CONDUIT Update

Cooperative Opportunity for NCEP Data using IDD Technology

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Agenda

- Technology Refresh
- Data available today
- NOAAPORT/SBN Expansion
- Upcoming NCEP model changes
- NOAA's IDP
- User Survey
- Discussion

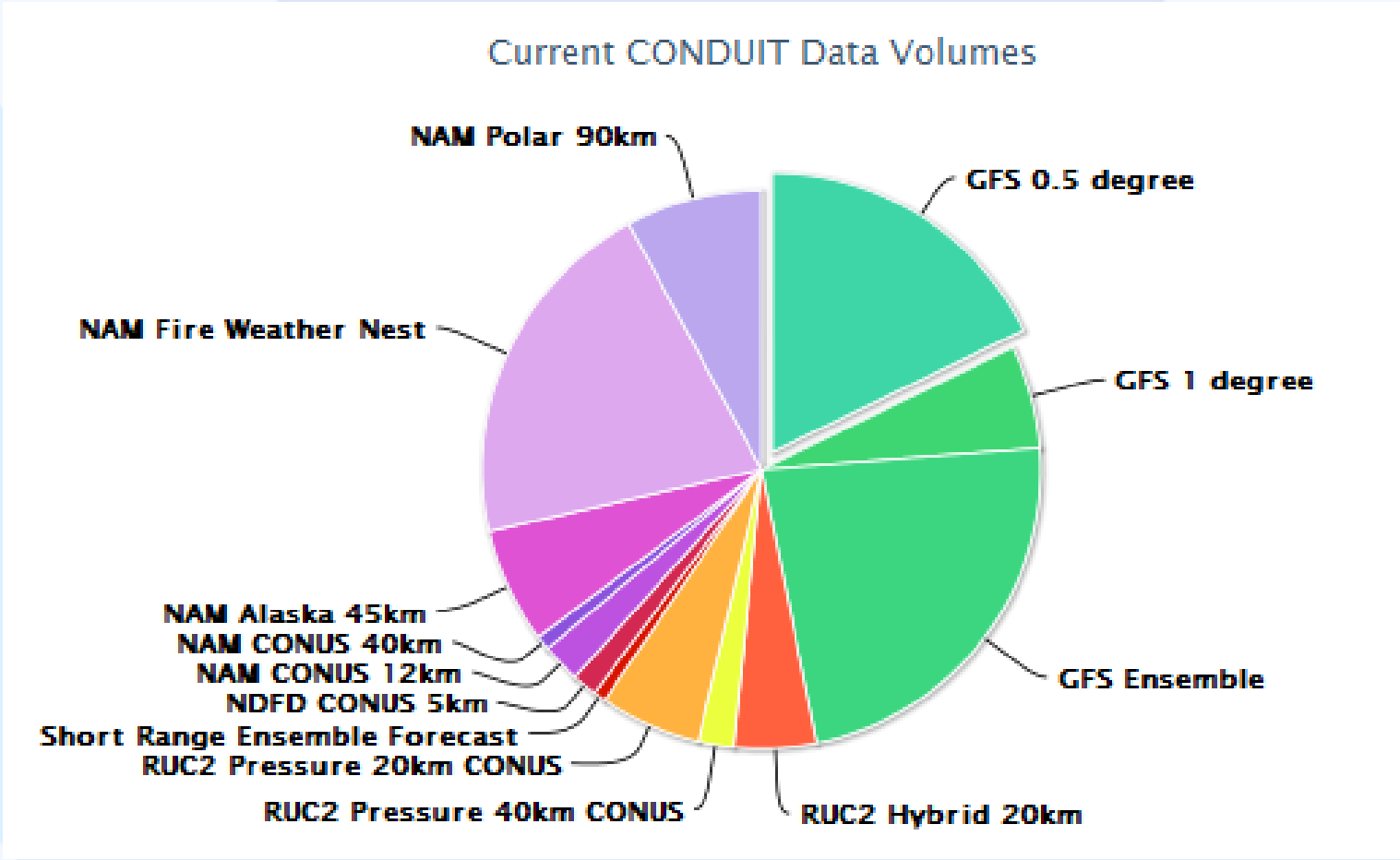
CONDUIT Technology Refresh

- New CONDUIT systems in NCWCP (College Park) operational in June 2014. Significantly larger LDM queues (20 GB) will allow for expansion of the datastream.

