

# Apollo-mission Images of the Earth



## (Part 1, non-Earthrise images)

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The authors have already published an article on the famous Apollo-17 Blue Marble image of Earth from 1972. This article covers some of the other Apollo-mission images of the Earth that have been found on postage stamps. A summary of those images will be given first, and the Apollo images will be presented along with the best examples of those images as reproduced on postage stamps. The best image on a postal item may be a large reproduction of the Apollo image, or it may be only a small part of the stamp design. The smaller the reproduction, the harder it is to find the equivalent Apollo or other source of the image.

There are also Apollo-mission Earthrise images (images of the Earth as seen above the horizon of the Moon). Those will be covered separately in Part 2 of this article. Some of the Apollo images of the Earth that are covered here are presented as Earthrise images, but those are artistic creations and not real Earthrise images from Apollo missions.

### Summary table of Apollo-mission images of the Earth

The following table summarizes the Apollo mission images that are covered in this article. The authors have found 26 different Apollo-mission images of the Earth taken from Apollo-4 through Apollo-17, on about 300 postal items. Only photos with 2 or more representations on postal items are listed here and discussed, plus one exception for a lone Apollo-15 photo reproduced on only one postal item, for a total of 12 of the 26 different Apollo images. The last one in the table, which is also known as the Blue Marble image of Earth from 1972, is included but has already been presented in great detail in a previously published article by the authors. This leaves 14 other Apollo images that are found on only one postal item and which will not be discussed in this article for the sake of brevity. Readers can view the authors website for examples of those images on postal items.

<b>Apollo mission</b>	<b>Date (yyyy-mm-dd)</b>	<b>NASA photo number</b>	<b>Approximate number of postal items (stamps + launch covers)</b>
<b>Apollo-mission images of the Earth</b> <b>(those with 2 or more postal items, plus one exception)</b>			
Apollo - 4	1967-11-09	AS04-01-0596	2 + 0 = 2
Apollo - 7	1968-10-11	AS07-03-1545	2 + 0 = 2
Apollo - 8	1968-12-22	AS08-16-2593	33 + 3 = 36
Apollo - 10	1969-05-18	AS10-34-5013	22 + 6 = 28
Apollo - 10	1969-05-25	AS10-27-3980	5 + 0 = 5
Apollo - 11	1969-07-16	AS11-36-5319	2 + 0 = 2
Apollo - 11	1969-07-16	AS11-36-5339	5 + 0 = 5

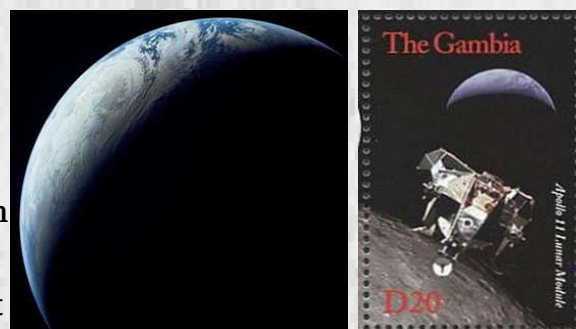
Apollo - 11	1969-07-17	AS11-36-5355	32 + 7 = 39
Apollo - 11	1969-07-24	AS11-44-6689	2 + 0 = 2
Apollo - 13	1970-04-12	AS13-60-8591	2 + 0 = 2
Apollo - 15	1971-07-26	AS15-91-12343	1 + 0 = 1
Apollo - 17	1972-12-07	AS17-148-22726 (Blue Marble 1972)	199 + 16 = 215

It took some effort to match images of Earth found on postal items with real Apollo photos of the Earth. There are many choices of images from Apollo as well as other spacecraft. Often an Earth depiction on a postal item may be rotated or flipped with respect to the Apollo photo, or a combination of both (rotation and flipping), may be employed by the stamp designer. Then there are artistic changes (such as color variations) to some of the images on postal items, as well as reproductions of only a portion of the Apollo photo. Therefore, the real images and postal designs sometimes match well, and other times the postal design is less clear as a reproduction of the original Apollo image.

Only one example of each Apollo image of Earth found on a postal item is presented here. Readers should refer to the authors' website for other examples of the same Apollo image on other postal items listed by the authors.

