NCEP Products Available to Distribute to CONDUIT
Phase 1
12/23/2010

High-Resolution Window Forecast System (HIRESW)   Full Description   Product Location (hiresw directory)

Note: These products should be added to NOAAPORT in 2011.

The HIRESW consists of daily runs of the WRF versions of the non-hydrostatic, hybrid vertical coordinate mesoscale model (NMM) and the NCAR Advanced Research WRF (ARW) at ~5 km resolution. Currently, five nested domains are being run, three large domains (East/Central U.S., West/Central U.S., Alaska) and two small domains (Hawaii and Puerto Rico), each domain run with the ARW and NMM core.

 Available grids:

Alaska ARW (NCAR Advanced Research WRF)
Alaska NMM (Non-hydrostatic, hybrid vertical coordinate mesoscale model)
East/Central US ARW (NCAR Advanced Research WRF)
East/Central US NMM (Non-hydrostatic, hybrid vertical coordinate mesoscale model)
Hawaii ARW (NCAR Advanced Research WRF)
Hawaii NMM (Non-hydrostatic, hybrid vertical coordinate mesoscale model)
Puerto Rico ARW (NCAR Advanced Research WRF)
Puerto Rico NMM (Non-hydrostatic, hybrid vertical coordinate mesoscale model)
West/Central US ARW (NCAR Advanced Research WRF)
West/Central US NMM (Non-hydrostatic, hybrid vertical coordinate mesoscale model)

Real Time Ocean Forecast System (RTOFS)   Full Description   Product Location

The RTOFS for the North Atlantic is an ocean forecast system based on the HYbrid Coordinate Ocean Model (HYCOM). HYCOM is a data-assimilative hybrid isopycnal-sigma-pressure (generalized) coordinate ocean model. The RTOFS-Atlantic is an operational real time ocean nowcast/forecast system for the North Atlantic running once daily at National Centers for Environmental Prediction (NCEP).

Available grids:

Daily full-basin volumetric fields, native horizontal coordinates, fixed-depth vertical coordinates

Daily volumetric fields, native horizontal coordinates, hybrid vertical coordinates

Hourly full basin surface fields, native horizontal coordinates, fixed depth vertical coordinates

Hourly surface fields, native horizontal coordinates, hybrid vertical coordinates

Daily surface fields, rectangular lat/lon horizontal coordinates

Daily Latitude-Longitude Ocean, 2 degrees of longitude and 1 degree of latitude resolution

GFDL Hurricane model   [Full Description](#)   [Product Location](#) (hur subdirectory)

The current GFDL hurricane model is a gridpoint model that consists of three computational meshes which are nested together with increasingly finer grid-point spacing in each mesh. The model is run on demand up to 4x daily.

Available grids:

latitude-longitude 1.0 degree resolution full domain
latitude-longitude 1/6 degree resolution nest
latitude-longitude 1/12 degree resolution nest

Hurricane Weather Research and Forecast (HWRF) system   [Full Description](#)   [Product Location](#) (hwrf subdirectory)

The HWRF is a high resolution coupled air-sea-land prediction model with a movable nested grid and advanced physics for high resolution. It is run on demand up to 4x daily.

Available grids:

latitude-longitude 27 km resolution full domain
latitude-longitude 9 km resolution nest

Real-Time Mesoscale Analysis   [Full Description](#)   [Product Location](#)

The Real-Time Mesoscale Analysis (RTMA) is a NOAA/NCEP high-spatial and temporal resolution analysis/assimilation system for near-surface weather conditions. Its main component is the NCEP/EMC Gridpoint Statistical Interpolation (GSI) system applied in two-dimensional variational mode to assimilate conventional and satellite-derived observations.

Available grids:

Note: All RTMA domains except for Alaska are available on NOAAPORT and are therefore already in the IDD.

Alaska Polar Stereographic, 3 km resolution, analysis products

NOAA WAVEWATCH III   Full Description   Product Location

 The NOAA WAVEWATCH III$^{®}$ operational wave model suite consists of a set of five wave models plus a global ensemble, based on version 2.22 of WAVEWATCH III$^{®}$. All models are run on the 00z, 06z, 12z and 18z model cycles, and start with a 6h hindcast to assure continuity of swell. All models provides 126 hour forecasts.

