

National Weather Service Melbourne, Florida

http://www.srh.noaa.gov/mlb/

Tropical Storm Debby brings tornadoes, wind damage and heavy rain to East Central Florida

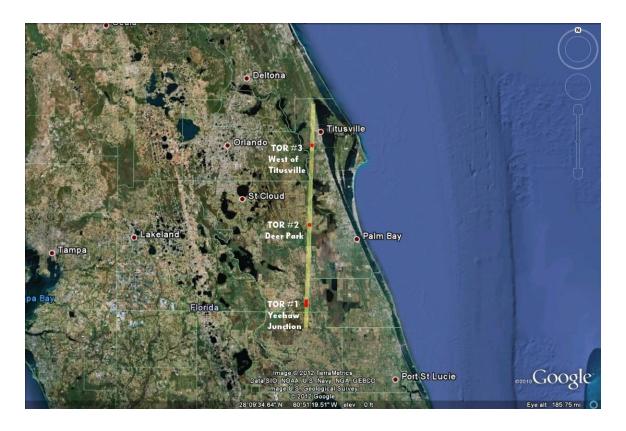
June 23-27, 2012

Tropical Storm Debby formed in the south central Gulf of Mexico on June 23, then moved slowly northeast. The storm made landfall near Steinhatchee in the Florida Big Bend on June 26^{th.}. Debby quickly weakened into a tropical depression after making landfall, and moved east across North Central Florida, exiting into the Atlantic early June 27th. East Central Florida experienced several effects from Debby, especially as the storm drifted into the northeast Gulf of Mexico June 24-26th. Four tornadoes were confirmed in East Central Florida, along with one area of straight line wind damage and heavy rainfall amounts approaching nine inches from northeast Lake County to northwest Volusia County.



Tornado Damage:

There were four tornado touchdowns confirmed the evening of June 24th associated with East Central Florida in an environment conducive to tornado formation that existed to the east of Debby in the northeast Gulf of Mexico. Three of these tornadoes formed within a long-tracked mini-supercell that traveled north from northern Okeechobee County to northern Brevard County. The fourth tornado was associated with a long-track mini-supercell that moved from Polk into southeast Lake County (see Tornado 4, below).



Tornado #1:Yeehaw Junction RATING: EF-0

ESTIMATED PEAK WIND: 65-75 MPH
PATH LENGTH /STATUTE/: 3.1 MILES
PATH WIDTH /MAXIMUM/: 100 YARDS
FATALITIES: 0

FATALITIES: 0
INJURIES: 0

START DATE JUN 24 2012 START TIME: 955 PM EDT

START LOCATION: 2 S YEEHAW JUNCTION / OSCEOLA COUNTY / FL

START LAT/LON: 27.6694 / -80.8961

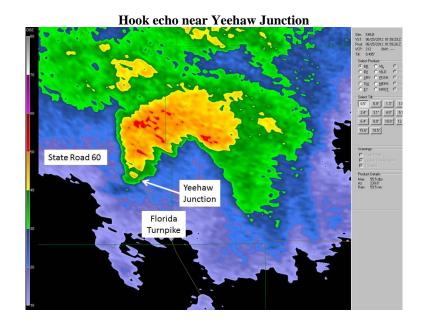
END DATE: JUN 24 2012 END TIME: 1001 PM EDT

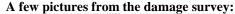
END LOCATION: 1 NNW YEEHAW JUNCTION / OSCEOLA COUNTY / FL

END_LAT/LON: 27.7101 / -80.8962

SURVEY SUMMARY:

This was the first of three tornadoes associated with the Tropical Storm Debby mini super-cell that tracked from Okeechobee County to Brevard County. The tornado touched down in a wooded area south-southwest of Highway 441, about one mile south of the State Road 60 intersection then traveled north for 3.1 miles, crossing Highway 441, State Road 60 and the Florida Turnpike. Considerable tree damage, mainly to pines and small brush occurred along the path. The tornado moved between the turnpike toll booth and an adjacent vacant motel, producing minor structural damage and downing trees. The debris damaged a parked car in the toll booth parking lot. One vehicle driving on the turnpike sustained damage from a falling tree. The damage location was also consistent with a very strong rotational signature, reflectivity hook echo and tornado debris signature on the NWS Melbourne Dual-Pol radar data. Osceola County Emergency Management assisted with the damage survey.

