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Catalogue of hot jets in the solar corona

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We present a catalogue of plasma jets in the solar corona with a temperature above 0.5 MK. The catalogue contains primary information about the event and of the parameters of the jet, based on the data obtained with the spaceborne high-precision EUV imaging telescope SDO/AIA and ground-based radio telescopes and spectrometers, including RATAN-600 (Radio telescope of the Russian Academy of Sciences, Russia), SRH (Siberian Radio Heliograph, Russia) and NoRH (Nobeyama Radio Heliograph, Japan). To obtain the primary parameters of the jets, we developed a new method of automatic jet detection in homogeneous time series of images. For some events, the catalogue is complemented with data on the reconstructed magnetic field. The purpose of the catalogue is to provide summary information about coronal jets to all interested researchers for further statistical analysis, determination of characteristic parameters of jets, and in-depth study of individual events. Currently, the catalogue covers the time interval from 2010 to 2019, and the data is continuously added. The work was supported by the Russian Foundation for Basic Research grant No. 18-29-21016.

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