

Imaging of the evolution of the Kelvin-Helmholtz instability

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Data from in situ spacecraft measurements sometimes have a difficulty in separating the temporal from spatial variations of a plasma structure. The remote-sensing method using Oxygen ion emissions, on the other hand, is becoming a powerful tool to provide global perspectives of the temporal evolution of the structure. We expect that two-dimensional snapshots of Kelvin-Helmholtz vortices successively taken by the eXtreme Ultra Violet (XUV) imagers at the Venusian ionopause will give clues to unresolved issues regarding plasma transport across plasma boundary such as the Earth's magnetopause.