



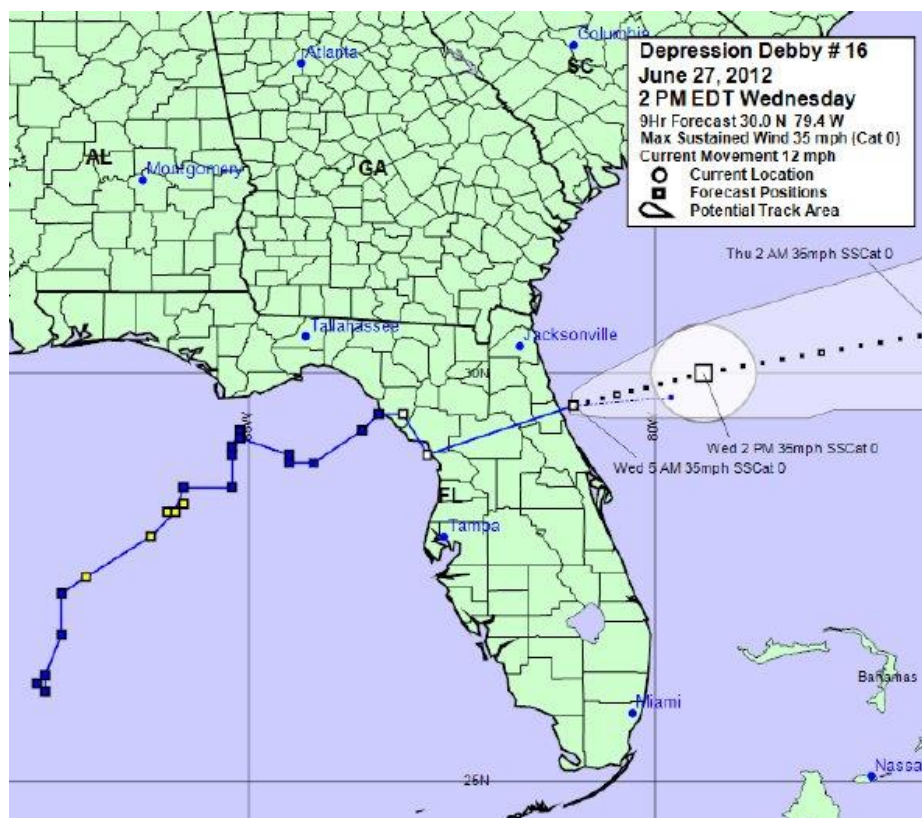
# National Weather Service Melbourne, Florida