### Image and stamp reproduction matchups

Our first matchup is for an Apollo-4 image from 9 November 1967, at a distance of 17,346 km. This is NASA photo number AS04-001-0596, an image of Earth illuminated only on the upper-left. The authors have found the same image on 2 postal items, one being a stamp issued by Gambia in 2019 commemorating the 50<sup>th</sup> anniversary of the Apollo-11 mission to the Moon. One has to be careful, as stamp artists often combine elements from unrelated events in their designs. Also, note that the reproduction on the stamp is rotated right about 45 degrees on the stamp, and it is presented in an Earthrise position above the surface of the Moon. While that was not the setting for the Apollo-4 image, putting the image of Earth above the Moon creates a more dramatic design for the stamp.



(left) Apollo-4 image of Earth from 1967 (AS04-01-0596);  
(right) Gambia Scott 3198b Michel 6101 (2019)



(left) Apollo-7 image from 1968 (AS07-03-1545) of Earth below the Saturn-4B rocket stage;  
(right) Malawi, no Scott or Michel numbers (2008)

The next pairing is for an Apollo-7 image from 11 October 1968, NASA photo AS07-03-1545, the only Apollo image in this article that is not far enough away to capture the full disk of the Earth. Since Apollo-7 did not leave Earth orbit, the image shows the Earth in the background of the image. This particular photo is from a series of images showing the Saturn-4B with its clamshell doors open above the east coast of Florida at an altitude of 230 km, ready for the manned Apollo-7 command module's test approach and simulated docking (with what would be a real LEM in the Saturn-4B in Apollo missions starting with Apollo-9). The authors have found this Apollo image on 2 postal items, one being a stamp issued by Malawi in 2008, with an excellent reproduction of the Apollo image, but 40 years after the fact.

In the next matchup, there are 36 different reproductions on postal items of an Apollo-8 mostly-illuminated image of Earth from 22 December 1968, NASA photo number AS08-16-2593. Interestingly, this is the image of Earth in the USA stamp issued in 1969 to commemorate the Apollo-11 Moon-landing mission. That image of Earth is displayed as an Earthrise as seen from the Moon, but only as an artistic feature that was not observed by the astronauts. For more about this stamp and its many derivatives and reproductions see the references at the end of this article. Although there are reproductions of this Apollo photo of Earth on many more postal items, readers will need to check the authors' website for them.



(left) Apollo-8 image of Earth from 1968 (AS08-16-2593);  
(center) United States Scott C76 Michel 990 (1969) rotated left 90 degrees;  
(right) blowup of USA C76 reproduction of the Earth (also rotated)

Next, the authors found two Apollo-10 images from 18 May 1969, each on 2 or more postal items. The first one is NASA photo number AS10-34-5013, a full-disk image of Earth, found by the authors on 18 postal items. An example of a postal item with this image was issued by Grenada in 1999. The brown land features in the Apollo image are not reproduced on the stamp, but most of the cloud features can be matched up between the two images.



(left) Apollo-10 image of Earth from 1969 (AS10-34-5013);  
(right) Grenada *Scott* 2868d *Michel* 3949 (1999)



(left) Apollo-10 image of Earth from 1969 (AS10-27-3980);  
(right) Yemen Arab Republic no *Scott* or *Michel* numbers (*Weebau* 198, *Sieger* 104A) (1970)

The other Apollo-10 image of Earth with 2 or more associated postal items is NASA photo number AS10-27-3980, taken 24 May 1969. This partially illuminated image of Earth was found by the authors on 5 postal items. All the items are stamp folders from Yemen Arab Republic spanning 3 years, 1969-1971. The reproduction of the Apollo image is from page 2 of a folder that contains a stamp on page 1 (stamp not shown, as not related to the image of Earth). The match-up is good considering the Apollo image of Earth is rotated left slightly in the reproduction.

The authors have found four Apollo-11 images from 16 to 25 July 1969, each on 2 or more postal items. The first one is NASA photo number AS11-36-5319, a partially illuminated image of Earth. This image is found on 2 nearly identical postal items commemorating the 50<sup>th</sup> anniversary of the first Moon landing. One of the two, a stamp issued by Angola in 2019 is shown. As in other postal items, the reproduction is presented as an Earthrise. The stamp is rotated right 90 degrees to match the orientation of the Apollo image of Earth.



