

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)	HORA ALT (m)
01 QUA 0041 0.3 0541 0.9 0902 0.7 1023 0.7 1313 0.6 1741 0.9	17 SEX 0234 0.3 0608 0.8 0824 0.7 1056 0.8 1456 0.5 1826 1.0 2243 0.8	01 SAB 0145 0.4 0609 0.9 1413 0.5 1834 0.9	17 SEG 0004 0.8 0443 0.5 0736 0.8 1000 0.6 1204 0.7 1645 0.4 2030 0.8 2204 0.8	01 DOM 0108 0.4 0517 0.9 1336 0.5 1754 1.0	17 TER 0023 0.8 0424 0.6 0658 0.8 0954 0.6 1154 0.6 1615 0.5 2004 0.8 2143 0.7	01 QUA 0311 0.6 0606 0.8 0908 0.7 1008 0.7 1536 0.4 2326 1.0	17 SEX 0054 1.0 0619 0.6 1149 0.8 1800 0.3
02 QUI 0126 0.3 0628 0.9 0936 0.7 1100 0.8 1408 0.6 1834 0.9	V 18 SAB 0343 0.4 0706 0.8 0906 0.7 1141 0.8 1600 0.5 1939 0.9 2202 0.8 2347 0.8	02 DOM 0249 0.4 0700 0.8 1519 0.5 2143 0.9	18 TER 0054 0.9 0558 0.5 0908 0.7 1045 0.7 1239 0.8 1756 0.3	02 SEG 0213 0.5 0558 0.8 1447 0.5 1854 0.8 2143 0.8	18 QUA 0056 0.9 0551 0.6 0830 0.7 1011 0.7 1209 0.7 1738 0.4	02 QUI 0428 0.6 0721 0.7 0854 0.7 1121 0.8 1647 0.3	18 SAB 0106 1.0 0700 0.5 1145 1.0 1847 0.2
03 SEX 0221 0.4 0751 0.8 1009 0.8 1506 0.6 2024 0.8	19 DOM 0454 0.4 0821 0.7 0956 0.7 1213 0.8 1704 0.4 2108 0.9 2243 0.9	03 SEG 0356 0.5 1045 0.8 1628 0.5 2317 1.0	19 QUA 0123 1.0 0700 0.5 1251 0.8 1858 0.2	03 TER 0336 0.6 0649 0.8 0902 0.7 1023 0.7 1558 0.4 2326 1.0	19 QUI 0113 1.0 0651 0.5 1234 0.8 1841 0.3	03 SEX 0015 1.1 0538 0.5 1208 0.9 1753 0.1	19 DOM 0123 1.1 0738 0.4 1219 1.1 1926 0.2
04 SAB 0321 0.4 1015 0.8 1606 0.5 2215 0.9	20 SEG 0036 0.9 0602 0.4 1249 0.8 1811 0.3	04 TER 0506 0.5 1145 0.9 1738 0.3	20 QUI 0156 1.0 0753 0.4 1219 1.0 1951 0.1	04 QUA 0454 0.5 1139 0.8 1708 0.3	20 SEX 0141 1.0 0734 0.4 1228 1.0 1928 0.2	04 SAB 0100 1.2 0636 0.4 1253 1.0 1853 0.0	20 SEG 0117 1.1 0802 0.3 1251 1.2 1954 0.1
05 DOM 0424 0.4 1109 0.9 1706 0.4 2323 1.0	21 TER 0111 1.0 0706 0.4 1247 0.9 1911 0.2	05 QUA 0023 1.1 0621 0.4 1234 1.0 1843 0.2	21 SEX 0211 1.1 0834 0.3 1243 1.1 2034 0.1	05 QUI 0024 1.1 0604 0.4 1224 0.9 1817 0.2	21 SAB 0154 1.4 0806 0.4 1238 1.1 2002 0.1	05 DOM 0145 1.3 0724 0.3 1328 1.1 1947 -0.1	21 TER 0123 1.1 0830 0.3 1324 1.2 2032 0.1
