Development of photometers onboard the TARANIS satellite and JEM-GLIMS

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TARANIS (Tool for the Analysis of RAdiations from lightNIngs and Sprites) is a micro satellite, which will be launched in 2012, to observe lightning discharges, transient luminous events (TLEs), and terrestrial gamma-ray flashes (TGFs). Our group develops filter photometers onboard the TARANIS satellite. The photometers consist of four channels (150-280nm, 337+/5nm, 762.5+/-5nm, 600-900nm) to detect optical emission of lightning discharge and TLEs. We had carried out calibration experiments using breadboard model (BBM) of the photometers. Based on these tests, we have determined the specifications of the engineering model (EM) of the TARANIS photometers and the pre-flight model (PFM) of the JEM-GLIMS photometers. We will present the experiment results and introduce the specifications of photometers in detail.