



National Aeronautics and
Space Administration

The Power of NASA Science

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Science Mission Directorate
NASA Headquarters



Key Science Themes

PROTECT & IMPROVE LIFE
ON EARTH & IN SPACE

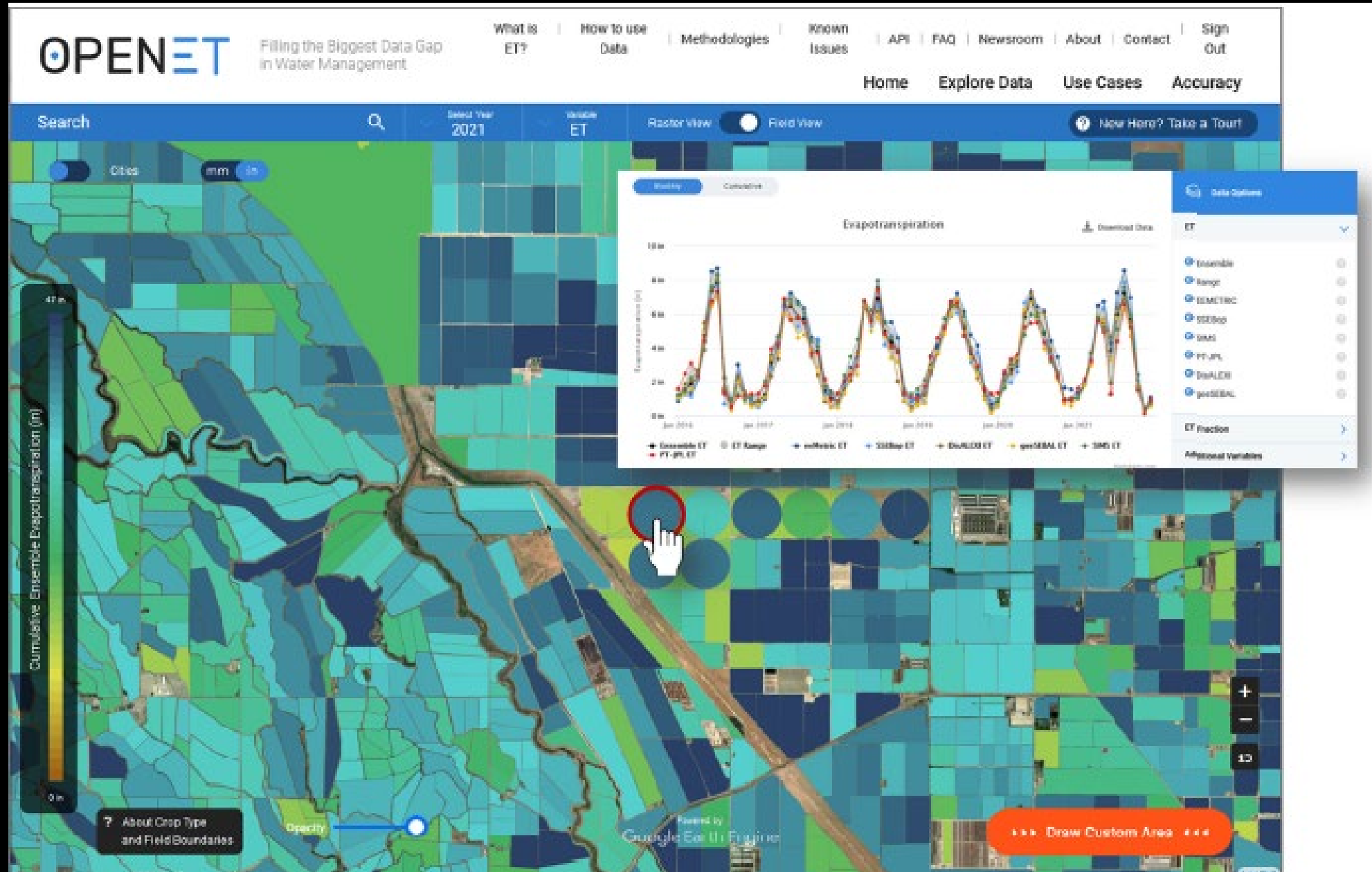


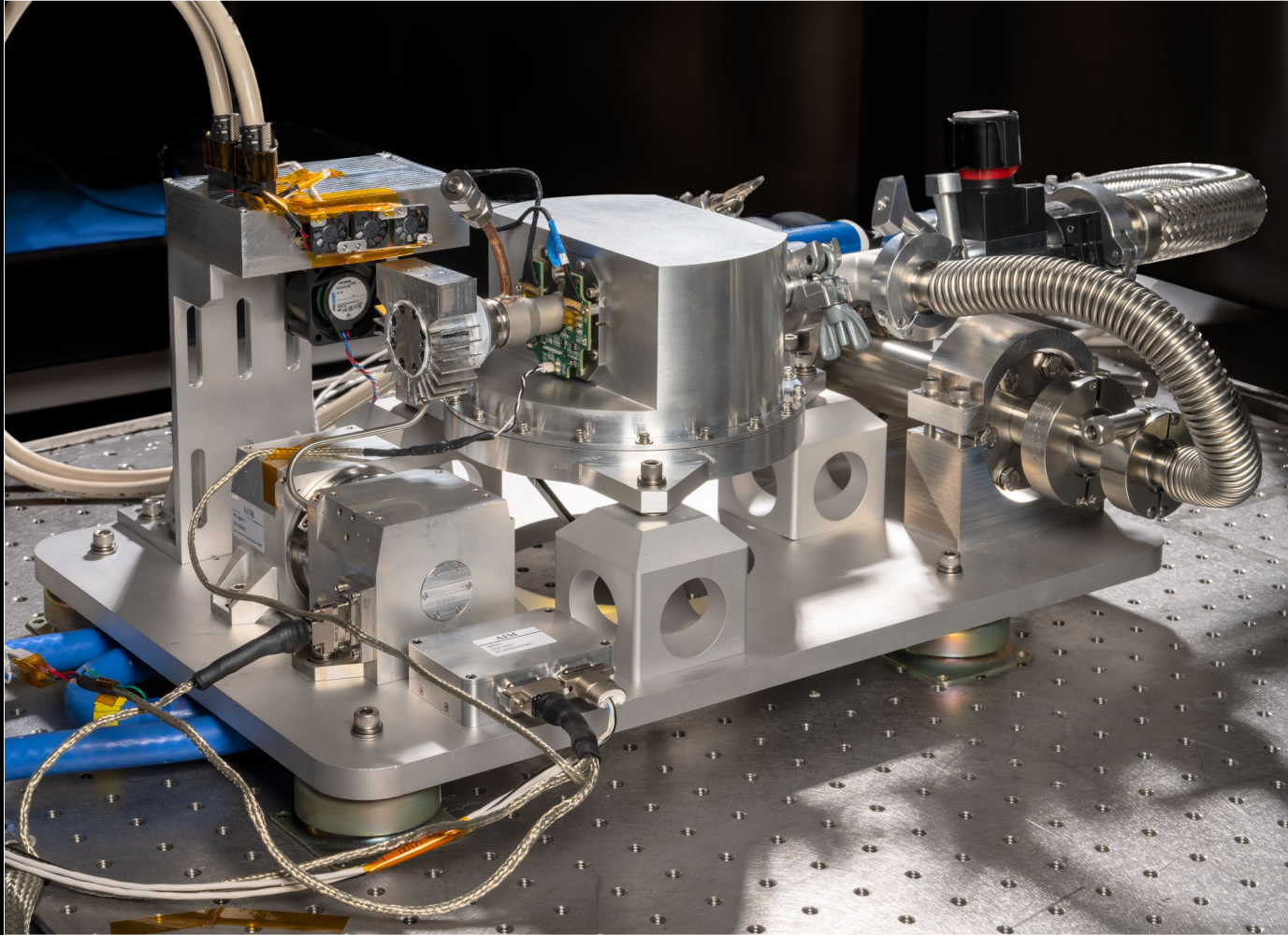
SEARCH FOR LIFE
ELSEWHERE



DISCOVER SECRETS
OF THE UNIVERSE



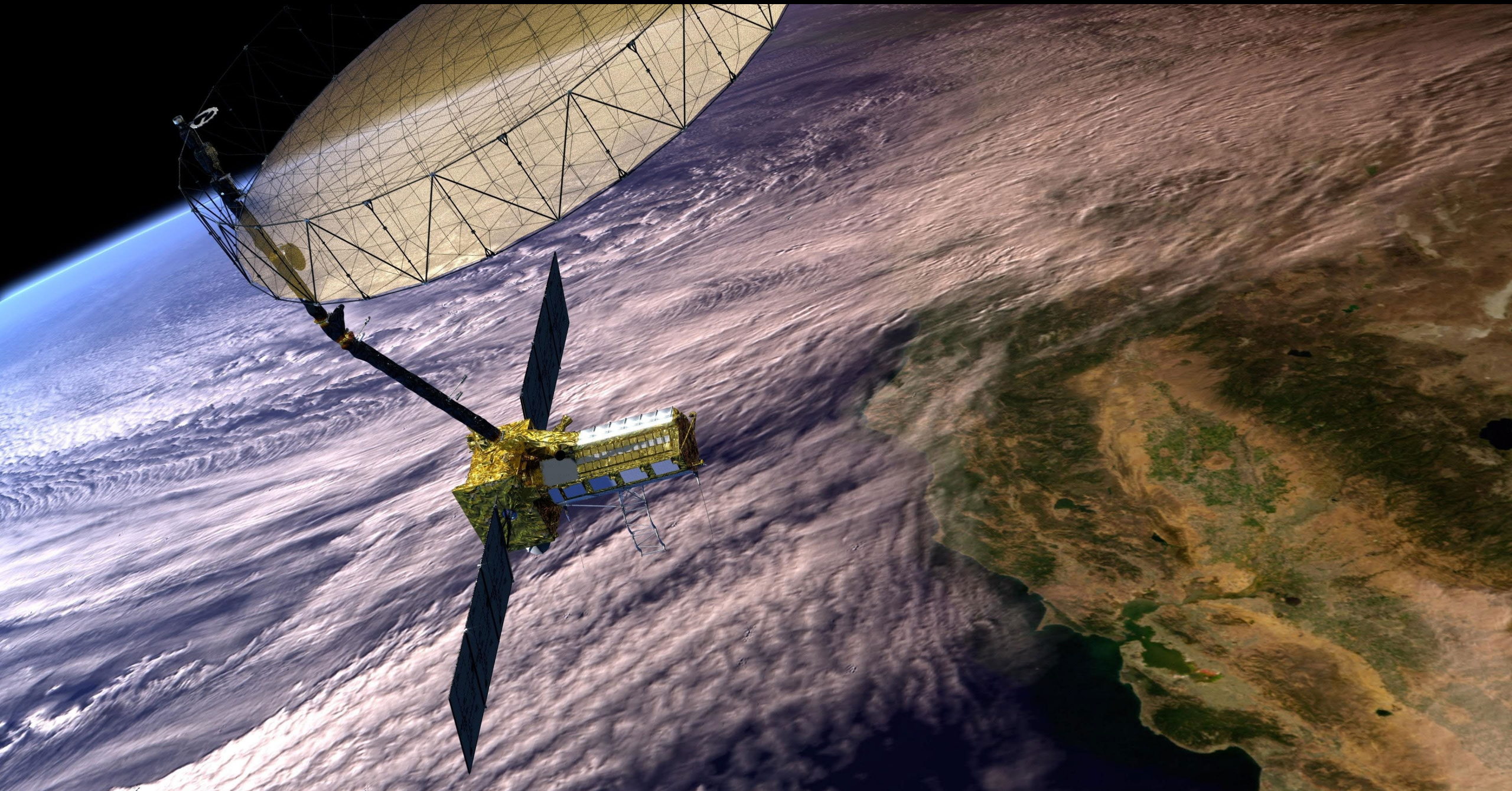


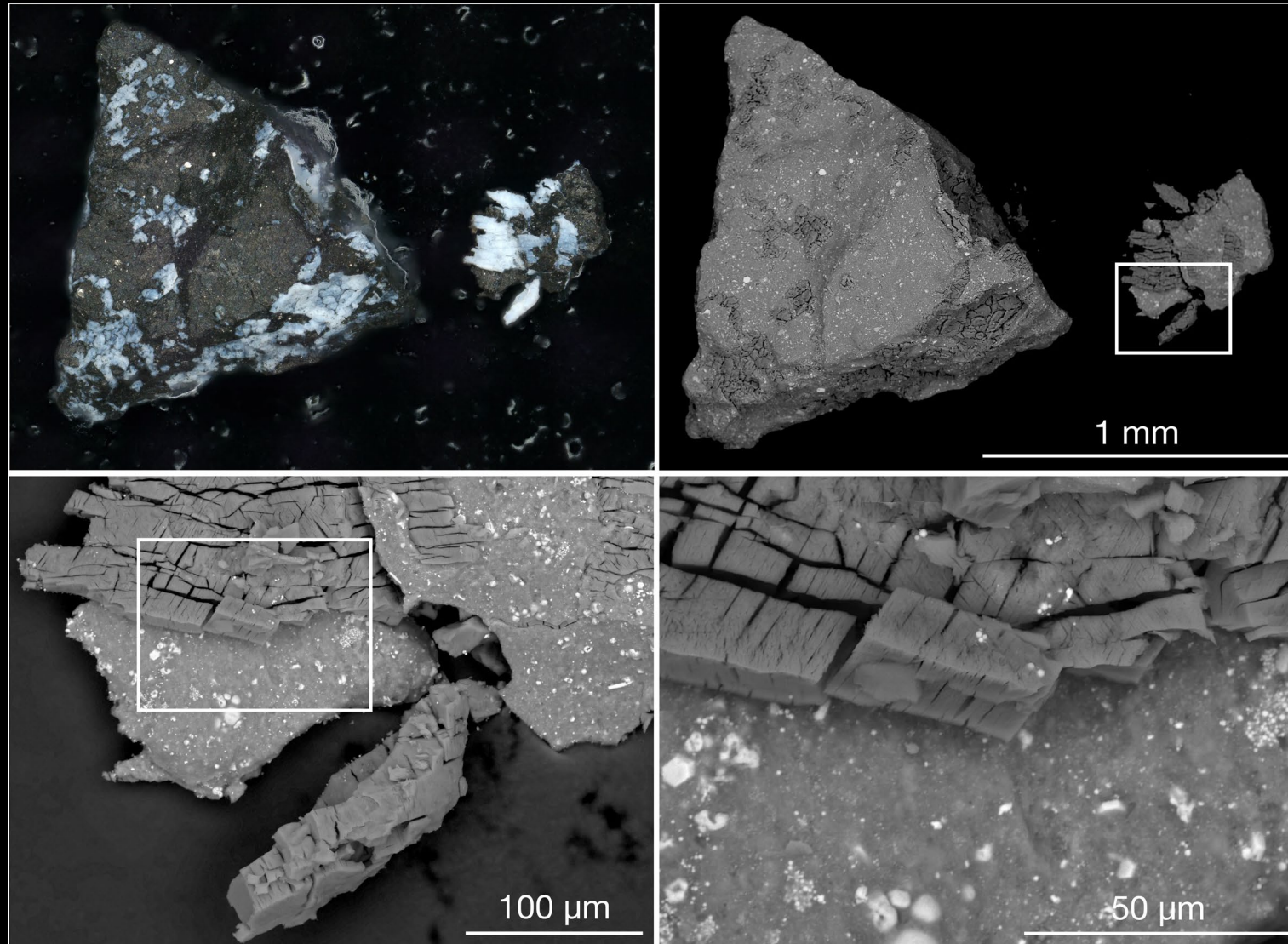


Compact Fire Infrared Radiance Spectral Tracker (C-FIRST)



