

Janeiro		Fevereiro				Março				Abril					
HORA ALT (m)		HORA ALT (m)		HORA ALT (m)		HORA ALT (m)		HORA ALT (m)		HORA ALT (m)		HORA ALT (m)			
01 SAB	0143 1.5 1004 0.4 1438 1.2 2108 0.1	17 SEG	0311 1.5 0847 0.4 1449 1.3 2102 0.2	01 TER	0313 1.5 1121 0.5 1558 1.4 2217 0.0	17 QUI	0406 1.6 0917 0.3 1558 1.4 2141 0.0	01 TER	0217 1.5 1002 0.4 1454 1.5 2106 0.0	17 QUI	0304 1.6 0830 0.2 1453 1.5 2051 0.0	01 SEX	0256 1.5 0751 0.3 1536 1.6 2056 0.1	17 DOM	0345 1.5 0843 0.1 1541 1.6 2053 0.3
	Z														
02 DOM	0234 1.5 1100 0.4 1521 1.3 2154 0.1	18 TER	0353 1.5 0911 0.4 1530 1.3 2126 0.1	02 QUA	0358 1.5 0824 0.7 1000 0.7 1200 0.6 1641 1.4 2243 0.0	18 SEX	0443 1.6 0941 0.3 1634 1.4 2209 0.1	02 QUA	0256 1.5 1026 0.5 1532 1.5 2132 0.0	18 SEX	0339 1.6 0851 0.2 1532 1.6 2115 0.0	02 SAB	0326 1.5 0811 0.2 1608 1.5 2119 0.1	18 SEG	0419 1.4 0906 0.2 1619 1.6 2104 0.4
	&														
03 SEG	0323 1.5 0847 0.8 1158 0.5 1608 1.3 2241 0.1	19 QUA	0428 1.5 0934 0.3 1608 1.3 2156 0.1	03 QUI	0439 1.5 0854 0.5 1719 1.4 2302 0.1	19 SAB	0515 1.5 1006 0.3 1704 1.4 2230 0.2	03 QUI	0330 1.6 0815 0.5 1608 1.5 2147 0.0	19 SAB	0411 1.6 0911 0.2 1606 1.6 2134 0.1	03 DOM	0358 1.5 0845 0.1 1649 1.5 2147 0.2	19 TER	0458 1.2 0934 0.2 1702 1.5 2119 0.5
04 TER	0409 1.5 0811 0.7 1009 0.8 1300 0.7 1700 1.3 2321 0.1	20 QUI	0504 1.5 1000 0.4 1647 1.3 2228 0.1	04 SEX	0513 1.5 0923 0.4 1800 1.3 2319 0.2	20 DOM	0554 1.4 1032 0.3 1738 1.3 2247 0.3	04 SEX	0404 1.5 0836 0.3 1647 1.5 2206 0.1	20 DOM	0451 1.5 0936 0.2 1643 1.5 2149 0.2	04 SEG	0428 1.4 0913 0.1 1723 1.4 2213 0.3	20 QUA	0056 0.8 0215 0.8 0547 1.0 1008 0.3 1749 1.3 2147 0.6
05 QUA	0458 1.5 0854 0.7 1149 0.9 1411 0.8 1753 1.2 2351 0.2	21 SEX	0543 1.5 1026 0.4 1723 1.3 2304 0.2	05 SAB	0553 1.4 1000 0.3 1841 1.2 2341 0.3	21 SEG	0634 1.3 1100 0.4 1808 1.3 2258 0.5	05 SAB	0441 1.5 0906 0.2 1719 1.4 2224 0.2	21 SEG	0524 1.3 1002 0.2 1715 1.4 2200 0.4	05 TER	0454 1.2 0951 0.2 1802 1.3 2243 0.4	21 QUI	0109 1.0 0432 0.7 0654 0.9 1100 0.5 1839 1.2 2208 0.7
