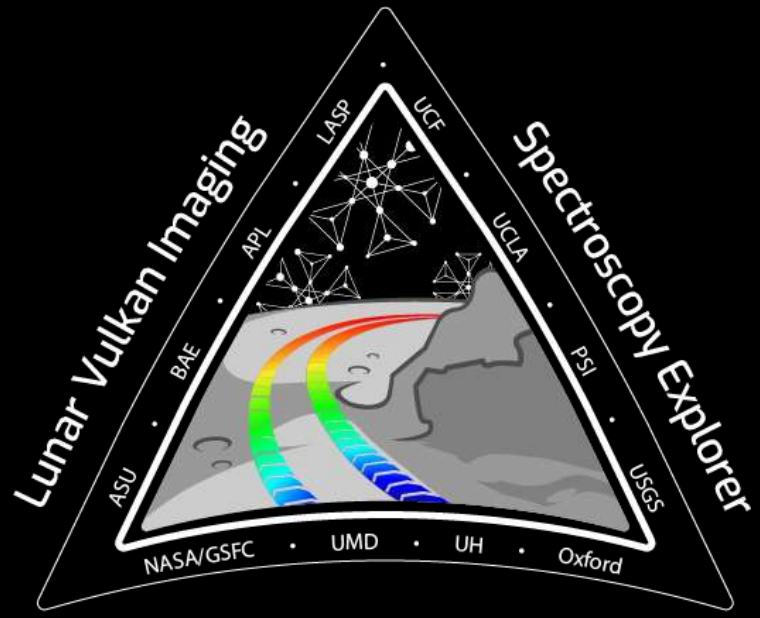
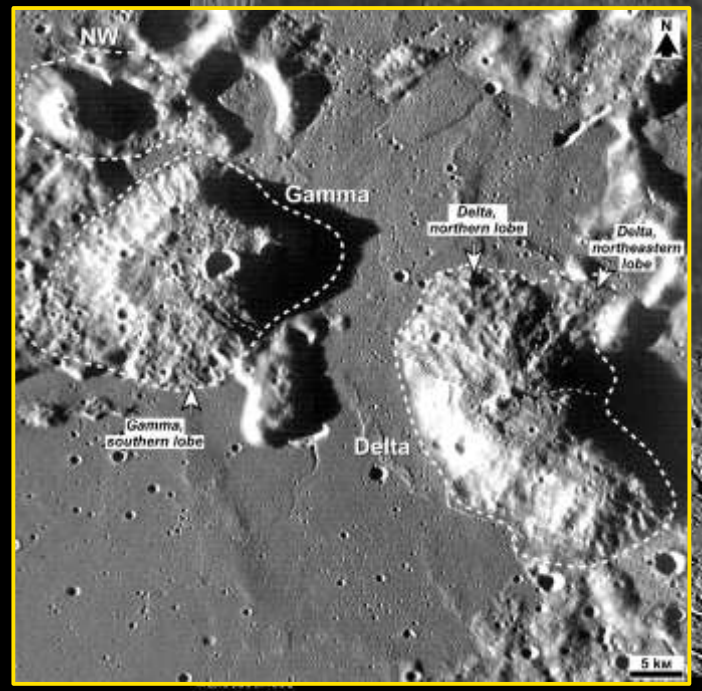
Lunar Vulkan Imaging and Spectroscopy Explorer (Lunar-VISE)

First NASA mission to the surface of the Moon in 2028*, led by UCF



Lunar-VISE



Ivanov et al. 2016

Image Credit: NASA / ASU / LROC

CLPS Deliveries 2024-2028

Delivery Site:
Gruithuisen Domes
Provider: Firefly
CP-21 | 2027

Delivery Site:
Ina IMP
Provider TBD
CP-32 | *2027*

Delivery Site:
Reiner Gamma
Provider: IM
CP-11 | *2025*

Delivery Site:
Shackleton Connecting Ridge
Provider: IM
TO PRIME-1 | *Q4 2024*

Delivery Site:
South Pole
Provider: Blue Origin
VIPER, CP-22 | 2027

Delivery Site:
Sinus Viscositatis
Provider: Astrobotic
TO2-AB | *Jan 2024*

Delivery Site:
TBD
Provider TBD
CP-41 | *2028*

Delivery Site:
South Pole
Provider TBD
CS-6 | *2027*

Delivery Site: Malapert A
Provider: Intuitive Machines (IM)
TO2-IM | *Feb 2024*

Delivery Site:
Mons Mouton
Provider: Astrobotic
CP-22 | 2027

Delivery Site:
Lunar Far Side &
Orbit Insertion
Provider: Firefly
CS-3 & CS-4 | *2025*

