

Observation of the interstellar hydrogen Lyman alpha emission by the Ultraviolet Imaging Spectrometer onboard NOZOMI

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The Ultraviolet Imaging Spectrometer (UVS) onboard the NOZOMI spacecraft has observed hydrogen Lyman alpha emission from the interstellar wind since October 1998. The intensity of the Lyman alpha emission observed by UVS is 100 #8211; 700 R. A short 25-day variation of the intensity due to the rotation of the sun and the longer time variation caused by the change of the position of NOZOMI were observed. By comparing these time variations obtained by the UVS and the developed model, we revealed the distribution of interstellar hydrogen density and an isotropy of the solar wind flux and the Lyman alpha emission of the sun in the solar maximum phase.