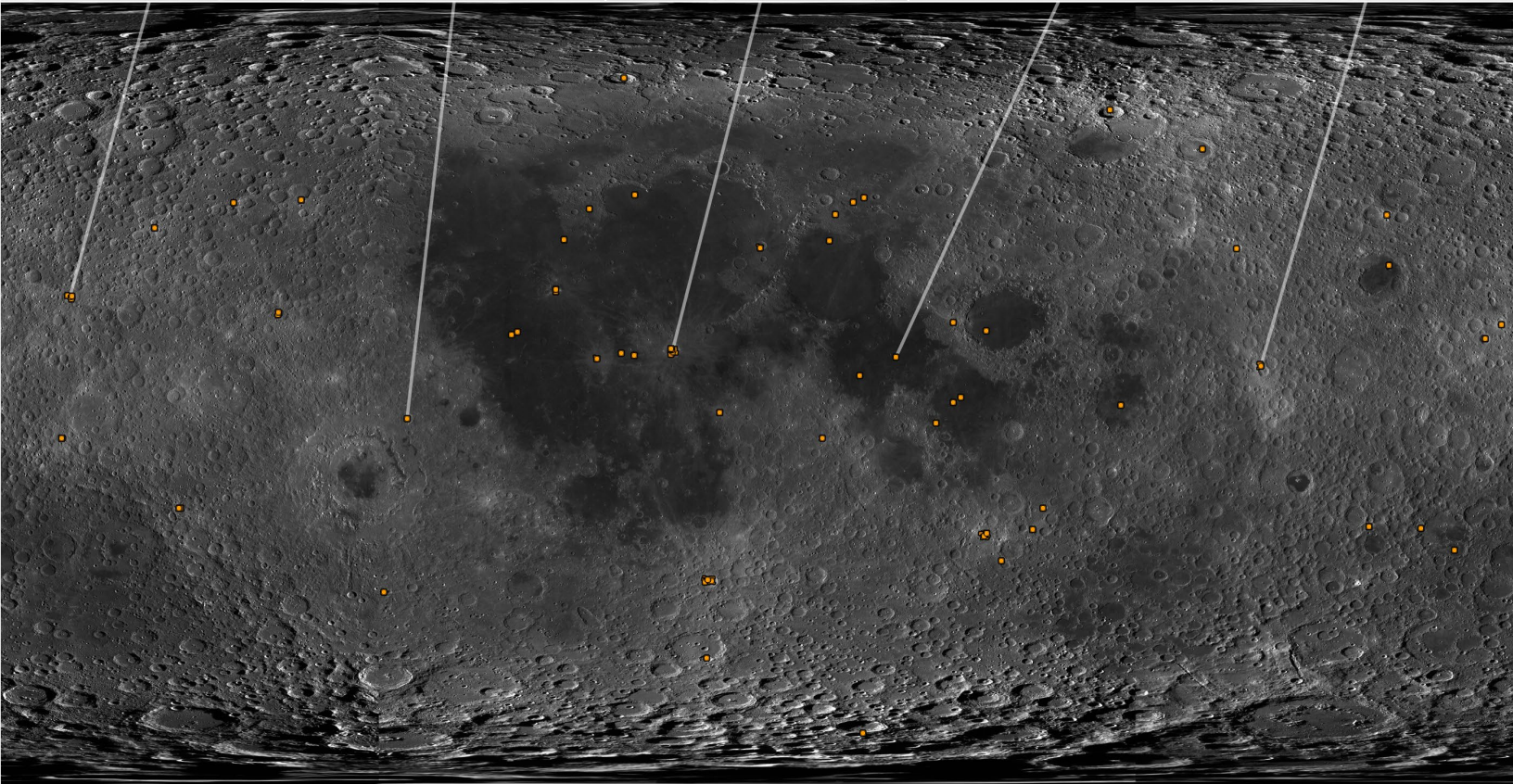
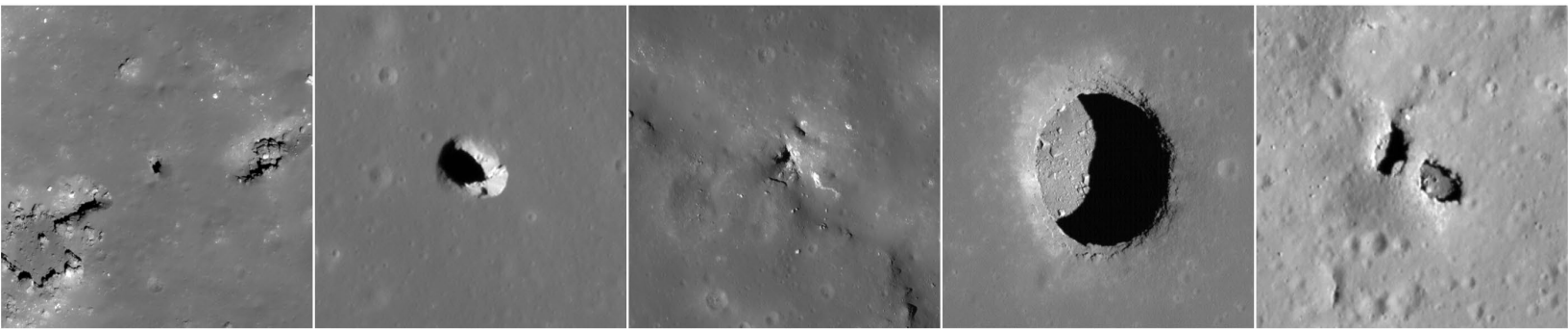


LUNAR RECONNAISSANCE ORBITER CAMERA

CATALOG OF LUNAR PITS



R.V. Wagner, M.S. Robinson, and the LROC Team
Version 1 - March 2021

Introduction

This document lists confirmed lunar pits, as described in Wagner and Robinson 2014 (<https://doi.org/10.1016/j.icarus.2014.04.002>). Lunar pits are small collapse features (10s to 100s of meter scale) characterized by having vertical walls and inward-sloping rims. The Lunar Reconnaissance Orbiter Camera (LROC) Narrow Angle Camera (NAC) provides high-resolution images of the lunar surface (~0.5-1.5 meter pixel scale), and after ten years in orbit, it has collected several images at multiple lighting angles of most lunar pits, allowing a detailed investigation of these small features.

For each pit, we have recorded the location, dimensions, and various feature descriptors (such as whether the pit is within a positive or negative relief feature, or has a path to the floor uninterrupted by a vertical wall), as well as a detailed description of the pit and environs.

Each pit is named based on the host feature's name, usually followed by a number roughly corresponding to order of discovery and a letter if the pit is part of a multi-pit cluster (e.g. "King 1a" and "King 1b").

Depths are calculated using shadow length measurements along the Sun direction in multiple images. Where possible three minimally-slewed images, with shadows cast by the rim onto the lowest part of the floor.

Latitude and longitude coordinates were computed from an average of multiple images and so should be more accurate than the ~31 m uncertainty of an arbitrary NAC image. We also report the line/sample location of the center of each pit in one LROC NAC frame to ensure unambiguous identification of each pit regardless of any future updates to the LROC ephemeris or changes to the lunar reference frame.

When citing this product, use the following reference:

Wagner, R. V. and Robinson, M. S. (2021). Occurrence and Origin of Lunar Pits: Observations from a New Catalog. 52nd Lunar and Planetary Science Conference, Abstract #2530.

<https://www.hou.usra.edu/meetings/lpsc2021/pdf/2530.pdf>

You can find an online version of this catalog, and PDF download link for the most recent update, at:

<http://lroc.sese.asu.edu/pits>

A version of this data (without images) in CSV or ESRI Shapefile can be found in the LROC PDS archive at:

https://wms.lroc.asu.edu/lroc/view_rdr/SHAPEFILE_LUNAR_PIT_LOCATIONS

Catalog Page Content Description

Header

<Name>

<Terrain and Keywords> Pit: <Host Feature>

Name: Unique identifier for the pit. Usually consists of

"<Crater Name> <Number><Optional Letter>", where:

<Crater Name> is the name of the host crater

<Number> is an arbitrary number, roughly corresponding to discovery order, but not necessarily sequential.

<Optional Letter> is a further identifier for pits within clusters (groups of multiple pits within ~100 meters of one another), usually ordered from largest to smallest or along a line.

Terrain: Host terrain of the pit. Mare, Highland, or Impact melt.

Keywords: Sub-categorization of pit:

Fracture: This pit is a wide section of a longer fracture.

Large Bowl: This pit is a wide bowl-shaped collapse feature, with most of the depth coming from the floor, rather than walls, but does have a vertical wall that completely or almost completely encircles the pit.

Uncertain: It is not clear whether or not this feature qualifies as a "pit": walls are missing on multiple sides or are very short.

Host Feature: Name of the feature the pit is in (e.g. "Copernicus" or "Mare Tranquillitatis").

Images

The upper-left block of images on each page shows the LROC NAC images used to measure the pit's depth, as well as a red/blue anaglyph of a stereo pair where possible. Image scale is listed in the caption. The upper-right image shows a color shaded relief map with contour lines and nomenclature of nearby features (using the LROC WAC global morphology map for the relief and the GLD100 for the topography).

Size and Location

Latitude: Latitude coordinate in degrees of the approximate center of the pit.

Longitude: Longitude coordinate in degrees of the approximate center of the pit.

Coordinates are estimated from multiple NAC images, and are usually accurate to within 30 m (see Wagner et al. 2017, <https://doi.org/10.1016/j.icarus.2016.05.011/>).

Depth: Average of depth measurements in meters from up to three individual images (see below). In cases where only minimum depth measurements exist, depth is based on the highest-Sun image(s).

Inner Pit Diameter: Diameters of the vertical-walled inner pit. Measured along the longest axis and perpendicular to that, though for rectilinear pits, this is usually parallel to the longest walls, rather than the true longest diagonal dimension. May be "N/A" or ">X" if there are not vertical walls bounding both ends of one axis of the pit (e.g. a wall collapse, as in the Lacus Mortis Pit).

Long Axis Azimuth: Orientation of the long axis of the inner pit (where applicable) in degrees clockwise from north, rounded to the nearest 5 degrees. All azimuths are >0; 0 is reserved as a special value for pits with no long axis.

Funnel Diameter: Diameters of the funnel/depression surrounding the pit, determined from a low-Sun image. Measures are along longest extent, and perpendicular to that longest line. Funnel diameters are a rough measure out to where there is some photometric darkening/brightening of the terrain due to slope change, and should be assumed to have an uncertainty of ~5 meters, erring on the side of reporting too small a value.

Measurement Source Images

This table gives details of the up to three images used to measure the depth of the pit, shown in the upper-left of the page.

Image ID: PDS image ID of each image.

Incidence: Incidence angle of each image, signed such that images with negative numbers have the Sun in the West, and those with positive numbers have the Sun in the East.

Emission: Emission angles of each image, signed such that images with negative numbers have the spacecraft in the West, and those with positive numbers have the spacecraft in the East.

Time of Day: Local solar time-of-day of each image, 6.00 is dawn, 12.00 is noon, 18.00 is dusk. This is not an <hour>.<minutes> format: the decimal fraction goes from 00 to 99.

Pixel Scale: Pixel scale of each image.

Depth: Depth measurement in meters from shadow measurement on each image. In general, measurements are from the top of a vertical wall to the floor, but some measurements may include some funnel, and impact melt pits rarely have uniform rim heights, so actual depth may vary between sides of the pit. Where possible, depth measurements from at least two walls are included.

If a depth measurement is “greater than X”, then no floor was visible, and “X” is the lowest point that sunlight could have reached within the pit in that image. Parts of the floor could lie above this depth if they were on the sun-ward side of the pit in that image.

Depth1 is usually from the image with the shadow boundary closest to the middle or apparent lowest point of the pit.

If possible, only images with emission angles <3 degrees were used to measure depths.

See Data Notes entry for any specific complications in the measurements of the pit.

Location Reference: Line/sample of the pit center in Image 1, as an unambiguous reference for exactly what feature this pit is.

Best Stereo Pair: PDS image IDs of the best stereo pair of the pit, if any exist. This pair is displayed as a red/blue anaglyph in the upper-left. Note that these anaglyphs are automatically generated, and may not be optimally aligned. If you have difficulty bringing it into focus, try tilting your head left or right. Also note that these anaglyphs have significant vertical exaggeration compared to a 3D model of the pit.

DTM: PDS identifier of the best NAC DTM produced by the LROC team that includes the pit, if any exist.

Other Useful Images: Any other images that may be helpful for interpreting the shape of the pit, other than the depth measurement images and any stereo pair.

Data Notes: Specific warnings about things that may affect the interpretation of the recorded data (unusual wall or floor topography, high uncertainty in shadow lengths, etc.).

Other Features

These fields are Yes/No flags of whether the pit has a given feature. Possible values are Yes, No, Likely Yes (“Yes?”), Likely No (“No?”), and Unknown (“?”). Note that for mare and highland pits, the radius for “nearby” features is increased to ~2 km from the impact melt pit standard radius of ~300 m.

Entrance Ramp: Whether the pit appears to have an unbroken slope from surrounding surface to floor. Note that this ramp may not actually be traversable in practice, due to slope or rockiness.

Overhang: Whether there is a confirmed overhang of any depth on any side, based on off-nadir imaging. Usually unknown.

Nearby Pits: Whether there is any other vertical-walled collapse feature (including other pits of the same cluster) within ~300 m.

Nearby Fractures: Whether there are any apparent surface fractures within ~300 m.

Nearby Depressions: Whether there are any negative relief features other than apparent impact craters, pits, or fractures within ~300 m.

In Depression: Whether the pit is in some sort of negative relief feature that appears unrelated to the funnel.

In Dome: Whether the pit is on some sort of local positive relief feature.

Beside Dome: Whether the pit is on flat ground within ~1 pit diameter of the base of some sort of local positive relief feature.

Colinear Pits: Whether there are at least two other pits that form an approximate line with this one.

Colinear Depression: Whether this pit is roughly in line with any nearby non-fracture elongate negative relief feature. If the pit is in a depression, disregards continuously-connected parts of that depression.

Colinear fractures: Whether this pit is roughly in line with a nearby fracture.

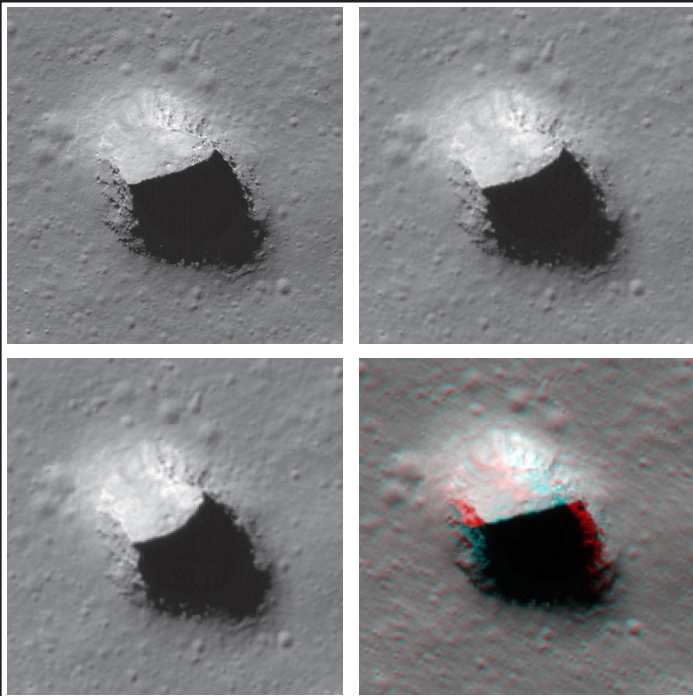
Description

Verbose description of the pit shape and surrounding terrain features. For pits in a cluster (e.g. 1a, 1b, 1c), the descriptions assume that you are reading all of them in order. Most regional description will be in the description for pit “a”.

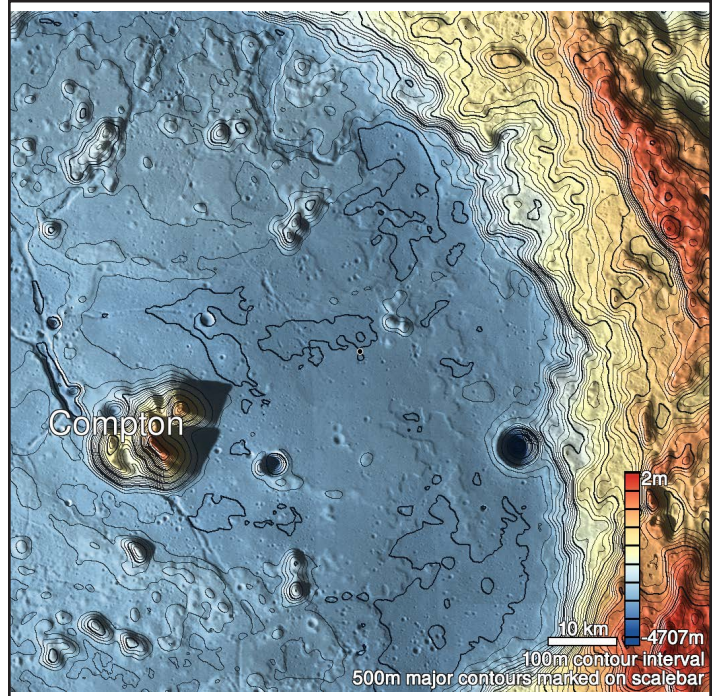
Common abbreviations: North (N), South (S), East (E), West (W), Positive Relief Feature (PRF).

Compton Pit

Mare Pit: Compton Crater



Upper left: NAC M110892182R. Upper right: NAC M1332351545L. Lower left: NAC M189923763R. Lower right: Stereo anaglyph of NACs M1225299477R (left eye, red) and M1225278371L (right eye, blue). All images are 300 m wide.



Color shaded relief map of the area around Compton Pit. Black dot marks the location of the pit.

Size and Location

Latitude	56.2247°N	Inner pit diameter	110 m × 92 m
Longitude	106.1955°E	Long axis azimuth	140°
Depth	35 m	Funnel diameter	230 m × 140 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M110892182R	M1332351545L	M189923763R
Incidence	60.26°	60.01°	61.63°
Emission	0.84°	-1.02°	1.02°
Time of Day	10.59	10.27	9.76
Pixel Scale	0.58 m/px	1.20 m/px	1.83 m/px
Depth	26.6 m	38.7 m	40.0 m

Location reference: NAC M110892182R line 44678, sample 1988

Best stereo pair: M1225299477R / M1225278371L

Other useful images:

DTM:

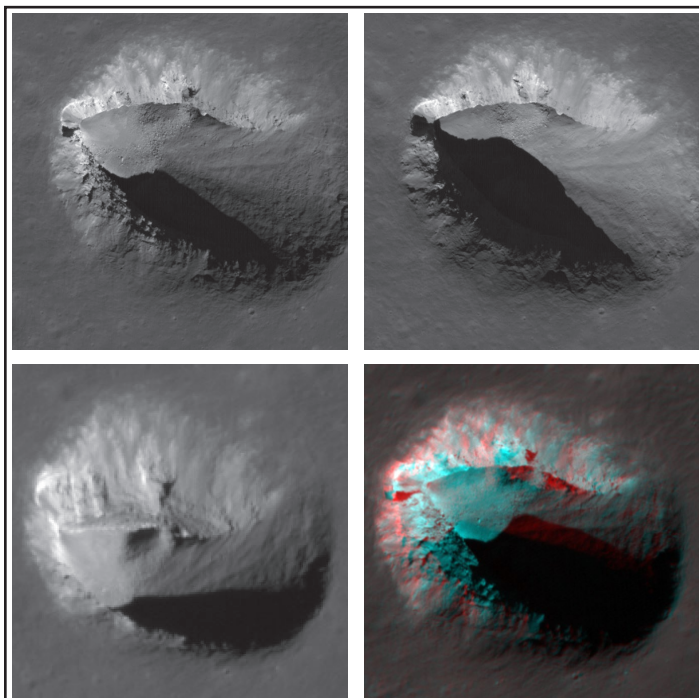
Data notes: Inner max diam is from permanently-shadowed SE rim to NW-most bit of rim by NW slope. Depths are from partway down funnel, not from inner rim, and go to partway down slope.

Description

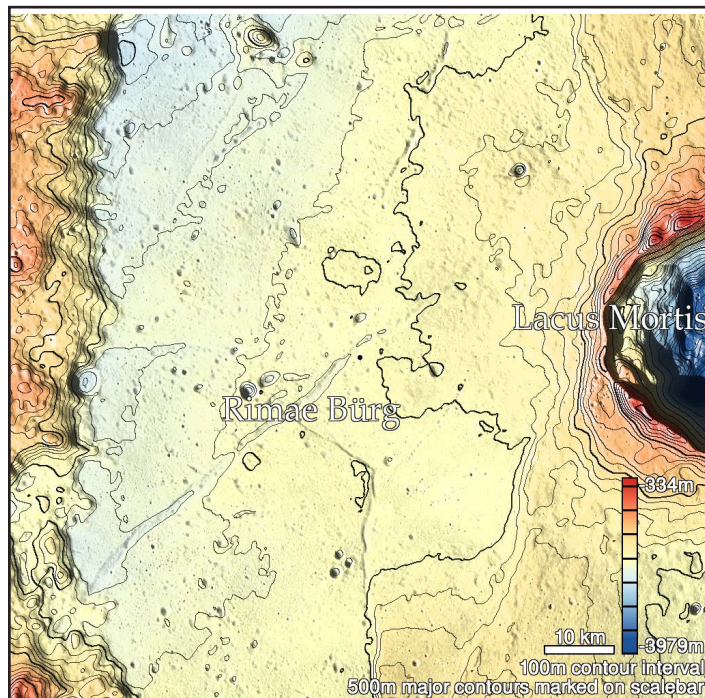
Elliptical pit, with extremely similar shape to the Mare Ingenii pit. NW side is a slope from surface to permanent shadow. Numerous layers visible on W wall in nadir images, similar to S wall of Lacus Mortis. There is an overhang under the E rim at the edge of the permanent shadow. No notable features within a few km, though the W edge of the unit the pit is in, ~10 km away, has a weird, scalloped edge.

Lacus Mortis Pit

Mare Pit: Lacus Mortis



Upper left: NAC M126759036L. Upper right: NAC M109072682R. Lower left: NAC M1136377273R. Lower right: Stereo anaglyph of NACs M1317542330L (left eye, red) and M1317528271L (right eye, blue). All images are 300 m wide.



Color shaded relief map of the area around Lacus Mortis Pit. Black dot marks the location of the pit.

Size and Location

Latitude	44.9608°N	Inner pit diameter	>165 m × 110 m
Longitude	25.6119°E	Long axis azimuth	110°
Depth	60 m	Funnel diameter	280 m × 210 m

Measurement Source Images

Image ID	M126759036L	M109072682R	M1136377273R
Incidence	49.39°	-46.47°	55.52°
Emission	-1.53°	2.22°	32.73° (S)
Time of Day	10.23	12.11	9.59
Pixel Scale	0.48 m/px	0.48 m/px	2.02 m/px
Depth			

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	Yes	Beside dome	No
Nearby pits	?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M126759036L line 25650, sample 2845

Best stereo pair: M1317542330L / M1317528271L

Other useful images:

DTM:

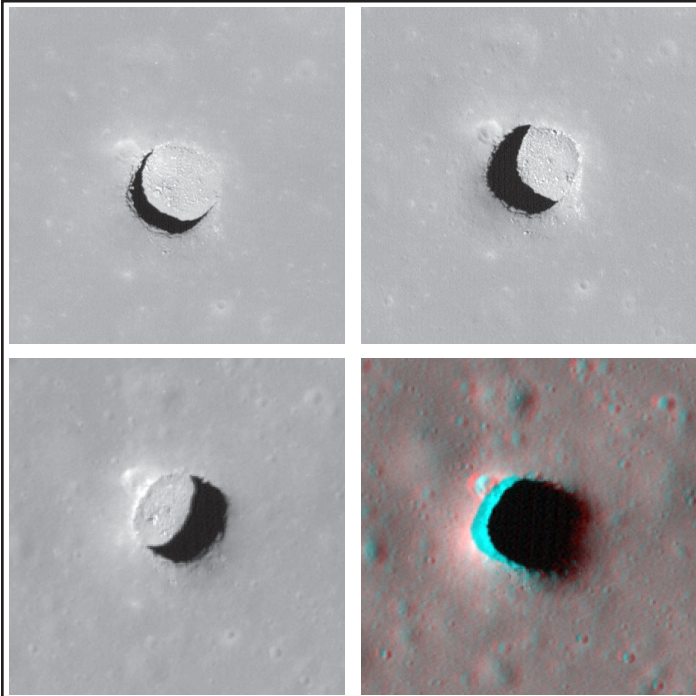
Data notes: Depth is determined from stereo modelling; image 1/2/3 are merely useful views. Note that image 3 is slewed to the north. Pit depth is calculated asserting a funnel depth of 40 m.

Description

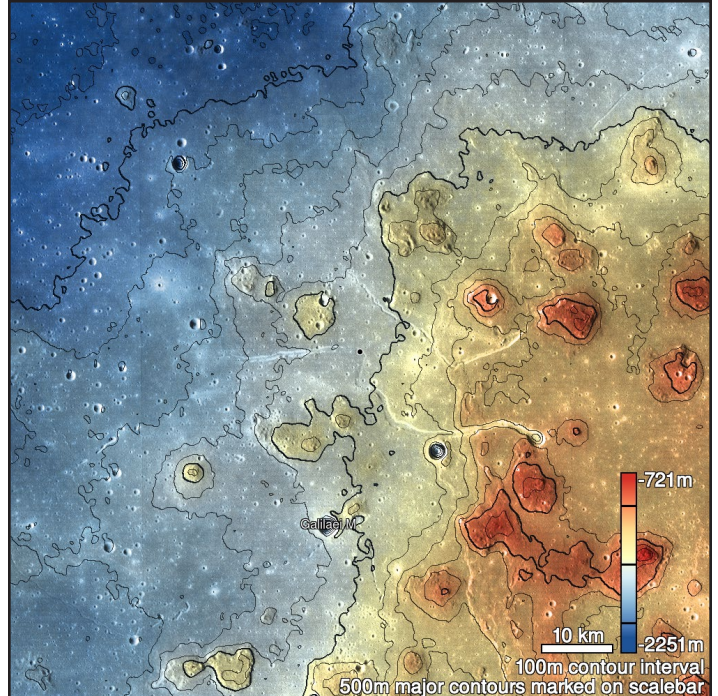
Large diamond-shaped pit with not-quite-vertical walls. The SW end is a slope from surroundings to floor. The W wall is covered by a debris slope, and the N wall has an overhang a few meters deep, with a back wall apparently visible. The apparent “funnel” is 40-60m deep (of the full pit’s ~100m depth from the surrounding surface), there is no clear transition point to vertical wall, although there is an overhang point at ~60m depth. There is a graben ~1km NW, and a much large potential pit ~10 km WSW on the other side of the graben.

Marius Hills Pit

Mare Pit: Marius Hills



Upper left: NAC M155607349R. Upper right: NAC M122584310L. Lower left: NAC M1256963084R. Lower right: Stereo anaglyph of NACs M1274616922L (left eye, red) and M1274609891L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Marius Hills Pit. Black dot marks the location of the pit.

Size and Location

Latitude	14.0917°N	Inner pit diameter	55 m × 49 m
Longitude	303.2299°E	Long axis azimuth	65°
Depth	40 m	Funnel diameter	92 m × 79 m

Measurement Source Images

Image ID	M155607349R	M122584310L	M1256963084R
Incidence	-12.63°	-25.15°	28.73°
Emission	8.82°	0.48°	0.96°
Time of Day	12.08	13.46	10.32
Pixel Scale	0.44 m/px	0.43 m/px	0.88 m/px
Depth			

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M155607349R line 32437, sample 723

Best stereo pair: M1274616922L / M1274609891L

Other useful images:

DTM: NAC_DTM_MARIUSPIT01

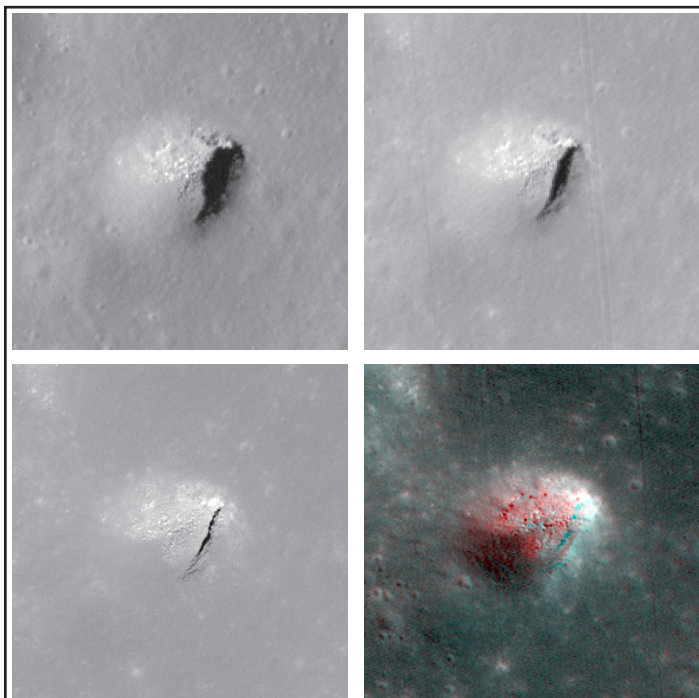
Data notes: Depth is determined from stereo modelling; image 1/2/3 are merely useful views.

Description

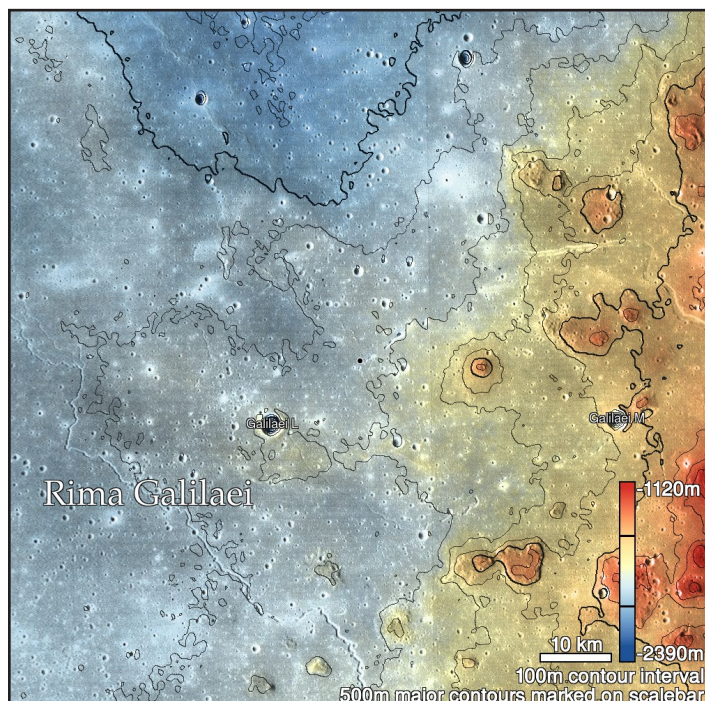
Elliptical pit in the middle of a sinuous rille. Floor appears mostly flat, covered in boulders. There are slight overhangs near floor-level on both sides, though there may not be any access to a deeper void space without squeezing through debris. Funnel is ~10 m deep. West Marius Hills pit is ~45km WSW.

West Marius Hills Pit

Mare Pit: Marius Hills



Upper left: NAC M1318098123R. Upper right: NAC M1346290850R. Lower left: NAC M124952951R. Lower right: Stereo anaglyph of NACs M1313401618L (left eye, red) and M1313394599L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around West Marius Hills Pit. Black dot marks the location of the pit.

Size and Location

Latitude	13.5507°N	Inner pit diameter	>50 m × 47 m
Longitude	301.8267°E	Long axis azimuth	55°
Depth	16 m	Funnel diameter	95 m × 70 m

Measurement Source Images

Image ID	M1318098123R	M1346290850R	M124952951R
Incidence	42.99°	28.05°	13.17°
Emission	1.99°	0.71°	0.51°
Time of Day	9.25	10.36	11.64
Pixel Scale	0.80 m/px	0.91 m/px	0.44 m/px
Depth	15.5 m	>13.2 m	>10.6 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	Yes?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1318098123R line 26290, sample 3877

Best stereo pair: M1313401618L / M1313394599L

Other useful images:

DTM:

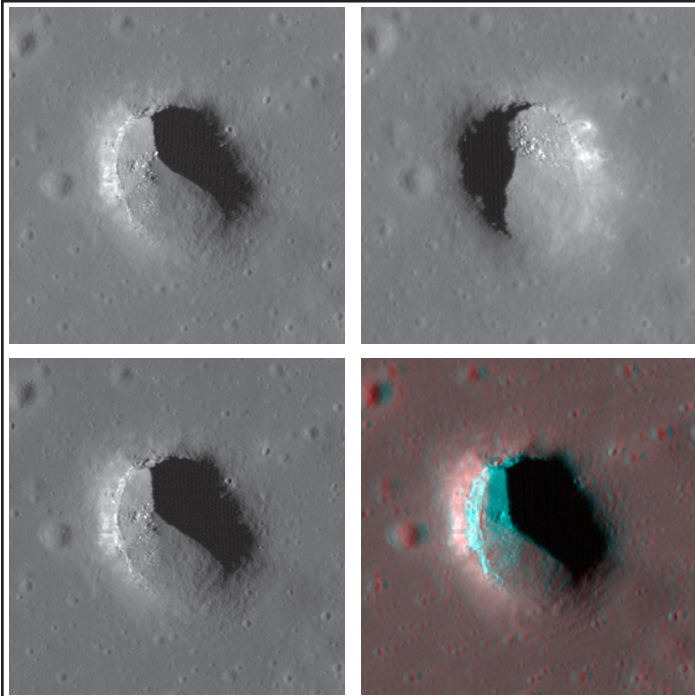
Data notes: Depth 1 is to center of pit, others are to partway down floor.

Description

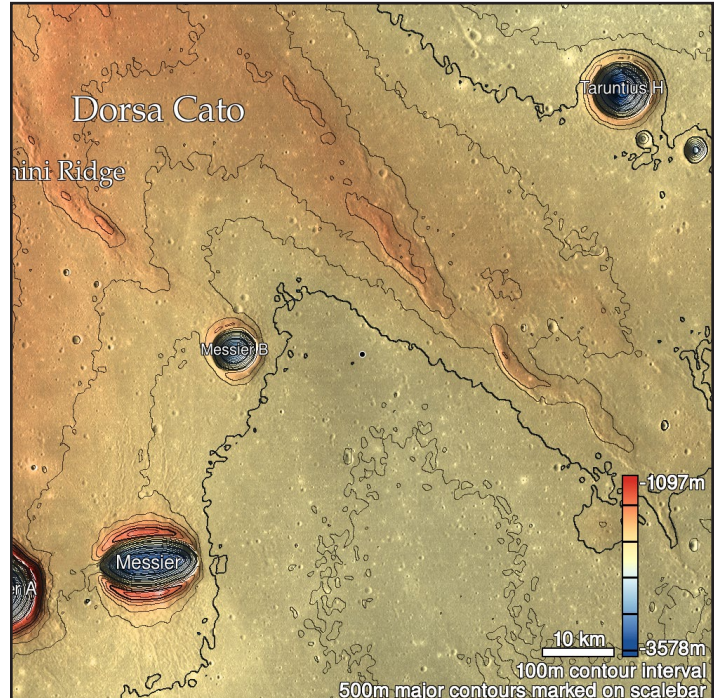
Diamond-shaped pit, SW side is a ramp from rim to floor. Floor seems bowl-shaped except for a hint that the SE edge of the floor slopes back down towards the wall, possibly indicating an extant or former overhang on that side. There is a large linear collapse nearly in line with this pit's long axis ~2km NW, crossing a wrinkle ridge, possibly indicating the presence of a partially intact lava tube.

Central Mare Fecunditatis Pit

Mare Large Bowl Pit: Mare Fecunditatis



Upper left: NAC M1304478302L. Upper right: NAC M1129169546R. Lower left: NAC M1319757415R. Lower right: Stereo anaglyph of NACs M1107968066R (left eye, red) and M1107953768R (right eye, blue). All images are 300 m wide.



Color shaded relief map of the area around Central Mare Fecunditatis Pit. Black dot marks the location of the pit.

Size and Location

Latitude	0.9182°S	Inner pit diameter	122 m × 100 m
Longitude	48.6595°E	Long axis azimuth	155°
Depth	42 m	Funnel diameter	198 m × 162 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1304478302L	M1129169546R	M1319757415R
Incidence	57.55°	-48.55°	59.61°
Emission	-1.01°	-1.92°	1.97°
Time of Day	8.16	15.24	8.03
Pixel Scale	0.90 m/px	1.05 m/px	0.85 m/px
Depth	41.7 m	39.8 m	44.0 m

Location reference: NAC M1304478302L line 24187, sample 3736

Best stereo pair: M1107968066R / M1107953768R

Other useful images:

DTM: NAC_DTM_FECNDITATS2

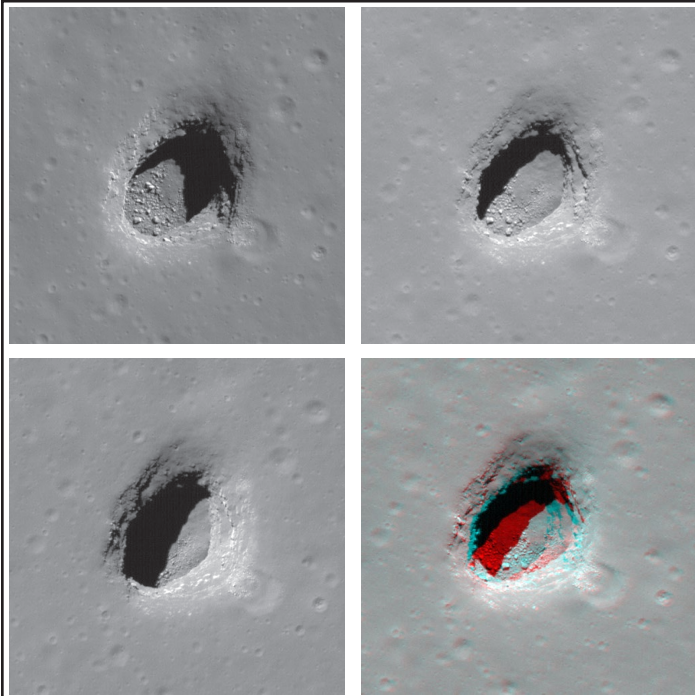
Data notes:

Description

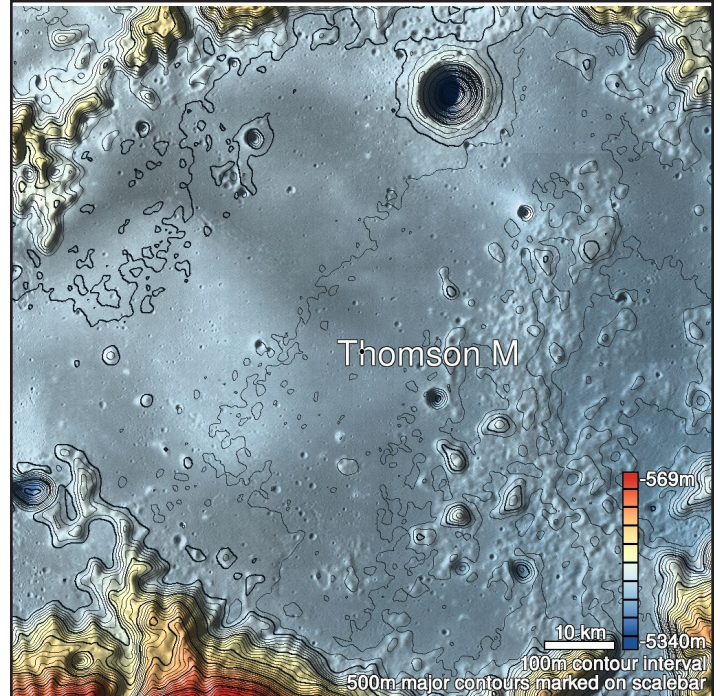
Elliptical pit with bowl-shaped floor partly covered in boulders. Walls are ~10 m high, funnel is ~15m deep. SE side is a slope from surface to center of floor with no boulders on it. NE side of floor is less bowl-shaped than the rest, but slewed image of that wall shows no evidence of overhang. There are no notable features nearby.

Mare Ingenii Pit

Mare Pit: Mare Ingenii



Upper left: NAC M1227298727R. Upper right: NAC M171835900L. Lower left: NAC M138819477R. Lower right: Stereo anaglyph of NACs M1117792640R (left eye, red) and M1117785537L (right eye, blue). All images are 300 m wide.



Color shaded relief map of the area around Mare Ingenii Pit. Black dot marks the location of the pit.

Size and Location

Latitude	35.9494°S	Inner pit diameter	104 m × 71 m
Longitude	166.0559°E	Long axis azimuth	30°
Depth	55 m	Funnel diameter	180 m × 157 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1227298727R	M171835900L	M138819477R
Incidence	43.98°	34.58°	-38.81°
Emission	0.62°	-0.44°	-0.72°
Time of Day	10.18	11.85	13.27
Pixel Scale	0.62 m/px	0.69 m/px	0.68 m/px
Depth			

Location reference: NAC M1227298727R line 17531, sample 1605

Best stereo pair: M1117792640R / M1117785537L

Other useful images:

DTM:

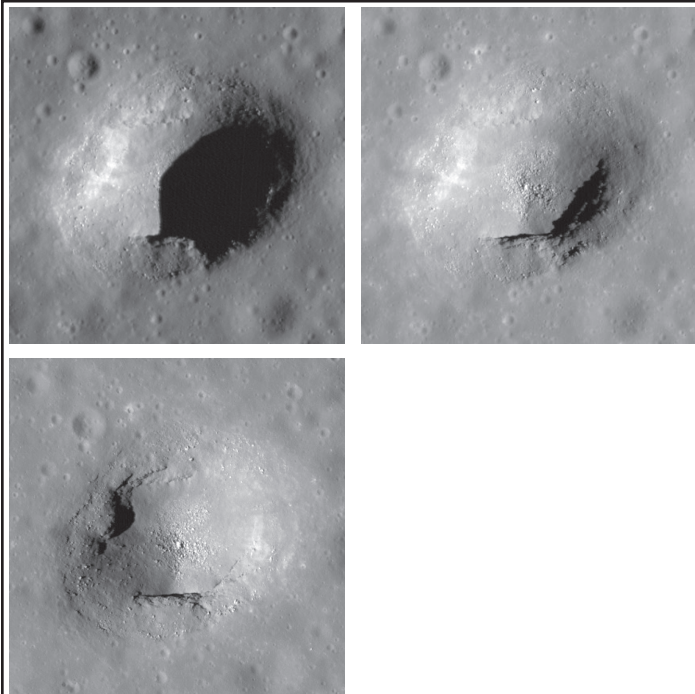
Data notes: Depth is determined from stereo modelling; image 1/2/3 are merely useful views.

Description

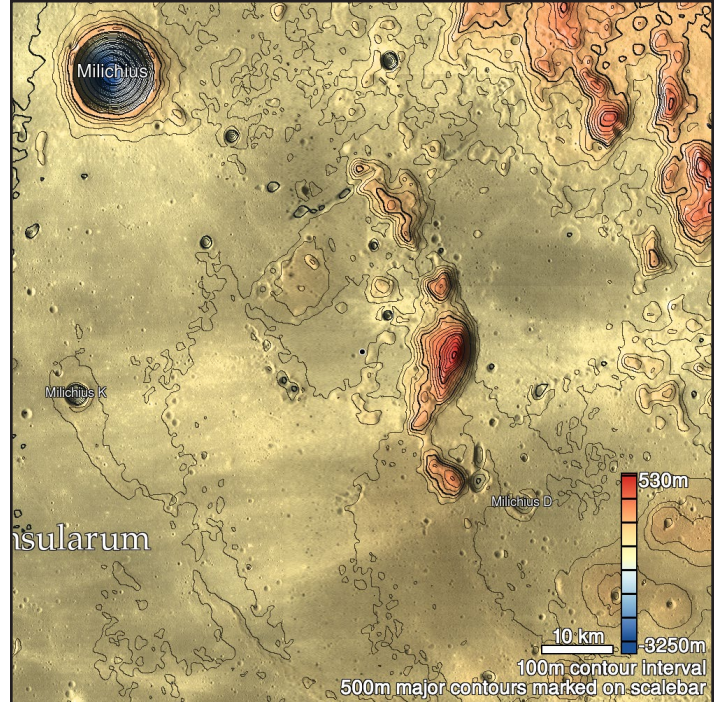
Elliptical pit with a very pronounced funnel exposing numerous coherent layers. There is a ~40m diameter crater on the wider E edge of the funnel, which may have triggered some expansion of the funnel on that side. The floor is higher on the E side than the W, and slopes down from N to S. Depth from rim to floor ranges from 15-65 m, and the funnel is ~40m deep on the E side (~20-30 on the W). There is an overhang of at least 10-20 m on both the W and S sides. No unusual surface features in the area, although there is a 600m crater ~200m N of the pit.

Mare Insularum Pit

Mare Pit: Mare Insularum



Upper left: NAC M1304991525R. Upper right: NAC M1197963230L. Lower left: NAC M1310860415R. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 400 m wide.



Color shaded relief map of the area around Mare Insularum Pit. Black dot marks the location of the pit.

Size and Location

Latitude	8.6861°N	Inner pit diameter	>165 m × 159 m
Longitude	330.9665°E	Long axis azimuth	65°
Depth	63 m	Funnel diameter	315 m × 255 m

Measurement Source Images

Image ID	M1304991525R	M1197963230L	M1310860415R
Incidence	63.51°	41.96°	-45.36°
Emission	1.32°	-2.48°	-1.02°
Time of Day	7.80	9.25	14.96
Pixel Scale	1.09 m/px	0.92 m/px	0.71 m/px
Depth	62.8 m	>17.3 m	>27.5 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1304991525R line 27215, sample 2727

Best stereo pair: /

Other useful images:

DTM:

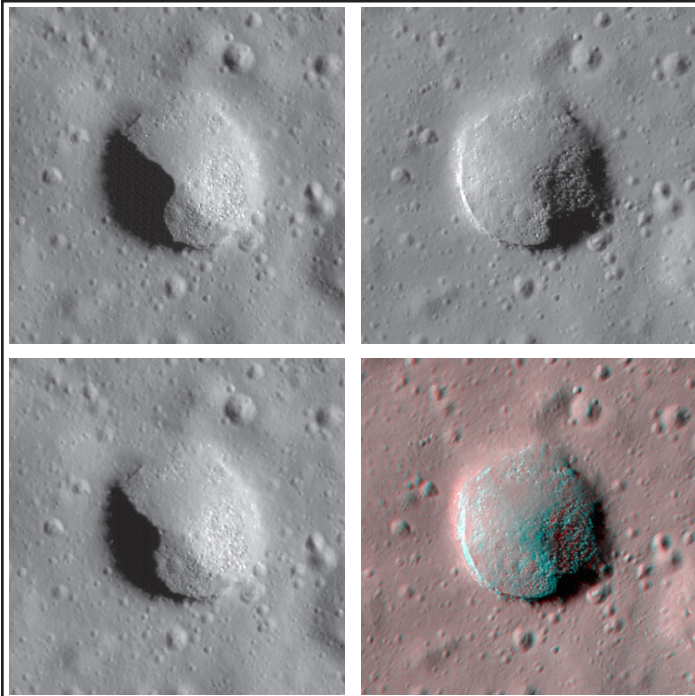
Data notes: Inner max depth is end-to-end length of SE wall. Depth 1 is from protrusion on SE wall, not rim. Depth 2 is from same protrusion to edge of floor, depth 3 is NW rim to edge of floor.

Description

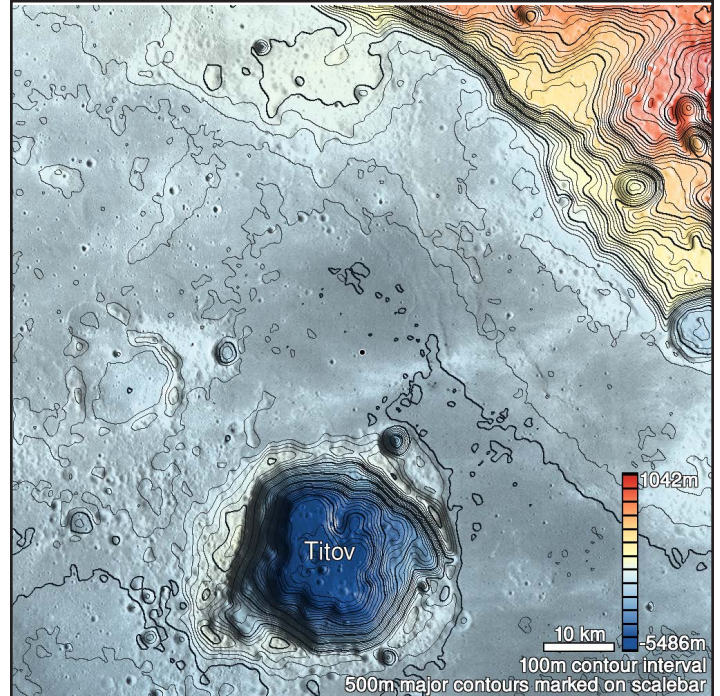
Large, diamond-shaped, mostly-filled-in pit. Largest extant wall is on the SE side. Floor is bowl-shaped (except possibly by the S wall) and filled with 1-3m scale boulders. There is a set of kipukas of highland material to the E, with the closest mound starting ~600m away. There's an unusual feature (looks like a slightly raised section of mare with floor-fractured crater style fractures) ~9km NW.

Mare Moscoviense Pit

Mare Large Bowl Pit: Mare Moscoviense



Upper left: NAC M1324979814L. Upper right: NAC M1334377850R. Lower left: NAC M1113191083R. Lower right: Stereo anaglyph of NACs M1319088918L (left eye, red) and M1319074859L (right eye, blue). All images are 400 m wide.



Color shaded relief map of the area around Mare Moscoviense Pit. Black dot marks the location of the pit.

