0.2	6
				31 Thu	146	0.0	0
					928	1.2	37
					1728	-0.2	-6
					2241	0.1	3

February

Day	Hour (h m)	Height (ft)	Height (cm)	Day	Hour (h m)	Height (ft)	Height (cm)
1 Fri	206	0.0	0	16 Sat	124	-0.1	-3
	1009	1.2	37		912	1.3	40
	1829	-0.2	-6		1704	-0.2	-6
					2158	0.1	3
2 Sat	9	0.1	3	17 Sun	214	-0.1	-3
	211	0.0	0		1002	1.3	40
	1050	1.1	34		1754	-0.3	-9
	1927	-0.2	-6		2307	0.1	3
3 Sun	1131	1.1	34	18 Mon	314	-0.1	-3
	2020	-0.2	-6		1056	1.2	37
					1843	-0.3	-9
4 Mon ●	1211	1.0	30	19 Tue ○	20	0.2	6
	2104	-0.2	-6		429	0.0	0
					1153	1.1	34
					1931	-0.3	-9
5 Tue	1252	0.9	27	20 Wed	131	0.3	9
	2137	-0.2	-6		600	0.1	3
					1256	1.0	30
					2017	-0.3	-9
6 Wed	1335	0.8	24	21 Thu	236	0.5	15
	2202	-0.1	-3		741	0.1	3
					1403	0.8	24
					2101	-0.3	-9
7 Thu	1419	0.7	21	22 Fri	333	0.6	18
	2220	-0.1	-3		917	0.1	3
					1512	0.7	21
					2144	-0.2	-6
8 Fri	532	0.4	12	23 Sat	424	0.8	24
	908	0.3	9		1042	0.0	0
	1507	0.6	18		1622	0.6	18
	2233	-0.1	-3		2225	-0.2	-6
9 Sat	532	0.5	15	24 Sun	513	0.9	27
	1042	0.3	9		1155	-0.1	-3
	1556	0.5	15		1728	0.5	15
	2245	0.0	0		2306	-0.2	-6
10 Sun	544	0.6	18	25 Mon	559	1.0	30
	1154	0.2	6		1259	-0.2	-6
	1647	0.4	12		1831	0.4	12
	2258	0.0	0		2345	-0.1	-3
11 Mon	605	0.8	24	26 Tue ◑	643	1.1	34
	1253	0.1	3		1356	-0.2	-6
	1736	0.3	9		1929	0.3	9
	2314	-0.1	-3				
12 Tue ◐	632	0.9	27	27 Wed	22	-0.1	-3
	1345	0.0	0		727	1.1	34
	1825	0.3	9		1451	-0.2	-6
	2337	-0.1	-3		2023	0.3	9
13 Wed	705	1.1	34	28 Thu	57	0.0	0
	1435	-0.1	-3		810	1.1	34
	1913	0.2	6		1543	-0.2	-6
					2115	0.2	6
14 Thu	6	-0.1	-3				
	743	1.2	37				
	1524	-0.1	-3				
	2004	0.1	3				
15 Fri	41	-0.1	-3				
	826	1.2	37				
	1614	-0.2	-6				
	2058	0.1	3				