B200 King Air in support of the Signals of Opportunity Synthetic Aperture Radar (SoOpSAR)





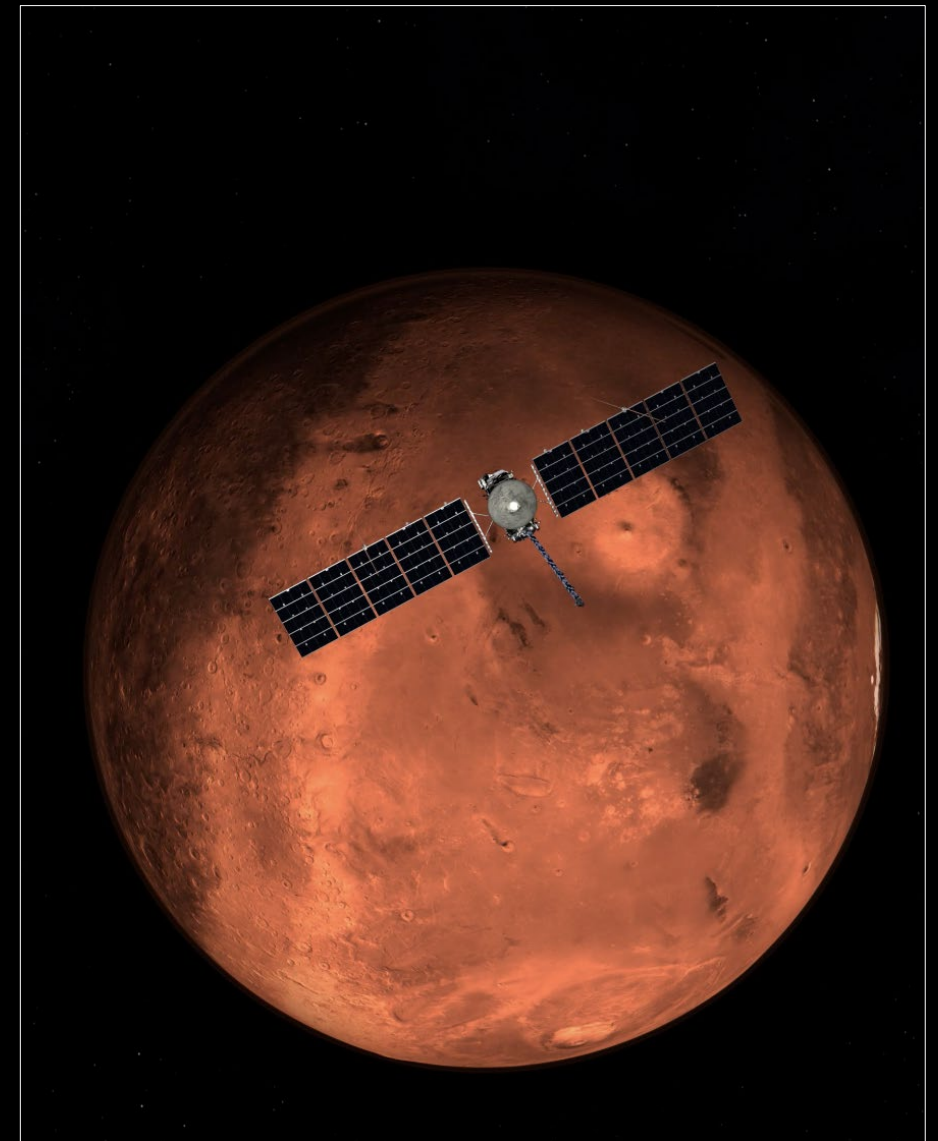
A tiny fraction of the asteroid Benu sample returned by NASA's OSIRIS-REx mission, shown in microscope images.



