ABNORMAL OSCILLATIONS OBSERVED IN DAYTONA BEACH, FLORIDA IN 1992 AND WEST FLORIDA, 1995. OCEAN AND GROUND METEOROLOGICAL DATA ANALYSIS.

In addition to the Boothbay event in 2008 other two significant episodes have been reported in the East Coast. The Daytona Beach event registered in July 1992 and the one observed in West Florida in March 1995.

Unfortunately no good resolution data are available to perform a detailed data analysis for these two episodes. The lack of available data is detailed in the following.

Daytona Beach, Florida (29°12′26″N 81°02′16″W)

Meteotsunami registered on July 3rd 1992 22:56h

Available observations

–SEA LEVEL

No sea level observations were found at any of the data servers provided:

http://tidesandcurrents.noaa.gov/tsunami/

and

http://opendap.co-ops.nos.noaa.gov/axis/).

–ATMOSPHERIC DATA

The atmospheric observations are available at two web servers, either at CO-OPS (http://www.co-ops.nos.noaa.gov/) or at NDBC (http://www.ndbc.noaa.gov/). The number of stations is larger in the latter, although the data provided is the same in both cases.

Station	St. ID	Data provider	Latitude	Longitude	WL Data	Bar. Pres.
Grays Reef (buoy)	41008	NDBC	31.402N	80.869W	-	1h†
St. Augustine	SAUF1	NDBC	29.857N	81.265W	-	1h†
CANAVERAL 20 NM	41009	NDBC	28.519N	80.166W	-	1h†

†Other standard meteorological data also available in the file

Table 1- Summary of closest stations and data available in the period July 3-6 1992.

Station	St. ID	Data provider	Latitude	Longitude	WL Data	Bar. Pres.
Sapelo Is.	SAXG1	NERRS	31.418N	81.295W	-	-
Fernandina B.	8720030	NOS	30.6717	-81.465	*	*
Offshore Fernandina B.	41112	Scripps	30.719N	81.293W	-	-
Mayport	8720218	NOS	30.397N	81.430W	*	*
St.Augustine buoy	41012	NDBC	30.041N	80.533W	-	-
Guana Tolomato	GTXF1	NERRS	29.658N	81.220W	-	-
Pellier Creek	GTQF1	NERRS	29.669N	81.256W	-	-
Trident Pier	TRDF1	NOS	28.415N	80.593W	**	**
Cape Canaveral Nearshore	41113	Scripps	28.400N	80.530W	-	-

NERRS→ National Estuarine Research Reserve System

***According to the station web site at the NDBC, data acquisition starts in 2005.**

****** As in * but without sea level trends.**

Table 2- Other stations that have been checked in the area but without observations.

However, it seems to be other available historical data under the tides and currents server (see for example:

http://www.ndbc.noaa.gov/station_history.php?station=frdf1).

Two problems arise when searching for observations in these links: first, data for the period 1992 of the meteorological observations lead to a different variable, presumably tidal oscillations; second, despite sea level data seem not to be available a plot of sea level trends is provided, with observations during the target period.

West Florida (27.9º (Tampa) to 26.1º (Naples))

Meteotsunami registered on March 25th 1995

Available observations

–SEA LEVEL

No sea level observations were found at any of the data servers provided *http://tidesandcurrents.noaa.gov/tsunami/* and *http://opendap.co-ops.nos.noaa.gov/axis/*.

– ATMOSPHERIC DATA

The atmospheric observations are available at two web servers, either at CO-OPS http://www.co-ops.nos.noaa.gov/ or at NDBC http://www.ndbc.noaa.gov/.

The number of stations is larger in the latter, although the data provided is the same in both cases.

Station	St. ID	Data provider	Latitude	Longitude	WL Data	Bar. Pres.	Wind
Old Port Tampa	8726607	NOS	27.858N	82.553W	-	-	6min
McKay Bay Entrance	8726667	NOS	27.928N	82.425W	-	-	6min
St. Petersburg	8726520	NOS	27.760N	82.627W	-	-	1h
Port Manatee	8726384	NOS	27.637N	82.563W	-	-	6min
Venice	VENF1	NDBC	27.070N	82.450W	-	1h	1h

Table 3- Summary of closest stations and data available in the period March 24-27 1995.

Stations			
TPA	Bishop Harbor	Egmont Key	Big Carlos Pass
Berth	Frog Creek	Anna Maria	Naples
Seabulk	Navy-2 (buoy)	C-Cut	Rookery Bay
Campbell Park	Fort Myers	Middle Tampa Bay	Lower Henderson

Table 4- Other stations in the area without observations.

Conclusions

Unfortunately, no analysis based on oceanic or ground meteorological data is possible for these two episodes.

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