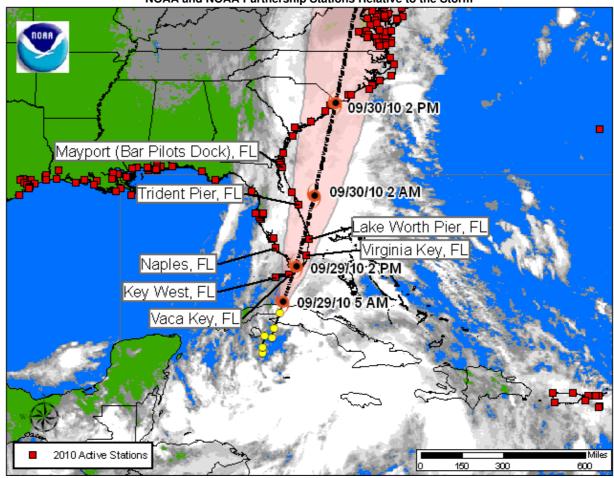


NOAA and NOAA Partnership Stations Relative to the Storm



**Storm Analysis** 

As of 09/29/2010 0600 EDT, water levels across southern Florida are at or near predicted. Barometric pressure is gradually falling across the region.

Winds are increasing to 15 knots with gusts to 20 knots in the Florida Keys, with some higher gusts up to 35 knots noted at Lake Worth Pier, FL.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Key West, FL Next predicted high tides are 1.30 ft (0.40 m) at 09/29/2010 15:16 EDT and 2.11 ft (0.64 m) at 09/30/2010 02:12 EDT.

Vaca Key, FL Next predicted high tides are 1.32 ft (0.40 m) at 09/30/2010 06:27 EDT and 1.28 ft

(0.39 m) at 10/01/2010 07:17 EDT.

Virginia Key, FL Next predicted high tides are 2.37 ft (0.72 m) at 09/29/2010 13:53 EDT and 2.28 ft (0.69 m) at 09/30/2010 01:48 EDT.

Naples, FL Next predicted high tides are 2.32 ft (0.71 m) at 09/29/2010 18:18 EDT and 3.00 ft (0.91 m) at 09/30/2010 03:45 EDT.

Lake Worth Pier, FL Next predicted high tides are 3.11 ft (0.95 m) at 09/29/2010 12:41 EDT and 2.94 ft (0.90 m) at 09/30/2010 00:42 EDT.

Trident Pier, FL Next predicted high tides are 4.25 ft (1.30 m) at 09/29/2010 12:27 EDT and 3.33 ft (1.01 m) at 09/30/2010 00:40 EDT.

Mayport (Bar Pilots Dock), FL Next predicted high tides are 5.37 ft (1.64 m) at 09/29/2010 13:10 EDT and 4.65 ft (1.42 m) at 09/30/2010 01:32 EDT.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

**Analyst: WFR** 

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#### SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL DEPRESSION SIXTEEN ADVISORY 4 500 AM EDT WED SEP 29 2010

...CENTER OF THE DEPRESSION EMERGING OVER THE FLORIDA STRAIT...HEAVY RAINS SPREADING ACROSS FLORIDA KEYS AND SOUTH FLORIDA...

#### **SUMMARY OF 500 AM EDT INFORMATION**

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#### **WATCHES AND WARNINGS**

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**CHANGES WITH THIS ADVISORY...** 

THE TROPICAL STORM WARNING ALONG THE FLORIDA EAST COAST HAS BEEN EXTENDED NORTHWARD TO SEBASTIAN INLET.

**SUMMARY OF WATCHES AND WARNINGS IN EFFECT...** 

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- \* SEBASTIAN INLET SOUTHWARD TO EAST CAPE SABLE AND FLORIDA BAY
- \* THE FLORIDA KEYS

A TROPICAL STORM WATCH IN IN EFFECT FOR...

