NW Flow Snow Conf Call Minutes for Dec 3, 2014 Participants from UNC-A, ASU, WFOs GSP and RNK

Small turnout for our first call in a while.

Sandy NWFS journal article:

For those not already involved in this, we are getting close to having a draft manuscript for WAF to send to the SR and ER SSDs for initial review. Some final clean-up of recent edits, and one more question on a figure, and it will be ready for this initial external review.

Field projects and instrumentation:

UNC-A sounding system and Poga Mtn sounding system will be ready to go this season for significant winter events. No funding this year to travel too much for upstream, but we talked about the possibility of Oak Ridge Labs making some special releases for some immediate upstream soundings for select events, and this may be especially helpful if we look more at Froude # application and to validate methods for calculating it upstream from gridded data.

No Poga Mtn MRR for next few years, and most HMT-SEPS observing stations have been removed since that prototype project is over, but the Parcival and Pluvio instruments at Poga Mtn as well as the App State network of surface stations in the Watauga/Avery Co area will be available again.

Potential focus topics for upcoming season:

- Model QPF validation efforts at select stations in NWFS-prone areas. We talked about HRRR a lot, but also other high res models and even standard NCEP models. All depends on how easily we can extract point-QPF data from archived model data for selected NWFS events, and how extensive a validation effort we want to undertake (how many sites and models overall). Doug mentioned that once archive and collection method for extracting QPF data for a grid point is setup, should be fairly easy. Next call will cover specifics of exactly what models and which locations we should focus on. Also, it would be helpful to access archived initialization fields for HRRR (i.e., soil moisture) so we can determine what role that may be playing.
- GSP has tools for blending high res model fields for near term PoP generation in GFE, and while designed more for warm season, can continue evaluating for NWFS and other winter events with mesoscale and terrain signals. RNK will

- Froude # efforts: RNK will install GSP tools for GFE and set up for some upstream domain and local characteristics, and will compare notes with GSP. Any Oak Ridge special soundings may help with additional Froude # analysis, and trying to compare events confined to upslope areas vs. those that "spill over" will be helpful. Maybe something student volunteers can help with?
- Not a lot of talk about idea of considering more locations to do wind direction (and other parameters) climo studies similar to what has been done at Poga Mtn. Need hourly data to determine event maturation and conditions at that time. Upper level data from archived LAPS soundings or gridded NARR data, but maybe start with sfc data? Once some additional stations are selected, maybe a good project for student.
- Better anticipation of potential impact, from factors most important for predicting SLRs, to perhaps considering an experimental impacts index being produced internally now for entire CONUS by WFO Burlington. Several components of this could be focused on for NWFS-specific impacts (snow accum and a drifting index). Need to find out more about this, and this will mainly be for NWS folks since this is all internal so far.

Future calls:

Once per month, during first half, so next call first half of January. Will likely try to Wed late mornings, but at some point may try Doodle in case there better times or days to get more folks. For now, **next call tentatively planned for January 14 @11am**.