

Overview of PUEO's Flight and Performance

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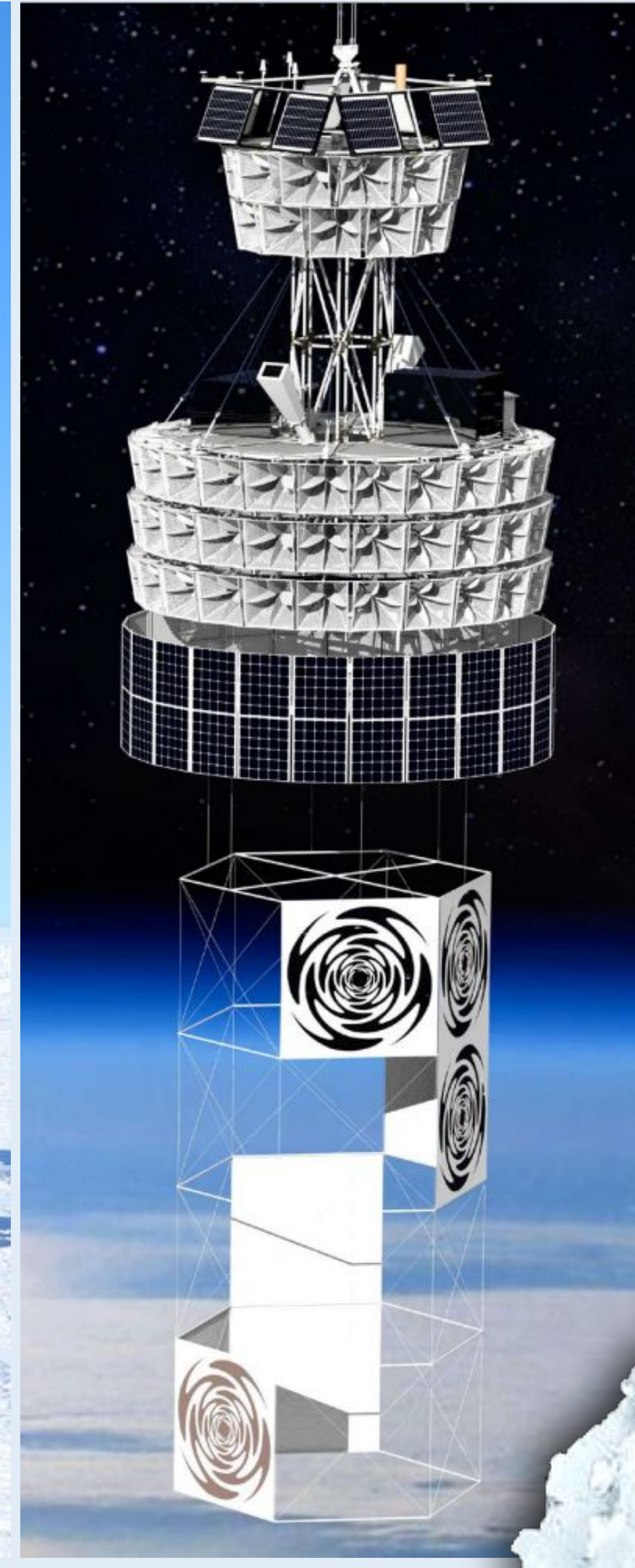
Antarctic Campaign at a Glance

