ARM Facilities on the North Slope of Alaska/ Barrow, Oliktok, and Atqasuk: An Update

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BARROW

Common to all instruments
- Structures & electrical systems designed, engineered, and installed to house the instrument.

RWP
- User Facility Upgrades: new deck structure installed behind User Facility.
- Instrument moved and reinstalled to new location.

Precipitation Radar - Addition to Barrow Arctic Research center (BARC)

- Controls in space below “golf ball”

Other upgrades:
- Road upgrade: Instrument site road was raised to original engineering levels.
- Power line upgrade: New insulators and cross arms were installed, along with a 4th insulator for a future upgrade. Such future work (no funding identified at this time) includes a system voltage/type upgrade, including the addition of a 4th wire to make it a more standardized and safer Wye configuration.
- MPL - New upgraded instrument.
- Vceil – CL31 replaced the older CT25K.
- MMCR - Migration to a digitally based radar was done, now called the Ka ARM Zenith Radar (KAZR).
- User Facilities - E4 and E5 vans were upgraded with better insulation, new HVAC systems, and electrical systems were re-wired.
- Shop - Building next to the duplex received two natural gas heaters and floor matting to allow it to be utilized as warm space during the winter.
- Transportation - Procured a Kubota rough terrain vehicle (RTV) complete with a winterer set of tracks for travel during all conditions.

OLIKTOK

Funding for future ARM site.
- Similar to Barrow in terms of instruments.
- Additional capability to include UAV work over ocean/land interfaces.

ATQASUK

For now, Atqasuk is in inactive status
- Electricity.
- No communications to site.
- Items stored until needed.
- No plans to disassemble beyond removal of instruments.