March

Day	Hour (h m)	Height (ft)	Height (cm)	Day	Hour (h m)	Height (ft)	Height (cm)
1 Fri	130	0.0	0	16 Sat	32	-0.1	-3
	852	1.1	34		753	1.2	37
	1636	-0.2	-6		1524	-0.3	-9
	2207	0.2	6		2051	0.2	6
2 Sat	159	0.0	0	17 Sun	127	-0.1	-3
	933	1.0	30		842	1.1	34
	1728	-0.2	-6		1609	-0.3	-9
	2304	0.2	6		2144	0.3	9
3 Sun	226	0.1	3	18 Mon	229	-0.1	-3
	1014	0.9	27		936	1.1	34
	1819	-0.1	-3		1654	-0.2	-6
					2242	0.4	12
4 Mon	9	0.2	6	19 Tue	342	0.0	0
	252	0.1	3		1034	0.9	27
	1055	0.8	24		1741	-0.2	-6
	1908	-0.1	-3		2345	0.5	15
5 Tue	124	0.2	6	20 Wed	508	0.0	0
	327	0.1	3		1139	0.8	24
	1139	0.8	24		1828	-0.2	-6
	1951	0.0	0				
6 Wed ●	226	0.2	6	21 Thu ○	48	0.6	18
	441	0.1	3		643	0.0	0
	1228	0.7	21		1252	0.6	18
	2024	0.0	0		1916	-0.1	-3
7 Thu	258	0.3	9	22 Fri	148	0.7	21
	637	0.2	6		817	-0.1	-3
	1324	0.6	18		1411	0.5	15
	2048	0.0	0		2004	-0.1	-3
8 Fri	319	0.4	12	23 Sat	245	0.8	24
	829	0.2	6		938	-0.2	-6
	1427	0.5	15		1531	0.4	12
	2106	0.1	3		2053	0.0	0
9 Sat	340	0.5	15	24 Sun	338	0.9	27
	954	0.1	3		1047	-0.3	-9
	1530	0.4	12		1643	0.4	12
	2120	0.1	3		2141	0.0	0
10 Sun	404	0.6	18	25 Mon	428	1.0	30
	1058	0.0	0		1145	-0.3	-9
	1628	0.3	9		1747	0.4	12
	2135	0.1	3		2228	0.0	0
11 Mon	432	0.7	21	26 Tue	515	1.1	34
	1149	0.0	0		1237	-0.4	-12
	1719	0.3	9		1842	0.3	9
	2156	0.1	3		2312	0.0	0
12 Tue	505	0.9	27	27 Wed	601	1.1	34
	1234	-0.1	-3		1325	-0.4	-12
	1802	0.2	6		1930	0.3	9
	2224	0.0	0		2355	0.1	3
13 Wed	542	1.0	30	28 Thu ◐	644	1.0	30
	1316	-0.2	-6		1410	-0.3	-9
	1842	0.2	6		2015	0.3	9
	2300	0.0	0				
14 Thu ◑	622	1.1	34	29 Fri	36	0.1	3
	1358	-0.2	-6		726	1.0	30
	1921	0.2	6		1453	-0.3	-9
	2343	-0.1	-3		2056	0.3	9
15 Fri	706	1.1	34	30 Sat	115	0.1	3
	1441	-0.3	-9		807	0.9	27
	2004	0.2	6		1534	-0.2	-6
					2137	0.3	9
				31 Sun	155	0.1	3
					847	0.8	24
					1613	-0.1	-3
					2218	0.3	9

compiled by: AARH

● New Moon ◑ First Quarter ○ Full Moon ◐ Last Quarter

Cristobal, Caribbean Sea
Times and Heights of High and Low Waters - year 2019

April

Day	Hour h m	ft	cm
1 Mon	240	0.1	3
	928	0.7	21
	1650	-0.1	-3
	2259	0.3	9
2 Tue	335	0.2	6
	1012	0.6	18
	1724	0.0	0
	2341	0.4	12
3 Wed	447	0.2	6
	1104	0.5	15
	1754	0.1	3
4 Thu	22	0.4	12
	618	0.2	6
	1211	0.4	12
	1820	0.1	3
5 Fri ●	59	0.5	15
	752	0.1	3
	1338	0.3	9
	1840	0.2	6
6 Sat	135	0.6	18
	908	0.0	0
	1511	0.3	9
	1858	0.2	6
7 Sun	212	0.7	21
	1005	-0.1	-3
	1629	0.2	6
	1921	0.1	3
8 Mon	250	0.8	24
	1051	-0.2	-6
	1723	0.2	6
	1956	0.1	3
9 Tue	331	0.9	27
	1131	-0.3	-9
	1757	0.2	6
	2043	0.1	3
10 Wed	414	1.0	30
	1209	-0.3	-9
	1825	0.2	6
	2137	0.1	3
11 Thu	458	1.1	34
	1246	-0.4	-12
	1853	0.2	6
	2234	0.1	3
12 Fri ◐	545	1.1	34
	1323	-0.4	-12
	1926	0.3	9
	2333	0.1	3
13 Sat	632	1.1	34
	1401	-0.4	-12
	2004	0.3	9
14 Sun	35	0.0	0
	722	1.0	30
	1438	-0.3	-9
	2047	0.4	12
15 Mon	143	0.0	0
	814	0.9	27
	1517	-0.3	-9
	2135	0.5	15
16 Tue	259	0.0	0
	911	0.8	24
	1556	-0.2	-6
	2226	0.7	21
17 Wed	424	0.0	0
	1016	0.6	18
	1637	-0.1	-3
	2320	0.8	24
18 Thu	554	0.0	0
	1133	0.5	15
	1719	-0.1	-3
19 Fri ○	14	0.9	27
	723	-0.1	-3
	1303	0.3	9
	1804	0.0	0
20 Sat	109	1.0	30
	841	-0.2	-6
	1439	0.3	9
	1853	0.1	3
21 Sun	202	1.0	30
	946	-0.3	-9
	1604	0.3	9
	1947	0.1	3
22 Mon	254	1.1	34
	1041	-0.4	-12
	1713	0.3	9
	2043	0.2	6
23 Tue	343	1.1	34
	1129	-0.4	-12
	1806	0.3	9
	2139	0.2	6
24 Wed	430	1.1	34
	1212	-0.4	-12
	1851	0.4	12
	2232	0.2	6
25 Thu	514	1.0	30
	1252	-0.4	-12
	1929	0.4	12
	2323	0.2	6
26 Fri	556	1.0	30
	1328	-0.3	-9
	2004	0.4	12
27 Sat ◑	11	0.2	6
	636	0.9	27
	1401	-0.3	-9
	2038	0.4	12
28 Sun	101	0.2	6
	714	0.8	24
	1431	-0.2	-6
	2110	0.5	15
29 Mon	155	0.2	6
	753	0.7	21
	1459	-0.1	-3
	2142	0.5	15
30 Tue	258	0.2	6
	834	0.6	18
	1522	-0.1	-3
	2214	0.6	18

