

Hurricane Irma: Florida's First Landfalling Major Hurricane Since 2005

Prepared by Daniel J. Brouillette (dbrouillette@coaps.fsu.edu) Florida Climate Center, Center for Ocean-Atmospheric Prediction Studies The Florida State University 1 December 2017



Hurricane Irma as it approached Florida. Courtesy: NASA/NOAA GOES Project

General Overview

Hurricane Irma made landfall on and then tracked over a large portion of Florida on 9-11 September 2017. Before its sojourn in the Sunshine State, Irma had a history as one of the most intense tropical cyclones in the observational record of the Atlantic basin. It was the ninth named storm, fourth hurricane, and second major hurricane of the active 2017 season.

The storm's origins were in western Africa, where, on 26 August, an easterly wave developed. That wave moved westward off the African coast and into the Atlantic Ocean on the 27th. On the 30th, at 11:00 AM EDT, a closed circulation was deemed to have developed near Cape Verde, allowing the entity to be christened as a tropical storm. High sea-surface temperatures and low wind shear, along with only dry air as a hindrance, allowed Irma to strengthen rapidly into a Category 2 hurricane by the 31st. This period of rapid strengthening included an increase in maximum sustained wind speeds from 70 to 115 MPH in only 12 hours. Later that day, Irma attained Category 3 strength. Over the following several days, moving generally westward over the open Atlantic Ocean, it fluctuated between Category 2 and 3 strength as eyewall replacement cycles modified its structure. On 4 September, intensification resumed, and Irma reached Category 4 strength that day. At 7:45 AM EDT on the 5th, it reached Category 5 strength. By 8:00 PM EDT that day, it reached peak intensity, which it would maintain for 37 hours, with maximum sustained winds of 185 MPH and a central barometric pressure of 914 hPa. At 2:00 AM on the 6th. Irma made its first landfall on the northern coast of the small Lesser Antilles island of Barbuda, causing near-total destruction. At 8:00 AM EDT, it made landfall on Saint Maarten; at 1:00 PM EDT, it made landfall on Ginger Island and Tortola in the British Virgin Islands cluster. Moving west-northwestward across the Caribbean Sea, on the 8th, it made landfall on the island of Little Inagua in the Bahamas at 2:00 AM EDT before weakening to Category 4 strength because of an eyewall replacement cycle. By 11:00 PM EDT on the 9th, Irma had re-strengthened to Category 5 strength before a landfall on Cuba. Interaction with the Cuban land-mass weakened it to Category 3 strength before it traversed into the Straits of Florida, where it regained Category 4 strenath.

On the 10th, Irma made three separate landfalls on Florida. The first occurred at Cudjoe Key (Monroe County; in the lower Keys), at 9:10 AM EDT, with 130-MPH maximum sustained winds (Category 4). This landfall was the first of a major hurricane on Florida since Hurricane Wilma made landfall at Cape Romano (Collier County) on 24 October 2005. The second Irma landfall was at 3:35 PM EDT at Marco Island (Collier County), with 115-MPH maximum sustained winds (Category 3). The third was one-half hour later at Naples, with 115-MPH maximum sustained winds. Irma's center then moved inland about 25 miles, weakening to Category 2 strength, before moving in a generally north-northwest direction. As it passed just east of Tampa on the night of the 10th, the storm maintained Category 1 strength. By the time the center reached the Big Bend region around dawn on the 11th, Irma had weakened to tropical-storm strength. By the afternoon of the 11th, the center had exited the state into Georgia.

Following is a list of outstanding points about Irma's strength and longevity (derived in part from a list compiled by Phil Klotzbach, who is a research scientist at the Colorado State University):

- Its peak maximum sustained wind speed value (185 MPH) was tied with the Florida Keys hurricane (1935), Hurricane Gilbert (1988), and Hurricane Wilma (2005) for second-highest value in the Atlantic basin observational record. Hurricane Allen (1980) had a peak maximum sustained wind speed value of 190 MPH.
- Based on the aforementioned maximum sustained wind speed value, it was the strongest storm to exist outside the Caribbean Sea and Gulf of Mexico in the observational record in the Atlantic basin.
- It maintained 185-MPH winds for 37 hours. No storm in the global observational record has maintained a higher wind speed for a longer period of time. Typhoon Haiyan (2013) in the northwest Pacific Ocean maintained 185-MPH winds for 24 hours.
- Its lifetime minimum barometric pressure was 914 hPa, which is the lowest in the Atlantic basin observational record since Hurricane Dean (2007) and the 10th lowest in the satellite era, which began in 1966.
- That lifetime minimum barometric pressure value was the lowest of any Atlantic basin hurricane outside of the western Caribbean Sea and Gulf of Mexico in the observational record.
- It was the first Category 5 hurricane in the tropical north Atlantic Ocean (7.5-20°N, 60-20°W) since Hurricane Hugo (1989).
- It had a 3.25-day lifetime at Category 5 strength, which is tied with the Cuba hurricane (1932) for longest in the Atlantic basin. It also maintained Category 5 strength for three consecutive days, the longest of any Atlantic basin storm in the satellite era.
- It spent 8.50 days as a major hurricane, which is the second longest in the satellite era in the Atlantic basin after Hurricane Ivan (2004).
- It generated the most Accumulated Cyclone Energy (ACE) (67.5 ACE) of any tropical cyclone in the observational record in the tropical Atlantic Ocean.
- It generated more ACE than the first eight named storms of the 2017 Atlantic hurricane season (Arlene through Harvey) combined.
- It generated the most ACE in a 24-hour period of any tropical cyclone in the Atlantic basin observational record, breaking the record set by Hurricane Allen (1980).
- Its ACE is the second greatest in the satellite era in the Atlantic basin, trailing only Hurricane Ivan (2004), whose ACE was 70.4.

Impacts on Florida

The impacts of Hurricane Irma were widespread, covering the entire Florida peninsula and approximately the eastern two-thirds of the panhandle, and ran the full gamut, including damaging winds, large storm surge, high rainfall totals, and tornadoes (totaling 17).

Damaging winds were observed throughout much of the state, with the strongest winds in the Keys and coastal southwest. It is likely that gusts of higher velocity than those recorded, especially in the southern part of the peninsula and the Keys, occurred but are not reflected in observations because of electric power being knocked out to anemometers. In the Keys, where Irma made its initial landfall, the highest wind gust recorded was 119 MPH at Big Pine Key. Peak gusts of 75 to 95 MPH were common among the observations available. In the southern part of the peninsula, the highest gust recorded was 142 MPH at the Naples Airport, and peak gusts of 75 to 105 MPH were common among the observations available, with the highest gusts on the western side of the peninsula. In the central part of the peninsula, peak gusts recorded were generally 75 to 90 MPH. Farther north, including the panhandle, gusts generally remained below hurricane force. More specific details on maximum wind speeds and gusts achieved can be found in the appendices of this report in the post-tropical cyclone reports prepared by the local National Weather Service (NWS) offices.

Storm surge reached record levels along portions of the eastern coast, exceeding levels observed during Hurricane Matthew in 2016 at many locations and breaking records set during Hurricane Dora in 1964 along the St. Johns River around Jacksonville. In the below table are selected surge height values.

LOCATION, BODY OF WATER	COUNTY	STORM SURGE HEIGHT (feet)
Fernandina Beach, Atlantic Ocean	Nassau	7.78
Southbank Riverwalk, St. Johns River	Duval	6.61
Mayport, St. Johns River	Duval	6.44
Dames Point Bridge, St. Johns River**	Duval	5.97
Buckman Bridge, St. Johns River**	Duval	5.71
Naples, Gulf of Mexico	Collier	5.14
Naples Bay, Gulf of Mexico**	Collier	5.00
Racy Point, St. Johns River	St. Johns	4.72
Trident Pier, Atlantic Ocean	Brevard	4.20
Virginia Key, Atlantic Ocean	Miami-Dade	3.92
Fort Myers, Gulf of Mexico	Lee	3.88
Bal Harbour, Atlantic Ocean	Miami-Dade	3.80
Key West, Atlantic Ocean	Monroe	3.29
McKay Bay, Gulf of Mexico	Hillsborough	3.07
Vaca Key, Atlantic Ocean	Monroe	2.80

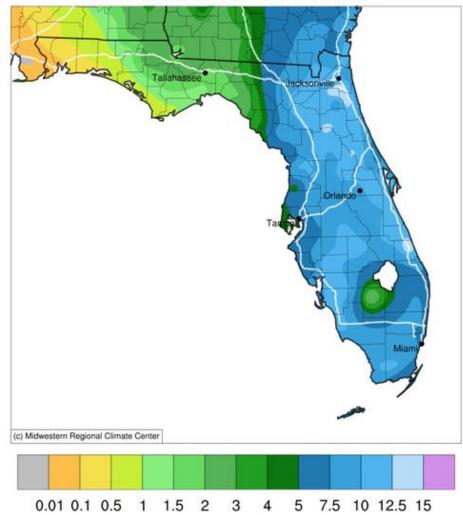
Lake Worth Pier, Atlantic Ocean	Palm Beach	2.23
Port Manatee, Gulf of Mexico	Manatee	2.17
St. Petersburg, Gulf of Mexico	Pinellas	2.17
Clearwater Beach, Gulf of Mexico	Pinellas	1.85

**Incomplete data.

Rainfall was heavy and led to street and river flooding in various parts of the state. Of particular note was the major to record flooding that occurred on streams of all sizes in the northern part of the peninsula. Typical of tropical cyclones, rainfall totals were heaviest to the east of the storm center, which was an area that included most of the peninsula. The figure below shows the spatial distribution of the storm-total rainfall, which ranged as high as 15" in pockets of south Florida.

Accumulated Precipitation (in)

September 09, 2017 to September 12, 2017



For this report, it was elected to report only those rainfall totals that were observed at stations part of the Community Collaborative Rain, Hail, and Snow (CoCoRaHS) network. To be included in the table below, a daily rainfall total observation for each of 10, 11, and 12 September needed to be available, and the total of those daily totals, forming a storm total, had to exceed 4.00"; a multi-day total covering those three days was also acceptable. For two stations in Monroe County, where rains from Irma started earlier than in the rest of the state, a total spanning 9-12 September is reported. Totals from stations in the Automated Surface Observing System (ASOS) and the NWS Cooperative Observation Program (NWS COOP) are not included in this table because many values are missing or incomplete. Some of these totals, for varying storm-total periods, are given in the post-tropical cyclone reports, issued by the various NWS local forecast offices, which can be found in the appendices of this report.

STATION NAME	COUNTY	STORM RAINFALL TOTAL (inches)
Lutz 2.2 SSE	Hillsborough	16.08
St. Augustine 12.2 WNW	St. Johns	15.39
Fort Pierce 3.4 NNE	St. Lucie	15.19
Fleming Island 1.7 SE	Clay	14.96
Orange Park 4.1 WSW	Clay	14.39
Keystone Heights 6.9 ENE	Clay	14.31
Starke 0.9 ESE	Bradford	14.14
Jacksonville 12.0 SSE	Duval	14.03
Jacksonville 12.0 SSE	Duval	13.95
Fleming Island 2.2 S	Clay	13.94
Jacksonville 9.6 SE	Duval	13.81
Palm Shores 4.3 NNW	Brevard	13.74
Buckingham 1.7 SE	Lee	13.55
Interlachen 8.8 S	Marion	13.24
Palm Bay 2.7 SSE	Brevard	13.23
Jacksonville 5.9 SW	Duval	13.21
Gainesville 2.4 NW	Alachua	13.07
East Palatka 3.5 NNW	Putnam	12.90
Mims 8.5 W	Volusia	12.87
Florahome 4.1 NNE	Putnam	12.57
De Land 4.5 NW	Volusia	12.55
Keystone Heights 7.6 ENE	Clay	12.47
Union Park 1.1 E	Orange	12.36
Oviedo 4.0 W	Seminole	12.14
Vero Beach 5.3 W	Indian River	12.10
Gainesville 6.5 NW	Alachua	12.07
Oviedo 1.6 SE	Seminole	12.06

Orongo 11 2 NE	Oranga	12.05
Orange 11.2 NE	Orange	12.05
Lady Lake 4.8 WNW	Marion	11.94
De Land 5.7 NW	Volusia	11.82
Apopka 3.5 ESE	Orange	11.80
Gainesville 1.7 SE	Alachua	11.59
Mount Plymouth 0.2 WSW	Lake	11.59
Gainesville 7.5 WSW	Alachua	11.58
Satsuma 4.0 NE	Putnam	11.55
Port St. Lucie 1.7 NNW	St. Lucie	11.55
DeLand 2.0 W	Volusia	11.53
Gainesville 3.8 W	Alachua	11.41
Arcadia 7.1 WSW	DeSoto	11.39
Titusville 5.9 NNW	Brevard	11.38
Titusville 3.5 NW	Brevard	11.33
Micanopy 2.1 NNE	Alachua	11.30
Alachua 5.2 NNW	Alachua	11.30
Bushnell 1.0 NNW	Sumter	11.30
Jacksonville 10.0 WSW	Duval	11.27
Lady Lake 2.0 NNW	Lake	11.26
Gainesville 2.4 SW	Alachua	11.22
Chuluota 0.9 N	Seminole	11.22
Orange Park 2.5 WSW	Clay	11.13
Palm Bay 2.6 SSE	Brevard	11.10
Lakeland 6.9 SW	Polk	11.10
Fernandina Beach 6.3 SW	Nassau	11.09
Oakland Park 0.3 SE	Broward	11.04
Vero Beach 2.5 S	Indian River	11.04
Miami Lakes 0.3 NNW	Miami-Dade	11.00
Sylvan Shores 8.5 NE	Highlands	10.95
Oxford 1.2 ENE	Sumter	10.88
The Villages 2.6 NW	Marion	10.87
Lady Lake 1.2 ESE	Lake	10.80
Rockledge 1.1 WSW	Brevard	10.79
Kendale Lakes 1.0 S	Miami-Dade	10.78
Crescent City 8.6 WSW	Putnam	10.77
Gainesville 7.7 W	Alachua	10.74
Crystal River 4.7 ESE	Citrus	10.65
The Villages 2.8 ESE	Sumter	10.62
Vero Beach 3.4 W	Indian River	10.61
Okeechobee 27.1 NNW	Okeechobee	10.61
Bay Lake 4.1 WSW	Orange	10.59
Sebring 4.7 WNW	Highlands	10.59
Orlando 4.9 N	Orange	10.54
Glen St. Mary 1.7 N	Baker	10.31
Jacksonville 4.2 NE		10.48
JAUNSUITVIILE 4.2 INE	Duval	10.40

	Marian	10 11
The Villages 2.7 NNW Lake Placid 1.1 WSW	Marion	10.44 10.42
Hernando 1.6 N	Highlands Citrus	10.42
St. Augustine South 2.1	Cillus	10.38
0	St Johns	10.29
SSW Port St. Lucie 4.0 NE	St. Johns St. Lucie	10.38 10.36
La Belle 2.3 WNW		10.30
	Hendry	
Interlachen 10.4 NNE Ocala 4.6 N	Putnam	10.29
Jacksonville 11.4 ESE	Marion Duval	10.23 10.21
	Marion	
Ocala 9.8 SW		10.21
Poinciana Place 2.5 SSW	Polk	10.20
Merritt Island 3.8 N	Brevard	10.19
De Land 1.4 WSW	Volusia	10.18
Penney Farms 0.1 E	Clay	10.16
Leesburg 2.7 NW	Lake	10.13
Port St. Lucie 2.4 N	St. Lucie	10.13
Lady Lake 4.6 W	Lake	10.12
Ocala 11.2 SW	Marion	10.12
Vero Beach 3.5 SSW	Indian River	10.11
Palm Shores 1.4 W	Brevard	10.10
Keystone Heights 10.0 NE	Clay	10.06
Belleview 4.8 E	Marion	10.06
Sebastian 1.7 SSE	Indian River	10.04
Keystone Heights 3.5 ENE	Clay	10.02
Plantation 3.4 E	Broward	10.01
Naples 9.0 NE	Charlotte	10.01
Miramar 3.0 WNW	Broward	9.94
Ocala 14.3 S	Marion	9.94
La Belle 4.5 NNW	Glades	9.92
Lady Lake 5.0 W	Sumter	9.92
Jacksonville 11.9 N	Duval	9.88
Bartow 7.8 SE	Polk	9.88
Babson Park 0.9 NW	Polk	9.88
Lake Wales 0.7 SE	Polk	9.88
High Springs 3.2 SW	Alachua	9.84
Melbourne 4.6 NNW	Brevard	9.84
Palm Coast 5.9 S	Flagler	9.83
Dade City 1.8 WSW	Pasco	9.83
Ocoee 1.4 N	Orange	9.82
Micco 1.3 NW	Brevard	9.80
Melbourne 1.1 N	Brevard	9.76
Hernando 2.9 W	Citrus	9.68
The Villages 3.7 NNW	Marion	9.68
Sunset 2.4 SW	Miami-Dade	9.66

	Columbia	0.62
Lake City 7.9 SSW	Columbia	9.63
Ocala Weather Service	Marion	9.60
Merritt Island 5.6 NNW	Brevard	9.57
Cocoa 5.1 NW	Brevard	9.55
Altoona 5.3 NNE	Lake	9.53
Gainesville 5.0 SSW	Alachua	9.46
Port St. Lucie 4.1 SW	St. Lucie	9.46
Cocoa 4.6 NW	Brevard	9.45
Cocoa 2.6 WNW	Brevard	9.44
Orlando 4.8 NNW	Orange	9.44
Winter Garden 2.3 SSW	Orange	9.44
Zephyrhills 0.9 ENE	Pasco	9.40
Melbourne 4.7 N	Brevard	9.39
Micanopy 3.6 SSW	Marion	9.35
Vero Beach 2.4 W	Indian River	9.34
Union Park 2.9 SSE	Orange	9.29
Union Park 3.8 ESE	Orange	9.28
Dade City 4.1 SSE	Pasco	9.28
Micanopy 8.5 W	Alachua	9.24
The Villages 2.7 NNW	Sumter	9.21
De Land 1.3 WSW	Volusia	9.21
Belleview 6.0 SSE	Marion	9.18
Zephyrhills North 2.3 N	Pasco	9.11
Crescent City 2.0 N	Putnam	9.07
Jacksonville 6.7 WSW	Duval	9.04
Aberdeen 3.7 WNW	Palm Beach	8.99
Sun Valley 0.8 SW	Palm Beach	8.96
Jacksonville 7.8 SW	Duval	8.93
Weston 2.8 SE	Broward	8.89
Plantation 2.3 WNW	Broward	8.89
Okeechobee 18.0 NNW	Okeechobee	8.88
Gainesville 5.4 W	Alachua	8.87
Davie 2.6 WSW	Broward	8.87
Ocala 1.1 SE	Marion	8.83
Lakeland Highlands 0.3 SE	Polk	8.79
Lakeland 5.3 WNW	Polk	8.75
Pierson 1.5 SW	Volusia	8.74
Ocala 7.0 NW	Marion	8.73
Aberdeen 1.4 WNW	Palm Beach	8.70
Haines City 6.0 ESE	Polk	8.67
Lady Lake 4.3 SSW	Sumter	8.65
Lutz 1.3 SSE	Hillsborough	8.62
Orlando 12.0 S	Orange	8.60
Jacksonville 3.8 ESE	Duval	8.57
Palm City 3.1 NW	Martin	8.52
	martin	0.02

Kov/Moot 1.2 ENE	Monroo	0.02**
Key West 1.3 ENE	Monroe	9.03**
Fort White 3.2 WNW	Columbia	8.28
Biscayne Park 0.3 E	Miami-Dade	8.19
Port Orange 2.9 WSW	Volusia	8.18
Port Charlotte 6.2 W	Charlotte	8.17
Delray Beach 2.3 WSW	Palm Beach	8.11
Chiefland 8.5 ENE	Levy	8.07
Jensen Beach 2.2 NW	Martin	8.07
Auburndale 1.1 W	Polk	8.03
Palm Coast 1.9 S	Flagler	7.91
Pompano Beach Highlands		
0.7 E	Broward	7.78
Palm City 1.4 NW	Martin	7.68
Weeki Wachee 7.1 NNE	Hernando	7.67
Valrico 2.2 SE	Hillsborough	7.63
Palm Bay 3.2 S	Brevard	7.62
Palm City 4.0 SW	Martin	7.56
Boynton Beach 1.3 WNW	Palm Beach	7.56
Tradition 5.6 W	St. Lucie	7.52
Groveland 1.7 E	Lake	7.49
Hollywood 3.9 SW	Broward	7.48
Micanopy 4.6 SSE	Martin	7.43
The Villages 4.8 SSW	Sumter	7.35
Eagle Lake 2.0 WNW	Polk	7.25
Lutz 3.4 NE	Pasco	7.16
Bradenton 10.8 SE	Manatee	7.12
Astatula 1.0 E	Lake	7.08
Hammocks 0.5 SSE	Miami-Dade	7.06
Ruskin 1.8 ESE	Hillsborough	6.89
Riverview 4.8 SSW	Hillsborough	6.87
Aberdeen 4.2 NNW	Palm Beach	6.81
Riverview 4.4 SSW	Hillsborough	6.79
Jupiter 4.0 NNW	Martin	6.79
Brooksville 1.2 E	Hernando	6.73
Delray Beach 1.6 WSW	Palm Beach	6.73
North Port 2.6 E	Sarasota	6.70
Hollywood 1.1 WNW	Broward	6.68
Trenton 4.0 NW	Gilchrist	6.68
Golden Lakes 2.4 SSW	Palm Beach	6.63
Valrico 1.1 SE		
Ormond Beach 3.5 SE	Hillsborough Volusia	6.61 6.61
Englewood 2.0 NNW	Sarasota	6.50
Riverview 4.9 S	Hillsborough	6.46
Englewood 3.7 NNW	Sarasota	6.41
Ellenton 6.6 E	Manatee	6.33

Sanford 1.9 WNW	Seminole	6.26
Boca Raton 2.1 ENE	Palm Beach	6.15
Bloomingdale 7.6 ESE	Hillsborough	6.11
Melbourne Beach 3.9 SSE	Brevard	6.05
Greater Northdale 0.4 ENE		6.04
	Hillsborough	
Tampa 6.5 NNE	Hillsborough	6.02 E.08
Riverview 0.9 ENE	Hillsborough	5.98
Neptune Beach 0.5 NNW	Duval	5.94
Sarasota 6.4 NNE	Manatee	5.86
Key West 1.0 SW	Monroe	5.75**
North Port 1.6 ENE	Sarasota	5.63
Ruskin 1.6 ESE	Hillsborough	5.62
Clearwater 2.2 S	Pinellas	5.62
Boynton Beach 6.2 WNW	Palm Beach	5.60
Oak Hill 2.8 WSW	Volusia	5.59
Apollo Beach 3.0 ENE	Hillsborough	5.52
Citrus Park 1.3 ENE	Hillsborough	5.48
Port Richey 2.0 NNE	Pasco	5.36
Land O Lakes 1.5 SSE	Pasco	5.36
Palm Harbor 1.0 S	Pinellas	5.36
Spring Hill 2.4 WSW	Hernando	5.33
Bradenton 3.5 WNW	Manatee	5.13
Titusville 0.9 SW	Brevard	5.12
Lutz 2.0 E	Hillsborough	5.12
Edgewater 0.1 SW	Volusia	5.09
North Port 4.7 NNE	Sarasota	5.06
Lantana 0.3 E	Palm Beach	5.05
West Palm Beach 6.0		
WNW	Palm Beach	4.94
Live Oak 10.0 W	Suwannee	4.83
Riverview 2.1 W	Hillsborough	4.78
Holiday 0.6 E	Pasco	4.76
St. Petersburg 4.5 NW	Pinellas	4.75
Bay Pines 0.5 NW	Pinellas	4.71
Dunedin 2.8 ESE	Pinellas	4.68
Golfview 0.9 SSW	Palm Beach	4.66
Dunedin 3.0 SE	Pinellas	4.62
Crystal River 5.3 NNE	Citrus	4.58
Lutz 0.6 WSW	Hillsborough	4.56
St. Petersburg 3.2 NNW	Pinellas	4.51
Sarasota 5.8 SE	Sarasota	4.43
Daytona Beach Shores 1.8	Curabola	
SSE	Volusia	4.43
Seminole 3.3 WNW	Pinellas	4.40
Largo 2.2 ESE	Pinellas	4.35
	1 11101103	т.55

Apollo Beach 2.7 ENE	Hillsborough	4.34
Lake Worth 1.2 N	Palm Beach	4.09
Green Cove Springs 6.8		
SSE	Clay	4.05
Gulfport 0.9 NNW	Pinellas	4.01

**Because Hurricane Irma's rains reached the Keys before other parts of the state, storm total covers 9-12 September.

Seventeen tornadoes were recorded in Florida due to Hurricane Irma. Forming typically east of the center of the storm, these tornadoes followed that pattern by generally occurring in the eastern half of the peninsula, north of its midpoint. The following table summarizes key facts about the tornadoes, and more details are given in the appendices in the post-tropical cyclone reports issued by the NWS local offices.

EF RATING	LOCATION	COUNTY	PATH LENGTH (miles)	MAXIMUM WIND SPEED (miles per hour)
2	1 SE Crescent Beach	St. Johns	1.0	110-130
1	Mims, Kilbee Street	Brevard		115-125
1	1 SSE Vilano Beach	St. Johns	4.0	85-100
1	1 N St. Augustine	St. Johns	1.0	85-100
1	Turkey Creek	Brevard	unknown	100-110
1	Indialantic	Brevard	unknown	90-100
1	Mims, Northgate	Brevard	unknown	90-95
1	Umatilla	Lake	unknown	95-100
1	Ormond Beach	Volusia	unknown	100-110
1	Patrick AFB	Brevard	unknown	85-95
1	North Merritt Island	Brevard	unknown	100-110
1	2 W Ochopee	Collier	unknown	unknown
0	2 NNW Fernandina Beach	Nassau	11.0	85-100
0	2 NNW Amelia City	Nassau	11.0	85-100
0	2 S Marineland	Flagler	4.0	85-100
0	Melbourne Beach	Brevard	unknown	70-80
0	1 S Wilton Manors	Broward	unknown	unknown

Conclusion

In Florida, Hurricane Irma will be remembered for being the first major hurricane to make landfall on the state in over a decade and for its widespread impacts throughout the state, including an evacuation and preparation effort that caused severe traffic congestion over much of the Southeast and strained material resources and commodities, such as gasoline and bottled water. In particular, Irma produced heavy rainfall through a large portion of the peninsula, contributing to a historically wet rainy season on the peninsula, and record-high storm surge at some locations along the northern east coast. Wind damage was noted throughout much of the peninsula and at some locations in the Big Bend; this damage proved to be substantial in the southwestern part of the state and in the Keys. A developing legacy of Irma, at the time of publication of this report, is its deleterious impact on the state's agricultural sector, particularly that part concerned with citrus crops. Seventy-two persons perished in Florida as a result of Irma.

Appendices

Appendix A – Links to other sources of information

This article from the Tampa Bay Times describes some of the agricultural impacts that are being realized following the hurricane: <u>http://www.tampabay.com/florida-politics/buzz/2017/11/16/irma-agriculture-losses-continue-to-mount/</u>

Courtesy of Brian McNoldy at the University of Miami's Rosenstiel School of Marine and Atmospheric Science, the following link leads to Doppler radar imagery of Irma as it moved over Florida and the rest of the Southeast: <u>http://andrew.rsmas.miami.edu/bmcnoldy/tropics/irma17/Irma_9-</u> <u>12Sep17_southeast.gif</u>

Appendix B – Post-Cyclone Report from the Tallahassee NWS WFO

489 ACUS72 KTAE 281538 CCA PSHTAE

POST TROPICAL CYCLONE REPORT...HURRICANE IRMA NATIONAL WEATHER SERVICE - TALLAHASSEE FL 1124 AM EDT THU SEP 28 2017

NOTE: THE DATA SHOWN HERE ARE PRELIMINARY....AND SUBJECT TO UPDATES AND CORRECTIONS AS APPROPRIATE.

THIS REPORT INCLUDES EVENTS OCCURRING WHEN WATCHES AND/OR WARNINGS WERE IN EFFECT...OR WHEN SIGNIFICANT FLOODING ASSOCIATED WITH IRMA OR ITS REMNANTS WAS AFFECTING THE AREA.

