



Contribution ID: 275

Type: Poster

Type III Radio Bursts Observations on 20th August 2017 and 9th September 2017 with LOFAR Baldy Telescope

Wednesday, 8 September 2021 10:18 (13 minutes)

We present the observations of two type III solar radio events performed with LOFAR (LOw-Frequency ARray) station in Baldy (PL612), Poland in single mode. The first event occurred on 20th August 2017 and the second one on 9th September 2017. Solar dynamic spectra were recorded in the 10 MHz up to 90 MHz frequency band. Together with the wide frequency bandwidth LOFAR telescope (with single station used) provides also high frequency and high sensitivity observations. Additionally to LOFAR observations, the data recorded by instruments on boards of the Interface Region Imaging Spectrograph (IRIS) and Solar Dynamics Observatory (SDO) in the UV spectral range complement observations in the radio field. Unfortunately, only the radio event from 9th September 2017 was observed by both satellites. Our study shows that the LOFAR single station observations, in combination with observations at other wavelengths can be very useful for better understanding of the environment in which the type III radio events occur.

Primary authors: MIKUŁA, Katarzyna (Space Radio Diagnostics Research Centre, University of Warmia and Mazury); DABROWSKI, Bartosz; Mr FLISEK, Pawel (University of Warmia and Mazury in Olsztyn); FRON, Adam (Space Radio-Diagnostics Research Centre, University of Warmia and Mazury); Dr VOCKS, Christian (Leibniz-Institut für Astrophysik Potsdam (AIP)); Dr MAGDALENIC, Jasmina (Solar-Terrestrial Centre of Excellence —SIDC, Royal Observatory of Belgium); Prof. KRANKOWSKI, Andrzej (University of Warmia and Mazury in Olsztyn); ZHANG, PeiJin (CAS Key Laboratory of Geospace Environment, School of Earth and Space Sciences, University of Science and Technology of China (USTC)); Dr ZUCCA, Pietro (ASTRON, The Netherlands Institute for Radio Astronomy); Prof. MANN, Gottfried (Leibniz-Institut für Astrophysik Potsdam (AIP))

Presenter: MIKUŁA, Katarzyna (Space Radio Diagnostics Research Centre, University of Warmia and Mazury)

Session Classification: Poster Session 5.5

Track Classification: Session 4 - From Radio to Gamma Rays: Near-Sun Manifestations and Triggering of Solar Flares and Coronal Mass Ejections