May

Day	Hour h m	ft	cm
1 Wed	411	0.2	6
	922	0.4	12
	1541	0.0	0
	2246	0.6	18
2 Thu	536	0.1	3
	1025	0.3	9
	1555	0.1	3
	2319	0.7	21
3 Fri	702	0.1	3
	1200	0.2	6
	1559	0.1	3
	2354	0.8	24
4 Sat	813	-0.1	-3
5 Sun ●	33	0.9	27
	908	-0.2	-6
6 Mon	115	1.0	30
	952	-0.3	-9
7 Tue	200	1.1	34
	1031	-0.4	-12
8 Wed	247	1.1	34
	1107	-0.4	-12
9 Thu	335	1.2	37
	1142	-0.5	-15
	1831	0.3	9
	2103	0.2	6
10 Fri	424	1.2	37
	1216	-0.5	-15
	1853	0.3	9
	2223	0.2	6
11 Sat	514	1.1	34
	1250	-0.5	-15
	1923	0.4	12
	2339	0.2	6
12 Sun ◐	604	1.0	30
	1324	-0.4	-12
	2000	0.6	18
13 Mon	55	0.2	6
	656	0.9	27
	1357	-0.4	-12
	2041	0.7	21
14 Tue	216	0.1	3
	752	0.7	21
	1431	-0.3	-9
	2124	0.8	24
15 Wed	340	0.1	3
	854	0.5	15
	1504	-0.2	-6
	2210	1.0	30
16 Thu	508	0.0	0
	1009	0.3	9
	1536	-0.1	-3
	2258	1.1	34
17 Fri	632	-0.1	-3
	1142	0.2	6
	1609	0.0	0
	2347	1.1	34
18 Sat ○	747	-0.3	-9
	1334	0.1	3
	1640	0.0	0
19 Sun	36	1.2	37
	850	-0.4	-12
20 Mon	125	1.2	37
	943	-0.4	-12
21 Tue	214	1.2	37
	1029	-0.5	-15
22 Wed	300	1.1	34
	1110	-0.4	-12
23 Thu	345	1.0	30
	1146	-0.4	-12
	1903	0.4	12
	2139	0.3	9
24 Fri	426	1.0	30
	1219	-0.4	-12
	1928	0.4	12
	2245	0.3	9
25 Sat	505	0.9	27
	1247	-0.3	-9
	1952	0.5	15
	2348	0.3	9
26 Sun ◑	543	0.8	24
	1312	-0.3	-9
	2016	0.6	18
27 Mon	53	0.3	9
	621	0.7	21
	1334	-0.2	-6
	2041	0.6	18
28 Tue	201	0.3	9
	700	0.6	18
	1353	-0.2	-6
	2106	0.7	21
29 Wed	315	0.2	6
	743	0.4	12
	1409	-0.1	-3
	2133	0.8	24
30 Thu	434	0.2	6
	835	0.3	9
	1421	0.0	0
	2202	0.9	27
31 Fri	553	0.1	3
	946	0.2	6
	1427	0.0	0
	2234	1.0	30

