

GRUS-3α

Advancing Earth observation capabilities—for the next generation.



GRUS-3α is the 11th microsatellite developed by Axelspace Corporation. The mission aims to validate the performance of an optical system with a telescope that will be used in AxelGlobe's next-generation Earth observation microsatellite, GRUS-3, scheduled for launch in 2026, in order to ensure its reliability and enable early service provision after its launch. GRUS-3α will also be used to validate the in-orbit performance of the versatile satellite bus system for AxelLiner.

GRUS-3α had been developed since 2024 and was launched on June 23, 2025 (UTC) from Vandenberg Space Force Base in California, USA. It was successfully placed into its scheduled orbit and Axelspace received the first radio signal from the satellite. The company is currently validating and evaluating the performance of the satellite.

Verification Results to be Fed into GRUS-3 Development

Up to seven GRUS-3, the largest number in the series, are scheduled to be launched simultaneously in 2026. Each satellite will feature an effective swath of 28.3 km and a maximum capture length of 1,356 km, with a spatial resolution of 2.2 m. The seven satellites will have the capacity to capture up to 2.3 million km² imagery per day. The onboard sensors can capture not only visible light but also spectral bands useful for visualizing plant growth conditions and coastal landscape.

Axelspace will add GRUS-3 to its existing constellation of five microsatellites for Earth observation, GRUS-1, to meet the demand for wide-area and rapid capturing, as well as emergency response capturing needs during disasters. This supports the broader use of Earth observation data across a wide range of fields, including environmental protection, financial product development, and real estate management, in addition to precision agriculture, forest monitoring, and map creation.

Owner : Axelspace Corporation
Size : W 96cm x D 78cm x H 126cm
Weight : Approx. 150kg
Orbit : Sun-synchronous, Altitude 600km
Launch Date and Time :
June 23, 2025 at 21:25 (UTC)
Launch Vehicle : Falcon 9 (SpaceX)
Current State : Initial Operation

Corporate Outline

AXELSPACE

Axelspace Corporation

Clip Nihonbashi Building, 3-3-3 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-0023, Japan

Mail : info@axelspace.com

URL : www.axelspace.com