

Preliminary Report  
Tropical Storm Dalila  
24 July-2 August 1995

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a. Synoptic History

The origin of Tropical Storm Dalila\* can be traced to a tropical wave that moved westward from Africa to the tropical Atlantic Ocean on 11 July. The wave soon developed two areas of thunderstorm activity. One of these moved northwestward and showed signs of becoming a tropical depression before degenerating over the eastern Atlantic. The other, farther south, moved westward across the Atlantic Ocean and then the Caribbean Sea and Central America from the 11th through the 21st.

Thunderstorms associated with the wave became more concentrated several hundred miles to the southwest of the Gulf of Tehuantepec on the 23rd. Based on satellite pictures and surface analyses it is estimated that this system became a tropical depression at 1200 UTC the next day (Table 1 and Fig. 1). The cyclone was then in an environment of weak steering currents and, over the course of the following three days, moved slowly first toward the north-northeast and then toward the northwest. The low-level circulation was not strongly convergent, with satellite pictures and surface data indicating a fairly broad area of west-southwesterly winds to the south and southeast of the depression. Easterly shear displaced the deepest convection up to 60 n mi to the west of the low-level cloud center. Only slight strengthening occurred and although the cyclone became a tropical storm on the 25th, it still had only 35 knot winds late on the 27th.

A deep-layer anticyclone then developed to the north of the storm. Dalila accelerated to 12 knots, initially heading toward the west-northwest and then the northwest. The shear decreased and the storm reached its peak intensity of 55 knots on the 28th. Dalila weakened upon moving over cooler water southwest of the Baja California peninsula. It stopped generating deep convection late on the 31st and dissipated on 2 August.

b. Meteorological Statistics

Figures 2 and 3 show "best track" curves of estimated minimum central pressure and maximum one-minute wind speed versus time, respectively, and the data upon which they were based. The Air

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\* The name "Dalilia" (Spanish for Delilah) was used in 1981 and 1988 and changed, perhaps inadvertently, to Dalila in operational documents prior to the 1995 season.

Force Global Weather Center (AFGWC), the NHC Tropical Analysis and Forecast Branch (TAFB; TSAF in figures), and the NESDIS Synoptic Analysis Branch (SAB) supplied the Dvorak technique classifications.

There were no surface reports of tropical storm force winds related to Dalila.

A measure of the uncertainty of Dalila's early intensity estimates is given by comparing the 0000 UTC 27 July satellite classifications from the AFGWC--which stated that the system had dissipated--and the analyses of the TAFB and SAB--which had Dalila as a tropical storm.

c. Casualty and Damage Statistics

There were no casualties or damages reported in association with Dalila.

d. Forecast and Warning Critique

The magnitudes of official track forecast errors were, on average, comparable to the past averages and smaller than most of the objective guidance errors for this storm. Intensity forecast errors were also similar in size to past averages.

Watches and warnings were neither issued nor necessary.

Table 1. Preliminary best track, Tropical Storm Dalila,  
24 July-2 August 1995.

Date/Time (UTC)	Position		Pressure (mb)	Wind Speed (kt)	Stage
	Lat. (°N)	Lon. (°W)			
24/1200	13.1	108.3	1007	25	Tropical Depression
1800	13.3	108.2	1006	25	" "
25/0000	13.5	108.1	1005	30	" "
0600	13.8	108.0	1004	35	Tropical Storm
1200	14.0	108.0	1003	35	" "
1800	14.3	108.1	1003	35	" "
26/0000	14.6	108.3	1002	35	" "
0600	14.9	108.6	1002	35	" "
1200	15.0	108.8	1002	35	" "
1800	15.1	109.0	1002	35	" "
27/0000	15.2	109.2	1002	35	" "
0600	15.4	109.5	1002	35	" "
1200	15.5	110.1	1001	35	" "
1800	15.6	111.3	1001	35	" "
28/0000	15.7	112.5	1000	40	" "
0600	15.8	113.6	999	45	" "
1200	16.0	114.7	997	50	" "
1800	16.2	115.9	995	55	" "
29/0000	16.4	117.0	994	55	" "
0600	16.7	118.0	996	50	" "
1200	17.0	118.9	998	50	" "
1800	17.3	119.8	999	45	" "
30/0000	17.7	120.6	1000	45	" "
0600	18.1	121.2	1001	45	" "
1200	18.7	121.9	1002	40	" "
1800	19.2	122.3	1003	40	" "
31/0000	19.5	122.5	1004	40	" "
0600	19.6	122.7	1005	35	" "
1200	19.7	122.9	1005	35	" "
1800	19.8	123.2	1006	35	" "
1/0000	20.0	123.5	1006	30	Tropical Depression
0600	20.3	123.9	1006	30	" "
1200	20.7	124.6	1007	30	" "
1800	21.1	125.4	1007	25	" "
2/0000	21.2	126.3	1007	25	" "
0600	20.7	127.1	1008	20	Dissipating
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29/0000	16.4	117.0	994	55	Minimum Pressure