June

Day	Hour h m	ft	cm
1 Sat	703	-0.1	-3
	1133	0.1	3
	1423	0.0	0
	2311	1.1	34
2 Sun	800	-0.2	-6
	2352	1.1	34
3 Mon ●	846	-0.3	-9
4 Tue	37	1.2	37
	926	-0.4	-12
5 Wed	126	1.2	37
	1003	-0.4	-12
6 Thu	216	1.3	40
	1038	-0.5	-15
7 Fri	307	1.2	37
	1112	-0.5	-15
	1808	0.3	9
	2100	0.2	6
8 Sat	359	1.1	34
	1145	-0.5	-15
	1835	0.5	15
	2234	0.3	9
9 Sun	452	1.0	30
	1217	-0.5	-15
	1908	0.6	18
10 Mon ◐	1	0.2	6
	545	0.9	27
	1249	-0.4	-12
	1946	0.8	24
11 Tue	126	0.2	6
	641	0.7	21
	1321	-0.3	-9
	2026	1.0	30
12 Wed	250	0.1	3
	742	0.5	15
	1351	-0.3	-9
	2108	1.1	34
13 Thu	412	0.0	0
	851	0.3	9
	1420	-0.2	-6
	2152	1.2	37
14 Fri	531	-0.1	-3
	1014	0.2	6
	1447	-0.1	-3
	2236	1.3	40
15 Sat	644	-0.2	-6
	1158	0.1	3
	1507	0.0	0
	2322	1.3	40
16 Sun	748	-0.3	-9
17 Mon ○	8	1.3	40
	844	-0.4	-12
18 Tue	54	1.2	37
	932	-0.4	-12
19 Wed	139	1.2	37
	1014	-0.4	-12
20 Thu	223	1.1	34
	1050	-0.4	-12
21 Fri	304	1.0	30
	1120	-0.3	-9
22 Sat	343	0.9	27
	1146	-0.3	-9
	1917	0.5	15
	2215	0.4	12
23 Sun	421	0.8	24
	1207	-0.3	-9
	1927	0.6	18
	2337	0.4	12
24 Mon	459	0.7	21
	1226	-0.2	-6
	1942	0.6	18
25 Tue ◑	53	0.4	12
	539	0.6	18
	1243	-0.2	-6
	2001	0.8	24
26 Wed	206	0.3	9
	622	0.5	15
	1258	-0.1	-3
	2024	0.9	27
27 Thu	316	0.2	6
	710	0.3	9
	1312	-0.1	-3
	2050	1.0	30
28 Fri	425	0.1	3
	806	0.2	6
	1325	-0.1	-3
	2121	1.1	34
29 Sat	530	0.0	0
	914	0.1	3
	1338	-0.1	-3
	2156	1.2	37
30 Sun	629	-0.1	-3
	1040	0.0	0
	1352	-0.1	-3
	2236	1.3	40

