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Type III radio bursts observed on April 03, 2019

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During April, 2019, several groups of type III radio bursts were observed, starting from the metric wavelength range (ground based observations) and continuing in the hectometric to kilometric range (space based observations). A majority of the type III bursts was observed by LOFAR (Low Frequency Array), by radio instruments on Stereo A and Wind spacecraft, and also by the Parker Solar Probe (PSP).

We focus this study on a small group of type III bursts observed on April 03, in the time window from 16:40 UT until 17:00 UT. The aim of the study is to map the propagation of the type III bursts and compare the obtained plasma densities with the density profiles provided by EUHFORIA (EUropean Heliospheric FORecasting Information Asset) model, and with in-situ observations from PSP which was located in a close proximity. First results indicate that the type III bursts do not follow, as generally considered, Parker spiral but they propagate strongly southward from their source region. It is possible that this unusual propagation path is induced by the weak CME that preceded the radio bursts and disturbed the ambient solar conditions.

Student poster?

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