Release Notes

Model	Real-Time Ocean Forecast System – Global (RTOFS-Global)
Version	1.1.2
Implementation date/time	October 17, 2017 0000 UTC
Purpose	The system provides daily a two-day nowcast and eight-day forecast for the global ocean.
Changes being made for this release	- An upgrade of HYCOM code to version 2.2.86F2p0i. - An increase in the number of vertical layers from 32 to 41 hybrid layers with additional iso-level coordinate layers in the upper ~200m. - The coupling of the ocean component Hybrid Coordinate Ocean Model (HYCOM) to Los Alamos National Laboratory's Community Sea Ice (CICE) model using v4.0 of Earth System Modeling Framework (ESMF). - Updated bathymetry, which improves representation of grid points in shallow regions where minimum depth is set to 5m. - An update of the climatology from the U.S. Navy's Generalized Digital Environmental Model (GDEM) v3.0 to v4.2. - An equation of state, which is updated from 9 terms to 17 terms.
Developed by	National Weather Service/ Environmental Modeling Center in close collaboration with the US Navy. This system is identical to the US Navy's GOFS 3.1 system which has been adapted to NWS/NCEP's operational environment and to NCEP's atmospheric forcings.
Runs on	The National Weather Service (NWS) Weather and Climate Operational Supercomputing System (WCOSS)
Community software	- Hybrid Ocean Model (HYCOM)+ v2.2.86F2p0i. - Community Sea Ice (CICE) v3.1 - Earth System Modeling Framework (ESMF) v4.0 - Climate Data Operators (CDO) v1.5.0
Input	- NAVOCEANO HYCOM and CICE restart files. - NCEP's GFS/GDAS ocean surface forcing files.
Output and where to find it	RTOFS-Global output consists of hourly 2D ocean surface archives and six-hourly 3D archives, as well as high vertical resolution regional 3Z archives. The output data in native system format, NetCDF and GRIB2 formats is available via - NCO Production FTP server ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/rtofs/prod/ - NCO operational NOMADS http://nomads.ncep.noaa.gov/pub/data/nccf/com/rtofs/prod/ Users can find additional information about RTOFS-Global data access and data formats at http://polar.ncep.noaa.gov/global/data_access.shtml?
Primary users	NWS Weather Forecast Offices (WFO); NCEP Ocean Prediction Center (OPC) ; NCEP National Hurricane center (NHC); NCEP Environmental Modeling Center (EMC); US Coastal Guard; NOAA National Ocean Service (NOS)
In the future	- Designing additional sea-ice products/forecasts (ice thickness, ice drifts) (FY18)

	- Updating HYCOM src codes, fix files to synch with US Navy (FY18) - NCODA at NCEP (FY19)

For more information on this model, please contact ncep.pmb.dataflow@noaa.gov .