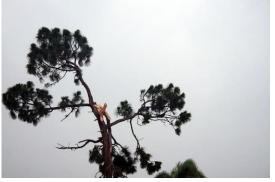












TORNADO #2 Deer Park **RATING: EF-0**

65-70 MPH ESTIMATED PEAK WIND: PATH LENGTH /STATUTE/: 1.2 MILES PATH WIDTH /MAXIMUM/: 50 YARDS

FATALITIES: INJURIES: 0

START DATE: START TIME:

JUN 24 2012 1046 PM EDT 2 NE DEER PARK / OSCEOLA COUNTY / FL 28.1035 / -80.8760 START LOCATION:

START LAT/LON:

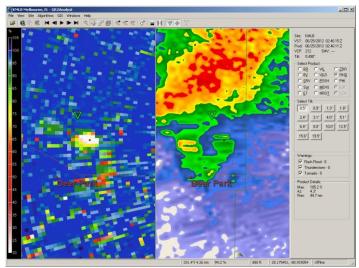
END DATE: END TIME:

JUN 24 2012 1047 PM EDT 3 NNE DEER PARK / OSCEOLA COUNTY / FL 28.1202 / -80.8763 END LOCATION:

END LAT/LON:

SURVEY SUMMARY:

This was the second of three tornadoes associated with the Tropical Storm Debby mini-supercell that tracked from Okeechobee County to Brevard County. The tornado produced a damage path through a wooded area within the Kempfer Ranch and Deseret Ranch in far eastern Osceola County, about one mile north of U.S. Highway 192. The damage path cut through an area of mainly pine trees and damaged a fence. The damage location was also consistent with a very strong rotational signature, reflectivity hook echo, and tornado debris signature on the NWS Melbourne Dual-Pol radar data. Osceola County Emergency Management assisted with the damage survey.



Tornado debris indicated (left) and hook echo near Deer Park (right).

A couple of pictures from the damage survey:





TORNADO #3 West of Titusville **RATING: EF-0**

ESTIMATED PEAK WIND: 50-55 MPH PATH LENGTH /STATUTE/: 1.2 MILES PATH WIDTH /MAXIMUM/: 25 YARDS FATALITIES:

INJURIES: 0

JUN 24 2012 START DATE: START TIME: 1137 PM EDT

START LOCATION: 5 SSW TITUSVILLE / BREVARD COUNTY / FL

START LAT/LON: 28.5314 / -80.8614

END DATE: JUN 24 2012 1138 EDT END TIME:

END TIME.
END LOCATION: 4 SW TITUSVILLE / BREVARD COUNTY / FL

28.5483 / -80.8617 END LAT/LON:

SURVEY SUMMARY:

This was the third and final tornado associated with the Tropical Storm Debby mini-supercell that tracked from Okeechobee County to Brevard County. The tornado touched down south of State Road 50 and west of Interstate 95, to the west of Titusville. This location

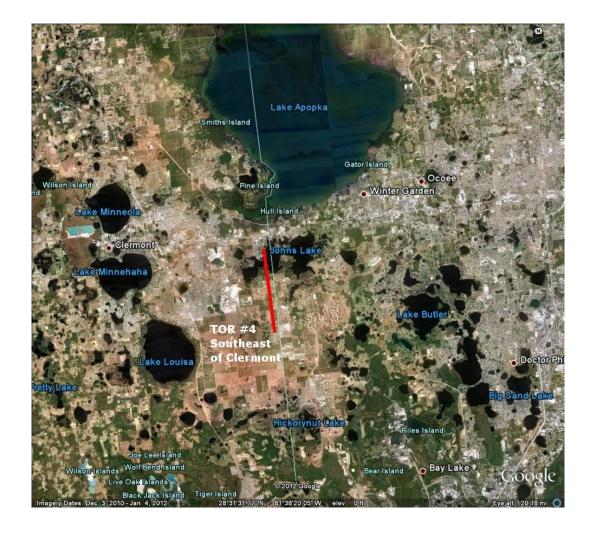
was also just north of The Great Outdoors RV park. Two motorists traveling on State Road 50 observed the tornado briefly touch down, illuminated by lightning strikes just to the south of their locations. One of the motorists provided a detailed eyewitness account of the tornado touchdown. While there was little for the tornado to damage in the immediate area, a path of downed tree limbs was noted immediately after passage of the tornado, from near the entrance of the RV Park to State Road 50.

