

## 2023 Portland tide times

# PORTLAND

## MARINA



by **boatfolk**

### Tide times 2023 (gmt)

Times are provided in GMT. For BST, please +1hr to times stated between 26th March and 29th October 2023.

#### January

| Time        | m           | Time | m |
|-------------|-------------|------|---|
| 1 0145 1.5  | 16 0007 1.4 |      |   |
| SU 0615 0.9 | M 0512 0.7  |      |   |
| 1408 1.5    | M 1227 1.5  |      |   |
| 1904 0.7    | 1750 0.6    |      |   |
| 2 0249 1.5  | 17 0127 1.4 |      |   |
| 0725 0.9    | 0623 0.8    |      |   |
| M 1513 1.5  | TU 1348 1.4 |      |   |
| 2004 0.7    | 1859 0.6    |      |   |
| 3 0346 1.6  | 18 0249 1.5 |      |   |
| 0829 0.9    | 0739 0.8    |      |   |
| TU 1613 1.5 | W 1510 1.5  |      |   |
| 2058 0.7    | 2015 0.6    |      |   |
| 4 0438 1.7  | 19 0357 1.7 |      |   |
| 0926 0.8    | 0900 0.7    |      |   |
| W 1709 1.6  | TH 1623 1.6 |      |   |
| 2149 0.6    | 2130 0.6    |      |   |
| 5 0525 1.9  | 20 0459 1.9 |      |   |
| 1020 0.7    | 1011 0.6    |      |   |
| TH 1757 1.7 | F 1730 1.8  |      |   |
| 2238 0.5    | 2233 0.5    |      |   |
| 6 0608 2.0  | 21 0555 2.1 |      |   |
| 1109 0.6    | 1110 0.4    |      |   |
| F 1840 1.8  | SA 1830 1.9 |      |   |
| ○ 2322 0.5  | ● 2327 0.4  |      |   |
| 7 0645 2.0  | 22 0649 2.2 |      |   |
| SA 1918 1.8 | SU 1929 2.0 |      |   |
| 8 0003 0.5  | 23 0014 0.3 |      |   |
| 0722 2.0    | 0743 2.3    |      |   |
| SU 1232 0.5 | M 1247 0.2  |      |   |
| 1954 1.8    | 2029 2.1    |      |   |
| 9 0039 0.5  | 24 0059 0.2 |      |   |
| 0758 2.0    | TU 0837 2.4 |      |   |
| M 1307 0.4  | TU 1331 0.1 |      |   |
| 2028 1.8    | 2115 2.1    |      |   |
| 10 0111 0.5 | 25 0142 0.2 |      |   |
| 0833 1.9    | 0924 2.4    |      |   |
| TU 1338 0.4 | W 1414 0.1  |      |   |
| 2101 1.7    | 2151 2.1    |      |   |
| 11 0141 0.5 | 26 0223 0.3 |      |   |
| 0905 1.9    | 1004 2.2    |      |   |
| W 1407 0.4  | TH 1457 0.2 |      |   |
| 2130 1.6    | 2225 1.9    |      |   |
| 12 0211 0.5 | 27 0302 0.4 |      |   |
| 0934 1.8    | F 1040 2.0  |      |   |
| TH 1437 0.4 | F 1540 0.3  |      |   |
| 2158 1.6    | 2259 1.8    |      |   |
| 13 0243 0.5 | 28 0341 0.5 |      |   |
| 1002 1.7    | 1115 1.8    |      |   |
| F 1513 0.4  | SA 1622 0.4 |      |   |
| 2229 1.5    | 2334 1.6    |      |   |
| 14 0320 0.6 | 29 0420 0.7 |      |   |
| 1038 1.6    | SU 1155 1.6 |      |   |
| SA 1555 0.5 | SU 1708 0.6 |      |   |
| 2310 1.4    |             |      |   |
| 15 0408 0.6 | 30 0018 1.4 |      |   |
| 1125 1.5    | M 0507 0.8  |      |   |
| SU 1647 0.5 | M 1253 1.4  |      |   |
| ○ 1808 0.7  |             |      |   |
| 31 0139 1.3 |             |      |   |
| 0633 0.9    |             |      |   |
| TU 1430 1.3 |             |      |   |
| 1922 0.8    |             |      |   |