Arrived on ice:
November 11th, 2025

Declared Flight
Readiness:
December 12th, 2025

Launched:
December 20th, 2025

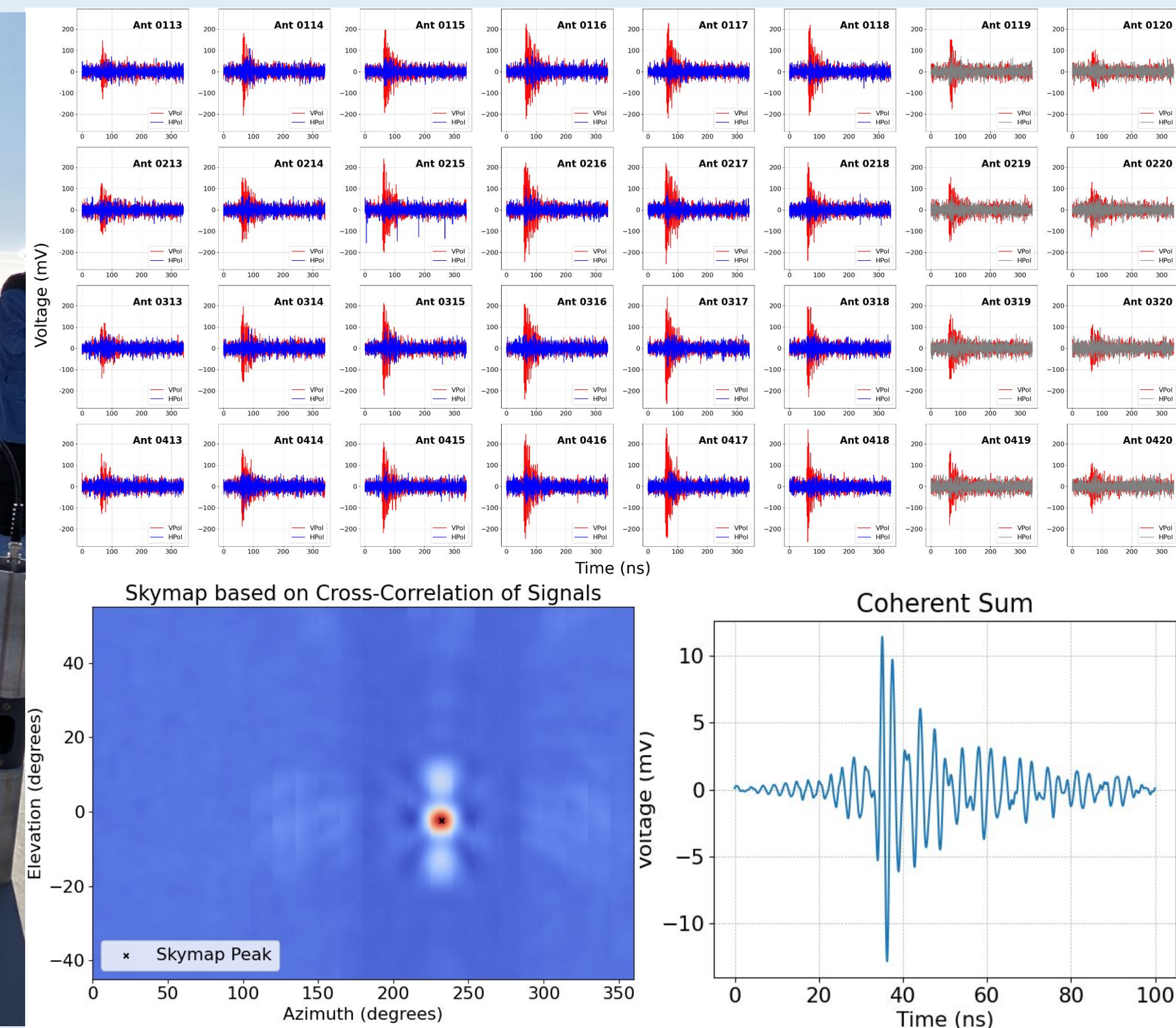
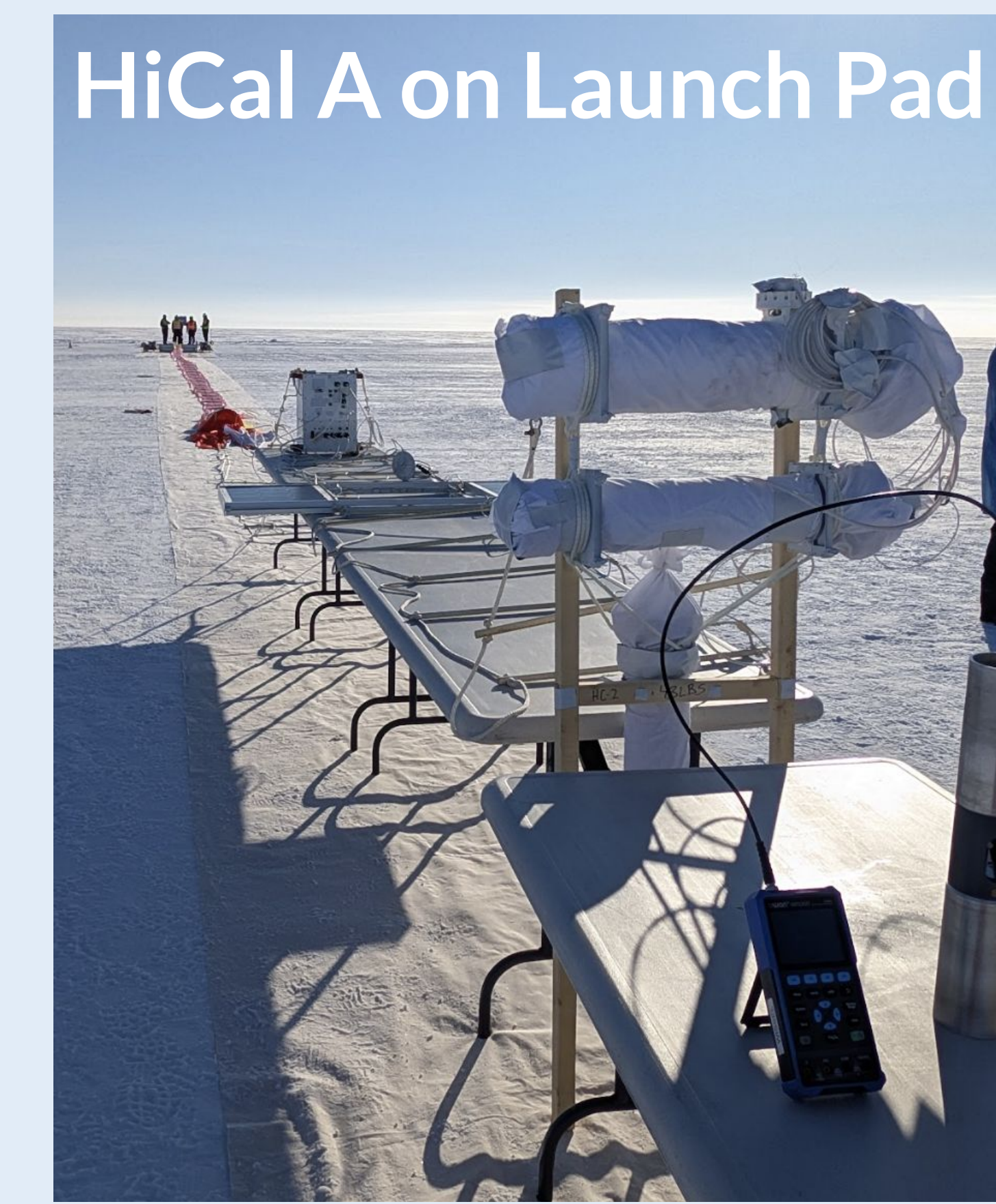
Terminated:
January 12th, 2026