\* NORTH OF EAST CAPE SABLE TO CHOKOLOSKEE FLORIDA

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA...IN THIS CASE WITHIN 12 TO 24 HOURS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA...IN THIS CASE WITHIN 12 TO 24 HOURS.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE.

#### **DISCUSSION AND 48-HOUR OUTLOOK**

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AT 500 AM EDT THE CENTER OF TROPICAL DEPRESSION SIXTEEN WAS LOCATED NEAR LATITUDE 23.3 NORTH...LONGITUDE 81.4 WEST. THE DEPRESSION IS MOVING TOWARD THE NORTH-NORTHEAST NEAR 14 MPH. A MOTION TO THE NORTH-NORTHEAST ACCOMPANIED BY A GRADUAL INCREASE IN FORWARD SPEED IS EXPECTED DURING THE NEXT 24 TO 36 HOURS. ON THE FORECAST TRACK...THE CENTER OF THE TROPICAL CYCLONE WILL MOVE OVER THE FLORIDA STRAITS LATER THIS MORNING...AND BE NEAR OR OVER SOUTHEASTERN FLORIDA BY THIS EVENING.

MAXIMUM SUSTAINED WINDS ARE NEAR 35 MPH WITH HIGHER GUSTS. REPORTS FROM AN AIR FORCE RESERVE RECONNAISSANCE AIRCRAFT INDICATE SURFACE WINDS ARE VERY NEAR TROPICAL STORM STRENGTH ABOUT MIDWAY BETWEEN THE FLORIDA KEYS AND CUBA. SOME STRENGTHENING IS FORECAST DURING THE NEXT 24 HOURS AND THE DEPRESSION IS EXPECTED TO BECOME A TROPICAL STORM LATER TODAY...BEFORE MERGING WITH A FRONTAL ZONE ON THURSDAY.

#### HAZARDS AFFECTING LAND

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RAINFALL...THE DEPRESSION IS EXPECTED TO PRODUCE RAIN ACCUMULATIONS OF 4 TO 8 INCHES ARE POSSIBLE OVER PORTIONS OF SOUTHERN FLORIDA AND THE FLORIDA KEYS.

WIND...TROPICAL STORM CONDITIONS WILL BE AFFECTING THE WARNING AREAS TODAY.

TORNADOES...ISOLATED TORNADOES ARE POSSIBLE OVER SOUTHEASTERN FLORIDA AND THE FLORIDA KEYS TODAY.

#### **FORECASTER STEWART**

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

### Tropical Depression SIXTEEN QuickLook, POSTED 06:00 EDT 09/29/2010

Jump to: Key West - Water Level, Key West - Barometric, Key West - Air/Water Temp, Vaca Key - Water Level, Vaca Key - Winds, Vaca Key - Barometric, Vaca Key - Air/Water Temp, Virginia Key - Water Level, Virginia Key - Winds, Virginia Key - Air/Water Temp, Naples - Water Level, Naples - Winds, Naples - Barometric, Naples - Air/Water Temp, Lake Worth Pier - Water Level, Lake Worth Pier - Winds, Lake Worth Pier - Barometric, Lake Worth Pier - Air/Water Temp, Trident Pier - Water Level, Trident Pier - Winds, Trident Pier - Barometric, Trident Pier - Air/Water Temp, Mayport (Bar Pilots Dock) - Water Level,

## Key West, FL - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8724580 Key West, FL Height (Feet relative to MLLW) from 09/27/2010 05:54 - 09/30/2010 05:54 5.0 4.0 3.0 2.0 1.0 0.0 -1.0 09/27 09/28 09/28 09/29 09/29 09/30 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) Predicted WL (Obs-Pred) Observed WL MHHW

Last Observed Sample: 09/29/2010 05:42 (EDT)

Relative to MLLW: Observed: 1.66 ft. Predicted: 0.97 ft. Residual: 0.69 ft.

