

Analemmatic Sundial

Latitude: 32.0° N/S

Earliest Sunrise: 4:53 a.m. Latest Sunset: 7:07 p.m.
 Semi-Major Axis (E-W): 1000 mm Semi-Minor Axis (N-S): 529.9 mm
 Sunrise/Sunset Markers: X = ± 699.9 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	529.9	529.9	0.0							
11:55	12:05	21.8	529.8	530.2	21.8	8:10	3:50	843.4	284.7	890.2	878.3
11:50	12:10	43.6	529.4	531.2	43.6	8:05	3:55	854.9	274.9	898.0	892.1
11:45	12:15	65.4	528.8	532.8	65.4	8:00	4:00	866.0	265.0	905.7	905.7
11:40	12:20	87.2	527.9	535.0	87.2	7:55	4:05	876.7	254.9	913.0	918.9
11:35	12:25	108.9	526.8	537.9	108.9	7:50	4:10	887.0	244.7	920.1	931.7
11:30	12:30	130.5	525.4	541.4	130.6	7:45	4:15	896.9	234.4	927.0	944.3
11:25	12:35	152.1	523.8	545.4	152.2	7:40	4:20	906.3	224.0	933.6	956.6
11:20	12:40	173.6	521.9	550.0	173.8	7:35	4:25	915.3	213.4	939.9	968.5
11:15	12:45	195.1	519.7	555.1	195.4	7:30	4:30	923.9	202.8	945.9	980.1
11:10	12:50	216.4	517.4	560.8	216.8	7:25	4:35	932.0	192.1	951.6	991.4
11:05	12:55	237.7	514.7	567.0	238.2	7:20	4:40	939.7	181.2	957.0	1002.3
11:00	1:00	258.8	511.9	573.6	259.4	7:15	4:45	946.9	170.3	962.1	1012.9
10:55	1:05	279.8	508.7	580.6	280.6	7:10	4:50	953.7	159.3	966.9	1023.2
10:50	1:10	300.7	505.4	588.1	301.7	7:05	4:55	960.0	148.3	971.4	1033.1
10:45	1:15	321.4	501.8	595.9	322.7	7:00	5:00	965.9	137.2	975.6	1042.7
10:40	1:20	342.0	498.0	604.1	343.5	6:55	5:05	971.3	126.0	979.5	1052.0
10:35	1:25	362.4	493.9	612.6	364.2	6:50	5:10	976.3	114.7	983.0	1060.9
10:30	1:30	382.7	489.6	621.4	384.8	6:45	5:15	980.8	103.4	986.2	1069.5
10:25	1:35	402.7	485.0	630.5	405.2	6:40	5:20	984.8	92.0	989.1	1077.8
10:20	1:40	422.6	480.3	639.7	425.5	6:35	5:25	988.4	80.6	991.6	1085.7
10:15	1:45	442.3	475.3	649.2	445.7	6:30	5:30	991.4	69.2	993.9	1093.3
10:10	1:50	461.7	470.0	658.9	465.6	6:25	5:35	994.1	57.7	995.7	1100.5
10:05	1:55	481.0	464.6	668.7	485.4	6:20	5:40	996.2	46.2	997.3	1107.4
10:00	2:00	500.0	458.9	678.7	505.0	6:15	5:45	997.9	34.7	998.5	1114.0
9:55	2:05	518.8	453.0	688.7	524.4	6:10	5:50	999.0	23.1	999.3	1120.2
9:50	2:10	537.3	446.9	698.9	543.7	6:05	5:55	999.8	11.6	999.8	1126.2
9:45	2:15	555.6	440.6	709.1	562.7	6:00	6:00	1000.0	0.0	1000.0	1131.7
9:40	2:20	573.6	434.1	719.3	581.5	5:55	6:05	999.8	-11.6	999.8	1137.0
9:35	2:25	591.3	427.4	729.6	600.1	5:50	6:10	999.0	-23.1	999.3	1141.9
9:30	2:30	608.8	420.4	739.8	618.5	5:45	6:15	997.9	-34.7	998.5	1146.5
9:25	2:35	625.9	413.3	750.1	636.7	5:40	6:20	996.2	-46.2	997.3	1150.8
9:20	2:40	642.8	405.9	760.2	654.6	5:35	6:25	994.1	-57.7	995.7	1154.7
9:15	2:45	659.3	398.4	770.4	672.3	5:30	6:30	991.4	-69.2	993.9	1158.4
9:10	2:50	675.6	390.7	780.4	689.8	5:25	6:35	988.4	-80.6	991.6	1161.7
9:05	2:55	691.5	382.8	790.4	707.0	5:20	6:40	984.8	-92.0	989.1	1164.8
9:00	3:00	707.1	374.7	800.3	723.9	5:15	6:45	980.8	-103.4	986.2	1167.5
8:55	3:05	722.4	366.4	810.0	740.6	5:10	6:50	976.3	-114.7	983.0	1169.9
8:50	3:10	737.3	358.0	819.6	757.1	5:05	6:55	971.3	-126.0	979.5	1172.0
8:45	3:15	751.8	349.4	829.1	773.2	5:00	7:00	965.9	-137.2	975.6	1173.9
8:40	3:20	766.0	340.6	838.4	789.1	4:55	7:05	960.0	-148.3	971.4	1175.4
8:35	3:25	779.9	331.7	847.5	804.7	4:50	7:10	953.7	-159.3	966.9	1176.7
8:30	3:30	793.4	322.6	856.4	820.0	4:45	7:15	946.9	-170.3	962.1	1177.7
8:25	3:35	806.4	313.3	865.2	835.0						
8:20	3:40	819.2	303.9	873.7	849.7						
8:15	3:45	831.5	294.4	882.1	864.2						

