## ISS setup 5 Jan 2022

A wet cold day, with temperatures in the 0 - 3C range. Snow had been forecast for most of the day with up to 5 inches of accumulation, however it appears that most of that fell as rain with occasional sleet mixed in.

The main news of the day was Dan clearing the road into the sounding site with a rented skid steer (tracked) snow plow. He did a great plowing job enabling the sounding trailer to be driven into the site this afternoon. His snow clearing also enabled the PIs to drive in equipment to the chemistry trailer and provided easier access to the DC supersite. Following his work, we delivered a couple of pick-up truck loads of equipment such as the CL61 ceilometer and sounding rack and computer. At the adjacent railway site other work included unpacking the CL61 and setting up an aerosol sensor on top of the lidar trailer.

At the ISS1 site, dug out some more snow and Dan plowed out the snow berm that had been blocking vehicle access to the site. I also ran some tests on the Modular Profiler adjusting the lowest ranges. By raising the lowest sampled gate (say from 200-300m to around 400-500m) then the lowest gate that actually gets good data lowers to around the 400m level (from around the 600m level previously). This suggests a problem in the partial decoding, perhaps due to non-linear behavior or saturation in the signals at the lowest gates. The rain/snow mix complicates interpretation of this analysis so I'll take another look at the lower range gate issue on a clear day.



Dan operating the skid steer snowplow and backing in the sounding trailer into the sounding site.