

Tropical Cyclone (TC) 06P (Zoe)*



First Poor : 0600Z 24 Dec 02

First Fair : 1930Z 24 Dec 02

First TCFA : 0830Z 25 Dec 02

First Warning : 1200Z 25 Dec 02

Last Warning : 0000Z 01 Jan 03, Extratropical

Max Intensity : 155 kts, gusts to 190 kts

Landfall : None

Total Warnings : 14

Remarks:

(1) Tropical Cyclone (TC) 06P was initially detected and described as a tropical disturbance in the South Pacific Convergence Zone on 24 December, 2002. Rapid development of the tropical disturbance due to an excellent poleward outflow channel caused JTWC to issue the first warning by 1200Z on 25 December.

Metsat data indicated that within 24 hours after the initial warning, the cyclone intensified from 35 knots to 75 knots, a rate of 2 Dvorak T-numbers per day. By 1200Z on 27 December, TC 06P had intensified to 155 knots, a rate of 3 Dvorak T-numbers per day. This rapid development occurred due to consistently decreasing vertical wind shear and excellent outflow in all quadrants, especially in the poleward direction. After reaching peak intensity, TC 06P began to slow in track speed, eventually stalling and maintaining an intensity at or above 100 knots. After 0000Z on 30 December, TC 06P recurved towards the southeast as a mid-level trough influenced a weakness in the ridge and the cyclone began rapid extratropical transition. Extratropical transition occurred south-southwest of the Fiji Islands.

(2) TC 06P is noted for its 155 knot maximum intensity and the damage caused when the TC passed near several small islands in the Temotu Province of the Solomon Islands. Damage done by passage of TC 06P was reported as relatively light on the island of Anuta, with most structures remaining intact. Early reports indicated damage was substantial on the island of Tikopia, though there was no initial loss of life or serious injuries reported. The islands have a combined population of approximately 3,700 individuals. During the first fly-over by a humanitarian mission after communications were lost with the islands, the devastation to the islands was reported as "total". Much of the vegetation used for food or shelter was denuded. Most major structures were damaged or destroyed. All fresh water sources with the exception of a spring accessible only at low tide were contaminated by salt water according to early reports. Based on the traditional lives

of the inhabitants, self-sufficiency was not considered likely for Tikopia for several years.

*Named by WMO designated RSMC

Statistics for JTWC on TC06P																			
DTG	WRN	BEST TRACK		wind	POSITION ERRORS								WIND ERRORS						
	NO.	LAT	LONG		00	12	24	36	48	72	96	120	00	12	24	36	48	72	96
02122412		9.0S	178.3W	15															
02122418		9.7S	179.1W	25															
02122500		10.4S	180.0W	25															
02122506		10.8S	178.9E	30															
02122512	1	10.8S	177.6E	35	13	65	80	81	77				0	-10	-25	-35	-90		
02122600	2	10.7S	175.4E	55	11	37	77	85	122				0	-10	-20	-70	-65		
02122612	3	10.8S	174.0E	75	17	30	31	46	41				0	0	-50	-45	-30		
02122700	4	11.2S	172.5E	95	8	26	13	24	31				0	-45	-30	-20	0		
02122712	5	11.7S	170.7E	155	5	32	50	80	96				0	10	25	45	55		
02122800	6	12.1S	169.9E	155	8	13	55	75	97				0	10	35	45	40		
02122812	7	12.4S	169.2E	145	6	59	71	77	91				0	20	30	25	40		
02122900	8	12.7S	169.5E	120	0	13	6	23	58				0	10	5	10	20		
02122912	9	13.5S	170.4E	100	8	21	50	56	54				0	-5	5	10	0		
02123000	10	14.4S	171.5E	95	8	25	55	41	36				0	5	20	5	0		
02123012	11	15.5S	172.3E	75	57	70	29	41					0	10	5	0			
02123100	12	16.8S	173.4E	55	26	79	111						0	-10	-10				
02123112	13	18.6S	174.8E	50	38	62							5	5					
03010100	14	20.7S	175.2E	45	34								0						
03010106		21.9S	175.9E	45															
			AVERAGE		18	41	52	57	70				0	12	22	28	34		
			BIAS										0	-1	-1	-3	-3		
			# CASE		14	13	12	11	10				14	13	12	11	10		