NEO Surveyor Instrument Enclosure Inside Historic Chamber A



A SpaceX Falcon Heavy rocket carrying the Europa Clipper spacecraft lifts off from Launch Complex 39A at NASA's Kennedy Space Center on Monday, Oct. 14, 2024.



This artist's concept depicts NASA's Europa Clipper as it flies by Mars.

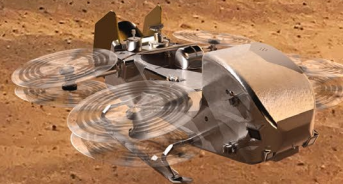
Dragonfly will be NASA's first aerial science mission to another world



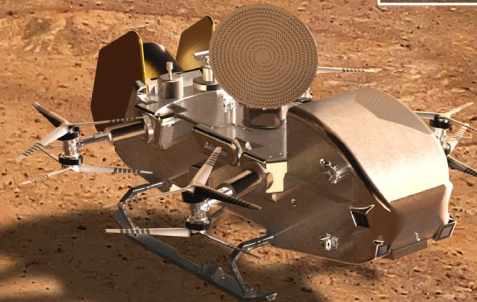
Full science payload to investigate the complex chemistry that is the precursor to life



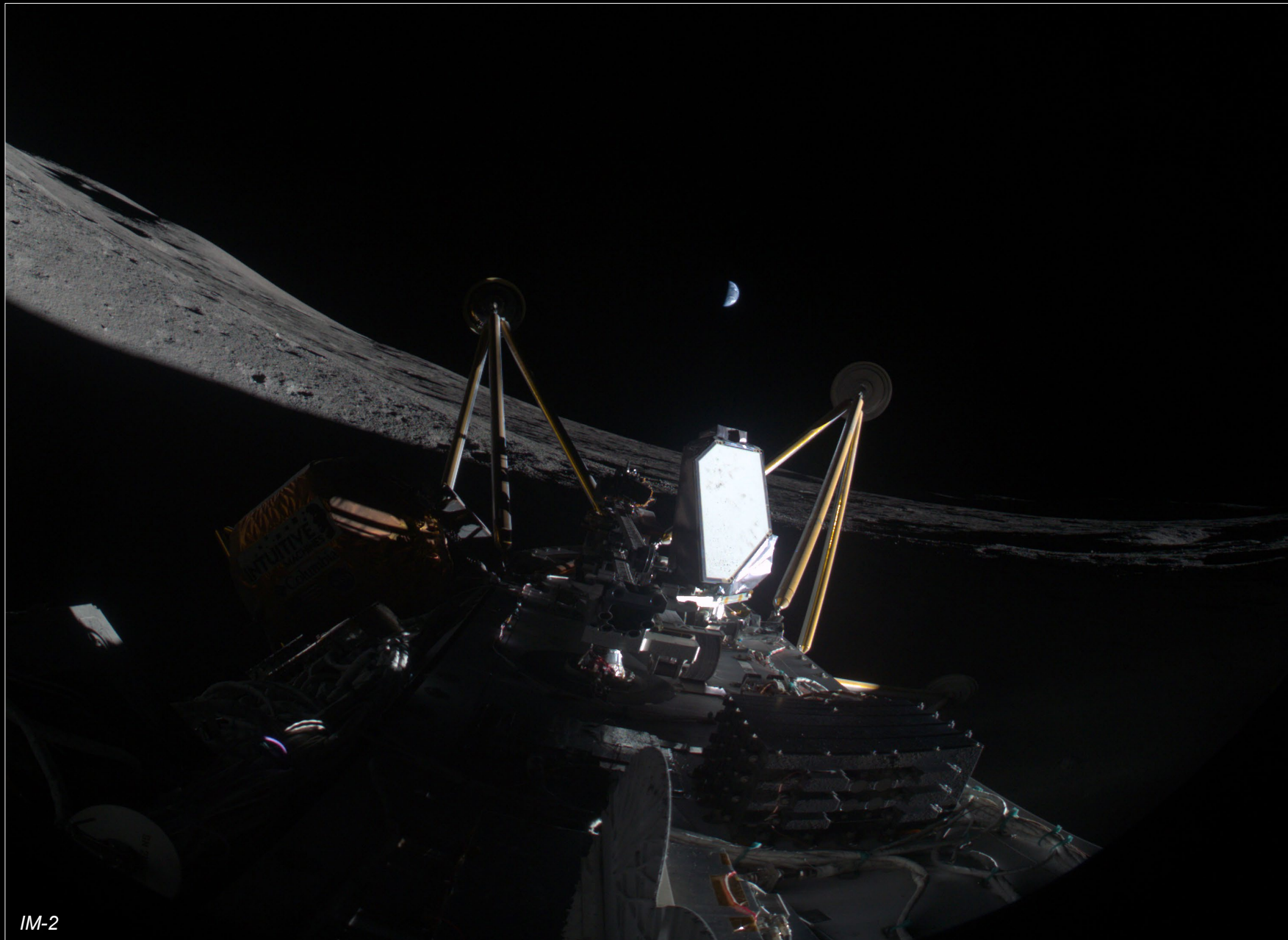
A new paradigm for exploration that covers more terrain than any other mission



Cameras will take aerial pictures, bringing the public along on rotorcraft flights over an icy Ocean World







