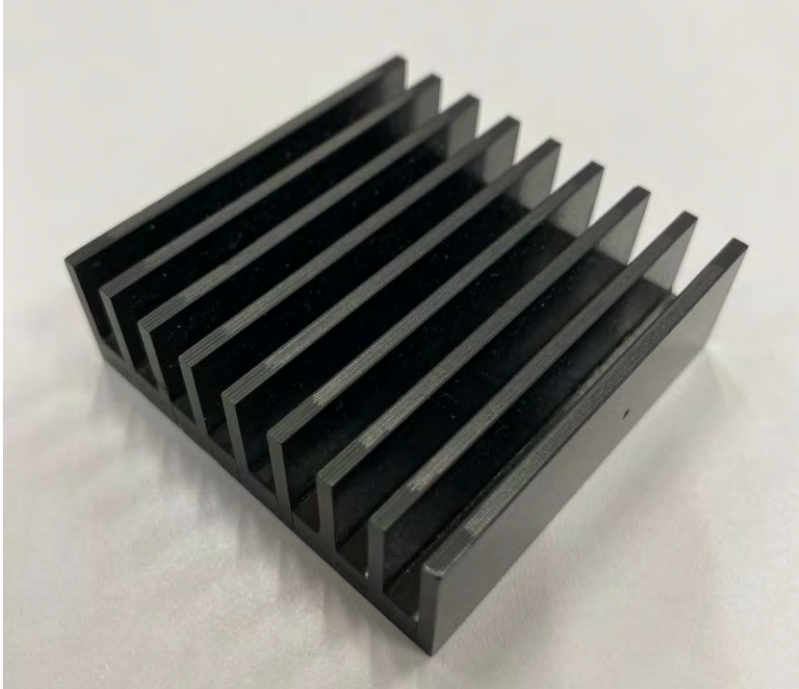


# Innovative graphite sheet



## 【Properties】

Thermal conductivity : **1,000 W/m·K**

- Two directions
- Stacking 120 μm graphite sheets / 120 μm CFRP

## 【Application】

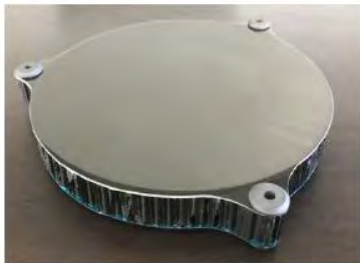
Heat Dissipation Plate for Flat Antenna  
for Space communication



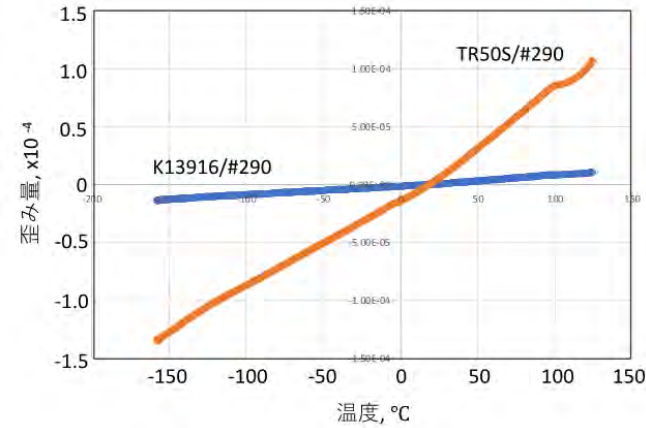
## 【Partner】



# Zero thermal expansion CFRP



## 【Properties: CTE】



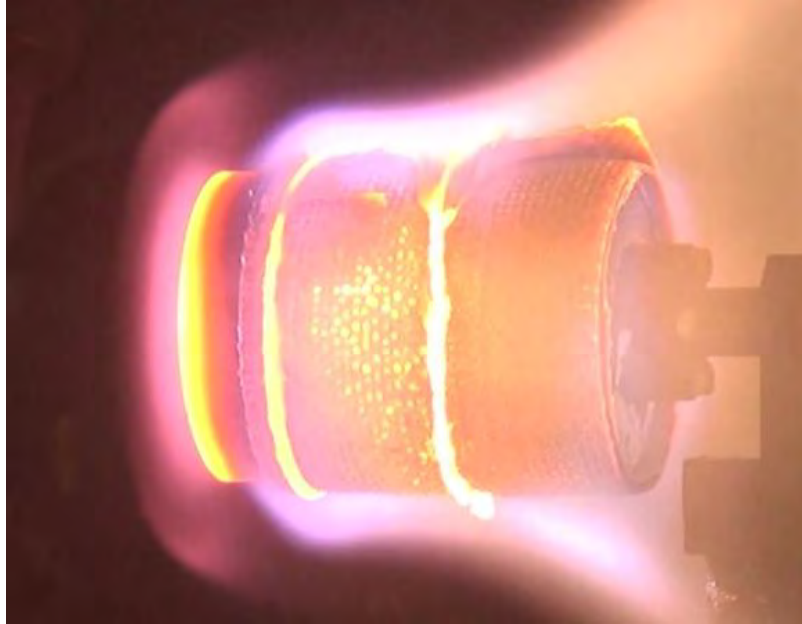
- K13916/#290  
**0.08ppm/°C**
- TR50S/#290  
**3.74ppm/°C**

Under the Stardust Program: Evaluation of Prototype Elements for a Long-Range Acquisition and Tracking Subsystem for Lunar Exploration (FY2024 Results)

## 【Application】

- CFRP Telescope
- Primary Mirror for Telescope

# 1,500°C Heat resistant pitch-based composite



## 【Properties】

Sample Density	Test Condition		Temperature		Thickness		
	Heat rate	distance	Surface	Back side	Before test	After test	Δ
g/cm <sup>3</sup>	MW/m <sup>2</sup>	mm	°C	°C	mm	mm	mm
2.38	3.6	100	1544	683	29.65	29.87	0.22
2.41	6.1	80	1842	759	29.99	30.12	0.13

## 【Application】

Outer Surface for  
Thermal Protection System

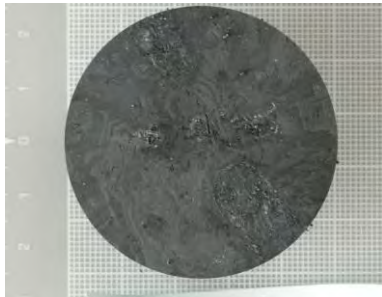


HOPE-X (C)JAXA

Before



After



## 【Partner】

