

## **December 15, 2006 Conference Call Notes**

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We had a very good first call of the season on Friday, with some good discussion following [Blair's update on his modeling work for his thesis](#) (1.55 MB file). We also talked a bit about modeling efforts at UNC-A under the supervision of Doug Miller, plus a brief overview of Baker's "Typical NWFS" image, Sandra Yuter's instruments on Baker's farm, and a few other things. I didn't take a lot of detailed notes, but here is a summary of the some of the highlights:

Blair's "no flux" runs for the Feb 10, 2005 case have significantly much less upslope NWFS over Appalachians, and this may be due largely to absence of shallow instability layer. "No flux over Great Lakes" runs have decreases in some areas and increases in others, but main difference is an increase in flux over land as more instability can develop downstream over land. Perhaps due to more solar radiation over land if no lake effect and cloudiness immediately downstream from Lakes (which are removed or frozen over in this case). So role of Lakes is clearly important, but main role may be moisture supply (this is my editorial) since a decent amount of heat flux and shallow instability seems to be generated over land anyway. Really need to run simulations on other cases, and maybe some where immediate Lake Effect bands are absent. Access the the computer time at NCSU is still an option but Blair may or may not have time after his thesis is complete, so another option may be current students at NCSU to help continue some runs.

Doug Miller and students at UNC-A are doing similar runs on some of the NWFS cases we had identified, and using a higher resolution grid, so these results will be nice to see as well. The field experiment with special soundings is also underway, and they will let us know when an operational day has been declared. Hope to get some good NWFS events (and I think other types of events) captured with these obs.

Baker is still looking for input on his NWFS figure, especially the category names and the areas beyond which he is most familiar with (such as SE WV). Steve Z asked if this could be extended farther north along WV/VA border, and with some help in data collection Baker may eventually have some time to do this. He is OK with this image being posted on web sites for public awareness if sites want to. Would be nice to have some better verifying data sets to supplement the fairly sparse (and valley weighted) COOP reports, and one suggestion was the high res MODIS images following an event (Larry often downloads from UW-Madison), at least to get the areal pattern. This assume no previous snow cover and a nice clear day after the event before any melting takes place (not that uncommon in winter NW flow...at least the no melting part!).

Baker provided brief update on Sandra's MicroRainRadar and other instruments, and while data is flowing now it may not be available to us in real-time any time soon. He will share any interesting examples though, which he has already done.

Steve Z reported that WFO LWX has recently implemented a 5-cluster WRF-NMM which is now on-line and he sent the URL in an email last week, and I've included it here as well:  
[http://www.erh.noaa.gov/lwx/lwx\\_nmm12g/wrf.php](http://www.erh.noaa.gov/lwx/lwx_nmm12g/wrf.php)

All should have the list of sites we'd like all local models to generate BUFR soundings for (if in their domain), and Baker recently provided the lat/lon for Sandra's instruments in NW NC so that can be added to anyone's local model as well ( 81° 54'48" W, 36° 15'09" N ). We at RNK are still hoping to get a local WRF (leaning toward an ARW version vs NMM for variety from the NCEP) late in the winter or early spring.

Baker mentioned Smoky Mtn park snow climatology that he, Chip Konrad, David Hotz and Larry Lee are working on, and they can hopefully share some of this with us on a future call.

Finally, speaking of future calls, it seemed consensus was to go with Fridays at 10am again, probably once per month, and I'll try to get something scheduled for late in January for our next call.

Please feel free to add or correct anything I left off (I'm sure there's something), and I look forward to having some email discussion over the coming weeks if we can ever get cold air back in here (I have a feeling we will). Happy Holidays everybody!