(left) Apollo-11 image of Earth from 1969 (AS11-36-5319);  
(right) Angola *Scott* 1574a *Michel* 2201 (2019) rotated right 90 degrees



(left) Apollo-11 image of Earth from 1969 (AS11-36-5339);  
(right) Guyana *Scott* 4591a *Michel* 9552 (2018)

A second Apollo-11 image of Earth, from 16 July 1969, is NASA photo number AS11-36-5339, a mostly illuminated image of Earth. This image is associated with 5 postal items, one being a stamp issued by Guyana in 2018, with a nearly identical reproduction of the Apollo image. The text on the stamp correctly identifies the image as from Apollo-11 and the year 1969.

A third Apollo-11 image of Earth from 17 July 1969 is NASA photo number AS11-36-5355, another mostly illuminated image of Earth. This image is associated with 39 postal items, one being a stamp issued by Great Britain in 1984 for the centenary of the Greenwich Meridian. In this case, the reproduction on the stamp is only the upper-left quadrant of the Earth's full disk, and that portion is rotated slightly to the right. The red line on the stamp image represents the Greenwich Meridian.



(left) Apollo-11 image of Earth, AS11-36-5355;  
(right) Great Britain *Scott* 1058 *Michel* 993 (1984)



(left) Apollo-11 image of Earth from 1969 (AS11-44-6689); (right) Tonga Scott 1363 Michel BL129 (2019) flipped vertically

A fourth Apollo-11 image of Earth from 24 July 1969 is NASA photo number AS11-44-6689, an image of Earth illuminated only on the right. This image is associated with only 2 postal items, one being in the margin of a sheet of 4 stamps issued by Tonga in 2019. As in the last few comparisons, the image in the right margin of the sheet is a good reproduction of the Apollo image. The sheet image is flipped

vertically for a better matchup between the two.

The next Apollo-mission image of Earth is from Apollo-13, NASA photo number AS13-60-8591, taken on 12 April 1970. The day after this photo was taken, an oxygen tank explosion ended the planned Moon landing for this mission and turned it into a rescue mission that successfully returned the Apollo-13 astronauts to Earth. One of the 2 postal items that reproduce this Apollo-13 image is the margin of a sheet of 3 stamps issued by Grenada in 2021. The sheet is flipped horizontally to match the Apollo image; the image is in the left margin of the un-flipped sheet.



(left) Apollo-13 image of Earth from 1970 (AS13-60-8591); (right) Grenada Scott 4420 Michel not yet listed (2021) flipped horizontally

The one Apollo image presented here with a single postal item reproduction is for an Apollo-15 image of the Earth from 26 July 1971, Apollo photo number AS15-91-12343. This photo is reproduced on only one postal item, a stamp issued by Tuvalu in 2021 for the 50<sup>th</sup> anniversary of the Apollo-15 mission. The stamp reproduces the Apollo image well without any rotation or color changes. Even the Apollo-15 mission is correctly identified as being taken on the trans-lunar coast (the outbound journey to the Moon), unlike some other postal items that mix up the Earth images among the various Apollo missions.



(left) Apollo-15 image of Earth from 1972 (AS15-91-12343); (right) Tuvalu Scott 1550a Michel 2803 (2021)



(left) Apollo-17 image of Earth from 1972 (AS17-148-22726) (Blue Marble 1972); (right) Canada Scott 1441 Michel 1323 (1992) rotated left 90 degrees

The final image to be covered in this article is the Apollo-17 image of Earth that is widely known as the 1972 version of the Blue Marble image! This image is NASA photo number AS17-148-22726 taken on 7 December 1972, on this last of six Apollo lunar landings (Apollo-11 through Apollo-17, minus Apollo-13). Part of the reason this image is the most popular of the Apollo images is its illumination across the full disk of the Earth. Although this image was covered in a previously published article by the authors, a comparison to a postal item will be made to complete the table of Apollo images of Earth presented at the beginning.

Amazingly, the authors have found 215 postal items with this Blue Marble image. For this image, unlike previous examples, the best reproduction on a postal item is not presented. Rather, one of the harder-to-match examples, a stamp issued by Canada in 1992, is presented. This reproduction of the Blue Marble image is not immediately apparent, first because the stamp must be rotated, and because only the lower-left part of the Blue Marble image is depicted. That causes the most-recognizable feature of the 1972 Blue Marble image, the bright white inverted comma cloud in the lower middle, to be cut off in the reproduction on the stamp. Moreover, the colors of the clouds on the stamp are altered to be pink. All of these details combined result in the matchup not being obvious.

