



The Current Status of the 1st Electromagnetism Satellite Mission in China

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The 1st China Electromagnetism Satellite now is on its Phase C for Electrical Mode and Qualification mode. And according to the developing schedule, the satellite is due to be launched before the end of 2016.

The first electromagnetism satellite is defined as an experiment satellite with its major scientific objectives to monitor the global electromagnetic fields as well as plasma distribution in ionosphere, to provide seismo-electromagnetic information for studying earthquake mechanism and short-term prediction of large earthquakes, and to share the data with earthquake sciences and space sciences.

The satellite will work on Sun synchronous orbit with the attitude of about 500km and descending node 14:00LT. The payload assembly are as following: Search Coil Magnetometer, Electric Field Detector, Flux-Gate Magnetometer, Plasma Analyser, Langmuir Probe, GNSS Two-frequency Receiver, Three-frequency Transmitter, Energetic Particle Detector.

The main physical parameters and products of the mission are electromagnetic field and electromagnetic wave, plasma density, temperature, and tomography in ionosphere, high energy particle disturbance, etc. The Chinese work team is ready to open the data and jointly research on common topics with international colleagues.