#### February

| Time        | m           | Time | m |
|-------------|-------------|------|---|
| 1 0309 1.4  | 16 0213 1.4 |      |   |
| 0800 0.9    | 0712 0.8    |      |   |
| W 1549 1.3  | TH 1455 1.3 |      |   |
| 2027 0.8    | 1959 0.7    |      |   |
| 2 0414 1.5  | 17 0338 1.6 |      |   |
| 0906 0.8    | 0928 0.7    |      |   |
| TH 1652 1.4 | F 1616 1.5  |      |   |
| 2125 0.7    | 2131 0.6    |      |   |
| 3 0505 1.7  | 18 0446 1.8 |      |   |
| 1004 0.7    | 1019 0.5    |      |   |
| F 1743 1.5  | SA 1725 1.7 |      |   |
| 2219 0.6    | 2229 0.5    |      |   |
| 4 0550 1.8  | 19 0545 2.0 |      |   |
| 1056 0.6    | 1107 0.3    |      |   |
| SA 1827 1.7 | SU 1829 1.9 |      |   |
| 2308 0.5    | 2318 0.3    |      |   |
| 5 0632 1.9  | 20 0641 2.2 |      |   |
| 1142 0.4    | 1151 0.1    |      |   |
| SU 1909 1.8 | M 1930 2.1  |      |   |
| ○ 2350 0.4  | ●           |      |   |
| 6 0712 2.0  | 21 0003 0.2 |      |   |
| 1222 0.3    | TU 0736 2.4 |      |   |
| M 1947 1.8  | TU 1233 0.0 |      |   |
|             | 2020 2.2    |      |   |
| 7 0028 0.3  | 22 0044 0.1 |      |   |
| 0750 2.0    | 0827 2.4    |      |   |
| TU 1256 0.3 | W 1313 0.0  |      |   |
| 2023 1.9    | 2057 2.2    |      |   |
| 8 0100 0.3  | 23 0123 0.0 |      |   |
| 0825 2.0    | 0908 2.4    |      |   |
| W 1324 0.3  | TH 1352 0.0 |      |   |
| 2053 1.8    | 2128 2.2    |      |   |
| 9 0130 0.3  | 24 0200 0.1 |      |   |
| 0855 1.9    | 0942 2.3    |      |   |
| TH 1350 0.3 | F 1428 0.1  |      |   |
| 2116 1.8    | 2156 2.0    |      |   |
| 10 0159 0.3 | 25 0233 0.2 |      |   |
| 0917 1.9    | 1010 2.0    |      |   |
| F 1419 0.3  | SA 1503 0.2 |      |   |
| 2134 1.7    | 2218 1.8    |      |   |
| 11 0228 0.3 | 26 0303 0.4 |      |   |
| 0938 1.8    | 1034 1.8    |      |   |
| SA 1449 0.3 | SU 1534 0.4 |      |   |
| 2156 1.6    | 2241 1.6    |      |   |
| 12 0258 0.4 | 27 0331 0.6 |      |   |
| 1009 1.7    | 1102 1.5    |      |   |
| SU 1522 0.3 | M 1601 0.6  |      |   |
| 2231 1.6    | 2311 1.5    |      |   |
| 13 0331 0.5 | 28 0357 0.7 |      |   |
| 1051 1.6    | 1140 1.3    |      |   |
| M 1603 0.4  | TU 1625 0.8 |      |   |
| 2319 1.5    | 2353 1.3    |      |   |
| 14 0420 0.6 |             |      |   |
| 1145 1.4    |             |      |   |
| TU 1701 0.5 |             |      |   |
| 15 0024 1.4 |             |      |   |
| 0538 0.7    |             |      |   |
| W 1304 1.3  |             |      |   |
| 1817 0.6    |             |      |   |