Historical Maximum Water Level: Oct 24 2005, 3.14 ft. above MHHW

## Key West, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8724580 Key West, FL from 09/27/2010 05:54 - 09/30/2010 05:54

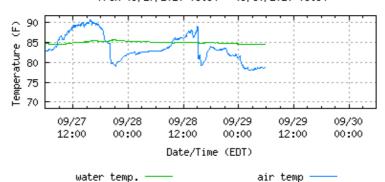


barometric pressure ——
Last Observed Sample: 09/29/2010 05:42 (EDT)

Barometric Pressure: 997.1 mb

## Key West, FL - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 8724580 Key West, FL from 09/27/2010 05:54 - 09/30/2010 05:54

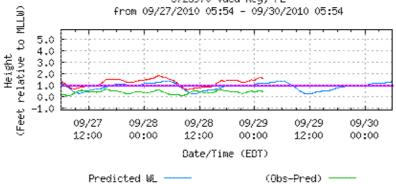


Last Observed Sample: 09/29/2010 05:42 (EDT)

Water Temperature: 84.4° F Air Temperature: 78.8° F

### Vaca Key, FL - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8723970 Vaca Key, FL from 09/27/2010 05:54 - 09/30/2010 05:54



Last Observed Sample: 09/29/2010 01:54 (EDT)

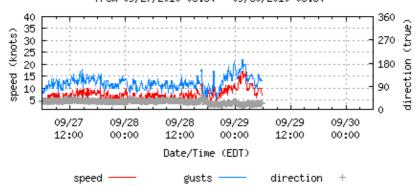
MHHW

Observed WL

Relative to MLLW: Observed: 1.60 ft. Predicted: 1.19 ft. Residual: 0.41 ft. Historical Maximum Water Level: Oct 7 1974, 1.42 ft. above MHHW

# Vaca Key, FL - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8723970 Vaca Key, FL from 09/27/2010 05:54 - 09/30/2010 05:54

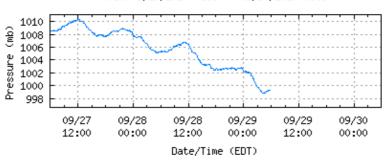


Last Observed Sample: 09/29/2010 05:42 (EDT)

Wind Speed: 7 knots Gusts: 13 knots Direction: 023° T

## Vaca Key, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8723970 Vaca Key, FL from 09/27/2010 05:54 - 09/30/2010 05:54



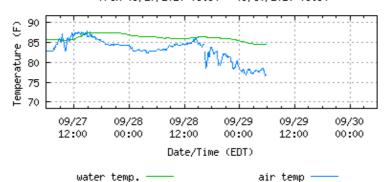
barometric pressure ---

Last Observed Sample: 09/29/2010 05:42 (EDT)

**Barometric Pressure: 999.3 mb** 

# Vaca Key, FL - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 8723970 Vaca Key, FL from 09/27/2010 05:54 - 09/30/2010 05:54



Last Observed Sample: 09/29/2010 05:42 (EDT)

Water Temperature: 84.4° F Air Temperature: 76.8° F

## Virginia Key, FL - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8723214 Virginia Key, FL Height (Feet relative to MLLW) from 09/27/2010 05:54 - 09/30/2010 05:54 5.0 4.0 3.0 2.0 1.0 -1.0 09/27 09/28 09/28 09/29 09/29 09/30 12:00 00:00 12:00 12:00 00:00 00:00 Date/Time (EDT)

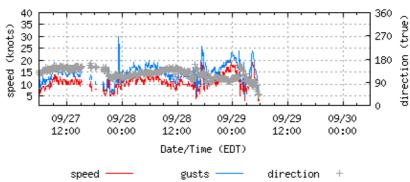
Predicted WL (Obs-Pred) — Observed WL MHHW —

Last Observed Sample: 09/29/2010 05:42 (EDT)

Relative to MLLW: Observed: 1.21 ft. Predicted: 0.72 ft. Residual: 0.49 ft. Historical Maximum Water Level: Oct 24 2005, 2.58 ft. above MHHW

# Virginia Key, FL - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8723214 Virginia Key, FL from 09/27/2010 05:54 - 09/30/2010 05:54