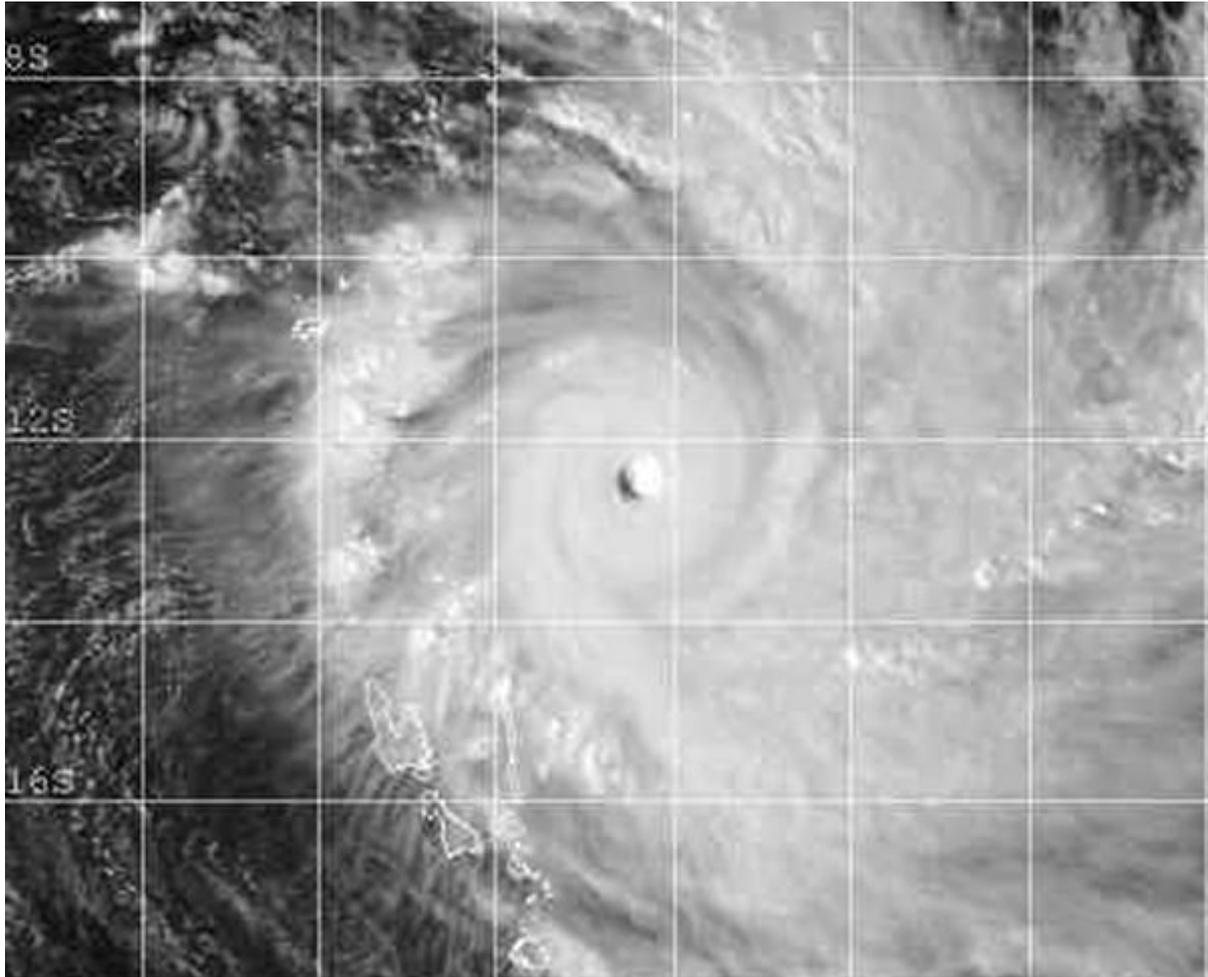


Figure 2-06P-1. 280400Z December 2002 GMS-5 visible imagery of TC 06P (Zoe), 230 nm northeast of Port Vila, Vanuatu, with an estimated peak intensity of 150 knots.