COUNTIES INCLUDED...BAKER...BAY...BEN HILL...BERRIEN...BROOKS... CLAY...COFFEE...COLQUITT...COOK...DALE...DECATUR...DIXIE... DOUGHERTY...EARLY...FRANKLIN...GADSDEN...GENEVA...GRADY...GULF... HENRY...HOLMES...HOUSTON...IRWIN...JACKSON...JEFFERSON... LAFAYETTE...LANIER...LEE...LEON...LIBERTY...LOWNDES...MADISON... MILLER...MITCHELL..QUITMAN..RANDOLPH...SEMINOLE...TAYLOR... TERRELL...THOMAS...TIFT...TURNER...WAKULLA...WALTON...WASHINGTON... WORTH...CALHOUN, FL...CALHOUN, GA

A. LOWEST SEA LEVEL PRESSURE/MAXIMUM SUSTAINED WINDS AND PEAK GUSTS _____ METAR OBSERVATIONS ... NOTE: ANEMOMETER HEIGHT IS 10 METERS AND WIND AVERAGING IS 2 MINUTES _____ LOCATION ID MIN DATE/ DATE/ MAX PEAK DATE/ TIME LAT LON PRES SUST TIME GUST TIME DEG DECIMAL (MB) (UTC) (KT) (UTC) (KT) (UTC) _____ KCTY-CROSS CITY, FL 29.62 -83.10 9999.0 / 360/036 11/0655 I 010/053 11/0735 I KAAF-APALACHICOLA MUNI, FL 996.6 11/1153 320/028 11/1953 360/042 11/0953 29.72 -85.03 K40J-PERRY-FOLEY, FL 020/020 11/0235 I 020/032 11/0335 I 30.07 -83.57 9999.0 / KPAM-TYNDALL AFB, FL . 999.3 11/1446 320/029 11/1446 320/038 11/1527 30.07 -85.59 KECP-PANAMA CITY NW, FL 30.35 -85.80 999.9 11/1953 300/024 11/1653 310/035 11/1706 KTLH-TALLAHASSEE RGNL, FL 30.40 -84.35 990.8 11/1553 350/030 11/1223 350/048 11/1208 KDTS-DESTIN/FT WALTON BEACH ARPT, FL 30.40 -86.47 1001.0 11/2053 330/024 11/1853 360/034 11/1125 KVLD-VALDOSTA, GA 996.5 11/0953 I 020/036 11/1005 I 010/049 11/0939 I 30.79 -83.28 KMAI-MARIANA, FL 30.80 -85.21 995.1 11/1953 340/027 11/1445 340/040 11/1453 KVAD-VLDOSTA/MODY AFB, GA 30.97 -83.20 984.8 11/1443 020/038 11/1214 010/054 11/1311

KBGE-BAINBRIDGE, GA 360/027 11/1255 350/040 11/1335 30.97 -84.63 9999.0 / KMGR-MOULTRIE/THMSVIL, GA 31.08 -83.80 9999.0 / 010/032 11/1235 010/047 11/1235 KOZR-FT RUCKER/CAIRNS, AL 31.29 -85.72 997.4 11/1944 330/025 11/1613 320/042 11/1727 KDHN-DOTHAN, AL 31.32 -85.45 996.1 11/2053 330/030 11/1615 330/048 11/1607 KABY-ALBANY MUNICIPAL, GA 31.54 -84.18 988.9 11/1953 010/025 11/1500 010/043 11/1336 K1JO-HOLMES COUNTY, FL 30.85 -85.60 993.6 11/1958 030/020 11/1911 320/032 11/1641 KTMA-TIFTON, GA 31.43 -83.49 9999.0 / 030/027 11/1455 020/044 11/1315 REMARKS: CTY STOPPED REPORTING AT 11/0955Z 40J STOPPED REPORTING AT 11/0315Z VLD STOPPED REPORTING AT 11/1030Z 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) ----------_____ _____ CONE FARM - GREENVILLE, FL 30.40 -83.54 984.1 99/9999 327/022 11/1030 355/038 11/1035 99/99 MADISON HIGH SCHOOL - MADISON, FL 30.48 -83.45 1001.4 999/99 049/030 11/0306 027/034 11/0505 99/99 TERRY FARM - MADISON, FL 30.35 -83.33 9999.9 99/9999 015/032 11/0120 029/043 11/0744 99/99 AUCILLA CHRISTIAN ACADEMY - AUCILLA, GA 30.48 -83.76 990.9 99/9999 071/027 11/0847 052/034 11/0931 99/99 UGA TIFTON - TIFTON, GA 31.47 -83.53 988.1 99/9999 049/023 11/1637 023/035 11/1318 99/99 SUN BELT AG EXPO - MOULTRIE, GA 31.13 -83.71 992.2 99/9999 344/037 11/1214 360/041 11/1216 9999 FSU COASTAL AND MARINE LAB - ST. TERESA, FL 29.91 -84.51 9999.9 99/9999 298/028 11/1158 319/034 11/1024 9999 ST. GEORGE ISLAND BRIDGE - EASTPOINT, FL 29.69 -84.89 9999.9 99/9999 350/047 11/1210 350/047 11/1210 9999 GULF COUNTY EOC - PORT ST. JOE, FL 29.81 -85.29 9999.9 99/9999 050/032 11/0447 014/035 11/1025 9999

FSU PANAMA CITY - PANAMA CITY, FL 30.19 -85.72 9999.9 99/9999 024/037 11/1213 024/041 11/1213 99/99 DOTHAN TECHNOLOGY CENTER - DOTHAN, AL 31.26 -85.38 9999.9 99/9999 335/023 11/1418 360/035 11/1609 9999 CHALLENGER LEARNING CENTER - TALLAHASSEE, FL 30.44 -84.28 9999.9 99/9999 024/035 11/1145 016/035 11/1206 99/99 TLLAS-CHILES HS TALLAHASSEE, FL 30.57 -84.21 9999.9 99/9999 344/027 11/1121 360/037 11/1135 9999 CONLEY ELEMENTARY - TALLAHASSEE, FL 30.41 -84.22 9999.9 99/9999 019/030 11/1127 011/036 11/1148 99/99 FSU SCHOOLS - TALLAHASSEE, FL 30.38 -84.22 9999.9 99/9999 050/030 11/0720 323/037 11/1136 99/99 FSU REC SPORTSPLEX - TALLAHASSEE, FL 360/034 11/1133 040/036 11/1131 30.42 -84.34 9999.9 99/9999 99/99 FSU RESERVATION - TALLAHASSEE, FL 30.40 -84.34 9999.9 99/9999 338/027 11/1219 348/036 11/1121 99/99 FSU WEATHERSTEM - TALLAHASSEE, FL 30.43 -84.30 9999.9 99/9999 014/037 11/0937 043/047 11/1109 9999 HOLY COMFORTER EPISCOPAL SCHOOL - TALLAHASSEE, FL 30.48 -84.22 9999.9 99/9999 355/030 11/1145 030/040 11/1207 99/99 SEALEY ELEMENTARY - TALLAHASSEE, FL 30.48 -84.29 9999.9 99/9999 350/027 11/1135 340/035 11/1012 99/99 TALLAHASSEE COMMUNITY COLLEGE - TALLAHASSEE, FL 30.44 -84.34 9999.9 99/9999 318/025 11/1327 282/035 11/1213 99/99 THE EDISON RESTAURANT - TALLAHASSEE, FL 30.43 -84.28 9999.9 99/9999 016/030 11/1048 044/037 11/1201 99/99 WT MOORE ELEMENTARY - TALLAHASSEE, FL 30.47 -84.21 9999.9 99/9999 266/031 11/1417 273/037 11/1201 99/99 AELG1 - ADEL GA RAWS 31.10 -83.43 9999.9 99/9999 170/027 11/1200 999/046 11/1200 99/99 PRWF1 - ST. MARKS RAWS 360/011 11/1100 999/038 11/1300 30.01 -84.42 9999.9 99/9999 99/99

REMARKS: WEATHERSTEM STATION UNLESS NOTED OTHERWISE.

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

_____ LOCATION IDMINDATE/MAXDATE/PEAKDATE/LATLONPRESTIMESUSTTIMEGUSTTIMEDEGDECIMAL(MB)(UTC)(KT)(UTC)(KT)(UTC) _____ 42036-3D32 /D W. TAMPA 28.50 -84.51 990.9 11/0850 020/043 11/0250 999/056 11/0650 42039-3D20 /D PENSACOLA 28.78 -86.04 1000.9 11/1050 350/033 11/1150 999/039 11/0250 SGOF1-TYNDALL AFB TOWER C, FL 29.41 -84.86 992.4 11/1200 999/999 99/9999 999/999 99/9999 APCF1-APALACHICOLA, FL NOS 29.73 -84.98 995.6 11/1206 020/034 11/0918 999/044 11/0942 APXF1-APALACHICOLA NERR, FL 29.79 -84.88 9999.9 99/9999 340/025 11/1115 999/999 99/9999 KTNF1-KEATON BEACH, FL/M 29.82 -83.59 984.7 11/1300 360/026 11/0700 999/042 11/1100 SHPF1-SHELL POINT, FL 30.06 -84.29 990.3 11/1506 340/030 11/1112 999/049 11/1112 PCBF1-PANAMA CITY BEACH, FL NOS 30.21 -85.88 999.4 11/2206 360/026 11/0942 999/038 11/2218

REMARKS:

C. STORM TOTAL RAINFALL FROM	I 1200 UTC SEP 01 U	NTIL 1200 UTC	SEP 02
CITY/TOWN LAT LON DEG DECIMAL	COUNTY	ID	(IN)
		MGNG1	
4 E EDISON 31.55 -84.68	CALHOUN	PCHG1	4.15
WSW SASSER 31.72 -84.35	TERRELL		3.93
5 WNW LEESBURG 31.76 -84.25	LEE	DSNG1	3.88
4 NW VALDOSTA 30.89 -83.32	LOWNDES	VDRG1	3.85
4 E MARIANNA 30.77 -85.17	JACKSON		3.66
1 SW MOODY AFB 30.97 -83.20	LOWNDES		3.53
5 WSW MOODY AFB 30.95 -83.27	LOWNDES	VDSG1	3.53
5 W MYSTIC	IRWIN	IVLG1	3.42

31.63 -83.42

2 S ADEL 31.11 -83.43	COOK	ADLG1	3.33
2 NW EAST ALBANY 31.59 -84.14	DOUGHERTY	ABNG1	3.28
1 SE CROSSROADS 31.82 -84.97	QUITMAN	MRSG1	3.23
WNW MILFORD 31.38 -84.55	BAKER	MLFG1	3.21
5 S MIDLAND CITY 31.25 -85.48	HOUSTON	LCHA1	3.16
3 NNE LEESBURG 31.78 -84.14	LEE	MCKG1	3.13
3 W CAPPS 31.50 -85.37	HENRY	EFKA1	3.04
4 WNW TIFTON 31.48 -83.56	TIFT	TWCG1	3.03

REMARKS:

D. INLAND FLOODING...

E. MAXIMUM STORM SURGE AND STORM TIDE... OFFICIAL TIDE GAUGES NOTED WITH LEADING G

COUNTY	CITY/TOWN OR LOCATION			ATE/ IME	BEACH EROSION
FRANKLIN	G APALACHICOLA	0.93 1	.68 12	/1124	NONE
WAKULLA	SHELL POINT	-9999.00	2.34	12/07	48 NONE
JEFFERSON	NUTALL RISE	-9999.00	2.28	12/07	48 NONE
WAKULLA	CURTIS MILL	-9999.00	2.63	12/10	30 NONE
TAYLOR	STEINHATCHEE	-9999.00	2.71	12/08	00 NONE

REMARKS: APPROXIMATE INUNDATION (HEIGHT ABOVE MEAN HIGHER HIGH WATER): APALACHICOLA....0.82 FT SHELL POINT....0.71 FT NUTALL RISE....0.39 FT CURTIS MILL....1.28 FT STEINHATCHEE.....1.07 FT

F. TORNADOES...

(DIST)CITY/TOWN	COUNTY	DATE/	EF SCALE
LAT LON (DEG DECIMAL DESCRIPTION		TIME (UTC)	(IF KNOWN)

G. STORM IMPACTS BY COUNTY...

COUNTY DESCRIPTION	DEATHS	INJURIES	EVACUATIONS
DIXIE	0	0	0
		DSS THE COUNTY. ROUGHL SUFFERING MINOR DAMAG	
SEMINOLE	0	0	116
		RUCTURESTREES AND P CUEES FROM FLORIDA.	OWER LINES.
LEON	0	0	3000
HOURS. THE HIGH INTERNATIONAL A MPH AT THE FSU DOWNED ACROSS T CUSTOMERS WERE ROADWAYS. 88 HO DESTROYED4 S SHELTERS HOSTED FROM OTHER PART	HEST WIND GUST RE AIRPORT. THE HIGH WEATHERSTEM SITE THE COUNTY. AT TH WITHOUT POWER. 2 OMES SUSTAINED SO SUSTAINING MAJOR 0 3000 PEOPLE INC TS OF THE STATE.	CE WIND GUSTS FOR APPR ECORDED WAS 55 MPH AT HEST RECORDED SUSTAINE 2. NUMEROUS TREES AND HE PEAKAPPROXIMATEL 200 OBSTRUCTIONS WERE DME LEVEL OF DAMAGE WI DAMAGE AND 29 OTHERS CLUDING LOCAL RESIDENT FSUFAMU AND TCC WE RE CLOSED FOR 4 DAYS.	TALLAHASSEE 3D WIND WAS 43 POWER LINES WERE 3Y 70000 CLEARED FROM 3TH ONE HOUSE MINOR DAMAGE. 11 3S AND EVACUEES
TAYLOR	0	0	400
CAUSING DAMAGE. DAMAGE. THERE W DAYS. THERE WER	THREE HOMES SUS NERE 10941 POWER RE BLOW OUT TIDES	AND POWER LINES WITH A STAINED MAJOR DAMAGE A OUTAGESSOME NOT RE B BUT NO SURGE FLOODIN CARBON MONOXIDE FROM	ND TWO MINOR STORED FOR 6 IG. TWO INDIRECT
WASHINGTON	0	0	0
A FEW DOWNED TR AT MILE MARKER		INES. ONE TREE BLOCKED) TRAFFIC ON I-10
MITCHELL	0	0	0
	. AGRICULTURAL I	AND POWER LINES. LITT IMPACT MAY BE LARGE TO	
		GED.	
LIBERTY	1	SED. O	250
DOWNED TREES AN STRUCTURES. 250	1 ID POWER LINES	0 .BUT MINIMAL TO NO DAM HOUSED IN SHELTERS. F	IAGE TO
DOWNED TREES AN STRUCTURES. 250	1 ID POWER LINES RESIDENTS WERE	0 .BUT MINIMAL TO NO DAM HOUSED IN SHELTERS. F	IAGE TO
DOWNED TREES AN STRUCTURES. 250 DURING THE EVEN COLQUITT ABOUT 200 TREES	1 ND POWER LINES) RESIDENTS WERE NT RESULTING IN C 0 S AND MANY POWER TREES FELL ON HC	0 .BUT MINIMAL TO NO DAM HOUSED IN SHELTERS. F DNE FATALITY.	AGE TO FIVE CAR CRASHES 0 IG IN ROAD
DOWNED TREES AN STRUCTURES. 250 DURING THE EVEN COLQUITT ABOUT 200 TREES CLOSURES. SOME	1 ND POWER LINES) RESIDENTS WERE NT RESULTING IN C 0 S AND MANY POWER TREES FELL ON HC	0 BUT MINIMAL TO NO DAM HOUSED IN SHELTERS. F DNE FATALITY. 0 LINES DOWNED RESULTIN	AGE TO FIVE CAR CRASHES 0 IG IN ROAD
DOWNED TREES AN STRUCTURES. 250 DURING THE EVEN COLQUITT ABOUT 200 TREES CLOSURES. SOME CITY OF MOULTRI LOWNDES PEAK GUST OF 50 A 52 MPH GUST A WERE DAMAGED AN 5,000 PECAN TRE OF VEGETATIVE D	1 D POWER LINES RESIDENTS WERE IT RESULTING IN C 0 S AND MANY POWER TREES FELL ON HC E LOST POWER. 0 0 0 0 0 0 0 0 0 0 0 0 0	0 BUT MINIMAL TO NO DAM HOUSED IN SHELTERS. F DNE FATALITY. 0 LINES DOWNED RESULTIN DMES AND ONE FELL ON A	AGE TO DIVE CAR CRASHES 0 IG IN ROAD CAR. HALF THE 1500 C KGAVALDO8 WITH WNED, 34 HOMES C. MORE THAN MATELY 25,000 CY
DOWNED TREES AN STRUCTURES. 250 DURING THE EVEN COLQUITT ABOUT 200 TREES CLOSURES. SOME CITY OF MOULTRI LOWNDES PEAK GUST OF 50 A 52 MPH GUST A WERE DAMAGED AN 5,000 PECAN TRE OF VEGETATIVE D	1 ND POWER LINES 0 RESIDENTS WERE NT RESULTING IN C 0 3 AND MANY POWER TREES FELL ON HC 10 E LOST POWER. 0 0 KNOTS OR 58 MPH AT VLD AIRPORT. C 10 60,000 CUSTOME CES WERE DESTROYE DEBRIS ON PUBLIC	0 BUT MINIMAL TO NO DAM HOUSED IN SHELTERS. F DNE FATALITY. 0 LINES DOWNED RESULTIN DMES AND ONE FELL ON A 0 A AT WUNDERGROUND SITE DVER 500 TREES WERE DO ERS WERE WITHOUT POWER ED. THERE WAS APPROXIM	AGE TO DIVE CAR CRASHES 0 IG IN ROAD CAR. HALF THE 1500 C KGAVALDO8 WITH WNED, 34 HOMES C. MORE THAN MATELY 25,000 CY

MANY TREES AND POWER LINES DOWNED BLOCKING ROADS INCLUDING U.S. 19.

19

US 98	BLOCKED	FROM SR 26	7 TO SR	363 BECA	AUSE OF T	REES DOWN	. A TOTAL
OF 98	TREES WE	ERE FELLED	WITH 50	OF THOSE	E WITH LI	NES ENTAN	GLED. ALL
98 FE	LLED TREE	IS WERE BLC	CKING RO	DADWAYS (OR PRESEN	TED A DAN	GER TO
TRAFF	IC ON ROA	ADWAYS. THR	EE TREES	S FELL ON	I STRUCTU	RES AND T	WO ON
VEHIC	LES. THEF	RE WERE 870	0 POWER	OUTAGES	AND 317	EVACUATED	TO
SHELT	ERS. 10 H	IOMES WERE	DAMAGED	IN TOTAI	L, 6 MAJO	R DAMAGE .	AND 1
DESTR	OYED.						

0

0

EARLY

WEATHER SENTRY STATION AT EARLY COUNTY EMA REPORTED GUST TO 63 MPH.

0

Ω

317

0

0

DOUGHERTY 0 0

WIDESPREAD TREES DOWN AND POWER LINES DOWN REPORTED IN ALBANY AREA WITH MANY POWER OUTAGES AND BLOCKED ROADS. ONE TREE FELL ON A CAR IN THE SHOREHAM APARTMENT COMPLEX.

HOUSTON 0 0 0

A FEW TREES AND POWER LINES DOWN.

WAKULLA

WORTH 1 \cap \cap

WIDESPREAD TREES AND POWER LINES DOWN WITH DAMAGE TO ROOFS AND VEHICLES REPORTED. SOME LARGE OAKS WERE AMONG THE TREES TOPPLED BY THE STORM. A MAN DIED OF A HEART ATTACK WHILE SHELTERING IN A HOME MADE SHELTER. SUSTAINED WINDS OF 42 MPH WITH GUSTS TO 70 MPH MEASURED AT EMA OFFICE.

LAFAYETTE 0 0 0

NUMEROUS TREES AND POWER LINES DOWN ACROSS THE COUNTY WITH EXTENSIVE DAMAGE TO TRANSMISSION AND FEEDER LINES RESULTING IN POWER LOSS TO 100 PERCENT OF COUNTY RESIDENTS AND BUSINESSES. TWO RESIDENTIAL STRUCTURES WERE DESTROYED WITH THREE OTHERS SUSTAINING MAJOR DAMAGE AND NINE MINOR DAMAGE.

0 MADISON 0 0

TREES DOWN AND POWER OUTAGES ACROSS MADISON COUNTY...TWO OF WHICH BLOCKED TRAFFIC ON I-10 AT MILE MARKERS 253 AND 246. TWO ROOFS DAMAGED DUE TO TREES. A TOTAL OF 12 HOMES WERE DAMAGED...3 OF WHICH SUSTAINED MAJOR DAMAGE.

0 97 LANIER 0

TREES AND POWER LINES DOWN ACROSS LANIER COUNTY INCLUDING A FEW LARGE OAKS. FIVE TREES DOWN ON HOMES. SHELTERED 97.

BERRIEN 0 0 Ο

TREES DOWN ACROSS COUNTY. POWER OUTAGES. AT LEAST ONE REPORT OF STRUCTURAL DAMAGE. WITHIN THE CITY OF NASHVILLE, TREES FELL ONTO TWO RESIDENCES CASUING SIGNIFICANT ROOF DAMAGE.

0 TURNER 0 0

TREES AND POWER LINES DOWN ACROSS THE COUNTY. ROOFS BLOWN OFF SEVERAL HOMES. SEVERAL BARNS BLOWN DOWN.

0 COFFEE 0 0

SEVERAL POWER LINES AND LARGE TREES WERE DOWN ACROSS MAJOR HIGHWAYS INCLUDING HWY 135 SOUTH...441 SOUTH AND 151 SOUTH. SOME TREES FELL ON STRUCTURES AND ONE FARM STRUCTURE COLLAPSED.

DECATUR 0 0 UNKNOWN SOME TREES AND POWER LINES DOWN. FACEVILLE HIGHWAY WAS BLOCKED.

LEE Ω 0 UNKNOWN MANY TREES DOWNED ACROSS THE COUNTY. TREES FELL ONTO OR INTO SEVERAL MOBILE HOMES. DOWNED POWER LINES BLOCKED U.S. 19. CITY OF SMITHVILLE HAD NO POTABLE WATER FOR A PERIOD OF TIME FROM MONDAY INTO TUESDAY. THOMAS 0 0 IINKNOWN NUMEROUS TRAFFIC SIGNALS WERE OUT. DOWNED TREES ON POWER LINES LEFT 750 RESIDENTS WITHOUT POWER. TERRELL Ω 0 UNKNOWN SEVERAL POWER LINES AND LARGE TREES DOWNED...DAMAGING SEVERAL HOMES. AT LEAST ONE HOME IN DAWSON WAS SEVERELY DAMAGED BY A LARGE PECAN TREE. UNKNOWN JACKSON 0 0 NUMEROUS TREES AND POWER LINES DOWN BLOCKING ROADS. TWO HOMES SUSTAINED MAJOR DAMAGE FROM FALLING TREES. BAY Ω Ω 55 55 PEOPLE WERE SHELTERED IN THE COUNTY. SPORADIC POWER OUTAGES DUE TO DOWNED TREES. MINOR DAMAGE WAS SUSTAINED TO ONE COUNTY FIRE STATION. CALHOUN, FL 0 0 UNKNOWN DOWNED TREES AND POWER LINES WITH SPORADIC POWER OUTAGES...BUT NO ROAD CLOSURES. NO MAJOR STRUCTURAL DAMAGE REPORTED. 0 FRANKLIN 0 0 SEVERAL TREES DOWN...SOME DAMAGING HOMES. SEVERAL POWER OUTAGES. JEFFERSON 0 0 0 SEVERAL TREES DOWN AROUND THE COUNTY...ONE FALLING ON A HOME AND THREE ON CARS. BARNS AND FENCES DAMAGED. FARM DAMAGE. 388 POWER OUTAGES. WALTON 0 0 110 110 EVACUATED TO SHELTERS. HOLMES 0 0 35 A FEW TREES AND POWER LINES WERE DOWN THROUGHOUT THE COUNTY. THIRTY-FIVE EVACUEES FROM OUTSIDE THE COUNTY WERE HOUSED IN COUNTY SHELTERS. QUITMAN 0 0 0 TREES AND POWER LINES WERE DOWNED ACROSS THE COUNTY. ESTIMATED COST OF DAMAGE TO THE COUNTY: \$15,000. RANDOLPH 0 0 0 WIDESPREAD TREES AND POWER LINES WERE DOWN ACROSS THE COUNTY. FORTY PERCENT OF THE COUNTY WAS WITHOUT POWER. A TWO-STORY HOUSE CAUGHT ON FIRE FROM A DOWNED TREE ON A POWER LINE. HENRY 0 0 0 NUMEROUS TREES AND POWER LINES WERE DOWN ACROSS THE COUNTY. TWO HOMES SUSTAINED STRUCTURAL DAMAGE DUE TO FALLING TREES. MULTIPLE

WITHOUT POWER. DALE 0 Ω \cap SEVERAL TREES AND POWER LINES WERE DOWN IN THE COUNTY. TWO HOMES SUFFERED MINOR DAMAGE DUE TO TREES FALLING ON THE ROOFS. POWER OUTAGES WERE ALSO NOTED IN THE COUNTY. MILLER 0 0 0 NUMEROUS TREES AND POWER LINES WERE DOWN THROUGHOUT THE COUNTY. ONE HOUSE AND ONE OUTBUILDING FIRE OCCURED DUE TO DOWNED POWER LINES. BAKER Ω Ω \cap

ROADS WERE BLOCKED BY FALLING TREES. APPROXIMATELY 1200 HOMES WERE

TREES AND POWER LINES DOWN ACROSS THE COUNTY. APPROXIMATELY 2400 PEOPLE LOST POWER.

GULF 0 0 2000

A FEW TREES AND POWER LINES WERE DOWN ACROSS THE COUNTY. AROUND 2000 PEOPLE WERE WITHOUT POWER.

GRADY 0 0 550

WIDESPREAD TREES AND POWER LINES DOWN ACROSS THE COUNTY (MORE THAN 225). SEVEN TO EIGHT HOMES SUSTAINED MINOR DAMAGE DUE TO FALLING TREES. APPROXIMATELY 11,000 PEOPLE WERE WITHOUT POWER. A VOLUNTARY EVACUATION WAS ORDERED FOR MOBILE HOMES AND APPROXIMATELY 550 PEOPLE IN THE COUNTY EVACUATED.

IRWIN 0 0 70

NUMEROUS TREES AND POWER LINES WERE DOWN ACROSS THE COUNTY. EIGHT HOMES SUSTAINED MINOR STRUCTURAL DAMAGE DUE TO FALLEN TREES. APPROXIMATELY 70 PEOPLE EVACUATED FROM THEIR MOBILE HOMES. THERE WAS ONE INDIRECT INJURY FROM THE STORM AS ONE LINEMAN WAS ELECTROCUTED.

COOK 0 0 0

TREES AND POWER LINES WERE DOWN ACROSS THE COUNTY THAT RESULTED IN 26 ROAD CLOSURES. THESE IMPACTS LASTED 4 TO 5 DAYS. APPROXIMATELY 15 HOMES WERE DAMAGED DUE TO FALLEN TREES. SCHOOL IN THE COUNTY WAS CLOSED FOR THE WHOLE WEEK.

BROOKS 0 0 0

WIDESPREAD TREES DOWN ACROSS THE COUNTY. SEVERAL HOMES WERE DAMAGED, TWO MAJOR. SEVERAL ROADS WASHED OUT. POWER OUTAGES LASTED 4 TO 5 DAYS ACROSS THE COUNTY WITH SEVERAL THOUSAND POWER OUTAGES. 150 PEOPLE WERE SHELTERED IN THE COUNTY.

CALHOUN, GA 0 0 70

NUMEROUS TREES AND POWER LINES WERE DOWN ACROSS THE COUNTY. TWO HUNDRED AND FIFTY PEOPLE WERE WITHOUT POWER FOR A COUPLE OF DAYS. A COMFORT STATION WAS SET UP FOR PEOPLE IN MOBILE HOMES TO STAY AT DURING THE STORM AND 70 PEOPLE STAYED AT THE COMFORT CENTER. TEN HOMES SUSTAINED STRUCTURAL DAMAGE DUE TO WIND OR FALLEN TREES. ONE BUSINESS IN ALRINGTON LOST ITS ROOF DUE TO WIND.

GENEVA 0 0 0

TREES AND POWER LINES WERE DOWN ACROSS THE COUNTY WITH THE COUNTY REMOVING TREES FROM 37 SITES. IN ADDITION, ON COUNTY ROAD 60, THE ROOF WAS LOST OFF A MOBILE HOME. THE CEILING OF THE MOBILE HOME EVENTUALLY COLLAPSED AND WITH RAIN ENTERING THE MOBILE HOME, IT WAS A COMPLETE LOSS.

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LEGEND: I-INCOMPLETE DATA E-ESTIMATED

HOLLINGSWORTH/CAMP/WOOL/FIEUX/GODSEY

Appendix C – Post-Cyclone Report from the Jacksonville NWS WFO

384 ACUS72 KJAX 230237 PSHJAX

POST TROPICAL CYCLONE REPORT...HURRICANE IRMA NATIONAL WEATHER SERVICE JACKSONVILLE FL 1037 PM EDT FRI SEP 22 2017

NOTE: THE DATA SHOWN HERE ARE PRELIMINARY....AND SUBJECT TO UPDATES AND CORRECTIONS AS APPROPRIATE.

THIS REPORT INCLUDES EVENTS OCCURRING WHEN WATCHES AND/OR WARNINGS WERE IN EFFECT... OR WHEN SIGNIFICANT FLOODING ASSOCIATED WITH IRMA OR ITS REMNANTS WAS AFFECTING THE AREA.

COUNTIES INCLUDED...ALACHUA...APPLING...ATKINSON...BACON...BAKER... BRADFORD...BRANTLEY...CAMDEN...CHARLTON...CLAY...CLINCH...COFFEE... COLUMBIA...DUVAL...ECHOLS...FLAGLER...GILCHRIST...GLYNN... HAMILTON...JEFF DAVIS...MARION...NASSAU...PIERCE...PUTNAM... ST JOHNS...SUWANNEE...UNION...WARE...WAYNE

SEP 19...UPDATED FOR...ADDED NOAA PORTS STATIONS AND AMENDED SOME NE FLORIDA AWOS STATIONS FOR INCOMPLETE DATA

SEP 22...UPDATED FOR...ADDED LOWEST PRESSURE READINGS FOR SOME NON-METAR SITES.

SEP 22... UPDATED FOR... INLAND FLOODING INFORMATION.