Size and Location

Latitude	29.5025°N	Inner pit diameter	175 m × 160 m
Longitude	150.4647°E	Long axis azimuth	170°
Depth	40 m	Funnel diameter	205 m × 205 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1324979814L	M1334377850R	M1113191083R
Incidence	-63.37°	61.82°	-59.20°
Emission	1.26°	1.13°	-0.33°
Time of Day	16.00	8.22	15.66
Pixel Scale	1.31 m/px	1.24 m/px	1.51 m/px
Depth	40.0 m	>23.6 m	>34.2 m

Location reference: NAC M1324979814L line 22025, sample 3363

Best stereo pair: M1319088918L / M1319074859L

Other useful images:

DTM:

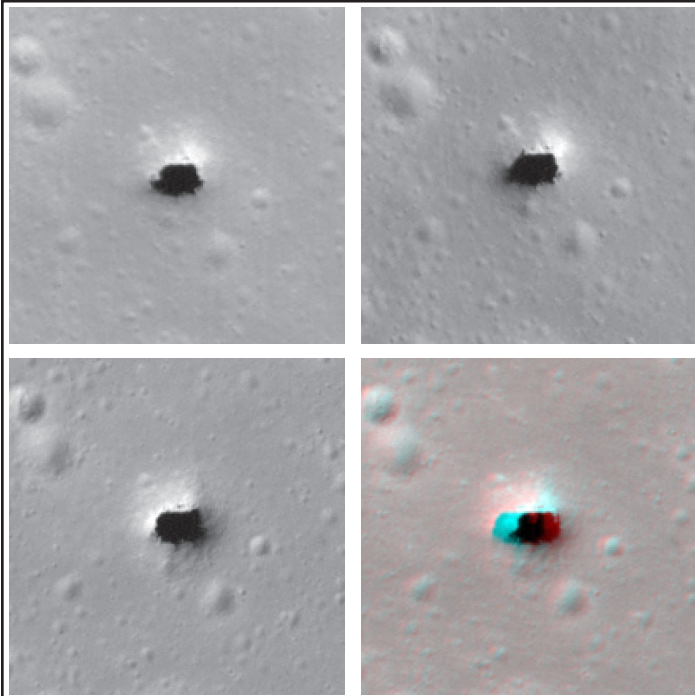
Data notes: Depth 1 is to center of pit, others are to partway down floor.

Description

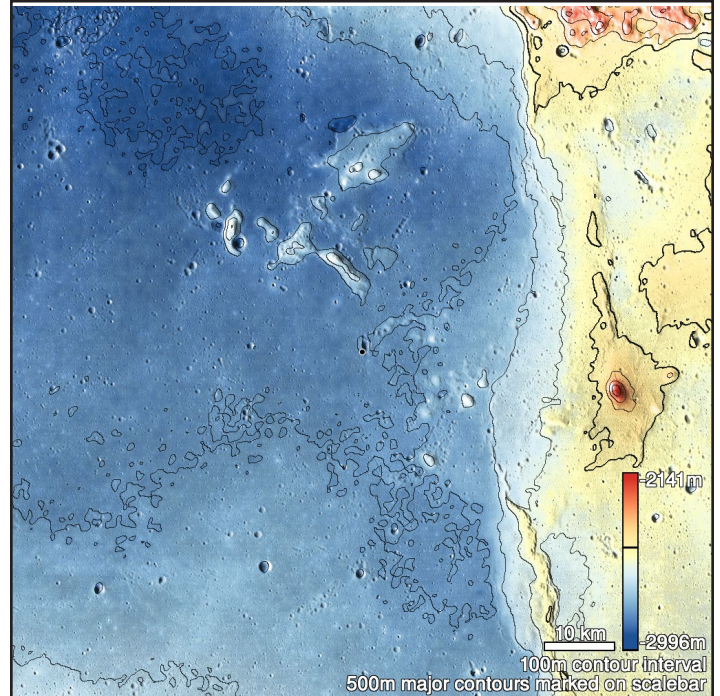
Circular bowl-shaped pit, with vertical wall mostly surrounding it. The N and NE sides may have breaches that would allow access to the interior. There appear to be ~1-5 impact craters in the interior, partly covered by boulders. Nearby terrain is very heavily cratered, but otherwise doesn't have any features of note.

Mare Serenitatis Pit

Mare Pit: Mare Serenitatis



Upper left: NAC M1343438359L. Upper right: NAC M1341090555L. Lower left: NAC M1317598749L. Lower right: Stereo anaglyph of NACs M1345798646L (left eye, red) and M1345784596R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Mare Serenitatis Pit. Black dot marks the location of the pit.

Size and Location

Latitude	35.1041°N	Inner pit diameter	21 m × 17 m
Longitude	17.4017°E	Long axis azimuth	85°
Depth	>25 m	Funnel diameter	60 m × 55 m

Measurement Source Images

Image ID	M1343438359L	M1341090555L	M1317598749L
Incidence	-36.89°	-49.76°	48.63°
Emission	3.97°	1.07°	-3.04°
Time of Day	12.52	14.41	9.59
Pixel Scale	1.02 m/px	1.02 m/px	0.92 m/px
Depth	>26 m	>19.4 m	>19.7 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1343438359L line 25530, sample 4259

Best stereo pair: M1345798646L / M1345784596R

Other useful images:

DTM:

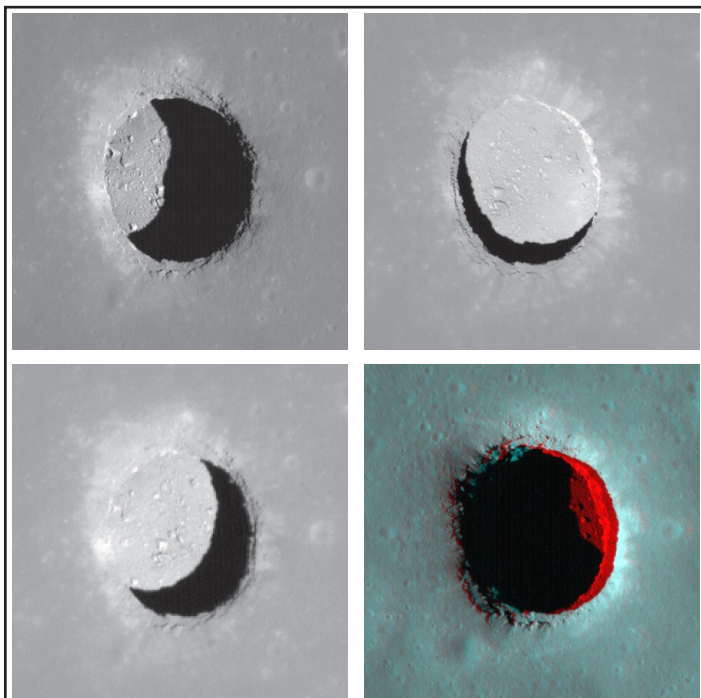
Data notes: Depths may be from partway up funnel.

Description

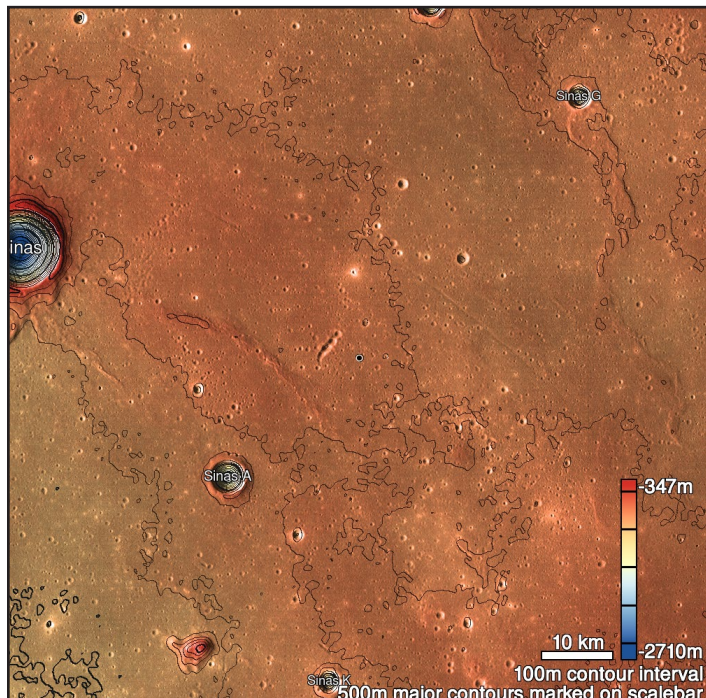
Small pit with no visible floor, even at near-noon lighting. 500m from an irregular 1.5km-wide depression (possibly a volcanic vent?).

Mare Tranquillitatis Pit

Mare Pit: Mare Tranquillitatis



Upper left: NAC M126710873R. Upper right: NAC M155016845R. Lower left: NAC M1225799854L. Lower right: Stereo anaglyph of NACs M137332905R (left eye, red) and M152655237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Mare Tranquillitatis Pit. Black dot marks the location of the pit.

Size and Location

Latitude	8.3355°N	Inner pit diameter	100 m × 88 m
Longitude	33.2220°E	Long axis azimuth	170°
Depth	105 m	Funnel diameter	146 m × 140 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M126710873R	M155016845R	M1225799854L
Incidence	26.48°	-10.57°	14.88°
Emission	0.47°	-5.22°	-0.75°
Time of Day	10.29	12.54	11.20
Pixel Scale	0.41 m/px	0.41 m/px	0.84 m/px
Depth			

Location reference: NAC M126710873R line 12020, sample 1352

Best stereo pair: M137332905R / M152655237R

Other useful images:

DTM: NAC_DTM_TRANQPIT1

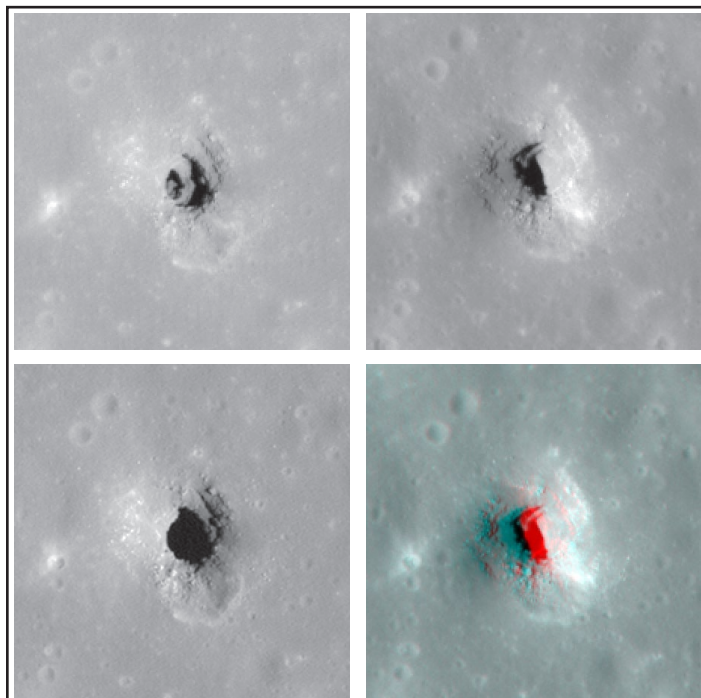
Data notes: Depth is determined from stereo modelling; image 1/2/3 are merely useful views.

Description

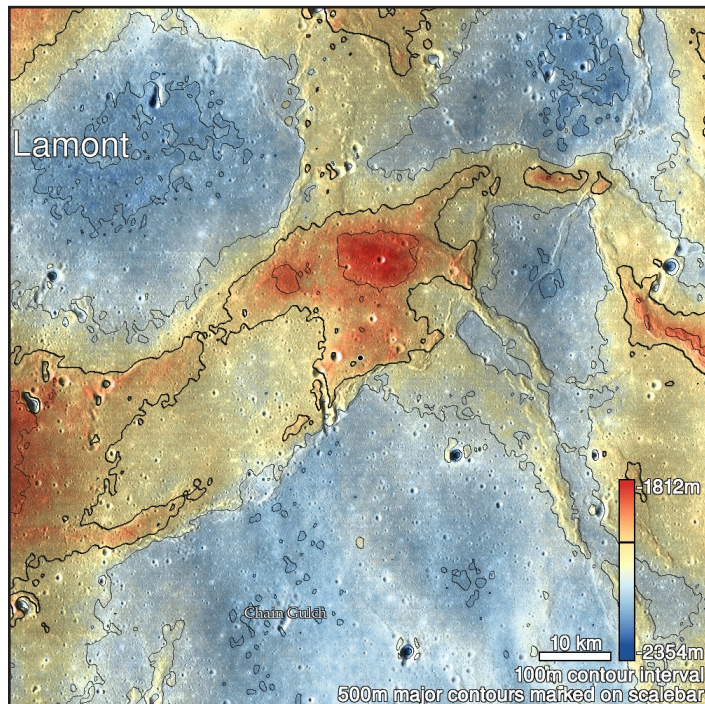
Elliptical pit with vertical walls. The type example for cylindrical pits. Funnel is ~20 m deep, inner pit depth of 105m is measured from bottom of funnel. Walls are vertical and are visible to ~80m depth, although there is a recess all the way around the pit at ~40m depth below the surface. Floor that is not overhung is flat and covered in boulders, floor under the E wall slopes downward. There are overhangs of at least 10-15 m on E, W, and N sides. No notable surface features in the area.

Southwest Mare Tranquillitatis Pit

Mare Pit: Mare Tranquillitatis



Upper left: NAC M1345757107L. Upper right: NAC M1297582135L. Lower left: NAC M1317564208L. Lower right: Stereo anaglyph of NACs M1341063036R (left eye, red) and M1297582135L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Southwest Mare Tranquillitatis Pit. Black dot marks the location of the pit.

Size and Location

Latitude	4.1438°N	Inner pit diameter	32 m × 26 m
Longitude	24.6871°E	Long axis azimuth	165°
Depth	25 m	Funnel diameter	100 m × 80 m

Measurement Source Images

Image ID	M1345757107L	M1297582135L	M1317564208L
Incidence	17.68°	-27.83°	34.02°
Emission	-0.85°	1.43°	-0.85°
Time of Day	10.86	13.85	9.75
Pixel Scale	0.88 m/px	0.91 m/px	0.77 m/px
Depth	27.9 m	22.8 m	>25.2 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1345757107L line 21851, sample 4015

Best stereo pair: M1341063036R / M1297582135L

Other useful images:

DTM:

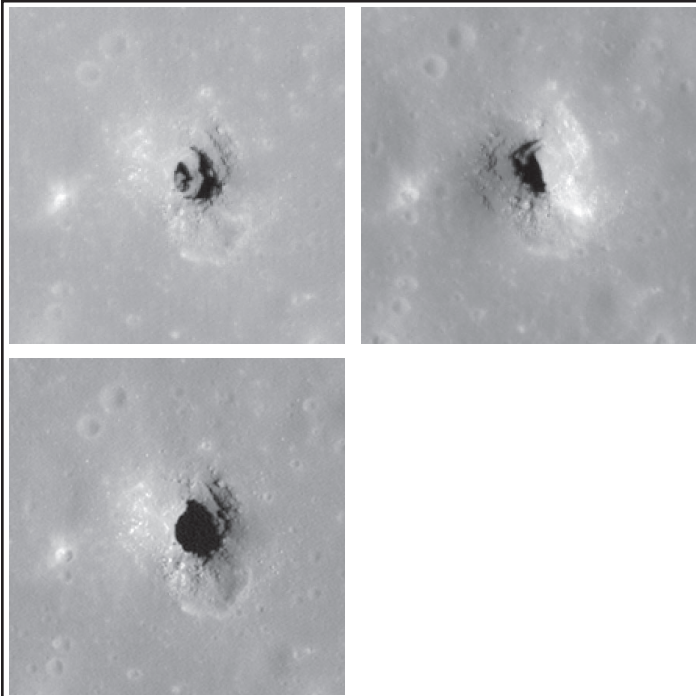
Data notes: Stereo is accidental and does not have matching lighting. Depths are to outer of the concentric pits.

Description

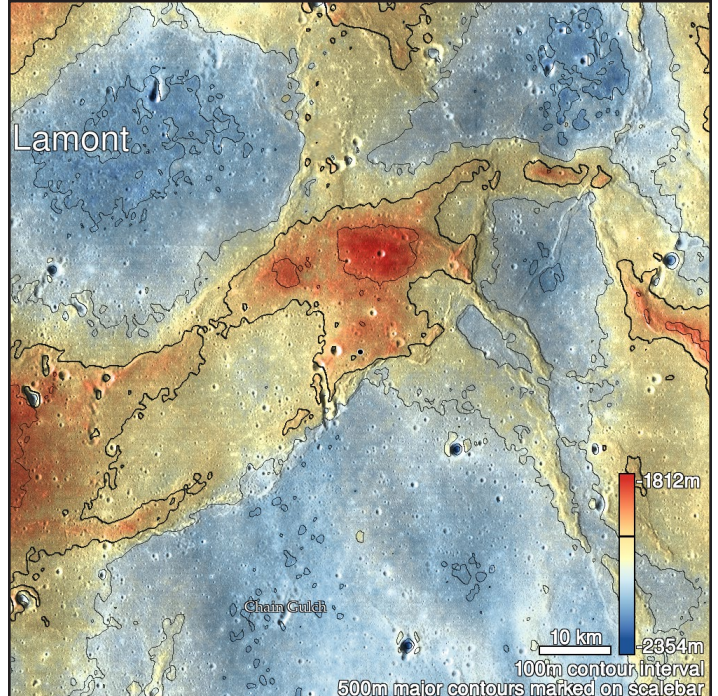
Round pit, seems to have multiple levels of floor. The funnel also has multiple exposed layers showing a stairstep, and is ~20-25m deep. W side of floor is a deeper pit, Southwest Mare Tranquillitatis B. There appears to be an additional narrow level of flat non-funnel interior surface on the N wall, above the main floor. There is a wrinkle ridge 2.3 km SE (possibly also 1 km SE), pit is on the uphill side of the ridge.

Southwest Mare Tranquillitatis B Pit

Mare Pit: Mare Tranquillitatis



Upper left: NAC M1345757107L. Upper right: NAC M1297582135L. Lower left: NAC M1317564208L. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Southwest Mare Tranquillitatis B Pit. Black dot marks the location of the pit.

Size and Location

Latitude	4.1438°N	Inner pit diameter	18 m × 10 m
Longitude	24.6867°E	Long axis azimuth	175°
Depth	13 m	Funnel diameter	N/A m × N/A m

Measurement Source Images

Image ID	M1345757107L	M1297582135L	M1317564208L
Incidence	17.68°	-27.83°	34.02°
Emission	-0.84°	1.44°	-0.84°
Time of Day	10.86	13.85	9.75
Pixel Scale	0.88 m/px	0.91 m/px	0.77 m/px
Depth	12.8 m	>0 m	>16 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1345757107L line 21851, sample 4024

Best stereo pair: /

Other useful images:

DTM:

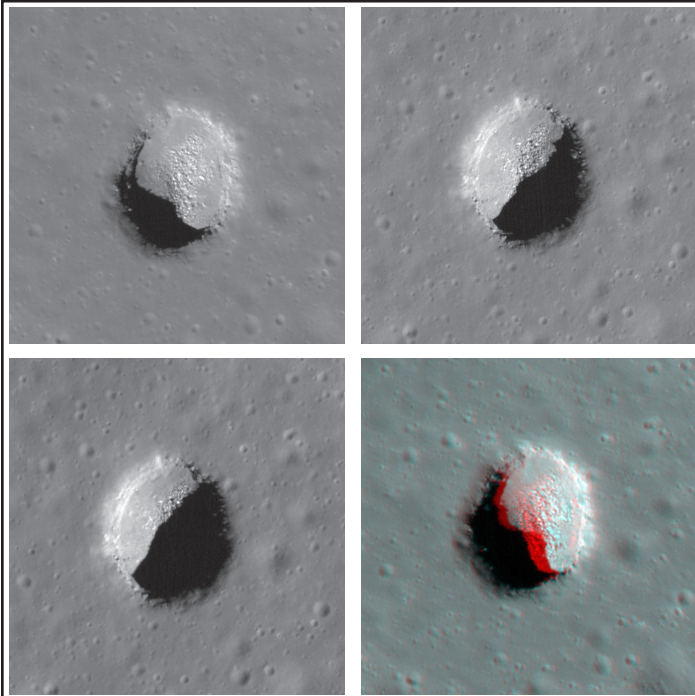
Data notes: Depth 1 is from floor of outer pit, Depths 2&3 are from outer pit rim adjusted by outer pit depth.

Description

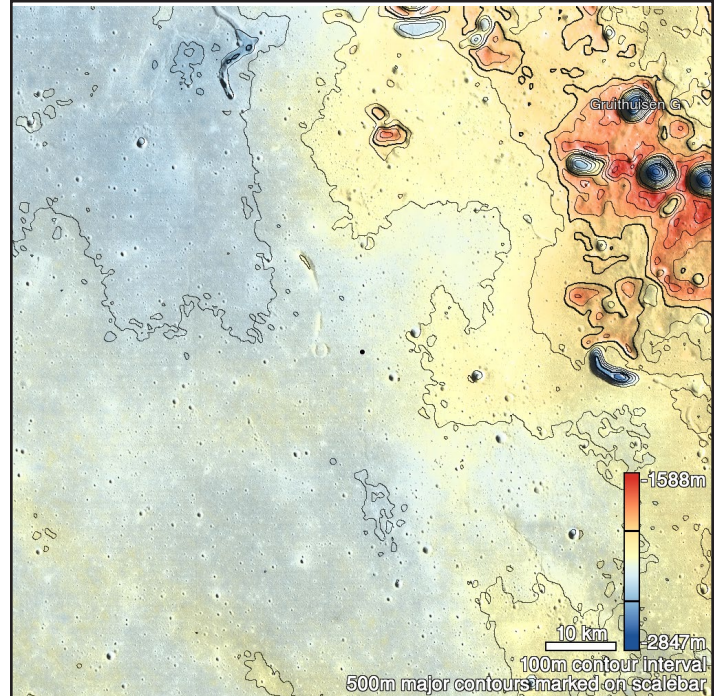
Inner pit on W side of floor of Southwest Mare Tranquillitatis pit. Floor may slope downward to the W.

North Procellarum 1 Pit

Mare Pit: Oceanus Procellarum



Upper left: NAC M1341498389L. Upper right: NAC M1318006340L. Lower left: NAC M1243977124L. Lower right: Stereo anaglyph of NACs M1206329407R (left eye, red) and M1206315342L (right eye, blue). All images are 400 m wide.



Color shaded relief map of the area around North Procellarum 1 Pit. Black dot marks the location of the pit.

Size and Location

Latitude	35.4097°N	Inner pit diameter	157 m × 108 m
Longitude	314.3602°E	Long axis azimuth	5°
Depth	54 m	Funnel diameter	195 m × 175 m

Measurement Source Images

Image ID	M1341498389L	M1318006340L	M1243977124L
Incidence	-46.58°	52.36°	58.14°
Emission	0.99°	-2.13°	-1.96°
Time of Day	14.04	9.22	8.73
Pixel Scale	1.04 m/px	0.94 m/px	1.21 m/px
Depth	50.0 m	57.8 m	54.2 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1341498389L line 23297, sample 3771

Best stereo pair: M1206329407R / M1206315342L

Other useful images:

DTM: NAC_DTM_PRCLRMPIT01

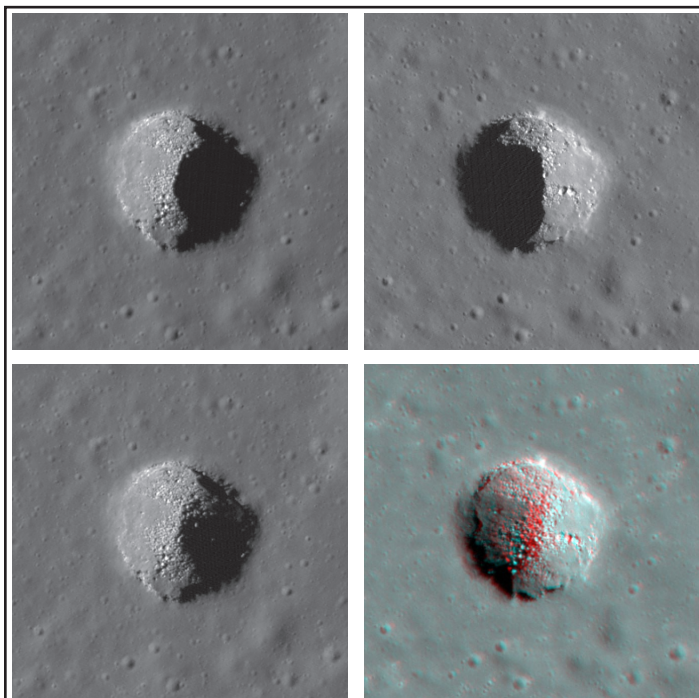
Data notes:

Description

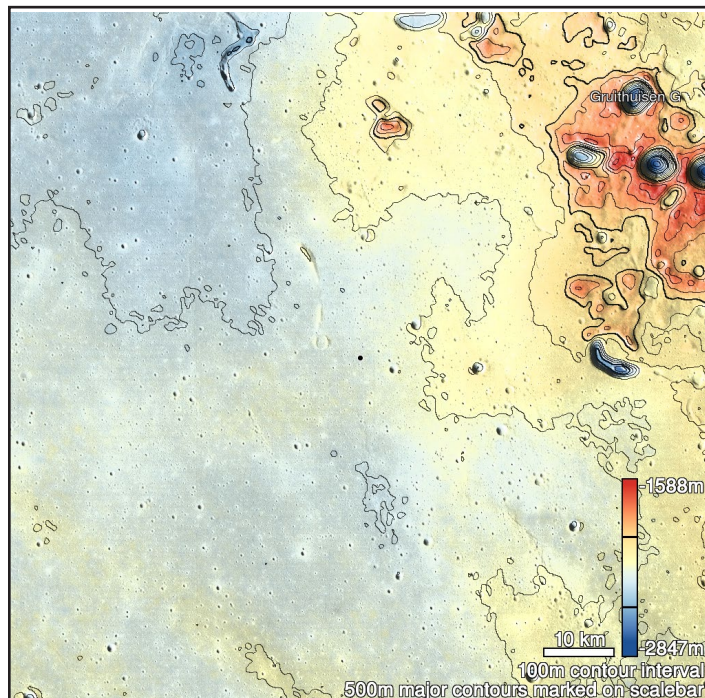
Elliptical pit, similar to Ingenii/Compton. N wall is almost a slope from rim to floor, but there appear to be two layers of outcrop in the way. Floor is mostly bowl-shaped, and the center is filled with boulders. North Procellarum 2 is ~2 km WSW.

North Procellarum 2 Pit

Mare Large Bowl Pit: Oceanus Procellarum



Upper left: NAC M1274547047R. Upper right: NAC M1339149465L. Lower left: NAC M1348546440R. Lower right: Stereo anaglyph of NACs M1206329407L (left eye, red) and M1206315342L (right eye, blue). All images are 400 m wide.



Color shaded relief map of the area around North Procellarum 2 Pit. Black dot marks the location of the pit.

Size and Location

Latitude	35.3433°N	Inner pit diameter	160 m × 155 m
Longitude	314.3447°E	Long axis azimuth	180°
Depth	43 m	Funnel diameter	175 m × 170 m

Measurement Source Images

Image ID	M1274547047R	M1339149465L	M1348546440R
Incidence	63.03°	-66.28°	60.28°
Emission	1.32°	0.91°	-0.16°
Time of Day	8.29	15.94	8.47
Pixel Scale	1.06 m/px	1.04 m/px	1.04 m/px
Depth	44.8 m	39.5 m	43.9 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1274547047R line 23044, sample 2739

Best stereo pair: M1206329407L / M1206315342L

Other useful images:

DTM: NAC_DTM_PRCLRMPIT01

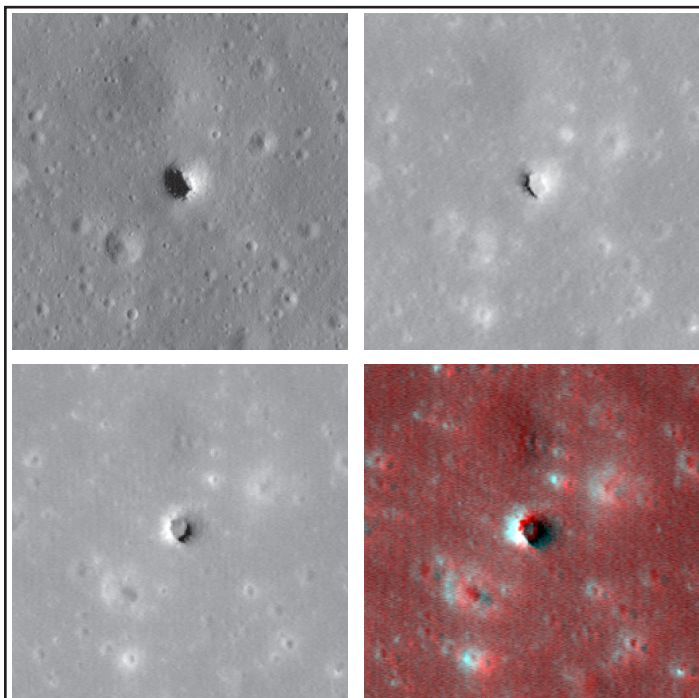
Data notes: Depth measurements may be from partway up the funnel.

Description

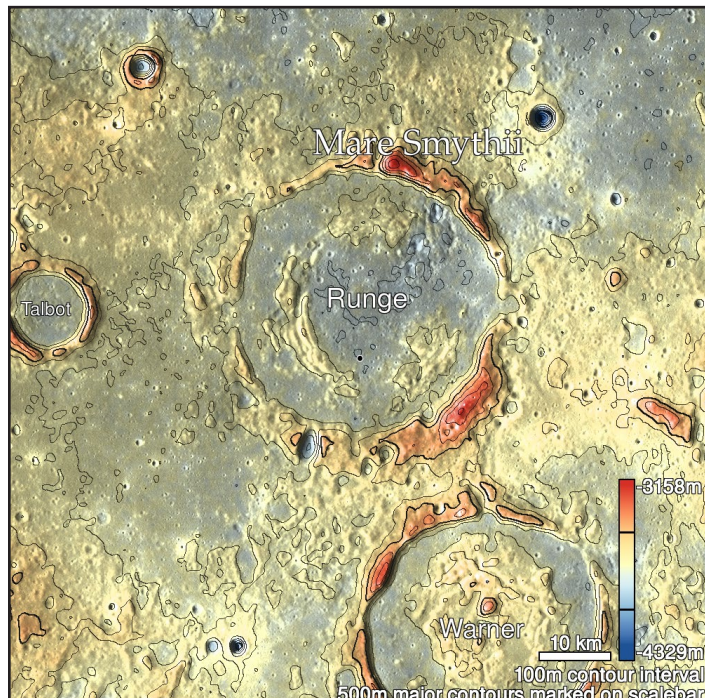
Nearly circular pit with short walls and deep, bowl-shaped, boulder-filled floor. There appears to be a break in the wall on the E side allowing access to the floor. No evidence of overhangs from floor shape, though the floor slope rising up to meet the NE wall may have a slight downturn in the last meter or two, suggesting that that wall may have recently been overhung. North Procellarum 1 is ~2km NNE.

Runge Pit

Mare Pit: Runge Crater



Upper left: NAC M119285915R. Upper right: NAC M1146585002R. Lower left: NAC M1105352882R. Lower right: Stereo anaglyph of NACs M190036923R (left eye, red) and M190022623R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Runge Pit. Black dot marks the location of the pit.

Size and Location

Latitude	2.7024°S	Inner pit diameter	14 m × 12 m
Longitude	86.7800°E	Long axis azimuth	165°
Depth	5 m	Funnel diameter	31 m × 28 m

Measurement Source Images

Image ID	M119285915R	M1146585002R	M1105352882R
Incidence	-61.25°	-22.75°	32.44°
Emission	-0.25°	-0.89°	0.45°
Time of Day	16.08	13.49	9.84
Pixel Scale	0.53 m/px	1.06 m/px	1.11 m/px
Depth	4.9 m	5.5 m	5.8 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M119285915R line 14100, sample 945

Best stereo pair: M190036923R / M190022623R

Other useful images: M1140701377L

DTM:

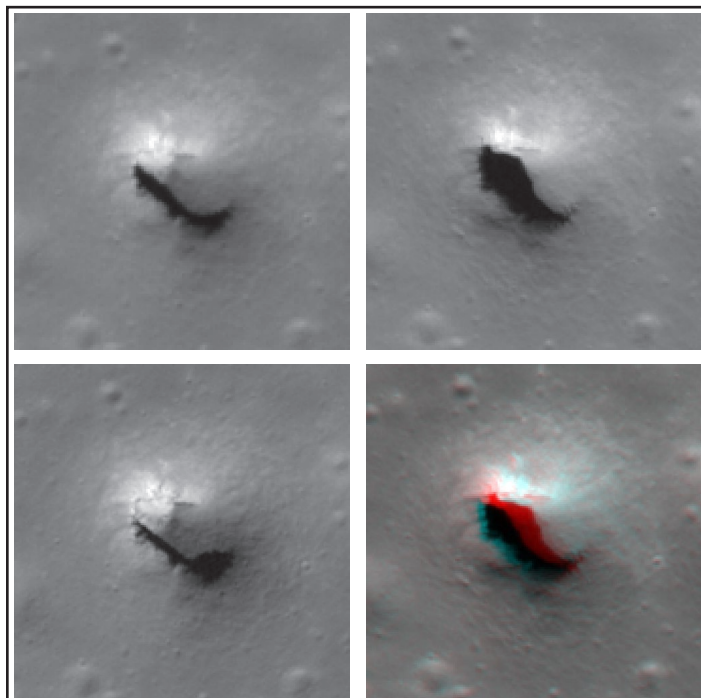
Data notes:

Description

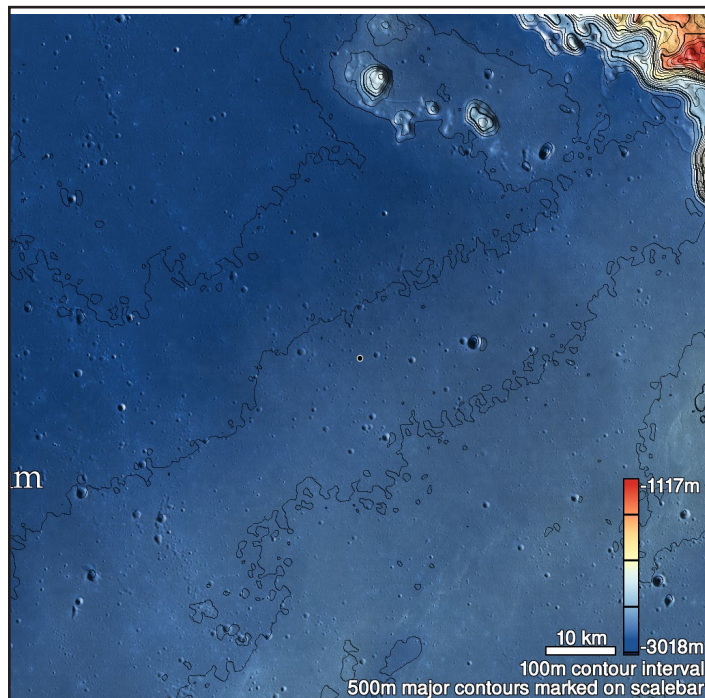
Small cylindrical pit. Floor appears flat, cannot determine if there is any overhang due to small scale. A subdued ridge (tectonic?) runs NNE/SSW ~300m W of the pit.

Sinus Iridum Pit

Mare Pit: Sinus Iridum



Upper left: NAC M1149709780L. Upper right: NAC M1193238358L. Lower left: NAC M1346079451R. Lower right: Stereo anaglyph of NACs M1223843860R (left eye, red) and M1223829793R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Sinus Iridum Pit. Black dot marks the location of the pit.

Size and Location

Latitude	45.6230°N	Inner pit diameter	66 m × 32 m
Longitude	331.1890°E	Long axis azimuth	120°
Depth	16 m	Funnel diameter	145 m × 125 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	Yes?		

Measurement Source Images

Image ID	M1149709780L	M1193238358L	M1346079451R
Incidence	46.22°	-47.87°	51.02°
Emission	-0.38°	1.57°	0.89°
Time of Day	11.12	12.75	10.33
Pixel Scale	1.54 m/px	1.36 m/px	1.11 m/px
Depth	15.2 m	21.4 m	12.4 m

Location reference: NAC M1149709780L line 16762, sample 4820

Best stereo pair: M1223843860R / M1223829793R

Other useful images:

DTM: NAC_DTM_IRIDIUMPIT1

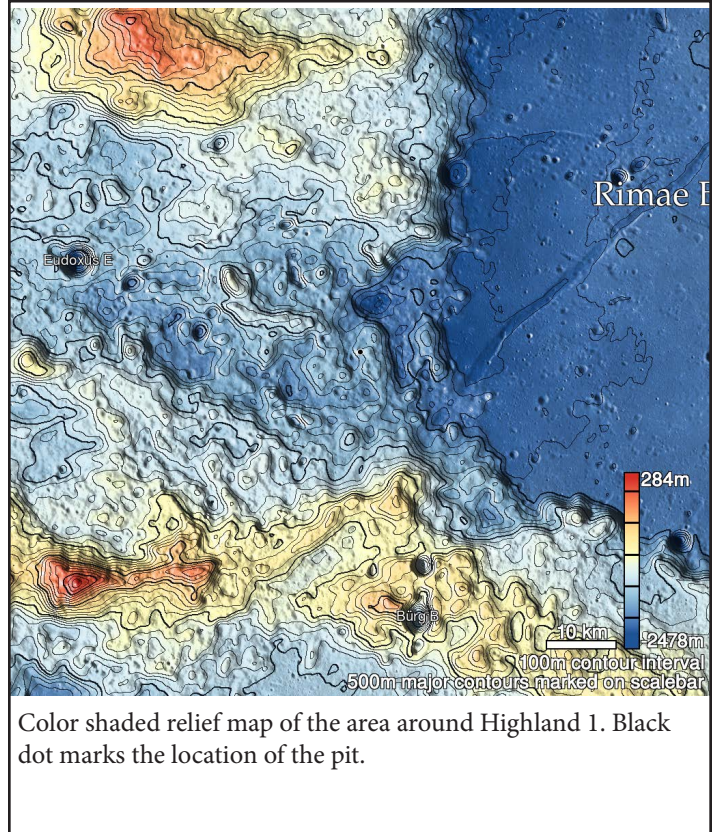
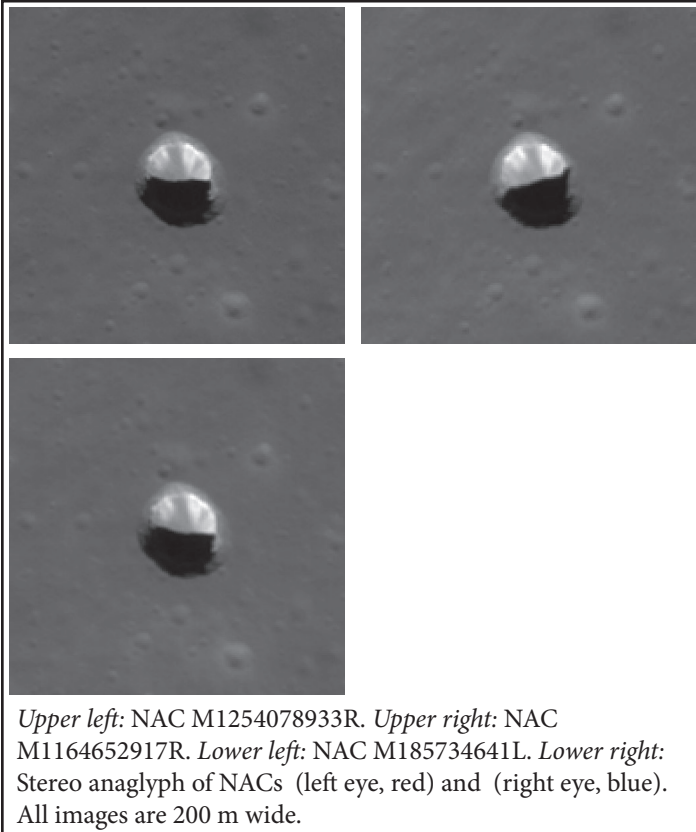
Data notes: Depth 3 is measured very obliquely relative to shadow edge.

Description

Elliptical pit, NE side is a slope from rim to floor. Funnel is ~10m deep. May be in a very subtle ESE-WNW trending depression, ~1.3 km long (not clear if this in a degraded catena, some other type of depression, or an illusion). No other notable nearby features.

Highland 1

Highland pit: Highland



Size and Location

Latitude	43.9662°N	Inner pit diameter	41 m × 37 m
Longitude	23.0836°E	Long axis azimuth	180°
Depth	27 m	Funnel diameter	58 m × 49 m

Measurement Source Images

Image ID	M1254078933R	M1164652917R	M185734641L
Incidence	-45.43°	45.65°	-43.81°
Emission	-2.23°	1.02°	1.99°
Time of Day	12.46	11.38	12.82
Pixel Scale	1.04 m/px	1.39 m/px	1.63 m/px
Depth	26.1 m	26.9 m	26.9 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	No?	Beside dome	Yes?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	Yes?		

Location reference: NAC M1254078933R line 21607, sample 4238

Best stereo pair: /

Other useful images:

DTM:

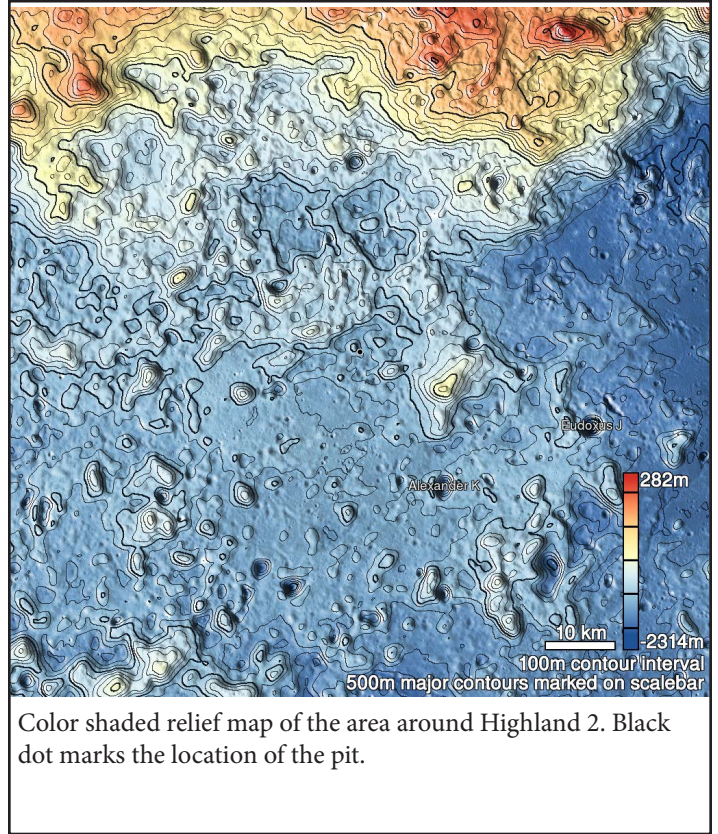
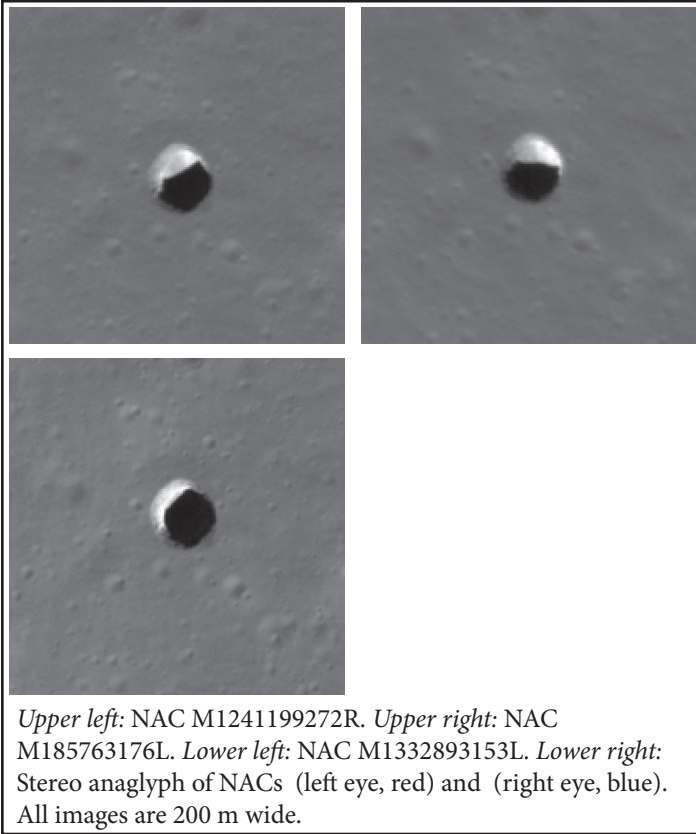
Data notes: Depths are from top of funnel, not inner wall.

Description

Circular pit with crisp funnel and apparently bowl-shaped floor on the northern side (southern side is in permanent shadow). Seems to have a continuous inner wall (or at least discontinuity in slope brightness) even on permanently-shadowed S side. Funnel extends out ~8m on all sides of pit, slope is >45° based on lighting. Funnel depth is between 8m and 13m based on angle and shadow measure. Surrounding terrain is very hilly, pit is in a valley between two ridges(?).

Highland 2

Highland pit: Highland



Size and Location

Latitude	41.1563°N	Inner pit diameter	34 m × 27 m
Longitude	18.8206°E	Long axis azimuth	175°
Depth	>24 m	Funnel diameter	42 m × 39 m

Measurement Source Images

Image ID	M1241199272R	M185763176L	M1332893153L
Incidence	43.25°	-41.09°	53.19°
Emission	1.46°	0.35°	-2.12°
Time of Day	10.94	12.80	9.53
Pixel Scale	1.24 m/px	1.59 m/px	1.02 m/px
Depth	>24 m	>24.6 m	>20.3 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	No?	Beside dome	Yes?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No?	Colinear fractures	No
In Depression	No?		

Location reference: NAC M1241199272R line 10225, sample 2945

Best stereo pair: /

Other useful images:

DTM:

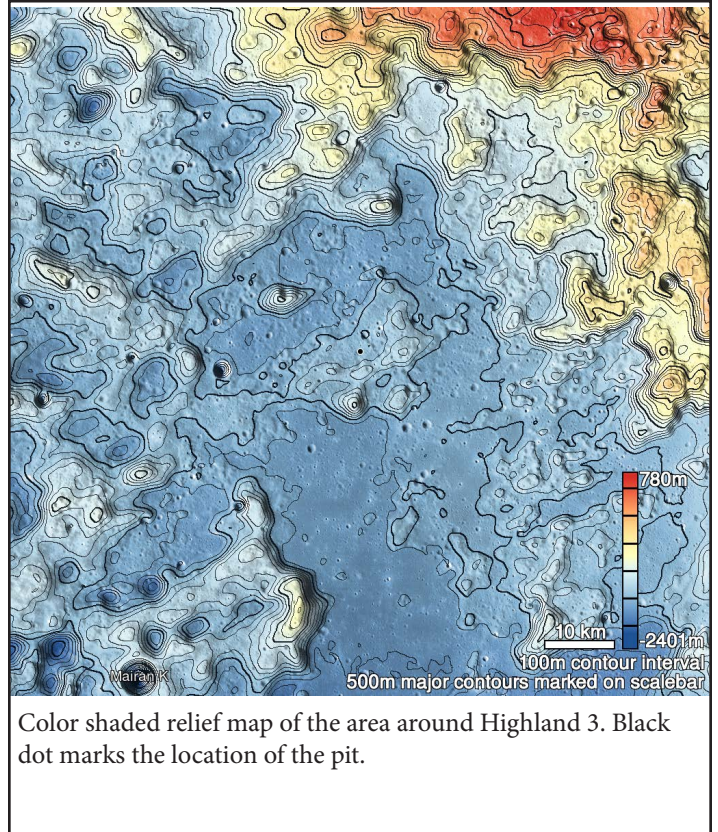
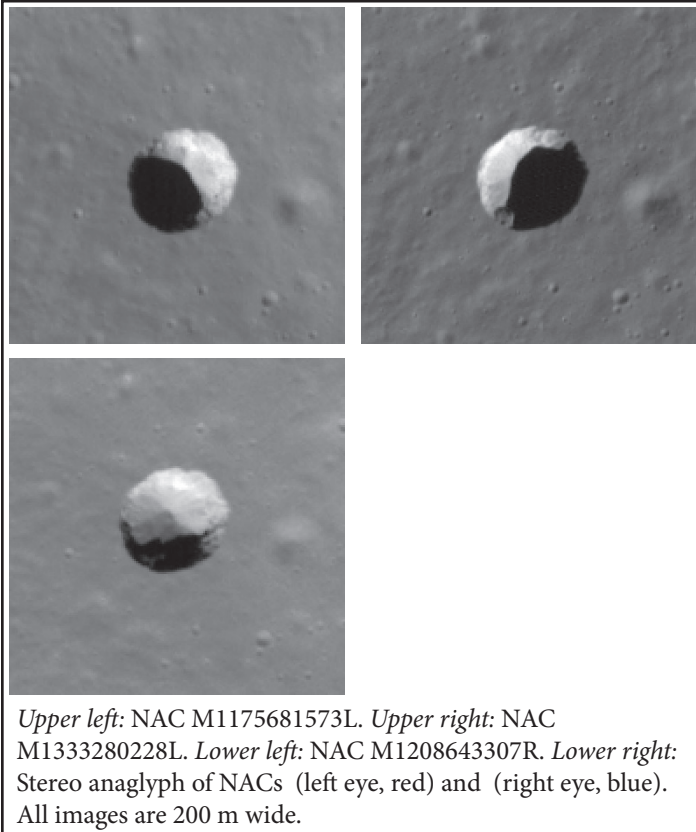
Data notes: Not clear if inner pit actually exists, long axis is from possible wall to top of funnel. All depths are from top of funnel to points probably above the lowest point on the floor.

Description

Elliptical pit with a bowl-shaped or sloped N-to-S floor. Probably has a vertical wall; assuming that is the case, the funnel is ~6 m deep. Nearby terrain is very hilly.

Highland 3

Highland pit: Highland



Size and Location

Latitude	42.3941°N	Inner pit diameter	45 m × 41 m
Longitude	320.3076°E	Long axis azimuth	35°
Depth	27 m	Funnel diameter	66 m × 63 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	No?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes?
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1175681573L	M1333280228L	M1208643307R
Incidence	-55.42°	56.48°	-42.72°
Emission	3.26°	-0.82°	-0.50°
Time of Day	14.79	9.25	12.81
Pixel Scale	1.40 m/px	1.02 m/px	1.28 m/px
Depth	26.9 m	27.5 m	>24.3 m

Location reference: NAC M1175681573L line 30048, sample 135

Best stereo pair: /

Other useful images:

DTM:

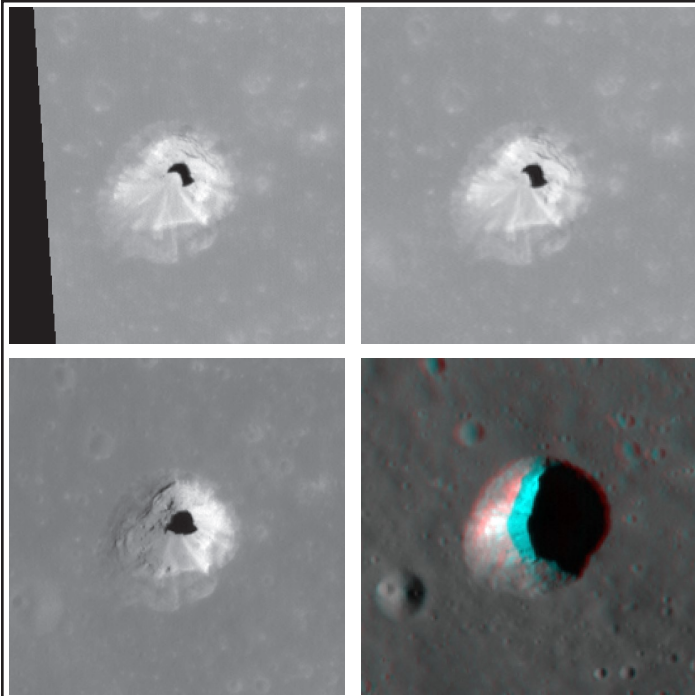
Data notes: Unclear if “inner pit” exists; dimensions may just be of break in wall slope. Depths 1&2 are from funnel rim to very nearly lowest point of floor.

