

Second National Mars Science Seminar

Prototype of the station for the observations of the ELF electromagnetic waves on the surface of Mars

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[POSTER]

The station is an autonomous ELF electromagnetic receiving system built in the micropower technology, operating in the frequency range from 30 mHz to 450 Hz. Station will be placed on the surface of Mars. The project developed with a new magnetic antenna technology. Developed antennas are characterized by a low weight of 0.6 kg and a very low noise level of 0.1 pT / sqrt (Hz) at 10 Hz. The station is powered by the solar batteries that ensure the continuous recording, data processing by the on-board computer and transmitting of the analysis results to the orbital retransmitter.

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