Analematic Sundial

Latitude: 32.0° N/S

Date Scale

Semi-Major Axis (E-W): 1000 mm Semi-Minor Axis (N-S): 529.9 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-359.8	-353.0	-350.9	-341.6	-338.9	-327.2	-324.0	-310.2	-306.5	-290.8	-286.7
February	-260.2	-241.3	-236.3	-216.2	-211.1	-190.0	-184.6	-162.8	-157.3	-134.9	-129.2
March	-112.1	-89.1	-83.3	-60.0	-54.2	-30.8	-25.0	-1.5	4.3	27.7	33.5
April	68.2	91.1	96.8	119.2	124.8	146.8	152.1	173.6	178.9	199.5	204.5
May	229.1	248.0	252.5	270.0	274.2	290.4	294.2	308.8	312.4	325.2	328.1
June	344.0	352.3	354.2	360.3	361.7	365.6	366.1	367.5	367.7	365.1	366.3
July	361.7	356.0	354.2	346.4	344.2	334.1	331.3	319.3	316.1	302.3	298.6
August	275.2	258.1	253.8	235.5	230.9	211.6	206.6	186.5	181.3	160.4	155.0
September	122.7	100.5	95.0	72.4	66.7	44.0	38.4	15.4	9.6	-13.5	-19.2
October	-48.0	-71.1	-76.7	-99.6	-105.2	-127.8	-133.4	-155.5	-161.0	-182.6	-187.9
November	-218.8	-238.7	-243.5	-262.2	-266.7	-284.1	-288.2	-304.0	-307.7	-321.6	-325.0
December	-339.5	-349.4	-351.4	-358.6	-360.1	-364.7	-365.6	-367.5	-367.7	-366.8	-366.3

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	359.8	353.0	350.9	341.6	338.9	327.2	324.0	310.2	306.5	290.8	286.7
February	260.2	241.3	236.3	216.2	211.1	190.0	184.6	162.8	157.3	134.9	129.2
March	112.1	89.1	83.3	60.0	54.2	30.8	25.0	1.5	-4.3	-27.7	-33.5
April	-68.2	-91.1	-96.8	-119.2	-124.8	-146.8	-152.1	-173.6	-178.9	-199.5	-204.5
May	-229.1	-248.0	-252.5	-270.0	-274.2	-290.4	-294.2	-308.8	-312.4	-325.2	-328.1
June	-344.0	-352.3	-354.2	-360.3	-361.7	-365.6	-366.1	-367.5	-367.7	-365.1	-366.3
July	-361.7	-356.0	-354.2	-346.4	-344.2	-334.1	-331.3	-319.3	-316.1	-302.3	-298.6
August	-275.2	-258.1	-253.8	-235.5	-230.9	-211.6	-206.6	-186.5	-181.3	-160.4	-155.0
September	-122.7	-100.5	-95.0	-72.4	-66.7	-44.0	-38.4	-15.4	-9.6	13.5	19.2
October	48.0	71.1	76.7	99.6	105.2	127.8	133.4	155.5	161.0	182.6	187.9
November	218.8	238.7	243.5	262.2	266.7	284.1	288.2	304.0	307.7	321.6	325.0
December	339.5	349.4	351.4	358.6	360.1	364.7	365.6	367.5	367.7	366.8	366.3

Southern Hemisphere

The shaded "Date" boxes identify the two extremes of the "Date Scale" that occur on the Summer and Winter Solstices.

