

Tropical Cyclone Report
Tropical Storm Lidia
17 -19 September 2005
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National Hurricane Center
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a. Synoptic History

During the period from 10 to 15 September, two or three convectively active tropical waves moved over the eastern Pacific from the Caribbean Sea. It is hard to determine which wave precisely triggered short-lived Tropical Storm Lidia since the waves were close to each other, and their associated convection was disorganized. However, the thunderstorm activity of one of these waves became distinct and organized enough to classify the system as a tropical depression at 1200 UTC 17 September. The depression became Tropical Storm Lidia at 1800 UTC that day with maximum winds of 35 knots about 725 n mi southwest of Cabo San Lucas, Baja California. This was the time when the cloud pattern was best organized. Lidia moved little and never gained additional strength. Thereafter, its cloud pattern became disrupted by the much larger circulation associated with Tropical Storm Max, which was developing to the northeast of Lidia. The tropical storm then weakened and rapidly became absorbed by Max. The cyclone was no longer identifiable by 0600 UTC 19 September. The “best track” chart of the tropical cyclone’s path is given in Fig. 1, with the wind and pressure histories shown in Figs. 2 and 3, respectively. The best track positions and intensities are listed in Table 1.

b. Meteorological Statistics

Observations of Lidia (Figs. 2 and 3) include satellite-based Dvorak technique intensity estimates from the Tropical Analysis and Forecast Branch (TAFB), the Satellite Analysis Branch (SAB) and the U. S. Air Force Weather Agency (AFWA). Microwave satellite imagery from NOAA polar-orbiting satellites, the NASA Tropical Rainfall Measuring Mission (TRMM), the NASA QuikSCAT, and Defense Meteorological Satellite Program (DMSP) satellites were also useful to track Lidia.

c. Casualty and Damage Statistics

There are no reports of casualties or damages associated with Lidia.

d. Forecast and Warning Critique

Lidia was a short-lived tropical cyclone and there were few forecasts to verify. The average official track errors (with the number of cases in parentheses) were 69 (5), 144(3), and

230 (1) n mi for the 12, 24, and 36 h forecasts, respectively. These errors are greater than the average official track errors for the 10-yr period 1995-2004 of 37, 68, and 97 n mi, respectively.

Average official intensity errors were 5, 10, and 15 kt for the 12, 24, and 36 h forecasts, respectively. For comparison, the average official intensity errors over the 10-yr period 1995-2004 are 6, 11, 14 kt, respectively. Lidia was forecast to strengthen slightly but it weakened instead as it was absorbed by Max. However, initial tropical cyclone discussions noted that possibility of interaction with another cyclone and that only one of the systems was likely to survive.

No watches or warnings were required for Lidia.

Table 1. Best track for Tropical Storm Lidia, 17-19 September 2005.

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
17 / 1200	12.5	114.9	1008	25	tropical depression
17 / 1800	12.4	115.2	1005	35	tropical storm
18 / 0000	12.3	115.3	1005	35	"
18 / 0600	12.3	115.5	1005	35	"
18 / 1200	12.6	115.2	1005	35	"
18 / 1800	13.3	114.6	1005	30	tropical depression
19 / 0000	14.2	114.1	1007	25	"
19 / 0600					absorbed by Max
17 / 1800	12.4	115.2	1005	35	minimum pressure