Description

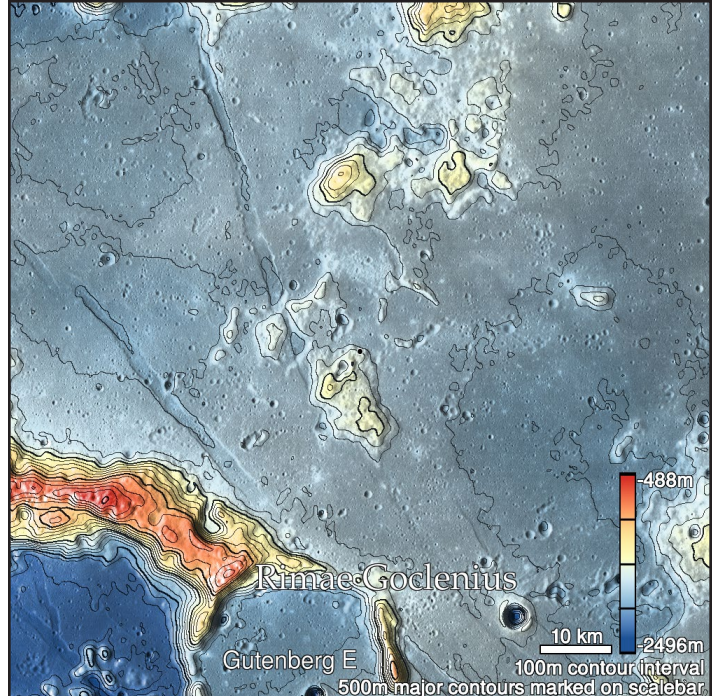
Roughly hemispherical pit. Extremely crisp funnel rim, not clear if there is actually an inner wall except for an outcrop on the S side. There is an elbow-shaped depression ~800m S, otherwise this is fairly generic highland terrain, ~10km from the edge of a mare deposit.

Southwest Mare Fecunditatis Pit

Highland pit: Mare Fecunditatis



Upper left: NAC M1315099773L. Upper right: NAC M1103288580R. Lower left: NAC M1223387753L. Lower right: Stereo anaglyph of NACs M1108003923R (left eye, red) and M1107996775R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Southwest Mare Fecunditatis Pit. Black dot marks the location of the pit.

Size and Location

Latitude	6.7521°S	Inner pit diameter	19 m × 15 m
Longitude	42.7595°E	Long axis azimuth	95°
Depth	51 m	Funnel diameter	90 m × 79 m

Other Features

Entrance Ramp	No	In dome	No?
Overhang	Yes	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	?
Nearby depressions	No	Colinear fractures	No
In Depression	?		

Measurement Source Images

Image ID	M1315099773L	M1103288580R	M1223387753L
Incidence	7.49°	9.42°	-17.29°
Emission	-0.31°	0.08°	2.80°
Time of Day	11.71	11.49	13.10
Pixel Scale	0.73 m/px	1.01 m/px	0.76 m/px
Depth	50.9 m	50.1 m	>51.4 m

Location reference: NAC M1315099773L line 27618, sample 4929

Best stereo pair: M1108003923R / M1107996775R

Other useful images: M167926438R, M1319799718R

DTM:

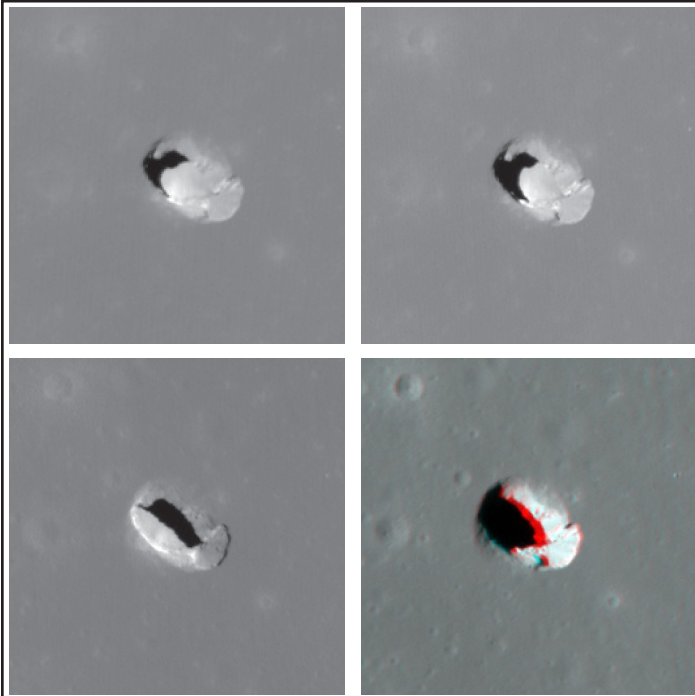
Data notes:

Description

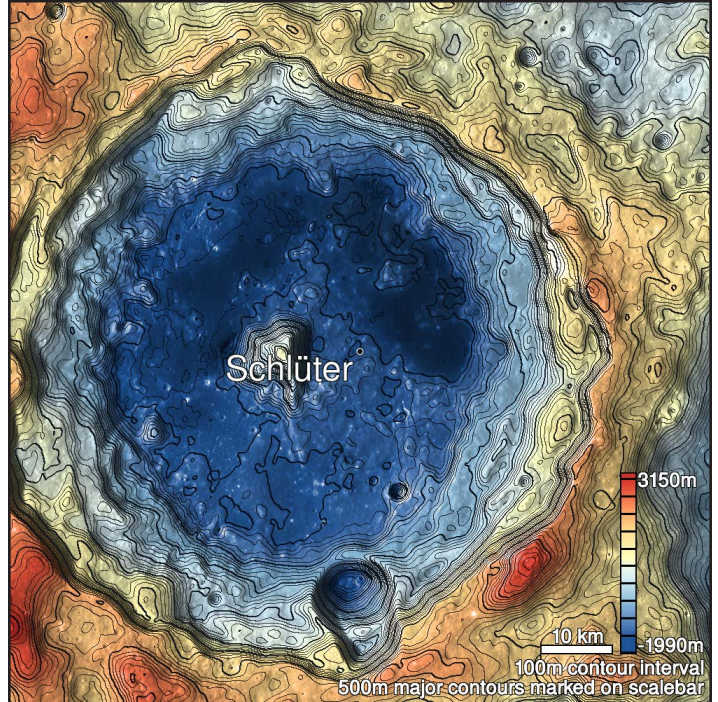
Very narrow, deep pit at the base of a large steeply sloped funnel. Limited off-nadir imaging shows no sign of walls, and floor is visible under a few meters of overhang. Funnel is ~30 m deep and extends out to ~30m from the pit, putting its average slope at ~45 degrees, with a fairly sharp upper edge, similar to the Highland 1 and 2 pits. There are some possible outcrops on the NW side of the funnel. The pit ~ 1km from the edge of Mare Fecunditatis, in a kipuka of highland material. There are no notable features in the immediate area, though there is a large graben ~6 km SW.

Schlüter Pit

Highland pit: Schlüter Crater



Upper left: NAC M1328836141R. Upper right: NAC M1313570429R. Lower left: NAC M1315920479R. Lower right: Stereo anaglyph of NACs M1311225886R (left eye, red) and M1114710368L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Schlüter Pit. Black dot marks the location of the pit.

Size and Location

Latitude	5.8395°S	Inner pit diameter	37 m × 23 m
Longitude	276.9500°E	Long axis azimuth	130°
Depth	57 m	Funnel diameter	63 m × 50 m

Measurement Source Images

Image ID	M1328836141R	M1313570429R	M1315920479R
Incidence	-11.93°	-14.09°	15.29°
Emission	-0.38°	0.17°	0.56°
Time of Day	12.65	12.89	11.04
Pixel Scale	0.94 m/px	0.76 m/px	0.76 m/px
Depth	58.2 m	55.7 m	>51.5 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1328836141R line 22300, sample 1168

Best stereo pair: M1311225886R / M1114710368L

Other useful images:

DTM:

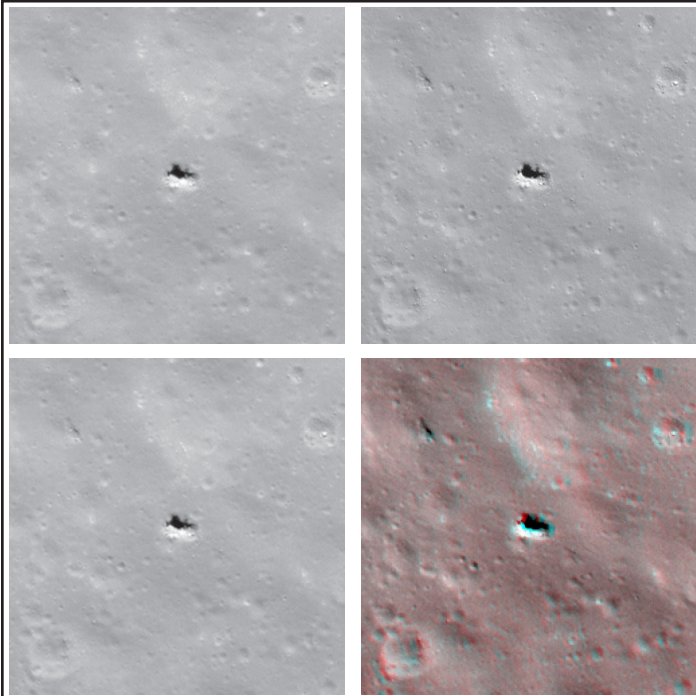
Data notes: Depths 1 and 2 appear to be on flat floor based on shadow shape. Listed stereo pair is accidental, but good for manual viewing, intentional stereo pair of the site is M1106460355R/ M1106474650R.

Description

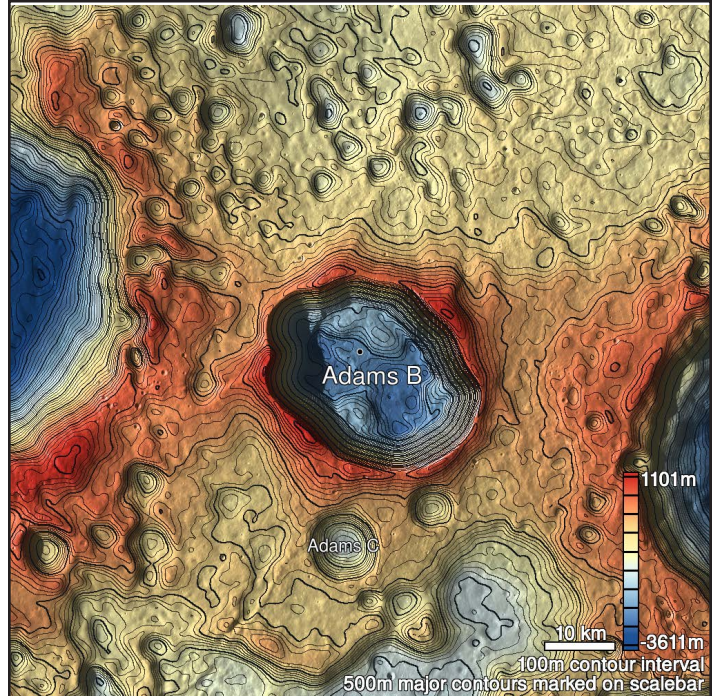
Elliptical pit with extremely steep, crisp funnel. SW wall appears to be a continuous near-vertical slope that smoothly transitions into floor; NE wall is a knife-edge at the base of the funnel, with an overhang below. Funnel is 18 m deep. Pit is in Schlüter crater, ~4km from the edge of a mare patch.

Adams B 1

Impact Melt Pit: Adams B Crater



Upper left: NAC M1149067652R. Upper right: NAC M126499815R. Lower left: NAC M187806127R. Lower right: Stereo anaglyph of NACs M1166758989L (left eye, red) and M1166744773L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Adams B 1. Black dot marks the location of the pit.

Size and Location

Latitude	31.4121°S	Inner pit diameter	10 m × N/A m
Longitude	65.6408°E	Long axis azimuth	110°
Depth	9 m	Funnel diameter	19 m × 10 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1149067652R	M126499815R	M187806127R
Incidence	33.57°	39.50°	34.99°
Emission	0.13°	2.00°	1.80°
Time of Day	11.40	10.46	11.13
Pixel Scale	0.68 m/px	0.43 m/px	0.69 m/px
Depth	10.1 m	8.5 m	9.3 m

Location reference: NAC M1149067652R line 31979, sample 721

Best stereo pair: M1166758989L / M1166744773L

Other useful images:

DTM:

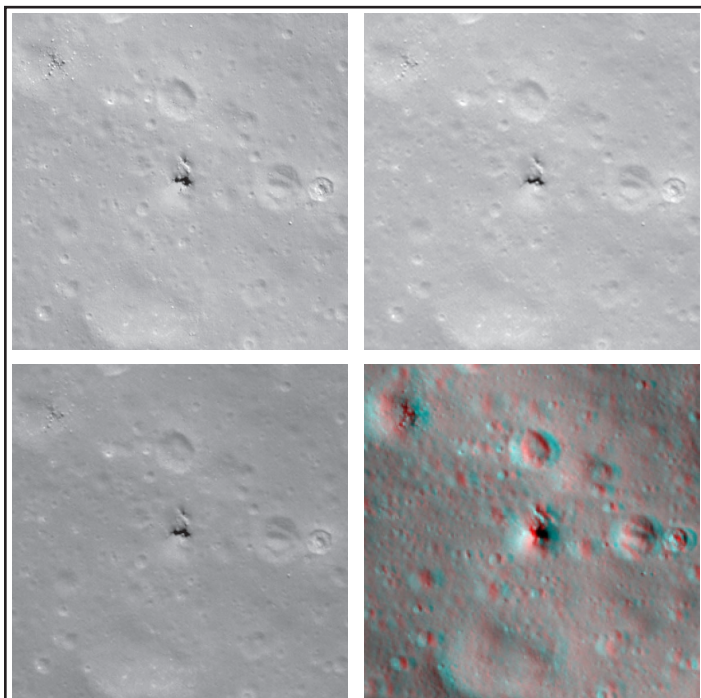
Data notes: Multiple stereo triplets and temporal pairs, very little lighting variation.

Description

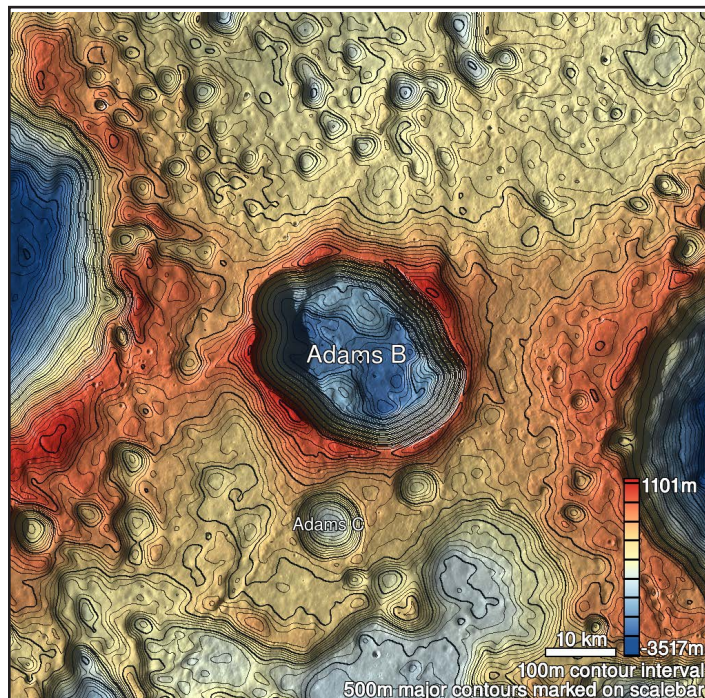
Elongated pit/cliff on a subtle rise. South wall is a slope, north wall is a vertical wall. Depth 1 is from highest-sun image, shadow is always cast on south slope.

Adams B 2

Impact Melt Pit: Adams B Crater



Upper left: NAC M126499815L. Upper right: NAC M1149067652L. Lower left: NAC M187806127R. Lower right: Stereo anaglyph of NACs M116911410R (left eye, red) and M1169097194R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Adams B 2. Black dot marks the location of the pit.

Size and Location

Latitude	31.5449°S	Inner pit diameter	14 m × N/A m
Longitude	65.7223°E	Long axis azimuth	85°
Depth	4 m	Funnel diameter	21 m × 17 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M126499815L	M1149067652L	M187806127R
Incidence	39.56°	33.68°	35.08°
Emission	-0.92°	-1.92°	-0.15°
Time of Day	10.47	11.40	11.14
Pixel Scale	0.43 m/px	0.68 m/px	0.69 m/px
Depth	4.5 m	3.6 m	4.1 m

Location reference: NAC M126499815L line 5838, sample 3853

Best stereo pair: M116911410R / M1169097194R

Other useful images:

DTM:

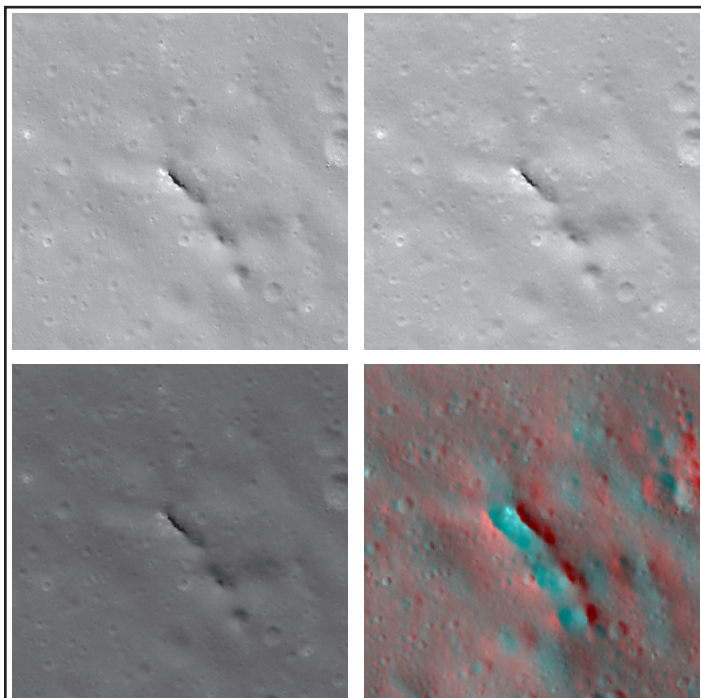
Data notes: Multiple stereo triplets and temporal pairs, very little lighting variation.

Description

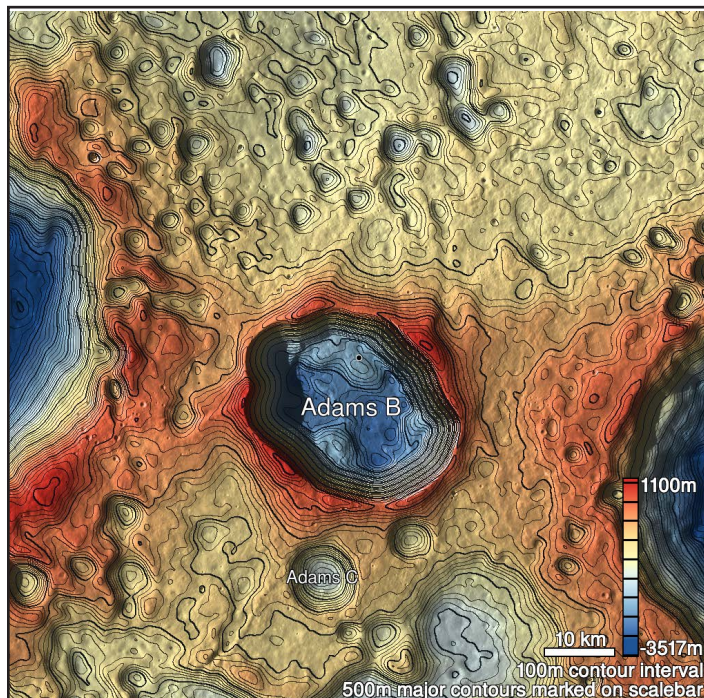
Elongated pit/cliff. South wall is a slope, north wall is a cliff. There's a tiny pit/depression/shadow 18m north.

Adams B 3

Impact Melt Pit: Adams B Crater



Upper left: NAC M126499815L. Upper right: NAC M1149067652L. Lower left: NAC M187806127L. Lower right: Stereo anaglyph of NACs M116911410R (left eye, red) and M1169097194R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Adams B 3. Black dot marks the location of the pit.

Size and Location

Latitude	31.2886°S	Inner pit diameter	14 m × N/A m
Longitude	65.7523°E	Long axis azimuth	135°
Depth	2 m	Funnel diameter	38 m × 17 m

Measurement Source Images

Image ID	M126499815L	M1149067652L	M187806127L
Incidence	39.34°	33.42°	34.84°
Emission	-1.95°	-2.28°	-0.60°
Time of Day	10.47	11.40	11.14
Pixel Scale	0.42 m/px	0.68 m/px	0.69 m/px
Depth	2.6 m	2.7 m	2.0 m

Other Features

Entrance Ramp	?	In dome	No
Overhang	?	Beside dome	Yes?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M126499815L line 19935, sample 2130

Best stereo pair: M116911410R / M1169097194R

Other useful images:

DTM:

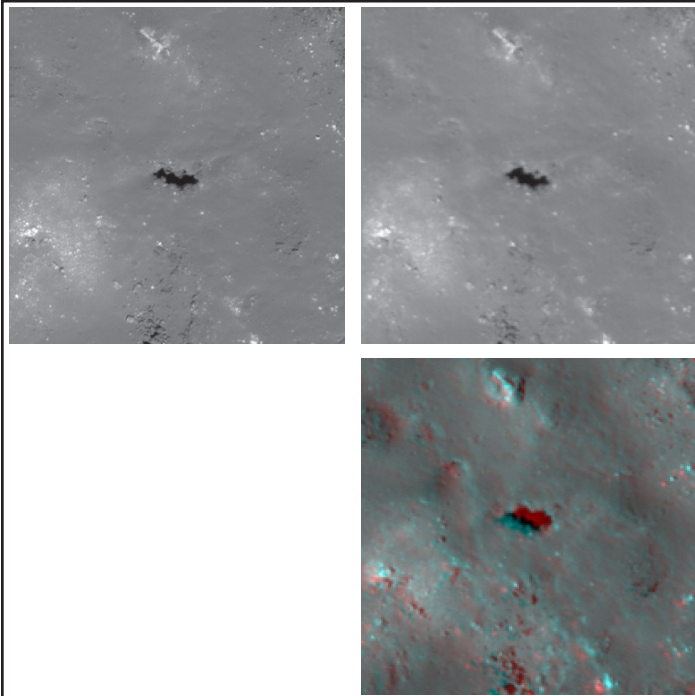
Data notes: Multiple stereo triplets and temporal pairs, very little lighting variation.

Description

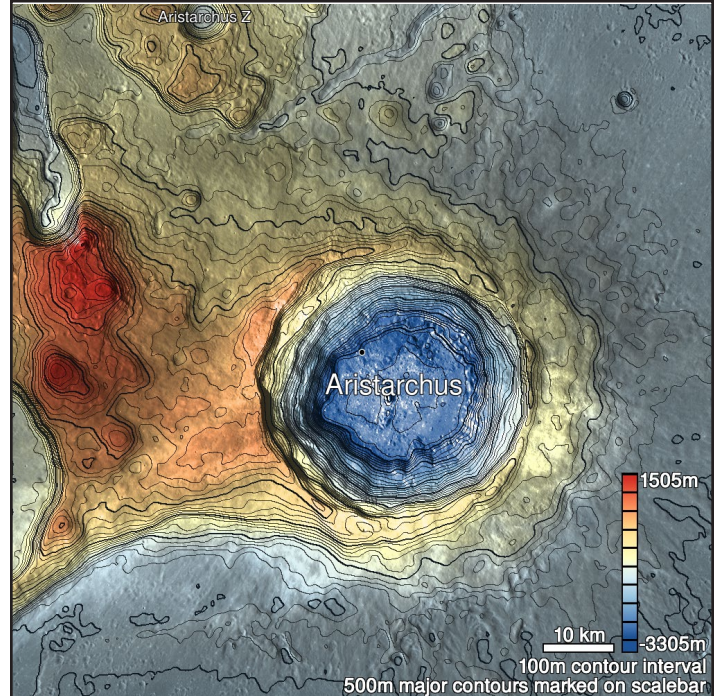
NW/SE trending cliff/fracture/narrow pit in a linear depression. South wall appears to be a slope. Some additional depressions for ~50 m SE.

Aristarchus 1

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636R. Upper right: NAC M1193372314R. Lower left: NAC. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 1. Black dot marks the location of the pit.

Size and Location

Latitude	23.8889°N	Inner pit diameter	27 m × 10 m
Longitude	312.3506°E	Long axis azimuth	95°
Depth	13 m	Funnel diameter	31 m × 16 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636R	M1193372314R	
Incidence	25.80°	-27.35°	
Emission	0.11°	-0.64°	
Time of Day	11.69	12.75	
Pixel Scale	0.52 m/px	1.08 m/px	
Depth	12.4 m	12.6 m	

Location reference: NAC M109548636R line 3220, sample 678

Best stereo pair: M1129801944R / M1129787722R

Other useful images: M1129794833R, M1096807995R

DTM:

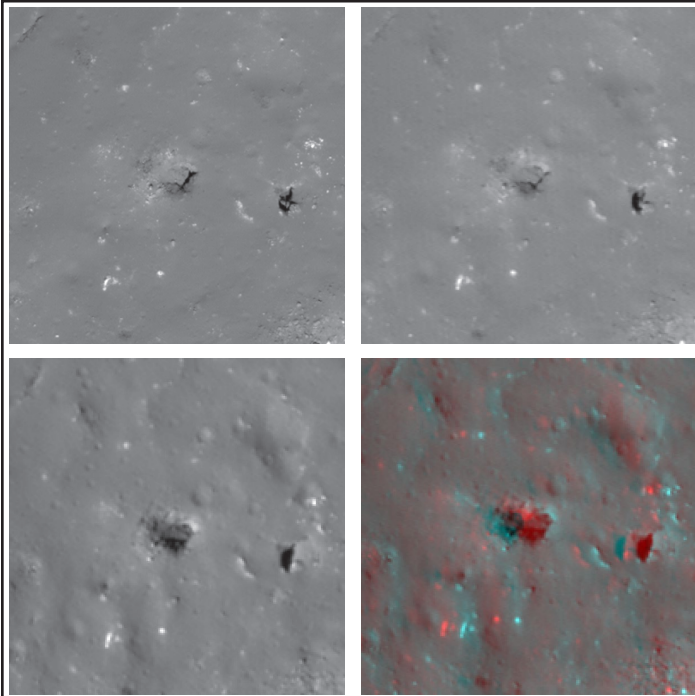
Data notes: Floor is only visible in near-noon images.

Description

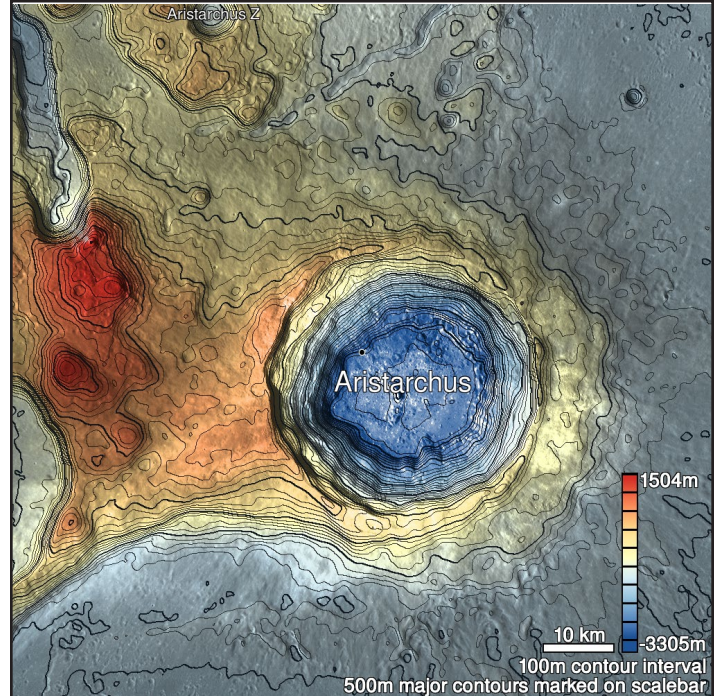
Elongated pit, entire rim seems to be sharp, very little sign of any funnel. Floor, where visible, has multi-meter diameter boulders.

Aristarchus 2a

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636R. Upper right: NAC M1193372314R. Lower left: NAC M1129794833R. Lower right: Stereo anaglyph of NACs M1129801944L (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 2a. Black dot marks the location of the pit.

Size and Location

Latitude	23.8730°N	Inner pit diameter	19 m × 16 m
Longitude	312.3029°E	Long axis azimuth	35°
Depth	5 m	Funnel diameter	22 m × 18 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636R	M1193372314R	M1129794833R
Incidence	25.79°	-27.32°	-46.82°
Emission	1.57°	0.14°	-1.73°
Time of Day	11.69	12.75	14.70
Pixel Scale	0.52 m/px	1.08 m/px	1.28 m/px
Depth	5.6 m	4.5 m	5.2 m

Location reference: NAC M109548636R line 4107, sample 3230

Best stereo pair: M1129801944L / M1129787722R

Other useful images:

DTM:

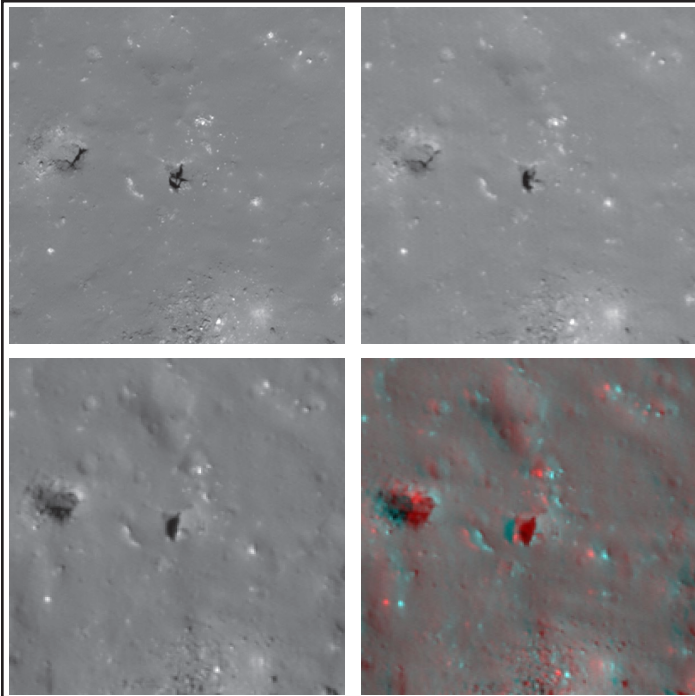
Data notes: Depths 2 and 3 are from the south wall, depth 1 is from east wall.

Description

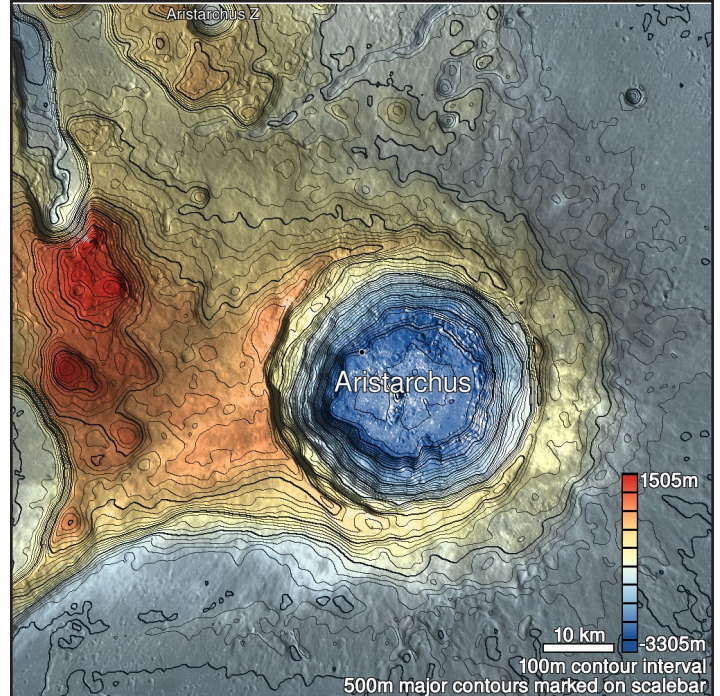
Westernmost of a chain of three pits trending E-W. West wall appears collapsed, other walls are vertical, though south wall looks a bit shorter. Visible funnel.

Aristarchus 2b

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636R. Upper right: NAC M1193372314R. Lower left: NAC M1129794833R. Lower right: Stereo anaglyph of NACs M1129801944L (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 2b. Black dot marks the location of the pit.

Size and Location

Latitude	23.8726°N	Inner pit diameter	13 m × 7 m
Longitude	312.3053°E	Long axis azimuth	165°
Depth	14 m	Funnel diameter	22 m × 13 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636R	M1193372314R	M1129794833R
Incidence	25.79°	-27.32°	-46.82°
Emission	1.48°	0.11°	-1.77°
Time of Day	11.69	12.75	14.70
Pixel Scale	0.52 m/px	1.08 m/px	1.28 m/px
Depth	12.4 m	16.3 m	m

Location reference: NAC M109548636R line 4131, sample 3104

Best stereo pair: M1129801944L / M1129787722R

Other useful images:

DTM:

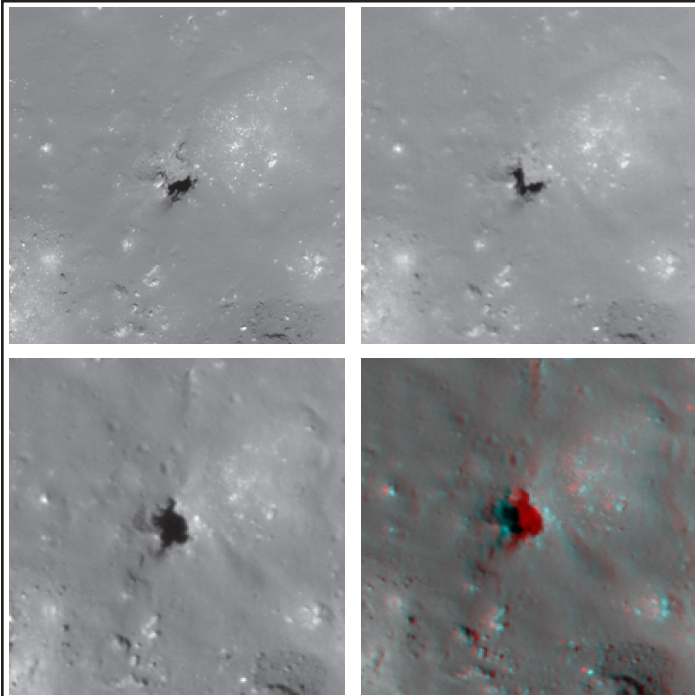
Data notes: My shadow measurements are from the S and W walls to the floor of the inner pit. The NE wall to the inner floor is ~7 meters (from Image 1), and the depth from E rim to NE rim is <= 7.5 m (from Image 3).

Description

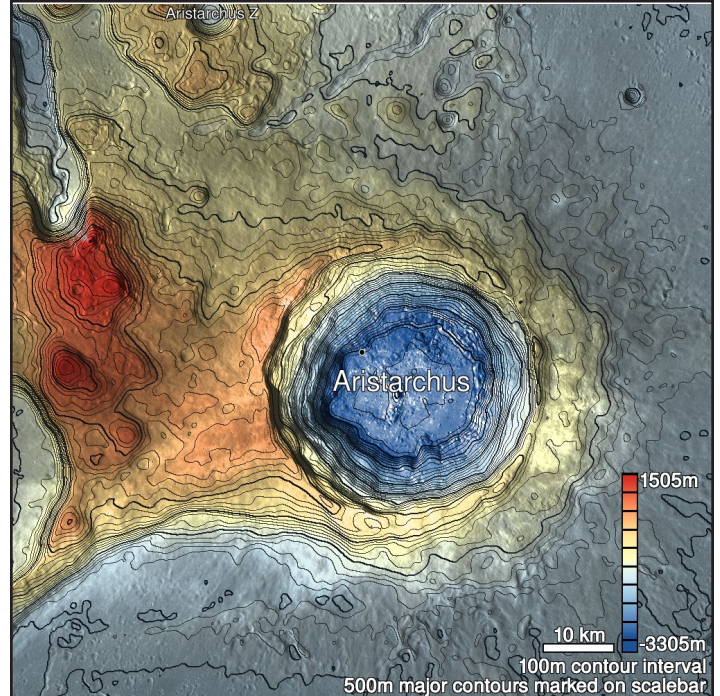
Central of a chain of three pits trending E-W. Complicated internal geometry: Sharp wall on three sides, NE wall slopes down to a sharp drop-off into an “inner pit”. Also, there’s a large boulder/projection on the SW wall.

Aristarchus 2c

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636R. Upper right: NAC M1193372314R. Lower left: NAC M1129794833R. Lower right: Stereo anaglyph of NACs M1129801944L (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 2c. Black dot marks the location of the pit.

Size and Location

Latitude	23.8716°N	Inner pit diameter	22 m × 16 m
Longitude	312.3098°E	Long axis azimuth	145°
Depth	14 m	Funnel diameter	38 m × 35 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636R	M1193372314R	M1129794833R
Incidence	25.79°	-27.32°	-46.82°
Emission	1.35°	0.08°	-1.83°
Time of Day	11.69	12.75	14.70
Pixel Scale	0.52 m/px	1.08 m/px	1.28 m/px
Depth	14.5 m	12.6 m	14.7 m

Location reference: NAC M109548636R line 4189, sample 2863

Best stereo pair: M1129801944L / M1129787722R

Other useful images:

DTM:

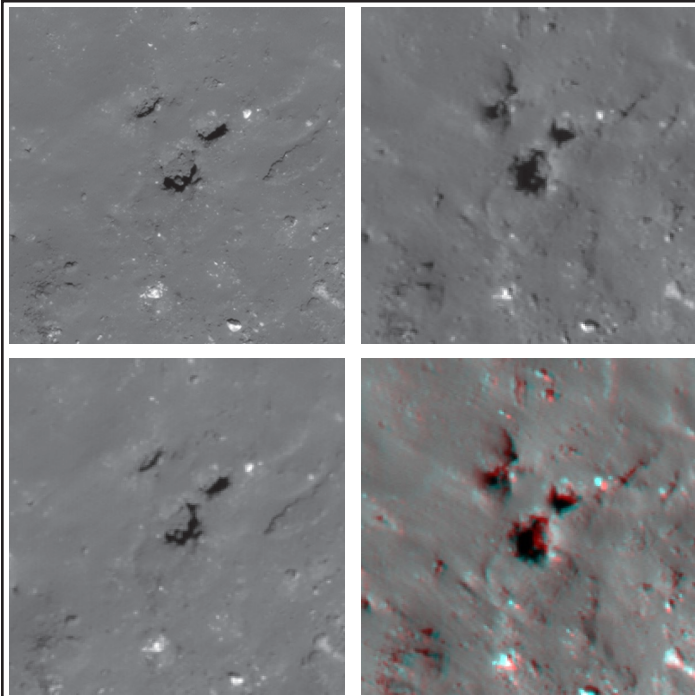
Data notes:

Description

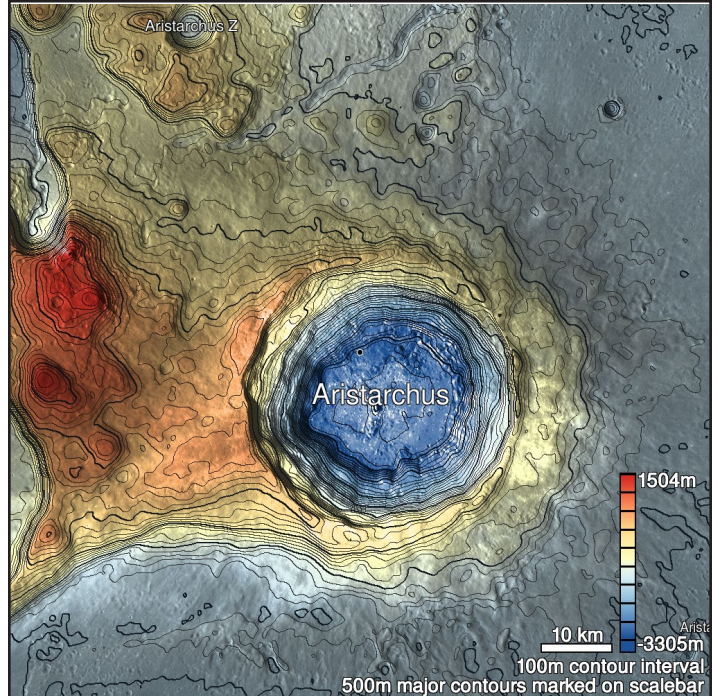
Easternmost of a chain of three pits trending E-W. Roughly rectangular, E corner is collapsed. There are “saggy”-looking depressions at the north and south corners. Floor has some 1-2m boulders.

Aristarchus 3a

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636L. Upper right: NAC M1099158773L. Lower left: NAC M1119200171L. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 3a. Black dot marks the location of the pit.

Size and Location

Latitude	23.9331°N	Inner pit diameter	25 m × 18 m
Longitude	312.4076°E	Long axis azimuth	50°
Depth	13 m	Funnel diameter	30 m × 25 m

Other Features

Entrance Ramp	No	In dome	No?
Overhang	?	Beside dome	Yes?
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636L	M1099158773L	M1119200171L
Incidence	25.83°	-45.03°	28.16°
Emission	-1.70°	2.62°	-2.68°
Time of Day	11.70	14.55	10.88
Pixel Scale	0.52 m/px	1.39 m/px	1.28 m/px
Depth	11.1 m	16.5 m	11.6 m

Location reference: NAC M109548636L line 894, sample 2527

Best stereo pair: M1129801944R / M1129787722R

Other useful images:

DTM:

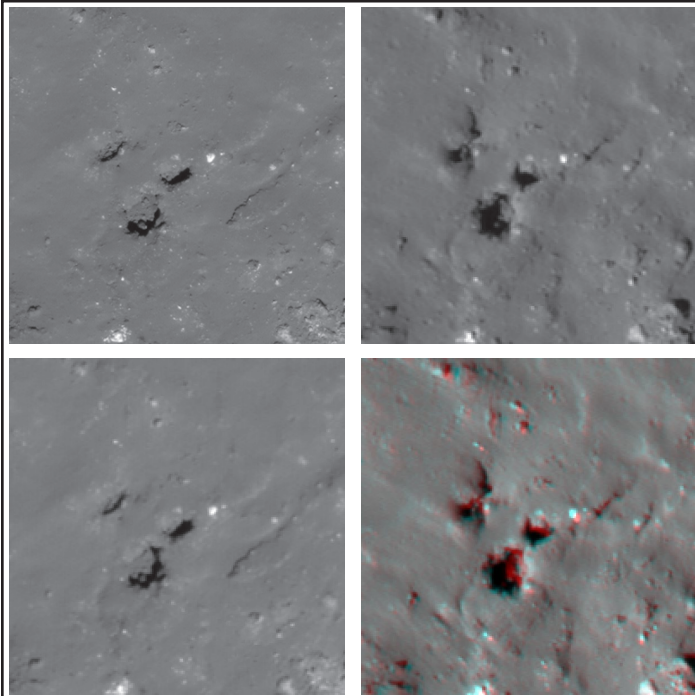
Data notes:

Description

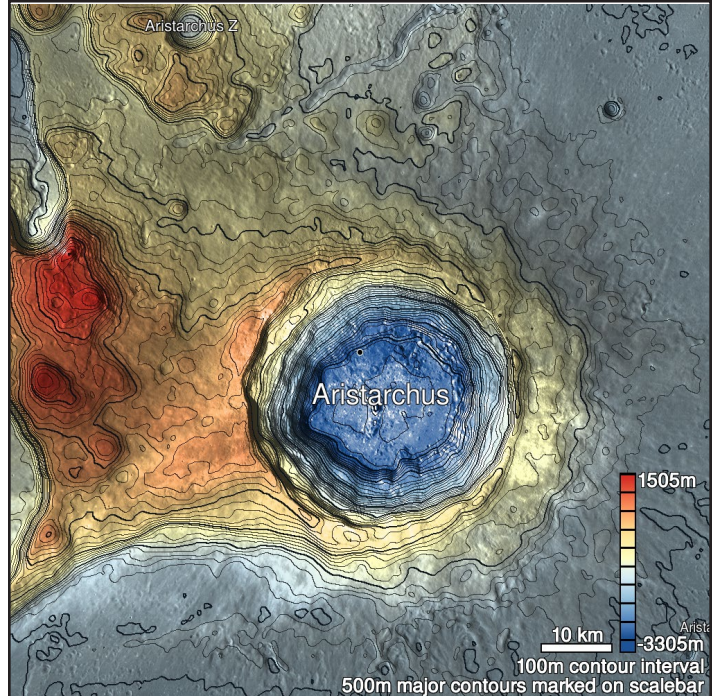
Southern (largest) of a ~50x50 m triangle of pits. This pit is on the N edge of a small (~40 m wide) PRF. Approximately round, no collapsed walls, floor appears roughly flat with a few 1-3m boulders visible. A ~5m block has fallen from the S wall.

Aristarchus 3b

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636L. Upper right: NAC M1099158773L. Lower left: NAC M1119200171L. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 3b. Black dot marks the location of the pit.

Size and Location

Latitude	23.9339°N	Inner pit diameter	18 m × 8 m
Longitude	312.4084°E	Long axis azimuth	60°
Depth	10 m	Funnel diameter	23 m × 18 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636L	M1099158773L	M1119200171L
Incidence	25.83°	-45.03°	28.16°
Emission	-1.73°	2.61°	-2.69°
Time of Day	11.70	14.55	10.88
Pixel Scale	0.52 m/px	1.38 m/px	1.28 m/px
Depth	9.3 m	9.5 m	11.2 m

Location reference: NAC M109548636L line 846, sample 2486

Best stereo pair: M1129801944R / M1129787722R

Other useful images:

DTM:

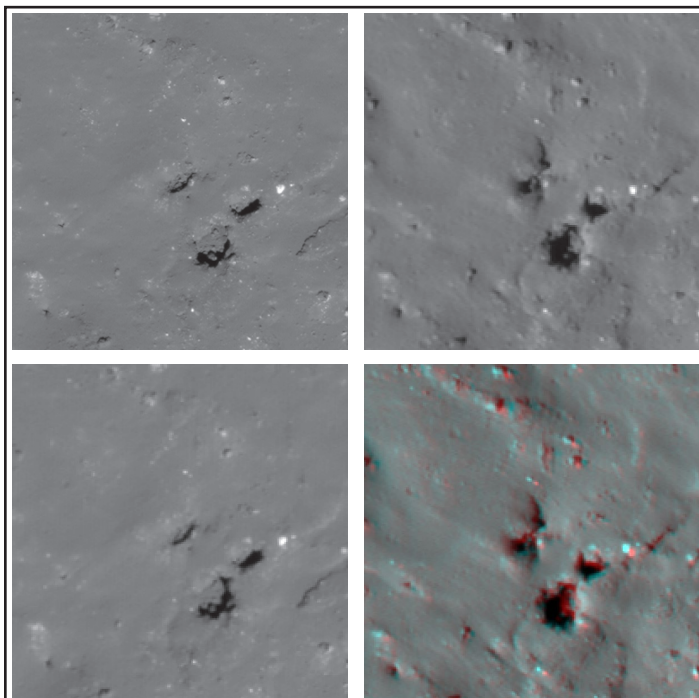
Data notes:

Description

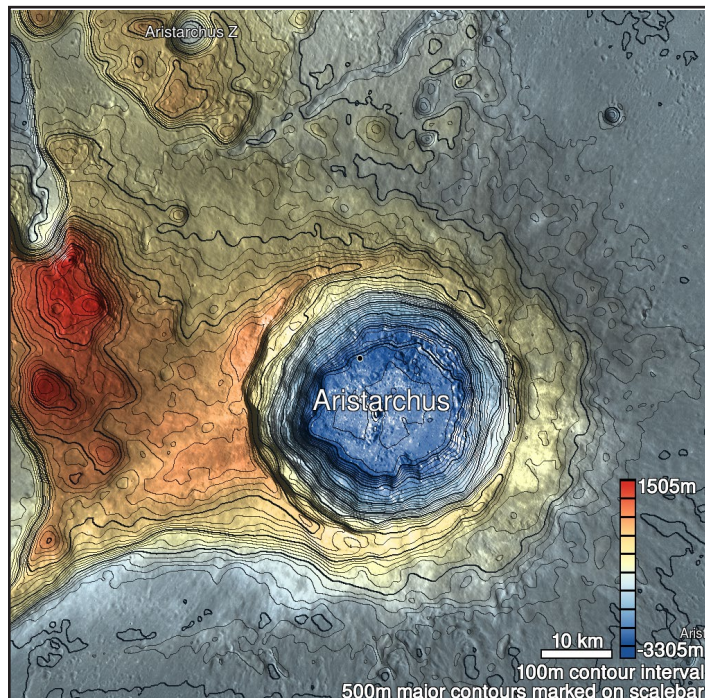
Eastern (second largest) of a ~50x50 m triangle of pits. Generally similar to Aristarchus 3a, but smaller. Floor appears to get deeper from west to east.

Aristarchus 3c

Uncertain Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636L. Upper right: NAC M1099158773L. Lower left: NAC M1119200171L. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 3c. Black dot marks the location of the pit.

