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Observations of the fine structure of the interplanetary shocks: case study results

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Plasma spectrometer BMSW was developed for the measurements of the main solar wind and magnetosheath plasma parameters – velocity, temperature, ion density and ion flux with high time resolution onboard the "Spektr-R" project. Since the beginning of measurements on August 2011 a lot of experimental data were received allowing to study, in particular, fine structure of the solar wind, interplanetary shocks, boundaries and so on. The paper presents case study results of several fast forward interplanetary (IP) shocks, observed by BMSW experiment. Such parameters of IP shocks as velocity, normal, thickness, are given. It was shown the presence of large amplitude ion flux oscillations near the front of interplanetary shock with the periods about 1-8 seconds. Power spectra of these ion flux oscillations are analyzed.