

**TOTAL SOLAR ECLIPSE OF 2012 NOVEMBER 13**

**TABLE 3**

**PATH OF THE UMBRAL SHADOW – TOTAL SOLAR ECLIPSE OF 2012 NOVEMBER 13**

Universal Time	Northern Limit		Southern Limit		Central Line		Sun Alt °	Path Width km	Central Durat.
	Latitude	Longitude	Latitude	Longitude	Latitude	Longitude			
Limits	11°26.7'S	133°22.1'E	12°27.2'S	132°47.2'E	11°56.9'S	133°04.8'E	0	126	01m40.9s
20:40	16°59.1'S	148°07.1'E	17°20.6'S	145°34.6'E	17°10.9'S	146°53.1'E	15	146	02m08.2s
20:45	19°45.3'S	154°20.5'E	20°23.5'S	152°21.8'E	20°04.9'S	153°22.2'E	23	155	02m24.1s
20:50	21°54.3'S	158°51.5'E	22°40.9'S	157°05.6'E	22°18.0'S	157°59.3'E	29	161	02m36.5s
20:55	23°44.3'S	162°33.7'E	24°36.7'S	160°55.3'E	24°10.8'S	161°45.1'E	34	165	02m47.2s
21:00	25°21.9'S	165°46.9'E	26°19.0'S	164°13.6'E	25°50.7'S	165°00.8'E	38	168	02m56.8s
21:05	26°50.3'S	168°40.7'E	27°51.5'S	167°11.6'E	27°21.2'S	167°56.7'E	42	171	03m05.4s
21:10	28°11.7'S	171°21.1'E	29°16.4'S	169°55.5'E	28°44.3'S	170°38.8'E	45	173	03m13.4s
21:15	29°27.2'S	173°51.6'E	30°35.2'S	172°29.3'E	30°01.4'S	173°10.9'E	48	175	03m20.6s
21:20	30°37.6'S	176°14.9'E	31°48.6'S	174°55.8'E	31°13.3'S	175°35.8'E	51	176	03m27.3s
21:25	31°43.6'S	178°32.9'E	32°57.4'S	177°17.0'E	32°20.6'S	177°55.4'E	54	177	03m33.4s
21:30	32°45.5'S	179°12.9'W	34°02.0'S	179°34.4'E	33°23.8'S	179°48.8'W	57	178	03m38.9s
21:35	33°43.7'S	177°01.4'W	35°02.6'S	178°10.6'W	34°23.3'S	177°35.6'W	59	179	03m43.8s
21:40	34°38.4'S	174°51.6'W	35°59.7'S	175°57.2'W	35°19.1'S	175°24.0'W	61	179	03m48.1s
21:45	35°29.7'S	172°42.8'W	36°53.2'S	173°44.5'W	36°11.5'S	173°13.3'W	63	179	03m51.9s
21:50	36°17.9'S	170°34.2'W	37°43.4'S	171°31.8'W	37°00.7'S	171°02.6'W	65	179	03m55.2s
21:55	37°02.8'S	168°25.2'W	38°30.3'S	169°18.4'W	37°46.6'S	168°51.5'W	66	179	03m57.8s
22:00	37°44.7'S	166°15.4'W	39°13.9'S	167°03.8'W	38°29.3'S	166°39.3'W	67	179	03m59.8s
22:05	38°23.4'S	164°04.1'W	39°54.2'S	164°47.5'W	39°08.8'S	164°25.6'W	68	179	04m01.2s
22:10	38°59.0'S	161°51.0'W	40°31.2'S	162°29.0'W	39°45.1'S	162°09.8'W	68	179	04m02.0s
22:15	39°31.4'S	159°35.6'W	41°04.8'S	160°07.9'W	40°18.1'S	159°51.6'W	68	179	04m02.2s
22:20	40°00.5'S	157°17.5'W	41°34.9'S	157°43.7'W	40°47.7'S	157°30.5'W	67	178	04m01.8s
22:25	40°26.3'S	154°56.2'W	42°01.4'S	155°16.0'W	41°13.8'S	155°06.1'W	67	178	04m00.7s
22:30	40°48.7'S	152°31.4'W	42°24.2'S	152°44.5'W	41°36.4'S	152°38.0'W	65	177	03m59.0s
22:35	41°07.3'S	150°02.5'W	42°43.1'S	150°08.5'W	41°55.2'S	150°05.7'W	64	177	03m56.7s
22:40	41°22.2'S	147°29.1'W	42°57.9'S	147°27.8'W	42°10.0'S	147°28.7'W	62	176	03m53.7s
22:45	41°33.0'S	144°50.7'W	43°08.3'S	144°41.7'W	42°20.6'S	144°46.5'W	60	175	03m50.1s
22:50	41°39.5'S	142°06.7'W	43°14.0'S	141°49.6'W	42°26.7'S	141°58.5'W	58	174	03m45.8s
22:55	41°41.4'S	139°16.2'W	43°14.7'S	138°51.0'W	42°28.0'S	139°04.1'W	56	173	03m40.9s
23:00	41°38.2'S	136°18.5'W	43°09.9'S	135°44.8'W	42°24.1'S	136°02.2'W	53	172	03m35.3s
23:05	41°29.5'S	133°12.4'W	42°59.2'S	132°29.9'W	42°14.4'S	132°51.8'W	50	171	03m29.2s
23:10	41°14.6'S	129°56.4'W	42°41.7'S	129°04.9'W	41°58.2'S	129°31.4'W	47	169	03m22.3s
23:15	40°52.7'S	126°28.6'W	42°16.6'S	125°27.7'W	41°34.8'S	125°59.0'W	44	167	03m14.7s
23:20	40°22.7'S	122°46.0'W	41°42.6'S	121°35.3'W	41°02.8'S	122°11.6'W	41	165	03m06.4s
23:25	39°42.8'S	118°44.5'W	40°57.9'S	117°23.1'W	40°20.6'S	118°04.8'W	37	162	02m57.3s
23:30	38°50.4'S	114°16.9'W	39°59.4'S	112°43.4'W	39°25.2'S	113°31.3'W	32	159	02m47.1s
23:35	37°41.0'S	109°10.9'W	38°41.8'S	107°22.1'W	38°11.8'S	108°17.8'W	27	155	02m35.6s
23:40	36°04.8'S	102°59.1'W	36°53.2'S	100°46.5'W	36°29.6'S	101°54.6'W	21	150	02m22.0s
23:45	33°30.8'S	094°11.7'W	33°48.8'S	090°51.2'W	33°41.9'S	092°36.5'W	12	141	02m03.5s
Limits	29°02.2'S	080°18.8'W	30°02.4'S	079°37.9'W	29°32.3'S	079°58.5'W	0	127	01m42.0s

ΔT = 66.8 s