

# AIRPACT and ClearSky Activity Report

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Pullman, WA

# AIRPACT Status Topics

- Contract period: July 2010 -- June 2011
- GOALS
- WORKPLAN
- DELIVERABLES
- Other AIRPACT related activity / progress

# AIRPACT GOALS

- Improve Model Performance
  - Support of analyses (Nitrate in Basin, Boise Study)
- Maintain AIRNow data stream
  - Maintained
- Keep 2 years of results available graphically
  - Original graphics since 6/08 & Flash since 3/09.
- Keep 2 weeks of gridded output files
  - Kept! Archival/backup performed monthly.
- Consult with NW-AIRQUEST on improvements
  - Responsive to NW-AIRQUEST 'consultation'?

# AIRPACT WORKPLAN

- Provide daily forecasts and real-time verification statistics and access to underlying data.
- Update emissions inventory and processing: SMOKE v2.4, New EI, SMARTFIRE, and Woodstove experiments.
- Update CMAQ to 4.7
- Implement a Change Log
- Identify New Users
- Reports on progress and state of model

# AIRPACT

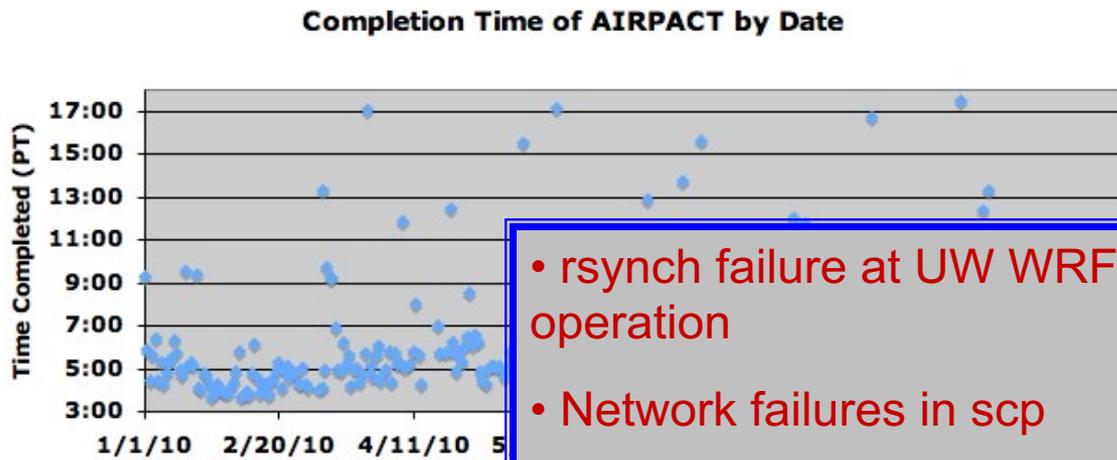
- SMOKE v2.7 *being used for AIRPACT-4*
- New EI files *being used for AIRPACT-4*
- SMARTFIRE (*work partially complete...but issues*)
- CMAQ update to 4.7.1 for AIRPACT-4
- Change Log -- Implemented online for both AIRPACT-3 and AIRPACT-4 at ...  
[sites.google.com/site/airpactchangelog](https://sites.google.com/site/airpactchangelog)
- Change log is linked to AIRPACT sidebar.

# AIRPACT Deliverables

- Graphical AQ fcsts by 7 AM PST Daily (95%).
- Archival of runs and results.
- Semi-annual report submitted January 31, 2011.
- State-of-the-Model report due July 30, 2011.

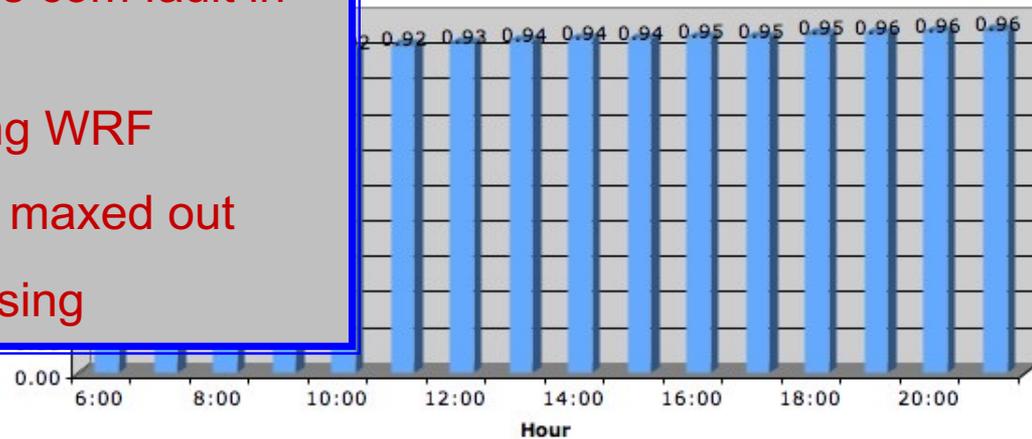
# AIRPACT

- Graphical AO forecasts by 6 AM Daily (95%)?



- rsynch failure at UW WRF operation
- Network failures in scp
- Interprocess com fault in cluster
- Late-running WRF
- Disk space maxed out
- Library missing

of AIRPACT by Hour



# AIRPACT

Archival of runs and results:

- Graphics available online for 2 years plus.
- Deposition results online for 2 years plus.
- Archival conducted monthly at LAR:
  - for 25 hrs of MCIP and CCTM output files
  - to removable drives (1.5 and 2 Tb) in usb-mounted disk-docks.
  - ICON files also archived (2009-2010, & partial)

## Presentation to the CMAS 2010 Conference 10/11/2010, Chapel Hill, NC

Louisa Emmons assimilates MOPITT CO for hours observed, globally, adjusting MOZART-4 run VCD CO throughout profiles.

AIRPACT gets hourly MOZART results for all species, all four boundaries, and converts to SAPRC chemistry.

Made live in AIRPACT-3 February 1, 2011

# AIRPACT-3 Work Going forward?

- Solve SMARTFIRE and blend wildfire emissions with other for summer and fall runs.
- Run in parallel with AIRPACT-4 for how long?
- W<sub>126</sub> exposure metric development?  
(-3 and -4)?
- Other metrics such as selected emissions and concentrations ratios?
- Summer undergraduate research project:  
Evaluation for O<sub>3</sub> by Breon ShanKara, DePauw Univ.



Discussion?