	CONS CR HEIGHT IS 10 M				
LAT LON DEG DECIMAL	MIN DATE/ PRES TIME (MB) (UTC)	SUST (KT)	TIME (UTC)	GUST (KT)	TIME (UTC)
KJAX-JACKSONVII	LE INTERNATIONAL 986.6 11/1156	AIRPORT	FL		
	CIPAL AIRPORT FL 987.0 11/1153		11/1227	140/061	11/1226
KNRB-MAYPORT NA 30.39 -81.42	AVAL STATION FL 988.5 11/1152	050/059	11/0738	050/076	11/0738
	LE NAVAL AIR STA 984.6 11/1153		11/1053	050/063	11/0636
KVQQ-CECIL FIEI 30.22 -81.88	LD AIRPORT FL 9999.0 /	040/024	11/0515 I	030/038	11/0435 I
	JSTINE AIRPORT FL 994.3 11/0656 I		11/0506 I	050/062	11/0446 I
KFIN-BUNNELL FI 29.47 -81.21	9999.0 /	060/035	11/0235	100/053	11/0455
KVVG-THE VILLAG 28.96 -81.97	GES FL 9999.0 /	050/032	11/0250	070/047	11/1010

A. LOWEST SEA LEVEL PRESSURE/MAXIMUM SUSTAINED WINDS AND PEAK GUSTS

KOCF-OCALA INTERNATIONAL AIRPORT FL 29.18 -82.22 995.3 11/0251 I 010/021 10/2221 I 030/034 11/0311 I K42J-KEYSTONE HEIGHTS FL 29.85 -82.05 9999.0 / 070/031 11/0755 070/049 11/0555 KGNV-GAINESVILLE REGIONAL AIRPORT FL 29.68 -82.27 979.5 11/1053 040/035 11/0527 050/053 11/0517 KLCQ-LAKE CITY FL 020/031 11/0635 020/047 11/0635 30.18 -82.58 9999.0 / KHOE-HOMERVILLE GA 030/020 11/0735 030/034 11/0735 31.06 -82.77 9999.0 / KHOE-HOMERVILLE GA 030/020 11/0735 030/034 11/0735 31.06 -82.77 9999.0 / KDQH-DOUGLAS MUNICIPAL AIRPORT GA 31.48 -82.86 9999.0 / 050/034 11/1355 040/051 11/1255 KAYS-WAYCROSS GA 31.25 -82.40 9999.0 / 040/030 11/0815 040/042 11/0955 KAMG-BACON COUNTY AIRPORT GA 31.54 -82.50 989.8 11/1553 140/021 11/1853 010/038 11/1314 KJES-JESUP GA 31.55 -81.88 9999.0 / 040/021 11/0856 030/033 11/0937 KBQK-BRUNSWICK/GLYNCO AIPORT GA 31.15 -81.47 9999.0 / 060/035 11/0915 060/052 11/0915 KSSI-ST. SIMONS/MALCOLM MCKINNON AIRPORT GA 31.15 -81.38 1006.1 11/0553 I 060/033 11/0610 I 050/049 11/0548 I REMARKS: 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/ SUST TIME PRES TIME LAT LON GUST TIME (MB) (UTC) (KT) DEG DECIMAL (UTC) (KT) (UTC) -------_____ BXTG1 - RAWS BAXLEY GA 31.71 -82.39 999/999 070/056 11/1504 XTRM - TERMINAL CHANNEL DOWNTOWN JACKSONVILLE 30.33 -81.62 983.0 11/1158 120/040 11/1143 120/065 11/1158 XJAK - BUCK ISLAND 30.39 -81.48 983.0 11/1235 060/055 11/0735 060/069 11/0735 XHUP - HUGUENOT PARK 30.41 -81.41 985.0 11/1116 065/057 11/0746 060/074 11/0741 XJAX - WEATHERFLOW JACKSONVILLE BEACH PIER 30.29 -81.39 986.0 11/1010 130/049 11/1310 097/065 11/1010 XLWS - WEATHERFLOW LEWIS ST. JOHNS 29.91 -81.33 984.0 11/1044 140/045 11/1149 130/065 11/1054 XHSE - WEATHERFLOW CRESCENT BEACH SUMMERHOUSE 29.71 -81.23 987.0 11/1005 145/047 11/1025 145/060 11/1055 OKEG1 - RAWS WAYCROSS GA 31.24 -82.40 999/999 035/055 11/1004

JONG1 - RAWS JONES ISLAND OKEFENOKEE NWR

25

30.82 -82.36	999/999	082/044 11/1801
TT331 - RAWS OKEFENOKEE NWR WES 30.97 -82.40		032/048 11/0910
EDTF1 - EDDY TOWER BAKER COUNTY 30.54 -82.34	999/999	114/024 11/1304
LGRF1 - RAWS LAKE GEORGE OCALA 1 29.38 -81.81	NF 999/999	208/034 11/1704
TS818 - RAWS OKEFENOKEE NWR EAS 30.74 -82.13	T 999/999	114/042 11/1256
OLSF1 - RAWS OLUSTEE BAKER 30.25 -82.42	999/999	173/040 11/1704
STRG1 - RAWS STERLING GLYNN GA 31.25 -81.61	999/999	073/048 11/1104
FAWN LIVE OAK FL 30.30 -82.90	999/999	999/042 11/0615
XJEK - JEKYLL ISLAND GA 31.05 -81.41 988.0 11/1322	130/050 1337	080/067 11/0837
1 NNE ST. AUGUSTINE BEACH 29.86 -81.26	999/999	999/068 11/0700
CRESCENT BEACH 29.72 -81.23	999/999	999/058 11/0720
PALATKA AIRPORT 29.66 -81.69	999/999	999/053 11/0055
3 SE WELAKA 29.44 -81.63	999/999	999/057 11/0421
2 SSE KINGSLAND 30.75 -81.65	999/999	999/049 11/0511
2 W DEENWOOD 31.25 -82.40	999/999	999/048 11/0604
3 NE YULEE 30.66 -81.54	999/999	999/047 10/2259
1 SW ORTEGA 30.26 -81.72	999/999	999/047 11/0212
PALM COAST 29.57 -81.21	999/999	999/046 11/0729
4 SW BAXLEY 31.71 -82.39	999/999	999/045 11/0704
2 NNE BAKERSTOWN 29.39 -81.47	999/999	999/045 11/0932
SUWANNE COUNTY AIRPORT 30.30 -83.02	999/999	999/043 11/0315
BAXLEY MUNICIPAL AIRPORT 31.71 -82.39	999/999	999/042 11/0715
3 N BUNNELL 29.51 -81.25	999/999	999/042 11/0042
5 ESE THALMANN 31.26 -81.61	999/999	999/042 11/0704

11 NNW STEVEN FOSTER ST PK 30.98 -82.40	999/999		999/042	11/0510
1 SE ORTEGA 30.25 -81.69	999/999		999/040	11/0203
3 S BOYS ESTATE 31.27 -81.48	999/999		999/030	11/0437
5WNW NEWBERRY 29.67 -82.70	999/999		999/039	11/0315
HAZLEHURST 31.88 -82.65	999/999		999/039	11/0655
5 WNW OCALA AIRPORT 29.20 -82.30	999/999		999/039	11/0147
3S BELLAIR 30.18 -81.81	999/999		999/039	11/0739
3 W BELLAIR 30.18 81.91	999/999		999/039	11/0739
5 SE ALACHUA 29.73 -82.42	999/999		999/037	11/0229
1 SW SAN PABLO 30.27 -81.46	999/999		999/037	11/0246
1 WNW STEVEN FOSTER ST PK 30.83 -82.36	999/999		999/036	11/0801
3 SSE SAN MARCO 30.27 -81.65	999/999		999/036	11/0243
2 NNW TALLYRAND 30.39 -81.65	999/999		999/036	11/0400
5 WSW DURBIN 30.05 -81.54	999/999		999/035	11/0130
1 SE SAN MARCO 30.30 -81.64	999/999		999/034	11/0115
3 WSW KINGSLAND 30.77 81.73	000 (000			
	999/999		999/034	11/0657
4 NNW VILANO BEACH 30.02 -81.32 1005.0 11/0308 I				
4 NNW VILANO BEACH 30.02 -81.32 1005.0 11/0308 I REMARKS:				
30.02 -81.32 1005.0 11/0308 I REMARKS: B. MARINE OBSERVATIONS NOTE: ANEMOMETER HEIGHT IN METE MINUTES INDICATED UNDER MAXIMUM	050/051 RS AND WI SUSTAINE	10/2223 I ND AVERAGII	055/060 NG PERIOI	11/0308 I
30.02 -81.32 1005.0 11/0308 I REMARKS: B. MARINE OBSERVATIONS NOTE: ANEMOMETER HEIGHT IN METE MINUTES INDICATED UNDER MAXIMUM LOCATION ID MIN DATE/ LAT LON PRES TIME DEG DECIMAL (MB) (UTC)	050/051 RS AND WI SUSTAINE MAX SUST (KT)	10/2223 I ND AVERAGIN D WIND IF 1 DATE/ TIME (UTC)	055/060 NG PERIOI KNOWN PEAK GUST (KT)	11/0308 I D IN DATE/ TIME (UTC)
30.02 -81.32 1005.0 11/0308 I REMARKS: B. MARINE OBSERVATIONS NOTE: ANEMOMETER HEIGHT IN METE MINUTES INDICATED UNDER MAXIMUM LOCATION ID MIN DATE/ LAT LON PRES TIME	050/051 RS AND WI SUSTAINE MAX SUST (KT) INE FL	10/2223 I ND AVERAGII D WIND IF I DATE/ TIME (UTC)	055/060 NG PERIOI KNOWN PEAK GUST (KT)	11/0308 I D IN DATE/ TIME (UTC)

FRDF1-NOS STATION FERNANDINA BEACH FL

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30.67 -81.47 990.0 11/1312 145/029 11/1548 124/052 11/1236

NFDF1-NOAA PORTS-NAVY DEPOT 30.40 -81.62 988.0 11/1200 9999999 99999 I 051/054 11/0800

BKBF1-NOAA PORTS- I-295 BRIDGE 30.18 -81.68 984.0 11/1142 060/050 11/0648 109/060 11/0936

BLIF1-NOAA PORTS, BLOUNT ISLAND COMMAND 30.39 -81.52 988.0 11/1212 117/041 11/1036 100/058 11/1000

REMARKS:

C. STORM TOTAL RAINFALL FROM			
	COUNTY	ID	RAINFALL (IN)
	GILCHRIST		15.11
FERNANDINA BEACH 30.65 -81.45	NASSAU		12.70
GAINESVILLE REGIONAL APT 29.67 -82.34	ALACHUA	GNV	12.40
2.4 NW GAINESVILLE 29.69 -82.36	ALACHUA	FL-AL-57	12.22
0.9 ESE STARKE 29.94 -82.10	BRADFORD	FL-BF-2	11.74
8.8 S INTERLACHEN 29.48 -81.90	MARION	FL-MR-46	11.51
8.8 E MIDDLEBURG 30.04 -81.75	CLAY		11.32
7.5 WSW GAINESVILLE 29.63 -82.45	ALACHUA	FL-AL-60	11.15
1 WNW ORTEGA 30.27 -81.72	DUVAL		11.11
10 SW JACKSONVILLE 30.24 81.79	DUVAL		11.04
1.8 WSW ORANGE PARK 30.15 -81.73	CLAY	FL-CY-25	11.03
5.2 NNW ALACHUA 29.84 -82.51	ALACHUA	FL-AL-56	11.03
12 SSE JACKSONVILLE 30.18 81.57	DUVAL		11.00
3.5 NNW EAST PALATKA 29.69 -81.62	PUTNAM		10.96
1.7 SE GAINESVILLE 29.65 -82.32	ALACHUA	FL-AL-26	10.94
3.8 W GAINESVILLE	ALACHUA	FL-AL-10	10.89

29.67	-82.40	

23.07 02.10			
2.4 SW GAINESVILLE 29.64 -82.36	ALACHUA	FL-AL-50	10.75
2.1 NNE MICANOPY 29.53 -82.26	ALACHUA	FL-AL-51	10.70
2.6 WNW GREEN COVE SPRIN 30.00 -81.72	CLAY	FL-CY-42	10.48
1.8 ESE KEYSTONE HEIGHTS 29.76 -82.01	CLAY	FL-CY-24	10.36
6 S NAHUNTA 31.12 -81.98	BRANTLEY		10.34
7.7 W GAINESVILLE 29.67 -82.46	ALACHUA	FL-AL-55	10.33
ST. AUGUSTINE SOUTH 29.84 -81.31	ST. JOHNS		10.22
4.6 N OCALA 29.25 -82.13	MARION	FL-MR-57	10.12
4 NE SATSUMA 29.59 -81.61	PUTNAM		10.05
11.2 SW OCALA 29.07 -82.26	MARION	FL-MR-59	9.96
6.3 S FERNANDINA BEACH 30.56 -81.45	NASSAU		9.92
9.80 SW OCALA 29.08 -82.24	MARION	FL-MR-43	9.91
10.7 WSW OCALA 29.12 -82.29	MARION	FL-MR-56	9.90
0.4 N FERNANDINA BEACH 30.66 -81.45	NASSAU		9.86
HOMELAND 30.85 -82.02	CHARLTON		9.85
3 N OLUSTEE 30.24 -82.43	BAKER		9.76
5 ESE THALMANN 31.29 -81.69	GLYNN		9.65
14.30 S OCALA 28.97 -82.13	MARION	FL-MR-36	9.65
3 SSW BELLEVIEW 29.01 -82.07	MARION		9.64
0.9 NE RAIFORD 30.07 -82.23	UNION		9.62
4.8 E BELLEVIEW 29.05 -81.97	MARION	FL-MR-18	9.50
10 SW FOLKSTON 30.73 -82.13	CHARLTON		9.30
JACKSONVILLE INTL APT 30.49 81.69	DUVAL	JAX	9.20

5.9 S PALM COAST 29.48 -81.21	FLAGLER	FL-FL-25	9.10
4.9 NE OCKLAWAHA 29.09 -81.87	MARION	FL-MR-22	9.00
5.4 W GAINESVILLE 29.67 -82.43	ALACHUA	FL-AL-48	8.87
31.21 -81.87	BRANTLEY		8.74
2 NE FARGO 30.70 -82.54	CLINCH		8.66
1.1 SE OCALA 29.17 -82.12	MARION	FL-MR-54	8.63
2.3 ENE SCREVEN 31.49 -81.98	WAYNE		8.56
9 N FLORAHOME 29.86 -81.88	CLAY		8.55
10 NE KEYSTONE HEIGHTS 29.88 -81.91	CLAY	FL-CY-38	8.55
1.0 ENE BUNNELL 29.47 -81.24	FLAGLER	FL-FL19	8.48
5 NNW BLACKSHEAR 31.36 -82.28	PIERCE		8.45
SUWANNEE RIVER US HWY 44 30.68 82.56			8.44
7.9 SSW LAKE CITY 30.08 -82.69	COLUMBIA	FL-CB-12	8.44
3.2 SW HIGH SPRINGS 29.78 -82.63	ALACHUA	FL-AL-17	8.23
MAYPORT NAVAL STATION 30.38 -81.41	DUVAL	NRB	7.96
11 NNW STEVEN FOSTER ST. 32.57 -83.19	CHARLTON		7.81
7 NNW TAYLOR 30.53 -82.34	BAKER		7.79
0.6 ESE PALM COAST 29.56 -81.20	FLAGLER	FL-FL-21	7.67
1 WNW STEVEN FOSTER ST. 30.83 82.36			7.66
8.0 ENE TRENTON 29.65 -82.69	GILCHRIST	FL-GC-1	7.60
5 WNW JACKSONVILLE HEIGH 30.27 -81.86	DUVAL		7.54
5 SE ALACHUA 29.72 -82.42	ALACHUA		7.51
PENNEY FARMS		DI OV 11	7.46
29.98 -81.81	CLAY	FL-CY-41	1.10

4 NNE MANDARIN 30.20 -81.61	DUVAL		7.35
4.2 NNW JESUP 31.65 -81.92	WAYNE		7.22
LITTLE SATILLA RIVER 31.45 82.05			7.14
JACKSONVILLE NAS 30.23 -81.68	DUVAL	NIP	7.08
10 NNW JESUP 31.73 -81.95	WAYNE		6.96
WAYCROSS 31.21 -82.36	WARE		6.86
3 WSW KINGSLAND 30.77 -81.71	INLAND CAMDEN		6.84
4.6 SSE MICANOPY 29.44 -82.25	MARION	FL-MR-42	6.83
3.5 ENE KEYSTONE HEIGHTS 29.79 -81.98	CLAY	FL-CY-7	6.78
1.9 S PALM COAST 29.54 -81.21	FLAGLER	FL-FL-26	6.72
4 NW TRENTON 29.65 -82.86	GILCHRIST	FL-GC-8	6.53
3.5 NE PEARSON 31.33 -82.81	ATKINSON		6.50
SATILLA RIVER HWY 158 31.30 82.56			6.49
BACON COUNTY AIRPORT 31.54 82.51	BACON		6.04
2 W DEENWOOD 31.24 -82.40	WARE		5.98
4 SW BAXLEY 31.72 -82.40	APPLING		5.89
ALAPAHA RIVER HWY 94 30.70 83.03			5.82
1 WNW ALACHUA 29.78 -82.50	ALACHUA		5.70
0.5 NNW NEPTUNE BEACH 30.32 -81.40	DUVAL	FL-DV-13	4.97
DOCTORTOWN 31.65 -81.83	WAYNE		4.92
3 SSW FOLKSTON 30.79 -82.03	CHARLTON		4.66
1 SSE LUMBER CITY 31.92 82.67			4.22
REMARKS:			

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D. INLAND FLOODING...

BRADFORD...ALLIGATOR CREEK AT STARKE SETS RECORD FLOOD STAGE AT 147.98 FEET ON 09/11 AT 1100 EDT. SANTA FE RIVER NEAR GRAHAM SETS RECORD FLOOD STAGE AT 118.98 FEET ON 09/11 AT 0945 EDT. HAMPTON LAKE NEAR HAMPTON CRESTED AT 131.03 FEET ON SEPT 13TH AT 1200 EDT. MODERATE FLOODING OCCURS AT THIS LEVEL. LAKE SAMPSON NEAR STARKE SETS RECORD FLOOD STAGE AT 135.34 FEET ON SEPT 15TH AT 2000 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. NEW RIVER NEAR LAKE BUTLER SETS RECORD FLOOD STAGE AT 98.55 FEET ON SEPT 12TH AT 0815 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. SAMPSON RIVER AT SAMPSON CITY SETS RECORD FLOOD STAGE AT 135.09 FEET ON SEPT 15TH AT 1900 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL.

CLAY...BLACK CREEK AT MIDDLEBURG (BLANDING BLVD/SR 21) SETS RECORD FLOOD STAGE AT 30.52 FEET ON 09/12 AT 0130 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. NORTH FORK BLACK CREEK NEAR MIDDLEBURG SETS ESTIMATED RECORD FLOOD STAGE BETWEEN 28 AND 29 FEET ON SEPT 12TH. MAJOR FLOODING OCCURS AT THIS LEVEL. SOUTH FORK BLACK CREEK NEAR PENNEY FARMS SETS ESTIMATED RECORD FLOOD STAGE BETWEEN 28 AND 29 FEET ON SEPT 12TH. MAJOR FLOODING OCCURS AT THIS LEVEL.

MARION...OCKLAWAHA RIVER NEAR CONNER SETS RECORD FLOOD STAGE AT 40.07 FEET ON 09/11 AT 1000 EDT. OCKLAWAHA RIVER AT EUREKA SETS RECORD FLOOD STAGE AT 25.49 FEET ON 09/13 AT 0515 EDT. OCKLAWAHA RIVER NEAR OCALA SET RECORD FLOOD STAGE AT 41.31 FEET ON SEPT 11TH AT 0745 EDT.

<code>PIERCE...ALABAHA</code> RIVER AT GEORGIA HIGHWAY 203 NEAR BLACKSHEAR CRESTED AT 11.41 FT ON 09/12 AT 1730 EDT. MINOR FLOODING OCCURS AT THIS LEVEL.

BRANTLEY...SATILLA RIVER AT ATKINSON CRESTED AT 16.07 FEET ON SEPT 17TH AT 0845 EDT. MINOR FLOODING OCCURS AT THIS LEVEL.

FLAGLER...MATANZAS RIVER AT BINGS LANDING CRESTED AT 4.85 FEET ON SEPT 11TH AT 0424 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. HAW CREEK ABOVE RUSSELL LANDING SETS RECORD FLOOD STAGE AT 7.87 FEET ON SEPT 11TH AT 1430 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL.

DUVAL...ST JOHNS RIVER AT THE BUCKMAN BRIDGE SETS RECORD FLOOD STAGE AT 5.63 FEET ON SEPT 11TH AT 0718 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. BROWARD RIVER BELOW BISCAYNE BLVD CRESTED AT 4.08 FEET ON SEPT 11TH AT 0045 EDT. MODERATE FLOODING OCCURS AT THIS LEVEL. CLAPBOARD CREEK NEAR SHEFFIELD ROAD SETS RECORD FLOOD STAGE AT 5.31 FEET ON SEPT 11TH AT 0430 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. DUNN CREEK AT DUNN CREEK ROAD SETS RECORD FLOOD STAGE AT 6.38 FEET ON SEPT 11TH AT 0930 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. THE ST JOHNS RIVER AT THE DAMES POINT BRIDGE SETS RECORD FLOOD STAGE AT 5.05 FEET ON SEPT 11TH AT 1324 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. CEDAR RIVER AT SAN JUAN AVENUE SETS RECORD FLOOD STAGE AT 6.35 FEET ON SEPT 11TH AT 1230 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. JULINGTON CREEK AT OLD ST AUGUSTINE ROAD SETS RECORD FLOOD STAGE AT 6.20 FEET ON SEPT 11TH AT 1030 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. THE ST JOHNS RIVER AT THE MAIN STREET BRIDGE SETS RECORD FLOOD STAGE AT 5.57 FEET ON SEPT 11TH AT 1224 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. ST JOHNS RIVER AT MAYPORT CRESTED AT 5.58 FEET ON SEPT 11TH AT 0254 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. NASSAU RIVER NEAR TISONIA SETS RECORD FLOOD STAGE AT 8.18 FEET ON SEPT 11TH AT 0330 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. ORTEGA RIVER AT ARGYLE FOREST BLVD SETS RECORD FLOOD STAGE AT 12.99 FEET ON SEPT 11TH AT 1215 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. ST JOHNS RIVER AT BUFFALO BLUFF CRESTED AT 3.31 FEET ON SEPT 12TH AT 2315 EDT. MODERATE FLOODING OCCURS AT THIS LEVEL. POTTSBURG CREEK AT BEACH BLVD SETS RECORD FLOOD STAGE AT 5.84 FEET ON SEPT 11TH AT 1300 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. POTTSBURG CREEK AT BOWDEN ROAD SETS RECORD FLOOD STAGE AT 10.04 FEET ON SEPT 11TH AT 0800 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. TROUT RIVER AT LEM TURNER ROAD CRESTED AT 4.16 FEET ON SEPT 11TH AT 0200 EDT. MODERATE FLOODING OCCURS AT THIS LEVEL.

GLYNN...THE TIDAL GAUGE ON THE ATLANTIC COAST AT ST SIMONS ISLAND

VILLAGE PIER CRESTED AT 6.90 FEET ON SEPT 11TH AT 1145 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL.

CAMDEN...THE TIDAL GAUGE ON THE ATLANTIC COAST AT SEA CAMP DOCK ON CUMBERLAND ISLAND CRESTED AT 6.48 FEET ON SEPT 11TH AT 0200 EDT. MODERATE FLOODING OCCURS AT THIS LEVEL. SATILLA RIVER AT WOODBINE CRESTED AT 6.85 FEET ON SEPT 11TH AT 1445 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL.

PUTNAM...DUNNS CREEK AT SATSUMA CRESTED AT 4.26 FEET ON SEPT 11TH AT 1915 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. ORANGE CREEK AT ORANGE SPRINGS CRESTED AT 28.96 FEET ON SEPT 11TH AT 1115 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. OCKLAWAHA RIVER AT RODMAN DAM SETS RECORD FLOOD STAGE AT 9.70 FEET ON SEPT 13TH AT 1900 EDT.

ST JOHNS...DURBIN CREEK AT RACE TRACK ROAD CRESTED AT 6.69 FEET ON SEPT 11TH AT 1600 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. ST JOHNS RIVER AT RACY POINT CRESTED AT 4.60 FEET ON SEPT 11TH AT 1648 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. DEEP CREEK AT SPUDS SETS RECORD FLOOD STAGE AT 6.57 FEET ON SEPT 11TH AT 2200 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. TOLOMATO RIVER ABOVE ST AUGUSTINE AIRPORT SETS RECORD FLOOD STAGE AT 5.58 FEET ON SEPT 11TH AT 0206 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL.

CLINCH...SUWANNEE RIVER AT FARGO CRESTED AT 104.57 FEET ON SEPT 19TH AT 0245 EDT. MINOR FLOODING OCCURS AT THIS LEVEL.

NASSAU...THE TIDAL GAUGE ON THE ATLANTIC COAST AT FERNANDINA BEACH CRESTED AT 6.34 FEET ON SEPT 11TH AT 0148 EDT. MODERATE FLOODING OCCURS AT THIS LEVEL. THE ST MARYS RIVER AT I-95 CRESTED AT 3.57 FEET ON SEPT 11TH AT 1415 EDT. MINOR FLOODING OCCURS AT THIS LEVEL. GILCHRIST...SANTA FE RIVER NEAR HILDRETH CRESTED AT 21.22 FEET ON SEPT 17TH AT 0715 EDT. MINOR FLOODING OCCURS AT THIS LEVEL. SANTA FE RIVER NEAR FORT WHITE CRESTED AT 34.46 FEET ON SEPT 15TH AT 1545 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL

ALACHUA...SANTA FE RIVER NEAR HIGH SPRINGS SETS RECORD FLOOD STAGE AT 48.46 FEET ON SEPT 14TH AT 1800 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL AND US HIGHWAY 441 WAS BRIEFLY SHUT DOWN NEAR THE CREST. SANTA FE RIVER AT POE SPRINGS POOL SETS RECORD FLOOD STAGE AT 40.59 FEET ON SEPT 15TH AT 0400 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. SANTA FE RIVER AT RIVER RISE NEAR HIGH SPRINGS SETS RECORD FLOOD STAGE AT 50.48 FEET ON SEPT 14TH AT 1315 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL.

COLUMBIA...ICHETUCKNEE RIVER BELOW ICHETUCKNEE SPRINGS STATE PARK CRESTED AT 24.54 FEET ON SEPT 16TH AT 1900 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. SANTA FE RIVER AT OLENO STATE PARK SETS RECORD FLOOD STAGE AT 57.07 FEET ON SEPT 14TH AT 0715 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. SUWANNEE RIVER NEAR BENTON CRESTED AT 94.47 FEET ON SEPT 21ST. MINOR FLOODING OCCURS AT THIS LEVEL. SANTA FE RIVER AT THREE RIVERS ESTATES CRESTED AT 24.55 FEET ON SEPT 16TH AT 2000 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. SUWANNEE RIVER AT WHITE SPRINGS CRESTED AT 76.49 FEET ON SEPT 13TH AT 0045 EDT. MINOR FLOODING OCCURS AT THIS LEVEL.

BAKER...ST MARYS RIVER NEAR MACCLENNY CRESTED AT 22.32 FEET ON SEPT 12TH AT 1845 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL. ST MARYS RIVER AT MONIAC CRESTED AT 17.51 FEET ON SEPT 13TH AT 0415 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL.

WAYNE...LITTLE SATILLA RIVER NEAR OFFERMAN CRESTED AT 12.81 FEET ON SEPT 12TH AT 1745 EDT. MODERATE FLOODING OCCURS AT THIS LEVEL.

CHARLTON...ST MARYS RIVER AT TRADERS HILL SETS RECORD FLOOD STAGE AT 19.30 FEET ON SEPT 15TH AT 1445 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL.

WARE...SATILLA RIVER AT GEORGIA HIGHWAY 158 ABOVE MILLWOOD CRESTED AT 14.91 FEET ON SEPT 14TH AT 2030 EDT. MINOR FLOODING OCCURS AT THIS LEVEL.

UNION...SANTA FE RIVER AT WORTHINGTON SPRINGS SETS RECORD FLOOD STAGE AT 71.17 FEET ON SEPT 12TH AT 2200 EDT. MAJOR FLOODING OCCURS AT THIS LEVEL.

E. MAXIMUM STORM SURGE AND STORM TIDE...

OFFICIAL TIDE GAUGES NOTED WITH LEADING G

COUNTY	CITY/TOWN OR LOCATION	SURGE (FT)	TIDE (FT)	DATE/ TIME	BEACH EROSION	
FLAGLER	G BINGS LANDING	4.19	4.19	11/0824	UNKNOWN	
DUVAL	G BUCKMAN BRIDGE	5.71	5.26	11/1118	UNKNOWN	I
GLYNN	G ST SIMONS ISLAN	3.93	3.93	11/1545	UNKNOWN	I
DUVAL	G BROWARD RIVER	2.78	2.78	11/0445	UNKNOWN	I
DUVAL	G CLAPBOARD CREEK	3.47	3.47	11/1715	UNKNOWN	
CAMDEN	G SEA CAMP DOCK O	3.13	3.13	11/0600	UNKNOWN	
DUVAL	G DUNN CREEK	4.77	4.77	11/0930	UNKNOWN	
DUVAL	G DAMES POINT BRI	5.97	3.69	11/1724	UNKNOWN	
PUTNAM	G DUNNS CREEK NEA	3.60	3.60	11/2315	UNKNOWN	
ST. JOHNS	G DURBIN CREEK AT	5.61	5.61	11/2000	UNKNOWN	Ι
NASSAU	G FERNANDINA BEAC	7.78	3.61	11/0548	UNKNOWN	
DUVAL	G CEDAR RIVER AT	5.66	5.66	11/1630	UNKNOWN	
DUVAL	G JULINGTON CREEK	5.35	5.35	11/1430	UNKNOWN	
CAMDEN	G ST MARYS RIVER	1.10	1.10	11/1815	UNKNOWN	
DUVAL	G MAYPORT	6.44	3.62	11/0654	UNKNOWN	
DUVAL	G SOUTHBANK RIVER	6.61	4.94	11/1624	UNKNOWN	
ST JOHNS	G RACY POINT	4.72	3.96	11/2100	UNKNOWN	
DUVAL	G NASSAU RIVER NE	6.21	6.21	11/0730	UNKNOWN	I
DUVAL	G POTTSBURG CREEK	4.76	4.76	11/1700	UNKNOWN	
DUVAL	G TROUT RIVER AT	2.91	2.91	11/0600	UNKNOWN	I
ST JOHNS	G TOLOMATO RIVER	3.61	3.61	11/0606	UNKNOWN	
CAMDEN	G SATILLA RIVER A	3.44	3.44	11/1845	UNKNOWN	
ST JOHNS	G DEEP CREEK AT S	5.75	5.75	12/0200	UNKNOWN	

REMARKS: OFFICIAL TIDE GAUGE SITES HAVE STORM TIDE WITH RESPECT TO MHHW. TIMES IN UTC. TIDE GAUGE AT BUCKMAN BRIDGE STOPPED REPORTING 9/11 1347UTC AND THEREFORE MAY HAVE EXPERIENCED HIGHER WATER LEVELS. FURTHER DETAILED ANALYSIS IS BEING DONE NEAR DOWNTOWN JAX ON WATER LEVELS AND STORM SURGE.

F. TORNADOES...

(DIST)CITY/TOWN LAT LON (DEG DECIMAL DESCRIPTION	COUNTY	DATE/ TIME (UTC)	EF SCALE (IF KNOWN)
1 SSE VILANO BEACH 29.93 -81.30	St. Johns	10/2350	EF1

THIS TORNADO MAY HAVE INITIATED AS A WATERSPOUT THAT MOVED ONSHORE AT VILANO BEACH. MINIMAL DAMAGE WAS SEEN IN VILANO BEACH, WITH MORE TREE DAMAGE OBSERVED WEST OF VILANO BEACH. A FEW TREES WERE SNAPPED AND UPROOTED. RADAR INDICATED A TORNADO DEBRIS SIGNATURE. ESTIMATED PEAK WINDS WERE 85-100 MPH. THE PATH LENGTH WAS ABOUT 4 MILES AND THE WIDTH OF THE VORTEX WAS ABOUT 200 YARDS. THE TORNADO DAMAGE SURVEY BEGIN IN VILANO BEACH FLORIDA (29.93, -81.30) AROUND 7:50 PM LOCAL TIME ON 9/10. THE DAMAGE ENDED 4 MILES WEST OF VILANO BEACH (29.95, -81.38) AROUND 7:56 PM ON 9/10.

1 N ST. AUGUSTINE St. Johns 10/1740 EF1 29.90 -81.31

THIS TORNADO LIKELY BEGAN AS A WATERSPOUT THAT MOVED ONSHORE. SIGNIFICANT TREE DAMAGE OCCURRED AT HUGUENOT CEMETERY, WITH MORE TREE DAMAGE WESTWARD TOWARD HIGHWAY 1. THE TIME OF DAMAGE WAS BASED ON RADAR. PEAK WINDS WERE 85-100 MPH WITH TOTAL PATH LENGTH OF 1 MILE AND WIDTH OF 50 YARDS. THE TORNADO STARTED IN ST. AUGUSTINE (29.90, -81.31) AROUND 1:40 PM AND TRACKED TOWARD 1 MILE WEST OF ST. AUGUSTINE (29.90, -81.33) ENDING AROUND 1:45 PM.

1 SE CRESCENT BEACH	ST. JOHNS	11/0415	EF2
29.72 -81.23			

SIGNIFICANT STRUCTURAL DAMAGE OCCURRED AT SUMMER HOUSE VACATION RENTALS. THERE WERE CLEAR SIGNS OF A CIRCULATION IN THE DAMAGE PATTERN. TREE DAMAGE OCCURRED TO A1A. THE TORNADO APPEARED TO DISSIPATE OVER THE INTERCOASTAL WATERWAY. PEAK WINDS WERE 110-130 MPH. TOTAL PATH LENGTH WAS ABOUT 1 MILE WITH WIDTH OF 300 YARDS. THE TORNADO BEGAN AROUND 1:15 AM ABOUT 2 MILES SOUTH OF CRESCENT BEACH (29.72, -81.23) AND ENDED AROUND 1:20 AM ABOUT 3 MILES SSW OF CRESCENT BEACH (29.72, -81.25).

2 NNW	FERNANDINA	BEACH	NASSAU	11/0625	EFO
30.69	-81.46				

NO DAMAGE WAS REPORTED AS THE TORNADO TRACKED GENERALLY OVER OPEN MARSH. THERE WAS A CLEAR TORNADO DEBRIS SIGNATURE ON RADAR. THE TIME OF THE TORNADO WAS ESTIMATED BASED ON RADAR. PEAK WINDS REACHED 85-100 MPH. THE TOTAL PATH LENGTH WAS 11 MILES WITH UNKNOWN WIDTH. THE TORNADO STARTED NEAR FORT CLINCH (30.69, -81.46) AROUND 2:25 AM AND ENDED ABOUT 11 MILES WEST OF FORT CLINCH (30.69, -81.64) AROUND 2:35 AM.