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

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

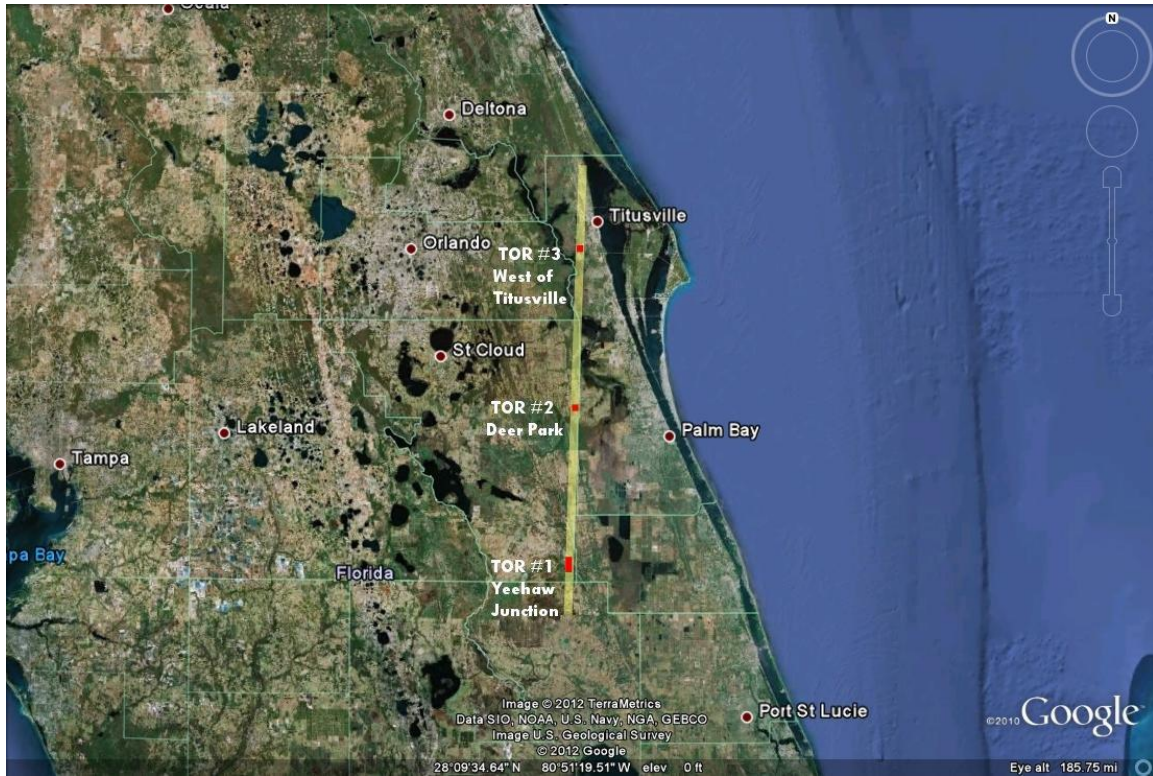
June 23-27, 2012

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<sup>th</sup>. Debby quickly weakened into a tropical depression after making landfall, and moved east across North Central Florida, exiting into the Atlantic early June 27<sup>th</sup>. East Central Florida experienced several effects from Debby, especially as the storm drifted into the northeast Gulf of Mexico June 24-26<sup>th</sup>. 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 24<sup>th</sup> 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  
 INJURIES:                        0

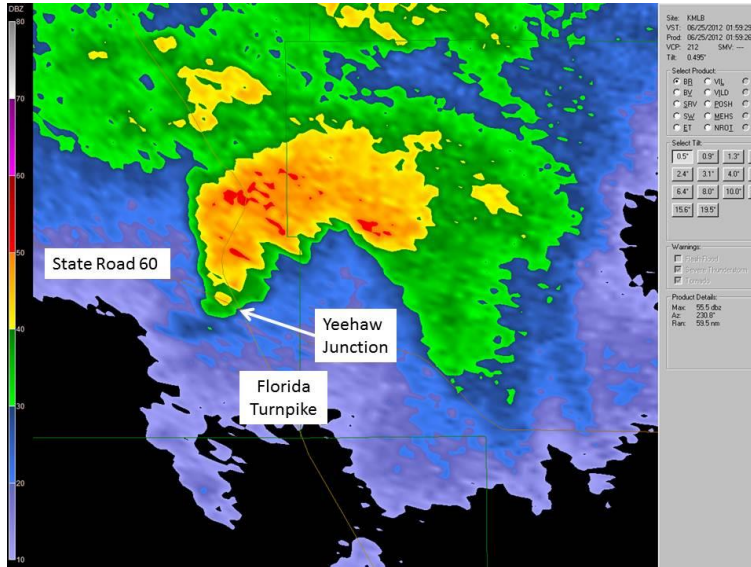
START DATE                    JUN 24 2012  
 START TIME:                    955 PM EDT  
 START LOCATION:            2 S YEEHAW JUNCTION / OSCEOLA COUNTY / FL  
 START LAT/LON:              27.6694 / -80.8961

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.

