

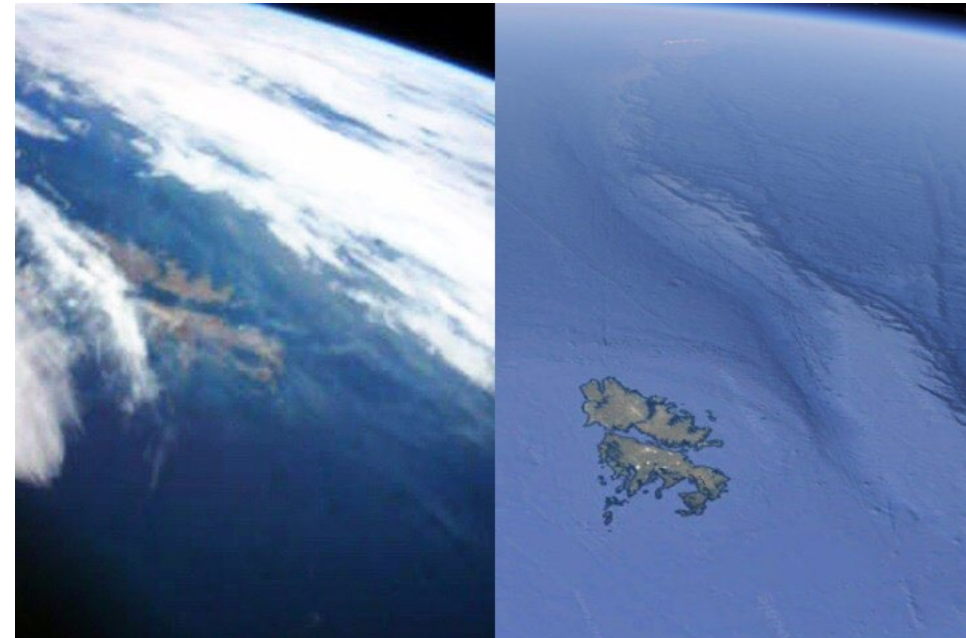
The University of Chile's Space program

Ph.D. Matías