A number of "Date Scale" configurations are available including the following "Date Line" combinations:

- | | | |
|---------|------------|--------------------|
| a) 1 | c) 1,10,20 | e) 1,5,10,15,20,25 |
| b) 1,15 | d) 1,11,21 | f) 1,6,11,16,21,26 |

Analemmatic Sundial

Latitude: 32.0° N/S

Earliest Sunrise: 4:53 a.m. Latest Sunset: 7:07 p.m.
 Semi-Major Axis (E-W): 1500 mm Semi-Minor Axis (N-S): 794.9 mm
 Sunrise/Sunset Markers: X = ± 1049.9 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	794.9	794.9	0.0							
11:55	12:05	32.7	794.7	795.4	32.7	8:10	3:50	1265.1	427.1	1335.2	1317.5
11:50	12:10	65.4	794.1	796.8	65.4	8:05	3:55	1282.4	412.4	1347.0	1338.2
11:45	12:15	98.1	793.2	799.2	98.1	8:00	4:00	1299.0	397.4	1358.5	1358.5
11:40	12:20	130.7	791.9	802.6	130.8	7:55	4:05	1315.1	382.3	1369.5	1378.3
11:35	12:25	163.3	790.2	806.9	163.4	7:50	4:10	1330.5	367.0	1380.2	1397.6
11:30	12:30	195.8	788.1	812.0	195.9	7:45	4:15	1345.3	351.6	1390.5	1416.5
11:25	12:35	228.2	785.6	818.1	228.4	7:40	4:20	1359.5	335.9	1400.4	1434.8
11:20	12:40	260.5	782.8	825.0	260.8	7:35	4:25	1373.0	320.1	1409.8	1452.7
11:15	12:45	292.6	779.6	832.7	293.0	7:30	4:30	1385.8	304.2	1418.8	1470.1
11:10	12:50	324.7	776.0	841.2	325.2	7:25	4:35	1398.0	288.1	1427.4	1487.0
11:05	12:55	356.5	772.1	850.4	357.3	7:20	4:40	1409.5	271.9	1435.5	1503.4
11:00	1:00	388.2	767.8	860.4	389.2	7:15	4:45	1420.4	255.5	1443.2	1519.4
10:55	1:05	419.7	763.1	870.9	420.9	7:10	4:50	1430.6	239.0	1450.4	1534.8
10:50	1:10	451.1	758.1	882.1	452.6	7:05	4:55	1440.1	222.4	1457.2	1549.7
10:45	1:15	482.2	752.7	893.9	484.0	7:00	5:00	1448.9	205.7	1463.4	1564.1
10:40	1:20	513.0	746.9	906.2	515.3	6:55	5:05	1457.0	188.9	1469.2	1578.0
10:35	1:25	543.7	740.8	918.9	546.3	6:50	5:10	1464.4	172.0	1474.5	1591.4
10:30	1:30	574.0	734.4	932.1	577.2	6:45	5:15	1471.2	155.1	1479.3	1604.3
10:25	1:35	604.1	727.6	945.7	607.9	6:40	5:20	1477.2	138.0	1483.6	1616.7
10:20	1:40	633.9	720.4	959.6	638.3	6:35	5:25	1482.5	120.9	1487.5	1628.5
10:15	1:45	663.4	712.9	973.8	668.5	6:30	5:30	1487.2	103.8	1490.8	1639.9
10:10	1:50	692.6	705.1	988.4	698.4	6:25	5:35	1491.1	86.5	1493.6	1650.8
10:05	1:55	721.5	696.9	1003.1	728.1	6:20	5:40	1494.3	69.3	1495.9	1661.1
10:00	2:00	750.0	688.4	1018.0	757.5	6:15	5:45	1496.8	52.0	1497.7	1671.0
9:55	2:05	778.2	679.6	1033.1	786.7	6:10	5:50	1498.6	34.7	1499.0	1680.4
9:50	2:10	805.9	670.4	1048.3	815.5	6:05	5:55	1499.6	17.3	1499.7	1689.2
9:45	2:15	833.4	660.9	1063.6	844.1	6:00	6:00	1500.0	0.0	1500.0	1697.6
9:40	2:20	860.4	651.1	1079.0	872.3	5:55	6:05	1499.6	-17.3	1499.7	1705.5
9:35	2:25	887.0	641.0	1094.4	900.2	5:50	6:10	1498.6	-34.7	1499.0	1712.9
9:30	2:30	913.1	630.6	1109.7	927.8	5:45	6:15	1496.8	-52.0	1497.7	1719.8
9:25	2:35	938.9	619.9	1125.1	955.0	5:40	6:20	1494.3	-69.3	1495.9	1726.2
9:20	2:40	964.2	608.9	1140.4	982.0	5:35	6:25	1491.1	-86.5	1493.6	1732.1
9:15	2:45	989.0	597.6	1155.6	1008.5	5:30	6:30	1487.2	-103.8	1490.8	1737.6
9:10	2:50	1013.4	586.0	1170.6	1034.7	5:25	6:35	1482.5	-120.9	1487.5	1742.6
9:05	2:55	1037.3	574.2	1185.6	1060.5	5:20	6:40	1477.2	-138.0	1483.6	1747.1
9:00	3:00	1060.7	562.1	1200.4	1085.9	5:15	6:45	1471.2	-155.1	1479.3	1751.2
8:55	3:05	1083.5	549.7	1215.0	1110.9	5:10	6:50	1464.4	-172.0	1474.5	1754.9
8:50	3:10	1105.9	537.0	1229.4	1135.6	5:05	6:55	1457.0	-188.9	1469.2	1758.1
8:45	3:15	1127.8	524.1	1243.6	1159.8	5:00	7:00	1448.9	-205.7	1463.4	1760.8
8:40	3:20	1149.1	510.9	1257.5	1183.6	4:55	7:05	1440.1	-222.4	1457.2	1763.2
8:35	3:25	1169.8	497.5	1271.2	1207.0	4:50	7:10	1430.6	-239.0	1450.4	1765.1
8:30	3:30	1190.0	483.9	1284.6	1230.0	4:45	7:15	1420.4	-255.5	1443.2	1766.6
8:25	3:35	1209.7	470.0	1297.8	1252.5						
8:20	3:40	1228.7	455.9	1310.6	1274.6						
8:15	3:45	1247.2	441.6	1323.1	1296.3						