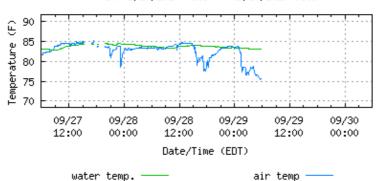


Last Observed Sample: 09/29/2010 05:42 (EDT)

Wind Speed: 3 knots Gusts: 5 knots Direction: 042° T

## Virginia Key, FL - Return to List

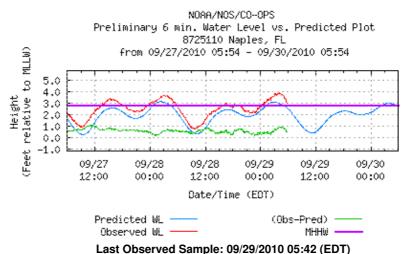
NOAA/NOS/CO-OPS Air/Water Temperature Plot 8723214 Virginia Key, FL from 09/27/2010 05:54 - 09/30/2010 05:54



Last Observed Sample: 09/29/2010 05:42 (EDT)

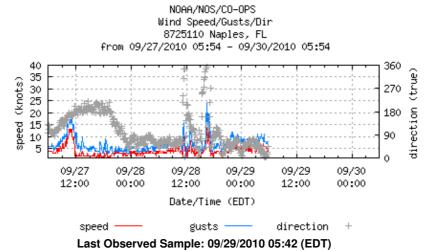
Water Temperature: 83.1° F Air Temperature: 75.6° F

## Naples, FL - Return to List



Relative to MLLW: Observed: 3.05 ft. Predicted: 2.60 ft. Residual: 0.45 ft. Historical Maximum Water Level: Dec 21 1972, 3.11 ft. above MHHW

# Naples, FL - Return to List



Wind Speed: 4 knots Gusts: 8 knots Direction: 044° T

## Naples, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8725110 Naples, FL from 09/27/2010 05:54 - 09/30/2010 05:54



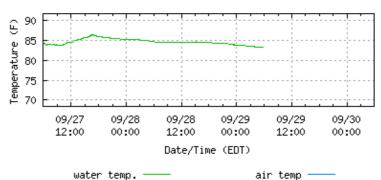
barometric pressure ——

Last Observed Sample: 09/29/2010 05:42 (EDT)

**Barometric Pressure: 1000.6 mb** 

### Naples, FL - Return to List

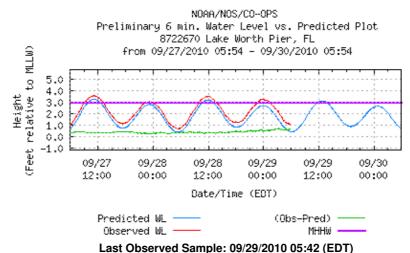
NOAA/NOS/CO-OPS Air/Water Temperature Plot 8725110 Naples, FL from 09/27/2010 05:54 - 09/30/2010 05:54



Last Observed Sample: 09/27/2010 05:54 (EDT)

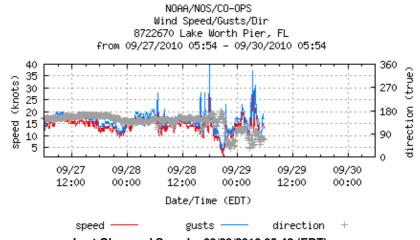
Water Temperature: 84.2° F Air Temperature: n/a

# Lake Worth Pier, FL - Return to List



Relative to MLLW: Observed: 1.07 ft. Predicted: 0.44 ft. Residual: 0.63 ft.
Historical Maximum Water Level: Nov 23 1984, 1.88 ft. above MHHW

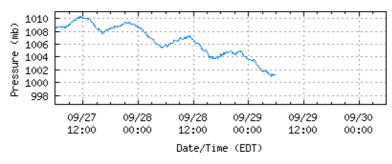
### Lake Worth Pier, FL - Return to List



