6. TROPICAL CYCLONE WARNING VERIFICATION STATISTICS

6.1 GENERAL

Since 1959, JTWC has compiled data on tropical cyclones (TC) within its AOR. In this 38-year period, over 32,000 warnings were verified on 1,800 TCs. The verification data include best tracks (6-hourly positions and associated intensities), JTWC forecasts (12-, 24-, 36-, 48- and 72-hour position, intensity and wind radii), and fixes made from satellite, aircraft, radar, and synoptic data. These data are archived and available upon request.

Efforts are underway to make this information available via anonymous FTP over the Internet, however, until this project is complete JTWC will provide the data by FTP upon request. To request data by Internet, send e-mail to: jtops@npmocw.navy.mil. If the Internet is not an option, data can be copied to 3.5" computer diskettes (that you provide) upon request. Plan for one diskette for each year and ocean basin. Mail them with your request to: NAVPACMETOCCEN WEST /JTWC, PSC 455, Box 12, FPO AP 96540-0051.

6.2 WARNING VERIFICATION STATISTICS

6.2.1 WESTERN NORTH PACIFIC — This section includes verification statistics for each significant TC in the western North Pacific during 1996.

JTWC BEST TRACK, FORECAST TRACK AND INTENSITY ERRORS BY WARNING

TROPICAL DEPRESSION 01W

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96022306		4.0N	148.7E	20												
96022312		4.0N	148.6E	20												
96022318		4.1N	148.6E	20												
96022400		4.1N	148.5E	20												
96022406		4.2N	148.4E	20												
96022412		4.2N	148.3E	25												
96022418		4.3N	148.2E	25												
96022500		4.3N	148.1E	25												
96022506		4.3N	148.0E	25												
96022512		4.3N	147.5E	25												
96022518		4.8N	146.8E	25												
96022600		5.2N	145.7E	25												
96022606		5.7N	144.4E	25												
96022612		6.1N	143.0E	25												
96022618		6.7N	141.3E	25												
96022700		7.3N	139.5E	25												
96022706		8.0N	137.7E	25												
96022712		8.4N	136.1E	20												
96022718		8.7N	134.5E	20												
96022800		8.9N	133.0E	20												
96022806		9.0N	131.5E	20												
96022812		9.1N	130.0E	25												
96022818		9.3N	128.7E	25												
96022900		9.5N	127.4E	25												

TROPICAL DEPRESSION 01W (CONTINUED)

96022906	1	9.9N	126.3E	30	21	68	127	129		0	5	15	20
96022912	2	10.1N	125.3E	30	29	90	112	100		0	5	10	20
96022918	3	10.5N	124.1E	30	21	82	98			0	0	0	
96030100	4	10.7N	122.7E	30	18	60	83			0	0	10	
96030106	5	10.6N	121.4E	30	50	82				0	0		
96030112	6	10.6N	120.4E	30	25	50				0	5		
96030118	7	10.6N	119.6E	30	29					0			
96030200		10.6N	118.8E	25									
			AVERAGE		28	72	106	115					
			# CASES		7	6	4	2					

TROPICAL STORM ANN (02W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96032918		4.0N	150.1E	15												
96033000		4.3N	150.0E	20												
96033006		4.6N	149.9E	20												
96033012		4.9N	149.8E	20												
96033018		5.4N	149.6E	25												
96033100		6.0N	149.2E	25												
96033106		6.6N	148.6E	25												
96033112		7.0N	147.6E	25												
96033118		7.5N	146.6E	25												
96040100		8.0N	145.7E	25												
96040106		8.3N	145.1E	25												
96040112		8.7N	144.5E	30												
96040118		9.0N	143.8E	30												
96040200	1	9.1N	143.0E	35	166	268	373	450	546	854	-10	-5	0	5	10	20
96040206	2	9.2N	142.1E	35	212	269	340	401	445	534	-5	-5	0	5	15	15
96040212	3	9.3N	141.5E	35	215	275	321	347	374	433	-5	-5	0	10	15	10
96040218	4	9.4N	140.8E	35	222	257	300	331	366	446	-5	0	0	15	15	10
96040300	5	9.5N	139.9E	35	196	186	178	235	275	366	0	0	10	20	30	30
96040306	6	9.6N	139.3E	35	186	189	208	269	310	413	0	0	15	20	25	30
96040312	7	9.6N	138.5E	35	183	162	173	193	215	302	0	5	15	15	15	20
96040318	8	9.6N	137.8E	35	198	212	233	254	293	353	0	10	15	10	15	10
96040400	9	9.7N	137.2E	30	206	278	359	441			0	0	0	-10		
96040406		9.7N	136.3E	25												
96040412	10	9.7N	135.5E	25	201	223	237				0	0	-10			
96040418		9.6N	134.7E	25												
96040500	11	9.6N	133.8E	25	142	152	172	177			0	-10	-10	-10		
96040506		9.5N	133.0E	30												
96040512	12	9.5N	132.1E	35	115	128	136	127	138	163	0	5	10	10	15	30
96040518	13	9.5N	130.9E	35	123	128	119	84	91	149	0	5	5	10	20	30
96040600	14	9.6N	129.7E	35	79	70	69	105	170	312	0	5	5	5	15	30
96040606	15	9.7N	128.7E	35	72	58	82	147	232	399	0	0	-5	5	15	25
96040612	16	9.9N	127.7E	35	94	105	102	159	234	378	0	-5	-5	0	10	15
96040618	17	10.2N	126.7E	40	104	131	194	294	399	644	0	-5	0	10	10	25
96040700	18	10.7N	125.7E	40	63	76	152	236	322	490	0	0	5	10	15	25
96040706	19	11.3N	125.0E	40	13	29	79	129	185	316	0	5	10	10	20	25
96040712	20	11.7N	124.3E	40	0	39	79	105	172	299	0	5	10	10	20	30
96040718	21	11.9N	123.8E	35	31	76	132	197	255	318	0	5	0	10	20	30
96040800	22	12.2N	123.4E	35	29	72	137	202	274	364	0	5	0	10	20	30
96040806	23	12.4N	123.1E	30	34	59	117	172	222	304	0	0	0	5	10	20
96040812	24	12.6N	122.8E	30	50	105	166	226	273	355	0	0	0	5	15	20
96040818	25	12.4N	122.5E	30	16	11	26	50	76	142	0	5	5	5	15	20
96040900	26	12.1N	122.3E	30	26	48	68	78			0	5	5	10		
96040906		11.8N	122.1E	25												
96040912	27	11.6N	121.9E	25	108	142	123				0	5	10			
96040918		11.4N	121.7E	20												
96041000		11.3N	121.5E	20												
96041006		11.3N	121.3E	20												
96041012		11.3N	121.1E	15												
96041018		11.4N	120.9E	15												
96041100		11.5N	120.7E	15												
96041106		11.7N	120.5E	15												
96041112		11.9N	120.3E	15												
96041118		12.1N	120.1E	15												
			AVERAGE		115	139	174	217	267	379						
			# CASES		27	27	27	25	22	22						

TROPICAL DEPRESSION 03W

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96042500		7.7N	113.6E	20												
96042506		7.3N	113.1E	25												
96042512	1	7.2N	112.6E	25	23	35					0	5				
96042518	2	7.1N	112.0E	25	24	24					0	5				
96042600	3	7.2N	111.4E	25	0						0					
96042606	4	7.3N	110.9E	20	0						0					
			AVERAGE		12	30										
			# CASES		4	2										

TYPHOON BART (04W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96050700		6.6N	137.8E	15												
96050706		6.8N	138.0E	15												
96050712		6.9N	138.4E	15												
96050718		7.0N	138.9E	15												
96050800		7.1N	139.2E	15												
96050806		7.1N	139.4E	15												
96050812		7.1N	139.7E	20												
96050818		7.2N	139.9E	20												
96050900		7.4N	139.9E	20												
96050906	1	7.6N	139.7E	25	13	12	56	122	159	169	0	0	0	-5	-5	-5
96050912	2	7.8N	139.3E	25	11	53	136	218	218	150	0	0	5	10	10	10
96050918	3	8.1N	138.7E	30	21	84	172	239	215	163	0	0	0	5	10	10
96051000	4	8.4N	138.0E	35	37	127	223	240	256	252	0	0	0	0	5	5
96051006	5	9.0N	136.9E	35	42	111	162	138	131	133	0	-5	-5	0	5	-5
96051012	6	9.6N	135.9E	40	45	115	106	114	125	133	-5	-5	-10	-10	-10	-35
96051018	7	10.5N	134.7E	45	60	67	35	65	140	330	0	0	5	10	10	-40
96051100	8	11.3N	133.6E	45	66	26	31	30	96	222	0	-5	0	5	0	-55
96051106	9	11.7N	132.5E	50	41	32	47	23	24	72	-5	-5	0	5	-5	-35
96051112	10	11.7N	131.7E	55	18	50	44	17	21	62	0	0	5	5	-5	-20
96051118	11	11.8N	130.8E	55	8	17	21	44	58	45	0	0	5	-5	-20	-15
96051200	12	12.1N	129.7E	60	26	43	42	68	111	196	0	0	0	-5	-25	-20
96051206	13	12.6N	128.9E	60	5	24	13	36	77	154	0	0	-10	-20	-25	-20
96051212	14	13.2N	128.3E	65	8	23	55	91	147	217	0	-5	-20	-35	-20	-20
96051218	15	13.6N	127.9E	65	17	45	96	145	211	244	0	-15	-35	-35	-15	-20
96051300	16	14.1N	127.5E	75	5	39	65	91	130	168	-10	-25	-45	-30	-15	-20
96051306	17	14.5N	127.0E	85	5	34	40	64	68	92	-10	-30	-35	-15	-10	-20
96051312	18	15.0N	126.5E	95	13	30	55	78	90	176	-5	-25	-10	-5	-15	-15
96051318	19	15.4N	126.1E	110	6	26	34	45	62	152	-10	-15	0	5	0	5
96051400	20	15.7N	125.8E	125	5	24	42	32	35	154	0	15	20	5	-5	10
96051406	21	16.1N	125.5E	125	6	34	37	36	22	124	0	10	10	0	-5	10
96051412	22	16.6N	125.2E	120	8	21	57	74	98	71	-5	-15	-25	-40	-40	-20
96051418	23	17.2N	124.9E	115	0	18	34	62	74	199	0	-15	-25	-40	-30	-10
96051500	24	17.7N	124.8E	115	0	11	34	49	84	247	0	0	-5	-15	-10	0
96051506	25	18.2N	124.8E	115	0	34	75	141	181	307	0	-10	-20	-15	-15	-5
96051512	26	18.6N	125.0E	115	11	17	23	67	168	414	0	0	-5	5	0	10
96051518	27	19.1N	125.4E	115	8	45	129	237	363	576	0	0	5	10	10	5
96051600	28	19.4N	125.9E	115	5	39	121	228	303	385	0	10	15	10	15	0
96051606	29	19.6N	126.6E	115	6	34	102	190	245	340	0	20	20	20	20	0
96051612	30	19.9N	127.5E	105	12	78	204	289	320	491	-5	0	-5	-10	-5	-10
96051618	31	20.4N	128.8E	95	21	78	156	222	240		-5	-10	-20	-10	-10	
96051700	32	21.1N	130.2E	85	0	60	113	139	174		-10	-15	-10	-5	-10	
96051706	33	22.2N	131.7E	80	24	82	121	141	255		-10	-5	-5	-5	-10	
96051712	34	23.4N	133.3E	75	6	8	48	101	303		-10	-5	-5	-10	-10	
96051718	35	24.6N	135.1E	65	36	128	192	240			0	0	-5	-10		
96051800	36	25.8N	136.8E	55	12	34	92	294			5	5	-5	-10		
96051806	37	26.7N	138.4E	50	40	86	194				5	0	-10			
96051812	38	27.6N	140.3E	45	8	37	166				0	-10	-15			
96051818	39	28.2N	142.0E	45	0	68					-5	-10				
96051900		28.7N	144.2E	45												
96051906		29.4N	147.2E	45												
96051912		30.4N	151.9E	45												
			AVERAGE		17	49	89	123	154	215						
			# CASES		39	39	38	36	34	30						

TROPICAL STORM CAM (05W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96051600		13.0N	110.9E	15												
96051606		13.2N	111.1E	15												
96051612		13.3N	111.3E	15												
96051618		13.4N	111.5E	15												
96051700		13.5N	111.6E	15												
96051706		13.6N	111.8E	15												
96051712		13.7N	111.9E	15												
96051718		13.9N	112.1E	15												
96051800		14.2N	112.3E	15												
96051806		14.5N	112.5E	20												
96051812		14.8N	112.7E	20												
96051818	1	15.1N	112.9E	25	48	84	141	159	162	256	0	5	5	5	5	-5
96051900	2	15.5N	113.3E	25	66	129	156	179	188	257	0	5	5	5	0	0
96051906	3	15.9N	113.9E	25	56	103	128	141	165	240	0	0	0	0	-5	0
96051912	4	16.4N	114.5E	25	67	96	117	126	164	243	0	0	0	-5	-5	0
96051918	5	16.8N	115.0E	30	74	93	95	130	174	280	0	0	0	-5	0	5
96052000	6	17.1N	115.4E	30	13	37	25	18	24	73	0	0	-5	-5	0	5
96052006	7	17.5N	115.7E	35	20	51	49	41	45	16	0	0	-5	5	10	20
96052012	8	17.9N	116.0E	35	18	48	66	79	84	152	0	0	5	10	10	5
96052018	9	18.1N	116.3E	40	18	49	74	100	130	283	-5	-5	0	5	-5	10
96052100	10	18.4N	116.9E	45	12	59	112	167	225	350	-10	-10	-10	-10	-20	5
96052106	11	18.7N	117.5E	50	20	53	92	143	212		-5	-10	-5	-15	-15	
96052112	12	19.1N	118.2E	50	16	21	24	12	12		-5	-10	-5	-10	-5	
96052118	13	19.4N	118.9E	55	12	23	26	16	42		-10	-10	-20	-15	-5	
96052200	14	19.7N	119.6E	55	6	13	26	29	75		-10	-10	-15	-10	5	
96052206	15	19.9N	120.3E	55	6	32	53	67			-10	-20	-20	-5		
96052212	16	20.2N	121.1E	55	12	26	41	88			-10	-20	-15	5		
96052218	17	20.6N	122.0E	60	18	25	44				-15	-15	-5			
96052300	18	21.0N	122.9E	60	21	25	61				-15	-10	5			
96052306	19	21.5N	123.9E	55	25	28					-10	5				
96052312	20	21.8N	124.9E	50	30	126					-5	10				
96052318	21	22.0N	126.4E	40	32						0					
96052400	22	21.9N	128.0E	30	69						0					
			AVERAGE	30	57	74	94	122	215							
			# CASES	22	20	18	16	14	10							

TYPHOON DAN (06W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72	DTG NO.
96070312		19.0N	155.6E	15													
96070318		18.9N	154.9E	15													
96070400		18.9N	154.2E	15													
96070406		18.9N	153.4E	15													
96070412		18.9N	152.4E	15													
96070418		19.0N	151.3E	20													
96070500	1	19.1N	150.2E	25	72	90	131	174	201	213	0	5	10	5	5	0	
96070506	2	19.3N	149.2E	25	74	91	130	166	187	215	0	5	5	5	0	0	
96070512	3	19.5N	148.2E	25	85	124	186	203	217	279	0	5	0	5	5	10	
96070518	4	19.8N	147.3E	25	82	92	114	120	127	239		0	0	0	-5	5	
96070600	5	20.1N	146.6E	25	8	13	21	39	37	129	0	-5	-5	-5	-15	-15	
96070606	6	20.4N	146.0E	30	8	8	12	20	50	201	0	-5	-5	-10	-10	-15	
96070612	7	20.6N	145.5E	35	6	12	23	39	50	195	-5	-5	-5	-15	-10	-10	
96070618	8	20.9N	144.9E	35	17	57	79	93	64	219	0	0	-5	0	5	10	
96070700	9	21.2N	144.2E	40	16	43	35	60	103	332	0	-5	-10	0	0	10	
96070706	10	21.6N	143.5E	45	18	24	52	85	174	397	0	-10	-10	-5	0	15	
96070712	11	22.1N	142.7E	50	45	73	97	150	254	443	0	-5	5	5	15	20	
96070718	12	22.4N	142.0E	60	21	45	69	72	84	223	-5	0	5	10	20	15	
96070800	13	22.8N	141.3E	65	8	54	114	187	252	390	0	0	0	10	20	15	
96070806	14	23.4N	140.8E	65	16	72	125	174	176	313	0	5	-5	-5	-5	-5	
96070812	15	24.0N	140.6E	65	24	65	115	146	142	248	0	-10	-15	-10	-10	-15	
96070818	16	24.7N	140.5E	70	36	85	124	131	138	296	-5	-10	-10	-5	-10	-15	
96070900	17	25.5N	140.5E	75	13	80	167	234	315	618	0	-5	-5	-5	-10	-15	
96070906	18	26.7N	140.6E	75	24	90	155	226	336	559	0	0	0	-5	-5	-15	
96070912	19	28.0N	140.7E	75	6	42	67	113	214	266	0	0	0	-5	-5	-10	
96070918	20	29.5N	140.8E	70	8	18	53	115	213	144	0	-5	-10	-15	-20	-15	
96071000	21	31.0N	141.0E	70	26	36	71	99	96	130	0	-5	-15	-15	-25	-15	
96071006	22	32.4N	141.2E	65	20	94	127	161	114	157	0	-5	-10	-15	-25	-15	
96071012	23	33.7N	141.8E	65	34	120	259	320	247	253	-10	-15	-20	-25	-25	-5	
96071018	24	35.0N	142.9E	65	15	86	225	255	130	169	-15	-20	-25	-25	-20	-5	
96071100	25	36.4N	144.2E	65	24	79	124	100	99		-15	-20	-25	-20	-15		

TYPHOON DAN (06W) (CONTINUED)

96071106	26	37.9N	145.8E	60	29	138	232	253	249		-10	-20	-25	-15	-15	
96071112	27	39.8N	147.9E	60	11	166	326	407			-20	-20	-20	-10		
96071118	28	42.0N	149.6E	60	58	211	346	445			-25	-25	-15	-10		
96071200	29	43.9N	150.8E	60	49	194	381	472			0	0	-5	-10		
96071206	30	45.3N	151.6E	60	103	280	469	559			0	0	-5	-5		
96071212		45.8N	152.3E	55												
96071218		45.9N	153.2E	50												
96071300		45.6N	154.7E	45												
96071306		45.2N	157.1E	45												
96071312		45.1N	159.9E	35												
96071318		45.0N	162.1E	35												
96071400		44.9N	164.2E	30												
96071406		45.2N	166.3E	25												
96071412		46.4N	168.1E	25												
96071418		47.7N	169.2E	20												
96071500		49.0N	170.2E	20												
			AVERAGE		32	86	148	188	165	277						
			# CASES		30	30	30	30	26	24						