Main Instrument:
96x Dual-Polarized
Horn Antennas
(300-1200MHz)
See T. Coakley's poster!

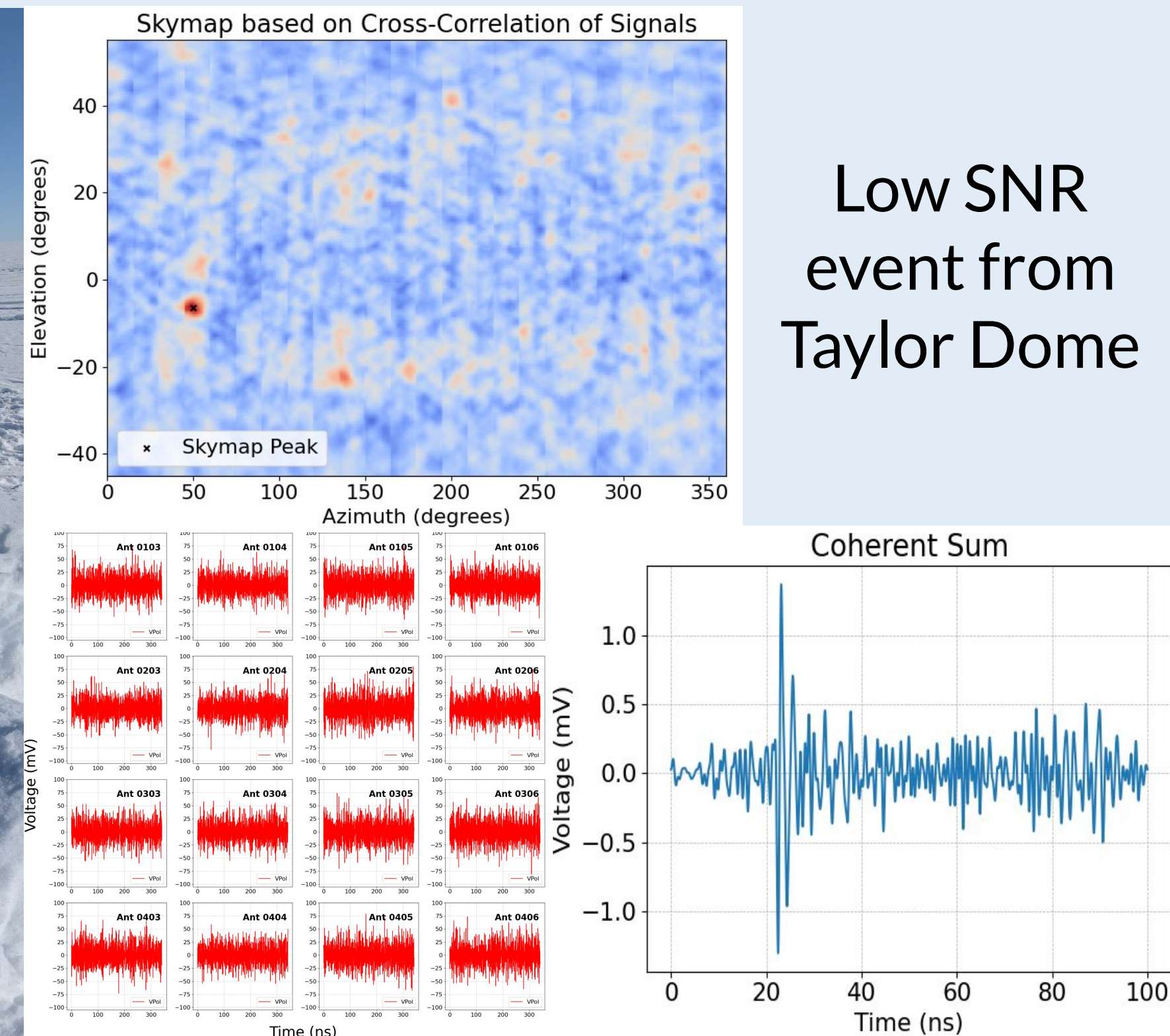
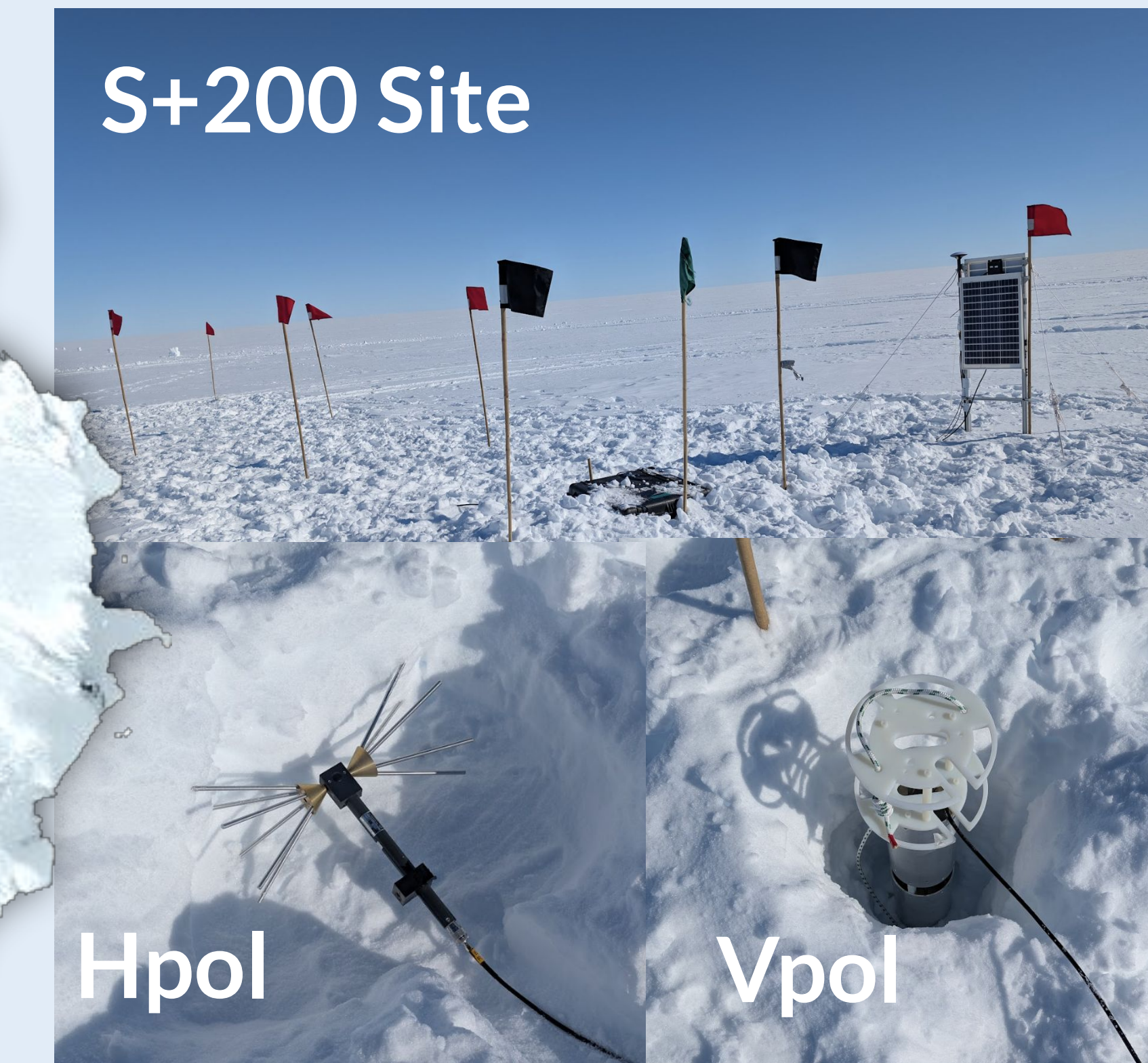
**Low Frequency
Instrument:**
8x Dual-Polarized
Sinuous Antennas
(50-500MHz)

HiCal Hand-launched balloons with pulsars, launched 1 day after PUEO.
Signals seen from both HiCal payloads in both polarizations