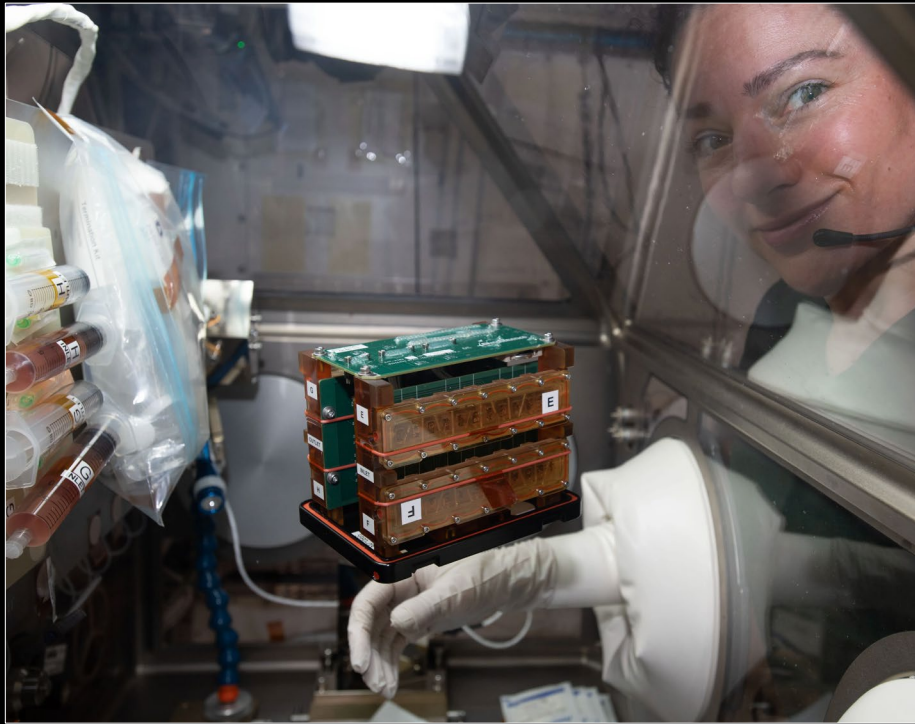
IM-2



Lunar Trailblazer

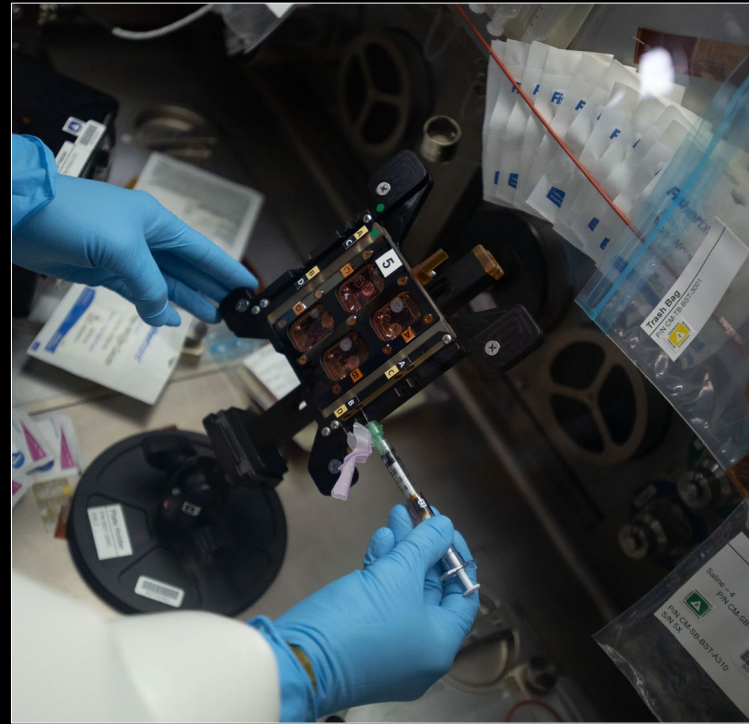


Researcher Rob Ferl became the first NASA-funded researcher to tend his own experiment in space, studying how plant genetics adapt to different stages of spaceflight on Blue Origin's NS-26 mission.



NASA astronaut Jessica Meir conducts cardiac research using tissue chip platforms in the Life Sciences Glovebox aboard the International Space Station in March of 2022.

Sponsoring Institutions: National Center for Advancing Translational Sciences, the National Institute of Biomedical Imaging and Bioengineering, and the ISS National Laboratory.



Astronaut Megan McArthur works on the Cardinal Muscle investigation in the Life Sciences Glovebox aboard the International Space Station.

Sponsoring Institutions: National Science Foundation and the Center for the Advancement for Science in Space (CASIS)

