

Plasmaspheric EUV Imager onboard International Space Station (ISS)

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The Extreme Ultra Violet Imager (EUVI) is a part of the ISS-IMAP (Ionosphere, Mesosphere, upper Atmosphere, and Plasmasphere mapping) mission. The main purpose of this mission is to clarify the process of the plasma transport from the Earth's ionosphere to the plasmasphere. To elucidate the process, EUVI will take the images of the regions from the exposed facility of Japanese experiment module on the ISS. Its field-of-view is aligned backward from ISS toward the Earth's limb. EUVI has two optical systems. One detects resonantly scattered emission from He II (30.4nm), and the other from O II (83.4nm). The main components for the optical system are a thin metal filter, a multilayer coated spherical mirror and five-staged microchannel plates. In this presentation, overall performance and the expected outcome of EUVI will be reported.