compiled by: AARH

● New Moon   ◑ First Quarter   ○ Full Moon   ◑ Last Quarter

Cristobal, Caribbean Sea
Times and Heights of High and Low Waters - year 2019

July

Day	h m	ft	cm	Day	h m	ft	cm
1 Mon	721	-0.2	-6	16 Tue ○	825	-0.3	-9
	2321	1.3	40				
2 Tue ●	807	-0.3	-9	17 Wed	26	1.2	37
					913	-0.3	-9
3 Wed	9	1.3	40	18 Thu	109	1.1	34
	848	-0.4	-12		952	-0.3	-9
4 Thu	100	1.3	40	19 Fri	151	1.0	30
	926	-0.4	-12		1024	-0.2	-6
5 Fri	154	1.3	40	20 Sat	231	0.9	27
	1002	-0.4	-12		1049	-0.2	-6
	1652	0.3	9				
	1934	0.2	6				
6 Sat	249	1.2	37	21 Sun	312	0.8	24
	1037	-0.4	-12		1108	-0.2	-6
	1725	0.5	15		1831	0.5	15
	2123	0.3	9		2219	0.4	12
7 Sun	345	1.0	30	22 Mon	354	0.7	21
	1111	-0.4	-12		1124	-0.1	-3
	1802	0.7	21		1837	0.6	18
	2259	0.3	9		2343	0.4	12
8 Mon	442	0.9	27	23 Tue	438	0.6	18
	1144	-0.4	-12		1139	-0.1	-3
	1841	0.8	24		1851	0.7	21
9 Tue ◐	27	0.2	6	24 Wed	53	0.3	9
	542	0.7	21		524	0.5	15
	1217	-0.3	-9		1153	-0.1	-3
	1921	1.0	30		1911	0.9	27
10 Wed	147	0.1	3	25 Thu ◐	155	0.2	6
	644	0.5	15		612	0.4	12
	1250	-0.3	-9		1208	-0.1	-3
	2003	1.2	37		1936	1.0	30
11 Thu	303	0.0	0	26 Fri	253	0.1	3
	749	0.3	9		702	0.3	9
	1321	-0.2	-6		1226	-0.1	-3
	2046	1.2	37		2006	1.1	34
12 Fri	415	-0.1	-3	27 Sat	348	0.0	0
	900	0.2	6		755	0.2	6
	1350	-0.1	-3		1247	-0.1	-3
	2129	1.3	40		2041	1.2	37
13 Sat	523	-0.2	-6	28 Sun	442	0.0	0
	1019	0.1	3		851	0.1	3
	1415	0.0	0		1314	-0.1	-3
	2213	1.3	40		2121	1.3	40
14 Sun	628	-0.2	-6	29 Mon	534	-0.1	-3
	1154	0.1	3		955	0.1	3
	1431	0.0	0		1348	-0.1	-3
	2258	1.3	40		2205	1.3	40
15 Mon	729	-0.3	-9	30 Tue	625	-0.2	-6
	2342	1.2	37		1109	0.0	0
					1430	-0.1	-3
					2253	1.3	40
				31 Wed	712	-0.2	-6
					1231	0.1	3
					1526	0.0	0
					2344	1.3	40

August

Day	h m	ft	cm	Day	h m	ft	cm
1 Thu ●	756	-0.3	-9	16 Fri	42	0.9	27
	1349	0.2	6		911	0.0	0
	1644	0.1	3				
2 Fri	40	1.2	37	17 Sat	128	0.8	24
	838	-0.3	-9		941	0.0	0
	1453	0.3	9		1703	0.4	12
	1825	0.2	6		1922	0.3	9
3 Sat	138	1.1	34	18 Sun	216	0.7	21
	917	-0.3	-9		1002	0.0	0
	1547	0.5	15		1701	0.5	15
	2012	0.2	6		2119	0.4	12
4 Sun	240	1.0	30	19 Mon	307	0.7	21
	956	-0.3	-9		1018	0.1	3
	1635	0.7	21		1710	0.6	18
	2152	0.2	6		2243	0.3	9
5 Mon	344	0.9	27	20 Tue	359	0.6	18
	1033	-0.3	-9		1031	0.1	3
	1720	0.9	27		1726	0.7	21
	2320	0.1	3		2348	0.3	9
6 Tue	449	0.7	21	21 Wed	451	0.5	15
	1110	-0.2	-6		1045	0.1	3
	1805	1.0	30		1747	0.8	24
7 Wed ◐	37	0.0	0	22 Thu	41	0.2	6
	554	0.6	18		539	0.4	12
	1147	-0.2	-6		1101	0.1	3
	1849	1.2	37		1814	1.0	30
8 Thu	146	-0.1	-3	23 Fri ◐	129	0.1	3
	658	0.4	12		624	0.3	9
	1223	-0.1	-3		1122	0.1	3
	1933	1.3	40		1845	1.1	34
9 Fri	249	-0.1	-3	24 Sat	215	0.0	0
	801	0.3	9		707	0.3	9
	1258	-0.1	-3		1149	0.0	0
	2018	1.3	40		1922	1.2	37
10 Sat	351	-0.2	-6	25 Sun	301	0.0	0
	903	0.3	9		750	0.3	9
	1331	0.0	0		1222	0.0	0
	2102	1.3	40		2002	1.3	40
11 Sun	450	-0.2	-6	26 Mon	346	-0.1	-3
	1008	0.2	6		837	0.2	6
	1401	0.0	0		1303	0.0	0
	2146	1.3	40		2046	1.3	40
12 Mon	550	-0.2	-6	27 Tue	433	-0.1	-3
	1120	0.2	6		929	0.2	6
	1426	0.1	3		1351	0.0	0
	2231	1.2	37		2134	1.3	40
13 Tue	649	-0.1	-3	28 Wed	519	-0.1	-3
	2314	1.1	34		1030	0.3	9
					1450	0.0	0
					2225	1.3	40
14 Wed	744	-0.1	-3	29 Thu	606	-0.1	-3
	2358	1.0	30		1137	0.3	9
					1601	0.1	3
					2322	1.2	37
15 Thu ○	833	-0.1	-3	30 Fri ●	652	-0.1	-3
					1246	0.4	12
					1730	0.2	6
				31 Sat	24	1.0	30
					738	-0.1	-3
					1352	0.6	18
					1909	0.2	6

