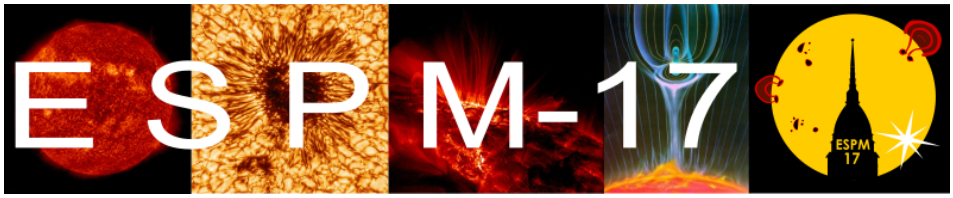

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Waves in coronal structures up to 1 Rsun?

Tuesday, 10 September 2024 09:55 (15 minutes)

At Solar Orbiter's perihelion, the FSI telescope of the EUI instrument images the EUV corona up to 1 Rsun above the limb with a plate-scale better than 1000 km on the Sun. Here we report on exceptional FSI image sequences in the 17.4nm bandpass with deep exposures and a 30s cadence during the so-called "Density Fluctuations"and "Probe Quadrature"Solar Orbiter Observing Plans (SOOPs).

These data, with unique high S/N in the high EUV corona, reveal ubiquitous intensity fluctuations propagating outward along open magnetic field-lines up to 1 Rsun above the limb, well beyond the FOV of traditional EUV imagers. Difference movies suggest these propagating intensity fluctuations have both a longitudinal as well as a transversal "swaying"component.

We will discuss the relation of these high-altitude fluctuations with similar features reported before in the low solar corona (eg COMP & AIA data), as well as higher up in simultaneous Metis data. Implications for the energisation of the solar wind will be discussed.

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