Vidal Valladares

Previous missions

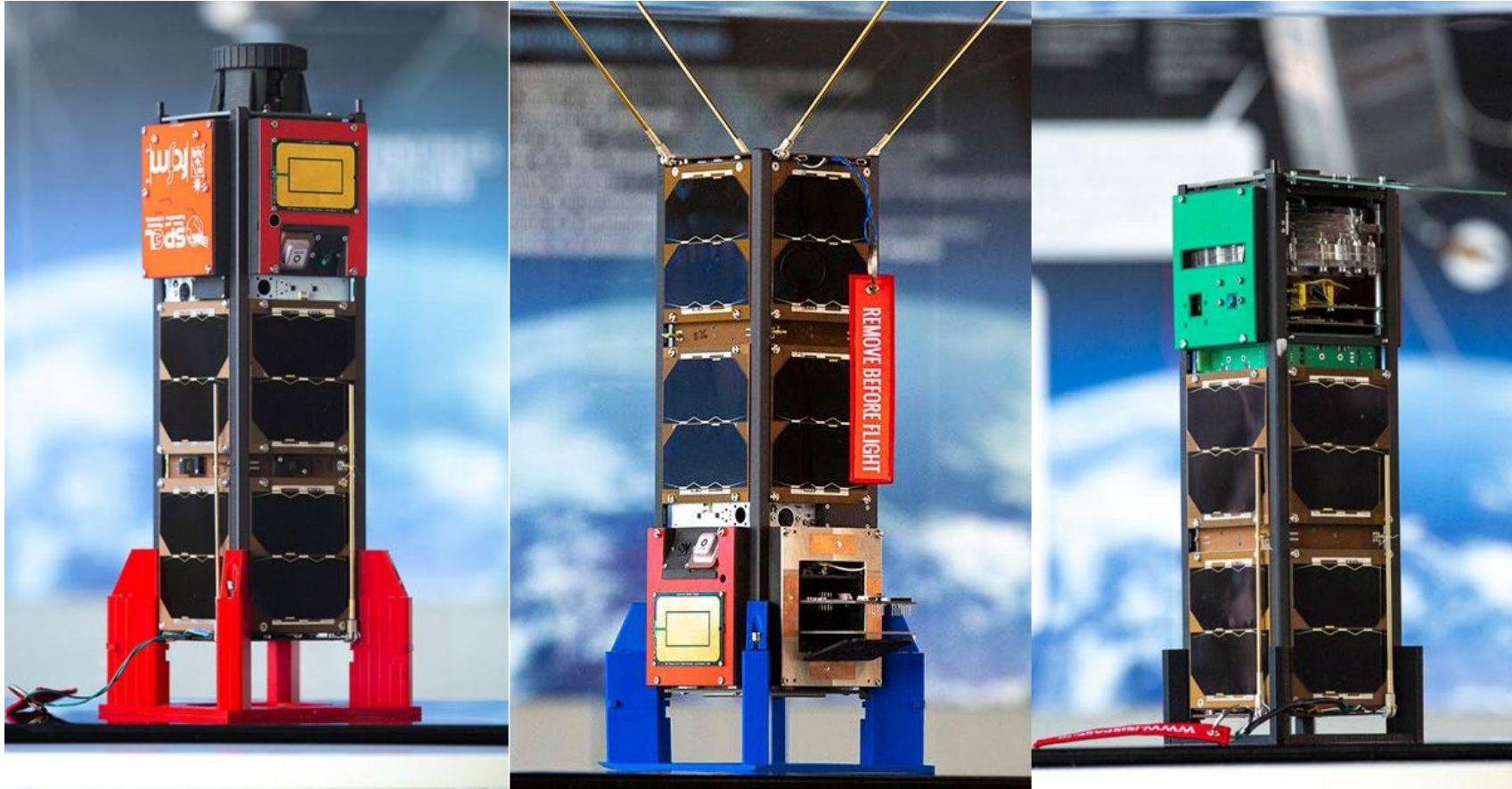
SUCHAI-1 (2017 - 2023)