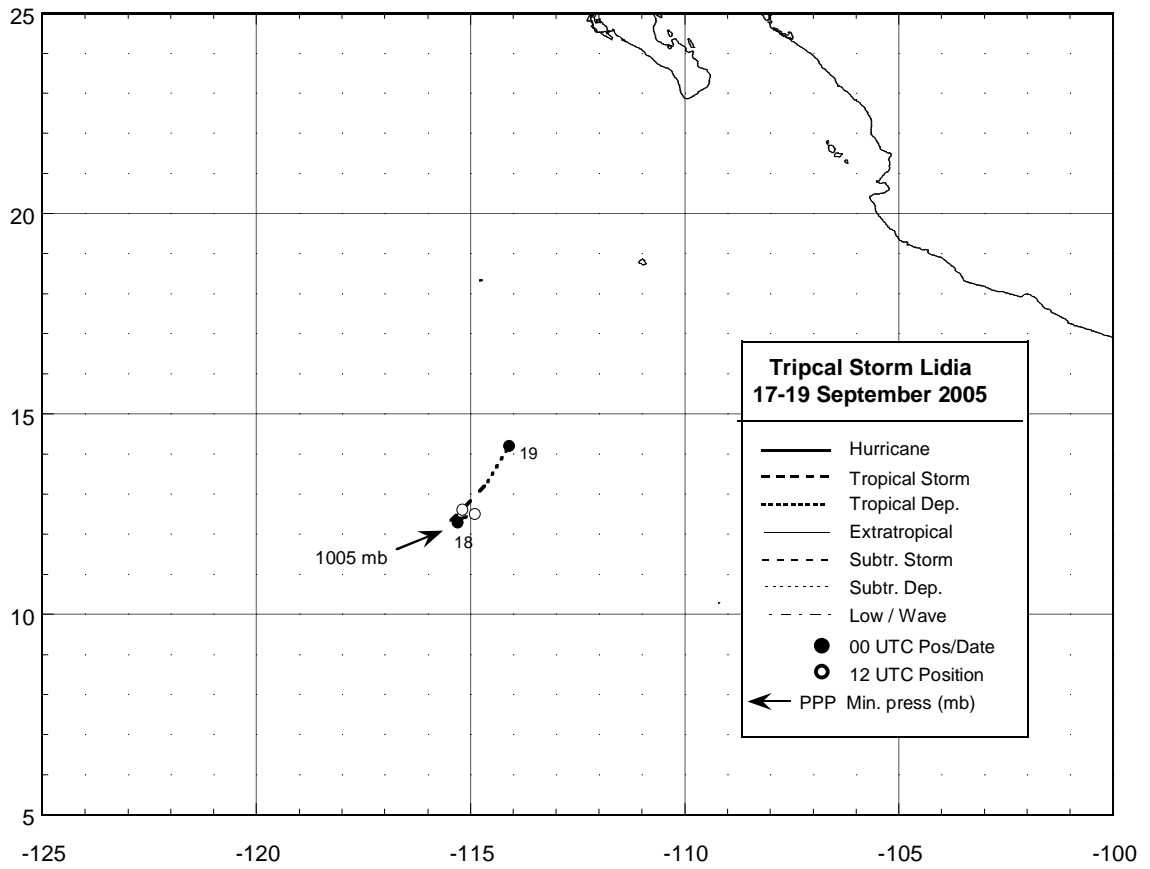


Figure 1. Best track positions for Tropical Storm Lidia, 17-19 September 2005.

