

Preliminary Report  
Tropical Storm Elida  
30 August - 6 September 1996

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a. Synoptic History

Tropical Storm Elida formed from a tropical wave that generated a small area of deep convection between 10-15°N nearly every day on its crossing of the Atlantic Ocean and Caribbean Sea from 16-26 August 1996. The convection became more concentrated on the 30th of August over the eastern North Pacific Ocean a few hundred miles to the south-southwest of Acapulco. Dvorak technique T-numbers reached 2.0 that day and it is estimated that the system became a tropical depression at 1200 UTC on the 30th.

During its one week lifespan, the tropical cyclone decelerated from 13 kt to 2 kt and moved toward the northwest, except for a 24-hour period of erratic movement when the center was located just east of Socorro Island on 2 September (Table 1, Fig. 1). Bands of thunderstorms became more prominent and, despite some northeasterly wind shear, the depression became Tropical Storm Elida on the 2nd. Elida reached its estimated peak intensity of 55 kt on the night of the 3rd-4th while centered about 100 n mi west-southwest of the southern tip of the Baja California peninsula. Elida's subsequent progression into colder waters led to gradual weakening, a final disappearance of deep convection on the afternoon of the 5th and, on the 6th, dissipation of the surface circulation.

b. Meteorological Statistics

Figures 2 and 3 show Elida's estimated central pressure and maximum one-minute wind speed, respectively, versus time. Position and intensity estimates from satellite pictures were provided by the NOAA Synoptic Analysis Branch (SAB) and Tropical Analysis and Forecast Branch (TAFB), and by the Air Force Global Weather Central (AFGWC).

Surface observations supplemented the satellite data. There were no reports of sustained surface winds as high as 34 knots.

c. Casualty and Damage Statistics

No reports of casualties or damages were received.

d. Forecast and Warning Critique

Table 2 lists track forecast error statistics. For the limited sample, the official track errors were a little lower than the NHC average forecast errors in this basin.

The government of Mexico issued a tropical storm warning for the Baja California peninsula from Cabo San Lazaro southward at 2100 UTC on the 3rd. The warning was discontinued at 0600 UTC on the 5th, when the threat to the peninsula ended.

Table 1. Preliminary best track, Tropical Storm Elida, 30 August - 6 September 1996.

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
30/1200	13.4	103.5	1007	25	Trop. Depression
1800	14.1	104.6	1006	25	" "
31/0000	14.7	105.5	1005	30	" "
0600	15.3	106.3	1004	30	" "
1200	15.9	107.1	1003	30	" "
1800	16.5	107.7	1004	30	" "
1/0000	17.1	108.4	1005	30	" "
0600	17.4	108.8	1005	30	" "
1200	17.7	109.1	1005	30	" "
1800	18.1	109.3	1005	30	" "
2/0000	18.2	109.8	1005	30	" "
0600	18.3	110.2	1005	35	Tropical Storm
1200	18.6	110.2	1004	35	" "
1800	19.0	110.0	1003	35	" "
3/0000	19.6	110.1	1003	40	" "
0600	20.0	110.7	1002	40	" "
1200	20.6	111.1	1000	45	" "
1800	21.1	111.4	997	50	" "
4/0000	21.7	111.8	995	55	" "
0600	22.2	112.1	994	55	" "
1200	22.7	112.4	996	50	" "
1800	23.2	112.6	1000	40	" "
5/0000	23.5	112.7	1003	35	" "
0600	23.7	112.8	1004	35	" "
1200	23.9	112.9	1005	30	Trop. Depression
1800	24.1	113.0	1005	30	" "

Table 1 (cont.) Preliminary best track, Tropical Storm Elida, 30 August -6 September 1996.

6/0000	24.3	113.1	1005	30	Trop. Depression
0600	24.5	113.2	1005	25	" "
1200	24.7	113.3	1005	25	" "
1800					Dissipated
4/0600	22.2	112.1	994	55	Min. Pressure

