

NW Flow Snow Conf Call Minutes for Feb 10, 2012

Participants from ASU, UNC-A, WFOs GSP, JKL, and RNK, plus guest from WKU (with KY Mesonet)

These are somewhat abbreviated notes, from a relatively short call.

Kentucky Mesonet update:

We had the pleasure of being joined on the call by Dr. Rezaul Mahmood of the Geography and Geology Department at Western Kentucky University and Associate Director of the Kentucky Climate Center. Dr. Mahmood has expressed some interest in what our group is doing, and provided to us an overview of the KY Mesonet which was very interesting. KY Mesonet is a research grade operational network with redundant sensors and the data is quality assured. Dr. Mahmood offered that this is probably the most extensive and organized mesonet in the country next to the Oklahoma mesonet. There are currently a total of 61 stations, with 5 more planned in the coming year or so (including at least one...maybe I heard two...in the Black Mountain area in Harland Co). Of these 61 stations, 5 collect soil moisture and temperature data. Probes are deployed at 5 different depths for each of these locations. The data are available every 5 minutes. KY Mesonet was originally funded with federal \$, but currently is being totally supported by WKU, so one of Dr. Mahmood's busiest roles sounds like it is that of fundraiser. \$600K per year to keep going I think. There is a staff of 5 employees. All this is getting into MADIS of course, although we weren't sure what data sets the soil moisture was getting into (for use in model simulations). Dr. Mahmood did mention some studies which show the NARR data has a wet bias in terms of soil moisture. For more information about the Kentucky Mesonet (I couldn't write down everything that Dr. Mahmood shared), please visit:

www.kymesonet.org.

There are a variety of ways to view the data. Didn't see a way to view plotted data on a map, but since it's in MADIS it can be displayed on the madis.noaa.gov site, mesowest, and also available in AWIPS if you've added this network. I'd like to suggest we add this link to our NWFS page hosted by GSP.

We will be adding Dr. Mahmood to our email list and he will try to join us from time to time on our calls.

Research topics review:

Baker has a student working on a trajectory analysis of the Poga Mtn database for the years since 2006 (to expand on what he and Chip Konrad did back in the 2005 time frame), evaluating # of hours each parcel remains in the various

upstream domains. Also planning to separate in terms of 700mv UVV (subsidence or not).

GSP still interesting in Froude # aspects, and with Harry Gerapetritus' leadership is working on an event review. Ed Ray is also interested in this for his area.

We talked a little bit about the upcoming NWFS event this weekend (potentially best of the season) and a possible IOP, but for the western NC area it looks like a low end event in terms of snow, so Doug will wait for something hopefully higher end. Also, there was a very localized snow event early in the morning of Feb 9 along Watauga/Avery border, that escaped detection by all observations and remote sensors, but very light precip was reported at Grandfather Mtn just downstream, and Hawksnest Ski resort reported an inch or two of snow on their web site. Very light accumulations caused a 10-vehicle accident on Hwy 105 near the county border, but this was very isolated and must have been a very shallow and narrow band of snow oriented parallel to the NW flow. All precip at any reporting site had ended over 12 hrs ago.

Synoptic category work continuing with recent events, and VT student will work again on composite maps later this semester.

Models:

RNK still hoping to make some adjustments to local WRF early next week. Domain shift back NW a little, SPoRT LIS for soil moisture, and maybe RUC initialization vs. LAPS hotstart.

Future calls:

Next call has not been determined yet, but will likely be March 2 or 9th at 10am. Baker, Doug, Larry and Steve will get together Feb 23 to do more work on recent event categorization.