Informal Release Notes: P-ETSS v1.0.0

As of: Feb 28, 2017

For **ETSS 2.2**, please see here: [Informal Release Notes for ETSS 2.2](https://docs.google.com/document/d/1JNQIKJDg0PReZ8AdOqdVIOW1iShDmZLg8XMV83K2w2E/edit#)

# 

# Supporting Documents

1. "Informal Release Notes" -> This document
2. [Formal Release Notes for P-ETSS 1.0](https://docs.google.com/document/d/1eOx6aKZ1MkrsGUtL9oceL13iCsxx0aXhmjHJq3j6GN0/edit)
3. [Implementation Instructions](https://docs.google.com/document/d/1LRUXinfHaIfsUt4HlTY6zomck8xQnDyu_3-m2NruRt4/edit)
4. [Flow Diagram](https://drive.google.com/open?id=0B5Fco9oi4iLSX3V3bnpFV1ZlWHM)
5. [TIN](https://docs.google.com/document/d/1MHHvj8YmXHI_sNqUwuBc4mn8Ypx-NuqCCRCHEOTaqH4)

# 

# History

v1.0.0 - Initial Implementation of model on June 06, 2017 -- (Code handoff on February 22, 2017)

1. Run ETSS 2.2 using GEFS ensemble member's wind and pressure
2. Generate the probability based on equally weighting the ensemble member results

# Input Data

**Type:** GEFS 21 ensemble members wind and pressure data at 0.5 degree resolution

**Length:** 3 days of hindcast (00, 06, 12 and 18 cycles) along with current forecast cycle

# Output Data

1. Gridded 0-102 hours GRIB2 Products (Surge + Tide):
   1. 10%, 20%, 30%, 40%, 50% and 90% exceedance
      1. Above Ground Level (AGL): 6 hour cumulative and 6 hour incremental
      2. Above NAVD-88: 6 hour cumulative and 1 hour incremental
   2. Ensemble max,mean and min
      1. AGL: 6 hour cumulative and 6 hour incremental
      2. Above NAVD-88: 6 hour cumulative and 1 hour incremental
   3. Probability (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13 and 16 ft)
      1. AGL: 6 hour cumulative and 6 hour incremental
      2. Above NAVD-88: 6 hour cumulative and 1 hour incremental
2. Station 0-102 hours Text Products (Surge Only and Surge + Tide):
   1. 10% and 90% exceedance
      1. Above NAVD-88: 1 hour incremental
   2. Ensemble max, mean and min
      1. Above NAVD-88: 1 hour incremental

# Technical Details (aka Computational Resource Information)

* Number of CPU: 294 CPU (13 Nodes)
* Memory: 2000 MB / CPU
* Serial/Parallel runs: 294 independent scripts run in parallel
* Run Time: 43 minutes
* How often: 4 cycles per day

# Dependencies

1. **Compiling model codes:**

* module load PrgEnv-intel/5.2.56 (default)
* module load g2-intel/2.5.0
* module load bacio-intel/2.0.1
* module load w3nco-intel/2.0.6
* module load jasper-gnu-haswell/1.900.1
* module load png-intel-haswell/1.2.49
* module load zlib-intel-haswell/1.2.7

1. **Running model:**

* module load PrgEnv-intel/5.2.56 (default)
* module load prod\_util/1.0.5 (default)
* module load grib\_util/1.0.3

1. **Storm surge model input**

* GEFS model results (wind and pressure)

# Disk Usage

* Data retention for files in /com and /nwges under prod/para/test environments:

A few weeks

* + /com usage - **15.0 Gigs**

|  |
| --- |
| % du -sh ./com/petss/prod/petss.YYYYMMDD/  **15.0G** ./com/petss/prod/petss.YYYYMMDD/ |

* + /pcom usage - **0**

|  |
| --- |
| % du -sh ./pcom/prod/petss/  **0** ./pcom/prod/petss/ |

# Testing Requirements

* Does this change require a 30-day evaluation? **Likely**
* Suggested evaluators? **MDL, NHC, OPC**

# Dissemination Information

* Where should this output be sent? **ftp server**
* Primary users: **WFOs, OPC and NHC**
* Archive to HPSS: **Yes**
  + Retention length: **Few years**
  + List which output files should be archived:
    - The GRIB files (petss.\*m)
    - Station output files (petss.\*.txt)