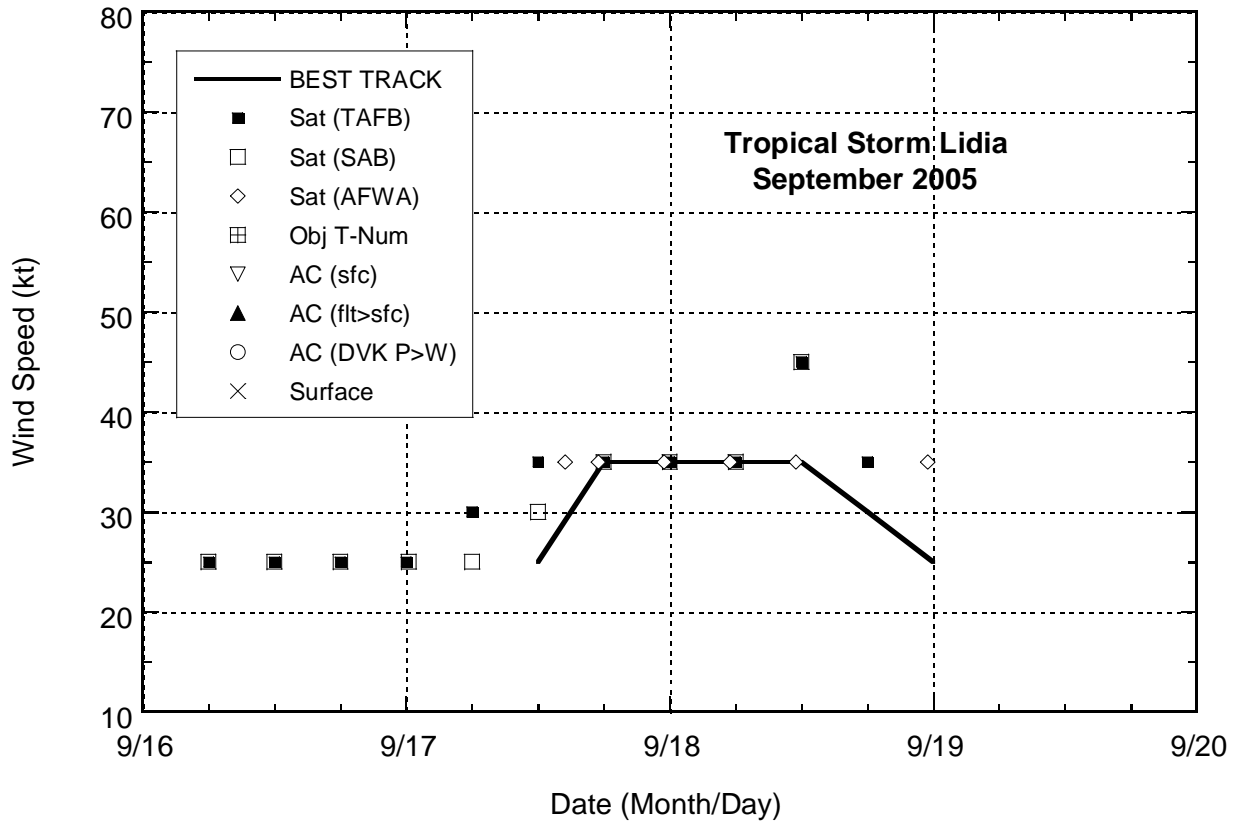


Figure 2. Selected wind observations and best track maximum sustained surface wind speed curve for Tropical Storm Lidia, 17-19 September 2005

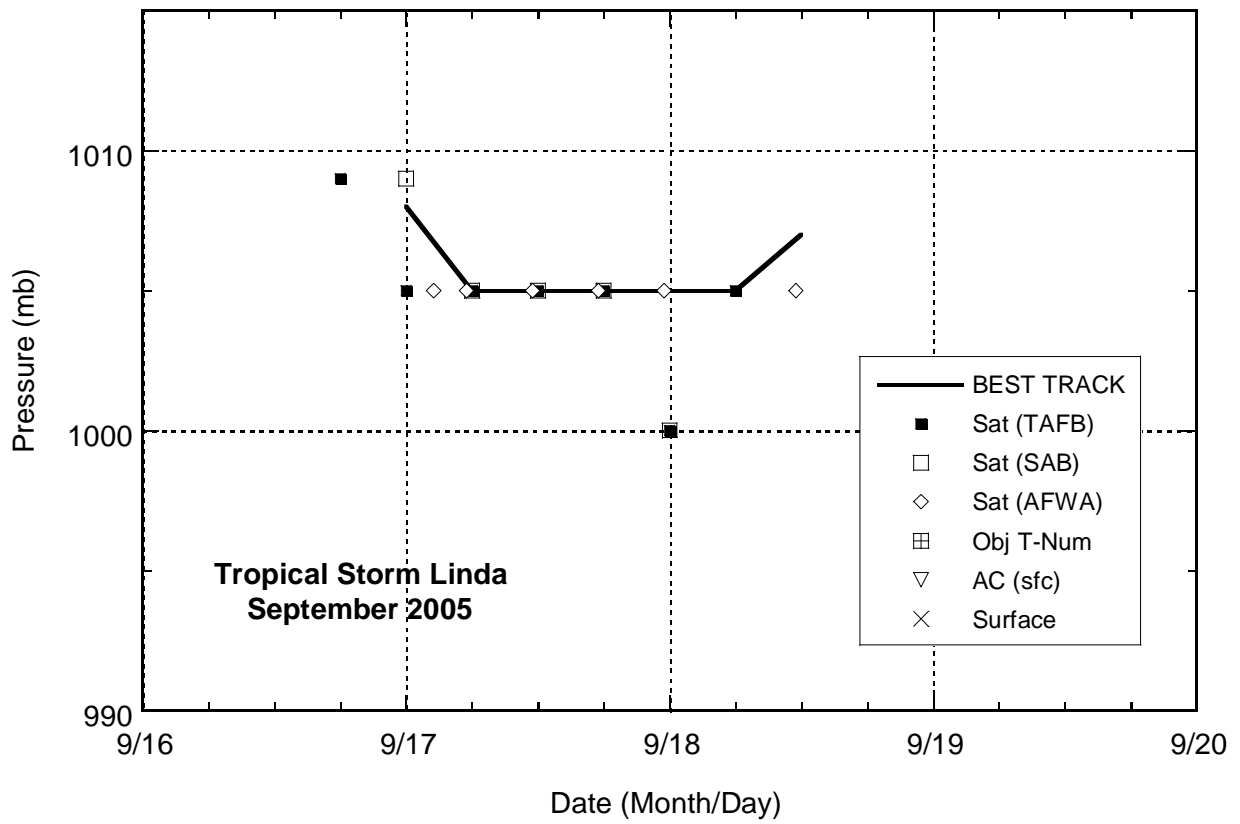


Figure 3. Selected pressure observations and best track minimum central pressure curve for Tropical Storm Lidia, 17-19 September 2005.