For some matchups, detective work is needed considering the wide range of Apollo and other images of the Earth that are available. In addition, many reproductions of the Earth on postal items cannot be identified or matched up with existing photos from Apollo or other missions. The authors have collected many of these postal items as well, but they are not the topic of discussion in this article.

In summary, these 12 matchups represent hundreds of postal items that reproduce Apollo-mission photos of the Earth. Furthermore, that is only about half of the 26 Apollo images that have been found by the authors on postal items, the others being rarer in their usage, available on only one postal item each. Interested readers will find numerous additional Apollo photo/postal item matchups on the authors' website.

Part 2 of this article will deal with real Earthrise images from Apollo (images of the Earth as seen above the horizon of the Moon), not artistic creations that used images that were not Earthrise images at the time they were photographed from Apollo.

## References to previous articles related to Apollo images of the Earth

Hillger, D., and G. Toth, 2013: The Blue Marble Image of the Earth, *Orbit*, (97), (March), 10-14.

Hillger, D., G. Toth, and P. Hoffman, 2019: Reproductions of USA [Scott] C76 Moon-landing stamp, *Orbit*, (122), (October), 29-32.

## Online and author contact information

The authors were greatly assisted by Peter Hoffman, who provided many Scott and Michel numbers for the postal items in this article and the associated web page. A checklist of postal items showing the Apollo mission images is available at <http://rammb.cira.colostate.edu/dev/hillger/Apollo-images.htm>, with separate sections for each Apollo image. The authors would like to hear from anyone who knows of additional reproductions of the Apollo mission photos on postal items. We will update the online details as new information is received. E-mail correspondence with the authors is welcome. Don Hillger can be reached at [don.hillger@colostate.edu](mailto:don.hillger@colostate.edu) and Garry Toth at [gmt.varia@gmail.com](mailto:gmt.varia@gmail.com).

## Don Hillger is looking for your help.

Don has some questions about some "JapanCover" numbered covers, mostly for sub-orbital rockets. Are there any Japanese members who might be able to help him?

Don is also looking for someone who might help with identifying the various Meteor (meteorological) satellites, particularly the early Meteor 1 and 2. We have some reference images of those that don't seem to agree.

If you can help in any way please get in touch with Don. Don Hillger can be reached at [don.hillger@colostate.edu](mailto:don.hillger@colostate.edu)

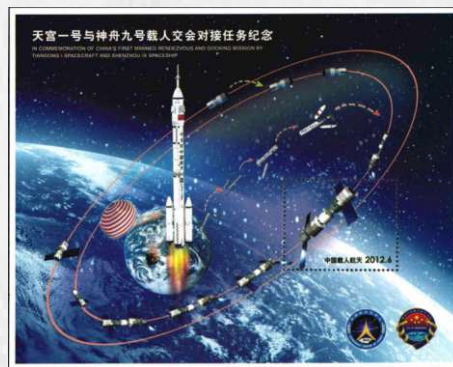
## The Kennedy Space Center Post Office Closure

The Kennedy Space Center Mail Services Contract, (KMSC) at Kennedy Space Center.

The Kennedy Space Center Contract Postal Unit will permanently close near the end of the fiscal year. All requests sent to KSC must be received by 15 September 2023.

Cancellation requests must be sent to the Titusville Post Office after that date. Note that they will have a Titusville Post Office cancellation on them, not Kennedy Space Center. The other post office closest to KSC is in Merritt Island.

## Commemorating the flight of Shenzhou 9



This miniature sheet commemorates China's first manned rendezvous and docking mission between the Tiangong 1 spacecraft and the Shenzhou 9, (神舟九号), spacecraft. It shows all the stages of the mission, from the launch and take-off of the Long March 2F, (CZ-2F), carrier rocket, through the staging process to orbit. It follows the rendezvous and docking with China's first space station, Tiangong 1. The fourth manned spaceflight of China's Shenzhou

programme had a crew of Jing Haipeng commander, Liu Wang and Liu Yang, China's first female taikonaut. Shenzhou 9 was launched on 16 June 2012 and docked on 18 June.

The Shenzhou 9 spacecraft docked twice with the space station. The first was on 18 June before undocking on 24 June after spending 3 days, 21 hours and 1 minute at the station. The taikonauts docked again on 24 June before undocking and leaving the station on 28 June before returning to Earth. During the second time at the station they spent a further 3 days, 20 hours and 44 minutes together.

The taikonauts returned to Earth in the Inner Mongolia Autonomous Region on 29 June 2012. The return capsule is shown under its parachute before landing.