

NOUS41 KWBC 081950  
PNSWSH

Public Information Statement 20-41  
National Weather Service Headquarters Silver Spring MD  
250 PM EDT Mon Jun 8 2020

To:           Subscribers:  
              -NOAA Weather Wire Service  
              -Emergency Managers Weather Information Network  
              -NOAAPort  
              Other NWS Partners, Users and Employees

From:         Jason Levit  
              Chief, Verification, Post-Processing, Product  
              Generation Branch  
              NCEP/Environmental Modeling Center

Subject: Soliciting Public Comments on Changing the Product Suite from  
the Proposed Upgrade of the Real Time Ocean Forecast System (RTOFS)  
Global Model through July 8, 2020

The National Centers for Environmental Prediction (NCEP) is soliciting  
comments on removing, adding and changing certain products from the Real-  
Time Ocean Forecast System (RTOFS) on or after November 11, 2020.

The following products will be removed from NCEP Web Services, including  
NOAA National Operational Model Archive and Distribution System (NOMADS)  
grib filter, OpenDap, and ftpprd.

For Nowcast:

-rtofs\_glo.t00z.n-NN.archs.a  
-rtofs\_glo.t00z.n-NN.archs.b

These files contain Global Surface binary data for HYbrid Coordinate  
Ocean Model (HYCOM) at 1 hourly intervals (Nowcast Hours: NN: 25-48, 1-  
hour increments).

Fields available in these files are Montgomery Potential (montgl), Sea  
Surface Height (srfhgt), Steric height (steric), Thermal Energy Flux  
(surflx), Salinity Flux (salflx), Boundary Layer Depth (bl\_depth), Mix  
layer Depth (mix\_depth), Ice Coverage (covice), Ice Thickness (thkice),  
Ice Temperature (icetem), U Barotropic Velocity (u\_btrop), V Barotropic  
Velocity (v\_btrop), U Velocity (u\_vel), V Velocity (v\_vel), Layer  
Thickness (thkness), Temperature (temp) and Salinity (salin).

-rtofs\_glo.t00z.n-NN.archv.a  
-rtofs\_glo.t00z.n-NN.archv.b

These files contain Global Volume binary data for HYbrid Coordinate Ocean  
Model (HYCOM) at 6-hourly intervals (Nowcast hours: NN: 25-48, 6-hour  
increments) at 41 hybrid levels.

Fields available in these files are Montgomery Potential (montgl), Sea Surface Height (srfhgt), Steric height (steric), Thermal Energy Flux (surflx), Salinity Flux (salflx), Boundary Layer Depth (bl\_depth), Mix layer Depth (mix\_depth), Ice Coverage (covice), Ice Thickness (thkice), Ice Temperature (icetem), U Barotropic Velocity (u\_btrop), V Barotropic Velocity (v\_btrop), U Velocity (u\_vel), V Velocity (v\_vel), Layer Thickness (thkness), Temperature (temp) and Salinity (salin).

Nowcast in the new upgrade is run for one day (n-24 to n00) and hence the above files are removed. For n-48 to n-24, users can use the previous day nowcast files from n-24 to n00.

-rtofs\_glo\_2ds\_nNNN\_3hrly\_[diag/prog].nc

These files contain Global Surface data in netCDF format in 3-hourly intervals (Nowcast hours: NNN: 000 to 048 in 3-hour increments).

-rtofs\_glo\_2ds\_nNNN\_daily\_[diag/prog].nc

These files contain Global Surface data in netCDF format in daily/24-hour intervals (Nowcast hours: NNN:000 to 048 in 24-hour increments).

Fields available in rtofs\_glo\_2ds\_nNNN\_[3hrly/daily]\_diag.nc are Ice Coverage, Ice\_thickness, U Barotropic Velocity, V Barotropic Velocity, Sea Surface Height (SSH), Surface Boundary Layer Thickness and Mixed Layer Thickness.

Fields available in rtofs\_glo\_2ds\_nNNN\_[3hrly/daily]\_prog.nc are U Velocity, V Velocity, Sea Surface Temperature (SST), Sea Surface Salinity (SSS) and Layer Density.

The reason for removing the above nowcast files (\*prog\* and \*diag\*) is that they are redundant. In current production \*1hrly\* files get copied to \*3hrly\* and \*daily\* files. So, we have three copies of the same file which causes redundancy. Hence, we plan to have one copy of the files with \*hrly\* and \*daily\* removed from the filenames (more on that below).

-rtofs\_glo\_3dz\_nNNN\_6hrly\_hvr\_REGION.nc

These files contain Regional Volume data in netCDF format in 6-hourly intervals [Nowcast hours: NNN: 030, 036, 042, 048]. Regions available are REGION US East, US West and Alaska [REGION: US\_east, US\_west alaska].

