

A Small Satellite Constellation: ELMOS

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ELMOS (ELectric and Magnetic field Observation Satellite) is a mission candidate for small scientific satellite of ISAS/JAXA. As ever, ELMOS was a single satellite like a DEMETER but it is impossible to observe daily variation of the ionosphere by fixed local time satellite.

New ELMOS satellite constellation is composed by one small satellite (200kg \sim) and 4 microsattellites (50kg \sim). All the satellites carry electron temperature probe, impedance probe and GPS occultation receiver, and it will be launched on LEO around 500-600km altitude with 30-40 degree inclination.

Its mission objectives are to collect reliable atmosphere/ionosphere data, to investigate ionospheric precursors based on its reliable ionospheric model and to unveil mechanism of the seismo-atmosphere/ionosphere coupling. We would like to propose that each country suffering from earthquake disasters launches one micro satellite.

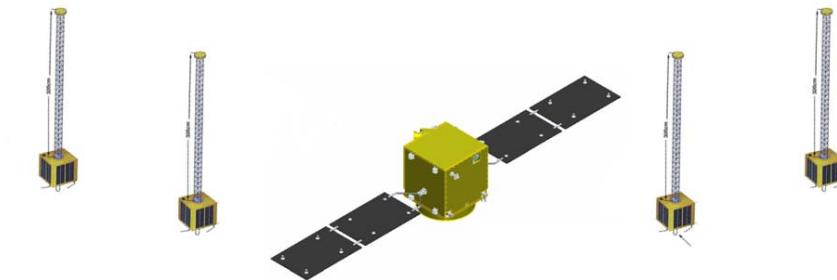


Figure 1. ELMOS Satellite Constellation

References

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