

TOTAL SOLAR ECLIPSE OF 2010 JULY 11

TABLE 2.A – MAPPING COORDINATES FOR THE UMBRAL PATH

$\Delta T = 66.2 \text{ s}$

Longitude	Latitude of:			Circumstances on Central Line				
	Northern Limit	Southern Limit	Central Line	Universal Time h m s	Sun Alt °	Sun Az. °	Path Width km	Central Durat. s
170°00.0'W	25°33.22'S	27°20.89'S	26°26.75'S	18:16:52	1.0	64.7	180.5	02m44.8s
169°00.0'W	25°08.24'S	26°56.51'S	26°02.07'S	18:16:56	2.0	64.2	181.9	02m47.3s
168°00.0'W	24°43.45'S	26°32.35'S	25°37.60'S	18:17:02	3.0	63.8	183.3	02m49.9s
167°00.0'W	24°18.89'S	26°08.41'S	25°13.35'S	18:17:11	4.0	63.3	184.7	02m52.6s
166°00.0'W	23°54.56'S	25°44.73'S	24°49.34'S	18:17:24	5.0	62.9	186.2	02m55.3s
165°00.0'W	23°30.49'S	25°21.31'S	24°25.59'S	18:17:39	6.1	62.4	187.7	02m58.1s
164°00.0'W	23°06.69'S	24°58.18'S	24°02.13'S	18:17:57	7.1	62.0	189.3	03m01.0s
163°00.0'W	22°43.19'S	24°35.35'S	23°38.97'S	18:18:18	8.2	61.5	190.9	03m04.0s
162°00.0'W	22°20.02'S	24°12.86'S	23°16.13'S	18:18:43	9.3	61.0	192.6	03m07.0s
161°00.0'W	21°57.18'S	23°50.73'S	22°53.65'S	18:19:11	10.3	60.6	194.3	03m10.2s
160°00.0'W	21°34.72'S	23°28.98'S	22°31.54'S	18:19:42	11.4	60.1	196.0	03m13.4s
159°00.0'W	21°12.65'S	23°07.63'S	22°09.83'S	18:20:16	12.5	59.6	197.8	03m16.6s
158°00.0'W	20°51.01'S	22°46.72'S	21°48.55'S	18:20:55	13.6	59.1	199.6	03m20.0s
157°00.0'W	20°29.81'S	22°26.27'S	21°27.72'S	18:21:37	14.7	58.6	201.5	03m23.4s
156°00.0'W	20°09.10'S	22°06.32'S	21°07.39'S	18:22:22	15.9	58.1	203.5	03m27.0s
155°00.0'W	19°48.90'S	21°46.90'S	20°47.57'S	18:23:12	17.0	57.6	205.5	03m30.6s
154°00.0'W	19°29.25'S	21°28.03'S	20°28.31'S	18:24:06	18.1	57.1	207.5	03m34.2s
153°00.0'W	19°10.18'S	21°09.76'S	20°09.63'S	18:25:03	19.3	56.5	209.6	03m38.0s
152°00.0'W	18°51.72'S	20°52.12'S	19°51.58'S	18:26:05	20.4	55.9	211.7	03m41.8s
151°00.0'W	18°33.92'S	20°35.15'S	19°34.19'S	18:27:12	21.6	55.3	213.9	03m45.8s
150°00.0'W	18°16.82'S	20°18.89'S	19°17.50'S	18:28:22	22.7	54.7	216.2	03m49.7s
149°00.0'W	18°00.45'S	20°03.38'S	19°01.56'S	18:29:37	23.9	54.0	218.5	03m53.8s
148°00.0'W	17°44.87'S	19°48.67'S	18°46.41'S	18:30:57	25.1	53.4	220.8	03m57.9s