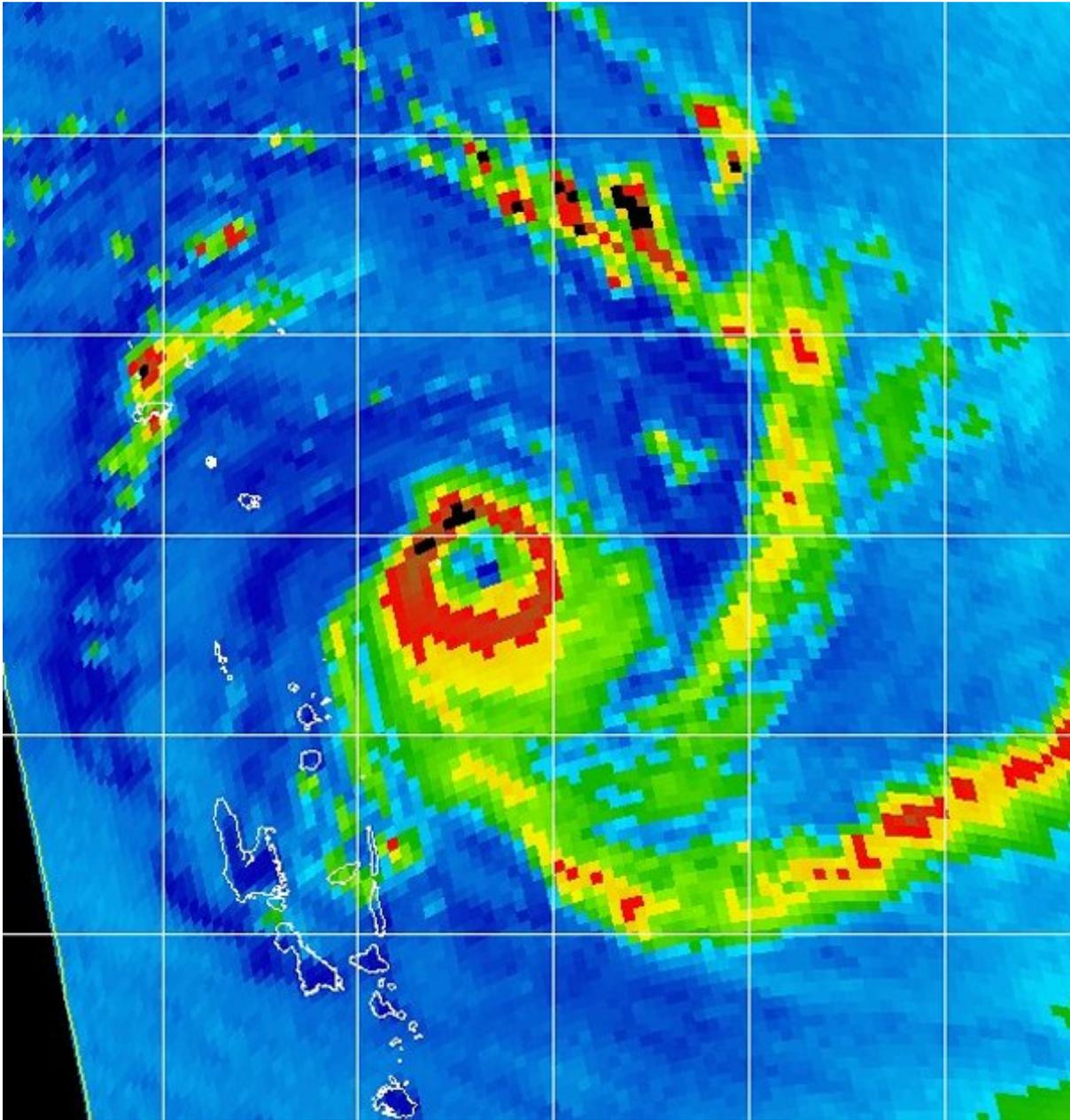


Figure 2-06P-2. 281013Z December 2002 85 GHz SSM/I imagery of TC 06P (Zoe), 210 nm northeast of Port Vila, Vanuatu, with an estimated peak intensity of 155 knots.