Analematic Sundial

Latitude: 32.0° N/S

Date Scale

Semi-Major Axis (E-W): 1500 mm Semi-Minor Axis (N-S): 794.9 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-539.7	-529.5	-526.4	-512.4	-508.3	-490.9	-486.0	-465.3	-459.7	-436.3	-430.1
February	-390.4	-361.9	-354.5	-324.2	-316.7	-285.0	-276.9	-244.3	-236.0	-202.4	-193.7
March	-168.1	-133.7	-125.0	-90.1	-81.4	-46.2	-37.5	-2.2	6.4	41.5	50.2
April	102.3	136.6	145.2	178.8	187.2	220.2	228.2	260.4	268.3	299.3	306.8
May	343.7	372.0	378.7	405.0	411.4	435.5	441.2	463.2	468.5	487.8	492.1
June	516.0	528.5	531.3	540.5	542.6	548.4	549.2	551.3	551.5	547.6	549.4
July	542.6	533.9	531.3	519.6	516.3	501.1	497.0	478.9	474.1	453.5	448.0
August	412.8	387.2	380.7	353.3	346.3	317.4	309.9	279.7	272.0	240.6	232.6
September	184.0	150.8	142.5	108.6	100.1	66.0	57.5	23.1	14.4	-20.2	-28.9
October	-72.0	-106.6	-115.1	-149.4	-157.8	-191.7	-200.1	-233.2	-241.5	-273.9	-281.8
November	-328.3	-358.0	-365.2	-393.3	-400.1	-426.1	-432.3	-456.0	-461.5	-482.5	-487.5
December	-509.3	-524.1	-527.2	-537.9	-540.2	-547.1	-548.4	-551.3	-551.5	-550.2	-549.4

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	539.7	529.5	526.4	512.4	508.3	490.9	486.0	465.3	459.7	436.3	430.1
February	390.4	361.9	354.5	324.2	316.7	285.0	276.9	244.3	236.0	202.4	193.7
March	168.1	133.7	125.0	90.1	81.4	46.2	37.5	2.2	-6.4	-41.5	-50.2
April	-102.3	-136.6	-145.2	-178.8	-187.2	-220.2	-228.2	-260.4	-268.3	-299.3	-306.8
May	-343.7	-372.0	-378.7	-405.0	-411.4	-435.5	-441.2	-463.2	-468.5	-487.8	-492.1
June	-516.0	-528.5	-531.3	-540.5	-542.6	-548.4	-549.2	-551.3	-551.5	-547.6	-549.4
July	-542.6	-533.9	-531.3	-519.6	-516.3	-501.1	-497.0	-478.9	-474.1	-453.5	-448.0
August	-412.8	-387.2	-380.7	-353.3	-346.3	-317.4	-309.9	-279.7	-272.0	-240.6	-232.6
September	-184.0	-150.8	-142.5	-108.6	-100.1	-66.0	-57.5	-23.1	-14.4	20.2	28.9
October	72.0	106.6	115.1	149.4	157.8	191.7	200.1	233.2	241.5	273.9	281.8
November	328.3	358.0	365.2	393.3	400.1	426.1	432.3	456.0	461.5	482.5	487.5
December	509.3	524.1	527.2	537.9	540.2	547.1	548.4	551.3	551.5	550.2	549.4

Southern Hemisphere

The shaded "Date" boxes identify the two extremes of the "Date Scale" that occur on the Summer and Winter Solstices.