06 SEG 0530 0.4 1156 1.0 1806 0.3	22 QUA 0149 1.0 0800 0.3 1208 1.0 2002 0.1	06 QUI 0117 1.2 0724 0.3 1317 1.0 1939 0.1	22 SAB 0223 1.1 0904 0.3 1323 1.2 2104 0.0	06 SEX 0113 1.2 0702 0.4 1308 1.0 1915 0.0	22 DOM 0147 1.1 0841 0.3 1313 1.2 2038 0.1	06 SEG 0221 1.3 0809 0.2 1339 1.2 2038 -0.1	22 QUA 0147 1.2 0856 0.2 1400 1.3 2106 0.1
07 TER 0019 1.1 0638 0.3 1236 1.0 1904 0.2	23 QUI 0134 1.1 0851 0.3 1247 1.1 2051 0.1	07 SEX 0206 1.3 0815 0.3 1353 1.1 2030 0.0	23 DOM 0217 1.1 0941 0.3 1404 1.2 2138 0.0	07 SAB 0200 1.3 0754 0.3 1347 1.1 2006 -0.1	23 SEG 0151 1.2 0904 0.3 1347 1.2 2104 0.1	07 TER 0254 1.2 0856 0.1 1328 1.3 2123 -0.1	23 QUI 0215 1.2 0930 0.2 1434 1.3 2147 0.2
08 QUA 0111 1.2 0741 0.3 1317 1.1 1956 0.1	& 24 SEX 0134 1.1 0930 0.3 1326 1.1 2130 0.0	08 SAB 0254 1.3 0900 0.2 1426 1.1 2113 -0.1	24 SEG 0238 1.2 1002 0.3 1438 1.3 2202 0.1	08 DOM 0245 1.3 0841 0.2 1415 1.2 2056 -0.2	24 TER 0215 1.2 0932 0.3 1419 1.3 2136 0.1	08 QUA 0309 1.1 0941 0.1 1358 1.3 2206 0.0	24 SEX 0239 1.1 1002 0.2 1506 1.2 2226 0.3
09 QUI 0202 1.2 0834 0.3 1347 1.1 2047 0.0	& 25 SAB 0217 1.1 1002 0.3 1409 1.2 2200 0.0	09 DOM 0339 1.3 0949 0.2 1413 1.2 2200 -0.1	25 TER 0308 1.2 1030 0.3 1511 1.3 2234 0.1	09 SEG 0319 1.3 0919 0.2 1351 1.2 2145 -0.2	25 QUA 0241 1.2 0956 0.3 1453 1.3 2206 0.1	09 QUI 0223 1.1 1021 0.1 1430 1.3 2256 0.1	25 SAB 0302 1.1 1041 0.3 1532 1.2 2304 0.3
10 SEX 0251 1.3 0919 0.3 1415 1.1 2134 0.0	& 26 DOM 0251 1.1 1039 0.4 1451 1.2 2234 0.1	10 SEG 0413 1.2 1026 0.2 1426 1.2 2249 -0.1	26 QUA 0338 1.1 1056 0.4 1545 1.2 2304 0.2	10 TER 0349 1.2 1000 0.2 1413 1.3 2228 -0.1	26 QUI 0308 1.2 1028 0.3 1523 1.3 2245 0.2	10 SEX 0254 1.1 1100 0.2 1509 1.3 2345 0.3	26 DOM 0321 1.1 1117 0.3 1602 1.1 2354 0.4
11 SAB 0339 1.2 1002 0.3 1415 1.1 2215 0.0	27 SEG 0324 1.1 1100 0.4 1526 1.2 2258 0.1	11 TER 0426 1.1 1106 0.3 1504 1.3 2332 0.0	27 QUI 0404 1.1 1126 0.4 1611 1.2 2343 0.3	11 QUA 0309 1.1 1047 0.2 1451 1.3 2309 0.0	27 SEX 0332 1.1 1058 0.3 1551 1.2 2319 0.3	11 SAB 0324 1.1 1147 0.3 1556 1.2	27 SEG 0349 1.0 1200 0.3 1632 1.1