06 QUI	0543 1.4 0932 0.6 1300 1.0 1536 0.8 1843 1.1	22 SAB	0617 1.4 1058 0.4 1756 1.2 2336 0.3	06 DOM	0623 1.3 1039 0.3 1508 1.0 1658 1.0 1917 1.1	22 TER	0715 1.1 1130 0.5 1854 1.2 2306 0.6	06 DOM	0509 1.4 0941 0.2 1756 1.3 2251 0.3	22 TER	0604 1.2 1030 0.3 1754 1.3 2211 0.5	06 QUA	0519 1.1 1021 0.3 1851 1.2 2308 0.6	22 SEX	0145 1.2 0547 0.6 0834 0.8 1428 0.5 1941 1.0 2241 0.8
07 SEX	0021 0.3 0621 1.3 1009 0.5 1400 1.1 1649 0.8 1930 1.1	23 DOM	0658 1.3 1124 0.5 1838 1.2	07 SEG	0015 0.4 0458 1.2 1115 0.3 1549 1.0 1800 0.9 2009 1.0	23 QUA	0209 0.8 0456 0.7 0815 0.9 1208 0.6 1958 1.0 2324 0.7	07 SEG	0543 1.3 1013 0.2 1834 1.2 2317 0.4	23 QUA	0147 0.8 0356 0.8 0658 1.0 1104 0.4 1841 1.2 2232 0.6	07 QUI	0532 1.0 1100 0.4 1945 1.0 2328 0.7	23 SAB	0211 1.3 0628 0.5 1017 0.9 1604 0.5 2058 1.0 2302 0.9
08 SAB	0051 0.4 0700 1.2 1054 0.5 1451 1.1 1749 0.8 2023 1.0	24 SEG	0011 0.4 0745 1.2 1200 0.6 1930 1.1	08 TER	0104 0.6 0739 1.1 1158 0.4 1615 0.9 1845 0.8 2124 1.0	24 QUI	0228 0.9 0624 0.6 0951 0.8 1638 0.7 2136 1.0 2354 0.9	08 TER	0613 1.1 1053 0.3 1915 1.1 2351 0.6	24 QUI	0200 1.0 0541 0.7 0813 0.8 1158 0.6 1945 1.0 2256 0.7	08 SEX	0339 0.9 0600 0.9 0709 0.9 1145 0.5 2056 1.0 2343 0.9	24 DOM	0243 1.3 0704 0.4 1121 1.1 1709 0.4
09 DOM	0132 0.5 0741 1.1 1138 0.5 1536 1.0 1836 0.8 2124 1.0	25 TER	0023 0.6 0345 0.6 0841 1.0 1243 0.7 2041 1.0	09 QUA	0234 0.7 0834 1.0 1251 0.6 1645 0.8 1902 0.7 2308 1.0	25 SEX	0254 1.1 0723 0.4 1139 0.9 1824 0.5	09 QUA	0653 1.0 1126 0.4 1741 0.9 2021 1.0	25 SEX	0221 1.1 0639 0.5 1008 0.8 1628 0.6 2111 0.9 2308 0.9	09 SAB	0200 0.9 0606 0.8 0856 0.9 1508 0.6	25 SEG	0258 1.2 0739 0.3 1206 1.2 1756 0.3
10 SEG	0226 0.5 0819 1.1 1223 0.5 1613 0.9 1906 0.7 2238 1.0	26 QUA	0145 0.7 0549 0.6 0958 1.0 1715 0.7 2202 1.0	10 QUI	0456 0.7 0947 1.0 1430 0.7 1641 0.7 1917 0.6	26 SAB	0308 1.1 0808 0.3 1249 1.1 1915 0.3	10 QUI	0024 0.7 0758 0.9 1211 0.5 1628 0.8 1811 0.8 2206 0.9	26 SAB	0249 1.2 0717 1.4 1143 1.0 1756 0.4	10 DOM	0106 1.0 0623 0.6 1011 0.9 1736 0.5	26 TER	0039 1.1 0802 0.3 1245 1.3 1830 0.2
