

247

203

R. G. 105 No 221203

DATE 247

LOAN-A TABLE

WITH JAPAN

PREFACE

This table contains necessary data for the establishment of hyperbolic Loran-A lines of position for the pertinent rate and the area of coverage indicated by the included chartlet. The tabular data are arranged for entering with the reading obtained from the Loran-A receiver-indicator and the latitude or longitude, with convenient arrangement for interpolating for the other coordinates. Skywave corrections are included for reduction of skywave readings to corresponding groundwave readings. These together with the chartlet displaying the Loran-A lattice precede the tabular data. Illustrative examples are also supplied. When necessary, corrections for matching groundwave to skywave will be included.

The information herein provided in tabular form is the counterpart of the Loran-A charts. An index of Loran-A charts is available in the Introduction, Part II, of H. O. Pub. No. 1-N, Catalog of Nautical Charts and Publications. The table may be used, if desired, for constructing Loran-A charts of any locality within the area of coverage.

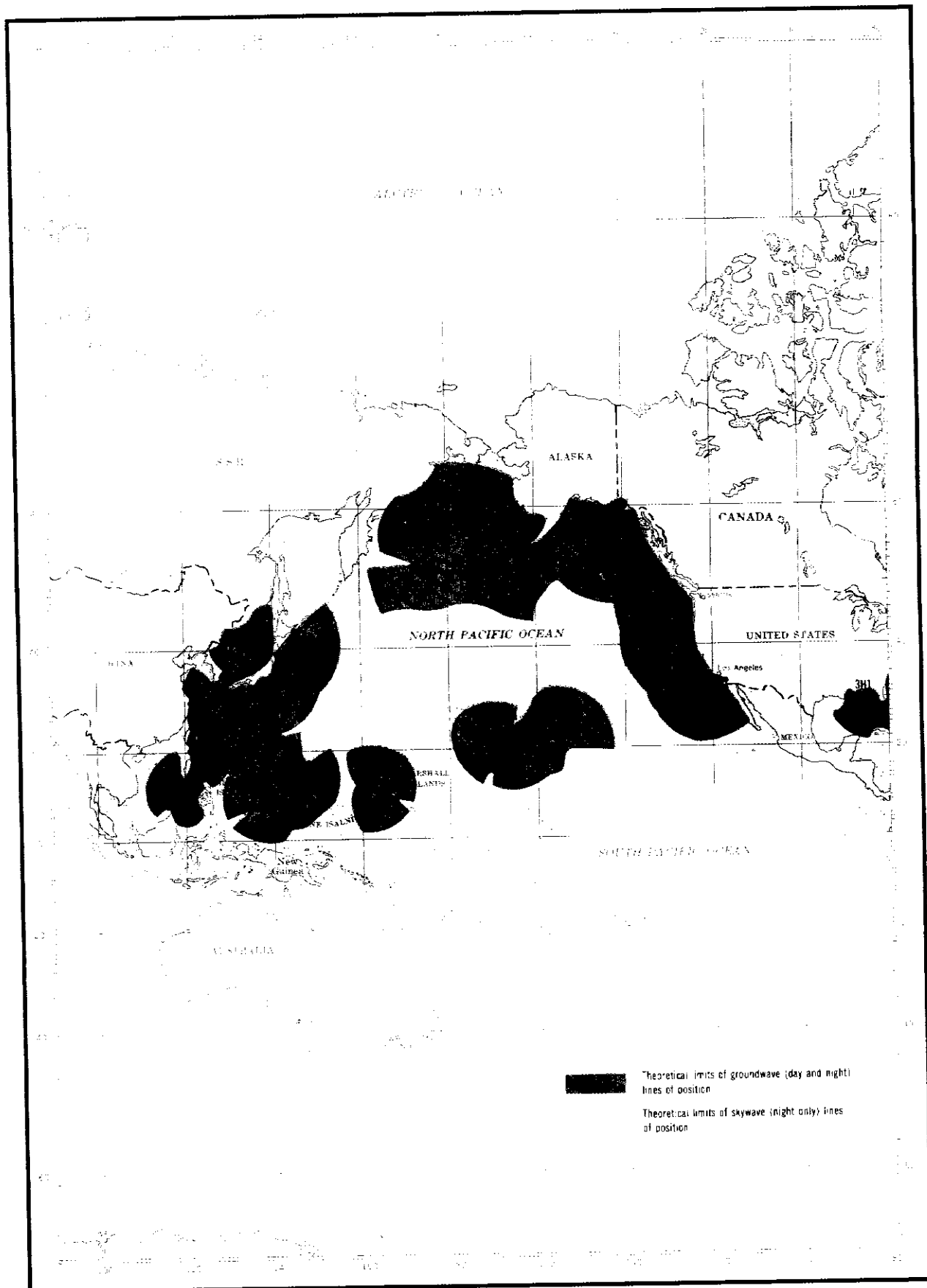
In effecting economies in production and printing the Oceanographic Office is providing this table in a somewhat revised format from that formerly used. The table was reproduced from computer copy and is printed in black, whereas previously tables were printed in the same color used on the charts for the respective rate. The introduction included in previous Loran-A tables has been eliminated since basic Loran-A information is presently included in available navigation manuals and additional material is supplied in manufacturers' handbooks which are usually obtained with the receiver-indicators. The Loran-A table series starting with 221 (101) will henceforth be reproduced, distributed and made available as separate rates, enabling the navigator to acquire only the rates desired. The publication number has been retained but with pertinent suffix which together with the rate will fully identify the table for requisitioning purposes. Future reprints of previously published tables will be reproduced as separate items. Existing volumes may still be ordered as in the past by volume number; the included rates will not be available as separate items until the present printings are exhausted.

Plans for air defense of the continental United States may require temporary suspension of the operation of certain electronic aids to navigation with little or no advance notice. In the case of Loran-A it is possible the coding delay might be changed without notice.

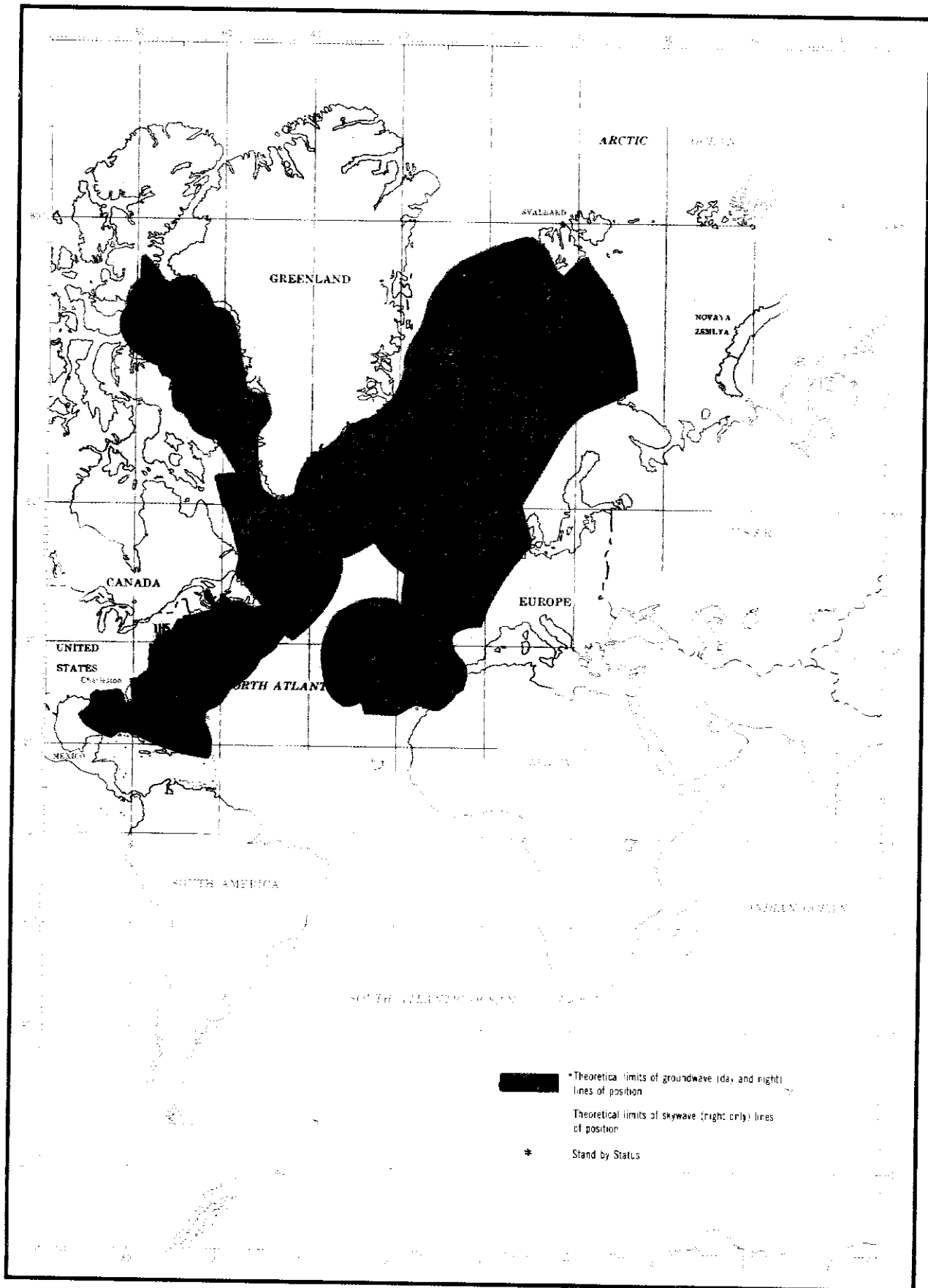
CAUTION

The 1957 edition of H. O. Pub. No. 221 (203), rate 2H7, is obsolete. This 1966 edition of the publication is current and contains recomputed values for rate 2H7 based on the relocation of the O'Shima slave transmitter to Hachijo Jima.

LORAN-A COVERAGE DIAGRAM



LORAN-A COVERAGE DIAGRAM



EXAMPLE 1

The 1530 DR position of a destroyer is latitude $15^{\circ}25'N$, longitude $168^{\circ}27'E$. The ship is on course (C) 015° , speed 30 knots. Loran-A readings are taken as follows:

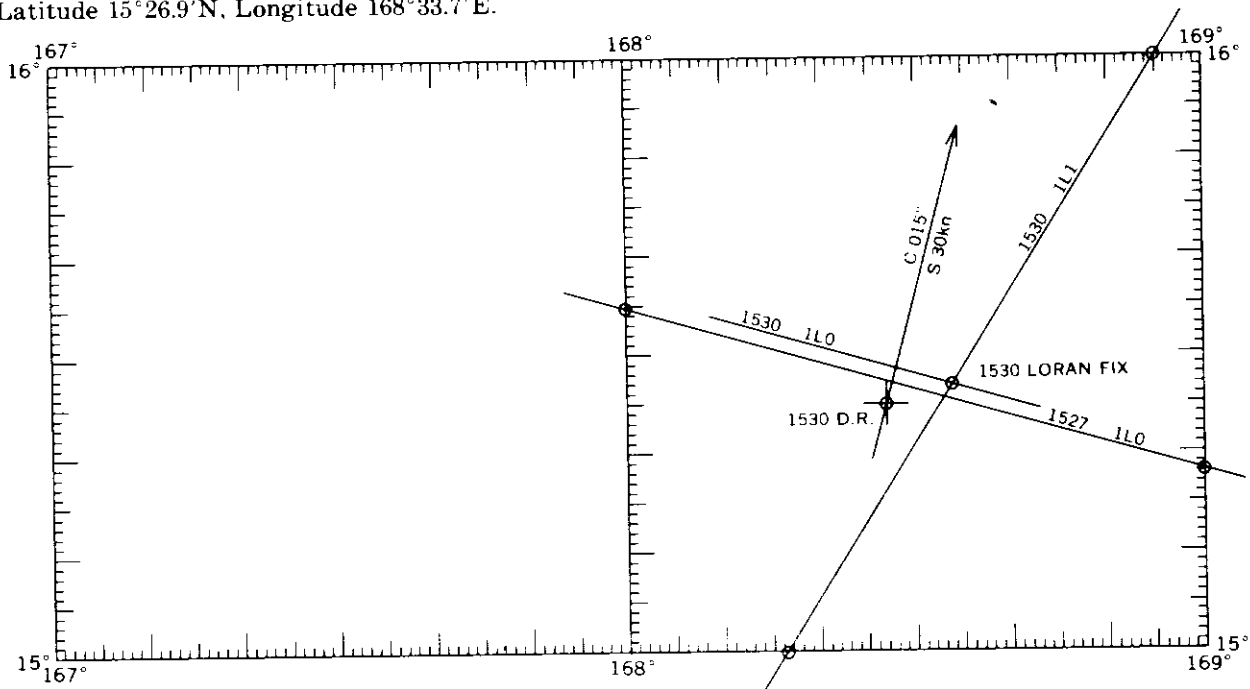
1527 1L0 T_G 3210 1530 1L1 T_G 2972

Required.—The 1530 Loran-A fix.

Solution.—Enter page one of the 1L0 table for the systematic correction at the DR position and apply to observed groundwave reading (T_G). Enter the time-difference tables in the T column nearest to the corrected value of T_G for 1L0, the observed value of T_G for 1L1, and with the latitudes or longitudes closest to and on each side of the DR position. Extract the corresponding longitudes or latitudes for these two points. Interpolate if necessary. Plot the two points thus obtained. Connect these two points with a straight line to determine a segment of a loran line. Label each plotted line with the time and rate used. The intersection of the two lines for different rates determines a loran fix.

Rate 1L0	Table EW, page 47	Long.	Tabulated Latitude	Δ	Lat. Change (T _G - T) $\times$ (Δ)	Interpolated Latitude
T _G (3210 - 5).....	3205					
T.....	3200	168°E	15°35.4'N	-11	(+5) $\times$ (-.11) = -0.6'	15°34.8'N
T _G - T.....	+5	169°E	15°18.8'N	-12	(+5) $\times$ (-.12) = -0.6'	15°18.2'N
Rate 1L1	Table EY, page 44	Lat.	Tabulated Longitude	Δ	Long. Change (T _G - T) $\times$ (Δ)	Interpolated Longitude
T _G	2972					
T.....	2980	15°N	168°14.6'E	-22	(-8) $\times$ (-.22) = +1.8'	168°16.4'E
T _G - T.....	-8	16°N	168°52.9'E	-26	(-8) $\times$ (-.26) = +2.1'	168°55.0'E

The fix.—Loran-A lines are plotted through the following positions: latitude $15^{\circ}34.8'N$, longitude $168^{\circ}16.4'E$; latitude $15^{\circ}18.2'N$, longitude $169^{\circ}E$; and latitude $15^{\circ}N$, longitude $168^{\circ}16.4'E$; latitude $16^{\circ}N$, longitude $168^{\circ}55.0'E$. Advance the 1L0 line 1.5 nautical miles (three minutes at 30 knots) in the direction of C, 015° . The intersection of this advanced line with the 1L1 line is the Loran-A fix at: Latitude $15^{\circ}26.9'N$, Longitude $168^{\circ}33.7'E$.



