



PLATFORM OVERVIEW

The Voyager Space Explorations External Payload Platform (NREP) is the **first commercial research platform** designed for testing scientific investigations, sensors, and technologies in space. Positioned on the Japanese Experiment Module Exposed Facility (JEM-EF), NREP deploys payloads via the JEMRMS, enabling exposure to the **unique conditions** of space. The platform supports up to **32U of total payload volume**, with an active and a passive side, all oriented towards Nadir.

APPLICATIONS

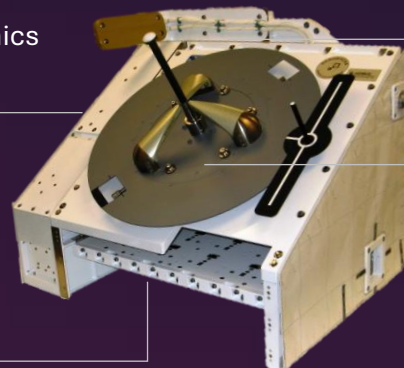
- ✓ Research in microgravity and outer-space environment
- ✓ Technology demonstration & proof-of-concept
- ✓ Radiation effects studies
- ✓ Physical and life sciences
- ✓ Pharmaceutical, food, and biotechnology research
- ✓ Educational program

KEY FEATURES

- **32U** payload total volume:
 - up to 5x4U **powered** payloads
 - Up to 4x3U **unpowered** payloads
 - non-standard geometry accommodated with **custom** fittings
- up to **50W @ 28V DC** power per payload:
 - 28 VDC +/- 2 V
 - 120 VDC as option
 - 2A max current
- **USB 2.0** data interfaces
- Up to **8 Mbit/s** data rate
- **Outer space** exposure
- **Nadir** pointing
- **Return** to Earth granted

Avionics

WiFi interface



Experiment packages
baseplate

Grapple fixture
for robotic arm
operations