1U CubeSat (10cm x 10cm x 10cm)



SUCHAI-2, SUCHAI-3 & PlantSat (2022 - 2024)

Three 3U CubeSat (10cm x 10cm x 30cm)

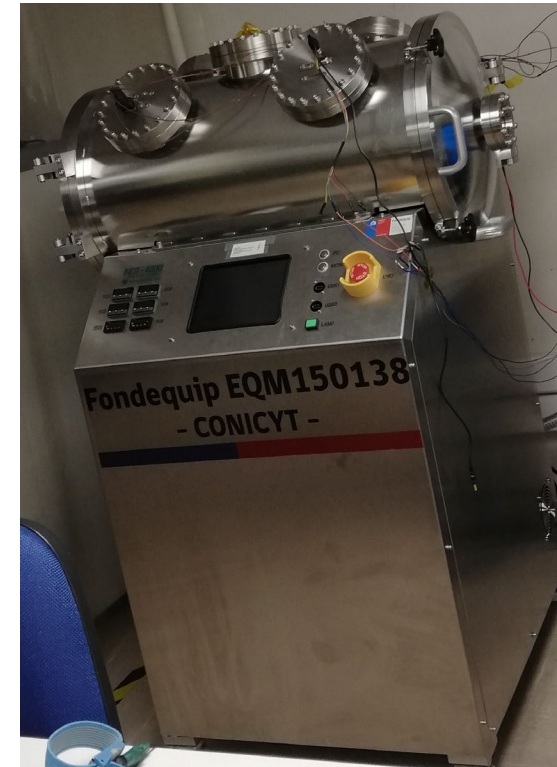


Environmental tests

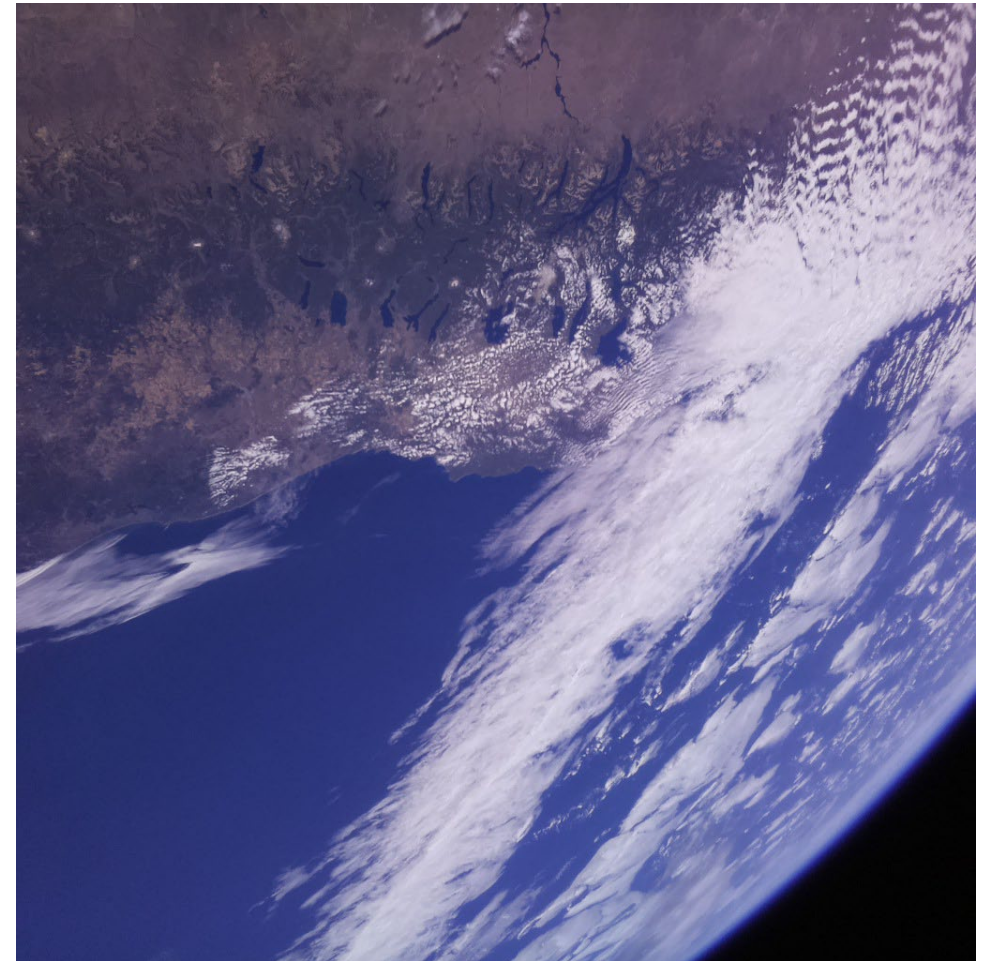
Vibration tests



Thermal cycling and vacuum tests



SUCHAI-2, SUCHAI-3 & PlantSat (2022 - 2024)



SUCHAI-2, SUCHAI-3 & PlantSat (2022 - 2024)