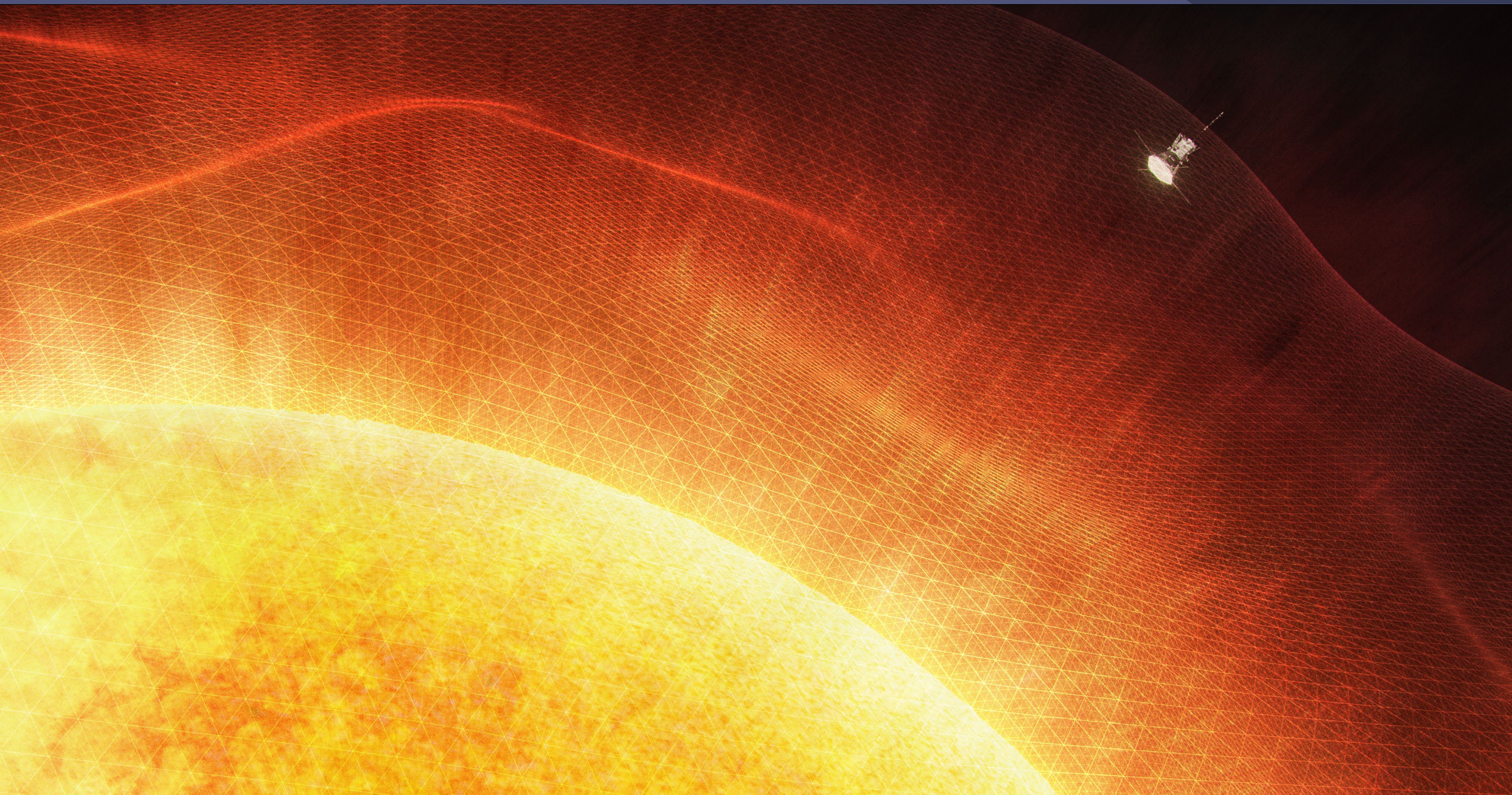


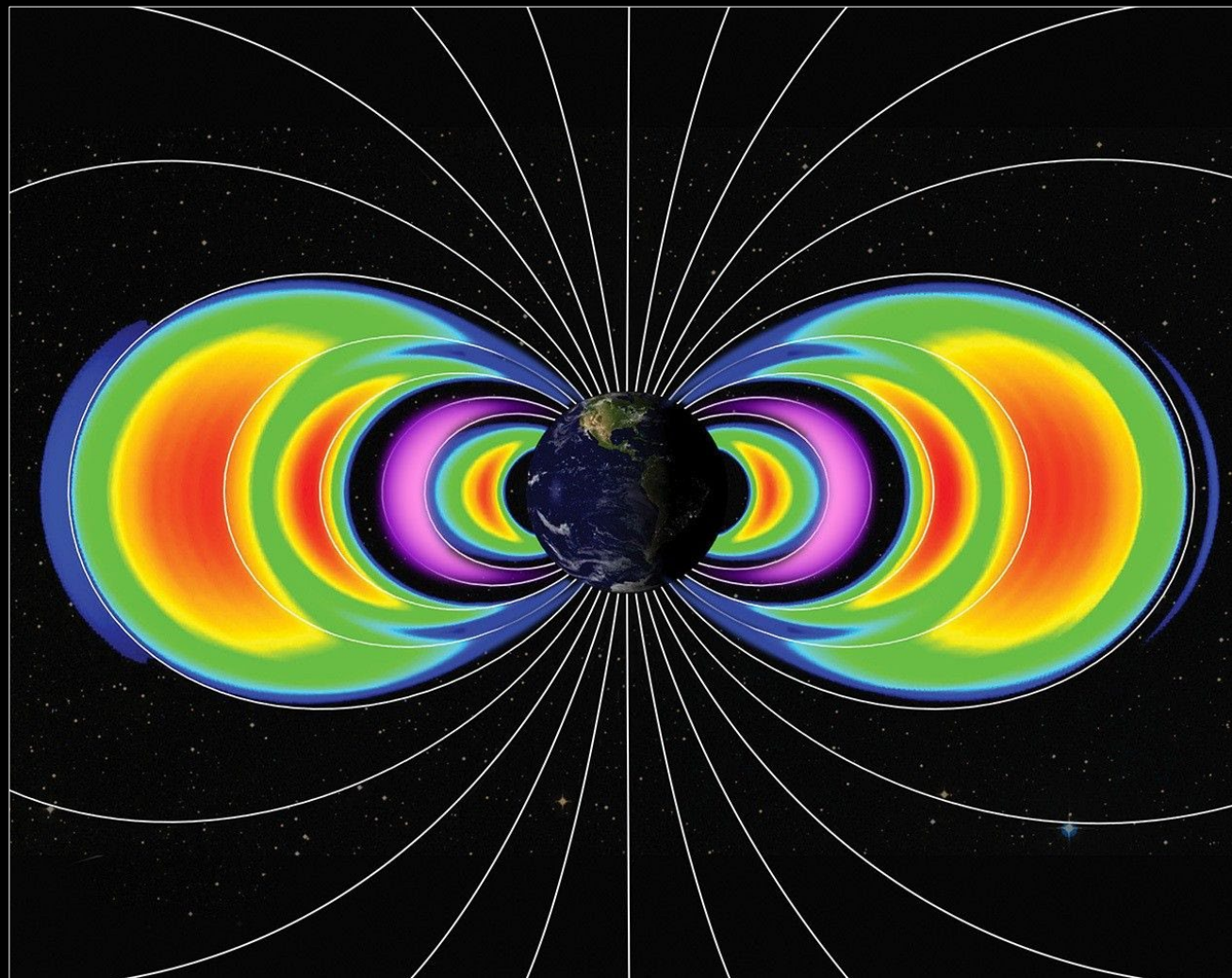
A tissue chip held by Biological and Physical Sciences Division Director Dr. Lisa Carnell. Tissue chips such as this will be used in upcoming space flight research and Artemis missions.

