

A satellite view of Earth from space, showing the curvature of the planet and the blue oceans. The landmasses are visible in shades of brown and green, with white clouds scattered across the surface.

Let's Go to Space

The Weiss CubeSat Development Team

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Founding of the Weiss CubeSat Development Team (WCDDT)

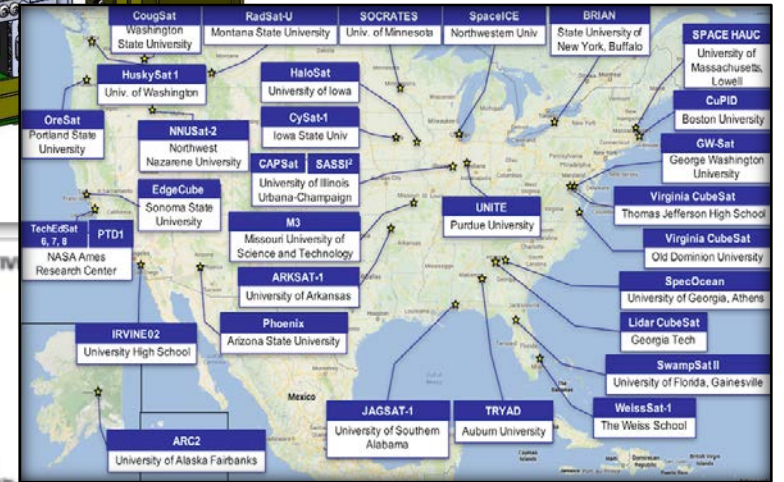
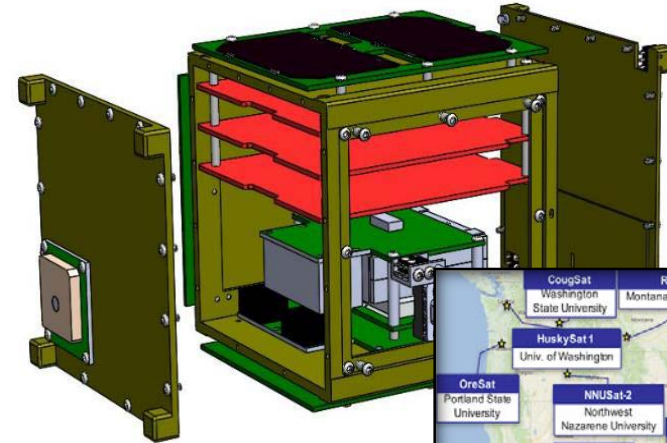
- ▶ Formed in August 2015
- ▶ 9 founding members
- ▶ Goal: To design, test, and fly a CubeSat within 3 years
- ▶ The process:
 - ▶ Raspberry Pi emulators
 - ▶ Tethered & HAB balloons
 - ▶ Captive carry flight
 - ▶ WeissSat-1



WeissSat-1

- ▶ 1U CubeSat, NSL FastBus Structure
- ▶ Extremophile bacteria payload
- ▶ Live/dead fluorescent dye, LEDs, and sensors to test viability
- ▶ Manifested to ELaNa 24
- ▶ Vandenberg Air Force Base, Falcon-9 November 15th
- ▶ Polar, sun synch orbit

1u FastBus v14 from NearSpace Launch inc.



575km: Apogee 573km: Perigee 574km: Min Altitude 97.75 deg: Inclination

Increasing STEM Awareness and Involvement

- ▶ Inspire next generation and STEM workforce
- ▶ Unique opportunities
- ▶ Increase student involvement
- ▶ WeissSat-1 federal resolution in support of NASA's CubeSat Launch Initiative

Mission: To establish a robust STEM program featuring a hands-on research-focused approach, to foster natural student curiosity, and to facilitate excellence via individual and team competitions.



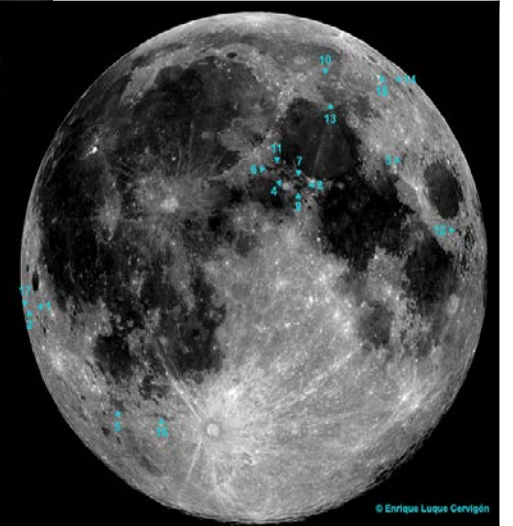
Amaris Lunar Rover

- ▶ Deployment in 2020-2021
- ▶ Based on NSL CubeSat technology
- ▶ Astrobotic's Peregrine Lander provides delivery and telemetry
- ▶ Landing site: Lacus Mortis (Lake of Death)



LACUS - LAKES

- 1- Lacus Aestatis
- 2- Lacus Autumni
- 3- Lacus Bonitatis
- 4- Lacus Doloris
- 5- Lacus Excellentiae
- 6- Lacus Felicitatis
- 7- Lacus Groullii
- 8- Lacus Hiemalis
- 9- Lacus Lenitatis
- 10- Lacus Mortis
- 11- Lacus Odii
- 12- Lacus Perseverantiae
- 13- Lacus Somniorum
- 14- Lacus Spei
- 15- Lacus Temporis
- 16- Lacus Timoris
- 17- Lacus Veris



▶ *"The only source of knowledge is experience."*

-Albert Einstein

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