September 24, 2010 Conference Call Notes

Provided by: Steve Keighton, SOO - Blacksburg, VA (RNK)

Research topics: Steve K, Larry, Doug, and Baker are beginning to work on categorization of NWFS events, and are still working on the best way to devise a scheme. Some utility in starting with basic synoptic scale classifications (such as was done for the Great Smoky Mtn Nat'l Park snowfall study) so we can understand how some of these events evolved from and the sorts of air masses involved, but also need to look at sub-types within what we are calling NWFS (pure upslope or post-frontal, wrap-around/deformation in comma head of large cyclone, clipper, etc). We are starting with a dataset of NWFS cases at Poga Mtn from 2006-2010, and may add a few more where parts of WV received snow yet Poga Mtn did not, and once we determine a final classification system based on a sub-set of all these cases, we will work to classify everything. Results will be posted on the Google sites page as appropriate and will brief on upcoming calls to solicit everyone's input.

Blair and others at GSP continue to collect data related to the Froude # relationship with NWFS events, and are beginning to put together some preliminary findings from this work. In the next couple of months they hope to brief us on what they have come up with.

Related to the CIPS Analog Tool for winter events, Chad Gravelle from CIPS at St. Louis Univ will be making a presentation for the staff at WFO RAH on Nov 5 (2pm) via GoToMeeting which all of us in the NWFS group will be invited to. Detail will be forwarded via email a couple weeks before the session. Hopefully this will be an opportunity to ask some more questions and learn more how this approach may provide some benefit in identifying potentially significant NWFS events.

Field project plans: Not much to report, other than proposal is about to be submitted by Baker and colleagues at ASU for several instruments in Boone that would likely provide some benefit to the NWFS challenge if funded, including an MRR and also a LIDAR to measure aerosols and clouds. Also Doug is submitting modest proposal to fund sondes and students for field operations this winter, but most likely launches taking place at Asheville.

Modeling: RENCI HME project focused on collecting the BUFR soundings from all contributing members for a coordinated list of stations within the domain, with the goal of producing ensemble sounding files which can be utilized with BUFKIT 10.7 software. This will be the first opportunity to look at forecast sounding info from a high res ensemble modeling system, and to begin to consider how this might be beneficial for forecasting aspects of NWFS events. The goal is to have these soundings available before winter weather gets underway.

Next call: We proposed Friday Oct 22 at 9am for our next call.