

Tropical Cyclone Report
Tropical Storm John
28 August - 1 September 2000

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17 October 2000

John was a tropical storm for several days and moved from the eastern to the central Pacific basin. John did not affect land.

a. Synoptic history

John originated as a disturbance in the intertropical convergence zone (ITCZ). By 25 August, an area of cloudiness in the ITCZ became concentrated about 1200 n mi southwest of the southern tip of Baja California. A low-level cloud circulation became apparent from visible satellite imagery late on the 26th. The twelfth tropical depression of the season in the eastern Pacific basin formed early on the 28th about 1700 n mi west-southwest of Baja California, when convection became well organized. The best track begins at this time and best track positions are plotted in Fig. 1. Figures 2 and 3 show plots of best-track wind speed and pressure curves as a function of time, along with the data on which they are based. Table 1 lists best track position, maximum one-minute surface wind speed, and minimum central surface pressure at six-hour intervals.

John strengthened from a depression to an estimated 55-knot tropical storm in about 18 hours on the 28th, as a small central dense overcast feature developed. John's motion was slow and northwestward under the steering of a weak mid-level ridge to its north on the 28th and 29th and the intensity remained the same during this time. Early on the 30th, still moving slowly, John moved across 140°W longitude into the central Pacific basin. John reached its peak intensity of 60 knots on the 30th while its motion became very slow and erratic. It began moving slowly westward on the 31st and gradually lost convection and weakened under strong vertical shear and dissipated on 1 September about 750 n mi east-southeast of the Hawaiian Islands.

b. Meteorological statistics

Satellites were the single source of data for determining the best track given in Table 1 in the eastern Pacific basin. Best-track data west of 140°W longitude was provided by the Central Pacific Hurricane Center in Honolulu, Hawaii.

c. Casualty and damage statistics

There were no reports of death or damage.

d. Forecast and warning critique

There were six forecasts made in the eastern Pacific basin that verified while John was a tropical storm and there were only two 72-hour forecasts verified. The track errors were rather small ranging up to 103 n mi at 72 hours. There was a negative intensity bias during the formative stage and a slight positive bias thereafter.