2 NNW AMELIA CITY	NASSAU	11/0625	EFO
30.61 -81.47			

NO DAMAGE WAS REPORTED AS THE TORNADO TRACKED MOSTLY OVER OPEN TERRITORY. THERE WAS A CLEAR TORNADO DEBRIS SIGNATURE ON RADAR. THE TIME OF THE EVENT WAS BASED ON RADAR. PEAK WINDS REACH 85-100 MPH. PATH LENGTH WAS ABOUT 11 MILES AND THE WIDTH WAS UNKNOWN. THE TORNADO STARTED ABOUT 5 MILES SOUTH OF FORT CLINCH STATE PARK (30.61, -81.47) AROUND 2:25 AM AND ENDED ABOUT 9 MILES SOUTHWEST OF FORT CLINCH STATE PARK (30.61, -81.57) AROUND 2:30 AM.

2 S MARINELAND	Flagler	11/0020	EFO
29.64 -81.21			

INITIAL AERIAL SURVEY FOUND A TORNADO PATH OF TREE DAMAGE. THERE WAS NO STRUCTURAL DAMAGE REPORTED. A TORNADO DEBRIS SIGNATURE WAS DETECTED ALONG THE TORNADO PATH. PEAK WINDS WERE 85-100 MPH. THE PATH LENGTH WAS ABOUT 4 MILES AND THE WIDTH WAS UNKNOWN. THE TORNADO STARTED ABOUT 1 MILE SOUTH OF MARINELAND (29.64, -81.21) AROUND 8:20 PM AND TRACKED TO ABOUT 4 MILES WEST OF MARINELAND (29.67, -81.29)

G. STORM IMPACTS BY COUNTY...

COUNTY	DEATHS	INJURIES	EVACUATIONS
DESCRIPTION			

FLAGLER

FLAGLER COUNTY EXPERIENCED SURGE, WIND AND FLOODING RAINFALL DAMAGE FROM IRMA. THERE WAS ALSO ONE CONFIRMED EF0 TORNADO TOUCHDOWN JUST SOUTH OF MARINELAND. TROPICAL STORM FORCE WIND GUSTS BEGAN SUNDAY MORNING AROUND 9:46 AM AT FLAGLER BEACH AS MEASURED BY A VOLUNTEER ARES OBSERVER WITH A WIND GUSTS OF 39 MPH. THROUGH NOON, GUSTS OF 40-45 MPH WERE MEASURED. AT 12:48 PM, SURF OVER-WASH WAS REPORTED AT MALACOMPRA BEACH APPROACH NEAR THE HAMMOCK. AT 1:16 PM, WATER WAS REPORTED AT THE TOP OF THE SEA WALL IN PALM COAST. BY 2:31 PM WATER WAS OVER THE SEA WALL AND ONTO GRASS IN PALM COAST. ALSO AT 2:31 PM, ROOF SHINGLES AND SIDING WAS BLOWN OFF OF HOMES ALONG NORTH 20TH STREET AND A1A. AROUND 3 PM, POWER LINES WERE BLOWN DOWN AT THE BEVERLY BEACH CAMPTOWN RV RESORT. AT 4:31 PM, WATER WAS ABOUT 15 INCHES OVER THE SEA WALL IN PALM COAST. AT 4:40 PM, WATER WAS OVER THE ROAD ALONG WYNFIELD DRIVE IN PALM COAST. AT 5 PM, WATER WAS OVER THE SEA WALL AND THE RAMP AT BINGS LANDING AND HERSHAL KING PARKS ON THE INTERCOASTAL WATERWAY, AND WATER WAS OVER THE BOAT RAMP AT DEAD LAKE FISH CAMP. AT 5:35 PM, POWER OUTAGES WERE REPORTED AT STATION 71. AT 6:30 PM, AT 50 MPH WIND GUST WAS MEASURED NORTH OF FLAGLER BEACH. BY 8:28 PM, SUSTAINED TROPICAL STORM FORCE WINDS OF 40 MPH WERE MEASURED AT NORTH FLAGLER BEACH. AT 8:29 PM, TREES WERE BLOWN DOWN ONTO POWERLINES AT BURGRESS PLACE. AT 8:30 PM, A MEASURED WIND GUST OF 50 MPH WAS RECORDED IN FLAGLER BEACH. AT 8:45 PM, TANGERINE TO LANCEWOOD WATEROAK TO HIBISCUS WAS UNDERWATER AND IMPASSABLE. AT 9:06 PM, A WIND GUST OF 60 MPH WAS MEASURED IN NORTH FLAGLER BEACH, AND BY 9:17 PM, A SUSTAINE WIND OF 45-50 MPH WAS MEASURED IN FLAGLER BEACH. BY 9:32 PM, THERE WERE MULTIPLE REPORTS OF 40-45 MPH WIND GUSTS INLAND AND 45-50 MPH GUSTS AT THE BEACHES. AT 9:40 PM, NUMEROUS SECONDARY ROADS IN DAYTONA NORTH WERE IMPASSABLE DUE TO FLOODING. THE EMERGENCY OPERATIONS CENTER IN BUNNELL MEASURED A WIND GUST OF 59 MPH AT 10:45 PM. AT 10:55 PM, THE ASOS AT THE FLAGLER COUNTY AIRPORT MEASURED A WIND GUST OF 59 MPH, THEN AT 11:58 PM, A SUSTAINED WIND OF 48 MPH WAS MEASURED IN FLAGLER BEACH. SEPTEMBER 11, AT 12:24 AM, A MEASURED WIND GUST OF 75 MPH WAS MEASURED IN FLAGLER BEACH WITH SUSATINED WINDS NEAR 50 MPH THROUGH 12:47 AM. AT 12:26 AM, A MEASURED GUST OF 72 MPH WAS MEASURED AT THE EMERGENCY OPERATIONS CENTER IN BUNNELL. AT 1:01 AM, THE COUNTY AIRPORT MEASURED A WIND GUST OF 63 MPH. AT 2 AM, ABOUT 2 FEET OF WATER WAS OVER THE SEA WALL IN PALM COAST. AT 2:38 AM, A SUSTAINED WIND OF 40 MPH WITH GUSTS TO 54 MPH WAS MEASURED AT FLAGLER BEACH, THEN AT 3 AM A SUSATINED WIND OF 54 MPH WITH A GUST OF 78 MPH WAS MEASURED IN FLAGLER BEACH. AT 3:10 AM, A MEASURED GUST OF 83 MPH WAS RECORDED AT FLAGLER BEACH. AT 3:13 AM, WAIST DEEP WATER WAS REPORTED ON EMERSON DRIVE IN PALM COAST. AT 4 AM, A REPORT OF STORM SURGE IMPACTED MARINELAND ACRES JUST SOUTH OF WASHINGTON OAKS STATE PARK. AT 4:03 AM, A SUSTAINED WIND OF 47 MPH WAS MEASURED WITH A GUST TO 67 MPH IN FLAGLER BEACH. AT 5:30 AM, A PORCH WAS BLOWN OFF ALONG CAROL COURT. AT 5:45 AM, WATER WAS 4 INCHES OVER THE SEA WALL IN PALM COAST. AT 6:49 AM, THERE WERE MULTIPLE REPORTS OF STORM SURGE FLOODING ALONG THE INTERCOASTAL WATERWAY IN FLAGLER BEACH. AT 7:22 AM, A WIND GUST OF 53 MPH WAS MEASURED IN PALM COAST. AT 7:44 AM, ALONG STATE ROAD 100 AND SOUTH CHAPEL, WATER WAS REPORTED OVER THE ROAD AS WELL AS TREES BLOWN DOWN. AT 8 AM, HOMES WERE DAMAGED ALONG WOODLASH LANE. AT 8:22 AM, BARRINGTON BECOME IMPASSABLE. AT 8:27 AM, A POWER LINE WAS REPORTED BLOWN DOWN ON BARKEY IN PALM COAST, THEN AT 8:31 AM TREES AND FENCES WERE BLOWN DOWN ALONG BELLE TERRE AND BALLAIRE BLVD. AT 10:19 AM, MULTIPLE HOMES WERE REPORTED UNDER WATER IN FLAGLER BEACH AND ALONG THE INTERCOASTAL WATERWAY. THE LAST MEASURED WIND OVER 40 MPH WAS MEASURED AT 1:15 PM. RAINFALL TOTALS INCLUDED 12.24 INCHES AT THE BUNNELL EMERGENCY OPERATIONS CENTER, 14.0 INCHES

IN CENTRAL PALM COAST AT THE COPC WATER PLANT 1, 10.03 INCHES IN SOUTHERN PALM COAST AT THE COPC WATER PLANT 2, 10.10 INCHES IN WEST PALM COAST AT THE COPC WATER PLANT 3, 8.82 INCHES IN EAST PALM COAST AND 5.6 INCHES IN WEST PALM COAST.

ALACHUA

COUNTYWIDE WIND DAMAGE INCLUDED TREES DOWN ACROSS ROADS AND ON HOMES. RESIDENTIAL HOMES FLOODED IN SOME AREAS DUE TO POOR DRAINAGE. TREES WERE BLOWN DOWN ACROSS THE UNIVERSITY OF FLORIDA CAMPUS AND WITHIN THE GAINESVILLE CITY LIMITS. AT 1015 PM ON 9/10, A 10 INCH IN DIAMETER SPRUCE TREE WAS BLOWN DOWN ABOUT 5 MILES WEST OF GAINESVILLE . THE U.S. HIGHWAY 441 BRIDGE AND U.S. HIGHWAY 27 BRIDGE OVER THE SANTE FE RIVER WAS CLOSED ON 9/13/2017 DUE TO RISING FLOOD WATER NEAR HIGH SPRINGS.

GLYNN

AT 4:15 AM ON 9/10, A TREE WAS BLOWN DOWN ONTO A CAR ALONG STUART AVENUE. THE TIME WAS BASED ON A PEAK WIND REPORTED AT THE ST. SIMONS ISLAND AIRPORT. AT 12:50 AM ON 9/11, A WATERSPOUT WAS OBSERVED OVER THE MARSH AREAS ALONG HIGHWAY 17, JUST WSW OF JEKYLL ISLAND.

BRADFORD

AT 10:35 AM ON 9/10, ALLIGATOR CREEK IN STARKE STARTED RISING UP TO THE BRIDGE LEVEL AT LAURA STREET. THIS OCCURRED IN CONJUNCTION WITH MAJOR FLOOD STAGE REPORTED AT THE ALLIGATOR CREEK GAUGE LOCATED JUST DOWNSTREAM AT U.S. HIGHWAY 301.

PUTNAM

At 11:49 pm on 9/10, a nursing home in palatka was flooded and evacuations were ordered due to flash flooding.

UNION

AT 8:15 AM ON 9/11, THE PUBLIC REPORTED POWER LINES WERE BLOWN DOWN ON SW 8TH STREET IN LAKE BUTLER.

DUVAL

TROPICAL STORM FORCE WIND GUSTS STARTED TO IMPACT DUVAL COUNTY DURING THE MORNING 9/10, with a gust of 50 MPH around 6:21 am at HUGUENOT PARK. AT 7 AM, A WEATHERFLOW MESONET STATION AT BUCK ISLAND ON THE ST. JOHNS RIVER MEASURED A SUSTAINED WINDS OF 37 MPH AND A GUST TO 50 MPH. AT 9:20 PM, A MESONET STATION ABOUT 2 MILES WNW OF FORT CAROLINE MEASURED SUSTAINED WINDS OF 35 MPH WITH A GUST TO 50 MPH. AT 10:26 PM, THE ASOS AT THE JACKSONVILLE INTERNATIONAL AIRPORT NEAR THE NWS OFFICE MEASURED A 58 MPH WIND GUST. ON 9/11 AT 1:45 AM, THE NOS TIDE GAUGE AT MAYPORT MEASURED WATER LEVELS OF 2.9 FT TO 3 FT ABOVE MHHW DATUM. AT 3:23 AM, THE MAYPORT ASOS MEASURED A SUSTAINED WIND OF 51 MPH (44 KT) AND A GUST OF 74 MPH (64 KT). AT 3:38 AM, THE MAYPORT ASOS MEASURED A SUSTAINED WIND OF 68 MPH (59 KT) AND A GUST OF 87 MPH (76 KT). THIS WAS THE HIGHEST OFFICIAL RECORDED WIND SPEED OF IRMA ACROSS THE NWS JACKSONVILLE COUNTY WARNING AREA. AT 3:41 AM, THE ASOS AT THE JACKSONVILLE INTERNATIONAL AIRPORT MEASURED SUSTAINED WINDS OF 59 MPH (51 KT) AND A GUST OF 86 MPH (75 KT) WITHIN THE SAME POTENT RAIN-BAND THAT STRETCHED EASTWARD ACROSS MAYPORT. THIS WAS THE MOST INTENSE RAINFALL AND WIND RAIN BAND THAT IMPACT THE AREA WITH IRMA. AT 3:41 AM, THE WEATHERFLOW SENSOR AT HUGUENOT PARK MEASURED SUSTAINED WINDS OF 66 MPH AND GUSTS TO 85 MPH, AGAIN UNDER THE SAME RAIN BAND. AT 3:42 AM, MULTIPLE TREES WERE BLOWN DOWN OUTSIDE OF THE NWS JACKSONVILLE OFFICE AT THE JACKSONVILLE INTERNATIONAL AIRPORT FOLLOWING THE 86 MPH WIND GUST. ONE TREE FELL ON THE NWS OFFICE SIGN AND DAMAGED IT. AT 4:30 AM, THE ROOF WAS BLOWN OFF OF A HOME IN THE SANS SOUCI NEIGHBORHOOD. AT 5:45 AM, THE ST. JOHNS RIVER AT MAIN STREET IN DOWNTOWN JACKSONVILLE REPORTED A WATER LEVEL OF 4.39 FT NAVD88, WHICH BROKE THE RECORD FROM HURRICANE DORA OF 4.12 FT NAVD88 SET IN 1964. AT 8:26 AM, THE ASOS AT CRAIG AIRFIELD MEASURED A WIND GUST OF 70 MPH. AT 10:09 AM,

THE ASOS AT NAVAL AIR STATION (NAS) JACKSONVILLE IN ORANGE PARK MEASURED A WIND GUST OF 67 MPH. AT 10:14 AM, A PEAK WIND GUST OF 69 MPH WAS MEASURED AT NAS JACKSONVILLE. AT 3:59 PM, AN EVACUEE IN SAN MARCO ALONG THE ST. JOHNS RIVER NEAR DOWNTOWN JACKSONVILLE REPORTED WATER ROSE INTO HIS HOME UP TO HIS NECK (ABOUT 5 FT INUNDATION IN HIS HOME). HISTORIC RECORD SETTING FLOODING OF THE ST. JOHNS RIVER AND TRIBUTARIES DUE TO COMBINATION OF ELEVATED WATER LEVELS FROM NOR'EASTER EVENT, HIGH ASTRONOMICAL TIDES, RIVER SURGE AND STORM RAINFALL FROM IRMA. THE RIVER GAUGE AT THE MAIN STREET BRIDGE IN DOWNTOWN JACKSONVILLE SURPASSED HURRICANE DORA 1964 RECORD FLOODING THE MORNING OF 9/11 AT LOW TIDE WITH A VALUE OF OVER 5 FT DATUM NAVD88 (DORA RECORD WAS 4.12 FT NAVD88 DATUM). THE RIVER AT THIS LOCATION CRESTED AROUND 12:30 PM AT 5.57 FT NAVD88, WHICH IS AN ALL TIME RECORD STAGE. MAJOR FLOODING IMPACTED THE ST. JOHNS RIVER BASIN, AND ABOUT 350 WATER RESCUES WERE CONDUCTED IN DUVAL COUNTY, ESPECIALLY IN THE RIVERSIDE, SAN MARCO AND DOWNTOWN JACKSONVILLE AREAS.

ST JOHNS

ST. JOHNS COUNTY WAS IMPACTED BY STRONG TROPICAL STORM WINDS, STORM SURGE AS WELL AS MULTIPLE TORNADOES DUE TO HURRICANE IRMA. ON 9/10, A MESONET STATION IN VILANO BEACH MEASURED A SUSTAINED WIND OF 47 MPH WITH GUSTS UP TO 54 MPH. AT 9:39 AM, THE ST. AUGUSTINE AIRPORT AWOS STATION MEASURED WINDS OF 39 MPH WITH GUSTS UP TO 53 MPH. AT 10:05 AM, THE VILANO BEACH MESONET STATION MEASURED A WINDS OF 56 MPH WITH GUSTS OF 62 MPH. AT 7:40 PM, A MESONET STATION 2 MILES NW OF ST. AUGUSTINE MEASURED A SUSTAINED WIND OF 30 MPH WITH GUSTS TO 50 MPH. AT 8:46 PM, THE ST. AUGUSTINE AIRPORT AWOS MEASURED A WIND GUST OF 58 MPH. ON 9/11 AT 12:46 AM, THE ST. AUGUSTINE AWOS AT THE AIRPORT MEASURED A SUSTAINED WIND OF 48 MPH (42 KT) AND A GUST OF 71 MPH (62 KT). AT 1:30 AM, A ROOF WAS BLOWN OFF OF A BARN AT THE 2500 BLOCK OF DEERWOOD LANE. AT 3:30 AM, MULTIPLE TREES WERE BLOWN DOWN AT THE TRINITY RESCUE MISSION FREEDOM FARM FACILITY. A ROOF WAS BLOWN OFF OF ONE OF THE BUILDINGS AND A FENCE WAS BLOWN DOWN.

BAKER

MULTIPLE TREES WERE BLOWN DOWN ACROSS THE COUNTY. LARGE TREES 18-20 INCHES IN DIAMETER WERE BLOWN DOWN ABOUT 3 MILES WNW OF MACCLENNY.

MARION

MARION COUNTY EXPERIENCED WIDESPREAD TREE AND POWER LINE DAMAGE FROM TROPICAL STORM FORCE WINDS. A LOCATION ABOUT 5 MILES ENE OF OCALA MEASURED A 24-HR RAINFALL TOTAL ON 9/10 OF 7.30 INCHES, WHICH WAS IN ADVANCE OF IRMA'S HEAVY RAINFALL BAND. AT 1 AM ON 9/11, TREES AND POWER LINES WERE BLOWN DOWN ABOUT 10 MILES SW OF SANTOS. AT 1 AM, TREES WERE BLOWN DOWN AND BLOCKED THE ROAD ALONG SE 50TH TERRACE. TREES AND POWER LINES WERE BLOWN DOWN OVER THE ROAD AT THE INTERSECTION OF SE 50TH TERRACE AND SE 21ST STREET IN OCALA. ADDITIONAL REPORTS OF TREES AND POWER LINES BLOWN DOWN CONTINUED THROUGH THE PRE-DAWN HOURS ON 9/11 AROUND OCALA WITH A REPORT OF A TREE BLOWN DOWN ONTO A ROOF ON SW 41ST AVENUE IN OCALA. AT 2:20 AM, POWER LINES WERE BLOWN DOWN INTO A YARD ON 38TH STREET IN OCALA, AND AT 2:40 AM, A 12-INCH IN DIAMETER CRUSHED A VEHICLE AND TORE A HOLE INTO A ROOF ALONG SE 47TH PLACE IN OCALA. AT 8:35 PM ON 9/11, A PUBLIC REPORT OF 5.42 INCHES ABOUT 5 MILES ENE OF OCALA WAS RELAYED AS A STORM TOTAL RAINFALL FROM IRMA.

NASSAU

ON 9/11, A PRIVATE WEATHER STATION ON DUNES ROW AT THE SOUTH END OF AMELIA ISLAND AT 60 FT ELEVATION MEASURED A WIND GUST OF 106 MPH, BETWEEN 1 AM AND 2:30 AM. AT 3 AM, SEVERAL TREES WERE BLOWN DOWN ONTO HOMES NEAR FERNANDINA BEACH. AT 2 AM, THE FERNANDINA BEACH NOS TIDE GAUGE MEASURED WATER LEVEL RISES OF 3.5 TO 4 FT ABOVE MHHW DATUM. CLAY COUNTY EXPERIENCED WIDESPREAD WIND DAMAGE INCLUDING TREES DOWN, POWER LINES DOWN, AND STRUCTURAL DAMAGE DUE TO TROPICAL STORM FORCE WINDS. RAPID RIVER RISES AND EXTREMELY HEAVY RAINFALL CAUSED HISTORIC RIVER FLOODING ALONG THE ST. JOHNS RIVER AND BLACK CREEK, AS WELL AS TRIBUTARIES OF THESE RIVERS. AT 3:04 AM, 3 FT OF STORM SURGE ABOVE MHHW WAS REPORTED AT THE I-295 BRIDGE AND THE ST. JOHNS RIVER. NUMEROUS RIVER FRONT HOMES LOST PROPERTY AND HAD EXTENSIVE DOCK AND PIER DAMAGE, INCLUDING MANY STRUCTURES AND BOATS WASHED AWAY FROM THE SURGE. RIVER WATERS ROSE TO LEVELS EXCEEDING PRIOR MAJOR STAGE RECORDS. SEVERAL HELICOPTER RESCUES OCCURRED ALONG BLACK CREEK.

CAMDEN

TREES AND POWER LINES WERE DAMAGED NEAR SAINT MARYS DUE TO TROPICAL STORM FORCE WINDS. DOZENS OF PEOPLE WERE RESCUED BY BOATS DUE TO STORM SURGE AND RAINFALL FLOODING. LANGS MARINE IN ST. MARYS WAS HEAVILY DAMAGED, WITH DOCKS, PIERS AND BOATS DAMAGED AS WELL ALONG THE ST. MARYS RIVER DUE TO BOTH STORM SURGE AND TROPICAL STORM WINDS.

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Legend: I-Incomplete Data E-Estimated

NWS JAX

Appendix D – Post-Tropical Cyclone Report from the Melbourne NWS WFO

044 ACUS72 KMLB 292144 CCA PSHMLB

POST TROPICAL CYCLONE REPORT...HURRICANE IRMA NATIONAL WEATHER SERVICE MELBOURNE FL 545 PM EDT FRI SEP 29 2017

NOTE: THE DATA SHOWN HERE ARE PRELIMINARY....AND SUBJECT TO UPDATES AND CORRECTIONS AS APPROPRIATE.

THIS REPORT INCLUDES EVENTS OCCURRING WHEN WATCHES AND/OR WARNINGS WERE IN EFFECT...OR WHEN SIGNIFICANT FLOODING ASSOCIATED WITH IRMA OR ITS REMNANTS WAS AFFECTING THE AREA.

UPDATED (SEPT 29): ADDED PATRICK AFB TORNADO AND UPDATED COUNTY SPECIFIC DAMAGE AND INDIRECT FATALITY INFORMATION.

UPDATED (SEPT 25): NEW INFORMATION: RAIN TOTALS FROM USGUS AND COOP WERE ADDED, UPDATED DAMAGE TOTALS FROM BREVARD, LAKE, SEMINOLE, AND VOLUSIA COUNTIES, AND STORM SURGE AT TRIDENT PIER.

UPDATE (SEPT 23): ADDED INFORMATION REGARDING NORTH MERRITT ISLAND TORNADO, BREVARD COUNTY DAMAGE ESTIMATES, AND PEAK WIND GUSTS, AND NEW RAINFALL TOTALS.

 MAX winds updated (sept 20): added one additional max sustained and peak wind.

MAX WINDS UPDATE (SEPT 19): ADDITIONAL MAX SUSTAINED AND PEAK WIND GUSTS ADDED.

RAINFALL UPDATE (SEPT 19): ADDITIONAL RAINFALL REPORTS ADDED.

TORNADO UPDATE (SEPT 19): NINE TORNADOES CONFIRMED IN BREVARD, VOLUSIA, AND LAKE COUNTIES...ROCKLEDGE TORNADO UPDATED TO EF-1.

PRELIMINARY REPORTS OF DAMAGE ESTIMATES FOR SOME COUNTIES HAS BEEN ADDED.

COUNTIES INCLUDED...VOLUSIA...LAKE...SEMINOLE...ORANGE...BREVARD... OSCEOLA...INDIAN RIVER...SAINT LUCIE...MARTIN...OKEECHOBEE

A. LOWEST SEA LEVEL PRESSURE/MAXIMUM SUSTAINED WINDS AND PEAK GUSTS

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

LOCATION ID LAT LON DEG DECIMAL	PRES		SUST		GUST	TIME
KDAB-DAYTONA B						
29.18 -81.05		,	060/047	11/0246	050/068	11/0202
KFPR-FORT PIER	਼ ਨ ਦਾ / ਨ ਜਾ ਜਾ	TOTE CO TN	דים דיד			
27.49 -80.36				10/2306	130/077	10/2309
VIER IRRODUCC	דאותד היו	r				
KLEE-LEESBURG 28.82 -81.80			120/042	11/0735	120/060	11/0746
WALD MELDOUDNE						
KMLB-MELBOURNE 28.10 -80.64			999/999	99/9999	999/999	99/9999
KMCO-ORLANDO I		,	110/051	11 /0510	050/060	10/0044
28.42 -81.31	980.4	11/0/20	110/021	TT/0218	050/069	10/2244
KORL-ORLANDO E	VECIITIV	. स्य				
28.54 -81.33			110/049	11/0504	120/068	11/0530
20.01.01.00	201.1	TT/0004	110,040	11/0004	120,000	± ±, 00000

KSFB-ORLANDO/SANFORD, FL 28.77 -81.24 982.1 11/0746 130/048 11/0651 130/065 11/0731 KVRB-VERO BEACH, FL 27.65 -80.41 9999.0 / 999/999 99/9999 999/999 99/9999 KOBE-OKEECHOBEE COUNTY AP, FL 27.26 -80.85 9999.0 / 150/040 11/0315 130/062 11/0135 KCOF-PATRICK AFB/COCOA, FL 28.23 -80.60 9999.0 999/999 99/9999 999/999 99/9999 KSUA-WITHAM FIELD/STUART, FL 27.18 -80.22 9999.0 / 999/999 99/9999 999/999 99/9999 KTIX-SPACE COAST REGIONAL/TITUSVILLE, FL 999/999 99/9999 999/999 99/9999 28.51 -80.79 9999.0 / KISM-KISSIMMEE GATEWAY AP 28.29 -81.43 990.4 11/0051 060/038 10/2349 080/058 11/0009 KXMR-CAPE CANAVERAL AFS SKID STRIP 28.46 -80.56 990.1 11/0441 110/051 11/0207 100/070 11/0214 KDED-DELAND MUNICIPAL AIRPORT 29.06 -81.28 9999.0 / 070/035 11/0215 070/055 11/0315 KTTS-SHUTTLE LANDING FACILITY 9999.0 / 999/999 99/9999 999/999 99/9999 28.61 -80.69 REMARKS: DATA FROM THE MELBOURNE (KMLB) ASOS, VERO BEACH (KVRB) ASOS,

SPACE COAST REGIONAL AIRPORT (KTIX), PATRICK AIR FORCE BASE (KCOF), WITHAM FIELD AIRPORT IN STUART (KSUA), AND THE SHUTTLE LANDING FACILITY (KTTS) WERE UNAVAILABLE.

NON-METAR OBSERVATIONS...US AIR FORCE WIND TOWERS...

WIND, IF KNOWN	•	N FEET INDICATE			
LOCATION ID LAT LON	MIN DA PRES TI (MB) (U	TE/ MAX ME SUST JTC) (KT)	DATE/ TIME	PEAK GUST	DATE/ TIME
KSC0001 - USAF 28.43 -80.57	TOWER 1	MMM/MMM 12 FEET	MM/MMMM	108/045	11/0220
KSC0003 - USAF 28.46 -80.53	TOWER 3	102/049 12 FEET	11/0202	MMM/MMM	MM/MMMM
KSC BALLOON LA 28.47 -80.56	UNCH FACILI		MM/MMMM	MMM/102	MM/MMMM
KSC0001 - USAF 28.43 -80.57	TOWER 1		11/0220	100/082	11/0220
KSC0003 - USAF 28.46 -80.53	TOWER 3		11/0205	100/074	11/0205
KSC0019 - USAF 28.74 -80.70	TOWER 19		11/0315	130/070	11/0315
KSC0108 - USAF 28.54 -80.57	TOWER 108		11/0205	110/081	11/0205
KSC0211 - USAF 28.61 -80.62	TOWER 211		11/0220	090/073	11/0235
KSC0300 - USAF	TOWER 300	J4 FEEI			

28.40 -80.65			140/056 54 FEET	11/0230	100/079	11/0135
KSC0303 - USAF	TOWER	303				
28.46 -80.57	100.210		100/039 54 FEET	11/0220	110/071	11/0220
KSC0311 - USAF	TOWER	311				
28.60 -80.57			100/048 54 FEET	11/0220	080/072	11/0210
KSC0403 - USAF	TOWER	403				
28.46 -80.59			100/044	11/0220	090/072	11/0150
			54 FEET	,		,
KSC0412 - USAF	TOWED	112	54 1001			
	TOWER	412	102/020	11/0010	000/065	11/0010
28.61 -80.67			103/039	11/0219	099/065	11/0218
			12 FEET			
KSC0412 - USAF	TOWER	412				
28.61 -80.67			092/056	11/0219	092/076	11/0218
			54 FEET			
KSC0415 - USAF	TOWER	415				
28.66 -80.70	TOWER	110	090/037	11/0220	090/064	11/0215
20.00 -00.70				11/0220	0907004	11/0215
			54 FEET			
KSC0418 - USAF	TOWER	418				
28.71 -80.73			130/042	11/0145	160/069	11/0455
			54 FEET			
KSC0506 - USAF	TOWER	506				
28.52 -80.64			080/042	11/0130	100/072	11/0230
			54 FEET	,	,	,
KSC0509 - USAF	TOWED	500	54 1001			
	TOWER	509	100/007	11/0000	100/005	11/0000
28.57 -80.66			100/037	11/0220	100/065	11/0230
			54 FEET			
KSC1102 - USAF	TOWER	1102				
28.57 -80.59			MMM/MMM	MM/MMMM	103/092	11/0210
			162 FEET			
KSC0021 - USAF	TOWER	21				
28.44 -80.56			106/073	11/0218	MMM/MMM	MM/MMMM
20000			204 FEET			
K001100 H03E	mower	1100	204 1661			
KSC1102 - USAF	TOWER	1102		(
28.57 -80.59			MMM/MMM		087/092	11/0210
			204 FEET			
KSC0397 - USAF	TOWER	397				
28.63 -80.62			076/081	11/0015	077/094	11/0015
			259 FEET			
KSC0397 - USAF	TOWER	397				
28.63 -80.62	1000010		111/090	11/0239	104/101	11/0230
20.00 00.02			458 FEET	11/02JJ	T0-1/T0T	11/0209
			400 FFEL			
REMARKS. UNITE			- (
REMARKS. UNLIFE		S AIR HORCI		$H \Delta V H \Delta I - M$	$\Gamma N \Gamma \Gamma \Gamma H^{*} = \Delta \sqrt{H^{*}}$	

REMARKS: UNITED STATES AIR FORCE (USAF) HAVE A 1-MINUTE AVERAGING PERIOD FOR SUSTAINED WINDS.

NON-METAR OBSERVATIONS...OTHER STATIONS... NOTE: ANEMOMETER HEIGHT IN METERS AND WIND AVERAGING PERIOD IN MINUTES INDICATED UNDER MAXIMUM SUSTAINED WIND IF KNOWN.

