

W45a 全天 X 線監視装置 Monitor of All-sky X-ray Image (MAXI) の全体像

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MAXI is an X-ray all-sky monitor, which will be delivered to the International Space Station (ISS) in 2008, to scan almost the whole sky once every 96 minutes for a mission life of more than two years. The detection sensitivity will be 7 mCrab (5σ level) in one scan, and 1 mCrab for one-week accumulation. At previous meetings, we presented the development status of the MAXI payload, in particular its X-ray detectors. In this talk, we present the whole picture of the MAXI system, including the downlink path and the MAXI ground system. We also examine the MAXI system components other than X-ray detectors from the point of view of the overall performance of the mission. The engineering model test of the MAXI X-ray slit collimator shows that we can achieve the position determination accuracy of <0.1 degrees, required for the ease of follow-up observations. Assessing the downlink paths, we currently estimate that the MAXI ground system receive more than 50% of the observational data in “real time” (with time delay of a few to ten seconds), and the rest of data with delay of 20 minutes to a few hours from detection, depending on the timing of downlink. The data will be processed in easily-utilised formats, and made open to public users through the Internet.