Imaging observation of the Io plasma torus

Hiromasa Nozawa[1], Hiroaki Misawa[1], Shin Takahashi[1], Akira Morioka[2], Shoichi Okano[3]

[1] Planet. Plasma and Atmos. Res. Cent., Tohoku Univ., [2] Planet. Plasma and Atmos. Res. Cent.,Tohoku Univ., [3] PPARC, Tohoku Univ.

The Io plasma torus (IPT), which is completely surrounding Jupiter, is created by the volcanic materials of Io. Among some ion species, S+ ions, one of the major components of the IPT, are especially bright at visible wavelength (wavelength 673.1, 671.6nm) and can be observed with a transportable telescope.

In this presentation, we mainly introduce some results of the last season's observation, which was carried out at the summit of Haleakala, Maui, Hawaii. In this observation, we newly used thermo control unit for interference filters. Moreover, we show another result of observations at Sendai, which was used the same instrument (28cm telescope) at Haleakala.