EW



v

T	1L 0-3200		1L 0-3220		1L 0-3240		1L 0-3260		1L 0-3280		T
Lat	L	△	L	△	L	△	L	△	L	△	Long
	11 05.3 N - 46		10 56.1 N - 46		10 46.9 N - 46		10 37.8 N - 46		10 28.6 N - 46		172 W
	11 19.6 44		11 10.8 44		11 02.0 44		10 53.2 44		10 44.4 44		173
	11 33.7 42		11 25.3 42		11 16.9 42		11 08.5 42		11 00.0 42		174
	11 47.7 N - 40		11 39.6 N - 40		11 31.6 N - 40		11 23.5 N - 40		11 15.5 N - 40		175 W
	12 01.4 38		11 53.8 38		11 46.1 39		11 38.4 39		11 30.7 39		176
	12 15.0 37		12 07.7 37		12 00.4 37		11 53.1 37		11 45.8 37		177
	12 28.4 35		12 21.5 35		12 14.6 35		12 07.7 35		12 00.7 35		178
	12 41.7 33		12 35.1 33		12 28.6 33		12 22.0 33		12 15.4 33		179 W
	12 54.7 N - 31		12 48.6 N - 31		12 42.4 N - 31		12 36.2 N - 31		12 30.0 N - 31		180
	13 07.7 N - 29		13 01.9 N - 29		12 56.0 N - 29		12 50.2 N - 29		12 44.4 N - 29		179 E
	13 20.4 27		13 15.0 27		13 09.6 27		13 04.1 27		12 58.7 27		178
	13 33.1 25		13 28.1 25		13 23.0 26		13 17.9 26		13 12.8 25		177
	13 45.7 24		13 41.0 24		13 36.3 24		13 31.6 24		13 26.9 24		176
	13 58.3 22		13 54.0 22		13 49.6 22		13 45.3 22		13 40.9 22		175
	14 10.9 N - 20		14 06.9 N - 20		14 02.9 N - 20		13 58.9 N - 20		13 54.9 N - 20		174 E
	14 23.6 18		14 19.9 18		14 16.3 18		14 12.7 18		14 09.0 18		173
	14 36.5 17		14 33.2 17		14 29.9 17		14 26.6 17		14 23.3 17		172
	14 49.8 15		14 46.8 15		14 43.9 15		14 40.9 15		14 37.9 15		171
	15 03.8 13		15 01.1 13		14 58.5 13		14 55.8 13		14 53.2 13		170
	15 18.8 N - 12		15 16.4 N - 12		15 14.0 N - 12		15 11.7 N - 12		15 09.3 N - 12		169 E
	15 35.4 11		15 33.3 11		15 31.2 11		15 29.1 11		15 27.0 11		168
	15 54.6 10		15 52.7 10		15 50.8 10		15 48.9 10		15 46.9 10		167
	16 05.6 9		16 03.7 9		16 01.9 9		16 00.0 10		15 58.1 9		166 30
	16 17.7 9		16 15.8 9		16 14.0 9		16 12.2 9		16 10.4 9		166

T		1L 1-2900		1L 1-2920		1L 1-2940		1L 1-2960		1L 1-2980		T
Lat		Lo	△	Lo	△	Lo	△	Lo	△	Lo	△	Long
29	N	179 26.8 E - 92		179 08.7 E - 90		178 50.9 E - 89		178 33.3 E - 87		178 16.0 E - 86		
28		178 33.5 86		178 16.5 84		177 59.9 83		177 43.4 82		177 27.3 80		
27		177 41.4 80		177 25.6 79		177 10.0 77		176 54.7 76		176 39.6 75		
26		176 50.5 74		176 35.8 73		176 21.3 72		176 07.1 71		175 53.0 70		
25	N	176 00.7 E - 69		175 47.1 E - 68		175 33.7 E - 67		175 20.5 E - 66		175 07.4 E - 65		
24		175 12.0 64		174 59.4 63		174 47.0 62		174 34.8 61		174 22.7 60		
23		174 24.3 58		174 12.7 58		174 01.3 57		173 50.0 56		173 38.9 55		
22		173 37.5 54		173 26.9 53		173 16.4 52		173 06.1 51		172 55.9 51		
21		172 51.6 49		172 41.9 48		172 32.4 47		172 23.0 47		172 13.7 46		
20	N	172 06.4 E - 44		171 57.7 E - 43		171 49.1 E - 43		171 40.6 E - 42		171 32.2 E - 42		
19		171 22.1 40		171 14.3 39		171 06.6 39		170 58.9 38		170 51.4 37		
18		170 38.6 35		170 31.6 35		170 24.7 34		170 18.0 34		170 11.3 34		
17		169 55.7 31		169 49.6 30		169 43.6 30		169 37.6 30		169 31.7 29		
16		169 13.6 27		169 08.4 26		169 03.1 26		168 58.0 26		168 52.9 26		
15	N	168 32.3 E - 23		168 27.8 E - 22		168 23.4 E - 22		168 19.0 E - 22		168 14.6 E - 22		
14		167 51.9 19		167 48.2 19		167 44.5 19		167 40.8 19		167 37.1 18		
13		167 12.7 16		167 09.6 15		167 06.6 15		167 03.5 15		167 00.6 15		
12 30		166 53.6 14		166 50.8 14		166 48.1 14		166 45.4 14		166 42.7 14		
12		166 35.0 13		166 32.5 13		166 30.0 12		166 27.6 12		166 25.2 12		

EXAMPLE 2

The 2100 DR position of a carrier is latitude $17^{\circ}25'N$, longitude $178^{\circ}20'E$. The ship is on course (C) 010° , speed 25 knots. Loran-A readings are taken as follows:

2057 1L0 Ts 2366 2100 1L1 Ts 1991

Required.—The 2100 Loran-A fix.

Solution.—Enter page one of the 1L0 table for the systematic correction at the DR position and apply to observed skywave reading (Ts). The corrected skywave reading for 1L0 and the observed skywave reading for 1L1 must be changed to equivalent groundwave readings. Preceding each time-difference table is a "Skywave Correction" table. Enter this table with the DR position and obtain the skywave correction. Interpolate if necessary. Apply the correction to the 1L0 corrected Ts and the 1L1 observed Ts to determine Tg. After Tg is determined, the remainder of the solution follows that of Example 1.

Rate 1L0 Table EW, page 5

Ts (2366 - 2)	2364
Skywave Corr.	-6
Tg	2358

Rate 1L0 Table EW, page 32

T	2360
Tg	2358
Tg - T	-2

Long.	Tabulated Latitude		Lat. Change (Tg - T) × (Δ)	Interpolated Latitude
178°E	17°15.0'N	-30	$(-2) \times (-.30) = +0.6'$	17°15.6'N
179°E	17°18.2'N	-32	$(-2) \times (-.32) = +0.6'$	17°18.8'N

Rate 1L1 Table EY, page 5

Ts	1991
Skywave Corr.	-2
Tg	1989

Rate 1L1 Table EY, page 24

T	1980
Tg	1989
Tg - T	+9

Long	Tabulated Latitude		Lat. Change (Tg - T) × (Δ)	Interpolated Latitude
178°E	16°58.6'N	+54	$(+9) \times (+.54) = +4.9'$	17°03.5'N
179°E	17°29.1'N	+57	$(+9) \times (+.57) = +5.1'$	17°34.2'N

The fix.—Following the procedure for plotting loran lines as shown in example 1, the 2100 Loran-A fix is: Latitude $17^{\circ}18.2'N$, Longitude $178^{\circ}28.9'E$.

SKY WAVE CORRECTION

EW

5

		LONGITUDE EAST					LONGITUDE WEST											
		175	176	177	178	179	180	179	178	177	176	175	174	173	172			
LATITUDE NORTH	38															38	LATITUDE NORTH	
	37															37		
	36															36		
	35															35		
	34	0	0		0											34		
	33	1	0	0	0											33		
	32	1	1	1	0	0										32		
	31	2	1	1	1	0	0									31		
	30	3	2	2	1	1												30
							SUBTRACT											
	29	4	3	2	2	1	1	0								29		
	28	6	5	3	2	2	1	1	0	0						28		
	27	8	6	5	3	2	1	1	0	0	0					27		
	26	10	8	6	4	3	2	1	1	0	0	0				26		
	25	12	9	7	5	3	2	1	1	0	0	0	0			25		
	24	15	11	8	6	4	3	2	1	0	0	0	0	0		24		
	23	17	13	9	7	5	3	2	1	1	0	0	0	0		23		
	22	18	14	10	8	5	3	2	1	1	0	0	0	0		22		
	21	20	15	11	8	6	4	2	1	1	0	0	0	0	0	21		
	20	20	15	11	8	6	4	2	1	1	0	0	0	0	0	20		
							SUBTRACT											
	19	20	15	11	8	6	4	2	1	1	0	0	0	0	0	19		
	18	18	14	11	8	5	4	2	1	1	0	0	0	0	0	18		
	17	16	13	10	7	5	3	2	1	1	0	0	0	0	0	17		
	16	14	11	8	6	4	3	2	1	0	0	0	0	0	0	16		
	15	11	9	7	5	4	2	1	1	0	0	0	0	0	0	15		
	14	9	7	6	4	3	2	1	1	0	0	0	0	0	0	14		
	13	6	5	4	3	2	1	1	0	0	0	0	0	0	0	13		
	12	4	4	3	2	2	1	1	0	0	0	0	0	0	0	12		
	11	2	2	2	1	1	1	0	0	0	0	0	0	0	0	11		
	10	0	1	1	1	1	0	0	0	0	0	0	0	0	0	10		
	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9		
	8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	8		
	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	7		
	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	6		
	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5		
	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4		
	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3		
	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
							ADD											
	0	0	0	0	0	0	0	0	0	0	0	0				0		
	1	0	0	0	0	0	0	0	0							1		
	2	0	0	0	0	0	0									2		
	3	0	0	0	0	0	0									3		
	4	0	0	0	0											4		
	5	0	0													5		
	6															6		
	7															7		
	8															8		
	9															9		
		175	176	177	178	179	180	179	178	177	176	175	174	173	172			
		LONGITUDE EAST					LONGITUDE WEST											

EY 5

IX

32

EW

T	1L 0-2300	1L 0-2320	1L 0-2340	1L 0-2360	1L 0-2380	T
Lat	L	L	L	L	L	Long
	°	°	°	°	°	°
	-----	-----	-----	-----	-----	-----
	18 07.1 N - 49	17 57.3 N - 49	17 49.5 N - 51	17 39.4 N - 50	17 29.4 N - 50	172 W
	18 04.2 47	17 54.9 47	17 47.6 48	17 38.0 48	17 28.4 48	173
			17 45.5 47	17 36.3 46	17 27.1 46	174
	18 01.1 N - 45	17 52.1 N - 45	17 43.2 N - 45	17 34.3 N - 44	17 25.5 N - 44	175 W
	17 57.7 43	17 49.1 43	17 40.6 42	17 32.2 42	17 23.7 42	176
	17 54.1 41	17 45.9 41	17 37.8 40	17 29.8 40	17 21.7 40	177
	17 50.3 39	17 42.5 39	17 34.8 39	17 27.1 38	17 19.5 38	178
	17 46.2 37	17 38.9 37	17 31.6 37	17 24.3 36	17 17.1 36	179 W
	17 42.0 N - 35	17 35.1 N - 35	17 28.2 N - 34	17 21.4 N - 34	17 14.6 N - 34	180
	17 37.6 N - 33	17 31.1 N - 32	17 24.7 N - 32	17 18.2 N - 32	17 11.9 N - 32	179 E
	17 33.1 31	17 27.1 30	17 21.0 30	17 15.0 30	17 09.0 30	178
	17 28.6 29	17 22.9 28	17 17.3 28	17 11.7 28	17 06.1 28	177
	17 24.0 26	17 18.8 26	17 13.5 26	17 08.4 26	17 03.2 26	176
	17 19.5 24	17 14.6 24	17 09.8 24	17 05.1 24	17 00.3 24	175
	17 15.1 N - 22	17 10.7 N - 22	17 06.3 N - 22	17 02.0 N - 22	16 57.6 N - 22	174 E
	17 11.0 20	17 07.0 20	17 03.1 20	16 59.1 20	16 55.2 20	173
	17 07.5 18	17 03.9 18	17 00.4 18	16 56.8 18	16 53.3 18	172
	17 04.8 16	17 01.6 16	16 58.5 16	16 55.3 16	16 52.2 16	171
	17 03.4 14	17 00.7 14	16 57.9 14	16 55.2 14	16 52.4 14	170

