

Radial distribution of sulfur and oxygen ions in the Io plasma torus observed by Hisaki spacecraft

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The imaging spectrum of Io plasma torus in extreme ultraviolet (50-150nm) has been observed by EXCEED on Hisaki. We analyzed them using the spectrum diagnosis method and deduced the column averaged plasma parameters (such as S⁺, S⁺⁺, S⁺⁺⁺, O⁺, etc.) from the radial distance of 6 to 8 Jovian radii. The local densities of those ions are deduced and the clear increase of S⁺ (about 3 times) after the Io's outburst event in 2015 are seen.

Keywords: Io plasma torus, sulfur, oxygen