

Preliminary Report
Tropical Depression Seven
5-7 September, 1999

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Final

Short-lived Tropical Depression Seven developed when a strong monsoon-type flow, which extended northward through eastern Mexico interacted with a tropical wave in the Bay of Campeche. Unexpectedly, on the 5th of September, early morning high resolution visible satellite images showed a well defined low-level circulation and organized convection in the Bay of Campeche. It was estimated that the tropical depression formed at 1800 UTC 5 September near Tampico. Because it was forecast to reach tropical storm status, a tropical storm warning was then issued for the coast of Mexico from Tampico to Matamoros. The depression was becoming better organized just before landfall as indicated by the well-defined center depicted in Fig 1. The depression moved slowly toward the northwest and moved inland around 1200 UTC 6 September in the vicinity of La Pesca (Fig.1) producing heavy rains over northwestern Mexico and southern Texas. The circulation of the tropical depression was clearly observed on the WFSO Brownsville radar. Table 1 is a listing, at six-hourly intervals of the best-track position, estimated minimum pressure and maximum 1-minute sustained surface wind speed.

Table 1. Best track, Tropical Depression Seven, 5- 7 September, 1999

Date/Time (UTC)	Position		Pressure (mb)	Wind Speed (kt)	Stage
	Lat. (°N)	Lon. (°W)			
5/1800	21.6	96.4	1006	25	tropical depression
6/0000	22.0	96.7	1006	30	"
0600	22.6	97.2	1006	30	"
1200	23.2	97.7	1006	30	"
1800	23.8	98.0	1006	30	"
7/0000	24.0	98.1	1006	30	"
0600	24.3	98.5	1006	30	"
1200	25.0	99.0	1007	25	dissipating
6/1200	23.2	97.7	1006	30	landfall near La Pesca

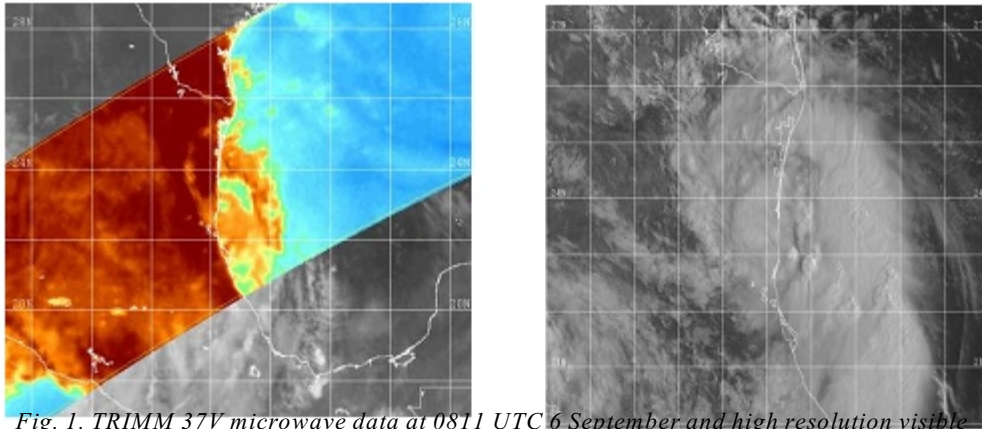


Fig. 1. TRIMM 37V microwave data at 0811 UTC 6 September and high resolution visible satellite image at 1445 UTC 6 September just after landfall provided by NRL.