

NEWS CATEGORIES:

- NEW! Gadgets**
- Science
- Technology
- Webmaster
- Security
- Microsoft
- Linux
- Apple
- Games
- Telecoms
- Reviews
- Editorials
- Interviews
- Life and Style

[NEWS ARCHIVE >>](#)
[SOFTPEDIA REVIEWS >>](#)
[MEET THE EDITORS >>](#)

Ads by Google

Jonathan's Landing News
Detailed info on everything Jonathan's Landing
www.jonathanslandingnews.com

Armstrong Aldrin Collins
Neil Armstrong Buzz Aldrin and Michael Collins Signed Autographed
www.hollywooddesires.com

Blood Pressure Discovery
Hugh Downs Reports: Artery clearing secret from Nobel Prize Winner
www.bottomlinesecrets.com

Apollo Group, Inc. (APOL)
Kaplan Fox Investigates Potential Securities Fraud at Apollo Group
www.kaplanfox.com

How to make Electricity
\$49 Homeowner's kit that power co exec's tried to outlaw in 18 states
www.Power-4-Homes.com

Peterson Pacific
Leading manufacturer of heavy duty machinery for recycling & biomass.
petersoncorp.com

Home > News > Science > Space

Space

[MA-1 NASA Flight Jacket](#)

[Apollo Flight Jacket with NASA Meatball & Apollo 11 patches](#)
www.ShopAlphaindustries.com

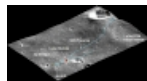
LRO Images Apollo 14 Landing Site in 3D

Data from the LROC instrument has been used for the photos

By **Tudor Vieru**, Science Editor
February 1st, 2010, 08:48 GMT

Adjust text size: **A-** **A+**

[Ads by Google](#)
[Images of Apollo](#)
[3D Virtual Earth](#)
[Moon Dates](#)
[Planet Earth](#)
[The Moon](#)



[ENLARGE](#)

The NASA Lunar Reconnaissance Orbiter (LRO) is undoubtedly one of the American space agency's most valuable assets in space today. In addition to being able to produce accurate maps of the Moon, and investigate possible landing sites for future missions, the probe can also apparently help create 3D images of particular structures, by using the LROC instrument. One such target was the Apollo 14 landing site, which had all of its equipment analyzed by the spacecraft. The data sets were combined in a series of 3D images, which reveal the size and shape of everything that was left behind.

In order to collect the images necessary for the 3D renditions, the LRO had to be positioned in slightly different orbits, while snapping photos of the same target area. The NAC [cameras](#) on LROC were put to good use, and the level of detail they provided was amazing. The structures that can be identified at the landing site include the ALSEP (Apollo Lunar Surface Experiments Package), and the descent stage of the Antares lunar module the mission used. A formation called "Turtle Rock" is also evidenced in the photos, alongside the footpaths the astronauts left behind while moving around.

One of the amazing features of LROC is its ability to measure small objects from high above, with remarkable accuracy. For example, in a close-up image it took of the lunar descent module, it was revealed that the equipment was about 3.0 meters (about 9.8 feet) tall, whereas the available specifications for the instrument show that it is, actually, 3.2 meters (about 10.5 feet) tall. Therefore, the cameras were off by just 20 centimeters, which is a remarkable feat. The same margin of error was recorded when establishing the diameter of the module. Measurements from the LRO showed it to be 4.4 meters (about 14.4 feet) wide, whereas specification data show the module is 4.2 meters (13.7 feet) wide.

All of these pieces of information were extracted using complex image-processing techniques, as well as reference points imprinted on the image. The 3D models were created by superimposing the model images of the equipment on the elevation map of the landing site, which was created using data from the LRO as well. Engineers managing the orbiter hope that these measurement capabilities will come in handy during other investigations too, such as other Apollo landing sites, or maybe peculiar landscape features in various regions of the Earth's natural [satellite](#), [Space Fellowship](#) reports.

[Ads by Google](#)
[Outer Space](#)
[Moon Dates](#)
[Planet Earth](#)
[Kennedy Space Centre](#)
[Space Pictures](#)

TAGS: [LRO](#) | [LROC](#) | [Apollo 14](#) | [3D](#) | [Moon](#)

Read by 405 user(s) | [Add comment](#) | [Link to this article](#)

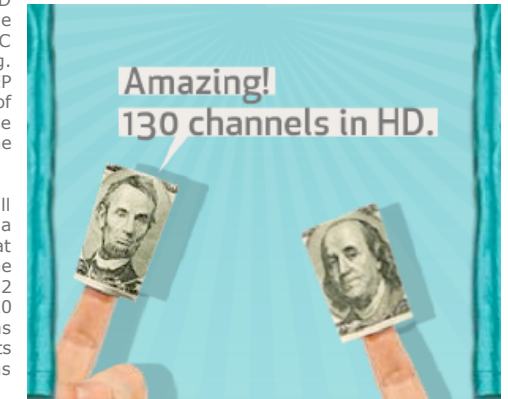
SHARE THIS

TWEET THIS

Article rating: Excellent (5.0/5) 1 vote(s)

[Subscribe to news](#) | [Print article](#) | [Send to friend](#)

© Copyright 2001-2010 Softpedia
Contact: newseditor@softpedia.com



MORE RELATED ARTICLES:

[Prominent Moon Crater Gets Beautiful Image](#)

[New Series of LRO Images Available](#)

[Moon's Shadows Cold Enough to Freeze Nitrogen](#)



[NASA Releases New LRO Data](#)

SEARCH THE NEWS ARCHIVE :

.....
LCROSS Finds Water on the Moon

[Today's News](#) | [Yesterday's News](#) | [News Archive](#)

User opinions:

 No user comments yet.
 Be the first to express your opinion using the form below!

Share your opinion:

Your Name:

Your Email Address:
(will not be used for commercial purposes)

Solve this to prove you're not a bot: 

Your review/opinion:

- WINDOWS
- GAMES
- DRIVERS
- MAC
- LINUX
- SCRIPTS
- MOBILE
- HANDHELD
- GADGETS
- NEWS

- [SUBMIT PROGRAM](#)
- [ADVERTISE](#)
- [GET HELP](#)
- [SEND US FEEDBACK](#)
- [RSS FEEDS](#)
- [ENTER NEWS SITE](#)
- [ENGLISH BOARD](#)
- [ROMANIAN FORUM](#)