SUPER TYPHOON EVE (07W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96071006		19.3N	151.5E	15												
96071012		19.2N	151.0E	15												
96071018		19.1N	150.5E	15												
96071100		19.0N	150.0E	15												
96071106		19.0N	149.5E	15												
96071112		19.0N	148.8E	15												
96071118		19.0N	148.0E	20												
96071200		18.9N	147.3E	20												
96071206		18.9N	146.7E	25												
96071212		18.9N	146.2E	25												
96071218		18.9N	145.7E	25												
96071300		18.9N	145.2E	30												
96071306		19.0N	144.5E	30												
96071312	1	19.2N	143.8E	35	20	34	42	58	77	126	-10	-15	-30	-35	-70	-65
96071318	2	19.6N	142.9E	40	17	26	42	47	49	110	-15	-25	-35	-50	-85	-50
96071400	3	20.1N	142.1E	45	12	28	39	33	50	112	-15	-35	-35	-70	-90	-45
96071406	4	20.5N	141.3E	55	5	27	33	44	62	144	-20	-30	-50	-85	-65	-30
96071412	5	21.0N	140.5E	65	8	24	45	66	95	199	-30	-35	-70	-85	-50	-25
96071418	6	21.5N	139.7E	70	16	33	56	87	128	230	-25	-40	-70	-50	-30	-10
96071500	7	22.0N	138.8E	75	6	6	24	52	86	194	0	-25	-40	0	15	20
96071506	8	22.5N	137.9E	95	6	30	45	61	94	211	-15	-40	-20	5	30	45
96071512	9	22.9N	136.9E	115	8	5	29	60	75	172	0	-10	20	30	40	75
96071518	10	23.4N	136.1E	135	6	17	44	59	63	133	-5	5	20	40	25	85
96071600	11	24.0N	135.3E	140	8	18	48	79	72	191	-10	25	10	15	-5	35
96071606	12	24.7N	134.5E	125	0	12	13	44	99	212	-5	20	20	0	20	40
96071612	13	25.4N	133.7E	115	6	24	38	62	102	174	5	10	10	-15	35	45
96071618	14	26.1N	133.0E	115	16	27	57	92	77	198	5	20	-5	10	35	45
96071700	15	26.9N	132.3E	110	5	24	36	88	54	442	5	5	-10	35	30	30
96071706	16	27.8N	131.6E	100	11	26	66	70	120	545	5	-10	15	30	30	25
96071712	17	28.7N	131.0E	100	6	11	45	54	199	561	0	-15	35	30	30	20
96071718	18	29.5N	130.6E	115	13	19	32	120	217	549	-10	10	30	35	30	25
96071800	19	30.5N	130.4E	115	0	32	24	111	231	474	0	25	25	20	5	5
96071806	20	31.6N	130.7E	90	7	16	64	107	181	438	5	35	30	20	10	0
96071812	21	32.6N	131.0E	65	5	34	36	34	47	59	10	20	20	5	0	-10
96071818	22	33.5N	131.3E	55	0	38	42	37	38	106	5	10	5	5	0	-20
96071900	23	34.0N	131.8E	45	0	34	42	27			-5	-5	-15	-15		
96071906	24	34.2N	132.8E	40	9	27	29				-5	-5	-10			
96071912	25	34.6N	133.9E	35	28	30	15				-5	-10	-10			
96071918	26	34.8N	135.0E	35	15	5	19	59			-5	-5	0	-10		
96072000	27	34.8N	136.0E	35	5	6	43				-5	-5	0			
96072006		34.7N	137.0E	30												
96072012		34.6N	138.0E	30												
96072018		34.3N	139.0E	25												
96072100		33.9N	140.0E	25												
96072106		33.3N	141.0E	30												
96072112		32.9N	141.9E	35												
96072118		32.4N	142.8E	40												
96072200		31.9N	143.8E	40												
96072206		31.5N	144.9E	35												
96072212		31.2N	146.0E	35												
96072218		31.0N	146.9E	30												
96072300		31.2N	147.6E	30												

SUPER TYPHOON EVE (07W) (CONTINUED)

DTG		LAT	LONG	WIND (KT)
96072306		31.5N	148.4E	30
96072312		32.1N	149.3E	30
96072318		33.0N	150.2E	30
96072400		34.2N	151.2E	30
96072406		36.0N	153.0E	30
96072412		37.8N	155.1E	30
96072418		39.6N	157.3E	30
96072500		41.4N	159.0E	30
96072506		42.9N	160.5E	30
96072512		44.1N	162.6E	30
96072518		45.3N	164.6E	30
96072600		46.5N	166.8E	30
96072606		47.9N	168.4E	30
96072612		49.5N	170.0E	30
96072618		51.0N	172.0E	30
96072700		52.6N	174.5E	30
96072706		54.0N	178.0E	30
96072712		55.0N	178.0W	30
96072718		56.0N	174.0W	30

	00	12	24	36	48	72
AVERAGE	9	23	39	65	101	254
# CASES	27	27	27	24	22	22

TYPHOON FRANKIE (08W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96071912		16.9N	114.7E	15												
96071918		16.6N	115.2E	15												
96072000		16.4N	115.7E	15												
96072006		16.0N	115.7E	20												
96072012		16.0N	115.2E	25												
96072018		16.3N	114.5E	25												
96072100	1	16.8N	113.8E	25	18	28	74	111	134	165	0	5	10	-5	-30	-40
96072106	2	17.3N	113.2E	30	5	36	74	94	110	188	-5	0	5	-20	-45	-30
96072112	3	17.7N	112.5E	30	0	39	73	100	140	281	-5	0	0	-25	-60	-15
96072118	4	18.1N	111.7E	35	25	74	102	135	148	290	0	0	-5	-40	-60	-10
96072200	5	18.5N	110.9E	35	20	50	69	96	144	233	0	-5	-25	-55	-35	0
96072206	6	18.7N	110.1E	40	37	53	82	116	194	237	-5	-20	-45	-60	-30	5
96072212	7	19.0N	109.7E	45	38	81	116	142	224	281	-5	-25	-55	-35	-15	10
96072218	8	19.2N	109.1E	50	59	77	91	148	201		-10	-40	-55	-30	-15	
96072300	9	19.5N	108.6E	60	6	16	13	35	84		-10	-35	-5	-10	-5	
96072306	10	19.8N	107.9E	75	5	32	12	49	139		-10	-20	0	0	0	
96072312	11	20.1N	107.2E	90	18	30	53	138	254		-20	0	5	5	5	
96072318	12	20.3N	106.8E	90	8	76	143	207			-5	15	15	10		
96072400	13	20.4N	106.0E	65	12	69	55	49			0	10	5	5		
96072406	14	20.2N	105.1E	55	42	49	17				0	5	5			
96072412		20.2N	104.1E	40												
96072418		20.6N	103.2E	35												
96072500		21.1N	102.3E	25												
96072506		21.7N	101.3E	20												
96072512		22.5N	100.3E	15												

	00	12	24	36	48	72
AVERAGE	21	51	70	110	162	240
# CASES	14	14	14	13	11	7

TYPHOON GLORIA (09W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96071900		7.1N	136.9E	15												
96071906		7.6N	136.6E	15												
96071912		8.2N	136.2E	15												
96071918		8.7N	135.8E	15												
96072000		9.1N	135.4E	15												
96072006		9.5N	135.0E	15												
96072012		10.0N	134.4E	20												
96072018		10.6N	133.7E	20												
96072100		11.2N	132.8E	20												
96072106		11.8N	131.8E	25												
96072112		12.4N	130.9E	25												
96072118		12.9N	130.1E	30												
96072200	1	13.2N	129.3E	35	51	71	120	133	135	166	-5	-10	-10	-15	-15	-60
96072206	2	13.5N	128.7E	40	53	128	191	186	198	244	-10	-10	-10	-10	-40	-40
96072212	3	13.9N	128.2E	45	18	46	40	25	42	120	-5	-5	-5	-5	-10	5

TYPHOON GLORIA (09W) (CONTINUED)

96072218	4	14.4N	127.8E	45	16	28	12	34	72	165	0	-5	-5	-5	-5	20
96072300	5	14.9N	127.5E	50	18	37	78	85	102	212	0	0	5	-10	0	20
96072306	6	15.5N	126.8E	55	24	82	103	125	146	195	0	0	0	-5	5	20
96072312	7	16.0N	126.0E	60	6	12	25	46	106	166	-5	-5	-10	-5	10	35
96072318	8	16.5N	125.1E	65	21	24	30	66	122	200	-5	-10	-10	0	15	50
96072400	9	16.9N	124.5E	70	23	42	75	140	171	173	-5	-20	-10	0	15	35
96072406	10	17.4N	123.9E	80	0	13	45	105	133	216	-5	-10	0	10	20	45
96072412	11	17.8N	123.4E	90	0	24	16	52	32	236	-15	0	10	25	15	60
96072418	12	18.4N	122.9E	90	6	0	30	36	40	189	0	15	25	10	15	50
96072500	13	19.0N	122.4E	90	12	54	60	32	62		0	15	25	20	25	
96072506	14	19.5N	121.9E	90	23	55	78	20	88		0	15	15	30	30	
96072512	15	19.9N	121.5E	90	12	36	89	54	70		0	15	25	40	45	
96072518	16	20.4N	121.1E	90	18	72	140	149	145		0	15	35	55	55	
96072600	17	21.2N	120.8E	90	6	60	97	149			0	20	40	60		
96072606	18	21.9N	120.8E	90	0	95	222	301			0	5	20	50		
96072612	19	23.4N	120.2E	80	16	113	241				-15	10	20			
96072618	20	24.3N	119.1E	70	12	69	102				0	20	20			
96072700	21	24.8N	117.7E	60	0	33					0	20				
96072706	22	25.1N	116.3E	45	21	67					5					
96072712		25.3N	115.0E	30												
96072718		25.4N	114.0E	20												
			AVERAGE		17	53	90	97	105	191						
			# CASES		22	22	20	18	16	12						

SUPER TYPHOON HERB (10W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96072106		12.3N	151.6E	15												
96072112		12.5N	151.9E	15												
96072118		12.9N	152.2E	15												
96072200		13.4N	152.4E	15												
96072206		14.1N	152.6E	15												
96072212		14.9N	152.7E	20												
96072218		15.5N	152.7E	25												
96072300		16.1N	152.5E	25												
96072306	1	16.8N	152.0E	25	67	111	163	228	329	566	0	0	0	0	0	-15
96072312	2	17.4N	151.5E	25	106	145	180	271	370	613	0	5	10	10	0	-15
96072318	3	18.0N	150.9E	30	133	145	199	294	419	728	0	0	5	0	-5	-25
96072400	4	18.5N	150.3E	30	103	142	228	292	365	444	0	0	0	-10	-10	-30
96072406	5	19.0N	149.5E	35	24	24	96	172	253	364	0	5	0	-5	-10	-30
96072412	6	19.5N	148.9E	35	24	56	135	192	233	317	0	0	-10	-10	-15	-40
96072418	7	20.0N	147.7E	40	32	107	175	238	281	403	5	0	-5	-10	-15	-25
96072500	8	20.2N	146.4E	45	11	55	68	100	153	321	-5	-10	-10	-15	-20	-25
96072506	9	20.2N	145.0E	55	5	17	45	60	132	318	0	-10	-20	-25	-30	-25
96072512	10	20.2N	143.6E	65	0	28	45	46	21	223	0	0	0	-5	-15	-10
96072518	11	20.5N	142.1E	70	33	105	131	153	91	120	0	-10	-10	-15	-15	-10
96072600	12	20.6N	140.6E	75	12	42	60	84	145	283	0	0	0	-15	-10	-5
96072606	13	20.6N	139.0E	85	21	81	180	246	314	449	0	-10	-10	-15	-10	0
96072612	14	20.4N	137.9E	90	29	96	187	254	308	293	-5	-15	-20	-15	-10	0
96072618	15	20.0N	136.7E	100	58	137	235	340	426	404	0	-5	-10	-5	-5	0
96072700	16	19.7N	135.6E	105	5	29	111	189	238	264	0	-10	0	0	0	-10
96072706	17	19.3N	134.7E	115	8	57	123	185	201	173	0	0	10	0	5	-15
96072712	18	19.0N	133.9E	125	13	26	18	41	92	173	0	10	10	5	5	-15
96072718	19	18.8N	133.2E	125	12	49	90	113	137	199	0	5	5	10	-5	-40
96072800	20	18.6N	132.5E	125	8	16	18	16	27	66	0	0	10	10	-15	-35
96072806	21	18.4N	131.8E	125	8	18	22	61	73	105	0	0	10	5	-20	-30
96072812	22	18.3N	131.1E	125	11	61	91	122	173	196	0	5	5	-10	-25	-40
96072818	23	18.3N	130.5E	125	8	70	92	111	154	174	0	10	5	-15	-35	10
96072900	24	18.7N	129.9E	120	8	32	55	82	97	84	0	5	-10	-15	-35	-10
96072906	25	19.2N	129.3E	115	8	28	46	107	120	88	0	0	-15	-30	-30	15
96072912	26	19.8N	128.7E	115	5	20	55	72	79	91	0	-10	-15	-30	-25	25
96072918	27	20.5N	128.2E	115	0	5	32	52	98	142	0	-15	-25	-30	20	35
96073000	28	21.3N	127.7E	125	11	6	25	54	103	131	-5	-15	-25	-25	0	45
96073006	29	22.0N	127.1E	130	8	30	56	89	125	102	0	-15	-20	30	25	55
96073012	30	22.6N	126.6E	130	0	32	72	133	170	121	0	-15	-15	10	35	55
96073018	31	23.1N	126.1E	140	0	60	121	170	184	127	0	-5	40	35	45	60
96073100	32	23.9N	124.8E	140	6	37	55	37	54		0	0	25	15	5	
96073106	33	24.2N	123.8E	135	6	29	96	159	162		-5	55	0	15	15	
96073112	34	24.8N	122.7E	130	0	44	96	107	65		0	-15	5	10	15	
96073118	35	25.0N	121.4E	75	8	114	154	171	151		0	-5	5	15	10	
96080100	36	25.4N	120.0E	95	0	32	49	67	91		0	0	5	0	0	
96080106	37	26.0N	118.6E	70	5	12	5	23			0	0	5	-5		
96080112	38	26.4N	117.3E	60	16	59	119				0	0	-10			
96080118		26.9N	116.3E	50												

SUPER TYPHOON HERB (10W) (CONTINUED)

96080200		27.5N	115.4E	40												
96080206		28.1N	114.5E	30												
96080212		28.8N	113.8E	30												
96080218		29.5N	113.1E	25												
96080300		30.3N	112.6E	20												
96080306		31.0N	112.1E	20												
96080312		31.7N	111.7E	20												
		AVERAGE			22	57	99	139	179	261						
		# CASES			38	38	38	37	36	31						

TROPICAL STORM IAN (11W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96072706		11.8N	143.7E	20												
96072712		12.3N	143.9E	25												
96072718		13.1N	144.0E	30												
96072800		13.9N	143.9E	35												
96072806		14.6N	143.6E	35												
96072812	1	15.3N	143.3E	35	62	154	364	484	529	645	-5	0	5	20	35	50
96072818	2	16.2N	142.9E	35	83	231	418	514	610	788	-5	-5	5	25	40	55
96072900	3	17.1N	142.3E	35	55	244	369	462	583	720	0	0	15	30	50	65
96072906	4	19.0N	141.2E	40	62	188	252	355	480	554	-5	0	20	35	50	70
96072912	5	21.1N	140.4E	40	136	229	294	402	498		0	15	30	45	60	
96072918	6	22.8N	139.8E	40	188	234	279	377	420		0	10	20	30	45	
96073000	7	23.9N	139.4E	35	144	159	200	234	222		0	5	5	5	10	
96073006	8	25.0N	139.0E	30	90	128	196	177			0	5	5	10		
96073012		25.9N	138.6E	30												
96073018	9	27.0N	138.2E	25	79	125	119	143			5	5	5	10		
96073106	10	29.3N	137.2E	25	60	125	200				-5	0	0			
96073112		30.0N	136.5E	25												
96073118		30.5N	135.5E	20												
96080100		30.9N	134.4E	20												
96080106		31.2N	133.3E	15												
		AVERAGE			96	182	270	350	478	677						
		# CASES			10	10	10	9	7	4						

TYPHOON JOY (12W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96072512		19.6N	165.2E	10												
96072518		19.5N	164.6E	10												
96072600		19.4N	164.0E	10												
96072606		19.4N	163.5E	10												
96072612		19.4N	163.0E	15												
96072618		19.4N	162.4E	15												
96072700		19.6N	161.7E	15												
96072706		20.0N	160.7E	15												
96072712		20.6N	159.8E	15												
96072718		21.4N	158.8E	15												
96072800		22.3N	157.8E	15												
96072806		23.1N	156.9E	15												
96072812		24.0N	155.9E	15												
96072818		24.8N	154.8E	20												
96072900		25.8N	153.9E	20												
96072906	1	26.7N	153.4E	25	8	110	223	306	367	441	0	-5	0	20	40	30
96072912	2	27.0N	152.9E	30	23	144	248	345	401	529	0	0	10	20	30	20
96072918	3	26.8N	152.3E	35	62	168	268	338	358	476	-5	0	10	15	25	15
96073000	4	26.4N	152.2E	35	41	142	283	341	359	382	0	5	5	-5	-25	-50
96073006	5	26.2N	152.5E	35	38	52	112	153	189	296	0	10	5	-5	-35	-50
96073012	6	26.2N	152.7E	35	20	30	51	73	93	155	0	5	0	-20	-40	-50
96073018	7	26.3N	153.0E	35	18	26	32	57	83	191	0	0	-5	-30	-45	-50
96073100	8	26.6N	153.2E	35	18	12	33	70	94	226	0	-5	-10	-35	-45	-45
96073106	9	26.9N	153.1E	40	20	69	111	132	140	198	-5	-10	-20	-40	-45	-45
96073112	10	27.5N	152.9E	45	41	70	76	61	63	198	0	-5	-25	-40	-45	-40
96073118	11	28.2N	152.6E	50	55	85	108	121	136	177	-5	-20	-30	-40	-45	-35
96080100	12	28.8N	152.3E	55	12	31	30	66	103	49	0	-5	-5	-15	-25	-25
96080106	13	29.5N	152.0E	65	13	23	56	119	163	64	0	0	0	-15	-25	-10
96080112	14	30.2N	151.9E	70	7	23	82	120	136	115	-5	-5	-10	-15	-25	-10
96080118	15	30.7N	151.9E	75	23	63	112	147	139	136	-10	-5	-10	-15	-20	-5
96080200	16	31.1N	152.0E	75	7	57	105	123	102	155	0	0	-5	-10	-15	0
96080206	17	31.5N	152.4E	75	15	58	93	85	48	46	0	0	-10	-10	-10	-5

TYPHOON JOY (12W) (CONTINUED)

96080212	18	31.8N	153.0E	75	10	16	35	44	65	46	0	5	0	-5	0	5
96080218	19	31.9N	153.6E	75	6	21	7	31	42	109	0	0	5	5	5	5
96080300	20	32.0N	154.2E	70	5	5	10	23	7	124	0	0	5	10	10	10
96080306	21	32.0N	154.9E	70	5	24	64	72	37		0	5	15	15	10	
96080312	22	32.2N	155.1E	65	28	58	119	96	60		0	5	10	10	10	
96080318	23	32.4N	155.3E	60	35	76	79	64	56		-5	0	5	5	5	
96080400	24	32.7N	155.3E	55	16	32	11	68	181		0	5	5	5	5	
96080406	25	33.2N	155.1E	45	7	24	42	191			0	0	0	5		
96080412	26	33.7N	154.9E	40	12	51	78	118			0	5	5	5		
96080418	27	34.1N	154.8E	35	25	92	110				-5	0	5			
96080500		34.5N	155.0E	30												
96080506	28	34.8N	155.3E	30	49	187					0	5				
96080512		36.1N	156.2E	25												
96080518		37.5N	157.1E	25												
96080600		39.0N	157.8E	20												
			AVERAGE		23	63	96	130	143	206						
			# CASES		28	28	27	26	24	20						

