

Florida Atlantic Coast Tide Gage Data Evaluations  
for use in High-Frequency Storm Tide Hydrograph Analyses  
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Storm tide data from 2 Florida east coast tide gages has been compiled and graphed for support in generating high-frequency storm tide hydrographs for use in high-frequency storm erosion studies. Available tide gage data near the open coast sufficient for storm tide analysis is sparse. Data was compiled from two NOAA-NOS gages within reasonable proximity to the open coast; from Mayport (Bar Pilots Dock, #8720218) and Canaveral (Trident Pier, #8721604). Location maps and other detailed information about these tide gages may be found through the following link: <http://tidesonline.noaa.gov/>

Data from another gage at Fernandina Beach (#8720030) was not included in this evaluation. The Fernandina gage data is located on the Amelia River on the landward side of the Amelia Island barrier island and is considered marginal in terms of proximity of the gage to the open coast. An NOS gage at Virginia Key was reviewed, but found to contain insufficient data for inclusion in this study work.

Below are several graphs which display storm tide data for the Canaveral and Mayport gages. A total of 6 specific storm events for each of the gages were found to contain sufficient data for inclusion in this study work. Summary tables of the storms for each gage are given below.

Table 1 – Mayport Gage  
Atlantic Storms/Hurricanes Evaluated

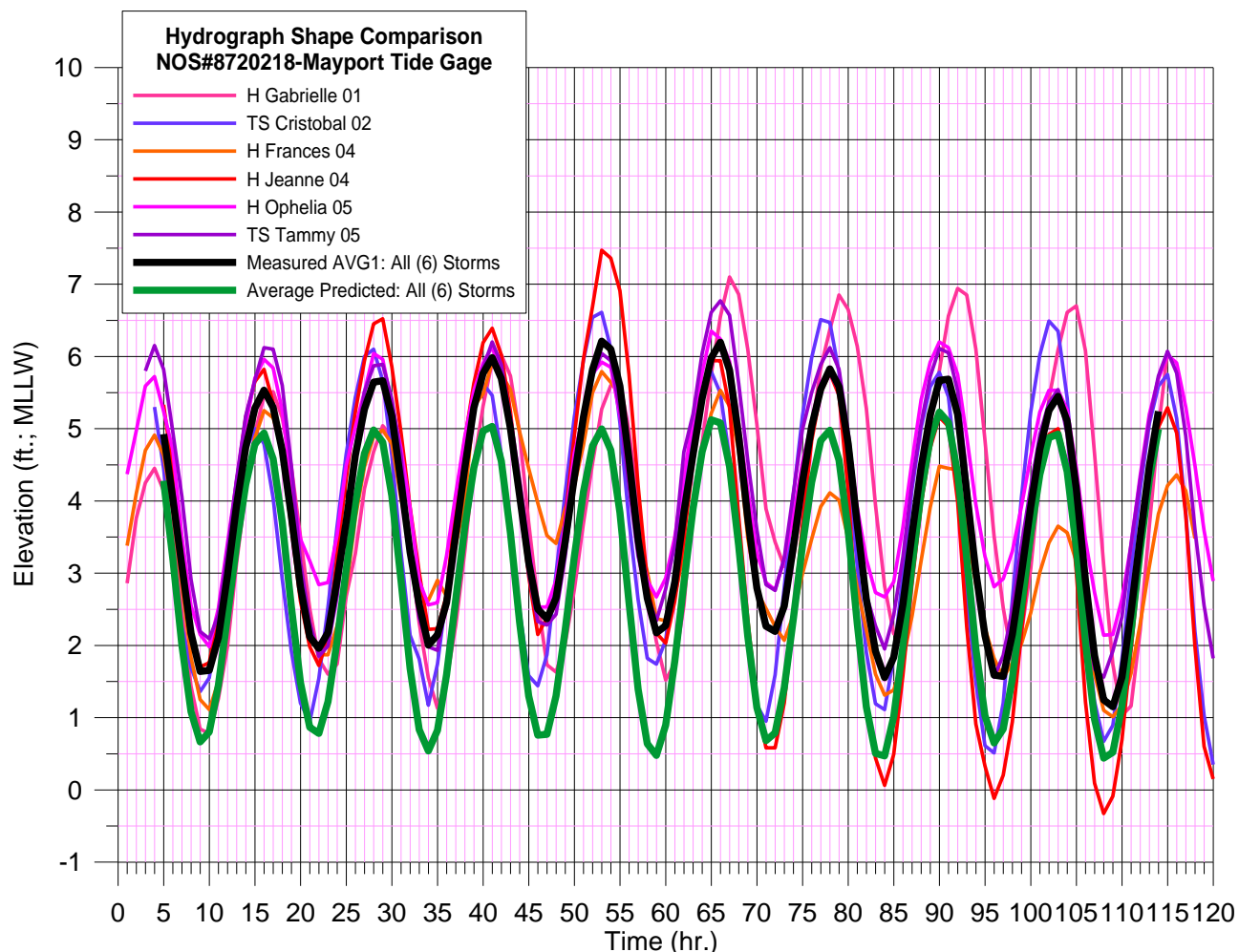
1)	2001	Hurricane Gabrielle
