

Signatures of small-scale heating events in EUV spectral lines as modeled from 3D MHD simulations

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We aim at understanding the implications of small scale heating events in the solar atmosphere for the variations of the solar spectral irradiance. We present a technique for identification and characterization of these events in 3D simulations of the solar atmosphere. An accurate property determination of these events in time and space will help us to understand how spectral lines, in particular in the EUV, respond to them and which kind of spectral signatures one would expect to find in observations as from SOHO/SUMER and eventually from future space missions, as for example observations by SPICE on board Solar Orbiter.