**Task ID**

TK- “Giver Dept.Code”-”Assignee Dept.Code”-R.X (X=Request number)  
(e.g “TK-EPS-TT&C-R.01”)

**File Name:**   
From “Giver Dept. Code” to “Assignee Dept. Code” – Deadline data (set a deadline) – Task Objective  
(e.g “From EPS to TT&C – 01.05.2025 – Activation Time of S-Band”)

**Request from:** Payload – Seyed Ali Rashidi

**Deadline:**  
DD/MM/YYYY

1. **Task Description:**

The objective of this request is to obtain **predicted temperature values of the onboard thermal infrared camera** during satellite operations. These values are essential for calculating the **detector noise (N\_D)** as part of the radiometric signal-to-noise ratio model. The prediction should ideally cover specific timestamps of satellite operation (if available) so that this data can be aligned with thermal scene observations.

The request supports the payload analysis for the IGNIS mission and is part of an ongoing modeling effort to characterize the radiometric behavior of the imaging system.

1. **Expected Outcome:** 
   * A CSV table or Excel file including the following fields:  
     Date, Time, Camera Temperature (°C or K)

* Optional: graphs showing temperature variations
* If no exact predictions are available yet, a **range of expected temperatures** under mission conditions would still be useful

1. **Additional Notes:**
   * This temperature data will be directly used to estimate the detector noise (N\_D) of the camera in thermal infrared conditions.
   * If predictions are not available for exact timestamps, please indicate for which conditions or mission phases the data is valid.

*Seyed Ali Rashidi*

*Employee - Payload*

*IGNIS*