- Unidata and NCEP agreed to expand the CONDUIT datastream on NCWCP systems even though Boulder systems can not be expanded until late-2015. In the event NCWCP is down, CONDUIT will have less content

- It's time to add data!

Data in CONDUIT Today



- **Also 2.5km GFS, and "RUC2" entries are now RAP, NDFD is now 2.5km**

NOAAPORT

- **Content on NOAAPORT is not duplicated on CONDUIT**
- **We have seen a push to add functionality to AWIPS, and therefore add data to the NOAAPORT**
- **Added to NOAAPORT recently:**
  - 2.5km Gridded MOS and Gridded LAMP
  - NAM DNG at 2.5km CONUS/3km Alaska
  - Global RTOFS in GRIB2
  - UnRestricted Mesoscale Analysis (URMA)
  - Extratropical Surge and Tide Operational Forecast System (ESTOFS) Atlantic
  - Global and Short-Range Ensemble member 2m temp & accumulated precip
  - Hurricane wave model (WW3)
  - Probabilistic Storm Surge (PSURGE)
- **AWIPS Data Delivery(DD) will impact what is put on NOAAPORT**
  - Items of interest to a few WFOs will be DD, not NOAAPORT
- **By October 1st Satellite Broadcast Network (SBN) will be expanded from 30 to 60 Mbps**

Coming to NOAAPORT

- ESTOFS Pacific
- RTOFS Atlantic in GRIB2
- WW3 wave steepness
- Extra Tropical Storm Surge at 2.5km
- GEFS ensemble mean and Climate Forecast System (CFS) max/min temp and precipitation

Completed NCEP Model Changes
potential options for CONDUIT

- **SREF Upgrade –** August 2012
  - 16 km output grid available – disseminated 1 hour later
- **HIRESW Upgrade** – June 2014
  - Introduced 5km full CONUS grid – not slated for NOAAPORT
- **New models not headed to NOAAPORT:**
  - **NGAC -- global inline aerosol forecast system**
  - **NOS models for Gulf of Mexico, Columbia River, and San Francisco Bay**
  - **North American Land Data Assimilation System (NLDAS)**

Upcoming NCEP Model Changes

- **High Resolution Rapid Refresh (HRRR)** – September 30, 2014
  - 2.5km data will be on NOAAPORT
  - 3km data will not – option for CONDUIT
- **Global Forecast System (GFS) upgrade** – November 2014
  - Upgrade model resolution to T1534 (~13km), T574 ENKF, extend high resolution to 10 days
  - 1 degree global grid will be added to NOAAPORT
  - 20km grids for CONUS, Alaska, Puerto Rico & the Pacific added to NOAAPORT
  - New 0.25 degree global output will not be on NOAAPORT
- **Global Ensemble (GEFS)** – FY15Q2
  - T574L64 out to 168 hrs, T382L64 to 384 hrs
  - 3 hourly output
  - New 0.5 degree output will be created but not on NOAAPORT

