

The 1st China Seismo-Electromagnetic Satellite Mission

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The 1st China Seismo-Electromagnetic Satellite (CSES) launched at Feb.2, 2018 after 15 year' s research and developing and currently it sounds good status onboard. CSES mission was proposed to be the first satellite of space-based geophysical fields observation system in China with a lot of application prospect in earthquake science, geophysics, space sciences and so on. And coincide with the mission objective, the satellite decides to use the Circular Sun Synchronous Orbit with altitude about 500km and descending node time at 14:00LT. The payload assemble includes 8 instruments, Search-Coil Magnetometer, Electric Field Detector, High precision Magnetometer, GNSS occupation Receiver, Plasma Analyzer, Langmuir Probe, Energetic Particle Detector, and Three-frequency Transmitter, in which, we have an effective cooperation with Italian Space Agency on Energetic Particle Detector and Austrian Institute of Space on High precision Magnetometer.

At this moment, the satellite and the launching vehicle shipped to and have passed different test in the launching site. Before their shipment, CSES have done a series of test and calibration both in China and Italy, most of the test results accord with the designing requirement and is due to very useful for the coming scientific application.

According to the schedule, CSES will have its life time of 5years with the first six months for commission test and then deliver to CEA for regular operation. The CSES data will open for global scientists with few class of authorization. And at this moment, we may expect that CSES primary result will be issued during the conference.

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