

Tropical Cyclone Report
Tropical Depression Ten
(AL102011)
25-26 August 2011

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A well-defined tropical wave crossed the west coast of Africa on 22 August and shortly after the system entered the Atlantic Ocean, its accompanying deep convection temporarily diminished. Over the ensuing couple of days, as the system moved westward near 15 kt, the associated thunderstorm activity increased. By 0000 UTC 25 August the deep convection became organized into curved bands, indicating the formation of a tropical depression centered about 350 n mi west-southwest of the southernmost Cape Verde Islands. Figure 1 is a map of the “best track” of the tropical cyclone, and the best track positions and intensities are listed in Table 1.

The tropical cyclone was best organized right around the time of genesis, and in fact was closest to becoming a tropical storm at that time. Thereafter, moderate to strong northeasterly shear prevented the system from strengthening as it moved west-northwestward on the south side of a weak mid-level ridge. The depression’s deep convection pulsated and became less organized over the next day or so while the shear gradually increased. On 26 August, the cyclone slowed and turned toward the north-northwest as the mid-level ridge weakened. By 0000 UTC 27 August, practically all of the associated thunderstorms vanished, signifying that the system had degenerated into a post-tropical remnant low. Shortly thereafter, the low-level circulation opened up into a northeast-southwest-oriented trough, and the system dissipated over the far eastern tropical Atlantic.

Tropical Depression Ten’s formation was not particularly well anticipated. The disturbance from which the depression formed was first noted into the Tropical Weather Outlook (TWO) at 1200 UTC 23 August, 36 h prior to tropical cyclogenesis. At that time, the system was given a “low” (20 percent) probability of development. The development probability was raised to “medium” (30 percent) on the subsequent TWO, issued 24 h prior to genesis. A “high” (60 percent) probability of genesis was assigned only 6 h prior to the formation of the tropical cyclone.

There are no reports of casualties or damage associated with Tropical Depression Ten, and tropical cyclone watches or warnings were not required for this system.

Table 1. Best track for Tropical Depression Ten, 25-26 August 2011.

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
25 / 0000	12.3	29.0	1006	30	tropical depression
25 / 0600	12.7	30.1	1006	30	"
25 / 1200	13.1	31.2	1008	30	"
25 / 1800	13.5	32.1	1008	30	"
26 / 0000	13.9	32.9	1009	30	"
26 / 0600	14.4	33.3	1009	30	"
26 / 1200	14.8	33.5	1009	30	"
26 / 1800	15.3	33.7	1009	30	"
27 / 0000	15.8	33.9	1010	25	low
27 / 0600					dissipated
25 / 0000	12.3	29.0	1006	30	minimum pressure

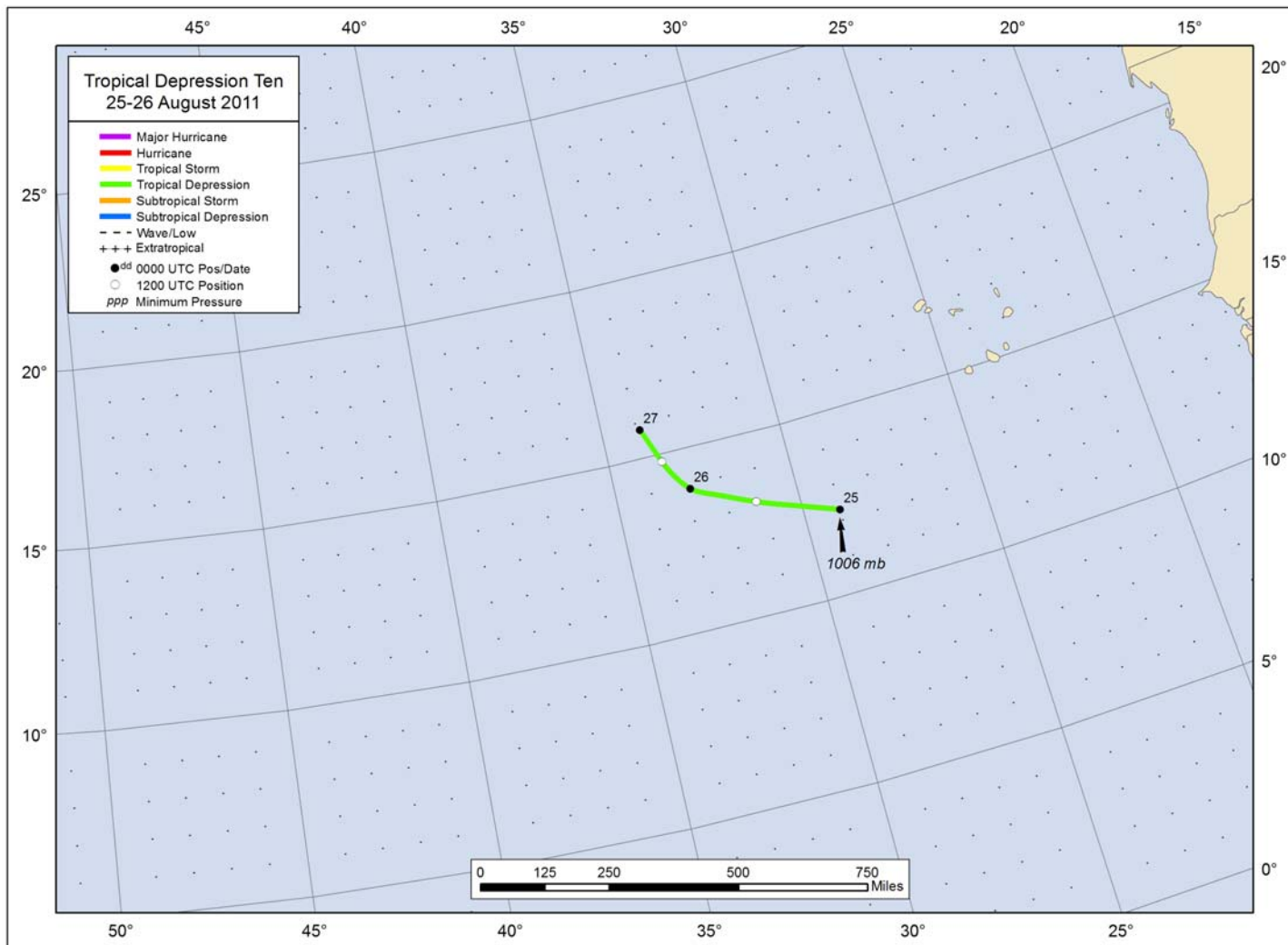


Figure 1. Best track positions for Tropical Depression Ten, 25-26 August 2011.