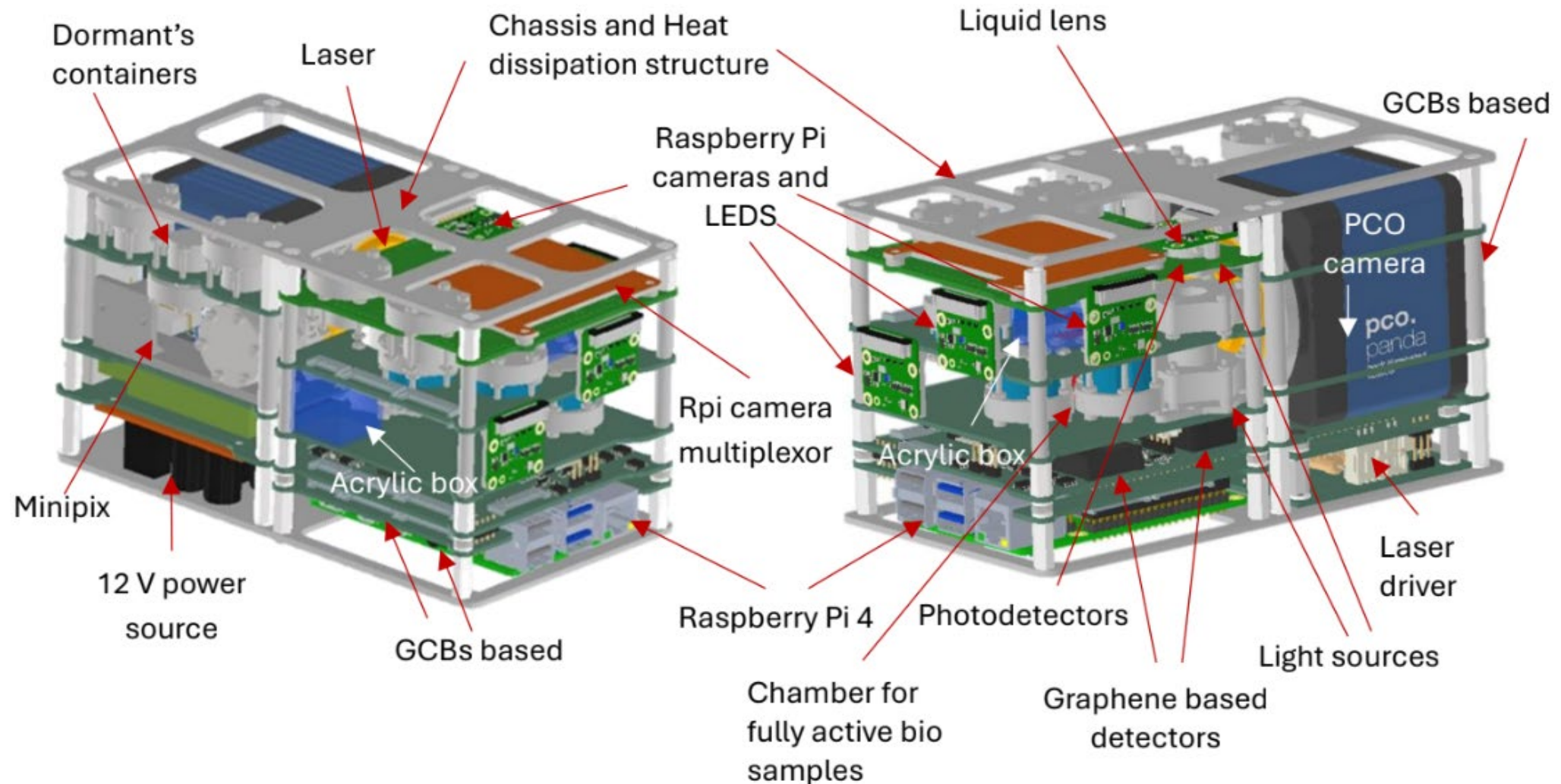
SUCHAI-2, SUCHAI-3 & PlantSat (2022 - 2024)

Images of the Pyrococcus chamber captured on July 20, 2022; August 20, 2022; September 18, 2022; and January 3, 2023, from left to right



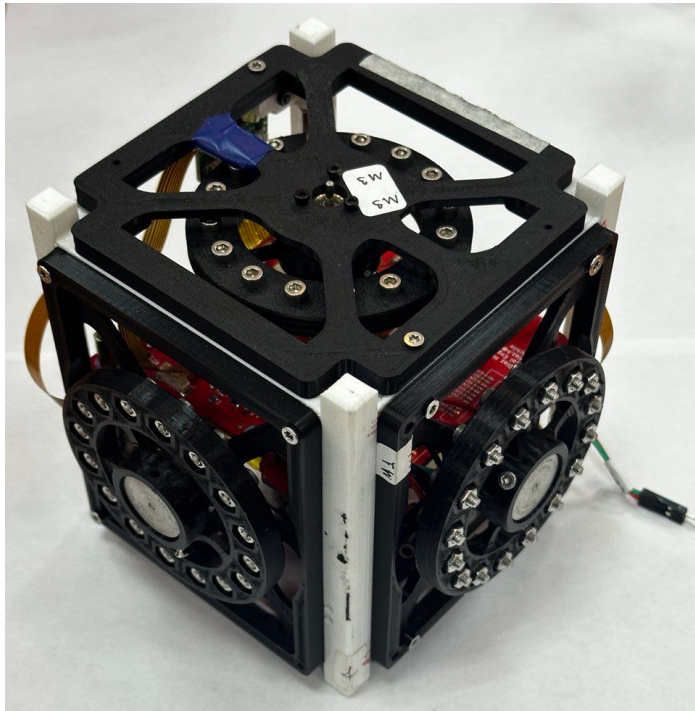
Next missions

ISS (2025)