**Hook echo near Yeehaw Junction**



**A few pictures from the damage survey:**



**TORNADO #2 Deer Park**

**RATING: EF-0**

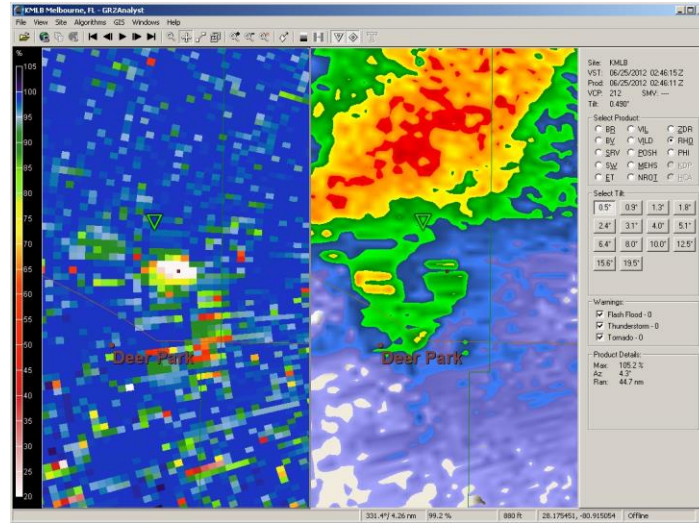
ESTIMATED PEAK WIND: 65-70 MPH  
 PATH LENGTH /STATUTE/: 1.2 MILES  
 PATH WIDTH /MAXIMUM/: 50 YARDS  
 FATALITIES: 0  
 INJURIES: 0

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

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

## 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: 0  
INJURIES: 0

START DATE: JUN 24 2012  
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  
END TIME: 1138 EDT  
END LOCATION: 4 SW TITUSVILLE / BREVARD COUNTY / FL  
END LAT/LON: 28.5483 / -80.8617

## 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:	EF-0
ESTIMATED PEAK WIND:	65-70 MPH
PATH LENGTH /STATUTE/:	3.7 MILES
PATH WIDTH /MAXIMUM/:	100 YARDS
FATALITIES:	0
INJURIES:	0
START DATE:	JUN 24 2012
START TIME:	859 PM EDT
START LOCATION:	8 SE CLERMONT / LAKE COUNTY / FL
START LAT/LON:	28.4849 / -81.6609
END DATE:	JUN 24 2012
END TIME:	905 PM EDT
END LOCATION:	5 WSW WINTER GARDEN / LAKE COUNTY / FL
END_LAT/LON:	28.5386 / -81.6622

### **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<sup>th</sup>, and the highest peak gust was 42 knots from the southwest at Vero Beach, also occurring the afternoon of June 26<sup>th</sup>.

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

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

METAR OBSERVATIONS...

NOTE: ANEMOMETER HEIGHT IS 10 METERS AND WIND AVERAGING IS 2 MINUTES

LOCATION	ID	MIN	DATE/	MAX	DATE/	PEAK	DATE/
LAT	LON	PRES	TIME	SUST	TIME	GUST	TIME
DEG	DECIMAL	(MB)	(UTC)	(KT)	(UTC)	(KT)	(UTC)
-----							
KDAB-DAYTONA BEACH INTL, FL							
29.18	-81.05	1001.6	26/2248	170/021	25/1927	160/032	25/2023
KFPR-FORT PIERCE/ST LUCIE CO INTL, FL							
27.49	-80.36	1003.9	26/2151	210/029	26/1854	210/038	26/1712
KLEE-LEESBURG INTL, FL							
28.82	-81.80	1000.9	26/2204	190/025	25/2227	140/034	25/0307
KMLB-MELBOURNE INTL, FL							
28.10	-80.64	1002.9	26/2202	200/025	26/1805	200/033	26/1804
KMCO-ORLANDO INTERNATIONAL, FL							
28.42	-81.31	1001.9	26/2304	200/025	26/1845	180/033	25/2118
KORL-ORLANDO EXECUTIVE, FL							
28.54	-81.33	1001.9	26/2152	190/027	25/2107	190/039	25/2105
KSFB-ORLANDO/SANFORD, FL							
28.77	-81.24	1001.2	26/2241	170/026	25/1957	200/034	25/2151
KVRB-VERO BEACH, FL							
27.65	-80.41	1003.9	26/2153	210/031	26/1839	220/042	26/1838
KOB-OKEECHOBEE COUNTY AP, FL							
27.26	-80.85	9999.0	/	190/023	26/1755	190/034	26/1755
KCOF-PATRICK AFB/COCOA, FL							
28.23	-80.60	1003.3	26/2155	220/027	27/0955	200/039	26/1850
KSUA-WITHAM FIELD/STUART, FL							
27.18	-80.22	9999.0	/	220/025	26/2147	190/040	26/1547
KTIK-SPACE COAST REGIONAL/TITUSVILLE, FL							
28.51	-80.79	9999.0	/	200/218	26/1650	200/034	26/1747
KISM-KISSIMMEE GATEWAY AP							
28.29	-81.43	9999.0	/	220/020	26/2050	190/036	26/1750
KXMR-CAPE CANAVERAL AFS SKID STRIP							
28.46	-80.56	1002.8	26/2105	180/023	26/1255	180/036	26/1911