Image of Emulate Chip: Wyss Institute



Artist's illustration of an Artemis astronaut on the lunar surface

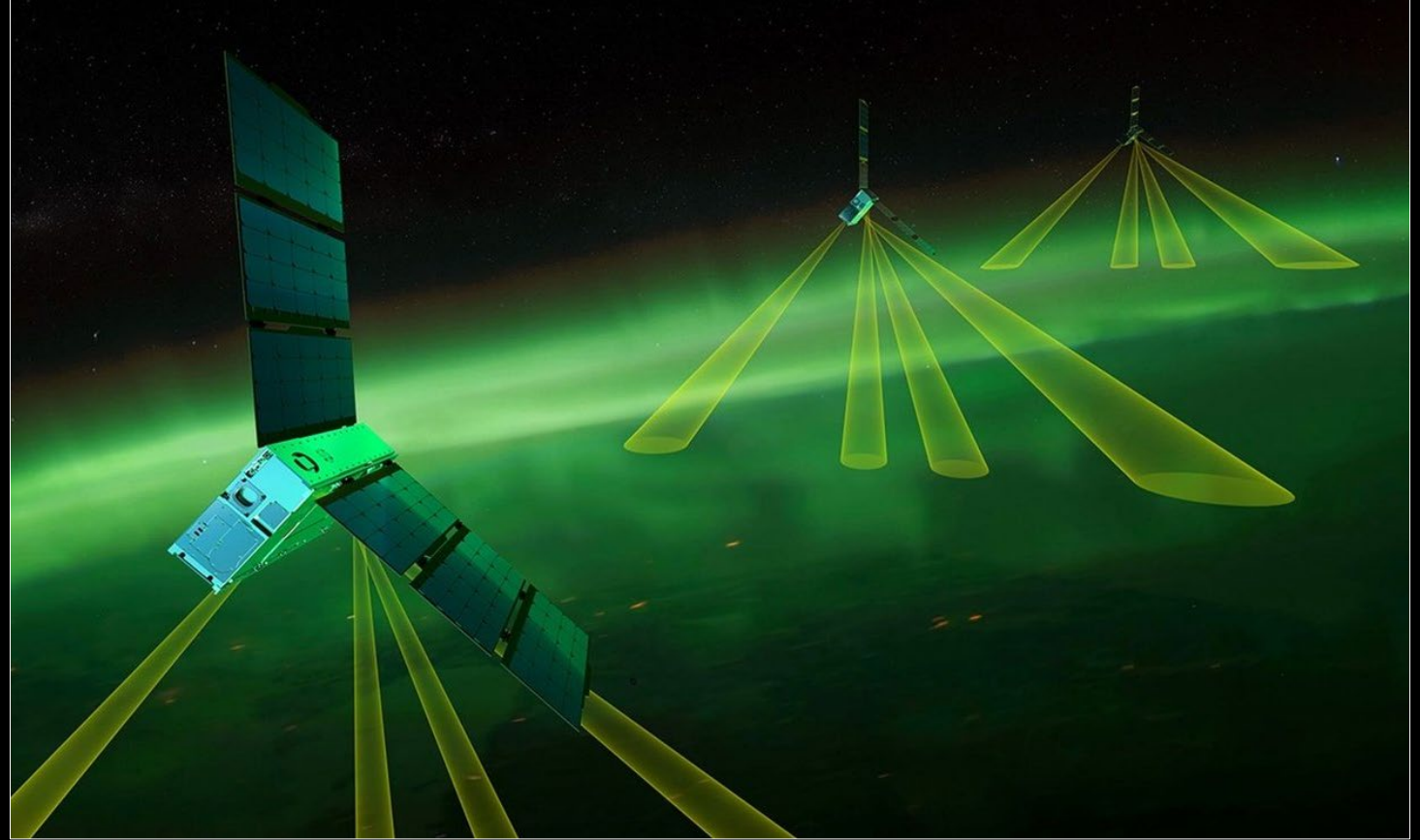




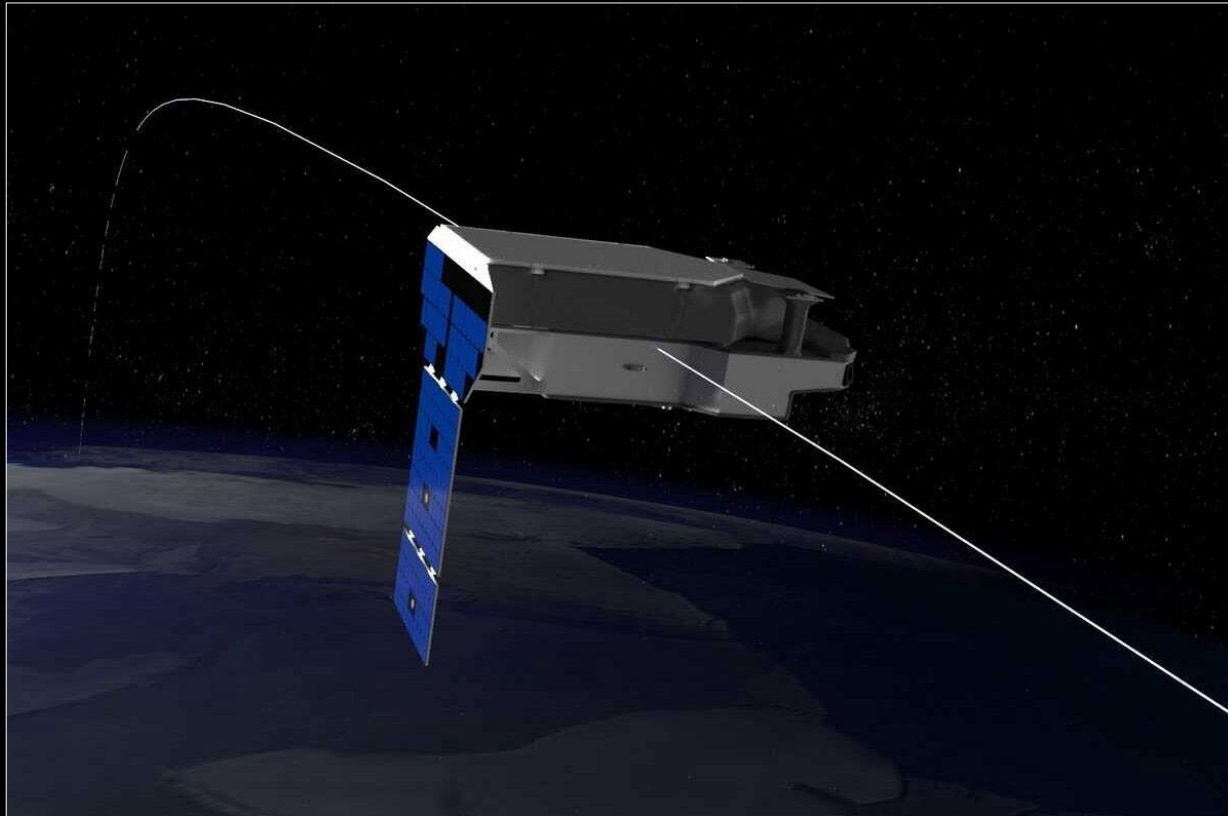
Visualization of two new radiation belts (shown in purple), sandwiched between the two permanent Van Allen Belts.