12 DOM 0423 1.2 1051 0.3 1439 1.1 2300 0.0	28 TER 0400 1.1 1128 0.5 1602 1.2 2332 0.2	12 QUA 0347 1.1 1153 0.3 1545 1.3	28 SEX 0428 1.0 1158 0.4 1641 1.1	12 QUI 0317 1.1 1124 0.3 1524 1.3 2358 0.2	28 SAB 0354 1.1 1136 0.4 1617 1.1	12 DOM 0034 0.4 0404 1.0 1228 0.3 1641 1.1 2034 0.7 2215 0.7	28 TER 0049 0.5 0417 1.0 1256 0.3 1711 1.0
13 SEG 0428 1.1 1134 0.4 1511 1.2 2351 0.0	29 QUA 0434 1.0 1158 0.5 1638 1.1	13 QUI 0015 0.1 0415 1.0 1236 0.4 1624 1.2	29 SAB 0021 0.3 0453 1.0 1241 0.5 1711 1.0	13 SEX 0354 1.1 1204 0.3 1608 1.3	29 DOM 0000 0.4 0413 1.0 1211 0.4 1649 1.1	13 SEG 0126 0.6 0451 1.0 1313 0.4 1724 1.0 2034 0.7 2326 0.8	29 QUA 0151 0.6 0500 0.9 1400 0.3 1806 0.9 1943 0.8 2213 0.9
14 TER 0409 1.0 1213 0.4 1558 1.2	30 QUI 0006 0.3 0504 1.0 1238 0.5 1708 1.0	14 SEX 0106 0.2 0458 1.0 1321 0.5 1709 1.2	30 SAB 0051 0.3 0428 1.0 1251 0.4 1656 1.2	14 SAB 0051 0.3 0428 1.0 1251 0.4 1656 1.2	30 SEG 0054 0.5 0447 1.0 1302 0.4 1724 1.0	14 TER 0241 0.7 0534 0.9 0915 0.5 1049 0.5 1417 0.4 1821 0.9 2056 0.7	30 QUI 0256 0.6 0556 0.9 0953 0.7 1508 0.3 2311 1.0
15 QUA 0039 0.1 0443 1.0 1302 0.5 1645 1.1	31 SEX 0053 0.3 0536 0.9 1319 0.5 1747 1.0	15 SAB 0204 0.4 0541 0.9 0847 0.6 1039 0.6 1415 0.5 1802 1.1 2123 0.7 2258 0.7	15 DOM 0315 0.5 0626 0.8 0915 0.6 1130 0.7 1526 0.5 1904 0.9 2151 0.7	15 DOM 0149 0.5 0508 0.9 0900 0.5 1017 0.5 1341 0.5 1747 1.0 2102 0.7 2326 0.8	31 TER 0158 0.6 0519 0.9 1415 0.4 1817 0.9 2004 0.8 2209 0.9	15 QUA 0008 0.9 0402 0.7 0630 0.8 0947 0.6 1108 0.6 1539 0.4 1951 0.8 2104 0.7	16 QUI 0028 0.9 0519 0.6 0802 0.7 1004 0.7 1141 0.7 1656 0.4
16 QUI 0134 0.2 0521 0.9 0754 0.7 0953 0.8 1356 0.5 1732 1.1	16 DOM 0315 0.5 0626 0.8 0915 0.6 1130 0.7 1526 0.5 1904 0.9 2151 0.7	16 DOM 0315 0.5 0626 0.8 0915 0.6 1130 0.7 1526 0.5 1904 0.9 2151 0.7	16 SEG 0258 0.6 0558 0.9 0915 0.5 1113 0.6 1451 0.5 1845 0.9 2115 0.7	16 SEG 0258 0.6 0558 0.9 0915 0.5 1113 0.6 1451 0.5 1845 0.9 2115 0.7	16 QUI 0028 0.9 0519 0.6 0802 0.7 1004 0.7 1141 0.7 1656 0.4	16 QUI 0028 0.9 0519 0.6 0802 0.7 1004 0.7 1141 0.7 1656 0.4	16 QUI 0028 0.9 0519 0.6 0802 0.7 1004 0.7 1141 0.7 1656 0.4