TORNADO #4 Southeast Lake County RATING: EF-0

RATING: 65-70 MPH ESTIMATED PEAK WIND: PATH LENGTH /STATUTE/: 3.7 MILES PATH WIDTH /MAXIMUM/: 100 YARDS FATALITIES: INJURIES: START DATE: JUN 24 2012 START TIME: 859 PM EDT 8 SE CLERMONT / LAKE COUNTY / FL START LOCATION: 28.4849 / -81.6609 START LAT/LON: END DATE: JUN 24 2012 905 PM EDT END TIME: END LOCATION: 5 WSW WINTER GARDEN / LAKE COUNTY / FL 28.5386 / -81.6622 END LAT/LON:

SURVEY SUMMARY:

A mini-supercell traveled from central Polk County to southeast Lake County and produced an EF-0 tornado along a discontinuous path of 3.7 miles within Winter Garden in Lake County, just west of the Orange County line. The storm crossed Johns Lake, producing tornado damage on both the south and immediate north sides of the lake. Numerous trees were damaged as far south as Avalon Woods Drive, with four adjacent homes at the northern end of the path in the Suburban Shores subdivision experiencing property damage. This damage consisted of large branches on a vehicle, a large tree on the roof of a home, and other homes with significant damage to pool screen enclosures.



NWS Melbourne is appreciative of Osceola, Lake and Brevard County Emergency Management Agencies for their assistance with these storm surveys and to the many citizens who contributed detailed observations which allowed for a more complete record of tornado impacts.

Winds:

The highest winds associated with Debby in East Central Florida occurred on June 25-26. The highest sustained wind was 26 knots from the southwest at Fort Pierce the afternoon of June 26^{th} , and the highest peak gust was 42 knots from the southwest at Vero Beach, also occurring the afternoon of June 26^{th} .

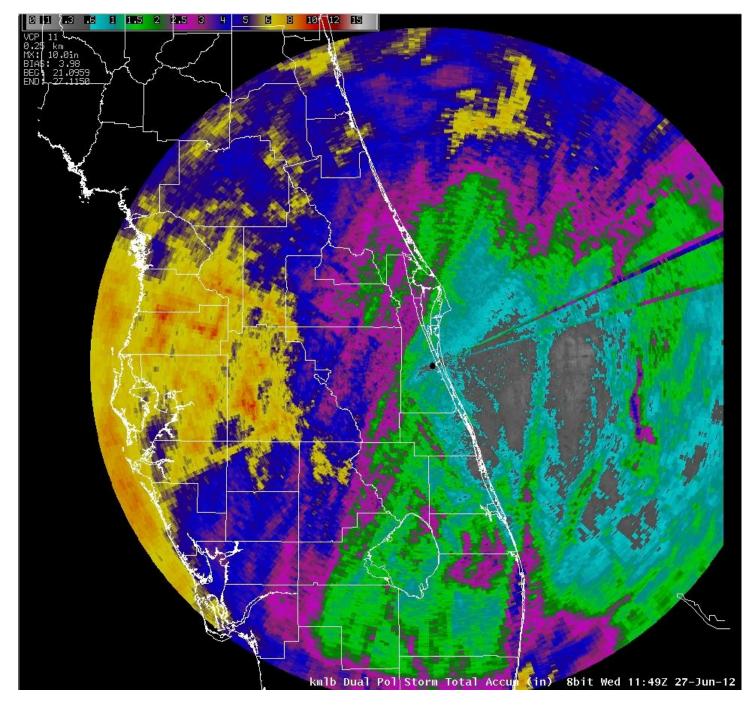
There were straight-line wind damage reports from the Kissimmee area the evening of June 24th.

Below is a sampling of lowest pressures/highest winds in East Central Florida:

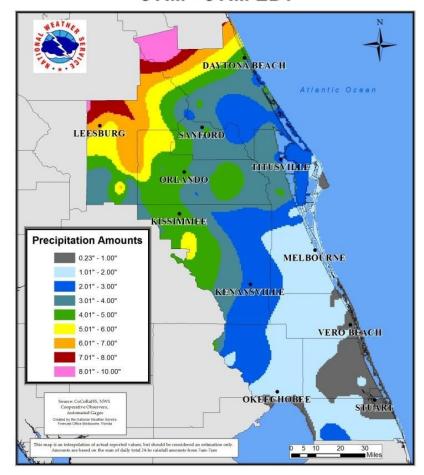
METAR OBSERVAT: NOTE: ANEMOMETI	ER HEIGHT					
LOCATION ID LAT LON DEG DECIMAL	MIN D. PRES T (MB) (ATE/ IME UTC)	MAX SUST (KT)	DATE/ TIME (UTC)	PEAK GUST (KT)	DATE/ TIME (UTC)
KDAB-DAYTONA BI 29.18 -81.05	EACH INTL,	FL				
KFPR-FORT PIERO 27.49 -80.36				26/1854	210/038	26/1712
KLEE-LEESBURG : 28.82 -81.80		/2204	190/025	25/2227	140/034	25/0307
KMLB-MELBOURNE 28.10 -80.64		/2202	200/025	26/1805	200/033	26/1804
KMCO-ORLANDO II 28.42 -81.31			200/025	26/1845	180/033	25/2118
KORL-ORLANDO EX 28.54 -81.33	XECUTIVE, 1001.9 26	FL /2152	190/027	25/2107	190/039	25/2105
KSFB-ORLANDO/S 28.77 -81.24			170/026	25/1957	200/034	25/2151
KVRB-VERO BEACI 27.65 -80.41	•	/2153	210/031	26/1839	220/042	26/1838
KOBE-OKEECHOBE 27.26 -80.85			190/023	26/1755	190/034	26/1755
KCOF-PATRICK A			220/027	27/0955	200/039	26/1850
KSUA-WITHAM FI 27.18 -80.22	ELD/STUART 9999.0 /	,FL	220/025	26/2147	190/040	26/1547
KTIX-SPACE COAS 28.51 -80.79					200/034	26/1747
KISM-KISSIMMEE 28.29 -81.43	GATEWAY A 9999.0 /	P	220/020	26/2050	190/036	26/1750
KXMR-CAPE CANA 28.46 -80.56				26/1255	180/036	26/1911
NON-METAR OBSE NOTE: ANEMOMETI MINUTES INDICA!	ER HEIGHT FED UNDER 1	IN METER MAXIMUM	SUSTAINE	O WIND IF H	KNOWN) IN
LOCATION ID LAT LON DEG DECIMAL	MIN D	ATE/	MAX		PEAK GUST (KT)	DATE/ TIME (UTC)
TOWER #22 28.80 -80.74				25/0450		25/0450

Rainfall:

Rainfall amounts from Debby varied widely, but in general the highest totals occurred north and west of Interstate 4. The highest totals were from Lake and northwest Volusia Counties, with a few rainfall reports between seven and nine inches. Several locations along the Space and Treasure Coasts had rain totals below one inch, but there were pockets of rainfall up to 3 to 4 inches in the southern sections. East Central Florida was in the process of coming out of a drought, so only temporary, nuisance flooding occurred.



Tropical Storm Debby Rainfall Totals June 23 - June 27, 2012 8 AM - 8 AM EDT



DEBBY STORM TOTAL RAINFALL FROM 1200 UTC JUN 23 UNTIL 1200 UTC JUN 27

CITY/TOWN LAT LON DEG DECIMAL	COUNTY	ID	RAINFALL (IN)
2 W PIERSON 29.23 -81.50	INLAND VOLUSIA COUN	LGRF1	8.82
2.5 SSW LADY LAKE 28.89 -81.94	NORTHERN LAKE COUNT	FL-LK-16	7.95
5 SW ASTOR PARK 29.09 -81.59	NORTHERN LAKE COUNT	CRAF1	7.07
1.2 SE EUSTIS 28.84 -81.67	NORTHERN LAKE COUNT	FL-LK-2	7.00
LISBON 28.87 -81.79	NORTHERN LAKE COUNT	LSBF1	7.00
3.6 E CLERMONT 28.55 -81.70	SOUTHERN LAKE COUNT	FL-LK-16	6.94
7 S CLERMONT	SOUTHERN LAKE COUNT	CLRF1	6.21

28.45	-81.75

LEESBURG AIRPORT 28.80 -81.88	LAKE	KLEE	5.79
6.9 SSE CLERMONT 28.45 -81.72	SOUTHERN LAKE COUNT	FL-LK-13	5.72
2 E ZELLWOOD 28.72 -81.57	ORANGE	PLTF1	5.54
6.1 SW WINTER GARDEN 28.49 -81.65	ORANGE	FL-OR-20	5.53
5.7 NW DELAND 29.09 -81.36	INLAND VOLUSIA COUN	FL-VL-9	5.48