147°00.0'W	17°30.10'S	19°34.80'S	18°32.08'S	18:32:21	26.2	52.7	223.2	04m02.1s
146°00.0'W	17°16.21'S	19°21.82'S	18°18.64'S	18:33:50	27.4	51.9	225.6	04m06.3s
145°00.0'W	17°03.25'S	19°09.78'S	18°06.13'S	18:35:24	28.6	51.1	228.1	04m10.6s
144°00.0'W	16°51.25'S	18°58.73'S	17°54.60'S	18:37:03	29.7	50.3	230.6	04m14.9s
143°00.0'W	16°40.28'S	18°48.73'S	17°44.11'S	18:38:46	30.9	49.4	233.1	04m19.2s
142°00.0'W	16°30.39'S	18°39.83'S	17°34.70'S	18:40:35	32.0	48.5	235.6	04m23.5s
141°00.0'W	16°21.63'S	18°32.08'S	17°26.44'S	18:42:29	33.2	47.5	238.1	04m27.8s
140°00.0'W	16°14.06'S	18°25.55'S	17°19.39'S	18:44:27	34.3	46.5	240.7	04m32.1s
139°00.0'W	16°07.74'S	18°20.29'S	17°13.59'S	18:46:31	35.4	45.4	243.1	04m36.4s
138°00.0'W	16°02.74'S	18°16.36'S	17°09.12'S	18:48:40	36.5	44.2	245.5	04m40.6s
137°00.0'W	15°59.10'S	18°13.83'S	17°06.02'S	18:50:55	37.6	43.0	247.9	04m44.7s
136°00.0'W	15°56.89'S	18°12.76'S	17°04.37'S	18:53:14	38.6	41.6	250.2	04m48.8s
135°00.0'W	15°56.18'S	18°13.20'S	17°04.23'S	18:55:38	39.6	40.2	252.3	04m52.7s
134°00.0'W	15°57.01'S	18°15.22'S	17°05.65'S	18:58:07	40.6	38.7	254.3	04m56.4s
133°00.0'W	15°59.46'S	18°18.86'S	17°08.68'S	19:00:41	41.5	37.2	256.1	05m00.0s
132°00.0'W	16°03.57'S	18°24.20'S	17°13.40'S	19:03:20	42.4	35.5	257.7	05m03.4s
131°00.0'W	16°09.41'S	18°31.27'S	17°19.85'S	19:06:03	43.2	33.7	259.1	05m06.5s
130°00.0'W	16°17.02'S	18°40.14'S	17°28.08'S	19:08:51	43.9	31.8	260.3	05m09.4s
129°00.0'W	16°26.45'S	18°50.82'S	17°38.13'S	19:11:42	44.6	29.8	261.2	05m12.0s
128°00.0'W	16°37.74'S	19°03.38'S	17°50.05'S	19:14:38	45.3	27.8	261.7	05m14.3s
127°00.0'W	16°50.92'S	19°17.82'S	18°03.86'S	19:17:37	45.8	25.6	262.0	05m16.3s
126°00.0'W	17°06.03'S	19°34.18'S	18°19.59'S	19:20:38	46.3	23.4	262.0	05m17.8s
125°00.0'W	17°23.07'S	19°52.45'S	18°37.25'S	19:23:43	46.6	21.1	261.6	05m19.1s
124°00.0'W	17°42.06'S	20°12.64'S	18°56.84'S	19:26:50	46.9	18.7	261.0	05m19.9s
123°00.0'W	18°03.00'S	20°34.73'S	19°18.36'S	19:29:58	47.1	16.3	260.0	05m20.3s
122°00.0'W	18°25.86'S	20°58.69'S	19°41.78'S	19:33:08	47.1	13.8	258.8	05m20.2s
121°00.0'W	18°50.62'S	21°24.49'S	20°07.07'S	19:36:18	47.1	11.3	257.3	05m19.8s

