

Recap of the April 29, 2008 -- NW-AIRQUEST Conference Call

On the call:

- Washington State University (Joe)
- Washington Department of Ecology (Clint, Sally, Ranil, and Jeff)
- Oregon Department of Environmental Quality (Phil & Jeff)
- Idaho Department of Environmental Quality (Bruce, Rick, Wei, Yayi, & Chris)
- EPA (Bob & Rob)
- Environment Canada (Colin & Andrew)
- National Park Service (Elizabeth)
- Puget Sound Clean Air Agency (Mike)

Conference Call Agenda Items:

Profiling Boundary Layer in the Pacific Northwest (Mike) -

- PowerPoint presentations on each of these pieces of equipment will be available soon on the AirNow Web page under the link for the 2008 Air Quality Conference.
 - Vaisala - Mixing height algorithm available in this product, but it picks up clouds as it profiles
 - Each piece of equipment is \$30,000 to \$40,000
 - Takes about 10 minutes to set up
 - About the size of a sleeping bag
 - Kipp & Zonen MTP5 - Vertical temperature profiler that looks at oxygen molecules
 - Each piece of equipment is \$130,000 to \$140,000
 - 1000-meter vertical profile
 - Can be set to run as frequently as you like
 - Recently conducted a comparison with met towers
 - Takes about 15 minutes to set-up
 - About the size of a sleeping bag
- Mike feels more comfortable with the MTP5
- He's interested in deploying these profilers in their two PM2.5 Nonattainment Areas (Darrington and South Tacoma) by July of this year
- How can we incorporate profiling into our PM2.5 and ozone work?
- Can we do a summer boundary layer for ozone?
- Can we utilize one of these pieces of equipment for wildfires in eastern Washington?

Annual Meeting Time and Location (Bruce and Clint) -

- Discussion of a move to a spring timeframe for the annual business meeting and possible permanent, central location for the meetings in Pullman, Washington (WSU):
 - o Bruce stated that the reports on products are more timely in the spring and that helps with discussion of work plans and the direction we'll go with these products - makes sense to do everything in spring to simplify the process
 - o There are too many meetings in the September - October period and folks seem to be less productive or motivated at the end of year November - December time we've held a couple of our annual meetings
 - o Spring meeting would allow more time before the Air Directors' meeting
 - o Fall is tough for EPA travel funding, so spring should work better for them
 - o Late March - early April works best for WSU, should the meeting be held in Pullman next spring or permanently, because of school wrapping up in late April - early May
 - o Location in Pullman allows Idaho to use Moscow for "in-state" with their travel, as well as being a location that has pretty equal travel time and distance for everyone in the region
 - o Some advantages exist for moving the meeting location around such as the need for an international airport
- The next meeting was tentatively set for early to mid-September (second week - Sept. 9, 10, 11) in Pullman, Washington (WSU), so as to avoid the beginning of the school semester and home football games
 - o More discussion on the location(s) for future meetings will be held, but the spring timeframe is to be adopted six months after the September meeting

Approval of January 22, 2008 Conference Call Minutes (Chris) -

- Minutes were approved and sent to WSU for posting on the Web site

WRF Changeover (Joe) -

- Both ClearSky and AIRPACT are switched over to WRF
- AIRPACT:
 - o Analysis time was limited
 - o Joe cannot see any major bias at sites between WRF and MM5
 - o Runs a little later for graphics with WRF
 - o MCIP tweaks the domain when WRF is used; Joe is adjusting it
- ClearSky:
 - o Combinations of defaults needs some work
 - o Tweaked the MCIP to CALMET to allow CALPUFF runs in ClearSky
 - o MCIP boundary layer was looked at and it is strange, or they are odd values
 - Boundary layer collapsing to zero at times or to 50m for 23 or 24 hours in MCIP
 - Clint added that WRF was having the same problems earlier, so the problem might come from there
 - Joe will look back at WRF and MCIP runs to see if he spots anything
 - Colin adds that Environment Canada will share information with Joe as well

WRF Domain Switch Impacts Canada (Joe and Colin) -

- About the same area is covered, but projection is not significantly different - center is
- Canada is concerned with corner of cell moves, not with the center of the domain move
- Emissions side (allocations) may be impacted for Canada if grid changes
- Prefers leaving CMAQ cells as they are and adjusting met
- More analysis is needed and Joe will share what he finds
 - o He can distribute the lat/lon of each cell
- The new lat/lon center can be shared with Canada as well
 - o Joe will send this on

Work Group and Project Updates (All) -

- Satellite vs. AIRPACT results are out on the NW-AIRQUEST Web site for 2007 and 2008 through March
 - o We can update our emissions as needed in the new 2009 emissions database; primarily looking at NOx emissions difference and how to get closer
 - Joe can share more on how we might do this, but it might be possible to use Hysplit back-trajectories and then list certain area's as "suspect on emissions"
 - o To view the satellite vs. AIRPACT results; go to the AIRPACT site and in the left bar select Satellite Products -- 2007 and 2008 through March is available with four different images
 - o Check this stuff out as it is part of the NASA ROSES Project!
- Speciation Work Group will have its next conference call May 8 at 10 - 11:30 PDT
 - o Eric and Stephanie will discuss nickel-vanadium observation on the call

Next Call -

- o Nothing was set-up, but Chris will send out the particulars for another Doodle poll in a few weeks regarding a call about six weeks down the road