LOCATION ID LAT LON DEG DECIMAL	PRES TIME	SUST	TIME	GUST	TIME
KFLDAYTO14 - WE 29.19 -81.05	CATHERSTEM DAY		(EMBRY RIDI 11/0324	,	11/0205
EW9392 - DAYTON 29.19 -81.07	IA INTERNATION				,
EW5900 - DAYTON 29.18 -81.07	IA INTERNATION				11/0301
XNSB - WEATHERE 29.04 -80.90	LOW NEW SMYRI		11/0309	090/071	11/0324
XCCB - WEATHERE 28.36 -80.65	LOW MERRITT		NA RIVER A1 11/0107	,	11/0037

XPAR - WEATHERFLOW TITUSVILLE (PARRISH PARK NORTH) 28.63 -80.81 110/049 11/0220 110/065 11/0215 XJEN - WEATHERFLOW JENSEN BEACH 140/048 10/2345 140/061 10/2345 27.22 -80.20 XDAI - WEATHERFLOW MELBOURNE (DAIRY ROAD) 28.04 -80.64 120/037 11/0232 130/066 11/0417 XMER - WEATHERFLOW MERRITT ISLAND (BANANA RIVER AT SR528) 28.40 -80.66 100/051 11/0120 120/082 11/0140 XSTL - WEATHERFLOW ST. LUCIE (ST. LUCIE POWER PLANT) 130/062 10/2304 130/087 11/2304 27.35 -80.24 XCOA - WEATHERFLOW COCOA BEACH CLUB 080/047 11/0022 080/072 11/0102 28.31 -80.63 XVER - WEATHERFLOW VERO BEACH (CITY HALL) 27.63 -80.39 140/032 11/0219 140/054 11/0219 XAQU - WEATHERFLOW MELBOURNE BEACH (AQUARINA R&D LAB) 090/048 10/2302 100/065 10/2327 27.94 -80.49 XHOB - WEATHERFLOW HOBE SOUND 110/040 10/2144 120/062 10/2309 27.05 -80.17 KFLSTUAR26 - WEATHERSTEM STUART (SOUTH FORK HIGH) 27.08 -80.25 MMM/MMM MM/MMMM MMM/065 10/2155 XSPR - WEATHERFLOW ALTAMONTE SPRINGS (SPRING LAKE) 120/029 11/0631 100/050 11/0456 28,66 -81,41 XRDY - WEATHERFLOW HORIZON WEST (REEDY LAKE) 28.44 -81.63 170/039 11/0821 130/060 11/0606 XIND - WEATHERFLOW NEAR GRANT-VALKARIA (INDIAN RIVER) 27.96 -80.53 090/044 10/2306 090/058 10/2306 KFLORLAN212 - WEATHERSTEM ORANGE COUNTY (LAKE NONA MIDDLE SCHOOL) 28.37 -81.25 MMM/MMM MM/MMMM 071/066 11/0011 KFLORLAN179 - WEATHERSTEM ORANGE COUNTY (UNIVERSITY OF CENTRAL FLORIDA) 28.59 -81.20 MMM/MMM MM/MMMM 170/053 11/0445 KFLKISSI30 - WEATHERSTEM OSCEOLA COUNTY (POINCIANA HIGH SCHOOL) 28.23 -81.49 MMM/MMM MM/MMMM 220/063 11/0113 WDW03 - WALT DISNEY WORLD ANIMAL KINGDOM (102 FEET) MMM/MMM MM/MMMM MMM/056 11/0700 28.42 -81.58 WDW08 - WALT DISNEY WORLD EPCOT 28.37 -81.55 MMM/MMM MM/MMMM MMM/053 11/0450 WDW09 - WALT DISNEY WORLD MAGIC KINGDOM (98 FEET) 28.42 -81.58 MMM/MMM MM/MMMM MMM/062 11/0605 LKBDC - WALT DISNEY WORLD CONTEMPORARY RESORT (106 FEET) 28.42 -81.57 MMM/MMM MM/MMMM MMM/079 11/0050 LKBNT - WALT DISNEY WORLD TOWER OF TERROR (131 FEET) 28.36 -81.56 MMM/MMM MM/MMMM MMM/063 11/0430 KFLMELBO72 - MELBOURNE SHORES (34 FT) 135/056 11/0325 135/075 11/0350 27.96 -80.51 REMARKS: WEATHERFLOW SITE XIND STOPPED REPORTING AT 10/2316.

WEATHERFLOW SITE XSPR STOPPED REPORTING AT 11/1111.

B. MARINE OBSER	VATIONS						
NOTE: ANEMOMETE	R HEIGHT II	N METERS	S AND W	VIND AVEF	RAGING	PERIOD	IN
MINUTES INDICAT	ED UNDER MA	AXIMUM S	SUSTAIN	NED WIND	IF KNO	OWN	

MINUTES INDICATED UNDER MAX			
LOCATION ID MIN DATE LAT LON PRES TIME DEG DECIMAL (MB) (UTC	E SUST TIME C) (KT) (UTC)	GUST (KT)	TIME (UTC)
BUOY 41009 28.52 -80.19 992.2 11/08	330 090/049 11/025	090/066	11/0250
IRDF1 - PORT CANAVERAL (TRI 28.42 -80.59 990.2 11/07		142/059	11/0742
REMARKS: TRIDENT PIER TRDF1	STOPPED REPORTING A	AT 11/0441Z.	
C. STORM TOTAL RAINFALL FRO			SEP 12
CITY/TOWN LAT LON DEG DECIMAL	COUNTY	ID	RAINFALL (IN)
FT. PIERCE WP (COOP) 27.44 -80.35			
CHRISTMAS (SPOTTER) 28.57 -81.02	ORANGE	ORA-048	17.44
FT. PIERCE (COCORAHS) 27.56 -80.40	ST. LUCIE	FL-SL-41	17.25
FT. PIERCE (AIRPORT ASOS) 27.49 -80.37	ST. LUCIE	KFPR	15.88
TT. PIERCE (SFWMD) 27.47 -80.47	ST. LUCIE	NCSF1	15.18
INDIAN RIVER (FAWN) 27.62 -80.57	INDIAN RIVER	IRVF1	14.15
UNION PARK (COCORAHS) 28.56 -81.17	ORANGE	FL-OR-10	13.79
PALM SHORES (COCORAHS) 28.24 -80.68	BREVARD	FL-BV-20	13.74
PALM BAY (COCORAHS) 27.95 -80.64	BREVARD	FL-BV-59	13.23
MIMS (COCORAHS) 28.69 -80.99	VOLUSIA	FL-VL-49	12.87
LAKE MARY (USGS) 28.79 -81.41	LAKE	LSPF1	12.46
JNION PARK (COCORAHS) 28.59 -81.22	ORANGE	FL-OR-19	12.36
DVIEDO (COCORAHS) 28.66 -81.25	SEMINOLE	FL-SM-12	12.14
VERO BEACH (COCORAHS) 27.64 -80.48	INDIAN RIVER	FL-IR-36	12.10
CAPE CANAVERAL* (ASOS) 28.48 -80.57	BREVARD	KXMR	12.08 I
DVIEDO (COCORAHS) 28.64 -81.17	SEMINOLE	FL-SM-20	12.06

ORANGE (COCORAHS) 28.59 -81.11	ORANGE	FL-OR-23	12.05
YEEHAW JUNCTION (SJRWMD) 27.70 -80.90	OSCEOLA	М	12.00
SANFORD (COOP) 28.81 -81.28	SEMINOLE	SFNF1	11.95
MELBOURNE (ASOS) 28.10 -80.65	BREVARD	KMLB	11.84
DE LAND (COCORAHS) 29.10 -81.36	VOLUSIA	FL-VL-9	11.82
10 MILE CREEK (SFWMD) 27.40 -80.43	ST. LUCIE	TMWF1	11.82
MELBOURNE WFO (COOP) 28.11 -80.65	BREVARD	MLBF1	11.82
APOPKA (COCORAHS) 28.67 -81.46	ORANGE	FL-OR-43	11.80
GENEVA (USGS) 28.71 -81.04	SEMINOLE	GNEF1	11.74
MT. PLYMOUTH (COOP) 28.79 -81.53	LAKE	PLTF1	11.59
APOPKA (COCORAHS) 28.68 -81.47	ORANGE	FL-OR-16	11.58
PORT ST. LUCIE (COCORAHS) 27.30 -80.36	ST. LUCIE	FL-SL-46	11.55
DE LAND (COCORAHS) 29.04 -81.33	VOLUSIA	FL-VL-21	11.53
TITUSVILLE (COCORAHS) 28.63 -80.86	BREVARD	FL-BV-74	11.38
RANSOM RD - NASA (SJRWMD) 28.51 -80.68	BREVARD	М	11.34
TITUSVILLE (COCORAHS) 28.63 -80.86	BREVARD	FL-BV-38	11.33
LADY LAKE (COCORAHS) 28.95 -81.94	LAKE	FL-LK-22	11.26
CHULUOTA (COCORAHS) 28.65 -81.12	SEMINOLE	FL-SM-8	11.22
ROCK SPRINGS WELL (SJRWMD) 28.77 -81.44	ORANGE	М	11.16
PALM BAY (COCORAHS) 27.95 -80.64	BREVARD	FL-BV-1	11.10
VERO BEACH (COCORAHS) 27.61 -80.39	INDIAN RIVER	FL-IR-27	11.04
LADY LAKE (COCORAHS) 28.89 -81.94	LAKE	FL-LK-16	11.03
APOPKA (FAWN) 28.64 -81.55	ORANGE	POPF1	11.01
LADY LAKE (COCORAHS) 28.92 -81.91	LAKE	FL-LK-21	10.80

PALM BAY STP (SJRWMD) 28.02 -80.60	BREVARD	М	10.67
L. BUENA VISTA (REEDY CREEK 28.39 -81.52) ORANGE	М	10.65
LAKE APOPKA NSRA (SJRWMD) 28.65 -81.57	ORANGE	М	10.65
YEEHAW JUNCTION (SFWMD) 27.68 -81.02	OSCEOLA	YEHF1	10.61
VERO BEACH (COCORAHS) 27.64 -80.45	INDIAN RIVER	FL-VL-24	10.61
BAY LAKE (COCORAHS) 28.36 -81.63	ORANGE	FL-OR-35	10.59
BITHLO (USGS) 28.44 -81.17	ORANGE	WELF1	10.54
STUART (COOP) 27.19 -80.24	MARTIN	STRF1	10.53
PALM BAY PUB WRK (SJRWMD) 27.99 -80.70	BREVARD	М	10.52
ORLANDO (COCORAHS) 28.57 -81.39	ORANGE	FL-OR-27	10.51
UMATILLA (FAWN) 28.93 -81.65	LAKE	UMLF1	10.49
PORT ST. LUCIE (COCORAHS) 27.32 -80.31	ST. LUCIE	FL-SL-19	10.36
MAGIC KINGDOM (REEDY CREEK) 28.43 -81.58	ORANGE	М	10.29
FT. WILDERNESS (REEDY CREEK 28.41 -81.56) ORANGE	М	10.21
WDW SERVICE AR (REEDY CREEK 28.38 -81.59) ORANGE	М	10.21
LEESBURG (COCORAHS) 28.84 -81.91	LAKE	FL-LK-30	10.13
VERO BEACH (COCORAHS) 27.60 -80.42	INDIAN RIVER	FL-IR-26	10.11
PARRISH PARK (SJRWMD) 28.76 -80.88	BREVARD	М	10.07
PINE MEADOWS C A (SJRWMD) 28.88 -81.66	LAKE	М	10.05
PIERSON (USGS) 29.23 -81.49	VOLUSIA	LGRF1	10.03
PALM SHORES (COCORAHS) 28.19 -80.68	BREVARD	FL-BV-2	10.01
VERO BEACH (COCORAHS) 27.64 -80.42	INDIAN RIVER	FL-IR-15	10.00
REMARKS: *THE LAST OBSERVATION FROM '	THE CAPE CANAVERAL A	SOS (KXMR) OCO	CURRED

*THE LAST OBSERVATION FROM THE CAPE CANAVERAL ASOS (KXMR) OCCURRED AT 0441 UTC SEP 11.

THIS REPORT ONLY INCLUDES VALUES OF 10 INCHES OR GREATER. A PUBLIC INFORMATION STATEMENT (PNS) WILL BE ISSUED WITH ALL THE RAINFALL TOTALS GATHERED ACROSS EAST CENTRAL FLORIDA. THIS INFORMATION IS PRELIMINARY AND MAY CHANGE AS MORE INFORMATION IS RECEIVED. D. INLAND FLOODING... _____ ST. LUCIE...REPORTS THAT US 1 AT ORANGE AVE IS IMPASSABLE DUE TO FLOODING ST. LUCIE...REPORTS OF FLOODING IN A HOME ON EL RANCHO DR IN FORT PIERCE ST. LUCIE.....UPDATED...A 1 MILE STRETCH OF US 1 FROM ORANGE AVE TO VIRGINIA AVE IS IMPASSABLE DUE TO FLOODING ST. LUCIE... PHOTO AND REPORT RELAYED VIA SOCIAL MEDIA OF WATER INSIDE A HOME NEAR 25TH ST AND VIRGINIA AVE ST. LUCIE...PHOTO RELAYED VIA SOCIAL MEDIA OF HOME AND PARKED CARS FLOODED INDIAN RIVER...INDIAN RIVER COUNTY SHERIFF AND FELLSMERE POLICE RESCUED 12 PEOPLE FROM FLOOD WATERS. BREVARD...REPORTS OF FLOOD WATER UP TO MAILBOXES BREVARD...PHOTOS RELAYED VIA SOCIAL MEDIA OF SIGNIFICANT FLOODING ON DESOTO PARKWAY IN SATELLITE BEACH BREVARD...VIDEO RELAYED VIA SOCIAL MEDIA OF ANKLE DEEP FLOODING ALONG EBER BLVD IN WEST MELBOURNE BREVARD...VIDEO RELAYED VIA SOCIAL MEDIA OF FLOODING AT US 1 AND FAY BLVD BREVARD...REPORT VIA SOCIAL MEDIA OF WAIST DEEP FLOODING AND DEEP WATER IN HOMES ON 12TH AVE NEAR S RAMONA IN INDIALANTIC. VOLUSIA... PHOTO RELAYED VIA SOCIAL MEDIA OF SEVERE FLOODING ALONG BEACH STREET IN DAYTONA BEACH VOLUSIA...DAYTONA BEACH POLICE REPORT SIGNIFICANT FLOODING EAST OF US 1 VOLUSIA...DAYTONA BEACH POLICE REPORT SIGNIFICANT FLOODING EAST OF US 1 ORANGE...FIRE DEPT AND NATIONAL GUARD RESCUING RESIDENTS FROM FLOODED HOMES E. MAXIMUM STORM SURGE AND STORM TIDE... OFFICIAL TIDE GAUGES NOTED WITH LEADING G _____ OR LOCATION (FT) BEACH COUNTY (FT) (FT) TIME EROSION _____ _____ BREVARD G TRIDENT PIER 4.20 4.18 11/0318 MODERATE REMARKS: STORM TIDE DATUM REFERENCED TO MHHW. F. TORNADOES... _____ (DIST)CITY/TOWN COUNTY DATE/ EF SCALE LAT LON (DEG DECIMAL TIME (UTC) (IF KNOWN) DESCRIPTION _____

BREVARD

10/1319

EF = 0

MELBOURNE BEACH TORNADO

28.07 -80.56

BASED ON A NWS STORM SURVEY, A WATERSPOUT MOVED ONSHORE MELBOURNE BEACH NEAR AVENUE B, CAUSING MINOR DAMAGE TO THE SECOND FLOOR OF TWO HOMES. THE BRIEF EF-0 TORNADO WITH WINDS ESTIMATED AT 70 TO 80 MPH CONTINUED INLAND AND DISSIPATED JUST WEST OF HIGHWAY A1A.

TURKEY CREEK TORNADO BREVARD 10/1500 EF-1 28.03 -80.58

BASED ON A NWS STORM SURVEY, A WATERSPOUT THAT DEVELOPED ON THE INDIAN RIVER MOVED ONSHORE AND DAMAGED SEVERAL RESIDENCES ON WORTH COURT, INCLUDING A WATERFRONT HOME WHOSE SECOND FLOOR WAS REMOVED AND CARRIED DOWNWIND. THE EF-1 TORNADO (ESTIMATED 100 TO 110 MPH) CONTINUED ACROSS US-1, CAUSING MINOR ROOF DAMAGE TO A UNIVERSITY BUILDING. THE TORNADO THEN IMPACTED OVER A DOZEN MOBILE HOMES WITHIN PALM BAY ESTATES, SEVERAL OF WHICH WERE HEAVILY DAMAGED OR DESTROYED. THE TORNADO CONTINUED WEST, JUST TO THE NORTH OF TURKEY CREEK, DAMAGING MANY TREES AND SEVERAL ADDITIONAL HOMES BEFORE MOVING THROUGH A SCHOOL CAMPUS BEFORE DISSIPATING NEAR THE HARRIS CORPORATION.

INDIAL	ANTIC TORNADO	BREVARD	10/1524	EF-1
28.09	-80.57			

A NWS STORM SURVEY REVEALED THAT A WATERSPOUT MOVED ONSHORE THE BARRIER ISLAND IN INDIALANTIC NEAR HIGHWAY A1A AND 1ST AVENUE. THE EF-1 TORNADO (WINDS ESTIMATED 90-100 MPH) REMOVED PART OF THE ROOF OF A BEACHFRONT CONDO AND CARRIED IT ACROSS THE HIGHWAY, WHERE IT LANDED ON A BANK. THE TORNADO THEN WEAKENED AS IT TRAVELED WEST-NORTHWEST, PRODUCING DAMAGE TO TREES AND ROOF SHINGLES AND SOFFITS OF SEVERAL HOMES ALONG A NARROW PATH ACROSS THE BARRIER ISLAND, EXITING TO THE INDIAN RIVER NEAR CEDAR LANE AND WEST RIVERIA BOULEVARD.

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MIMS KILBEE STREET TORNADO BREVARD 10/2149 EF-2 28.69 -80.85
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BASED ON A NWS STORM SURVEY, A TORNADO DEVELOPED NEAR THE NORTH END OF NAB STREET AND THE EAST END OF BENSON COURT IN MIMS. A PICKUP TRUCK NEAR THE CORNER OF BENSON COURT AND LISA DRIVE ROLLED ABOUT 30 FEET WEST INTO THE FENCE OF AN ADJACENT YARD. THE TORNADO STRENGTHENED TO EF-2 INTENSITY WITH ESTIMATED WIND SPEEDS OF 115 TO 125 MPH AS IT AFFECTED HOMES ON KILBEE STREET, TURNBULL ROAD, AND BREVARD ROAD. NUMEROUS HOMES WERE IMPACTED AND SEVERAL WERE LEFT UNINHABITABLE DUE TO SEVERE ROOF DAMAGE. A NUMBER OF TREES WERE SNAPPED AND UPROOTED AS THE TORNADO CONTINUED WEST NORTHWEST ACROSS OLD DIXIE HIGHWAY. THE TORNADO DISSIPATED SHORTLY AFTER CROSSING US HIGHWAY 1.

MIMS NORTHGATE TORNADO BREVARD 10/2201 EF-1 28.69 -80.86

BASED ON A NWS STORM SURVEY, AN EF-1 TORNADO, WITH ESTIMATED WIND SPEEDS BETWEEN 90 TO 95 MPH, SNAPPED AND UPROOTED SEVERAL TREES AS IT DEVELOPED NEAR OLD DIXIE HIGHWAY. THE TORNADO CONTINUED ACROSS US HIGHWAY 1 AND THE NORTHERN PORTION OF THE NORTHGATE MOBILE HOME AND RV PARK, DAMAGING OVER A DOZEN HOMES, SEVERAL OF WHICH EXPERIENCED PARTIAL ROOF REMOVAL. IN ADDITION, SEVERAL OF WHICH EXPERIENCED IN THE DEVELOPMENT AND ONE LANDED ON A HOME. THE TORNADO ALSO ROLLED SEVERAL UNOCCUPIED RV'S ONTO TO THEIR SIDES, WHICH WERE BEING STORED IN A PARKING LOT BETWEEN US HIGHWAY 1 AND THE MOBILE HOME PARK.

UMATILLA TORNADO	LAKE	10/2226	EF-1
28.94 -81.62			

A NWS STORM SURVEY REVEALED AN EF-1 TORNADO WITH ESTIMATED WIND SPEEDS BETWEEN 95 AND 100 MPH DEVELOPED NEAR EAST 8TH AVENUE IN UMATILLA, UPROOTING AND SNAPPING SEVERAL TREES IN AN OPEN FIELD. THE TORNADO MOVED TOWARD A RESIDENTIAL NEIGHBORHOOD BETWEEN EAST 8TH AVENUE AND EAST COLLINS STREET AND PEELED BACK THE ROOFS FROM SEVERAL HOMES AND UPROOTED NUMEROUS TREES. DAMAGE CONTINUED INTO NORTH LAKE COMMUNITY PARK WHERE A SCOREBOARD WAS TOPPLED AND THREE POWER LINES WERE SNAPPED. THE TORNADO MOVED ACROSS LAKE PEARL AND INTO THE OLDE MILL RV RESORT WHERE IT DESTROYED APPROXIMATELY TEN RECREATIONAL VEHICLES AND DAMAGED AT LEAST 25 OTHERS. THE TORNADO CONTINUED WEST TOWARD DOWNTOWN UMATILLA AND DAMAGED THE ROOFS OF THE UMATILLA INN, AN ELEMENTARY SCHOOL, AND A HOME ON BABB ROAD.

ORMOND BEACH TORNADO VOLUSIA 11/0104 EF-1 29.29 -81.06

BASED ON A NWS STORM SURVEY, A WATERSPOUT MOVED ONSHORE FROM THE HALIFAX RIVER NEAR DIX AVENUE AND NORTH BEACH STREET IN ORMOND BEACH, CAUSING TREE DAMAGE AND MINOR SIDING AND SHINGLE DAMAGE TO A FEW TWO STORY HOMES. THE TORNADO CONTINUED INLAND AND PRODUCED STRONG EF-1 DAMAGE (ESTIMATED 100 TO 110 MPH) TO SEVERAL HOMES AND TREES NEAR THE INTERSECTION OF HERNANDEZ AVENUE, NORTH RIDGEWOOD AVENUE AND ROSEWOOD AVENUE. SEVERAL HOMES SUSTAINED MAJOR ROOF DAMAGE. THE TORNADO THEN DOWNED TREES AND PRODUCED DEBRIS IMPACT AT THE ORMOND BEACH FIRE STATION 93 AND DAMAGING THE ROOFS OF TWO COMMERCIAL BUILDINGS NEAR US HIGHWAY 1 AND WILMETTE AVENUE. THE TORNADO DISSIPATED JUST WEST OF US HIGHWAY 1.

PATRICK AFB TORNADO BREVARD 11/0104 EF-1 28.23 -80.60

BASED ON A NWS STORM SURVEY, A WATERSPOUT MOVED ONSHORE FROM THE ATLANTIC AND CAUSED TORNADO DAMAGE AS IT CONTINUED ACROSS THE BARRIER ISLAND, AFFECTING PATRICK AIR FORCE BASE. THE EF-1 TORNADO (ESTIMATED 85-95 MPH) REMOVED THE ROOF FROM A SMALL BUILDING EAST OF HIGHWAY A1A, THEN PRODUCED MINOR TO MODERATE DAMAGE TO SEVERAL STORAGE BUILDINGS, MAINLY IN THE FORM OF PARTIAL LOSS OF ROOF COVERINGS AND BROKEN GLASS IN SOME EAST AND NORTH FACING WINDOWS. SEVERAL LARGE, STEEL CONEX STORAGE CONTAINERS WITHIN THE TORNADO PATH WERE ROLLED 100+ FEET DOWNWIND (NORTHWEST). DAMAGE ALSO OCCURRED TO ANTENNAS MOUNTED ON FREE STANDING TOWERS AND TO SOME SMALL TREES AND SHRUBS. THE TORNADO THEN WEAKENED AS IT APPROACHED THE BANANA RIVER.

ROCKLEDGE TORNADO	BREVARD	11/0114	EF-1
28.28 -80.69			

A NWS STORM SURVEY CONFIRMED THAT A WATERSPOUT MOVED ONSHORE ALONG ROCKLEDGE DRIVE NEAR RIVER WOODS DRIVE AND PRODUCED EF-1 TORNADO DAMAGE (WINDS ESTIMATED AT 95-105 MPH) ALONG A SHORT TRACK. APPROXIMATELY SIX HOMES SUSTAINED SIGNIFICANT ROOF DAMAGE AND NUMEROUS TREES WERE SNAPPED OR UPROOTED. A PORTION OF ONE ROOF WAS REMOVED AND AT LEAST ONE OTHER HOME HAD A PORTION OF ITS METAL ROOF PEELED BACK. SEVERAL HOMES ADJACENT TO THE AREA OF MOST SIGNIFICANT DAMAGE ALSO EXPERIENCED A LESSER DEGREE OF SHINGLE DAMAGE. AT LEAST ONE SCREEN PATIO WAS DESTROYED, SEVERAL OTHERS WERE DAMAGED AND SOME FENCES WERE BLOWN OVER AND CARRIED DOWNWIND.

NORTH MERRITT ISLAND TORNADO BREVARD 11/0148 EF-1 28.42 -80.68

A NWS STORM SURVEY CONFIRMED THAT A TORNADO FORMED ON NORTH MERRITT ISLAND WITHIN OR SOUTHEAST OF THE SAVANNAHS SUBDIVISION, PRODUCING STRONG EF-1 DAMAGE (WINDS ESTIMATED 100-110 MPH) TO NUMEROUS HOMES ON SAVANNAHS TRAIL. OVER A DOZEN HOMES SUSTAINED SIGNIFICANT SHINGLE DAMAGE AND APPROXIMATELY SIX POOL SCREEN ENCLOSURES WERE DESTROYED. NUMEROUS TREES WERE SNAPPED. THE TORNADO CONTINUED NORTHWEST AND CROSED EAST HALL ROAD AND LEILANI LANE, PRODUCING TREE AND MINOR ROOF DAMAGE TO A FEW HOMES. THE TORNADO THEN TRAVELED THROUGH THE SOUTHERN PORTION OF THE ISLAND LAKES MOBILE HOME PARK AT EF-1 STRENGTH (ESTIMATED WINDS OF 95 TO 105 MPH) AND IMPACTED OVER 25 MOBILE HOMES. SEVERAL MOBILE HOMES WERE DESTROYED AND MANY OTHERS SUSTAINED MODERATE TO MAJOR DAMAGE (THE NEIGHBORHOOD WAS NEARLY COMPLETED EVACUATED FOR HURRICANE IRMA). THE TORNADO THEN WEAKENED, BUT TOPPLED THE STEEPLE AT THE ORSINO BAPTIST CHURCH, AFTER CROSSING NORTH COURTNEY BOULEVARD. TREE DAMAGE AND MINOR ROOF DAMAGE OCCURRED ALONG THE REMAINDER OF THE PATH UNTIL THE INDIAN RIVER WAS REACHED.

G. STORM IMPACTS BY COUNTY... INJURIES COUNTY DEATHS EVACUATIONS DESCRIPTION _____ 0 0 BREVARD 3667 PRELIMINARY REPORT: OVER 7,132 HOMES SUSTAINED DAMAGE, INCLUDING 400 WITH MAJOR DAMAGE AND 45 DESTROYED. INITIAL PROPERTY DAMAGE ESTIMATE OF \$30.0 MILLION. FLORIDA POWER AND LIGHT REPORTS 100% OF CUSTOMERS IN BREVARD COUNTY LOST POWER DURING THE HURRICANE. MODERATE TO LOCALLY SEVERE BEACH EROSION WAS OBSERVED. INDIAN RIVER 0 0 MMMM PRELIMINARY REPORT OF 72 STRUCTURES WITH MINOR DAMAGE, AND 6 WITH MAJOR DAMAGE. TOTAL ESTIMATED DAMAGE COST OF \$1.5 MILLION. LAKE 0 0 4413 PRELIMINARY REPORT OF 110 COMMERCIAL BUILDINGS: 92 WERE AFFECTED, 16 SUSTAINED MINOR DAMAGE, AND 2 SUSTAINED MAJOR DAMAGE. TOTAL DAMAGE TO COMMERCIAL BUILDINGS IS APPROXIMATELY \$3.5 MILLION. PRELIMINARY REPORT OF 2,615 RESIDENTIAL BUILDINGS: 1,895 WERE AFFECTED, 632 SUSTAINED MINOR DAMAGE, 80 SUSTAINED MAJOR DAMAGE, 7 WERE DESTROYED. TOTAL DAMAGE TO RESIDENTIAL BUILDINGS IS APPROXIMATELY \$33 MILLION. OUT OF 160,707 CUSTOMERS IN MARTIN COUNTY, 123,467 OR 77% LOST POWER DURING THE HURRICANE. MARTIN 0 0 MMMM PRELIMINARY REPORT: 180 AFFECTED STRUCTURES, 192 WITH MINOR DAMAGE, 8 WITH MAJOR DAMAGE, 1 DESTROYED. TOTAL ESTIMATED DAMAGE COST OF \$4.3 MILLION. 0 OKEECHOBEE 0 MMMM PRELIMINARY REPORT: 585 AFFECTED RESIDENTIAL STRUCTURES, 239 WITH MINOR DAMAGE, 99 WITH MAJOR DAMAGE, AND 8 DESTROYED. TOTAL ESTIMATED DAMAGE COST OF \$157 MILLION. 1 0 ORANGE MMMM ONE DIRECT FATALITY; VEHICLE ACCIDENT DURING HURRICANE AND 5 INDIRECT FATALITIES (3 CARBON MONOXIDE AND 2 ELECTROCUTION). OSCEOLA 0 0 MMMM PRELIMINARY REPORT OF RESIDENTIAL AND BUSINESS STRUCTURES: 183 WERE AFFECTED, 3,934 WITH MINOR DAMAGE, 95 WITH MAJOR DAMAGE, 23 DESTROYED. TOTAL ESTIMATED DAMAGE COST OF \$100 MILLION. 0 0 ST. LUCIE 2365 TOTAL OF 150,000 HOMES/BUSINESSES LOST POWER. TOTAL ESTIMATED DAMAGE TO BUSINESS STRUCTURES IS APPROXIMATELY \$25 MILLION. SEMINOLE 0 0 MMMM PRELIMINARY REPORT OF 7,125 RESIDENTIAL STRUCTURES: 4,939 WERE AFFECTED, 698 WITH MINOR DAMAGE, 162 WITH MAJOR DAMAGE, 24 WERE DESTROYED, AND 1,302 WERE INACCESSIBLE. TOTAL ESTIMATED DAMAGE TO RESIDENTIAL STRUCTURES IS APPROXIMATELY \$393 MILLION. PRELIMINARY REPORT OF 305 BUSINESS STRUCTURES: 191 WERE AFFECTED, 64 WITH MINOR DAMAGE, 18 WITH MAJOR DAMAGE, 1 WAS DESTROYED, AND 31 WERE INACCESSIBLE. TOTAL ESTIMATED DAMAGE TO BUSINESS STRUCTURES IS APPROXIMATELY \$150.2 MILLION. VOLUSTA 0 0 MMMM PRELIMINARY REPORT OF 4,811 RESIDENTIAL AND BUSINESS STRUCTURES: 3,457 WERE AFFECTED, 1,003 WITH MINOR DAMAGE, 329 WITH MAJOR DAMAGE,

3,457 WERE AFFECTED, 1,003 WITH MINOR DAMAGE, 329 WITH MAJOR DAMAGE, 21 DESTROYED. TOTAL ESTIMATED DAMAGE COST OF \$332 MILLION. MODERATE TO LOCALLY SEVERE BEACH EROSION WAS OBSERVED. ONE INDIRECT FATALITY (CARBON MONOXIDE). \$\$

LEGEND: I-INCOMPLETE DATA E-ESTIMATED 9999 OR MMMM - DENOTES MISSING DATA.

