Preliminary Analysis of the Development and Operation of the Space Science Payloads aboard KAISTSAT-4

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Four space science payloads, Far-Ultraviolet Imaging Spectrograph (FIMS), Solid-State Telescope (SST), Langmuir Probe (LP) and Scientific Magnetometer (SM), are currently being designed for KAISTSAT-4 satellite. A mission analysis of the satellite and implementation of the analysis in the design of the spacecraft have been. Several important design features of the spacecraft and payloads, as well as operational concepts, have been assessed from a series of initial analyses. The results of these initial analyses support that major scientific objectives of the science payloads can be achieved under moderate levels of design risk. Brief reviews of the analyses will be provided in this study.