

The Heating of the Solar Atmosphere: From the bottom up?

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The heating of the solar atmosphere remains a mystery. Over the past several decades, scientists have examined the observational properties of structures in the solar atmosphere, notably their temperature, density, lifetime, and geometry, to determine the location, frequency, and duration of heating. In this talk, I will review these observational results, focusing on the wealth of information stored in the light curve of structures in different spectral lines or channels available in the Solar Dynamic Observatory's Atmospheric Imaging Assembly, Hinode's X-ray Telescope and Extreme-ultraviolet Imaging Spectrometer, and the Interface Region Imaging Spectrograph. I will discuss some recent results from combined data sets that support the heating of the solar atmosphere may be dominated by low, near-constant heating events.