Tropical Cyclone Report Tropical Storm Fabio 3-8 August 2000

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a. Synoptic history

A tropical wave that moved off the west coast of Africa on 18-19 July moved into the Pacific on 26-27 July. Little development occurred in the west-northwestward moving wave until 1 August, when the first signs of a low-level circulation and convective organization were seen to the south of Manzanillo, Mexico. The system continued to become better organized, and a tropical depression formed from it about 540 n mi west-southwest of Manzanillo near 1200 UTC 3 August (Table 1 and Figure 1).

The depression initially moved west-northwestward about 13 kt. It then slowed and turned westward on 4 August while becoming a tropical storm. Despite the presence of easterly vertical shear, Fabio reached a peak intensity of 45 kt later that day. The storm turned toward the west-southwest while weakening on the 5th, and this motion continued for the rest of the cyclone's life. Fabio weakened to a depression on 6 August and dissipated as a tropical cyclone about 1170 n mi west-southwest of Cabo San Lucas, Mexico, on 8 August. The remnant swirl of low clouds persisted for several more days, eventually undergoing a Fujiwhara interaction with the remains of Hurricane Gilma.

b. Meteorological statistics

Table 1 shows the best track positions and intensities for Fabio, with the track plotted in Figure 1. Figures 2 and 3 depict the curves of minimum central sea-level pressure and maximum sustained one-minute average "surface" (10 m above ground level) winds, respectively, as a function of time. These figures also contain the data on which the curves are based: satellite-based Dvorak technique intensity estimates from the Tropical Analysis and Forecast Branch (TAFB), the Satellite Analysis Branch (SAB) of the National Environmental Satellite Data and Information Service (NESDIS), and the Air Force Weather Agency (AFWA).

There were no surface observations of tropical storm-force winds in Fabio. Scatterometers on the ERS-2 and QUIKScat satellites provided useful information on the center position and tropical storm-force wind radii.

c. Damage and casualty statistics

The National Hurricane Center has received no reports of damage or casualties associated with Fabio.

d. Forecast and warning critique

Fabio was a tropical storm for only 42 hr, so no meaningful evaluation of forecast errors is possible. The 12, 24, and 36 hr official forecast errors were 22, 33, and 58 n mi with 6, 4, and 2 cases respectively. These errors are smaller than the 10-year average errors of 37, 69, and 101 n mi for those times.

The 12, 24, and 36 hr official intensity errors for Fabio were 6, 10, and 15 kt. This is somewhat below the 10-year average of 7, 12 and 16 kt.

Watches and warnings were not issued nor needed for Fabio.

Table 1. Best track, Tropical Storm Fabio, 3 - 8 August 2000.

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
03/ 1200	16.4	113.6	1008	30	tropical depression
03 / 1800	16.6	114.9	1006	30	11
04 / 0000	16.7	115.8	1005	35	tropical storm
04 / 0600	16.8	116.6	1004	35	11
04 / 1200	16.8	117.5	1000	45	"
04 / 1800	16.8	118.5	1000	45	"
05 / 0000	16.7	119.5	1000	40	"
05 / 0600	16.7	120.4	1001	40	"
05 / 1200	16.5	121.4	1002	35	"
05 / 1800	16.3	122.4	1004	35	"
06 / 0000	16.2	123.2	1006	30	tropical depression
06 / 0600	15.9	124.0	1007	30	"
06 / 1200	15.5	124.8	1008	30	"
06 / 1800	15.1	125.4	1008	25	"
07 / 0000	14.9	125.9	1009	25	"
07 / 0600	14.7	126.5	1009	25	"
07 / 1200	14.5	127.1	1010	25	"
07 / 1800	14.3	127.7	1010	25	"
08 / 0000	14.2	128.3	1011	25	"
08 / 0600					dissipated
04 / 1200	16.8	117.5	1000	45	minimum pressure
04 / 1800	16.8	118.5	1000	45	"
05 / 0000	16.7	119.5	1000	40	"

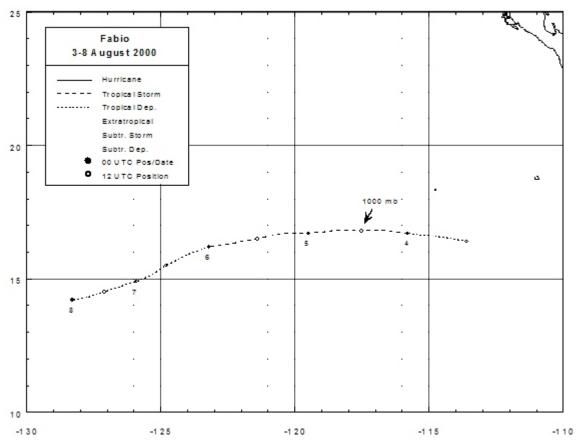


Figure 1. Best track of Tropical Storm Fabio, 3 - 8 August 2000.

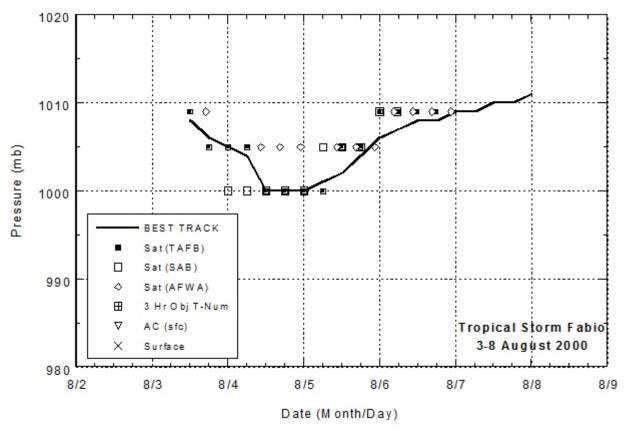


Figure 2. Best track minimum central pressure curve for Tropical Storm Fabio, 3 - 8 August 2000.

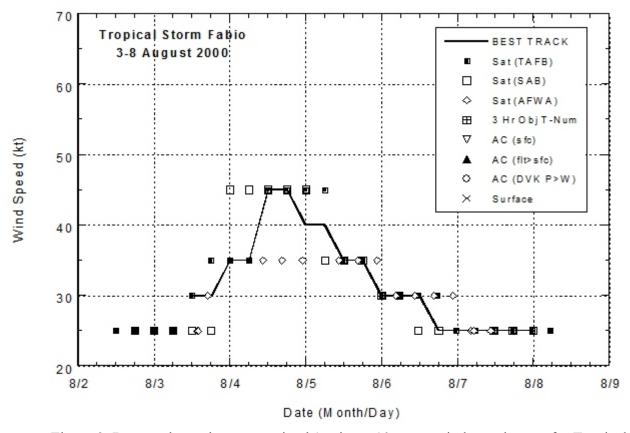


Figure 3. Best track maximum sustained 1-minute 10 meter wind speed curve for Tropical Storm Fabio, 3 - 8 August 2000.