

Observations of auroral spectra in EISCAT radar site, Tromso, Norway

Takuo Tsuda[1]; Keisuke Hosokawa[1]; Tetsuya Kawabata[2]; Satonori Nozawa[2]; Akira Mizuno[2]
[1] UEC; [2] ISEE, Nagoya Univ.

We have developed a compact spectrograph, which is capable of measuring optical emission intensity in visible range from ~480 nm to ~880 nm with a resolution of ~1.6 nm. The aperture, i.e. F-number, is ~4, and the data sampling rate is 1 Hz. We installed the spectrograph in European incoherent scatter (EISCAT) radar site, Tromso, Norway (69.6N, 19.2E), and started unmanned nighttime operation on 4 October 2016. The field-of-view (FOV) of the spectrograph is pointed at magnetic field-aligned direction. Since then, aurora observations have been done continuously during the last winter. In the presentation, we will introduce the spectrograph and its observations of aurora in EISCAT Tromso site.