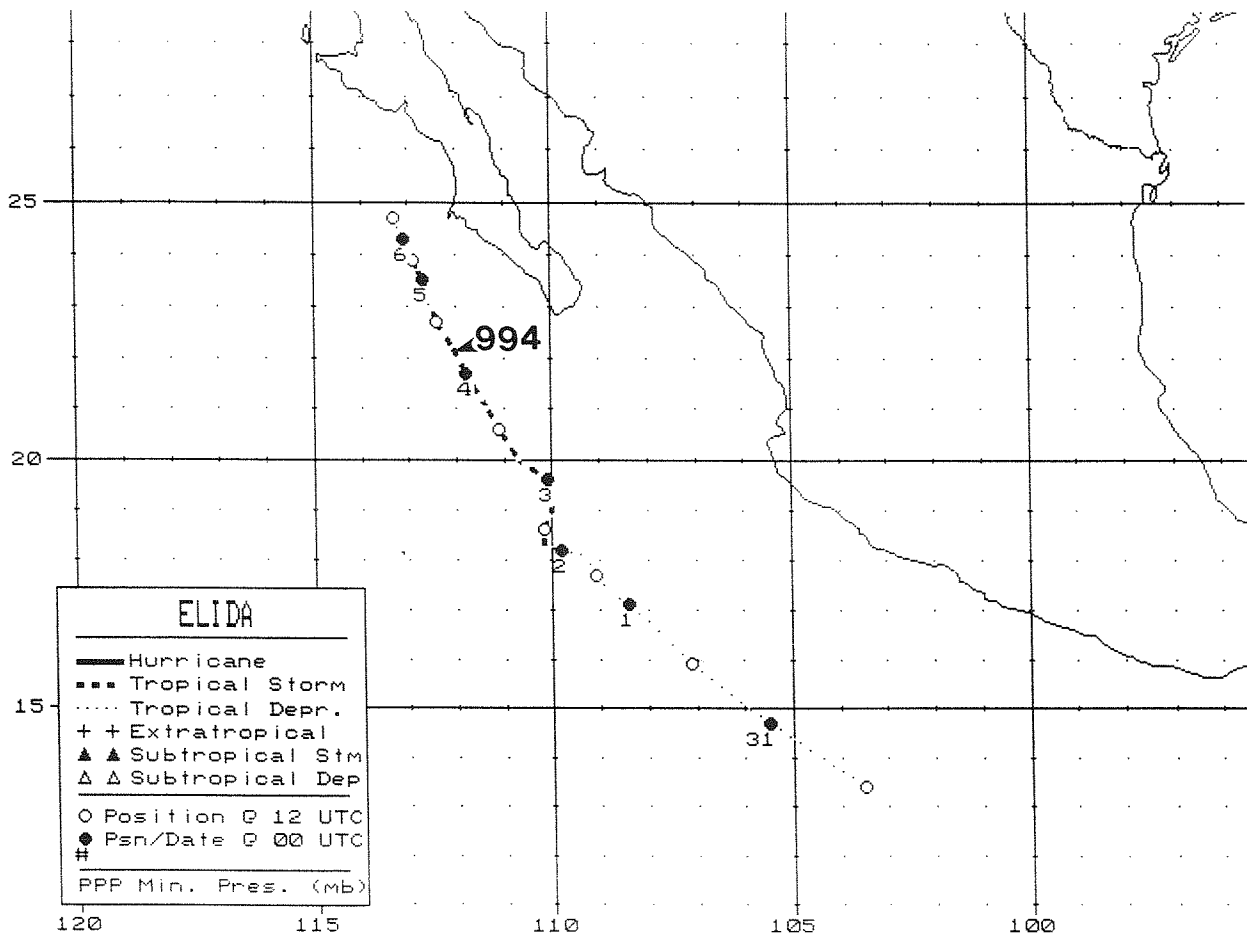


Figure 1. Best track positions for Tropical Storm Elida.