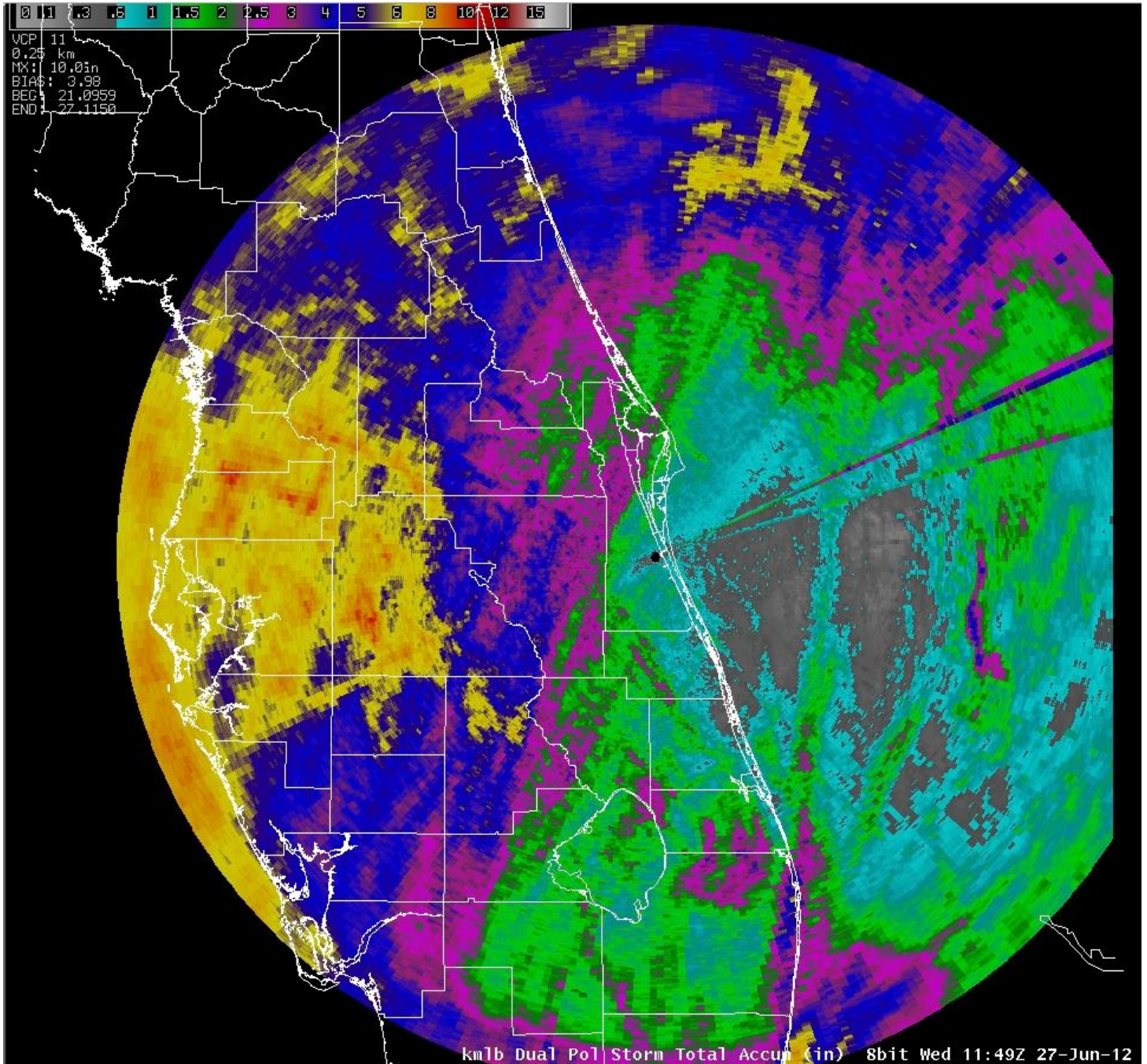
NON-METAR OBSERVATIONS...

