

# **On bandwidth of solar subsecond bursts in cm-range**

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The dependence of subsecond pulse spectral bandwidth on source location has been studied. The goal is to study spectral band spreading due to wave scattering in the low corona. The data with high spatial, spectral and temporal resolution obtained with the Siberian Solar Radio telescope (frequency about 5.7 GHz, spatial resolution until 15 arc sec, time resolution 14 ms) were used. The data of the spectropolarimeters (5.2-7.6 GHz, 6 ms) of the National Astronomical Observatories overlap with SSRT observation time including the SSRT working bandwidth.

Working with a large dataset of observations (22 events) we researched relation between spectral width of type III-like pulses and their position on the Sun. The mean bandwidth differs significantly from event to event at the same center frequency. The results show that there is no intrinsic bandwidth of subsecond pulses suggesting that accidental surrounding source plasma parameters are responsible for the width of the emission.

Our study opens new possibilities for diagnostics of plasma turbulence parameters in the corona and it permits one to identify the generation mechanism of emission.

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