

Space BD

Items in 1st Japanese ISS exposed facility utilization program

return to earth

Contributing to broad use of space ranging from academic to commercial use

First round of Space Delivery Project "RETURN to EARTH"





Selection of payload items: (Left) Prior to launch

(Right) After exposure to space and return to Earth

Tokyo—Space BD, a leading Japanese space startup, announces the return to Earth of the payload items exposed to space in the Space Delivery Project "RETURN to EARTH." Through this project payload items were launched to the International Space Station (ISS) in February 2022, exposed to space for 9 months, and have now been returned to Earth.



Astronaut Koichi Wakata removing the Space Delivery Project "RETURN to EARTH" payload items Provided by: JAXA/NASA

The payload items, after being launched into space, were affixed to the ISS exposed facility, where they were exposed to cosmic and ultraviolet rays while flying at approx. 7.9 km per second (approx. 28,000 km per hour), 400 km above ground. This is one orbit of the Earth in approx. 90 minutes, or approx. 16 orbits per day. This is the first return of payload items for this first round of the project, and the items showed significant changes in color.

On March 27, 2023, a ceremony celebrating the return of the payload items was held at the Tsukuba Space Center of the Japan Aerospace Exploration Agency (JAXA), with some of the project participating companies in attendance.



In the first round of the project, research materials, photographs, and illustrations, among other items, were gathered from research institutes, educational institutions, and private companies in Japan and internationally, and transported into space. In addition to academic use of space to date, this project contributed to creating use cases of a diverse array of potential uses of space, including for marketing, branding, and education.

The payload items now returned to Earth are expected to be used for a variety of purposes going forward according to the goals of the customers, including for research & development, education, and PR.



Comment from Masataka Sato, Business Development, Space BD Inc.



This project, first begun in 2021, has now had all milestones completed, and I am thrilled that the payload items are now ready to be safely returned to our customers.

Among the participating and partner companies in this first round were those who had prior experience participating in space-related projects, and those for whom this was the first such project. In my view, the strength of this project is the ease of access to a space experience. Going forward we hope to have even more people experience the use of space through this project, and contribute to new business development and existing business growth.

Payload items

Participating organizations: Orbray Co., Ltd. (formerly Adamant Namiki Precision Jewel Co., Ltd.), Kyoto University, Clark Memorial High School, Space SAGA, Sompo Japan Insurance Inc., Tampopo 4 Research Team (Fukuoka Institute of Technology, Yokohama National University, Hokkaido University, the University of Vienna, and others), Toagosei Co., Ltd. (Aron Alpha), Hachinohe Institute of Technology's First High School, Airvantis, Toucan Space Payload item list: https://space-bd.com/en/news/20210825.php

Space Delivery Project "RETURN to EARTH"

This project makes use of the simple material exposed experiment bracket (ExBAS) installed in the medium exposure experiment adapter (i-SEEP) of the ISS Kibo. Space BD called for participation among a wide range of organizations and is providing a variety of support, including the payload item selection, launch, and the return to Earth.

▼ Space Delivery Project introductory video https://youtu.be/HCv3MBrVL6c

▼Past news releases about the Space Delivery Project Round one

August 25, 2021 Space BD to start Space Delivery Project Joint project in collaboration with global research & educational institutions and the private sector to launch research objects & mementos by the end of FY2021

About Space BD

We at Space BD are a one-stop provider of solutions for those in the space utilization field. Not only can we deliver payloads to space by a variety of methods and facilitate the use of International Space Station assets, but we can also assist with everything from business plans to hands-on technical operations. As of February 2023, Space BD's performance record marked over 70 satellite projects and over 300 orders.