

November 6, 2015

MEMORANDUM FOR: Distribution Email

FROM: Chris Caruso Magee  
Configuration Manager, NCEP Central Operations

SUBJECT: Scheduled Operational Changes and Upgrades

**NCO College Park**

The following accelerated items were implemented this past week:

RFC #1440 – For the CTBTO website, increased the default max\_execution\_time from 30 seconds to 300 seconds. Done because the CTBTO HYSPLIT files were timing out on upload to the site. Implemented on October 30 at 1600Z.

RFC #1441 – Great Lakes Wave model v3.3.8 – Removed a bug in the ice-handling scripts 'ush/waveice\_glw.sh' and 'ush/imsice\_gl.sh'. The bug caused an incorrect internal processing if the climatology ice file 'imssnow96' from a previous day was used instead of a currently unavailable NIC ice file. Implemented on November 3 at 1400Z.

RFC #1442 – Adjusted varnish web cache rules to provide special configuration for the new IDP aviationweather.gov site, to allow caching without affecting site functions. Also changed the mounts for the site on operational web servers. Implemented on November 3 at 1545Z.

RFC #1443 – For NIDS socket software, added client and server executables and added rules to allow traffic in. Implemented on November 3 at 2330Z.

RFC #1444 - NCODF Dataflow – Modified the DBNet software on NCODF9 and NCODF10 to begin sending Himawari satellite data from IDP to the test CTBN AWIPS-II system in Silver Spring. Implemented on November 5 at 1600Z.

RFC #1445 – Made a change to allow NCEP IDP Himawari data to be sent to AWC's DBNet server. Implemented on November 5 at 1500Z.

RFC #1446 – Remounted /common/data/model/com/gens globally in order to further unload the nastore8 network interfaces. After remounting the volume, clients will be able to access the data through the nastore7 network interfaces. This will be more efficient because the volume's storage is on nastore7. Implemented on November 5 at 1830Z.

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The following will be implemented the week of November 9, 2015:

RFC #1448 – Old (non-production) versions of source code in /nwprod and /nwprod2 on WCOSS will be removed. This is being done to free up disk space on WCOSS. To be implemented on November 9 at 1200Z.

RFC #1449 – Make a change to VLab/IDP to restrict certain files from being downloaded when the request originates from AWIPS. To be implemented on November 9 at 1300Z.

RFC #1450 - Mount /common/data/apps/nwstg/public/ to OPC's IDP machines. This mount point will provide meteorological data that OPC needs for N-AWIPS migration. To be implemented on November 9 at 1600Z.

RFC #1451 - Install GnuPlot on several OPC servers. OPC will use GnuPlot to display differences in wave height and wind speed between 2 datasets from the same satellite/sensor (SARAL (Satellite with ARgos and ALtiKa)) and the same time/location, but which followed different processing paths from the satellite AltiKa sensor to reach OPC. To be implemented on November 9 at 1600Z.

RFC #1454 – HYSPLIT v7.3.2 - Increase the wall clock for the HYSPLIT CTBTO forecast job from 90 minutes to 210 minutes to deal with increasing CTBTO requests. To be implemented on November 10 at 1200Z.

RFC #1455 – prod\_util v1.0.2 - Upgrade prod\_util to allow the parallel dbn\_alert to use the DBN type, SBN\_EVAL, to send pcom data to nomads for evaluators. Also adds the date2jday.sh. To be implemented on November 10 at 1200Z.

RFC #1456 – bufrlib v11.0.1 – Update the NCEP BUFRLIB to fix a bug involving a variable that was not being saved between successive calls to a particular subroutine and which in very rare cases could result in the loss of compressed output subsets. To be implemented on November 10 at 1200Z.

RFC #1457 – Make a change to NCO's web servers used for NOS/OCS/MCD (Marine Chart Division) ENCD (Existing Navigational Chart Data) to allow clients to use SHTML pages in an iframe on their pages only for the specific files that need to be served in this way. To be implemented on November 10 at 1300Z.

RFC #1458 – WCOSS Dataflow v1.73.0 – NCO's SPA and Dataflow teams will make changes to WCOSS in preparation for CPC making a file name change to their RCDAS data. The changes will run 1 week in parallel and move permanently on the 17th. To be implemented in parallel on November 10 at 1300Z.

RFC #1459 – g2tmpl library v1.4.0 – ‘libg2tmpl’ (GRIB2 table support library) will be upgraded from v1.3.0 to v1.4.0. Changes include: adding more parameters and updates to table 4.2-0-20, adding four types of aerosols in table 4.233. The module for v1.4.0 will become the default version in /nwprod2/lib/modulefiles. To be implemented on November 10 at 1400Z.

RFC #1461 - Brocade firmware BIN file v8.30C 0 – On WCOSS – Luna, upgrade the Brocade firmware to fix an LACP LAG reassembly issue on Luna and eventually Surge when it comes out of acceptance. One of 4 connections went down and the automatic reassembly of the LAG with the remaining 3 connections failed and some nodes were not ping-able. This update will address the known defect in the Brocade. To be implemented on November 12 at 1400Z.

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The following items are in progress:

RFC #1379 – WCOSS Dataflow v1.71.0 - Modify the Dataflow Mirror Utility on WCOSS to begin pulling in the FNMOC data from IDP instead of the Gateway. This is in support of the NWSTG transition. Until the IDP BB servers are stood up in CP, the SDMs’ BB will be the only FNMOC flags. The SDM will keep the same procedures as they do today and notify Tech Control. Tech Control will continue to be the POC with FNMOC. The granularity of number of files missing will be added to Dataflow’s BB to match with current TG output. Was to be implemented on October 15 at 1200Z; FNMOC transition issues caused this to be delayed. Implementation began on October 27. Expected completion date is TBD.

RFC #1424 – NCOSRV Dataflow v2.13.0, WCOSS Dataflow v1.72.0 - The DBNet software on NCOSRV and WCOSS is being modified to begin sending parallel versions of the EKDMOS, GFS MOS, RTMA, URMA, and the new National Model Blend (NMB) to the parallel NOMADS site in preparation for the upcoming NMB evaluation. Implementation began on November 2 at 1300Z and should be completed by November 10.

RFC #1431 – NCODF Dataflow v2.12.0 – Modify the DBNet tables on NCODF to begin sending Himawari data to a new AWC DBNet server. Implementation began on November 3 at 1300Z; was to be completed by November 5; AWC and NCO are still working out a few issues so this should be completed the week of November 9.

RFC #1435 – GPFS v4.1 (on Tide) - Enhance the existing WCOSS - Tide phase-1 and phase-2 storage solution by adding metadata-only GPFS NSD servers and changing the existing data-and-metadata NSD to data-only servers. Existing data will be "restriped" to separate the data and metadata. Implementation began on November 4 at 1200Z and should be completed by December 4. NCO/IDSB will send notification to users via the WCOSS-announce mailing list should planned work be impactful to users.

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The following NCO RFC was approved with an implementation date TBD:

RFC #1357 – RTOFS global v1.1.0 – Major upgrade of the Global RTOFS model. See the TIN at: <http://www.nws.noaa.gov/os/notification/tin15-36global-rtofsaaa.htm> for details. This was advertised as having an October 6 implementation date but this implementation was postponed due to a delay in the Navy's HYCOM model upgrade. Once the HYCOM upgrade is implemented, the Global RTOFS will be scheduled for implementation. Notification will be given in advance so users may prepare for any changes which may affect them. This upgrade of the Global RTOFS was approved by the NCEP Director.

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The following have been delayed from their initially advertised implementation dates and are on hold:

RFC #1320 – Himawari v1.2 – Himawari was to be declared operational on IDP effective November 3 at 1200Z. There is a recurring outage that is seen every Saturday on NESDIS's source server in College Park. This server provides Himawari data to NCO, so the outage's cause must be mitigated before Himawari may be declared operational on IDP

RFC #1370 – GEFS v11.0.3 – Major GEFS upgrade. See the TIN at: <http://www.nws.noaa.gov/os/notification/tin15-43gefsaab.htm> for specifics. This was scheduled for an October 14 implementation and was conditionally approved at the October 8 NCO CCB, but it was not approved by the NCEP Director at the October 9 briefing, so it is on hold until a future date.

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**NCO Silver Spring – NWSTG**

The following accelerated items were implemented this past week:

None

The following will be implemented the week of November 9, 2015:

None  
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The following items are in progress:

RFC #1380 – The FNMOC data pull of Grib2-bundled and ocean data are being transitioned to IDP in College Park. IDSB at Silver Spring no longer needs to pull the data from FNMOC and also monitor the pull. This RFC is to stop that process. The pull of Grib2-bundled data and BB monitoring of it was to be discontinued on October 15 at 1400Z; FNMOC transition issues caused this to be delayed. The Grib2 data pull was stopped on October 28. The discontinuation of the ocean data pull is TBD.

RFC #1387 - The replication servers at site A and site B crashed with signal 11 once every 10 - 14 days. SAP has suggested we upgrade it to the next version to fix the issue. There are 4 production replication servers. We will do the upgrade one server at a time and start at site B first. Implementation began on October 19 at 1330Z and should be completed by November 30.

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**NCO Silver Spring – One NWSnet (OPSnet)**

The following accelerated items were implemented this past week:

RFC #4286 – Established access between IDP Himawari systems and the AWIPS CTBN system. Implemented on November 2 at 1500Z.

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The following will be implemented the week of November 9, 2015:

RFC #4269 – Grant access to the US Bureau of Reclamation to send river forecast products from the California Nevada River Forecast Center in Sacramento. To be implemented on November 9 at 1500Z.

RFC #4283 – Grant access from Alaska Region Headquarters to Environment Canada in order to retrieve grib data from Environment Canada. To be implemented on November 9 at 1500Z.

RFC #4290 – Advertise AWIPS routes to NCEP in support of the IDP OCONUS migration. To be implemented on November 9 at 1400Z.

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The following items are in progress:

RFC #4241 Implement access for new Alaska region subnets in support of their migration to a new IP addressing scheme. Implementation began on October 26 at 1400Z and is expected to take up to 2 weeks to be completed.

RFC #4281 – Migrate all OPSnet services on Verizon at Boulder to the OPSnet access point 02, serviced by NWAWE. Implementation began on October 30 at 1400Z; was to be completed by November 5; new completion date is November 13.

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**NCO Kansas City**

The following accelerated items were implemented this past week:

None

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The following will be implemented the week of November 9, 2015:

RFC #1452 – In preparation for the new racks for GRB (GOES ReBroadcast), move AWC systems 6509 and 7306. To be implemented on November 9 at 1800Z.

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The following items are in progress:

RFC #1402 – Redirect traffic from the legacy Pacific Region site to the weather.gov content management system (CMS) pages. Redirect some field office names to Southern Region pages. Implementation began on October 21 at 1500Z; Pacific Region completed on October 22; Southern Region deployed in Kansas City on October 22. A helpdesk ticket was opened for the Southern Region deployment in College Park, so the completion date for this work is TBD.

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**NCO OCONUS**

The following accelerated items were implemented this past week:

None

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The following will be implemented the week of November 9, 2015:

RFC #1453 - BGP & OSPF changes 15.4(3)S3 - Add two public WAN pairs to Century Link cloud routing table to support the install of the GRB (GOES ReBroadcast) system at the Anchorage Forecast Office. To be implemented on November 10 at 0000Z.

RFC #1460 – Make a change to introduce the AWIPS routes from OPSNet to the CenturyLink routing table for the purpose of migrating OCONUS AWIPS to the IDP network. To be implemented on November 10 at 1800Z.

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**NCO Boulder**

The following accelerated items were implemented this past week:

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The following will be implemented the week of November 9, 2015:

None

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The following items are in progress:

None

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**RFCs that are security-related are not included in the RFC Memo.**

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---- OPERATIONAL ANNOUNCEMENTS ----

1. The WCOSS Implementation Standards are available at

<http://www.nco.ncep.noaa.gov/pmb/docs/>.

Please adhere to these standards when submitting changes for the WCOSS.

2. Upcoming major changes to NCEP's production suite and details on any product or timing changes associated with upcoming implementations can be viewed at the following website:

<http://www.nco.ncep.noaa.gov/pmb/changes/>

Test data for major changes should be available six weeks prior to implementation. Anyone wishing to receive formal notice of the final pre-implementation testing and the opportunity to provide feedback on the proposed changes can subscribe to the Model Evaluation mailing list via:

<https://lstsrv.ncep.noaa.gov/mailman/listinfo/ncep.list.modelevelinfo>

3. Maintenance of subscriptions to the Scheduled Operational Changes and Upgrades mailing list can be performed via the following website:

<https://lstsrv.ncep.noaa.gov/mailman/listinfo/ncep.list.rfcmemo>