Size and Location

Latitude	23.9344°N	Inner pit diameter	16 m × 8 m
Longitude	312.4070°E	Long axis azimuth	45°
Depth	6 m	Funnel diameter	39 m × 17 m

Measurement Source Images

Image ID	M109548636L	M1099158773L	M1119200171L
Incidence	25.83°	-45.03°	28.16°
Emission	-1.68°	2.63°	-2.67°
Time of Day	11.70	14.55	10.88
Pixel Scale	0.52 m/px	1.39 m/px	1.28 m/px
Depth	4.1 m	7.5 m	6.0 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M109548636L line 820, sample 2562

Best stereo pair: M1129801944R / M1129787722R

Other useful images:

DTM:

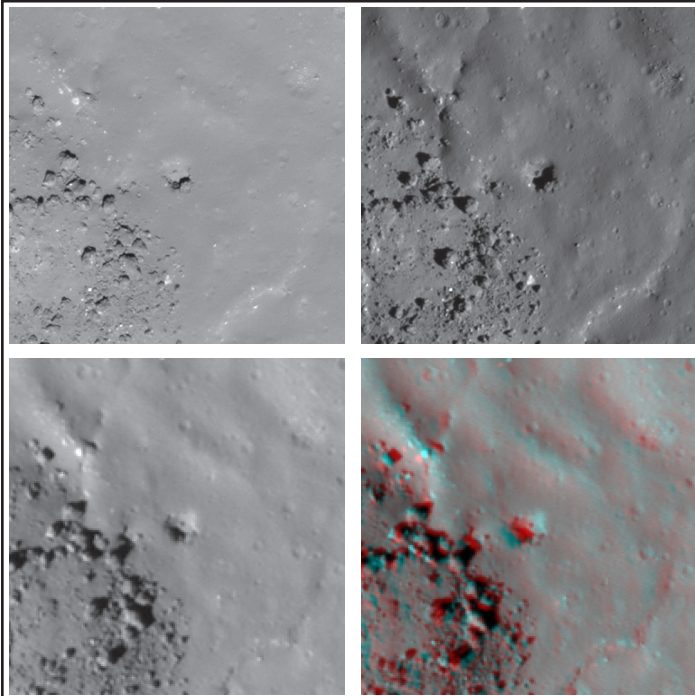
Data notes:

Description

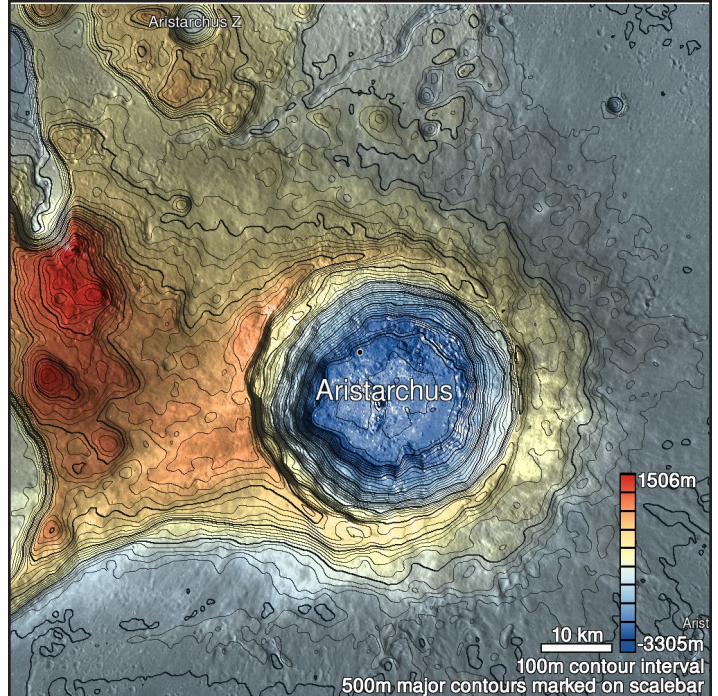
North-western (smallest) of a ~50x50 m triangle of pits. Very elongate NE-SW, with a slope/collapse at the NE end that may reach to the pit floor. W wall is much higher than E, floor is only slightly below E rim.

Aristarchus 4

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636L. Upper right: NAC M114267211R. Lower left: NAC M1099158773L. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 4. Black dot marks the location of the pit.

Size and Location

Latitude	23.9140°N	Inner pit diameter	23 m × 22 m
Longitude	312.3913°E	Long axis azimuth	50°
Depth	8 m	Funnel diameter	39 m × 33 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636L	M114267211R	M1099158773L
Incidence	25.81°	62.89°	-45.00°
Emission	-1.20°	2.42°	2.83°
Time of Day	11.69	8.03	14.55
Pixel Scale	0.52 m/px	0.49 m/px	1.39 m/px
Depth	11.4 m	7.2 m	6.5 m

Location reference: NAC M109548636L line 1966, sample 3392

Best stereo pair: M1129801944R / M1129787722R

Other useful images: M1193372314R

DTM:

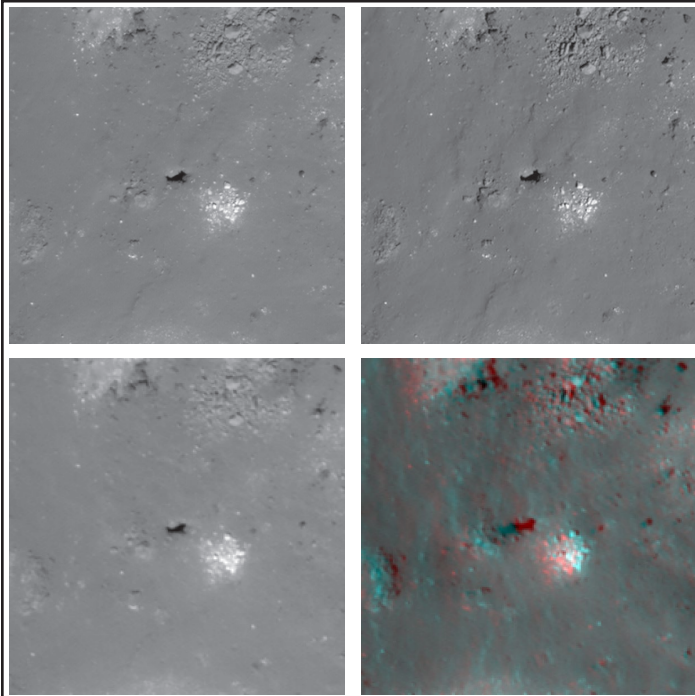
Data notes:

Description

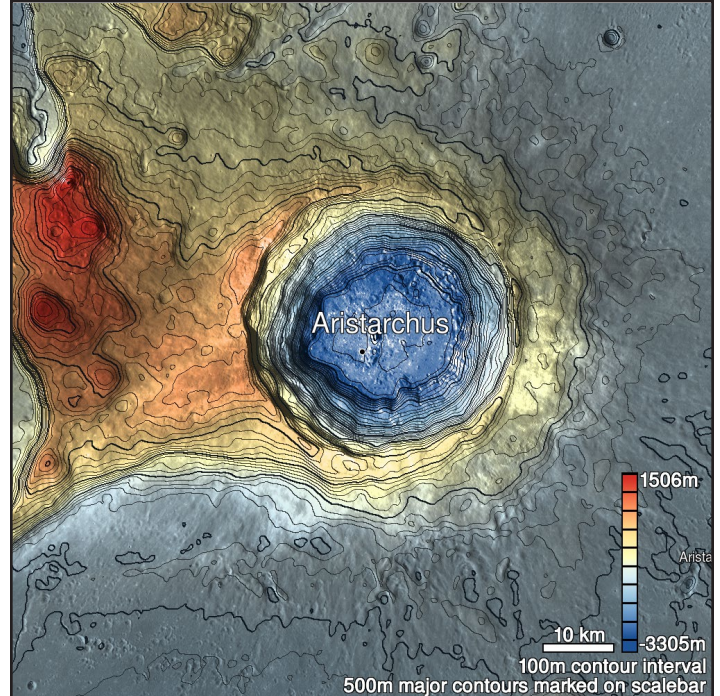
Roughly square pit with no breaches in the walls, ~10 m from the base of a bouldery PRF. Floor appears somewhat rounded up on the sides. Several other depressions and collapses nearby- Aristarchus 8 is 250 m SE.

Aristarchus 5

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636L. Upper right: NAC M157906985R. Lower left: NAC M1193372314R. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 5. Black dot marks the location of the pit.

Size and Location

Latitude	23.5984°N	Inner pit diameter	21 m × 7 m
Longitude	312.4196°E	Long axis azimuth	75°
Depth	>17 m	Funnel diameter	30 m × 16 m

Measurement Source Images

Image ID	M109548636L	M157906985R	M1193372314R
Incidence	25.50°	32.99°	-27.12°
Emission	-2.17°	2.42°	-1.48°
Time of Day	11.70	10.33	12.76
Pixel Scale	0.52 m/px	0.42 m/px	1.08 m/px
Depth	>17.8 m	>16.9 m	>16.1 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M109548636L line 19440, sample 1744

Best stereo pair: M1129801944R / M1129787722R

Other useful images: M114267211R, M1099158773L

DTM:

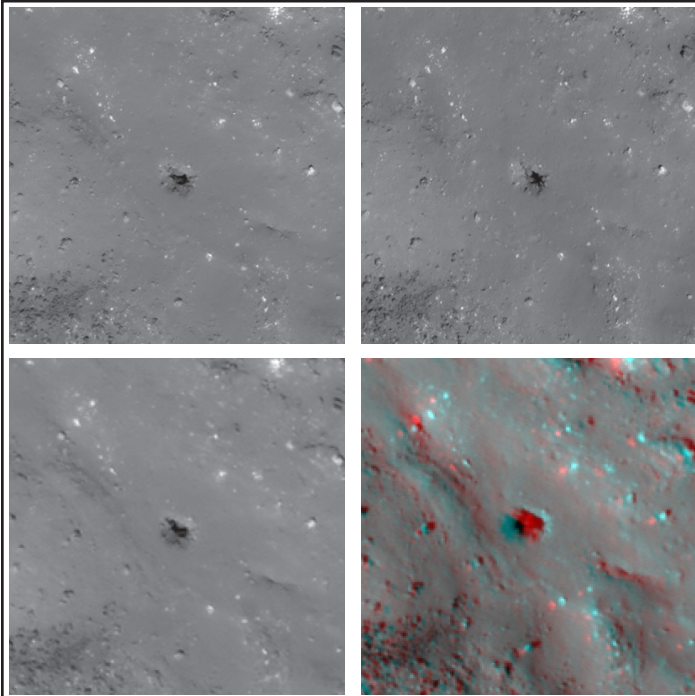
Data notes: Depth 3 is from a fairly low-res image. Only other high-resolution option (M114267211R) would be measuring from top of funnel.

Description

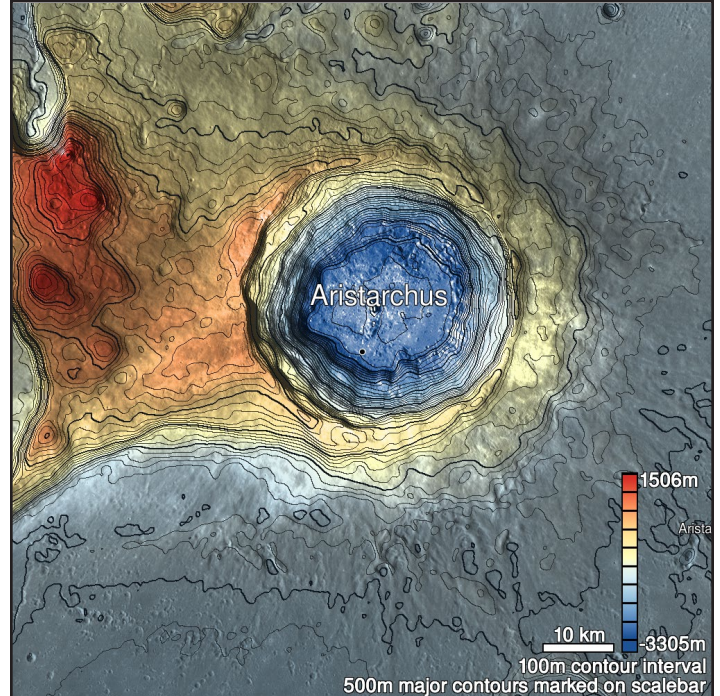
Small irregular pit. No visible floor, north wall might be a steep slope rather than vertical.

Aristarchus 6

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636L. Upper right: NAC M157906985R. Lower left: NAC M1193372314R. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 6. Black dot marks the location of the pit.

Size and Location

Latitude	23.4657°N	Inner pit diameter	12 m × 7 m
Longitude	312.4235°E	Long axis azimuth	120°
Depth	11 m	Funnel diameter	24 m × 18 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	Yes?
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636L	M157906985R	M1193372314R
Incidence	25.37°	32.90°	-27.00°
Emission	-2.34°	2.23°	-1.43°
Time of Day	11.70	10.33	12.76
Pixel Scale	0.52 m/px	0.42 m/px	1.07 m/px
Depth	11.6 m	10.8 m	9.8 m

Location reference: NAC M109548636L line 26784, sample 1456

Best stereo pair: M1129801944R / M1129787722R

Other useful images:

DTM:

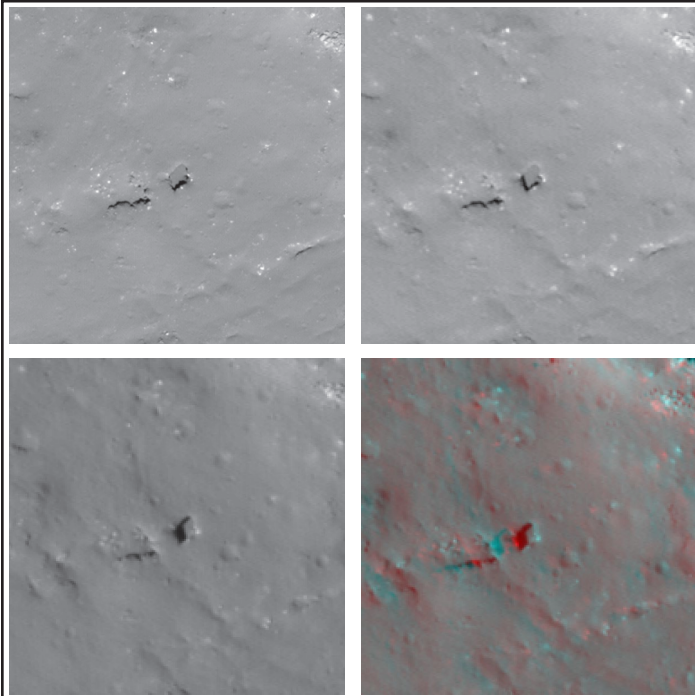
Data notes:

Description

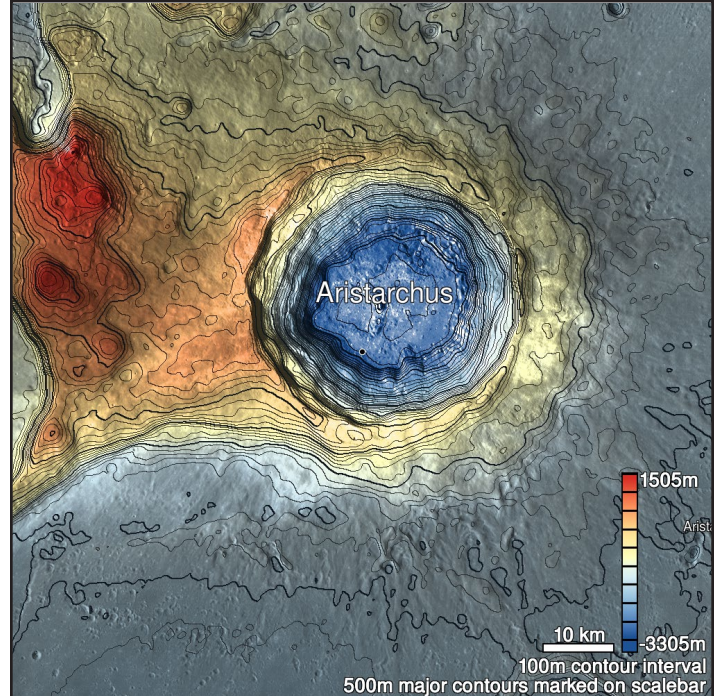
Elliptical pit in the (~250m wide) gap between two irregular linear collapses/fractures, and ~1 diameter NE of the base of a bouldery PRF. Very pronounced funnel, no apparent wall collapses, although south wall protrudes in a shelf ~halfway down.

Aristarchus 7a

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636L. Upper right: NAC M1193372314R. Lower left: NAC M1099158773L. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 7a. Black dot marks the location of the pit.

Size and Location

Latitude	23.4536°N	Inner pit diameter	16 m × 11 m
Longitude	312.3967°E	Long axis azimuth	45°
Depth	7 m	Funnel diameter	20 m × 16 m

Measurement Source Images

Image ID	M109548636L	M1193372314R	M1099158773L
Incidence	25.36°	-26.98°	-44.79°
Emission	-1.50°	-1.00°	2.95°
Time of Day	11.70	12.75	14.55
Pixel Scale	0.52 m/px	1.07 m/px	1.38 m/px
Depth	5.9 m	6.9 m	7.5 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M109548636L line 27472, sample 2897

Best stereo pair: M1129801944R / M1129787722R

Other useful images:

DTM:

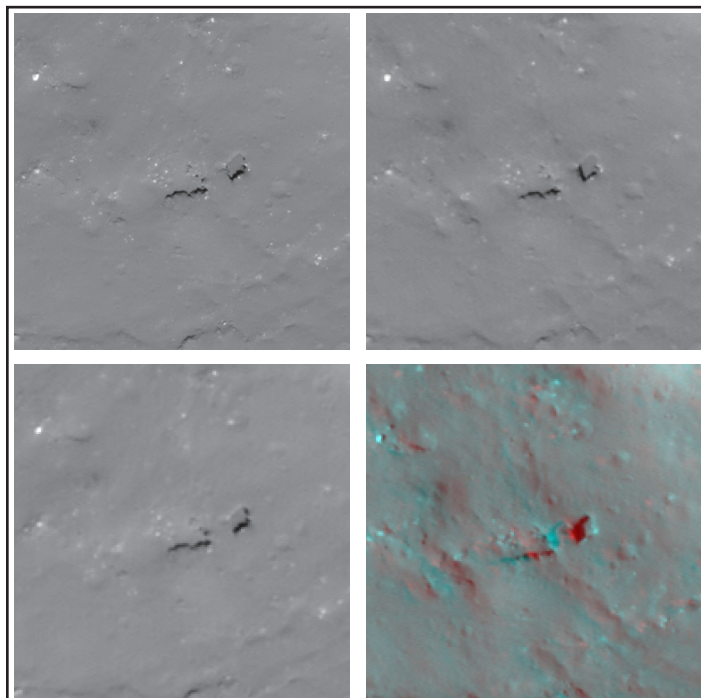
Data notes: Shadow measurement point moves from south-center in Depth 1 to west-center in Depth 3.

Description

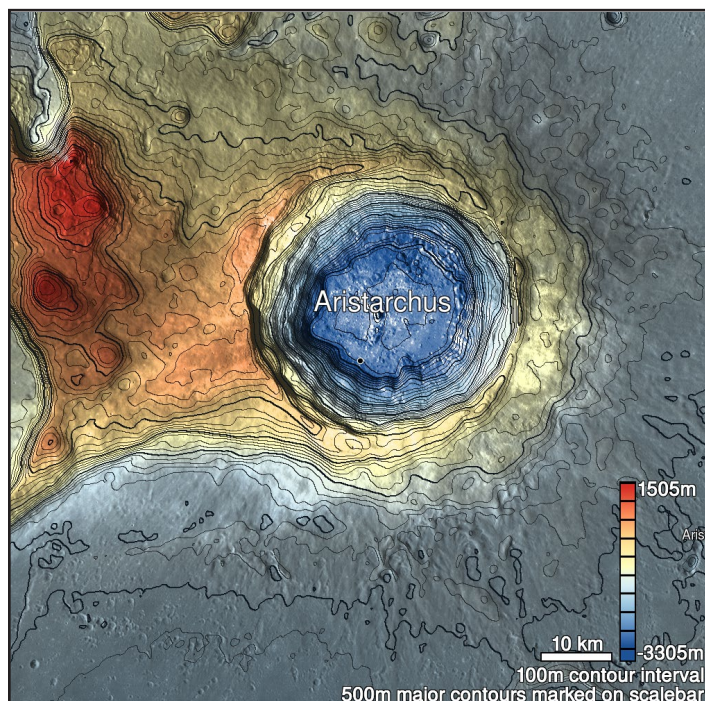
Smaller and more complete of a pair of pits 150m north of the south wall of Aristarchus. The two pits are 35m apart. There are several fractures in the area that roughly parallel the two pits. This pit does not have any collapsed walls, and the floor seems flat, although there might be a slope up to (near?) the rim in the SE corner.

Aristarchus 7b

Uncertain Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636L. Upper right: NAC M1193372314R. Lower left: NAC M1103873683R. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 7b. Black dot marks the location of the pit.

Size and Location

Latitude	23.4532°N	Inner pit diameter	24 m × 12 m
Longitude	312.3957°E	Long axis azimuth	85°
Depth	5 m	Funnel diameter	30 m × 27 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636L	M1193372314R	M1103873683R
Incidence	25.36°	-26.98°	28.93°
Emission	-1.46°	-0.99°	1.09°
Time of Day	11.69	12.75	10.96
Pixel Scale	0.52 m/px	1.07 m/px	1.36 m/px
Depth	4.6 m	4.9 m	5.4 m

Location reference: NAC M109548636L line 27490, sample 2957

Best stereo pair: M1129801944R / M1129787722R

Other useful images:

DTM:

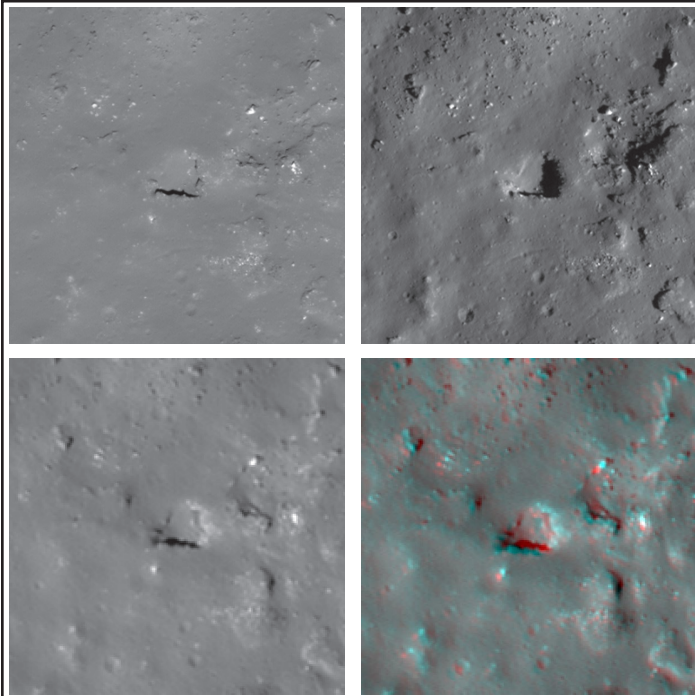
Data notes:

Description

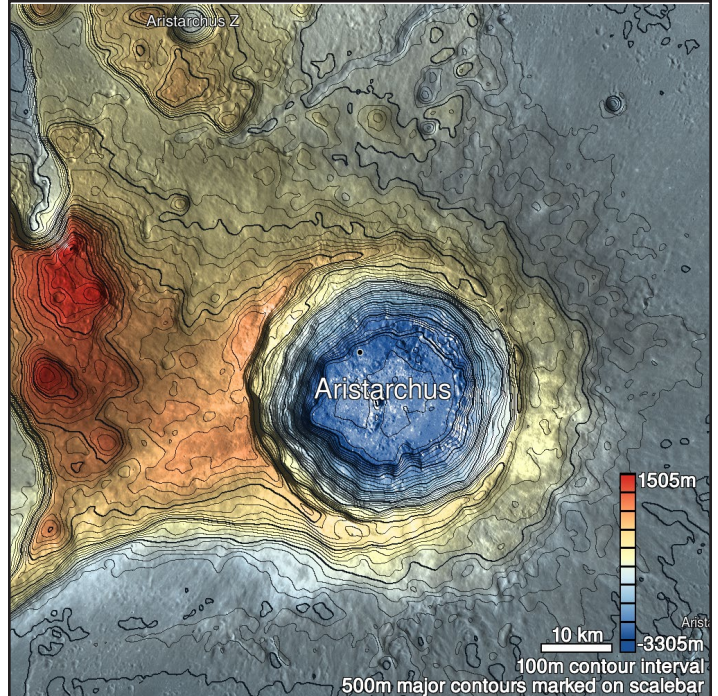
Larger, less complete of the Aristarchus 7a pair. North and west walls are slopes leading down to the floor.

Aristarchus 8

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636L. Upper right: NAC M114267211R. Lower left: NAC M1099158773L. Lower right: Stereo anaglyph of NACs M1129801944R (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 8. Black dot marks the location of the pit.

Size and Location

Latitude	23.9091°N	Inner pit diameter	28 m × 23 m
Longitude	312.3992°E	Long axis azimuth	5°
Depth	7 m	Funnel diameter	36 m × 30 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109548636L	M114267211R	M1099158773L
Incidence	25.81°	62.89°	-45.01°
Emission	-1.45°	2.16°	2.74°
Time of Day	11.70	8.03	14.55
Pixel Scale	0.52 m/px	0.49 m/px	1.39 m/px
Depth	8.1 m	6.4 m	7.5 m

Location reference: NAC M109548636L line 2222, sample 2971

Best stereo pair: M1129801944R / M1129787722R

Other useful images:

DTM:

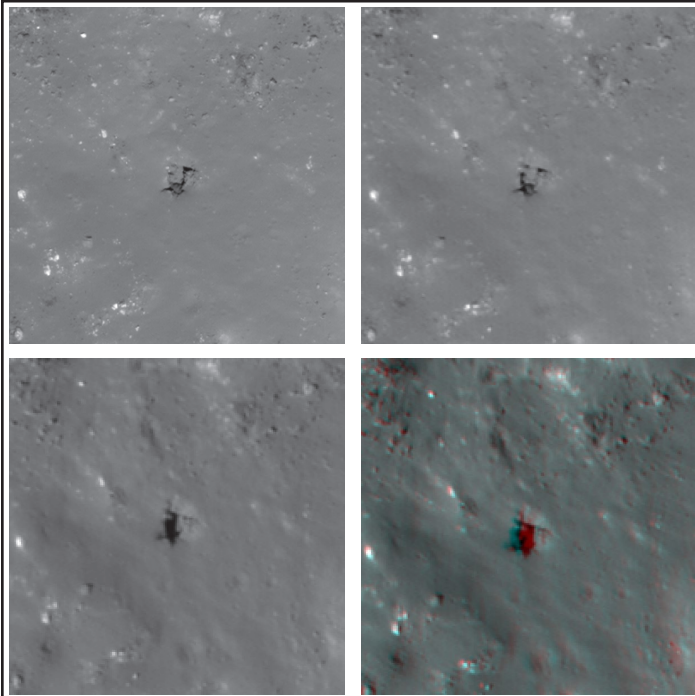
Data notes:

Description

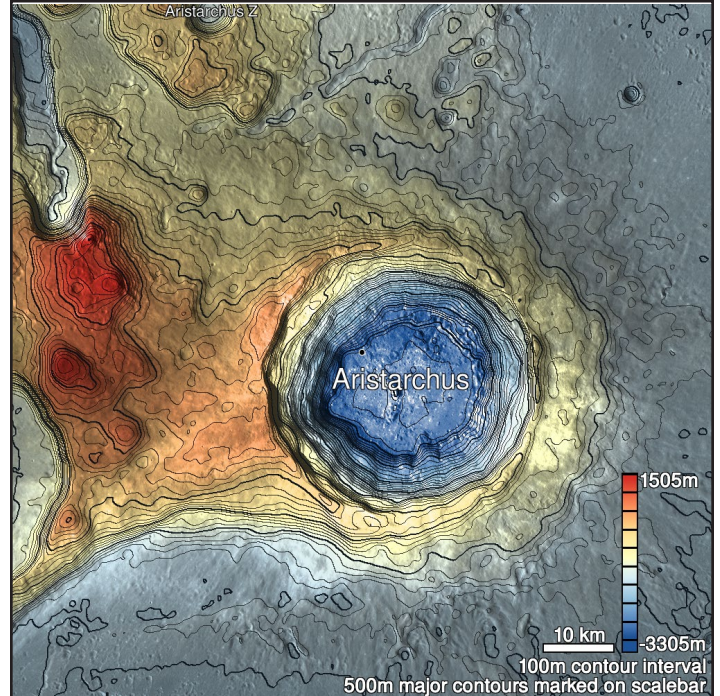
Wide, shallow pit. NW wall is a slope from rim to floor in most places, floor appears to slope up at most/all walls. In a moderately lumpy section of melt. Aristarchus 4 is ~250m NW.

Aristarchus 9

Impact Melt Pit: Aristarchus Crater



Upper left: NAC M109548636R. Upper right: NAC M1193372314R. Lower left: NAC M1129794833R. Lower right: Stereo anaglyph of NACs M1129801944L (left eye, red) and M1129787722R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristarchus 9. Black dot marks the location of the pit.

Size and Location

Latitude	23.8631°N	Inner pit diameter	17 m × 10 m
Longitude	312.3150°E	Long axis azimuth	15°
Depth	7 m	Funnel diameter	25 m × 23 m

Measurement Source Images

Image ID	M109548636R	M1193372314R	M1129794833R
Incidence	25.78°	-27.31°	-46.82°
Emission	1.19°	-0.10°	-1.89°
Time of Day	11.69	12.75	14.70
Pixel Scale	0.52 m/px	1.08 m/px	1.28 m/px
Depth	6.2 m	5.8 m	7.5 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No?
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M109548636R line 4653, sample 2580

Best stereo pair: M1129801944L / M1129787722R

Other useful images:

DTM:

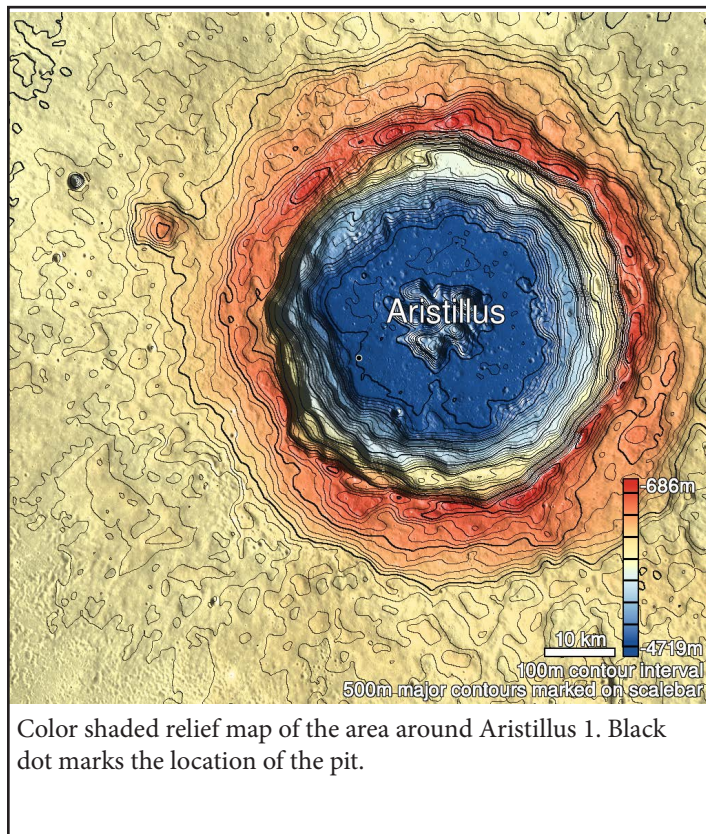
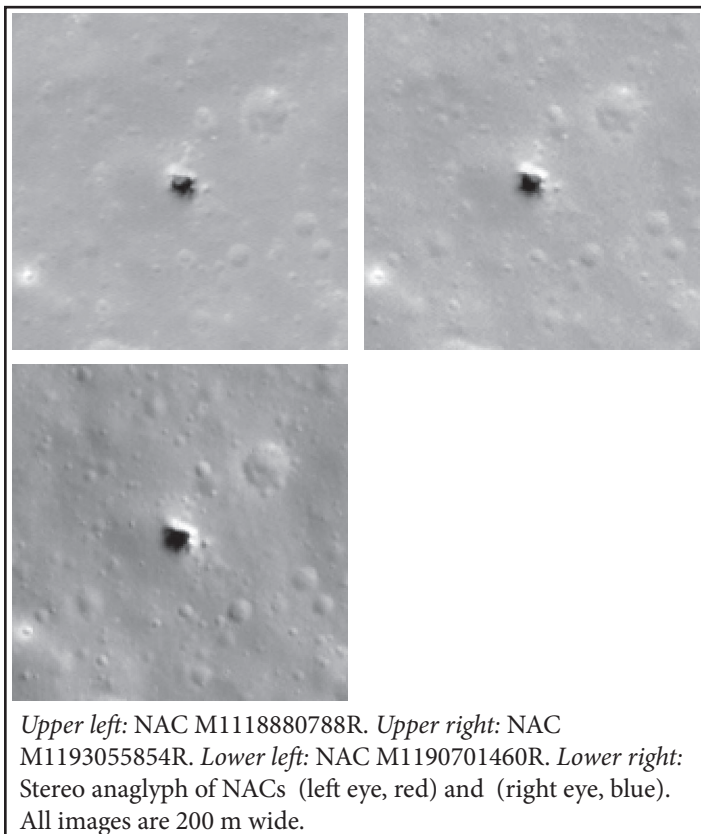
Data notes: Depths 1 and 2 are very small pixel sizes (~3).

Description

Irregular pit. South wall has a shelf/boulder sticking out part-way down, which interferes with shadow measurements. There is some texturing on the floor that implies ~0.5-2m boulders. ~300m SSE of Aristarchus 2c, and there is another pit-like depression another ~300m SSE.

Aristillus 1

Impact Melt Pit: Aristillus Crater



Size and Location

Latitude	33.6622°N	Inner pit diameter	11 m × 10 m
Longitude	0.7149°E	Long axis azimuth	100°
Depth	11 m	Funnel diameter	20 m × 20 m

Measurement Source Images

Image ID	M1118880788R	M1193055854R	M1190701460R
Incidence	34.93°	-37.66°	-52.80°
Emission	2.56°	-2.13°	-1.42°
Time of Day	11.10	13.00	14.79
Pixel Scale	1.38 m/px	1.22 m/px	1.22 m/px
Depth	9.7 m	10.8 m	11.6 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1118880788R line 19668, sample 4719

Best stereo pair: /

Other useful images:

DTM:

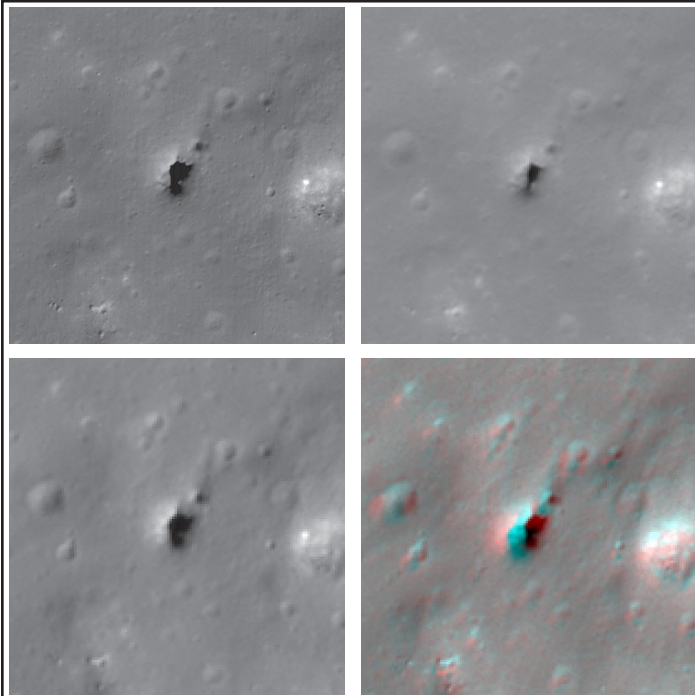
Data notes: No <1m/px images available.

Description

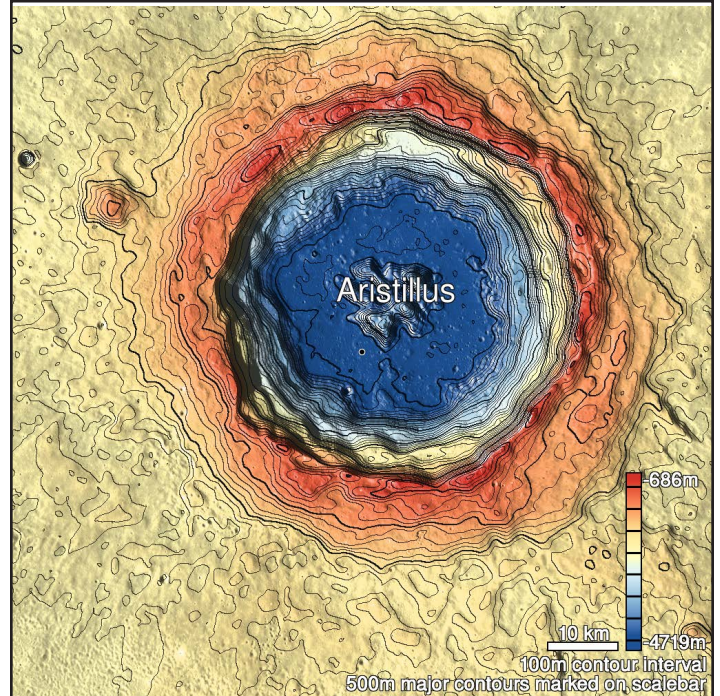
A pentagonal pit with very crisp walls. Floor is featureless, although all image pixel scales are low (1m/px or worse). Surroundings are very generic cratered regolith.

Aristillus 2

Impact Melt Pit: Aristillus Crater



Upper left: NAC M111592038L. Upper right: NAC M1118880788L. Lower left: NAC M190595203R. Lower right: Stereo anaglyph of NACs M1167162798R (left eye, red) and M1167148583R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristillus 2. Black dot marks the location of the pit.

Size and Location

Latitude	33.5874°N	Inner pit diameter	16 m × 9 m
Longitude	1.0190°E	Long axis azimuth	45°
Depth	14 m	Funnel diameter	30 m × 36 m

Measurement Source Images

Image ID	M111592038L	M1118880788L	M190595203R
Incidence	43.71°	34.76°	52.67°
Emission	-2.15°	-0.90°	1.35°
Time of Day	10.16	11.12	9.07
Pixel Scale	0.53 m/px	1.38 m/px	1.52 m/px
Depth	13.1 m	18.0 m	10.4 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No?	Colinear fractures	No
In Depression	No		

Location reference: NAC M111592038L line 42564, sample 1796

Best stereo pair: M1167162798R / M1167148583R

Other useful images:

DTM:

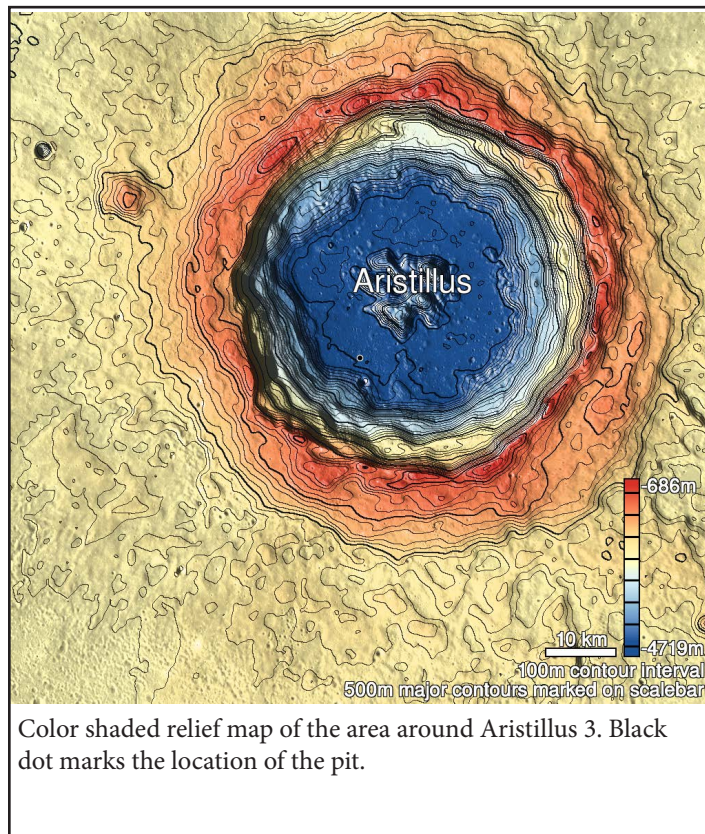
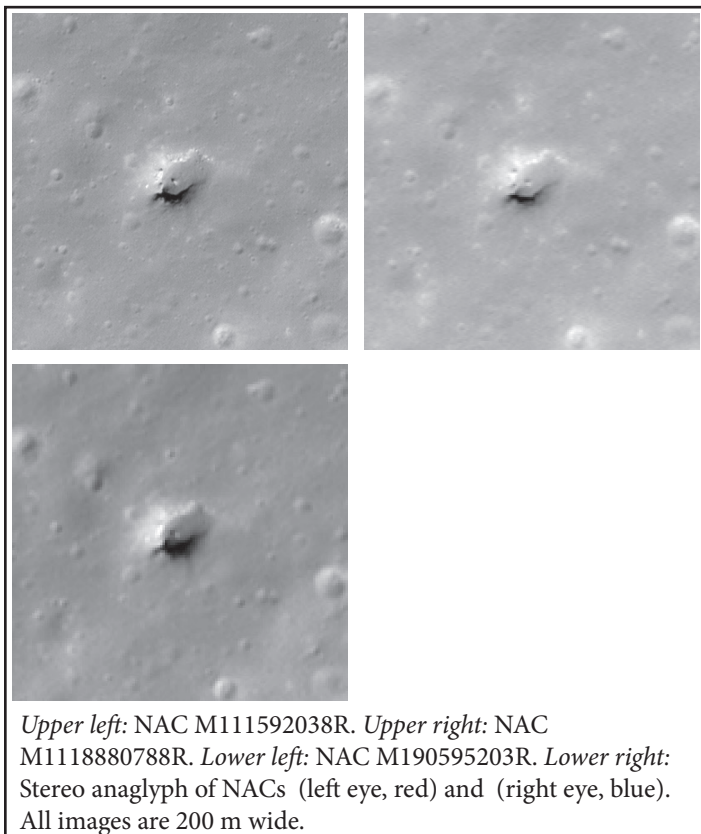
Data notes: Some uncertainty about where the end of the shadow I'm measuring is, and what part of the rim/funnel is the source.

Description

Rectangular pit, with possible slope covering most of SW wall. There's a suspiciously deep-looking 6m crater ~10m from the N wall, but no other depressions/pits in the area. Possibly no floor visible, just SW sloped wall.

Aristillus 3

Impact Melt Pit: Aristillus Crater



Size and Location

Latitude	33.5169°N	Inner pit diameter	33 m × 19 m
Longitude	0.9128°E	Long axis azimuth	40°
Depth	8 m	Funnel diameter	51 m × 34 m

Measurement Source Images

Image ID	M111592038R	M1118880788R	M190595203R
Incidence	43.72°	34.73°	52.71°
Emission	0.83°	0.29°	2.43°
Time of Day	10.15	11.11	9.07
Pixel Scale	0.52 m/px	1.38 m/px	1.52 m/px
Depth	4.7 m	8.6 m	11.8 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M111592038R line 46391, sample 1967

Best stereo pair: /

Other useful images: M1188347051L

DTM:

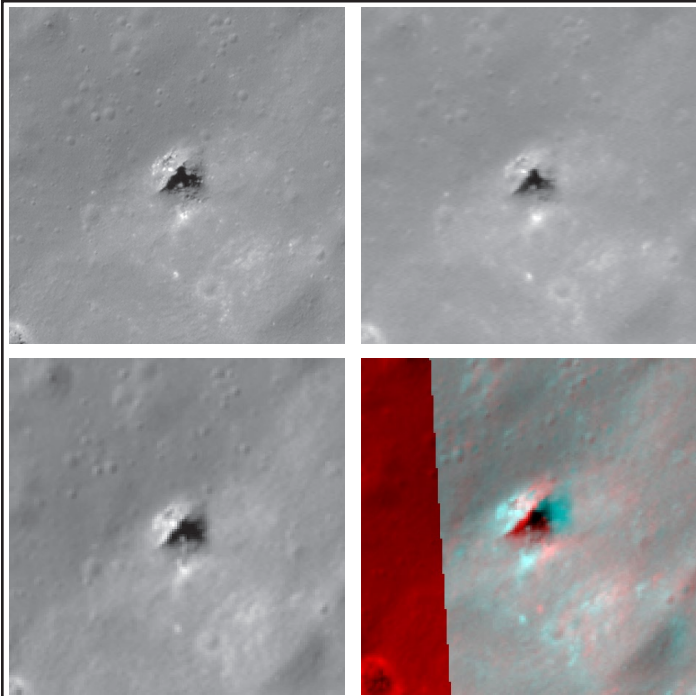
Data notes: Depth 3 may be from funnel. Funnel to NE slope is ~9m, from M1188347051L.

Description

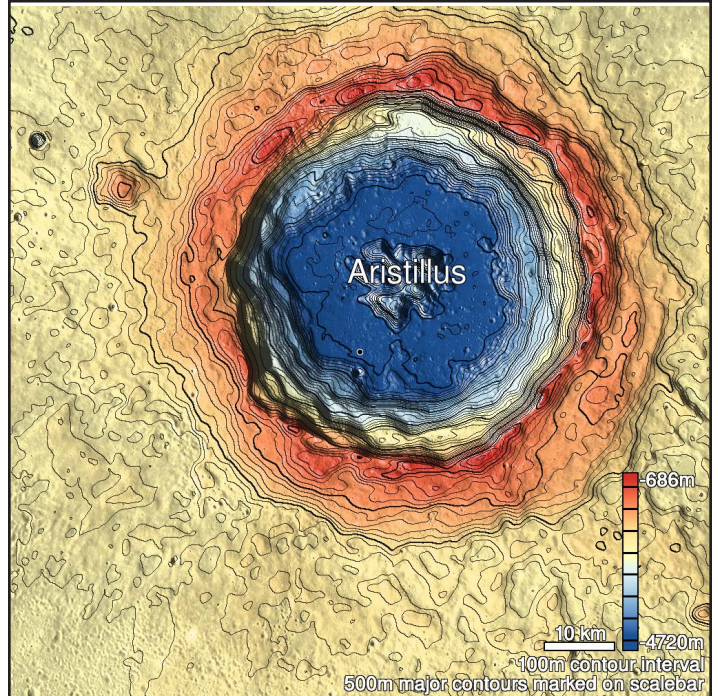
Generally round pit with extension to NE where wall collapse provides a gentle slope from surroundings to floor. Floor is fairly smooth, with one 3m boulder and one 2m crater.

Aristillus 4

Impact Melt Pit: Aristillus Crater



Upper left: NAC M111592038R. Upper right: NAC M1118880788R. Lower left: NAC M190595203R. Lower right: Stereo anaglyph of NACs M1167162798R (left eye, red) and M1167148583R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Aristillus 4. Black dot marks the location of the pit.

Size and Location

Latitude	33.4981°N	Inner pit diameter	NA m × NA m
Longitude	0.9447°E	Long axis azimuth	50°
Depth	14 m	Funnel diameter	28 m × 25 m

Measurement Source Images

Image ID	M111592038R	M1118880788R	M190595203R
Incidence	43.69°	34.70°	52.68°
Emission	-0.11°	-0.12°	2.10°
Time of Day	10.15	11.12	9.07
Pixel Scale	0.52 m/px	1.38 m/px	1.52 m/px
Depth	11.5 m	18.6 m	11.7 m

Other Features

Entrance Ramp	No	In dome	Yes?
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M111592038R line 47416, sample 404

Best stereo pair: M1167162798R / M1167148583R

Other useful images:

DTM:

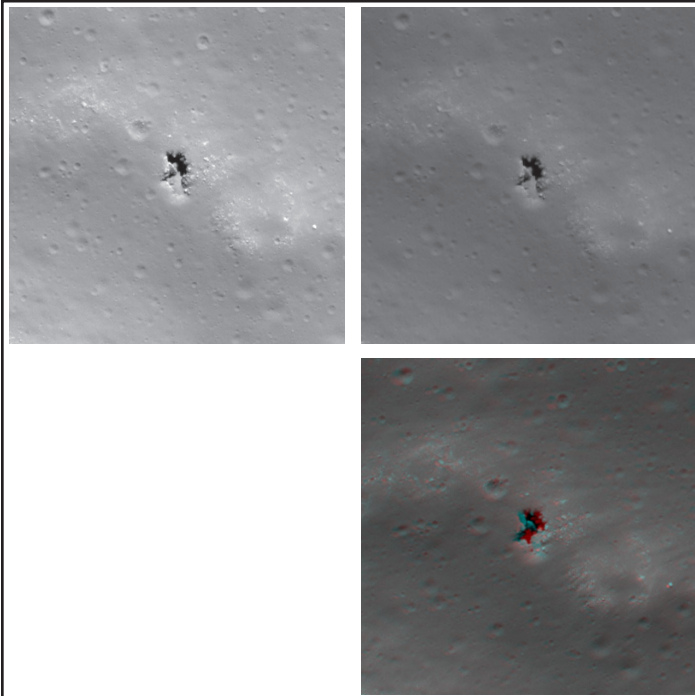
Data notes: Measures are from S wall/funnel to the deepest point the shadow crosses.

Description

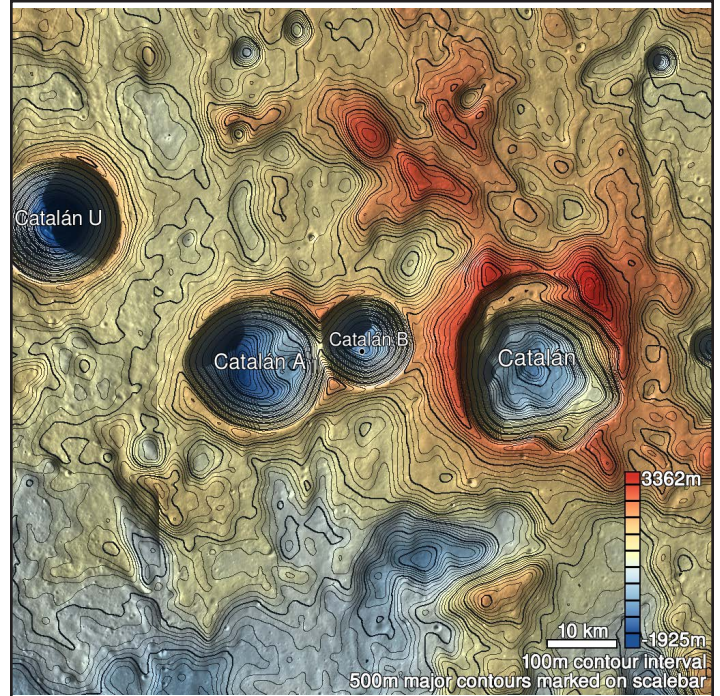
Hard to tell what's going on with this one. It seems to be an irregular depression, with sloped/broken walls on N, E, and W, and possible vertical wall (casting shadow) on south. There may be a ~4m wide inner pit at the bottom. Maybe a smaller version of SW Fecunditatis?