SPRATT/ULRICH/BLOTTMAN/SMITH/COMBS/RODRIGUEZ/

Appendix E – Post-Tropical Cyclone Report from the Tampa Bay NWS WFO

701 ACUS72 KTBW 141642 PSHTBW

POST TROPICAL CYCLONE REPORT...HURRICANE IRMA NATIONAL WEATHER SERVICE TAMPA BAY AREA - RUSKIN FL 1241 PM EDT THU SEP 14 2017

NOTE: THE DATA SHOWN HERE ARE PRELIMINARY....AND SUBJECT TO UPDATES AND CORRECTIONS AS APPROPRIATE.

THIS REPORT INCLUDES EVENTS OCCURRING WHEN WATCHES AND/OR WARNINGS WERE IN EFFECT...OR WHEN SIGNIFICANT FLOODING ASSOCIATED WITH IRMA OR ITS REMNANTS WAS AFFECTING THE AREA.

COUNTIES INCLUDED...INLAND LEVY...INLAND CITRUS...SUMTER... INLAND HERNANDO...INLAND PASCO...INLAND HILLSBOROUGH...PINELLAS... POLK...INLAND MANATEE...HARDEE...HIGHLANDS...INLAND SARASOTA... DE SOTO...INLAND CHARLOTTE...INLAND LEE...COASTAL LEVY... COASTAL HERNANDO...COASTAL PASCO...COASTAL HILLSBOROUGH... COASTAL MANATEE...COASTAL SARASOTA...COASTAL CHARLOTTE... COASTAL LEE

A. LOWEST SEA LEVEL PRESSURE/MAXIMUM SUSTAINED WINDS AND PEAK GUSTS _____ METAR OBSERVATIONS ... NOTE: ANEMOMETER HEIGHT IS 10 METERS AND WIND AVERAGING IS 2 MINUTES _____ LOCATION ID MIN DATE/ LAT LON PRES TIME DATE/ MAX PEAK DATE/ PRES SUST TIME GUST TIME DEG DECIMAL (MB) (UTC) (KT) (UTC) (KT) (UTC) _____ _____ _____ KBKV-BROOKSVILLE FL 973.1 11/0553 020/033 11/0335 030/056 11/0333 28.47 -82.45 KTPA-TAMPA INTERNATIONAL AIRPORT FL 350/040 11/0309 330/058 11/0343 27.97 -82.53 971.8 11/0553 KPIE-SAINT PETERSBURG FL 27.91 -82.69 975.0 11/0553 330/043 11/0553 360/064 11/0310 KSPG-ALBERT WHITTED FL 973.8 11/0453 030/047 11/0053 030/060 11/0110 27.77 -82.63 KSRO-SARASOTA FL 27.40 -82.55 975.5 11/0353 350/042 11/0120 340/061 11/0226 KMCF-MACDILL AIRFORCE BASE FL 27.86 -82.52 980.3 11/0240 030/032 11/0109 030/045 11/0119 KGIF-WINTER HAVEN FL 28.05 -81.75 971.5 11/0453 120/044 11/0445 110/066 11/0445 KPGD-PUNTA GORDA FL 962.7 11/0053 050/044 10/2153 030/064 10/2348 26.92 -81.99 KFMY-FORT MYERS PAGE FIELD FL 26.58 -81.97 952.4 10/2253 040/050 10/2216 020/073 10/2216 KRSW-REGIONAL SOUTHWEST FL 26.54 -81.76 958.1 10/2353 060/054 10/2153 070/077 10/2150

KRSW-REGIONAL SOUTHWEST FL 26.54 -81.76 958.1 10/2353 060/054 10/2153 070/077 10/2150

REMARKS:

NON-METAR OBSERVATIONS... NOTE: ANEMOMETER HEIGHT IN METERS AND WIND AVERAGING PERIOD IN MINUTES INDICATED UNDER MAXIMUM SUSTAINED WIND IF KNOWN

LOCATION ID LAT LON DEG DECIMAL	MIN PRES	DATE/ TIME	MAX SUST	DATE/ TIME	PEAK GUST	TIME
KVVG-THE VILLAG 28.90 -82.00	ES FL		050/032	110205	050/047	110205
KLAL-LAKELAND I 27.99 -82.01	. FIELD	FL	080/044	110415	080/058	110415
KLEE-LEESBURG F 28.82 -81.81	_		130/037	110753	130/060	110753
KVDF-TAMPA EXEC 28.01 -82.34	UTIVE		350/027	110435	350/048	110455
KINF-INVERNESS 28.81 -82.32	AIRPORT		020/022	101755	020/029	101755
KPCM-PLANT CITY 28.00 -82.16	-		040/036	110355	040/046	110355
KBOW-BARTOW 27.94 -81.78			050/037	110135	070/056	110255

REMARKS:

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

LOCATION ID LAT LON DEG DECIMAL	MIN PRES (MB)	DATE/ TIME (UTC)	MAX SUST (KT)	DATE/ TIME (UTC)	PEAK GUST (KT)	DATE/ TIME (UTC)
CDRF1-CEDAR KEY 29.14 -83.03		11/0936	258/031	11/1536	006/047	11/0730
OLD PORT TAMPA- 27.86 -82.55		11/0418	348/050		11/0254	348/060
SAINT PETERSBUF 27.77 -82.63			010/033	10/2342	353/052	11/0248

REMARKS:

C. STORM TOTAL RAINFALL FRO	4 0000 UTC JUL 31	UNTIL 0000 UTC	AUG 01
CITY/TOWN LAT LON DEG DECIMAL	COUNTY	ID	RAINFALL (IN)
WASTEPLANT 26.63 -81.76	LEE	WTEP	11.59
ROMP 89 CUMPRESSCO 28.36 -82.04	SUMTER	1834	11.34

ARCADIA 7.1 WSW 27.18 -81.96	DESOTO	FL-DS-1	11.34
AUBURNDALE 3.0 SSW 28.03 -81.82	POLK	FL-PK-01	11.00
WEBSTER CITY 28.61 -82.05	SUMTER	9074	10.60
FORT MYERS - PAGE FIELD 26.59 -81.86	LEE	PAGEFIEL	10.60
THE VILLAGES 2.8 ESE 28.90 -81.97	SUMTER	FL-ST-26	10.59
ROMP 30 ZOLFO SPRINGS 27.46 -81.80	HARDEE	2794	10.58
SEBRING 4.7 WNW 27.52 -81.53	HIGHLANDS	FL-HL-13	10.54
WITHLACOOCHEE RIVER AT T 28.48 -82.18	HERNANDO	6082	10.31
HERNANDO 1.6 N 28.93 -82.37	CITRUS	FL-CT-11	10.28
ROMP 116 (TSALA APOPKA C 28.96 -82.34	CITRUS	6734	10.19
POINCIANA PLACE 2.5 SSW 28.12 -81.50	POLK	FL-PK-53	10.14
ROMP 45 FORT MEADE	POLK	1354	10.11
27.76 -81.79			
	LEE	LEHI	10.07
LEHIGH ACRES		lehi 10mile	
LEHIGH ACRES 26.61 -81.65 TEN MILE CANAL NR DANIEL	LEE		10.03
LEHIGH ACRES 26.61 -81.65 TEN MILE CANAL NR DANIEL 26.55 -81.86 PANA VISTA (LK PANASOFFK	LEE SUMTER	10MILE	10.03 9.98
LEHIGH ACRES 26.61 -81.65 TEN MILE CANAL NR DANIEL 26.55 -81.86 PANA VISTA (LK PANASOFFK 28.81 -82.14 BONITA SPRINGS UTILITIES	LEE SUMTER LEE	10MILE 8974	10.03 9.98 9.92
LEHIGH ACRES 26.61 -81.65 TEN MILE CANAL NR DANIEL 26.55 -81.86 PANA VISTA (LK PANASOFFK 28.81 -82.14 BONITA SPRINGS UTILITIES 26.34 -81.75 BABSON PARK 0.9 NW	lee Sumter Lee Polk	10MILE 8974 BSUTIL	10.03 9.98 9.92 9.85
LEHIGH ACRES 26.61 -81.65 TEN MILE CANAL NR DANIEL 26.55 -81.86 PANA VISTA (LK PANASOFFK 28.81 -82.14 BONITA SPRINGS UTILITIES 26.34 -81.75 BABSON PARK 0.9 NW 27.84 -81.54 LAKE WALES 0.7 SE	lee Sumter Lee Polk	10MILE 8974 BSUTIL FL-PK-58	10.03 9.98 9.92 9.85
LEHIGH ACRES 26.61 -81.65 TEN MILE CANAL NR DANIEL 26.55 -81.86 PANA VISTA (LK PANASOFFK 28.81 -82.14 BONITA SPRINGS UTILITIES 26.34 -81.75 BABSON PARK 0.9 NW 27.84 -81.54 LAKE WALES 0.7 SE 27.89 -81.58 ARCADIA	lee Sumter Lee Polk Polk Desoto	10MILE 8974 BSUTIL FL-PK-58 FL-PK-59 490	10.03 9.98 9.92 9.85 9.84 9.83
LEHIGH ACRES 26.61 -81.65 TEN MILE CANAL NR DANIEL 26.55 -81.86 PANA VISTA (LK PANASOFFK 28.81 -82.14 BONITA SPRINGS UTILITIES 26.34 -81.75 BABSON PARK 0.9 NW 27.84 -81.54 LAKE WALES 0.7 SE 27.89 -81.58 ARCADIA 27.23 -81.84 WHIDDEN PROPERTIES	LEE SUMTER LEE POLK POLK DESOTO CHARLOTTE	10MILE 8974 BSUTIL FL-PK-58 FL-PK-59 490	10.03 9.98 9.92 9.85 9.84 9.83
LEHIGH ACRES 26.61 -81.65 TEN MILE CANAL NR DANIEL 26.55 -81.86 PANA VISTA (LK PANASOFFK 28.81 -82.14 BONITA SPRINGS UTILITIES 26.34 -81.75 BABSON PARK 0.9 NW 27.84 -81.54 LAKE WALES 0.7 SE 27.89 -81.58 ARCADIA 27.23 -81.84 WHIDDEN PROPERTIES 26.95 -81.57 SOUTHWEST INTERNATIONAL	LEE SUMTER LEE POLK POLK DESOTO CHARLOTTE	10MILE 8974 BSUTIL FL-PK-58 FL-PK-59 490 WHID	10.03 9.98 9.92 9.85 9.84 9.83 9.76 9.70
LEHIGH ACRES 26.61 -81.65 TEN MILE CANAL NR DANIEL 26.55 -81.86 PANA VISTA (LK PANASOFFK 28.81 -82.14 BONITA SPRINGS UTILITIES 26.34 -81.75 BABSON PARK 0.9 NW 27.84 -81.54 LAKE WALES 0.7 SE 27.89 -81.58 ARCADIA 27.23 -81.84 WHIDDEN PROPERTIES 26.95 -81.57 SOUTHWEST INTERNATIONAL 26.54 -81.76 N. RESV 26.71 -81.84	LEE SUMTER LEE POLK POLK DESOTO CHARLOTTE LEE	10MILE 8974 BSUTIL FL-PK-58 FL-PK-59 490 WHID RSW	10.03 9.98 9.92 9.85 9.84 9.83 9.76 9.70

28.31 -81.91			
ROMP 87 GREEN SWAMP (NW 28.22 -82.03	POLK	1254	9.61
ROMP 12 PRAIRIE CREEK (S 27.04 -81.74	DESOTO	2834	9.51
NORTH KISSIMMEE RIVR 27.75 -81.18	POLK	KREF	9.48
ROMP 44 WARNER SOUTHERN 27.82 -81.60	POLK	8054	9.46
AVON PARK 0.6 NW 27.60 -81.51	HIGHLANDS	FL-HL-10	9.42
LP-6 COLEMAN 28.81 -82.09	SUMTER	2774	9.26
INDIAN LAKES FIRE T 27.79 -81.33	POLK	INDIANL	9.21
LAKES REGIONAL PARK 26.53 -81.89	LEE	LAKES	9.20
THE VILLAGES 2.7 NNW 28.90 -81.97	SUMTER	FL-ST-13	9.18
ROMP 28 JOSEPHINE CREEK 27.37 -81.44	HIGHLANDS	2634	9.18
SEBRING 27.42 -81.40	HIGHLANDS	470	9.03
ROMP 13 TIPPEN BAY (SE D 27.07 -81.62	DESOTO	2614	8.96
BOWLING GREEN 27.64 -81.84	HARDEE	7114	8.94
ROMP 17 HORSE CREEK 27.17 -81.98	DESOTO	1554	8.94
SADDLE CREEK (N OF BARTO 27.94 -81.85	POLK	1774	8.90
ROMP 5 CECIL WEBB 26.95 -81.81	CHARLOTTE	2754	8.86
LAKE HENRY 28.08 -81.66	POLK	1814	8.84
OLGA 26.72 -81.68	LEE	OLGA	8.81
ROMP 15 LONG ISL MARSH (27.21 -81.66	DESOTO	7934	8.80
LOVERS KEY 26.39 -81.87	LEE	LOVERSKE	8.78
ROMP 26 BROWNSVILLE SCHO 27.30 -81.82	DESOTO	4334	8.77
JOSHUA 27.26 -81.61	DESOTO	241	8.72
LAKE HAMILTON 28.04 -81.64	POLK	1754	8.68

28.31 -81.91

DADE CITY 28.35 -82.20	PASCO	311	8.67
ROMP 90 DADE CITY 28.36 -82.14	PASCO	6174	8.67
ROMP 76 OLD POLK CITY 28.18 -81.83	POLK	8114	8.66
ROMP 14 HICORIA (NR ARCH 27.15 -81.35	HIGHLANDS	7554	8.65
LAKE GIBSON 2 28.10 -81.95	POLK	2434	8.59
WILDWOOD II 28.86 -82.03	SUMTER	7034	8.57
FLORAL CITY POOL 28.75 -82.28	CITRUS	2014	8.52
ROMP 112 RUTLAND 28.88 -82.23	SUMTER	8434	8.48
COLEY (NR FROSTPROOF) 27.74 -81.53	POLK	6070	8.45
PEACE RIVER (SW DESOTO C 27.09 -82.01	DESOTO	7394	8.43
LAKE LOWERY 28.13 -81.69	POLK	6184	8.41
LECANTO 28.83 -82.50	CITRUS	275	8.41
20.03 -02.30			
	HIGHLANDS	VENUSR	8.40
VENUS		VENUSR 7954	
VENUS 27.08 -81.34 ROMP 25 LILY (SW HARDEE	HARDEE	7954	
VENUS 27.08 -81.34 ROMP 25 LILY (SW HARDEE 27.37 -82.01 TICK ISLAND-KISS RVR	HARDEE POLK	7954 TICK	8.40 8.38
VENUS 27.08 -81.34 ROMP 25 LILY (SW HARDEE 27.37 -82.01 TICK ISLAND-KISS RVR 27.69 -81.19 ROMP 16.5 FORT OGDEN	HARDEE POLK DESOTO	7954 TICK 5094	8.40 8.38
VENUS 27.08 -81.34 ROMP 25 LILY (SW HARDEE 27.37 -82.01 TICK ISLAND-KISS RVR 27.69 -81.19 ROMP 16.5 FORT OGDEN 27.06 -81.88 AVON PARK BOMB RANGE 27.63 -81.26	HARDEE POLK DESOTO	7954 TICK 5094 AVONPK	8.40 8.38 8.38 8.23
VENUS 27.08 -81.34 ROMP 25 LILY (SW HARDEE 27.37 -82.01 TICK ISLAND-KISS RVR 27.69 -81.19 ROMP 16.5 FORT OGDEN 27.06 -81.88 AVON PARK BOMB RANGE 27.63 -81.26 INVERNESS FOOL	HARDEE POLK DESOTO HIGHLANDS CITRUS	7954 TICK 5094 AVONPK 2034	 8.40 8.38 8.23 8.20
VENUS 27.08 -81.34 ROMP 25 LILY (SW HARDEE 27.37 -82.01 TICK ISLAND-KISS RVR 27.69 -81.19 ROMP 16.5 FORT OGDEN 27.06 -81.88 AVON PARK BOMB RANGE 27.63 -81.26 INVERNESS POOL 28.85 -82.32 ROMP 43XX AVON PARK (ALP 27.60 -81.48	HARDEE POLK DESOTO HIGHLANDS CITRUS	7954 TICK 5094 AVONPK 2034 7174	 8.40 8.38 8.23 8.20 8.19
VENUS 27.08 -81.34 ROMP 25 LILY (SW HARDEE 27.37 -82.01 TICK ISLAND-KISS RVR 27.69 -81.19 ROMP 16.5 FORT OGDEN 27.06 -81.88 AVON PARK BOMB RANGE 27.63 -81.26 INVERNESS POOL 28.85 -82.32 ROMP 43XX AVON PARK (ALP 27.60 -81.48 HERNANDO POOL	HARDEE POLK DESOTO HIGHLANDS CITRUS CITRUS	7954 TICK 5094 AVONPK 2034 7174 2054	 8.40 8.38 8.23 8.20 8.19
VENUS 27.08 -81.34 ROMP 25 LILY (SW HARDEE 27.37 -82.01 TICK ISLAND-KISS RVR 27.69 -81.19 ROMP 16.5 FORT OGDEN 27.06 -81.88 AVON PARK BOMB RANGE 27.63 -81.26 INVERNESS POOL 28.85 -82.32 ROMP 43XX AVON PARK (ALP 27.60 -81.48 HERNANDO POOL 28.90 -82.37 ROMP 16 JOSHUA CREEK	HARDEE POLK DESOTO HIGHLANDS CITRUS CITRUS DESOTO	7954 TICK 5094 AVONPK 2034 7174 2054 1574	 8.40 8.38 8.23 8.20 8.19 8.13 8.04
VENUS 27.08 -81.34 ROMF 25 LILY (SW HARDEE 27.37 -82.01 TICK ISLAND-KISS RVR 27.69 -81.19 ROMP 16.5 FORT OGDEN 27.06 -81.88 AVON PARK BOMB RANGE 27.63 -81.26 INVERNESS POOL 28.85 -82.32 ROMP 43XX AVON PARK (ALP 27.60 -81.48 HERNANDO POOL 28.90 -82.37 ROMP 16 JOSHUA CREEK 27.19 -81.77 ROMP 9 NORTH PORT	HARDEE POLK DESOTO HIGHLANDS CITRUS CITRUS DESOTO SARASOTA	7954 TICK 5094 AVONPK 2034 7174 2054 1574	 8.40 8.38 8.23 8.20 8.19 8.13 8.04 8.03

CREEK RANCH 28.04 -81.46	POLK	CREEKR	7.93
CHIEFLAND 8.5 ENE 29.50 -82.72	LEVY	FL-LV-9	7.92
SEBRING 27.46 -81.35	HIGHLANDS	SEBRNG	7.92
ROMP 28X LAKE PLACID 27.27 -81.34	HIGHLANDS	1494	7.82
LORIDA-MCARTHUR PROP 27.44 -81.21	HIGHLANDS	MCARTH	7.79
ROMP 134 WILLISTON 29.44 -82.46	LEVY	1114	7.77
LESLIE HEIFNER (NR FLYIN 28.75 -82.23	CITRUS	6774	7.72
NORTH KISSIMMEE RIVR 27.66 -81.13	POLK	S65AMW	7.69
CHINSEGUT HILL 28.62 -82.37	HERNANDO	9174	7.65
ST PETE 42 (HWY 54 NR LA 28.18 -82.52	PASCO	3014	7.58
MCINTOSH (ALONG HWY 39 N 28.07 -82.14	HILLSBOROUGH	5074	7.51
CYPRESS CREEK TMR-5 28.26 -82.40	PASCO	2734	7.48
NORTH PORT 27.14 -82.34	SARASOTA	480	7.44
		480 8034	
27.14 -82.34 ROMP 73 WINTER HAVEN	POLK		7.43
27.14 -82.34 ROMP 73 WINTER HAVEN 28.02 -81.73 ROMP TR 21-2 OZELLO 28.85 -82.60	POLK CITRUS	8034	7.43 7.43
27.14 -82.34 ROMP 73 WINTER HAVEN 28.02 -81.73 ROMP TR 21-2 OZELLO 28.85 -82.60 GATEWAY	POLK CITRUS LEE	8034 1174 GATEWAY	7.43 7.43 7.38
27.14 -82.34 ROMP 73 WINTER HAVEN 28.02 -81.73 ROMP TR 21-2 OZELLO 28.85 -82.60 GATEWAY 26.57 -81.74 WEEKI WACHEE 7.1 NNE	POLK CITRUS LEE HERNANDO	8034 1174 GATEWAY FL-HN-24	7.43 7.43 7.38
27.14 -82.34 ROMP 73 WINTER HAVEN 28.02 -81.73 ROMP TR 21-2 OZELLO 28.85 -82.60 GATEWAY 26.57 -81.74 WEEKI WACHEE 7.1 NNE 28.61 -82.54 ROMP 105 HORSE LAKE (BRO	POLK CITRUS LEE HERNANDO HERNANDO	8034 1174 GATEWAY FL-HN-24 8454	7.43 7.43 7.38 7.36
27.14 -82.34 ROMP 73 WINTER HAVEN 28.02 -81.73 ROMP TR 21-2 OZELLO 28.85 -82.60 GATEWAY 26.57 -81.74 WEEKI WACHEE 7.1 NNE 28.61 -82.54 ROMP 105 HORSE LAKE (BRO 28.56 -82.40 ROMP TR 3-1 POINT LONESO	POLK CITRUS LEE HERNANDO HERNANDO CHARLOTTE	8034 1174 GATEWAY FL-HN-24 8454 1594	7.43 7.43 7.38 7.36 7.33 7.33
27.14 -82.34 ROMP 73 WINTER HAVEN 28.02 -81.73 ROMP TR 21-2 OZELLO 28.85 -82.60 GATEWAY 26.57 -81.74 WEEKI WACHEE 7.1 NNE 28.61 -82.54 ROMP 105 HORSE LAKE (BRO 28.56 -82.40 ROMP TR 3-1 POINT LONESO 26.94 -82.22 BLOOMINGDALE 1.3 ESE	POLK CITRUS LEE HERNANDO HERNANDO CHARLOTTE HILLSBOROUGH	8034 1174 GATEWAY FL-HN-24 8454 1594 FL-HB-14	7.43 7.43 7.38 7.36 7.33 7.33
27.14 -82.34 ROMP 73 WINTER HAVEN 28.02 -81.73 ROMP TR 21-2 OZELLO 28.85 -82.60 GATEWAY 26.57 -81.74 WEEKI WACHEE 7.1 NNE 28.61 -82.54 ROMP 105 HORSE LAKE (BRO 28.56 -82.40 ROMP TR 3-1 POINT LONESO 26.94 -82.22 BLOOMINGDALE 1.3 ESE 27.87 -82.24 ROMP 131 (WILLISTON HIGH	POLK CITRUS LEE HERNANDO HERNANDO CHARLOTTE HILLSBOROUGH LEVY	8034 1174 GATEWAY FL-HN-24 8454 1594 FL-HB-14	7.43 7.43 7.38 7.36 7.33 7.33 7.32 7.26
27.14 -82.34 ROMP 73 WINTER HAVEN 28.02 -81.73 ROMP TR 21-2 OZELLO 28.85 -82.60 GATEWAY 26.57 -81.74 WEEKI WACHEE 7.1 NNE 28.61 -82.54 ROMP 105 HORSE LAKE (BRO 28.56 -82.40 ROMP TR 3-1 POINT LONESO 26.94 -82.22 BLOOMINGDALE 1.3 ESE 27.87 -82.24 ROMP 131 (WILLISTON HIGH 29.33 -82.56 ROMP 32 MYAKKA HEAD 27.47 -82.06	POLK CITRUS LEE HERNANDO HERNANDO CHARLOTTE HILLSBOROUGH LEVY	8034 1174 GATEWAY FL-HN-24 8454 1594 FL-HB-14 4434 1414	7.43 7.43 7.38 7.36 7.33 7.33 7.32 7.26

26.71 -81.61

ROMP 18 MURDOCK (ERN SAR 27.19 -82.13	SARASOTA	8514	7.00
DV-1 DOVER 27.99 -82.21	HILLSBOROUGH	1294	6.95
ROMP 35 (NW DESOTO CO AL 27.29 -82.04	DESOTO	3394	6.95
TAMPA SVC OFFICE (NR TAM 28.02 -82.35	HILLSBOROUGH	9274	6.87
RIVERVIEW 4.8 SSW 27.80 -82.34	HILLSBOROUGH	FL-HB-98	6.82
LAKE ISTOKPOGA 27.33 -81.25	HIGHLANDS	S68	6.82
BRONSON 29.40 -82.59	LEVY	230	6.81
ROMP TR 5-3 KNIGHTS TRAI 27.16 -82.40	SARASOTA	8574	6.79
ROMP 11 SHELL CREEK 26.98 -81.94	CHARLOTTE	1614	6.79
LAKE HATCHINEHA 28.05 -81.40	POLK	WRWX	6.78
YELLOW FEVER CREEK 26.68 -81.90	LEE	YELLOWFE	6.78
RUSKIN 1.8 ESE 27.71 -82.40	HILLSBOROUGH	FL-HB-44	6.78
ROMP TR 4-1 CASPERSEN (S 27.06 -82.44	SARASOTA	8634	6.71
STARKEY (NW JAY B. STARK 28.25 -82.65	PASCO	3154	6.69
ROMP 23 MYAKKA CITY 27.31 -82.18	MANATEE	1474	6.64
ROMP 33 WATERBURY (EAST 27.46 -82.26	MANATEE	7694	6.62
BROOKSVILLE 1.2 E 28.56 -82.37	HERNANDO	FL-HN-17	6.59
ROMP 61 LAKE MEDARD 27.91 -82.16	HILLSBOROUGH	1854	6.57
NORTH PORT 2.6 E 27.05 -82.15	SARASOTA	FL-SS-34	6.55
VALRICO 1.1 SE 27.93 -82.23	HILLSBOROUGH	FL-HB-3	6.52
S-161 (ALONG HARNEY RD) 28.02 -82.37	HILLSBOROUGH	6614	6.52
WOLFE (NR JUMPING GULLY 28.38 -82.50	PASCO	7254	6.49
ROMP TR 3-3 LEMON BAY 26.93 -82.33	CHARLOTTE	7594	6.49

ROMP CB-1NW KUKA (NR MAS 28.43 -82.48	PASCO	7274	6.47
SWFWMD HEADQUARTERS 28.47 -82.44	HERNANDO	7094	6.46
ROMP 39 (NR LITTLE MANAT 27.59 -82.25	MANATEE	2594	6.37
LAKE ARBUCKLE 27.66 -81.37	POLK	ARBCKL_P	6.36
ROMP 60 MULBERRY 27.89 -81.98		1314	6.36
ROMP 31 ONA 27.45 -81.92	HARDEE	1434	6.34
BIRD CREEK (WSW OF YANKE 29.01 -82.75	LEVY	4074	6.33
VALRICO 2.2 SE 27.91 -82.23	HILLSBOROUGH	FL-HB-4	6.31
ENGLEWOOD 3.7 NNW 27.00 -82.39	SARASOTA	FL-SS-44	6.30
ROMP 107 RINGGOLD (NR SK 28.66 -82.46	HERNANDO	1214	6.30
ISLAND FORD LAKE 28.15 -82.60	HILLSBOROUGH	1634	6.24
ROMP 22 UTOPIA (NR UTOPI 27.31 -82.34	SARASOTA	7474	6.21
ROMP 123 STARLING (SE OF 27.68 -82.25	HILLSBOROUGH	1374	6.20
HANNA LAKE 28.14 -82.45	HILLSBOROUGH	7534	6.07
ROMP 62 CRISTINA - RIVER 27.86 -82.31	HILLSBOROUGH	8414	6.06
GREATER NORTHDALE 0.4 EN 28.11 -82.51	HILLSBOROUGH	FL-HB-48	5.98
RIVERVIEW 0.9 ENE 27.87 -82.30	HILLSBOROUGH	FL-HB-11	5.95
CHASSAHOWITZKA 28.72 -82.55	CITRUS	6114	5.94
S KISSIMMEE RIVER 27.22 -80.97	HIGHLANDS	S84	5.91
TAMPA 6.5 NNE 28.03 -82.41	HILLSBOROUGH	FL-HB-29	5.88
ALICO RD NR LEE CO UTILI 26.46 -81.70	LEE	CORKPL	5.80
ROMP TR 13-3 RACE TRACK 28.07 -82.64	HILLSBOROUGH	4274	5.79
CRESCENT LAKE 28.15 -82.60	HILLSBOROUGH	1674	5.76
ROMP 20 OSPREY 27.19 -82.48	SARASOTA	7414	5.74

LAKE THONOTOSASSA AT FLI 28.07 -82.27	HILLSBOROUGH	6814	5.73
ELDRIDGE-WILDE 2N (NE PI 28.18 -82.65	PINELLAS	3094	5.61
ARCHOLD BIO STN 27.18 -81.35	HIGHLANDS	ACHF1	5.61
NORTH PORT 1.6 ENE 27.06 -82.17	SARASOTA	FL-SS-14	5.60
HILLSBOROUGH RIVER AT SU 28.02 -82.45	HILLSBOROUGH	6140	5.55
ROMP 19X MACARTHUR (NR M 27.17 -82.25	SARASOTA	1534	5.53
BRADEN RIVER 27.42 -82.44	MANATEE	2894	5.50
APOLLO BEACH 3.0 ENE 27.78 -82.36	HILLSBOROUGH	FL-HB-46	5.47
S-160 (NR ADAMO AND 78TH 27.96 -82.37	HILLSBOROUGH	6574	5.45
CLEARWATER 2.2 S 27.95 -82.76	PINELLAS	FL-PN-16	5.44
ROMP TR 6-1 SIESTA KEY 27.27 -82.55	SARASOTA	7974	5.38
ROMP TR 9-1 SIMMONS PARK 27.74 -82.46	HILLSBOROUGH	1334	5.37
ROMP TR 5-1 LAUREL PARK 27.14 -82.45	SARASOTA	1514	5.36
ENGLE PARK (NR HUDSON) 28.39 -82.63	PASCO	3134	5.35
INDIAN PRAIRIE 27.27 -81.20	HIGHLANDS	S82	5.33
FLINT PEN STRAND 26.43 -81.72	LEE	FPWX	5.30
BAY LAKE (NR CARROLLWOOD 28.07 -82.50	HILLSBOROUGH	1654	5.30
NEAR TUCKERS CORNER 26.85 -81.75	CHARLOTTE	CHARLT_P	5.28
PALM HARBOR 1.0 S 28.07 -82.77	PINELLAS	FL-PN-71	5.26
CITRUS PARK 1.3 ENE 28.08 -82.55	HILLSBOROUGH	FL-HB-5	5.22
WHITE TROUT LAKE - CARRO 28.04 -82.50	HILLSBOROUGH	1934	5.22
SARASOTA OFFICE (NR I-75 27.34 -82.43	SARASOTA	3054	5.19
ROMP 8 WARM MINERAL SPRI 27.08 -82.25	SARASOTA	9234	5.16
FROG CREEK (NR I-275 AND	MANATEE	2874	5.14