TYPHOON KIRK (13W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96072800		5.3N	155.8E	15												
96072806		5.5N	155.3E	15												
96072812		5.7N	154.7E	15												
96072818		5.9N	154.2E	15												
96072900		6.1N	153.7E	15												
96072906		6.3N	152.9E	15												
96072912		6.5N	152.0E	15												
96072918		6.8N	151.0E	20												
96073000		7.1N	149.7E	20												
96073006		7.4N	1484.E	25												
96073012		7.6N	1473.E	25												
96073018		7.8N	146.2E	25												
96073100		8.0N	145.3E	25												
96073106		8.1N	144.6E	25												
96073112		8.1N	143.9E	20												
96073118		8.2N	143.2E	20												
96080100		8.4N	142.5E	20												
96080106		8.7N	141.6E	20												
96080112		8.9N	140.7E	20												
96080118		9.3N	139.8E	20												
96080200		9.8N	138.9E	20												
96080206		10.4N	138.1E	20												
96080212		11.0N	137.4E	20												
96080218		11.6N	136.7E	20												
96080300		13.1N	135.7E	20												
96080306		15.3N	134.7E	25												
96080312		17.7N	134.0E	25												
96080318	1	20.1N	133.4E	25	30	143	180	196	185	141	0	0	5	15	10	0
96080400	2	22.3N	132.3E	25	17	87	104	91	17	187	0	0	5	5	-5	0
96080406	3	23.8N	131.3E	30	18	113	188	276	354	562	0	5	15	10	10	30
96080412	4	24.9N	130.9E	30	49	142	255	371	506	778	0	5	10	0	5	5
96080418	5	25.8N	130.7E	30	20	44	152	256	392	609	0	5	0	0	5	0
96080500	6	26.4N	130.5E	30	24	41	151	281	420	640	0	0	-10	0	0	-5
96080506	7	27.0N	130.4E	30	50	119	230	369	516	693	0	-10	-10	0	0	-15
96080512	8	27.5N	130.7E	35	19	71	128	187	233	203	-5	-25	-20	-20	-10	-20
96080518	9	27.5N	131.1E	45	36	72	134	193	220	195	-15	-25	-20	-20	-15	-25
96080600	10	27.4N	131.4E	55	7	49	89	136	142	123	-20	-10	-5	0	0	-10
96080606	11	27.1N	131.7E	55	8	24	55	72	77	126	0	10	10	15	5	5
96080612	12	26.7N	132.2E	55	16	49	82	80	68	130	0	0	5	5	-5	-5
96080618	13	26.3N	132.6E	55	13	41	47	64	80	137	0	0	5	-5	-5	-5
96080700	14	25.9N	133.0E	60	20	0	8	21	16	114	0	0	0	-10	-5	-5
96080706	15	25.4N	133.6E	60	5	21	13	37	92	126	0	0	-10	-10	-5	-10
96080712	16	25.1N	133.9E	60	12	29	62	97	123	171	0	-5	-15	-10	-5	-10
96080718	17	24.9N	134.1E	60	6	43	86	121	136	169	-5	-20	-20	-15	-10	-10
96080800	18	24.8N	134.1E	65	8	5	59	123	164	146	-5	-15	-15	-10	-10	-10
96080806	19	24.8N	134.0E	75	12	29	98	139	125	60	-10	-15	-10	-10	-15	-10
96080812	20	24.9N	133.8E	80	0	38	94	117	98	85	-15	-10	-5	0	5	5
96080818	21	25.1N	133.4E	80	8	56	99	107	72	66	-15	-10	-5	-5	5	5
96080900	22	25.1N	132.7E	80	16	52	67	72	84	76	-5	-5	0	5	15	15
96080906	23	25.0N	132.1E	80	16	45	56	54	37	52	0	5	10	15	20	15
96080912	24	24.8N	131.6E	80	24	48	90	118	116	89	0	5	10	15	20	15
96080918	25	24.6N	131.1E	80	10	24	29	52	61	112	0	0	10	15	20	15
96081000	26	24.4N	130.8E	80	8	20	38	47	36	125	-5	-10	0	5	10	10

TYPHOON KIRK (13W) (CONTINUED)

96081006	27	24.3N	130.7E	85	0	5	18	43	60	101	0	5	10	15	10	10
96081012	28	24.2N	130.5E	85	8	30	36	72	60	143	0	5	10	10	10	15
96081018	29	24.3N	130.4E	85	17	47	53	80	47	160	0	5	10	5	10	15
96081100	30	24.5N	130.3E	85	17	39	76	72	52	221	0	0	0	0	5	10
96081106	31	24.8N	130.1E	85	5	33	59	34	48	146	-5	0	-5	0	5	25
96081112	32	25.1N	129.6E	85	8	24	41	48	40	205	-5	-5	-5	0	10	30
96081118	33	25.5N	129.0E	85	6	12	43	70	67	319	-5	-10	-5	0	5	15
96081200	34	25.9N	128.3E	90	0	43	83	107	132	459	-20	-25	-20	-20	-15	20
96081206	35	26.4N	127.8E	95	0	41	84	118	173	489	-20	-20	-15	-10	0	30
96081212	36	26.6N	127.7E	95	0	27	98	147	256	459	-5	0	5	10	25	25
96081218	37	27.2N	127.6E	95	5	42	97	188	333	333	-5	0	0	15	10	-10
96081300	38	27.8N	127.8E	95	0	55	89	180	326	422	-5	0	5	25	25	20
96081306	39	28.5N	128.1E	95	0	52	93	206	282	371	-5	0	10	30	30	20
96081312	40	30.0N	128.8E	95	6	50	57	131	152	149	-5	-5	10	25	5	10
96081318	41	31.1N	129.3E	95	0	34	102	151	111		0	-5	10	15	5	
96081400	42	32.2N	130.2E	95	5	69	95	46	36		0	10	20	10	5	
96081406	43	33.8N	131.6E	85	0	64	72	48	24		0	15	25	10	5	
96081412	44	35.3N	133.7E	70	7	61	74	78	160		0	5	5	0	0	
96081418	45	37.0N	136.5E	65	33	32	47	4			0	0	-5	-5		
96081500	46	38.6N	139.5E	55	11	51	67	190			0	-5	-5	-10		
96081506	47	40.0N	142.3E	50	29	71	162				0	-5	-5			
96081512	48	41.3N	144.9E	45	10	18	127				0	5	-5			
96081518	49	42.4N	147.2E	45	0	104					0	5				
96081600	50	43.7N	150.0E	40	18	107					0	-5				
96081606	51	44.8N	153.5E	40	7						0					
96081612		45.2N	157.0E	40												
			AVERAGE		13	51	89	124	154	248						
			# CASES		51	50	48	46	44	40						

TROPICAL STORM LISA (14W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96080400		15.5N	111.0E	25												
96080406		15.9N	111.7E	25												
96080412		16.4N	112.4E	25												
96080418		16.9N	113.0E	25												
96080500		17.3N	113.4E	25												
96080506	1	17.7N	113.8E	30	72	111	169	243	198		-5	-10	-5	15	20	
96080512	2	18.3N	114.2E	35	39	119	279	343	289		-10	-10	0	15	35	
96080518	3	19.0N	114.8E	40	72	186	311	303	258		-15	-10	5	20	35	
96080600	4	20.1N	115.4E	40	41	146	163	123	102		0	10	25	30	30	
96080606	5	21.4N	116.5E	40	45	87	79	61			0	15	30	30		
96080612	6	22.8N	117.5E	35	55	78	192				0	-5	-5			
96080618	7	24.1N	118.0E	30	28	142	140				0	0	-5			
96080700	8	25.0N	117.6E	30	6	36					0	0				
96080706		25.5N	117.3E	25												
96080712		25.8N	117.0E	20												
96080718		26.1N	116.9E	20												
96080800		26.3N	116.6E	15												
			AVERAGE		45	114	191	215	212							
			# CASES		8	8	7	5	4							

TROPICAL DEPRESSION 15W

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96081006		29.0N	158.0E	15												
96081012		29.7N	157.8E	15												
96081018		30.4N	157.8E	15												
96081100		31.2N	157.9E	15												
96081106		31.6N	158.1E	15												
96081112		32.1N	158.5E	20												
96081118		32.4N	158.9E	25												
96081200		32.7N	159.2E	30												
96081206	1	32.9N	159.5E	30	18	57	115	169			-5	-5	0	0		
96081212		32.9N	160.0E	30												
96081218	2	32.6N	160.2E	30	18	63	72	85			0	0	0	0		
96081300		32.2N	160.3E	30												
96081306	3	31.8N	160.5E	30	12	54	82	139			0	0	0	0		
96081312		31.6N	161.1E	30												
96081318	4	31.4N	161.6E	30	15	39	58	91			0	0	0	0		
96081400		31.3N	162.0E	30												
96081406	5	31.3N	162.4E	30	13	62	116	178			0	0	0	0		

TROPICAL DEPRESSION 15W (CONTINUED)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96081412		31.5N	163.2E	30												
96081418	6	31.8N	163.8E	30	20	54	80	99			0	0	0	0		
96081500		32.1N	164.5E	30												
96081506	7	32.4N	165.2E	30	13	24	34	60			0	0	-5	5		
96081512		32.7N	165.9E	30												
96081518	8	33.2N	166.5E	30	20	25	54				0	-5	0			
96081600		33.7N	167.1E	30												
96081606	9	34.1N	167.6E	30	13	59	68				-5	5	0			
96081612		34.4N	168.2E	25												
96081618		34.8N	168.7E	20												
96081700		35.6N	169.1E	20												
96081706		36.6N	169.6E	20												
		AVERAGE			16	49	76	118								
		# CASES			9	9	9	7								

TROPICAL STORM MARTY (16W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96081112		22.9N	108.4E	15												
96081118		22.1N	108.4E	15												
96081200		21.6N	108.3E	20												
96081206		21.3N	108.2E	25												
96081212		21.1N	108.0E	25												
96081218		21.0N	107.7E	25												
96081306	1	20.6N	107.3E	35	25	56	140	220			-10	-25	-10	0		
96081312		20.5N	107.1E	40												
96081318	2	20.3N	106.8E	50	18	68	130	189			-25	-15	0	10		
96081400		20.2N	106.5E	50												
96081406	3	20.2N	106.1E	40	8	28	45				-5	0	0			
96081412		20.1N	105.7E	30												
96081418		20.2N	105.3E	30												
96081500		20.3N	104.9E	25												
96081506		20.3N	104.5E	20												
96081512		20.3N	104.0E	15												
96081518		20.3N	103.6E	15												
96081600		20.3N	103.3E	15												
96081606		20.3N	103.0E	15												
96081612		20.3N	102.7E	15												
96081618		20.4N	102.4E	15												
96081700		20.4N	102.1E	15												
96081418		29.8N	178.9W	25												
96081500		29.4N	178.6W	25												
96081506		29.1N	178.7W	25												
96081512		28.8N	179.0W	25												
96081518		28.3N	179.3W	25												
96081600		27.8N	179.7W	25												
96081606		27.7N	179.7E	25												
96081612		27.5N	179.0E	25												
96081618		27.5N	178.0E	25												
96081700		27.4N	177.1E	25												
		AVERAGE			17	51	105	205								
		# CASES			3	3	3	2								

TROPICAL DEPRESSION 17W

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96081312		29.6N	176.5E	25												
96081318		29.8N	177.1E	25												
96081400	1	30.2N	177.9E	30	0	90	126	237			0	5	5	5		
96081412	2	30.0N	179.3W	25	13	80	210	376			0	5	5	5		
96081500		29.4N	178.6W	25												
96081506		29.1N	178.7W	25												
96081512		28.8N	179.0W	25												
96081518		28.3N	179.3W	25												
96081600		27.8N	179.7W	25												
96081606		27.7N	179.7E	25												
96081612		27.5N	179.0E	25												
96081618		27.5N	178.0E	25												
96081700		27.4N	177.1E	25												
		AVERAGE			7	85	168	307								
		# CASES			2	2	2	2								

TYPHOON NIKI (18W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96081312		8.0N	155.8E	15												
96081318		7.5N	154.3E	15												
96081400		7.0N	152.8E	20												
96081406		7.0N	151.0E	20												
96081412		7.0N	148.8E	20												
96081418		6.5N	147.2E	20												
96081500		6.5N	145.2E	20												
96081506		6.7N	143.4E	20												
96081512		7.0N	142.0E	20												
96081518		7.4N	140.5E	20												
96081600		7.9N	139.0E	20												
96081606		8.5N	137.5E	20												
96081612		10.0N	136.0E	15												
96081618		11.9N	135.3E	25												
96081700		13.5N	134.8E	20												
96081706		14.7N	134.2E	25												
96081712		15.7N	133.3E	25												
96081718		16.4N	132.1E	20												
96081800	1	17.2N	130.8E	30	16	80	157	198	259	382	0	0	5	-5	5	-15
96081806	2	17.6N	129.3E	35	24	79	136	167	244	393	-5	0	-5	-10	-5	-20
96081812	3	17.7N	128.0E	35	33	83	131	222	324	459	-5	0	-15	-5	-15	-20
96081818	4	17.6N	126.8E	35	30	64	126	232	330	474	-5	-10	-20	-15	-30	-35
96081900	5	17.5N	125.5E	35	8	30	69	127	172	210	0	-10	-10	-45	-50	-40
96081906	6	17.5N	124.2E	45	0	12	86	135	152	175	0	-5	-30	-45	-45	-25
96081912	7	17.6N	123.1E	55	5	82	150	173	188	170	0	5	-30	-35	-30	10
96081918	8	17.6N	121.6E	60	23	89	141	144	137	123	0	-20	-30	-35	-30	25
96082000	9	17.5N	120.0E	55	26	45	67	74	87	131	0	-15	-20	-20	-5	45
96082006	10	17.4N	118.4E	65	16	41	62	74	90	132	-10	-20	-25	-25	0	60
96082012	11	17.3N	116.8E	75	13	24	45	64	66	82	0	0	0	10	30	60
96082018	12	17.2N	115.3E	80	31	62	92	100	110		-5	-10	-10	10	35	
96082100	13	17.2N	114.0E	85	5	29	41	62	71		-10	-5	10	5	40	
96082106	14	17.4N	112.7E	90	5	23	38	65	77		0	5	5	25	45	
96082112	15	17.8N	111.4E	90	6	12	33	45	30		0	0	20	45	45	
96082118	16	18.1N	110.3E	95	13	11	29	34			-5	0	25	30		
96082200	17	18.5N	109.2E	85	8	18	36	17			-5	15	15	15		
96082206	18	19.0N	108.2E	80	18	18	16				0	15	30			
96082212	19	19.6N	107.1E	75	21	49	28				0	25	30			
96082218	20	20.2N	106.0E	65	0	41					0	15				
96082300	21	20.6N	104.9E	45	12	30					0	15				
96082306		20.8N	103.9E	30												
96082312		20.8N	103.2E	20												
		AVERAGE			15	44	79	114	156	249						
		# CASES			21	21	19	17	15	11						

TYPHOON ORSON (19W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96081400		14.8N	1763E	15												
96081406		14.8N	1754E	15												
96081412		14.9N	1743E	15												
96081418		14.9N	1727E	15												
96081500		15.0N	1711E	15												
96081506		15.1N	1696E	15												
96081512		15.2N	1680E	15												
96081518		15.3N	1664E	20												
96081600		15.4N	1648E	20												
96081606		15.5N	1630E	20												
96081612		15.6N	1611E	20												
96081618		15.6N	1593E	20												
96081700		15.4N	1575E	20												
96081706		15.2N	1559E	20												
96081712		15.0N	1541E	20												
96081718		15.0N	1523E	20												
96081800		15.1N	1505E	20												
96081806		15.2N	1492E	20												
96081812		15.4N	1479E	20												
96081818		15.6N	1466E	20												
96081900		16.0N	1453E	20												
96081906		16.6N	1443E	20												
96081912		17.4N	1438E	20												

TYPHOON ORSON (19W) (CONTINUED)

96081918		17.8N	143.6E	20												
96082000		18.2N	143.4E	20												
96082006		18.6N	143.2E	15												
96082012		19.0N	143.0E	15												
96082018		19.7N	142.8E	20												
96082100		20.5N	142.7E	20												
96082106		21.3N	142.8E	20												
96082112		21.7N	142.8E	20												
96082118	1	21.9N	142.8E	25	24	37	32	50	66	193	0	0	-5	-15	-10	-30
96082200	2	22.2N	142.8E	30	25	33	35	63	102	254	0	-5	-10	-15	-10	-50
96082206	3	22.5N	142.7E	30	12	5	26	53	129	338	0	-10	-20	-15	-20	-65
96082212	4	22.9N	142.6E	35	5	28	56	105	198	440	-5	-15	-20	-20	-35	-70
96082218	5	23.2N	142.6E	40	22	25	34	56	113	223	-5	-20	-20	-25	-40	-70
96082300	6	23.4N	142.6E	45	25	24	32	101	203	386	0	-5	0	-20	-40	-45
96082306	7	23.5N	142.6E	55	24	40	115	219	335	540	0	5	0	-10	-40	-30
96082312	8	23.7N	142.7E	55	29	72	158	267	378	527	0	5	-10	-30	-40	-25
96082318	9	23.8N	142.8E	55	22	90	176	276	375	496	0	-5	-15	-45	-40	-20
96082400	10	24.0N	143.3E	55	12	71	158	241	314	411	0	-10	-25	-35	-25	0
96082406	11	24.1N	144.0E	65	13	53	94	133	168	195	0	-10	-40	-35	-20	5
96082412	12	24.2N	144.7E	75	11	65	130	184	221	255	0	-15	-20	-15	0	20
96082418	13	24.2N	145.5E	80	5	44	104	164	183	219	0	-25	-15	-5	10	20
96082500	14	24.4N	146.5E	100	8	17	16	22	52	116	0	-10	-5	10	25	40
96082506	15	24.7N	147.3E	115	10	5	27	29	44	98	0	0	10	25	40	55
96082512	16	24.9N	148.2E	115	5	22	37	46	57	114	0	0	15	30	40	55
96082518	17	25.2N	148.9E	115	12	5	0	24	66	125	0	5	15	30	35	55
96082600	18	25.5N	149.6E	115	8	8	8	42	78	137	0	10	25	30	40	65
96082606	19	25.8N	150.2E	110	5	17	39	67	95	191	-10	0	15	25	45	70
96082612	20	26.0N	150.6E	105	13	36	60	84	122	202	-5	5	15	30	45	70
96082618	21	26.2N	150.9E	100	8	20	50	72	118	190	-5	10	15	35	40	60
96082700	22	26.3N	151.2E	95	6	18	44	66	96	150	0	10	20	35	50	70
96082706	23	26.3N	151.4E	90	12	50	62	84	104	133	0	10	30	35	60	70
96082712	24	26.3N	151.5E	90	8	26	60	120	151	178	0	5	30	45	60	60
96082718	25	26.2N	151.7E	90	5	32	92	174	215	203	0	10	0	15	10	0
96082800	26	26.3N	151.7E	85	8	34	75	97	115	173	5	10	10	15	20	10
96082806	27	26.4N	151.6E	75	5	44	75	83	84	149	0	0	15	10	15	-15
96082812	28	26.4N	151.3E	75	5	48	59	75	87	144	0	10	15	20	5	-15
96082818	29	26.4N	150.8E	75	21	47	63	79	100	172	0	20	15	20	5	-30
96082900	30	26.5N	150.1E	65	13	31	49	64	87	153	0	5	15	0	0	-30
96082906	31	26.8N	149.5E	55	13	18	37	58	99	188	0	0	10	-5	-15	-30
96082912	32	27.0N	148.9E	55	6	18	42	78	109	263	-5	5	-10	-10	-25	-45
96082918	33	27.3N	148.3E	55	8	32	47	72	113	316	-5	0	-10	-25	-40	-40
96083000	34	27.6N	147.7E	45	8	8	39	78	133	381	0	-10	-10	-25	-40	-35
96083006	35	27.9N	147.1E	45	16	27	7	30	79	397	0	-10	-20	-35	-30	-10
96083012	36	28.2N	146.5E	55	5	17	30	69	147	505	-10	-10	-15	-25	-25	0
96083018	37	28.6N	145.8E	55	12	15	39	90	197	427	-10	-20	-30	-25	-20	10
96083100	38	29.0N	145.1E	55	6	15	58	116	183	474	0	-5	-15	-15	-10	15
96083106	39	29.4N	144.4E	65	0	26	68	160	241	543	0	-10	-5	5	5	10
96083112	40	29.8N	143.9E	65	0	36	103	221	371	518	0	-10	-5	10	10	10
96083118	41	30.3N	143.5E	80	13	5	77	151	310	443	-5	0	0	5	10	10
96090100	42	31.0N	143.2E	80	11	49	115	228	297	487	0	0	5	0	5	0
96090106	43	31.6N	143.2E	80	13	62	83	167	180	322	-5	-5	0	5	0	0
96090112	44	32.6N	143.9E	80	23	45	55	132	183	468	-10	-5	-5	0	-5	-10
96090118	45	33.6N	144.8E	75	15	12	149	213	246	529	-10	-10	-5	-10	-10	-10
96090200	46	34.7N	145.8E	70	11	103	171	237	321		-5	-5	0	-5	0	
96090206	47	36.3N	147.1E	65	15	73	79	109	226		-5	0	0	0	0	
96090212	48	38.4N	148.9E	60	0	37	66	139	252		-5	5	0	0	0	
96090218	49	40.0N	151.4E	50	0	32	98	213	330		0	0	0	-5	-10	
96090300	50	41.1N	153.7E	45	4	66	130				0	-5	-5			
96090306	51	42.2N	156.6E	45	12	54	112	167			0	5	5	5		
96090312		42.7N	159.9E	45												
96090318		43.0N	163.3E	40												
96090400		43.4N	167.7E	40												
96090406		43.7N	172.2E	40												
96090412		43.9N	176.7E	40												
96090418		44.3N	178.8W	40												
		AVERAGE			12	36	70	118	173	297						
		# CASES			51	51	51	50	49	45						