11 TER	0332 0.6 0911 1.0 1332 0.6 1654 0.8 1932 0.7 2343 1.1	27 QUI	0711 0.5 1136 1.0 1836 0.5 2334 1.1	11 SEX	0028 1.1 0630 0.6 1102 1.0 1934 0.5	27 DOM	0128 1.2 0853 0.3 1334 1.2 1958 0.1	11 SEX	0602 0.7 0915 0.9 1338 0.7 1558 0.7 1841 0.6	27 DOM	0302 1.2 0756 0.3 1232 1.1 1847 0.3	11 SEG	0104 1.2 0641 0.5 1115 1.1 1813 0.4	27 QUA	0051 1.2 0821 0.4 1317 1.4 1856 0.2
12 QUA	0441 0.6 1021 1.0 1553 0.6 1700 0.7 1941 0.6	28 SEX	0813 0.4 1254 1.1 1930 0.3	12 SAB	0113 1.2 0711 0.5 1209 1.1 1949 0.3	28 SEG	0145 1.4 0928 0.3 1413 1.4 2036 0.0	12 SAB	0047 1.1 0638 0.6 1039 1.0 1854 0.5	28 SEG	0209 1.2 0826 0.3 1309 1.3 1923 0.1	12 TER	0119 1.3 0658 0.4 1208 1.2 1845 0.2	28 QUI	0119 1.3 0813 0.4 1353 1.5 1923 0.1
13 QUI	0034 1.2 0553 0.5 1136 1.1 1945 0.5	29 SAB	0047 1.3 0906 0.3 1345 1.2 2017 0.2	13 DOM	0151 1.3 0745 0.4 1304 1.2 2006 0.2			13 DOM	0115 1.2 0700 0.5 1145 1.1 1911 0.3	29 TER	0130 1.3 0856 0.3 1349 1.4 1953 0.1	13 QUA	0139 1.4 0719 0.2 1254 1.4 1921 0.1	29 SEX	0151 1.4 0709 0.3 1426 1.5 1949 0.1
14 SEX	0115 1.3 0654 0.5 1236 1.2 1956 0.4	30 DOM	0143 1.4 0956 0.3 1430 1.3 2100 0.0	14 SEG	0224 1.4 0811 0.4 1353 1.3 2028 0.2			14 SEG	0141 1.3 0726 0.4 1239 1.2 1932 0.2	30 QUA	0154 1.4 0911 0.4 1423 1.5 2019 0.0	14 QUI	0206 1.5 0741 0.2 1338 1.5 1953 0.1	30 SAB	0221 1.5 0723 0.2 1502 1.5 2019 0.1
15 SAB	0156 1.4 0741 0.4 1323 1.2 2019 0.3	31 SEG	0230 1.5 1041 0.4 1511 1.3 2141 0.0	15 TER	0258 1.5 0836 0.3 1436 1.4 2049 0.1			15 TER	0204 1.4 0749 0.3 1326 1.3 1956 0.1	31 QUI	0223 1.5 0811 0.4 1458 1.6 2036 0.0	15 SEX	0238 1.6 0802 0.1 1419 1.6 2024 0.1		
16 DOM	0236 1.4 0819 0.4 1408 1.3 2038 0.2			16 QUA	0332 1.6 0856 0.3 1517 1.4 2115 0.0			16 QUA	0236 1.5 0809 0.2 1411 1.4 2023 0.0			16 SAB	0308 1.6 0821 0.1 1500 1.6 2041 0.2		

BARRA DE PARANAGUÁ - CANAL DA GALHETA (ESTADO DO PARANÁ) - 2022

Latitude 25° 34' 0 S

Longitude 048° 19' 0 W

Fuso +03.0 horas

APPA

44 Componentes

Nível Médio 0.79 m

