

ISS-IMAP 搭載極端紫外光撮像装置 (EUVI) の地上較正試験 Performance of the Extreme Ultraviolet Imager (EUVI) of ISS-IMAP mission

宇治 賢太郎^{1*}, 吉川 一郎¹, 伊佐敷 一裕¹, 吉岡 和夫², 村上 豪², 山崎 敦², 齊藤 昭則³, 穂積 裕太³
Kentaro Uji^{1*}, Ichiro Yoshikawa¹, Kazuhiro Isashiki¹, Kazuo Yoshioka², Go Murakami², Atsushi Yamazaki², Akinori Saito³,
Yuta Hozumi³

¹ 東大, ² 宇宙研, ³ 京大

¹Univ. of Tokyo, ²ISAS/JAXA, ³Kyoto Univ.

The Extreme Ultraviolet Imager (EUVI), which is the part of ISS-IMAP (Ionosphere, Mesosphere, upper Atmosphere and Plasmasphere mapping) mission, was successfully launched in July 2012 and began its on-orbit operations. EUVI has two prime-focus telescopes that are designed to detect the resonantly scattered emissions from He⁺ (at the wavelength of 30.4 nm) and O⁺ (83.4 nm) respectively. In order to clarify the plasma transport process in Earth's upper atmosphere, EUVI observes distributions of He⁺ and O⁺ in the ionosphere and plasmasphere.

The optical instruments consist of multilayer coated mirrors, metallic thin filters and microchannel plate detectors. The EUVI ground calibration has been carried out and the total sensitivities are estimated to be 0.060 cps/R for He⁺ and 0.0023 cps/R for O⁺.

In this poster, the instrumental design and performance of EUVI are presented.

キーワード: 国際宇宙ステーション, 極端紫外光, 電離圏, プラズマ圏

Keywords: ISS, EUV, ionosphere, plasmasphere