NOAA's IDP

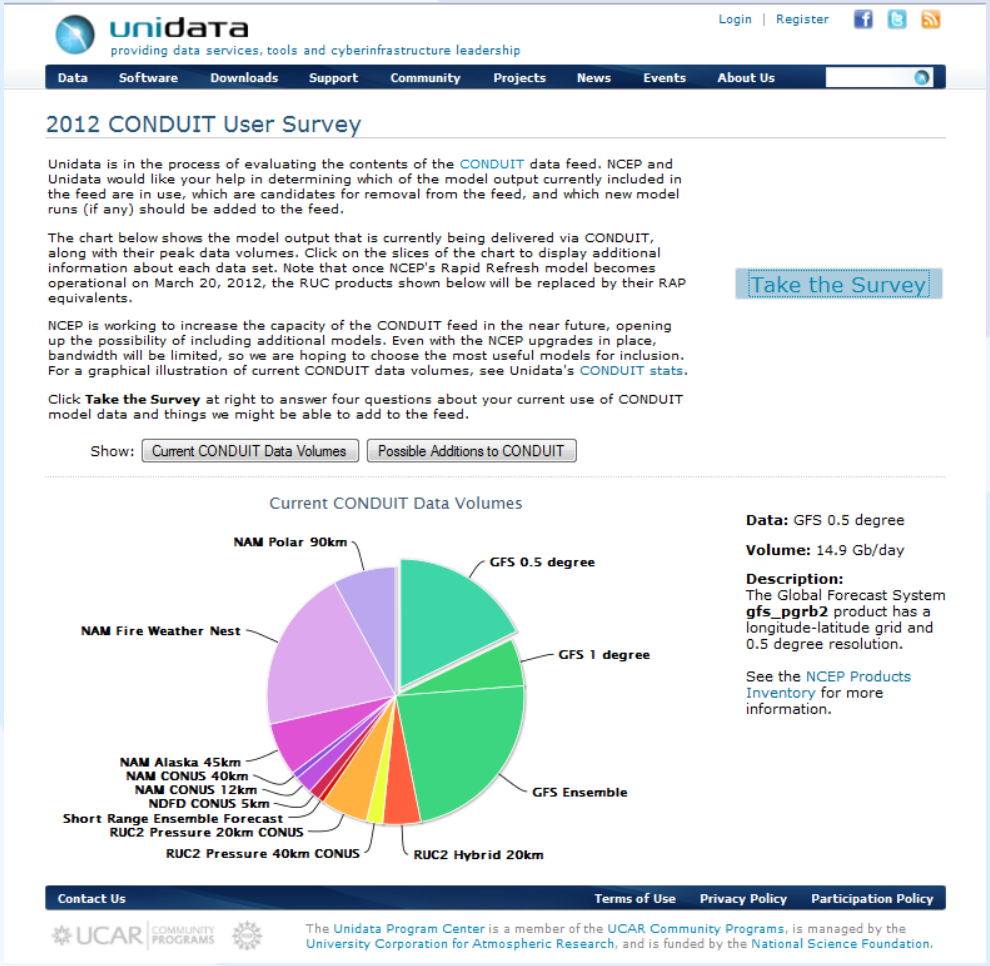
- NOAA's Integrated Dissemination Program (IDP) established to transform organization's dissemination capabilities from a collection of independent stovepipes to an integrated enterprise-wide dissemination service

- Primary IDP infrastructure foundation to be part of NCEP Central Operations in College Park, MD, with a back-up in Boulder, CO

- Multi-Radar/Multi-Sensor (MRMS) first IDP project to go operational Sept. 30th
- NOAA Enterprise GIS coming soon

2012 User Survey

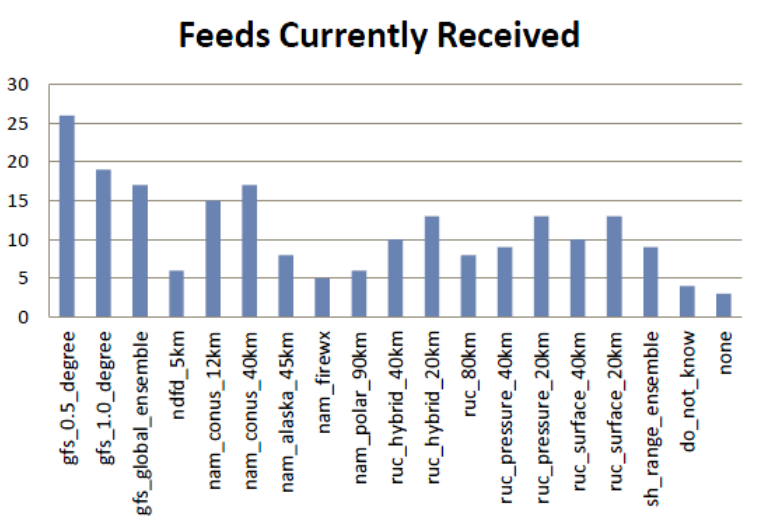
http://www.unidata.ucar.edu/community/surveys/conduit2012/2012survey_intro.html

