



## Lunar Reconnaissance Orbiter spots Surveyor 1

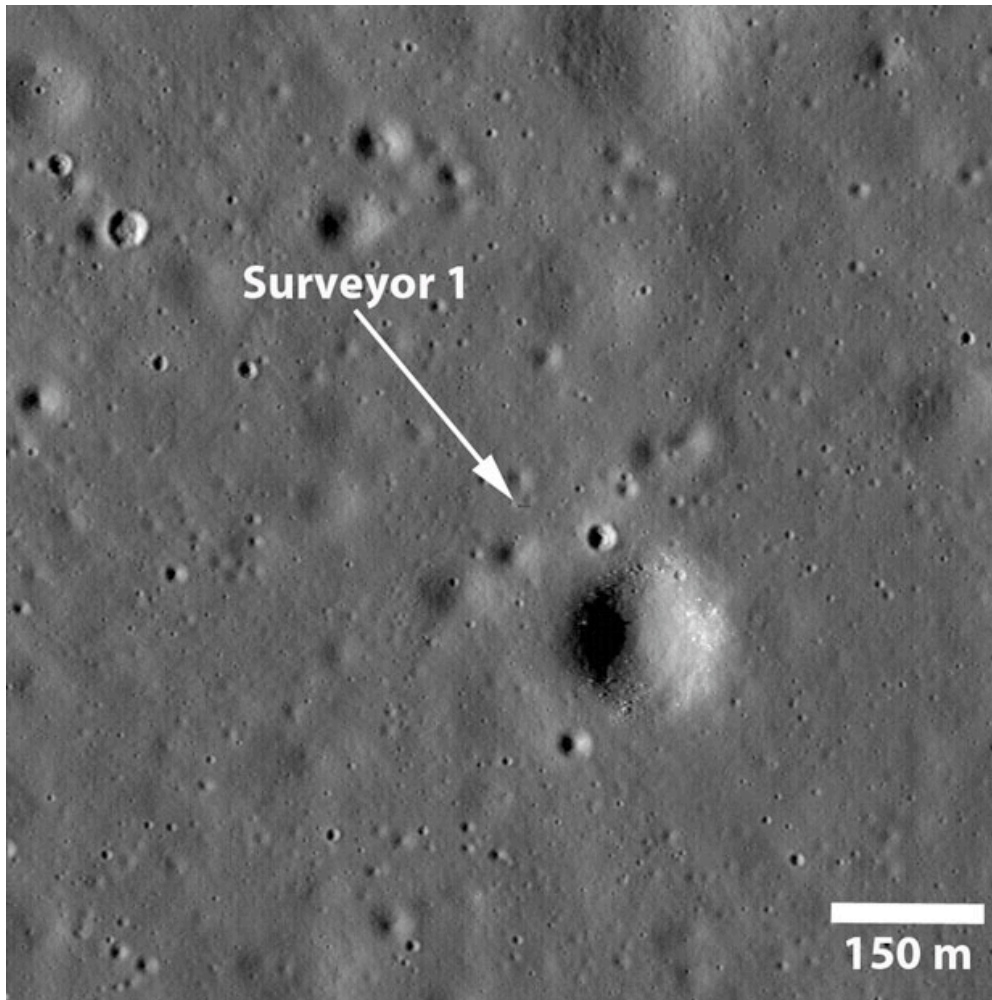
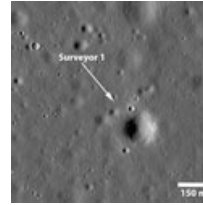
Thu Oct 1, 2009 at 10:20 UTC

[Surveyor 1](#) was the first in a series of seven US missions to the Moon that preceded Apollo; five of the seven missions were successful. Surveyor 1 was launched on May 30, 1966 and landed on June 2, 1966.

The mission's objectives were to soft land on the Moon and to collect information on the lunar regolith. This first Surveyor spacecraft carried only a television camera system (later missions carried additional instruments).

The spacecraft landed on a relatively smooth mare surface in Oceanus Procellarum (the Ocean of Storms). The Surveyor 1 landing site is also one of the areas identified by Project Constellation as a high-priority target for future human lunar exploration.

The scene shows the spacecraft (annotated with an arrow) just south of a subdued 40 m diameter crater and about 110 m northwest of a 190 m diameter crater lined with boulders. The landing site is in the northeast corner of the Flamsteed Ring, a 100 km diameter impact crater almost completely buried by mare lavas such that all that remains exposed is the upper part of the original crater rim.



Surveyor 1 spacecraft sitting silently on Oceanus Procellarum, the first US spacecraft to land on another planet (June 2, 1966). The image was taken in the lunar afternoon such that the sun is low on the western horizon and the 3.3 meter tall spacecraft casts a long shadow (almost 15 m long) to the east. Credit: NASA/GSFC/Arizona State University

[Subscribe](#)

### Random Image



The Gargantuan Galaxy NGC 1132

[Browse Album](#)