September

Day	h m	ft	cm	Day	h m	ft	cm
1 Sun	132	0.9	27	16 Mon	232	0.6	18
	823	-0.1	-3		840	0.3	9
	1451	0.8	24		1514	0.7	21
	2047	0.1	3		2156	0.3	9
2 Mon	244	0.8	24	17 Tue	341	0.5	15
	907	-0.1	-3		857	0.3	9
	1545	0.9	27		1541	0.8	24
	2213	0.0	0		2253	0.2	6
3 Tue	357	0.7	21	18 Wed	441	0.5	15
	951	0.0	0		913	0.3	9
	1636	1.1	34		1610	0.9	27
	2326	0.0	0		2339	0.1	3
4 Wed	507	0.6	18	19 Thu	529	0.4	12
	1034	0.0	0		934	0.3	9
	1725	1.2	37		1642	1.0	30
5 Thu	29	-0.1	-3	20 Fri	20	0.0	0
	611	0.5	15		608	0.4	12
	1117	0.0	0		1001	0.3	9
	1812	1.3	40		1718	1.1	34
6 Fri ◐	126	-0.2	-6	21 Sat	58	0.0	0
	710	0.5	15		641	0.4	12
	1200	0.1	3		1037	0.2	6
	1858	1.3	40		1757	1.2	37
7 Sat	220	-0.2	-6	22 Sun ◐	136	-0.1	-3
	804	0.4	12		713	0.4	12
	1240	0.1	3		1119	0.2	6
	1944	1.3	40		1839	1.3	40
8 Sun	312	-0.2	-6	23 Mon	215	-0.1	-3
	856	0.4	12		748	0.4	12
	1319	0.1	3		1207	0.1	3
	2029	1.2	37		1924	1.3	40
9 Mon	403	-0.1	-3	24 Tue	254	-0.1	-3
	947	0.4	12		829	0.4	12
	1357	0.2	6		1302	0.1	3
	2113	1.1	34		2011	1.3	40
10 Tue	454	0.0	0	25 Wed	334	-0.1	-3
	1040	0.4	12		916	0.5	15
	1434	0.2	6		1404	0.1	3
	2156	1.1	34		2103	1.2	37
11 Wed	544	0.0	0	26 Thu	415	-0.1	-3
	1137	0.4	12		1009	0.6	18
	1514	0.3	9		1517	0.2	6
	2241	1.0	30		2159	1.1	34
12 Thu	631	0.1	3	27 Fri	458	0.0	0
	1237	0.4	12		1107	0.7	21
	1605	0.3	9		1641	0.2	6
	2327	0.9	27		2303	0.9	27
13 Fri	715	0.1	3	28 Sat ●	543	0.0	0
	1334	0.4	12		1207	0.8	24
	1722	0.3	9		1815	0.2	6
14 Sat ○	20	0.8	24	29 Sun	17	0.8	24
	751	0.2	6		629	0.1	3
	1417	0.5	15		1307	1.0	30
	1903	0.4	12		1948	0.1	3
15 Sun	122	0.7	21	30 Mon	139	0.7	21
	819	0.2	6		718	0.1	3
	1448	0.6	18		1405	1.1	34
	2041	0.3	9		2110	0.0	0