Catalán B 1

Impact Melt Pit: Catalán B Crater



Upper left: NAC M1196023180R. Upper right: NAC M1165415996R. Lower left: NAC . Lower right: Stereo anaglyph of NACs M1147715124L (left eye, red) and M1147708008L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Catalán B 1. Black dot marks the location of the pit.

Size and Location

Latitude	45.6547°S	Inner pit diameter	26 m × 15 m
Longitude	271.4260°E	Long axis azimuth	175°
Depth	7 m	Funnel diameter	32 m × 19 m

Measurement Source Images

Image ID	M1196023180R	M1165415996R	
Incidence	47.05°	46.48°	
Emission	2.25°	0.60°	
Time of Day	11.00	11.11	
Pixel Scale	0.47 m/px	0.64 m/px	
Depth	7.5 m	7.2 m	

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No?	Colinear fractures	No
In Depression	No		

Location reference: NAC M1196023180R line 11434, sample 4389

Best stereo pair: M1147715124L / M1147708008L

Other useful images:

DTM:

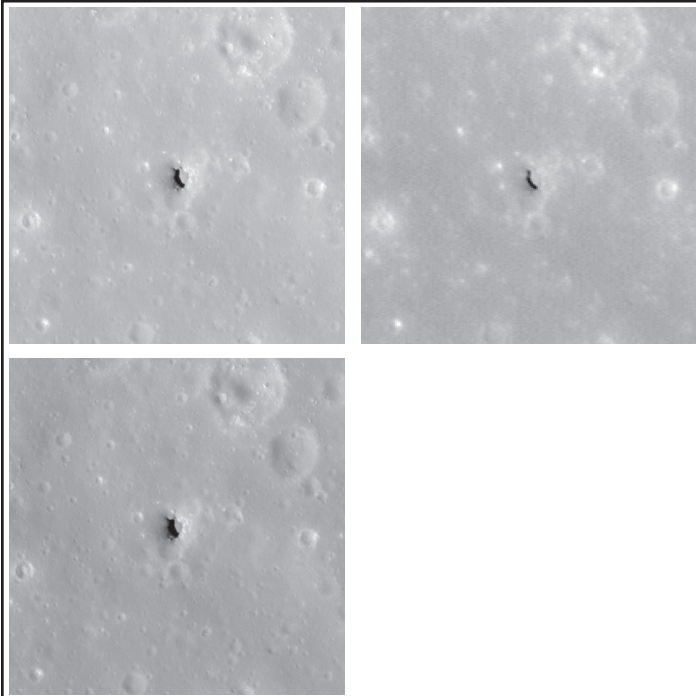
Data notes:

Description

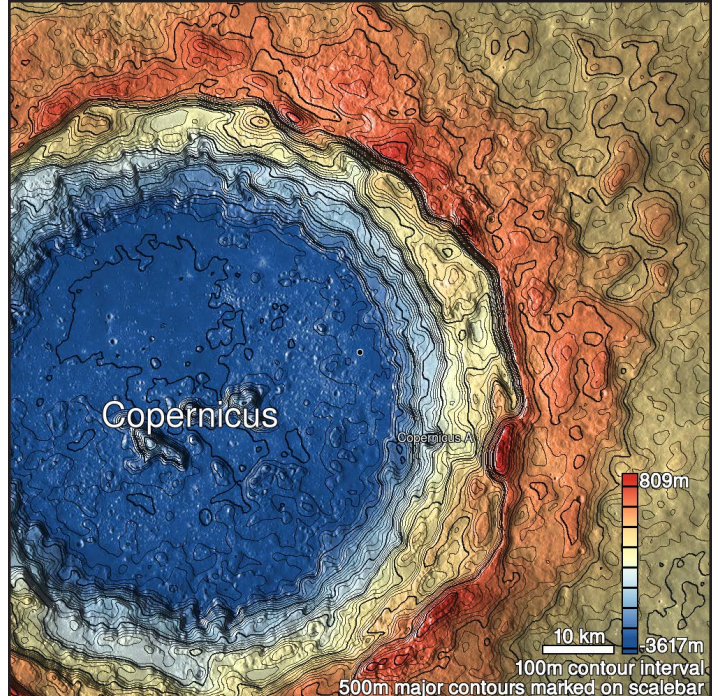
Irregular pit at the peak of a PRF. Floor appears lower than terrain surrounding the PRF. No other collapses nearby. No overhang on west side.

Copernicus 1

Impact Melt Pit: Copernicus Crater



Upper left: NAC M122339925R. Upper right: NAC M186012733L. Lower left: NAC M137672132L. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 1. Black dot marks the location of the pit.

Size and Location

Latitude	9.9277°N	Inner pit diameter	11 m × 9 m
Longitude	340.7455°E	Long axis azimuth	180°
Depth	8 m	Funnel diameter	31 m × 25 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M122339925R	M186012733L	M137672132L
Incidence	-26.35°	-12.29°	-33.32°
Emission	0.17°	1.08°	1.68°
Time of Day	13.67	12.60	14.10
Pixel Scale	0.43 m/px	1.26 m/px	0.49 m/px
Depth	6.9 m	11.8 m	6.5 m

Location reference: NAC M122339925R line 18592, sample 288

Best stereo pair: /

Other useful images: M1149637879L

DTM:

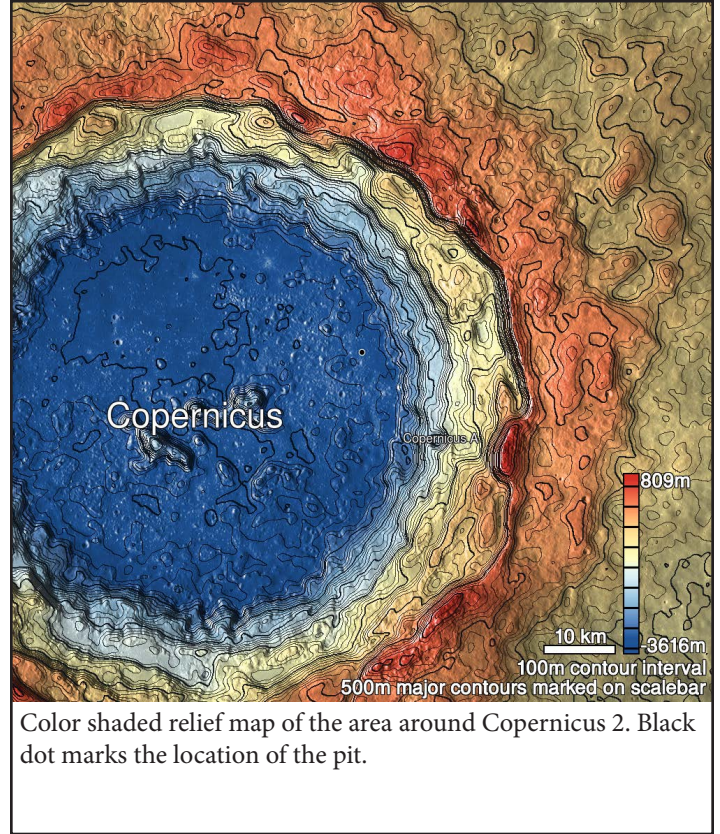
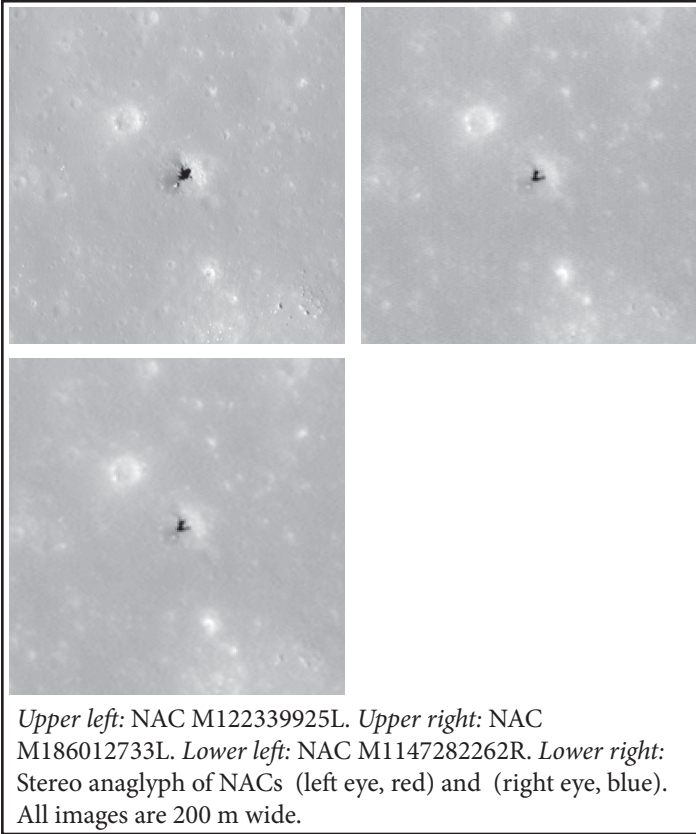
Data notes: Depth 2 is a very low-res, high-Sun image. All depths are from W wall, although a depth from a similar incidence angle and resolution, but from the E wall (M1149637879L), gave a depth similar to Depth 2.

Description

Elliptical pit in a semi-circular funnel; long axes of both are oriented ~N-S. Floor is flat and featureless, walls are vertical. No obvious other depressions in the area.

Copernicus 2

Impact Melt Pit: Copernicus Crater



Size and Location

Latitude	9.9308°N	Inner pit diameter	9 m × 6 m
Longitude	340.7296°E	Long axis azimuth	40°
Depth	14 m	Funnel diameter	31 m × 30 m

Measurement Source Images

Image ID	M122339925L	M186012733L	M1147282262R
Incidence	-26.33°	-12.28°	-16.57°
Emission	0.80°	1.31°	-2.22°
Time of Day	13.67	12.60	12.95
Pixel Scale	0.43 m/px	1.26 m/px	1.19 m/px
Depth	>13.5 m	13.1 m	15.1 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M122339925L line 18881, sample 4057

Best stereo pair: /

Other useful images:

DTM:

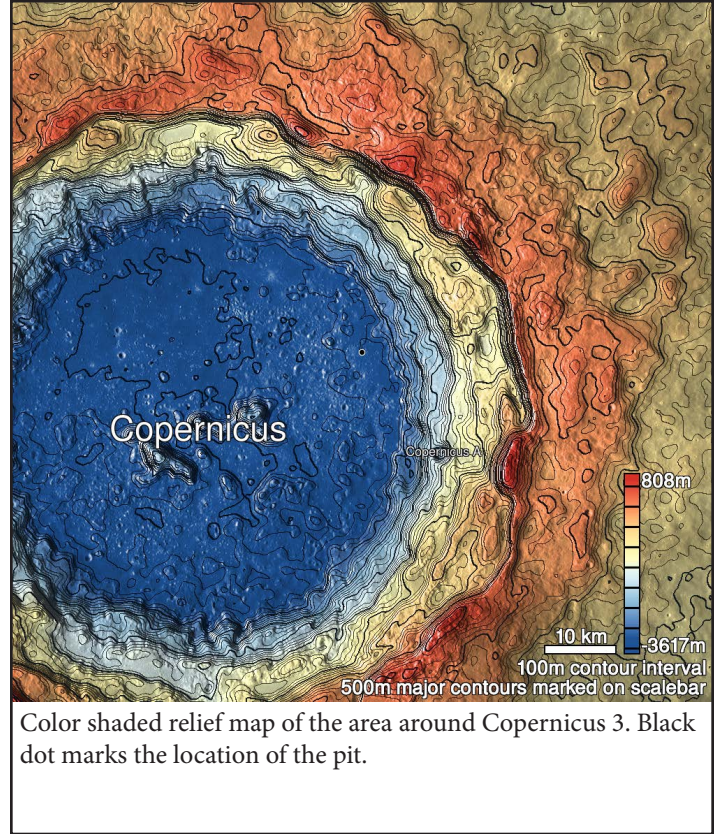
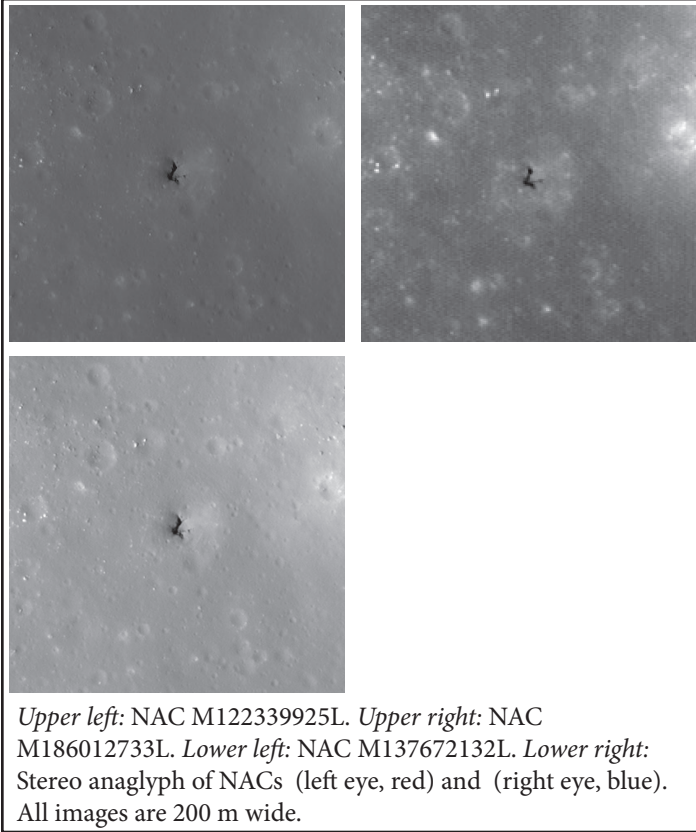
Data notes: Both images with visible floor are very low-res and high-Sun.

Description

Tiny diamond-shaped pit in a giant funnel. Floor might be peaked in the middle from the shape of the shadow in the one lighting angle we can see it in. N-S trending linear depression ~120m E.

Copernicus 3

Impact Melt Pit: Copernicus Crater



Size and Location

Latitude	9.9929°N	Inner pit diameter	13 m × 10 m
Longitude	340.7149°E	Long axis azimuth	60°
Depth	7 m	Funnel diameter	36 m × 36 m

Measurement Source Images

Image ID	M122339925L	M186012733L	M137672132L
Incidence	-26.34°	-12.31°	-33.31°
Emission	1.38°	1.53°	2.79°
Time of Day	13.67	12.60	14.10
Pixel Scale	0.43 m/px	1.26 m/px	0.49 m/px
Depth	5.1 m	9.1 m	6.4 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No?
Nearby depressions	No?	Colinear fractures	No
In Depression	No		

Location reference: NAC M122339925L line 22295, sample 3089

Best stereo pair: /

Other useful images: M1111940683L

DTM:

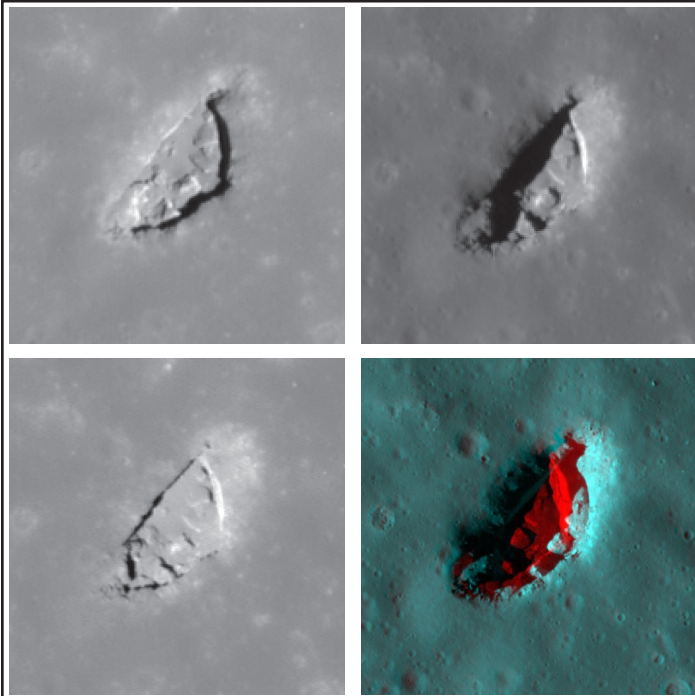
Data notes: Depth 2 is from a very high-Sun, low-res image. Getting a stretch that accurately reveals the shadow length is difficult. The stretch used only measures the very darkest pixels of the shadow.

Description

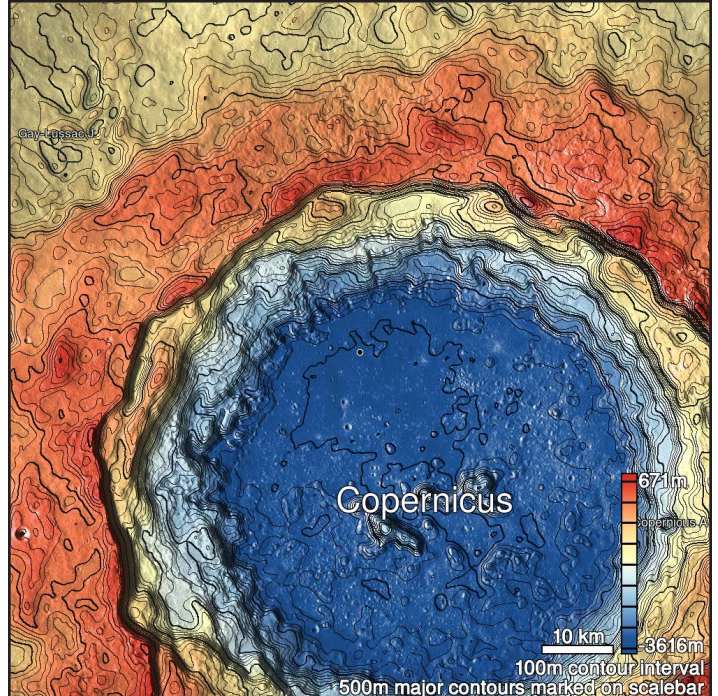
Irregular pit. NE wall/corner appears to be a ramp from rim to SW wall. There are a couple ~120m circular depressions in a line to the NW, but they could easily be very degraded impact craters.

Copernicus 4

Impact Melt Pit: Copernicus Crater



Upper left: NAC M188378781L. Upper right: NAC M1175545925L. Lower left: NAC M1147289388R. Lower right: Stereo anaglyph of NACs M135324446L (left eye, red) and M135317661R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 4. Black dot marks the location of the pit.

Size and Location

Latitude	10.3288°N	Inner pit diameter	89 m × 49 m
Longitude	339.6206°E	Long axis azimuth	35°
Depth	24 m	Funnel diameter	71 m × 128 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	No?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M188378781L	M1175545925L	M1147289388R
Incidence	20.43°	-42.78°	-16.69°
Emission	-1.22°	1.40°	-1.55°
Time of Day	10.77	14.81	12.95
Pixel Scale	1.27 m/px	1.18 m/px	1.20 m/px
Depth	19.9 m	25.9 m	26.3 m

Location reference: NAC M188378781L line 40138, sample 3433

Best stereo pair: M135324446L / M135317661R

Other useful images: M157730473L

DTM:

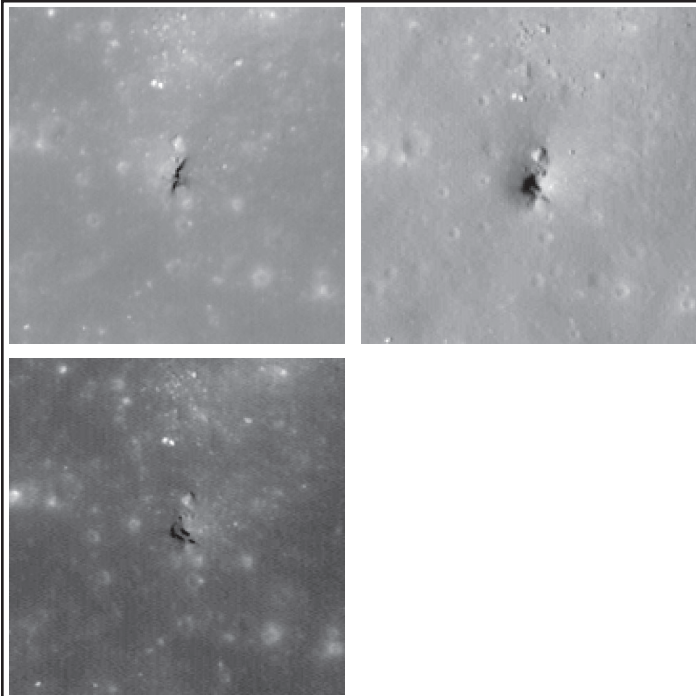
Data notes: Depth 1 is from E rim to very close to E rim, Depth 2 is from E rim to center, Depth 3 is from W rim to very near W rim.

Description

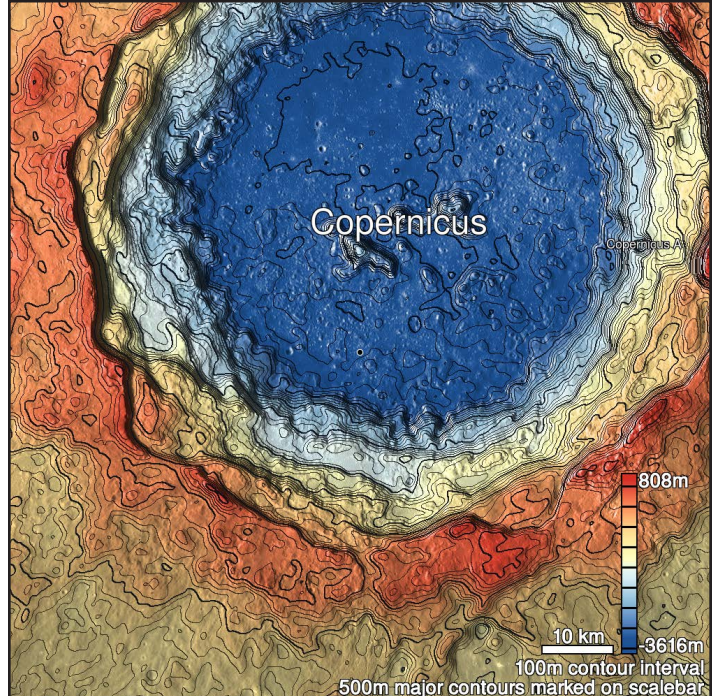
Enormous semicircular pit. Floor along the arc of the semicircle (SE wall) contains ~10 6-13m angular boulders, remainder of floor is reasonably smooth (some ~40cm rocks visible, a small cluster of 2-5m boulders under the W rim. Stereo shows that floor slopes down towards center of W wall. E wall and southern end of W wall have no overhang, center of W wall has at least 3m overhang, although there is no evidence that it goes any deeper than that. No other depressions or PRFs in the immediate vicinity, although there's a similarly wide sinuous collapse a kilometer or so S.

Copernicus 5

Impact Melt Pit: Copernicus Crater



Upper left: NAC M1164945337R. Upper right: NAC M183660970L. Lower left: NAC M186019864R. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 5. Black dot marks the location of the pit.

Size and Location

Latitude	9.0159°N	Inner pit diameter	13 m × 7 m
Longitude	339.7451°E	Long axis azimuth	40°
Depth	10 m	Funnel diameter	35 m × 28 m

Other Features

Entrance Ramp	No	In dome	No?
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1164945337R	M183660970L	M186019864R
Incidence	15.04°	-37.26°	-11.69°
Emission	0.54°	2.67°	-0.31°
Time of Day	11.24	14.44	12.60
Pixel Scale	1.10 m/px	1.26 m/px	1.25 m/px
Depth	9.3 m	9.5 m	10.6 m

Location reference: NAC M1164945337R line 3320, sample 1442

Best stereo pair: /

Other useful images: M150653709L

DTM:

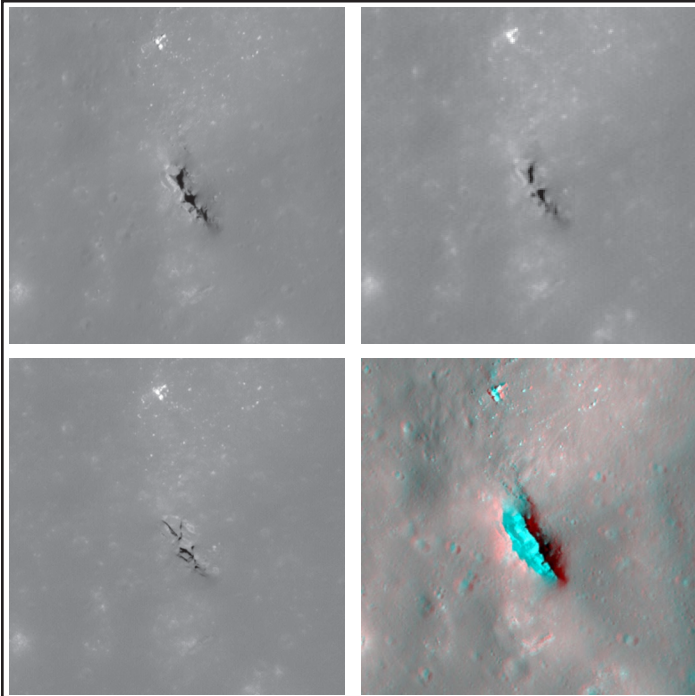
Data notes:

Description

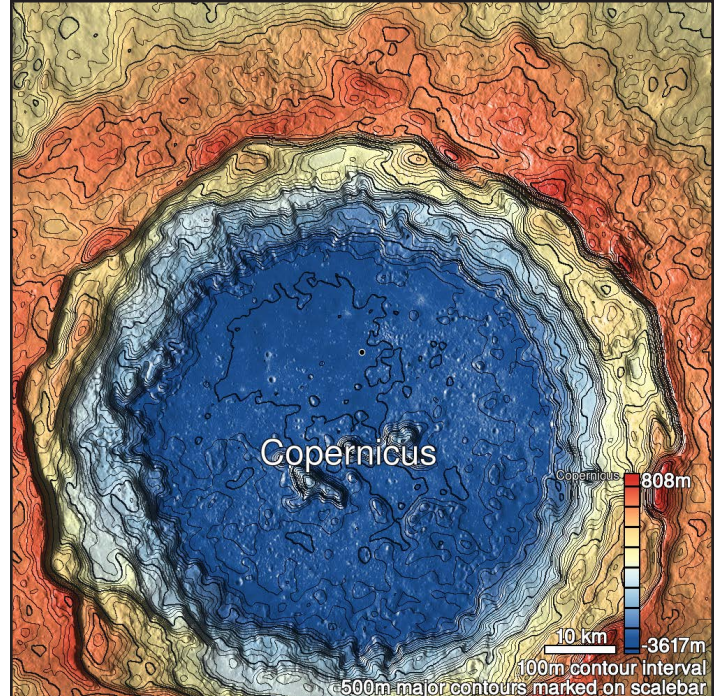
Roundish pit in a fairly deep funnel. No particular features of note nearby.

Copernicus 6a

Impact Melt Pit: Copernicus Crater



Upper left: NAC M142394466R. Upper right: NAC M1103695396L. Lower left: NAC M109365462L. Lower right: Stereo anaglyph of NACs M144755352L (left eye, red) and M144748567L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 6a. Black dot marks the location of the pit.

Size and Location

Latitude	10.1053°N	Inner pit diameter	10 m × 9 m
Longitude	339.9950°E	Long axis azimuth	150°
Depth	11 m	Funnel diameter	55 m × 30 m

Measurement Source Images

Image ID	M142394466R	M1103695396L	M109365462L
Incidence	25.24°	17.29°	11.94°
Emission	2.16°	-0.91°	-0.88°
Time of Day	10.50	11.12	11.82
Pixel Scale	0.49 m/px	1.21 m/px	0.52 m/px
Depth	8.9 m	12.2 m	12.8 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M142394466R line 980, sample 4246

Best stereo pair: M144755352L / M144748567L

Other useful images: M168333206L

DTM:

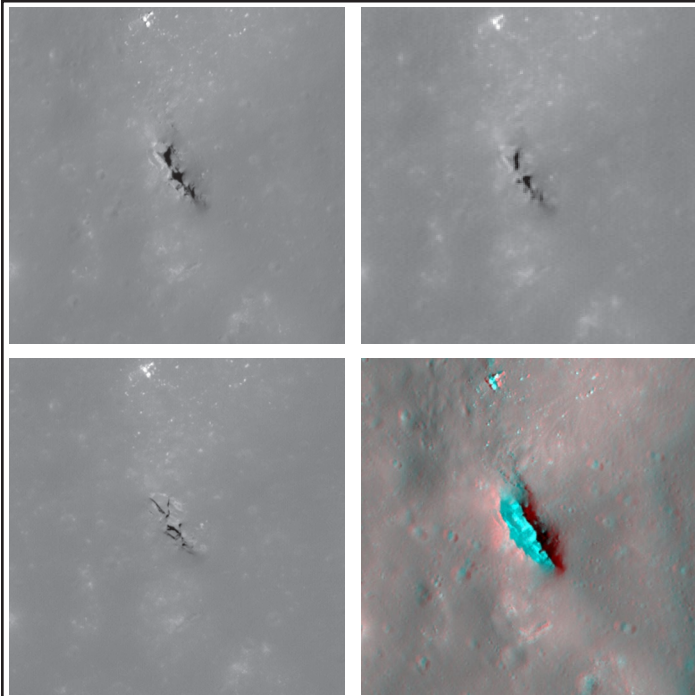
Data notes: All depths are from very high Sun. Inner pit is measured along diagonals, not rectilinearly.

Description

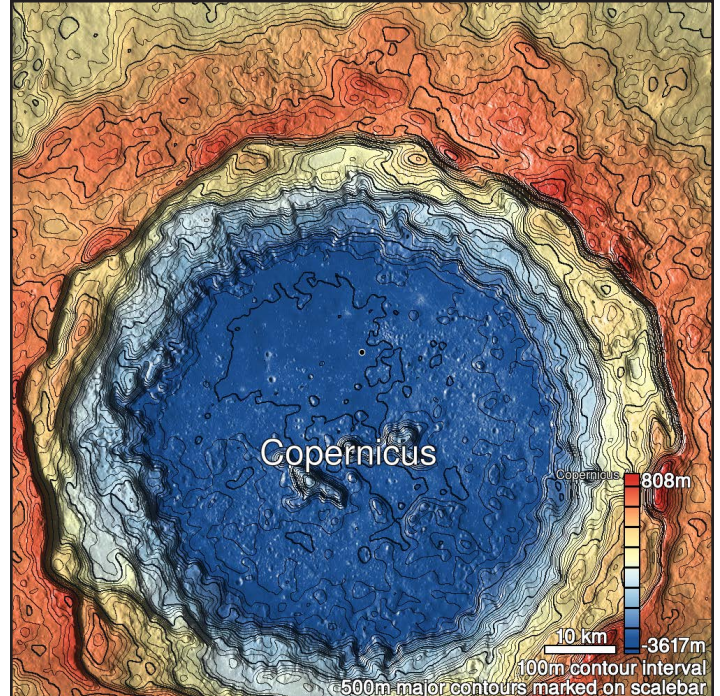
Larger and northernmost of a linear pair (triplet?) of pits at the north end of a subtle linear depression (>300m long). This pit is triangular, with the longest side(?) parallel to the line of the pits. Both pits are within a larger linear collapse (pit?) and are only distinguishable as distinct pits at the very highest Sun angles (funnel measurements for both are for the enclosing depression). Copernicus 6a is ~4m NW of Copernicus 6b, and there is another collapse just SE of 6b (although it might just be walls of the surrounding depression). There are no other pits in the immediate vicinity.

Copernicus 6b

Impact Melt Pit: Copernicus Crater



Upper left: NAC M142394466R. Upper right: NAC M1103695396L. Lower left: NAC M109365462L. Lower right: Stereo anaglyph of NACs M144755352L (left eye, red) and M144748567L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 6b. Black dot marks the location of the pit.

Size and Location

Latitude	10.1048°N	Inner pit diameter	10 m × 8 m
Longitude	339.9952°E	Long axis azimuth	145°
Depth	13 m	Funnel diameter	55 m × 30 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Measurement Source Images

Image ID	M142394466R	M1103695396L	M109365462L
Incidence	25.24°	17.29°	11.93°
Emission	2.16°	-0.91°	-0.88°
Time of Day	10.50	11.12	11.82
Pixel Scale	0.49 m/px	1.21 m/px	0.52 m/px
Depth	>12.8 m	14.4 m	11.9 m

Location reference: NAC M142394466R line 1004, sample 4230

Best stereo pair: M144755352L / M144748567L

Other useful images: M168333206L

DTM:

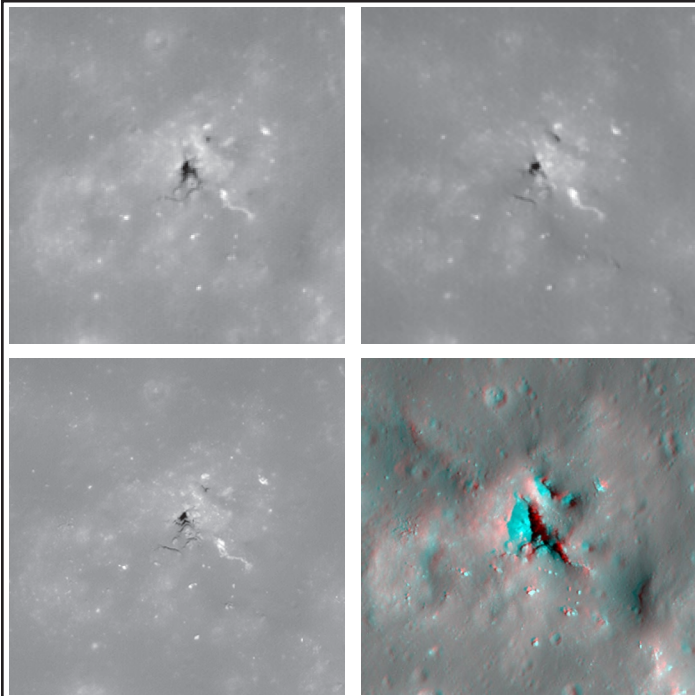
Data notes: All depths are from very high Sun. Inner pit is measured along diagonals, not rectilinearly.

Description

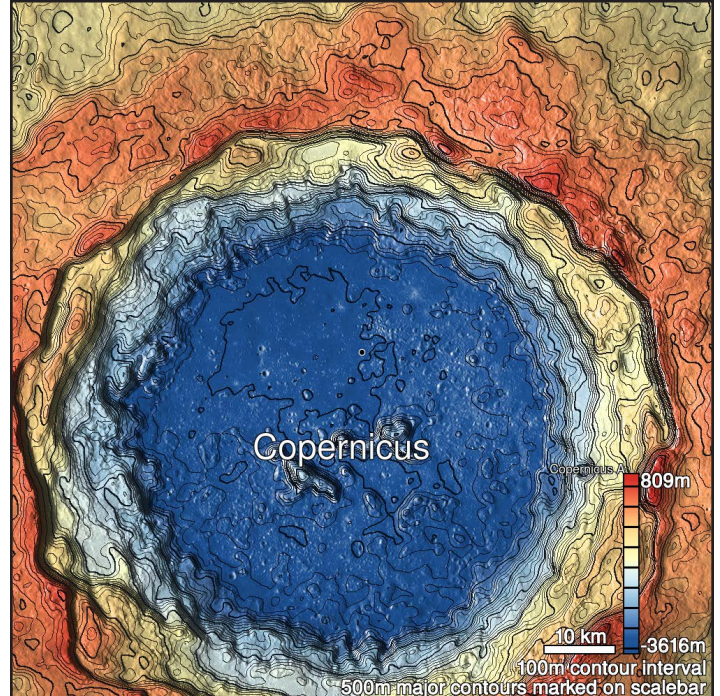
Smaller and southern of the Copernicus 6a pair. Roughly rectangular, with one of the diagonals (measured as max diameter) running parallel to the line of the pits.

Copernicus 7

Impact Melt Pit: Copernicus Crater



Upper left: NAC M1103695396L. Upper right: NAC M1177898186R. Lower left: NAC M109365462L. Lower right: Stereo anaglyph of NACs M144755352L (left eye, red) and M144748567L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 7. Black dot marks the location of the pit.

Size and Location

Latitude	10.0763°N	Inner pit diameter	6 m × 4 m
Longitude	340.0269°E	Long axis azimuth	45°
Depth	>21 m	Funnel diameter	26 m × 24 m

Measurement Source Images

Image ID	M1103695396L	M1177898186R	M109365462L
Incidence	17.25°	-16.18°	11.90°
Emission	-1.38°	-0.24°	-1.98°
Time of Day	11.13	12.91	11.82
Pixel Scale	1.21 m/px	1.17 m/px	0.52 m/px
Depth	>21 m	>19.6 m	>20.9 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M1103695396L line 22972, sample 3165

Best stereo pair: M144755352L / M144748567L

Other useful images: M168333206R

DTM:

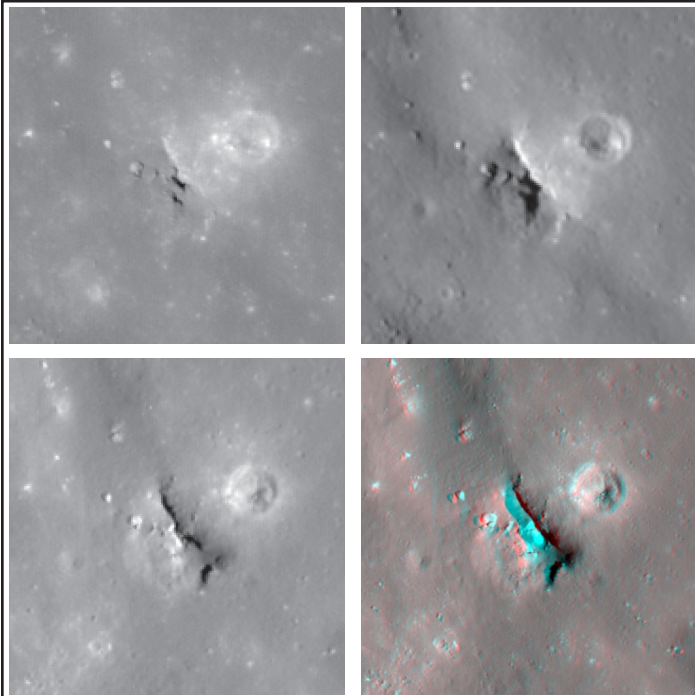
Data notes: All depths are from very high Sun.

Description

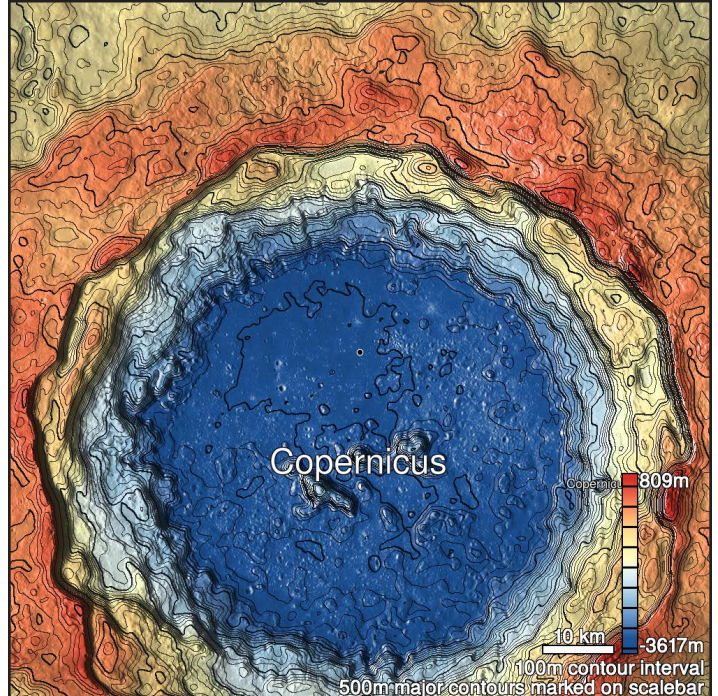
Round pit in a linear, round-bottomed 37m-wide depression. This depression has some very shallow cliffs at the rim in most places, and runs >300m NW, and terminates in a ~70m wide round-bottomed depression ~150m SE. The pit is in the middle of a set of collapses, and the central pit is only visible in the highest-Sun images (the floor is never visible). There is a tiny depression, with a bit of shadow visible at even 11 degrees incidence, 18m NE (outside the linear depression). There is a rounded mound (ooze dome?) ~180m NE.

Copernicus 8

Impact Melt Pit: Copernicus Crater



Upper left: NAC M1177898186L. Upper right: NAC M104648293R. Lower left: NAC M1136683665L. Lower right: Stereo anaglyph of NACs M144755352R (left eye, red) and M144748567R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 8. Black dot marks the location of the pit.

Size and Location

Latitude	10.1462°N	Inner pit diameter	57 m × 21 m
Longitude	339.9373°E	Long axis azimuth	130°
Depth	12 m	Funnel diameter	70 m × 50 m

Measurement Source Images

Image ID	M1177898186L	M104648293R	M1136683665L
Incidence	-16.14°	-51.59°	39.85°
Emission	1.21°	-1.52°	-1.68°
Time of Day	12.90	15.38	9.42
Pixel Scale	1.18 m/px	1.26 m/px	1.15 m/px
Depth	13.2 m	>4.6 m	9.8 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M1177898186L line 47635, sample 3453

Best stereo pair: M144755352R / M144748567R

Other useful images:

DTM:

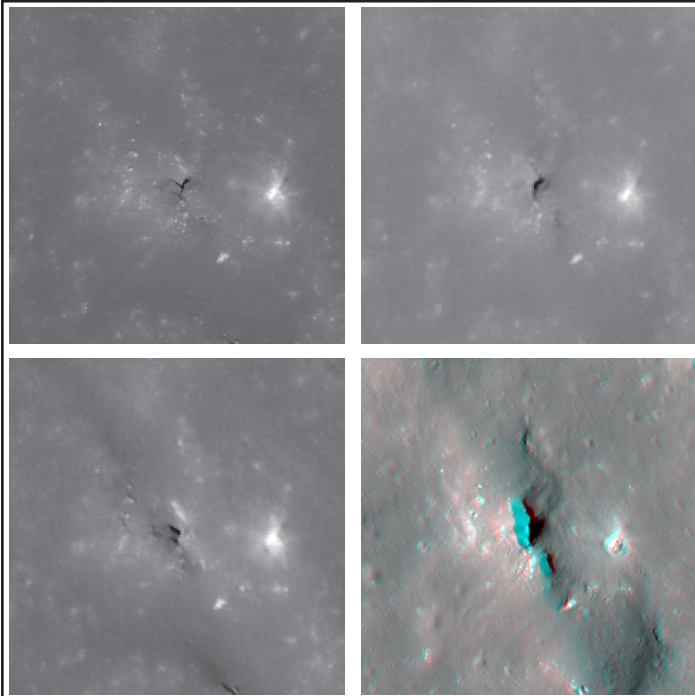
Data notes:

Description

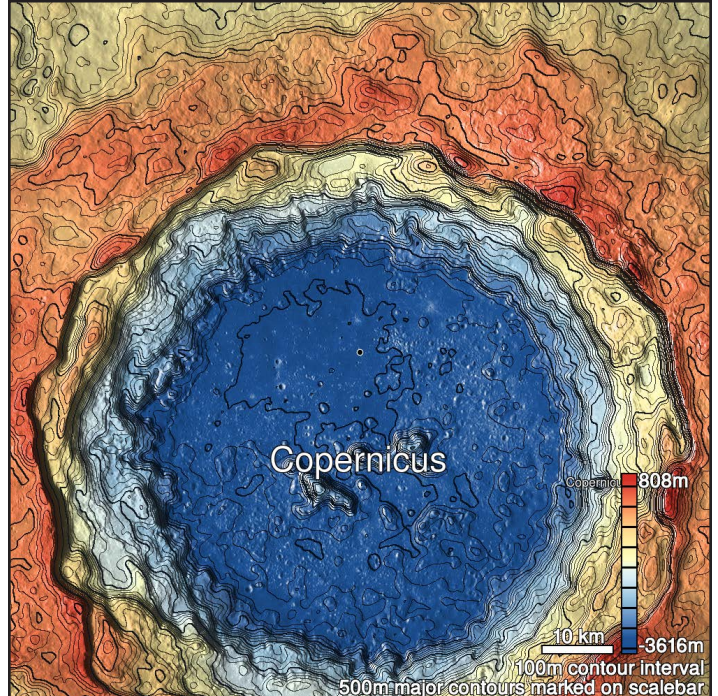
Linear pit at the SSE end of a sinuous/linear depression (~40m wide). The pit itself is not very pit-like- There is a long wall parallel to the depression on the NE, and a short wall perpendicular to the SSE, but the other sides are just slopes running down to a deepest point near the center of the long wall. ~200m north of Copernicus XX. There are some hints that whatever features caused the depression forked here, as there are two very subtle possible depressions to the SSE, one of which houses Copernicus 9 (~200m S).

Copernicus 9

Impact Melt Pit: Copernicus Crater



Upper left: NAC M109365462R. Upper right: NAC M1103695396R. Lower left: NAC M1101338216L. Lower right: Stereo anaglyph of NACs M144755352R (left eye, red) and M144748567R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 9. Black dot marks the location of the pit.

Size and Location

Latitude	10.1385°N	Inner pit diameter	10 m × 7 m
Longitude	339.9387°E	Long axis azimuth	140°
Depth	12 m	Funnel diameter	31 m × 22 m

Measurement Source Images

Image ID	M109365462R	M1103695396R	M1101338216L
Incidence	11.98°	17.36°	-18.09°
Emission	1.06°	-0.11°	0.37°
Time of Day	11.81	11.12	12.93
Pixel Scale	0.52 m/px	1.21 m/px	1.22 m/px
Depth	12.5 m	12.4 m	10.5 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M109365462R line 8310, sample 2346

Best stereo pair: M144755352R / M144748567R

Other useful images:

DTM:

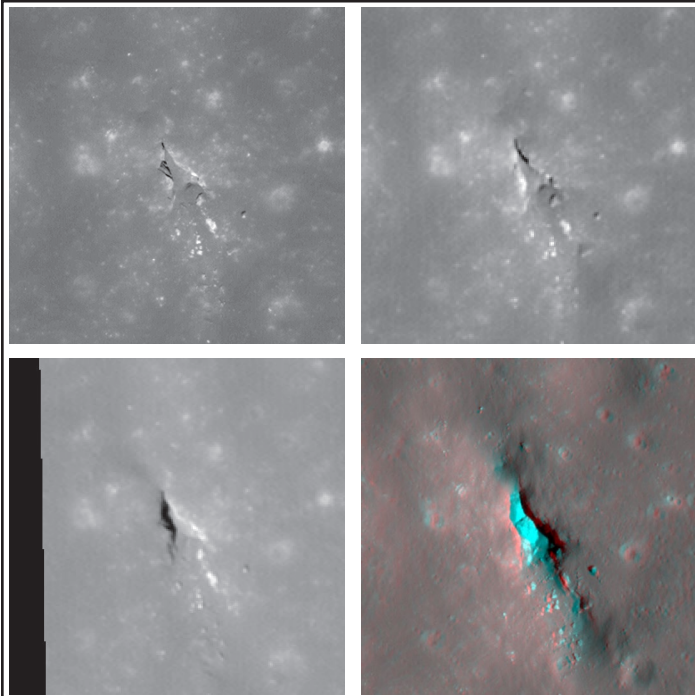
Data notes: All depths are from very high Sun.

Description

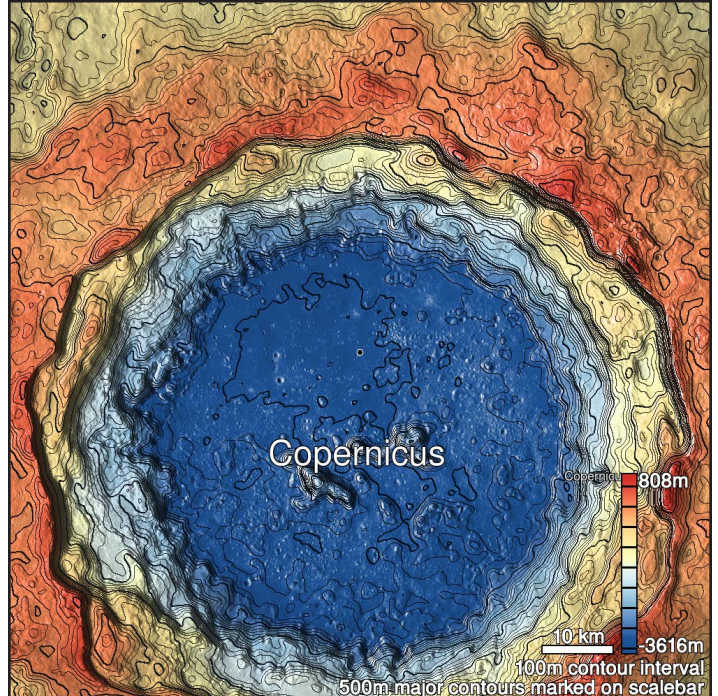
Round pit in a deep local depression in a NNW-SSE trending linear depression. ~200m S of Copernicus 8, which is in an adjacent depression. NW wall seems to be a slope to floor level. Floor appears fairly clear, but is usually in shadow from deep outer depression/funnel.

Copernicus 10

Impact Melt Pit: Copernicus Crater



Upper left: NAC M109365462R. Upper right: NAC M1103695396R. Lower left: NAC M1101338216R. Lower right: Stereo anaglyph of NACs M144755352R (left eye, red) and M144748567R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 10. Black dot marks the location of the pit.

