



Results of proto-flight test of the Dual-frequency Precipitation Radar for the Global Precipitation Measurement

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The Dual-frequency Precipitation Radar (DPR) on the Global Precipitation Measurement (GPM) core satellite is being developed by Japan Aerospace Exploration Agency (JAXA) and National Institute of Information and Communications Technology (NICT). The GPM is a follow-on mission of the Tropical Rainfall Measuring Mission (TRMM). The objectives of the GPM mission are to observe global precipitation more frequently and accurately than TRMM. The frequent precipitation measurement about every three hours will be achieved by some constellation satellites with microwave radiometers (MWRs) or microwave sounders (MWSs), which will be developed by various countries. The accurate measurement of precipitation in mid-high latitudes will be achieved by the DPR. The GPM core satellite is a joint product of National Aeronautics and Space Administration (NASA), JAXA and NICT. NASA is developing the satellite bus and the GPM microwave radiometer (GMI), and JAXA and NICT are developing the DPR. JAXA and NICT are developing the DPR through procurement. The contract for DPR is NEC TOSHIBA Space Systems, Ltd. The proto-flight test for DPR started in November 2010. The results of proto-flight test of DPR will be presented.