compiled by: AARH

● New Moon   ◐ First Quarter   ○ Full Moon   ◐ Last Quarter

Cristobal, Caribbean Sea
Times and Heights of High and Low Waters - year 2019

October

Day	Hour (h m)	ft	cm	Day	Hour (h m)	ft	cm
1 Tue	303	0.6	18	16 Wed	1427	1.0	30
	809	0.2	6		2244	0.0	0
	1500	1.2	37				
	2219	-0.1	-3				
2 Wed	420	0.5	15	17 Thu	1506	1.1	34
	902	0.2	6		2320	-0.1	-3
	1553	1.3	40				
	2318	-0.2	-6				
3 Thu	527	0.5	15	18 Fri	1547	1.2	37
	954	0.2	6		2354	-0.1	-3
	1643	1.3	40				
4 Fri	11	-0.2	-6	19 Sat	638	0.4	12
	624	0.5	15		853	0.3	9
	1046	0.3	9		1630	1.2	37
	1732	1.3	40				
5 Sat ◑	100	-0.2	-6	20 Sun	28	-0.2	-6
	714	0.5	15		652	0.4	12
	1135	0.3	9		958	0.3	9
	1819	1.3	40		1715	1.3	40
6 Sun	145	-0.2	-6	21 Mon ◑	100	-0.2	-6
	800	0.6	18		715	0.5	15
	1222	0.3	9		1101	0.3	9
	1904	1.2	37		1801	1.3	40
7 Mon	228	-0.1	-3	22 Tue	134	-0.2	-6
	843	0.6	18		746	0.5	15
	1308	0.3	9		1206	0.3	9
	1947	1.1	34		1849	1.2	37
8 Tue	309	-0.1	-3	23 Wed	207	-0.1	-3
	925	0.6	18		824	0.7	21
	1356	0.3	9		1316	0.3	9
	2029	1.0	30		1940	1.1	34
9 Wed	347	0.0	0	24 Thu	242	-0.1	-3
	1006	0.6	18		907	0.8	24
	1447	0.4	12		1432	0.3	9
	2112	0.9	27		2035	1.0	30
10 Thu	422	0.1	3	25 Fri	318	0.0	0
	1046	0.6	18		955	0.9	27
	1548	0.4	12		1556	0.2	6
	2158	0.8	24		2137	0.8	24
11 Fri	454	0.2	6	26 Sat	355	0.0	0
	1126	0.6	18		1045	1.0	30
	1704	0.4	12		1725	0.2	6
	2252	0.7	21		2252	0.6	18
12 Sat	521	0.3	9	27 Sun	434	0.1	3
	1204	0.7	21		1138	1.2	37
	1834	0.3	9		1854	0.1	3
13 Sun ○	5	0.5	15	28 Mon ●	23	0.5	15
	542	0.3	9		517	0.2	6
	1240	0.8	24		1232	1.3	40
	2002	0.3	9		2012	-0.1	-3
14 Mon	145	0.5	15	29 Tue	202	0.4	12
	557	0.4	12		605	0.2	6
	1314	0.8	24		1327	1.3	40
	2110	0.2	6		2118	-0.2	-6
15 Tue	340	0.4	12	30 Wed	334	0.4	12
	604	0.3	9		700	0.3	9
	1350	0.9	27		1420	1.4	43
	2202	0.1	3		2214	-0.3	-9
				31 Thu	448	0.5	15
					802	0.4	12
					1512	1.4	43
					2304	-0.3	-9

November

Day	Hour (h m)	ft	cm	Day	Hour (h m)	ft	cm
1 Fri	546	0.5	15	16 Sat	1506	1.3	40
	906	0.4	12		2327	-0.2	-6
	1602	1.3	40				
	2349	-0.3	-9				
2 Sat	633	0.6	18	17 Sun	1554	1.3	40
	1008	0.4	12		2357	-0.3	-9
	1650	1.3	40				
3 Sun	31	-0.3	-9	18 Mon	648	0.5	15
	714	0.6	18		939	0.4	12
	1106	0.4	12		1641	1.3	40
	1735	1.2	37				
4 Mon ◑	108	-0.2	-6	19 Tue ◑	26	-0.3	-9
	752	0.6	18		708	0.6	18
	1202	0.4	12		1103	0.4	12
	1818	1.1	34		1730	1.2	37
5 Tue	143	-0.1	-3	20 Wed	56	-0.2	-6
	827	0.7	21		738	0.7	21
	1258	0.4	12		1224	0.4	12
	1858	1.0	30		1821	1.0	30
6 Wed	213	-0.1	-3	21 Thu	127	-0.2	-6
	901	0.7	21		814	0.9	27
	1358	0.4	12		1346	0.3	9
	1938	0.9	27		1916	0.9	27
7 Thu	240	0.0	0	22 Fri	158	-0.1	-3
	934	0.8	24		855	1.0	30
	1505	0.4	12		1510	0.3	9
	2020	0.7	21		2016	0.7	21
8 Fri	302	0.1	3	23 Sat	229	-0.1	-3
	1005	0.8	24		939	1.2	37
	1621	0.4	12		1636	0.2	6
	2108	0.6	18		2127	0.5	15
9 Sat	320	0.2	6	24 Sun	301	0.0	0
	1036	0.9	27		1026	1.3	40
	1745	0.3	9		1759	0.0	0
	2212	0.5	15		2254	0.3	9
10 Sun	329	0.2	6	25 Mon	333	0.1	3
	1107	1.0	30		1114	1.4	43
	1907	0.2	6		1914	-0.1	-3
	2354	0.3	9				
11 Mon	325	0.2	6	26 Tue ●	41	0.3	9
	1140	1.0	30		406	0.2	6
	2014	0.1	3		1205	1.4	43
					2019	-0.2	-6
12 Tue ○	1215	1.1	34	27 Wed	239	0.3	9
	2105	0.0	0		440	0.2	6
					1256	1.4	43
					2115	-0.3	-9
13 Wed	1254	1.2	37	28 Thu	1346	1.4	43
	2147	-0.1	-3		2204	-0.3	-9
14 Thu	1336	1.2	37	29 Fri	1436	1.3	40
	2223	-0.2	-6		2247	-0.3	-9
15 Fri	1420	1.3	40	30 Sat	1524	1.3	40
	2255	-0.2	-6		2326	-0.3	-9

