

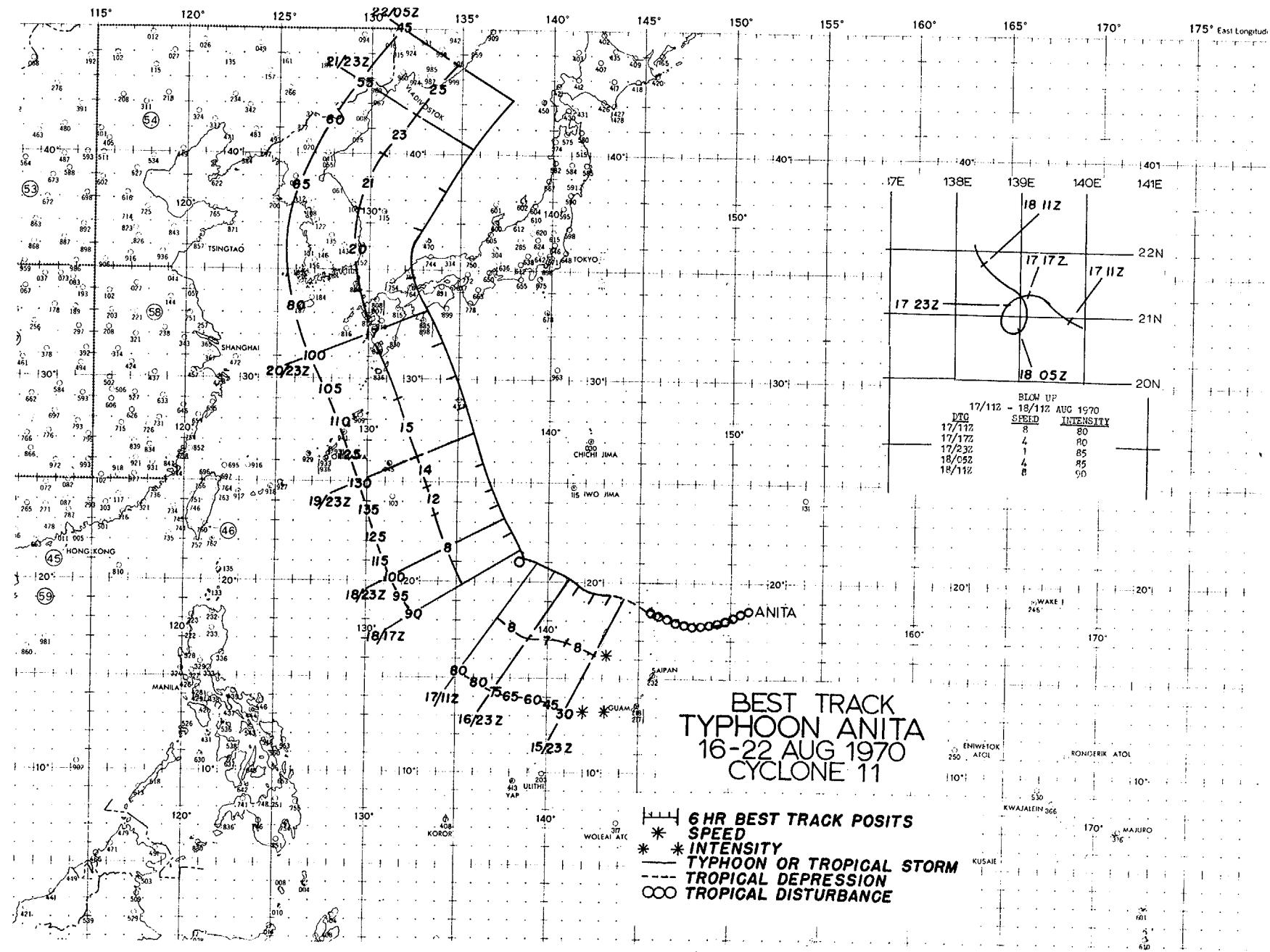
D. TYPHOON ANITA 15 AUG 2300Z-22 AUG 0500Z

1. STATISTICS

- a. Number of Warnings Issued - 26
- b. Number of Warnings with Typhoon Intensity - 19
- c. Distance Traveled During Warning Period - 2,001 MI

