

JAPAN ARCTIC LIDAR NETWORK (JALNet)

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Two Japanese lidar groups from four organizations have begun lidar observation in three Arctic stations. Stations are at Ny-Ålesund, Norway (78.5°N, 12°E), Eureka, Canada (80°N, 86°W), and Fairbanks, Alaska (65°N, 147°W). The organizations are Solar Terrestrial Environmental Laboratory, Nagoya University (STEL), Fukuoka University (FU), Communications Research Laboratory (CRL), and Meteorological Research Institute (MRI). The table below shows the stations, groups, started month and year, and observing parameters.

Station	Ny-Ålesund	Eureka	Fairbanks
Group	STEL, FU	CRL, MRI	STEL, FU
Started in	Jan., 1994	Jan., 1993	Dec., 1991
Observing parameter	backscattering and depolarization at 532 nm	backscattering depolarization at 1.06 μm and 532 nm	backscattering and depolarization at 1.06 μm and 532 nm

The university and the national institute groups began those Arctic projects almost simultaneously, but independently. These stations are scattered well on the polar region, and situated inside, at boundary, and outside of the stratospheric polar vortex in the winter season.

With the common understanding that it is important to perform those observations as a network, the groups are going to cooperate in many aspect. Those lidar groups are trying to have a activity as **JALNet**.