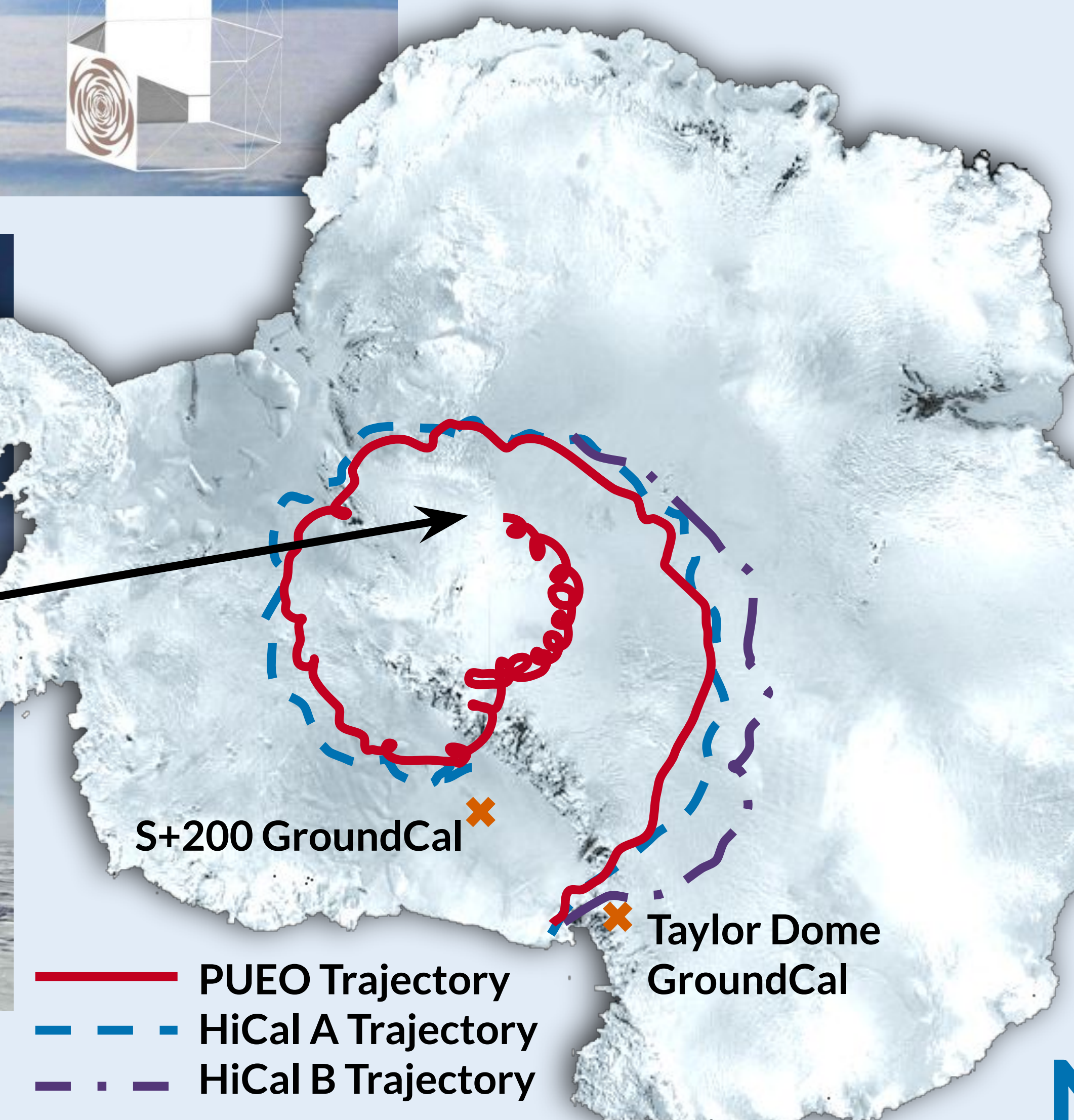


Ground Calibration

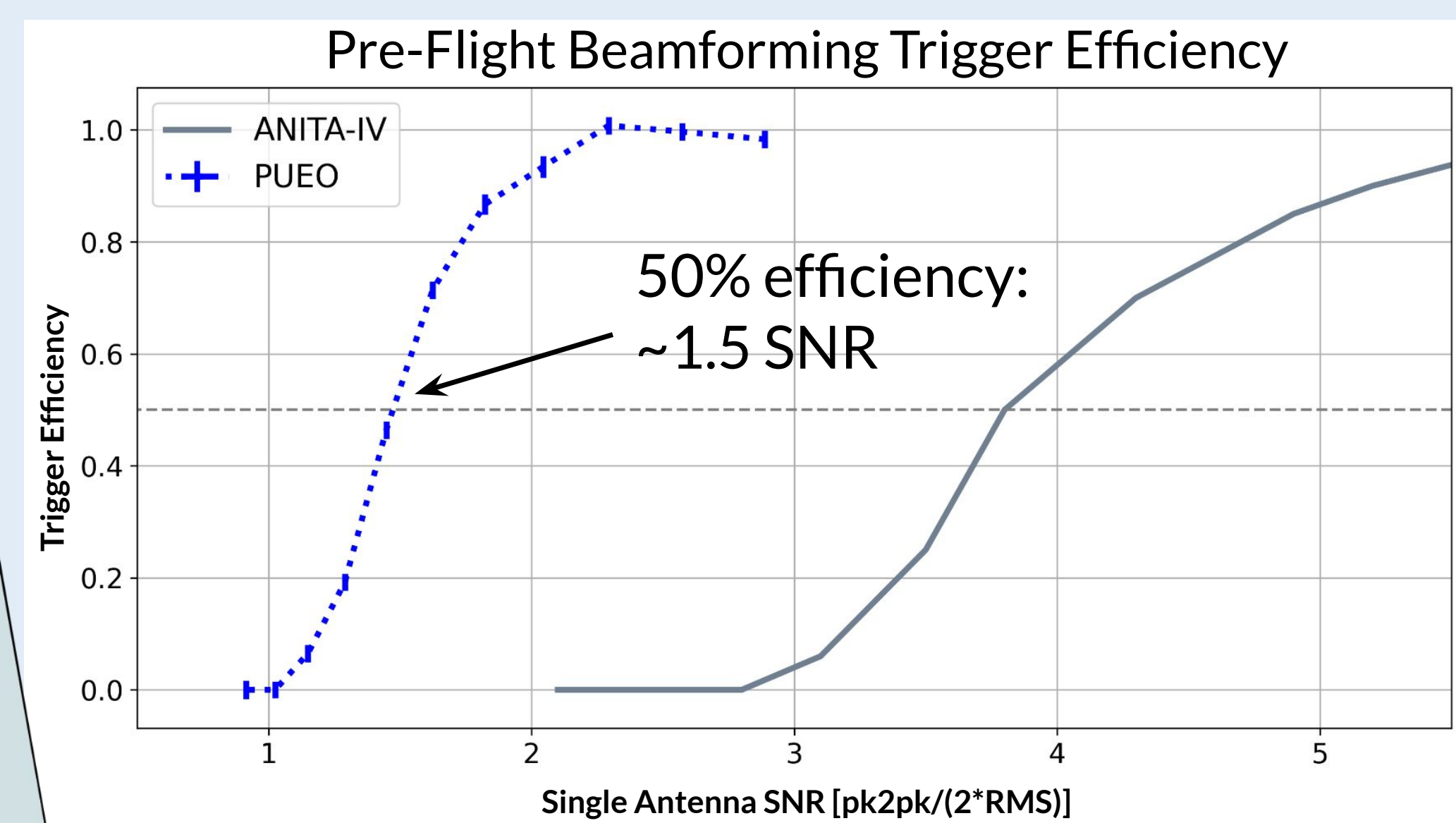
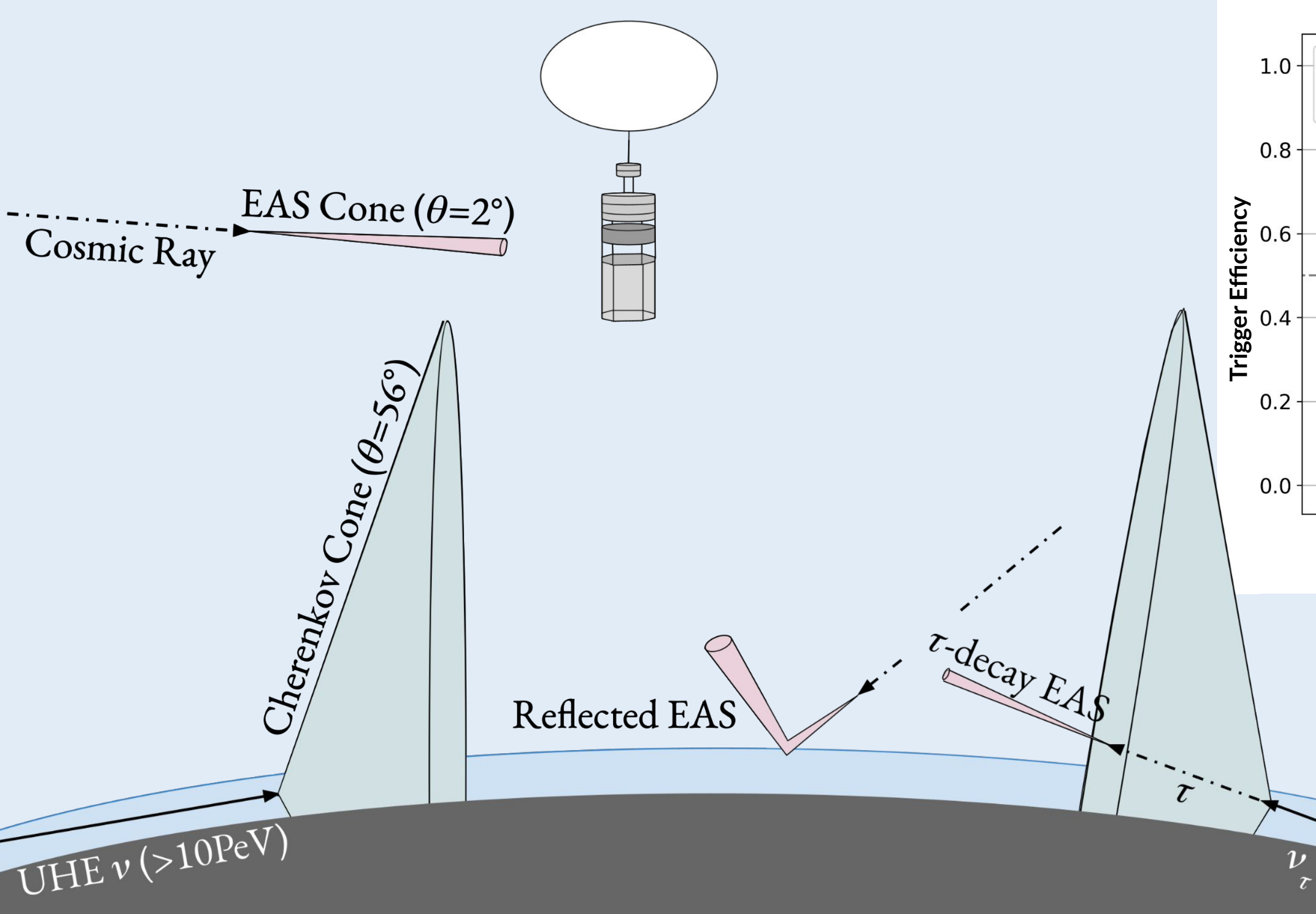
Autonomous pulsing stations at S+200, Taylor Dome, and launch site. Signals seen from all three stations in both polarizations



