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FastQSL: A Fast Computation Method for Quasi-separatrix Layers

Magnetic reconnection preferentially takes place at the intersection of two separatrices or two quasi-separatrix layers, which can be quantified by the squashing factor Q, whose calculation is computationally expensive due to the need to trace as many field lines as possible. FastQSL is developed for obtaining Q and the twist number, with the performance of millions of Q values per second. FastQSL supports both uniformed and stretched grids, the support of spherical coordinates is extended recently.

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