24

EY

T	1L 1-1900	1L 1-1920	1L 1-1940	1L 1-1960	1L 1-1980	T
Lat	L	L	L	L	L	Long
	°	°	°	°	°	°
	20 06.0 N + 84	20 22.8 N + 84	20 39.6 N + 84	20 56.5 N + 84	21 13.3 N + 84	173 W
	19 42.4 81	19 58.6 81	20 14.7 81	20 30.9 81	20 47.2 81	174
	19 18.3 N + 78	19 33.8 N + 78	19 49.3 N + 78	20 04.9 N + 78	20 20.5 N + 78	175 W
	18 53.8 74	19 08.6 74	19 23.4 74	19 38.3 75	19 53.2 75	176
	18 28.7 71	18 42.9 71	18 57.0 71	19 11.2 71	19 25.5 72	177
	18 03.2 67	18 16.6 67	18 30.1 68	18 43.6 68	18 57.2 68	178
	17 37.2 64	17 49.9 64	18 02.7 64	18 15.5 64	18 28.4 64	179 W
	17 10.6 N + 60	17 22.7 N + 60	17 34.7 N + 60	17 46.8 N + 61	17 59.0 N + 61	180
	16 43.6 N + 57	16 54.9 N + 57	17 06.3 N + 57	17 17.6 N + 57	17 29.1 N + 57	179 E
	16 16.1 53	16 26.7 53	16 37.3 53	16 47.9 53	16 58.6 54	178
	15 48.0 49	15 57.9 49	16 07.7 49	16 17.6 50	16 27.5 50	177
	15 19.4 45	15 28.5 46	15 37.6 46	15 46.7 46	15 55.9 46	176
	14 50.2 42	14 58.5 42	15 06.8 42	15 15.2 42	15 23.6 42	175
	14 20.3 N + 38	14 27.9 N + 38	14 35.4 N + 38	14 43.0 N + 38	14 50.6 N + 38	174 E
	13 49.7 34	13 56.4 34	14 03.2 34	14 10.0 34	14 16.9 35	173
	13 18.2 30	13 24.1 30	13 30.1 30	13 36.2 30	13 42.2 30	172
	12 45.5 26	12 50.7 26	12 55.9 26	13 01.1 26	13 06.4 27	171
	12 11.1 22	12 15.5 22	12 19.9 22	12 24.4 23	12 28.9 23	170
	11 53.0 N + 20	11 57.0 N + 20	12 01.1 N + 20	12 05.1 N + 20	12 09.2 N + 21	169 30 E
	11 34.0 18	11 37.6 18	11 41.3 19	11 45.0 19	11 48.7 19	169
	11 13.7 17	11 17.0 17	11 20.3 17	11 23.6 17	11 27.0 17	168 30
	11 02.8 16	11 05.9 16	11 09.1 16	11 12.3 16	11 15.5 16	168 15



LORAN STATIONS

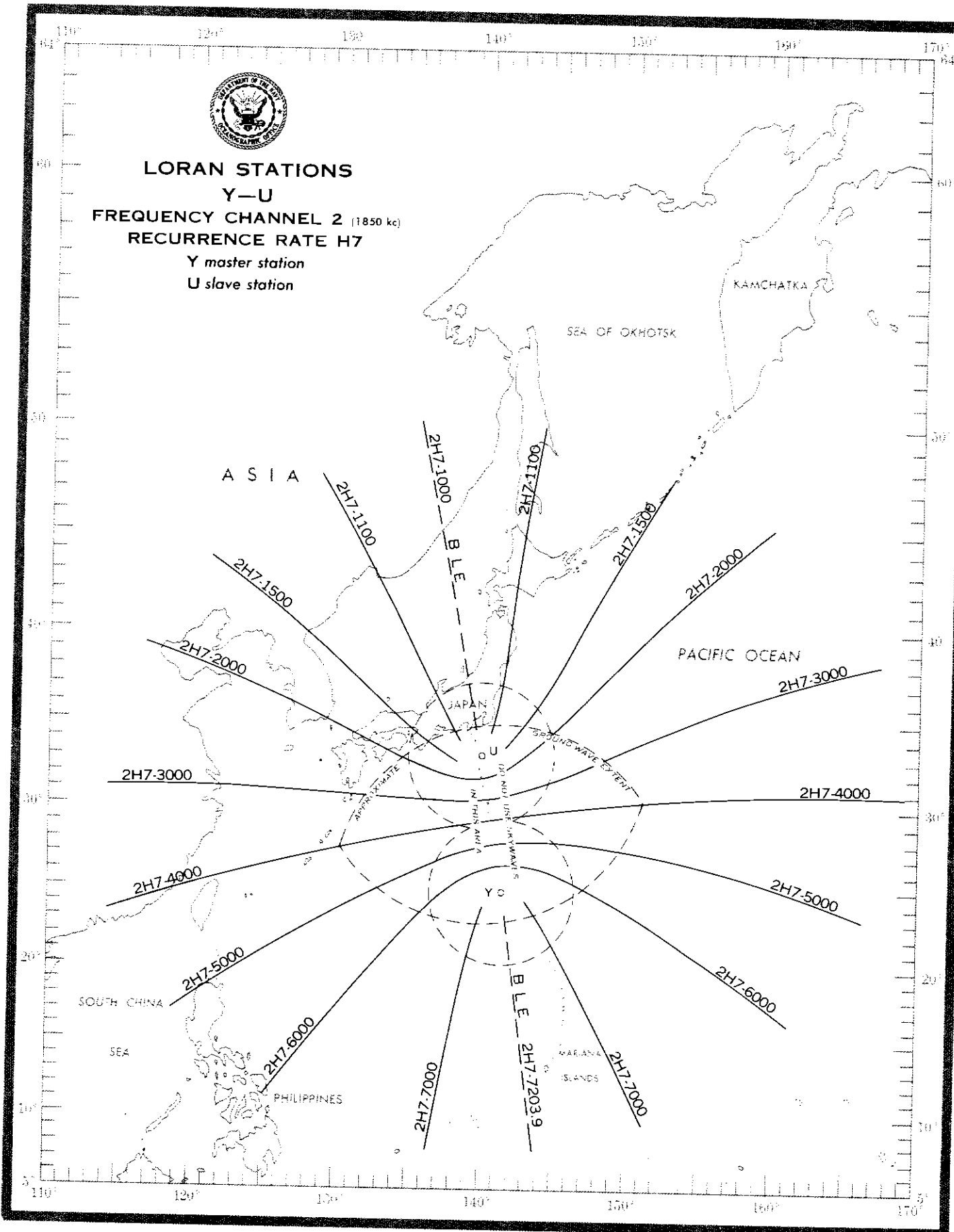
Y-U

FREQUENCY CHANNEL 2 (1850 kc)

RECURRENCE RATE H7

Y master station

U slave station



APPLICATION OF CORRECTION FOR MATCHING SKYWAVES WITH GROUNDWAVES

In the coverage area of a loran rate with an extremely long base line, such as rate 2H7, there are positions too close (within 250 miles) to one station to use skywaves and too remote from the other station of the rate, to always receive groundwaves. To obtain a fix in such areas, it is sometimes necessary to match a groundwave with a skywave, and apply a correction from special tables.

The correction table for rate 2H7 occupies the following page and precedes the conventional skywave correction tables. The correction is obtained and used in the same manner as a conventional skywave correction, by entering the table with latitude and longitude of the DR position, and applying the correction to the time-difference reading as indicated.

For example, at latitude $22^{\circ}20'N$, longitude $143^{\circ}55'E$, the receiver set for rate 2H7, a groundwave from the master station at Iwo Jima is matched with the first skywave from the slave station at Hachijo Jima, and the reading obtained is 2H7 TGS 7101. The correction table is entered with latitude $22^{\circ}N$ and longitude $144^{\circ}E$, and the correction (-71) obtained. This, applied to the time-difference reading, gives an equivalent 2H7 TG 7030.

2H7

GROUNDWAVE TO SKYWAVE CORRECTION

YU

NIGHTTIME																	YU
Groundwave from Master (Y) to First-hop Skywave from Slave (U)																	
Longitude—135° E to 149° E																	
	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149		
LATITUDE	29															29	
	28															28	
	27	90	94	97	100	102	102	101	99	96	92	88	85	81	79	27	
	26	84	87	89	91	92	92	92	90	88	86	83	80	78	75	26	
	25	79	81	83	84	85	85	84	84	82	81	79	76	75	73	25	
		SUBTRACT						SUBTRACT						SUBTRACT			
	24	76	77	78	79	80	80	79	79	77	76	75	74	72	71	24	
	23	73	74	74	75	75	75	75	75	74	73	72	72	70	69	23	
	22	70	71	72	72	72	72	72	72	72	71	70	70	69	68	22	
	21	69	69	70	70	70	70	70	70	69	69	68	68	67	67	21	
NORTH	20	67	67	68	68	68	68	68	68	68	67	67	66	66	66	20	
		SUBTRACT						SUBTRACT						SUBTRACT			
	19	66	66	66	67	67	67	67	66	66	66	66	66	65	65	19	
	18	65	65	66	66	66	66	66	66	66	65	65	65	65	65	18	
	17															17	
	16															16	
	15															15	
Longitude—135° E to 149° E																	
Groundwave from Master (Y) to First-hop Skywave from Slave (U)																	
NIGHTTIME																	

		NIGHTTIME																
		Groundwave from Slave (U) to First-hop Skywave from Master (Y)																
		Longitude—133° E to 147° E																
		133	134	135	136	137	138	139	140	141	142	143	144	145	146	147		
LATITUDE	39	65	65	66	66	66	66	66	66	66	66	66	66	66	66		39	LATITUDE
	38	66	66	66	67	67	68	68	68	68	68	68	68	67	66		38	
	37	67	67	68	68	69	69	70	70	70	70	70	69	69	69		37	
	36	68	68	69	70	71	71	72	72	72	72	72	72	71	70		36	
	35	69	70	71	72	73	74	74	75	75	75	75	74	74	73		35	
		ADD						ADD						ADD				
	34	71	72	73	75	76	77	78	79	79	79	79	77	76	75		34	
	33	73	74	76	78	80	82	83	84	84	84	84	82	81	79		33	
	32	75	77	80	82	85	87	89	91	91	91	90	88	86	84		32	
	31	77	80	83	87	91	94	98	100	101	101	99	97	93	89		31	
NORTH	30	80	83	88	93	98	103	108	113	115	114	112	106	101	96		30	
		133	134	135	136	137	138	139	140	141	142	143	144	145	146	147		
		Longitude—133° E to 147° E																
		Groundwave from Slave (U) to First-hop Skywave from Master (Y)																
		NIGHTTIME																

SKYWAVE CORRECTION

YU

2H7

YU		NIGHTTIME																	
		Longitude—106° E to 120° E																	
		106	107	108	109	110	111	112	113	114	115	116	117	118	119	120			
49																		49	
48																		48	
47																		47	
46																		46	
45																		45	
44																		44	
43																		43	
42																		42	
41																		41	
40																		40	
39																		39	
38																		38	
37																		37	
36																		36	
35																		35	
34																		34	
33																		33	
32																		32	
31																		31	
30																		30	
L A T I T U D E	29																	29	L A T I T U D E
	28																	28	
	27																	27	
	26																	26	
	25																	25	
	24																	24	
	23																	23	
	22																	22	
N O R T H	21																	21	N O R T H
	20																	20	
	19																	19	
	18																	18	
	17																	17	
	16																	16	
	15																	15	
	14																	14	
	13																	13	
	12																	12	
	11																	11	
	10																	10	
	9																	9	
	8																	8	
	7																	7	
	6																	6	
	5																	5	
	4																	4	
	3																	3	
	2																	2	
	1																	1	
	0																	0	
			106	107	108	109	110	111	112	113	114	115	116	117	118	119	120		
		Longitude—106° E to 120° E																	
		NIGHTTIME																	

2H7

SKYWAVE CORRECTION

YU

NIGHTTIME																	YU
Longitude—121° E to 135° E																	
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135			
49															49		
48											0	0	0	0	48		
47							0	0	1	0	1	1	1	1	47		
46							0	1	1	2	2	3	3	2	46		
45							0	1	1	2	3	4	5	4	45		
44						0	1	2	2	3	4	5	6	6	44		
43				0	0	1	2	2	3	4	5	6	7	8	43		
42			0	1	2	2	3	3	4	6	7	8	9	10	42		
41			0	1	2	2	3	4	6	7	9	10	12	14	41		
40		0	1	1	2	3	4	6	7	9	11	14	16	18	40		
		SUBTRACT					SUBTRACT					SUBTRACT					
39		0	1	2	3	4	5	7	8	11	14	16	20	23	27	39	
38		0	1	2	3	5	6	8	10	13	16	20	24	28	33	38	
37	0	1	1	2	4	5	7	9	11	15	18	23	28	34	41	37	
36	0	1	2	3	4	6	8	10	13	16	20	25	32	39	50	36	
35	0	1	2	3	4	6	8	10	13	16	21	27	34	44	58	35	
34	0	1	2	2	4	6	8	10	13	16	21	27	34	47		34	
33	0	1	2	3	4	6	8	9	12	15	20	26	33	46		33	
32	0	1	1	2	4	5	7	8	11	14	18	23	30	41	56	32	
31		0	1	2	3	5	6	7	9	11	14	19	24	32	43	31	
30		0	1	2	3	4	5	6	6	8	11	14	17	21	28	30	
		SUBTRACT					SUBTRACT					SUBTRACT					
29	L	0	1	1	2	3	3	4	4	6	7	8	10	11	12	29	L
28	A		0	1	1	2	2	2	2	2	3	3	2	1	0	28	A
27	T			0	1	1	1	1	1	0	0	1	2	4	7	12	27
26	I				0	0	0	1	1	2	4	6	9	14	20	26	26
25	T				0	1	1	2	3	4	6	9	13	19	26	25	25
24	U			0	1	1	2	3	4	5	7	10	15	21	29	24	24
23	D			0	1	1	2	3	5	6	8	11	16	22	29	23	23
22	E				0	1	2	4	5	7	8	12	16	21	28	22	22
21					0	1	2	3	5	6	8	12	15	19	25	21	21
20				0	1	1	3	4	6	6	8	10	13	17	21	20	20
						ADD					ADD						
19					0	1	2	3	5	7	9	11	14	18		19	
18					0	1	2	3	4	6	8	10	12	15		18	
17						0	1	2	3	4	6	8	9	11		17	
16	N						0	1	2	3	4	6	7	8		16	N
15	O							0	1	2	3	4	5	6		15	O
14	R								0	1	2	3	4	4		14	R
13	T									0	1	2	2	3		13	T
12	H											0	1	1	2	12	H
11													0	0	1	11	
10														0	0	10	
						ADD					ADD						
9																9	
8																8	
7																7	
6																6	
5																5	
4																4	
3																3	
2																2	
1																1	
0																0	
Longitude—121° E to 135° E																	
NIGHTTIME																	