Carta 1821

Setembro		Outubro		Novembro		Dezembro									
HORA	ALT (m)	HORA	ALT (m)	HORA	ALT (m)	HORA	ALT (m)								
01	0532 1.3 1030 0.4 1851 1.2 2308 0.4	17 SAB V	0343 0.9 0554 0.8 0821 0.8 1156 0.8 1923 0.9 2343 0.5	01 SAB	0600 1.2 1008 0.6 1341 1.0 1700 0.7 1928 0.9 2317 0.5	17 SEG	0400 0.7 0458 0.7 0858 1.0 1138 0.9 1411 0.9 1811 0.8 2009 0.8	01 TER	0343 0.5 0828 1.0 1053 0.9 1419 1.3 1849 0.4 2304 1.0	17 QUI	0421 0.5 1019 1.1 1756 0.6 2211 1.0	01 QUI	0413 0.4 0904 1.0 1151 0.8 1506 1.1 1906 0.5 2319 1.1	17 SAB	0413 0.5 1006 1.1 1724 0.6 2219 1.1
02	0611 1.2 1049 0.6 1402 0.8 1556 0.7 1939 1.0 2338 0.5	18 DOM	0351 0.8 0617 0.7 1017 1.0 1808 0.8 2049 0.9	02 DOM	0708 1.0 1032 0.7 1400 1.1 1809 0.6 2106 0.8	18 TER	0008 0.6 0253 0.7 0541 0.6 1221 1.0 1819 0.7 2151 0.9	02 QUA	0500 0.4 1002 1.0 1117 1.0 1447 1.2 1921 0.4 2356 1.1	18 SEX	0515 0.4 1147 1.2 1813 0.5 2317 1.1	02 SEX	0506 0.4 1009 1.0 1304 0.9 1543 1.0 1945 0.5	18 DOM	0521 0.4 1132 1.1 1804 0.5 2323 1.2
03	0723 1.0 1104 0.7 1408 0.9 1754 0.7 2053 0.8	19 SEG	0028 0.6 0319 0.7 0639 0.6 1213 1.1 1839 0.7 2217 0.9	03 SEG	0406 0.6 0851 1.0 1056 0.9 1423 1.2 1900 0.4 2336 0.9	19 QUA	0558 0.5 1228 1.1 1832 0.6 2306 1.0	03 QUI	0551 0.3 1251 1.1 1436 1.1 1956 0.4	19 SAB	0556 0.3 1236 1.3 1838 0.4	03 SAB	0004 1.2 0541 0.4 1115 1.1 2006 0.5	19 SEG	0624 0.4 1238 1.2 1843 0.4
04	0006 0.6 0253 0.7 0415 0.7 0902 1.0 1136 0.9 1432 1.0 1902 0.5 2311 0.8	20 TER	0651 0.4 1247 1.2 1856 0.6 2347 1.0	04 TER	0536 0.4 1445 1.2 1939 0.3	20 QUI	0615 0.3 1249 1.3 1847 0.4	04 SEX	0036 1.3 0628 0.2 1219 1.2 2021 0.4	20 DOM	0009 1.3 0632 0.2 1311 1.4 1904 0.3	04 DOM	0045 1.3 0611 0.4 1209 1.2 2023 0.5	20 TER	0017 1.3 0738 0.4 1323 1.2 1923 0.3
05	0556 0.5 1054 1.1 1202 1.0 1454 1.1 1954 0.4	21 QUA	0700 0.3 1315 1.3 1915 0.4	05 QUA	0026 1.1 0623 0.2 1432 1.2 2009 0.3	21 SEX	0004 1.2 0636 0.2 1315 1.4 1908 0.3	05 SAB	0108 1.4 0654 0.2 1254 1.3 2041 0.4	21 SEG	0054 1.4 0708 0.2 1349 1.4 1930 0.2	05 SEG	0117 1.4 0636 0.3 1256 1.2 1932 0.4	21 QUA	0108 1.4 0854 0.4 1406 1.3 2008 0.2
