TYPHOON TILDA - 130600Z to 221200Z SEPTEMBER

I. DATA

A. Statistics

1. Calendar days of tropical warning - 9½
2. Calendar days of typhoon intensity - 5 3/4
3. Total distance traveled during tropical warning period - 1800 mi

B. Characteristics as a typhoon

1. Minimum observed SLP - 952mb, 201015Z
2. Minimum observed 700mb height - 2774m, 200300Z
3. Maximum surface wind - 110 kts
4. Max radius of surface circulation - 500 mi

II. DEVELOPMENT

A. Initial impetus - Superposition of Polar Trough with easterly wave and subsequent fracture

B. Initial surface vortex

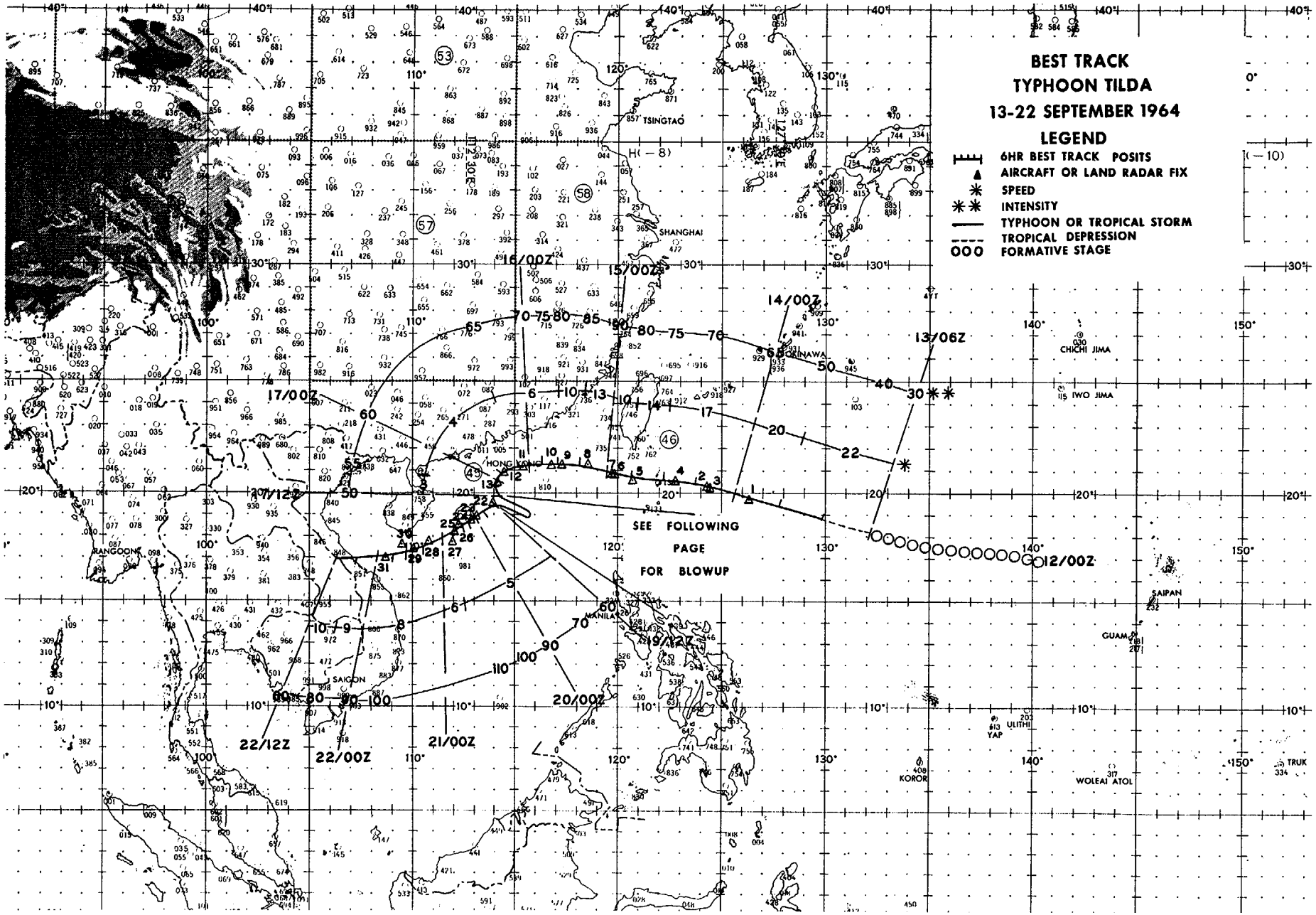
1. Junction vortex at 120000Z
2. Surface pressure less than 1008mb

