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Langmuir waves: a database from the STEREO mission

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Langmuir waves are ubiquitous in the planetary environments and the interplanetary medium. These electrostatic waves occur in the range 10-30 kHz in the solar wind. They are of interest as they are linked to the electron dynamics. Moreover, they are at the origin of the most intense electromagnetic radio waves related to solar flare and interplanetary
shocks.

The waveform analyzers of the WAVES instrument onboard of STEREO spacecraft have been observing the interplanetary medium since more than seven years. A complete database of the observed Langmuir waves is accessible to the community from the CDPP website (http://cdpp.eu/).

We present here the details of the available information, as well as some analysis on different heliophysical contexts (interplanetary medium, shocks in particular).