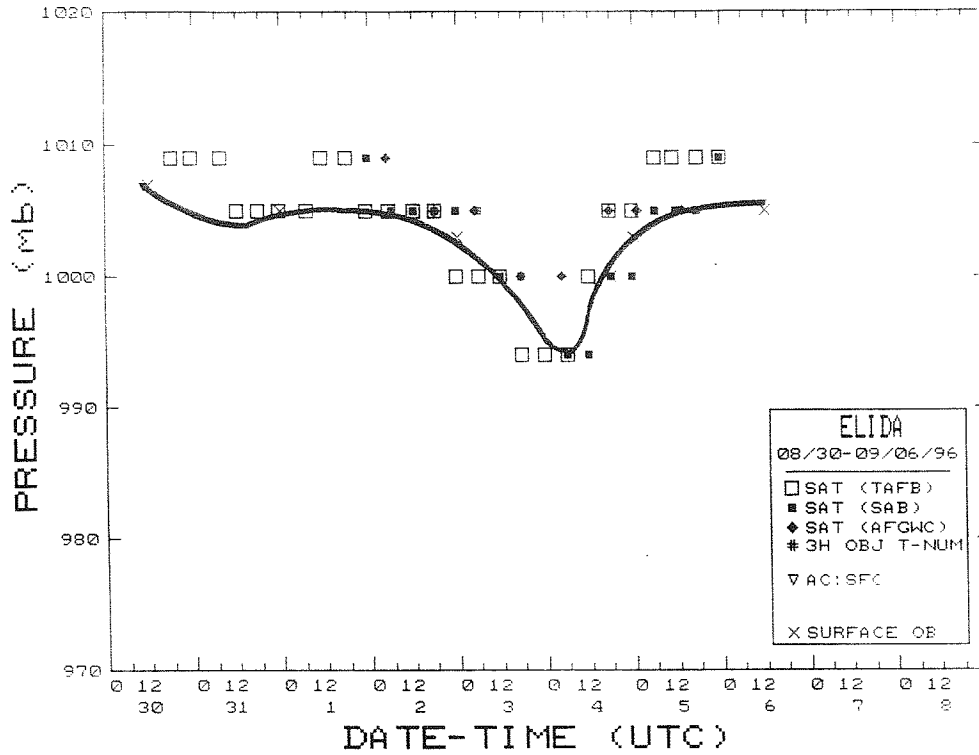


Figure 2. Best track central pressure curve for Tropical Storm Elida, 30 August-6 September 1996.

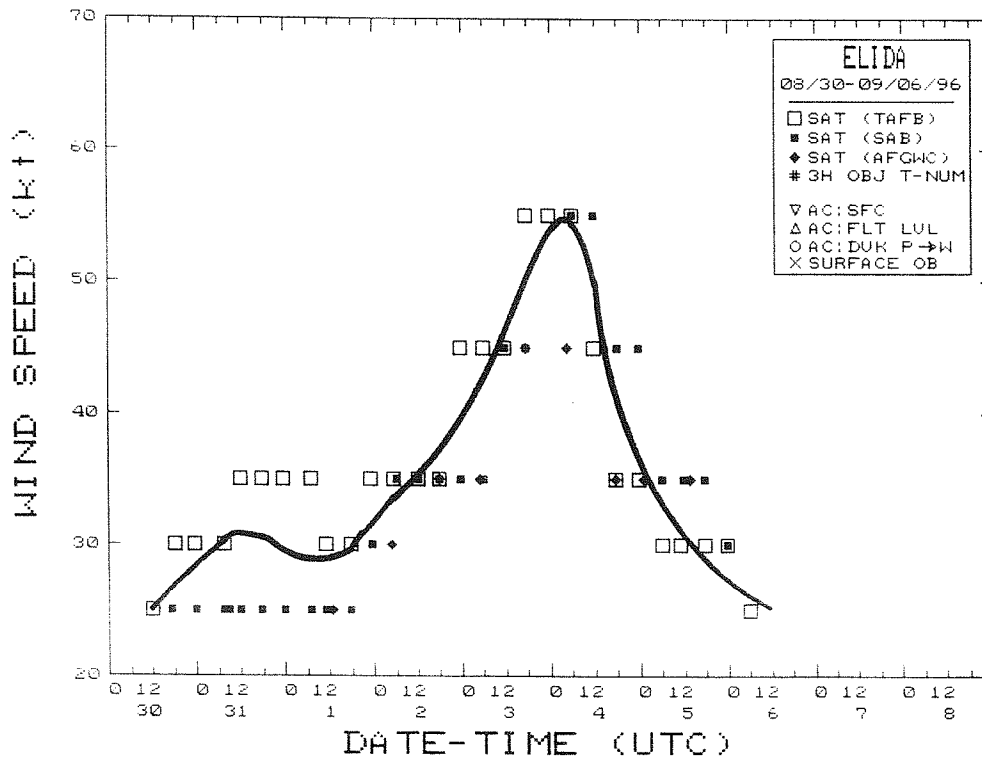


Figure 3. Best track maximum one-minute wind speed curve for Tropical Storm Elida, 30 August-6 September 1996.

Table 2

Preliminary forecast evaluation of Tropical Storm Elida  
Heterogeneous sample

(Errors in nautical miles for tropical storm  
and hurricane stages with number  
of forecasts in parenthesis)

Technique	Period (hours)				
	12	24	36	48	72
CLIP	38 (11)	62 (9)	103 (7)	138 (5)	199 (1)
GFDI	30 (11)	61 (9)	119 (7)	179 (5)	237 (1)
GFDL*	35 (5)	37 (4)	85 (3)	144 (2)	- (0)
LBAR	31 (11)	36 (9)	46 (7)	67 (5)	132 (1)
AVNI	45 (11)	87 (9)	161 (7)	230 (5)	451 (1)
BAMD	27 (11)	43 (9)	79 (7)	106 (5)	164 (1)
BAMM	30 (11)	47 (9)	75 (7)	109 (5)	303 (1)
BAMS	35 (11)	67 (9)	113 (7)	168 (5)	359 (1)
P91E	37 (11)	55 (9)	83 (7)	120 (5)	192 (1)
NGPI	38 (11)	50 (9)	86 (7)	145 (5)	218 (1)
UKMI	- (0)	- (0)	- (0)	- (0)	- (0)
NHC OFFICIAL	34 (11)	61 (9)	95 (7)	135 (5)	175 (1)

\* GFDL output not available until after forecast issued.