A number of "Date Scale" configurations are available including the following "Date Line" combinations:

- | | | |
|---------|------------|--------------------|
| a) 1 | c) 1,10,20 | e) 1,5,10,15,20,25 |
| b) 1,15 | d) 1,11,21 | f) 1,6,11,16,21,26 |

Analemmatic Sundial

Latitude: 32.0° N/S

Earliest Sunrise: 4:53 a.m. Latest Sunset: 7:07 p.m.
 Semi-Major Axis (E-W): 2000 mm Semi-Minor Axis (N-S): 1059.6 mm
 Sunrise/Sunset Markers: X = ± 1399.8 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	1059.8	1059.8	0.0							
11:55	12:05	43.6	1059.6	1060.5	43.6	8:10	3:50	1686.8	569.5	1780.3	1756.6
11:50	12:10	87.2	1058.8	1062.4	87.2	8:05	3:55	1709.8	549.8	1796.0	1784.3
11:45	12:15	130.8	1057.6	1065.6	130.8	8:00	4:00	1732.1	529.9	1811.3	1811.3
11:40	12:20	174.3	1055.8	1070.1	174.4	7:55	4:05	1753.5	509.8	1826.1	1837.7
11:35	12:25	217.7	1053.5	1075.8	217.8	7:50	4:10	1774.0	489.4	1840.3	1863.5
11:30	12:30	261.1	1050.8	1082.7	261.2	7:45	4:15	1793.7	468.8	1854.0	1888.6
11:25	12:35	304.2	1047.5	1090.8	304.5	7:40	4:20	1812.6	447.9	1867.1	1913.1
11:20	12:40	347.3	1043.7	1100.0	347.7	7:35	4:25	1830.6	426.8	1879.7	1937.0
11:15	12:45	390.2	1039.5	1110.3	390.7	7:30	4:30	1847.8	405.6	1891.7	1960.2
11:10	12:50	432.9	1034.7	1121.6	433.6	7:25	4:35	1864.0	384.1	1903.2	1982.7
11:05	12:55	475.4	1029.5	1133.9	476.3	7:20	4:40	1879.4	362.5	1914.0	2004.6
11:00	1:00	517.6	1023.7	1147.2	518.9	7:15	4:45	1893.9	340.7	1924.3	2025.8
10:55	1:05	559.7	1017.5	1161.3	561.3	7:10	4:50	1907.4	318.7	1933.9	2046.4
10:50	1:10	601.4	1010.8	1176.2	603.4	7:05	4:55	1920.1	296.6	1942.9	2066.2
10:45	1:15	642.9	1003.6	1191.8	645.3	7:00	5:00	1931.9	274.3	1951.2	2085.5
10:40	1:20	684.0	995.9	1208.2	687.0	6:55	5:05	1942.7	251.9	1958.9	2104.0
10:35	1:25	724.9	987.8	1225.2	728.4	6:50	5:10	1952.6	229.4	1966.0	2121.9
10:30	1:30	765.4	979.2	1242.8	769.6	6:45	5:15	1961.6	206.8	1972.4	2139.0
10:25	1:35	805.5	970.1	1260.9	810.5	6:40	5:20	1969.6	184.0	1978.2	2155.6
10:20	1:40	845.2	960.5	1279.5	851.0	6:35	5:25	1976.7	161.2	1983.3	2171.4
10:15	1:45	884.6	950.5	1298.5	891.3	6:30	5:30	1982.9	138.3	1987.7	2186.6
10:10	1:50	923.5	940.1	1317.8	931.2	6:25	5:35	1988.1	115.4	1991.5	2201.0
10:05	1:55	962.0	929.2	1337.5	970.8	6:20	5:40	1992.4	92.4	1994.5	2214.9
10:00	2:00	1000.0	917.8	1357.4	1010.0	6:15	5:45	1995.7	69.3	1996.9	2228.0
9:55	2:05	1037.5	906.1	1377.5	1048.9	6:10	5:50	1998.1	46.2	1998.6	2240.5
9:50	2:10	1074.6	893.9	1397.8	1087.3	6:05	5:55	1999.5	23.1	1999.7	2252.3
9:45	2:15	1111.1	881.2	1418.2	1125.4	6:00	6:00	2000.0	0.0	2000.0	2263.5
9:40	2:20	1147.2	868.2	1438.6	1163.1	5:55	6:05	1999.5	-23.1	1999.7	2274.0
9:35	2:25	1182.6	854.7	1459.1	1200.3	5:50	6:10	1998.1	-46.2	1998.6	2283.8
9:30	2:30	1217.5	840.8	1479.6	1237.1	5:45	6:15	1995.7	-69.3	1996.9	2293.0
9:25	2:35	1251.8	826.6	1500.1	1273.4	5:40	6:20	1992.4	-92.4	1994.5	2301.6
9:20	2:40	1285.6	811.9	1520.5	1309.3	5:35	6:25	1988.1	-115.4	1991.5	2309.5
9:15	2:45	1318.7	796.8	1540.7	1344.7	5:30	6:30	1982.9	-138.3	1987.7	2316.8
9:10	2:50	1351.2	781.4	1560.9	1379.6	5:25	6:35	1976.7	-161.2	1983.3	2323.5
9:05	2:55	1383.0	765.6	1580.8	1414.0	5:20	6:40	1969.6	-184.0	1978.2	2329.5
9:00	3:00	1414.2	749.4	1600.5	1447.9	5:15	6:45	1961.6	-206.8	1972.4	2335.0
8:55	3:05	1444.7	732.9	1620.0	1481.3	5:10	6:50	1952.6	-229.4	1966.0	2339.8
8:50	3:10	1474.6	716.0	1639.2	1514.1	5:05	6:55	1942.7	-251.9	1958.9	2344.1
8:45	3:15	1503.7	698.8	1658.1	1546.4	5:00	7:00	1931.9	-274.3	1951.2	2347.8
8:40	3:20	1532.1	681.3	1676.7	1578.2	4:55	7:05	1920.1	-296.6	1942.9	2350.9
8:35	3:25	1559.8	663.4	1695.0	1609.4	4:50	7:10	1907.4	-318.7	1933.9	2353.4
8:30	3:30	1586.7	645.2	1712.9	1640.0	4:45	7:15	1893.9	-340.7	1924.3	2355.4
8:25	3:35	1612.9	626.7	1730.4	1670.0						
8:20	3:40	1638.3	607.9	1747.4	1699.5						
8:15	3:45	1662.9	588.8	1764.1	1728.4						