TYPHOON PIPER (20W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96081900		20.6N	169.6E	15												
96081906		21.2N	168.1E	15												
96081912		22.2N	166.5E	20												

TYPHOON PIPER (20W) (CONTINUED)

DTG	WRN NO.	LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96081918		23.2N	165.0E	20												
96082000		24.4N	163.3E	20												
96082006		25.7N	161.7E	20												
96082012		26.8N	160.3E	20												
96082018		27.9N	158.9E	20												
96082100		28.2N	157.7E	20												
96082106		28.0N	157.0E	20												
96082112		27.5N	156.8E	20												
96082118		26.8N	157.1E	20												
96082200		26.7N	158.0E	25												
96082206		27.0N	158.8E	25												
96082212		27.5N	159.5E	25												
96082218		28.1N	160.0E	25												
96082300	1	28.7N	160.4E	30	20	28	28	42	73	306	0	0	-5	-10	-15	-5
96082306	2	29.5N	160.7E	35	12	26	59	74	126	475	0	0	-5	-10	-10	10
96082312	3	30.3N	160.8E	35	6	47	62	57	51	422	0	-5	-10	-15	-10	-20
96082318	4	30.9N	160.4E	40	35	82	89	69	91	678	-5	-10	-15	-15	-10	-15
96082400	5	31.4N	160.0E	45	18	35	75	132	269		0	-5	-20	-20	-30	
96082406	6	32.0N	159.6E	50	15	45	105	199	388		-5	-10	-20	-20	-25	
96082412	7	32.6N	159.4E	55	13	74	168	324	596		-10	-20	-20	-25	-25	
96082418	8	33.2N	159.1E	60	16	60	196	452	893		-15	-25	-25	-25	-25	
96082500	9	34.2N	158.9E	65	7	64	213	504			0	5	-5	-15		
96082506	10	35.3N	158.6E	65	7	59	235	597			0	5	0	-10		
96082512	11	36.7N	158.5E	60	17	130	393				0	-5	-10			
96082518	12	38.5N	158.8E	60	57	217	584				0	0	-5			
96082600	13	40.7N	159.4E	60	55	179					0	-5				
96082606	14	43.6N	160.3E	55	43	222					0	-5				
96082612		47.5N	161.8E	55												
96082618		52.0N	164.0E	50												
		AVERAGE			23	91	184	246	311	471						
		# CASES			14	14	12	10	8	4						

TROPICAL DEPRESSION 21W

DTG	WRN NO.	LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96082412		27.0N	155.1E	20												
96082418		27.6N	156.6E	20												
96082500		28.0N	158.0E	20												
96082506		28.6N	159.6E	20												
96082512		29.6N	161.0E	25												
96082518		30.8N	161.8E	25												
96082600	1	31.4N	161.8E	25	5	32	101	161			0	0	0	-5		
96082606		31.7N	161.6E	25												
96082612	2	32.1N	161.2E	25	33	113	170	189			0	0	0	-5		
96082618		32.1N	160.6E	25												
96082700	3	32.2N	159.9E	25	15	54	133	204			0	0	0	0		
96082706		32.5N	159.1E	25												
96082712	4	32.9N	158.3E	25	0	86	179				0	0	-5			
96082718		34.0N	157.3E	25												
96082800		35.5N	156.6E	25												
96082806		37.1N	156.6E	25												
96082812		38.4N	156.9E	25												
96082818		39.5N	157.5E	25												
96082900		40.2N	158.5E	25												
96082906		40.6N	159.5E	25												
96082912		41.1N	160.5E	25												
96082918		41.7N	161.5E	25												
96083000		42.3N	162.6E	25												
		AVERAGE			14	72	146	185								
		# CASES			4	4	4	3								

TROPICAL STORM RICK (22W)

DTG	WRN NO.	LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96082700		21.5N	168.0E	25												
96082706		22.3N	168.3E	30												
96082712		22.8N	169.0E	35												
96082718		22.9N	169.9E	35												
96082800	1	23.0N	170.8E	35	33	110	193	263			-5	0	0	0		
96082806		23.4N	171.7E	30												
96082812	2	24.0N	172.6E	30	8	5	24	31			-5	0	0	-5		

TROPICAL STORM RICK (22W) (CONTINUED)

96082818		24.8N	173.5E	30												
96082900	3	25.9N	173.9E	30	18	30	85	130			0	-5	-10	-10		
96082906		27.1N	173.8E	30												
96082912	4	28.3N	173.6E	30	130	192	217	250			0	-5	-10	-5		
96082918		29.4N	173.2E	30												
96083000	5	30.3N	173.0E	35	28	109	168	180	188	297	0	0	5	-5	-5	-10
96083006	6	30.7N	172.7E	35	16	31	36	96	155	241	0	5	5	-5	0	-10
96083012	7	31.0N	172.4E	35	46	103	142	185	232		0	5	5	0	5	
96083018	8	31.2N	172.3E	30	31	70	134	222			0	0	-5	0		
96083100	9	31.5N	172.3E	30	17	62	147	252			0	0	-5	0		
96083106		31.9N	172.5E	30												
96083112	10	32.2N	173.1E	30	7	44	69				0	-5	0			
96083118		32.5N	174.0E	30												
96090100		32.9N	175.3E	30												
96090106		33.3N	176.8E	25												
96090112		33.7N	178.6E	25												
96090118		34.5N	179.2W	30												
96090200		35.5N	177.1W	30												
96090206		36.5N	175.0W	30												
96090212		37.8N	173.1W	30												
96090218		39.2N	171.3W	30												
96090300		40.7N	169.6W	30												
			AVERAGE		34	76	122	179	192	270						
			# CASES		10	10	10	9	3	2						

SUPER TYPHOON SALLY (23W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96090200		8.1N	147.7E	15												
96090206		8.5N	146.7E	15												
96090212		8.9N	145.7E	15												
96090218		9.2N	144.5E	15												
96090300		9.8N	143.1E	15												
96090306		10.5N	141.6E	20												
96090312		11.3N	140.2E	20												
96090318		12.1N	138.4E	20												
96090400		12.6N	137.1E	20												
96090406		13.1N	136.1E	20												
96090412		13.6N	135.4E	25												
96090418		14.0N	134.8E	25												
96090500	1	14.3N	134.2E	25	48	83	132	212	316	546	0	-10	-20	-40	-45	-80
96090506	2	14.6N	133.6E	30	16	52	132	226	375	678	0	-10	-30	-40	-55	-75
96090512	3	15.0N	133.0E	35	18	64	166	274	400	717	-5	-15	-35	-45	-60	-60
96090518	4	15.5N	132.3E	40	8	58	114	232	331	621	-5	-25	-35	-45	-75	-45
96090600	5	16.0N	131.6E	50	33	87	153	224	296	573	0	-15	-15	-20	-30	0
96090606	6	16.7N	130.5E	65	20	57	157	243	364	651	0	-5	-10	-35	-15	25
96090612	7	17.2N	129.3E	75	11	45	116	193	314	613	0	0	-15	-25	-15	40
96090618	8	17.6N	128.2E	80	8	52	97	192	301	529	-5	-10	-40	-20	-10	65
96090700	9	18.1N	126.4E	90	22	18	18	69	128	295	0	-15	-20	-5	15	70
96090706	10	18.6N	124.8E	100	23	18	30	74	144	253	-10	-40	-15	0	30	80
96090712	11	18.9N	123.2E	115	22	40	89	151	207	232	0	-20	0	15	50	85
96090718	12	19.1N	121.5E	140	23	50	101	177	253		0	10	15	30	65	
96090800	13	19.4N	119.7E	135	8	11	35	91	126		-5	5	15	25	45	
96090806	14	19.8N	117.7E	130	5	12	49	102	111		-5	10	20	40	50	
96090812	15	20.2N	115.7E	125	5	35	74	122	103		-5	10	40	50	50	
96090818	16	20.6N	113.7E	120	6	30	90	105			0	20	45	55		
96090900	17	21.0N	111.5E	110	11	40	94	102			-5	5	15	20		
96090906	18	21.5N	109.3E	95	0	43	82				-10	5	15			
96090912	19	22.0N	107.2E	75	0	36	60				-10	10	15			
96090918		22.6N	105.1E	50												
96091000		23.1N	103.5E	35												
96091006		23.4N	102.4E	20												
96091012		23.6N	101.5E	15												
			AVERAGE		15	44	95	165	252	520						
			# CASES		19	19	19	17	15	11						

TROPICAL STORM 24W

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96090600		8.3N	148.1E	15												
96090606		9.1N	147.6E	15												

TROPICAL STORM 24W (CONTINUED)

96090612		9.9N	147.1E	15												
96090618		10.7N	146.6E	15												
96090700		11.3N	145.9E	15												
96090706		11.8N	145.1E	15												
96090712		12.3N	144.1E	15												
96090718		12.9N	142.7E	15												
96090800		13.3N	140.9E	15												
96090806		13.8N	139.0E	15												
96090812		14.2N	137.1E	15												
96090818		14.5N	135.0E	15												
96090900		14.7N	133.1E	25												
96090906	1	14.8N	131.2E	25	87	72	145	213	249	321	0	5	10	5	0	-10
96090912	2	14.8N	129.2E	25	36	118	294	257	346	299	0	5	10	5	5	0
96090918	3	14.8N	127.0E	25	46	174	269	284	358	293	0	5	10	5	10	15
96091000	4	15.0N	124.4E	25	75	255	255	331	329	172	0	5	5	5	5	15
96091006	5	15.9N	121.7E	25	198	280	253	312	277	194	0	0	0	0	0	20
96091012	6	16.5N	118.7E	25	103	64	175	209	174	294	0	0	0	0	-5	0
96091018	7	16.8N	117.7E	25	49	120	193	187	206	342	0	-5	0	-10	0	0
96091100	8	16.8N	116.7E	25	39	210	270	247	228	223	0	-5	-10	-5	10	35
96091106	9	16.3N	114.9E	30	117	283	335	339	327	256	0	-5	-10	0	15	35
96091112	10	15.7N	112.9E	30	79	170	195	216			0	-10	-15	-10		
96091118		15.5N	111.5E	35												
96091200	11	15.5N	110.7E	40	26	72	102	125			-10	-15	-10	0		
96091206		15.8N	110.0E	45												
96091212	12	16.2N	109.5E	45	13	34	62	82			-15	-10	0	0		
96091218		16.6N	109.0E	40												
96091300	13	17.0N	108.5E	40	13	21	49	87			-10	-5	-5	0		
96091306		17.4N	108.0E	35												
96091312	14	17.8N	107.5E	30	21	33	74				0	0	5			
96091318		18.1N	107.1E	30												
96091400	15	18.4N	106.8E	30	25	66					0	10				
96091406		18.6N	106.5E	25												
96091412	16	18.7N	106.3E	20	79						0					
			AVERAGE		63	132	191	223	278	267						
			# CASES		16	15	14	13	9	9						

TYPHOON TOM (25W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96090806		10.9N	161.8E	15												
96090812		10.9N	161.3E	15												
96090818		10.9N	160.5E	15												
96090900		10.9N	159.8E	15												
96090906		10.9N	158.6E	15												
96090912		10.9N	157.5E	15												
96090918		11.1N	156.4E	20												
96091000		11.3N	155.5E	20												
96091006		11.5N	154.7E	20												
96091012		11.9N	153.9E	20												
96091018		12.3N	153.0E	20												
96091100		13.0N	152.0E	20												
96091106		13.6N	151.1E	20												
96091112		14.2N	150.3E	25												
96091118	1	14.8N	149.6E	25	16	21	67	88	84	228	0	0	-5	0	5	5
96091200	2	15.5N	149.0E	25	88	134	160	164	139	237	0	-5	-10	-10	-5	0
96091206	3	16.1N	148.5E	30	24	66	105	131	180	489	0	-5	-5	-5	5	5
96091212	4	16.8N	148.1E	35	5	33	52	97	178	475	0	-5	-5	0	10	5
96091218	5	17.6N	147.6E	40	17	23	18	78	188	508	-5	-5	-5	0	5	0
96091300	6	18.3N	147.1E	45	5	18	37	76	150	286	0	0	0	5	0	-10
96091306	7	18.9N	146.5E	45	12	32	53	79	153	125	0	0	0	-5	-15	-30
96091312	8	19.3N	145.7E	50	6	43	72	122	191	211	0	0	5	0	0	0
96091318	9	19.5N	145.0E	50	20	32	73	144	182	225	0	0	0	0	-5	0
96091400	10	19.6N	144.2E	55	24	45	82	157	162	199	-5	0	-5	-5	-5	5
96091406	11	19.8N	143.6E	55	13	66	118	114	94	72	-5	-5	-5	-10	-5	5
96091412	12	19.9N	143.4E	55	20	49	81	90	156	278	-5	-10	-10	-10	-10	-10
96091418	13	20.1N	143.4E	60	11	82	65	81	140	291	-5	-5	-10	-5	-10	-5
96091500	14	20.3N	143.6E	65	11	75	38	78	133	222	0	0	0	-5	-5	0
96091506	15	20.6N	144.3E	65	12	28	61	85	105	88	0	-5	0	0	0	10
96091512	16	21.0N	144.8E	70	17	73	81	97	108	90	-5	-5	0	5	0	10
96091518	17	21.4N	145.1E	75	22	30	64	100	106	55	-5	0	0	5	5	5
96091600	18	22.0N	145.3E	75	8	40	36	50	44	184	0	0	10	5	10	5
96091606	19	22.3N	146.0E	75	8	18	37	65	129	367	0	0	10	10	15	5
96091612	20	22.6N	146.5E	75	0	18	42	95	178	437	0	5	10	15	15	5
96091618	21	23.1N	146.9E	75	12	30	67	143	251	547	0	5	5	5	-10	-15

TYPHOON TOM (25W) (CONTINUED)

96091700	22	23.6N	147.3E	70	0	18	86	187	330	625	0	-5	0	0	-10	-10
96091706	23	24.1N	147.8E	70	5	29	80	159	285	489	0	0	10	5	0	5
96091712	24	24.7N	148.3E	70	8	29	76	161	251	307	0	10	10	5	-5	0
96091718	25	25.3N	148.9E	65	5	60	111	205	227	194	0	10	10	5	0	0
96091800	26	26.1N	149.6E	60	5	12	65	147	186	249	0	0	-5	-10	-5	-10
96091806	27	27.0N	150.2E	55	0	48	52	90	114	114	0	0	-5	-5	-5	-10
96091812	28	27.9N	151.2E	55	0	30	60	46	44	54	0	0	-5	0	-5	-10
96091818	29	28.8N	152.5E	55	15	88	54	15	53	169	0	0	0	0	-5	-10
96091900	30	30.3N	153.2E	55	43	34	13	19	26		-5	-10	0	-5	-5	
96091906	31	31.7N	154.3E	55	5	57	72	65	41		-15	-10	-5	-5	-10	
96091912	32	32.7N	155.9E	55	20	131	213	281	346		0	5	0	-5	-5	
96091918	33	33.3N	157.6E	50	11	41	132	244	343		0	0	0	-5	-5	
96092000	34	34.1N	159.2E	45	25	34	64	132	172		0	0	-5	-5	-5	
96092006	35	34.9N	160.7E	45	61	87	119				0	0	-5			
96092012		35.7N	162.1E	45												
96092018		36.5N	163.4E	45												
96092100		37.3N	164.5E	45												
96092106		38.0N	165.6E	45												
96092112		38.8N	166.7E	45												
96092118		39.6N	168.2E	45												
96092200		40.7N	170.0E	45												
96092206		42.2N	172.2E	45												
			AVERAGE		16	48	75	115	161	270						
			# CASES		35	35	35	34	34	29						

SUPER TYPHOON VIOLET (26W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96090918		13.3N	138.4E	15												
96091000		14.1N	137.0E	15												
96091006		14.6N	135.9E	15												
96091012		14.9N	134.8E	15												
96091018		15.2N	133.7E	15												
96091100		15.5N	132.9E	20												
96091106		15.7N	132.2E	20												
96091112		15.8N	131.7E	25												
96091118	1	15.9N	131.3E	25	75	77	88	116			0	-5	-10	-45		
96091206	2	16.1N	130.4E	35	11	42	62	93			-5	-5	-40	-55		
96091218	3	16.2N	129.7E	35	5	24	58	37	23	107	0	-30	-35	-45	-45	-75
96091300	4	16.2N	129.5E	45	18	24	24	11	8	29	0	-15	-10	-15	-15	-35
96091306	5	16.3N	129.3E	65	0	17	11	24	29	66	0	0	0	5	10	0
96091312	6	16.3N	129.0E	75	6	23	40	40	51	119	0	10	15	15	5	5
96091318	7	16.4N	128.8E	75	5	31	41	49	74	170	0	0	10	10	-10	15
96091400	8	16.5N	128.7E	80	23	44	64	90	143	275	0	0	5	0	-10	25
96091406	9	16.7N	128.5E	90	16	37	67	110	171	339	0	5	10	-10	0	35
96091412	10	17.1N	128.2E	90	16	53	30	59	118	273	0	0	0	-10	0	40
96091418	11	17.5N	127.8E	95	5	11	20	56	99	202	-5	-5	-15	-5	10	45
96091500	12	17.9N	127.4E	100	0	34	79	109	146	223	0	-10	-15	-5	20	45
96091506	13	18.3N	127.1E	105	8	17	62	115	166	203	0	-20	-10	5	25	35
96091512	14	18.8N	126.8E	115	0	22	79	134	166	212	0	-10	0	25	35	45
96091518	15	19.3N	126.6E	130	0	17	81	150	164	192	-5	0	15	30	35	45
96091600	16	19.8N	126.5E	130	8	53	113	168	175	157	0	5	25	30	35	25
96091606	17	20.2N	126.5E	125	20	71	139	170	158	217	0	10	20	30	25	20
96091612	18	20.6N	126.7E	125	12	62	128	154	182	283	0	20	25	30	35	20
96091618	19	20.9N	127.0E	115	11	30	85	128	158	265	0	10	15	10	10	-20
96091700	20	21.4N	127.7E	105	5	25	42	79	127	300	0	5	0	5	-15	-20
96091706	21	21.8N	128.3E	100	0	5	24	53	109	203	0	10	0	5	-10	-10
96091712	22	22.2N	129.0E	95	5	8	31	36	60	36	0	5	10	-5	-10	-5
96091718	23	22.6N	129.6E	90	8	22	36	69	76	32	0	0	5	-5	-10	0
96091800	24	22.9N	130.0E	90	16	8	8	37	61	29	0	10	-5	-5	-10	0
96091806	25	23.2N	130.5E	90	5	16	30	37	46	27	0	10	-5	-5	-10	0
96091812	26	23.3N	131.0E	80	0	28	33	65	64	63	0	-10	-15	-20	-15	-10
96091818	27	23.7N	131.4E	80	0	39	66	96	99	74	0	-10	-15	-20	-10	-5
96091900	28	23.9N	131.6E	90	8	30	30	31	58	128	0	-5	-15	-15	-10	-10
96091906	29	24.0N	131.8E	90	6	13	8	16	21	282	0	-5	-15	-10	-10	-15
96091912	30	24.2N	132.0E	90	5	20	17	13	42	366	0	0	-5	-5	-5	-10
96091918	31	24.6N	132.1E	90	6	37	54	54	57	338	0	0	0	-5	0	-5
96092000	32	25.0N	132.2E	90	0	34	62	105	87	187	0	0	0	0	-5	0
96092006	33	25.5N	132.3E	90	5	58	84	135	181	335	0	0	-5	0	-15	-5
96092012	34	26.1N	132.9E	85	17	36	56	42	84	187	0	-5	-5	-10	-15	0
96092018	35	26.7N	133.5E	80	17	54	59	14	51	194	0	-5	0	-15	-10	5
96092100	36	27.3N	134.2E	80	20	39	31	57	76	263	0	0	-5	-10	-5	10
96092106	37	28.2N	135.0E	80	8	43	67	78	68	277	0	5	-10	-5	0	15
96092112	38	29.2N	136.2E	75	12	64	131	158	114	329	0	-5	-10	-5	0	15