#### March

| Time        | m            | Time | m |
|-------------|--------------|------|---|
| 1 0437 0.9  | 16 0508 0.7  |      |   |
| 1241 1.1    | 1251 1.2     |      |   |
| W 1843 0.9  | TH 1748 0.7  |      |   |
| 2 0114 1.2  | 17 0159 1.3  |      |   |
| 0744 0.9    | 0950 0.7     |      |   |
| TH 1538 1.1 | F 1455 1.3   |      |   |
| 2003 0.9    | 2026 0.7     |      |   |
| 3 0355 1.4  | 18 0328 1.5  |      |   |
| 0846 0.8    | 1155 0.5     |      |   |
| F 1640 1.3  | SA 1611 1.5  |      |   |
| 2101 0.7    | 2126 0.6     |      |   |
| 4 0447 1.5  | 19 0434 1.7  |      |   |
| 0940 0.6    | 1013 0.4     |      |   |
| SA 1727 1.5 | SU 1716 1.7  |      |   |
| 2155 0.6    | 2216 0.4     |      |   |
| 5 0531 1.7  | 20 0533 2.0  |      |   |
| 1031 0.5    | 1052 0.2     |      |   |
| SU 1809 1.7 | M 1814 1.9   |      |   |
| 2245 0.4    | 2302 0.2     |      |   |
| 6 0613 1.9  | 21 0627 2.2  |      |   |
| 1118 0.3    | 1134 0.0     |      |   |
| M 1850 1.8  | TU 1904 2.1  |      |   |
| 2330 0.3    | ● 2346 0.1   |      |   |
| 7 0654 2.0  | 22 0718 2.3  |      |   |
| 1159 0.2    | 1213 -0.1    |      |   |
| TU 1930 1.9 | W 1949 2.2   |      |   |
| ○           |              |      |   |
| 8 0008 0.2  | 23 0024 0.0  |      |   |
| 0734 2.1    | 0804 2.4     |      |   |
| W 1233 0.2  | TH 1250 -0.1 |      |   |
| 2007 2.0    | 2027 2.3     |      |   |
| 9 0040 0.2  | 24 0100 0.0  |      |   |
| 0810 2.1    | 0843 2.3     |      |   |
| TH 1300 0.2 | F 1324 0.0   |      |   |
| 2037 1.9    | 2058 2.2     |      |   |
| 10 0109 0.2 | 25 0132 0.1  |      |   |
| 0837 2.0    | 0912 2.2     |      |   |
| F 1326 0.2  | SA 1355 0.1  |      |   |
| 2057 1.9    | 2120 2.0     |      |   |
| 11 0138 0.2 | 26 0201 0.2  |      |   |
| 0853 1.9    | 0934 1.9     |      |   |
| SA 1354 0.2 | SU 1424 0.3  |      |   |
| 2107 1.8    | 2139 1.8     |      |   |
| 12 0207 0.2 | 27 0229 0.4  |      |   |
| 0913 1.8    | 0958 1.7     |      |   |
| SU 1423 0.2 | M 1450 0.5   |      |   |
| 2129 1.7    | 2204 1.7     |      |   |
| 13 0235 0.3 | 28 0254 0.5  |      |   |
| 0945 1.7    | 1028 1.5     |      |   |
| M 1453 0.3  | TU 1509 0.6  |      |   |
| 2203 1.7    | 2235 1.5     |      |   |
| 14 0305 0.4 | 29 0318 0.7  |      |   |
| 1027 1.6    | 1106 1.2     |      |   |
| TU 1527 0.4 | W 1530 0.8   |      |   |
| 2248 1.5    | 2313 1.4     |      |   |
| 15 0347 0.5 | 30 0357 0.8  |      |   |
| 1122 1.4    | 1200 1.1     |      |   |
| W 1618 0.6  | TH 1618 0.9  |      |   |
| 2350 1.4    |              |      |   |
| 31 0012 1.2 |              |      |   |
| 0720 0.9    |              |      |   |
| F 1535 1.1  |              |      |   |
| 1935 0.9    |              |      |   |