27.58 -82.51

27.30 -02.31			
CYPRESS STRAND 27.51 -82.48	MANATEE	2854	5.12
INGLIS DAM 29.01 -82.62	LEVY	6154	5.10
LUTZ 2.0 E 28.14 -82.43	HILLSBOROUGH	FL-HB-37	5.07
ROMP TR 8-1 RUBONIA 27.58 -82.55	MANATEE	7774	5.06
TARPON SINK (LAKE TARPON 28.13 -82.74	PINELLAS	2114	5.04
INDIAN PRAIRIE 27.27 -81.18	HIGHLANDS	S83	5.01
S-162 (NR HWY 301 AND DR 27.99 -82.35	HILLSBOROUGH	6654	4.97
FT MYERS WASTEWATER 26.49 -81.93	LEE	FTMYERSP	4.91
S-163 (NR I-75 AND FLETC 28.07 -82.35	HILLSBOROUGH	1714	4.86
NORTH PORT 4.7 NNE 27.11 -82.17	SARASOTA	FL-SS-15	4.84
ST. PETERSBURG 4.5 NW 27.80 -82.70	PINELLAS	FL-PN-60	4.75
BAY PINES 0.5 NW 27.82 -82.78	PINELLAS	FL-PN-76	4.71
ROMP 58 WILSON ELEM (NR 27.92 -81.59	POLK	7874	4.65
GAMBLE CREEK (NR MULHOLL 27.53 -82.40	MANATEE	8694	4.63
ROMP TR 7-2 ONECO 27.44 -82.55	MANATEE	8614	4.63
ROMP 40 FOUR CORNERS 27.65 -82.05	POLK	1394	4.54
GOVERNMENT HAMMOCK (NR E 27.53 -82.50	MANATEE	8754	4.54
ROMP TR 14-1 SAFETY HARB 28.00 -82.69	PINELLAS	1274	4.52
LUTZ 0.6 WSW 28.13 -82.47	HILLSBOROUGH	FL-HB-11	4.51
FAIRWAYS 26.74 -81.94	LEE	FAIRWAYS	4.49
SEMINOLE 3.3 WNW 27.86 -82.83	PINELLAS	FL-PN-77	4.40
ROMP TR SA-1 (PIONEER PA 27.35 -82.55	SARASOTA	8994	4.29
APOLLO BEACH 2.7 ENE 27.78 -82.36	HILLSBOROUGH	FL-HB-13	4.29

ROMP TR 7-1 BA 27.42 -82.58	AYSHORE GAR	MANATEE		1454	4.27
PEARCE DRAIN 27.43 -82.52		MANATEE		8734	4.21
DOVER 28.02 -82.23		HILLSBOROUGH	ł	360	4.20
S-155 (HILLSOF 28.09 -82.35	ROUGH RVR A	HILLSBOROUGH	ł	6694	4.08
PALMA SOLA DRA 27.47 -82.64	AIN	MANATEE		8674	3.94
SUMTER 13 (NR 28.86 -82.20	RUTLAND)	SUMTER		8934	3.84
ST. PETERSBURG 27.78 -82.67	G 2.4 NW	PINELLAS		FL-PN-3	3 3.78
ROMP TR 9-2 AB 27.77 -82.39	POLLO BEACH	HILLSBOROUGH	ł	7514	3.78
LAKE KISSIMMEE 27.97 -81.42		POLK		SNIVLY	3.69
S-551 (LAKE TA 28.05 -82.71	ARPON CANAL	PINELLAS		6494	3.66
SAWGRASS LAKE 27.84 -82.67	2	PINELLAS		7614	3.57
WARES CREEK 27.47 -82.57		MANATEE		8714	3.57
CHANNEL A (HWY 28.01 -82.61	7 580 NR TO	HILLSBOROUGH	ł	6414	3.54
S-159 (NR HWY 28.04 -82.34	301 NR TEM	HILLSBOROUGH	ł	6534	3.24
REMARKS: THIS	PSH IS THE FIF	RST OF SEVERAI	L UPDATE	S TO COM	Ε.
D. INLAND FLOC					
HILLSBOROUGH	SOCIAL MEDIA FERING HOMES NE	VIDEO OF SIGN	NIFICANT	STREET	
POLKPUBLIC OFF YATES ROAI	REPORTS VIA SC D IN LAKELAND.	OCIAL MEDIA 19) INCHES	OF WATE	R IN HOME
HILLSBOROUGH MULRENNAN RD.	BROADCAST MEI IN VALRICO.	DIA IS REPORTI	ING STRE	ET FLOOD	ING ON
	5 WASHED OUT. 1 NOTHER ROAD PAF PROOF.				
	ORM SURGE AND S GAUGES NOTED W		G 		
COUNTY	CITY/TOWN OR LOCATION	1 (FT)	TIDE (FT)	DATE/ TIME	BEACH EROSION
	G FORT MYERS		3.55	11/1900	UNKNOWN

MANATEE	G PORT MANATEE	2.17	1.87	11/1518	UNKNOWN
PINELLAS	G SAINT PETERSBUR	2.17	1.96	11/1636	UNKNOWN
PINELLAS	G CLEARWATER BEAC	1.85	1.67	12/0254	UNKNOWN
LEVY	G CEDAR KEY	2.59	2.71	11/1730	UNKNOWN
HILLSBOROUGH	G MCKAY BAY	3.07	2.75	11/1724	UNKNOWN

REMARKS: SURGE INFORMATION UPDATED WITH NATIONAL OCEAN SERVICE VALUES AND SURGE WAS LATER THAN PREVIOUS STATEMENT ISSUANCE.

F. TORNADOES...

LAT LON (DEG DEC DESCRIPTION	CIMAL	COUNTY	TIME (UTC)	(IF	KNOWN)
N WAUCHULA 27.55 -81.81		HARDEE			I
REPORT OF ROOF I	AMAGE TO BUS	INESS IN WAUCHULA	1		
4 WSW POLK CITY 28.15 -81.89		POLK	10/1615		EF2
7 WOODEN HIGH PC	WER TRANSMIS	SION POLES SNAPPE	D.		
G. STORM IMPACTS	BY COUNTY				
COUNTY DESCRIPTION		INJURIES			
\$\$					
Legend: I-Incomplete Dat	a				

NOAH

E-Estimated

Appendix F – Post-Tropical Cyclone Report from the Miami NWS WFO

344 ACUS72 KMFL 090932 AAF PSHMFL

POST TROPICAL CYCLONE REPORT...HURRICANE IRMA...UPDATED NATIONAL WEATHER SERVICE MIAMI FLORIDA 532 AM EDT MON OCT 9 2017

NOTE: THE DATA SHOWN HERE ARE PRELIMINARY....AND SUBJECT TO UPDATES AND CORRECTIONS AS APPROPRIATE.

THIS REPORT INCLUDES EVENTS OCCURRING WHEN WATCHES AND/OR WARNINGS WERE IN EFFECT...OR WHEN SIGNIFICANT FLOODING ASSOCIATED WITH IRMA

COUNTIES INCLUDED...MIAMI DADE...BROWARD...PALM BEACH...GLADES... HENDRY...COLLIER...MAINLAND MONROE

SEP 28...UPDATED FOR...CORRECTIONS TO METAR/ASOS OBSERVATIONS, NUMEROUS ADDITIONS TO NON-METAR OBSERVATIONS AND MARINE OBSERVATIONS, NUMEROUS ADDITIONS TO STORM TIDE/SURGE SECTION BASED ON NWS SURVEYS, TORNADO SECTION UPDATED TO ADD TORNADO IN COLLIER COUNTY, AND ADDED STORM EFFECTS FOR EACH COUNTY BASED ON LATEST INFORMATION.

SEP 28...UPDATED FOR...ADDITIONS/CORRECTIONS TO STORM RAINFALL FOR PERIOD FROM 1200 UTC SEPTEMBER 9TH TO 1200 UTC SEPTEMBER 11TH.

OCT 03...UPDATED FOR...ADDITIONAL NON-METAR OBSERVATIONS FROM TEXAS TECH UNIVERSITY RESEARCH TEAM STICKNET, AND USGS TIDE GAUGE DATA FROM NAPLES BAY AT U.S. 41.

OCT 09...UPDATED FOR...ADDITIONAL STORM SURGE/TIDE INFORMATION FROM USGS RAPID DEPLOYMENT GAUGES AND UPDATED FATALITY NUMBERS.

SEP 28...CORRECTED FOR...POMPANO BEACH AIRPARK (KPMP) METAR MAX SUSTAINED WIND 60 KNOTS WITH MAX GUST 76 KNOTS

SEP 29...CORRECTED FOR...TIME FRAME OF RAINFALL OBSERVATIONS FROM SEP 9 TO SEP 11.

A. LOWEST SEA L	EVEL PRES	SSURE/MAX	IMUM SUSI	AINED WIN	IDS AND PE	EAK GUSTS	;
METAR OBSERVATIONS NOTE: ANEMOMETER HEIGHT IS 10 METERS AND WIND AVERAGING IS 2 MINUTES							
LOCATION ID LAT LON DEG DECIMAL	PRES 7	TIME	SUST	TIME	GUST	TIME	
KOPF-OPA LOCKA . 25.91 -80.28		0/2112	140/056	10/1903	110/074	10/1439	
KTMB-MIAMI EXEC 25.65 -80.43	- , -			10/1110 I	100/063	10/1110	I
KMIA-MIAMI INTE 25.80 -80.29			110/046	10/1303 I	100/063	10/1312	I
KFLL-FT LAUDERD. 26.07 -80.15	989.0 10	0/2120	-	10/0153 I	110/061	09/2022	I

KFXE-FT LAUDERDALE EXECUTIVE

26.20 -80.17 989.5 10/2202 110/053 10/1847 120/072 10/1818 KHWO-HOLLYWOOD NORTH PERRY AIRPORT 26.00 -80.24 993.3 10/1701 I 120/049 10/1651 I 110/068 10/1422 I KAPF-NAPLES MUNICIPAL AIRPORT 26.15 -81.77 959.4 10/1932 I 060/053 10/1801 I 070/071 10/1800 I KPBI-WEST PALM BEACH INTERNATIONAL 26.68 -80.09 990.2 10/2320 130/057 10/2101 120/079 10/2055 KPMP - POMPANO BEACH AIRPARK 26.24 -80.11 990.1 10/2205 I 140/060 10/2039 I 120/076 10/2046 I REMARKS: 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/ LAT LON PRES TIME DEG DECIMAL (MB) (UTC)	MAX SUST	DATE/ TIME	PEAK GUST	DATE/ TIME	
CIMCH - NEAD N DEDDY ADDT	I 157/070				
NPLMP- 1 E NAPLES 26.15 -81.77	I 999/081	10/2000	068/123	10/2035	
DRFCE - DEERFIELD BEACH 26.31 -80.15	I 158/061	10/2200	999/087	999/999	I
	I 113/071				
MMMCH - WEST MIAMI 25.74 -80.30	I 113/059	10/1540	999/081	99/9999	I
MDFR4 - BAL HARBOUR	068/058				
MDFR5 - SOUTH MIAMI HEIGHTS 25.57 -80.37	I 113/049	10/1500	999/072	10/1413	
PPFMS - COCONUT GROVE 25.74 -80.21	I 113/037	10/0600	999/066	10/9999	I
MFR11 - MIAMI 25.77 -80.29	I 145/049	10/1830	999/063	10/9999	I
WFORT - DORAL 25.79 -80.34	I 090/041	10/1800	999/083	10/1837	I
MDFR1 - DORAL 25.80 -80.35	I 113/046	10/2200	999/057	10/9999	
MDFR8 - HOMESTEAD 25.44 -80.46	I 999/040	10/1400 I	999/068	10/1256	I
MFRFC - COCONUT GROVE 25.73 -80.26	I 999/999	I	999/078	10/1810	I
MNTLA - MIA SOUTH TERMINAL 25.79 -80.27	I 999/999 29/MM	I	999/067		I
MDFR6 - KENDALL 25.71 -80.33	I 999/999	I	999/070	10/1737	I

XURB - DORAL

25.85 -80.37	984.7 10/211		07/043 15/05	10/1701		110/067	10/1646	
XFLM - MIRAMAR 25.96 -80.30	982.0 10/215		16/043 15/05	10/1827		114/073	10/1747	
LPIF1 - ROYAL P 25.39 -80.68	ALM RANGER ST	I 99	99/048 06/10	10/1623	I	999/079	10/1423	I
CHKF1 - CHEKIKA 25.62 -80.58			99/049 06/10	10/1723		999/078	10/1623	
STDF1 - HOMESTE 25.50 -80.50	AD		25/045 10/15	10/1700		121/063	10/1645	
S331W - THE RED 25.61 -80.51	LAND		13/044 08/15	10/1700		095/061	10/1403	
MIA/ITWS 25.80 -80.29			99/058 15/01	10/1646	I	999/086	10/1719	Ι
NWS MIAMI 25.76 -80.38	989.5	I 99	99/999		I	999/070	10/1708	I
HLLYW - PEMBROK 25.99 -80.16	E PARK	I 99	99/047	10/2200	I	999/075		I
3AS3W - MICCOSU 25.85 -80.77	KEE VILLAGE		18/059 08/15	10/1715		115/075	10/1658	
AVE MARIA 26.30 -81.43			24/057 08/15	10/2200		109/077	10/2125	
BELLW - BELLE G 26.65 -80.63	LADE		52/044 08/15	10/2245		124/062	10/1935	
CFSW - CLEWISTO 26.73 -80.89	Ν		27/043 08/15	10/2300		134/060	10/2344	
FHCHSX - WEST P 26.65 -80.07	ALM BEACH		41/038 08/15	10/2130		141/067	10/2128	
LXWS - LOXAHATC 26.50 -80.22	HEE NWR		99/039 08/15	10/2245	I	999/058	10/2020	I
ROTNWX - ROTENB 26.33 -80.88	ERGER WMA		39/047)8/15	10/2130		133/065	10/2048	
S140W - BROWARD 26.17 -80.83	MICCOSUKEE R	13	ATION 36/037 08/15	10/1945		121/056	10/1812	
S75WX - BRIGHTO 27.19 -81.13	Ν		96/048 08/15	10/2345		115/068	11/0058	
S78W - ORTONA 26.79 -81.30		14	49/044	11/0015		125/065	10/2327	

	00/20			
SGGEW - GOLDEN GATE ESTATES 26.14 -81.58	160/047 08/15	10/2130	150/084 10/21	120
MRMRH - MIRAMAR HIGH SCHOOL 25.99 -80.28	999/038	10/2200 I	999/085 10/14	144 I
WSTNF - SOUTHWEST RANCHES 26.06 -80.39	999/047	10/1700	999/085	I
FTBCM - DAVIE 26.08 -80.23	999/037	10/1800	999/064	I
FRBCS - LAUDERHILL 26.12 -80.18	999/043	10/1300	999/070	I
FLTLS - OAKLAND PARK 26.17 -80.16	999/036	10/1300	999/062	I
XCVN - TAMARAC 26.19 -80.30 986.1 10/2123	106/043 10/05	10/1853	110/061 10/18	358
BEMA3 - BROWARD COUNTY EOC 26.12 -80.27	999/050	10/2100	999/067	I
FTDST - SUNRISE 26.16 -80.25	999/045	10/1700	999/071	I
SNRSC - SUNRISE 26.16 -80.29	999/042	10/2100	999/085	I
FTPCS - OAKLAND PARK 26.20 -80.13	999/043	10/2100	999/074	I
PMPNB - MARGATE 26.25 -80.19	999/046	10/1925	999/069	I
CRLCG - CORAL SPRINGS 26.26 -80.30	999/043	10/1900	999/077 10/19	900
DFBS1 - DEERFIELD BEACH 26.29 -80.12	999/051 15/MM	10/2000	999/097	I
PRKLN - PARKLAND 26.30 -80.27	999/042	10/2000	999/071	
PBRPN - PEMBROKE PINES 26.01 -80.27	999/053	10/1520	999/095 10/14	140
FDLF1 - DAVIE 26.09 -80.24	136/030 10/15	10/1800 I	136/057 10/18	300
NPLLV - URBAN ESTATES 26.27 -81.75	999/048	10/2100	999/097 10/21	134
RACF1 - RACCOON POINT 25.98 -80.90	999/999 06/10		999/062	
OASF1 - OASIS RANGER STATION 25.86 -81.03	999/039 06/10	10/1637	999/067 10/17	137
OCOF1 - OCHOPEE 25.90 -81.32	999/055 06/10	10/1903	999/083 10/20	003

08/15

RKIF1 - MILES CITY 26.24 -81.30	999/031 06/10	10/2045	999/065	10/2045	
HMRF1 - HONEYMOON RAWS 26.19 -81.07	999/024 06/10	10/2145	999/059	10/2145	
PSTF1 - PANTHER EAST RAW 26.16 -81.36	7S 999/031	10/1711	999/065	10/2111	
PHWF1 - PANTHER WEST RAW 26.17 -81.48	7S 999/021 06/10	10/2211	999/059	10/2211	
IMKF1 - IMMOKALEE 26.46 -81.44	143/056 10/15	10/2300	133/072	10/2245	
MARCO ISLAND PD 25.94 -81.71	999/999		999/113	10/1900	
MARCO ISLAND - SPOTTER F 25.92 -81.73 936.9	REPORT I 999/097		I 999/112		I
XWPB - WEST PALM BEACH 26.65 -80.14 988.7 10	0/2318 119/033 10/05	10/2138	130/058	10/2108	
DLRYD - DELRAY BEACH 26.44 -80.13	999/037	10/1900	999/069		
MRHMG - MOORE HAVEN 26.83 -81.10	999/047	10/2300	999/068		
PALF1 - PALMDALE 26.92 -81.40	143/036 10/15	11/0045	143/059	11/0045	
AIRGL - AIRGLADES AIRPOF 26.73 -81.05	T CLEWISTON 152/059 10/15	11/0015	152/078	11/0015	
0102A - 9 E Miles City 26.16 -81.19	148/045 02/01	10/1636	223/060	10/2029	
0103A - 4 E Orangetree 26.29 -81.51	148/061 02/01	10/2151	146/077	10/2145	
0104A - Miami Beach 25.76 -80.13	211/052 02/01	10/2239	210/064	10/2239	
0105A - 6 E Miccosukee V 25.76 -80.67	village 123/048 02/01	10/1703	I 114/066	10/1605	I
0106A - Hollywood Beach 26.04 -80.11	146/050 02/01	10/1955	147/060	10/2003	
0108A - 10 ESE Ochopee 25.86 -81.15	145/035 02/01	10/1947	128/053	10/1815	
0109A - Broward Miccosuk 26.17 -80.85	ee Reservation 112/051 02/01	10/1727	110/068	10/1727	

0111A - 2 NNW Royal Palm Hammoc 26.04 -81.62		10/2008	113/099 10/2007
0112A - 9 ESE Golden Gate 26.15 -81.54	104/052 02/01	10/2052	112/077 10/2046
0214A - 5 SW Florida City 25.40 -80.56	113/066 02/01	10/1558	099/077 10/1345
0220A - Miles City 26.15 -81.34	113/055 02/01	10/2032	103/073 10/1944

REMARKS:

B. MARINE 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/ PRES TIME SUST TIME (MB) (UTC) (KT) (UTC) GUST LAT LON TIME DEG DECIMAL (KT) (UTC) _____ FWYF1 - FOWEY ROCKS 25.59 -80.10 I 127/073 10/1830 130/087 10/1828 44/00 VAKF1 - VIRGINIA KEY 25.73 80.16 989.0 10/1918 110/046 10/1900 100/062 10/1754 10/06 NPSF1 - NAPLES PIER 26.13 -81.81 939.7 10/2054 290/056 10/2200 290/072 10/2200 06/06 LKWF1 - LAKE WORTH PIER 26.61 -80.03 I 130/055 10/2100 130/079 10/2100 06/06 XGVT - GOVERNMENT CUT 25.75 -80.10 983.0 10/1907 143/065 10/1852 143/079 10/1852 23/05 XTKY - TURKEY POINT 25.43 -80.35 977.4 10/1726 161/062 10/1746 140/081 10/1701 19/05 XMSP - MORNINGSIDE PARK MIAMI 25.82 -80.18 987.5 10/1924 163/055 10/1854 144/073 10/1934 10/05 XKBS - BISCAYNE BAY LIGHT 20 25.65 -80.19 987.2 10/1824 137/053 10/1824 137/075 10/1824 06/05 XDIN - DINNER KEY 25.71 -80.21 990.3 10/1803 999/050 10/1828 999/071 10/1828 05/05 XDGE- DODGE ISLAND MIAMI 25.76 -80.14 987.0 10/1917 144/048 10/1917 144/069 10/1917 12/05XSOM - SOUTH MIAMI 25.63 -80.30 986.4 10/1730 111/050 10/1300 I 110/071 10/1020 I 10/05

XCRN -CRANDON KEY BISCAYNE 25.72 -80.15 990.8 10/2120 108/048 10/1555 108/065 10/1555 08/05 XNMI - NORTH MIAMI 25.90 -80.16 986.0 10/1930 184/039 10/1930 173/060 10/1645 17/05 RSMAS - VIRGINIA KEY WEATHER STEM 25.73 -80.16 I 999/999 I 999/088 10/1732 XPEG - PORT EVERGLADES 26.08 -80.12 985.2 10/2145 137/061 10/2005 127/074 10/1835 41/05 XDAN - DANIA PIER I 999/055 10/1839 I 999/070 10/1759 I 26.05 -80.11 09/05 XPES - PORT EVERGLADES SOUTH 26.06 -80.13 988.1 10/2137 129/040 10/1852 129/071 10/1822 10/05 XCAP - ISLES OF CAPRI 26.03 -81.70 934.8 10/2012 089/062 10/1957 099/086 10/2002 15/05 L006 - LAKE OKEECHOBEE SOUTH 26.82 -80.78 I 142/052 11/0030 147/062 11/0100 08/15 L005 - LAKE OKEECHOBEE WEST 26.96 -80.94 I 147/055 11/0030 127/068 10/2307 08/15 L001 - LAKE OKEECHOBEE NORTH 27.14 -80.79 I 134/052 11/0115 143/065 11/0151 08/15 LZ40 - LAKE OKEECHOBEE CENTER 26.90 -80.79 I 158/052 11/0030 156/067 11/0014 08/15XBOC - BOCA RATON 26.37 -80.08 986.2 10/2058 127/044 10/2058 128/069 10/2043 21/05 XBOY - BOYNTON BEACH 26.54 -80.05 989.4 10/2037 093/044 10/2017 102/068 10/2127 10/05 XMGN -MANGONIA PARK 123/038 10/2154 123/065 10/2154 26.75 -80.07 987.2 10/2254 23/05 XJUP - JUNO BEACH PIER 26.89 -80.06 987.9 10/2354 163/061 10/2354 163/074 10/2354 06/05 XOAK - JUPITER 26.91 -80.07 987.5 10/2126 135/042 10/2301 124/067 10/2126 15/05REMARKS: WITH THE EXCEPTION OF LAKE OKEECHOBEE SITES AND FOWEY ROCKS, OBSERVATIONS SITES ARE COASTAL WITHIN 1 MILE OF THE WATER.

C. STORM TOTAL RAINFALL FROM 1200 UTC SEP 09 UNTIL 1200 UTC SEP 11

70

CITY/TOWN LAT LON		ID	
DEG DECIMAL			
	Miami-Dade		
7 E Naples 26.17 -81.68	Collier	NPLF1	11.46
4 W Royal Palm Ranger 25.39 -80.68	Miami-Dade	LPIF1	11.31
7 W Plantation 26.13 -80.37	Broward	WSTF1	10.81
1 NW Miles City 26.17 -81.36	Collier	PSTF1	10.73
9 SW Big Cypress Seminol 26.19 -81.07	Collier	HMRF1	10.55
5 SE Golden Gate Estates 26.15 -81.58	Collier	PHWF1	10.41
13 E Golden Gate 26.17 -81.48	Collier	SGGEW	10.36
2 WNW LaBelle 26.76 -81.48	Hendry	FL-HY-3	10.31
7 NE Miles City 26.25 -81.30	Collier	RKIF1	10.23
1 S Wilton Manors 26.14 -80.13	Broward	D0271	9.94
1 WSW Miramar 25.98 -80.37	Broward	FL-BW-10	9.92
4 W Fort Lauderdale 26.14 -80.20	Broward	FTDF1	9.90
Oasis Ranger Station 25.86 -81.03	Collier	OASF1	9.90
3 SW Coral Springs 26.23 -80.30	Broward	CSGF1	9.72
1 W Ochopee 25.90 -81.32	Collier	OCOF1	9.61
Fort Lauderdale Executiv 26.20 -80.17	Broward	KFXE	9.57
12 W Boca Raton 26.36 -80.30	Palm Beach	WBCF1	9.24
2 WNW Aberdeen 26.58 -80.20	Palm Beach	FL-PB-2	8.96
2 SSE WESTON 26.13 -80.39	BROWARD	FL-BW-99	8.80
Aberdeen 26.56 -80.17	Palm Beach	FL-PB-77	8.68
Big Cypress Reservation 26.30 -80.98	Hendry	TS909	8.23

	Minul Daile		0 1 0
Biscayne Park 25.88 -80.18	Miami-Dade	F.T-WD-33	8.19
2 SE Plantation 26.09 -80.23	Broward	PLAF1	8.10
Loxahatchee NWR 26.49 -80.43	Palm Beach	LOHF1	8.08
Opa-Locka Airport 25.91 -80.28	Miami-Dade	KOPF	8.03
2 NW Carol City 25.97 -80.30	Broward	LLUF1	8.00
Sunrise 26.16 -80.30	Broward	SNRF1	7.95
Lake Harbor 26.70 -80.81	Palm Beach	SLOF1	7.75
3 NNW Brighton Seminole 27.12 -81.08	Glades	TS896	7.74
25 ENE Ochopee 25.98 -80.90	Collier	RACF1	7.72
1 NE Moore Haven 26.84 -81.09	Glades	MHVF1	7.70
1 E Lauderdale Lakes 26.17 -80.18	Broward	LDLF1	7.68
1 WNW Boynton Beach 26.54 -80.10	Palm Beach	FL-PB-70	7.56
2 NNW Boca Raton 26.39 -80.11	Palm Beach	E5514	7.36
12 WSW Buckhead Ridge 27.03 -81.07	Glades	BRGF1	7.30
9 SW Buckhead Ridge 27.03 -81.00	Glades	NWLF1	7.11
3 NW Moore Haven 26.86 -81.14	Glades	MRHF1	6.98
University Park 25.75 -80.38	Miami-Dade	MFL	6.96
2 E Miami Springs 25.81 -80.26	Miami-Dade	MINF1	6.94
5 E Leisure City 25.49 -80.35	Miami-Dade	BHMF1	6.88
El Portal 25.85 -80.19	Miami-Dade	ELPF1	6.79
Princeton 25.54 -80.41	Miami-Dade	PRNF1	6.79
2 WNW Deerfield Beach 26.33 -80.13	Broward	BORF1	6.76
3 N Florida Gardens 26.67 -80.18	Palm Beach	FL-PB-87	6.61
2 E Lakeport 26.98 -81.09	Glades	LKPF1	6.60

5 SW Florida City 25.40 -80.56	Miami-Dade	EVGF1	6.49
3 NE Cutler Bay 25.61 -80.31	Miami-Dade	CTRF1	6.48
1 S Juno Beach 26.86 -80.06	Palm Beach	JUBF1	6.47
Pompano Beach 26.23 -80.12	Broward	PNOF1	6.39
Miami Lakes 25.91 -80.32	Miami-Dade	MMLF1	6.33
3 W Jupiter 26.93 -80.14	Palm Beach	JPTF1	6.32
15 W Buckhead Ridge 27.12 -81.16	Glades	IPRF1	6.18
7 WSW Buckhead Ridge 27.09 -81.01	Glades	IPEF1	6.18
7 WNW Richmond Heights 25.66 -80.48	Miami-Dade	RHWF1	6.18
9 W Sweetwater 25.76 -80.50	Miami-Dade	TTLF1	6.11
3 SSE Cutler Bay 25.54 -80.33	Miami-Dade	BCPF1	6.07
14 WNW Buckhead Ridge 27.19 -81.13	IPIF1	Glades	6.03
13 SSE South Bay 26.48 -80.65	Palm Beach	SWAF1	6.03
31 W Coral Springs 26.33 -80.78	Broward	HYDF1	5.90
3 NW Haverhill 26.72 -80.16	Palm Beach	D7488	5.90
1 SE Pompano Beach 26.22 -80.11	Broward	PSEF1	5.88
North Palm Beach 26.82 -80.08	Palm Beach	NPBF1	5.64
North Miami Beach 25.95 -80.26	Miami-Dade	NMBF1	5.59
Canal Point 26.86 -80.63	Palm Beach	CNPF1	5.59
2 WNW Leisure City 25.50 -80.47	Miami-Dade	LSCF1	5.47
Boynton Beach 26.54 -80.06	Palm Beach	BYBF1	5.39
4 S Cutler Bay 25.52 -80.35	Miami-Dade	BBBF1	5.28
1 E Weston 26.11 -80.36	Broward	D4511	5.23
2 NNW Country Walk	Miami-Dade	C4495	5.14

25.67 -80.44

REMARKS: DATA IS FOR PERIOD FROM SEPTEMBER 9TH AT 1200 UTC TO SEPTEMBER 11TH AT 1200 UTC

D. INLAND FLOODING...

MIAMI-DADE...PUBLIC REPORTS FLOOD WATERS IN GARAGE OF HOME EAST OF US1 NEAR SW184TH ST

GLADES...GLADES COUNTY EMERGENCY MANAGEMENT REPORTS THAT STATE ROAD 29 IS CLOSED DUE TO STANDING WATER FROM STATE ROAD 78... EXTENDING NORTHEASTWARD... HALFWAY TO PALMDALE. STATE ROAD 78 IS ALSO CLOSED DUE TO STANDING WATER FROM STATE ROAD 29 TO US27. THESE ROADS HAVE BEEN CLOSED SINCE YESTERDAY... SEPTEMBER 12TH.

BROWARD...STREET FLOODING, NO MAJOR IMPACTS NOTED.

PALM BEACH...STREET FLOODING. NO MAJOR IMPACTS NOTED.

HENDRY...FLOODING OF LOW LYING AREAS, AS WELL AS SHEET FLOW FLOODING.

COLLIER...SIGNIFICANT FLOODING OF LOW LYING AREAS, WITH STANDING WATER IN MANY LOCATIONS OVER THE INTERIOR INCLUDING GOLDEN GATE ESTATES, BIG CYPRESS NATIONAL PRESERVE AND EVERGLADES NATIONAL PARK.

