Joe,

We all agreed that we'll best be able to evaluate the cfradials with a simple ncdump to verify that all the changes we requested were implemented. But we also agreed that Harris can do a few things in advance to ensure that standard radar software is able to properly display and process the data. The LROSE software should be installed (<u>https://github.com/NCAR/lrose-core/blob/master/docs/download/download_package_and_install.redhat.md</u> ... I successfully installed for Centos 7 via the rpm: yum install -y ./lrose-core-20211114-centos_7.x86_64.rpm):

--(Top priority) To display reflectivity, etc. in a sweep, use **HawkEye**. I've included below a screen shot of what it looks like.

[I've attached a param file that I used to read in an old HWX file from 2019. I had to add a 'Reflectivity' variable to the param file since HawkEye is defaulted to read in standard-name variables (all variables in the final CfRadial should have standard names, per our request). Also, there are some hardwired paths containing 'reasor' in the param file that must be set appropriately. HawkEye is executed from the command line by providing paths to the param file and cfradial data: /usr/local/lrose/bin/HawkEye -params ~/HawkEye/params/mmr.HawkEye.params -f ~/data/cfradial/mmr/HWX_2019_09_03*)]

Other evaluation tools (from the LROSE installation):

--Use **RadxCheck** to verify a home grown CfRadial has correct format: RadxCheck -f <u>cfradial_filename.nc</u> (outputs nothing if all is well)

--Use **RadxConvert** to convert a CfRadial to, say, DORADE (swp.*) format: RadxConvert -dorade f <u>cfradial_filename.nc</u> (creates an output/ subdir with a swp.* file in it. NSSL have noted issues with the resulting swp.* files when converted from some of the older MMR CfRadials. The converter itself doesn't fail per se, but it yields results (with azimuth rotation) that they said don't arise when converting from other compliant CfRadials. We'll be looking at that carefully with the new files.

Do you know if this test in January is airborne? I just assumed it was. Do you know if there will be weather data collection? We hope there will be for the sake of evaluation. That is, it will be difficult to evaluate the 1.3 compliance if all the values in the sweeps are flagged. Let me know if you all need anything else. We stand by ready to evaluate!

Regards, Paul

