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# Determination of angular and polarization parameters of space sources using the WIND/WAVES/RAD2 observations: solar type III radio bursts

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A new technique for the determination of the Stokes parameters of point sources based on WAVES/RAD2 observations was proposed recently [1]. The technique can be developed for the case of a source with a finite angular size.

Some applications of this technique are demonstrated using RAD2 on January 27, 2007, when the receiver operated in SUM mode at 8,925 kHz with high time resolution (16 Hz).

The angular size and arrival direction for three solar type III radio bursts, which took place about 11 hours after hurling a bright coronal mass ejection over the sun's eastern limb, are determined. It was also found that emissions of all three bursts have a right circular polarization as is the case with ionospheric ordinary waves.

Results can be used for calibration of the new STEREO receivers which captured these type III bursts as well. It must be underlined that the WAVES/RAD2 can be used as effective auxiliary instrument in the two spacecraft STEREO program.

1. Tokarev, Yu.; Kaiser, M. "Determination of Stokes parameters using by rotating spacecraft for case of strong intensity fluctuations of observed emission". EGU-2007. Abstract N EGU2007-A-09906.

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