SUPER TYPHOON VIOLET (26W) (CONTINUED)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96092118	39	30.9N	137.9E	70	0	23	38	48	46	111	0	-10	-5	0	5	20
96092200	40	32.5N	139.3E	75	0	83	137	97	68	150	0	0	5	10	10	20
96092206	41	34.9N	140.9E	80	5	56	79	63	71		0	5	10	15	15	
96092212	42	37.1N	142.7E	75	0	42	50	55	66		0	5	10	15	15	
96092218	43	39.3N	144.6E	70	18	14	16	48	119		0	10	15	20	20	
96092300	44	41.5N	146.7E	65	0	66	141	163			0	10	15	15		
96092306		43.0N	148.1E	60												
96092312		44.5N	149.6E	55												
96092318		45.8N	151.1E	50												
96092400		46.7N	152.4E	45												
96092406		47.6N	154.3E	40												
96092412		48.4N	156.2E	40												
96092418		48.9N	158.3E	35												
96092500		49.2N	160.6E	35												
		AVERAGE			10	36	60	79	95	191						
		# CASES			44	44	44	44	41	38						

TYPHOON WILLIE (27W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96091600		18.7N	107.2E	15												
96091606		18.5N	107.5E	15												
96091612		18.3N	107.8E	15												
96091618		18.1N	108.1E	20												
96091700		17.8N	108.4E	25												
96091706		17.5N	108.7E	25												
96091712		17.3N	109.2E	35												
96091718	1	17.2N	109.7E	40	31	74	168	246	274	360	-15	-20	-15	-30	-25	-15
96091800	2	17.2N	110.2E	45	16	69	145	197	223	334	-5	0	0	-5	0	10
96091806	3	17.3N	110.8E	50	13	90	164	189	223	326	0	5	-5	0	0	15
96091812	4	17.9N	111.4E	50	12	39	84	147	248	414	0	-5	-5	0	5	15
96091818	5	18.6N	111.7E	50	21	34	79	164	266	426	0	-15	-5	0	5	5
96091900	6	19.3N	111.8E	55	16	25	16	24	38	51	0	0	-15	-15	-15	0
96091906	7	19.9N	111.5E	65	6	17	18	47	62	115	0	5	-10	-15	-10	0
96091912	8	20.1N	111.3E	65	13	18	17	33	35	64	0	0	-5	-10	-5	-10
96091918	9	20.2N	111.1E	65	8	46	71	86	91	146	0	0	-5	-5	-15	10
96092000	10	20.2N	110.6E	65	11	18	16	46	77	95	0	5	15	30	25	30
96092006	11	20.1N	110.1E	65	16	12	40	63	108	122	0	5	20	15	-5	10
96092012	12	20.0N	109.5E	60	8	12	56	102	131	83	0	5	20	0	-20	10
96092018	13	20.0N	108.9E	60	16	75	158	202	205		0	15	-5	-20	-20	
96092100	14	19.8N	108.4E	60	5	12	45	69	64		0	10	-5	-20	0	
96092106	15	19.6N	108.0E	55	5	17	40	36	47		0	0	-5	0	0	
96092112	16	19.4N	107.6E	55	25	64	72	38	61		0	5	-15	10	5	
96092118	17	19.3N	107.2E	65	5	11	33	87			0	5	5	10		
96092200	18	19.2N	106.8E	60	0	16	74	134			-5	-10	20	15		
96092206	19	19.0N	106.3E	60	17	58	108				-5	10	20			
96092212	20	18.8N	105.7E	60	25	74	163				-10	15	10			
96092218	21	18.2N	104.8E	40	34	95					0	10				
96092300	22	17.5N	104.0E	20	34	82					10	10				
96092306		17.1N	103.0E	20												
96092312		16.5N	101.7E	15												
		AVERAGE			16	44	79	107	135	212						
		# CASES			22	22	20	18	16	12						

SUPER TYPHOON YATES (28W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96091706		8.0N	175.7W	15												
96091712		8.1N	176.9W	15												
96091718		8.2N	178.2W	15												
96091800		8.3N	179.6W	15												
96091806		8.4N	178.9E	15												
96091812		8.5N	177.4E	15												
96091818		8.7N	175.9E	20												
96091900		8.8N	174.3E	20												
96091906		8.9N	172.8E	25												
96091912		9.0N	171.3E	25												
96091918		9.1N	169.8E	25												
96092000		9.3N	168.4E	25												
96092006		9.5N	167.2E	25												
96092012		9.7N	166.0E	25												

SUPER TYPHOON YATES (28W) (CONTINUED)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96092018		10.0N	165.0E	25												
96092100		10.6N	164.2E	25												
96092106		11.2N	163.5E	25												
96092112		11.9N	163.0E	25												
96092118		12.6N	162.4E	25												
96092200		13.4N	161.8E	25												
96092206		14.3N	160.9E	25												
96092212		15.1N	159.8E	30												
96092218	1	15.5N	158.6E	35	21	11	66	138	204	290	0	-25	-50	-40	-45	-40
96092300	2	15.9N	157.3E	55	11	64	145	211	283	393	0	-50	-40	-35	-40	-25
96092306	3	16.2N	156.1E	80	8	20	72	138	197	319	-15	-40	-35	-40	-40	-25
96092312	4	16.4N	154.9E	115	0	36	84	158	239	292	-10	0	5	0	0	-10
96092318	5	16.4N	153.8E	115	0	17	55	141	231	301	-5	0	0	0	0	0
96092400	6	16.3N	152.7E	115	0	12	29	79	158	305	0	0	-5	5	10	25
96092406	7	16.2N	151.5E	115	11	31	41	47	106	271	0	-5	-5	5	10	20
96092412	8	16.1N	150.3E	120	0	5	34	109	157	182	-10	-20	-5	5	10	15
96092418	9	16.0N	149.1E	125	0	0	44	111	144	206	-15	-15	-5	5	20	15
96092500	10	15.9N	147.8E	130	0	21	64	97	102	205	0	10	5	0	5	-10
96092506	11	15.9N	146.6E	130	0	42	89	108	130	214	0	10	5	10	0	-10
96092512	12	16.0N	145.7E	125	0	16	31	38	64	368	0	5	5	10	-5	-10
96092518	13	16.2N	144.8E	125	6	29	29	12	94	359	0	5	15	5	-5	-5
96092600	14	16.5N	144.0E	125	0	12	37	43	96	310	-5	-5	5	-10	-10	-10
96092606	15	17.0N	143.2E	125	11	18	16	90	167	282	0	10	5	-5	-10	0
96092612	16	17.5N	142.4E	125	12	13	28	94	171	187	0	10	-5	-5	-10	0
96092618	17	18.1N	141.7E	115	6	5	66	126	189	209	0	-10	-20	-25	-25	-15
96092700	18	18.8N	141.0E	115	12	48	103	162	177	140	-10	-20	-20	-25	-20	0
96092706	19	19.6N	140.3E	120	13	60	108	135	140	90	-5	-10	-10	-10	-5	5
96092712	20	20.2N	139.6E	125	5	42	111	124	138	11	-10	-10	-15	-10	0	10
96092718	21	20.6N	139.0E	125	17	79	113	137	128	39	-15	-15	-15	-5	0	15
96092800	22	21.0N	138.6E	125	6	24	24	52	31	177	0	0	-5	0	10	20
96092806	23	21.4N	138.2E	125	0	21	62	84	123	247	0	5	0	0	5	5
96092812	24	21.9N	137.9E	125	5	60	136	251	406	654	0	0	5	10	10	5
96092818	25	22.7N	137.9E	120	5	30	12	72	155	357	0	10	10	15	15	5
96092900	26	23.4N	138.2E	120	0	0	35	42	80	245	0	15	20	20	20	10
96092906	27	24.3N	138.6E	110	11	43	78	128	174	327	5	0	0	-5	-10	-15
96092912	28	25.3N	139.1E	105	13	58	72	117	120	306	0	5	5	0	-10	-15
96092918	29	26.7N	139.6E	100	5	30	91	136	189	319	0	5	5	0	-15	-15
96093000	30	28.3N	140.4E	90	0	97	258	315	417	456	0	10	10	0	-10	-10
96093006	31	29.9N	141.7E	85	8	131	215	299	380	528	0	0	0	-15	-10	-10
96093012	32	31.4N	144.0E	80	6	51	98	237	376	607	0	5	0	-10	-15	-15
96093018	33	32.7N	146.7E	75	7	83	168	276	385		0	0	-5	-15	-20	
96100100	34	33.6N	149.7E	70	0	18	125	240	321		0	0	0	-15	-15	
96100106	35	34.3N	152.3E	65	23	90	189	302			0	-10	-10	-15		
96100112	36	34.9N	155.2E	65	38	157	299	426			-10	-15	-20	-20		
96100118	37	35.4N	158.6E	65	39	106	151				-20	-20	-25			
96100200		35.9N	162.3E	60												
96100206		36.6N	165.7E	60												
96100212		37.3N	169.2E	60												
96100218		38.4N	172.1E	60												
96100300		39.3N	175.3E	55												
96100306		40.5N	178.5E	55												
96100312		41.7N	177.5W	55												
		AVERAGE			8	43	92	147	191	288						
		# CASES			37	37	37	36	34	32						

TYPHOON ZANE (29W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96092018		5.7N	153.6E	15												
96092100		5.7N	152.7E	15												
96092106		5.7N	151.6E	15												
96092112		5.7N	150.5E	15												
96092118		5.7N	149.1E	15												
96092200		5.7N	147.7E	15												
96092206		5.8N	146.3E	15												
96092212		6.4N	145.4E	15												
96092218		7.4N	144.9E	15												
96092300		8.4N	144.5E	15												
96092306		9.2N	143.9E	20												
96092312		10.1N	142.9E	20												
96092318		11.5N	141.4E	25												
96092400	1	13.1N	139.8E	30	72	47	77	45	37	85	0	0	0	-10	-20	-20
96092406	2	14.7N	138.1E	30	29	54	96	92	116	137	0	0	0	-15	-25	-10
96092412	3	15.6N	136.9E	35	0	53	45	81	132	185	0	0	-15	-25	-25	-10

TYPHOON ZANE (29W) (CONTINUED)

96092418	4	16.2N	135.5E	40	17	75	92	129	162	204	0	-5	-25	-35	-30	-20
96092500	5	16.6N	134.0E	45	25	29	95	148	210	394	0	-20	-30	-30	-25	-20
96092506	6	17.0N	132.5E	50	13	72	117	152	165	216	0	-20	-30	-25	-10	-15
96092512	7	17.6N	131.3E	70	24	79	130	159	173	246	-20	-30	-30	-25	-10	-15
96092518	8	18.3N	130.3E	80	20	36	82	117	156	338	-15	-25	-15	5	5	5
96092600	9	19.0N	129.4E	90	5	23	24	39	110	234	-15	-15	-10	10	5	0
96092606	10	19.6N	128.4E	100	13	26	42	88	104	206	-10	0	20	25	10	0
96092612	11	20.1N	127.7E	100	0	16	24	77	131	268	0	0	20	15	10	5
96092618	12	20.6N	127.0E	105	13	45	62	102	189	268	0	20	20	10	5	15
96092700	13	21.0N	126.4E	105	5	12	16	68	150	201	0	10	0	0	-5	20
96092706	14	21.4N	125.9E	95	8	16	12	89	128	107	-5	-15	-20	-25	-25	-10
96092712	15	21.8N	125.5E	95	0	24	63	131	123	136	0	-15	-15	-20	-20	0
96092718	16	22.3N	125.4E	105	0	12	71	99	66	99	0	5	5	-5	0	10
96092800	17	22.9N	125.3E	110	8	48	116	124	81	165	0	5	5	5	15	15
96092806	18	23.5N	125.2E	110	0	56	92	55	10	63	0	5	5	15	15	15
96092812	19	24.4N	125.5E	110	5	45	62	22	30	199	0	5	10	25	20	15
96092818	20	25.4N	125.9E	110	5	53	127	184	192	125	0	-5	0	5	5	5
96092900	21	26.3N	126.3E	110	8	83	160	190	181	192	0	0	15	10	10	5
96092906	22	26.9N	126.5E	110	6	42	73	78	83	132	0	10	15	15	5	-5
96092912	23	27.3N	126.7E	105	8	41	71	112	136	202	0	10	10	15	5	-5
96092918	24	27.2N	127.1E	95	8	51	100	140	148	217	0	5	10	10	5	-10
96093000	25	27.2N	128.1E	85	6	48	111	166	204	238	0	-5	-5	-15	-20	-25
96093006	26	27.2N	129.2E	85	0	44	108	147	204	321	0	5	0	-10	-20	-20
96093012	27	27.5N	130.6E	80	0	30	36	62	145	56	0	5	-5	-10	-20	-20
96093018	28	27.9N	132.2E	75	11	31	31	62	103		-5	-5	-5	-20	-25	
96100100	29	28.5N	134.1E	70	0	10	47	80	118	377	0	-5	-5	-25	-30	-15
96100106	30	28.9N	136.2E	70	6	13	70	101	131		0	0	-5	-15	-15	
96100112	31	29.3N	138.3E	70	15	36	30	24	47		0	-5	-10	-20	-15	
96100118	32	29.5N	140.5E	65	12	55	74	86	146		-5	-10	-20	-20	-15	
96100200	33	29.5N	142.8E	65	12	39	26	86	244		-5	-10	-20	-15	-10	
96100206	34	29.8N	145.2E	65	5	0	20	118	266		0	-5	-5	-5	0	
96100212	35	30.3N	147.6E	65	11	15	81	223	318		0	-5	0	0	5	
96100218	36	30.7N	149.8E	65	5	36	146	292	363		0	-5	-5	0	0	
96100300	37	31.1N	151.8E	65	61	178	154	174	290		0	0	0	5	5	
96100306	38	31.7N	154.1E	60	0	40	140	167			0	0	0	5		
96100312	39	32.4N	156.5E	55	50	161	192	167			0	0	5	5		
96100318		32.9N	159.4E	50												
96100400		33.1N	162.4E	45												
96100406		33.3N	165.0E	40												
96100412		33.4N	166.7E	35												
96100418		32.9N	168.2E	35												
96100500		32.0N	169.4E	30												
96100506		30.8N	170.3E	25												
96100512		29.5N	170.8E	25												
96100518		28.4N	171.0E	15												
96100600		27.3N	171.0E	15												
		AVERAGE			13	46	80	115	152	201						
		# CASES			39	39	39	39	37	28						

TROPICAL STORM ABEL (30W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96100906		12.0N	133.0E	15												
96100912		12.8N	131.7E	15												
96100918		13.5N	130.6E	20												
96101000		13.9N	129.6E	20												
96101006		14.2N	128.6E	20												
96101012		14.5N	127.6E	25												
96101018		14.8N	126.6E	25												
96101100	1	15.0N	125.6E	25	61	133	196	189	133	81	0	5	10	-5	-5	20
96101106	2	15.2N	124.6E	25	89	173	213	187	165	59	0	5	0	-10	-5	20
96101112	3	15.4N	123.7E	25	104	159	188	199	190	119	0	5	-15	-5	0	20
96101118	4	15.8N	122.7E	25	70	143	199	224	193	198	0	-5	-15	-5	0	25
96101200	5	16.3N	121.7E	25	186	138	126	133	165	266	0	-20	-10	5	15	15
96101206	6	17.1N	120.6E	35	129	99	78	140	246	494	-5	-20	-10	5	0	-5
96101212	7	17.7N	119.5E	50	16	70	78	25	145	517	-20	-10	0	15	25	0
96101218	8	18.2N	118.6E	50	12	67	41	63	191	566	-20	-10	0	15	30	0
96101300	9	18.8N	117.6E	45	11	28	72	168	313	606	-15	-5	5	15	15	0
96101306	10	19.4N	116.7E	45	18	71	153	275	450		-15	-10	-5	0	-5	
96101312	11	19.6N	116.0E	40	18	90	198	378	534		-5	10	20	5	-5	
96101318	12	19.6N	115.5E	40	36	115	236	426	582		0	10	20	5	-5	
96101400	13	19.4N	114.9E	35	6	25	66	140	198	199	0	-5	0	-5	-5	-5
96101406	14	19.1N	114.3E	35	24	63	152	236	337	452	0	5	0	0	-5	-5
96101412	15	18.6N	113.7E	35	12	82	170	254	312	383	0	5	0	0	-5	0

TROPICAL STORM ABEL (30W) (CONTINUED)

96101418	16	18.0N	113.2E	30	12	87	161	225			0	0	0	-5
96101500		17.2N	112.8E	30										
96101506	17	16.3N	112.4E	30	18	48	94	104			0	0	0	-5
96101512		15.5N	111.9E	30										
96101518	18	14.7N	111.4E	30	21	58	115	178			0	0	-5	-5
96101600		14.0N	111.1E	30										
96101606	19	13.7N	110.9E	30	11	55	109				0	0	5	
96101612		13.6N	110.7E	30										
96101618	20	13.6N	110.5E	30	25	75					0	5		
96101700		13.7N	110.3E	25										
96101706	21	13.8N	110.1E	25	11						0			
96101712		13.9N	109.9E	20										
		AVERAGE			43	89	140	197	277	329				
		# CASES			21	20	19	18	15	12				

