

A catalogue of the small transients observed in STEREO HI-A and their associated in-situ measurements

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The systematic monitoring of the solar wind in high-cadence and high-resolution heliospheric images taken by the Solar-Terrestrial Relation Observatory (STEREO) spacecraft permits the study of the spatial and temporal evolution of variable solar wind flows from the Sun out to 1 AU, and beyond. As part of the EU Framework 7 (FP7) Heliospheric Cataloguing, Analysis and Techniques Service (HELCATS) project, Plotnikov et al. (2016) created a catalogue of 190 Stream Interaction Regions (SIRs) well-observed in images taken by the Heliospheric Imager (HI) instruments onboard STEREO-A (ST-A). This catalogue has been made available on line on the official HELCATS website (https://www.helcats-fp7.eu/catalogues/wp5_cat.html) and included in the propagation tool (http://propagationtool.cdpp.eu). Several transients, known as blobs, are observed entrained in each SIR. We complete this catalogue with the trajectory of individual blobs and with the latitudinal extent of the SIR. For every SIR we report whether the trajectory of any of the entrained blob impacts a spacecraft in the Heliosphere. For the cases where a blob is predicted to impact one or more spacecraft, we include in the catalogue the predicted arrival time and the date and time of the visually recognized blob which is the closest to the predicted arrival time.

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