SKYWAVE CORRECTION

YU		NIGHTTIME															217	
		Longitude—136° E to 150° E																
		136	137	138	139	140	141	142	143	144	145	146	147	148	149	150		
L A T I T U D E	49	0	0	0	0	0	0	0	0	0	0	0	0	0			49	L A T I T U D E
	48	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	48	
	47	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	47	
	46	3	3	3	3	3	3	3	3	2	2	2	2	2	2	1	46	
	45	5	5	5	5	5	5	5	5	4	4	4	3	2	2	1	45	
	44	7	7	8	8	8	8	8	7	7	6	5	5	4	3	2	44	
	43	10	10	10	11	11	11	10	10	9	8	8	7	6	5	4	43	
	42	13	14	15	15	15	15	14	14	12	11	10	8	8	6	5	42	
	41	18	19	20	21	21	20	20	18	17	15	14	11	10	8	6	41	
	40	23	25	27	28	28	28	26	24	22	20	17	15	12	10	8	40	
		SUBTRACT					SUBTRACT					SUBTRACT						
N O R T H	39	30	33	36	37	37	36	34	32	28	25	21	18	15	12	10	39	N O R T H
	38	38	44	48	51	52	50	46	41	35	30	26	21	17	14	11	38	
	37	50	59						54	45	36	30	24	20	16	13	37	
	36	DO NOT USE								56	44	34	27	21	16	13	36	
	35	SKYWAVES									50	37	28	22	16	13	35	
	34	IN THIS AREA									54	38	28	21	16	12	34	
	33										51	35	25	19	14	10	33	
	32										42	29	20	14	10	7	32	
	31	58								41	27	18	12	9	6	4	31	
	30	36	46	56			52	39	26	17	10	5	3	2	1	0	30	
		SUBTRACT																
N O R T H	29	15	17	16	13	7	0	6	10	11	10	8	7	6	5	4	29	N O R T H
	28	3	10	19	31	44	53	56	51	41	31	24	17	14	10	8	28	
	27	20	32	50							54	38	27	20	15	11	27	
	26	32	49				DO NOT USE					50	35	26	19	14	26	
	25	40					SKYWAVES					58	40	29	22	16	25	
	24	43					IN THIS AREA					58	42	30	23	17	24	
	23	41	57									54	39	30	22	17	23	
	22	36	49									46	35	27	21	16	22	
	21	31	40	50						59	48	38	31	24	19	13	21	
	20	27	32	38	46	51	54	54	50	44	37	32	26	21	17	13	20	
		ADD					ADD					ADD						
N O R T H	19	22	26	30	34	37	38	38	36	34	30	25	21	17	14	11	19	N O R T H
	18	18	21	24	26	28	29	29	28	26	23	20	17	14	11	9	18	
	17	14	16	18	20	21	22	22	21	19	17	15	13	10	9	7	17	
	16	10	11	14	15	16	16	16	15	14	13	11	10	8	7	5	16	
	15	8	9	10	10	11	11	11	11	10	9	8	7	6	5	4	15	
	14	6	6	7	8	8	8	8	8	8	7	6	5	4	3	2	14	
	13	4	4	5	5	6	6	6	6	6	5	4	3	3	2	1	13	
	12	2	3	3	3	4	4	4	4	4	3	3	2	2	2	1	12	
	11	1	1	2	2	2	2	2	2	2	2	2	1	1	1	0	11	
	10	0	0	1	1	1	1	1	1	1	1	1	0	0	0		10	
		ADD					ADD					ADD						
N O R T H	9			0	0	0	0	0	0	0	0						9	N O R T H
	8																8	
	7																7	
	6																6	
	5																5	
	4																4	
	3																3	
	2																2	
	1																1	
	0																0	
		136	137	138	139	140	141	142	143	144	145	146	147	148	149	150		
		Longitude—136° E to 150° E																
		NIGHTTIME																

SKYWAVE CORRECTION

NIGHTTIME																	YU
Longitude—151° E to 165° E																	
	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165		
49																49	
48																48	
47																47	
46	0	0														46	
45	1	1	0													45	
44	2	1	1	0												44	
43	3	2	1	1	0											43	
42	4	3	2	1	1	0										42	
41	5	4	3	2	1	1	0									41	
40	7	5	4	3	2	1	0									40	
	SUBTRACT						SUBTRACT										
39	8	6	5	3	2	1	1	0								39	
38	9	7	6	4	2	2	1	0								38	
37	10	8	6	4	3	2	1	0								37	
36	10	8	6	5	3	2	1	0								36	
35	9	8	6	5	3	2	1	0								35	
34	9	7	5	4	3	2	1	0								34	
33	8	6	4	3	2	2	1	0								33	
32	5	4	3	2	2	1	1	0								32	
31	3	2	2	1	1	1	0									31	
30	0	0	0	0	0	0										30	
L A T I T U D E	ADD						ADD										
	29	3	2	2	1	1	0									29	
	28	6	4	4	3	2	1	0								28	
	27	8	6	5	4	3	2	1	0							27	
	26	11	8	6	5	4	3	1	1	0						26	
	25	12	9	7	5	4	3	1	1	0						25	
	24	13	10	8	6	4	2	1	1	0						24	
	23	13	10	8	6	4	2	1	0							23	
	22	13	10	7	5	3	2	1	0							22	
	21	11	9	6	4	3	2	1	0							21	
N O R T H	20	10	8	5	4	2	1	0								20	
	ADD						ADD										
	19	8	6	5	3	2	1	0								19	
	18	7	5	4	2	1	0									18	
	17	5	4	3	2	1	0									17	
	16	4	3	2	1	0										16	
	15	3	2	1	0											15	
	14	2	1	0												14	
	13	1	0													13	
	12	0														12	
	ADD																
	11															11	
	10															10	
	9															9	
	8															8	
	7															7	
	6															6	
	5															5	
	4															4	
	3															3	
2															2		
1															1		
0															0		
Longitude—151° E to 165° E																	
NIGHTTIME																	

2 YU

T	2H7-1000 Baseline Ext.	2H7-1020	2H7-1040	2H7-1060	2H7-1080	T
Lat						Long
° ,	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	° ,
49 N	135 49.6E	132 15.1E	130 40.0E -428	129 23.6E -359	128 16.3E -322	
48 N	136 08.8E	132 49.4E	131 21.3E -397	130 10.5E -332	129 08.3E -298	
47 N	136 27.2E	133 22.5E	132 00.9E -367	130 55.5E -307	129 53.0E -275	
46 N	136 44.9E	133 54.2E	132 38.9E -338	131 38.6E -282	130 45.7E -253	
45 N	137 02.0E	134 24.8E	133 15.5E -311	132 20.1E -259	131 31.6E -232	
44 N	137 18.5E	134 54.3E	133 50.8E -285	133 00.1E -237	132 15.7E -212	
43 N	137 34.5E	135 22.8E	134 25.0E -260	133 38.7E -216	132 58.3E -193	
42 N	137 49.9E	135 50.5E	134 58.0E -235	134 16.1E -196	133 39.5E -175	
41 N	138 04.8E	136 17.3E	135 30.1E -212	134 52.4E -176	134 19.5E -157	
40 N	138 19.3E	136 43.4E	136 01.2E -189	135 27.6E -157	134 58.3E -140	
39 N	138 33.4E	137 08.8E	136 31.7E -166	136 02.0E -138	135 36.1E -123	
38 N	138 47.0E	137 33.7E	137 01.5E -144	136 35.7E -120	136 13.2E -107	
37 N	139 00.3E	137 58.2E	137 30.8E -123	137 08.9E -102	136 49.8E -91	
36 N	139 13.2E	138 22.5E	138 00.0E -101	137 42.0E -84	137 26.1E -75	
35 N	139 25.8E	138 46.9E	138 29.5E -78	138 15.4E -66	138 03.1E -59	
34 45N	139 29.0E	138 53.1E	138 37.1E -72	138 24.0E -61	138 12.5E -55	
34 30N	139 32.0E	138 59.5E	138 44.8E -66	138 32.8E -56	138 22.2E -51	
34 15N	139 35.1E	139 05.9E	138 52.6E -60	138 41.8E -51	138 32.1E -46	
34 N	139 38.1E	139 12.6E	139 00.8E -53	138 51.1E -46	138 42.4E -42	
33 45N	139 41.2E	139 19.6E	139 09.4E -46	139 00.9E -40	138 53.3E -37	
33 30N	139 44.2E	139 27.3E	139 18.8E -38	139 11.7E -34	139 05.1E -32	
33 15N	139 47.2E	139 36.2E	139 29.9E -29	139 24.2E -27	139 18.8E -25	
T	Baseline Ext. 2H7-1000	2H7-1020	2H7-1040	2H7-1060	2H7-1080	T

T	2H7-1000 Baseline Ext.	2H7-1020	2H7-1040	2H7-1060	2H7-1080	T
Lat	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	Long ° ,
	33 25.9N	33 05.2N	33 02.8N - 10	33 00.8N - 9	32 59.0N - 8	139 45E
33 15N	139 47.2E	139 56.8E	140 01.7E 22	140 05.9E 20	140 09.8E 19	
33 30N	139 44.2E	139 59.7E	140 06.6E 31	140 12.2E 26	140 17.2E 24	
33 45N	139 41.2E	140 01.2E	140 09.8E 38	140 16.6E 32	140 22.6E 28	
34 N	139 38.1E	140 02.0E	140 12.1E 45	140 20.1E 37	140 27.0E 33	
34 15N	139 35.1E	140 02.5E	140 14.0E 51	140 23.0E 42	140 30.8E 37	
34 30N	139 32.0E	140 02.7E	140 15.6E 57	140 25.6E 46	140 34.2E 41	
34 45N	139 29.0E	140 02.8E	140 16.9E 62	140 27.9E 50	140 37.3E 44	
35 N	139 25.8E	140 02.7E	140 18.0E 67	140 29.9E 55	140 40.1E 48	
36 N	139 13.2E	140 01.5E	140 21.5E 88	140 36.9E 71	140 50.1E 62	
37 N	139 00.3E	139 59.5E	140 23.9E 108	140 42.7E 87	140 58.7E 75	
38 N	138 47.0E	139 56.9E	140 25.7E 127	140 47.8E 102	141 06.7E 89	
39 N	138 33.4E	139 54.0E	140 27.1E 146	140 52.6E 117	141 14.3E 102	
40 N	138 19.3E	139 50.7E	140 28.3E 166	140 57.2E 133	141 21.7E 115	
41 N	138 04.8E	139 47.2E	140 29.3E 185	141 01.6E 149	141 29.1E 129	
42 N	137 49.9E	139 43.5E	140 30.1E 206	141 06.0E 165	141 36.4E 143	
43 N	137 34.5E	139 39.6E	140 30.9E 226	141 10.4E 182	141 43.9E 158	
44 N	137 18.5E	139 35.5E	140 31.6E 248	141 14.8E 199	141 51.4E 172	
45 N	137 02.0E	139 31.2E	140 32.3E 270	141 19.3E 217	141 59.1E 188	
46 N	136 44.9E	139 26.7E	140 32.9E 292	141 23.8E 235	142 07.0E 203	
47 N	136 27.2E	139 21.9E	140 33.4E 316	141 28.4E 254	142 15.1E 220	
48 N	136 08.8E	139 17.0E	140 34.0E 340	141 33.2E 273	142 23.4E 236	
49 N	135 49.6E	139 11.8E	140 34.5E 365	141 38.1E 293	142 32.0E 254	
50 N	135 29.6E	139 06.4E	140 35.0E 391	141 43.2E 314	142 40.9E 272	
T	Baseline Ext. 2H7-1000	2H7-1020	2H7-1040	2H7-1060	2H7-1080	T

4 YU

T	2H7-1100	2H7-1120	2H7-1140	2H7-1160	2H7-1180	T
Lat	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	Long
47 N	129 05.4E -255	128 16.0E -241	127 28.8E -231	126 43.2E -225	125 58.8E -220	
46 N	129 57.3E -234	129 11.9E -221	128 28.6E -212	127 46.8E -206	127 06.1E -201	
45 N	130 47.2E -214	130 05.6E -203	129 26.0E -194	128 47.8E -188	128 10.6E -183	
44 N	131 35.2E -196	130 57.2E -185	130 21.0E -177	129 46.2E -171	129 12.4E -167	
43 N	132 21.4E -178	131 46.9E -168	131 14.0E -161	130 42.4E -155	130 11.7E -151	
42 N	133 06.1E -161	132 34.9E -152	132 05.2E -145	131 36.6E -140	131 08.9E -136	
41 N	133 49.4E -145	133 21.4E -136	132 54.7E -130	132 29.1E -126	132 04.2E -122	
40 N	134 31.5E -129	134 06.5E -121	133 42.7E -116	133 19.9E -112	132 57.8E -109	
39 N	135 12.5E -114	134 50.5E -107	134 29.5E -102	134 09.4E - 99	133 49.9E - 96	
38 N	135 52.7E - 99	135 33.5E - 93	135 15.3E - 89	134 57.8E - 86	134 40.8E - 83	
37 N	136 32.3E - 84	136 15.9E - 79	136 00.3E - 76	135 45.4E - 73	135 30.8E - 71	
36 N	137 11.7E - 70	136 58.1E - 66	136 45.2E - 63	136 32.7E - 61	136 20.6E - 59	
35 N	137 51.6E - 55	137 40.9E - 52	137 30.6E - 50	137 20.7E - 49	137 11.0E - 47	
34 45N	138 01.9E - 51	137 51.9E - 49	137 42.3E - 47	137 33.0E - 45	137 23.9E - 45	
34 30N	138 12.4E - 47	138 03.1E - 45	137 54.2E - 43	137 45.5E - 42	137 37.1E - 42	
34 15N	138 23.1E - 43	138 14.6E - 41	138 06.4E - 40	137 58.4E - 39	137 50.5E - 38	
34 N	138 34.3E - 39	138 26.5E - 38	138 19.0E - 37	138 11.6E - 36	138 04.5E - 35	
33 45N	138 46.0E - 35	138 39.1E - 34	138 32.3E - 33	138 25.6E - 33	138 19.1E - 32	
33 30N	138 58.8E - 31	138 52.7E - 30	138 46.7E - 29	138 40.7E - 29	138 34.8E - 29	
33 15N	139 13.5E - 26	139 08.2E - 26	139 02.9E - 26	138 57.6E - 26	138 52.3E - 26	
T	2H7-1100	2H7-1120	2H7-1140	2H7-1160	2H7-1180	T