TROPICAL DEPRESSION 31W

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96101000		8.9N	158.4E	20												
96101006		9.0N	157.3E	20												
96101012		9.2N	156.2E	20												
96101018		9.4N	155.3E	20												
96101100		9.7N	154.4E	20												
96101106		10.2N	153.8E	20												
96101112		11.0N	153.0E	20												
96101118		11.7N	152.3E	20												
96101200		12.2N	151.8E	20												
96101206		12.8N	151.4E	20												
96101212		13.4N	151.1E	20												
96101218		14.0N	150.8E	20												
96101300		14.4N	150.5E	25												
96101306	1	14.8N	149.8E	25	13	58	106	143	142	233	0	5	10	20	30	45
96101312	2	15.2N	149.0E	25	104	169	223	263	283	234	0	5	10	20	30	45
96101318	3	15.6N	148.3E	25	24	68	116	104	164	243	0	0	5	10	20	30
96101400	4	16.0N	147.6E	25	21	42	36	78	145	296	0	0	5	10	20	30
96101406	5	16.5N	146.9E	25	5	29	51	66	102	212	0	5	10	15	25	40
96101412	6	16.9N	146.2E	25	0	29	34	42	68	109	0	5	10	15	25	40
96101418	7	17.5N	145.3E	25	20	52	66	82			0	0	0	0		
96101500		17.5N	144.3E	25												
96101506	8	17.8N	143.5E	25	5	87	135	235			0	0	0	0		
96101512		18.7N	142.7E	25												
96101518	9	19.5N	142.3E	25	69	104	176	262	319		5	5	10	15	15	
96101600	10	20.2N	141.7E	25	33	83	128	226			0	0	0	-5		
96101606		20.8N	141.2E	25												
96101612	11	21.5N	140.9E	25	50	57	110	215			0	0	0	5		
96101618		22.4N	140.7E	25												
96101700	12	23.2N	140.5E	25	18	105	211				0	0	5			
96101706		23.8N	140.3E	25												
96101712	13	24.3N	139.8E	25	22	76					0	5				
96101718		24.7N	139.2E	25												
96101800		25.8N	138.7E	20												
96101806		27.0N	138.5E	15												
		AVERAGE			30	74	116	156	175	222						
		# CASES			13	13	12	11	7	6						

TYPHOON BETH (32W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96100712		10.9N	162.2E	15												
96100718		11.0N	161.1E	15												
96100800		11.0N	160.0E	15												
96100806		11.1N	158.7E	15												
96100812		11.2N	157.4E	15												
96100818		11.5N	156.2E	15												
96100900		11.9N	154.8E	15												
96100906		12.3N	153.5E	15												
96100912		13.0N	152.1E	15												
96100918		13.6N	150.8E	15												
96101000		14.1N	149.5E	15												
96101006		14.5N	148.6E	15												
96101012		14.7N	147.6E	15												
96101018		14.8N	146.7E	15												

TYPHOON BETH (32W) (CONTINUED)

DTG	WRN NO.	LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96101100		14.8N	145.7E	20												
96101106		14.7N	144.6E	20												
96101112		14.2N	143.8E	25												
96101118		14.0N	142.7E	25												
96101200		14.0N	141.6E	25												
96101206		14.2N	140.3E	25												
96101212		14.6N	139.2E	25												
96101218		15.0N	138.1E	25												
96101300		15.4N	136.5E	25												
96101306		15.5N	134.8E	25												
96101312	1	15.6N	133.8E	25	35	115	203	280	352	418	0	5	10	10	20	10
96101318	2	15.7N	133.0E	30	26	82	171	257	313	379	0	5	5	10	15	5
96101400	3	15.9N	132.2E	30	13	50	108	142	132	101	0	0	0	10	10	0
96101406	4	16.0N	131.6E	30	18	59	91	98	90	91	0	0	5	10	10	-10
96101412	5	16.4N	131.1E	35	42	91	119	114	122	120	-5	-5	5	5	5	-20
96101418	6	17.0N	130.4E	40	49	60	48	37	18	16	-10	-10	-5	-5	-5	-15
96101500	7	17.3N	130.0E	45	26	24	33	20	20	160	-10	0	-5	-5	0	-15
96101506	8	17.5N	129.5E	45	13	33	56	46	11	184	-5	-5	-10	-10	-5	-15
96101512	9	17.6N	129.0E	45	23	39	45	45	34	128	-5	-10	-15	-15	-15	-20
96101518	10	17.6N	128.2E	50	16	33	37	37	23	126	-5	-10	-15	-15	-15	-20
96101600	11	17.6N	127.4E	55	21	18	20	58	120	167	-10	-10	-10	-30	-15	-20
96101606	12	17.6N	126.6E	60	0	5	12	86	145	201	-10	-10	-10	-30	-15	-20
96101612	13	17.6N	125.9E	65	18	52	37	43	108	174	-5	-5	-10	-15	-20	-10
96101618	14	17.6N	125.1E	70	0	13	34	70	132	145	-5	-10	-10	-15	-20	0
96101700	15	17.7N	124.0E	75	13	49	74	130	153	140	-5	-5	-5	0	15	60
96101706	16	17.7N	123.4E	80	8	18	42	100	121	62	0	0	-5	-5	0	30
96101712	17	17.7N	122.8E	90	8	16	48	91	100	121	0	10	-10	-5	5	40
96101718	18	17.6N	122.1E	90	0	45	96	122	124	237	0	-5	-10	-5	15	45
96101800	19	17.8N	121.4E	75	0	30	82	101	131	291	10	-10	-10	0	25	50
96101806	20	18.2N	120.5E	75	0	21	39	57	69	190	0	-10	-10	10	30	50
96101812	21	18.4N	120.2E	80	8	88	136	186	258	350	0	5	15	35	40	50
96101818	22	18.8N	119.3E	80	30	90	128	199	271	337	0	5	25	40	45	50
96101900	23	18.9N	118.3E	80	0	25	63	60	77	158	0	10	35	45	50	50
96101906	24	18.9N	117.4E	80	5	34	88	95	77	204	0	20	40	45	55	45
96101912	25	18.7N	116.6E	75	13	79	109	143	143	263	0	25	35	45	45	30
96101918	26	18.4N	115.6E	65	24	81	90	89	128	343	0	15	25	30	30	15
96102000	27	17.6N	114.8E	55	16	73	123	133	104		0	10	15	20	20	
96102006	28	17.1N	113.7E	50	5	34	36	72	141		0	5	10	10	10	
96102012	29	16.9N	112.6E	45	6	43	67	135	244		0	10	10	5	10	
96102018	30	16.5N	111.5E	40	13	18	85	175	325		5	15	10	5	10	
96102100	31	16.1N	110.5E	35	0	33	116	261			0	0	-5	0		
96102106	32	15.8N	109.8E	30	21	83	128	208			0	0	0	5		
96102112		15.2N	109.2E	30												
96102118	33	14.5N	108.9E	30	60	123					-5	-5				
96102200		13.9N	108.7E	30												
96102206		13.4N	109.0E	25												
96102212		13.1N	109.7E	20												
		AVERAGE			16	51	81	116	137	197						
		# CASES			33	33	32	32	30	26						

TYPHOON CARLO (33W)

DTG	WRN NO.	LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96101700		17.0N	168.0E	15												
96101706		16.2N	167.3E	15												
96101712		15.7N	166.4E	15												
96101718		15.3N	165.2E	15												
96101800		15.1N	164.1E	15												
96101806		15.1N	163.0E	15												
96101812		15.1N	161.6E	15												
96101818		15.1N	160.5E	10												
96101900		15.4N	158.7E	15												
96101906		15.8N	156.9E	20												
96101912		16.4N	155.2E	20												
96101918		16.8N	153.7E	20												
96102000		17.0N	152.2E	20												
96102006		17.3N	151.5E	20												
96102012		17.7N	150.8E	20												
96102018		18.0N	150.3E	20												
96102100	1	18.4N	149.8E	25	36	39	74	103	90	105	0	-5	-10	-15	-20	-50
96102106	2	18.8N	149.3E	30	30	48	69	72	84	98	0	-10	-10	-15	-30	-50
96102112	3	19.0N	148.8E	35	21	55	96	98	131	318	0	-5	-10	-15	-35	-25
96102118	4	19.1N	148.5E	45	29	55	71	89	122	407	0	0	-5	-20	-35	-10
96102200	5	19.2N	148.0E	45	29	33	62	54	172	572	0	-5	-10	-25	-35	-5

TYPHOON CARLO (33W) (CONTINUED)

96102206	6	19.3N	147.6E	50	0	25	33	53	215	683	5	0	-15	-35	-35	-5
96102212	7	19.4N	147.1E	55	0	28	45	176	347	772	0	-5	-25	-35	-25	0
96102218	8	19.7N	146.3E	60	0	23	94	197	318	688	0	-15	-30	-30	-10	10
96102300	9	20.0N	145.5E	65	12	91	118	202	283	479	0	-20	-30	-20	-15	0
96102306	10	20.2N	145.2E	80	20	66	175	291	398	508	-15	-30	-30	-10	-5	0
96102312	11	20.7N	145.0E	90	12	40	76	106	157	250	0	-5	10	20	20	0
96102318	12	21.5N	144.9E	100	5	10	24	49	37	113	-10	-5	15	10	5	-5
96102400	13	22.6N	144.8E	105	0	24	44	129	157	179	0	10	15	20	5	0
96102406	14	23.8N	144.9E	105	5	34	60	109	102		0	20	25	25	5	
96102412	15	25.2N	145.1E	95	0	27	86	131	214		-10	-10	5	0	0	
96102418	16	26.8N	145.4E	85	11	20	77	140	195		-10	0	10	-5	0	
96102500	17	28.4N	146.0E	80	13	98	200	279	356		-5	15	10	5	5	
96102506	18	30.1N	146.9E	70	0	46	61	109			5	0	-15	-15		
96102512	19	31.9N	148.7E	60	8	14	7	36			5	0	-5	-10		
96102518	20	33.6N	150.4E	55	11	46	40				0	-10	-10			
96102600	21	35.1N	152.3E	55	9	61	130				-5	-5	0			
96102606	22	36.7N	154.4E	55	7	97					0	5				
96102612	23	38.2N	157.4E	50	15	79					0	10				
96102618	24	39.9N	160.5E	45	25						0					
96102700		41.9N	163.6E	40												
			AVERAGE		13	47	79	128	199	398						
			# CASES		24	23	21	19	17	13						

TROPICAL DEPRESSION 34W

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96102412		10.5N	121.0E	15												
96102418		9.7N	120.0E	15												
96102500		9.3N	118.7E	15												
96102506		8.9N	117.5E	15												
96102512		8.7N	116.2E	15												
96102518		8.4N	114.9E	15												
96102600		8.1N	113.7E	15												
96102606		7.7N	112.8E	15												
96102612		7.4N	112.1E	15												
96102618		7.0N	111.5E	15												
96102700		6.6N	110.9E	20												
96102706		6.3N	110.3E	25												
96102712		5.9N	109.6E	30												
96102718		5.8N	108.7E	30												
96102800		5.7N	107.7E	25												
96102806		5.8N	106.6E	25												
96102812		6.0N	105.5E	25												
96102818		6.5N	104.4E	25												
96102900		7.5N	103.7E	25												
96102906	1	8.6N	103.2E	25	24	102	114	83			-5	0	5	5		
96102912		9.5N	102.8E	25												
96102918	2	10.4N	102.3E	25	29	35	40	57			0	5	0	0		
96103000		11.0N	101.6E	25												
96103006	3	11.2N	100.7E	20	8	85	83	125			0	-5	-5	10		
96103012		11.4N	99.6E	15												
96103018	4	11.7N	98.3E	20	79						-5					
96103100		12.4N	97.3E	25												
96103106		13.4N	96.7E	25												
96103112		14.6N	97.2E	20												
96103118		15.7N	97.9E	15												
			AVERAGE		36	75	79	89								
			# CASES		4	3	3	3								

TROPICAL STORM 35W

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96103106		10.8N	120.8E	15												
96103112		10.8N	120.1E	20												
96103118		10.9N	119.4E	20												
96110100		11.0N	118.5E	20												
96110106		11.2N	117.7E	20												
96110112		11.5N	116.9E	25												
96110118		11.9N	116.0E	25												
96110200	1	12.6N	114.4E	30	49	118	271	394	432		-5	-10	0	15	30	
96110206	2	13.2N	112.7E	35	83	176	303	378	327		-10	-10	5	20	10	

TROPICAL STORM 35W (CONTINUED)

DTG	WRN NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96110212	3	13.6N	111.2E	40	98	206	297	291			-10	0	10	5		
96110218	4	14.0N	109.3E	40	106	163	180				-10	0	-5			
96110300	5	14.4N	107.2E	35	6	24	88				-5	-5	0			
96110306	6	14.7N	105.3E	30	11	60	219				-5	-5	-5			
96110312		14.8N	103.8E	30												
96110318		15.4N	102.6E	25												
96110400		16.4N	102.2E	20												
96110406		17.3N	102.2E	20												
			AVERAGE		59	125	227	355	380							
			# CASES		6	6	6	3	2							

SUPER TYPHOON DALE (36W)

DTG	WRN NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96110200		9.1N	154.0E	15												
96110206		9.1N	153.7E	15												
96110212		9.1N	153.4E	15												
96110218		9.1N	152.9E	15												
96110300		9.2N	152.5E	15												
96110306		9.4N	152.2E	20												
96110312		9.7N	152.1E	25												
96110318		9.9N	152.2E	25												
96110400		9.9N	151.9E	25												
96110406	1	10.0N	152.0E	30	21	58	114	152	142	198	-5	-5	-5	-10	-15	-25
96110412	2	9.9N	151.9E	35	43	61	113	123	126	146	-10	-5	-5	-5	-10	-25
96110418	3	10.1N	151.9E	35	64	97	123	122	145	162	-5	0	0	-5	-5	0
96110500	4	10.2N	152.0E	35	71	146	143	95	115	72	-5	-5	-5	-10	-10	0
96110506	5	10.5N	152.1E	35	87	128	100	64	126	106	-5	-10	-15	-15	-15	0
96110512	6	10.7N	152.3E	40	48	78	106	59	41	72	0	-5	-15	-15	-20	5
96110518	7	10.9N	152.0E	45	42	85	82	51	72	48	0	-10	-15	-15	-15	-5
96110600	8	11.3N	151.1E	50	48	76	76	58	99	74	-5	-10	-10	-15	0	0
96110606	9	11.5N	150.2E	60	76	102	64	113	128	81	-5	-5	-5	0	10	-10
96110612	10	11.6N	149.1E	65	42	79	123	155	236	251	-5	-5	-15	0	10	-20
96110618	11	11.5N	148.4E	70	34	106	94	145	159	161	-5	-10	-15	0	0	-20
96110700	12	11.1N	148.0E	75	11	16	18	64	59	137	-10	-20	-15	0	-15	-20
96110706	13	11.3N	147.7E	80	8	63	72	58	26	99	-5	0	15	15	0	-15
96110712	14	11.7N	146.1E	90	0	45	109	100	88	119	0	10	25	10	-5	-15
96110718	15	11.4N	144.5E	90	12	84	105	125	115	200	0	10	15	-5	-5	-15
96110800	16	11.6N	143.3E	90	0	67	78	123	155	201	0	10	0	-15	-5	5
96110806	17	11.4N	142.4E	90	0	58	114	198	240	280	0	-5	-15	-15	-5	5
96110812	18	11.7N	141.5E	90	18	88	144	228	230	287	0	-10	-25	-15	-5	5
96110818	19	12.3N	140.0E	100	18	72	156	220	244	371	0	-15	-20	-10	-5	10
96110900	20	12.8N	138.9E	115	8	66	148	162	228	473	-10	-25	-20	-10	5	20
96110906	21	13.7N	137.8E	130	0	32	64	111	225	562	0	-10	-15	-20	-10	5
96110912	22	14.5N	136.6E	140	0	68	90	162	237	515	5	15	20	10	-10	15
96110918	23	15.7N	135.2E	140	21	36	83	176	253	626	10	15	20	10	-5	15
96111000	24	16.8N	133.8E	140	0	92	162	228	286	555	5	5	5	0	5	5
96111006	25	17.5N	132.8E	140	0	64	152	212	264	736	0	0	5	5	5	15
96111012	26	18.3N	132.1E	140	11	74	149	197	324	924	0	10	5	15	15	25
96111018	27	19.3N	131.6E	140	11	65	94	129	275	907	0	10	10	10	5	20
96111100	28	20.5N	131.3E	130	5	20	76	192	388	1048	0	-5	5	0	0	20
96111106	29	21.7N	131.3E	130	5	22	87	201	463	1129	0	-5	-5	-10	5	15
96111112	30	22.7N	131.4E	130	0	29	91	220	345		0	5	5	0	0	
96111118	31	23.7N	131.8E	125	0	17	120	244	393		0	0	-5	5	0	
96111200	32	24.9N	132.5E	115	0	59	236	425	612		0	0	0	10	0	
96111206	33	26.1N	133.8E	115	0	106	257	450	692		0	-5	0	5	0	
96111212	34	27.8N	136.4E	105	44	164	246	267			0	10	10	10		
96111218	35	29.5N	139.3E	105	37	191	272	352			0	20	25	15		
96111300	36	31.2N	143.9E	90	87	129	153				0	15	10			
96111306	37	32.9N	148.7E	80	40	9	91				0	5	10			
96111312	38	34.9N	154.3E	70	15	27					-5	0				
96111318	39	37.4N	160.6E	65	61	181					0	5				
96111400		40.7N	167.1E	60												
			AVERAGE		26	76	122	171	229	364						
			# CASES		39	39	37	35	33	29						

TROPICAL STORM ERNIE (37W)

DTG	WRN NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96102900		7.0N	155.0E	15												
96102906		7.0N	154.5E	15												

TROPICAL STORM ERNIE (37W) (CONTINUED)