Size and Location

Latitude	10.1083°N	Inner pit diameter	38 m × 11 m
Longitude	339.9456°E	Long axis azimuth	145°
Depth	23 m	Funnel diameter	N/A m × 45 m

Measurement Source Images

Image ID	M109365462R	M1103695396R	M1101338216R
Incidence	11.95°	17.33°	-18.08°
Emission	0.81°	-0.19°	0.29°
Time of Day	11.81	11.12	12.93
Pixel Scale	0.52 m/px	1.21 m/px	1.21 m/px
Depth	25.4 m	22.5 m	20.8 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M109365462R line 9987, sample 1914

Best stereo pair: M144755352R / M144748567R

Other useful images:

DTM:

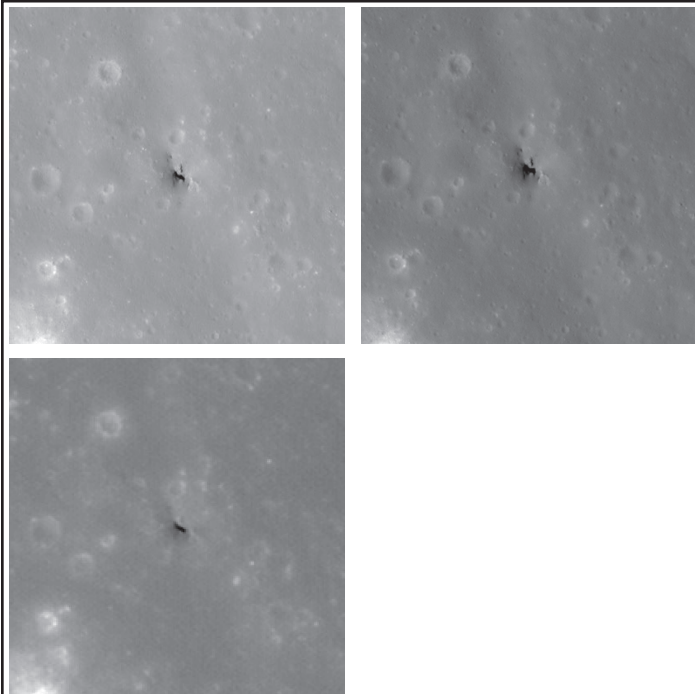
Data notes: No good shadows when Sun is to the E.

Description

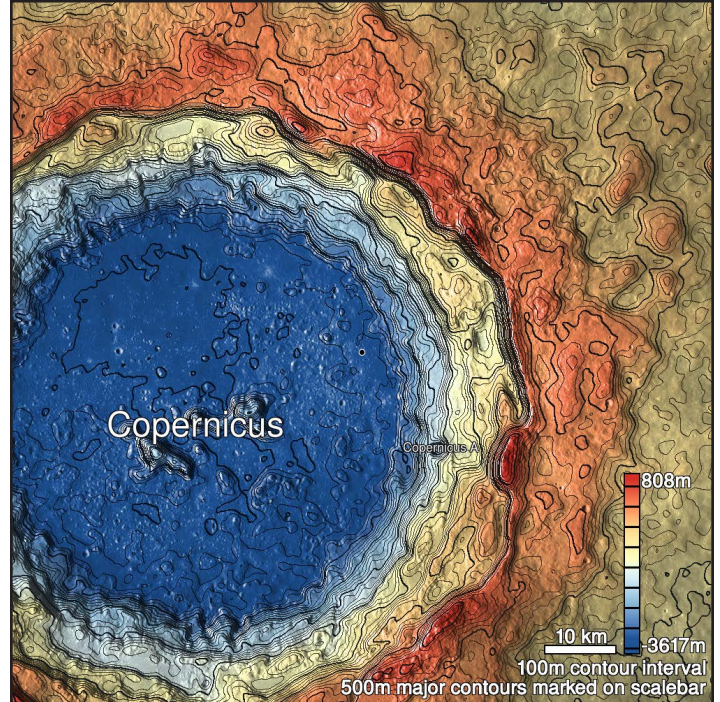
Triangular pit in a NNW-SSE trending linear depression. SE wall is a nearly-traversable slope to pit floor.

Copernicus 11

Impact Melt Pit: Copernicus Crater



Upper left: NAC M122339925L. Upper right: NAC M137672132L. Lower left: NAC M186012733L. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 11. Black dot marks the location of the pit.

Size and Location

Latitude	9.9726°N	Inner pit diameter	8 m × 4 m
Longitude	340.7284°E	Long axis azimuth	130°
Depth	11 m	Funnel diameter	28 m × 23 m

Measurement Source Images

Image ID	M122339925L	M137672132L	M186012733L
Incidence	-26.35°	-33.32°	-12.31°
Emission	0.83°	2.30°	1.33°
Time of Day	13.67	14.10	12.60
Pixel Scale	0.43 m/px	0.49 m/px	1.26 m/px
Depth	10.7 m	9.6 m	14.0 m

Other Features

Entrance Ramp	No?	In dome	No?
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	Yes?		

Location reference: NAC M122339925L line 21178, sample 4027

Best stereo pair: /

Other useful images: M1149637879L

DTM:

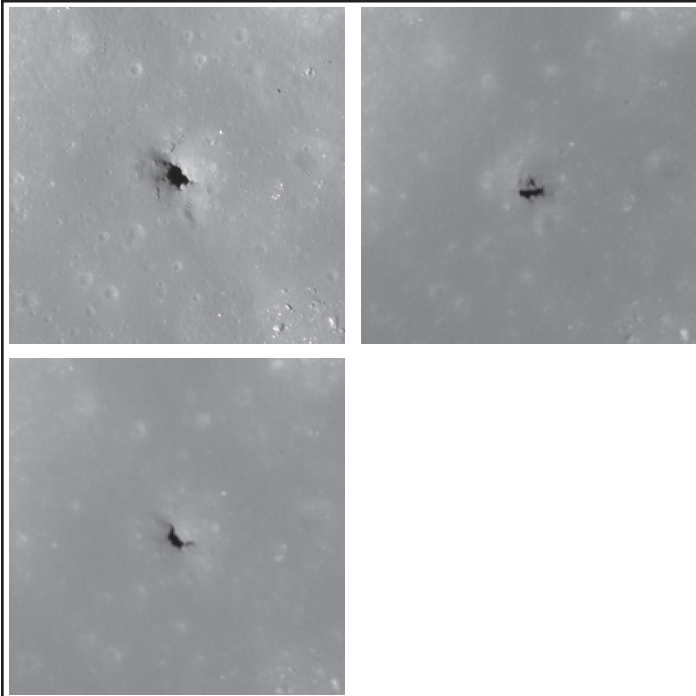
Data notes: Image 3 is very high-Sun and low-resolution.

Description

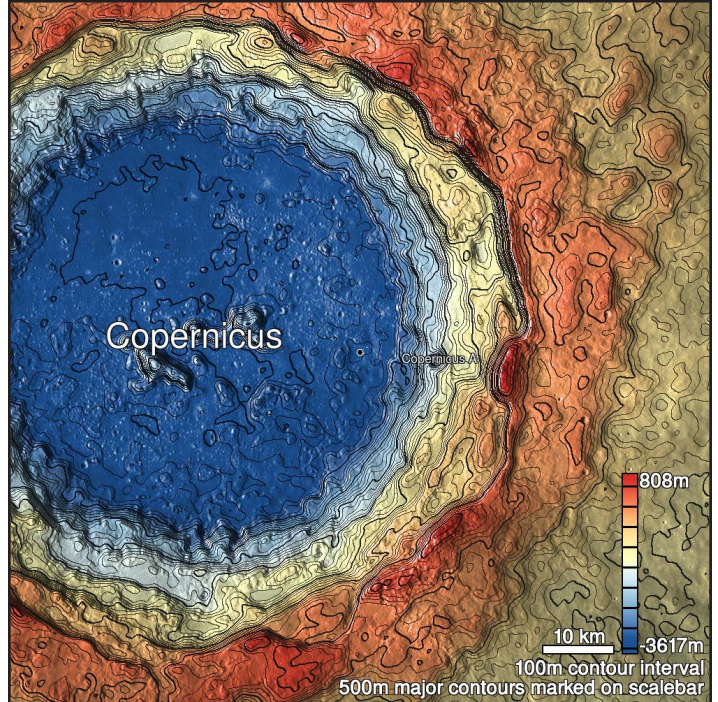
Irregular pit in a probable N-S trending depression. Some other linear depressions running parallel? Cannot tell for certain if there is a visible floor- possibly in NE corner in M122339925L and M186012733L.

Copernicus 12

Impact Melt Pit: Copernicus Crater



Upper left: NAC M137672132L. Upper right: NAC M1149637879L. Lower left: NAC M1147282262R. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 12. Black dot marks the location of the pit.

Size and Location

Latitude	9.5539°N	Inner pit diameter	15 m × 10 m
Longitude	340.7251°E	Long axis azimuth	130°
Depth	18 m	Funnel diameter	40 m × 30 m

Measurement Source Images

Image ID	M137672132L	M1149637879L	M1147282262R
Incidence	-33.19°	16.17°	-16.38°
Emission	2.33°	-3.00°	-2.33°
Time of Day	14.10	11.08	12.95
Pixel Scale	0.49 m/px	1.21 m/px	1.19 m/px
Depth	>15.3 m	18.9 m	16.6 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M137672132L line 34601, sample 1469

Best stereo pair: /

Other useful images: M1111940683L

DTM:

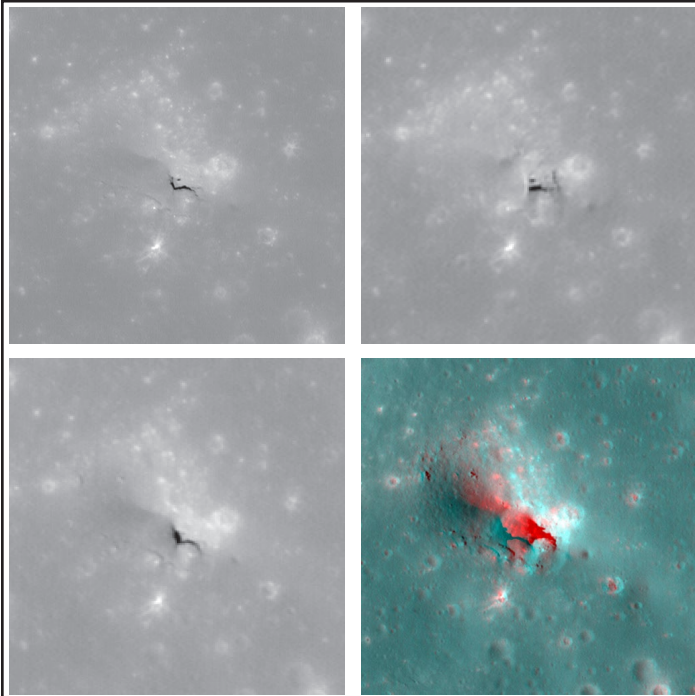
Data notes:

Description

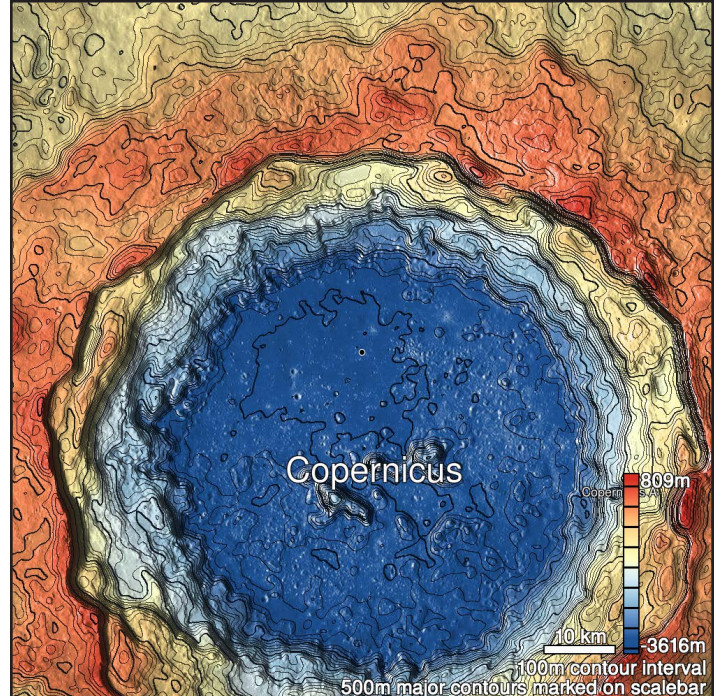
Trapezoidal pit with a fairly large funnel. Floor may be rough (only really visible in one low-res image). No particular features of note nearby.

Copernicus 13a

Impact Melt Pit: Copernicus Crater



Upper left: NAC M155369774R. Upper right: NAC M1103695396R. Lower left: NAC M1177898186L. Lower right: Stereo anaglyph of NACs M153014813R (left eye, red) and M153008029R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 13a. Black dot marks the location of the pit.

Size and Location

Latitude	10.1857°N	Inner pit diameter	14 m × 6 m
Longitude	339.8727°E	Long axis azimuth	120°
Depth	11 m	Funnel diameter	123 m × 68 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	No	Colinear fractures	No
In Depression	No?		

Measurement Source Images

Image ID	M155369774R	M1103695396R	M1177898186L
Incidence	-9.71°	17.44°	-16.11°
Emission	-0.63°	0.91°	2.23°
Time of Day	12.29	11.12	12.90
Pixel Scale	0.43 m/px	1.21 m/px	1.18 m/px
Depth	8.8 m	11.8 m	13.8 m

Location reference: NAC M155369774R line 38160, sample 1628

Best stereo pair: M153014813R / M153008029R

Other useful images:

DTM:

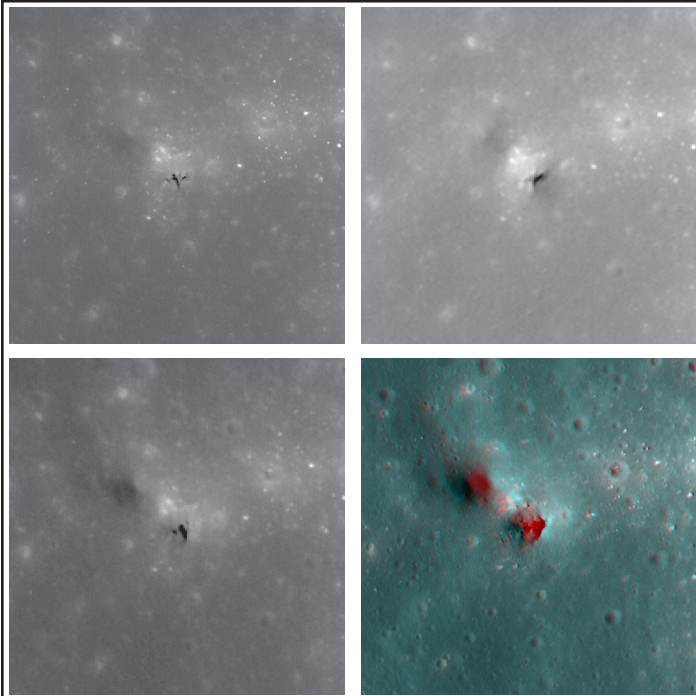
Data notes:

Description

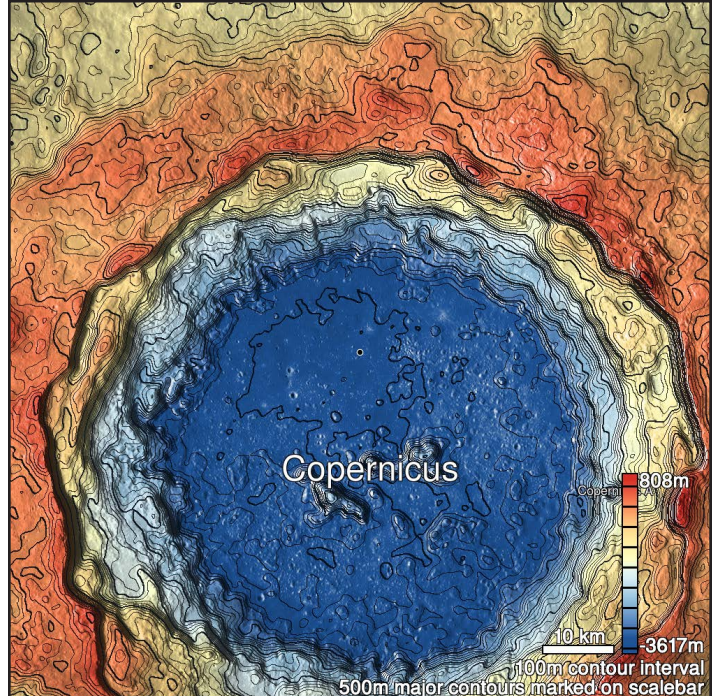
Irregular pit in a double depression; northwesternmost of a pair of pits. NW bowl has no pit, SE bowl has pit, both are included in funnel measure. Rocky floor, no ramp in. Copernicus 13b is ~250m SE, and is aligned with the two depressions of 13a and an additional depression NW of 13b. There is no linear depression between 13a and 13b, and the entire area is very flat. Both are roughly in line with Copernicus 21, ~650m WNW.

Copernicus 13b

Impact Melt Pit: Copernicus Crater



Upper left: NAC M155369774R. Upper right: NAC M1103695396R. Lower left: NAC M1177898186L. Lower right: Stereo anaglyph of NACs M153014813R (left eye, red) and M153008029R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 13b. Black dot marks the location of the pit.

Size and Location

Latitude	10.1799°N	Inner pit diameter	5 m × 5 m
Longitude	339.8811°E	Long axis azimuth	145°
Depth	5 m	Funnel diameter	25 m × 25 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	No	Colinear fractures	No
In Depression	No?		

Measurement Source Images

Image ID	M155369774R	M1103695396R	M1177898186L
Incidence	-9.70°	17.43°	-16.11°
Emission	-0.97°	0.79°	2.10°
Time of Day	12.29	11.12	12.90
Pixel Scale	0.43 m/px	1.21 m/px	1.18 m/px
Depth	3.5 m	5.4 m	7.3 m

Location reference: NAC M155369774R line 37835, sample 2217

Best stereo pair: M153014813R / M153008029R

Other useful images:

DTM:

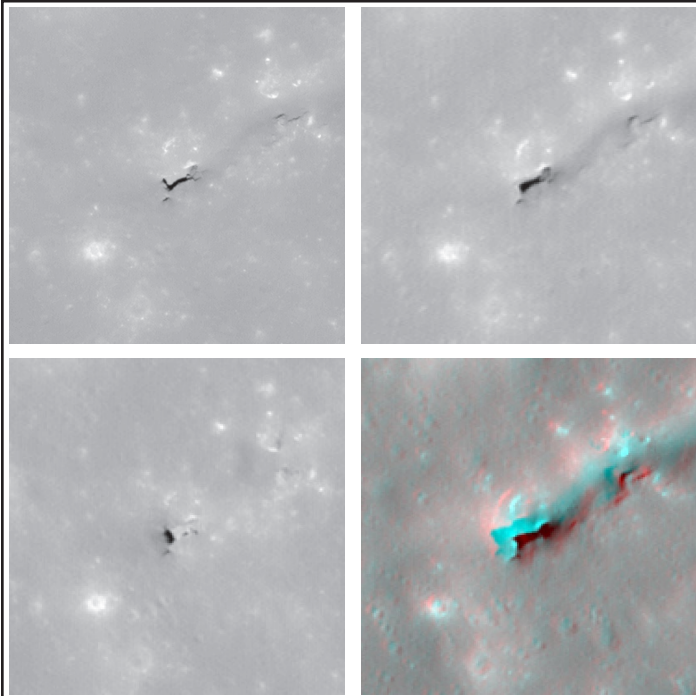
Data notes: Very small shadows, very high Sun.

Description

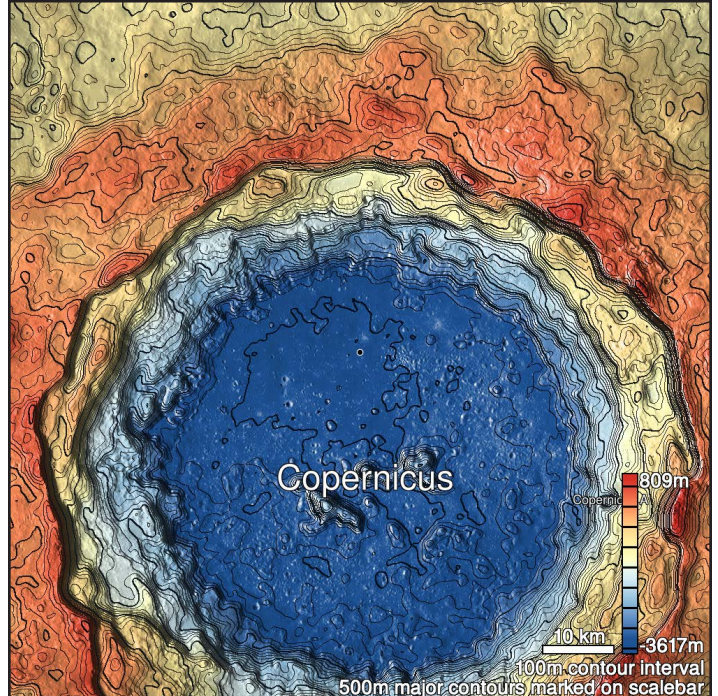
Triangular pit(?) (possibly just some outcrops near the bottom of a deep (>8m) depression), ~250m SW of Copernicus 13, and ~25m SW of a similarly-sized depression with no steep walls. Possibly drivable slope from the N, although resolution is poor enough that this is uncertain.

Copernicus 14

Impact Melt Pit: Copernicus Crater



Upper left: NAC M109365462R. Upper right: NAC M1103695396R. Lower left: NAC M1177898186L. Lower right: Stereo anaglyph of NACs M1106059896L (left eye, red) and M1106045604L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 14. Black dot marks the location of the pit.

Size and Location

Latitude	10.2215°N	Inner pit diameter	20 m × 7 m
Longitude	339.9041°E	Long axis azimuth	60°
Depth	17 m	Funnel diameter	N/A m × 40 m

Measurement Source Images

Image ID	M109365462R	M1103695396R	M1177898186L
Incidence	12.07°	17.44°	-16.15°
Emission	2.27°	0.43°	1.76°
Time of Day	11.81	11.12	12.90
Pixel Scale	0.52 m/px	1.21 m/px	1.18 m/px
Depth	12.2 m	15.9 m	21.7 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M109365462R line 3710, sample 4398

Best stereo pair: M1106059896L / M1106045604L

Other useful images:

DTM:

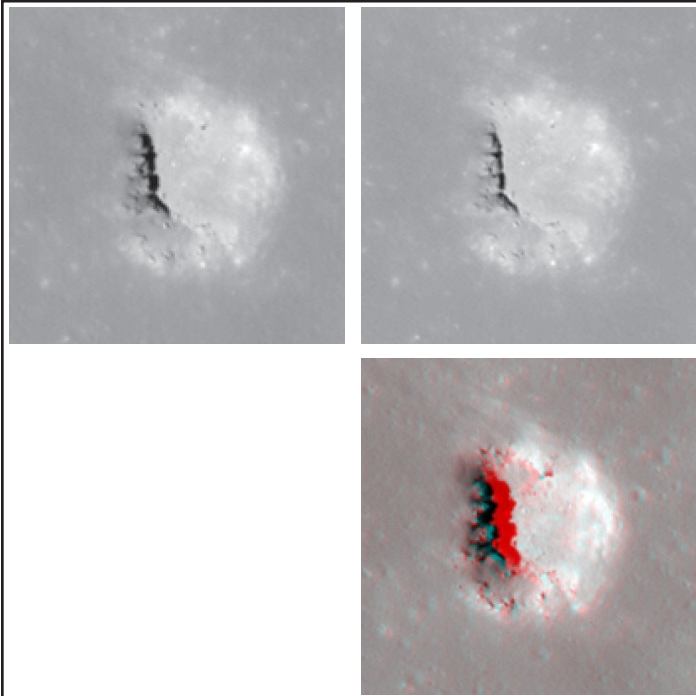
Data notes: Depth 3 is from W rim, largely outside the funnel, others are from S rim inside funnel.

Description

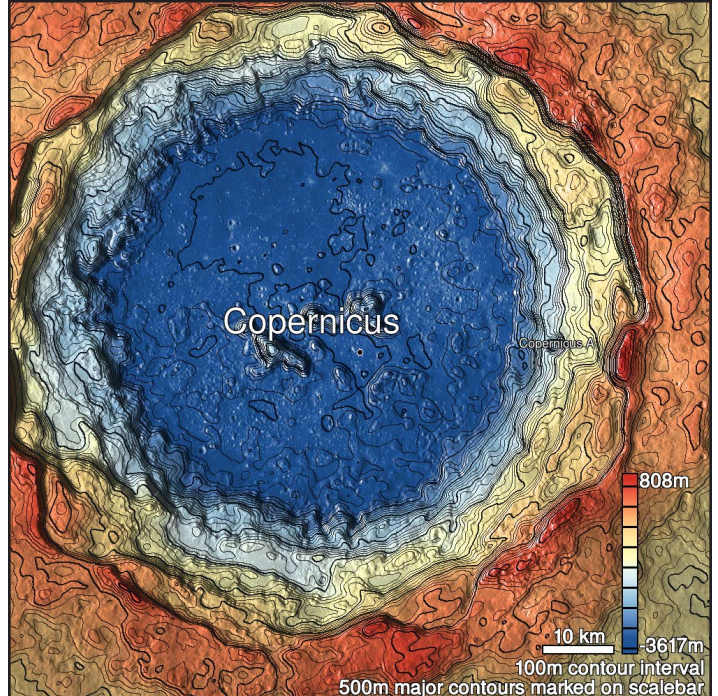
Linear pit at the SW end of a linear depression. Floor may slope down from NE to SW. Tiny pit-like dark spot (~1-2m) 3m S. There is a deeper section of the depression with vertical sidewalls ~50m NE. No other features of note nearby. ~400m N of Copernicus 23.

Copernicus 16

Impact Melt Pit: Copernicus Crater



Upper left: NAC M107006443R. Upper right: NAC M1131971116R. Lower left: NAC M1206153124L. Lower right: Stereo anaglyph of NACs M1206153124L (left eye, red) and M1206139057L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 16. Black dot marks the location of the pit.

Size and Location

Latitude	9.4838°N	Inner pit diameter	73 m × 71 m
Longitude	340.1616°E	Long axis azimuth	90°
Depth	15 m	Funnel diameter	115 m × 96 m

Measurement Source Images

Image ID	M107006443R	M1131971116R	
Incidence	-26.43°	-19.40°	
Emission	-0.49°	-2.45°	
Time of Day	13.62	13.07	
Pixel Scale	1.33 m/px	1.14 m/px	
Depth	15.1 m	15.0 m	

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M107006443R line 36492, sample 1338

Best stereo pair: M1206153124L / M1206139057L

Other useful images: M193089462R, M114084316L

DTM:

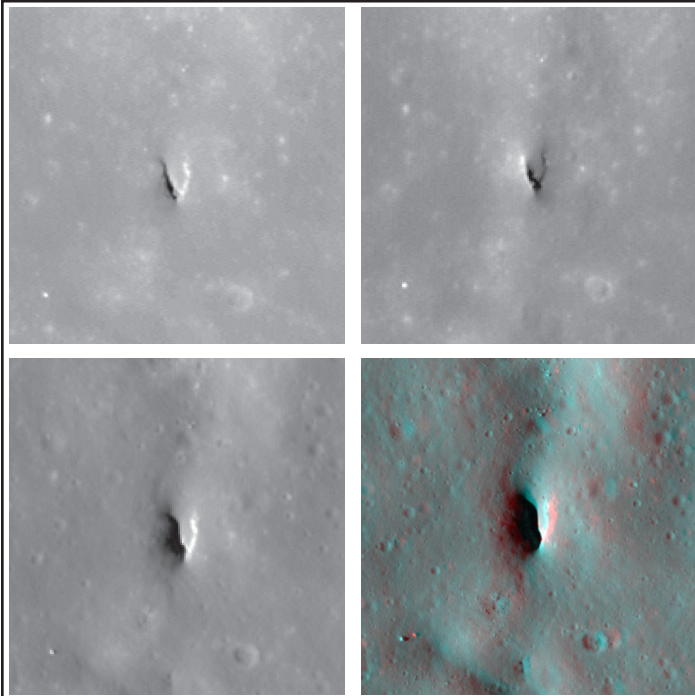
Data notes: Only two images show shadow from west inner rim.

Description

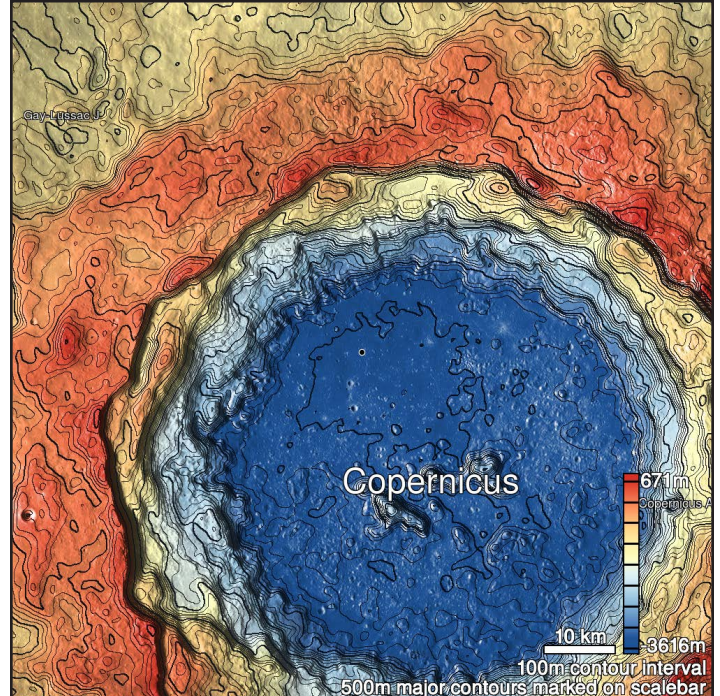
Semicircular pit. East wall (curved) is a smooth ~18-23 degree slope to base of west wall. Cannot tell for certain if there is any overhang, but low-Sun slew towards W wall shows a lot of wall and not lit floor; any overhang is ~<5m high and <25m deep. West vertical wall is 15m high, total depth including funnel is ~25m.

Copernicus 17a

Impact Melt Pit: Copernicus Crater



Upper left: NAC M1147289388R. Upper right: NAC M188378781L. Lower left: NAC M1175545925L. Lower right: Stereo anaglyph of NACs M135324446L (left eye, red) and M135317661L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 17a. Black dot marks the location of the pit.

Size and Location

Latitude	10.2403°N	Inner pit diameter	25 m × 15 m
Longitude	339.6013°E	Long axis azimuth	170°
Depth	7 m	Funnel diameter	N/A m × 30 m

Measurement Source Images

Image ID	M1147289388R	M188378781L	M1175545925L
Incidence	-16.62°	20.41°	-42.75°
Emission	-1.30°	-0.96°	1.65°
Time of Day	12.94	10.77	14.81
Pixel Scale	1.20 m/px	1.27 m/px	1.18 m/px
Depth	6.4 m	7.5 m	6.5 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M1147289388R line 31933, sample 2688

Best stereo pair: M135324446L / M135317661L

Other useful images: M157730473R

DTM:

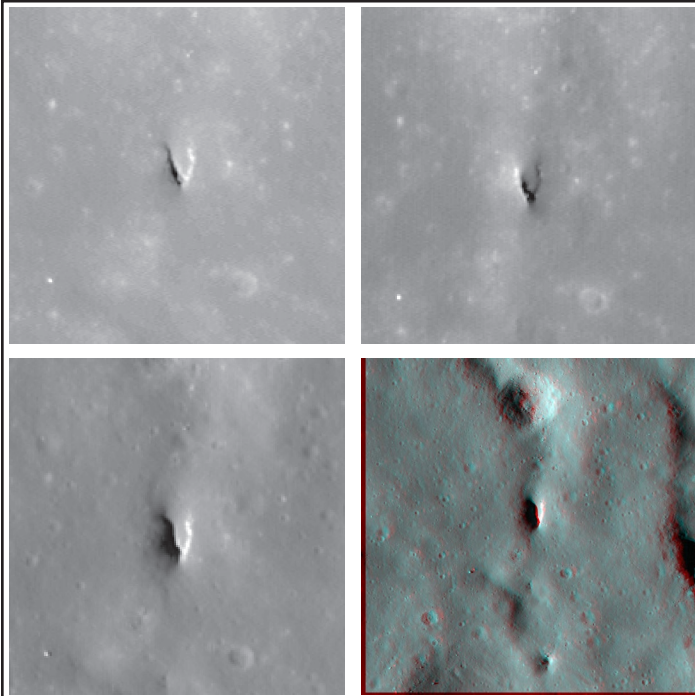
Data notes: Depths 1 and 3 are from W outer wall, Depth 2 is from E inner wall.

Description

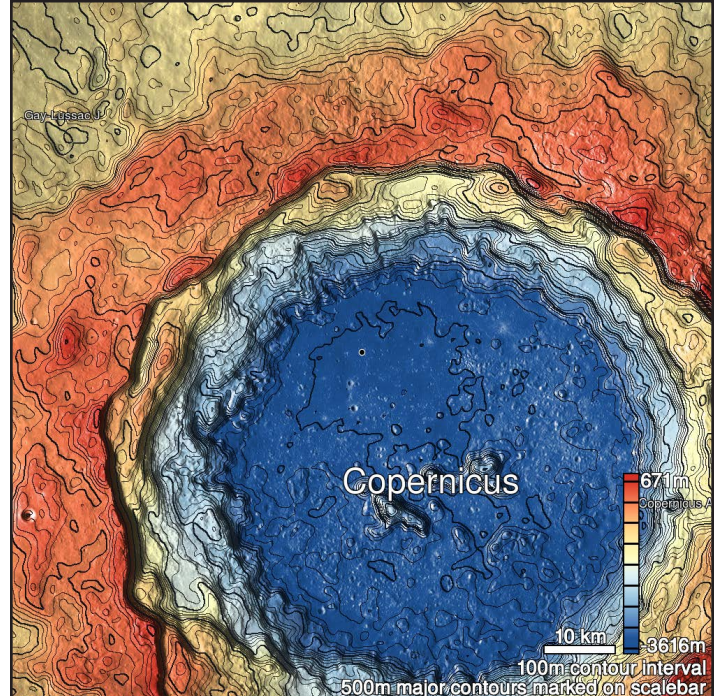
Linear pit in a linear series of rounded depressions. N wall appears to be a slope to the S end, where there is a deeper drop-off along SW wall (Copernicus 17b). There is a deep vertical-walled linear depression running parallel ~260m E, and a deep non-pit depression in the same series of shallow depressions ~270m S.

Copernicus 17b

Impact Melt Pit: Copernicus Crater



Upper left: NAC M1147289388R. Upper right: NAC M188378781L. Lower left: NAC M1175545925L. Lower right: Stereo anaglyph of NACs M135324446L (left eye, red) and M135317661L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 17b. Black dot marks the location of the pit.

Size and Location

Latitude	10.2401°N	Inner pit diameter	10 m × 3 m
Longitude	339.6012°E	Long axis azimuth	160°
Depth	>10 m	Funnel diameter	10 m × 3 m

Measurement Source Images

Image ID	M1147289388R	M188378781L	M1175545925L
Incidence	-16.62°	20.41°	-42.75°
Emission	-1.30°	-0.96°	1.65°
Time of Day	12.94	10.77	14.81
Pixel Scale	1.20 m/px	1.27 m/px	1.18 m/px
Depth	>10 m	>7.8 m	>7.8 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M1147289388R line 31915, sample 2686

Best stereo pair: M135324446L / M135317661L

Other useful images: M157730473R

DTM:

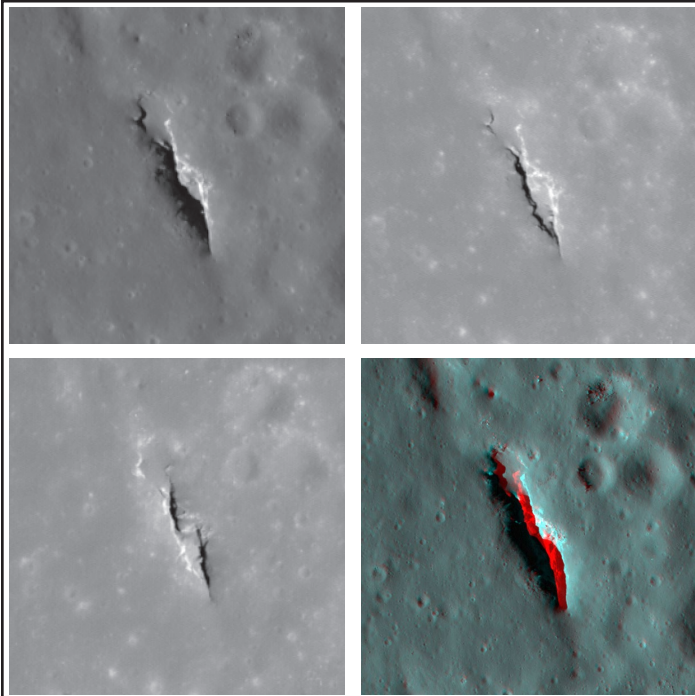
Data notes:

Description

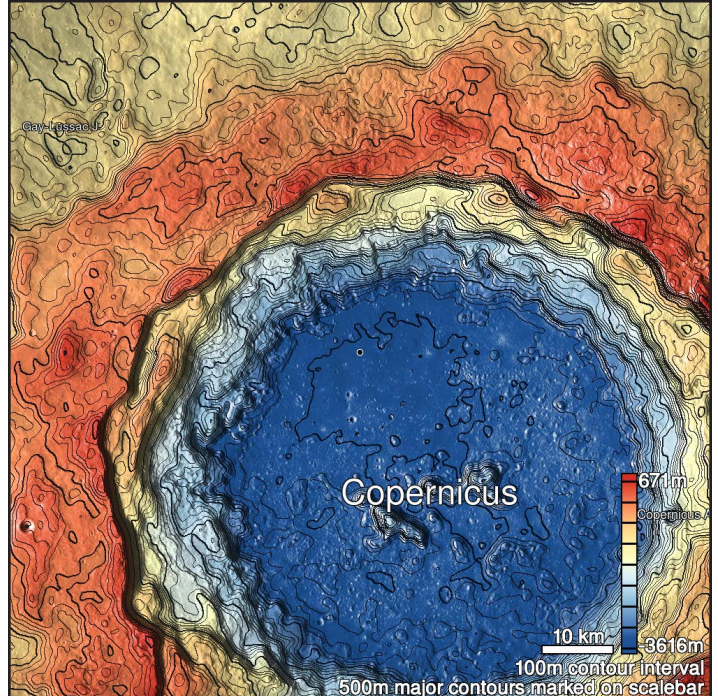
Inner pit of Copernicus 17a.

Copernicus 18

Impact Melt Pit: Copernicus Crater



Upper left: NAC M1175545925L. Upper right: NAC M1147289388R. Lower left: NAC M188378781L. Lower right: Stereo anaglyph of NACs M135324446L (left eye, red) and M135317661L (right eye, blue). All images are 300 m wide.



Color shaded relief map of the area around Copernicus 18. Black dot marks the location of the pit.

Size and Location

Latitude	10.2933°N	Inner pit diameter	137 m × 26 m
Longitude	339.5981°E	Long axis azimuth	155°
Depth	15 m	Funnel diameter	165 m × 48 m

Measurement Source Images

Image ID	M1175545925L	M1147289388R	M188378781L
Incidence	-42.76°	-16.65°	20.43°
Emission	1.73°	-1.23°	-0.91°
Time of Day	14.81	12.94	10.77
Pixel Scale	1.18 m/px	1.20 m/px	1.27 m/px
Depth	14.1 m	15.1 m	16.1 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1175545925L line 39101, sample 2593

Best stereo pair: M135324446L / M135317661L

Other useful images: M157730473R

DTM:

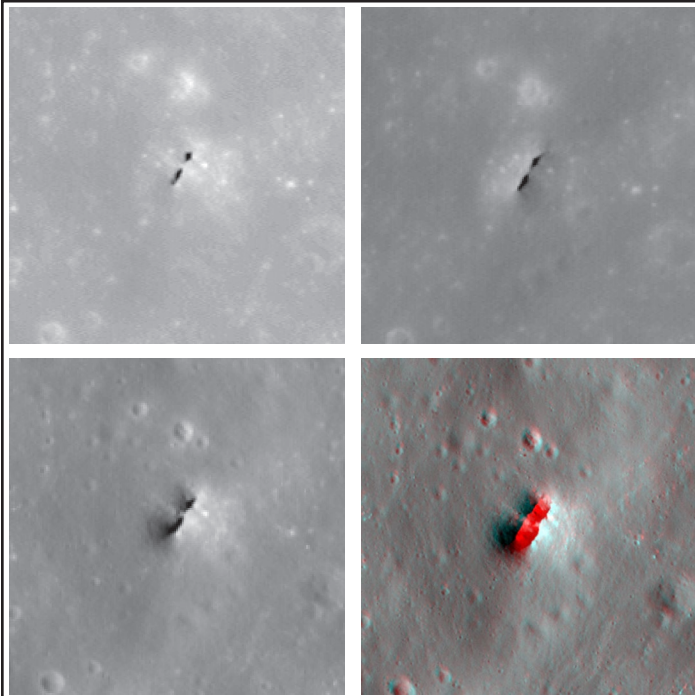
Data notes:

Description

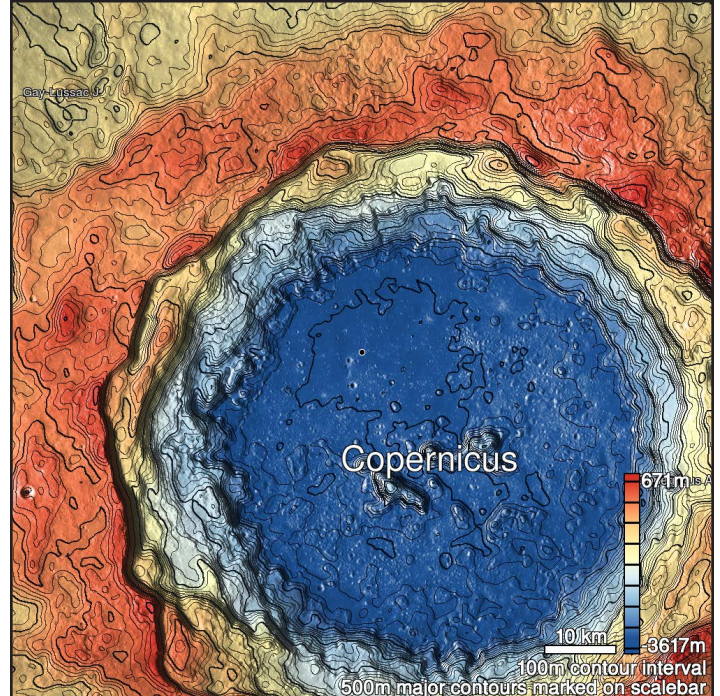
Linear pit running NNW-SSE. There are two wide sections: a shallow one in the north that may be drivable, and a deep one in the south, with a narrow (5m wide) section joining them. Depths are for the southern opening. There's a line of shallow depressions starting ~75m NW and trending away to the NW, and a <5m pit-like dark spot ~150m SW.

Copernicus 19a

Impact Melt Pit: Copernicus Crater



Upper left: NAC M1147289388R. Upper right: NAC M188378781L. Lower left: NAC M1175545925L. Lower right: Stereo anaglyph of NACs M135324446L (left eye, red) and M135317661L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 19a. Black dot marks the location of the pit.

Size and Location

Latitude	10.1326°N	Inner pit diameter	11 m × 3 m
Longitude	339.6052°E	Long axis azimuth	32°
Depth	>15 m	Funnel diameter	57 m × 51 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No?
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No?		

Measurement Source Images

Image ID	M1147289388R	M188378781L	M1175545925L
Incidence	-16.57°	20.36°	-42.74°
Emission	-1.41°	-1.04°	1.53°
Time of Day	12.94	10.77	14.81
Pixel Scale	1.19 m/px	1.27 m/px	1.18 m/px
Depth	>17.8 m	>8.9 m	>5.1 m

Location reference: NAC M1147289388R line 25610, sample 2869

Best stereo pair: M135324446L / M135317661L

Other useful images:

DTM:

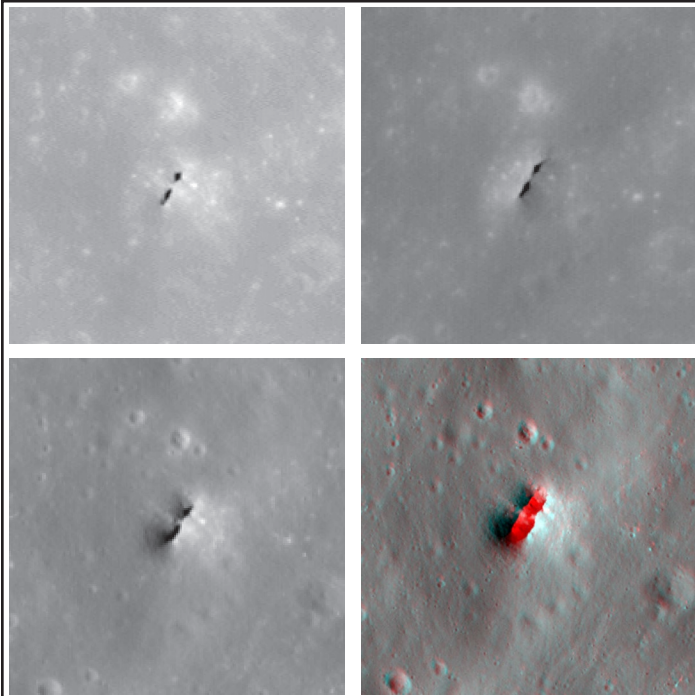
Data notes:

Description

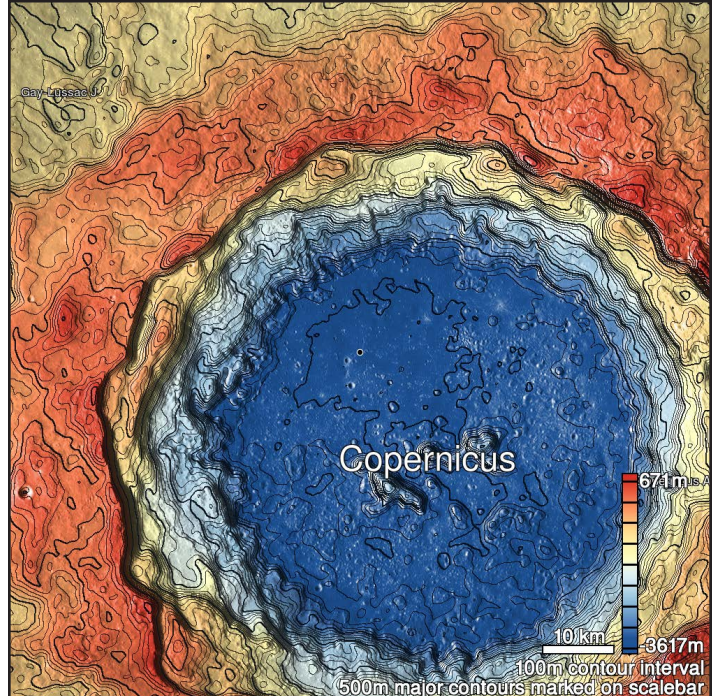
Larger (southern) of two pits adjoining a possible bridge. Both pits are very narrow, and at the bottom of a fairly deep (~12m) funnel. No floor is visible. No unambiguously non-impact-caused depressions nearby.

Copernicus 19b

Impact Melt Pit: Copernicus Crater



Upper left: NAC M1147289388R. Upper right: NAC M188378781L. Lower left: NAC M1175545925L. Lower right: Stereo anaglyph of NACs M135324446L (left eye, red) and M135317661L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 19b. Black dot marks the location of the pit.

Size and Location

Latitude	10.1329°N	Inner pit diameter	7 m × 4 m
Longitude	339.6055°E	Long axis azimuth	32°
Depth	>15 m	Funnel diameter	57 m × 51 m

Measurement Source Images

Image ID	M1147289388R	M188378781L	M1175545925L
Incidence	-16.57°	20.36°	-42.74°
Emission	-1.42°	-1.05°	1.52°
Time of Day	12.94	10.77	14.81
Pixel Scale	1.19 m/px	1.27 m/px	1.18 m/px
Depth	>14.1 m	>8.4 m	>3.4 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No?
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No?		

Location reference: NAC M1147289388R line 25634, sample 2874

Best stereo pair: M135324446L / M135317661L

Other useful images:

DTM:

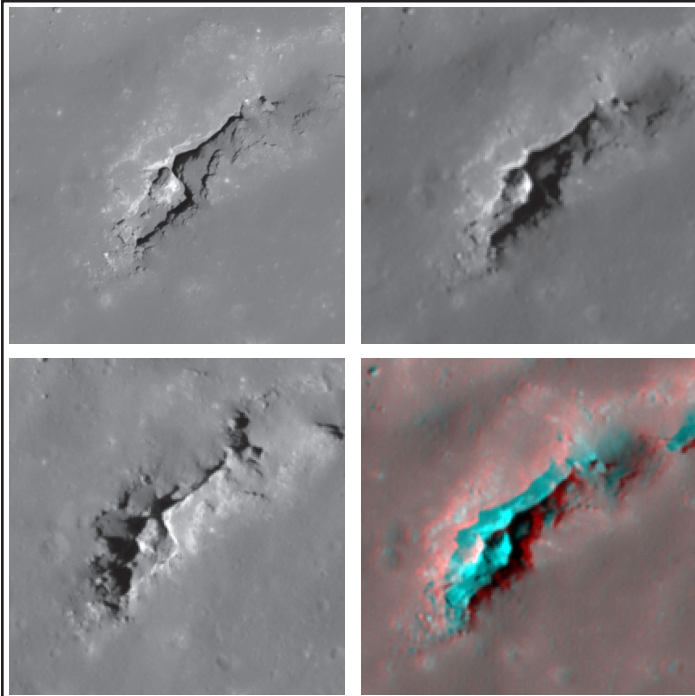
Data notes:

Description

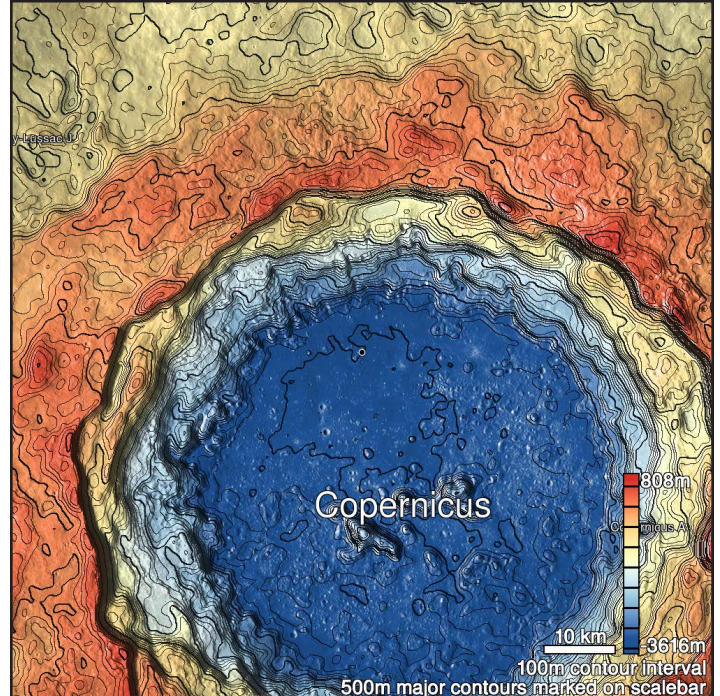
Smaller (northern) of two pits adjoining a possible bridge.