YU							5				
T	2H7-1100		2H7-1120		2H7-1140		2H7-1160		2H7-1180		T
Lat	° , Δ		° , Δ		° , Δ		° , Δ		° , Δ		Long
° ,	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	° ,	
	33 13.6N - 23	33 09.4N - 19	33 05.8N - 17	33 02.6N - 15	32 59.7N - 13	32 57.3N - 8	32 55.6N - 8	32 53.9N - 9	32 52.2N - 8	32 50.5N - 8	139 15E
	33 02.5N - 14	32 59.9N - 12	32 57.5N - 11	32 55.3N - 10	32 53.2N - 10	32 52.2N - 8	32 51.2N - 8	32 50.2N - 8	32 49.2N - 8	32 48.2N - 8	139 30E
	32 57.3N - 8	32 55.6N - 8	32 53.9N - 9	32 52.2N - 8	32 50.5N - 8	32 48.8N - 7	32 47.1N - 6	32 45.4N - 5	32 43.7N - 4	32 42.0N - 3	139 45E
	33 00.8N - 11	32 58.6N - 10	32 56.7N - 9	32 54.7N - 9	32 52.9N - 8	32 51.2N - 7	32 49.5N - 6	32 47.8N - 5	32 46.1N - 4	32 44.4N - 3	140 E
33 N	139 58.6E 20	140 02.5E 18	140 06.1E 18	140 09.7E 17	140 13.2E 17	140 16.7E 16	140 20.2E 15	140 23.7E 14	140 27.2E 13	140 30.7E 12	139 15E
33 15N	140 13.6E 18	140 17.4E 18	140 21.1E 18	140 24.8E 18	140 28.5E 18	140 32.2E 17	140 35.9E 16	140 39.6E 15	140 43.3E 14	140 47.0E 13	139 30E
33 30N	140 21.9E 22	140 26.4E 22	140 30.7E 21	140 35.0E 21	140 39.1E 20	140 43.2E 19	140 47.3E 18	140 51.4E 17	140 55.5E 16	140 59.6E 15	139 45E
33 45N	140 28.2E 26	140 33.4E 25	140 38.3E 24	140 43.2E 23	140 47.8E 23	140 52.4E 22	140 57.0E 21	141 01.6E 20	141 06.2E 19	141 10.8E 18	140 E
34 N	140 33.3E 30	140 39.2E 28	140 44.8E 27	140 50.2E 26	140 55.4E 25	141 00.6E 24	141 05.8E 23	141 11.0E 22	141 16.2E 21	141 21.4E 20	140 E
34 15N	140 37.9E 34	140 44.4E 31	140 50.6E 30	140 56.6E 29	141 02.3E 28	141 08.3E 27	141 14.3E 26	141 20.3E 25	141 26.3E 24	141 32.3E 23	140 E
34 30N	140 42.0E 37	140 49.2E 34	140 56.0E 33	141 02.4E 31	141 08.7E 30	141 15.0E 29	141 21.3E 28	141 27.6E 27	141 33.9E 26	141 40.2E 25	140 E
34 45N	140 45.8E 40	140 53.6E 37	141 00.9E 35	141 07.9E 34	141 14.7E 33	141 21.7E 32	141 28.7E 31	141 35.7E 30	141 42.7E 29	141 49.7E 28	140 E
35 N	140 49.3E 43	140 57.7E 40	141 05.6E 38	141 13.1E 36	141 20.3E 35	141 27.8E 34	141 35.3E 33	141 42.8E 32	141 50.3E 31	141 57.8E 30	140 E
36 N	141 01.8E 56	141 12.6E 52	141 22.7E 48	141 32.2E 46	141 41.3E 44	141 50.4E 43	142 00.5E 42	142 09.6E 41	142 18.7E 40	142 27.8E 39	140 E
37 N	141 13.0E 68	141 26.0E 63	141 38.2E 59	141 49.7E 56	142 00.6E 53	142 11.7E 51	142 22.8E 49	142 33.9E 47	142 45.0E 45	142 56.1E 43	140 E
38 N	141 23.4E 80	141 38.8E 73	141 53.0E 69	142 06.5E 65	142 19.3E 62	142 32.1E 59	142 44.9E 56	142 57.7E 53	143 10.5E 50	143 23.3E 47	140 E
39 N	141 33.6E 92	141 51.2E 84	142 07.5E 79	142 22.9E 75	142 37.6E 71	142 52.3E 67	143 07.0E 63	143 21.7E 59	143 36.4E 55	143 51.1E 51	140 E
40 N	141 43.5E 104	142 03.4E 96	142 21.9E 89	142 39.4E 84	142 55.9E 81	143 13.4E 77	143 30.9E 73	143 48.4E 69	144 05.9E 65	144 23.4E 61	140 E
41 N	141 53.4E 116	142 15.7E 107	142 36.4E 100	142 55.9E 94	143 14.4E 90	143 33.9E 86	143 53.4E 82	144 12.9E 78	144 32.4E 74	144 51.9E 70	140 E
42 N	142 03.5E 129	142 28.1E 118	142 51.0E 111	143 12.6E 105	143 33.1E 100	143 53.6E 96	144 14.1E 92	144 34.6E 88	144 55.1E 84	145 15.6E 80	140 E
43 N	142 13.6E 142	142 40.7E 130	143 06.0E 122	143 29.7E 115	143 52.2E 110	144 14.7E 106	144 37.2E 102	144 59.7E 98	145 22.2E 94	145 44.7E 90	140 E
44 N	142 23.9E 155	142 53.6E 143	143 21.2E 133	143 47.1E 126	144 11.8E 120	144 36.7E 114	144 61.6E 108	144 86.5E 102	145 11.4E 96	145 36.3E 90	140 E
45 N	142 34.5E 169	143 06.8E 155	143 36.8E 145	144 05.0E 137	144 31.9E 131	144 58.8E 125	145 25.7E 119	145 52.6E 113	146 19.5E 107	146 46.4E 101	140 E
46 N	142 45.3E 183	143 20.3E 168	143 52.9E 157	144 23.5E 149	144 52.6E 142	145 21.7E 136	145 50.8E 130	146 19.9E 124	146 49.0E 118	147 18.1E 112	140 E
47 N	142 56.5E 198	143 34.3E 182	144 09.4E 170	144 42.5E 161	145 13.9E 153	145 47.0E 146	146 19.1E 140	146 52.2E 134	147 24.3E 128	147 57.4E 122	140 E
48 N	143 08.0E 213	143 48.7E 196	144 26.5E 183	145 02.2E 173	145 36.0E 165	146 09.8E 158	146 43.6E 152	147 17.4E 146	147 51.2E 140	148 25.0E 134	140 E
49 N	143 19.9E 229	144 03.6E 210	144 44.3E 197	145 22.6E 186	145 59.0E 178	146 35.4E 171	147 11.8E 165	147 48.2E 159	148 24.6E 153	149 01.0E 147	140 E
50 N	143 32.3E 245	144 19.1E 226	145 02.7E 211	145 43.7E 200	146 22.8E 191	147 01.9E 183	147 42.0E 176	148 22.1E 170	149 02.2E 164	149 42.3E 158	140 E
T	2H7-1100		2H7-1120		2H7-1140		2H7-1160		2H7-1180		T

6 YU

6 YU																
T	2H7-1200			2H7-1220			2H7-1240			2H7-1260			2H7-1280			T
Lat	° , Δ			° , Δ			° , Δ			° , Δ			° , Δ			Long
° ,	° ,	° ,	Δ	° ,	° ,	Δ	° ,	° ,	Δ	° ,	° ,	Δ	° ,	° ,	Δ	° ,
46 N	126	26.2E	-198	125	46.8E	-196	125	07.8E	-194	124	28.9E	-194	123	50.1E	-194	
45 N	127	34.2E	-180	126	58.3E	-178	126	22.8E	-177	125	47.5E	-176	125	12.2E	-176	
44 N	128	39.2E	-164	128	06.6E	-162	127	34.4E	-160	127	02.4E	-159	126	30.5E	-159	
43 N	129	41.7E	-148	129	12.2E	-146	128	43.1E	-145	128	14.2E	-144	127	45.4E	-143	
42 N	130	41.9E	-134	130	15.3E	-132	129	49.0E	-130	129	23.0E	-129	128	57.2E	-129	
41 N	131	39.9E	-120	131	16.1E	-118	130	52.6E	-116	130	29.3E	-115	130	06.3E	-115	
40 N	132	36.2E	-106	132	15.0E	-105	131	54.1E	-103	131	33.4E	-102	131	12.9E	-102	
39 N	133	30.8E	-94	133	12.1E	-92	132	53.7E	-91	132	35.5E	-90	132	17.5E	-90	
38 N	134	24.2E	-82	134	07.9E	-80	133	51.9E	-79	133	36.1E	-79	133	20.3E	-78	
37 N	135	16.7E	-70	135	02.8E	-69	134	49.0E	-68	134	35.4E	-67	134	22.0E	-67	
36 N	136	08.8E	-58	135	57.1E	-57	135	45.7E	-57	135	34.3E	-56	135	23.0E	-56	
35 N	137	01.5E	-47	136	52.1E	-46	136	42.8E	-46	136	33.7E	-45	136	24.5E	-45	
34 45N	137	15.0E	-44	137	06.2E	-43	136	57.5E	-43	136	48.8E	-43	136	40.2E	-43	
34 30N	137	28.7E	-41	137	20.5E	-40	137	12.3E	-40	137	04.2E	-40	136	56.1E	-40	
34 15N	137	42.8E	-38	137	35.2E	-38	137	27.5E	-38	137	19.9E	-37	137	12.4E	-37	
34 N	137	57.3E	-35	137	50.2E	-35	137	43.2E	-35	137	36.1E	-35	137	29.1E	-35	
33 45N	138	12.5E	-32	138	06.0E	-32	137	59.5E	-32	137	53.0E	-32	137	46.5E	-32	
33 30N	138	28.8E	-29	138	22.9E	-29	138	16.9E	-29	138	11.0E	-30	138	04.9E	-30	
33 15N	138	47.0E	-26	138	41.5E	-27	138	36.1E	-27	138	30.6E	-27	138	25.0E	-27	
33 N	139	09.4E	-25	139	04.2E	-25	138	59.0E	-26	138	53.7E	-26	138	48.4E	-26	
T	2H7-1200			2H7-1220			2H7-1240			2H7-1260			2H7-1280			T

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T	2H7-1200		2H7-1220		2H7-1240		2H7-1260		2H7-1280		T
Lat	° , Δ		° , Δ		° , Δ		° , Δ		° , Δ		Long
	° ,		° ,		° ,		° ,		° ,		° ,
	33 05.7N	- 16	33 02.5N	- 15	32 59.4N	- 14	32 56.6N	- 13	32 53.9N	- 13	139 E
	32 57.0N	- 12	32 54.5N	- 12	32 52.1N	- 11	32 49.9N	- 11	32 47.6N	- 10	139 15E
	32 51.2N	- 9	32 49.2N	- 9	32 47.4N	- 9	32 45.5N	- 9	32 43.6N	- 9	139 30E
	32 48.9N	- 8	32 47.3N	- 8	32 45.6N	- 8	32 44.0N	- 8	32 42.3N	- 8	139 45E
	32 51.2N	- 8	32 49.4N	- 8	32 47.6N	- 8	32 45.9N	- 8	32 44.2N	- 8	140 E
	32 58.8N	- 12	32 56.3N	- 11	32 54.0N	- 11	32 51.8N	- 10	32 49.8N	- 10	140 15E
	33 12.5N	- 20	33 08.7N	- 18	33 05.3N	- 16	33 02.2N	- 14	32 59.3N	- 13	140 30E
33 15N	140 32.1E	18	140 35.8E	18	140 39.5E	18	140 43.2E	18	140 46.9E	18	
33 30N	140 43.2E	20	140 47.3E	20	140 51.4E	20	140 55.5E	20	140 59.5E	19	
33 45N	140 52.5E	22	140 57.0E	22	141 01.5E	22	141 05.9E	21	141 10.3E	21	
34 N	141 00.5E	25	141 05.5E	24	141 10.5E	24	141 15.3E	23	141 20.1E	23	
34 15N	141 07.9E	27	141 13.3E	26	141 18.6E	26	141 23.9E	26	141 29.1E	25	
34 30N	141 14.7E	29	141 20.6E	29	141 26.3E	28	141 32.0E	28	141 37.6E	27	
34 45N	141 21.1E	32	141 27.5E	31	141 33.6E	30	141 39.7E	30	141 45.6E	29	
35 N	141 27.3E	34	141 34.1E	33	141 40.6E	32	141 47.1E	31	141 53.4E	31	
36 N	141 50.0E	43	141 58.5E	41	142 06.7E	40	142 14.8E	39	142 22.6E	38	
37 N	142 11.2E	51	142 21.3E	49	142 31.1E	48	142 40.7E	47	142 50.1E	46	
38 N	142 31.5E	60	142 43.4E	58	142 54.9E	56	143 06.0E	55	143 16.9E	53	
39 N	142 51.7E	69	143 05.2E	66	143 18.3E	64	143 31.1E	63	143 43.6E	61	
40 N	143 11.8E	77	143 27.1E	75	143 41.9E	73	143 56.3E	71	144 10.4E	69	
41 N	143 32.1E	87	143 49.2E	84	144 05.7E	81	144 21.8E	79	144 37.5E	77	
42 N	143 52.8E	96	144 11.7E	93	144 30.0E	90	144 47.8E	87	145 05.2E	85	
43 N	144 13.8E	106	144 34.6E	102	144 54.8E	99	145 14.4E	96	145 33.5E	94	
44 N	144 35.4E	115	144 58.2E	111	145 20.2E	108	145 41.6E	105	146 02.5E	103	
45 N	144 57.6E	126	145 22.4E	121	145 46.4E	118	146 09.7E	115	146 32.5E	112	
46 N	145 20.5E	136	145 47.3E	132	146 13.3E	128	146 38.7E	125	147 03.4E	122	
47 N	145 44.1E	147	146 13.1E	142	146 41.2E	138	147 08.6E	135	147 35.3E	132	
48 N	146 08.5E	159	146 39.8E	154	147 10.1E	149	147 39.7E	145	148 08.5E	142	
49 N	146 33.9E	171	147 07.5E	165	147 40.2E	160	148 11.9E	157	148 43.0E	153	
T	2H7-1200		2H7-1220		2H7-1240		2H7-1260		2H7-1280		T