#### April

| Time        | m           | Time | m |
|-------------|-------------|------|---|
| 1 0321 1.3  | 16 0314 1.6 |      |   |
| 0818 0.7    | 1134 0.4    |      |   |
| SA 1621 1.3 | SU 1557 1.5 |      |   |
| 2033 0.8    | 2104 0.6    |      |   |
| 2 0417 1.5  | 17 0416 1.8 |      |   |
| 0910 0.6    | 0949 0.3    |      |   |
| SU 1701 1.5 | M 1654 1.8  |      |   |
| 2125 0.6    | 2154 0.4    |      |   |
| 3 0500 1.7  | 18 0512 2.0 |      |   |
| 0959 0.4    | 1029 0.2    |      |   |
| M 1740 1.7  | TU 1746 2.0 |      |   |
| 2215 0.5    | 2240 0.3    |      |   |
| 4 0543 1.8  | 19 0604 2.1 |      |   |
| 1046 0.3    | 1110 0.1    |      |   |
| TU 1820 1.8 | W 1833 2.1  |      |   |
| 2300 0.3    | 2323 0.2    |      |   |
| 5 0626 2.0  | 20 0652 2.2 |      |   |
| 1127 0.2    | 1148 0.0    |      |   |
| W 1900 2.0  | TH 1916 2.2 |      |   |
| 2340 0.2    | ●           |      |   |
| 6 0707 2.1  | 21 0000 0.1 |      |   |
| 1201 0.2    | 1134 0.0    |      |   |
| TH 1938 2.0 | F 1221 0.0  |      |   |
| ○           | 1953 2.2    |      |   |
| 7 0013 0.2  | 22 0032 0.1 |      |   |
| 0744 2.1    | 0811 2.2    |      |   |
| F 1230 0.1  | SA 1252 0.1 |      |   |
| 2012 2.0    | 2023 2.1    |      |   |
| 8 0043 0.2  | 23 0103 0.2 |      |   |
| 0811 2.1    | 0837 2.0    |      |   |
| SA 1258 0.1 | SU 1322 0.2 |      |   |
| 2031 2.0    | 2045 2.0    |      |   |
| 9 0114 0.2  | 24 0133 0.3 |      |   |
| 0826 2.0    | 0902 1.8    |      |   |
| SU 1329 0.2 | M 1351 0.4  |      |   |
| 2042 1.9    | 2109 1.8    |      |   |
| 10 0145 0.2 | 25 0203 0.4 |      |   |
| 0853 1.9    | 0931 1.6    |      |   |
| M 1400 0.2  | TU 1416 0.5 |      |   |
| 2110 1.9    | 2139 1.7    |      |   |
| 11 0217 0.3 | 26 0229 0.6 |      |   |
| 0931 1.7    | 1006 1.4    |      |   |
| TU 1433 0.3 | W 1435 0.6  |      |   |
| 2148 1.7    | 2214 1.5    |      |   |
| 12 0254 0.4 | 27 0255 0.7 |      |   |
| 1018 1.5    | 1048 1.3    |      |   |
| W 1510 0.5  | TH 1501 0.8 |      |   |
| 2238 1.6    | 2256 1.4    |      |   |
| 13 0346 0.6 | 28 0340 0.8 |      |   |
| 1121 1.3    | 1143 1.1    |      |   |
| TH 1609 0.7 | F 1557 0.9  |      |   |
| 2347 1.4    | 2352 1.3    |      |   |
| 14 0518 0.7 | 29 0648 0.8 |      |   |
| 1315 1.2    | 1326 1.1    |      |   |
| F 1752 0.8  | SA 1859 0.9 |      |   |
| 15 0154 1.4 | 30 0133 1.3 |      |   |
| 0939 0.6    | 0746 0.7    |      |   |
| SA 1451 1.3 | SU 1537 1.3 |      |   |
| 2004 0.8    | 1958 0.8    |      |   |

## PORTLAND

Tide times 2023 (gmt)

Times are provided in GMT. For BST,  
please +1hr to times stated between  
26th March and 29th October 2023.

