

# First 360-degree color panorama from China's Chang'e-3 lunar lander

January 20 2014, by Ken Kremer

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]Portion of first color panorama from Chang'e-3 lander focuses on the 'Yutu' lunar rover and the impressive tracks it left behind after initially rolling all six wheels onto the pockmarked and gray lunar terrain on Dec. 15, 2013. Mosaic Credit: CNSA/Chinanews/Ken Kremer/Marco Di Lorenzo

Chinese space officials have at last released much higher quality versions of the 1st color imagery captured by China's first spacecraft to soft land on the surface of the Earth's Moon; Chang'e-3.

For the enjoyment of space enthusiasts worldwide, we have assembled the newly released imagery to create the first 360 Degree color panorama from China's Chang'e-3 Lunar Lander.' See above and below two versions in full resolution, as well as an interactive version –

showing the fabulous view on the first Lunar Day.

The panorama shows the magnificent desolation of the pockmarked gray lunar plains at the mission's touchdown site at Mare Imbrium. It is starkly reminiscent of NASA's manned Apollo lunar landing missions which took place over 4 decades ago – from 1969 to 1972.

And this view may well be a harbinger of what's coming next – as China's leaders consider a manned lunar landing perhaps a decade hence.

The beautiful imagery snapped by China's history making [Chang'e-3 lunar lander](#) on 17 and 18 December 2013 – during its 1st Lunar day – was released in six separate pieces on the Chinese language version of the Chinanews website, over the weekend.

We have also enhanced the imagery to improve contrast, lighting and uniformity to visibly reveal further details.



This first color panorama from Chang'e-3 lander shows the view all around the landing site after the 'Yutu' lunar rover left impressive tracks behind when it initially rolled all six wheels onto the pockmarked and gray lunar terrain on Dec. 15, 2013. Mosaic Credit: CNSA/Chinanews/Ken Kremer/Marco Di Lorenzo – kenkremer.com

For comparison, below is the initial black and white panoramic version seen by the navigation camera – which we assembled from screenshots

taken as it as twirling about in a CCTV news video report.

Alas, one bit of sad news is that it appears the 1200 kg lander's color camera apparently did not survive the 1st frigid night since it reportedly wasn't protected by a heater.