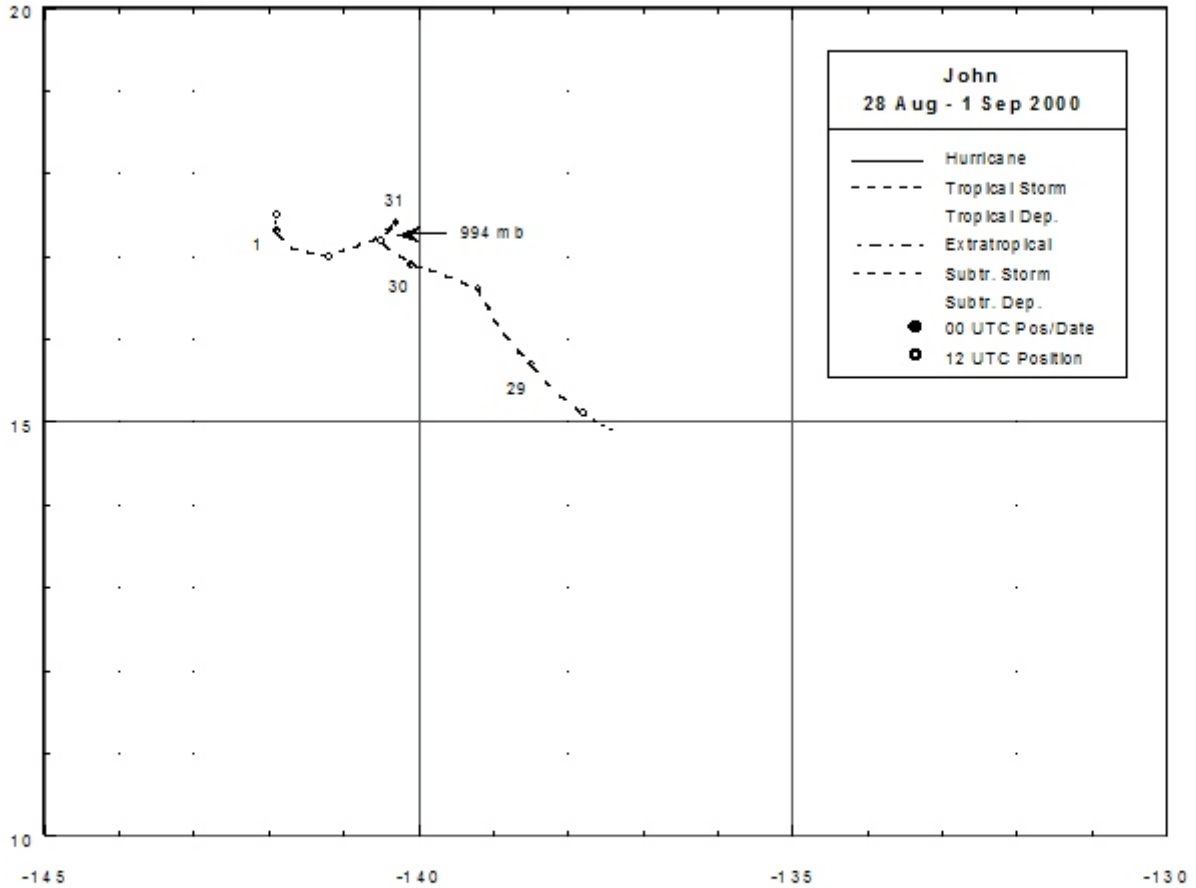


Fig. 1. Best track positions for Tropical Storm Ernesto, 1 - 3 September 2000.

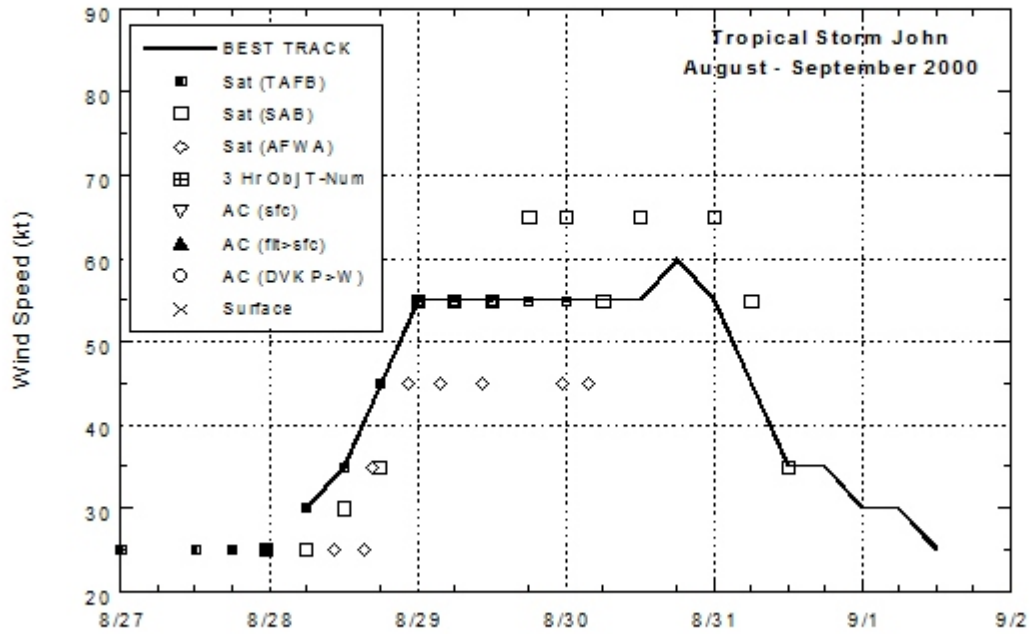


Fig. 2. Best track one-min. wind speed curve, 1 -3 September 2000.

