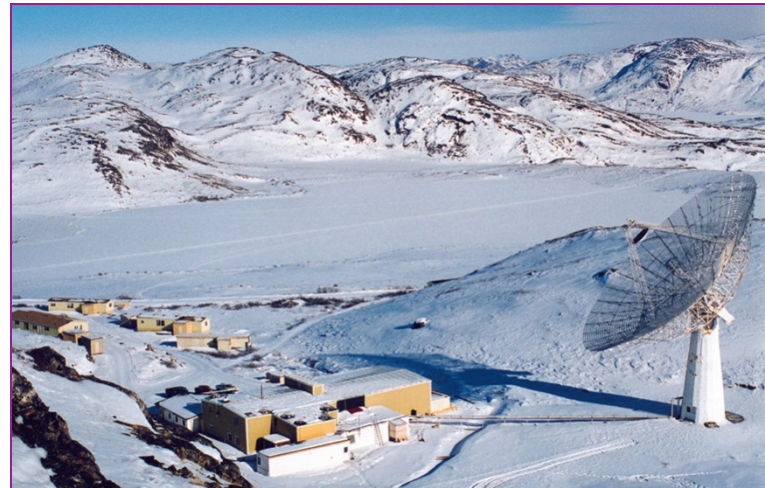


ISR Data Exercise

- First group exercise!
- Four data examples from the Millstone Hill and Sondrestrom radars will be handed out to each group
- The axes and labels on the plots describe the data displayed
- Work together as a group to determine what phenomena are shown in each example. Describe as well as you can what is being displayed.
- Tomorrow morning we will ask you for your ideas and briefly discuss each example.



- Sondrestrom is a 32 m fully steerable dish antenna
- Center transmit frequency = 1290 MHz
- Peak power = 3.5 MW
- Antenna beamwidth = 0.5 deg





- Millstone uses both a fully-steerable 46 meter antenna (the MISA) and a 67 meter fixed zenith pointing dish (see both below).
- Millstone is at sub-auroral latitudes, however using the steerable antenna, it can observe over a latitude span from near the polar cap and to the near-equatorial ionosphere.
- Frequency 440.0 to 440.4 MHz
- Peak Power 2.5 MW per TX unit
- Avg Power 150 KW
- Gain of MISA 42.5 dBi; BW 3dB= 1.2 °
- Gain of Zenith 45.5 dBi, BW 3dB = 0.6 °