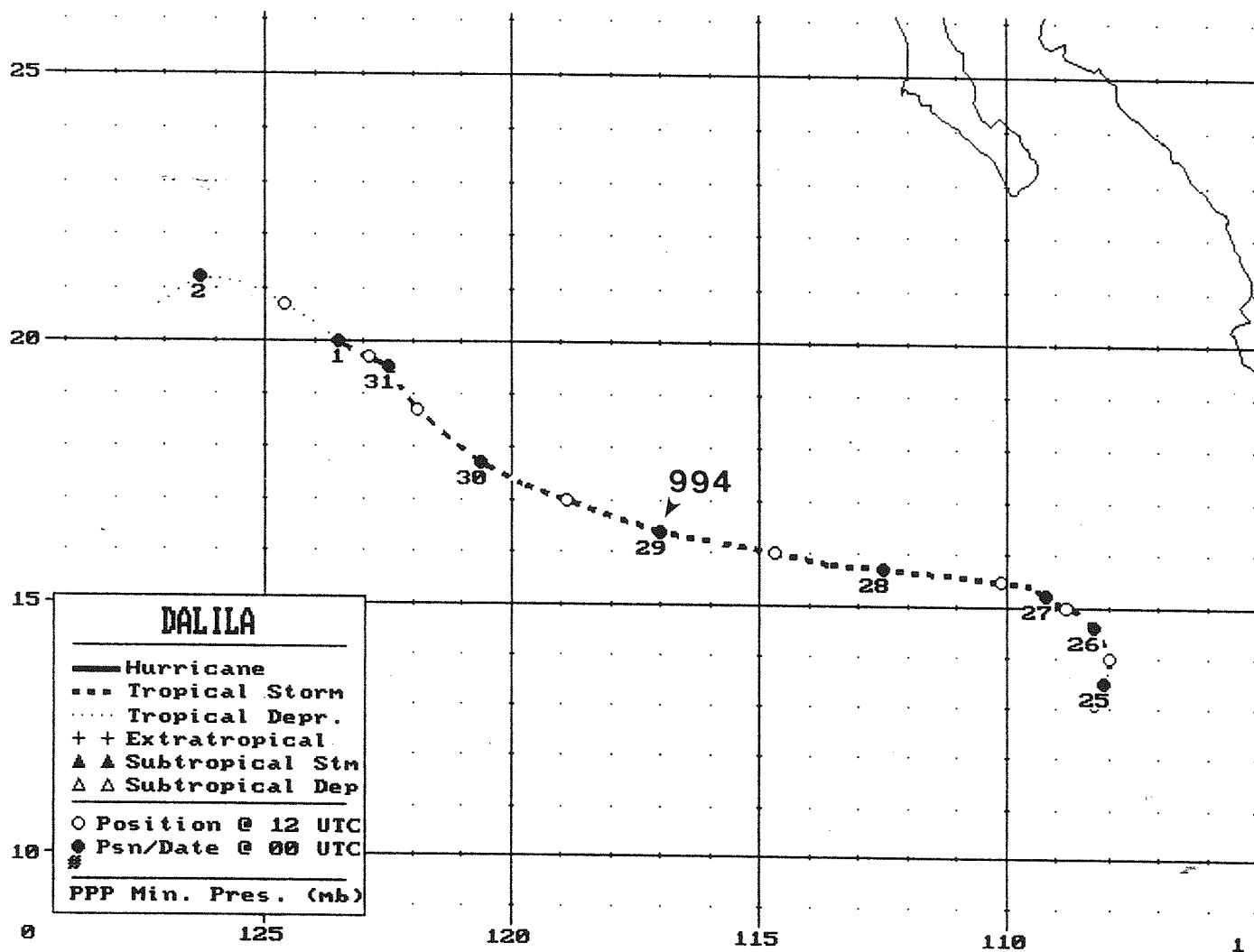


Fig. 1. Best track positions for Tropical Storm Dalila, 24 July-2 August 1995.