PORTO DE ANGRA DOS REIS (ESTADO DO RIO DE JANEIRO) - 2020

Latitude 23° 00'.8 S

Longitude 044° 18'.9 W

Fuso +03.0 horas

DHN

22 Componentes

Nível Médio 0.69 m

Carta 1636

Maio		Junho		Julho		Agosto									
HORA	ALT (m)	HORA	ALT (m)	HORA	ALT (m)	HORA	ALT (m)								
01	0400 0.6	17	0036 1.0	01	0017 1.1	17	0615 0.4	01	0043 0.9	0004	01.0	01	0741 0.1	17	0128 1.1
SEX	0702 0.8	DOM	0611 0.5	SEG	0523 0.4	QUA	1202 1.1	QUA	0554 0.3	SEX	0636 0.3	SAB	1406 1.1	SEG	0802 0.0
	0900 0.7		1108 0.9		1202 1.0		1828 0.3		1245 1.0		1247 1.1		2024 0.3		1426 1.3
	1100 0.8		1730 0.3		1758 0.1				1847 0.3		1915 0.4				2041 0.3
	1615 0.2														
02	0000 1.1	18	0030 1.0	02	0058 1.1	18	0021 1.0	02	0104 0.9	18	0049 1.0	02	0019 1.0	18	0156 1.1
SAB	0502 0.5	SEG	0641 0.4	TER	0621 0.3	QUI	0708 0.3	QUI	0656 0.2	SAB	0736 0.2	DOM	0830 0.1	TER	0853 -0.1
	1149 0.9		1145 1.0		1239 1.1		1249 1.1		1324 1.1		1339 1.2		1428 1.1		1508 1.3
	1721 0.1		1823 0.3		1900 0.1		1932 0.3		1949 0.3		2011 0.3		2106 0.3		2121 0.2
03	0043 1.2	19	0023 1.1	03	0134 1.0	19	0058 1.1	03	0002 1.0	19	0128 1.1	03	0106 1.1	19	0221 1.2
DOM	0600 0.4	TER	0715 0.3	QUA	0715 0.2	SEX	0756 0.2	SEX	0754 0.1	DOM	0826 0.2	SEG	0911 0.0	QUA	0939 -0.1
	1228 1.0		1224 1.1		1219 1.1		1334 1.2		1226 1.1		1430 1.2		1354 1.1		1551 1.2
	1823 0.0		1911 0.2		1958 0.1		2028 0.3		2041 0.3		2100 0.3		2153 0.3		2202 0.2
04	0119 1.2	20	0049 1.1	04	0130 1.0	20	0132 1.1	04	0030 1.0	20	0158 1.1	04	0149 1.2	20	0219 1.2
SEG	0654 0.3	QUA	0745 0.3	QUI	0808 0.1	SAB	0847 0.2	SAB	0847 0.1	SEG	0911 0.0	TER	0953 0.0	QUI	1021 -0.1
	1258 1.1		1304 1.2		1238 1.2		1423 1.2		1313 1.1		1517 1.2		1428 1.1		1623 1.1
	1921 0.0		1956 0.2		2053 0.1		2115 0.3		2126 0.3		2149 0.3		2224 0.4		2247 0.3
05	0158 1.2	21	0119 1.1	05	0058 1.1	21	0204 1.1	05	0111 1.1	21	0219 1.1	05	0228 1.2	21	0249 1.2
TER	0745 0.2	QUI	0826 0.2	SEX	0858 1.0	DOM	0932 0.1	DOM	0934 0.0	TER	0958 0.0	QUA	1026 0.1	SEX	1104 0.0
	1321 1.2		1341 1.2		1319 1.2		1508 1.2		1356 1.1		1600 1.2		1508 1.1		1530 1.1
	2013 0.0		2045 0.2		2143 0.2		2200 0.3		2208 0.3		2228 0.3		2256 0.4		2326 0.3
06	0226 1.1	22	0149 1.1	06	0126 1.1	22	0221 1.1	06	0158 1.1	22	0230 1.1	06	0308 1.2	22	0321 1.3
QUA	0834 0.1	SEX	0902 0.2	SAB	0949 0.1	SEG	1011 0.1	SEG	1011 0.0	QUA	1045 0.0	QUI	1054 0.1	SAB	1154 0.1
	1308 1.3		1421 1.2		1404 1.2		1545 1.2		1438 1.1		1643 1.1		1543 1.1		1600 1.0
	2104 0.0		2132 0.3		2226 0.3		2251 0.4		2254 0.4		2306 0.4		2319 0.4		
07	0128 1.1	23	0217 1.1	07	0208 1.1	23	0243 1.1	07	0239 1.2	23	0302 1.2	07	0351 1.2	23	0006 0.4
QUI	0915 0.1	SAB	0947 0.2	DOM	1032 0.1	TER	1058 0.1	TER	1053 0.1	QUI	1126 0.0	SEX	1121 0.2	DOM	0402 1.2
	1334 1.3		1454 1.2		1447 1.2		1628 1.1		1519 1.1		1619 1.0		1615 1.1		1245 0.2