2. CHARACTERISTICS AS A TYPHOON

- a. Minimum Observed SLP - 912 MBS at 19/2055Z
- b. Minimum Observed 700 MB Height - 2325 M at 19/2055Z
- c. Maximum Surface Wind - 135 KTS (From Best Track)
- d. Maximum Radius of Surface Circulation - 480 MI



### 3. TYPHOON ANITA NARRATIVE

As early as the 11th upper air reports from Marcus and Wake Islands plus satellite pictures indicated an upper level circulation in existence between the two islands. Two days later an ESSA-8 view disclosed the system to have drifted south of Marcus and enhanced in convective activity. Ship data indicated the low aloft had reflected downward into the surface pressure pattern as an induced wave.

This wave disturbance passed through the Northern Marianas chain during the night of the 15th to 16th with evidence of a developing circulation. A reconnaissance aircraft investigated the system the following afternoon and located a closed center with 995 mb central pressure 140 miles northwest of Pagan Island and Tropical Storm Anita was named.

Anita proceeded west northwest and intensified to typhoon strength within 18 hours while shifting to a more northerly course on the 17th. The ridge line north of the typhoon began to weaken considerably between Okinawa and Iwo Jima as a reflection of a slow moving trough in the westerlies east of Korea. Meanwhile heights began to build east of Japan with the establishment of a strong center of action for the subtropical ridge to the northeast of Anita. This set up steering conditions which resulted in a northwest path towards the Japanese coastline for the next three days.

While southwest of Iwo Jima on the 18th, Anita began to approach a 200 mb trough over the Sea of Japan extending through the Northern Ryukyu's. As this trough provided an efficient evacuation mechanism for the transfer of mass to the westerlies, the central pressure began to respond. In the following 36 hours dropsonde measurements showed a progressive fall of 55 mb. Reconnaissance aircraft radar presentations and infra-red satellite view of the storm during the night of the 19-20th indicated Anita had become highly organized in character (Figure 5-8). The storm reached its peak intensity while attaining super typhoon strength during the morning hours of the 20th as aerial reconnaissance registered a 912 mb surface pressure in the eye some 270 mi northwest of Iwo Jima (Figure 5-9).

At this point Anita started to increase her forward speed to 15 knots and later to 17 knots due to the increased southerly flow created between a strong mid-tropospheric high to the northeast and a cut off low in the East China Sea. The eye of the typhoon crossed the coastline of Western Shikoku about 40 N.M. southwest of Kochi City during the late morning hours of the 21st with an accompanying storm surge of 7.7 feet flooding parts of the city. At this time Anita had filled and wind strength was near 105 knots. Maximum sustained wind



FIGURE 5-8 NIMBUS IV NIGHTTIME INFRA-RED VIEW OF TYPHOON ANITA (ORBIT 1783) 19 AUGUST.  
A TROPICAL DISTURBANCE IS DEPICTED NORTHEAST OF THE TYPHOON EAST OF THE  
JAPANESE ISLANDS.