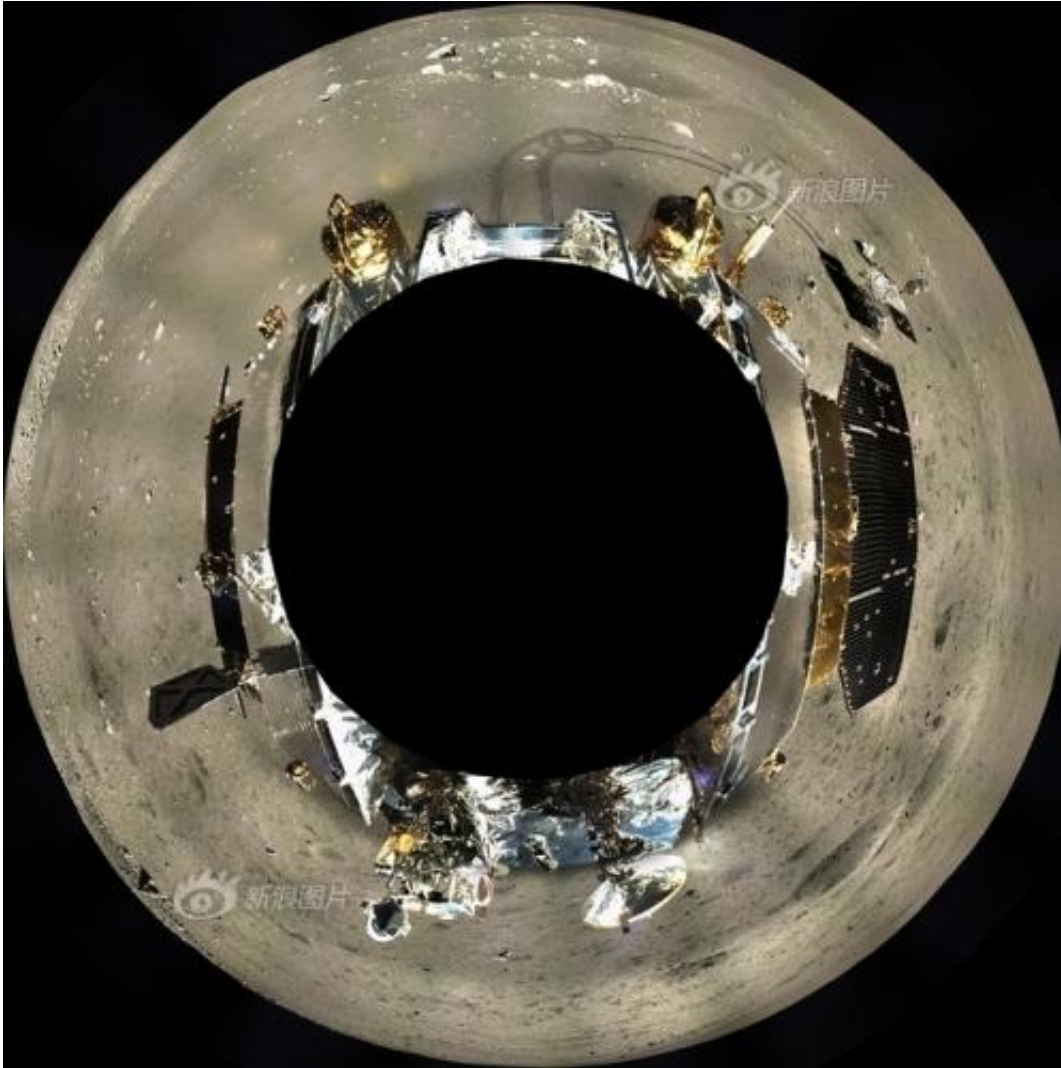
For a collection of new and higher quality Chang'e-3 mission photos – including the first portraits of the Earth taken from the Moon's surface in some 40 years – please check my [recent article](#).

Check [this link](#) to view a 360 degree interactive version of the first Chang'e-3 color panorama – created by space enthusiast Andrew Bodrov. He has added in a separate image of the Earth snapped by the lander.

China's action to release higher quality imagery is long overdue and something I have urged the Chinese government to do on several occasions here so that everyone can marvel at the magnitude of China's momentous space feat.

We applaud the China National Space Administration (CNSA) for this new release and hope they will publish the higher resolution digital versions of all the imagery taken by the Chang'e-3 mothership and the Yutu rover and place everything onto a dedicated mission website – just as NASA does.

Here's the pair of polar views of the 360 degree lunar landing site panoramas (released last week) – taken by each spacecraft and showing portraits of each other.



This digitally-combined polar panorama shows a 360 degree color view of the moonscape around the Chang'e-3 lander after the Yutu moon rover drove onto the lunar surface leaving visible tracks behind. Images were taken from Dec. 17 to Dec. 18, 2013. Credit: Chinese Academy of Sciences



This digitally-combined polar panorama shows a 360 degree black and white view of the moonscape around the Yutu moon rover after it drove off the Chang'e-3 lander at top and left visible tracks behind. Images were taken on Dec. 23, 2013. Credit: Chinese Academy of Sciences

China's history making moon robots – the Chang'e-3 lander and Yutu rover – are now working during their second Lunar Day. They have resumed full operation – marking a major milestone in the new mission.

It's remarkable to consider that although they were just awakened last weekend on Jan. 11 and Jan. 12 from the forced slumber of survival during their long frigid 1st lunar night, they are now already half way through Lunar Day 2 – since each day and night period on the Moon lasts two weeks.

China is only the 3rd country in the world to successfully soft land a spacecraft on Earth's nearest neighbor after the United States and the Soviet Union.

Meanwhile as China's Yutu rover trundles across pitted moonscapes, NASA's Opportunity rover is in the midst of Martian mountaineering at the start of Decade 2 on the Red Planet and younger sister Curiosity is speeding towards the sedimentary layers of Mount Sharp.

Source: [Universe Today](#)

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