

Development of FIMS Observation Planning Software

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Basic algorithm and preliminary results of FIMS observation simulation will be presented. Observation planning in space observation is an important technique to ensure spacecraft health and safety and to maximize observation efficiency and instrument performance. Planning objectives include analysis of observational constraints, sky coverage monitoring, observation sequence and priority for selected targets, and minimization of data loss. Some important observational constraints will be discussed separately.

Two year of baseline mission is composed of sky survey and pointed observation, and earth monitoring for space physic research. Necessary software components and observational constraints for each operation mode will be discussed. While sky survey mode is just a simple hemisphere scanning during eclipse, pointed observation mode needs more complex operation and planning. Orbit distribution between astrophysical observation and space science observation is also an important topic for efficient sky coverage. We will discuss possible orbit distribution schemes compromising allocated orbits for both astrophysics and space science.