Analematic Sundial

Latitude: 32.0° N/S

Date Scale

Semi-Major Axis (E-W): 2000 mm Semi-Minor Axis (N-S): 1059.6 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-719.6	-706.0	-701.9	-683.2	-677.7	-654.5	-648.0	-620.3	-613.0	-581.7	-573.4
February	-520.5	-482.5	-472.6	-432.3	-422.3	-380.1	-369.2	-325.7	-314.7	-269.8	-258.3
March	-224.2	-178.3	-166.6	-120.1	-108.5	-61.6	-50.0	-3.0	8.6	55.4	66.9
April	136.5	182.2	193.5	238.4	249.6	293.6	304.3	347.2	357.7	399.1	409.1
May	458.3	496.0	505.0	540.0	548.5	580.7	588.3	617.7	624.7	650.4	656.2
June	688.0	704.6	708.4	720.6	723.4	731.2	732.2	735.0	735.4	730.1	732.6
July	723.4	711.9	708.4	692.9	688.4	668.1	662.6	638.5	632.1	604.6	597.3
August	550.4	516.3	507.6	471.0	461.8	423.2	413.2	372.9	362.7	320.8	310.1
September	245.3	201.0	189.9	144.8	133.5	88.0	76.7	30.8	19.2	-26.9	-38.5
October	-96.0	-142.1	-153.5	-199.2	-210.4	-255.6	-266.8	-311.0	-322.0	-365.2	-375.7
November	-437.7	-477.4	-487.0	-524.4	-533.5	-568.2	-576.4	-608.0	-615.3	-643.3	-650.1
December	-679.1	-698.7	-702.9	-717.2	-720.3	-729.4	-731.2	-735.0	-735.4	-733.6	-732.6

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	719.6	706.0	701.9	683.2	677.7	654.5	648.0	620.3	613.0	581.7	573.4
February	520.5	482.5	472.6	432.3	422.3	380.1	369.2	325.7	314.7	269.8	258.3
March	224.2	178.3	166.6	120.1	108.5	61.6	50.0	3.0	-8.6	-55.4	-66.9
April	-136.5	-182.2	-193.5	-238.4	-249.6	-293.6	-304.3	-347.2	-357.7	-399.1	-409.1
May	-458.3	-496.0	-505.0	-540.0	-548.5	-580.7	-588.3	-617.7	-624.7	-650.4	-656.2
June	-688.0	-704.6	-708.4	-720.6	-723.4	-731.2	-732.2	-735.0	-735.4	-730.1	-732.6
July	-723.4	-711.9	-708.4	-692.9	-688.4	-668.1	-662.6	-638.5	-632.1	-604.6	-597.3
August	-550.4	-516.3	-507.6	-471.0	-461.8	-423.2	-413.2	-372.9	-362.7	-320.8	-310.1
September	-245.3	-201.0	-189.9	-144.8	-133.5	-88.0	-76.7	-30.8	-19.2	26.9	38.5
October	96.0	142.1	153.5	199.2	210.4	255.6	266.8	311.0	322.0	365.2	375.7
November	437.7	477.4	487.0	524.4	533.5	568.2	576.4	608.0	615.3	643.3	650.1
December	679.1	698.7	702.9	717.2	720.3	729.4	731.2	735.0	735.4	733.6	732.6

Southern Hemisphere

The shaded "Date" boxes identify the two extremes of the "Date Scale" that occur on the Summer and Winter Solstices.

