AIA-Observed Filament Eruption Catalog

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Abstract

We report the development of a filament eruption catalog for events observed by the Atmospheric Imaging Assembly (AIA)
aboard the Solar Dynamics Observatory (SDO). Events were collected from the Heliophysics Event Knowledgebase (HEK) and
further manual inspection of the data. Various characteristics of each eruption were determined with the goal of
compiling statistics on the general nature of filament eruptions and to provide a resource for studies of particular
events. These characteristics include the symmetry of the eruptions, whether or not twisting motions were observed, the
presence and orientation of thread-like structures, and a number of others. Information about flares and CMEs is
compiled along with movies from several instruments. Height-time plots and column density measurements are also made for
a number of events.

Keywords: Prominence, Filament, Eruption, Catalog, AIA

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