NOTE: ANEMOMETER HEIGHT IN METERS AND WIND AVERAGING PERIOD IN MINUTES INDICATED UNDER MAXIMUM SUSTAINED WIND IF KNOWN

LOCATION	ID	MIN	DATE/	MAX	DATE/	PEAK	DATE/
LAT	LON	PRES	TIME	SUST	TIME	GUST	TIME
DEG	DECIMAL	(MB)	(UTC)	(KT)	(UTC)	(KT)	(UTC)
-----							
TOWER #22							
28.80	-80.74			I 150/035	25/0450	150/049	25/0450

## Rainfall:

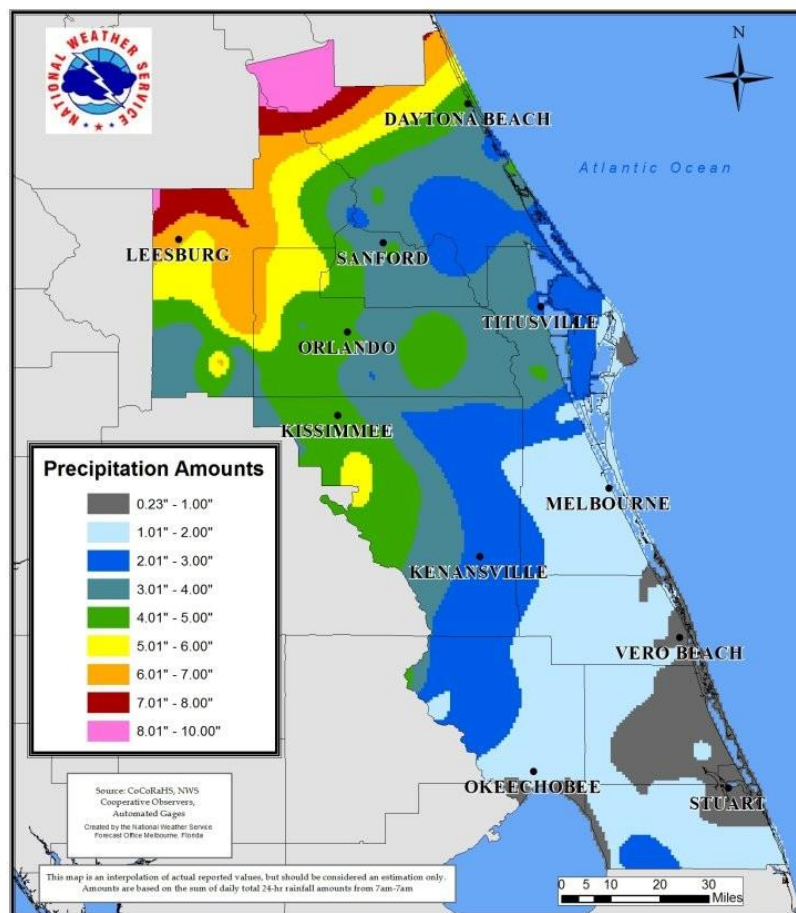
Rainfall amounts from Debby varied widely, but in general the highest totals occurred north and west of Interstate 4. The highest totals were from Lake and northwest Volusia Counties, with a few rainfall reports between seven and nine inches. Several locations along the Space and Treasure Coasts had 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	LAKE	KLEE	5.79
28.80 -81.88			

6.9 SSE CLERMONT	SOUTHERN LAKE COUNT	FL-LK-13	5.72
28.45 -81.72			

2 E ZELLWOOD	ORANGE	PLTF1	5.54
28.72 -81.57			

6.1 SW WINTER GARDEN	ORANGE	FL-OR-20	5.53
28.49 -81.65			

5.7 NW DELAND	INLAND VOLUSIA COUN	FL-VL-9	5.48
29.09 -81.36			