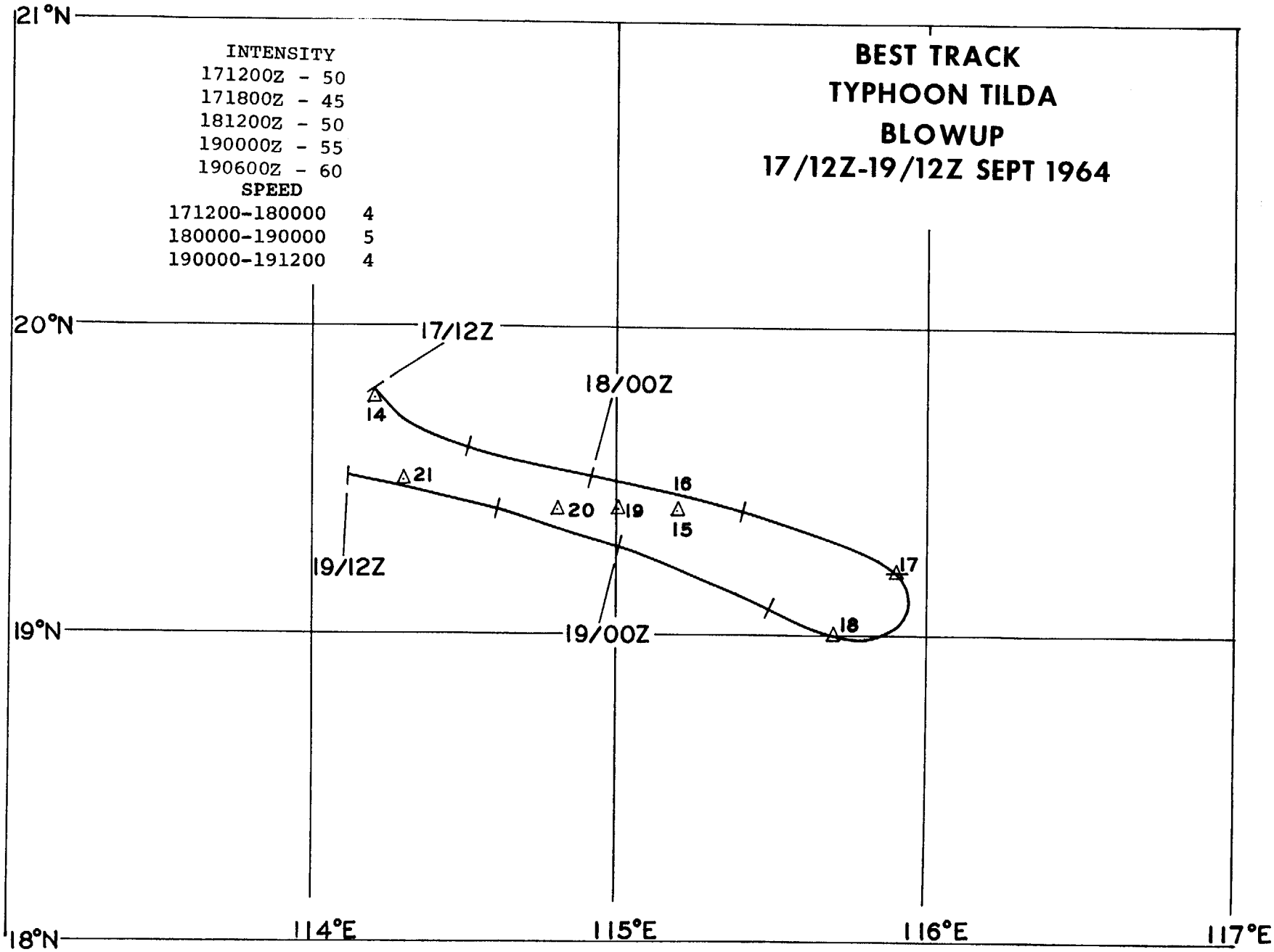
C. 200mb flow above surface vortex

1. Initial - SE quadrant of huge anticyclone centered over Chinese mainland
2. Upon reaching typhoon intensity - S quadrant of anticyclone

III. FINAL DISPOSITION

A. Dissipated over land


BEST TRACK
TYPHOON TILDA
13-22 SEPTEMBER 1964
LEGEND
6HR BEST TRACK POSITS
AIRCRAFT OR LAND RADAR FIX
SPEED
INTENSITY
TYPHOON OR TROPICAL STORM
TROPICAL DEPRESSION
FORMATIVE STAGE
SEE FOLLOWING PAGE FOR BLOWUP
TSINGTAO
SHANGHAI
OKINAWA
CHICHI JIMA
IWO JIMA
HONG KONG
MANILA
SAIGON
RANGOON
SAIPAN
GUAM
ULITHI
YAP
KOROR
WOLEAI ATOL
TRUK
13/06Z
14/00Z
15/00Z
16/00Z
17/00Z
17/12Z
19/12Z
20/00Z
21/00Z
22/00Z
22/12Z
12/00Z


BEST TRACK
TYPHOON TILDA
BLOWUP
17/12Z-19/12Z SEPT 1964
INTENSITY
171200Z - 50
171800Z - 45
181200Z - 50
190000Z - 55
190600Z - 60
SPEED
171200-180000 4
180000-190000 5
190000-191200 4
21°N
20°N
19°N
18°N
114°E
115°E
116°E
117°E
17/12Z
18/00Z
19/00Z
19/12Z
14
15
16
17
18
19
20
21

EYE FIXES TYPHOON TILDA

FIX NO.	TIME	POSIT	UNIT-METHOD -ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TT/TD	REMARKS
1	132206Z	19.9N 126.2E	VW1-P-3	700ft	--	75	989	---	27/20	CIRC 14 MI DIA
