

# Thermal IR observations of Hayabusa mission target Itokawa

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As a previous work on this paper, thermal observations of (25143) 1998\_SF36 Itokawa were performed using the ESO 3.6m telescope with the TIMMI2 at the La Silla observatory in Chile (Sekiguchi et al. 2003, *Astron. & Astrophys.* 397).

The mid-IR radiation in the N-band (11.9  $\mu\text{m}$ ) was measured. Assuming the STM (Standard Thermal Model) and combining with the time-resolved absolute magnitude in optical, the derived effective diameter and the geometric albedo are 0.35 km and 0.23, respectively.

We here show new observations in multi wavelengths (7.9, 9.6, 12.9, 17.2  $\mu\text{m}$ ) and analysis using same instrumentations at same telescope and more sophisticated model.

TPM (Thermophysical Model, Legerros, 1998, *Astron. & Astrophys.* 332) reveals the thermal properties of asteroid surface layer.