96102912		7.0N	154.0E	15												
96102918		7.0N	153.5E	15												
96103000		7.0N	153.0E	15												
96103006		7.0N	152.5E	15												
96103012		7.0N	152.0E	15												
96103018		7.0N	151.5E	15												
96103100		7.0N	151.0E	15												
96103106		6.9N	150.4E	15												
96103112		6.8N	149.7E	15												
96103118		6.6N	148.8E	15												
96110100		6.4N	147.7E	15												
96110106		6.1N	146.2E	15												
96110112		5.9N	144.7E	15												
96110118		5.7N	143.2E	15												
96110200		5.6N	142.0E	15												
96110206		5.5N	141.0E	15												
96110212		5.5N	140.2E	15												
96110218		5.4N	139.4E	15												
96110300		5.2N	138.3E	15												
96110306		5.0N	137.1E	15												
96110312		4.9N	136.0E	20												
96110318		5.1N	134.9E	20												
96110400		5.3N	133.4E	20												
96110406		5.5N	132.2E	20												
96110412	1	6.0N	131.2E	25	29	127	215	274	353	412	0	5	5	0	0	0
96110418	2	6.6N	130.2E	25	51	134	187	223	285	332	0	10	10	10	0	-10
96110500	3	7.4N	129.2E	25	26	48	49	108	130	107	0	5	5	5	0	-5
96110506	4	8.1N	128.3E	25	25	36	29	74	105	91	0	5	0	0	-5	-5
96110512	5	8.7N	127.2E	30	16	18	71	112	101	108	0	0	0	0	-5	-5
96110518	6	9.1N	126.3E	30	23	24	96	117	85	136	0	-5	-5	-5	-5	0
96110600	7	9.5N	125.3E	35	24	93	96	85	88	234	-5	-10	-10	-10	-5	15
96110606	8	10.3N	124.7E	40	43	96	109	85	113	274	-5	-10	-15	-10	-5	20
96110612	9	11.2N	123.8E	40	18	84	104	90	70	193	0	-5	-5	0	5	30
96110618	10	11.7N	122.8E	45	18	101	88	83	81	191	0	-5	0	5	20	35
96110700	11	12.0N	121.3E	45	21	78	144	182	225	260	0	0	0	5	25	30
96110706	12	12.1N	120.2E	50	8	103	183	237	291	381	0	5	15	25	40	50
96110712	13	12.3N	119.8E	50	64	146	209	300	365	479	0	5	15	30	40	30
96110718	14	12.5N	119.5E	50	105	148	175	233	298	381	0	5	20	35	35	30
96110800	15	12.7N	119.3E	50	16	197	243	295	369	403	0	0	15	25	20	20
96110806	16	13.4N	118.9E	50	30	90	216	259	311	308	0	5	20	20	20	20
96110812	17	14.1N	118.6E	50	13	64	139	172	149	64	0	10	20	15	20	20
96110818	18	14.8N	118.4E	45	25	96	127	164	146	90	0	15	15	15	20	20
96110900	19	16.0N	118.3E	40	24	120	171	182	186	186	-5	0	-10	-15	-15	-15
96110906	20	17.3N	117.7E	35	20	36	63	123	144	193	0	-10	-15	-15	-15	-5
96110912	21	17.9N	117.7E	35	75	160	232	264			-5	-15	-15	-15		
96110918		18.5N	117.8E	40												
96111000	22	19.2N	117.9E	45	0	34	102	118	138	215	-5	-5	-5	0	0	15
96111006	23	19.6N	118.0E	45	0	28	73	164	193	279	-5	-5	-5	0	10	15
96111012	24	19.8N	118.0E	45	30	43	135	194	239	350	-5	-5	-15	-20	-10	-10
96111018	25	20.0N	118.1E	45	47	94	181	229	254	423	0	0	0	15	15	20
96111100	26	20.2N	118.1E	45	0	102	184	224	232	467	0	0	0	15	15	15
96111106	27	19.8N	118.5E	45	5	80	148	165	120	234	0	0	10	15	15	15
96111112	28	19.4N	119.2E	45	12	72	110	75	81	276	0	-5	0	0	0	-5
96111118	29	19.3N	120.0E	45	39	79	104	125	187	343	0	5	0	-5	-5	-10
96111200	30	19.0N	120.6E	45	0	64	123	187	281	414	0	5	-5	-10	-15	-10
96111206	31	18.4N	121.0E	35	34	62	99	174	266	357	0	0	-5	-10	-15	-10
96111212	32	17.6N	121.1E	35	5	102	179	255	321	350	0	0	-5	-15	-10	0
96111218	33	16.7N	120.4E	35	18	89	129	182	205	300	0	-5	-10	-15	-5	5
96111300	34	16.2N	119.3E	35	8	53	120	188	213	244	0	-5	-10	-10	-10	-5
96111306	35	15.8N	118.2E	35	8	23	21	59	96	159	0	-5	-10	-5	-10	-5
96111312	36	15.5N	117.3E	35	0	61	122	185	212	339	0	-10	-10	0	0	5
96111318	37	14.9N	116.2E	35	21	72	107	154	172	243	0	-5	0	0	5	0
96111400	38	14.1N	115.1E	40	0	8	42	50	67	56	0	5	10	10	10	5
96111406	39	13.6N	113.9E	40	0	46	105	128	143	95	0	10	10	5	0	5
96111412	40	13.0N	112.8E	40	8	58	82	90	93	34	0	10	10	5	0	5
96111418	41	12.3N	112.3E	35	21	43	54	77	75	21	0	0	5	0	0	0
96111500	42	11.4N	111.6E	35	8	56	63	67	82	173	0	-5	0	-5	0	-5
96111506	43	11.0N	110.8E	35	13	32	29	18	36	129	0	0	0	0	0	0
96111512	44	10.8N	110.1E	35	0	29	51	45	23		0	0	0	0	0	
96111518	45	10.4N	109.2E	30	16	46	71	69	35		0	0	5	0	0	
96111600	46	10.0N	108.3E	30	0	13	61	84			0	0	0	0		
96111606		9.7N	107.3E	30												
96111612	47	9.4N	106.3E	30	0	42	67	131			0	0	0	0		
96111618		9.4N	105.0E	25												
96111700	48	9.5N	103.9E	25	8	23	84				0	0	-5			
96111706		9.6N	102.8E	25												
96111712		9.8N	101.8E	25												

TROPICAL STORM ERNIE (37W) (CONTINUED)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72	PLATFORM
96111718		10.1N	100.8E	25													
96111800		10.4N	100.0E	25													
		AVERAGE			21	72	117	152	175	246							
		# CASES			48	48	48	47	44	42							

TROPICAL STORM 38W

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72	PLATFORM
96110406		21.4N	175.1E	25													
96110412		22.4N	174.9E	35													
96110418		23.1N	174.3E	40													
96110500		23.5N	173.7E	50													
96110506		23.6N	173.1E	50													
96110512		23.6N	172.5E	45													
96110518		23.7N	172.1E	40													
96110600		24.0N	171.8E	35													
96110606	1	24.3N	171.8E	35	8	68	158	145			-5	-5	-5	-10			
96110612		24.5N	172.0E	35													
96110618	2	24.7N	172.2E	35	21	32	115	87			-5	-5	-5	-10			
96110700		25.0N	172.3E	35													
96110706	3	25.4N	172.4E	35	49	39	112	190			-5	-5	-5	-5			
96110712		26.7N	171.8E	35													
96110718	4	27.6N	170.5E	35	32	121	196	275			-5	-10	-5	-5			
96110800		27.0N	169.0E	35													
96110806	5	26.6N	169.3E	35	34	166	282				-10	-10	-10				
96110812		26.5N	169.8E	30													
96110818		26.5N	170.2E	30													
96110900		26.3N	170.4E	25													
96110906		26.0N	170.6E	25													
96110912		25.6N	170.7E	25													
96110918		25.1N	170.6E	25													
96111000		24.5N	170.7E	25													
96111006		24.0N	171.0E	25													
96111012		24.0N	171.9E	30													
96111018		23.9N	173.1E	30													
96111100		23.8N	174.4E	30													
96111106		23.7N	175.8E	25													
96111112		23.3N	177.3E	25													
96111118		22.8N	178.8E	25													
96111200		22.2N	179.1W	25													
		AVERAGE			29	86	173	175									
		# CASES			5	5	5	4									

TROPICAL DEPRESSION 39W

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96110612		13.8N	125.4E	15												
96110618		14.5N	125.4E	20												
96110700		15.2N	125.2E	20												
96110706		15.8N	124.8E	25												
96110712		16.3N	124.3E	25												
96110718		16.8N	123.6E	25												
96110800		17.3N	122.8E	30												
96110806	1	17.8N	121.6E	30	47	70	120	162			-5	-5	0	5		
96110812		18.1N	120.3E	30												
96110818	2	18.7N	119.7E	30	48	135	188				-5	-5	-10			
96110900		19.2N	119.0E	30												
96110906	3	19.8N	118.5E	30	65	135					-5	-5				
96110912		20.4N	118.0E	30												
96110918		19.8N	117.6E	25												
96111000		19.2N	117.9E	25												
		AVERAGE			54	114	154	163								
		# CASES			3	3	2	1								

TROPICAL DEPRESSION 40W

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96112300		8.0N	151.0E	15												
96112306		8.2N	150.8E	15												
96112312		8.6N	150.4E	15												
96112318		9.2N	149.7E	15												
96112400		10.0N	148.6E	15												
96112406		10.9N	147.4E	15												
96112412		11.6N	146.1E	20												
96112418		12.3N	144.8E	20												
96112500	1	13.4N	143.6E	20	30	155	213	251	278	294	0	0	10	20	30	55
96112506	2	14.9N	142.9E	20	87	167	199	225	253	241	0	0	10	20	30	50
96112512	3	16.1N	142.4E	25	86	58	38	29	75	236	-5	0	10	20	35	45
96112518	4	17.0N	141.7E	25	90	90	82	115	167	113	5	10	15	25	40	50
96112600	5	17.5N	141.0E	25	90	145	223	333	428	384	5	10	15	15	10	5
96112606	6	17.8N	140.3E	25	100	136	176	236	296	272	0	5	15	15	5	5
96112612	7	18.1N	139.6E	25	125	171	206	309	354	359	0	5	20	15	5	5
96112618	8	18.3N	139.0E	25	154	203	276	376	397	411	0	5	15	10	5	0
96112700	9	18.3N	138.5E	25	5	42	149	188			0	5	5	0		
96112706		18.1N	138.1E	25												
96112712	10	17.7N	137.7E	20	26	111	161				5	0	-10			
96112718		17.0N	137.0E	20												
96112800		16.1N	135.9E	20												
96112806		15.7N	134.5E	25												
96112812		15.8N	133.2E	25												
96112818		16.0N	132.1E	25												
96112900	11	15.9N	131.2E	25	181	193	256	339			5	5	5	5		
96112906		15.3N	130.6E	25												
96112912	12	14.5N	130.4E	25	180	232	306	391			0	0	0	0		
96112918		14.0N	129.9E	25												
96113000	13	13.7N	129.3E	25	150	201	277				0					
96113006		13.4N	128.6E	25												
96113012	14	13.1N	127.8E	25	234	322	440				0	5	0			
96113018		12.7N	127.0E	25												
96120100	15	12.0N	126.3E	20	35	164					5					
96120106		11.0N	126.0E	20												
96120112		10.0N	125.8E	20												
96120118		9.2N	125.7E	15												
96120200		8.5N	125.6E	10												
		AVERAGE			105	160	215	254	281	289						
		# CASES			15	15	14	11	8	8						

TROPICAL DEPRESSION 41W

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96121218		4.2N	103.7E	15												
96121300		4.2N	104.3E	15												
96121306		4.2N	104.9E	20												
96121312		4.2N	105.5E	20												
96121318		4.2N	106.1E	20												
96121400		4.2N	106.6E	25												
96121406	1	4.2N	107.1E	25	119	216	306	391			0	5	0	-5		
96121412		4.1N	107.4E	25												
96121418	2	3.9N	107.7E	25	83	170	268	394			0	5	0	-5		
96121500		3.8N	107.9E	25												
96121506	3	3.6N	108.2E	25	17	73	91	78			0	5	5	5		
96121512		3.5N	108.4E	25												
96121518	4	3.3N	108.7E	25	50	64	33	69			0	5	5	-5		
96121600		3.2N	109.3E	25												
96121606	5	3.3N	109.7E	25	40	69	128	155			0	0	-5	-5		
96121612		3.5N	110.1E	25												
96121618	6	4.0N	110.5E	25	42	67	80	75			0	-5	-5	-5		
96121700		4.4N	110.3E	30												
96121706	7	4.5N	110.1E	30	8	8	26	43			0	0	0	5		
96121712		4.6N	109.8E	30												
96121718	8	4.6N	109.6E	30	43	78	117	153			0	0	5	5		
96121800		4.6N	109.5E	30												
96121806	9	4.6N	109.3E	30	0	13	16	41			0	5	0	0		
96121812		4.7N	109.1E	30												
96121818	10	4.8N	109.0E	25	0	13	42				0	0	0			
96121900		4.9N	108.8E	25												
96121906	11	4.9N	108.5E	25	17	60	126	185			0	0	0	5		

96121912		4.8N	108.2E	25												
96121918	12	4.8N	107.7E	25	36	91	139				0	0	0			
96122000		4.8N	107.0E	25												
96122006	13	4.9N	106.4E	25	72	104					0	0				
96122012		5.0N	105.8E	20												
96122018		5.1N	105.3E	20												
96122100		5.2N	104.8E	20												
			AVERAGE		41	79	115	159								
			# CASES		13	13	12	10								

TYPHOON FERN (42W)

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96121712		5.2N	151.3E	20												
96121718		5.4N	150.8E	20												
96121800		5.5N	150.3E	20												
96121806		5.6N	149.5E	20												
96121812		5.7N	148.8E	20												
96121818		5.9N	148.1E	20												
96121900		6.1N	147.4E	20												
96121906		6.3N	146.7E	20												
96121912		6.5N	146.0E	25												
96121918		6.8N	145.4E	25												
96122000		7.4N	144.3E	25												
96122006		7.5N	143.5E	25												
96122012		7.6N	142.6E	25												
96122018		7.8N	142.2E	25												
96122100		7.9N	142.0E	25												
96122106		8.0N	141.8E	30												
96122112		8.2N	141.6E	35												
96122118	1	8.3N	141.4E	40	101	124	155	175	207	260	-10	-10	5	20	25	20
96122200	2	8.5N	141.2E	45	50	69	96	131	173	276	-5	5	25	35	30	25
96122206	3	8.6N	141.1E	45	55	61	96	141	180	284	0	10	25	30	25	20
96122212	4	8.7N	141.0E	45	66	77	97	115	150	240	0	10	15	10	5	5
96122218	5	8.8N	140.8E	40	53	59	85	120	142	192	0	5	5	0	0	-5
96122300	6	8.8N	140.6E	35	21	42	97	122	162	222	0	0	-5	-15	-10	-30
96122306	7	8.8N	140.4E	35	30	72	118	143	175	208	0	-5	-10	-15	-10	-40
96122312	8	8.7N	140.1E	35	51	105	118	138	149	176	0	-10	-15	-15	-15	-45
96122318	9	8.5N	139.6E	40	85	119	137	147	163	166	-5	-15	-15	-15	-20	-45
96122400	10	8.5N	139.0E	45	78	72	84	101	96	141	-10	-20	-15	-20	-25	-45
96122406	11	8.6N	138.7E	50	13	24	47	64	49	113	-5	-5	0	-5	-20	-25
96122412	12	8.8N	138.5E	55	17	30	60	80	90	193	0	5	5	0	-5	-5
96122418	13	9.0N	138.3E	55	8	31	76	83	121	246	0	5	0	-5	-5	-5
96122500	14	9.2N	138.2E	55	5	47	69	51	104	204	0	-5	-10	-15	-20	-20
96122506	15	9.4N	138.2E	55	11	47	59	55	109	171	0	-10	-15	-15	-15	-20
96122512	16	9.8N	138.3E	60	6	6	23	24	86	98	-5	-10	-15	-10	0	-5
96122518	17	10.1N	138.4E	65	13	8	37	83	117	68	0	-10	-15	-10	-15	-20
96122600	18	10.6N	138.5E	70	12	18	35	88	99	6	-5	-15	-10	-5	-5	10
96122606	19	11.3N	138.7E	75	5	48	75	107	86	78	0	-5	5	5	5	30
96122612	20	11.7N	138.8E	80	11	32	71	86	38	84	-5	5	20	20	10	35
96122618	21	12.0N	138.8E	80	11	39	59	74	87	120	0	15	25	20	10	40
96122700	22	12.4N	138.8E	80	24	51	43	49	33	349	0	10	15	10	20	40
96122706	23	13.0N	138.7E	75	0	8	34	41	97	493	-5	0	5	5	25	40
96122712	24	13.6N	138.8E	75	0	23	26	108	255	687	-5	0	-5	5	20	30
96122718	25	14.3N	139.1E	75	0	31	57	74	193	689	0	0	-5	15	25	35
96122800	26	14.8N	139.7E	75	21	38	54	178	371	955	0	-5	5	25	30	40
96122806	27	15.8N	140.6E	75	30	42	114	263	475	1102	-5	-10	10	25	30	40
96122812	28	16.2N	141.6E	75	24	69	165	313	520	1112	0	10	25	30	35	35
96122818	29	16.8N	142.6E	75	29	93	216	408	714		0	20	30	35	40	
96122900	30	17.1N	143.6E	60	53	130	260	484	834		10	30	35	40	40	
96122906	31	17.2N	144.6E	50	66	115	195	375	528		10	25	30	40	35	
96122912	32	17.2N	145.5E	40	107	149	211	335	390		15	20	25	25	20	
96122918	33	17.2N	146.2E	35	107	129	234	336			15	20	25	20		
96123000	34	17.2N	146.7E	30	0	46	173	230			15	15	10	5		
96123006	35	17.2N	147.1E	25	11	111	206				5	10	5			
96123012		17.1N	147.2E	20												
96123018		16.7N	146.7E	15												
96123100		16.7N	146.3E	15												
96123106		16.9N	146.3E	15												
96123112		17.0N	146.5E	15												
			AVERAGE		34	62	106	157	219	320						
			# CASES		35	35	35	34	32	28						

TROPICAL STORM GREG (43W)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96122106		7.8N	110.0E	15												
96122112		8.0N	110.1E	15												
96122118		8.0N	110.5E	15												
96122200		8.0N	110.7E	15												
96122206		7.9N	110.9E	15												
96122212		7.8N	111.1E	15												
96122218		7.7N	111.3E	15												
96122300		7.6N	111.4E	20												
96122306		7.5N	111.5E	25												
96122312		7.4N	111.6E	25												
96122318		7.3N	111.8E	25												
96122400		7.3N	112.1E	25												
96122406	1	7.3N	112.4E	30	17	64	101	109			0	-10	-15	-15		
96122412		7.2N	112.9E	35												
96122418	2	6.9N	113.4E	40	61	107	152	320			-10	-15	-15	0		
96122500	3	6.6N	113.9E	45	0	24	93	239	414		-5	-5	0	-5	-5	
96122506	4	6.5N	114.4E	45	13	49	143	329	474		-5	-5	5	-5	0	
96122512	5	6.5N	114.9E	45	16	124	329	516			-5	5	5	0		
96122518	6	6.6N	115.8E	45	37	205	425	573			-5	10	5	5		
96122600	7	6.7N	117.3E	35	29	176	303				0	0	5			
96122606	8	5.8N	119.2E	30	48	174	261				0	0	5			
96122612		5.5N	121.3E	30												
96122618	9	4.9N	123.4E	30	29	166					0	10				
96122700		4.1N	125.0E	25												
96122706	10	3.3N	126.1E	20	0						5					
		AVERAGE			26	121	226	348	444							
		# CASES			10	9	8	6	2							

6.2.2 NORTH INDIAN OCEAN — This section includes verification statistics for each warning in the North Indian Ocean during 1996.