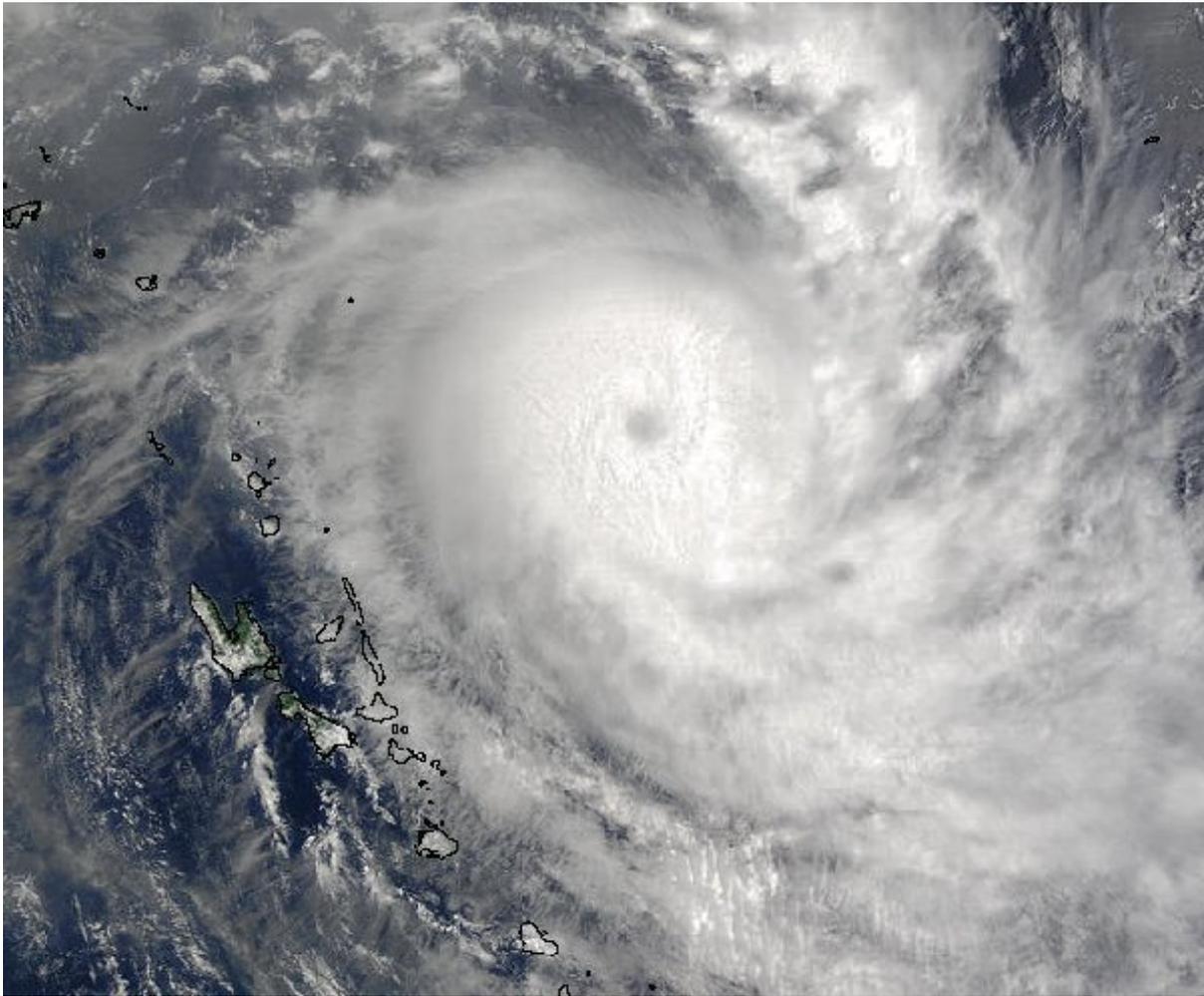
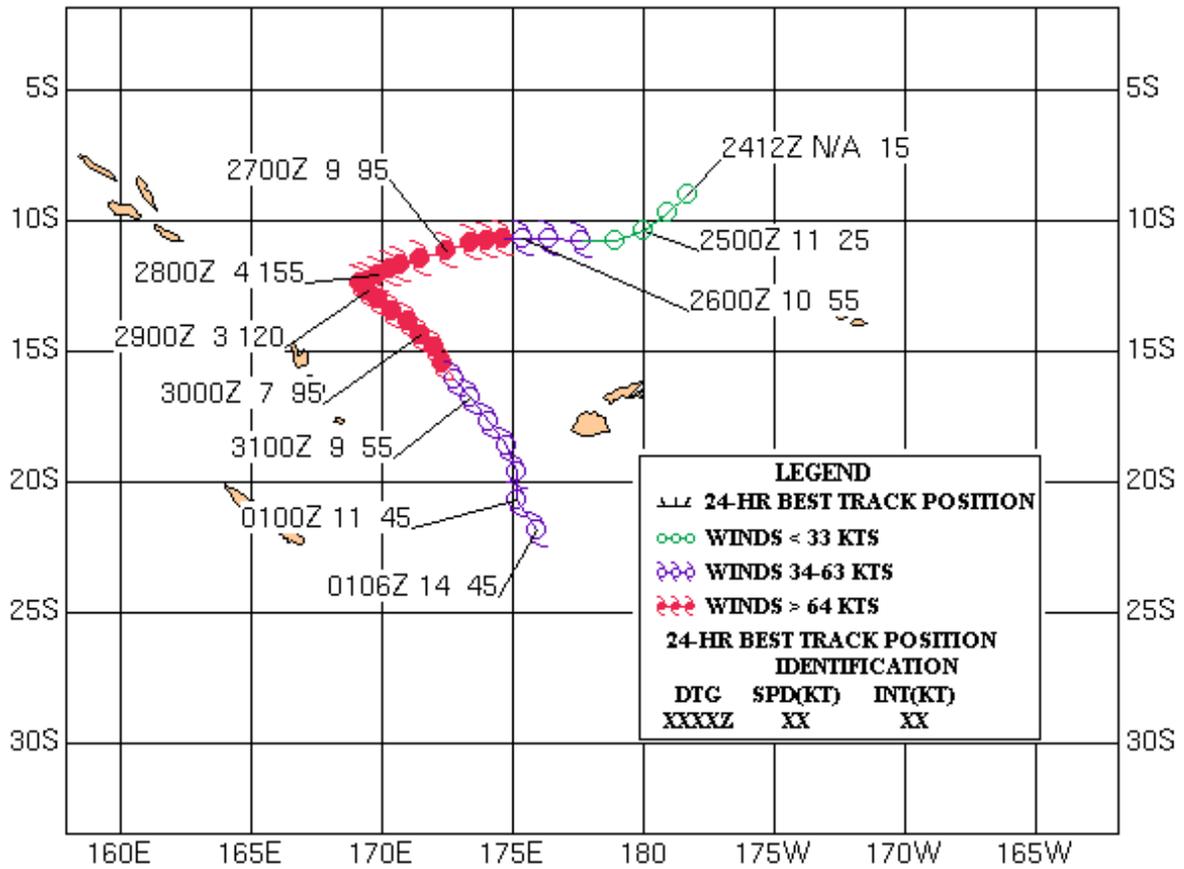


Figure 2-06P-3. 292240Z December 2002 MODIS true-color image of TC 06P (Zoe), located 240nm east-northeast of Port Vila, Vanuatu, with an intensity of 100 knots.

TROPICAL CYCLONE 06P (ZOE)
25 DEC 2002--01 JAN 2003



Time Intensity for 06P

Intensity (kts)

