

October 7, 2016

MEMORANDUM FOR: Distribution Email

FROM: Chris Caruso Magee
Configuration Manager, NCEP Central Operations

SUBJECT: Scheduled Operational Changes and Upgrades for
CPC, OPC, and WPC

Climate Prediction Center

The following accelerated items were implemented this past week:

None

The following will be implemented the week of October 10, 2016:

RFC #738 – GlobalPrecipitationSummary v1.0.1 - A 14-day accumulation climatology was requested for a CPC project. This change adds scripts to the GlobalPrecipitationSummary application that can create the climatology, copies the climatology to the central data storage, and updates the GrADS ctl files available in the application to include the new climatologies. Was to be implemented on October 6 at 1300Z; postponed to October 13 at 1300Z due to CWD.

RFC #746 - 1. Update logic on the Compute Farm to switch to/from transmission of Heat Index products to transmission of Wind Chill products on 1 Apr and 1 Oct, respectively. Only real change that's to be made removes restrictive PHP logic that prevented this change-over from occurring on weekends. Prior logic was the first Monday after 1 Oct/1 Apr, something that was not proper. 2. Make changes to similar c-shell coding that is part of the product transmissions scripts on the Compute Farm, which prevented inappropriate graphs from being posted during the active period of the appropriate products (e.g. Wind Chill getting sent out during the non-winter months). To be implemented on October 12 at 1500Z.

The following will be implemented the week of October 17, 2016:

RFC #747 - model-data-retrieval v2.4.3 - Change all exit statements in the Perl driver script to return the correct exit status codes (1 for error, 0 for no error). This

makes it easier to deal with errors externally, since it'll be clearer now when an error occurs, because the exit status will be 1 instead of 0. To be implemented on October 17 at 1400Z.

RFC #748 – calc-data-stats v1.0 – Move to separate cron jobs for each variable/lead, instead of them all being run by a single script. Some data is in by different times, so the cron jobs should be separate so that they can be executed at different times. To be implemented on October 17 at 1430Z.

The following RFCs are in progress:

None

The following NCO RFCs to be implemented the week of October 10, 2016 may affect CPC:

RFC #2414 – CFS v2.1.22 - Script 'excdas_dump.sh.ecf' was changed to add cdas1.tCCz.gpsipw.tm00.bufr_d data into the restricted data list. File gdas1.tCCz.gpsipw.tm00.bufr_d became restricted data once obsproc.v6.4.0 was implemented. Cfs_cdas copies this data into its own directory and this needs to change to restricted data as well. To be implemented on October 11 at 1145Z.

RFC #2430 – LSF v9.1.3 - IBM will add ecFlow-notify-enabled POST_EXEC scripts to devonprod[2] and devonprod[2]_shared queues in LSF on the production machine profile. This functionality is necessary for users to use ecFlow to schedule their jobs. This script is already used on the development machine LSF queues and will now be applied to several queues on the production machine profile. To be implemented on October 13 at 1400Z.

RFC #2432 – CDT v16.09 - IBM will install the latest version of the Cray Development Toolkit (CDT) on the Crays. This newest version includes updates to compilers and other tools, and specifically an update to the iobuff utility which is currently problematic. This version will not be made the default at this time, so users would need to specifically invoke the new version. To be implemented on October 13 at 1700Z.

The following NCO RFCs are in progress and may affect CPC:

None

Ocean Prediction Center

The following accelerated items were implemented this past week:

RFC #749 – OISST_ArcticImages.csh, crontab.utc v16.10.05 – File name changes made as part of RFC #695 resulted in blank images appearing on OPC's web page. Modified the crontab to create the images 30 minutes after the data should be available. Modified the image script to not create and send blank images, but send a warning email when data is missing. Implemented on October 5 at 1900Z.

RFC #750 – In preparation for a possible NHC COOP for multiple tropical cyclones, OPC's backup desk was given access to the NCWCP ATCF. Implemented on October 6 at 1630Z.

The following will be implemented the week of October 10, 2016:

RFC #751 – launch_sfc_anal.csh v2016.10.10 - The large color ocean surface analysis web images will be archived instead of the small images. This change provides greater flexibility when working with archive images. To be implemented on October 11 at 1230Z.

RFC #752 - The X virtual frame buffer script is being updated to send error notifications to OPC/OAB. Also, the color bit depth is being changed from 8 bit to 24 bit, since no issues with that setting have been observed on the test Compute Farm for more than 1 year. To be implemented on October 11 at 1230Z.

RFC #753 (OPC) - Update ETSS surge web images to be hourly and include a choice for total water level at MDL's request. Update both ETSS and ESTOFS images to include hourly 0.25 degree GFS EMSL data, replacing 3 hourly 0.5 degree PMSL data. Update the web page to display the new images and process run time monitoring for the new scripts. To be implemented on October 11 at 1500Z.

RFC #754 - web_monitor_extended_config.php v2016.10.13 - Remove references to the Model vs OI SST web images that are no longer used for model evaluation. To be implemented on October 13 at 1330Z.

The following RFCs are in progress:

None

The following NCO RFCs to be implemented the week of October 10, 2016 may affect OPC:

RFC #2398 – In order to verify that all preparations are made to ensure a successful shutdown of the Silver Spring Telecommunications Gateway (SSTG) prior to moving it to Boulder, NCO will shut down the network to the SSTG for 1 hour. NCO's Data Management Team and others will keep a close eye on any issues discovered during the shutdown and take action accordingly. Was to be implemented on October 5 at 1400Z; postponed until October 11 at 1630Z due to CWD. An admin message will be sent prior to the network being shut down.

RFC #2416 – pcpanl v1.2.2 - Update one source code ('nam_stage4_acc.fd/acc.f') to check for consistency in the dimension of input fields to be accumulated in the NAM PCPANL model. This is a measure to avert disruptions caused by bad input QPE files of abnormal dimensions. To be implemented on October 11 at 1215Z.

RFC #2429 – Configure VLANs in the NCO Core to allow configuration, testing, and deployment of the DX80 phones for the Hurricane Hotline system. To be implemented on October 12 at 1300Z.

RFC #2430 – LSF v9.1.3 - IBM will add ecFlow-notify-enabled POST_EXEC scripts to devonprod[2] and devonprod[2]_shared queues in LSF on the production machine profile. This functionality is necessary for users to use ecFlow to schedule their jobs. This script is already used on the development machine LSF queues and will now be applied to several queues on the production machine profile. To be implemented on October 13 at 1400Z.

RFC #2432 – CDT v16.09 - IBM will install the latest version of the Cray Development Toolkit (CDT) on the Crays. This newest version includes updates to compilers and other tools, and specifically an update to the iobuff utility which is currently problematic. This version will not be made the default at this time, so users would need to specifically invoke the new version. To be implemented on October 13 at 1700Z.

The following NCO RFCs are in progress and may affect OPC:

None

Weather Prediction Center

The following accelerated items were implemented this past week:

RFC #755 – The masking of QPF values greater than 0 was changed to 0.01. This alleviates overinflated QPF in the disaggregation by eliminating quotient values <0.01. Implemented on October 3 at 1900Z.

The following will be implemented the week of October 10, 2016:

RFC #756 - WPC Winter Weather Desk Scripts v2016.10.10 – Implement a few updates to the winter weather scripts: Bug Fixes: add cleanup logic to the GRIB2 generation scripts to ensure only the 8 most recent cycles are kept on the ftp site. Fix an issue with the ftp GRIB2 status file not updating correctly. Status file was showing the "final" grids as "pre-collaboration". Enhancements: add ice-to-liquid ratio (ILR) parameter to the GEMPAK grids generated by the winter weather blender. To be implemented on October 11 at 1400Z and should be completed by October 14.

The following RFCs are in progress:

None

The following NCO RFCs to be implemented the week of October 3, 2016 may affect WPC:

RFC #2398 – In order to verify that all preparations are made to ensure a successful shutdown of the Silver Spring Telecommunications Gateway (SSTG) prior to moving it to Boulder, NCO will shut down the network to the SSTG for 1 hour. NCO's Data Management Team and others will keep a close eye on any issues discovered during the shutdown and take action accordingly. Was to be implemented on October 5 at 1400Z; postponed until October 11 at 1630Z due to CWD. An admin message will be sent prior to the network being shut down.

RFC #2416 – pcpnl v1.2.2 - Update one source code ('nam_stage4_acc.fd/acc.f') to check for consistency in the dimension of input fields to be accumulated in the NAM PCPANL model. This is a measure to avert disruptions caused by bad input QPE files of abnormal dimensions. To be implemented on October 11 at 1215Z.

RFC #2429 – Configure VLANs in the NCO Core to allow configuration, testing, and deployment of the DX80 phones for the Hurricane Hotline system. To be implemented on October 12 at 1300Z.

RFC #2430 – LSF v9.1.3 - IBM will add ecFlow-notify-enabled POST_EXEC scripts to devonprod[2] and devonprod[2]_shared queues in LSF on the production machine profile. This functionality is necessary for users to use ecFlow to schedule their jobs. This script is already used on the development machine LSF queues and will now be applied to several queues on the production machine profile. To be implemented on October 13 at 1400Z.

RFC #2432 – CDT v16.09 - IBM will install the latest version of the Cray Development Toolkit (CDT) on the Crays. This newest version includes updates to compilers and other tools, and specifically an update to the iobuff utility which is currently problematic. This version will not be made the default at this time, so users would need to specifically invoke the new version. To be implemented on October 13 at 1700Z.

The following NCO RFCs are in progress and may affect WPC:

None

Please note that security-related RFCs are never listed in the RFC memo.

---- OPERATIONAL ANNOUNCEMENTS ----

The CPC/OPC/WPC Configuration Management documents are available at <https://sites.google.com/a/noaa.gov/nws-ncep-nco-cm/>.

Please review these documents if you have questions prior to submitting changes for CPC/OPC/WPC configurable items.

Users who wish to view their network utilization via the Scrutinizer appliance may request access from NCO/IWSB. Please send an account request to the NCWCP Helpdesk at NCWCP.helpdesk@noaa.gov.