

## Development of an uncooled infrared camera onboard a Venus orbiter

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Long-wavelength Infrared Camera (LIR) is one of a suite of imagers onboard a Venus orbiter PLANET-C which will be launched in 2008. LIR will take thermal infrared images of Venus providing wind vector fields retrieved from changes in a temperature difference pattern at the cloud top altitude. Adapting an uncooled bolometer array to an infrared focal plane array (IRFPA) LIR can be a light, compact, low-power consumption and reliable image sensor. The IRFPA has passed a radiation dose test which simulates a radiation environment of Venus. In FY2003 a BBM of LIR has been designed and produced to confirm its basic performance to meet requirements for the science mission.