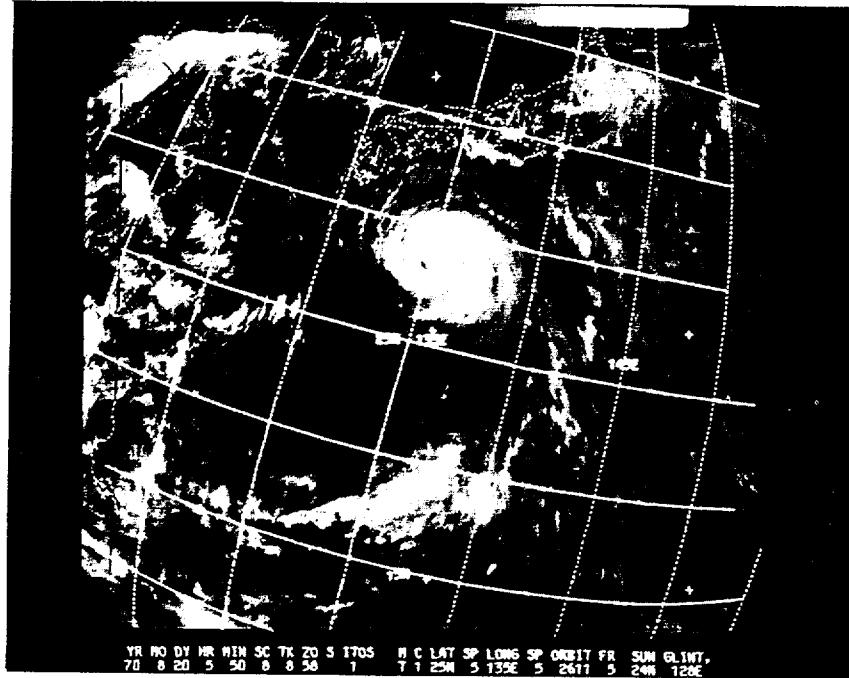


FIGURE 5-9 ANITA SOUTH OF SHIKOKU ISLAND WITH SUPER TYPHOON WINDS AS DISPLAYED TO  
ITOS-1 ON THE AFTERNOON OF 20 AUGUST.

report occurred at Murotomisaki Weather Station registering 100 knots and gusts to 124 knots about 60 miles east of the center. Lowest pressure measured in the area was at Cape Ashizuri 15 miles west of the center with 962.3 mb.

At least 31 vessels were reported sunk including the 2,739 ton Japanese ship Koyo Maru along the coast of Japan while heavy rains (up to 15 inches) caused floods and landslides inland. Statistics reveal at least 23 storm-related deaths, 556 injured and over 5,000 houses partially or totally destroyed.

In response to a major trough moving off the China coast, the typhoon recurved sharply after passage over Hiroshima and entrance into the Sea of Japan. On her north-east course, at a rate greater than 20 knots, Anita quickly lost typhoon intensity late on the 21st. She transformed to an extratropical system as she passed west of Hokkaido by the 22nd.

## TYPHOON ANITA

TYPHOON ANITA  
EYE FIXES CYCLONE

FIX NO.	TIME	POSII	UNIT- METHOD -ACCUY	FLT		SFC	OBS	MIN	700MB	FLT	EYE	ORIEN- TATION	EYE DIA	CHARACTER WALL CLOUD
				FLT	LVL									
49	Z10700Z	35.7N 132.4E	LND RDR	---	---	---	---	---	---	---	---	---	---	---
50	Z10800Z	35.8N 132.5E	LND RUR	---	---	---	---	---	---	---	---	---	---	---
51	Z11000Z	36.1N 132.7E	LND RUR	---	---	---	---	---	---	---	---	---	---	---
52	Z11024Z	36.1N 132.3E	VW--03---	700MB	057	---	993	3024	15/09	---	---	---	---	---
53	Z11200Z	36.7N 132.9E	LND RDR	---	---	---	---	---	---	---	---	---	---	---
54	Z11215Z	36.8N 132.8E	VW--04---	700MB	060	---	---	---	---	---	---	---	---	NEG W/C
55	Z11300Z	36.9N 133.1E	LND RUR	---	---	---	---	---	---	---	---	---	---	---
56	Z11400Z	37.5N 133.0E	LND RUR	---	---	---	---	---	---	---	---	---	---	---
57	Z11407Z	37.2N 133.4E	VW--01---	700MB	060	---	991	3051	13/11	---	---	---	---	NEG W/C
58	Z12100Z	39.4N 135.1E	54--10---		065	---	---	---	---	---	CTRC	---	10	---

