

STUDY OF THE MICROWAVE SOURCE POSITIONING AS A POSSIBLE PREDICTION PATTERN OF MAJOR SOLAR FLARES

Ivan Myshyakov, Sergey Anfinogentov, Arkadiy Uralov

*Institute of Solar-Terrestrial Physics SB RAS, Irkutsk, Russia,
ivan_m@iszf.irk.ru*

A number of X-class flare events that occurred in active region 13663 in May 2024 are considered. Multifrequency images provided by Siberian Radio Heliograph are analyzed for the positioning of the microwave source relative to the polarity inversion line (PIL) of the magnetic field reconstructed using Solar Dynamics Observatory vector magnetograms. During the preflare stages, the center of the source brightness shifted on or very close to the PIL. The obtained results highlight the practical importance of detection of microwave sources over the PIL for prediction of major solar flares.