LINE OF CENTRAL AND ANNULAR ECLIPSE.

Longitude.	Latitude.	Longitude.	Latitude.
31 17 E	40 15 N	102 18 E	8 48 N
42 47	40 11	106 42	3 18 N
52 47	39 16	111 35	1 59 S
63 28	37 12	117 0	6 37
73 8	33 59	123 17	10 34
81 2	29 58	130 48	13 53
87 38	25 14	139 4	16 15
93 17	19 51	146 52	17 33
98 2 E	14 18 N	156 1 E	18 14 S

NORTHERN LINE OF SIMPLE CONTACT.

Long.	Lat.	Long.	Lat.	Long.	Lat.
14 35 E	78 4 N	114 16 E	54 42 N	137 49 E	28 39 N
47 16	77 36	118 50	49 40	142 49	25 30
69 47	75 9	122 32	45 4	147 58	23 11
87 56	70 47	126 14	40 25	154 2	21 26
99 19	65 56	129 36	36 22	159 37	20 29
107 54 E	60 21 N	133 20 E	32 27 N	166 40 E	20 0 N

SOUTHERN LINE OF SIMPLE CONTACT.

Long.	Lat.	Long.	Lat.	Long.	Lat.
31 6 E	7 13 N	72 51 E	4 24 S	103 1 E	36 21 S
41 46	7 6	77 42	9 10	110 54	41 6
48 9	6 25	81 52	14 5	119 35	44 50
54 50	5 0	86 18	19 42	129 21	47 44
61 6	2 52 N	90 43	25 4	139 6	49 39
67 11 E	0 16 S	96 12 E	30 47 S	155 51 E	51 13 S

ECLIPSE BEGINS AT SUN SET.

Long.	Lat.	Long.	Lat.	Long.	Lat.
166 42 E	19 50 N	173 23 E	3 40 N	170 12 E	29 24 S
169 39	18 39	173 22	3 19 S	167 30	38 44
171 47	15 6	172 54	11 13	164 5	45 41
172 52 E	10 21 N	171 48 E	20 37 S	160 1	49 52
				155 54 E	51 7 S

ECLIPSE ENDS AT SUN RISE.

Long.	Lat.	Long.	Lat.	Long.	Lat.
31 1 E	7 19 N	17 13 E	29 8 N	12 43 E	61 58 N
26 59	8 34	15 33	37 53	12 12	68 34
23 5	12 47	14 13	47 14	11 58	73 15
19 50 E	19 45 N	13 21 E	55 4 N	12 28	76 44
				14 40 E	77 54 N