Initial environmental noise assessment for Cosmic Explorer: equipment and impact on the measurement site

Below: the two main types of sensors and how they are deployed. We expect 3 to 10 deployments, each lasting an hour to a day.

Seismometers can be set on a granite slab on the ground after clearing a flat place. If it is windy and digging a hole is acceptable, a ~1ft hole will be dug to put the seismometer below ground level



Magnetometer requires about a ~1 foot hole for burrial.

The full setup with cover over seismometer.





Below: figures from a talk on a previous more invasive set of field measurements showing minimization of impact.



Drumheller Channels. Margarita taking her turn digging the EW trench. Magnetometer in the NS trench has not yet been buried.



Drumheller Channels. After: trenches filled in and impact minimized, good practice for field measurements.