8 YU

T	2H7-1300	2H7-1320	2H7-1340	2H7-1360	2H7-1380	T
Lat	Δ					Long
	° ,	° ,	° ,	° ,	° ,	° ,
	46 07.5N -133	45 41.6N -126	45 17.0N -119	44 53.6N -113	44 31.4N -108	123 E
	45 26.2N -129	45 01.1N -122	44 37.3N -115	44 14.8N -109	43 53.3N -104	124 E
	44 43.4N -124	44 19.1N -117	43 56.3N -111	43 34.6N -105	43 14.0N -100	125 E
	43 59.0N -119	43 35.7N -112	43 13.8N -106	42 53.0N -101	42 33.3N -96	126 E
	43 13.0N -114	42 50.8N -107	42 29.9N -101	42 10.1N -96	41 51.3N -91	127 E
	42 25.5N -108	42 04.4N -102	41 44.6N -96	41 25.8N -91	41 08.0N -86	128 E
	41 36.4N -102	41 16.5N -96	40 57.8N -91	40 40.1N -86	40 23.3N -81	129 E
	40 45.6N -96	40 27.0N -90	40 09.5N -85	39 53.0N -80	39 37.4N -76	130 E
	39 53.3N -89	39 36.1N -83	39 19.9N -78	39 04.6N -74	38 50.2N -70	131 E
	38 59.5N -81	38 43.8N -76	38 29.0N -71	38 15.0N -67	38 01.9N -64	132 E
	38 04.4N -73	37 50.2N -68	37 36.9N -64	37 24.4N -60	37 12.5N -57	133 E
	37 08.1N -64	36 55.6N -60	36 43.9N -56	36 32.9N -53	36 22.5N -50	134 E
	36 11.2N -55	36 00.5N -51	35 50.5N -48	35 41.1N -45	35 32.2N -43	135 E
	35 14.4N -45	35 05.6N -42	34 57.5N -39	34 49.8N -37	34 42.5N -35	136 E
	34 19.3N -34	34 12.6N -32	34 06.3N -30	34 00.5N -28	33 54.9N -27	137 E
	34 06.1N -31	33 59.9N -29	33 54.2N -27	33 48.8N -26	33 43.6N -25	137 15E
	33 53.2N -28	33 47.6N -27	33 42.4N -25	33 37.5N -24	33 32.8N -22	137 30E
	33 40.9N -26	33 35.8N -24	33 31.1N -23	33 26.6N -21	33 22.4N -20	137 45E
	33 29.1N -23	33 24.6N -21	33 20.4N -20	33 16.4N -19	33 12.5N -18	138 E
	33 18.1N -20	33 14.1N -19	33 10.4N -18	33 06.8N -17	33 03.4N -16	138 15E
	33 07.9N -17	33 04.5N -16	33 01.2N -15	32 58.1N -15	32 55.2N -14	138 30E
	32 58.9N -15	32 56.0N -14	32 53.2N -13	32 50.5N -13	32 47.9N -12	138 45E
	32 51.3N -12	32 48.9N -12	32 46.5N -11	32 44.2N -11	32 41.9N -11	139 E
	32 45.5N -10	32 43.4N -10	32 41.4N -10	32 39.4N -9	32 37.5N -9	139 15E
	32 41.8N -9	32 40.0N -8	32 38.2N -8	32 36.5N -8	32 34.8N -8	139 30E
	32 40.7N -8	32 39.0N -8	32 37.4N -8	32 35.7N -8	32 34.1N -8	139 45E
	32 42.5N -8	32 40.8N -8	32 39.1N -8	32 37.4N -8	32 35.8N -8	140 E
	32 47.7N -10	32 45.7N -9	32 43.8N -9	32 41.9N -9	32 40.1N -9	140 15E
	32 56.6N -13	32 54.1N -12	32 51.7N -11	32 49.3N -11	32 47.1N -11	140 30E
	33 09.3N -17	33 05.9N -16	33 02.7N -15	32 59.8N -14	32 56.9N -13	140 45E
T	2H7-1300	2H7-1320	2H7-1340	2H7-1360	2H7-1380	T

T	2H7-1300			2H7-1320			2H7-1340			2H7-1360			2H7-1380			YU
Lat	° , Δ			° , Δ			° , Δ			° , Δ			° , Δ			T
																Long
33 15N	140	50.6E	18	140	54.3E	18	140	58.1E	18	141	01.9E	18	141	05.6E	19	
33 30N	141	03.5E	20	141	07.5E	20	141	11.6E	20	141	15.6E	20	141	19.7E	20	
33 45N	141	14.7E	21	141	19.0E	21	141	23.4E	21	141	27.8E	21	141	32.1E	21	
34 N	141	24.8E	23	141	29.5E	23	141	34.2E	23	141	39.0E	23	141	43.6E	23	
34 15N	141	34.2E	25	141	39.3E	25	141	44.3E	25	141	49.4E	25	141	54.4E	24	
34 30N	141	43.1E	27	141	48.5E	27	141	53.9E	26	141	59.2E	26	142	04.6E	26	
34 45N	141	51.5E	29	141	57.3E	28	142	03.1E	28	142	08.8E	28	142	14.4E	28	
35 N	141	59.7E	31	142	05.8E	30	142	12.0E	30	142	18.0E	29	142	24.0E	29	
36 N	142	30.3E	38	142	37.9E	37	142	45.4E	37	142	52.8E	36	143	00.2E	36	
37 N	142	59.3E	45	143	08.3E	44	143	17.2E	44	143	26.1E	43	143	34.7E	43	
38 N	143	27.6E	52	143	38.1E	52	143	48.4E	51	143	58.6E	50	144	08.7E	50	
39 N	143	55.8E	60	144	07.8E	59	144	19.6E	58	144	31.2E	57	144	42.7E	57	
40 N	144	24.1E	68	144	37.6E	66	144	50.9E	65	145	04.0E	65	145	16.9E	64	
41 N	144	52.9E	76	145	07.9E	74	145	22.8E	73	145	37.4E	72	145	51.8E	71	
42 N	145	22.2E	84	145	38.9E	82	145	55.3E	81	146	11.5E	80	146	27.4E	79	
43 N	145	52.2E	92	146	10.5E	91	146	28.6E	89	146	46.4E	88	147	04.0E	87	
44 N	146	23.0E	101	146	43.1E	99	147	02.9E	98	147	22.4E	96	147	41.6E	95	
45 N	146	54.8E	110	147	16.6E	108	147	38.2E	106	147	59.4E	105	148	20.4E	104	
46 N	147	27.6E	119	147	51.3E	117	148	14.7E	116	148	37.8E	114	149	00.6E	113	
47 N	148	01.5E	129	148	27.2E	127	148	52.6E	125	149	17.6E	124	149	42.3E	123	
48 N	148	36.8E	140	149	04.5E	137	149	31.9E	135	149	58.9E	134	150	25.6E	132	
49 N	149	13.4E	150	149	43.3E	148	150	12.8E	146	150	41.9E	144	151	10.7E	143	
T	2H7-1300			2H7-1320			2H7-1340			2H7-1360			2H7-1380			T

10 YU

T	2H7-1400	2H7-1420	2H7-1440	2H7-1460	2H7-1480	T
Lat	Long					
° ,	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	° ,
44 46.3N - 107	44 25.4N - 102	44 05.2N - 98	43 45.9N - 94	43 27.3N - 91	122	F
44 10.2N - 103	43 50.0N - 99	43 30.5N - 95	43 11.8N - 91	42 53.9N - 85	123	E
43 32.9N - 99	43 13.4N - 95	42 54.6N - 91	42 36.7N - 88	42 19.4N - 84	124	E
42 54.3N - 96	42 35.6N - 91	42 17.6N - 88	42 00.4N - 84	41 43.8N - 81	125	E
42 14.5N - 91	41 56.6N - 87	41 39.4N - 84	41 22.9N - 80	41 07.1N - 77	126	E
41 33.4N - 87	41 16.3N - 83	41 00.0N - 79	40 44.3N - 76	40 29.3N - 73	127	E
40 51.0N - 82	40 34.9N - 78	40 19.4N - 75	40 04.6N - 72	39 50.4N - 69	128	E
40 07.4N - 77	39 52.2N - 74	39 37.7N - 70	39 23.8N - 67	39 10.5N - 65	129	E
39 22.5N - 72	39 08.4N - 69	38 54.9N - 66	38 41.9N - 63	38 29.5N - 60	130	E
38 36.5N - 66	38 23.4N - 63	38 11.0N - 60	37 59.0N - 58	37 47.6N - 55	131	E
37 49.3N - 61	37 37.4N - 58	37 26.1N - 55	37 15.3N - 53	37 04.9N - 50	132	E
37 01.3N - 54	36 50.6N - 52	36 40.5N - 49	36 30.7N - 47	36 21.4N - 45	133	E
36 12.6N - 48	36 03.3N - 45	35 54.3N - 43	35 45.8N - 41	35 37.6N - 40	134	E
35 23.8N - 41	35 15.8N - 39	35 08.2N - 37	35 00.9N - 35	34 53.9N - 34	135	E
34 35.6N - 33	34 29.0N - 32	34 22.8N - 30	34 16.8N - 29	34 11.1N - 28	136	E
33 49.6N - 25	33 44.6N - 24	33 39.8N - 23	33 35.2N - 22	33 30.7N - 21	137	E
33 38.8N - 23	33 34.1N - 22	33 29.7N - 21	33 25.4N - 20	33 21.3N - 20	137	15E
33 28.3N - 21	33 24.0N - 20	33 20.0N - 20	33 16.0N - 19	33 12.3N - 18	137	30E
33 18.3N - 19	33 14.4N - 18	33 10.7N - 18	33 07.1N - 17	33 03.7N - 17	137	45E
33 08.9N - 17	33 05.4N - 17	33 02.0N - 16	32 58.8N - 15	32 55.6N - 15	138	E
33 00.2N - 15	32 57.1N - 15	32 54.0N - 14	32 51.1N - 14	32 48.3N - 14	138	15E
32 52.3N - 14	32 49.5N - 13	32 46.8N - 13	32 44.2N - 12	32 41.6N - 12	138	30E
32 45.4N - 12	32 43.0N - 12	32 40.6N - 11	32 38.3N - 11	32 36.0N - 11	138	45E
32 39.7N - 10	32 37.6N - 10	32 35.5N - 10	32 33.4N - 10	32 31.4N - 10	139	E
32 35.5N - 9	32 33.6N - 9	32 31.7N - 9	32 29.9N - 9	32 28.0N - 9	139	15E
T	2H7-1400	2H7-1420	2H7-1440	2H7-1460	2H7-1480	T

T	2H7-1400		2H7-1420		2H7-1440		2H7-1460		2H7-1480		YU 11
Lat	° , Δ		° , Δ		° , Δ		° , Δ		° , Δ		T
° ,	° , Δ		° , Δ		° , Δ		° , Δ		° , Δ		Long
	32 33.0N - 8	32 31.3N - 8	32 29.6N - 8	32 27.8N - 8	32 26.1N - 8	139 30E					
	32 32.5N - 8	32 30.8N - 8	32 29.2N - 8	32 27.5N - 8	32 25.9N - 8	139 45E					
	32 34.1N - 8	32 32.5N - 8	32 30.8N - 8	32 29.1N - 8	32 27.5N - 8	140 E					
	32 38.2N - 9	32 36.4N - 9	32 34.6N - 8	32 32.8N - 8	32 31.0N - 8	140 15E					
	32 44.9N - 10	32 42.7N - 10	32 40.7N - 10	32 38.6N - 10	32 36.7N - 9	140 30E					
	32 54.2N - 13	32 51.7N - 12	32 49.2N - 12	32 46.8N - 11	32 44.4N - 11	140 45E					
	33 06.2N - 16	33 03.0N - 15	33 00.0N - 14	32 57.1N - 14	32 54.3N - 13	141 E					
33 15N	141 09.5E 19	141 13.3E 19	141 17.2E 19	141 21.1E 19	141 25.0E 19						
33 30N	141 23.8E 20	141 27.8E 20	141 31.9E 20	141 36.0E 20	141 40.2E 20						
33 45N	141 36.5E 21	141 40.9E 21	141 45.3E 21	141 49.6E 21	141 54.0E 22						
34 N	141 48.2E 23	141 52.9E 23	141 57.6E 23	142 02.3E 23	142 07.0E 23						
34 15N	141 59.3E 24	142 04.3E 24	142 09.3E 24	142 14.3E 24	142 19.2E 24						
35 N	142 29.9E 29	142 35.8E 29	142 41.7E 29	142 47.6E 29	142 53.6E 29						
36 N	143 07.4E 36	143 14.6E 35	143 21.8E 35	143 28.9E 35	143 36.1E 35						
37 N	143 43.4E 42	143 51.8E 42	144 00.3E 42	144 08.7E 42	144 17.2E 41						
38 N	144 18.7E 49	144 28.5E 49	144 38.3E 48	144 48.1E 48	144 57.8E 48						
39 N	144 54.0E 56	145 05.3E 56	145 16.5E 55	145 27.5E 55	145 38.6E 54						
40 N	145 29.7E 63	145 42.5E 63	145 55.0E 62	146 07.5E 62	146 19.9E 61						
41 N	146 06.1E 71	146 20.2E 70	146 34.3E 69	146 48.2E 69	147 02.0E 69						
42 N	146 43.2E 78	146 58.9E 78	147 14.4E 77	147 29.9E 76	147 45.2E 76						
43 N	147 21.4E 86	147 38.6E 85	147 55.7E 85	148 12.7E 84	148 29.7E 84						
44 N	148 00.7E 94	148 19.6E 94	148 38.3E 93	148 56.9E 92	149 15.5E 92						
45 N	148 41.2E 103	149 01.8E 102	149 22.3E 102	149 42.6E 101	150 02.9E 101						
46 N	149 23.2E 112	149 45.6E 111	150 07.9E 111	150 30.1E 110	150 52.1E 109						
47 N	150 06.8E 121	150 31.1E 121	150 55.2E 120	151 19.3E 119	151 43.2E 119						
T	2H7-1400		2H7-1420		2H7-1440		2H7-1460		2H7-1480		T