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E. MAXIMUM STORM SURGE AND STORM TIDE... OFFICIAL TIDE GAUGES NOTED WITH LEADING ${\rm G}$

COUNTY		CITY/TOWN OR LOCATION					
MIAMI-DADE	G	VIRGNIA KEY	3.92	3.66	10/1630	MAJOR	
PALM BEACH	G	LAKE WORTH PIER	2.23	1.50	10/1542	MODERATE	
COLLIER	G	NAPLES	5.14	4.25	10/2306	MODERATE	
COLLIER		NAPLES BAY	5.00	4.13	11/0130	NONE	I
MIAMI-DADE		BLACK POINT	5.00	5.61	10/1748	UNKNOWN	
MIAMI-DADE		TURKEY POINT	3.50	4.07	10/1651	UNKNOWN	
MIAMI-DADE		BAL HARBOUR	3.80	3.32	10/1848	UNKNOWN	
MIAMI-DADE		MATHESON HAMMOC	5.00	5.36	10/1809	UNKNOWN	
MIAMI-DADE		COCONUT GROVE	6.00	5.75	10/2151	UNKNOWN	
BROWARD		DANIA BEACH	2.00	2.54	10/1556	MODERATE	
BROWARD		POMPANO BEACH	2.70	3.72	10/1558	MODERATE	
COLLIER		EVERGLADES CITY	6.50	8.92	10/2334	UNKNOWN	
COLLIER		GOODLAND	5.50	7.17	10/2210	UNKNOWN	
COLLIER		MARCO ISLAND	5.00	5.37	10/2238	MODERATE	

REMARKS: ENTRIES 4-14 ARE FROM USGS RAPID DEPLOYMENT GAUGES.

COLLIER COUNTY: SURVEY INDICATED HIGHEST INUNDATION IN CHOKOLOSKEE OF 6-8 FEET AT WATERFRONT, APPROXIMATELY 8 FT ABOVE MEAN HIGHER HIGH

WATER (MHHW), WITH 3-5 FEET ACROSS MOST OF ISLAND. IN EVERGLADES CITY, MAXIMUM 6 FT OF INUNDATION AT EVERGLADES NATIONAL PARK GULF VISITOR CENTER, WITH 2-4 FEET ACROSS THE TOWN AND AS HIGH AS 5 FEET IN A FEW AREAS. USGS DATA INDICATES 1-2 FEET OF INUNDATION AS FAR INLAND AS TAMIAMI TRAIL BETWEEN STATE ROAD 29 AND COLLIER SEMINOLE STATE PARK. IN GOODLAND, 5-6 FT INUNDATION AT WATERFRONT, ABOUT 5.5 FT ABOVE MHHW, AND 3-4 FT ACROSS MOST OF TOWN. IN MARCO ISLAND, 2-4 FT INUNDATION MAINLY SOUTH AND EAST PARTS OF ISLAND WITH LESS THAN HALF-MILE INLAND PENETRATION. IN NAPLES, 3-4 FT INUNDATION ALONG GULF WATER FRONT WITHIN 1 BLOCK OF BEACH, WITH LESS THAN A HALF-MILE INLAND PENETRATION. HIGHEST INUNDATION VALUES NOTED IN VANDERBILT BEACH AS WELL AS SOUTH OF NAPLES PIER. ALONG NAPLES BAY, INUNDATION OF 1 TO 2 FEET ON WEST SIDE OF BAY JUST SOUTH OF TAMIAMI TRAIL, RESULTING IN ABOUT 2-3 FT ABOVE MHHW.

MIAMI-DADE COUNTY: 3-5 FEET INUNDATION ALONG BISCAYNE BAY SHORELINE FROM HOMESTEAD TO DOWNTOWN MIAMI/BRICKELL, WITH HIGHEST ESTIMATED VALUE OF 6 FEET IN MATHESON HAMMOCK PARK AND COCONUT GROVE. INLAND PENETRATION LESS THAN A HALF-MILE, PRIMARILY AFFECTING BAYFRONT PROPERTIES AND ADJACENT STREETS. LESSER INUNDATION NORTH OF DOWNTOWN MIAMI AND ALONG ATLANTIC OCEANFRONT.

BROWARD COUNTY: HIGHEST INUNDATION 2-3 FEET ALONG BARRIER ISLAND FROM FORT LAUDERDALE BEACH SOUTH. OVERWASH OF AIA IN FORT LAUDERDALE INTO ADJACENT STREETS. INLAND PENETRATION LESS THAN A HALF-MILE. LITTLE SIGNIFICANT INUNDATION NOTED NORTH OF FORT LAUDERDALE BEACH.

PALM BEACH COUNTY: LITTLE SIGNIFICANT INUNDATION NOTED.

F. TORNADOES...

(DIST)CITY/TOWN LAT LON (DEG DE DESCRIPTION	CIMAL	COUNTY	DATE/ TIME (UTC)	EF (IF	SCALE KNOWN)
		COASTAL BROWARD			
A TORNADO WAS R 635 PM EDT.	EPORTED BY A	HAM RADIO OPERATO	R IN OAKLAND	PARK	AT
4 W HOMESTEAD P. 25.44 -80.39	ARK	COASTAL MIAMI DA	. 09/2320		- I
A TORNADO WAS R MOTOR SPEEDWAY		EMBER OF THE PUBLI T.	C AROUND HOM	ESTEAI	C
2 W OCHOPEE 25.89 -81.33		WESTERN COLLIER	09/1620		EF1
LEANING WOOD PO AND CARNESTOWN/		ONG TAMIAMI TRAIL/ ECTION.	US 41 BETWEE	N OCHO	OPEE
G. STORM IMPACT	S BY COUNTY.				
DESCRIPTION		INJURIES			FIONS
COLLIER					7,000

SUBJECT TO CHANGE WITH SUBSEQUENT UPDATES. ESTIMATED \$320 MILLION IN DAMAGE TO UNINCORPORATED COLLIER COUNTY, DOES NOT INCLUDE TOTALS FROM NAPLES, MARCO ISLAND AND EVERGLADES CITY. MAJORITY OF STRUCTURES IN EVERGLADES CITY SUFFERED MAJOR WIND AND/OR WATER DAMAGE. COUNTY-WIDE, AT LEAST 88 BUILDINGS DESTROYED AND 1,500 WITH MAJOR DAMAGE. HEAVY TREE AND POWER POLE DAMAGE IN AREAS AFFECTED BY EYE WALL, INCLUDING PORT OF THE ISLANDS, MARCO ISLAND, COLLIER SEMINOLE STATE PARK, GOLDEN GATE, ORANGETREE AND PARTS OF CITY OF NAPLES CONSISTENT WITH TYPICAL DAMAGE CAUSED BY WINDS OVER 110 MPH. EVIDENCE OF POSSIBLE MINI-SWIRLS IN NE QUADRANT OF EYE WALL IN THE ORANGETREE/VALENCIA LAKES AREA NORTH OF GOLDEN GATE ESTATES AS SUGGESTED BY DAMAGE PATTERN. CONCENTRATED TREE DAMAGE IN PORT OF THE ISLANDS, COLLIER SEMINOLE STATE PARK AND MARCO ISLAND ALSO SUGGEST POSSIBLE MINI-SWIRLS, BUT NOT DETERMINED WITH SAME LEVEL OF CONFIDENCE AS IN ORANGETREE. 197,630 FPL CUSTOMERS LOST POWER, 94% OF TOTAL CUSTOMERS. OVER 30,000 INSURANCE CLAIMS FILED.

HENDRY

1

5

19

3

PRELIMINARY DAMAGE ESTIMATES INCLUDE 131 RESIDENTIAL STRUCTURES WITH MAJOR DAMAGE AND 42 DESTROYED. OVER 2,000 INSURANCE CLAIMS FILED AND ALMOST 10,000 CUSTOMERS LOST POWER, VIRTUALLY ALL CUSTOMERS IN THE COUNTY.

GLADES

334 STRUCTURES SUFFERED MAJOR DAMAGE, 118 UNINHABITABLE AND 33 DESTROYED WITH 50% OF COUNTY ASSESSMENT COMPLETED. TREE AND POWER POLE DAMAGE THROUGHOUT COUNTY WITH SEVERAL HOMES SUSTAINING TOTAL ROOF FAILURE. TOTAL OF 689 INSURANCE CLAIMS FILED.

MIAMI DADE

31,092

PRELIMINARY ASSESSMENT OF 1,000 RESIDENCES SUSTAINING SIGNIFICANT DAMAGE. ABOUT 50% OF AGRICULTURAL INDUSTRY DAMAGED WITH ESTIMATED LOSSES CLOSE TO \$245 MILLION. TOTAL OF 888,530 FPL CUSTOMERS LOST POWER, 80% OF TOTAL CUSTOMERS IN COUNTY. MAJORITY OF DAMAGE COUNTY-WIDE WAS TO TREES AND FENCES, WITH FLOODING DAMAGE IN AREAS IMPACTED BY STORM SURGE ALONG THE BISCAYNE BAY SHORELINE. TOTAL OF 55,012 INSURANCE CLAIMS FILED IN THE COUNTY.

BROWARD

17,000

12 OF THE 19 REPORTED DEATHS OCCURRED IN NURSING HOME IN HOLLYWOOD FROM HYPERTHERMIA CAUSED BY LOSS OF POWER. TOTAL OF 689,500 FPL CUSTOMERS LOST POWER, ABOUT 74% OF TOTAL CUSTOMERS IN THE COUNTY. 38,836 INSURANCE CLAIMS FILED. DAMAGE PRIMARILY TO TREES AND FENCES.

PALM BEACH

17**,**263

TOTAL OF 566,240 FPL CUSTOMERS LOST POWER, OVER 75% OF TOTAL CUSTOMERS IN THE COUNTY. 18,930 INSURANCE CLAIMS FILED. MAJORITY OF DAMAGE WAS TO TREES AND FENCES.

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Legend: I-Incomplete Data E-Estimated

REYNES/MOLLEDA/HAGEN

Appendix G – Post Tropical-Cyclone Report from the Key West NWS WFO

ACUS72 KKEY 291651 AAB PSHKEY

POST TROPICAL CYCLONE REPORT...HURRICANE IRMA...UPDATED NATIONAL WEATHER SERVICE KEY WEST FL 1250 PM EDT FRI SEP 29 2017

UPDATED TEXT IN HEADLINES AND INCLUDED BAHIA HONDA STATE PARK RAINFALL TOTAL.

NOTE: THE DATA SHOWN HERE ARE PRELIMINARY....AND SUBJECT TO UPDATES AND CORRECTIONS AS APPROPRIATE.

THIS REPORT INCLUDES EVENTS OCCURRING WHEN WATCHES AND/OR WARNINGS WERE IN EFFECT...OR WHEN SIGNIFICANT FLOODING ASSOCIATED WITH IRMA OR ITS REMNANTS WAS AFFECTING THE AREA.

COUNTIES INCLUDED...MONROE

A. LOWEST SEA LEVEL PRESSURE/MAXIMUM SUSTAINED WINDS AND PEAK GUSTS _____ METAR OBSERVATIONS ... NOTE: ANEMOMETER HEIGHT IS 10 METERS AND WIND AVERAGING IS 2 MINUTES _____ LOCATION ID MIN DATE/ MAX DATE/ DATE/ PEAK GUST TIME PRES TIME SUST TIME (KT) (UTC) LAT LON DEG DECIMAL (MB) (UTC) (KT) (UTC) _____ KEYW-KEY WEST INTERNATIONAL AIRPORT I 020/052 10/1115 030/082 10/1113 24.56 -81.76 KMTH-FLORIDA KEYS MARATHON INTERNATIONAL AIRPORT 24.73 -81.05 I 060/044 09/2353 060/062 09/2345 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/ GUST SUST TIME (KT) (UTC) LAT LON PRES TIME DEG DECIMAL (MB) (UTC) TIME (KT) (UTC) (UTC) (KT) _____ -----------KYWF1 - KEY WEST NOAA/NOS TIDE GAUGE 25.55 -81.81 340/061 10/1224 340/078 10/1224 ANEMOMETER HEIGHT 15 M (49.2 FT AGL) ADDITIONAL WIND REPORTS FOR THE NORTH KEY LARGO HANDAR AND KEY DEER NWR RAWS IN SECTION A AND STORM TOTAL RAINFALL REPORTS IN SECTION C. VCAF1 - VACA KEY NOAA/NOS TIDE GAUGE 160/054 10/1342 160/081 10/1342 24.71 -81.11 ANEMOMETER HEIGHT 6.5 M (21.3 FT AGL) XSMS - WEATHERFLOW KEY WEST COAST GUARD SECTOR 24.57 -81.57 952.9 10/1225 014/053 10/1140 349/077 10/1245 XUMK - WEATHERFLOW UPPER MATECUMBE KEY 24.92 -80.64 976.3 10/1256 160/061 10/1436 158/081 10/1401 XSKL - WEATHERFLOW SOUTH KEY LARGO 980.8 10/1347 135/054 10/1542 135/074 10/1542 25.10 - 80.43TS607 - KEY DEER NATIONAL WILDLIFE REFUGE RAWS (BIG PINE KEY) 24.72 -81.39 090/048 10/1438 104/104 10/1338 ANEMOMETER HEIGHT 6.1 M (20 FT AGL) SUSTAINED WINDS 10-MIN AVERAGE

KLNF1 - NORTH KEY LARGO HANDAR 110/045 10/1330 110/063 10/1300 25.19 -80.35 987.5 10/1400 10/1500 WFO KEY WEST (ROOFTOP RSOIS) 24.55 -81.79 030/079 10/1155 USCG ISLAMORADA STATION 24.95 -80.59 050/071 10/0430 ANEMOMETER HEIGHT 5.5 M (18 FT AGL) 104.1 FM STUDIO - UPPER SUGARLOAF KEY 24.67 -81.53 939.7 10/1315 REMARK: REPORTED AS 27.75 IN B. MARINE OBSERVATIONS... NOTE: ANEMOMETER HEIGHT IN METERS AND WIND AVERAGING PERIOD IN MINUTES INDICATED UNDER MAXIMUM SUSTAINED WIND IF KNOWN _____ LOCATION IDMINDATE/MAXDATE/PEAKDATE/LATLONPRESTIMESUSTTIMEGUSTTIMEDEGDECIMAL(MB)(UTC)(KT)(UTC)(KT)(UTC) _____ PLSF1 - PULASKI SHOAL LIGHT CMAN 24.70 -82.77 986.5 10/1500 010/059 10/1200 010/072 10/1142 ANEMOMETER HEIGHT 17.7 M (58.1 FT AMSL) XSMS - WEATHERFLOW SMITH SHOAL LIGHT 24.72 -81.92 964.6 10/1230 027/067 10/1210 035/084 10/0905 XALG - WEATHERFLOW ALLIGATOR REEF LIGHT 24.85 -80.62 977.0 10/1204 106/062 10/1159 106/081 10/1159 MLRF1 - MOLASSES REEF LIGHT CMAN 25.01 -80.38 884.7 10/1300 I 130/065 10/1200 140/080 10/1300 140/065 10/1300 ANEMOMETER HEIGHT 15.8 M (51.8 FT AMSL) XCFL - WEATHERFLOW CARYSFORT REEF LIGHT 25.23 -80.21 986.8 10/1325 120/062 10/1240 124/081 10/1335 ANEMOMETER HEIGHT 47 FEET AMSL C. STORM TOTAL RAINFALL FROM 0400 UTC SEP 09 UNTIL 0400 UTC SEP 12 _____ ID CTTY/TOWN COUNTY RATNFALL LAT LON (IN) DEG DECIMAL _____ KEY DEER NATIONAL WILDLIFE REFUGE RAWS (BIG PINE KEY) 24.72 -81.39 MONROE TS607 12.54 5.3 SW KEY LARGO 25.05 -80.49 MONROE COCORAHS 9.98 RAINFALL RECOVERED FOR PERIOD SEP 08 THROUGH SEP 15 0.9 SSW CUDJOE KEY 24.66 -81.51 MONROE COCORAHS 9.76 RAINFALL RECOVERED FOR PERIOD SEP 09 THROUGH SEP 18 6.8 ENE MARATHON MONROE COCORAHS 9.42 24.74 -80.98 RAINFALL RECOVERED FOR PERIOD SEP 09 THROUGH SEP 19 1.3 NE KEY WEST 24.57 -81.76 MONROE COCORAHS 9.03 1 WSW BAHIA HONDA KEY MONROE BPNF1 7.58

24.66 -81.28 MONKOE BPNF1 RAINFALL RECOVERED FOR PERIOD SEP 06 THROUGH SEP 22

NORTH KEY LARGO HANDAR 24.19 -80.35	MONROE	KLNF1	7.16
6.2 NE KEY LARGO 25.17 -80.37 RAINFALL RECOVERED FOR	MONROE PERIOD SEP 07 THROUGH SEP	COCORAHS 13	6.93
1 SW KEY WEST			

24.55 -81.79 MONROE KKEY 5.70

REMARKS (UPDATED): DUE TO INCOMPLETE RAINFALL RECORDS FROM FAILED AUTOMATED STATIONS AND MANDATORY RESIDENTIAL EVACUATION OF MONROE COUNTY FLORIDA KEYS...PLEASE NOTE SPECIFIC RAINFALL RECOVERY PERIODS AS RESIDENTS AND PARTNERS RETURNED TO REPORT TOTAL RAINFALL.

D. INLAND FLOODING...

MONROE FLORIDA KEYS...RAINFALL FLOODING OF 6 TO 18 INCHES IN DEPTH OBSERVED IN OCEAN REEF DURING MONROE EOC CONTINUITY OF OPERATIONS CLEARLY DISTINGUISHABLE FROM STORM SURGE. RAINFALL ON TOP OF EXISTING STORM SURGE RESULTED IN TOTAL WATER HEIGHT 6 TO 10 INCH HIGHER STORM SURGE VALUES IN NEW TOWN KEY WEST PER MEASURED WATERLINES.

REMARKS: STORM SURGE VALUES GREATLY EXCEEDED POTENTIAL RAINFALL FLOOD DEPTHS ACROSS MOST AREAS OF THE FLORIDA KEYS AND WILL B (TOP OF THE 5TH STOREY ABOVE GROUND)E VERY DIFFICULT TO DISTINGUISH.

E. MAXIMUM STORM SURGE AND STORM TIDE... OFFICIAL TIDE GAUGES NOTED WITH LEADING G

COUNTY	CITY/TOWN OR LOCATION	SURGE (FT)	TIDE (FT)	DATE/ TIME	BEACH EROSION	
MONROE MONROE	G KYWF1-KEY WEST G KYWF1-KEY WEST		2.73 2.56	10/1742 10/1424		I I
MONROE MONROE	G VCAF1-VACA KEY G VCAF1-VACA KEY		2.21 2.19	11/0118 11/0130		I I
MONROE	G MANATEE BAY CR		4.05	10/1000		I

REMARKS: FOR EACH STATION...

 \ldots FIRST ROW DENOTES TIME OF MAX STORM TIDE IN FT NAVD88 \ldots SECOND ROW DENOTES TIME OF MAX STORM SURGE IN FT

...MANATEE BAY CREEK USGS GAUGE

ADDITIONAL REMARKS:

BASED ON DAMAGE SURVEYS...THE ESTIMATED INUNDATION OR PEAK FLOODING ABOVE GROUND (ABOVE MEAN HIGHER HIGH WATER - MHHW) REACHED 5 TO 8 FEET OVER PORTIONS OF THE LOWER AND MIDDLE KEYS. THIS INCLUDES PORTIONS OF SUGARLOAF KEY...CUDJOE KEY...RAMROD KEY...BIG PINE KEY...BAHIA HONDA KEY...VACA KEY (MARATHON AND KEY COLONY BEACH)...AND DUCK KEY.

OFFICIAL GAUGES AT KEY WEST AND VACA KEY ARE LOCATED ON THE GULF OF MEXICO COAST AND BAYSIDE RESPECTIVELY. KEY WEST STORM TIDE LEVELS WERE OBSERVED TO BE CONSISTENT WITH OBSERVED STORM SURGE FLOODING IN KEY WEST. VACA KEY BAYSIDE WAS IN THE LEE OF THE MAXIMUM SOUTH WINDS WITH MAXIMUM STORM TIDE VALUES OCCURRING WELL AFTER HURRICANE IRMA WAS CENTERED 35 MILES EAST-NORTHEAST OF FORT MYERS.

F. TORNADOES...

(DIST)CITY/TOWN	COUNTY	DATE/	EF	SCALE
LAT LON (DEG DECIMAL		TIME (UTC)	(IF	KNOWN)
DESCRIPTION				

REMARKS: NO DISCERNABLE TORNADO DAMAGE PATHS WERE DETERMINED AT THIS TIME. THERE WAS EVIDENCE OF NON-UPDRAFT-INDUCED MESO-VORTICY DAMAGE RESULTING IN OPPOSITE FALL OF A CONTINUOUS STRETCH OF WOOD AND HOLLOW SPUN CONCRETE POWER DISTRIBUTION POLES ALONG KEY DEER BOULEVARD ALMOST TWO MILES NORTHWEST OF AN AREA OF LOCALLY EXTREME WIND DAMAGE ON BIG PINE KEY. THIS WIND DAMAGE LIKELY OCCURRED WITHIN THE ALMOST TWO-HOUR PASSAGE OF THE EASTERN EYEWALL OF HURRICANE IRMA.

G.	STORM	IMPACTS	ΒY	COUNTY

COUNTY DESCRIPTION	DEATHS	INJURIES	EVACUATIONS
MONROE	9	SEE REMARKS	SEE REMARKS

THE FOLLOWING REPORT IS PRELIMINARY AND MAY BE REVISED PENDING OFFICIAL JURISDICTIONAL AND DIVISIONAL REPORTS.

REMARKS: FATALITY INFO RELEASED BY THE MONROE COUNTY SHERIFFS OFFICE. THIS VALUE MAY BE REVISED PENDING RELEASE OF ADDITIONAL INFORMATION FROM AN OFFICIAL MONROE COUNTY SOURCE. INCLUDES BOTH DIRECT AND INDIRECT CAUSES.

MORE THAN 40 INJURIES WERE IMMEDIATELY REPORTED WITHIN ONE DAY OF HURRICANE IRMA'S DEPARTURE...BUT TOTAL INJURIES BOTH DIRECT AND INDIRECT ARE PENDING.

PRELIMINARY EVACUATION TOTALS PRIOR TO THE ARRIVAL OF HURRICANE IRMA OUT OF APPROXIMATLEY 73,000 RESIDENTS OF MONROE COUNTY INDICATE APPROXIMATELY A 75 PERCENT EVACUATION RATE.

MONROE LOWER KEYS...KEY WEST THROUGH LITTLE DUCK KEY

OVER BAHIA HONDA THROUGH LITTLE TORCH KEY...THE STRONGEST ESTIMATED WINDS WERE EVIDENT... POSSIBLY ATTRIBUTABLE TO A MESO-VORTEX CIRCULATION WITHIN THE EYEWALL. A GENERAL PATH OF MAXIMUM WIND DAMAGE OCCURRED FROM JUST SOUTH OF BIG PINE KEY PARK THROUGH KEY DEER BOULEVARD NORTH OF SOUTH STREET. COMPLETE ROOF STRUCTURE FAILURE INVOLVING SNAPPED WOOD TRUSSES WAS OBSERVED ON SEVERAL HOMES ALONG WITH COMPLETE EXTERIOR WALL FAILURE ON A WATERFRONT HOME. THE PATH CONTINUED ACROSS KEY DEER BOULEVARD WHERE UTILITY POLES BOTH OF WOOD AND HOLLOW-SPUN CONCRETE DESIGN WERE SNAPPED WITH NUMEROUS SPANS LYING IN COMPLETELY OPPOSITE DIRECTIONS...THE SOUTHERN SPANS OPPOSITE TO THE PATH DIRECTION. PEAK WIND GUSTS ESTIMATED 150 TO 160 MPH ALONG THE NORTHERN SIDE OF THE POSSIBLE CIRCULATION. ELSEWHERE ACROSS BIG PINE KEY...SIGNFICANT ROOF LOSS/EXTERIOR WALL COLLAPSE OF OLDER MOBILE HOMES...LARGE SECTIONS OF ROOF COVERINGS ALL TYPES...SOFFET DAMAGE AND LARGE METAL ROOF...WALL...AND DOOR FAILURES ON A MODERN METAL BUILDING SYSTEM INDICATED MORE WIDESPREAD ESTIMATED PEAK WIND GUSTS OF 120 TO 130 MPH.

FROM RAMROD KEY THROUGH SUGARLOAF KEY...WIDESPREAD AND BUSINESS -RESIDENTIAL ROOF COVERING DAMAGE OF ALL TYPES WAS OBSERVED...WITH ISOLATED ROOF TRUSS OR GABLE END FAILURES OF OLDER DESIGN. IT WAS NOTED A DIAGONAL METAL CROSS BRACE ON THE POWER TRANSMISSION LINE ACROSS NILES CHANNEL BECAME DETACHED FROM ONE VERTICAL CONCRETE COLUMN INDICATIVE OF SIGNIFICANT FLEXING OF THE TRANSMISSION TOWERS. ESTIMATED PEAK WIND GUST 110 TO 120 MPH.

FROM LOWER SUGARLOAF THROUGH BIG COPPITT KEY...WIDESPREAD SMALL RESIDENTIAL AND BUSINESS ROOF COVERINGS WITH ISOLATED STRUCTURAL GABLE END OR OVERHANG DAMAGE WAS NOTED ESPECIALLY IN AREAS OF OPEN NORTH WIND EXPOSURE. ISOLATED MOBILE HOME DESTRUCTION INCLUDING COLLAPSE OF ALL WALLS...ALTHOUGH SOME MODERN MOBILE HOMES ADJACENT TO PROPERTIES WITH SEVERE DESTRUCTION EXHIBITED FEW SIGNS OF COSMETIC DAMAGE. ESTIMATED PEAK WIND GUSTS 100 TO 110 MPH.

FROM BOCA CHICA KEY THROUGH KEY WEST...LOSSES OF ROOF COVERINGS...SOFFET DAMAGE TO RESIDENTIAL HOMES AND CONDOMINIUMS WERE NOTED...WITH TWO LODGING PROPERTIES INDICATED WITH GABLE END WOOD TRUSS FAILURES OF BOTH MID-RISE AND TWO-STOREY DESIGN. PEAK ESTIMATED WIND GUSTS 90 TO 100 MPH...ALTHOUGH THE MID-RISE ROOF STRUCTURE FAILURE LOCATED WITH OPEN NORTH WIND EXPOSURE OFF THE GULF OF MEXICO MAY HAVE INDICATED ISOLATED STRONGER WIND GUSTS OF 100 TO 110 MPH AT ROOFTOP LEVEL IN THIS HOUR.

TREE DAMAGE WAS WIDESPREAD AND EXTENSIVE.

MONROE MIDDLE KEYS...PIGEON KEY/MARATHON THROUGH CRAIG KEY

WIND DAMAGE FROM LONG KEY/LAYTON THROUGH GRASSY KEY INCLUDED SEVERAL SECTIONS OF PULLED METAL BUILDING SYSTEM WALL PANELS...DAMAGE TO BUILT-UP AND SHINGLE ROOF COVERINGS...VINYL SIDING...AND PLASTIC PANELED SIGNS. PEAK WIND GUSTS ESTIMATED 90 TO 100 MPH.

THE FOLLOWING REPORT IS PRELIMINARY AND MAY BE REVISED PENDING OFFICIAL JURISDICTIONAL AND DIVISIONAL REPORTS. IN THE KEY COLONY BEACH AND MARATHON VICINITY...AREAL OVERFLIGHT FROM LOCAL AGENCIES REVEALED SIGNIFICANT ROOF COVERING LOSS AND ISOLATED ROOF TRUSS DAMAGE ON OLDER DESIGN OCEANFRONT HOMES. OLDER RETAIL STORES AND A STRIP MALL DISPLAYED COMPLETE UPLIFT AND COLLAPSE OF ROOF STRUCTURES OF BOX TRUSS TYPE...WHILE MODERN DESIGN STRUCTURES DISPLAYED SIGNIFICANT SECTIONS OF ROOF COVERING LOSS...INCLUDING METAL PANEL-OVER WOOD SHEATHING AND BUILT-UP TAR/RUBBER COVERINGS. SOME OLDER SERVICE STATION CANOPIES DISPLAYED COLUMN BUCKLING WHEREAS MODERN DESIGNS PERFORMED WELL OR HAD SLIGHT RACKING. SIGNIFICANT ROOF PANEL DAMAGE TO MOBILE HOMES OVER BOTH OLDER AND MODERN DESIGN. WHILE TRAFFIC SIGNAL MASTS REMAINED IN PLACE SOME HORIZONTALLY MOUNTED SIGNALS WERE STILL BLOWN 90 DEGREES OUT OF ALIGNMENT. PEAK WIND GUSTS ESTIMATED 100 TO 115 MPH.

TREE DAMAGE WAS WIDESPREAD AND EXTENSIVE.

MONROE UPPER KEYS...LOWER MATECUMBE KEY THROUGH OCEAN REEF

WIND DAMAGE FROM OCEAN REEF THROUGH KEY LARGO WAS CONSISTENT WITH ESTIMATED PEAK GUSTS NEAR 90 MPH WITH LIMITED LOSSES OF BUILT-UP ROOF COVERINGS...AND METAL FASCIA FROM GAS STATION CANOPIES. SOME OLDER STRIP MALLS IN KEY LARGO DISPLAYED LARGE LOSSES OF SHINGLE AND BARRELL TILE COVERINGS.

IN TAVERNIER...MODERN DESIGN LARGE METAL BUILDING SYSTEMS DISPLAYED FAILURE OF OVERHEAD DOORS ON EAST AND SOUTHEAST-FACING SIDES...WITH OLDER DESIGNS INCLUDING SOME PULLED EXTERIOR SHEET PANELS. PEAK GUSTS NEAR 100 MPH ESTIMATED. SIGN DAMAGE WAS MORE PREVALENT THAN IN KEY LARGO.

IN ISLAMORADA...WIND ESTIMATION AMONG MOBILE HOMES WAS DIFFICULT DUE TO IMPACTS OF STORM SURGE FLOODING...HOWEVER ROOF PANELS WERE STRIPPED FROM SOME HOMES ALONG WITH VINYL SIDING DAMAGE ON MODERN SINGLE FAMILY HOMES. ONE SERVICE STATION CANOPY WAS COMPLETELY OVERTURNED...HOWEVER THERE WAS NO DISCERNABLE DAMAGE TO THE FOUNDATION FLANGES OR COLUMNS. PEAK WIND GUSTS ESTIMATED AT 90 TO 100 MPH.

TREE DAMAGE WAS WIDESPREAD AND EXTENSIVE.

THROUGHOUT THE KEYS--WIDESPREAD LOSS OF ELECTRIC POWER...CELLULAR COMMUNICATIONS AND WATER PRESSURE OCCURRED. MOST POWER PROBLEMS WERE DUE TO FAILURE OF DISTRIBUTION SYSTEMS...ALTHOUGH SIGNICANT INSULATOR DAMAGE OCCURRED NEAR THE EAST END OF LONG KEY ON THE TRANSMISSION LINE. THE WATER TRANSMISSION PIPE WAS LARGELY INTACT...HOWEVER NUMEROUS NEIGHBORHOOD DISTRIBUTION LEAKS OCCURRED AS TREES UPROOTED. NO COMMUNICATIONS TOWERS WERE REPORTED COLLAPSED OR DEFORMED...ALTHOUGH MOUNTED ANTENNAS ON THE TOWERS WERE DAMAGED OR FELL OUT OF ALIGNMENT. A FEW MICROWAVE RELAY DISHES WERE TORN FROM THEIR TOWERS. WIDESPREAD DAMAGE TO TELECOM AND FIBER CABLES DUE TO FALLING TREES AND DIRECT WIND IMPACTS STRIPPING FROM POLES AND BEING STRETCHED ACROSS STREETS.

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LEGEND: I-INCOMPLETE DATA E-ESTIMATED

RIZZO/MORELAND