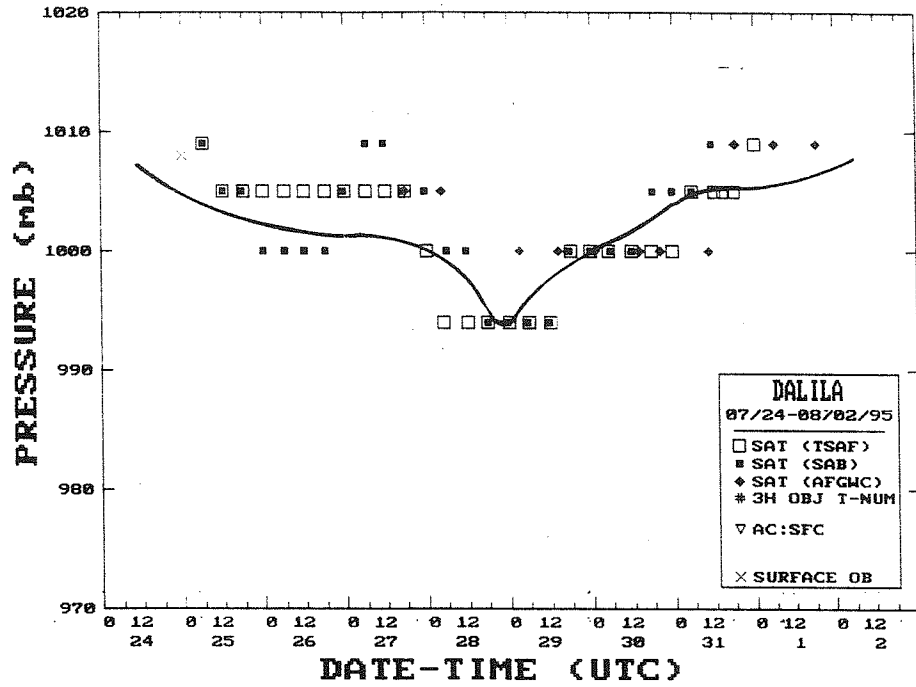


Fig. 2. Best track minimum central pressure curve for Tropical Storm Dalila.

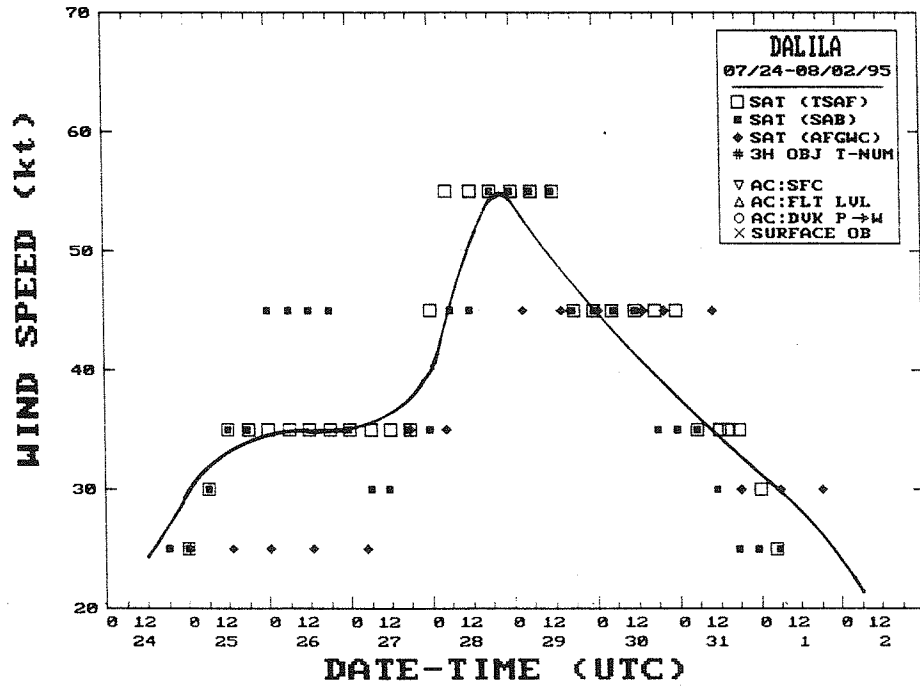


Fig. 3. Best track one-minute wind speed curve for Tropical Storm Dalila.