

Hinode EUV Imaging Spectrometer Observations of Solar Coronal Dynamics

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The EUV Imaging Spectrometer (EIS) on the Hinode satellite provides high spatial and spectral resolution data along a 512 arcsec slit in two wavelength ranges, 170–210 Å and 250–290 Å. These wavelengths mostly contain emission lines from upper transition region and coronal plasmas. While emission from these wavelengths is routinely imaged using instruments such as the EIT on SOHO and TRACE, there are few high-resolution spectra to aid in more deeply understanding the physical conditions and dynamics associated with the intensity variations seen in the images. This is particularly important for understanding the nature of waves and oscillations in the transition region and corona. This presentation provides an overview of the EIS instrument and shows some initial observations that demonstrate the capabilities of EIS for diagnosing dynamical phenomena.