PUEO flew for 23 days, 10 hours with ~55% livetime, and collected 55TB of data (>100 million events)



Radio Detection Technique

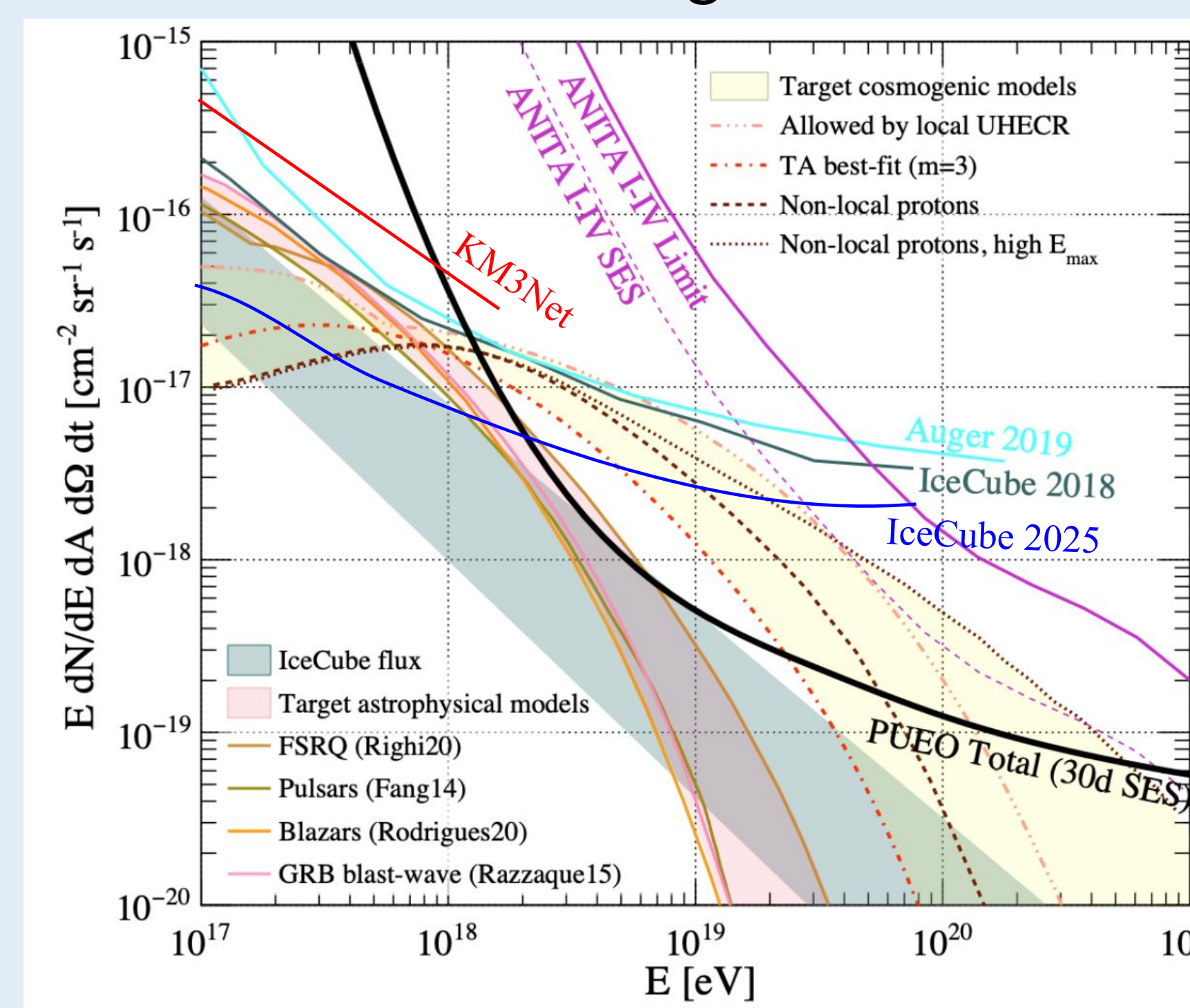


PUEO targets impulsive radio signals induced by UHE ν interactions in the Antarctic Ice (ie Askaryan Emission)

Neutrino Analysis Plans