Last Observed Sample: 09/29/2010 05:42 (EDT)
Wind Speed: 13 knots Gusts: 17 knots Direction: 067° T

## Lake Worth Pier, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8722670 Lake Worth Pier, FL from 09/27/2010 05:54 - 09/30/2010 05:54



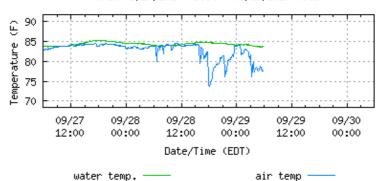
barometric pressure ——

Last Observed Sample: 09/29/2010 05:42 (EDT)

**Barometric Pressure: 1001.2 mb** 

### Lake Worth Pier, FL - Return to List

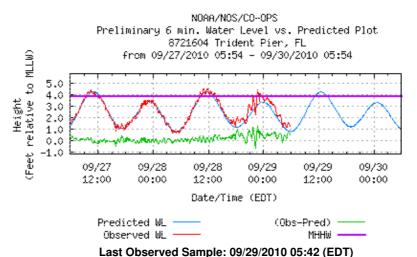
NOAA/NOS/CO-OPS Air/Water Temperature Plot 8722670 Lake Worth Pier, FL from 09/27/2010 05:54 - 09/30/2010 05:54



Last Observed Sample: 09/29/2010 05:42 (EDT)

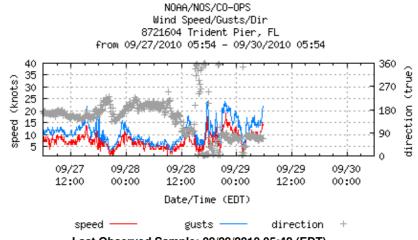
Water Temperature: 83.7° F Air Temperature: 77.5° F

### Trident Pier, FL - Return to List



Relative to MLLW: Observed: 1.23 ft. Predicted: 0.78 ft. Residual: 0.45 ft.
Historical Maximum Water Level: Sep 26 2004, 4.13 ft. above MHHW

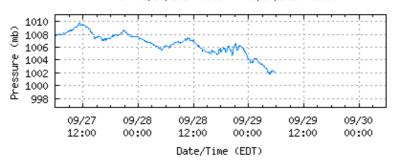
## Trident Pier, FL - Return to List



Last Observed Sample: 09/29/2010 05:42 (EDT)
Wind Speed: 14 knots Gusts: 22 knots Direction: 066° T

## Trident Pier, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8721604 Trident Pier, FL from 09/27/2010 05:54 - 09/30/2010 05:54



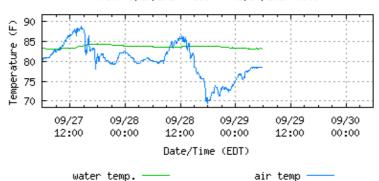
barometric pressure ———

Last Observed Sample: 09/29/2010 05:42 (EDT)

**Barometric Pressure: 1002.1 mb** 

# Trident Pier, FL - Return to List

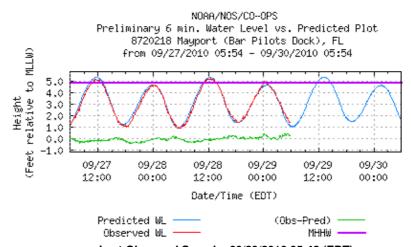
NOAA/NOS/CO-OPS Air/Water Temperature Plot 8721604 Trident Pier, FL from 09/27/2010 05:54 - 09/30/2010 05:54



Last Observed Sample: 09/29/2010 05:42 (EDT)

Water Temperature: 83.1° F Air Temperature: 78.6° F

# Mayport (Bar Pilots Dock), FL - Return to List



Last Observed Sample: 09/29/2010 05:42 (EDT)

Relative to MLLW: Observed: 1.38 ft. Predicted: 1.12 ft. Residual: 0.26 ft.

#### Historical Maximum Water Level: Sep 27 2004, 2.48 ft. above MHHW

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce