

CONDUIT Update

Rebecca Cosgrove

NCEP/NCO/Production Management Branch March 11, 2010







Background



- Meteorology degrees
 - BS from Cornell '96
 - MS from Penn State '98
- 10 years as developer/implementer of MOS statistical guidance
- NCEP/NCO Dataflow Team Lead since April 2009
- Learning as I go!



CONDUIT



Cooperative Opportunity for NCEP Data Using IDD Technology

- CONDUIT currently fed by three loadbalanced high-end servers
- Data sent from CCS to Netapp serving NCEP ftp server and then inserted to LDM queue on CONDUIT machines
- Currently serve 42 GB of GRIB2 data per day to three top tier CONDUIT systems.
- 6 GB LDM queue



Recent Changes



- SREF upgrade
 - Change in ensemble make-up
 - Hourly resolution to 39-hr for CONUS grids
- RUC extension to 18 hours for all 24 cycles
- Access granted to PSU machines to serve as tier 1 distribution point for Eastern United States



Content Changes



- Submit request to NCO Dataflow team at ncep.pmb.dataflow@noaa.gov
- NCO determines availability of data
- NCO tests gribinsert utility
 - Work with developer if modifications are necessary
- NCO obtains Change Control Board approval
- User notification?
- Vetting of requests?

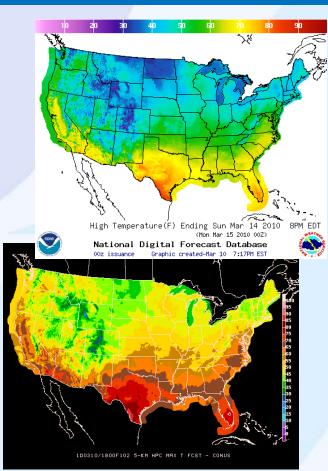


Recent Requests



NDFD forecast grids

- Products on NOAAPORT are HPCgenerated day 4-7 guidance
- NDFD grids only disseminated on NWS ftp server
- Inclusion on NOAAPORT determined by linkage to NWS mission
- Could the grids be retrieved from ftp server?





Recent Requests (cont)



- Real-time Ocean Forecast System (RTOFS) on native grid
- RTMA Requests
 - Operational NAM precip grids
 - EMC's Experimental RTMA grids
- Rapid Refresh



What is Available?



 What is the benefit in providing data on CONDUIT that's already on NCEP ftp server?



Available on NCEP FTP



- HIRES 4km output nests
- Real-time Ocean Forecast System
- Hurricane model output
- Climate Forecast System products
- RTMA CONUS 5km
- Assimilation data for GFS, NAM and RUC
- Gridded MOS*



What is Available?



- What is the benefit in providing data on CONDUIT that's already on NCEP ftp server?
- Is there interest in NCO model parallels prior to implementation?



NCO Parallels



- Typically 30 days in duration
- Upcoming parallels:
 - Global multi-grid wave model upgrade
 - Hurricane wind wave model upgrade
 - GFS resolution increase

Use new LDM feed type?



What is Available?



- What is the benefit in providing data on CONDUIT that's already on NCEP ftp server?
- Is there interest in NCO model parallels prior to implementation?
- Do you want experimental data if we can't provide 24x7 support or control content changes?



Experimental Data



- Recognize the demand
- Providing this data represents a paradigm shift for NCO