IMPORTANT NOTICE REGARDING THE WAVEWATCH III® MULTI-1 WEBSITE

The EMC WAVEWATCH III® global wave model Multi-1 will be decommissioned in NCEP operations in February 2021. It will be replaced by a new configuration of the WAVEWATCH III global wave model coupled to GFSv16, named GFS-Wave.

At that time, this website will cease to update.

Information on the GFSv16 can be found here:

https://vlab.ncep.noaa.gov/web/environmental-modeling-center/unified-forecast-system
https://www.emc.ncep.noaa.gov/users/meg/gfsv16

Full PNS

https://www.weather.gov/media/notification/pdf2/pns20-33multi_1_removal.pdf

GFS-Wave graphics of the fields will be available from:

https://mag.ncep.noaa.gov/model-guidance-model-area.php#
Select WW3
Select a Model Area from the list (only available areas will be active)
Select a cycle (left side) and wave parameter (center section)
Select Loop All (right side) to see the animation similar to the old wave site. All of the frames can be individually viewed from that page as well.
Note: The Model Analysis and Guidance (MAG) is managed by NCEP Central Operations, not the Environmental Modeling Center. For more information, see the MAG Users Guide:
https://mag.ncep.noaa.gov/help/ModelGuidanceProds.php
Any comments or questions should be sent to NCEP.Webmaster@noaa.gov.

SAMPLE GFS-WAVE DATA AVAILABLE FROM:

https://para.nomads.ncep.noaa.gov/pub/data/nccf/com/gfs/para/gfs.YYYYMMDD/CC/wave
Note: will only have data for the last 5 cycles (yesterday and today)

GFS-Wave data files will be available from:

Note that the directory paths will change, with GFS absorbing all wave processing.

FTPPRD:
Currently:
ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/wave/prod/multi_1.YYYYMMDD/
Feb 2021:
ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/gfs/prod/gfs.YYYYMMDD/CC/wave
/gridded for all grib2 files

for gfswave.tCCz.spec_tar.gz, gfswave.tCCz.bull_tar, gfswave.tCCz.cbull_tar and gfswave.tCCz.ibp_tar files

NOMADS: https://nomads.ncep.noaa.gov

File naming convention

The file names will change from the currently-operational:

multi_1.GRID.tCCz.fNNN.grib2 is replaced by gfswave.tCCz.GRID.fNNN.grib2

Where CC = 00, 06, 12, 18 is the cycle run, and NNN is the forecast hour

Forecast hours are extended from 180 hrs to 384 hours

For example:

multi_1.ak_10m.tCCz.fNNN.grib2 is replaced by gfswave.tCCz.alaska.0p16.fNNN.grib2

multi_1.at_10m.tCCz.fNNN.grib2 is replaced by gfswave.tCCz.atlocn.0p16.fNNN.grib2

multi_1.ep_10m.tCCz.fNNN.grib2 is replaced by gfswave.tCCz.epacif.0p16.fNNN.grib2

multi_1.wc_10m.tCCz.fNNN.grib2 is replaced by gfswave.tCCz.wcoast.0p16.fNNN.grib2

multi_1.global_30m.tCCz.fNNN.grib2 is replaced by gfswave.tCCz.global.0p25.fNNN.grib2

multi_1.global_30mext.tCCz.fNNN.grib2 is replaced by gfswave.tCCz.global.0p25.fNNN.grib2

Grid Information

Old Name	Old Range	Old Resolution	New Range	New Resolution	New Name
glo_30m	-77.5:77.5 0:359.5	50 km ½ deg 30 arcmin	-15:52.5 0:359.83	16km ⅙ deg 10 arcmin	global.0p16
			50:90, 0:360	9km	arctic.9km
			-10.5:-79.5 0:359.75	25km ¼ deg 15 arcmin	gsouth.0p25
glo_30mext (interpolated from all grids)	-77.5:90 0:359.5	50 km ½ deg 30 arcmin	-90:90 0:359.75	25km ¼ deg 15 arcmin	global.0p25 (interpolated from 3 above)
ak_10m	44:75 140:240 (masked)	16km ⅙ deg 10 arcmin	SAME	SAME	alaska.0p16
at_10m	0:55 260:310 (masked)	16km ⅙ deg 10 arcmin	SAME	SAME	atlocn.0p16
ep_10m	-20:30 130:215	16km ⅙ deg 10 arcmin	SAME	SAME	epacif.0p16

	(masked)				
wc_10m	25:50 210:250 (masked)	16km ⅙ deg 10 arcmin	SAME	SAME	wcoast.0p16
ak_4m	48:74 165:237.93	7km 1/15 deg 4 arcmin			REMOVED
at_4m	15:47 261:300	7km 1/15 deg 4 arcmin			REMOVED
wc_4m	15:50 195:244	7km 1/15 deg 4 arcmin			REMOVED

Note about the grids

In Multi-1, all of the grids (except for the interpolated glo_30mext) were computational grids. In GFS-Wave, only three grids are computational grids: global.0p16, arctic.9km, and gsouth.0p25. These three grids together replace the glo_30m from Multi-1. In GFS-Wave, the regional 0p16 grids are subsets of the three computational grids and are provided for continuity.

These products will be removed:

1) All products from legacy grids: awk, end, wan, nww3, wam.

2) Wave steepness files (wstp). This parameter can be reconstructed directly from wave heights and periods available in grib2 data.

3) All 4-arcmin gridded data files: ak_4m, at_4m, wc_4m. These coastal grids are replaced by data provided by NCEP's coastal wave models: https://polar.ncep.noaa.gov/nwps/

4) Binary forcing files (icean_5m, gfs_30m).

5) CSV bulletins (csbull). The CSV bulletins (csbull) will be removed, but the regular (bull) and compressed bulletins (cbull) will still be available. The regular bulletins have the same information as the CSV bulletins, but the format is designed as human-readable and not as easy to ingest as a CSV. The compressed bulletins also have the information, perhaps slightly more machine readable, but note that the Hs there is in feet not meters.
You can find current examples of these files in the FTPPRD server (linked on the WW3 website under Model Data Access):
ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/wave/prod/multi_1.20210105/bulls.t00z/