December

Day	Hour (h m)	ft	cm	Day	Hour (h m)	ft	cm
1 Sun	641	0.5	15	16 Mon	1528	1.2	37
	921	0.4	12		2323	-0.3	-9
	1609	1.2	37				
2 Mon	1	-0.3	-9	17 Tue	618	0.6	18
	711	0.6	18		953	0.4	12
	1035	0.5	15		1620	1.1	34
	1651	1.1	34		2352	-0.3	-9
3 Tue	32	-0.2	-6	18 Wed	645	0.7	21
	739	0.7	21		1127	0.4	12
	1144	0.5	15		1713	1.0	30
	1731	0.9	27				
4 Wed ◑	58	-0.2	-6	19 Thu ◑	21	-0.3	-9
	805	0.7	21		719	0.9	27
	1253	0.5	15		1254	0.3	9
	1809	0.8	24		1808	0.8	24
5 Thu	121	-0.1	-3	20 Fri	51	-0.2	-6
	831	0.8	24		757	1.1	34
	1404	0.4	12		1418	0.2	6
	1849	0.7	21		1908	0.6	18
6 Fri	140	0.0	0	21 Sat	121	-0.2	-6
	857	0.9	27		838	1.2	37
	1518	0.4	12		1538	0.1	3
	1932	0.5	15		2015	0.4	12
7 Sat	156	0.0	0	22 Sun	151	-0.1	-3
	924	1.0	30		921	1.3	40
	1634	0.3	9		1655	0.0	0
	2024	0.4	12		2132	0.3	9
8 Sun	206	0.1	3	23 Mon	221	0.0	0
	952	1.1	34		1006	1.4	43
	1750	0.2	6		1807	-0.1	-3
	2133	0.3	9		2303	0.2	6
9 Mon	211	0.1	3	24 Tue	248	0.0	0
	1023	1.1	34		1053	1.4	43
	1858	0.1	3		1912	-0.2	-6
	2319	0.2	6				
10 Tue	159	0.1	3	25 Wed	55	0.1	3
	1056	1.2	37		308	0.0	0
	1954	0.0	0		1141	1.4	43
					2011	-0.3	-9
11 Wed	1134	1.3	40	26 Thu ●	1229	1.4	43
	2039	-0.1	-3		2103	-0.3	-9
12 Thu ○	1216	1.3	40	27 Fri	1318	1.3	40
	2118	-0.2	-6		2148	-0.3	-9
13 Fri	1301	1.3	40	28 Sat	1405	1.2	37
	2152	-0.3	-9		2228	-0.3	-9
14 Sat	1349	1.3	40	29 Sun	1449	1.1	34
	2224	-0.3	-9		2301	-0.3	-9
15 Sun	1438	1.3	40	30 Mon	1532	1.0	30
	2254	-0.3	-9		2330	-0.2	-6
				31 Tue	653	0.6	18
					1015	0.5	15
					1613	0.9	27
					2354	-0.2	-6

compiled by: AARH

● New Moon ◑ First Quarter ○ Full Moon ◐ Last Quarter