JTWC BEST TRACK, FORECAST TRACK AND INTENSITY ERRORS BY WARNING

TROPICAL CYCLONE 01B

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96050106		7.5N	91.5E	20												
96050112		7.9N	91.4E	25												
96050118		8.4N	91.3E	25												
96050200		8.9N	91.2E	25												
96050206		9.4N	91.2E	25												
96050212		9.9N	91.1E	25												
96050218		10.5N	91.1E	25												
96050300		11.0N	91.0E	25												
96050306		11.5N	90.9E	25												
96050312		12.1N	90.8E	25												
96050318		12.5N	90.6E	25												
96050400		12.9N	90.3E	25												
96050406		13.3N	90.0E	25												
96050412		13.6N	89.6E	25												
96050418		13.9N	89.3E	25												
96050500		14.2N	89.0E	25												
96050506		14.6N	88.7E	25												
96050512		14.9N	88.5E	25												
96050518		15.4N	88.3E	25												
96050600		15.9N	88.2E	25												
96050606		16.6N	88.2E	25												
96050612		17.3N	88.3E	25												
96050618		17.8N	88.5E	30												
96050700	1	18.3N	88.9E	30	47	96	198	321			0	0	0	15		
96050706	2	18.8N	89.3E	30	58	130	254	389			0	-5	5	20		
96050712	3	19.5N	89.9E	35	0	52	113				-5	-5	10			

TROPICAL CYCLONE 01B (CONTINUED)

96050718	4	20.4N	90.9E	40	8	35	68			-5	0	0	
96050800	5	21.3N	92.1E	40	17	60				-5	5		
96050806	6	22.2N	93.4E	35	25	138				0	0		
96050812		23.0N	94.8E	30									
96050818		23.7N	96.2E	25									
		AVERAGE			26	86	159	356					
		# CASES			6	6	4	2					

TROPICAL CYCLONE 02A

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96060900		16.6N	62.7E	15												
96060906		16.9N	62.4E	15												
96060912		17.1N	62.0E	15												
96060918		17.3N	61.6E	20												
96061000		17.5N	61.1E	25												
96061006		17.7N	60.6E	25												
96061012		17.9N	60.0E	30												
96061018		18.2N	59.3E	35												
96061100	1	18.6N	58.7E	40	83	127	173	168			-10	5	15	20		
96061106	2	19.2N	58.0E	40	110	222	271				0	0	10			
96061112	3	20.1N	57.6E	35	0	71	151				0	0	10			
96061118	4	20.7N	57.2E	35	0	182					0	5				
96061200		21.0N	56.5E	30												
96061206		21.0N	55.9E	20												
96061212		21.0N	55.4E	15												
		AVERAGE			49	151	199	169								
		# CASES			4	4	3	1								

TROPICAL CYCLONE 03B

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
96061100		8.2N	87.8E	15												
96061106		8.5N	87.7E	20												
96061112		8.8N	87.6E	20												
96061118		9.3N	87.4E	20												
96061200		9.9N	86.9E	25												
96061206	1	10.4N	86.2E	30	42	121	214	265	260	196	0	-5	0	10	20	40
96061212	2	10.9N	85.5E	35	0	148	213	212	175	81	0	-10	-5	0	10	20
96061218	3	11.5N	84.6E	40	26	97	116	98	40	75	-10	-10	-5	0	10	10
96061300	4	12.2N	83.7E	45	31	42	77	179	317		0	10	15	-5	-15	
96061306	5	12.8N	82.9E	45	79	37	24	66	105	94	5	5	-20	5	-20	-20
96061312	6	13.4N	82.3E	45	0	86	128	198	230		0	10	15	-5	-15	
96061318	7	13.9N	81.9E	45	0	148	258	335	388		0	-5	-5	-10	-15	
96061400	8	14.1N	81.8E	45	0	133	218	280			0	0	-10	-20		
96061406	9	14.5N	81.8E	45	0	118	178	182	141	74	0	0	0	-5	-15	-5
96061412	10	15.1N	82.1E	45	82	179	241	267	245	161	0	-5	-5	-10	-15	-5
96061418	11	15.8N	82.6E	45	138	220	266	266	228	168	0	-5	-5	-10	-10	0
96061500	12	16.4N	83.0E	45	0	91	110				0	-20	-25			
96061506	13	16.8N	83.3E	45	0	46	46	17	42		0	0	-10	-15	-10	
96061512	14	17.2N	83.6E	45	11	13	67	131	182		0	0	-10	-10	-10	
96061518	15	17.5N	83.7E	45	0	43	110	182	207		0	-5	-5	-5	-5	
96061600	16	17.8N	83.7E	45	12	65	130	189			0	-10	-10	-10		
96061606	17	18.0N	83.5E	45	51	133	229				-5	-10	-5			
96061612	18	18.2N	83.1E	45	61	111	152				-5	-5	-5			
96061618	19	18.3N	82.7E	40	20	18	13				0	0	-5			
96061700	20	18.4N	82.2E	35	0	45					0	-10				
96061706		18.5N	81.6E	30												
96061712		18.8N	81.2E	30												
96061718		19.3N	81.0E	25												
96061800		19.8N	80.9E	25												
96061806		20.4N	80.8E	25												
96061812		21.3N	80.7E	25												
96061818		22.1N	80.7E	25												
		AVERAGE			28	95	147	192	197	122						
		# CASES			20	20	19	15	13	7						

TROPICAL CYCLONE 04A

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96061500		15.6N	72.0E	15												
96061506		15.9N	72.0E	15												
96061512		16.2N	71.9E	15												
96061518		16.5N	71.8E	15												
96061600		16.8N	71.7E	25												
96061606		17.2N	71.4E	20												
96061612		17.4N	71.0E	20												
96061618		17.5N	70.5E	25												
96061700		17.5N	69.6E	25												
96061706		17.6N	69.1E	25												
96061712		18.1N	69.1E	30												
96061718	1	18.4N	69.5E	35	0	97	179	267	371	507	0	-5	-20	-5	20	30
96061800	2	18.8N	69.9E	40	48	128	194	290	366	439	-5	-15	-15	5	25	35
96061806	3	19.2N	70.3E	45	18	50	105	139	137	42	-5	-20	-5	15	10	5
96061812	4	19.7N	70.6E	55	21	34	84	97	45		-15	-15	0	5	5	
96061818	5	20.3N	70.8E	65	12	16	29	43			-25	-15	0	0		
96061900	6	21.0N	70.9E	60	23	60	77	97			-20	-10	0	0		
96061906	7	22.0N	71.1E	55	55	118	163	186			-10	0	-5	0		
96061912	8	23.0N	71.4E	45	42	61	71	134			0					
96061918		23.8N	71.7E	35												
96062000		24.5N	72.0E	30												
96062006		25.1N	72.2E	30												
96062012		25.6N	72.4E	25												
96062018		26.0N	72.6E	25												
96062100		26.3N	72.9E	25												
96062106		26.6N	73.2E	25												
96062112		26.9N	73.5E	25												
96062118		27.1N	73.8E	25												
96062200		27.3N	74.1E	25												
96062206		27.5N	74.4E	25												
96062212		27.7N	74.8E	25												
96062218		27.9N	75.1E	25												
96062300		28.1N	75.4E	20												
96062306		28.3N	75.8E	20												
96062312		28.5N	76.1E	20												
96062318		28.7N	76.4E	20												
96062400		28.9N	76.7E	20												
96062406		29.1N	77.0E	20												
96062412		29.2N	77.3E	15												
96062418		29.4N	77.7E	15												
96062500		29.5N	78.1E	15												
96062506		29.6N	78.6E	15												
96062512		29.7N	79.2E	15												
			AVERAGE		28	71	113	157	230	330						
			# CASES		8	8	8	8	4	3						

TROPICAL CYCLONE 05A

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96101400		9.1N	91.7E	15												
96101406		9.5N	90.5E	15												
96101412		10.0N	89.2E	15												
96101418		10.6N	87.9E	15												
96101500		11.3N	86.6E	15												
96101506		11.9N	85.4E	15												
96101512		12.4N	84.4E	15												
96101518		12.9N	83.7E	15												
96101600		13.3N	83.2E	15												
96101606		13.4N	82.7E	20												
96101612		13.4N	82.3E	20												
96101618		13.3N	82.0E	20												
96101700		13.1N	81.7E	20												
96101706		12.9N	81.3E	20												
96101712		12.8N	80.8E	20												
96101718		12.9N	80.4E	20												
96101800		13.0N	80.1E	15												
96101806		13.0N	79.8E	15												
96101812		13.0N	79.5E	15												
96101818		13.0N	78.8E	15												
96101900		13.0N	78.1E	15												

TROPICAL CYCLONE 05A (CONTINUED)

96101906		13.0N	77.5E	15													
96101912		13.0N	76.9E	15													
96101918		13.0N	76.3E	15													
96102000		13.1N	75.4E	15													
96102006		13.2N	74.4E	15													
96102012		13.2N	73.2E	20													
96102018		13.2N	72.1E	20													
96102100		13.3N	71.3E	20													
96102106		13.5N	70.7E	25													
96102112		13.7N	70.3E	25													
96102118		13.8N	70.0E	25													
96102200		13.9N	69.8E	30													
96102206		14.0N	69.7E	35													
96102212	1	14.2N	69.6E	40	34	82	143	201	249	280	-5	-15	-20	-20	-10	5	
96102218	2	14.3N	69.7E	45	13	58	139	204	255	248	-10	-20	-25	-15	-10	10	
96102300	3	14.5N	69.9E	50	31	95	175	236	268	243	-10	-20	-15	-10	0	20	
96102306	4	15.0N	70.1E	55	58	138	200	250	260	240	-5	-10	0	-5	0	20	
96102312	5	15.8N	70.2E	60	21	90	150	180	156	34	-5	0	5	10	15	25	
96102318	6	16.8N	70.2E	65	12	51	77	140	238	417	-10	5	5	10	15	10	
96102400	7	17.6N	70.0E	60	34	71	124	182	280	472	-5	5	0	0	0	-10	
96102406	8	18.3N	69.9E	55	8	43	50	37	73	147		5	5	10	10	-10	
96102412	9	19.0N	69.9E	55	30	47	49	51	96	144	-5	0	10	10	10	-20	
96102418	10	19.5N	70.0E	55	37	49	51	90	133	191	-5	5	15	15	5	-15	
96102500	11	19.8N	70.1E	50	20	53	131	220	305	436	0	10	10	10	-5	-10	
96102506	12	20.0N	70.1E	45	37	87	168	257	345		5	5	10	0	-15		
96102512	13	20.1N	69.9E	40	32	77	126	194			0	10	10	-5			
96102518	14	20.0N	69.7E	35	45	72	117				0	10	-5				
96102600	15	19.8N	69.7E	30	16	41					0	0					
96102606		19.6N	69.7E	25													
96102612		19.4N	69.7E	25													
96102618		19.0N	69.6E	30													
96102700		18.4N	69.3E	35													
96102706		17.8N	69.0E	40													
96102712		17.0N	68.6E	45													
96102718		16.2N	68.1E	40													
96102800	16	15.5N	67.5E	35	54	41	21	41	58		0	0	0	0	-5		
96102806	17	15.0N	67.0E	35	34	45	80	121	172		0	0	0	0	-5		
96102812	18	14.8N	66.6E	35	5	18	58	96	138	172	0	0	0	0	-5	-5	
96102818	19	14.5N	66.0E	35	32	58	111	156	184	168	0	0	0	-5	-5	0	
96102900	20	14.3N	65.1E	35	68	140	184	247	266	233	0	0	0	-5	0	0	
96102906	21	14.1N	64.1E	35	49	102	139	160	162		0	0	-5	-5	0		
96102912	22	13.9N	62.8E	35	33	33	29	18	75		0	-5	-5	-5	-5		
96102918	23	13.7N	61.6E	35	41	31	11	18	63		0	-5	-10	-5	-5		
96103000	24	13.7N	60.6E	35	29	52	103	119	106		0	0	0	-5	-5		
96103006	25	13.7N	59.4E	35	34	60	88	103	116		0	0	0	0	-5		
96103012	26	13.7N	58.3E	35	0	40	70	87			0	0	0	0			
96103018	27	13.6N	57.6E	35	34	64	78	93			0	0	5	0			
96103100	28	13.5N	56.7E	30	36	76	100				0	0	5				
96103106	29	13.3N	56.1E	30	33	88	167				0	5	0				
96103112	30	13.0N	55.4E	30	51	133					-5	0					
96103118		12.3N	54.8E	25													
96110100		11.8N	54.3E	25													
96110106		10.9N	53.8E	25													
96110112		10.1N	53.3E	25													
96110118		9.3N	52.8E	25													
96110200		8.5N	52.4E	20													
96110206		7.7N	51.9E	20													
		AVERAGE			33	68	105	141	182	245							
		# CASES			30	30	28	25	22	14							

TROPICAL CYCLONE 06B

	WRN	BEST TRACK			POSITION ERRORS						WIND ERRORS					
DTG	NO.	LAT	LONG	WIND (KT)	00	12	24	36	48	72	00	12	24	36	48	72
0696102118	91N	932E		20												
96102200		9.5N	93.1E	25												
96102206		9.9N	93.0E	25												
96102212		10.2N	92.9E	25												
96102218		10.5N	92.8E	25												
96102300		10.7N	92.6E	25												
96102306		10.9N	92.2E	25												
96102312		10.9N	91.7E	25												
96102318		11.0N	90.9E	25												
96102400		11.2N	90.0E	25												
96102406		11.4N	89.3E	25												

TROPICAL CYCLONE 06B (CONTINUED)

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96102412		11.6N	88.7E	25												
96102418		11.8N	88.2E	25												
96102500		12.0N	87.8E	25												
96102506	1	12.2N	87.4E	30	26	58	81	128	155	230	0	0	5	10	15	-10
96102512	2	12.4N	87.0E	30	71	129	155	186	235	393	0	0	0	10	0	-10
96102518	3	12.6N	86.6E	35	175	290	393	483			0	5	-10	-20		
96102600	4	12.9N	86.2E	35	152	205	281	367	491		0	0	-10	-15	-20	
96102606	5	13.2N	85.7E	40	170	221	285	378	501		-5	0	-10	-15	-20	
96102612	6	13.6N	85.4E	45	56	58	103	203	343		0	5	10	15	-5	
96102618	7	14.2N	85.3E	45	64	62	126	235	371		0	5	10	15	0	
96102700	8	14.7N	85.3E	45	13	58	142	244	367		0	5	15	20	25	
96102706	9	15.5N	85.4E	45	21	75	167	291	447		0	5	10	20	30	
96102712	10	16.2N	85.7E	45	33	87	189	326			0	5	10	25		
96102718	11	17.0N	86.2E	45	52	112	221	375			0	5	15	30		
96102800	12	18.0N	86.8E	45	58	158	309				0	5	25			
96102806	13	19.1N	87.5E	45	82	188	346				0	5	20			
96102812	14	20.4N	88.2E	45	95	188					0	15				
96102818	15	21.9N	88.9E	40	23	76					5	15				
96102900	16	23.7N	89.6E	30	54						5					
96102906		14.1N	64.1E	35												
		AVERAGE			72	132	216	293	364	312						
		# CASES			16	15	13	11	8	2						

TROPICAL CYCLONE 07B

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96110100		15.0N	97.3E	15												
96110106		15.7N	96.5E	15												
96110112		15.9N	96.0E	15												
96110118		16.2N	95.2E	15												
96110200		16.4N	94.3E	15												
96110206		16.4N	93.5E	15												
96110212		16.4N	92.9E	15												
96110218		16.2N	92.1E	15												
96110300		16.1N	91.4E	20												
96110306		16.0N	90.8E	20												
96110312	1	16.0N	90.2E	25	26	30	62	108	142	116	0	0	-5	-20	-25	-80
96110318	2	16.0N	89.5E	25	33	30	37	62	93	93	0	-5	-15	-25	-35	-80
96110400	3	16.0N	88.8E	30	18	5	29	60	104	128	0	-5	-20	-30	-50	-60
96110406	4	16.0N	88.3E	35	11	29	49	73	128	181	0	-5	-10	-20	-80	-30
96110412	5	16.1N	87.7E	40	0	18	32	62	67	26	-5	-15	-20	-35	-80	-10
96110418	6	16.0N	87.0E	50	13	21	24	13	33	83	-5	-15	-30	-50	-80	0
96110500	7	16.0N	86.3E	60	23	26	13	29	54		-5	-10	-25	-50	-45	
96110506	8	16.0N	85.6E	65	5	12	49	97	120		0	-10	-40	-50	-20	
96110512	9	16.0N	84.9E	75	0	11	50	90	101		-10	-30	-40	-20	0	
96110518	10	16.0N	84.1E	85	5	16	62	96			-10	-30	-40	0		
96110600	11	16.0N	83.6E	100	18	67	104	118			-30	-45	-35	-5		
96110606	12	16.2N	82.9E	115	11	30	74	85			0	10	15	10		
96110612	13	16.5N	82.4E	120	13	33	62				-5	20	35			
96110618	14	16.8N	81.7E	115	12	82	132				5	50	45			
96110700	15	17.3N	80.8E	80	0	33					10	25				
96110706	16	17.5N	79.6E	50	11	58					30	35				
96110712		17.6N	78.8E	30												
96110718		17.8N	77.7E	20												
		AVERAGE			12	32	56	75	94	105						
		# CASES			16	16	14	12	9	6						

TROPICAL CYCLONE 08B

DTG	WRN NO.	BEST TRACK LAT	LONG	WIND (KT)	POSITION ERRORS 00	12	24	36	48	72	WIND ERRORS 00	12	24	36	48	72
96112612		8.9N	92.3E	20												
96112618		9.2N	91.3E	20												
96112700		9.4N	90.3E	25												
96112706		9.6N	89.2E	25												
96112712		10.0N	87.9E	25												
96112718		10.4N	86.8E	25												
96112800		11.1N	85.9E	30												
96112806	1	11.7N	85.3E	35	18	64	129	258	431	593	-5	-5	-5	0	-5	-25
96112812	2	12.4N	84.9E	35	16	29	107	280	468	595	-5	-10	-5	0	-15	-25
96112818	3	13.0N	84.6E	40	0	29	151	334	494	575	-5	-5	0	0	-15	-20
96112900	4	13.6N	84.4E	45	8	58	233	402	501	548	0	5	10	-5	-15	-20

TROPICAL CYCLONE 08B (CONTINUED)

96112906	5	14.1N	84.4E	45	29	141	319	473	522	563	0	5	5	-5	-15	-15
96112912	6	14.6N	84.8E	45	70	233	397	462	457	511	0	5	0	-5	-15	-15
96112918	7	15.0N	85.7E	45	104	233	322	325	358	602	0	0	0	-5	-5	-5
96113000	8	15.3N	86.9E	45	88	170	267	386	535	875	0	-5	-5	-5	-5	-30
96113006	9	15.3N	87.9E	50	50	119	252	370	487	694	-5	-10	-10	-5	-5	-35
96113012	10	15.1N	88.8E	55	49	159	300	436	578	780	0	0	-10	-10	-10	-40
96113018	11	14.7N	89.2E	55	72	163	258	355	464	666	0	0	-5	-5	-15	-20
96120100	12	14.3N	89.0E	55	62	162	255	323	357	382	0	0	5	10	0	0
96120106	13	14.0N	88.6E	55	13	18	37	54	79	109	0	0	0	-5	-15	-20
96120112	14	13.9N	88.1E	55	13	33	66	87	133	253	0	0	0	-10	-20	-50
96120118	15	13.9N	87.6E	50	13	24	37	66	130	214	0	0	-5	-20	-15	-50
96120200	16	13.9N	87.1E	50	13	30	56	116	154	242	0	5	-10	-15	-15	-50
96120206	17	13.9N	86.6E	45	0	11	52	99	163	293	0	-5	-20	-15	-25	-40
96120212	18	13.9N	86.1E	45	0	13	18	46	105	272	0	-10	-20	-15	-40	-40
96120218	19	14.0N	85.5E	50	11	16	34	94	161	276	-5	-15	-10	-20	-40	-35
96120300	20	14.1N	84.9E	55	39	76	136	210	295	366	0	0	10	-25	-40	-30
96120306	21	14.2N	84.3E	60	11	26	73	137	213	334	0	10	5	5	-20	-20
96120312	22	14.2N	83.8E	60	5	34	87	153	220	365	0	10	-5	-15	-20	-15
96120318	23	14.3N	83.3E	55	18	24	62	113	185	358	0	-10	-15	-10	-15	-5
96120400	24	14.4N	82.9E	55	26	65	122	175	252	375	0	-15	-10	-15	-20	-5
96120406	25	14.5N	82.6E	65	46	94	156	222	283	344	0	-5	0	-10	-15	5
96120412	26	14.5N	82.3E	75	52	104	171	238	296	325	-5	0	-10	-15	-15	10
96120418	27	14.5N	82.2E	75	73	122	162	212	274		0	10	-5	-10	-5	
96120500	28	14.5N	82.0E	75	54	105	149	221	270		0	5	-10	-10	-5	
96120506	29	14.4N	81.8E	65	8	30	56	103	117		-10	-5	-5	0	5	
96120512	30	14.2N	81.5E	60	18	34	42	50			-5	-10	-10	-5		
96120518	31	14.0N	81.3E	55	23	36	60	109			0	-5	0	5		
96120600	32	13.8N	81.1E	55	8	26	94	208			0	0	5	10		
96120606	33	13.5N	80.8E	50	5	42	141				0	10	15			
96120612	34	13.0N	80.5E	45	23	89	173				0	5	5			
96120618	35	12.5N	79.8E	35	18	107					0	5				
96120700		12.2N	78.8E	30												
96120706		12.1N	77.5E	20												
96120712		11.9N	76.3E	15												
		AVERAGE			31	78	147	223	310	443						
		# CASES			35	35	34	32	29	26						