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From:    Peter Stone  
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NOS Center for Operational Oceanographic Products and Services (CO-OPS)

Subject: Changes in Lateral Open Boundary Conditions for the National Ocean Service’s new Operational Forecast System for the Columbia River and Estuary (CREOFS): Effective September 25, 2012

Effective September 25, 2012, beginning at 1500 Coordinated Universal Time (UTC), 10:00 AM Eastern Daylight Time (EDT), the NOAA/National Ocean Service (NOS) CREOFS will be forced by NCEP’s global operational Real-Time Ocean Forecast System (RTOFS). CREOFS field outputs will be separated into multiple NetCDF files. For the nowcast cycle, the field output NetCDF file name is like nos.creofs.fields.n{HH}.{YYYYMMDD}.t{CYC}z.nc For forecast cycle, the field output NetCDF file name is like:

nos.creofs.fields.f{HH}.{YYYYMMDD}.t{CYC}z.nc

where HH is the nowcast/forecast hour (i.e., 00, 01,...48) and CYC is the model cycle runtime, i.e., 03, 09, 15, 21.

CREOFS will provide users with nowcast (analyses of near present) and forecast guidance of the three-dimensional physical conditions of the Columbia River and Estuary, including surface water levels and 3-dimensional (3-D) water currents, water temperature, and salinity out to 48 hours.

Currently, most of NOS' 3-D Operational Forecast Systems (OFS) rely on NCOM for their lateral ocean boundary conditions. The Naval Oceanographic Office (NAVO) is transitioning to a new computer system and only plans to transition Global HYCOM to the new system. Therefore, NAVO will stop running Global NCOM in September 2012. Global RTOFS runs at NCEP on the same computer system as the NOS OFS; thereby making G-RTOFS model outputs directly accessible to NOS OFS. As a result, G-RTOFS is the first choice for lateral ocean open boundary conditions for all NOS OFS. The Navy’s Global HYCOM will serve as a backup for NCEP’s G-RTOFS. G-HYCOM uses the same numerical ocean model and has similar system configurations as NCEP’s RTOFS making the outputs from both G-RTOFS and G-HYCOM similar and
comparable.

Gridded and point forecast guidance from CREOFS will be available in netCDF files on the NCEP server at NOAA’s Web Operations Center (WOC) (ftpprd.ncep.noaa.gov) in the directory:

/pub/data/nccf/com/nos/prod/creofs.yyyymmdd at NOS/CO-OPS OPeNDAP server:

http://.opendap.co-ops.nos.noaa.gov/netcdf/

and at CO-OPS THREDDS server

http://.opendap.co-ops.nos.noaa.gov/thredds/catalog.html

CREOFS output is displayed on the CO-OPS webpage at:

http://tidesandcurrents.noaa.gov

Additional information about CREOFS can be found at:

http://www.tidesandcurrents.noaa.gov/models.html

CREOFS predictions are used by commercial and recreational mariners, fishermen, emergency managers, search and rescue operations, and NWS marine weather forecasters. The development and implementation of CREOFS was a joint project of the NOS/Office of Coast Survey (OCS), the NOS/Center for Operational Oceanographic Products and Services (CO-OPS), NWS/NCEP/NCEP Central Operations (NCO) and the Oregon Health & Science University. CREOFS is monitored 24 x 7 by both NCO/NCEP and CO-OPS Continuous Real-Time Monitoring System (CORMS) personnel.

If you have any questions concerning these changes, please contact:

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For questions regarding the dataflow aspects with respect to the NCEP server at the WOC, please contact:

Rebecca Cosgrove
NCEP/NCO Dataflow Team
Camp Springs, MD
Email: ncep.list.pmb-dataflow@noaa.gov

National Technical Implementation Notices are online at:

https://www.weather.gov/notification/archive

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