2	140330Z	20.3N 124.5E	54-R-5	30000ft	--	80	---	---	--/--	OVAL 25 MI N/S 20 MI E/W
3	140400Z	20.2N 124.5E	56-P-3	704mb	65	70	990	2993	15/12	CIRC 15 MI DIA OPEN NW
4	140950Z	20.7N 122.8E	VW1-R-5	10000ft	--	--	---	---	--/--	CIRC 22 MI DIA WALL CLDS 6 MI THICK ALL QUADS
5	141615Z	20.8N 120.9E	VW1-R-5	10000ft	--	--	---	---	--/--	CIRC 20 MI DIA OPEN N WALL CLDS 5 TO 8 MI THICK
6	142138Z	20.9N 119.9E	54-R-2	30000ft	--	--	---	---	--/--	CIRC 8 MI DIA OPEN NW & SW
7	142200Z	20.9N 120.0E	56-P-6	700mb	90	150	980	2944	16/15	CIRC 15 MI DIA OPEN NE RAGGED WALL CLDS
8	150300Z	21.3N 118.6E	56-P-3	683mb	85	130	990	3033	17/14	CIRC 25 MI DIA BRKN TO NE
9	151110Z	21.3N 117.2E	VW1-R-5	11000ft	--	--	---	---	--/--	CIRC 23 MI DIA WALL CLD 7 MI THICK IN SW QUAD ONLY
10	151545Z	21.2N 116.9E	VW1-R-5	5000ft	--	--	---	---	--/--	NO RADAR EYE STORM APPEARS TO BE WEAKENING
11	160311Z	21.1N 115.5E	56-P-5	700mb	69	65	955	2990	15/13	CIRC 20 MI DIA OPEN SW WALL CLDS 6 MI THICK
12	161500Z	21.1N 114.6E	VW1-R-10	3000ft	--	--	---	---	--/--	ELLIP 51 MI NW/SE 33 MI NE/SW OPEN NW WALL CLD 12 MI THICK
13	170115Z	20.6N 114.3E	56-P-U	691mb	45	50	994	3075	15/8	NO EYE SHAPE NO WALL CLDS