## PORTLAND

## May

| Time    | m   | Time    | m   |
|---------|-----|---------|-----|
| 1 0313  | 1.4 | 16 0348 | 1.7 |
| M 0837  | 1.5 | TU 0916 | 0.4 |
| M 1616  | 1.5 | TU 1623 | 1.8 |
| 2051    | 0.6 | 2124    | 0.5 |
| 2 0412  | 1.6 | 17 0443 | 1.9 |
| TU 0924 | 0.4 | W 0958  | 0.3 |
| TU 1659 | 1.6 | W 1714  | 1.9 |
| 2138    | 0.5 | 2212    | 0.4 |
| 3 0502  | 1.7 | 18 0535 | 2.0 |
| 1009    | 0.3 | TH 1039 | 0.2 |
| W 1742  | 1.8 | TH 1801 | 2.0 |
| 2224    | 0.4 | 2255    | 0.3 |
| 4 0549  | 1.9 | 19 0623 | 2.0 |
| 1048    | 0.3 | F 1116  | 0.2 |
| TH 1825 | 2.0 | F 1843  | 2.1 |
| 2304    | 0.3 | 2332    | 0.3 |
| 5 0632  | 2.0 | 20 0705 | 2.0 |
| 1124    | 0.2 | SA 1150 | 0.2 |
| F 1905  | 2.1 | SA 1920 | 2.1 |
| 2341    | 0.3 |         |     |
| 6 0710  | 2.1 | 21 0005 | 0.3 |
| SA 1157 | 0.2 | TU 0741 | 2.0 |
| SA 1940 | 2.1 | SU 1223 | 0.2 |
|         |     | 1951    | 2.1 |
| 7 0016  | 0.2 | 22 0040 | 0.3 |
| TH 0738 | 2.0 | M 0810  | 1.9 |
| SU 1232 | 0.2 | M 1256  | 0.3 |
| 2003    | 2.1 | 2020    | 2.0 |
| 8 0052  | 0.2 | 23 0114 | 0.4 |
| TH 0805 | 2.0 | TU 0840 | 1.7 |
| M 1308  | 2.0 | TU 1328 | 0.4 |
| 2027    | 0.2 | 2051    | 1.9 |
| 9 0129  | 0.2 | 24 0147 | 0.5 |
| TH 0842 | 1.9 | W 0914  | 1.6 |
| TU 1345 | 0.3 | W 1356  | 0.6 |
| 2104    | 1.9 | 2126    | 1.7 |
| 10 0210 | 0.3 | 25 0218 | 0.6 |
| W 0929  | 1.7 | TH 0952 | 1.4 |
| W 1426  | 0.4 | TH 1421 | 0.6 |
| 2150    | 1.8 | 2202    | 1.6 |
| 11 0259 | 0.4 | 26 0250 | 0.7 |
| TH 1024 | 1.5 | TH 1034 | 1.3 |
| TH 1516 | 0.6 | F 1454  | 0.7 |
| 2245    | 1.7 | 2243    | 1.5 |
| 12 0404 | 0.6 | 27 0335 | 0.7 |
| 1132    | 1.4 | 1122    | 1.2 |
| F 1624  | 0.7 | SA 1548 | 0.8 |
| ( 2356  | 1.5 | ) 2331  | 1.4 |
| 13 0528 | 0.6 | 28 0442 | 0.7 |
| 1311    | 1.3 | 1228    | 1.2 |
| SA 1744 | 0.8 | SU 1701 | 0.8 |
| 14 0134 | 1.5 | 29 0033 | 1.4 |
| 0946    | 0.5 | 0706    | 0.7 |
| SU 1431 | 1.4 | M 1402  | 1.3 |
| 1913    | 0.8 | 1903    | 0.8 |
| 15 0249 | 1.6 | 30 0158 | 1.4 |
| 0840    | 0.5 | 0758    | 0.6 |
| M 1530  | 1.6 | TU 1513 | 1.4 |
| 2028    | 0.7 | 2005    | 0.7 |
|         |     | 31 0309 | 1.5 |
|         |     | W 0842  | 0.5 |
|         |     | W 1608  | 1.6 |
|         |     | 2053    | 0.6 |