	2156 0.1		2211 0.3		2309 0.4		2334 0.4		2330 0.5		2354 0.4		2347 0.5		1632 1.0
08	0156 1.1	24	0236 1.1	08	0253 1.1	24	0311 1.1	08	0321 1.1	24	0339 1.2	08	0424 1.1	24	0056 0.4
SEX	1000 0.1	DOM	1026 0.2	SEG	1109 0.1	QUA	1147 0.1	QUA	1124 0.1	SEX	1209 0.1	SAB	1154 0.3	SEG	0453 1.2
	1413 1.3		1528 1.2		1528 1.1		1624 1.0		1602 1.1		1624 1.0		1653 1.0		1341 0.3
	2245 0.2		2258 0.4		2356 0.5										1709 0.9
															2021 0.6
															2158 0.6
09	0224 1.1	25	0300 1.1	09	0334 1.1	25	0013 0.5	09	0000 0.5	25	0039 0.4	09	0015 0.5	25	0151 0.4
SAB	1047 0.1	SEG	1106 0.2	TER	1151 0.2	QUI	0354 1.1	QUI	0404 1.1	SAB	0417 1.2	DOM	0500 1.1	TER	0541 1.1
	1458 1.3		1554 1.1		1611 1.0		1234 0.1		1156 0.2		1302 0.2		1234 0.3		0908 0.7
	2328 0.4		2349 0.5				1653 1.0		1645 1.0		1702 0.9		1721 0.9		1008 0.7
											2047 0.8				1449 0.5
															1800 0.8
															2058 0.6
															2302 0.7
10	0304 1.1	26	0324 1.0	10	0041 0.6	26	0102 0.5	10	0028 0.6	26	0126 0.5	10	0058 0.5	26	0254 0.5
DOM	1128 0.2	TER	1154 0.2	QUA	0413 1.0	SEX	0436 1.1	SEX	0451 1.1	DOM	0506 1.1	SEG	0539 1.0	QUA	0638 1.0
	1541 1.2		1623 1.0		1226 0.3		1323 0.2		1226 0.3		1358 0.2		1317 0.4		0913 0.8
					1700 1.0		1728 0.9		1226 0.3		1749 0.9		1756 0.9		1138 0.8
					2008 0.7		1908 0.8		1723 0.9		2006 0.7				1600 0.5
					2200 0.8		2119 0.9		2149 0.7		2206 0.8				1858 0.8
															2132 0.6
															2349 0.7
11	0013 0.5	27	0038 0.5	11	0117 0.6	27	0158 0.5	11	0100 0.6	27	0219 0.5	11	0153 0.5	27	0404 0.4
SEG	0351 1.1	QUA	0402 1.0	QUI	0502 1.0	SAB	0523 1.0	SAB	0532 1.0	SEG	0600 1.1	TER	1415 0.5	QUI	0754 0.9
	1208 0.3		1249 0.2		1302 0.3		1421 0.2		1306 0.3		1502 0.3		1836 0.8		0949 0.8
	1623 1.1		1704 0.9		1754 0.9		1817 0.8		1808 0.9		1838 0.8				1226 0.9
	2008 0.7				2032 0.7		1956 0.8		2123 0.7		2054 0.7				1715 0.5
	2200 0.8				2241 0.8		2226 0.9		2234 0.7		2304 0.8				2011 0.7
															2206 0.7
12	0104 0.6	28	0130 0.6	12	0200 0.7	28	0256 0.5	12	0145 0.6	28	0321 0.5	12	0254 0.5	28	0013 0.7
TER	0428 1.0	QUI	0451 1.0	SEX	0556 0.9	DOM	0619 1.0	DOM	0619 0.9	TER	0702 1.0	QUA	0823 0.8	SEX	0517 0.3
	1253 0.3		1347 0.2		1349 0.4		1524 0.2		1358 0.4		0949 0.8		1023 0.5		1306 1.0
	1709 1.0		1756 0.9		1854 0.8		1919 0.8		1904 0.8		1104 0.8		2123 0.8		1826 0.5
	2009 0.7		1908 0.8		2100 0.8		2023 0.8		2208 0.7		1609 0.4				2254 0.8
	2256 0.8		2156 0.9		2306 0.8		2315 0.9				1943 0.8				
											2136 0.7				
											2354 0.8				
13	0202 0.7	29	0228 0.6	13	0249 0.9	29	0354 0.5	13	0238 0.6	29	0426 0.4	13	0400 0.5	29	0043 0.8
QUA	0511 0.9	SEX	0543 0.9	SAB	0700 0.9	SEG	0732 0.9	SEG	0734 0.9	QUA	0817 0.9	QUI	1049 0.9	SAB	0626 0.2
	1341 0.4		1449 0.2		1441 0.4		0956 0.9		1454 0.4		1006 0.9		1639 0.5		1343 1.0

