

Daily Report for Mon Oct 7

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Fine today, southerly breeze last night turning to light easterlies, then southerly again by evening. Scattered high cloud, cirrus. Apparently conditions are unfavorable for another IOP for the next few days.

IOP-1 last night went well. Seven soundings were launched, and a tether sonde was operated at the ISFS base, and two other tethers were in the crater. The NCAR windcube scanned into the crater (operated by Nihanth) and the UU Halo lidar was in the crater doing coordinated scans. There are a very sharp inversion seen by the soundings and by RASS, 5C near the ground with the southerly, then 15C up a few hundred meters where there were easterlies (seen by the lidar and 449 wind profiler). Soundings at ISFS were carried out by Tim, Dave and Joanas.

449 Profiler running well. Using "Metcrax" mode which is now 10 minute winds followed by 5 minutes RASS. RASS sound now appears to be stable. Amplifier power is 141W in winds, 199W in RASS.

Did a bunch of 449 tests this evening to check the bandwidth (for freqs see data recorded in the files). Started around 01:54 UT (Oct 8) and continued various tests until 4:06.

From 4:30 to 4:59 used delay line to calibrate range - in standard mode appears to be correct (to better than 50m). Will analyze later to check RIM. Back to regular Metcrax schedule from 5UT.

Training Kate on ISS operations, visiting ISS, lidar, sodar and ISFS base (soundings and ceilometer).

Various data backup activities: DVD on ISS DM; completed disk SHUTTLE449_2 (has data from Oct 1 to Oct 8 5UT) and installed fresh disk (SHUTTLE449_3); installed USB drive on lidar and backed up all data so far.

We met Judy Prossier yesterday and she said that cattle are being moved into our area, so installed an electric fence around the 449 profiler. Tested and no apparent affect on 449 data, but turned off for now until the cattle actually appear.

Generator was serviced today around 21UT. Contrary to expectations, the generator wasn't switched out, but instead was shutdown and serviced in place (apparently they had a problem with their replacement units). Fortunately we were here so we shut down the computers and Kate brought them back up (as a training exercise). The shutdown lasted around 15 minutes so we could have remained operating on the large UPS in the trailer.

I am headed back to Boulder. Kate and Tim are now the operators. Good luck for the rest of the project.