TOTAL SOLAR ECLIPSE OF 2010 JULY 11

TABLE 2.A – MAPPING COORDINATES FOR THE UMBRAL PATH

ΔT = 66.2 s

Longitude	Latitude of:			Circumstances on Central Line				
	Northern Limit	Southern Limit	Central Line	Universal Time h m s	Sun Alt °	Sun Az. °	Path Width km	Central Durat. s
120°00.0'W	19°17.24'S	21°52.07'S	20°34.17'S	19:39:28	46.9	8.9	255.6	05m19.0s
119°00.0'W	19°45.66'S	22°21.37'S	21°03.05'S	19:42:38	46.7	6.4	253.8	05m17.7s
118°00.0'W	20°15.82'S	22°52.31'S	21°33.60'S	19:45:47	46.3	4.0	251.7	05m16.1s
117°00.0'W	20°47.63'S	23°24.79'S	22°05.77'S	19:48:54	45.9	1.5	249.6	05m14.1s
116°00.0'W	21°21.01'S	23°58.73'S	22°39.44'S	19:51:58	45.3	359.2	247.4	05m11.7s
115°00.0'W	21°55.86'S	24°34.01'S	23°14.52'S	19:55:00	44.7	356.9	245.0	05m09.1s
114°00.0'W	22°32.07'S	25°10.53'S	23°50.90'S	19:57:59	43.9	354.7	242.7	05m06.1s
113°00.0'W	23°09.51'S	25°48.15'S	24°28.45'S	20:00:53	43.1	352.6	240.4	05m02.9s
112°00.0'W	23°48.08'S	26°26.77'S	25°07.06'S	20:03:44	42.3	350.5	238.0	04m59.4s
111°00.0'W	24°27.64'S	27°06.26'S	25°46.60'S	20:06:29	41.4	348.6	235.7	04m55.8s
110°00.0'W	25°08.08'S	27°46.50'S	26°26.95'S	20:09:10	40.4	346.7	233.4	04m52.0s
109°00.0'W	25°49.26'S	28°27.37'S	27°07.99'S	20:11:46	39.4	344.9	231.1	04m48.0s
108°00.0'W	26°31.06'S	29°08.76'S	27°49.60'S	20:14:16	38.3	343.2	228.9	04m44.0s
107°00.0'W	27°13.38'S	29°50.56'S	28°31.66'S	20:16:40	37.2	341.6	226.8	04m39.9s
106°00.0'W	27°56.09'S	30°32.66'S	29°14.08'S	20:18:58	36.1	340.0	224.7	04m35.7s
105°00.0'W	28°39.09'S	31°14.96'S	29°56.74'S	20:21:11	34.9	338.5	222.7	04m31.4s
104°00.0'W	29°22.28'S	31°57.38'S	30°39.55'S	20:23:17	33.8	337.1	220.8	04m27.2s
103°00.0'W	30°05.57'S	32°39.84'S	31°22.42'S	20:25:18	32.6	335.7	218.9	04m23.0s
102°00.0'W	30°48.87'S	33°22.24'S	32°05.28'S	20:27:12	31.4	334.4	217.1	04m18.8s
101°00.0'W	31°32.11'S	34°04.54'S	32°48.04'S	20:29:01	30.2	333.2	215.3	04m14.6s
100°00.0'W	32°15.21'S	34°46.65'S	33°30.65'S	20:30:44	29.1	332.0	213.6	04m10.5s
099°00.0'W	32°58.11'S	35°28.54'S	34°13.04'S	20:32:21	27.9	330.8	212.0	04m06.5s
098°00.0'W	33°40.76'S	36°10.14'S	34°55.17'S	20:33:53	26.7	329.7	210.4	04m02.5s
097°00.0'W	34°23.10'S	36°51.42'S	35°36.97'S	20:35:19	25.5	328.6	208.9	03m58.5s
096°00.0'W	35°05.09'S	37°32.34'S	36°18.42'S	20:36:40	24.4	327.6	207.4	03m54.7s
095°00.0'W	35°46.69'S	38°12.85'S	36°59.48'S	20:37:56	23.2	326.6	206.0	03m50.9s
094°00.0'W	36°27.87'S	38°52.94'S	37°40.11'S	20:39:08	22.1	325.6	204.6	03m47.3s
093°00.0'W	37°08.61'S	39°32.58'S	38°20.29'S	20:40:14	21.0	324.6	203.3	03m43.7s
092°00.0'W	37°48.86'S	40°11.75'S	39°00.00'S	20:41:16	19.9	323.7	202.1	03m40.2s
091°00.0'W	38°28.63'S	40°50.42'S	39°39.21'S	20:42:13	18.8	322.8	200.8	03m36.8s
090°00.0'W	39°07.88'S	41°28.59'S	40°17.92'S	20:43:06	17.7	321.9	199.6	03m33.4s
089°00.0'W	39°46.60'S	42°06.24'S	40°56.10'S	20:43:56	16.6	321.0	198.5	03m30.2s
088°00.0'W	40°24.79'S	42°43.37'S	41°33.75'S	20:44:41	15.6	320.1	197.4	03m27.1s
087°00.0'W	41°02.42'S	43°19.95'S	42°10.86'S	20:45:22	14.5	319.3	196.3	03m24.0s
086°00.0'W	41°39.51'S	43°56.00'S	42°47.41'S	20:46:00	13.5	318.4	195.2	03m21.0s
085°00.0'W	42°16.03'S	44°31.50'S	43°23.42'S	20:46:35	12.5	317.6	194.2	03m18.1s
084°00.0'W	42°51.99'S	45°06.44'S	43°58.87'S	20:47:07	11.5	316.8	193.3	03m15.3s
083°00.0'W	43°27.38'S	45°40.84'S	44°33.76'S	20:47:35	10.5	316.0	192.3	03m12.6s
082°00.0'W	44°02.21'S	46°14.69'S	45°08.09'S	20:48:00	9.6	315.1	191.4	03m10.0s
081°00.0'W	44°36.47'S	46°47.98'S	45°41.87'S	20:48:23	8.6	314.3	190.5	03m07.4s
080°00.0'W	45°10.17'S	47°20.73'S	46°15.08'S	20:48:43	7.7	313.5	189.6	03m04.9s
079°00.0'W	45°43.30'S	47°52.93'S	46°47.74'S	20:49:00	6.8	312.8	188.8	03m02.5s
078°00.0'W	46°15.88'S	48°24.58'S	47°19.85'S	20:49:15	5.9	312.0	188.0	03m00.1s
077°00.0'W	46°47.89'S	48°55.69'S	47°51.41'S	20:49:28	5.0	311.2	187.2	02m57.8s
076°00.0'W	47°19.36'S	49°26.26'S	48°22.42'S	20:49:38	4.2	310.4	186.4	02m55.6s
075°00.0'W	47°50.27'S	49°56.29'S	48°52.89'S	20:49:46	3.3	309.6	185.7	02m53.5s
074°00.0'W	48°20.64'S	50°25.80'S	49°22.83'S	20:49:53	2.5	308.8	184.9	02m51.4s
073°00.0'W	48°50.47'S	50°54.78'S	49°52.23'S	20:49:57	1.7	308.1	184.2	02m49.4s
072°00.0'W	49°19.77'S	51°23.24'S	50°21.11'S	20:50:00	0.8	307.3	183.5	02m47.4s
071°00.0'W	49°48.53'S		50°49.46'S	20:50:01	0.1	306.5	182.9	02m45.5s