A number of "Date Scale" configurations are available including the following "Date Line" combinations:

- | | | |
|---------|------------|--------------------|
| a) 1 | c) 1,10,20 | e) 1,5,10,15,20,25 |
| b) 1,15 | d) 1,11,21 | f) 1,6,11,16,21,26 |

Analemmatic Sundial

Latitude: 32.0° N/S

Earliest Sunrise: 4:53 a.m. Latest Sunset: 7:07 p.m.
 Semi-Major Axis (E-W): 2500 mm Semi-Minor Axis (N-S): 1324.8 mm
 Sunrise/Sunset Markers: X = ± 1749.8 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	1324.8	1324.8	0.0							
11:55	12:05	54.5	1324.5	1325.6	54.5	8:10	3:50	2108.5	711.8	2225.4	2195.8
11:50	12:10	109.0	1323.5	1328.0	109.1	8:05	3:55	2137.3	687.3	2245.1	2230.3
11:45	12:15	163.5	1322.0	1332.0	163.5	8:00	4:00	2165.1	662.4	2264.1	2264.1
11:40	12:20	217.9	1319.8	1337.6	217.9	7:55	4:05	2191.8	637.2	2282.6	2297.1
11:35	12:25	272.2	1316.9	1344.8	272.3	7:50	4:10	2217.5	611.7	2300.4	2329.4
11:30	12:30	326.3	1313.5	1353.4	326.5	7:45	4:15	2242.2	585.9	2317.5	2360.8
11:25	12:35	380.3	1309.4	1363.5	380.6	7:40	4:20	2265.8	559.9	2333.9	2391.4
11:20	12:40	434.1	1304.7	1375.0	434.6	7:35	4:25	2288.3	533.6	2349.7	2421.2
11:15	12:45	487.7	1299.3	1387.9	488.4	7:30	4:30	2309.7	507.0	2364.7	2450.2
11:10	12:50	541.1	1293.4	1402.0	542.0	7:25	4:35	2330.0	480.2	2379.0	2478.4
11:05	12:55	594.2	1286.8	1417.4	595.4	7:20	4:40	2349.2	453.1	2392.5	2505.7
11:00	1:00	647.0	1279.7	1433.9	648.6	7:15	4:45	2367.3	425.8	2405.3	2532.3
10:55	1:05	699.6	1271.9	1451.6	701.6	7:10	4:50	2384.3	398.4	2417.3	2558.0
10:50	1:10	751.8	1263.5	1470.2	754.3	7:05	4:55	2400.1	370.7	2428.6	2582.8
10:45	1:15	803.6	1254.5	1489.8	806.7	7:00	5:00	2414.8	342.9	2439.0	2606.8
10:40	1:20	855.1	1244.9	1510.3	858.8	6:55	5:05	2428.4	314.9	2448.7	2630.0
10:35	1:25	906.1	1234.7	1531.5	910.6	6:50	5:10	2440.7	286.7	2457.5	2652.3
10:30	1:30	956.7	1224.0	1553.5	962.0	6:45	5:15	2452.0	258.5	2465.5	2673.8
10:25	1:35	1006.9	1212.6	1576.1	1013.1	6:40	5:20	2462.0	230.0	2472.7	2694.4
10:20	1:40	1056.5	1200.7	1599.3	1063.8	6:35	5:25	2470.9	201.5	2479.1	2714.2
10:15	1:45	1105.7	1188.2	1623.1	1114.1	6:30	5:30	2478.6	172.9	2484.6	2733.2
10:10	1:50	1154.4	1175.1	1647.3	1164.0	6:25	5:35	2485.1	144.2	2489.3	2751.3
10:05	1:55	1202.5	1161.5	1671.8	1213.5	6:20	5:40	2490.5	115.5	2493.2	2768.6
10:00	2:00	1250.0	1147.3	1696.7	1262.5	6:15	5:45	2494.6	86.6	2496.2	2785.0
9:55	2:05	1296.9	1132.6	1721.9	1311.1	6:10	5:50	2497.6	57.8	2498.3	2800.6
9:50	2:10	1343.2	1117.3	1747.2	1359.2	6:05	5:55	2499.4	28.9	2499.6	2815.4
9:45	2:15	1388.9	1101.5	1772.7	1406.8	6:00	6:00	2500.0	0.0	2500.0	2829.3
9:40	2:20	1433.9	1085.2	1798.3	1453.8	5:55	6:05	2499.4	-28.9	2499.6	2842.5
9:35	2:25	1478.3	1068.4	1823.9	1500.3	5:50	6:10	2497.6	-57.8	2498.3	2854.8
9:30	2:30	1521.9	1051.0	1849.6	1546.3	5:45	6:15	2494.6	-86.6	2496.2	2866.3
9:25	2:35	1564.8	1033.2	1875.1	1591.7	5:40	6:20	2490.5	-115.5	2493.2	2877.0
9:20	2:40	1607.0	1014.9	1900.6	1636.6	5:35	6:25	2485.1	-144.2	2489.3	2886.9
9:15	2:45	1648.4	996.0	1925.9	1680.8	5:30	6:30	2478.6	-172.9	2484.6	2896.0
9:10	2:50	1689.0	976.7	1951.1	1724.5	5:25	6:35	2470.9	-201.5	2479.1	2904.3
9:05	2:55	1728.8	957.0	1976.0	1767.5	5:20	6:40	2462.0	-230.0	2472.7	2911.9
9:00	3:00	1767.8	936.8	2000.6	1809.9	5:15	6:45	2452.0	-258.5	2465.5	2918.7
8:55	3:05	1805.9	916.1	2025.0	1851.6	5:10	6:50	2440.7	-286.7	2457.5	2924.8
8:50	3:10	1843.2	895.0	2049.0	1892.6	5:05	6:55	2428.4	-314.9	2448.7	2930.1
8:45	3:15	1879.6	873.5	2072.7	1933.0	5:00	7:00	2414.8	-342.9	2439.0	2934.7
8:40	3:20	1915.1	851.6	2095.9	1972.7	4:55	7:05	2400.1	-370.7	2428.6	2938.6
8:35	3:25	1949.7	829.2	2118.7	2011.7	4:50	7:10	2384.3	-398.4	2417.3	2941.8
8:30	3:30	1983.4	806.5	2141.1	2050.0	4:45	7:15	2367.3	-425.8	2405.3	2944.3
8:25	3:35	2016.1	783.4	2163.0	2087.5						
8:20	3:40	2047.9	759.9	2184.3	2124.4						
8:15	3:45	2078.7	736.0	2205.1	2160.5						