12 YU

12 YU						
T	2H7-1500	2H7-1520	2H7-1540	2H7-1560	2H7-1580	T
Lat	Δ					Long
° ,	° ,	° ,	° ,	° ,	° ,	° ,
43 41.1N - 91	43 23.1N - 88	43 05.8N - 85	42 48.9N - 82	42 32.6N - 80	121 E	
43 09.3N - 88	42 52.0N - 85	42 35.2N - 82	42 18.9N - 80	42 03.2N - 77	122 E	
42 36.5N - 85	42 19.8N - 82	42 03.6N - 79	41 48.0N - 77	41 32.8N - 74	123 E	
42 02.7N - 81	41 46.6N - 79	41 31.1N - 76	41 16.0N - 74	41 01.5N - 71	124 E	
41 27.8N - 78	41 12.4N - 75	40 57.5N - 73	40 43.1N - 70	40 29.2N - 68	125 E	
40 51.9N - 74	40 37.2N - 72	40 23.0N - 69	40 09.3N - 67	39 56.0N - 65	126 E	
40 14.9N - 70	40 00.9N - 68	39 47.5N - 66	39 34.5N - 63	39 21.9N - 61	127 E	
39 36.8N - 66	39 23.6N - 64	39 11.0N - 62	38 58.7N - 60	38 46.8N - 58	128 E	
38 57.7N - 62	38 45.4N - 60	38 33.5N - 58	38 22.0N - 56	38 10.9N - 54	129 E	
38 17.6N - 58	38 06.2N - 56	37 55.1N - 54	37 44.5N - 52	37 34.2N - 50	130 E	
37 36.7N - 53	37 26.1N - 51	37 15.9N - 49	37 06.1N - 48	36 56.7N - 46	131 E	
36 54.9N - 48	36 45.3N - 47	36 36.0N - 45	36 27.1N - 43	36 18.5N - 42	132 E	
36 12.5N - 43	36 03.9N - 42	35 55.6N - 40	35 47.6N - 39	35 39.9N - 37	133 E	
35 29.8N - 38	35 22.2N - 37	35 14.9N - 35	35 07.9N - 34	35 01.2N - 33	134 E	
34 47.2N - 32	34 40.7N - 31	34 34.5N - 30	34 28.5N - 29	34 22.7N - 28	135 E	
34 05.6N - 27	34 00.3N - 26	33 55.2N - 25	33 50.2N - 24	33 45.5N - 23	136 E	
33 26.5N - 20	33 22.3N - 20	33 18.4N - 19	33 14.5N - 19	33 10.7N - 18	137 E	
33 17.3N - 19	33 13.5N - 18	33 09.8N - 18	33 06.2N - 17	33 02.7N - 17	137 15E	
33 08.6N - 17	33 05.1N - 17	33 01.7N - 16	32 58.3N - 16	32 55.1N - 15	137 30E	
33 00.3N - 16	32 57.1N - 15	32 53.9N - 15	32 50.9N - 15	32 47.9N - 14	137 45E	
32 52.6N - 15	32 49.6N - 14	32 46.8N - 14	32 43.9N - 13	32 41.2N - 13	138 E	
32 45.5N - 13	32 42.8N - 13	32 40.2N - 13	32 37.6N - 12	32 35.1N - 12	138 15E	
32 39.2N - 12	32 36.7N - 12	32 34.4N - 11	32 32.0N - 11	32 29.7N - 11	138 30E	
32 33.7N - 11	32 31.6N - 10	32 29.4N - 10	32 27.2N - 10	32 25.2N - 10	138 45E	
32 29.3N - 9	32 27.4N - 9	32 25.4N - 9	32 23.5N - 9	32 21.6N - 9	139 E	
32 26.2N - 9	32 24.4N - 8	32 22.6N - 8	32 20.8N - 8	32 19.0N - 8	139 15E	
32 24.4N - 8	32 22.7N - 8	32 21.0N - 8	32 19.3N - 8	32 17.7N - 8	139 30E	
32 24.3N - 8	32 22.6N - 8	32 21.0N - 8	32 19.3N - 8	32 17.7N - 8	139 45E	
32 25.8N - 8	32 24.2N - 8	32 22.5N - 8	32 20.8N - 8	32 19.2N - 8	140 E	
32 29.2N - 8	32 27.5N - 8	32 25.8N - 8	32 24.0N - 8	32 22.3N - 8	140 15E	
T	2H7-1500	2H7-1520	2H7-1540	2H7-1560	2H7-1580	T

T						YU														
2H7-1500			2H7-1520			2H7-1540			2H7-1560			2H7-1580			T					
Lat			Δ			Δ			Δ			Δ			Long					
32 34.7N - 9			32 32.8N - 9			32 30.9N - 9			32 28.9N - 9			32 27.0N - 9			140 30E					
32 42.1N - 11			32 39.9N - 11			32 37.7N - 10			32 35.6N - 10			32 33.5N - 10			140 45E					
32 51.6N - 13			32 49.0N - 12			32 46.4N - 12			32 44.0N - 12			32 41.6N - 11			141 E					
33 02.9N - 15			32 59.9N - 15			32 56.9N - 14			32 54.1N - 13			32 51.3N - 13			141 15E					
33 N			141 11.4E 19			141 15.2E 19			141 19.0E 19			141 22.9E 19			141 26.8E 19					
33 15N			141 28.9E 19			141 32.8E 19			141 36.9E 20			141 40.9E 20			141 44.9E 20					
33 30N			141 44.3E 20			141 48.5E 20			141 52.7E 21			141 57.0E 21			142 01.2E 21					
33 45N			141 58.5E 22			142 02.9E 22			142 07.3E 22			142 11.8E 22			142 16.4E 22					
34 N			142 11.7E 23			142 16.4E 23			142 21.1E 23			142 25.9E 23			142 30.6E 23					
35 N			142 59.4E 29			143 05.3E 29			143 11.1E 29			143 17.0E 29			143 22.9E 29					
36 N			143 43.2E 35			143 50.3E 35			143 57.3E 35			144 04.4E 35			144 11.5E 35					
37 N			144 25.5E 41			144 33.8E 41			144 42.1E 41			144 50.4E 41			144 58.8E 41					
38 N			145 07.4E 48			145 17.0E 48			145 26.6E 48			145 36.3E 47			145 45.8E 47					
39 N			145 49.5E 54			146 00.5E 54			146 11.4E 54			146 22.3E 54			146 33.2E 54					
40 N			146 32.3E 61			146 44.6E 61			146 56.9E 61			147 09.2E 61			147 21.4E 61					
41 N			147 15.8E 68			147 29.6E 68			147 43.3E 68			147 57.0E 68			148 10.7E 68					
42 N			148 00.5E 76			148 15.8E 76			148 31.1E 76			148 46.2E 75			149 01.4E 75					
43 N			148 46.5E 84			149 03.3E 84			149 20.1E 83			149 36.9E 83			149 53.6E 83					
44 N			149 33.9E 92			149 52.4E 92			150 10.9E 92			150 29.2E 91			150 47.6E 91					
45 N			150 23.1E 100			150 43.2E 100			151 03.4E 100			151 23.5E 100			151 43.6E 100					
46 N			151 14.1E 109			151 36.1E 109			151 58.0E 109			152 19.9E 109			152 41.9E 110					
47 N			152 07.1E 119			152 30.9E 119			152 54.8E 119			153 18.7E 119			153 42.6E 119					
48 N			153 02.4E 129			153 28.2E 129			153 54.1E 129			154 20.1E 129			154 46.1E 130					
T			2H7-1500			2H7-1520			2H7-1540			2H7-1560			2H7-1580			T		

14 YU

T	2H7-1600	2H7-1620	2H7-1640	2H7-1660	2H7-1680	T
Lat	Δ					Long
° ,	° ,	° ,	° ,	° ,	° ,	° ,
42 44.7N - 80	42 28.8N - 73	42 13.3N - 76	41 58.1N - 74	41 43.3N - 73	120	E
42 16.7N - 78	42 01.3N - 76	41 46.3N - 74	41 31.6N - 72	41 17.4N - 70	121	E
41 47.8N - 75	41 32.9N - 73	41 18.5N - 71	41 04.3N - 69	40 50.6N - 67	122	E
41 18.0N - 72	41 03.7N - 70	40 49.8N - 68	40 36.2N - 67	40 23.0N - 65	123	E
40 47.3N - 69	40 33.6N - 67	40 20.2N - 65	40 07.2N - 64	39 54.5N - 62	124	E
40 15.7N - 66	40 02.5N - 64	39 49.8N - 62	39 37.4N - 61	39 25.3N - 59	125	E
39 43.1N - 63	39 30.6N - 61	39 18.5N - 59	39 06.7N - 58	38 55.2N - 56	126	E
39 09.7N - 60	38 57.8N - 58	38 46.4N - 56	38 35.2N - 55	38 24.3N - 53	127	E
38 35.4N - 56	38 24.2N - 54	38 13.4N - 53	38 02.9N - 51	37 52.6N - 50	128	E
38 00.2N - 52	37 49.7N - 51	37 39.6N - 49	37 29.8N - 48	37 20.2N - 47	129	E
37 24.2N - 49	37 14.5N - 47	37 05.1N - 46	36 56.0N - 45	36 47.1N - 43	130	E
36 47.5N - 45	36 38.6N - 43	36 29.9N - 42	36 21.6N - 41	36 13.4N - 40	131	E
36 10.2N - 41	36 02.1N - 39	35 54.2N - 38	35 46.6N - 37	35 39.2N - 36	132	E
35 32.4N - 36	35 25.2N - 35	35 18.2N - 34	35 11.4N - 33	35 04.7N - 32	133	E
34 54.6N - 32	34 48.2N - 31	34 42.1N - 30	34 36.1N - 29	34 30.3N - 28	134	E
34 17.1N - 27	34 11.7N - 26	34 06.4N - 26	34 01.3N - 25	33 56.3N - 24	135	E
33 40.8N - 22	33 36.3N - 22	33 31.9N - 21	33 27.7N - 21	33 23.5N - 20	136	E
33 07.1N - 18	33 03.5N - 17	33 00.1N - 17	32 56.7N - 16	32 53.4N - 16	137	E
32 59.3N - 16	32 56.0N - 16	32 52.8N - 15	32 49.6N - 15	32 46.5N - 15	137	15E
32 51.9N - 15	32 48.8N - 15	32 45.8N - 14	32 42.9N - 14	32 40.0N - 14	137	30E
32 45.0N - 14	32 42.1N - 14	32 39.3N - 13	32 36.6N - 13	32 33.9N - 13	137	45E
32 38.5N - 13	32 35.9N - 13	32 33.3N - 12	32 30.8N - 12	32 28.2N - 12	138	E
32 32.6N - 12	32 30.2N - 11	32 27.8N - 11	32 25.4N - 11	32 23.2N - 11	138	15E
32 27.4N - 11	32 25.2N - 11	32 23.0N - 11	32 20.8N - 10	32 18.7N - 10	138	30E
32 23.1N - 10	32 21.0N - 10	32 19.0N - 10	32 17.0N - 9	32 15.0N - 9	138	45E
32 19.6N - 9	32 17.7N - 9	32 15.8N - 9	32 14.0N - 9	32 12.1N - 9	139	E
32 17.2N - 8	32 15.5N - 8	32 13.7N - 8	32 11.9N - 8	32 10.2N - 8	139	15E
32 16.0N - 8	32 14.2N - 8	32 12.6N - 8	32 11.0N - 8	32 09.3N - 8	139	30E
32 16.1N - 8	32 14.4N - 8	32 12.7N - 8	32 11.1N - 8	32 09.5N - 8	139	45E
32 17.5N - 8	32 15.9N - 8	32 14.3N - 8	32 12.6N - 8	32 11.0N - 8	140	E
T	2H7-1600	2H7-1620	2H7-1640	2H7-1660	2H7-1680	T

						YU	15
T	2H7-1600	2H7-1620	2H7-1640	2H7-1660	2H7-1680	T	
Lat	° , Δ		° , Δ		° , Δ		Long
° ,	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	° ,	
	32 20.6N - 8	32 18.9N - 8	32 17.2N - 8	32 15.5N - 8	32 13.8N - 8	140 15E	
	32 25.2N - 9	32 23.4N - 9	32 21.6N - 9	32 19.7N - 9	32 17.9N - 9	140 30E	
	32 31.4N - 10	32 29.4N - 10	32 27.4N - 10	32 25.4N - 9	32 23.5N - 9	140 45E	
	32 39.3N - 11	32 37.0N - 11	32 34.8N - 11	32 32.5N - 10	32 30.4N - 10	141 E	
	32 48.6N - 13	32 46.0N - 12	32 43.5N - 12	32 41.0N - 12	32 38.6N - 11	141 15E	
	32 59.4N - 15	32 56.5N - 14	32 53.6N - 14	32 50.8N - 13	32 48.1N - 13	141 30E	
	33 11.6N - 17	33 08.2N - 16	33 04.9N - 16	33 01.8N - 15	32 58.7N - 15	141 45E	
33 15N	141 49.0E 20	141 53.1E 20	141 57.2E 20	142 01.4E 21	142 05.6E 21		
33 30N	142 05.5E 21	142 09.8E 21	142 14.2E 21	142 18.6E 22	142 23.0E 22		
34 N	142 35.4E 24	142 40.2E 24	142 45.0E 24	142 49.9E 24	142 54.8E 24		
35 N	143 28.8E 29	143 34.7E 29	143 40.7E 29	143 46.7E 29	143 52.6E 29		
36 N	144 18.6E 35	144 25.7E 35	144 32.8E 35	144 39.9E 35	144 47.1E 35		
37 N	145 07.1E 41	145 15.4E 41	145 23.7E 41	145 32.1E 41	145 40.4E 41		
38 N	145 55.3E 47	146 04.9E 48	146 14.6E 48	146 24.2E 48	146 33.8E 48		
39 N	146 44.1E 54	146 55.0E 54	147 05.9E 54	147 16.9E 54	147 27.9E 54		
40 N	147 33.7E 61	147 46.0E 61	147 58.3E 61	148 10.6E 61	148 22.9E 61		
41 N	148 24.4E 68	148 38.2E 68	148 51.9E 68	149 05.6E 68	149 19.5E 69		
42 N	149 16.6E 75	149 31.8E 76	149 47.1E 76	150 02.4E 76	150 17.7E 76		
43 N	150 10.4E 83	150 27.1E 84	150 44.0E 84	151 00.9E 84	151 17.9E 85		
44 N	151 06.0E 92	151 24.5E 92	151 43.1E 92	152 01.7E 93	152 20.3E 93		
45 N	152 03.8E 101	152 24.1E 101	152 44.4E 101	153 04.8E 102	153 25.3E 102		
46 N	153 03.9E 110	153 26.0E 110	153 48.2E 111	154 10.6E 111	154 33.0E 112		
47 N	154 06.6E 120	154 30.7E 120	154 55.0E 121	155 19.3E 122	155 43.8E 123		
T	2H7-1600	2H7-1620	2H7-1640	2H7-1660	2H7-1680	T	