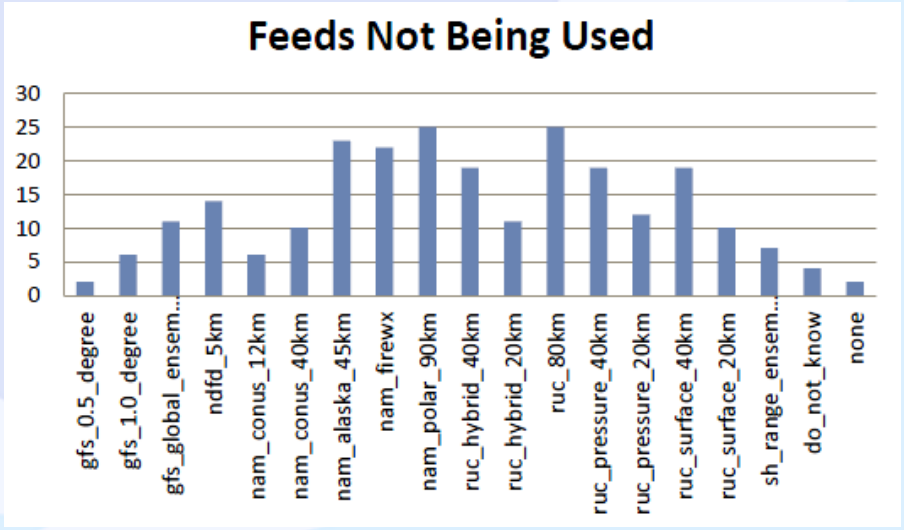


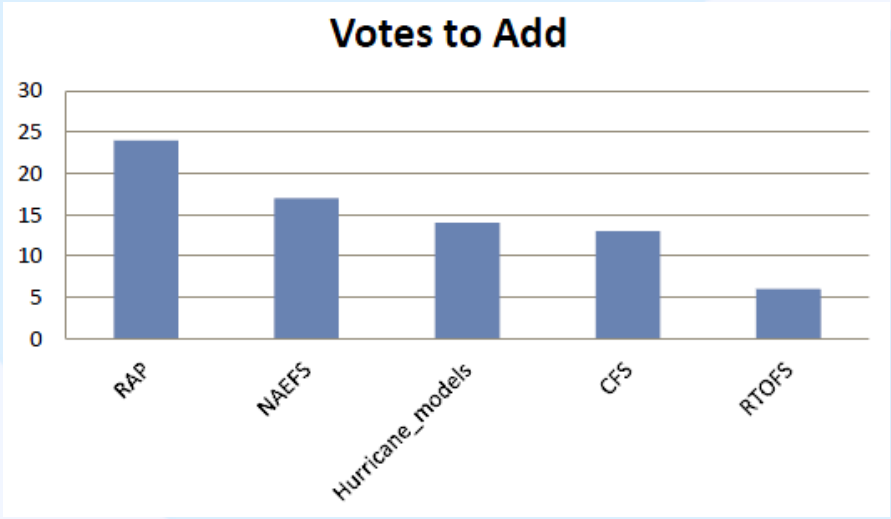
- What do you currently use?
- What do you not use?
- What should we add?

- Surveyed users March 14th – 30th, 2012

Survey Results







44 responses as of 4/2

Recommendations from 2012 Survey

- Remove all 40km RUC products
- Remove 45km NAM Alaska
- Remove 90km NAM Polar

- Add 32km RAP products when available
- Add bias-corrected NAEFS output (or raw?)
- Need more information from CFS and Global RTOFS requests due to large size of datasets

Next steps?

Questions/Discussion