FIX NO.	TIME	POSIT	UNIT-METHOD-ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TT/TD	REMARKS
14	171503Z	19.8N 114.2E	VW1-R-5	3000ft	--	--	---	---	--/--	ELLIP 15 MI N/S 25 MI E/W POORLY DEFINED OPEN SE
15	172210Z	19.4N 115.2E	56-P-5	708mb	40	30	993	3042	15/11	CIRC 20 MI DIA OPEN SW
16	180345Z	19.4N 115.2E	56-P-2	700mb	30	45	993	3045	16/9	CIRC 30 MI DIA WEAK WALL CLDS ALL QUADS
17	180945Z	19.2N 115.9E	VW1-P-5	1000ft	--	50	992	3018	24/17	700MB TEMP 14 EYE CIRC 15 MI DIA OPEN E
18	181521Z	19.0N 115.7E	VW1-P-5	1000ft	--	60	990	---	27/20	CIRC 34 MI DIA OPEN E WALL CLD 7 MI THICK
19	182230Z	19.4N 115.0E	56-P-5	704mb	40	35	986	3021	17/12	CIRC 5 MI DIA WALL CLD SE ONLY
20	190300Z	19.4N 114.8E	56-P-5	704mb	45	45	984	2966	15/10	CIRC
21	190930Z	19.5N 114.3E	VW1-R-5	1500ft	--	--	---	---	--/--	CIRC 5 MI DIA OPEN NE
22	191545Z	19.6N 114.0E	VW1-P-5	10000ft	--	--	---	2957	14/10	ELLIP 12 MI NW/SE 9 MI NE/SW SOLID WALL CLD W SEMI BRKN ELSW
23	192315Z	18.8N 113.3E	56-P-5	692mb	70	45	966	2807	16/13	CIRC 12 MI DIA
24	200300Z	18.7N 113.1E	56-P-3	682mb	60	65	964	2774	17/12	CIRC 14 MI DIA
25	201015Z	18.6N 112.4E	VW1-P-5	800ft	--	130	952	---	25/18	CIRC 12 MI DIA WALL CLD 5 MI THICK
26	201530Z	18.2N 112.2E	VW1-R-5	1500ft	--	--	---	---	--/--	CIRC 12 MI DIA SMALL BREAK N WALL CLD 5 MI THICK

FIX NO.	TIME	POSIT	UNIT-METHOD -ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TT/TD	REMARKS
27	210305Z	17.7N 112.0E	56-R-5	700mb	--	--	---	---	--/--	CIRC 15 MI SFC WND 70 KTS 50 MI E OF CNTR
28	210625Z	17.9N 110.9E	COMMERCIAL JET-RADAR	UNK	--	--	---	---	--/--	
29	211015Z	17.5N 110.1E	VW1-R-5	1200ft	--	--	---	---	--/--	CIRC 9 MI DIA SFC WND 95 KTS 50 MI E OF CNTR
30	211530Z	17.7N 109.5E	VW1-R-3	1500ft	--	--	---	---	--/--	ELLIP 9 MI NW/SE
31	212230Z	17.1N 108.7E	56-R-10	700mb	--	--	---	---	--/--	CIRC 40 MI DIA STRONG WALL CLDS S & SE QUADS