### Countdown

#### LCROSS lunar impact:

2 days, 15 hours, 29 minutes

#### Cassini Titan flyby T-62:

5 days, 12 hours, 34 minutes

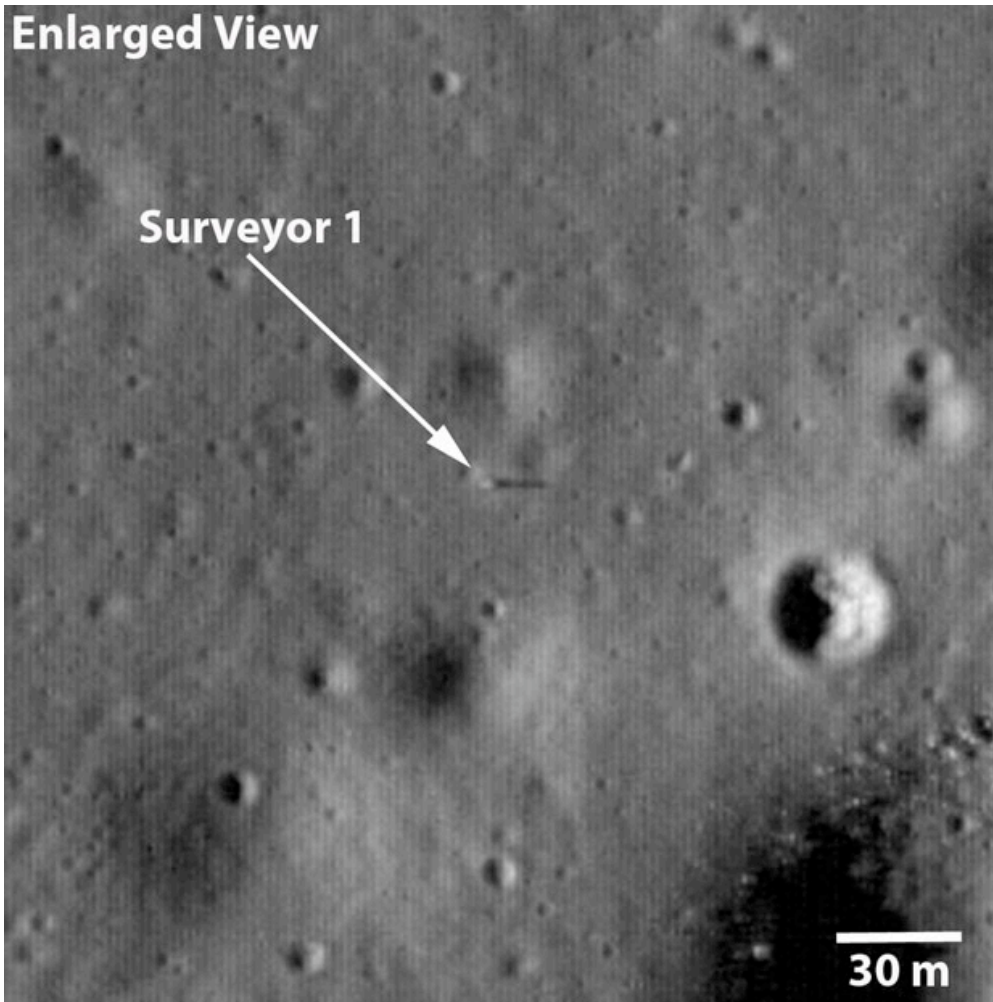
#### SMOS/Proba-2 launch:

26 days, 5 hours, 48 minutes

### Topics

- [Cassini-Huygens](#) (334)
- [Dawn](#) (41)
- [Deep Impact / EPOXI](#) (58)
- [European Space Agency](#) (195)
- [Heliophysics](#) (128)
- [Lunar Exploration](#) (152)
- [Mars](#) (239)
- [Mars Exploration Rovers](#) (261)
- [Mars Reconnaissance Orbiter](#) (166)
- [Mars Science Laboratory](#) (19)
- [MESSENGER](#) (90)
- [New Horizons](#) (69)
- [Phoenix Mars Lander](#) (94)
- [Science and Technology](#) (211)
- [Space Observatories](#) (685)
- [Stardust / Stardust-NExT](#) (37)

Search



Enlarged view showing Surveyor 1 sitting in the Ocean of Storms, waiting for a return visit by human explorers. *Credit: NASA/GSFC/Arizona State University*



Image of Surveyor 1's shadow against the lunar surface, collected by the on-board imaging system. *Credit: NASA*

Surveyor 1 collected over 11,000 images, most during the first lunar day between landing and July 7, 1966. The spacecraft continued to operate until January 7, 1967. The Surveyor images demonstrated that the lunar surface was strong enough to support a landed vehicle or a human. The detailed images also indicated that the surface was composed of a granular material interpreted to be produced by the impact of various size meteors over billions of years.

Explore the full-resolution [NAC image](#) of the Surveyor 1 site.

Source: [Arizona State University](#)



More on

- [Lunar Reconnaissance Orbiter](#)
- [Lunar Exploration](#)

▼ advertisement

**[How to make electricity](#)**

A weird shocking secret electric co's don't want you to know  
[www.Power4Home.com](#)

**[Dr. Oz's Free Test](#)**

Millions have already taken this amazing test.  
What's your RealAge?  
[RealAge.com](#)

**[Harrisburg Land Surveyor](#)**

Construction, Mortgage, Boundary & Other Surveying Services. Call Us!  
[www.BurgetAssociatesInc.com](#)

**[Local Land Survey Service](#)**

Flagstaff property surveying Call us today for more information!  
[www.Geometrixllcaz.com](#)