

High-resolved Thermographic Observation of Craters and Boulders on Ryugu

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Thermal infrared imager (TIR) onboard Hayabusa2 have taken more than 2,300 thermographic images of asteroid Ryugu in 2018's. During some descending operations of Hayabusa2, including touch-down rehearsals and MASCOT/MINERVA releases, highresolved thermal images were acquired from the spacecraft altitude below 100 m, resulting in spatial resolution around 10 cm. These images show interesting and important thermal signatures of surface geological objects; hot spot around small craters and boulders with high ($\sim 1,000 \text{ J m}^{-2} \text{ K}^{-1} \text{ s}^{-0.5}$) and low ($\sim 200 \text{ J m}^{-2} \text{ K}^{-1} \text{ s}^{-0.5}$) thermal inertia. Furthermore, optical images obtained by telescopic multi-band camera (ONC-T) reveal the nature of the surface materials. We present the integrated interpretation of TIR and ONC-T high-resolved observation of Ryugu.