## June

| Time    | m   | Time    | m   |
|---------|-----|---------|-----|
| 1 0408  | 1.7 | 16 0506 | 1.7 |
| TH 0922 | 0.4 | F 1002  | 0.4 |
| TH 1657 | 1.8 | F 1730  | 1.9 |
| 2140    | 0.5 | 2226    | 0.5 |
| 2 0502  | 1.8 | 17 0557 | 1.8 |
| 1003    | 0.3 | 1045    | 0.4 |
| F 1745  | 1.9 | SA 1815 | 2.0 |
| 2225    | 0.4 | 2311    | 0.5 |
| 3 0551  | 1.9 | 18 0642 | 1.8 |
| 1046    | 0.3 | 1126    | 0.4 |
| SA 1828 | 2.0 | SU 1854 | 2.0 |
| 2310    | 0.4 | 2351    | 0.4 |
| 4 0634  | 2.0 | 19 0721 | 1.8 |
| 1129    | 0.3 | 1204    | 0.4 |
| SU 1906 | 2.1 | M 1930  | 2.0 |
| 2305    | 0.3 |         |     |
| 5 0714  | 2.0 | 20 0029 | 0.4 |
| 1213    | 0.2 | 0755    | 1.8 |
| M 1943  | 2.2 | TU 1241 | 0.4 |
|         |     | 2005    | 2.0 |
| 6 0039  | 0.3 | 21 0107 | 0.4 |
| TH 0757 | 2.0 | TH 0829 | 1.7 |
| TU 1256 | 0.3 | W 1316  | 0.4 |
| 2024    | 2.1 | 2040    | 1.9 |
| 7 0125  | 0.3 | 22 0143 | 0.5 |
| W 0845  | 1.9 | TH 0904 | 1.6 |
| W 1340  | 0.3 | TH 1349 | 0.5 |
| 2109    | 2.1 | 2116    | 1.8 |
| 8 0213  | 0.3 | 23 0216 | 0.5 |
| TH 0938 | 1.8 | TH 0940 | 1.5 |
| TH 1428 | 0.4 | F 1419  | 0.6 |
| 2159    | 2.0 | 2151    | 1.7 |
| 9 0306  | 0.4 | 24 0247 | 0.5 |
| 1032    | 1.7 | 1016    | 1.4 |
| F 1520  | 0.5 | SA 1451 | 0.6 |
| 2250    | 1.9 | 2225    | 1.6 |
| 10 0404 | 0.4 | 25 0322 | 0.5 |
| 1131    | 1.6 | 1054    | 1.4 |
| SA 1616 | 0.6 | SU 1533 | 0.7 |
| ( 2348  | 1.7 | ) 2300  | 1.5 |
| 11 0504 | 0.5 | 26 0406 | 0.5 |
| TH 1243 | 1.5 | TH 1140 | 1.3 |
| SU 1716 | 0.7 | M 1625  | 0.7 |
|         |     | ) 2346  | 1.5 |
| 12 0058 | 1.6 | 27 0500 | 0.6 |
| 12 0609 | 0.5 | 1241    | 1.3 |
| M 1354  | 1.5 | TU 1727 | 0.7 |
| 1821    | 0.7 |         |     |
| 13 0210 | 1.6 | 28 0045 | 1.4 |
| 0721    | 0.5 | 0603    | 0.6 |
| TU 1454 | 1.6 | W 1359  | 1.4 |
| 1932    | 0.7 | 1836    | 0.7 |
| 14 0311 | 1.6 | 29 0157 | 1.5 |
| 0826    | 0.5 | 0711    | 0.5 |
| W 1548  | 1.7 | TH 1506 | 1.5 |
| 2038    | 0.7 | 1946    | 0.7 |
| 15 0410 | 1.7 | 30 0307 | 1.5 |
| 0916    | 0.5 | 0819    | 0.5 |
| TH 1641 | 1.8 | F 1606  | 1.7 |
| 2135    | 0.6 | 2053    | 0.6 |
|         |     | 31 0501 | 1.6 |
|         |     | 1009    | 0.5 |
|         |     | M 1734  | 2.0 |
|         |     | 2251    | 0.4 |

## July

| Time    | m   | Time    | m   |
|---------|-----|---------|-----|
| 1 0413  | 1.6 | 16 0539 | 1.6 |
| TH 0920 | 0.4 | SU 1022 | 0.5 |
| SA 1702 | 1.8 | SU 1754 | 1.9 |
| 2154    | 0.5 | 2303    | 0.6 |
| 2 0515  | 1.8 | 17 0626 | 1.7 |
| 1018    | 0.4 | 1109    | 0.5 |
| SU 1754 | 2.0 | M 1836  | 2.0 |
| 2253    | 0.5 | 2347    | 0.5 |
| 3 0612  | 1.9 | 18 0708 | 1.7 |
| 1113    | 0.3 | 1152    | 0.4 |
| M 1843  | 2.1 | TU 1916 | 2.0 |
| 2347    | 0.4 |         |     |
| 4 0706  | 1.9 | 19 0026 | 0.4 |
| 1203    | 0.3 | 0747    | 1.8 |
| TU 1932 | 2.2 | W 1231  | 0.4 |
|         |     | 1954    | 2.0 |
| 5 0036  | 0.3 | 20 0102 | 0.3 |
| 0800    | 2.0 | 0822    | 1.8 |
| W 1250  | 0.3 | TH 1307 | 0.4 |
| 2024    | 2.3 | 2030    | 2.0 |
| 6 0123  | 0.2 | 21 0135 | 0.3 |
| TH 0857 | 2.0 | 0855    | 1.7 |
| TH 1336 | 0.3 | F 1339  | 0.4 |
| 2114    | 2.2 | 2104    | 1.9 |
| 7 0209  | 0.2 | 22 0204 | 0.4 |
| 0946    | 1.9 | 0925    | 1.6 |
| F 1421  | 0.3 | SA 1408 | 0.4 |
| 2200    | 2.2 | 2134    | 1.8 |
| 8 0257  | 0.2 | 23 0229 | 0.4 |
| 1029    | 1.8 | 0953    | 1.6 |
| SA 1507 | 2.0 | SU 1437 | 0.5 |
| 2243    | 2.0 | 2159    | 1.7 |
| 9 0345  | 0.3 | 24 0258 | 0.4 |
| 1113    | 1.7 | 1020    | 1.5 |
| SU 1554 | 0.5 | M 1509  | 0.5 |
| 2327    | 1.9 | 2226    | 1.6 |
| 10 0434 | 0.4 | 25 0333 | 0.4 |
| 1202    | 1.6 | 1053    | 1.4 |
| M 1643  | 0.6 | TU 1549 | 0.6 |
| ( 2348  | 1.7 | ) 2303  | 1.5 |
| 11 0017 | 1.7 | 26 0417 | 0.4 |
| TH 0526 | 0.5 | 1139    | 1.4 |
| TU 1303 | 1.5 | W 1643  | 0.6 |
| 1738    | 0.7 | 2354    | 1.5 |
| 12 0122 | 1.5 | 27 0514 | 0.5 |
| 0625    | 0.6 | 1243    | 1.4 |
| W 1411  | 1.5 | TH 1749 | 0.7 |
| 1844    | 0.8 |         |     |
| 13 0233 | 1.4 | 28 0101 | 1.4 |
| 0731    | 0.7 | 0620    | 0.6 |
| TH 1514 | 1.5 | F 1410  | 1.4 |
| 1956    | 0.8 | 1902    | 0.7 |
| 14 0341 | 1.4 | 29 0226 | 1.4 |
| 0834    | 0.7 | 0735    | 0.6 |
| F 1613  | 1.6 | SA 1528 | 1.6 |
| 2107    | 0.8 | 2028    | 0.7 |
| 15 0444 | 1.5 | 30 0349 | 1.5 |
| 0930    | 0.6 | 0859    | 0.6 |
| SA 1707 | 1.8 | SU 1634 | 1.8 |
| 2210    | 0.7 | 2150    | 0.6 |
|         |     | 31 0501 | 1.6 |
|         |     | 1009    | 0.5 |
|         |     | M 1734  | 2.0 |
|         |     | 2251    | 0.4 |