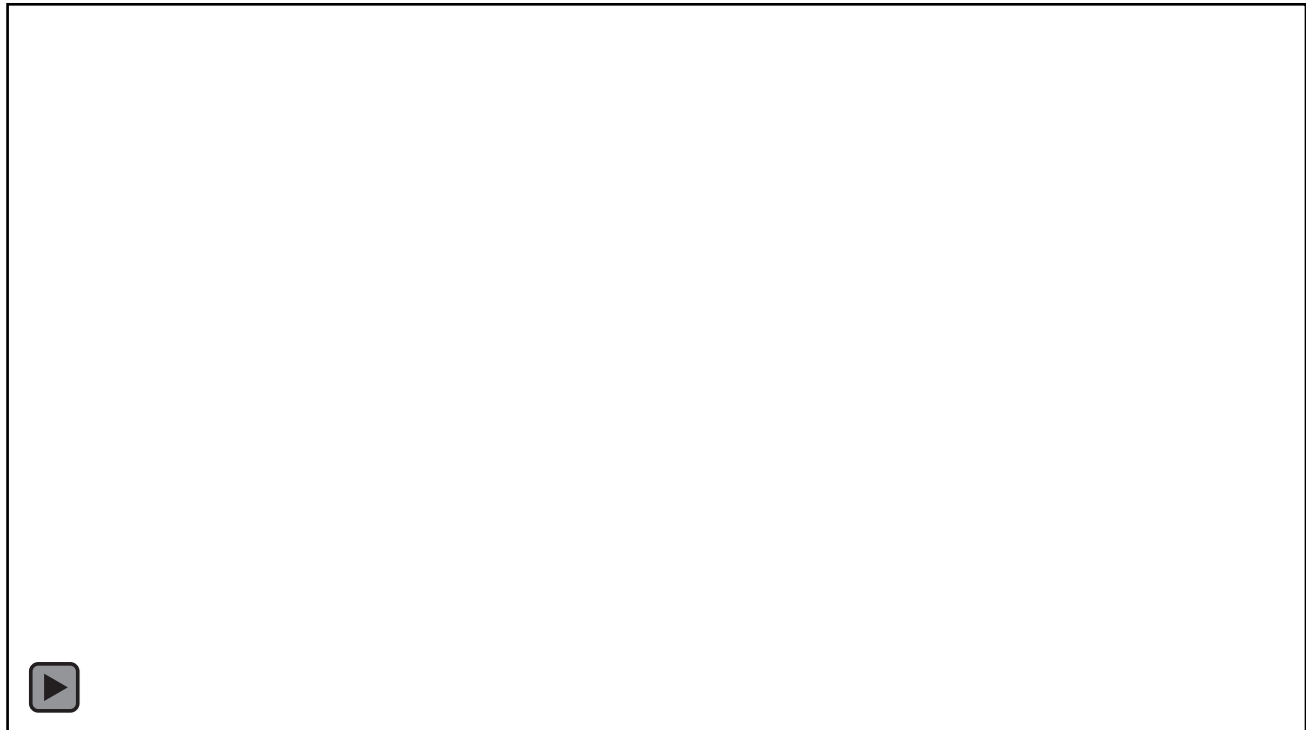


Next 3U CubeSat: New attitude control systems

Reaction Wheels

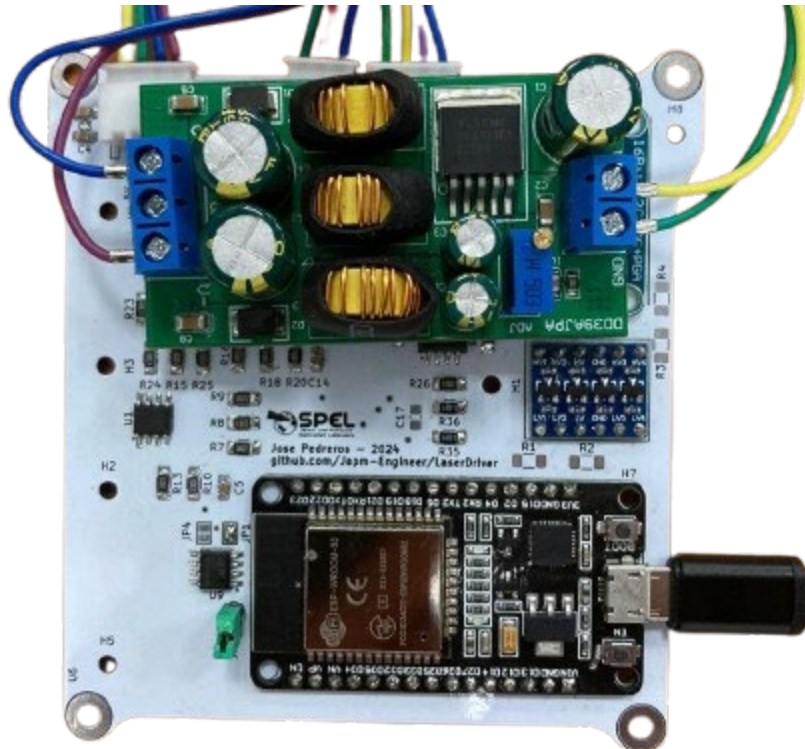


Propulsion system

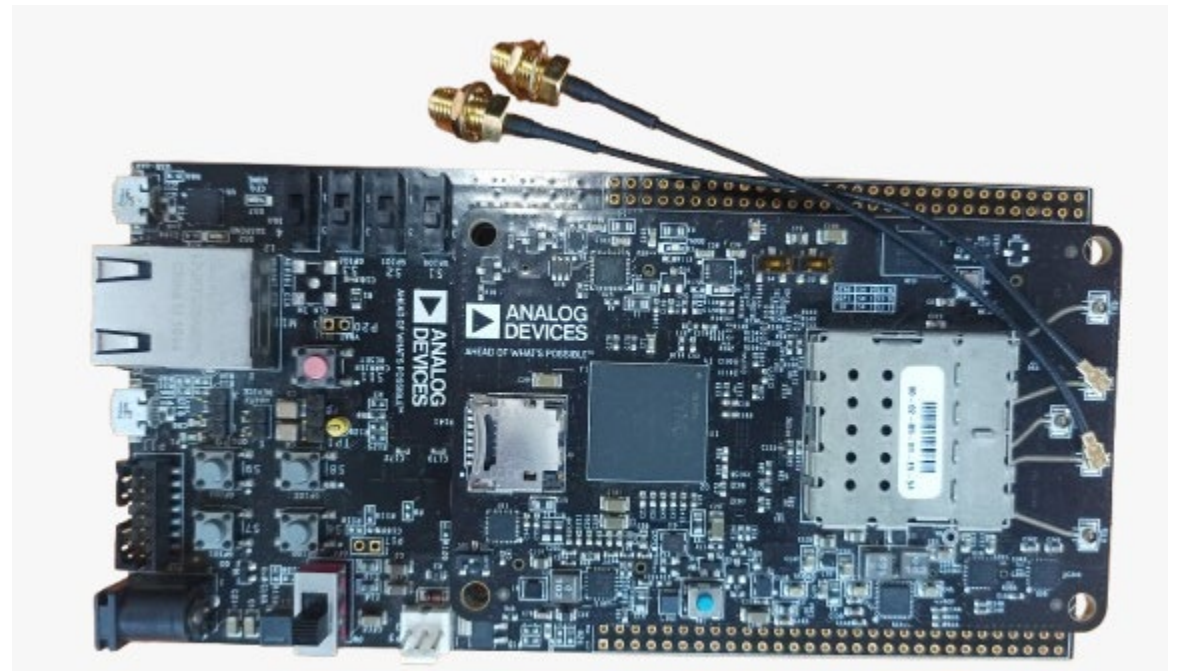