Delivery Site:
Mare Crisium
Provider: Firefly
TO19D | *Late 2024*

Delivery Site:
Schrödinger Basin
Provider: Draper
CP-12 | *2026*

Updated 2025

Space Science Week 2024

Lunar-VISE Science Investigati

Using BAE-built multispectral cameras and an ASU-built gamma ray and neutron spectrometer on a rover, we will:

1) Map the composition of rocks and regolith on top of the volcanic dome
2) Map the physical properties of rocks and regolith
3) If high enough abundances, map H abundance
4) Ground truth spacecraft observations of the volcanic dome

Image credit: Ball Aerospace

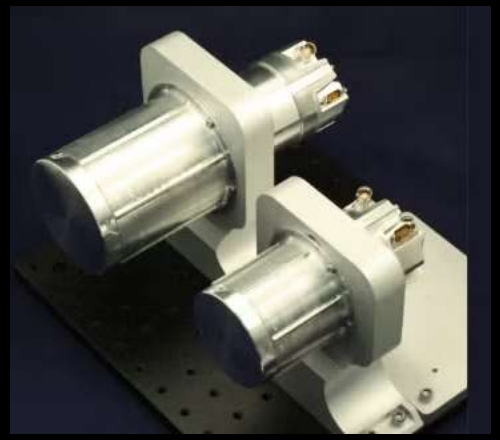


Image credit: RMD

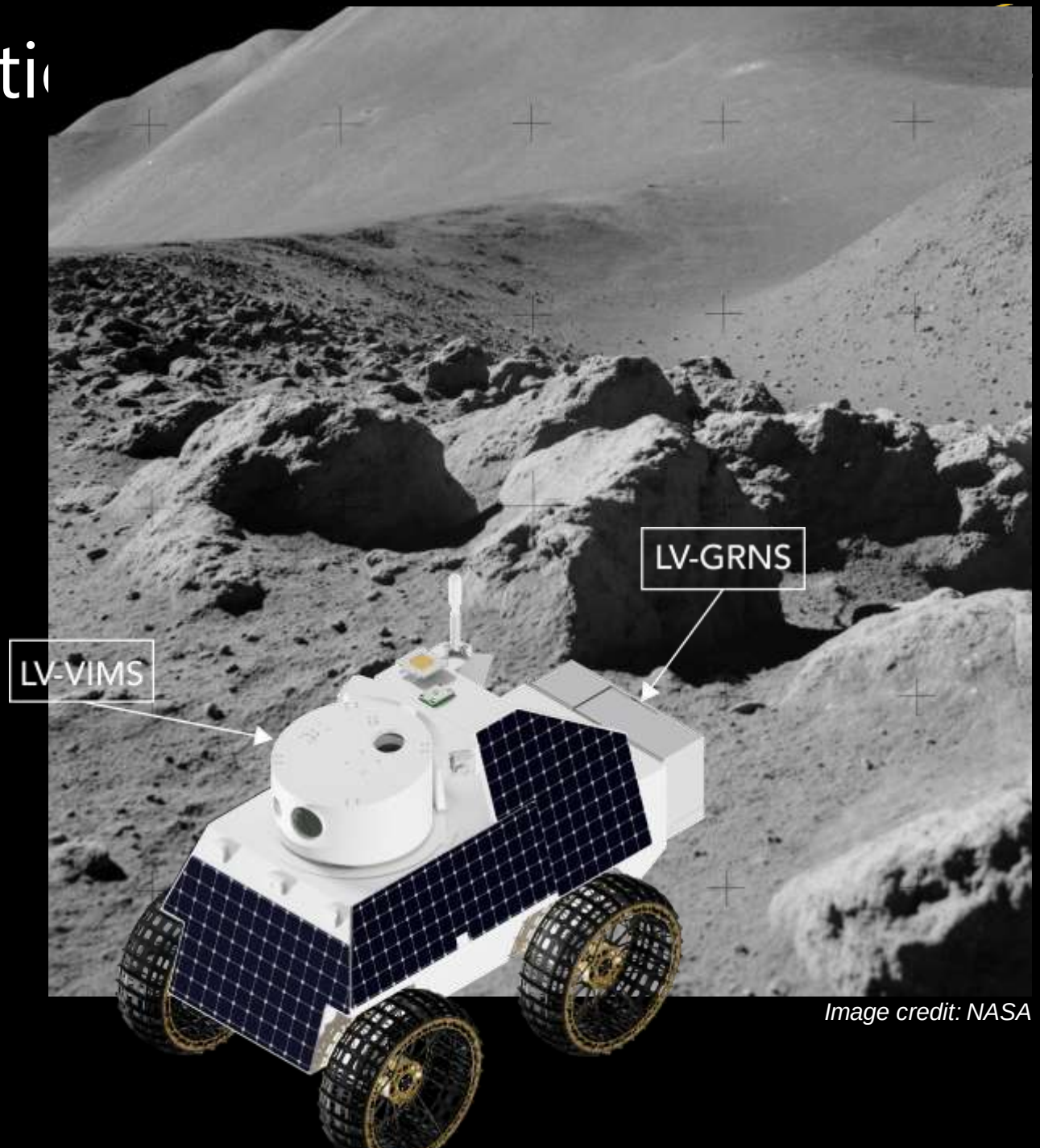


Image credit: NASA

Lunar-VISE Exploration Investigation

Using BAE-built descent and context cameras on a lander, we will:

1) Image the landing site as the lander descends to the surface
2) Map the geologic context of the landing site
3) Characterize how rover interacts with the lunar regolith

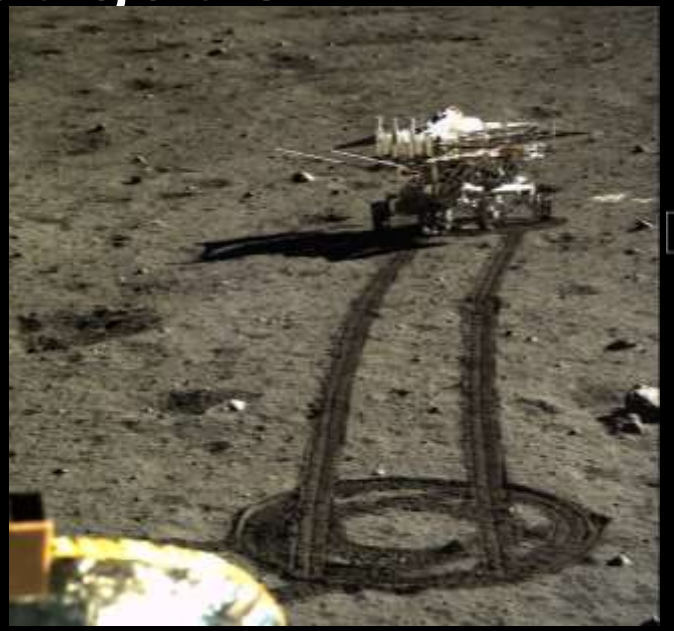
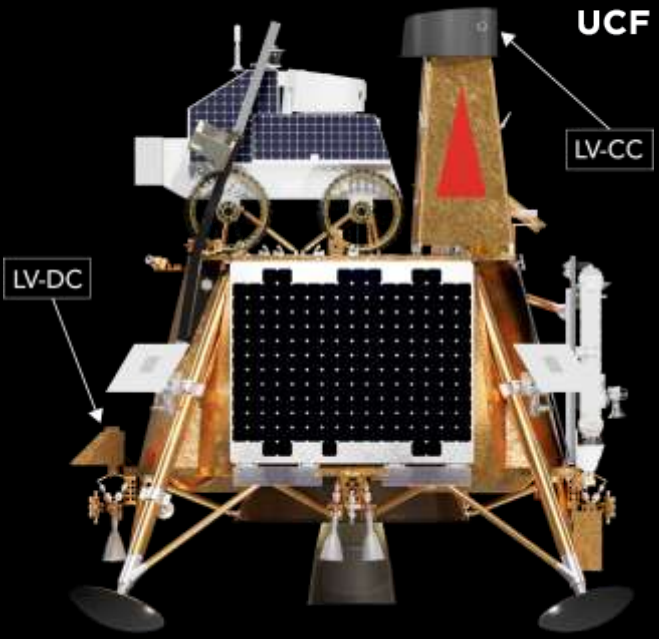