06	0047 1.0 0647 0.3 1228 1.2 2034 0.3	22 QUI	0039 1.2 0713 0.2 1343 1.4 1938 0.3	06 QUI	0102 1.3 0702 0.1 1302 1.3 2045 0.3	22 SAB	0047 1.3 0700 0.1 1345 1.5 1930 0.2	06 DOM	0141 1.5 0715 0.1 1328 1.4 2024 0.4	22 TER	0134 1.5 0732 0.2 1423 1.4 2000 0.1	06 TER	0154 1.4 0708 0.3 1336 1.3 1908 0.3	22 QUI	0158 1.5 1000 0.4 1451 1.3 2056 0.1
07	0123 1.2 0726 0.1 1313 1.3 2108 0.3	23 SEX	0119 1.3 0730 0.1 1411 1.5 1958 0.2	07 SEX	0136 1.4 0734 0.0 1328 1.4 2108 0.3	23 DOM	0126 1.5 0724 0.1 1415 1.5 1953 0.1	07 SEG	0211 1.5 0732 0.2 1402 1.4 1913 0.3	23 QUA	0213 1.6 0747 0.3 1502 1.4 2028 0.1	07 QUA	0230 1.5 0741 0.3 1411 1.3 1943 0.2	23 SEX	0247 1.6 1104 0.5 1538 1.3 2151 0.1
08	0158 1.4 0804 0.0 1353 1.5 2149 0.3	24 SAB	0156 1.5 0751 0.0 1447 1.6 2019 0.2	08 SAB	0206 1.5 0758 0.0 1402 1.5 2124 0.4	24 SEG	0202 1.6 0749 0.1 1451 1.6 2013 0.1	08 TER	0249 1.6 0756 0.2 1438 1.4 1941 0.2	24 QUI	0258 1.6 0758 0.4 1545 1.3 2106 0.1	08 QUI	0306 1.5 0819 0.3 1449 1.3 2021 0.2	24 SAB	0338 1.6 0802 0.7 0941 0.7 1209 0.6 1624 1.2 2247 0.1
09	0234 1.5 0839 -0.1 1432 1.5 2213 0.4	25 DOM	0234 1.5 0813 0.0 1519 1.6 2039 0.1	09 DOM	0241 1.6 0817 0.0 1438 1.5 1941 0.4	25 TER	0241 1.6 0808 0.1 1524 1.5 2038 0.1	09 QUA	0323 1.6 0823 0.2 1509 1.4 2011 0.2	25 SEX	0343 1.6 0811 0.5 1106 0.7 1156 0.7 1628 1.2 2143 0.2	09 SEX	0351 1.5 0854 0.4 1523 1.3 2100 0.2	25 DOM	0426 1.5 0830 0.7 1054 0.8 1326 0.7 1717 1.2 2343 0.1
10	0306 1.6 0908 -0.1 1509 1.5 2224 0.5	26 SEG	0306 1.6 0836 0.0 1556 1.6 2102 0.1	10 SEG	0311 1.6 0828 0.1 1509 1.5 2000 0.2	26 QUA	0315 1.6 0823 0.2 1600 1.4 2104 0.1	10 QUI	0400 1.5 0856 0.3 1543 1.3 2051 0.2	26 SAB	0426 1.5 0841 0.6 1143 0.9 1353 0.8 1717 1.1 2243 0.3	10 SAB	0432 1.5 0926 0.4 1554 1.2 2132 0.2	26 SEG	0513 1.5 0904 0.7 1200 1.0 1453 0.8 1813 1.1
