Implementation Instructions: P-ETSS v1.0.0

As of: Feb 28, 2017

# 1) Check out P-ETSS 1.0.0 from the repository

|  |
| --- |
| % workDir=**<your working directory>**  % cd $workDir  % svn co https://vlab.ncep.noaa.gov/svn/etss/petss/tags/PETSS1.0-spa petss.v1.0.0  % cd petss.v1.0.0 |

# 2) Build the executables

|  |
| --- |
| % cd sorc  # Load 'cray' module file to setup the compiling environment.  % module load ./build\_petss.module.cray  % make -f Makefile.petss.cray clean install ;# Build the executables  % make -f Makefile.petss.cray clean ;# Clean up afterwards  % cd ../ |

# 3) Run a test

|  |
| --- |
| % cd dev  #===============================================================  # ./runPETSS.sh is the kick off script for the P-ETSS model.  # Arguments are:  # YYYYMMDD (optional): Date to run, or current date if missing.  # Cycle: 00, 06, 12, 18  # Copy wind data? copy/no-copy  # Skip P-ETSS model Run? Y/N  # Generate web images? Y/N  #  # The run scripts creates /gpfs/hps/ptmp/${USER}/petss.v1.0.0/tmp and  # treats that as the root from a production perspective (e.g. .../tmp/com,  # .../tmp/pcom) {where USER=<your login username>}.  #===============================================================  # Option 1: Run the model with today's wind forcing  # Note - replace **XX** with the (00 06 12 18) for the cycle  % ./runPETSS.sh **XX** copy N N # First run: copies GEFS data to sandbox area  % ./runPETSS.sh **XX** no-copy N N # Skips copying GEFS data, but runs the model  # Option 2: Run the model with wind forcing from a specified date  # Note - replace **XX** with the (00 06 12 18) for the cycle  % ./runPETSS.sh YYYYMMDD **XX** copy N N # First run: Copies GEFS data to sandbox  % ./runPETSS.sh YYYYMMDD **XX** no-copy N N # Skips copying GEFS data - runs the model |

# 4) Check the logs for errors

Look at the log entries via...

|  |
| --- |
| % cd ${workdir}/tmp/com/logs  # Review the logs... |

# 5) Check results

|  |
| --- |
| % cd ${workdir}  #===============================================================  # 1) Check the GRIB2 results in the /com folder. There should be the  # following 264 GRIB2 files each cycle (cyc = 00, 06, 12, 18):  #  # petss.tYYYYMMDD${cyc}z.${phenom}\_${type}\_${time-datum}.${area-res}.grib2  #  # Where:  # phenom=stormtide  # type=e10, e20, e30, e40, e50, e90  # gt0, gt1, gt2, gt3, gt4, gt5, gt6, gt7, gt8, gt9, gt10, gt13, gt16,  # max, mean, min  # time-datum=1hr\_inc\_dat, 6hr\_cum\_dat, 6hr\_inc\_agl, 6hr\_cum\_agl  # area-res=con2p5km, con625m, ala3km  #===============================================================  % ls tmp/com/petss/prod/petss.YYYYMMDD/petss.\*${cyc}z\*.grid2  #===============================================================  # 2) Check model specific text files for surge and storm tide results in the the  # /com folder. There should be the following 50 files for surge and storm  # tide each cycle (cyc = 00, 06, 12, 18):  # petss.${type}.t${cyc}z.stormsurge.${area}.txt  # petss.${type}.t${cyc}z.stormtide.${area}.txt  # Where:  # type = 10p, 90p, max, mean, min  # area = wst, goa, ber, est, gom  #===============================================================  % ls tmp/com/etss/prod/etss.YYYYMMDD/\*.txt |

# 6) Compare results to MDL’s runs

|  |
| --- |
| #===============================================================  # Compare /com directories to MDL's runs. There should be no differences  # if everything is correct.  #===============================================================  % tree1=/gpfs/hps/ptmp/mdl.surge/petss.v1.0.0/tmp/com/petss/prod/petss.YYYYMMDD  % tree2=${workdir}/com/petss/prod/petss.YYYYMMDD  % diff -rq ${tree1} ${tree2} |