



Characterization of small-scale heating events in the solar atmosphere from 3D-MHD simulations and their potential role in coronal heating

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Aiming at better understanding the mechanism(s) responsible for the coronal heating and the ubiquitous redshifts observed in the lower transition region we focus on analyzing the properties of small-scale heating events (SSHEs) in the solar atmosphere. We present a comprehensive method to follow SSHEs over time in 3D-MHD simulations of the solar atmosphere. Applying the method we are able to better understand the properties of the SSHEs and how the plasma in their vicinity respond to them. We present results for the lifetime, energy and spectral signatures of the SSHEs. Ultimately, these results will be important for the coordinated scientific exploration of SPICE and EUH along with other interments on board solar orbiter.