Image credit: CNSA



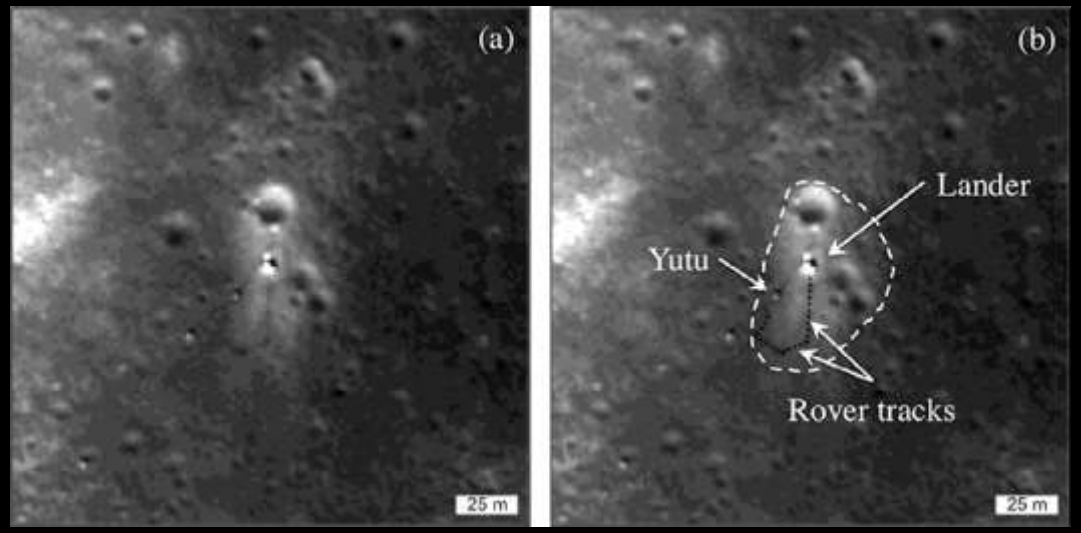


Image credit: Clegg-Watkins et al. 2016

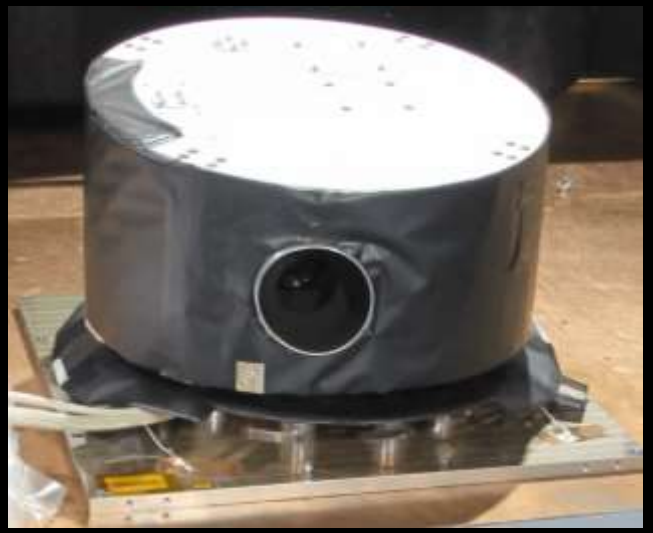


Image credit: BAE

Image credit: BAE