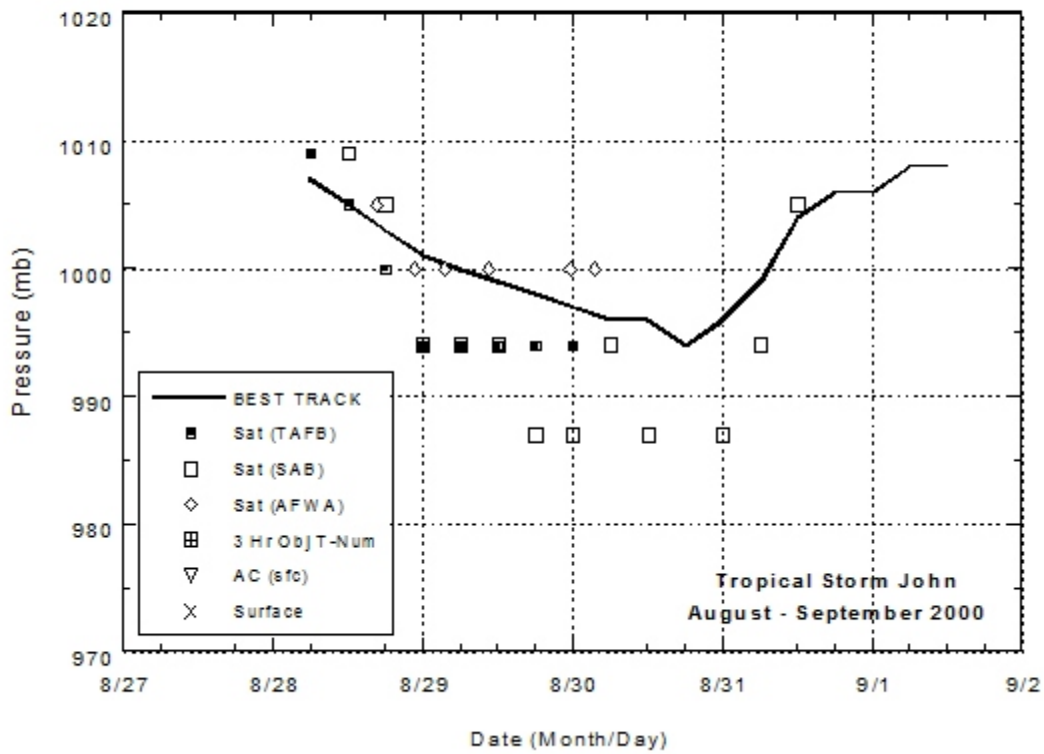


Fig. 3. Best track minimum central pressure curve, 1 -3 September 2000.

Table 1. Best track data for Tropical Storm John, 28 August - 1 September 2000. Data west of 140°W longitude provided by Central Pacific Hurricane Center.

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
28/0600	14.9	137.4	1007	30	tropical depression
1200	15.1	137.8	1005	35	tropical storm
1800	15.4	138.2	1003	45	“
29/0000	15.7	138.5	1001	55	“
0600	16.1	138.9	1000	55	“
1200	16.6	139.2	999	55	“
1800	16.8	139.7	998	55	“
30/0000	16.9	140.1	997	55	“
0600	17.1	140.4	996	55	“
1200	17.2	140.5	996	55	“
1800	17.3	140.4	994	60	“
31/0000	17.4	140.3	996	55	“
0600	17.2	140.6	999	45	“
1200	17.0	141.2	1004	35	“
1800	17.1	141.7	1006	35	“
01/0000	17.3	141.9	1006	30	tropical depression
0600	17.4	141.9	1008	30	“
1200	17.5	141.9	1008	25	“
30/1800	17.3	140.4	994	60	minimum pressure