Performance evaluation of UPI-TEX for SELENE

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One of the methods to research the escaping atmosphere from the Planet to the Space is to observe the resonance-scattered light from the escaping particles. Especially, as the H, He and O particles resonance-scatter an extreme ultraviolet light (H I: 121.6nm, He I: 58.4nm, He II: 30.4nm, O II: 83.4nm), it is important to develop the optics for the extreme ultraviolet light. In addition, to observe the temporal variation of the escaping atmosphere, imaging observation is necessary.

We will place the Telescope of EXtreme ultraviolet in the Upper atmosphere and Plasma Imager (UPI-TEX) on the SELENE lunar orbiter, which will launch at 2006, and will carry out the imaging observation of the terrestrial plasmasphere and the magnetosphere.

In this presentation, we report the performance evaluation of UPI-TEX.