Tropical Depression Five 17 - 19 July 1997

Max Mayfield National Hurricane Center 28 July 1997

Tropical Depression Five formed from a **tropical wave** that emerged from the west coast of Africa on 11 July. The wave moved westward across the tropical Atlantic, and finally began to show consistent evidence of a cloud system center. **Dvorak intensity estimates** began on 16 July. Deep convection associated with the wave became concentrated on satellite images on 17 July, and it is estimated that the disturbance became Tropical Depression Five around 0600 UTC on this day while centered about 475 nautical miles east of Barbados. Dvorak estimates from both **TAFB** and **SAB** were T1.5 at this time. The post-analysis "**best track**" is shown in Table 1 and in **Figure 1** (18K GIF).

The tropical depression moved west-northwestward between 10 and 15 knots. The first aircraft reconnaissance flight investigated the depression from a flight level near 1500 feet around 2100 UTC on 17 July and found 36 knot peak winds both north and south of the center. Although satellite intensity estimates never exceeded 30 knots from the SAB, TAFB or **AFGWC**, the fact that 36 knot winds were measured by the aircraft at a low level to the south of the center suggests that Tropical Depression Five might have been a minimal **tropical storm** earlier.

The depression soon lost its organization in satellite imagery, and an aircraft reconnaissance flight on the afternoon of 18 July had difficulty in finding a center. Satellite analysts declared the system too weak to classify at 0600 UTC on the 18th, at which time the depression is considered to have degenerated into a tropical wave. However, the system continued to show some signs of organization in satellite imagery, and another reconnaissance flight found a very

weak circulation center at 1200 UTC on 19 July in the northeastern Caribbean Sea. Convection associated with the wave moved over portions of the Lesser Antilles, Puerto Rico, the Bahamas and the Florida Straits. The tropical wave finally lost its identity over the eastern Gulf of Mexico on 23 July.

Date/Time (UTC)	ble 1. Best track, Tropic Position			Wind	
	Lat. (°N)	Lon. (°W)	Pressure (mb)	Speed (kt)	Stage
17/0600	12.0	51.5	1009	25	tropical depression
1200	12.5	52.7	1008	30	"
1800	13.0	54.0	1009	30	"
18/0000	13.6	55.3	1009	30	"
0600	14.1	56.6	1011	30	"
1200	14.6	57.8	1012	30	"
1800	14.8	58.9	1013	30	"
19/0000	15.0	60.0	1013	25	"
0600					Dissipated
17/1200	12.5	52.7	1008	30	minimum pressure

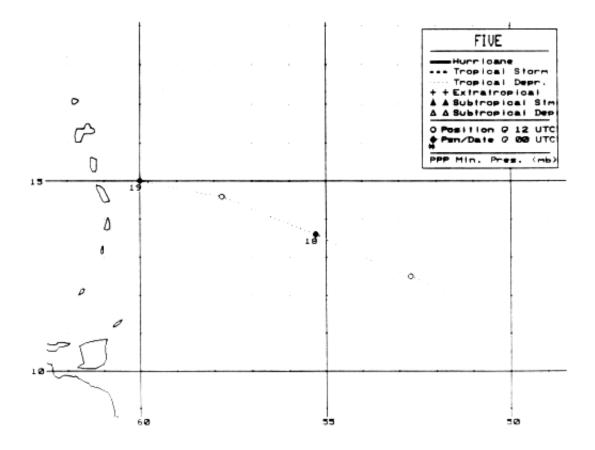


Figure 1. Best track positions for Tropical Depression Five.