Fields available in these files are U Velocity (u), V Velocity (v), Temperature and Salinity.

-rtofs\_glo.t00z.n048\_REGION\_std.grb2

This file contains Regional Surface data in gridded binary version 2 (GRIB2) format (REGION: alaska, arctic, bering, guam, gulf\_alaska, honolulu, hudson\_baffin, samoa, trop\_paci\_lowres, west\_atl, west\_conus).

Fields available in this file are Temperature (wtmp), Salinity (salty), U Velocity (UOGRD), V Velocity (VOGRD), U Barotropic Velocity (UBARO), V Barotropic Velocity (VBARO), Sea Surface Height (SSHG).

Nowcast in the new upgrade is run for one day (n-24 to n00) and hence the above files are removed. For n-48 to n-24, users can use the previous day nowcast files from n-24 to n00.

For Forecast:

-rtofs\_glo\_2ds\_fNNN\_3hrly\_[diag/prog].nc

These files contain Global Surface data in netCDF format in 3-hourly intervals (Forecast Hours: NNN: 000 to 072; 3-hourly intervals).

-rtofs\_glo\_2ds\_fNNN\_daily\_[diag/prog].nc

These files contain Global Surface data in netCDF format in daily/24-hour intervals (Forecast Hours: NNN:000 to 192 in 24-hour increments).

Fields available in rtofs\_glo\_2ds\_fNNN\_[3hrly/daily]\_diag,nc are Ice Coverage , Ice\_thickness , U Barotropic Velocity, V Barotropic Velocity, Sea Surface Height (SSH), Surface Boundary Layer Thickness and Mixed Layer Thickness.

Fields available in rtofs\_glo\_2ds\_fNNN\_[3hrly/daily]\_prog.nc are U Velocity, V Velocity, Sea Surface Temperature (SST), Sea Surface Salinity (SSS) and Layer Density.

The reason for removing the above forecast files (\*prog\* \*diag\*) is that they are redundant. In the current production, \*1hrly\* files get copied to \*3hrly\* and \*daily\* files. So, we have three copies of the same file which causes redundancy. Hence, we plan to have one copy of the files with \*hrly\* \*daily\* removed from the filenames (more on that below).

The following products will be changed on the web services:

rtofs\_glo\_[2ds]\_[f/n]NNN\_1hrly\_[diag].nc

These files contain Global Surface data in netCDF format in 1-hourly intervals for both nowcast and forecast [f/n] (Nowcast Hours: NNN: 000 to 024 and Forecast Hours: NNN : 000 to 192).

Ice coverage and Ice thickness will be removed from the "diag" files and added on to Global Surface ice data files in netCDF format in 1-hourly intervals for both nowcast and forecast. This \*ice\* is a new file that will be provided with this upgrade rtofs\_glo\_[2ds]\_[f/n]NNN\_1hrly\_ice.nc files.

Comments: Fields in \*diag\* files for both Nowcast and Forecast will have U Barotropic Velocity, V Barotropic Velocity, Sea Surface Height (SSH), Surface Boundary Layer Thickness and Mixed Layer Thickness.

Changing file names:

Also, all the Global Surface 1hrly files  
rtofs\_glo\_[2ds]\_[f/n]NNN\_1hrly\_[diag/prog/ice].nc will be renamed as:  
rtofs\_glo\_[2ds]\_[f/n]NNN\_[diag/prog/ice].nc

Where:

f/n: forecast/nowcast

Nowcast hours: NNN: 000 to 024 for nowcast

Forecast Hours: NNN: 000 to 192 for forecast.

Further, all nc files will be converted to NetCDF4 with compression.

World Meteorological Organization (WMO) GRIB data to be removed from the  
Satellite Broadcast Network (SBN)/NOAAPort:

48-hour nowcast output for the following regions will be removed:  
alaska, arctic, bering, guam, gulf\_alaska, honolulu,  
hudson\_baffin,samoa,trop\_paci\_lowres,west\_atl,west\_conus.

Please see the list of headers here:

[https://www.nco.ncep.noaa.gov/pmb/changes/RTOFS\\_48hr\\_nowcast\\_headers.txt](https://www.nco.ncep.noaa.gov/pmb/changes/RTOFS_48hr_nowcast_headers.txt)

If these product changes are approved, a Service Change Notice will be  
issued giving 30 days of notice of the termination date.

Please send comments on this proposal to:

Jason Levit  
NWS/NCEP Environmental Modeling Center  
College Park, MD  
[jason.levit@noaa.gov](mailto:jason.levit@noaa.gov)

For questions on the data flow aspects, please contact:

Anne Myckow  
NWS/NCEP Central Operations  
College Park, MD  
[ncep.pmb.dataflow@noaa.gov](mailto:ncep.pmb.dataflow@noaa.gov)

National Public Information Statements are online at:

<https://www.weather.gov/notification/>

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