Development of an Extreme Ultraviolet Imaging Spectrometer for the Telescope Observatory for Planets on Small-satellite mission

Takenori Toyota[1]; Kazuo Yoshioka[2]; Go Murakami[1]; Ichiro Yoshikawa[3]

[1] Earth and Planetary Sci., Univ. of Tokyo; [2] Earth Planet Phys. Univ of Tokyo; [3] Univ. of Tokyo

The Telescope Observatory for Planets on Small-satellite (TOPS) is to be launched in 2012 and injected into the sun synchronized orbit. TOPS will observe planets, asteroids and stars and in extreme ultraviolet (EUV) range. The TOPS mission will address various fundamental scientific questions pertaining to planetary exosphere and magnetosphere. TOPS has three EUV imaging spectrometers who have different spectral region: 46.3-71.4nm, 71.4-96.5nm and 96.5-121.6nm. These spectrometers have the spectral resolution of 0.3 nm, and have the field of view of 384 seconds of arc in spatial direction with the spatial resolution of 18 seconds of arc.