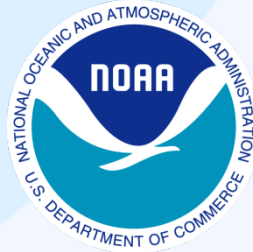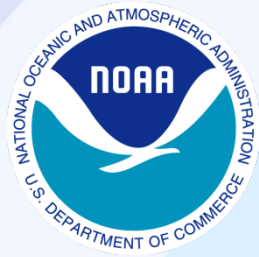# CONDUIT Update
Cooperative Opportunity for NCEP Data using IDD Technology

Rebecca Cosgrove/Scott Jacobs

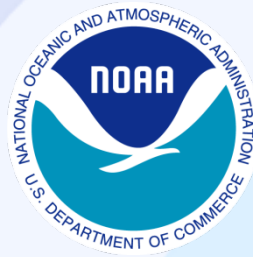### NCEP Central Operations

September 17, 2012

Agenda

- Activities for last 6 months
- CONDUIT Technology Refresh
- Plan for upcoming CONDUIT changes
- Future plans
- Discussion

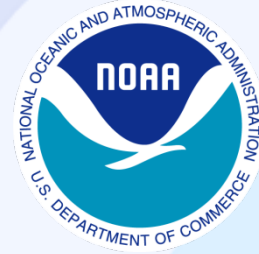# Activities April – August 2012

- **Bulk of NCO Dataflow Team Effort focused on move to new NCWCP building**
  - Move was a huge success
  - Building is wonderful!
- **Rapid Refresh (RAP) Implementation**
  - RUC 80km, 40km native levels and all surface grids removed from CONDUIT
  - All other RUC grids replaced with corresponding RAP product
- **SREF Implementation**
  - Eta and RSM members removed from CONDUIT
  - New ensemble comprised of 7 members each NMMB, NMM WRF and NMM ARW – all sent to CONDUIT
  - Added a few ensemble percentage products to CONDUIT
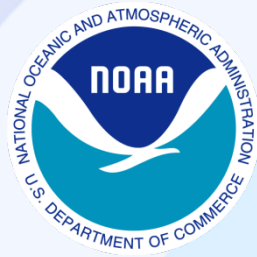
CONDUIT Tech Refresh

- Sizeable additions to CONDUIT not possible due to 6GB LDM queue

- Currently working on technical refresh
  - New systems have 20GB LDM queue
  - Change from 6 LDM boxes at two locations to 4 LDM boxes at two locations based on WOC recommendation

- Week of 9/10 began testing live feed with Unidata staff

- Once testing is complete we'll transition to the four new servers – estimate mid-October

- Then datasets can be added to CONDUIT!

4

User Survey

- Surveyed users March 14th – 30th, 2012
- 47 responses

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

5

Upcoming CONDUIT Changes
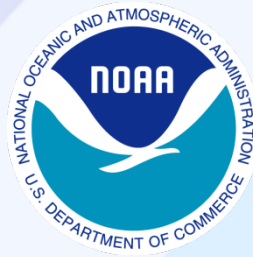
Based on Survey results

- Remove 40km RAP, 45km NAM Alaska, 90km NAM Polar products

- Add 32km RAP products

- Add 1 degree NAEFS output

- Add hurricane model output

Based on recent feedback from CONDUIT users

- Add full grid 218 NAM 12km dataset

- Add 13km RAP grids

Need Guidance

- RAP – 13km or 32km – which first?
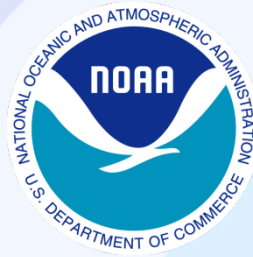 - 24 said 32km RAP in survey, 4 or 5 wanted 13km RAP in recent email exchange – I'm leaning towards 32km first and see if they still want the 13km after that

- NAEFS 1 degree grids
  - Raw or bias-corrected?

- Hurricane models
  - GFDL has 1 degree, 1/6th and 1/12th degree grids
  - HWRF has 5 different output grids – .25 degree parent down to 0.03 degree nest or 3 domains combined

- CFS and Global RTOFS
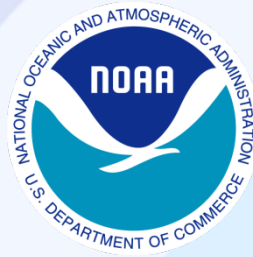 - Need Unidata staff to contact respondents for more specifics
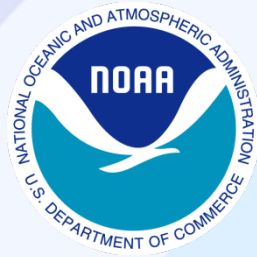
What's next?

- Not offering usual list of other datasets available – we've got enough on the list for the next 6 months!

- Next 12 months NCEP will be working to transition to new supercomputer – WCOSS
  - As a result, no model upgrades till Fall 2013
  - There is possibility of adding already-existing model data to CONDUIT during that period
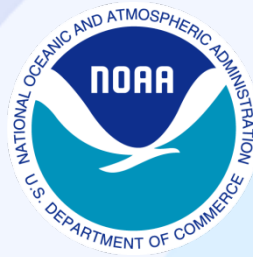
HRRR

- I knew you'd ask ☺

- NCEP has a requirement to get the HRRR data for internal use by the NCEP Centers

- I ask that Usercomm send a request to my boss, Ben Kyger, stating the value of the HRRR to the university community and ask that he provide it via CONDUIT

Questions/Discussion