## TYPHOON ANITA

TROPICAL CYCLONE 11 -- 8/15/2300Z TO 8/22/0500Z  
POSITION AND FORECAST VERIFICATION DATA

WARN NO.	DTG	WARNING LAT	POSIT LONG	BEST TRACK LAT	TRACK LONG	24 HR FCST LAT	FCST LONG	24 HR ERROR DEG DIST	48 HR FCST LAT	FCST LONG	48 HR ERROR DEG DIST	72 HR FCST LAT	FCST LONG	72 HR ERROR DEG DIST
01	15/2300Z	19.4N	143.6E	19.1N	144.4E	21.7N	141.7E	-018-0096-	-----	-----	-----	-----	-----	-----
02	16/0500Z	20.1N	143.2E	19.3N	143.5E	22.2N	141.2E	027-0102	-----	-----	-----	-----	-----	-----
03	16/1100Z	19.2N	142.2E	19.3N	142.5E	19.4N	138.8E	202-0096	20.2N	135.5E	242-0186	21.3N	132.8E	229-0306
04	16/1700Z	19.3N	141.2E	19.6N	141.7E	19.7N	137.5E	227-0120	20.6N	134.2E	244-0240	-----	-----	-----
05	16/2300Z	19.8N	141.1E	20.1N	141.1E	21.2N	138.5E	288-0018	22.7N	135.5E	259-0120	24.3N	132.9E	226-0252
06	17/0500Z	20.5N	140.4E	20.6N	140.3E	22.6N	137.7E	324-0120	24.6N	135.1E	288-0132	-----	-----	-----
07	17/1100Z	21.0N	139.6E	20.9N	139.5E	23.1N	136.8E	313-0120	25.3N	134.3E	283-0150	27.7N	132.7E	217-0180
08	17/1700Z	21.4N	138.9E	21.1N	139.1E	23.4N	136.2E	300-0114	25.7N	133.9E	266-0156	-----	-----	-----
09	17/2300Z	21.2N	138.9E	21.1N	138.9E	21.9N	137.8E	175-0072	23.4N	135.7E	188-0234	25.0N	133.9E	175-0480
10	18/0500Z	20.9N	138.9E	20.9N	139.0E	21.3N	138.7E	155-0168	22.3N	137.2E	167-0390	-----	-----	-----
11	18/1100Z	21.6N	138.4E	21.7N	138.5E	23.2N	136.8E	188-0090	25.8N	134.7E	180-0258	28.3N	133.4E	177-0492
12	18/1700Z	22.1N	138.0E	22.4N	138.1E	24.0N	136.8E	180-0114	26.6N	135.5E	164-0300	-----	-----	-----
13	18/2300Z	23.1N	137.7E	23.1N	137.7E	26.3N	135.9E	197-0060	30.5N	134.5E	156-0162	36.5N	136.2E	197-0228
14	19/0500Z	23.9N	137.2E	23.9N	137.4E	27.6N	135.5E	180-0066	32.6N	134.1E	146-0150	-----	-----	-----
15	19/1100Z	24.7N	136.9E	24.7N	137.1E	28.4N	135.2E	169-0102	33.9N	134.0E	160-0162	41.5N	136.5E	-----
16	19/1700Z	25.4N	136.5E	25.9N	136.8E	29.0N	134.7E	166-0150	33.6N	132.1E	200-0294	-----	-----	-----
17	19/2300Z	26.6N	136.5E	27.3N	136.3E	31.2N	135.2E	134-0144	37.8N	134.8E	197-0150	47.0N	139.5E	-----
18	20/0500Z	28.3N	135.7E	28.7N	135.6E	36.5N	134.1E	036-0132	45.0N	137.5E	003-0162	-----	-----	-----
19	20/1100Z	30.1N	134.9E	30.1N	134.8E	39.2N	134.9E	030-0180	-----	-----	-----	-----	-----	-----
20	20/1700Z	31.5N	134.3E	31.5N	133.9E	38.5N	134.5E	046-0012	-----	-----	-----	-----	-----	-----
21	20/2300Z	32.9N	133.2E	33.0N	133.1E	40.3N	134.6E	277-0048	-----	-----	-----	-----	-----	-----
22	21/0500Z	34.8N	132.7E	34.7N	132.4E	43.7N	136.2E	330-0096	-----	-----	-----	-----	-----	-----
23	21/1100Z	36.3N	132.7E	36.5N	132.9E	41.0N	136.1E	-----	-----	-----	-----	-----	-----	-----
24	21/1700Z	38.0N	133.9E	38.3N	134.2E	43.8N	139.5E	-----	-----	-----	-----	-----	-----	-----
25	21/2300Z	40.1N	135.7E	40.2N	135.7E	-----	-----	-----	-----	-----	-----	-----	-----	-----
26	22/0500Z	42.2N	137.4E	42.3N	137.4E	-----	-----	-----	-----	-----	-----	-----	-----	-----

AVERAGE 24 HOUR ERROR - 0100 MI. } O/.  
AVERAGE 48 HOUR ERROR - 0202 MI.  
AVERAGE 72 HOUR ERROR - 0323 MI.