Technicians attach a solar array to one of the Electrojet Zeeman Imaging Explorer (EZIE) CubeSats. Credit: Brooks Freehill, Blue Canyon Technologies



An artist's concept shows the three EZIE satellites orbiting Earth. Credit: NASA/Johns Hopkins APL/Steve Gribben



Artist's concept of Polarimeter to Unify the Corona and Heliosphere (PUNCH) mission



NASA's PUNCH satellites are deployed after launching from Vandenberg Space Force Base in California on March 11, 2025



SPHEREx Spacecraft on Work Stand in Astrotech



SPHEREx observatory and PUNCH satellites lift off on a SpaceX Falcon 9 rocket on March 11, 2025.

Little Red Dots

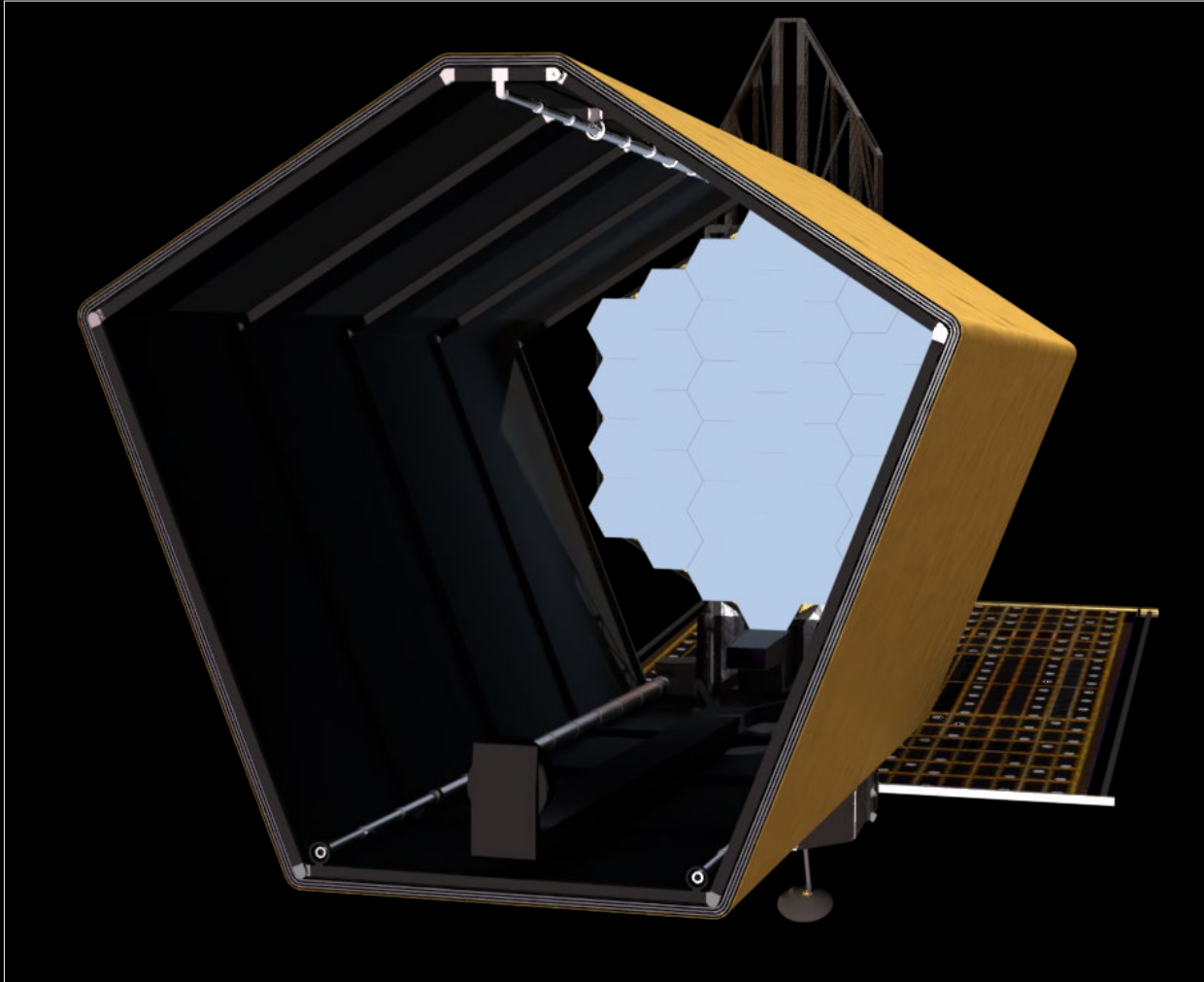
CEERS 14448 $z=4.75$ 	NGDEEP 4321 $z=8.92$ 	PRIMER-COS 10539 $z=7.48$ 
CEERS 20320 $z=5.27$ 	JADES 9186 $z=4.99$ 	PRIMER-UDS 17818 $z=6.40$ 

Galaxies < 1.5 Bn yrs old with supermassive black holes

HH-30: Edge-on protoplanetary disc



A close-in image of a protoplanetary disc around a newly formed star



This artist's concept features one of multiple initial possible design options for NASA's Habitable Worlds Observatory. Credits: NASA's Goddard Space Flight Center Conceptual Image Lab



Deployable aperture cover for NASA's Nancy Grace Roman Space Telescope as seen through the outer barrel assembly. Credit: NASA/Chris Gunn



The image is a vibrant, surreal digital artwork. The sky is a deep blue, filled with a massive, swirling nebula in shades of blue, purple, and white. Several bright, multi-pointed stars are scattered across the sky. In the upper right, two satellite-like spacecraft with solar panels are visible. Below them, several large, glowing spheres in shades of purple and orange float in the air. A bright, orange-red comet streaks across the middle of the sky. In the foreground, a large, dark, rocky coastline with a small lighthouse-like structure is visible. A large, multi-decked ship is sailing on the water, which is illuminated by a bright, orange glow from the right. In the bottom right corner, a small, orange, submarine-like vehicle is visible. The overall atmosphere is one of wonder and exploration.

Thank you!