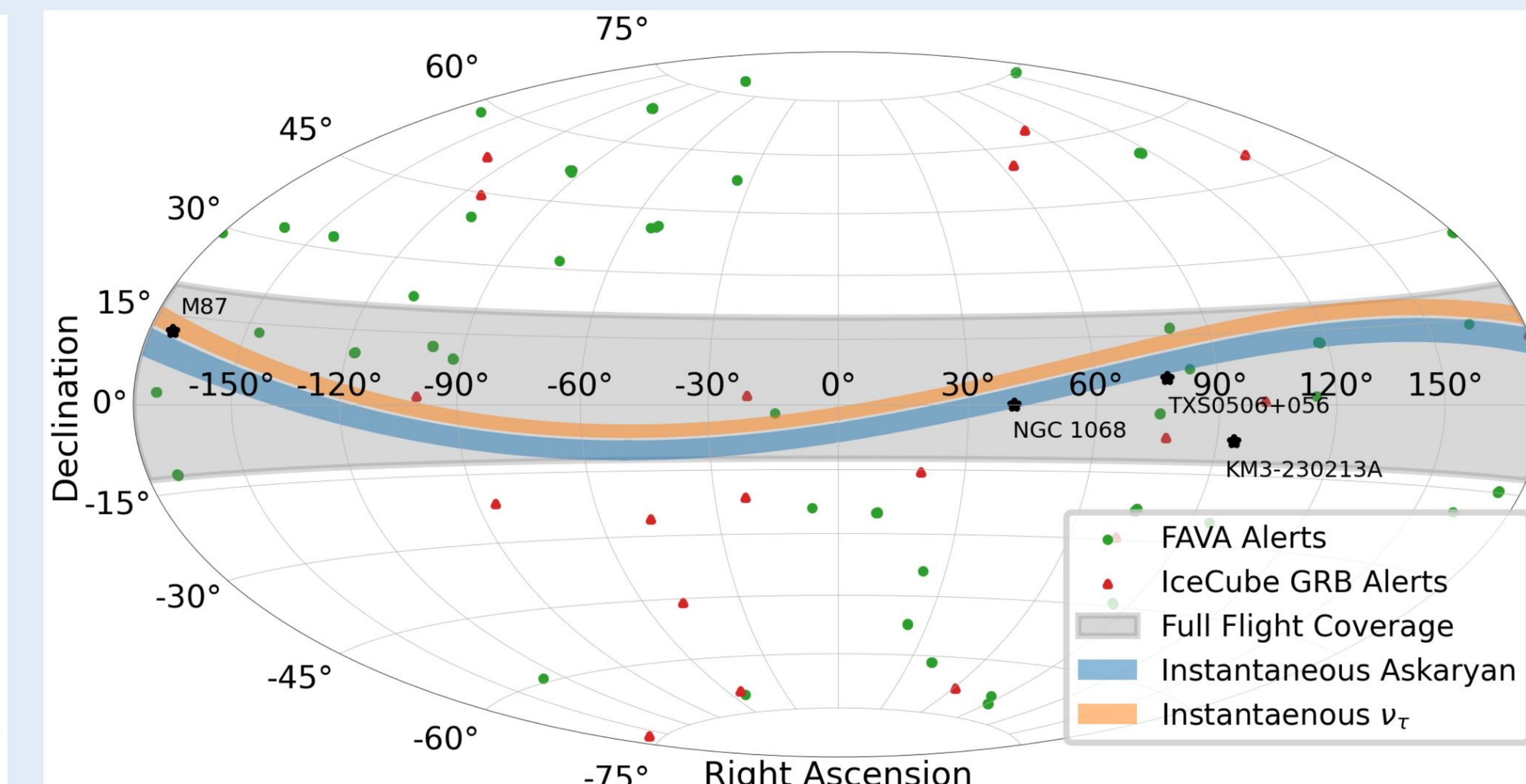
Diffuse Search

First detection of UHE neutrinos >1EeV or world leading flux limits



Source Search

UHE neutrino search coincident with interesting and/or flaring sources in PUEO's FOV



We gratefully acknowledge NASA Awards #80NSSC20K0775, #80NSSC20K0925 and #80NSSC25K7301.