The Operation Scenario of FIMS for Mission Requirements

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FIMS flight operation modes are defined for mission requirements. FIMS flight operation modes include Initial Operation Mode, Standby Mode, and Observation Modes. Detailed software controls and electronics states for each mode are described. FIMS is unpowered and non-operational during launch and ascent. During Initial Operation Mode the activities are to incrementally power FIMS subsystems using uplinked serial commands, conduct an outgassing period, conduct an optics-heating period, deploy the contamination door, establish payload command operations, commence science data acquisition, and establish optimal engineering parameters. During Standby and Observation operations the activities are to monitor and maintain the payload health and status for normal operations, maintain payload command operations, routinely collect and transfer science data, and occasionally uplink and verify minor software modifications. Both science and engineering data are accumulated in the Observation Modes. Only engineering data are accumulated in the Standby Mode.