Next 3U CubeSat: Faster communication systems

Optical communication

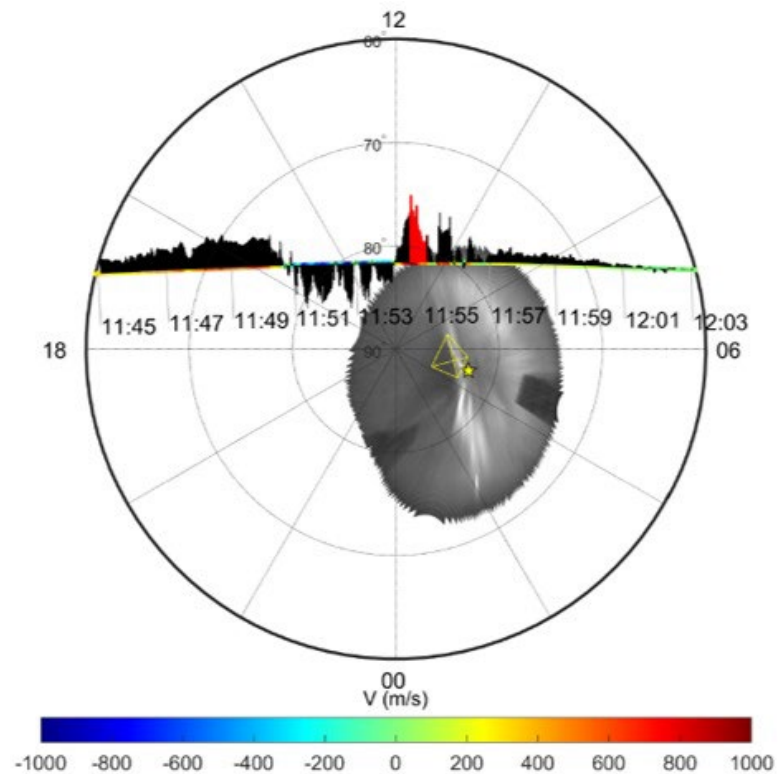


RF adaptive communication system

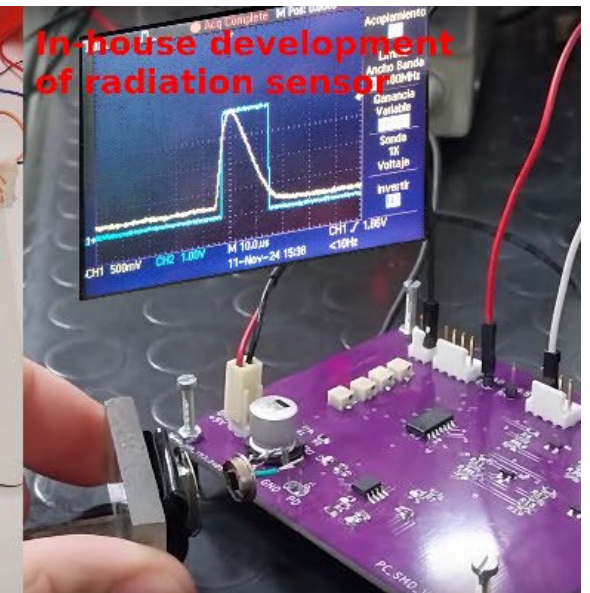
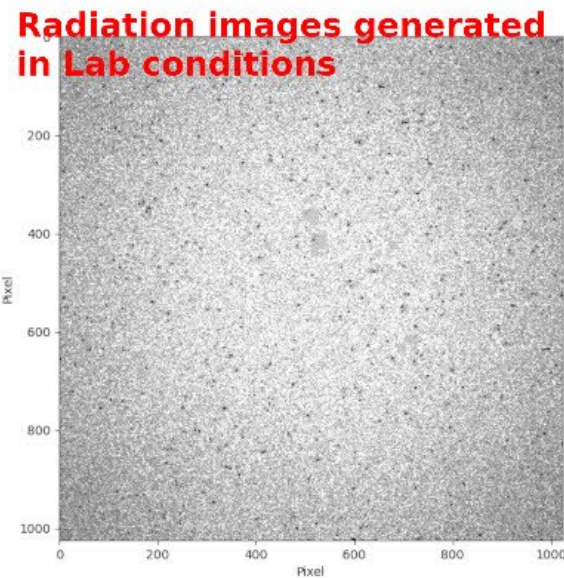
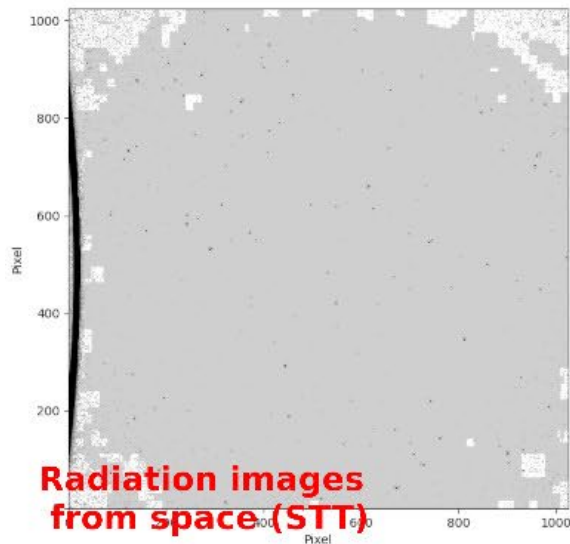


Next 3U CubeSat: Space awareness

Space weather remote sensing



Next 3U CubeSat: Commercial and in-house developed radiation sensors





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