Copernicus 20

Impact Melt Pit: Copernicus Crater



Upper left: NAC M173049982L. Upper right: NAC M1136683665R. Lower left: NAC M1190842495L. Lower right: Stereo anaglyph of NACs M1106059896R (left eye, red) and M1106045604L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 20. Black dot marks the location of the pit.

Size and Location

Latitude	10.3522°N	Inner pit diameter	95 m × 31 m
Longitude	339.7351°E	Long axis azimuth	50°
Depth	14 m	Funnel diameter	N/A m × 48 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Measurement Source Images

Image ID	M173049982L	M1136683665R	M1190842495L
Incidence	20.86°	40.09°	-42.32°
Emission	-0.57°	1.44°	0.94°
Time of Day	10.84	9.41	14.72
Pixel Scale	0.47 m/px	1.15 m/px	0.96 m/px
Depth	14.9 m	13.2 m	13.0 m

Location reference: NAC M173049982L line 51051, sample 4523

Best stereo pair: M1106059896R / M1106045604L

Other useful images:

DTM:

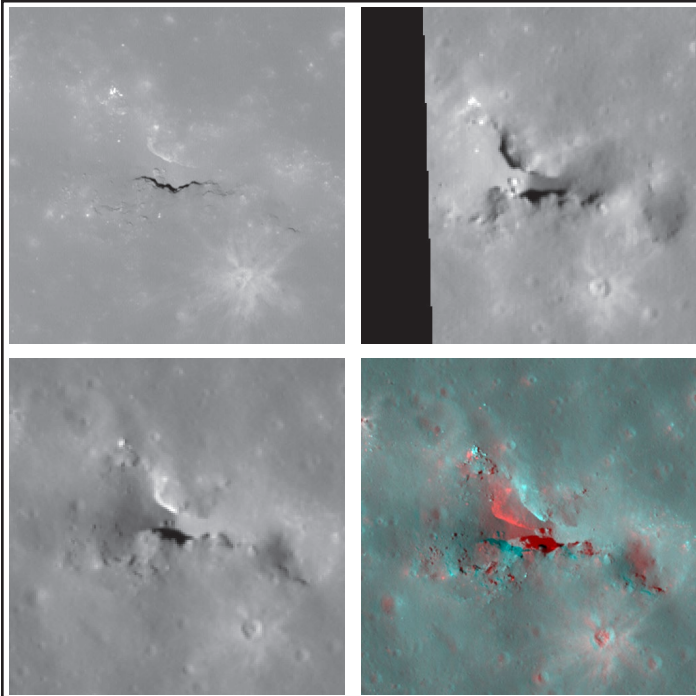
Data notes: See description for dimension details. Depths are to rectangular section near large block; narrow crevice may be deeper.

Description

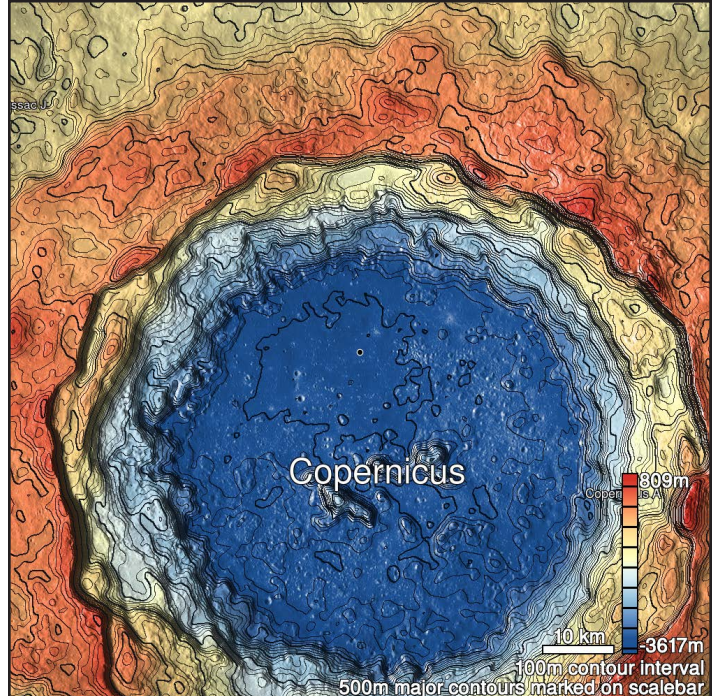
Long pit at the SW end of a linear depression/collapse that runs parallel to the base of a PRF. Consists of two parts: A rectangular section in the SW (~40x25m), and a narrow crevice running from the N corner NE along the N edge of the linear depression (~53x7m). There is a large (~18m) block at the NE end of the floor of the rectangular section that appears to have broken off of the SE wall intact. There is a shallower linear depression running parallel ~75m NW.

Copernicus 21

Uncertain Impact Melt Pit: Copernicus Crater



Upper left: NAC M155369774L. Upper right: NAC M1136683665L. Lower left: NAC M1175545925R. Lower right: Stereo anaglyph of NACs M153014813R (left eye, red) and M153008029R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 21. Black dot marks the location of the pit.

Size and Location

Latitude	10.1943°N	Inner pit diameter	44 m × 17 m
Longitude	339.8470°E	Long axis azimuth	105°
Depth	15 m	Funnel diameter	150 m × 60 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Measurement Source Images

Image ID	M155369774L	M1136683665L	M1175545925R
Incidence	-9.70°	39.94°	-42.98°
Emission	0.42°	-0.27°	-2.18°
Time of Day	12.29	9.42	14.83
Pixel Scale	0.43 m/px	1.15 m/px	1.18 m/px
Depth	15.2 m	15.3 m	13.7 m

Location reference: NAC M155369774L line 38727, sample 4738

Best stereo pair: M153014813R / M153008029R

Other useful images:

DTM:

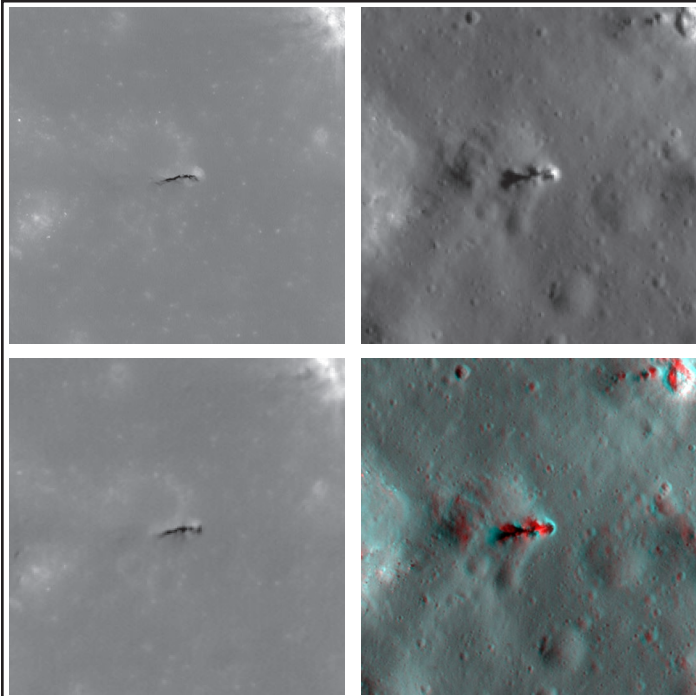
Data notes: Depth 1 is extremely high-Sun.

Description

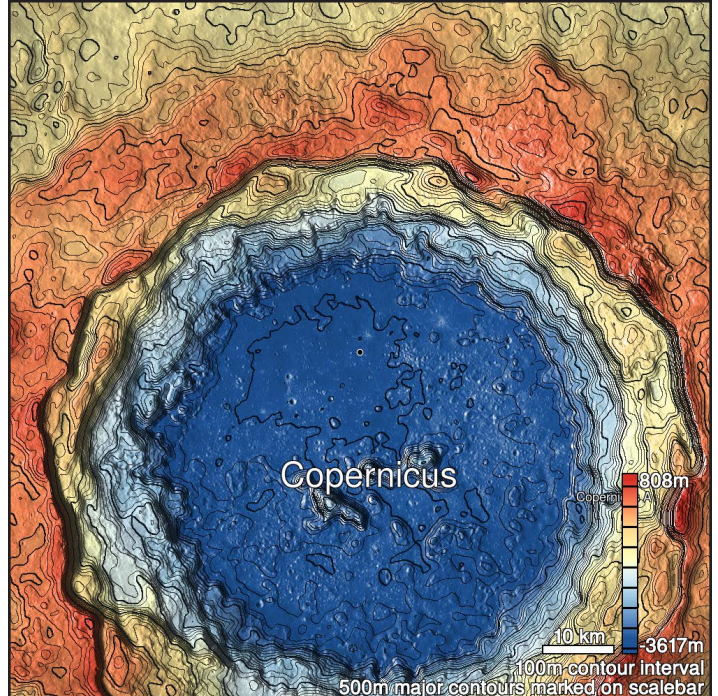
Irregular pit/canyon at the E end of a linear depression. There are vertical walls on the N and S sides, with open slopes to the surface on E and W (W slope is into the linear depression, E slope is into a small circular depression). No other pits in the immediate area, but Copernicus 13 is ~650m ESE.

Copernicus 22

Impact Melt Pit: Copernicus Crater



Upper left: NAC M155369774R. Upper right: NAC M1188488085R. Lower left: NAC M1103695396R. Lower right: Stereo anaglyph of NACs M165978380L (left eye, red) and M165971594L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 22. Black dot marks the location of the pit.

Size and Location

Latitude	10.2095°N	Inner pit diameter	17 m × 3 m
Longitude	339.8873°E	Long axis azimuth	75°
Depth	>11 m	Funnel diameter	29 m × 11 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No?	Colinear pits	No?
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Measurement Source Images

Image ID	M155369774R	M1188488085R	M1103695396R
Incidence	-9.73°	-68.59°	17.44°
Emission	-1.22°	-1.03°	0.69°
Time of Day	12.29	16.53	11.12
Pixel Scale	0.43 m/px	0.95 m/px	1.21 m/px
Depth	>11.7 m	>3 m	>10.5 m

Location reference: NAC M155369774R line 39471, sample 2631

Best stereo pair: M165978380L / M165971594L

Other useful images:

DTM:

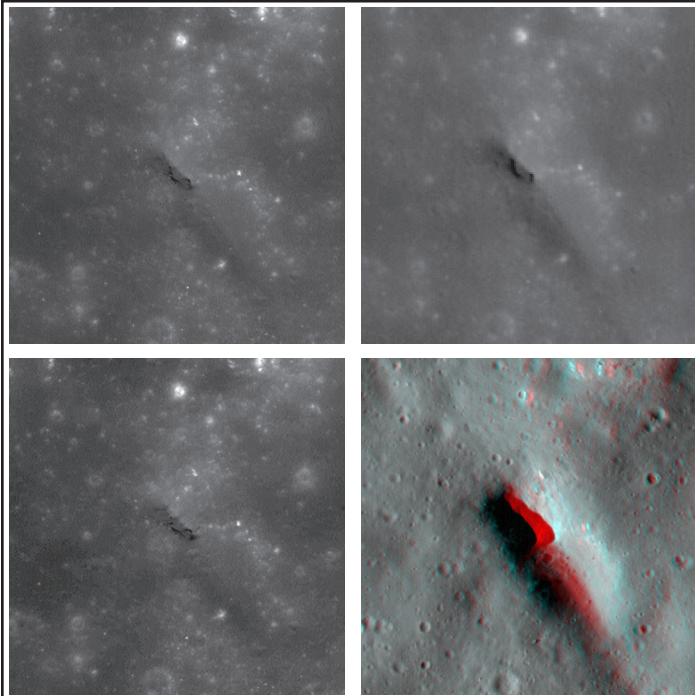
Data notes: Funnel only includes the immediately adjacent slopes in, not the broader shallow depression this pit is in.

Description

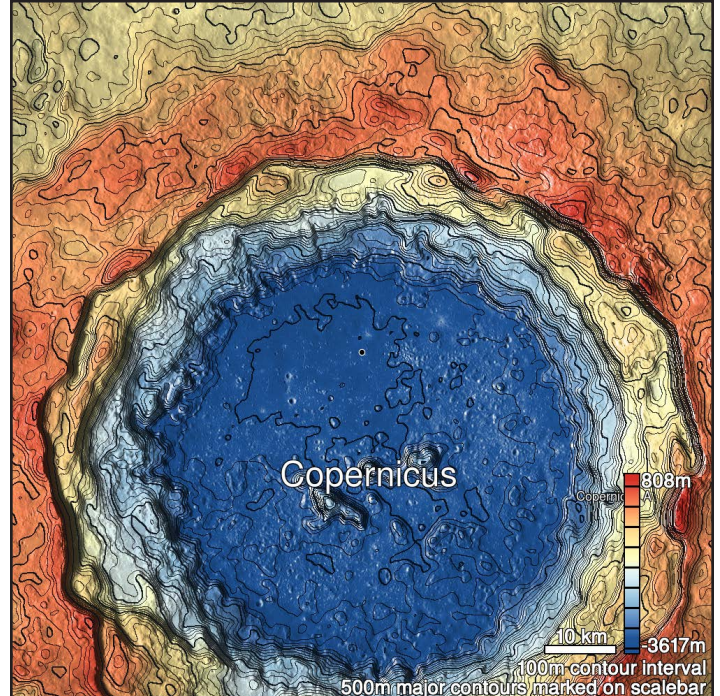
Linear/irregular pit at the E end of a set of broad shallow circular depressions. Extremely narrow- no clear view of the floor, although it might be visible in the M16597... stereo pair, and possibly M1188488085R. Hints of a linear depression running E of the pit, passing just south of a mound. Copernicus 23 is ~300m E.

Copernicus 23

Impact Melt Pit: Copernicus Crater



Upper left: NAC M155369774R. Upper right: NAC M1177898186L. Lower left: NAC M109365462R. Lower right: Stereo anaglyph of NACs M165978380L (left eye, red) and M165971594R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 23. Black dot marks the location of the pit.

Size and Location

Latitude	10.2067°N	Inner pit diameter	9 m × 6 m
Longitude	339.8978°E	Long axis azimuth	125°
Depth	9 m	Funnel diameter	118 m × 45 m

Measurement Source Images

Image ID	M155369774R	M1177898186L	M109365462R
Incidence	-9.74°	-16.14°	12.06°
Emission	-1.65°	1.85°	2.48°
Time of Day	12.29	12.90	11.81
Pixel Scale	0.43 m/px	1.18 m/px	0.52 m/px
Depth	8.2 m	8.0 m	9.4 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	No?	Colinear pits	No?
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

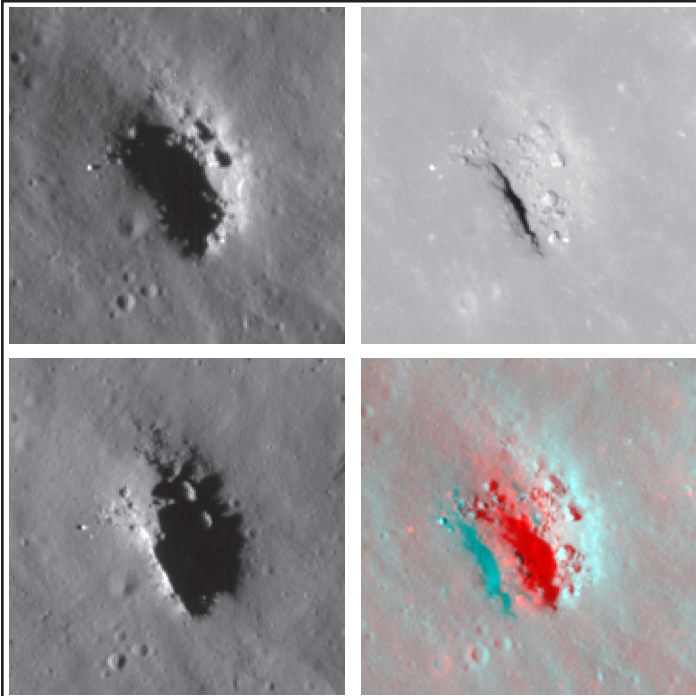
Location reference: NAC M155369774R line 39305, sample 3365
Best stereo pair: M165978380L / M165971594R
Other useful images: M124701702L, M124708491R, M153008029R
DTM:
Data notes: All images are VERY high Sun.

Description

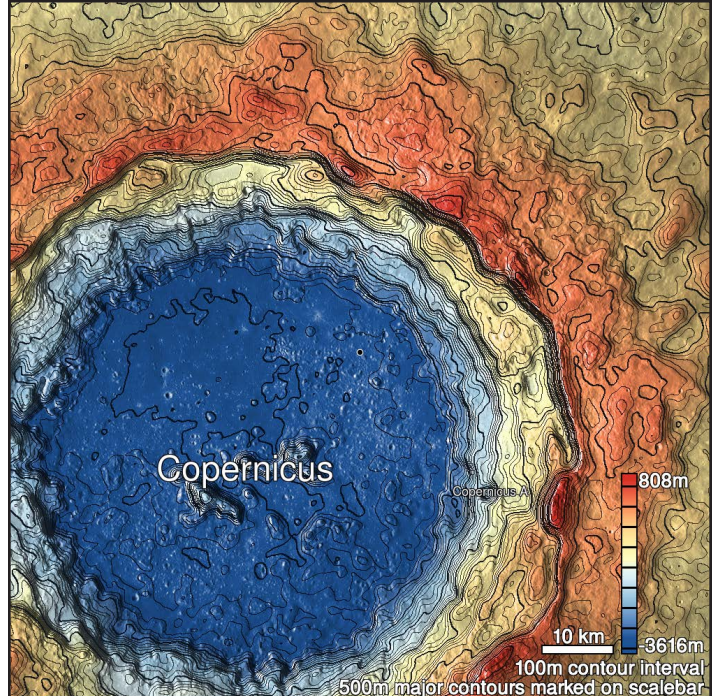
Small linear pit at the NW end of a larger elliptical depression. Exact bounds are hard to determine, as the south end is a very dark material (possibly a slope to inner floor?), and there are some small, very deep depressions just north of the inner pit. On the S end of a ~100m wide mound. Copernicus 14 is ~400m N, Copernicus 13 is ~1km SW, Copernicus X in ~300m W. Roughly in line with a large linear depression that starts ~1km SE.

Copernicus 24

Impact Melt Pit: Copernicus Crater



Upper left: NAC M1127256342R. Upper right: NAC M1147282262L. Lower left: NAC M1169650726L. Lower right: Stereo anaglyph of NACs M1206153124R (left eye, red) and M1206139057R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Copernicus 24. Black dot marks the location of the pit.

Size and Location

Latitude	10.1810°N	Inner pit diameter	85 m × 52 m
Longitude	340.4814°E	Long axis azimuth	145°
Depth	16 m	Funnel diameter	130 m × 70 m

Measurement Source Images

Image ID	M1127256342R	M1147282262L	M1169650726L
Incidence	-70.17°	-16.49°	66.93°
Emission	-0.95°	1.70°	-2.94°
Time of Day	16.64	12.94	7.56
Pixel Scale	1.14 m/px	1.19 m/px	1.10 m/px
Depth	15.3 m	19.5 m	13.3 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No?	Beside dome	No
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1127256342R line 14058, sample 2114

Best stereo pair: M1206153124R / M1206139057R

Other useful images:

DTM:

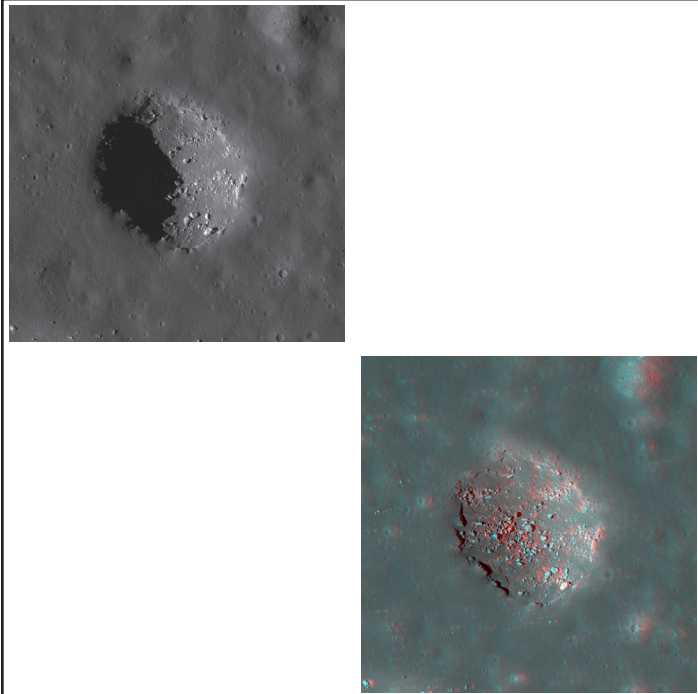
Data notes: Depths are to (in order): Eastern floor, just below two large rocks; Immediately adjacent to the west wall (very high Sun); Center of floor, shadow line running just barely between the two aforementioned large rocks (possibly hitting them).

Description

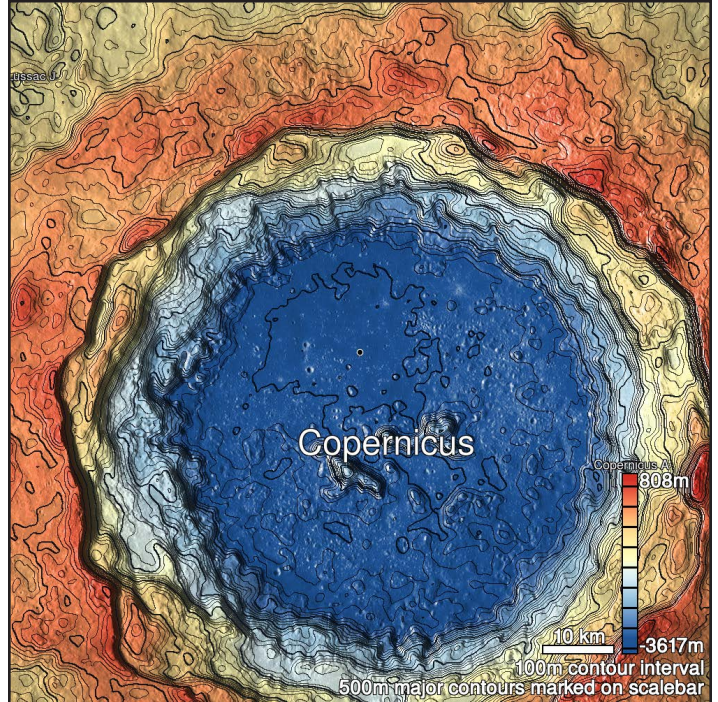
Semicircular round-bottomed pit, with hints of a linear depression in line with the long axis of the pit. NW wall is a slope from rim to floor. Unclear if floor is concave on all sides, or sloped down towards the E wall (that section is in shadow in the stereo images). Many large blocks on the floor. There is a mound ~200m W, and a suspiciously deep depression (collapse?) ~100m SE along the possible linear depression.

Copernicus LB2

Impact Melt Large Bowl Pit: Copernicus Crater



Upper left: NAC M1188488085L. Upper right: NAC . Lower left: NAC . Lower right: Stereo anaglyph of NACs M153014813L (left eye, red) and M153008029L (right eye, blue). All images are 700 m wide.



Color shaded relief map of the area around Copernicus LB2. Black dot marks the location of the pit.

Size and Location

Latitude	10.0588°N	Inner pit diameter	305 m × 260 m
Longitude	339.8038°E	Long axis azimuth	140°
Depth	65 m	Funnel diameter	355 m × 325 m

Measurement Source Images

Image ID	M1188488085L		
Incidence	-68.49°		
Emission	0.66°		
Time of Day	16.52		
Pixel Scale	0.95 m/px		
Depth	65.0 m		

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1188488085L line 22520, sample 4336

Best stereo pair: M153014813L / M153008029L

Other useful images:

DTM:

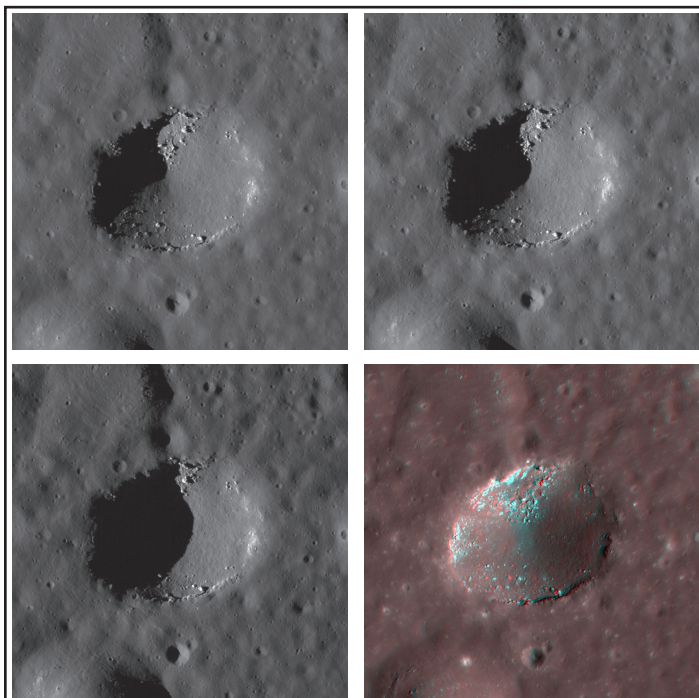
Data notes: M1188488085L is the only non-slewed image with a shadow falling at the deepest point of the pit.

Description

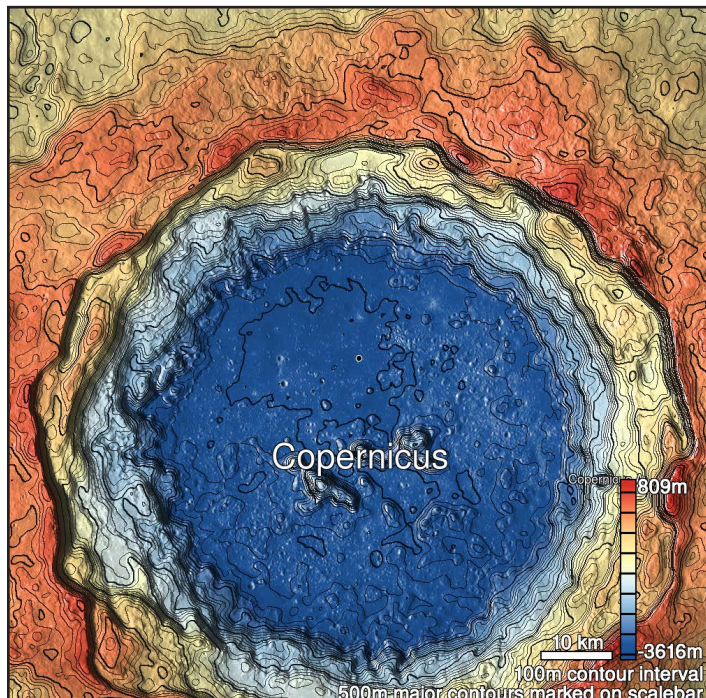
Elliptical pit with very rounded floor (vertical walls are only ~15-20m high). Numerous 3-20m boulders in the interior, and there are several places where a slope runs from rim to center. No other features of note in the immediate area.

Copernicus LB3

Impact Melt Large Bowl Pit: Copernicus Crater



Upper left: NAC M1188488085R. Upper right: NAC M1142574974L. Lower left: NAC M102286291L. Lower right: Stereo anaglyph of NACs M1106059896L (left eye, red) and M1106045604L (right eye, blue). All images are 800 m wide.



Color shaded relief map of the area around Copernicus LB3. Black dot marks the location of the pit.

Size and Location

Latitude	10.0954°N	Inner pit diameter	385 m × 315 m
Longitude	339.9231°E	Long axis azimuth	60°
Depth	66 m	Funnel diameter	430 m × 330 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No?		

Measurement Source Images

Image ID	M1188488085R	M1142574974L	M102286291L
Incidence	-68.61°	-70.97°	-76.82°
Emission	-1.62°	2.34°	2.86°
Time of Day	16.53	16.73	17.11
Pixel Scale	0.95 m/px	1.19 m/px	1.25 m/px
Depth	66.0 m	65.0 m	>55 m

Location reference: NAC M1188488085R line 21663, sample 3249

Best stereo pair: M1106059896L / M1106045604L

Other useful images:

DTM:

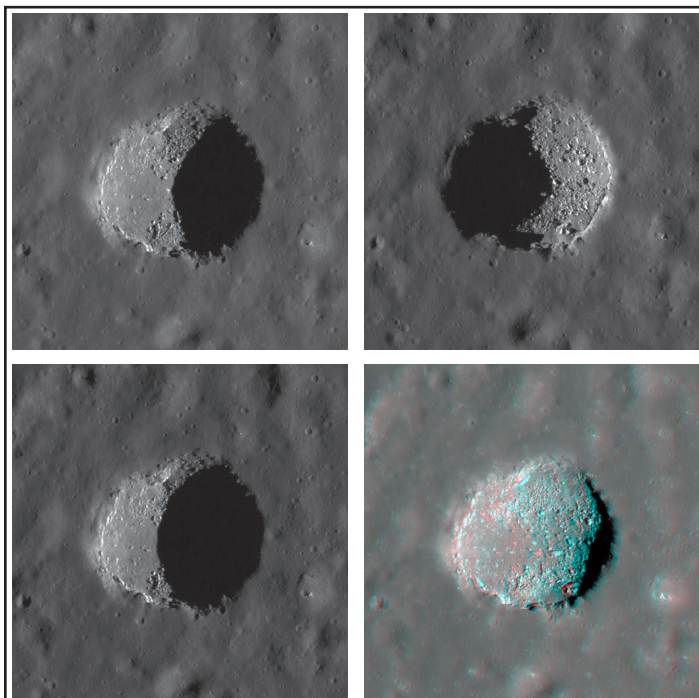
Data notes:

Description

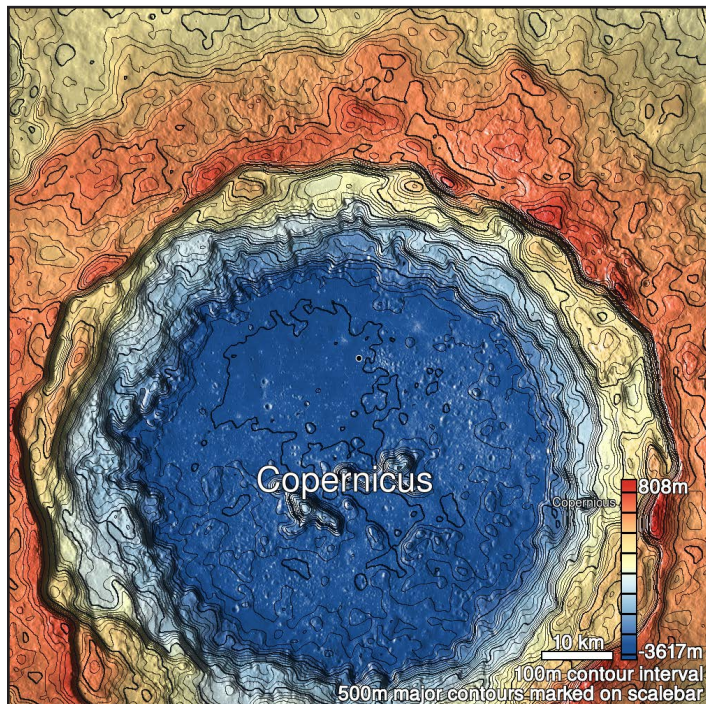
Elliptical pit with very rounded floor (vertical walls are <20m high). Floor is very clear compared to the other Copernicus LB_ pits, with most boulders confined to a wedge coming down from the N wall. Drive-in accessibility is limited to a few points along the NE rim, and one gap in the SW rim.

Copernicus LB4

Impact Melt Large Bowl Pit: Copernicus Crater



Upper left: NAC M1139037292R. Upper right: NAC M1142574974L. Lower left: NAC M193089462R. Lower right: Stereo anaglyph of NACs M1213214112R (left eye, red) and M1213200044R (right eye, blue). All images are 700 m wide.



Color shaded relief map of the area around Copernicus LB4. Black dot marks the location of the pit.

Size and Location

Latitude	10.2041°N	Inner pit diameter	320 m × 275 m
Longitude	339.9985°E	Long axis azimuth	65°
Depth	78 m	Funnel diameter	375 m × 340 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	No	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No?	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1139037292R	M1142574974L	M193089462R
Incidence	67.12°	-71.04°	72.67°
Emission	2.18°	1.23°	2.59°
Time of Day	7.55	16.73	7.18
Pixel Scale	1.15 m/px	1.19 m/px	1.26 m/px
Depth	79.0 m	77.0 m	>69 m

Location reference: NAC M1139037292R line 11562, sample 4147

Best stereo pair: M1213214112R / M1213200044R

Other useful images: M1103695396L, M168333206L

DTM:

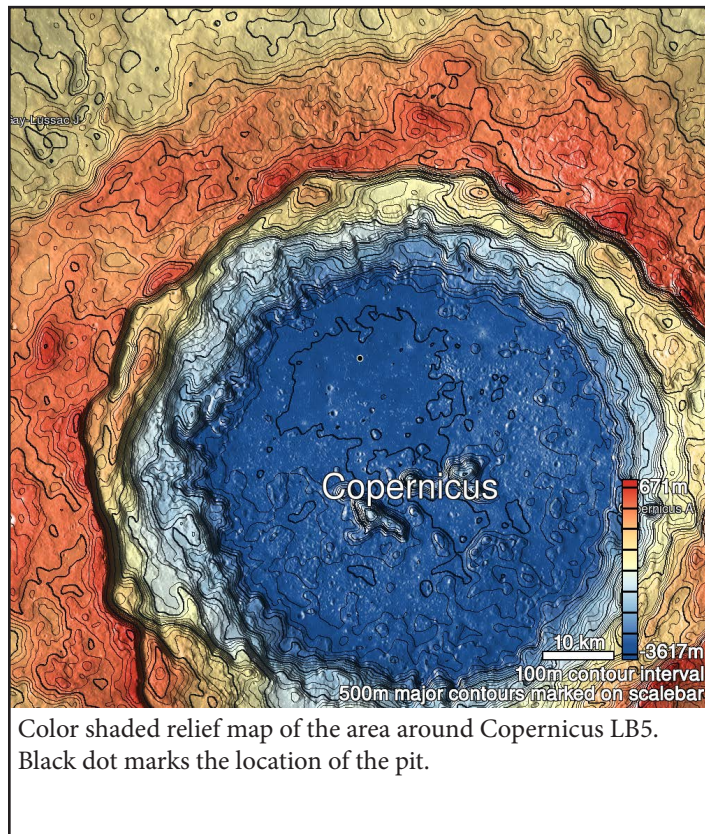
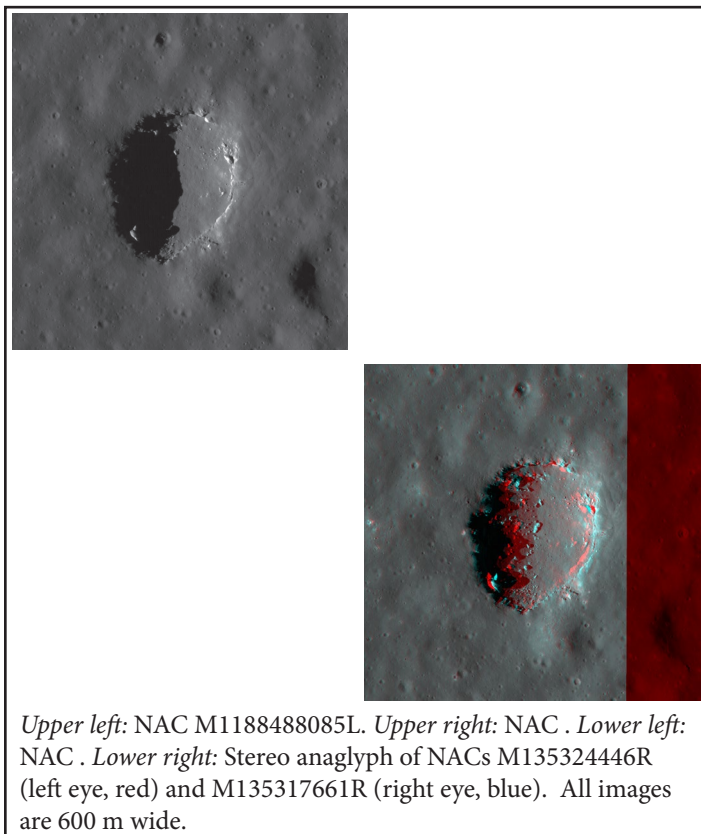
Data notes:

Description

Elliptical pit with very rounded floor, and taller walls than most of the other Copernicus LB_ pits (vertical walls are up to 35m high). This pit was previously identified as “Copernicus 15”. Floor has numerous 5-20m boulders. Possible traversable slope at two points (NW rim and NNE rim), but paths may be blocked by boulders. Rim is mostly unbroken. There is a narrow slope down towards the rim on the SE side, reminiscent of a Type-I APC (Cushing et al. 2015), but slews do not reveal any openings above the current floor-level.

Copernicus LB5

Impact Melt Large Bowl Pit: Copernicus Crater



Size and Location

Latitude	10.2349°N	Inner pit diameter	270 m × 220 m
Longitude	339.6899°E	Long axis azimuth	10°
Depth	50 m	Funnel diameter	290 m × 230 m

Measurement Source Images

Image ID	M1188488085L		
Incidence	-68.40°		
Emission	2.67°		
Time of Day	16.52		
Pixel Scale	0.96 m/px		
Depth	50.0 m		

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1188488085L line 16849, sample 1019

Best stereo pair: M135324446R / M135317661R

Other useful images: M1136683665R, M1190842495L

DTM:

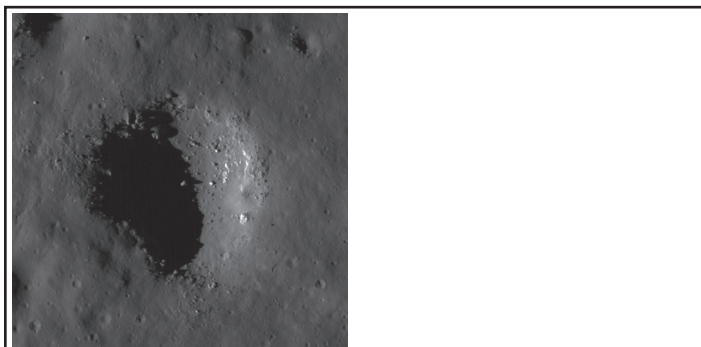
Data notes: M1188488085L is the only non-slewed image with a shadow falling near the deepest point of the pit (~20m E of deepest point).

Description

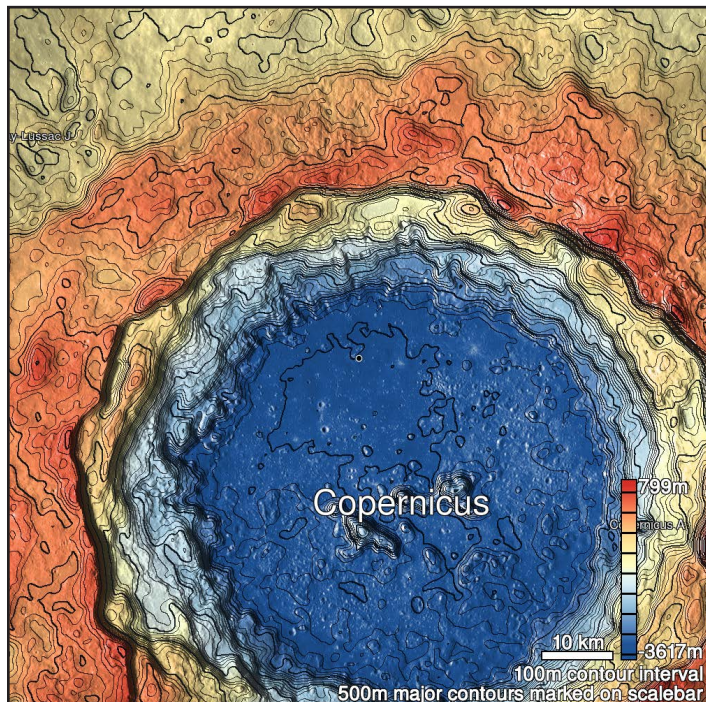
Elliptical pit with very rounded floor (vertical walls <20m high). Interior mostly only has boulders on the W side, and there is one break in the rim with a slope to the floor on the NW side. Slewed images show no overhangs. There are two PRFs near the rim.

Copernicus LB6

Impact Melt Large Bowl Pit: Copernicus Crater



Upper left: NAC M1188488085L. Upper right: NAC. Lower left: NAC. Lower right: Stereo anaglyph of NACs M1106059896R (left eye, red) and M1106045604L (right eye, blue). All images are 500 m wide.



Color shaded relief map of the area around Copernicus LB6. Black dot marks the location of the pit.

Size and Location

Latitude	10.3127°N	Inner pit diameter	250 m × 225 m
Longitude	339.7263°E	Long axis azimuth	175°
Depth	64 m	Funnel diameter	290 m × 260 m

Measurement Source Images

Image ID	M1188488085L		
Incidence	-68.44°		
Emission	1.92°		
Time of Day	16.52		
Pixel Scale	0.96 m/px		
Depth	64.0 m		

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	No?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1188488085L line 14451, sample 2236

Best stereo pair: M1106059896R / M1106045604L

Other useful images: M117545925R

DTM:

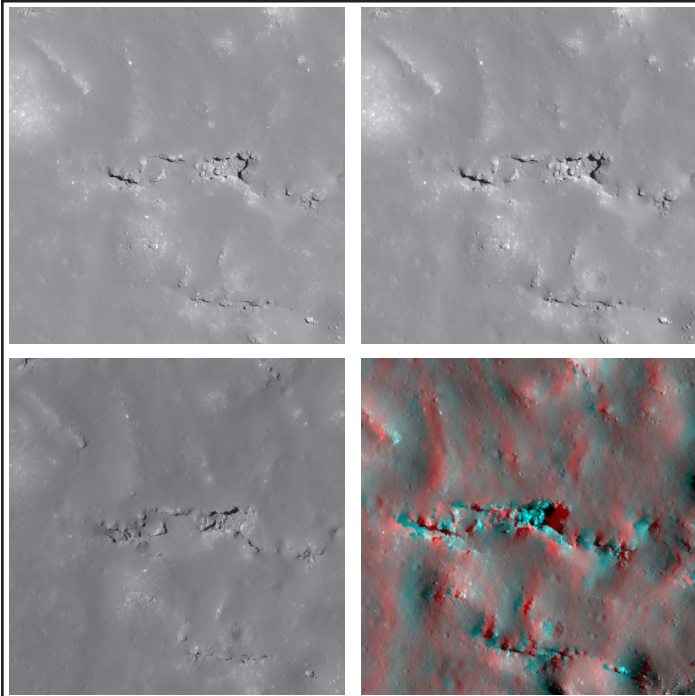
Data notes: M1188488085L is the only non-slewed image with a shadow falling near the deepest point of the pit.

Description

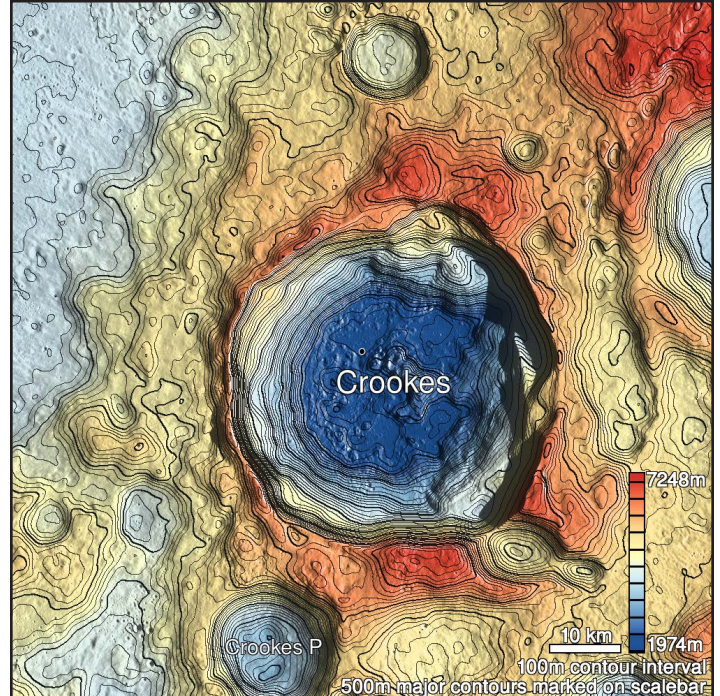
Elliptical pit with very rounded floor. Smaller and more degraded-looking than the other Copernicus LB_pits, with only the SW wall being more than a couple meters high (it is ~m tall). Interior mostly only has boulders on the W side, and there is one break in the rim with a slope to the floor on the NW side. Slewed image mostly precludes overhangs, although there is an ambiguous darker pixel in M193025138R at the base of the SW wall.

Crookes 1

Impact Melt Pit: Crookes Crater



Upper left: NAC M110316458R. Upper right: NAC M1119966613L. Lower left: NAC M1099931168R. Lower right: Stereo anaglyph of NACs M1214163158R (left eye, red) and M1214149094L (right eye, blue). All images are 500 m wide.



Color shaded relief map of the area around Crookes 1. Black dot marks the location of the pit.

Size and Location

Latitude	10.2424°S	Inner pit diameter	213 m × 67 m
Longitude	194.7536°E	Long axis azimuth	70°
Depth	17 m	Funnel diameter	259 m × 77 m

Measurement Source Images

Image ID	M110316458R	M1119966613L	M1099931168R
Incidence	16.33°	28.48°	-31.04°
Emission	-8.52°	-0.53°	-1.14°
Time of Day	11.07	10.24	14.00
Pixel Scale	0.59 m/px	0.93 m/px	1.00 m/px
Depth	20.5 m	14.7 m	15.8 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No?
In Depression	No		

Location reference: NAC M110316458R line 12322, sample 1076

Best stereo pair: M1214163158R / M1214149094L

Other useful images: M176353098R

DTM:

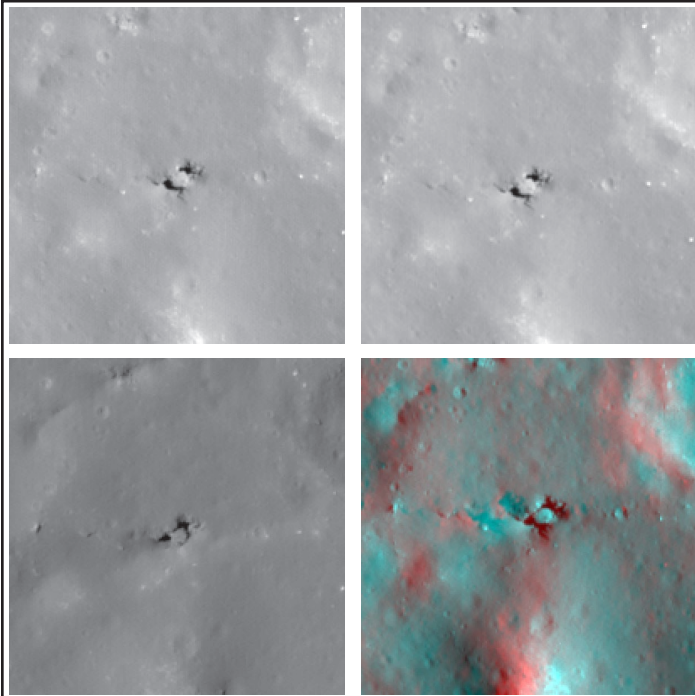
Data notes: All depths are of eastern section. Central section is >10m deep (M1097573241L), and western section is ~18m deep (M110316458R).

Description

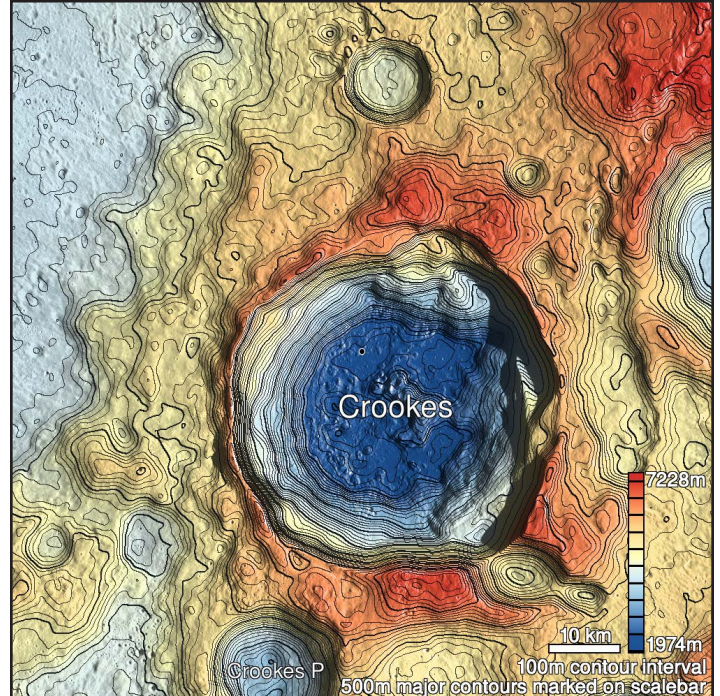
A complicated and very large pit. There are three main sections: The E end is the deepest part, and does not have any slopes leading into it. It is separated from the central section by a jumble of 10-15m boulders. The central section is wide (70m across) and round-bottomed, and the south wall is a smooth slope to the floor. The W section is a narrow (50x17m) canyon, barely opening into the central section, and with a smooth slope from the W end down to the floor. There are deep fracture systems to the N and S, and some depressions/collapses past the E end.

Crookes 2

Impact Melt Pit: Crookes Crater



Upper left: NAC M1119966613L. Upper right: NAC M1150591312L. Lower left: NAC M1099931168R. Lower right: Stereo anaglyph of NACs M1214163158R (left eye, red) and M1214149094R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 2. Black dot marks the location of the pit.

