

Cocoa Beach Tornado

February 12, 2008

The parent storm which produced the EF0 tornado developed along the coast between Melbourne/Palm Bay and Satellite Beach around 2:00 PM and moved northward at 20-25 mph. The storm hugged the coast line through most of its life cycle before weakening as it moved off the coast just south of Playalinda Beach. The storm acquired a discernible inflow notch with corresponding cyclonic rotation around 2:10 PM as it moved north of Melbourne.

By 2:15 PM, the combination of both reflectivity and velocity signatures indicated the storm had a high probability of producing a waterspout or tornado. Given the storm's proximity to the coastline, both a Special Marine Warning and a Tornado Warning were necessary. At 2:22 PM, a Special Marine Warning was issued for the coastal and intracoastal waters of Brevard County from Cocoa Beach north to the Brevard-Volusia county line, quickly followed by a Tornado Warning for northeast Brevard County at 2:24 PM, effective through 3:00 PM.

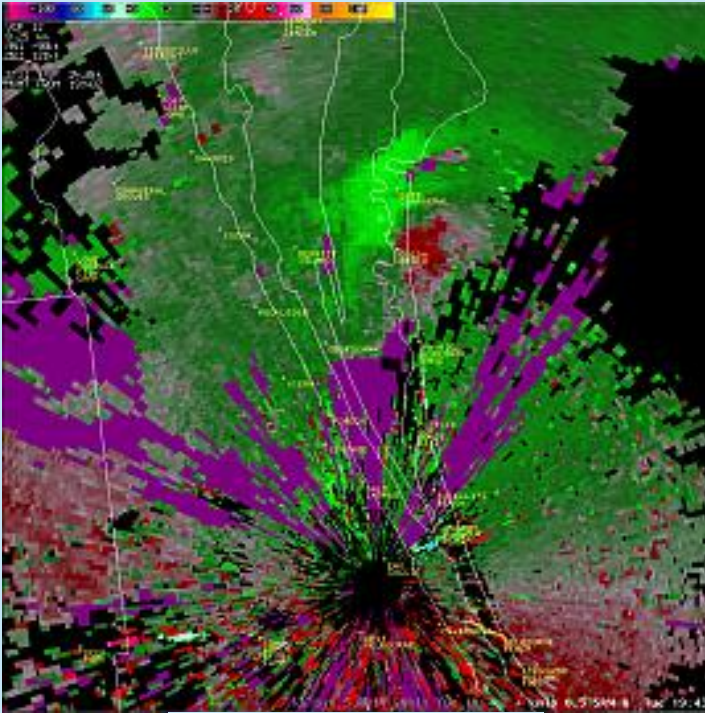
The storm continued moving north, with large hail reported at Cocoa Beach at 2:37 PM. At 2:45 PM, isolated tornadic damage was reported at the Diplomat Condominiums at the 3100 block of Hwy. A1A. The storm continued to display a strong tornadic signature in both the reflectivity and velocity data fields as it moved through Port Canaveral in vicinity of the Kennedy Space Center. At 2:58 PM, the Tornado Warning for northeast Brevard County was extended to 3:30 PM.

The storm was the result of a lifting warm front which brought a rapid increase to surface dew points, as well as southerly low-level winds, to promote rotating updrafts within erupting thunderstorms. The tornado potential was accentuated given the storm's proximity to the coast.

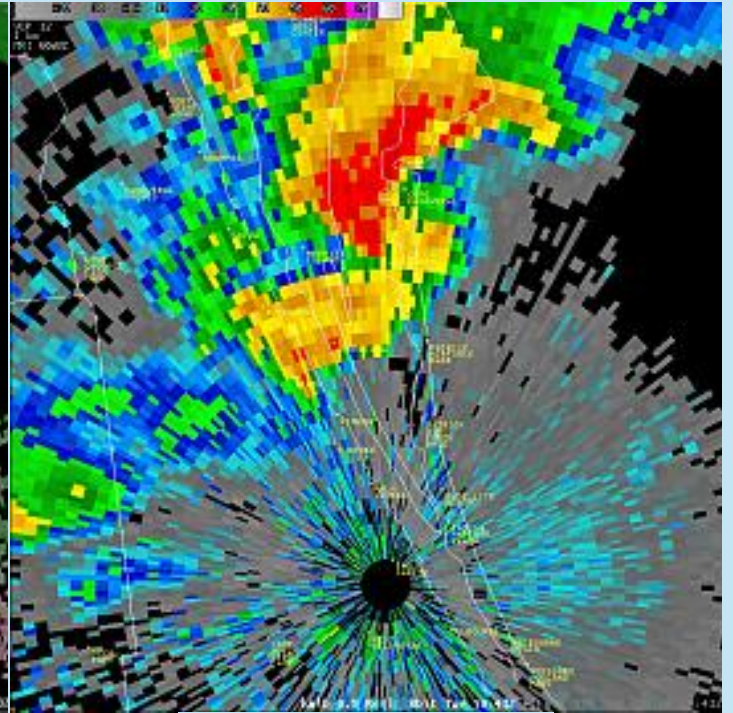


The tornado touched down and produced damage at the red dot, at 3100 N. A1A in Cocoa Beach

Radar Imagery:



[Click for a loop of larger images](#)
Storm Relative Motion at 2:43 PM (1943 GMT)



[Click for a loop of larger images](#)
Reflectivity at 2:43 PM (1943 GMT)



Part of the roof from Diplomat Condo where it landed
on nearby Windrush Condo



Unroofed Diplomat Condo building.



Illustrating the proximity of Diplomat Condo to Windrush Condo. The roof from building in foreground hit the building behind it.

This illustrates how the roof structure of the Diplomat Condo appeared like prior to the tornado. This is a another building in the Diplomat Condo complex.

Related products Issued by the NWS office in Melbourne:

- Special Marine Warning at 2:22 PM
- Tornado Warning at 2:24 PM
- Severe Weather Statement at 2:35 PM
- Local Storm Report at 2:43 PM
- Severe Weather Statement at 2:46 PM
- Local Storm Report at 2:56 PM
- Tornado Warning at 2:58 PM
- Severe Weather Statement at 3:10 PM
- Special Marine Warning at 3:20 PM
- Public Information Statement at 3:25 PM
- Local Storm Report at 3:21 PM
- Severe Weather Statement at 3:30 PM
- Local Storm Report at 3:42 PM
- Public Information Statement at 6:25 PM
- Public INformation Statement at 7:55 PM