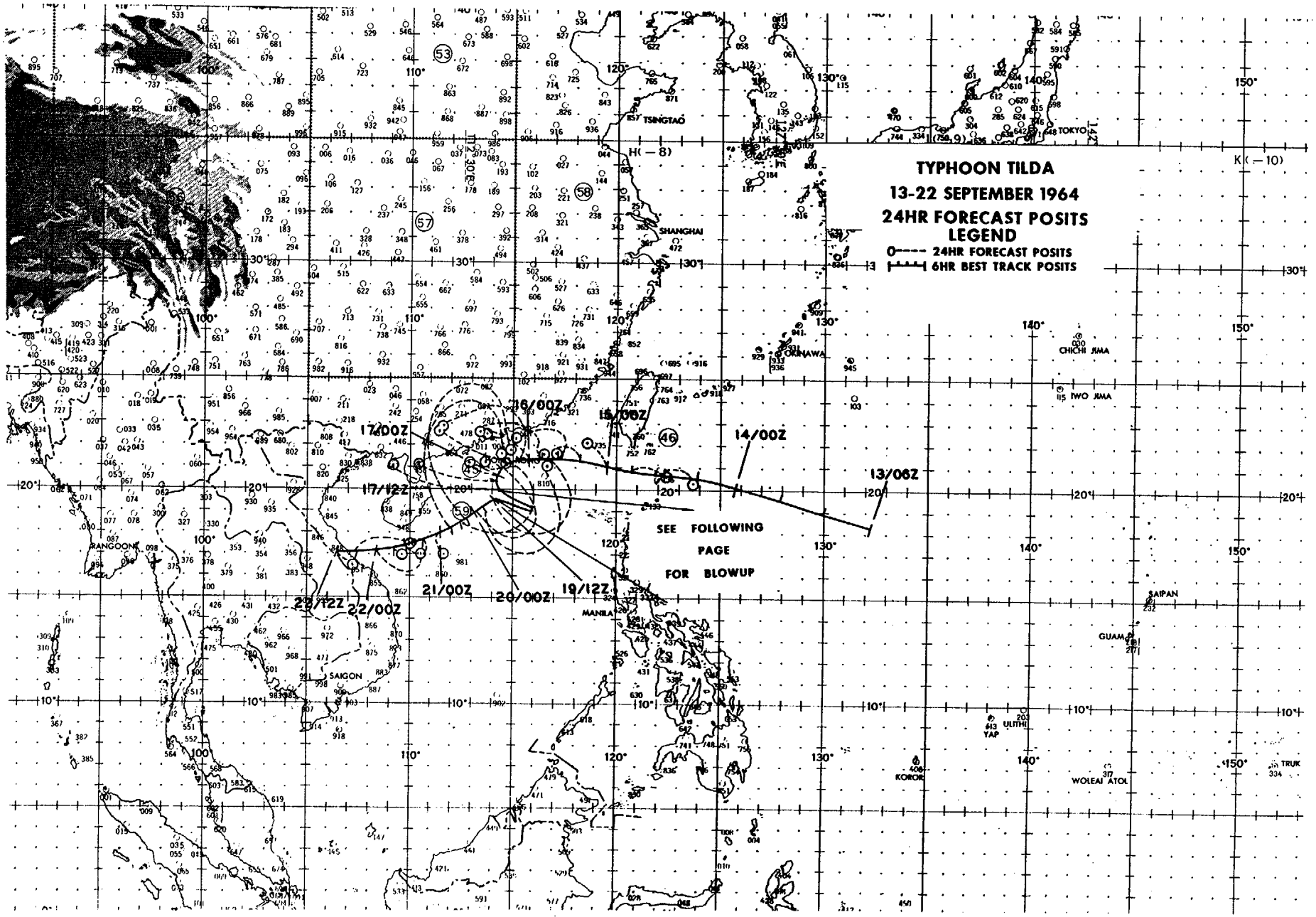
TYPHOON TILDA 13 SEPT-22 SEPT 1964
POSITION AND FORECAST VERIFICATION DATA

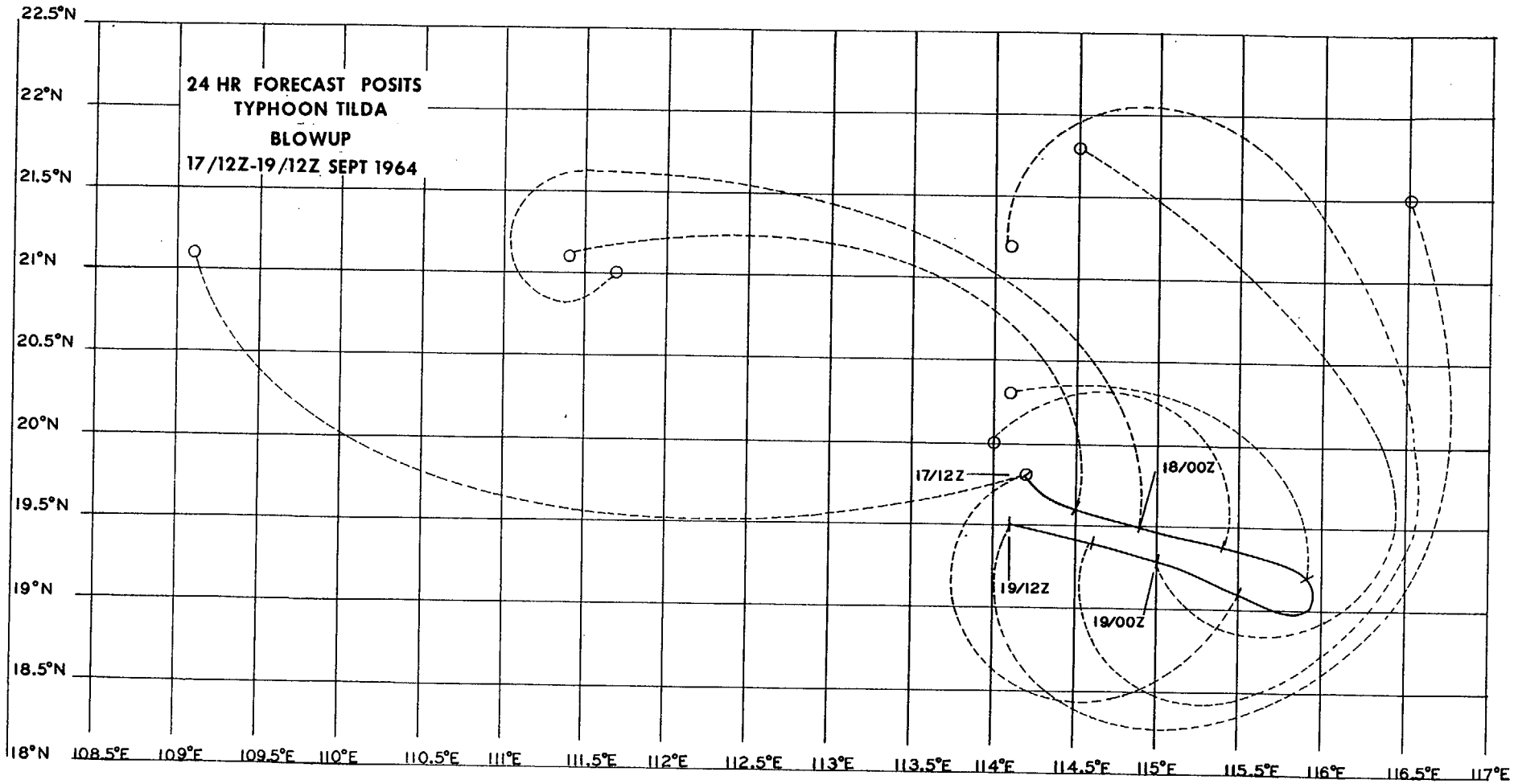
DTG	STORM POSITION LAT.	LONG.	24 HOUR ERROR DEG. DISTANCE	48 HOUR ERROR DEG. DISTANCE
130600Z	18.2N	132.3E	------	------
131200Z	18.4N	129.9E	------	------
131800Z	19.4N	127.7E	------	------
140000Z	20.0N	125.6E	------	------
140600Z	20.3N	123.8E	------	------
141200Z	20.7N	122.1E	106-93	------
141800Z	20.8N	120.6E	98-102	------
150000Z	21.0N	119.6E	325-81	------
150600Z	21.3N	118.2E	290-65	------
151200Z	21.3N	117.1E	300-129	064-104
151800Z	21.3N	116.5E	295-192	043-118
160000Z	21.2N	115.8E	303-136	312-237
160600Z	21.1N	115.3E	298-229	301-266
161200Z	21.1N	114.7E	297-212	308-369
161800Z	21.0N	114.4E	288-45	312-520
170000Z	20.6N	114.3E	292-88	------
170600Z	20.3N	114.2E	283-221	------
171200Z	19.8N	114.2E	284-297	------
171800Z	19.6N	114.5E	294-193	299-243
180000Z	19.5N	114.9E	296-200	------
180600Z	19.4N	115.4E	295-88	280-597
181200Z	19.2N	115.9E	304-120	280-695
181800Z	19.1N	115.5E	303-85	290-441
190000Z	19.3N	115.0E	350-156	290-333
190600Z	19.4N	114.6E	346-112	------
191200Z	19.5N	114.1E	050-187	------
191800Z	19.3N	113.6E	057-207	------
200000Z	18.8N	113.3E	029-171	332-300
200600Z	18.6N	112.8E	033-222	013-394
201200Z	18.4N	112.4E	035-214	028-472
201800Z	18.2N	112.0E	034-251	030-464