## August

| Time    | m   | Time    | m   |
|---------|-----|---------|-----|
| 1 0604  | 1.8 | 16 0653 | 1.8 |
| 1105    | 0.4 | 1135    | 0.4 |
| TU 1829 | 2.1 | W 1900  | 2.0 |
| 2342    | 0.3 |         |     |
| 2 0702  | 1.9 | 17 0009 | 0.3 |
| 1155    | 0.3 | 0733    | 1.9 |
| W 1922  | 2.3 | TH 1215 | 0.3 |
|         |     | 1939    | 2.1 |
| 3 0028  | 0.1 | 18 0046 | 0.2 |
| 0833    | 2.1 | 0838    | 2.0 |
| TH 1240 | 0.2 | F 1250  | 0.3 |
| 2017    | 2.4 | 2015    | 2.0 |
| 4 0112  | 0.0 | 19 0116 | 0.2 |
| 0858    | 2.1 | 0840    | 1.9 |
| F 1323  | 0.1 | SA 1320 | 0.3 |
| 2107    | 2.4 | 2047    | 2.0 |
| 5 0155  | 0.0 | 20 0140 | 0.3 |
| 0909    | 2.2 | 0905    | 1.8 |
| SA 1405 | 0.1 | SU 1347 | 0.3 |
| 2147    | 2.3 | 2111    | 1.9 |
| 6 0236  | 0.1 | 21 0204 | 0.3 |
| 1010    | 2.0 | 0923    | 1.7 |
| SU 1445 | 0.2 | M 1414  | 0.4 |
| 2223    | 2.2 | 2128    | 1.8 |
| 7 0318  | 0.2 | 22 0229 | 0.3 |
| 1043    | 1.8 | 0925    | 1.6 |
| M 1524  | 0.4 | TU 1441 | 0.4 |
| 2258    | 1.9 | 2150    | 1.7 |
| 8 0359  | 0.4 | 23 0257 | 0.4 |
| 1117    | 1.7 | 1009    | 1.6 |
| TU 1603 | 0.6 | W 1511  | 0.5 |
| ( 2334  | 1.7 | ) 2226  | 1.6 |
| 9 0441  | 0.5 | 24 0331 | 0.4 |
| 1158    | 1.5 | 1052    | 1.5 |
| W 1648  | 0.7 | TH 1553 | 0.6 |
|         |     | ) 2316  | 1.5 |
| 10 0023 | 1.4 | 25 0422 | 0.5 |
| 0534    | 0.7 | 1151    | 1.4 |
| TH 1310 | 1.4 | F 1707  | 0.7 |
| 1758    | 0.9 |         |     |
| 11 0159 | 1.3 | 26 0023 | 1.3 |
| 0651    | 0.8 | 0539    | 0.7 |
| F 1447  | 1.4 | SA 1326 | 1.4 |
| 1936    | 0.9 | 1835    | 0.8 |
| 12 0326 | 1.3 | 27 0214 | 1.3 |
| 0806    | 0.8 | 0711    | 0.7 |
| SA 1555 | 1.5 | SU 1510 | 1.5 |
| 2052    | 0.8 | 2309    | 0.7 |
| 13 0433 | 1.4 | 28 0345 | 1.4 |
| 0907    | 0.7 | 0905    | 0.7 |
| SU 1650 | 1.7 | M 1620  | 1.7 |
| 2152    | 0.7 | 2159    | 0.5 |
| 14 0526 | 1.5 | 29 0455 | 1.6 |
| 1001    | 0.6 | 1003    | 0.5 |
| M 1737  | 1.8 | TU 1720 | 2.0 |
| 2243    | 0.6 | 2246    | 0.3 |
| 15 0611 | 1.7 | 30 0557 | 1.9 |
| 1051    | 0.5 | 1054    | 0.3 |
| TU 1820 | 1.9 | W 1815  | 2.2 |
| 2329    | 0.4 | 2330    | 0.2 |
|         |     | 31 0653 | 2.0 |
|         |     | 1141    | 0.2 |
|         |     | TH 1908 | 2.4 |
|         |     | 2019    | 0.2 |

