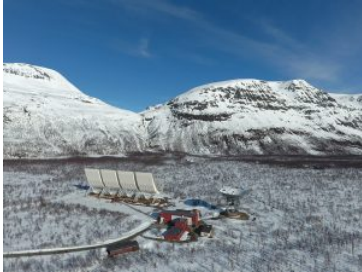




Tromsø



EISCAT Tromsø. Photo by Craig Heinselman

The EISCAT-UHF radar operates in the 930 MHz band with transmitter peak power 2.0 MW, 12.5 % duty cycle and 1 μ s - 10 ms pulse length with frequency and phase modulation capability. The antenna is a 32 meter mechanically fully steerable parabolic dish used for transmission and reception.

The EISCAT-VHF radar operates in the 224 MHz band with transmitter peak power 3 MW, 12.5 % duty cycle and 1 μ s - 2 ms pulse length with frequency and phase modulation capability. The antenna, used for transmission and reception, is a parabolic cylinder consisting of 4 quarters, constituting a total aperture of 120 m x 40 m. This antenna is mechanically steerable in the meridional plane (-30° to 60° zenith angle), and electronically steerable in the longitudinal direction ($\pm 12^\circ$ off-boresight).

The receivers consist of multiple channels for both the UHF radar and the VHF radars. The data are pre-processed in signal processors, displayed and analysed in real-time and can be recorded to mass storage media both locally and at the main storage facility. The whole radar system is controlled by computers, and the sites in Tromsø, Kiruna, Sodankylä, and Longyearbyen are interconnected via the Internet.

The radar instrumentation is located in a main operating building, which includes offices and laboratories. There is a separate building providing quarters for visiting scientists. The radar operations buildings (in-kind contribution by Norway) belong to the [University of Tromsø](#). The land is provided by the University of Tromsø. Take a look at the site from a different [view](#).

Tromsø Ionospheric Modification facility



EISCAT Heating facility

The Tromsø Heating facility is located at Ramfjordmoen close to the Tromsø Incoherent Scatter Radar facility.

[The Heating facility](#) consists of 12 transmitters of 100 kW CW power, which can be modulated, and three antenna arrays covering the



frequency range 3.85 MHz to 8 MHz. The Heating facility includes a transmitter hall and an operations, office and accommodation building, which are owned by EISCAT. The land is provided by the University of Tromsø. The buildings belong to EISCAT.

Snowy antenna

Because of the dish shape of the radar antennas, they can collect snow in winter time. And because of the location above the Arctic Circle, it can snow quite a lot.