Initial Results from the Extreme Ultraviolet Imager (EUVI) of ISS-IMAP

Kazuhiro Isashiki\textsuperscript{1*}, Ichiro Yoshikawa\textsuperscript{1}, Kentaro Uji\textsuperscript{1}, Kazuo Yoshioka\textsuperscript{2}, Go Murakami\textsuperscript{2}, Atsushi Yamazaki\textsuperscript{2}, Yuta Hozumi\textsuperscript{3}, Akinori Saito\textsuperscript{3}

\textsuperscript{1}Univ. of Tokyo, \textsuperscript{2}ISAS/JAXA, \textsuperscript{3}Kyoto univ.

The extreme ultraviolet imager (EUVI) on the international space station (ISS) was launched in July 2012 and started observations in December 2012. The EUVI detects resonantly scattered EUV emissions from He\textsuperscript{+} (30.4 nm) and O\textsuperscript{+} (83.4 nm). It directs toward the Earth’s limb and provides images of He\textsuperscript{+} and O\textsuperscript{+} distribution in the ionosphere and plasmasphere on the night side with 15 degrees of field of view. The maximum spatial resolution is 0.1 degree and the exposure time is 1 minute. In this presentation, we show images taken by EUVI at various latitudes, longitudes and local times. We will discuss temporal and spatial variations of He\textsuperscript{+} and O\textsuperscript{+} in the ionosphere and plasmasphere.

Keywords: ionosphere, plasmasphere, ISS, EUV