2)	2002	Tropical Storm Cristobal
3)	2004	Hurricane Frances
4)	2004	Hurricane Jeanne
5)	2005	Hurricane Ophelia
6)	2005	Tropical Storm Tammy

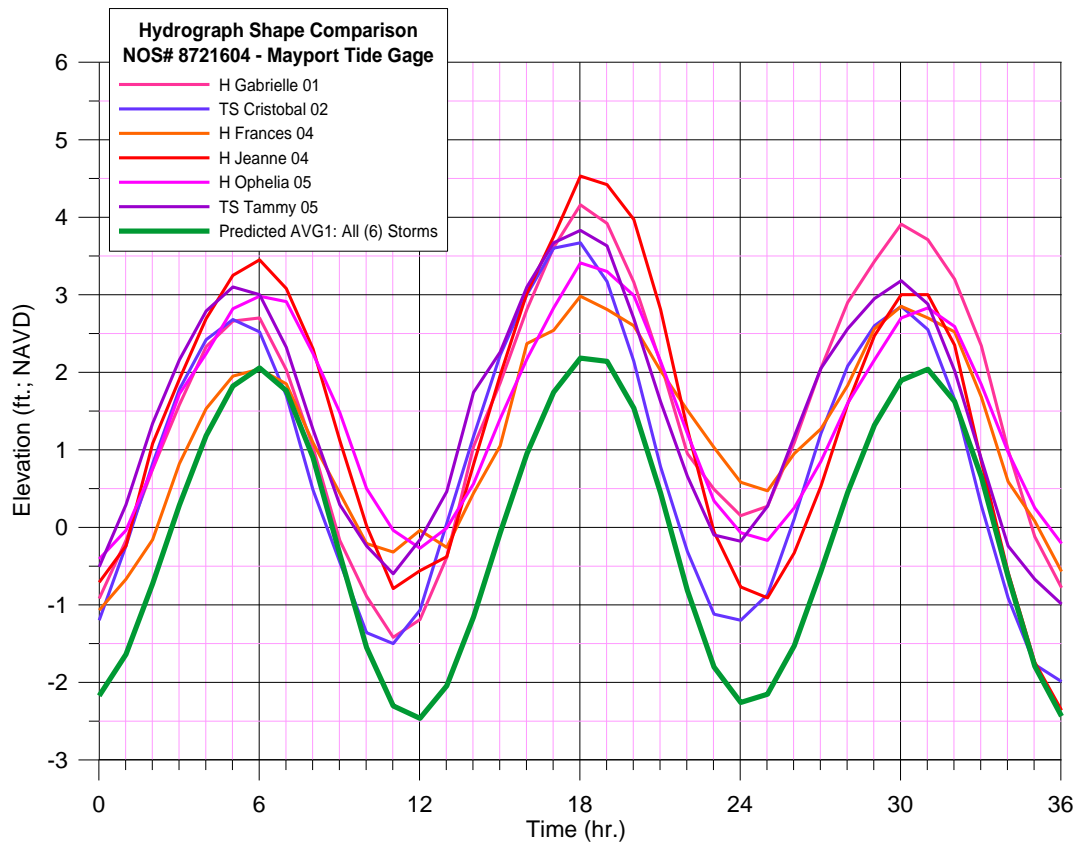
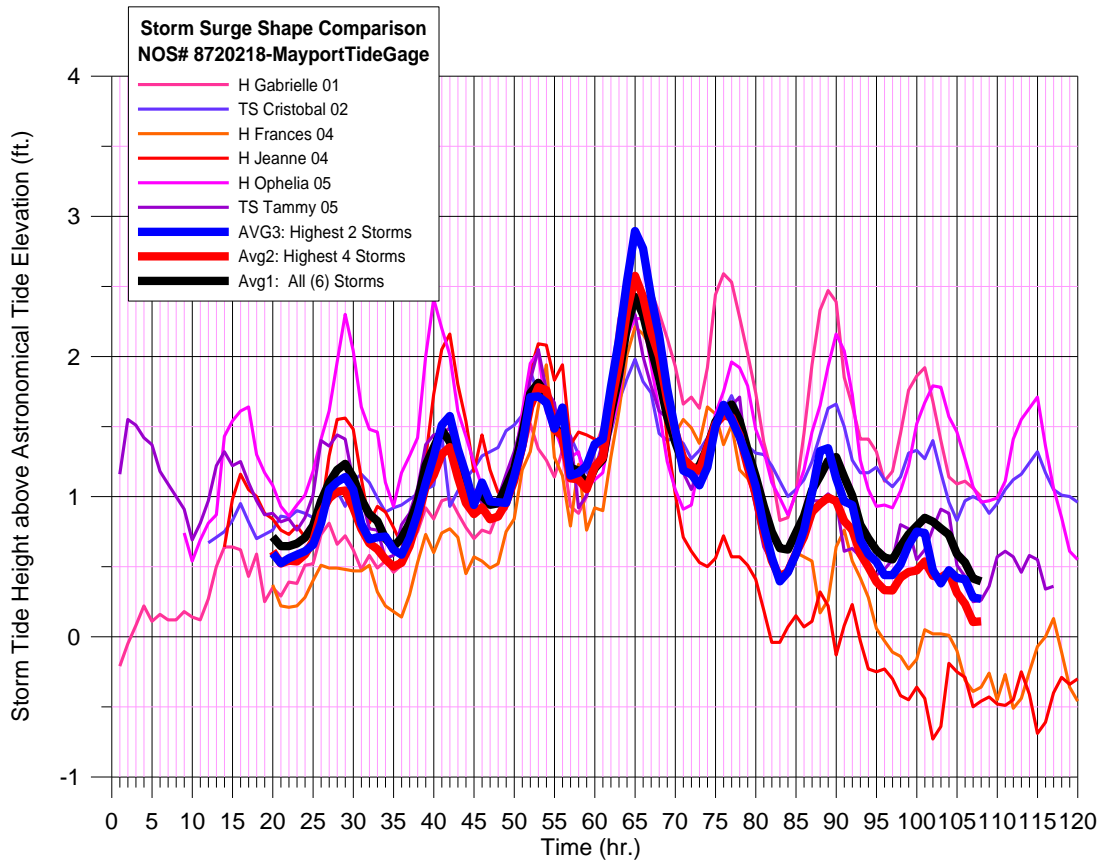
Table 2 – Canaveral Gage  
Atlantic Storms/Hurricanes Evaluated

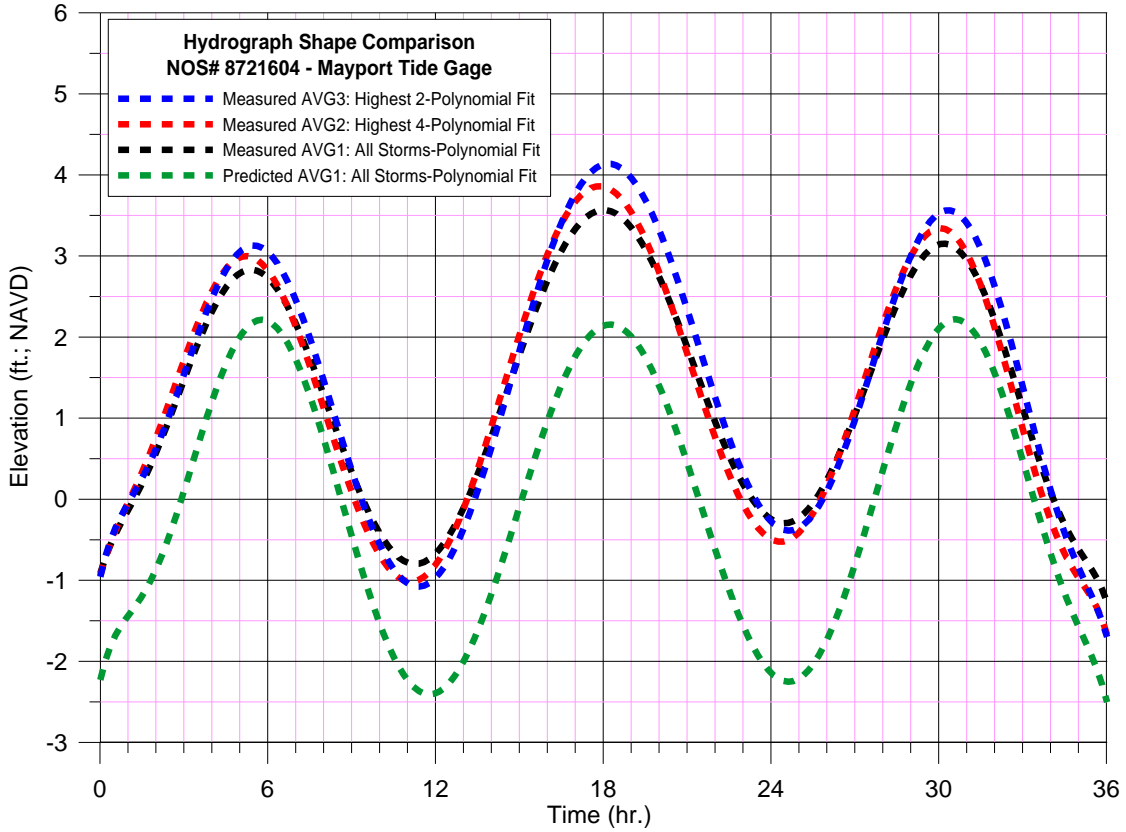
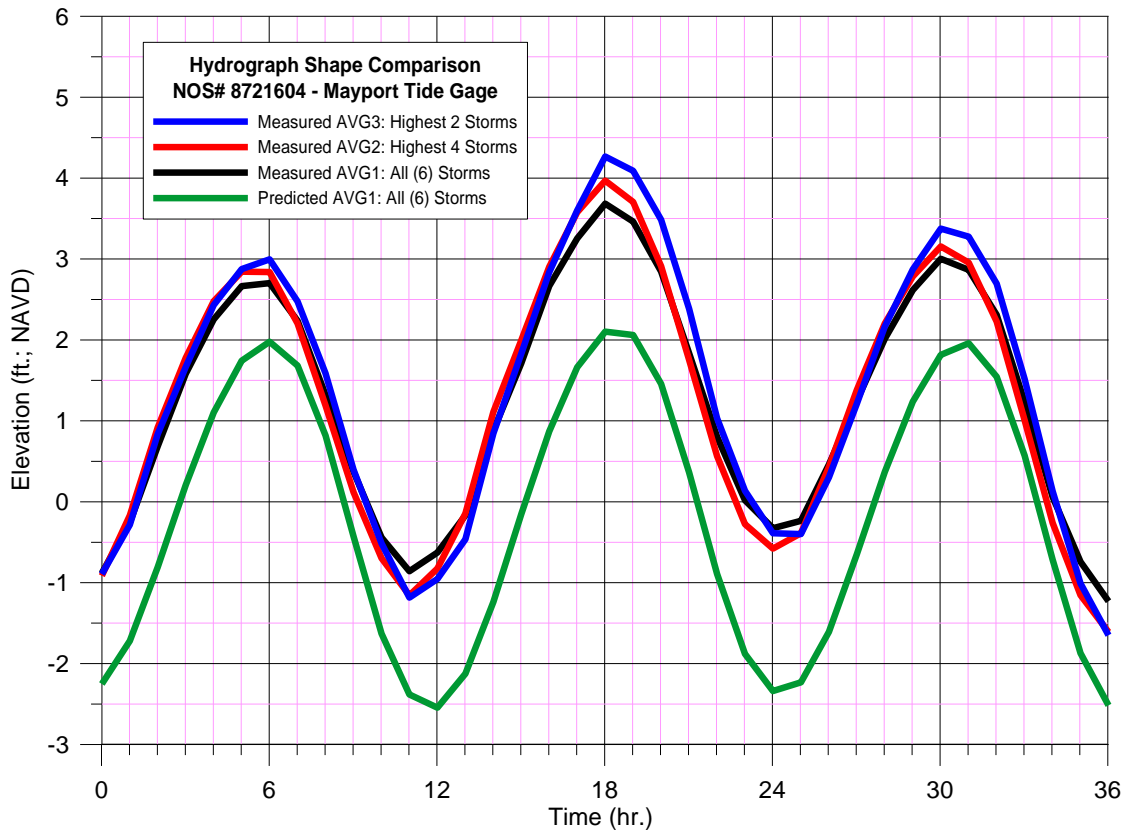
1)	1994	Hurricane Gordon
2)	1995	Hurricane Erin
3)	1999	Hurricane Floyd
4)	1999	Hurricane Irene
5)	2004	Hurricane Frances
6)	2004	Hurricane Jeanne

