



The SECCHI View of EIT Waves

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One of the first discoveries of EIT was that CMEs having a source region close to disk center are very often associated with propagating intensity disturbances covering significant fraction of the solar surface. There exists sizable discussion about what the so-called EIT waves really are. Possibilities include fast-mode MHD waves, reconnection fronts or separatrices induced by or associated with CMEs respectively. Irrespective of the ultimate explanation of EIT waves would lead in advances of our understanding of either coronal seismology or the early stages of CMEs.

Unfortunately, EIT observations are quite limited by things such as low cadence and single temperature and viewpoint coverage and cannot conclusively discriminate between the competing ideas for EIT waves.

We will discuss how the high cadence, multi temperature observations of EIT waves from the distinct viewpoints of the two STEREO spacecraft EUVI imagers can enhance our understanding of EIT waves. In particular, we will present the analysis of a couple of EIT waves observed in late 2007 and early 2008, when the STEREO spacecraft separation was above 40 degrees which allowed to infer the 3D geometry of the waves. We will also discuss the relative timing of various relevant features seen in such events like, flare onset, dimmings, loop openings, wave onset and how the wave morphology depends on the temperature.