## September

| Time    | m    | Time    | m   |
|---------|------|---------|-----|
| 1 0013  | 0.0  | 16 0019 | 0.2 |
| 0748    | 2.2  | 0745    | 2.0 |
| F 1223  | 0.1  | SA 1226 | 0.2 |
| 2000    | 2.5  | 1952    | 2.1 |
| 2 0053  | -0.1 | 17 0047 | 0.2 |
| 0833    | 2.3  | 0815    | 2.0 |
| SA 1304 | 0.0  | SU 1255 | 0.3 |
| 2046    | 2.5  | 2022    | 2.1 |
| 3 0132  | 0.0  | 18 0110 | 0.2 |
| 0909    | 2.2  | 0838    | 2.0 |
| SU 1341 | 0.1  | M 1321  | 0.3 |
| 2124    | 2.4  | 2041    | 2.0 |
| 4 0209  | 0.1  | 19 0133 | 0.3 |
| 0940    | 2.1  | 0847    | 1.9 |
| M 1416  | 0.2  | TU 1348 | 0.3 |
| 2156    | 2.1  | 2054    | 1.9 |
| 5 0243  | 0.2  | 20 0158 | 0.3 |
| 1004    | 1.9  | 0904    | 1.8 |
| TU 1449 | 0.4  | W 1414  | 0.4 |
| 2222    | 1.9  | 2120    | 1.8 |
| 6 0315  | 0.4  | 21 0223 | 0.4 |
| 1026    | 1.7  | 0935    | 1.7 |
| W 1521  | 0.6  | TH 1440 | 0.5 |
| ( 2249  | 1.6  | ) 2159  | 1.6 |
| 7 0344  | 0.7  | 22 0251 | 0.5 |
| 1058    | 1.5  | 1018    | 1.6 |
| TH 1553 | 0.8  | F 1516  | 0.6 |
| 2327    | 1.3  | ) 2250  | 1.4 |
| 8 0410  | 0.8  | 23 0329 | 0.7 |
| 1141    | 1.4  | 1118    | 1.4 |
| F 1647  | 1.0  | SA 1637 | 0.8 |
| 9 0033  | 1.1  | 24 0007 | 1.3 |
| 0624    | 1.0  | SU 0520 | 0.8 |
| SA 1426 | 1.3  | SU 1309 | 1.4 |
| 1924    | 1.0  | 2103    | 0.8 |
| 10 0330 | 1.2  | 25 0224 | 1.3 |
| 0743    | 1.0  | 0803    | 0.9 |
| SU 1546 | 1.4  | M 1501  | 1.5 |
| 2028    | 0.8  | 2225    | 0.6 |
| 11 0428 | 1.4  | 26 0344 | 1.5 |
| 0842    | 0.8  | 0859    | 0.7 |
| M 1635  | 1.6  | TU 1608 | 1.8 |
| 2122    | 0.7  | 2149    | 0   |