Analemmatic Sundial

Latitude: 32.0° N/S

Date Scale

Semi-Major Axis (E-W): 2500 mm Semi-Minor Axis (N-S): 1324.8 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-899.5	-882.5	-877.3	-854.0	-847.1	-818.1	-810.0	-775.4	-766.2	-727.1	-716.8
February	-650.6	-603.1	-590.8	-540.4	-527.8	-475.1	-461.5	-407.1	-393.3	-337.3	-322.9
March	-280.2	-222.8	-208.3	-150.1	-135.6	-77.0	-62.6	-3.7	10.7	69.2	83.7
April	170.6	227.7	241.9	298.0	311.9	367.0	380.3	434.0	447.2	498.8	511.3
May	572.8	620.0	631.2	675.0	685.6	725.9	735.4	772.1	780.9	813.0	820.2
June	860.0	880.8	885.6	900.8	904.3	913.9	915.3	918.8	919.2	912.6	915.7
July	904.3	889.9	885.6	866.1	860.5	835.1	828.3	798.2	790.2	755.8	746.6
August	688.1	645.4	634.5	588.8	577.2	529.0	516.4	466.1	453.4	401.0	387.6
September	306.6	251.3	237.4	181.0	166.9	110.0	95.9	38.5	24.1	-33.7	-48.1
October	-120.0	-177.7	-191.8	-249.1	-262.9	-319.5	-333.5	-388.7	-402.5	-456.4	-469.6
November	-547.1	-596.7	-608.7	-655.5	-666.8	-710.2	-720.5	-759.9	-769.1	-804.1	-812.6
December	-848.8	-873.4	-878.6	-896.4	-900.4	-911.8	-913.9	-918.8	-919.2	-917.0	-915.7

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	899.5	882.5	877.3	854.0	847.1	818.1	810.0	775.4	766.2	727.1	716.8
February	650.6	603.1	590.8	540.4	527.8	475.1	461.5	407.1	393.3	337.3	322.9
March	280.2	222.8	208.3	150.1	135.6	77.0	62.6	3.7	-10.7	-69.2	-83.7
April	-170.6	-227.7	-241.9	-298.0	-311.9	-367.0	-380.3	-434.0	-447.2	-498.8	-511.3
May	-572.8	-620.0	-631.2	-675.0	-685.6	-725.9	-735.4	-772.1	-780.9	-813.0	-820.2
June	-860.0	-880.8	-885.6	-900.8	-904.3	-913.9	-915.3	-918.8	-919.2	-912.6	-915.7
July	-904.3	-889.9	-885.6	-866.1	-860.5	-835.1	-828.3	-798.2	-790.2	-755.8	-746.6
August	-688.1	-645.4	-634.5	-588.8	-577.2	-529.0	-516.4	-466.1	-453.4	-401.0	-387.6
September	-306.6	-251.3	-237.4	-181.0	-166.9	-110.0	-95.9	-38.5	-24.1	33.7	48.1
October	120.0	177.7	191.8	249.1	262.9	319.5	333.5	388.7	402.5	456.4	469.6
November	547.1	596.7	608.7	655.5	666.8	710.2	720.5	759.9	769.1	804.1	812.6
December	848.8	873.4	878.6	896.4	900.4	911.8	913.9	918.8	919.2	917.0	915.7

Southern Hemisphere

The shaded "Date" boxes identify the two extremes of the "Date Scale" that occur on the Summer and Winter Solstices.

A number of "Date Scale" configurations are available including the following "Date Line" combinations:

- | | | |
|---------|------------|--------------------|
| a) 1 | c) 1,10,20 | e) 1,5,10,15,20,25 |
| b) 1,15 | d) 1,11,21 | f) 1,6,11,16,21,26 |