

Tropical Cyclone Report  
Tropical Depression Eleven-E  
(EP112010)  
3 - 4 September 2010

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Tropical Depression Eleven-E formed from the southern portion of the tropical wave that spawned Hurricane Danielle in the eastern tropical Atlantic. The southern portion of the wave continued westward at a low latitude across the tropical Atlantic and northern South America, eventually reaching the eastern Pacific on 29 August. The associated shower activity remained mostly over Central America until 2 September, when it increased significantly over the Gulf of Tehuantepec and the adjacent Pacific waters. A surface circulation gradually developed, and it is estimated that a tropical depression formed near 1800 UTC 3 September about 100 n mi southeast of Salina Cruz, Mexico. The “best track” chart of the tropical cyclone’s path is given in Fig. 1, with the best track positions and intensities listed in Table 1<sup>1</sup>.

After genesis, the depression moved northwestward across the Gulf of Tehuantepec, and it made landfall near Salina Cruz around 0700 UTC 4 September. The cyclone turned northward after landfall, and it degenerated to a low pressure area later that day over the Isthmus of Tehuantepec. In an uncommon occurrence, the low continued northward into the Bay of Campeche on 5 September, where it re-developed and became Atlantic Tropical Storm Hermine.

The ship **Aida** (call sign SBLI) reported tropical-storm-force winds four times on 3-4 September, including two reports well after landfall and well west of the center. This suggests these winds were more associated with a westerly monsoon flow west and south of the depression rather than directly associated with the tropical cyclone.

The genesis of Tropical Depression Eleven-E was not well anticipated. The disturbance that became the depression was not mentioned in the Tropical Weather Outlook (TWO) until 18 h before genesis occurred, and at that time it was only given a low chance (less than 30%) of development during the next 48 h. This was increased to a medium chance (30-50%) at the time of genesis, and to a high chance (60% or greater) only in a Special TWO issued after genesis.

There are no reports of casualties or damages directly related to the depression. However, the monsoon flow caused heavy rains over portions of Central America. These rains produced mud slides that caused 38 deaths in Guatemala.

A tropical storm warning was issued for the Pacific coast of Mexico from Boca de Pijijiapan westward to Puerto Angel at 2300 UTC 3 September. The warning was discontinued at 1200 UTC 4 September after the depression made landfall.

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<sup>1</sup> A digital record of the complete best track, can be found on line at <ftp://ftp.nhc.noaa.gov/atcf>. Data for the current year’s storms are located in the *bt* directory, while previous years’ data are located in the *archive* directory.

Table 1. Best track for Tropical Depression Eleven-E, 3 – 4 September 2010.

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
03 / 1800	14.9	94.1	1006	30	tropical depression
04 / 0000	15.3	94.5	1005	30	"
04 / 0600	16.1	95.1	1004	30	"
04 / 1200	16.7	95.6	1006	25	"
04 / 1800	17.5	95.6	1006	20	low
05 / 0000					moved into Atlantic basin to become Tropical Storm Hermine
04 / 0600	16.1	95.1	1004	30	minimum pressure
04 / 0700	16.2	95.2	1004	30	landfall near Salina Cruz, Mexico

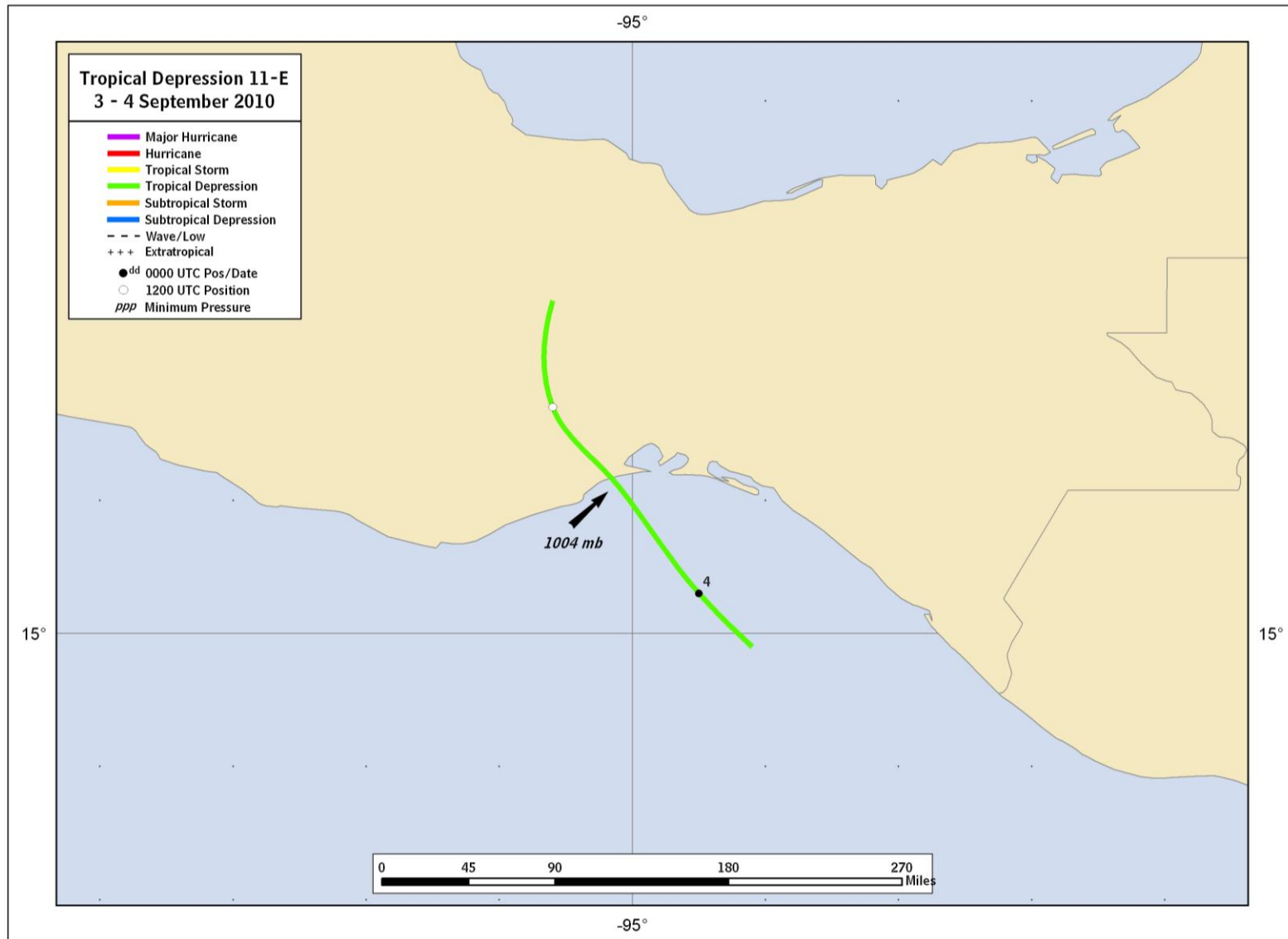


Figure 1. Best track positions for Tropical Depression Eleven-E, 3 – 4 September 2010.