Status of the SmartSat Program

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The SmartSat is a small satellite, which is a collaborative program of government agency and private sector in Japan. SmartSat will carry Reconfifurabale Communication Experiment and The Space Weather Experiment.The space weather experiment of the SmartSat consists of Wide Field CME Imager for CME tracking (WCI), Space Environment Data Acquisition Equipment (SEDA), and mission processor (MP). WCI is a imager to track CME as far as earth orbit. CME brightness near the earth orbit is expected 10E-15 solar brightness or 1/200 of zodiacal light brightness. For space weather alert, not only high quality observation, but also sophisticated onboard data analysis, CME detection and some alert issue are required. We plan to carry high performance MP with COTS CPU and commercial real time OS, QNX for onboard data processing. SEDA will monitor the radiation belt particles and proton event. We will report recent status and future prospect of the program.