The models are:

The global NWW3 model
The global NWW3 ensemble
The regional Alaskan Waters (AKW) model
The regional Western North Atlantic (WNA) model
The regional North Atlantic Hurricane (NAH) model
The regional Eastern North Pacific (ENP) model
The regional North Pacific Hurricane (NPH) model

Available grids:

 Regional - Alaska , longitude-latitude grid
 Regional - Eastern North Pacific, longitude-latitude grid
 Regional - Great Lakes, longitude-latitude grid
 Global - longitude-latitude grid, 1.250 x 1.000 degree resolution
 Regional - Western North Atlantic, longitude-latitude grid
 Regional - North Atlantic Hurricane, longitude-latitude grid, 0.25 degree resolution, Multi-grid Hurricane Wave
 Regional - North Pacific Hurricane, longitude-latitude grid, 0.25 degree resolution, Multi-grid Hurricane Wave
 Regional – Alaska, longitude-latitude grid, 0.25 x 0.167 degree resolution, Multi-grid Hurricane Wave
 Regional – Alaska, longitude-latitude grid, 0.133 x 0.067 degree resolution, Multi-grid Hurricane Wave
 Regional - US East Coast, longitude-latitude grid, 0.067 degree resolution, Multi-grid Hurricane Wave
 Regional - US East Coast, longitude-latitude grid, 0.167 degree resolution, Multi-grid Hurricane Wave
 Regional - US East Coast, longitude-latitude grid, 0.25 degree resolution, Multi-grid Hurricane Wave

Regional - E. Pacific, longitude-latitude grid, 0.167 degree resolution, Multi-grid Hurricane Wave

Global - longitude-latitude grid, 0.5 degree resolution, Multi-grid Hurricane Wave

Regional - North Pacific, longitude-latitude grid, 0.25 degree resolution, Multi-grid Hurricane Wave

Regional - US West Coast, longitude-latitude grid, 0.167 degree resolution, Multi-grid Hurricane Wave

Regional - US West Coast, longitude-latitude grid, 0.067 degree resolution, Multi-grid Hurricane Wave

Regional – Alaska, longitude-latitude grid, 0.25 x 0.167 degree resolution, Global Multi-Grid Wave

Regional – Alaska, longitude-latitude grid, 0.133 x 0.067 degree resolution, Global Multi-Grid Wave

Regional - US East Coast, longitude-latitude grid, 0.167 degree resolution, Global Multi-Grid Wave

Regional - US East Coast, longitude-latitude grid, 0.067 degree resolution, Global Multi-Grid Wave

Regional - E. Pacific, longitude-latitude grid, 0.167 degree resolution, Global Multi-Grid Wave

Global - longitude-latitude grid, 0.5 degree resolution, Global Multi-Grid Wave

Regional - US West Coast, longitude-latitude grid, 0.167 degree resolution, Global Multi-Grid Wave

Regional - US West Coast, longitude-latitude grid, 0.067 degree resolution, Global Multi-Grid Wave

Global – longitude-latitude, 1.0 degree resolution, Wave Ensemble Control and Members

Global – longitude-latitude, 1.0 degree resolution, Wave Ensemble Products (mean, probability, spread)

Assimilation data – NAM, GFS Product Information

Availalble products:

NAM Product Location

POES/NESDIS and METOP AMSU-A 1b radiances

POES/NESDIS AMSU-B 1b radiances

 Surface land synoptic, station pressure, specific humidity

Upper-air (raob, pibal, recco, drops) reports

MDCRS ACARS aircraft reports

AIREP/PIREP, AMDAR (ASDAR/ACARS), E-ADAS (AMDAR BUFR) aircraft reports

Wind profiler reports

Satellite-derived wind reports

Surface marine (ship, buoy, c-man platform) reports

GFS Product Location

POES/NESDIS and METOP AMSU-A 1b radiances

POES/NESDIS AMSU-B 1b radiances

POES/NESDIS HIRS-3 1b radiances

POES/NESDIS and METOP HIRS-4 1b processed radiances

POES/NESDIS and METOP MHS 1b processed radiances

Upper-air (raob, pibal, recco, drops) reports

[AQUA-AIRS AIRS/AMSU-A/HSB 1B processed radiances](#)

AQUA/AMSR-E processed radiances

GOES NESDIS-processed 11x17 field-of-view imager clear radiances

GOES/NESDIS-processed 1x1 field-of-view soundings/brightness temperatures

GPS integrated precipitable water

COSMIC, CHAMP, GRACE, METOP(GRAS) and SAC-C GPS radio occultation data

METOP-2 IASI 1C radiance data (variable channels)

POES/NESDIS Solar Backscatter UV-2 radiances, version 8

Wind profiler reports

Radio Acoustic Sounding System Virtual Temperature

Satellite-derived wind reports

Mean sea-level pressure bogus

Surface marine (ship, buoy, c-man platform) reports

NASA/Tropical Rainfall Measuring Mission superobed data (on a 1 degree lat/lon grid)

NASA/Tropical Rainfall Measuring Mission

Vertical Azimuth Display winds by height at U.S. NEXRAD radar sites

WindSat products from NAVY