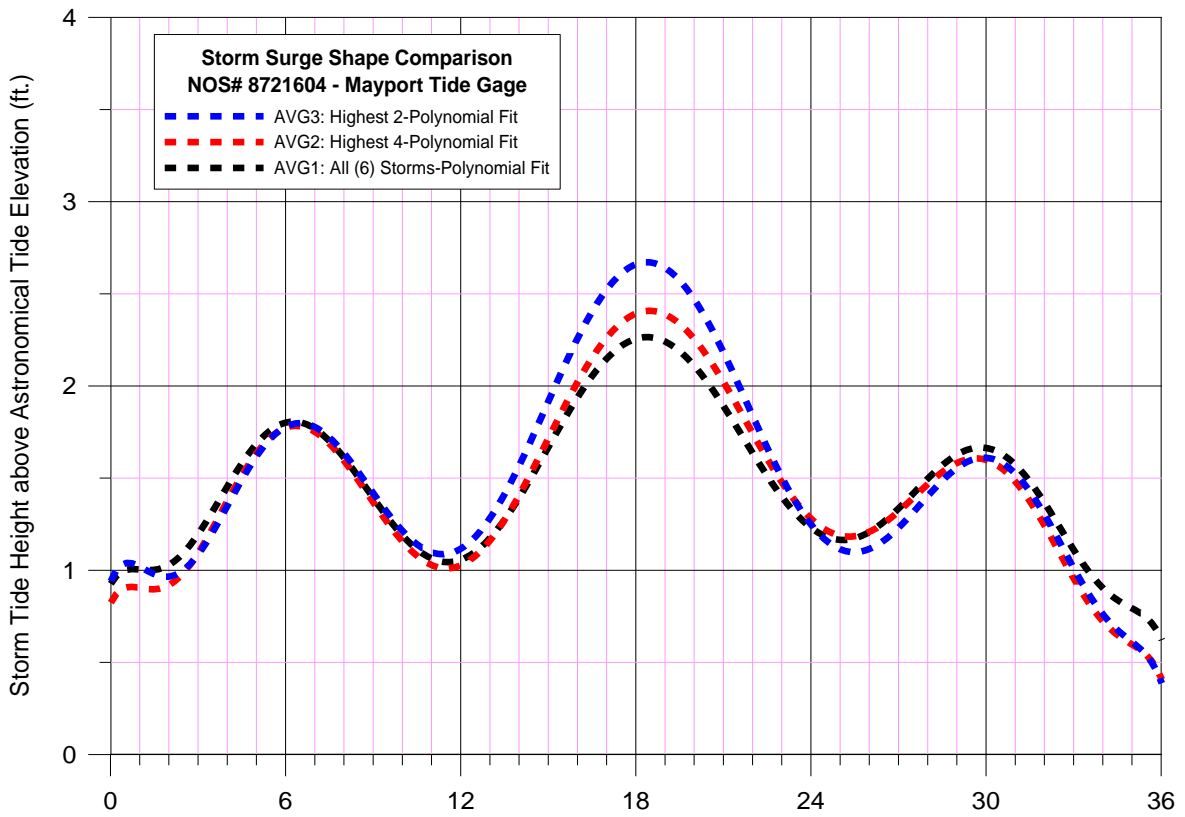
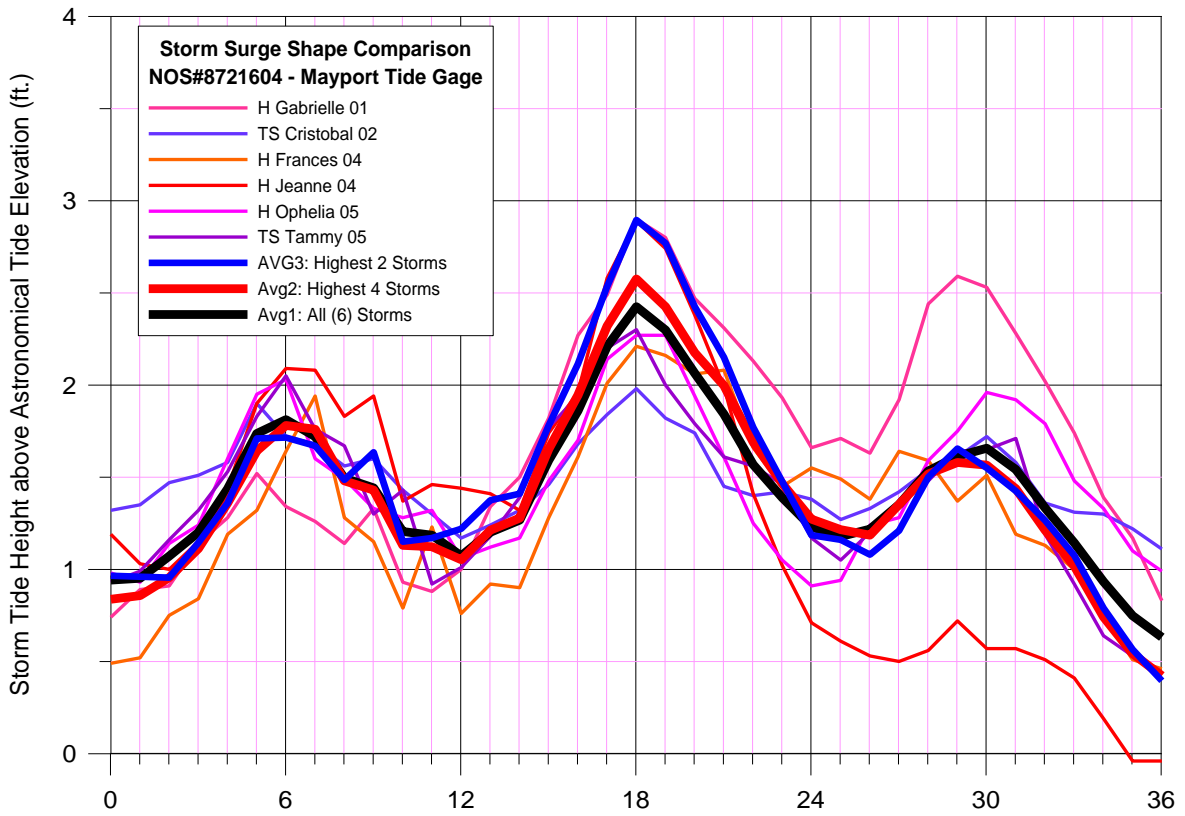
The following graphs are relatively self-explanatory; no specific descriptions will be provided in this preliminary work product. The summary graphs consist of various time periods; i.e., 120 hr. and 36 hr., datums; i.e., MLLW and NAVD. The tide records have been lined up horizontally (time) for overlap/evaluation purposes. The 36 hr. graphs include the highest peak tide portion of the storm tide with the maximum peak tides corresponding to the horizontal mid-point of the graph at 18 hrs. Two types of graphs are included, tide elevation graphs and graphs which depict the height of total storm tide minus predicted astronomical tide referred to as storm surge herein. No specific figure captions are included in this work product; as stated, the graphs are essentially self-explanatory for purposes of this work preliminary work product. No special report formatting is included here, just listing of the graphs.

**Mayport Data:**









**Canaveral Data:**

