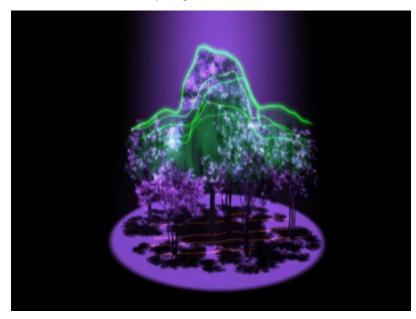
Unlocking forest mysteries: Nasa's GEDI resumes mission on ISS

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Nasa's Global Ecosystem Dynamics Investigation (GEDI) is back in action aboard the International Space Station (ISS), poised to shed light on the secrets of Earth's forests in three dimensions.

After an extended hiatus since its last mission in March 2023, GEDI has been reinstalled on the ISS, ready to resume its vital role in mapping Earth's forests with precision. Utilizing lidar technology, a special kind of laser technology, akin to the principles of a lightsaber, GEDI measures forest structure by bouncing light off the canopy, providing detailed insights into canopy height, vegetation density, and branch distribution.

Following its return to the ISS, rigorous testing is underway to ensure GEDI is fully operational and primed for data collection, expected to commence this summer. The instrument's extended downtime came after completing its initial mission, during which it played a crucial role in mapping Earth's biomass and tracking forest responses to climate change.

GEDI's significance extends beyond scientific exploration, as its data has been instrumental in understanding Earth's carbon cycle and the impact of protected areas on carbon sequestration.

A joint mission between Nasa and the University of Maryland, GEDI's three-dimensional maps of forest canopy

height and structure provide invaluable insights into biodiversity, habitat changes, and the distribution of biomass and carbon in forests worldwide.