TYPHOON TILDA 13 SEPT-22 SEPT 1964
POSITION AND FORECAST VERIFICATION DATA

DTG	STORM POSITION LAT.	LONG.	24 HOUR ERROR DEG. DISTANCE	48 HOUR ERROR DEG. DISTANCE
210000Z	17.9N	111.4E	170-55	033-496
210600Z	17.6N	110.6E	182-40	034-583
211200Z	17.4N	109.8E	132-41	044-483
211800Z	17.3N	109.1E	113-37	045-543
220000Z	17.1N	108.3E	094-117	191-70
220600Z	17.0N	107.3E	080-155	177-66
221200Z	17.0N	106.3E	124-54	094-70

AVERAGE 24 HOUR ERROR - 139MI
AVERAGE 48 HOUR ERROR - 357MI


TYPHOON TILDA
13-22 SEPTEMBER 1964
24HR FORECAST POSITS
LEGEND
24HR FORECAST POSITS
6HR BEST TRACK POSITS
SEE FOLLOWING PAGE FOR BLOWUP
13/06Z
14/00Z
15/06Z
16/00Z
17/00Z
17/12Z
19/12Z
20/00Z
21/00Z
22/00Z
22/12Z
TSINGTAO
SHANGHAI
OKINAWA
TOKYO
CHICHI JIMA
IWO JIMA
RANGOON
MANILA
SAIGON
SAIPAN
GUAM
YAP
ULITHI
KOROR
WOLEAI ATOL
TRUK


24 HR FORECAST POSITS
TYPHOON TILDA
BLOWUP
17/12Z-19/12Z SEPT 1964
22.5°N
22°N
21.5°N
21°N
20.5°N
20°N
19.5°N
19°N
18.5°N
18°N
108.5°E
109°E
109.5°E
110°E
110.5°E
111°E
111.5°E
112°E
112.5°E
113°E
113.5°E
114°E
114.5°E
115°E
115.5°E
116°E
116.5°E
117°E
17/12Z
18/00Z
19/12Z
19/00Z