16 YU

16 YU						
T	2H7-1700	2H7-1720	2H7-1740	2H7-1760	2H7-1780	T
Lat						Long
° ,	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	° ,
41 53.6N - 73	41 39.0N - 72	41 24.8N - 70	41 10.8N - 69	40 57.1N - 67	119	E
41 28.9N - 71	41 14.8N - 69	41 01.0N - 68	40 47.5N - 66	40 34.3N - 65	120	E
41 03.4N - 68	40 49.8N - 67	40 36.5N - 65	40 23.5N - 64	40 10.7N - 63	121	E
40 37.1N - 66	40 24.0N - 64	40 11.2N - 63	39 58.7N - 62	39 46.4N - 60	122	E
40 10.1N - 63	39 57.5N - 62	39 45.1N - 60	39 33.1N - 59	39 21.3N - 58	123	E
39 42.2N - 61	39 30.1N - 59	39 18.3N - 58	39 06.8N - 56	38 55.5N - 55	124	E
39 13.5N - 58	39 02.0N - 56	38 50.7N - 55	38 39.7N - 54	38 29.0N - 53	125	E
38 44.0N - 55	38 33.0N - 54	38 22.4N - 52	38 11.9N - 51	38 01.7N - 50	126	E
38 13.7N - 52	38 03.3N - 51	37 53.3N - 49	37 43.4N - 48	37 33.8N - 47	127	E
37 42.7N - 49	37 32.9N - 48	37 23.4N - 46	37 14.2N - 45	37 05.1N - 44	128	E
37 10.9N - 46	37 01.8N - 44	36 52.9N - 43	36 44.3N - 42	36 35.8N - 41	129	E
36 38.5N - 42	36 30.0N - 41	36 21.8N - 40	36 13.8N - 39	36 06.0N - 38	130	E
36 05.5N - 39	35 57.7N - 38	35 50.2N - 37	35 42.8N - 36	35 35.6N - 35	131	E
35 32.0N - 35	35 25.0N - 34	35 18.1N - 33	35 11.4N - 33	35 04.9N - 32	132	E
34 58.3N - 31	34 52.0N - 31	34 45.8N - 30	34 39.9N - 29	34 34.0N - 28	133	E
34 24.6N - 28	34 19.0N - 27	34 13.6N - 26	34 08.4N - 26	34 03.2N - 25	134	E
33 51.4N - 24	33 46.6N - 23	33 42.0N - 22	33 37.5N - 22	33 33.0N - 21	135	E
33 19.5N - 20	33 15.5N - 19	33 11.7N - 19	33 07.9N - 18	33 04.1N - 18	136	E
32 50.1N - 15	32 47.0N - 15	32 43.9N - 15	32 40.9N - 15	32 37.8N - 14	137	E
32 43.5N - 15	32 40.5N - 14	32 37.6N - 14	32 34.7N - 14	32 31.9N - 13	137 15E	
32 37.2N - 14	32 34.4N - 13	32 31.6N - 13	32 29.0N - 13	32 26.3N - 13	137 30E	
32 31.2N - 13	32 28.7N - 12	32 26.1N - 12	32 23.6N - 12	32 21.1N - 12	137 45E	
32 25.8N - 12	32 23.4N - 12	32 21.0N - 11	32 18.6N - 11	32 16.3N - 11	138	E
32 20.9N - 11	32 18.6N - 11	32 16.4N - 11	32 14.2N - 11	32 12.0N - 10	138 15E	
32 16.6N - 10	32 14.5N - 10	32 12.4N - 10	32 10.4N - 10	32 08.3N - 10	138 30E	
32 13.1N - 9	32 11.1N - 9	32 09.1N - 9	32 07.2N - 9	32 05.3N - 9	138 45E	
32 10.3N - 9	32 08.5N - 9	32 06.6N - 9	32 04.8N - 9	32 03.0N - 8	139	E
32 08.4N - 8	32 06.7N - 8	32 04.9N - 8	32 03.2N - 8	32 01.5N - 8	139 15E	
32 07.5N - 8	32 05.9N - 8	32 04.3N - 8	32 02.6N - 8	32 00.9N - 8	139 30E	
32 07.9N - 8	32 06.2N - 8	32 04.5N - 8	32 02.9N - 8	32 01.3N - 8	139 45E	
T	2H7-1700	2H7-1720	2H7-1740	2H7-1760	2H7-1780	T

T	2H7-1700		2H7-1720		2H7-1740		2H7-1760		2H7-1780		T
Lat	° , Δ		° , Δ		° , Δ		° , Δ		° , Δ		Long
	° ,	Δ	° ,	Δ	° ,	Δ	° ,	Δ	° ,	Δ	° ,
	32 09.3N	- 8	32 07.7N	- 8	32 06.1N	- 8	32 04.4N	- 8	32 02.8N	- 8	140 E
	32 12.0N	- 8	32 10.4N	- 8	32 08.7N	- 8	32 07.0N	- 8	32 05.3N	- 8	140 15E
	32 16.1N	- 8	32 14.4N	- 8	32 12.6N	- 8	32 10.9N	- 8	32 09.1N	- 8	140 30E
	32 21.5N	- 9	32 19.6N	- 9	32 17.7N	- 9	32 15.8N	- 9	32 14.0N	- 9	140 45E
	32 28.2N	- 10	32 26.1N	- 10	32 24.0N	- 10	32 22.0N	- 10	32 20.0N	- 10	141 E
	32 36.2N	- 11	32 33.9N	- 11	32 31.6N	- 11	32 29.4N	- 11	32 27.1N	- 10	141 15E
	32 45.4N	- 13	32 42.8N	- 12	32 40.3N	- 12	32 37.8N	- 12	32 35.3N	- 12	141 30E
	32 55.7N	- 14	32 52.8N	- 14	32 50.0N	- 13	32 47.3N	- 13	32 44.6N	- 13	141 45E
	33 07.1N	- 16	33 03.8N	- 15	33 00.7N	- 15	32 57.6N	- 15	32 54.7N	- 14	142 E
	34 00.2N	- 24	33 55.5N	- 23	33 51.0N	- 22	33 46.6N	- 21	33 42.3N	- 20	143 E
34	N 142 59.8E	24	143 04.7E	24	143 09.7E	25	143 14.8E	25	143 19.9E	25	
35	N 143 58.6E	30	144 04.7E	30	144 10.8E	30	144 16.9E	30	144 23.1E	30	
36	N 144 54.3E	35	145 01.5E	36	145 08.7E	36	145 16.0E	36	145 23.3E	36	
37	N 145 48.8E	42	145 57.3E	42	146 05.8E	42	146 14.2E	42	146 22.9E	43	
38	N 146 43.5E	48	146 53.2E	48	147 03.0E	49	147 12.8E	49	147 22.7E	49	
39	N 147 38.8E	55	147 49.9E	55	148 01.0E	55	148 12.2E	55	148 23.4E	56	
40	N 148 35.4E	62	148 47.8E	62	149 00.3E	62	149 12.9E	63	149 25.6E	63	
41	N 149 33.4E	69	149 47.3E	69	150 01.3E	70	150 15.4E	70	150 29.6E	71	
42	N 150 33.1E	77	150 48.6E	77	151 04.2E	78	151 19.9E	78	151 35.7E	79	
43	N 151 35.0E	85	151 52.1E	85	152 09.3E	86	152 26.7E	87	152 44.2E	87	
44	N 152 39.1E	94	152 58.0E	94	153 17.0E	95	153 36.2E	96	153 55.5E	96	
45	N 153 45.9E	103	154 06.7E	104	154 27.6E	104	154 48.6E	105	155 09.9E	106	
46	N 154 55.6E	113	155 18.3E	114	155 41.3E	115	156 04.4E	116	156 27.8E	117	
47	N 156 08.5E	124	156 33.5E	125	156 58.6E	126	157 24.0E	127	157 49.6E	129	
T	2H7-1700		2H7-1720		2H7-1740		2H7-1760		2H7-1780		T

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T	2H7-1800	2H7-1820	2H7-1840	2H7-1860	2H7-1880	T
Lat	Long					
° , ' Δ	° , ' Δ	° , ' Δ	° , ' Δ	° , ' Δ	° , ' Δ	° , ' Δ
40 43.7N - 66	40 30.6N - 65	40 17.7N - 63	40 05.0N - 62	39 52.5N - 61	119	E
40 21.3N - 64	40 08.6N - 62	39 56.1N - 61	39 43.9N - 60	39 31.9N - 59	120	E
39 58.2N - 61	39 45.9N - 60	39 33.9N - 59	39 22.1N - 58	39 10.5N - 57	121	E
39 34.3N - 59	39 22.6N - 58	39 11.0N - 57	38 59.6N - 56	38 48.5N - 55	122	E
39 09.8N - 57	38 58.5N - 55	38 47.4N - 54	38 36.5N - 53	38 25.8N - 52	123	E
38 44.5N - 54	38 33.7N - 53	38 23.1N - 52	38 12.7N - 51	38 02.5N - 50	124	E
38 18.5N - 52	38 08.2N - 50	37 58.1N - 49	37 48.2N - 49	37 38.4N - 48	125	E
37 51.7N - 49	37 42.0N - 48	37 32.4N - 47	37 23.0N - 46	37 13.8N - 45	126	E
37 24.3N - 46	37 15.1N - 45	37 06.1N - 44	36 57.2N - 43	36 48.5N - 43	127	E
36 56.3N - 43	36 47.6N - 42	36 39.1N - 42	36 30.6N - 41	36 22.6N - 40	128	E
36 27.6N - 40	36 19.5N - 40	36 11.5N - 39	36 03.8N - 38	35 56.2N - 37	129	E
35 58.3N - 37	35 50.8N - 37	35 43.5N - 36	35 36.3N - 35	35 29.2N - 34	130	E
35 28.6N - 34	35 21.7N - 34	35 15.0N - 33	35 08.3N - 32	35 01.9N - 32	131	E
34 58.5N - 31	34 52.3N - 30	34 46.1N - 30	34 40.1N - 29	34 34.2N - 29	132	E
34 28.3N - 28	34 22.7N - 27	34 17.2N - 27	34 11.8N - 26	34 06.5N - 26	133	E
33 58.2N - 24	33 53.2N - 24	33 48.4N - 23	33 43.7N - 23	33 39.0N - 23	134	E
33 28.7N - 21	33 24.4N - 21	33 20.2N - 20	33 16.1N - 20	33 12.1N - 19	135	E
33 00.5N - 18	32 56.9N - 17	32 53.4N - 17	32 50.0N - 17	32 46.6N - 16	136	E
32 34.9N - 14	32 32.0N - 14	32 29.2N - 14	32 26.3N - 13	32 23.6N - 13	137	E
32 29.2N - 13	32 26.4N - 13	32 23.7N - 13	32 21.0N - 13	32 18.4N - 13	137	15E
32 23.7N - 12	32 21.1N - 12	32 18.6N - 12	32 16.1N - 12	32 13.6N - 12	137	30E
32 18.6N - 12	32 16.2N - 11	32 13.8N - 11	32 11.5N - 11	32 09.1N - 11	137	45E
32 14.0N - 11	32 11.7N - 11	32 09.5N - 11	32 07.2N - 11	32 05.0N - 10	138	E
32 09.9N - 10	32 07.8N - 10	32 05.6N - 10	32 03.5N - 10	32 01.4N - 10	138	15E
32 06.3N - 10	32 04.3N - 9	32 02.3N - 9	32 00.3N - 9	31 58.4N - 9	138	30E
32 03.4N - 9	32 01.5N - 9	31 59.6N - 9	31 57.7N - 9	31 55.8N - 9	138	45E
32 01.2N - 9	31 59.4N - 9	31 57.5N - 8	31 55.8N - 8	31 54.0N - 8	139	E
31 59.8N - 8	31 58.0N - 8	31 56.3N - 8	31 54.6N - 8	31 52.9N - 8	139	15E
31 59.2N - 8	31 57.5N - 8	31 55.9N - 8	31 54.2N - 8	31 52.6N - 8	139	30E
31 59.7N - 8	31 58.0N - 8	31 56.4N - 8	31 54.8N - 8	31 53.1N - 8	139	45E
T	2H7-1800	2H7-1820	2H7-1840	2H7-1860	2H7-1880	T

T	2H7-1800	2H7-1820	2H7-1840	2H7-1860	2H7-1880	T
Lat	° , Δ	° , Δ	° , Δ	° , Δ	° , Δ	Long
	32 01.1N - 8	31 59.5N - 8	31 57.9N - 8	31 56.2N - 8	31 54.6N - 8	140 E
	32 03.6N - 8	32 02.0N - 8	32 00.3N - 8	31 58.6N - 8	31 57.0N - 8	140 15E
	32 07.3N - 8	32 05.6N - 8	32 03.8N - 8	32 02.1N - 8	32 00.3N - 8	140 30E
	32 12.1N - 9	32 10.2N - 9	32 08.4N - 9	32 06.5N - 9	32 04.7N - 9	140 45E
	32 18.0N - 9	32 16.0N - 9	32 14.0N - 9	32 12.1N - 9	32 10.1N - 9	141 E
	32 25.0N - 10	32 22.8N - 10	32 20.7N - 10	32 18.5N - 10	32 16.5N - 10	141 15E
	32 33.0N - 11	32 30.6N - 11	32 28.2N - 11	32 26.0N - 11	32 23.7N - 11	141 30E
	32 41.9N - 13	32 39.3N - 12	32 36.8N - 12	32 34.3N - 12	32 31.8N - 12	141 45E
	32 51.8N - 14	32 48.9N - 14	32 46.1N - 13	32 43.4N - 13	32 40.7N - 13	142 E
	33 38.2N - 20	33 34.2N - 19	33 30.3N - 19	33 26.5N - 18	33 22.9N - 18	143 E
34 N	143 24.9E 25	143 30.1E 25	143 35.3E 25	143 40.5E 26	143 45.9E 26	
35 N	144 29.3E 30	144 35.5E 31	144 41.8E 31	144 48.2E 31	144 54.6E 32	
36 N	145 30.7E 37	145 38.2E 37	145 45.6E 37	145 53.2E 37	146 00.8E 38	
37 N	146 31.5E 43	146 40.1E 43	146 48.9E 43	146 57.7E 44	147 06.5E 44	
38 N	147 32.6E 49	147 42.6E 50	147 52.6E 50	148 02.7E 50	148 13.0E 51	
39 N	148 34.7E 56	148 46.1E 57	148 57.5E 57	149 09.1E 57	149 20.7E 58	
40 N	149 38.3E 63	149 51.2E 64	150 04.1E 64	150 17.1E 65	150 30.3E 66	
41 N	150 43.8E 71	150 58.2E 72	151 12.7E 72	151 27.3E 73	151 42.1E 74	
42 N	151 51.6E 79	152 07.6E 80	152 23.8E 81	152 40.1E 81	152 56.5E 82	
43 N	153 01.8E 88	153 19.6E 89	153 37.6E 90	153 55.7E 91	154 14.0E 92	
44 N	154 15.0E 97	154 34.7E 98	154 54.5E 99	155 14.6E 100	155 34.9E 102	
45 N	155 31.4E 107	155 53.1E 109	156 15.0E 110	156 37.2E 111	156 59.7E 113	
T	2H7-1800	2H7-1820	2H7-1840	2H7-1860	2H7-1880	T