11	0345 1.6 0923 0.0 1551 1.5 2019 0.4	27 TER	0341 1.6 0858 0.1 1630 1.5 2124 0.1	11 TER	0349 1.6 0849 0.1 1545 1.4 2026 0.2	27 QUI	0354 1.6 0841 0.3 1641 1.3 2130 0.2	11 SEX	0443 1.4 0926 0.4 1608 1.2 2123 0.2	27 DOM	0515 1.4 0908 0.6 1219 1.0 1534 0.8 1821 1.0	11 DOM	0511 1.4 0958 0.4 1623 1.2 2208 0.2	27 TER	0602 1.4 0947 0.6 1300 1.0 1606 0.8 1911 1.1
12	0417 1.5 0930 0.1 1623 1.4 2053 0.3	28 QUA	0409 1.5 0913 0.2 1704 1.4 2153 0.2	12 QUA	0421 1.5 0911 0.2 1615 1.3 2102 0.1	28 SEX	0432 1.5 0900 0.4 1723 1.1 2204 0.2	12 SAB	0523 1.3 1000 0.5 1630 1.1 2200 0.3	28 SEG	0026 0.3 0608 1.3 0947 0.7 1304 1.1 1651 0.7 1941 0.9	12 SEG	0556 1.3 1026 0.5 1645 1.1 2243 0.3	28 QUA	0130 0.3 0651 1.3 1021 0.6 1356 1.1 1709 0.7 2013 1.0
13	0454 1.4 0949 0.2 1658 1.4 2121 0.2	29 QUI	0443 1.5 0932 0.3 1745 1.2 2217 0.2	13 QUI	0458 1.4 0943 0.3 1647 1.2 2136 0.2	29 SAB	0513 1.4 0921 0.5 1256 1.0 1549 0.8 1817 0.9 2245 0.4	13 DOM	0608 1.2 1030 0.6 1621 1.0 2236 0.3	29 TER	0153 0.4 0704 1.2 1017 0.7 1351 1.2 1745 0.6 2100 0.9	13 TER	0638 1.3 1058 0.6 1728 1.1 2321 0.4	29 QUI	0221 0.4 0736 1.1 1102 0.6 1447 1.1 1806 0.7 2119 1.0
14	0528 1.3 1011 0.3 1732 1.3 2158 0.2	30 SEX	0517 1.3 0953 0.4 1338 0.8 1500 0.8 1826 1.0 2249 0.4	14 SEX	0541 1.3 1009 0.5 1711 1.1 2208 0.2	30 DOM	0604 1.2 0953 0.6 1317 1.1 1708 0.7 1943 0.8	14 SEG	0700 1.1 1102 0.7 1547 1.0 2313 0.4	30 QUA	0308 0.4 0802 1.1 1100 0.8 1428 1.2 1828 0.5 2217 1.0	14 QUA	0715 1.2 1130 0.6 1845 1.0	30 SEX	0309 0.5 0819 1.0 1153 0.6 1532 1.0 1858 0.6 2232 1.0
15	0604 1.2 1043 0.5 1800 1.1 2232 0.2	31 QUI	0517 1.3 0953 0.4 1338 0.8 1500 0.8 1826 1.0 2249 0.4	15 SAB	0628 1.1 1043 0.6 1724 1.0 2245 0.3	31 SEG	0036 0.5 0708 1.1 1015 0.7 1353 1.2 1804 0.5 2123 0.8	15 TER	0758 1.1 1134 0.8 1519 0.9 1800 0.9 1932 0.9	31 DOM	0021 0.4 0802 1.1 1213 0.7 2000 1.0	15 QUI	0021 0.4 0802 1.1 1213 0.7 2000 1.0	31 SAB	0358 0.6 0909 1.0 1251 0.7 1613 0.9 1936 0.6
16	0454 1.0 0700 1.0 1113 0.6 1836 1.0 2304 0.3	31 SEX	0454 1.0 0700 1.0 1113 0.6 1836 1.0 2304 0.3	16 DOM	0736 1.0 1108 0.7 1528 0.9 2317 0.5			16 QUA	0019 0.5 0902 1.0 1753 0.8 2100 0.9			16 SEX	0243 0.5 0900 1.1 1632 0.7 2111 1.0		