

NOTES AND CORRESPONDENCE

Comments on "Hurricane-Spawned Tornadoes"

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In their paper, Novlan and Gray (1974) discuss several aspects of the hurricane-spawned tornado, including the climatology and environmental winds.

Just exactly what is and what isn't a tornado has plagued investigators for years, especially with the short-lived squalls on the outskirts of the hurricane. This may have led to some of the discrepancies in the climatological table. Orton (1970) has indicated 115 tornadoes with Hurricane Beulah rather than the 141 listed by the authors. For Hurricane Carla, the USWB Storm Data lists 19 tornadoes, rather than 26 cited by the authors, with the majority of the 19 tornadoes in Louisiana rather than Texas—as suggested by Fig. 6.

The authors show plan views of the surface and 850 mb wind and temperature fields for hurricanes *with* and *without* tornadoes; with data averaged outward to 250 miles from the hurricane center *in all directions*. Since the majority of the hurricanes are initially moving

toward a northerly direction, this would place most of the hurricane over the data barren Gulf of Mexico. Actual data available are heavily biased toward the northern semicircle until the center is well inland and can no longer be classed as a hurricane.

The author's conclusion might be acceptable if they had indicated the actual number of reports that went into the averaging process at each grid point in the data sparse area, while the storm was still classed as a hurricane. Without it, I must conclude that there is, in reality, insufficient observational evidence to support their conclusions.

REFERENCES

- Novlan, David J., and Gray, William M., 1974: Hurricane-spawned tornadoes. *Mon. Wea. Rev.*, **102**, 476–488.
Orton, R., 1970: Tornadoes associated with Hurricane Beulah on September 19–23, 1967. *Mon. Wea. Rev.*, **98**, 541–547.