Size and Location

Latitude	10.1275°S	Inner pit diameter	18 m × 11 m
Longitude	194.7446°E	Long axis azimuth	45°
Depth	10 m	Funnel diameter	NA m × 20 m

Measurement Source Images

Image ID	M1119966613L	M1150591312L	M1099931168R
Incidence	28.44°	27.39°	-31.00°
Emission	-0.31°	-2.22°	-1.01°
Time of Day	10.24	10.31	14.00
Pixel Scale	0.93 m/px	1.02 m/px	1.00 m/px
Depth	8.9 m	10.6 m	9.5 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No?
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	Yes		

Location reference: NAC M1119966613L line 38120, sample 4903

Best stereo pair: M1214163158R / M1214149094R

Other useful images:

DTM:

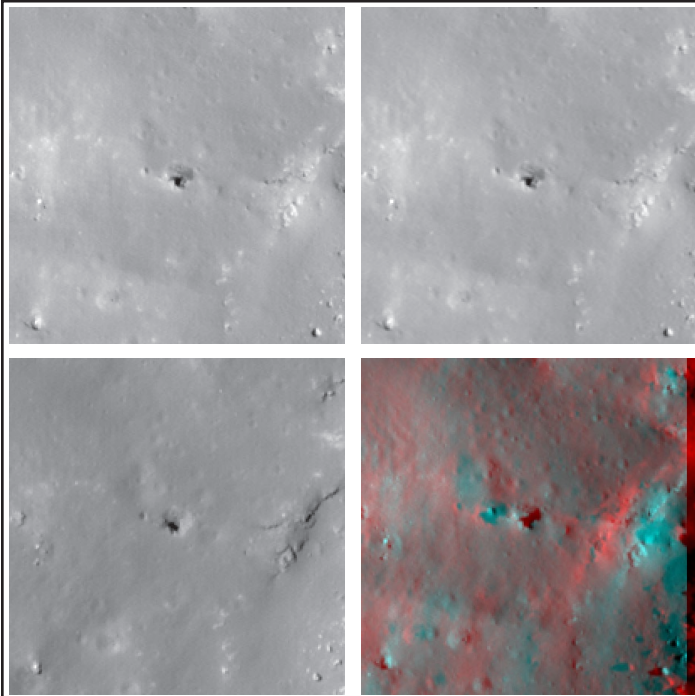
Data notes:

Description

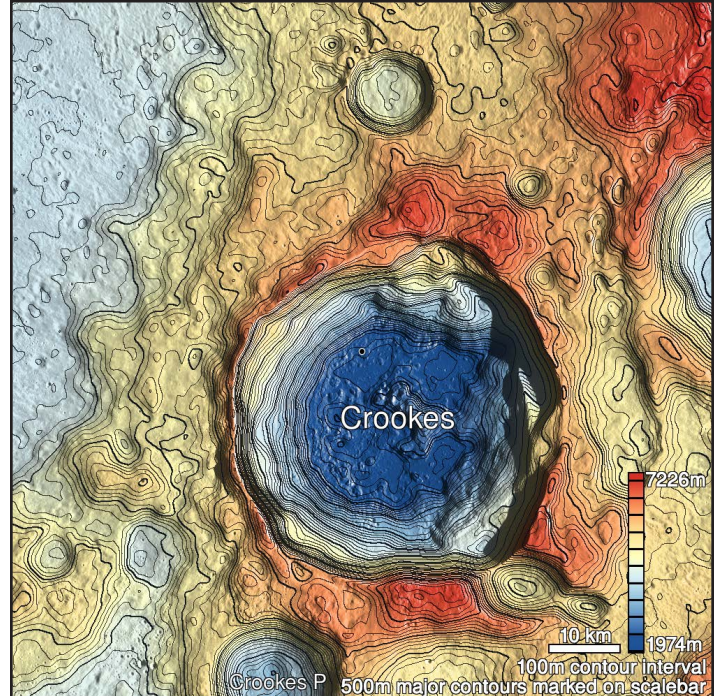
A rectangular pit with a relatively enormous boulder filling ~80% of it. The boulder is roughly round, and stretches from NW wall to SE wall. The SW wall is a gentle slope that leads into a ~60x30m depression, and the SE wall may also be a slope. No floor visible, depths are from SW slope near boulder. In line with fractures 125 and 250 m to the SW, and there's another fracture/depression string ~100m north.

Crookes 3

Impact Melt Pit: Crookes Crater



Upper left: NAC M1119966613R. Upper right: NAC M1150591312L. Lower left: NAC M1099931168R. Lower right: Stereo anaglyph of NACs M1214163158R (left eye, red) and M1214149094R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 3. Black dot marks the location of the pit.

Size and Location

Latitude	10.0749°S	Inner pit diameter	6 m × 6 m
Longitude	194.7337°E	Long axis azimuth	115°
Depth	>9 m	Funnel diameter	17 m × 17 m

Measurement Source Images

Image ID	M1119966613R	M1150591312L	M1099931168R
Incidence	28.43°	27.38°	-30.98°
Emission	-0.11°	-2.00°	-0.83°
Time of Day	10.24	10.31	14.00
Pixel Scale	0.93 m/px	1.02 m/px	1.00 m/px
Depth	>8.1 m	>8.5 m	>10.7 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1119966613R line 40218, sample 325

Best stereo pair: M1214163158R / M1214149094R

Other useful images: M1183552745R

DTM:

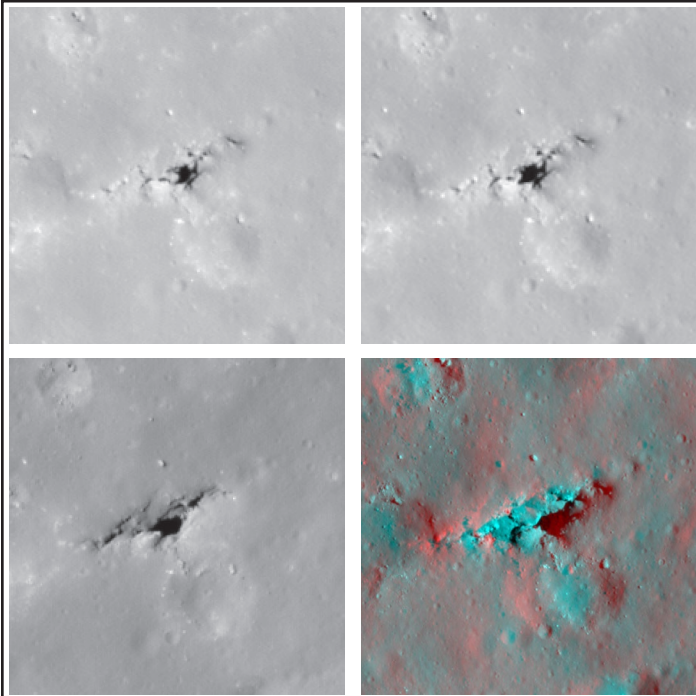
Data notes:

Description

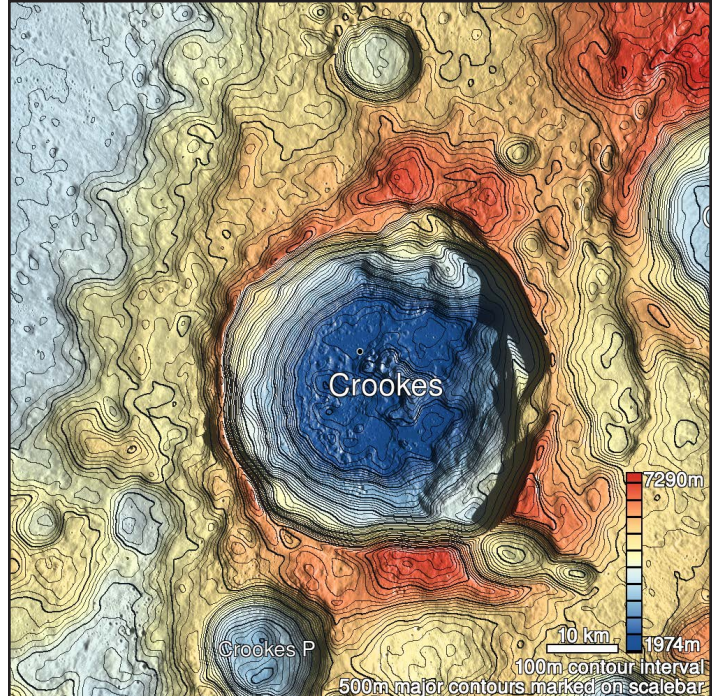
Round pit, much deeper in the south than the north (possibly a large funnel, possibly a shelf). Sizes assume that it is a large funnel. There's a larger depression/cliff 70m to the east, and a tiny (~2m diameter) dark spot that is likely a tiny pit/depression 15m to the west.

Crookes 4

Impact Melt Pit: Crookes Crater



Upper left: NAC M1135276569R. Upper right: NAC M1150591312L. Lower left: NAC M1191791679L. Lower right: Stereo anaglyph of NACs M176359843R (left eye, red) and M176353098R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 4. Black dot marks the location of the pit.

Size and Location

Latitude	10.2294°S	Inner pit diameter	15 m × 12 m
Longitude	194.7791°E	Long axis azimuth	50°
Depth	>25 m	Funnel diameter	84 m × 41 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes?
In Depression	No		

Measurement Source Images

Image ID	M1135276569R	M1150591312L	M1191791679L
Incidence	24.21°	27.40°	-31.37°
Emission	1.81°	-2.89°	2.97°
Time of Day	10.50	10.31	14.02
Pixel Scale	0.99 m/px	1.02 m/px	0.88 m/px
Depth	>20 m	>25 m	>24 m

Location reference: NAC M1135276569R line 47996, sample 3549

Best stereo pair: M176359843R / M176353098R

Other useful images:

DTM:

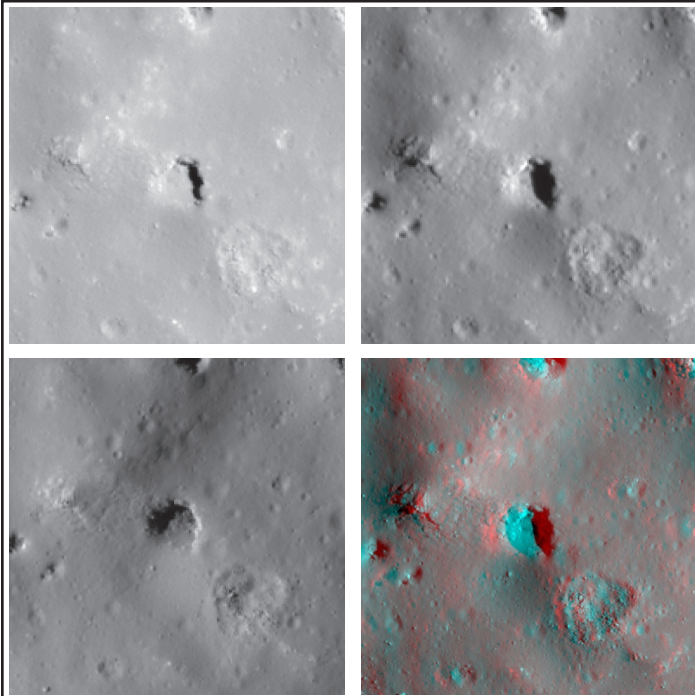
Data notes:

Description

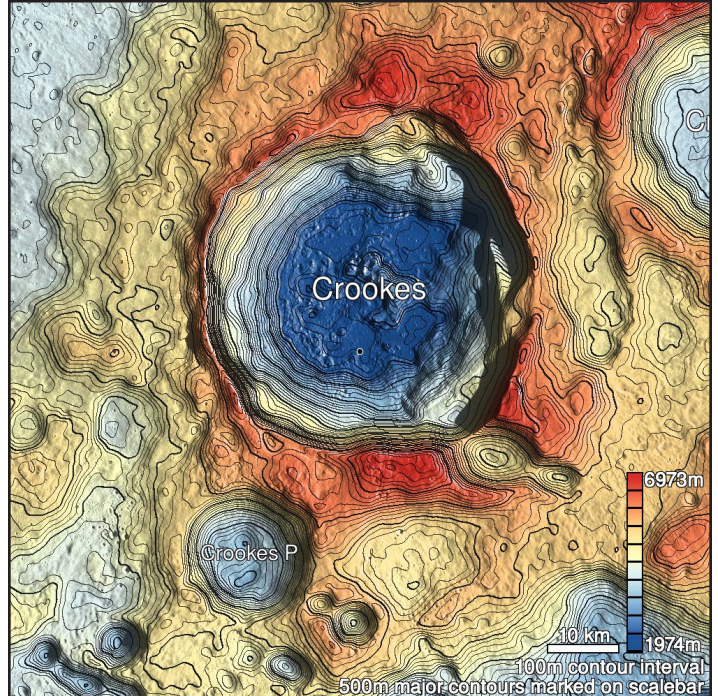
Round/irregular pit in a ~100m long fracture. No floor visible, but depths 1 and 2 might be to top of a boulder on the floor. A series of broad, shallow depressions runs off to the WSW. Crookes 11a is ~190m S.

Crookes 5a

Impact Melt Pit: Crookes Crater



Upper left: NAC M1119966613L. Upper right: NAC M1183552745R. Lower left: NAC M1189437272L. Lower right: Stereo anaglyph of NACs M176359843L (left eye, red) and M176353098L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 5a. Black dot marks the location of the pit.

Size and Location

Latitude	10.6859°S	Inner pit diameter	22 m × 22 m
Longitude	194.8609°E	Long axis azimuth	20°
Depth	10 m	Funnel diameter	32 m × 30 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1119966613L	M1183552745R	M1189437272L
Incidence	28.54°	55.13°	-57.72°
Emission	-2.79°	0.71°	2.38°
Time of Day	10.25	8.37	15.83
Pixel Scale	0.93 m/px	1.01 m/px	0.87 m/px
Depth	12.0 m	9.8 m	8.5 m

Location reference: NAC M1119966613L line 16898, sample 789

Best stereo pair: M176359843L / M176353098L

Other useful images:

DTM:

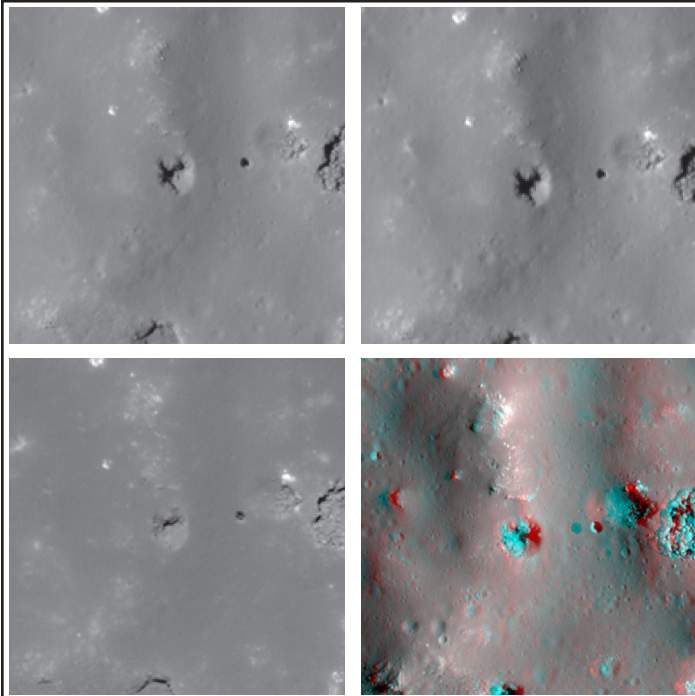
Data notes:

Description

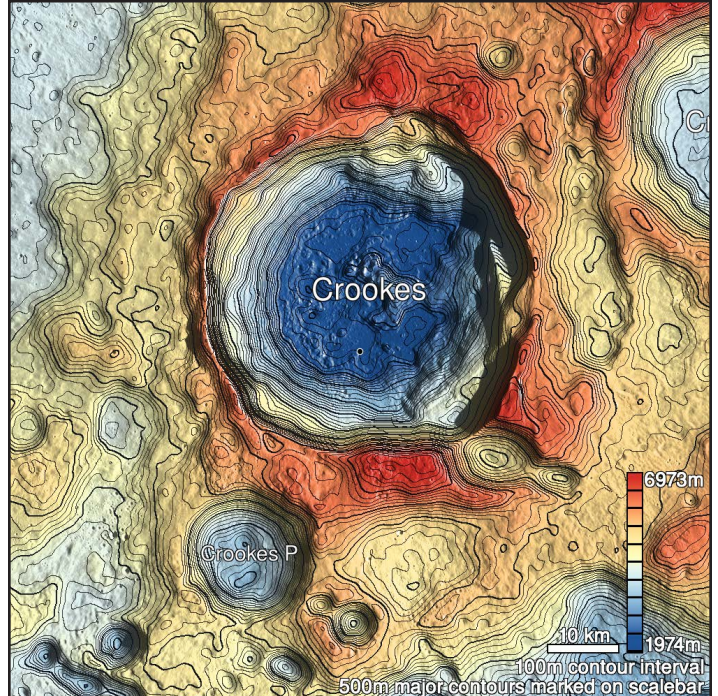
Largest pit in a cluster of 3-7 pits in and around a set of three PRFs. This one is a round pit in a saddle between the southern two PRFs. The south wall is a slope from rim to floor. Crookes 5b is ~80m N in the E flank of one of those PRFs. Crookes 5c is the larger (eastern) collapse in another PRF, ~80m east of Crookes 5b. There is a shallow collapse adjacent to Crookes 5c to the west. Crookes 5d is a tiny pit ~30m east of Crookes 5b, in a valley between the 5b PRF and the 5c PRF. There are two or three collapses, one of which might qualify as a very shallow pit, ~75m to the west of Crookes 5a.

Crookes 5b

Impact Melt Pit: Crookes Crater



Upper left: NAC M1191791679L. Upper right: NAC M105593830R. Lower left: NAC M1117608455L. Lower right: Stereo anaglyph of NACs M176359843L (left eye, red) and M176353098L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 5b. Black dot marks the location of the pit.

Size and Location

Latitude	10.6825°S	Inner pit diameter	NA m × 5 m
Longitude	194.8612°E	Long axis azimuth	15°
Depth	12 m	Funnel diameter	25 m × 23 m

Measurement Source Images

Image ID	M1191791679L	M105593830R	M1117608455L
Incidence	-31.57°	-40.51°	-12.03°
Emission	1.65°	-0.11°	2.57°
Time of Day	14.03	14.64	12.08
Pixel Scale	0.87 m/px	1.03 m/px	0.94 m/px
Depth	11.4 m	11.7 m	11.8 m

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1191791679L line 40925, sample 2669

Best stereo pair: M176359843L / M176353098L

Other useful images:

DTM:

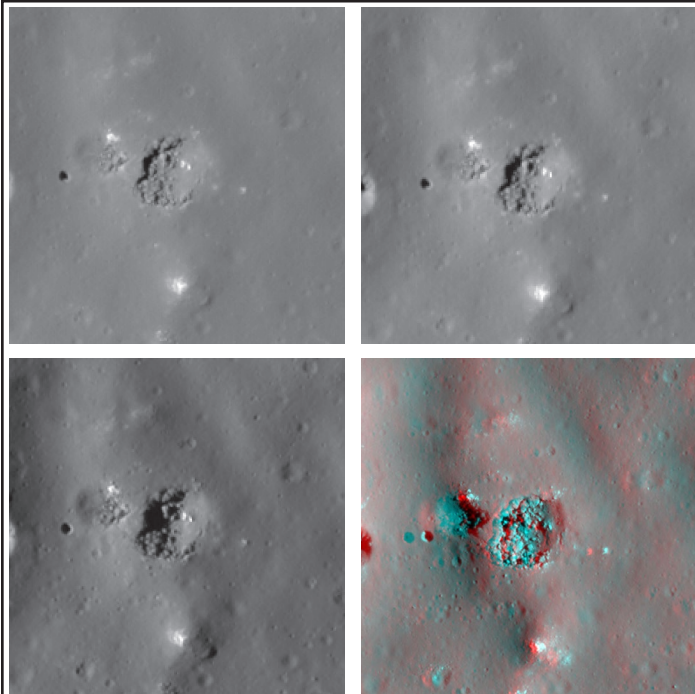
Data notes: All depths are from W rim. Depth from E rim is ~6m (M1183552745R).

Description

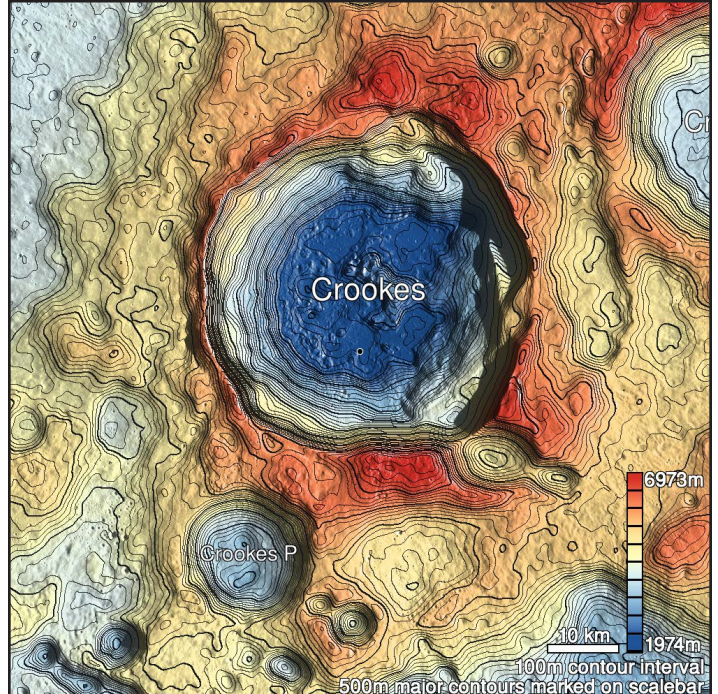
Collapse in the E flank of a PRF. Mostly funnel/steep walls- I'm not entirely certain it has a "floor" as such. The E wall seems to be a slope from rim to W walls.

Crookes 5c

Impact Melt Pit: Crookes Crater



Upper left: NAC M1191791679L. Upper right: NAC M105593830R. Lower left: NAC M1189437272L. Lower right: Stereo anaglyph of NACs M176359843L (left eye, red) and M176353098L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 5c. Black dot marks the location of the pit.

Size and Location

Latitude	10.6824°S	Inner pit diameter	45 m × 34 m
Longitude	194.8646°E	Long axis azimuth	25°
Depth	9 m	Funnel diameter	46 m × 38 m

Measurement Source Images

Image ID	M1191791679L	M105593830R	M1189437272L
Incidence	-31.57°	-40.51°	-57.72°
Emission	1.58°	-0.16°	2.30°
Time of Day	14.03	14.64	15.83
Pixel Scale	0.87 m/px	1.03 m/px	0.87 m/px
Depth	8.9 m	8.8 m	10.0 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	Yes?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1191791679L line 40920, sample 2793

Best stereo pair: M176359843L / M176353098L

Other useful images:

DTM:

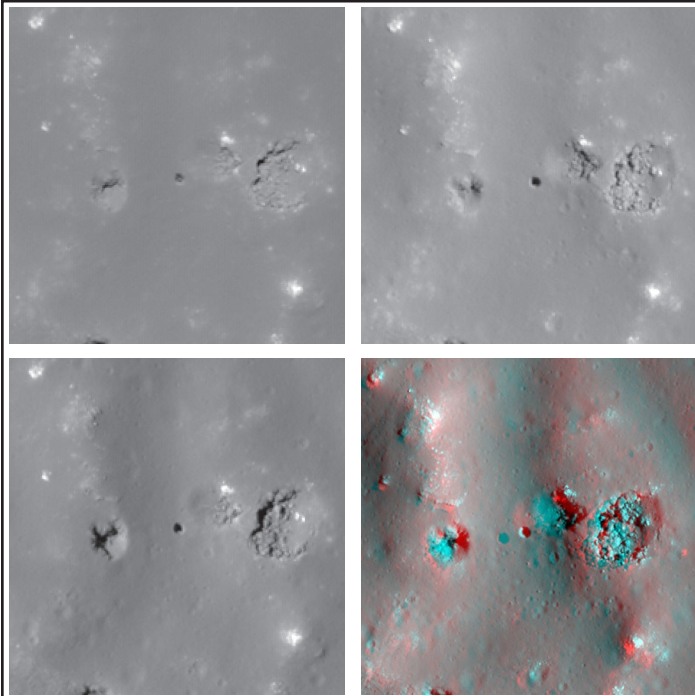
Data notes:

Description

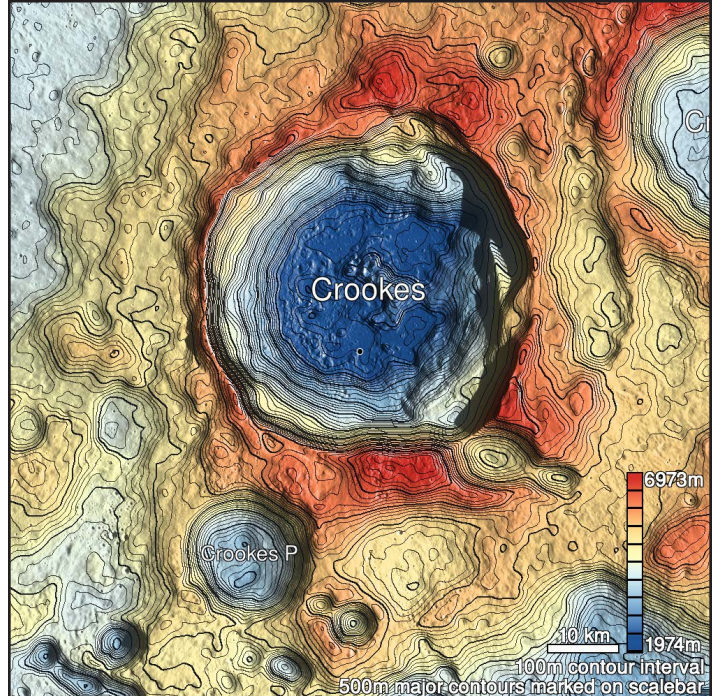
Wide collapse in the E side of a PRF, mostly filled with the semi-coherent remains of the former roof (shattered into 1-2m boulders, but there are still sections that look like they fell together). The E side is a smooth slope to the surrounding surface- no rim. ~10m to the W, across a strip of untouched ground, is another collapse. The arrangement is similar to the various not-bridges in King crater, and I cannot rule out the uncollapsed section being hollow (stereo image hints at a 1-2m overhang), but the rock pile on the W side of the “bridge-like” section appears solid.

Crookes 5d

Impact Melt Pit: Crookes Crater



Upper left: NAC M1117608455L. Upper right: NAC M1119966613L. Lower left: NAC M1191791679L. Lower right: Stereo anaglyph of NACs M176359843L (left eye, red) and M176353098L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 5d. Black dot marks the location of the pit.

Size and Location

Latitude	10.6824°S	Inner pit diameter	4 m × 4 m
Longitude	194.8626°E	Long axis azimuth	135°
Depth	10 m	Funnel diameter	6 m × 6 m

Measurement Source Images

Image ID	M1117608455L	M1119966613L	M1191791679L
Incidence	-12.03°	28.54°	-31.57°
Emission	2.54°	-2.82°	1.62°
Time of Day	12.08	10.25	14.03
Pixel Scale	0.94 m/px	0.93 m/px	0.87 m/px
Depth	9.9 m	>7.3 m	>8.3 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1117608455L line 23860, sample 1204

Best stereo pair: M176359843L / M176353098L

Other useful images:

DTM:

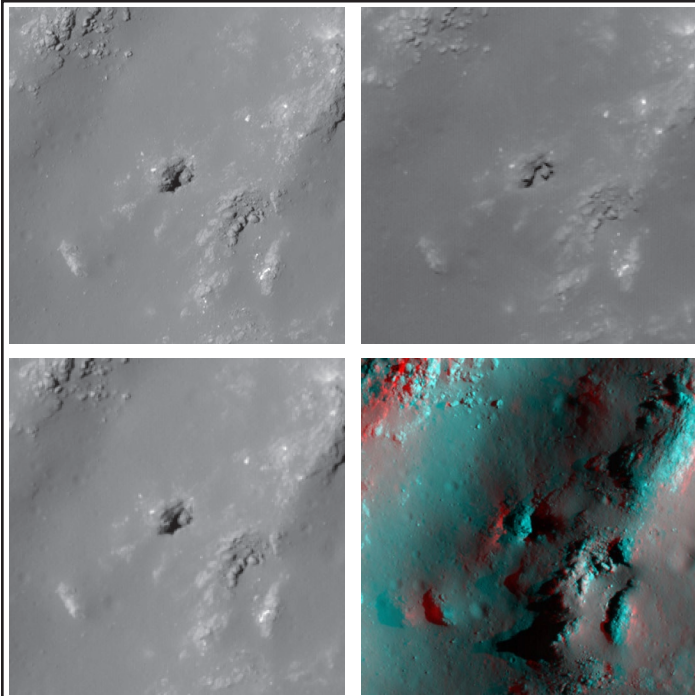
Data notes:

Description

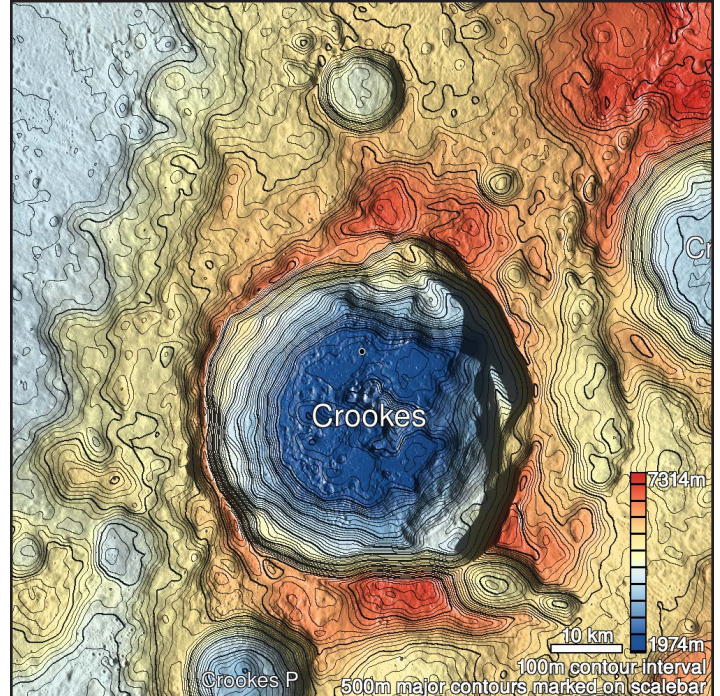
Tiny circular pit in the valley between two PRFs. Floor is visible only in ultra-high-Sun image M1117608455L, 12 degrees incidence.

Crookes 6

Impact Melt Pit: Crookes Crater



Upper left: NAC M169283456L. Upper right: NAC M1117608455L. Lower left: NAC M1191791679L. Lower right: Stereo anaglyph of NACs M176359843L (left eye, red) and M176353098L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 6. Black dot marks the location of the pit.

Size and Location

Latitude	10.0854°S	Inner pit diameter	17 m × 9 m
Longitude	194.8702°E	Long axis azimuth	30°
Depth	21 m	Funnel diameter	28 m × 20 m

Measurement Source Images

Image ID	M169283456L	M1117608455L	M1191791679L
Incidence	-27.26°	-11.44°	-31.43°
Emission	2.27°	2.62°	0.98°
Time of Day	13.73	12.08	14.03
Pixel Scale	0.43 m/px	0.95 m/px	0.88 m/px
Depth	>11.9 m	20.8 m	>11.5 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No?	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M169283456L line 41462, sample 1549

Best stereo pair: M176359843L / M176353098L

Other useful images:

DTM:

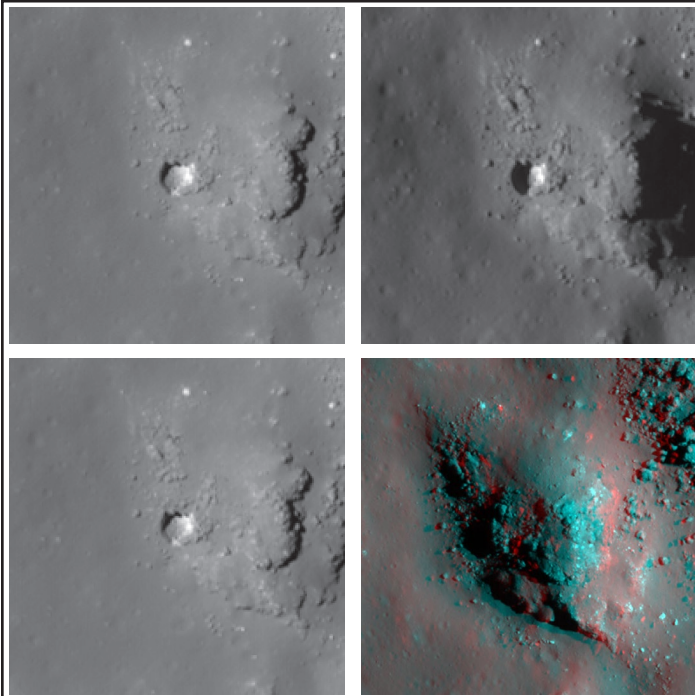
Data notes: All measurements are from the W rim. Only Depth 2 is clearly to the floor, but it is at extremely high Sun (11 degrees) (measure point is at south end of E wall, same place as other depths. Alternate measure at north end is 10m deep).

Description

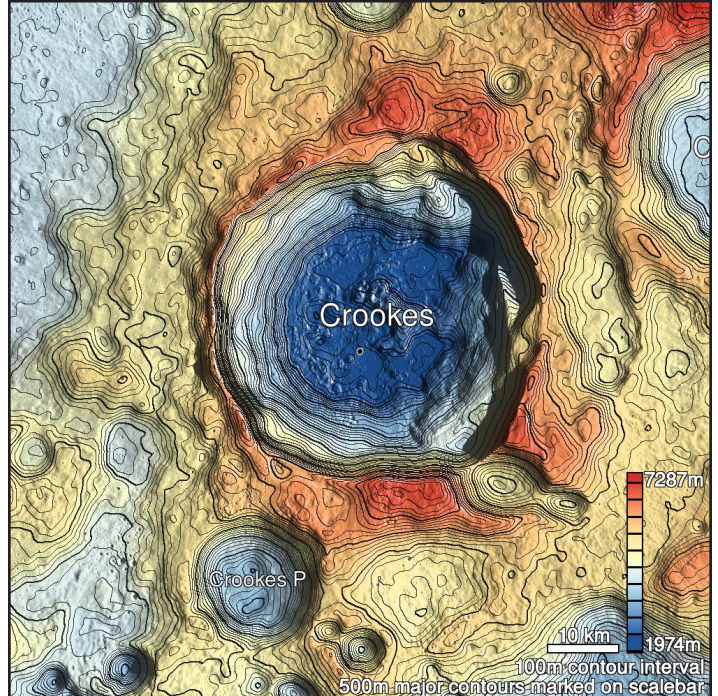
Diamond-shaped pit in the NW side of a NNE-SSW trending ridge (part of a set of at least three such ridges, spaced at ~150m intervals). There is a ~8m boulder filling the NE half of the pit, complicating shadow measurements. No other pits in the area, but there's a possible collapse-caused depression ~35m ESE at the top of the ridge.

Crookes 7

Impact Melt Pit: Crookes Crater



Upper left: NAC M1099931168R. Upper right: NAC M1097573241R. Lower left: NAC M184611296L. Lower right: Stereo anaglyph of NACs M176359843R (left eye, red) and M176353098L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 7. Black dot marks the location of the pit.

Size and Location

Latitude	10.5592°S	Inner pit diameter	20 m × 19 m
Longitude	194.8230°E	Long axis azimuth	55°
Depth	8 m	Funnel diameter	23 m × 23 m

Measurement Source Images

Image ID	M1099931168R	M1097573241R	M184611296L
Incidence	-31.18°	-57.04°	-28.31°
Emission	-2.31°	-0.24°	2.78°
Time of Day	14.00	15.78	13.71
Pixel Scale	1.00 m/px	1.00 m/px	1.00 m/px
Depth	8.6 m	6.6 m	8.2 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1099931168R line 33900, sample 4382

Best stereo pair: M176359843R / M176353098L

Other useful images:

DTM:

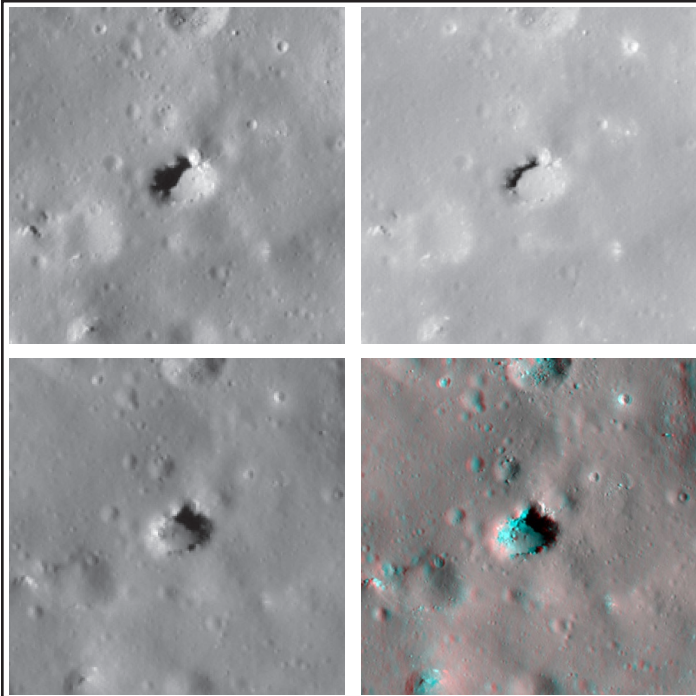
Data notes: All measurements are from W rim. Depth from E wall measure in M1119966613L is ~23m.

Description

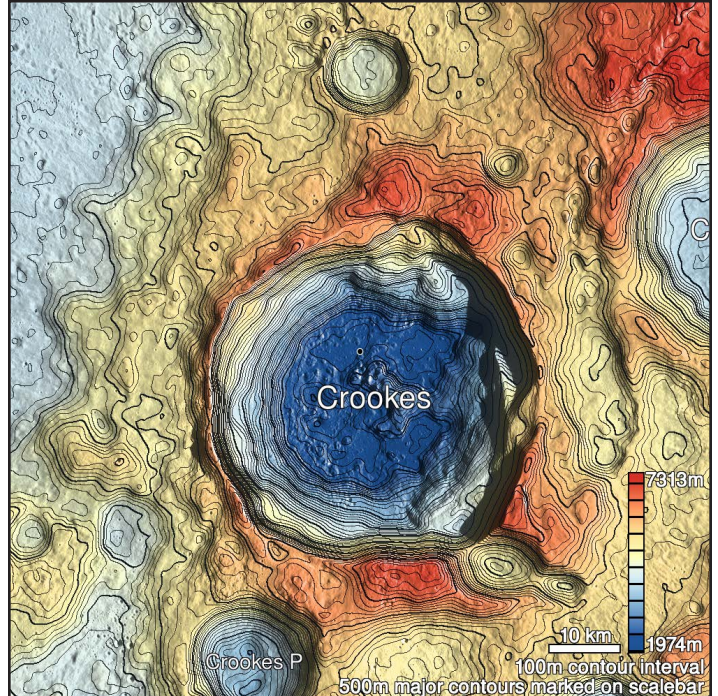
Round pit in the SW flank of a blocky rise. Appears to have somewhat rounded floor, with only one or two ~1m boulders. Pit is in shadow in full stereo pair, but higher-Sun slewed image shows no overhang on W wall. E wall (under the rise) is never seen. E rim is ~12m higher than W rim above floor. No other collapses in the area.

Crookes 9

Impact Melt Pit: Crookes Crater



Upper left: NAC M1189437272L. Upper right: NAC M1191791679L. Lower left: NAC M1183552745R. Lower right: Stereo anaglyph of NACs M176359843L (left eye, red) and M176353098L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 9. Black dot marks the location of the pit.

Size and Location

Latitude	10.1715°S	Inner pit diameter	26 m × 22 m
Longitude	194.8375°E	Long axis azimuth	50°
Depth	10 m	Funnel diameter	34 m × 28 m

Measurement Source Images

Image ID	M1189437272L	M1191791679L	M1183552745R
Incidence	-57.65°	-31.42°	55.09°
Emission	2.44°	1.72°	1.46°
Time of Day	15.83	14.02	8.37
Pixel Scale	0.87 m/px	0.88 m/px	1.02 m/px
Depth	8.9 m	7.2 m	12.8 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes?	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1189437272L line 18830, sample 1346

Best stereo pair: M176359843L / M176353098L

Other useful images: M110316458L

DTM:

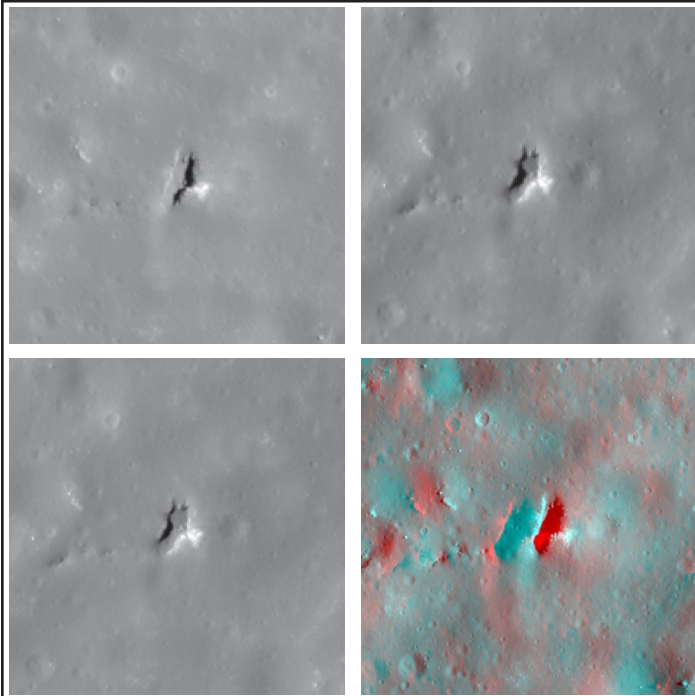
Data notes: Depths 1 and 2 are from W rim, depth 3 is from E. In stereo, E rim does appear higher.

Description

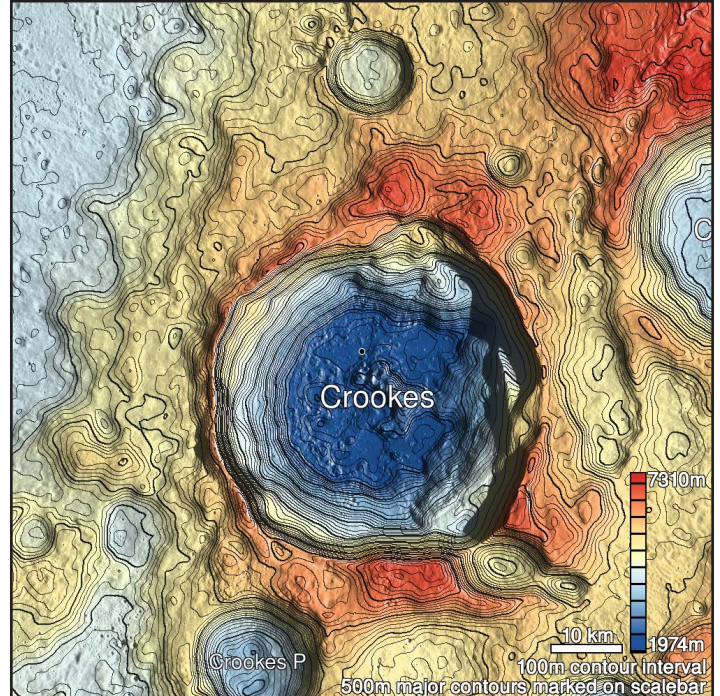
Circular pit with rounded floor. Few boulders visible on floor. Possible slope from rim to floor in SW side. Crookes 10 is ~180m W.

Crookes 10

Impact Melt Pit: Crookes Crater



Upper left: NAC M1119966613L. Upper right: NAC M105593830L. Lower left: NAC M1191791679L. Lower right: Stereo anaglyph of NACs M176359843L (left eye, red) and M176353098L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 10. Black dot marks the location of the pit.

Size and Location

Latitude	10.1717°S	Inner pit diameter	30 m × 12 m
Longitude	194.8302°E	Long axis azimuth	20°
Depth	8 m	Funnel diameter	40 m × 20 m

Measurement Source Images

Image ID	M1119966613L	M105593830L	M1191791679L
Incidence	28.38°	-40.38°	-31.41°
Emission	-1.98°	0.59°	1.87°
Time of Day	10.24	14.63	14.02
Pixel Scale	0.93 m/px	1.04 m/px	0.88 m/px
Depth	10.7 m	6.5 m	7.5 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes?	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1119966613L line 36522, sample 2127

Best stereo pair: M176359843L / M176353098L

Other useful images:

DTM:

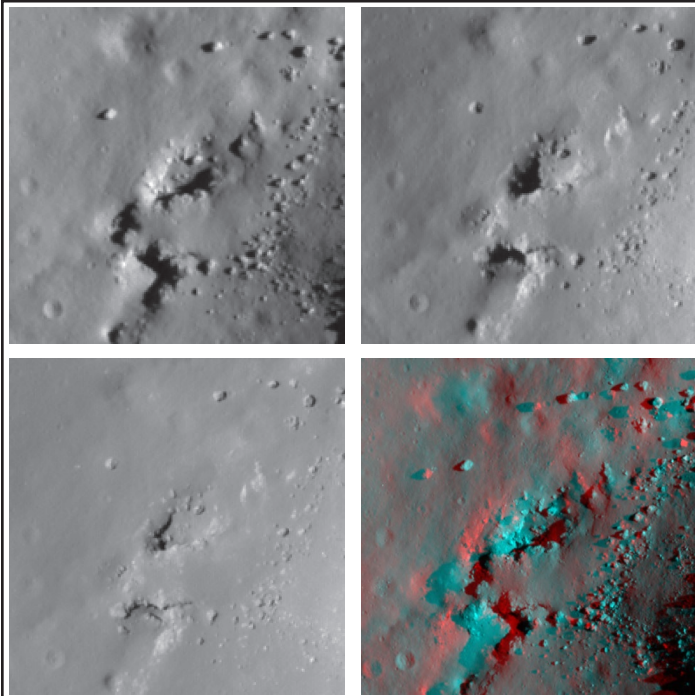
Data notes: Depth 3 is from E wall, others are from W wall. In stereo, E wall appears higher than W.

Description

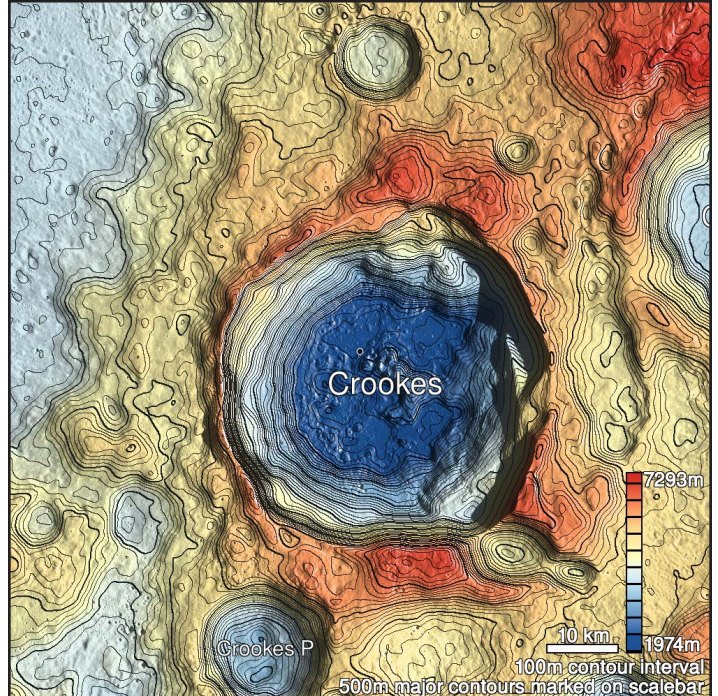
Elliptical pit with the long axis running NNE-SSW. N and S ends appear to have ramps running from rim to floor (S ramp is much wider). There is a chain of collapses running roughly E-W, with the E end ~140m NW of this point. There are a few minor collapses running ~100m W from this pit. Crookes 9 is ~180m E.

Crookes 11a

Impact Melt Pit: Crookes Crater



Upper left: NAC M1183552745R. Upper right: NAC M1097573241L. Lower left: NAC M1191791679L. Lower right: Stereo anaglyph of NACs M176359843R (left eye, red) and M176353098R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 11a. Black dot marks the location of the pit.

Size and Location

Latitude	10.2353°S	Inner pit diameter	41 m × 25 m
Longitude	194.7830°E	Long axis azimuth	45°
Depth	9 m	Funnel diameter	57 m × 38 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No?	Colinear depressions	Yes?
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1183552745R	M1097573241L	M1191791679L
Incidence	55.15°	-56.97°	-31.38°
Emission	2.39°	0.40°	2.89°
Time of Day	8.36	15.78	14.02
Pixel Scale	1.02 m/px	1.00 m/px	0.88 m/px
Depth	8.4 m	9.7 m	8.0 m

Location reference: NAC M1183552745R line 31788, sample 4525

Best stereo pair: M176359843R / M176353098R

Other useful images:

DTM:

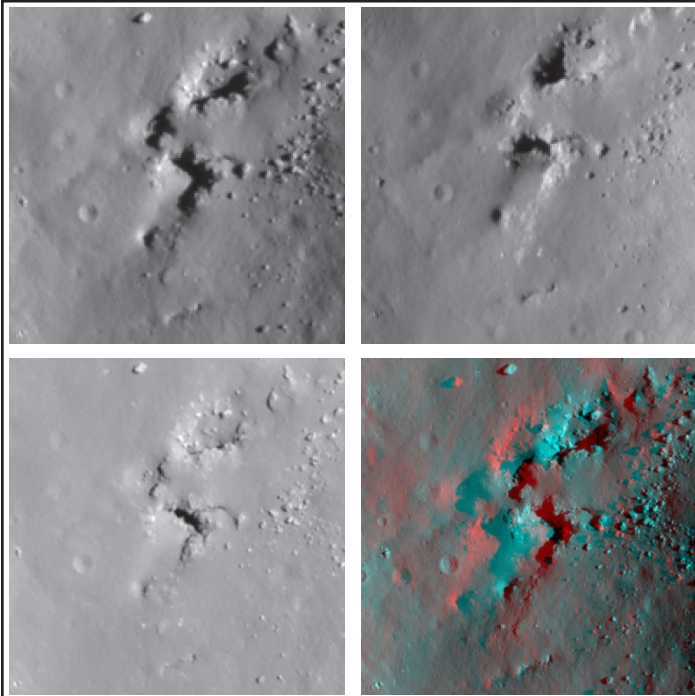
Data notes:

Description

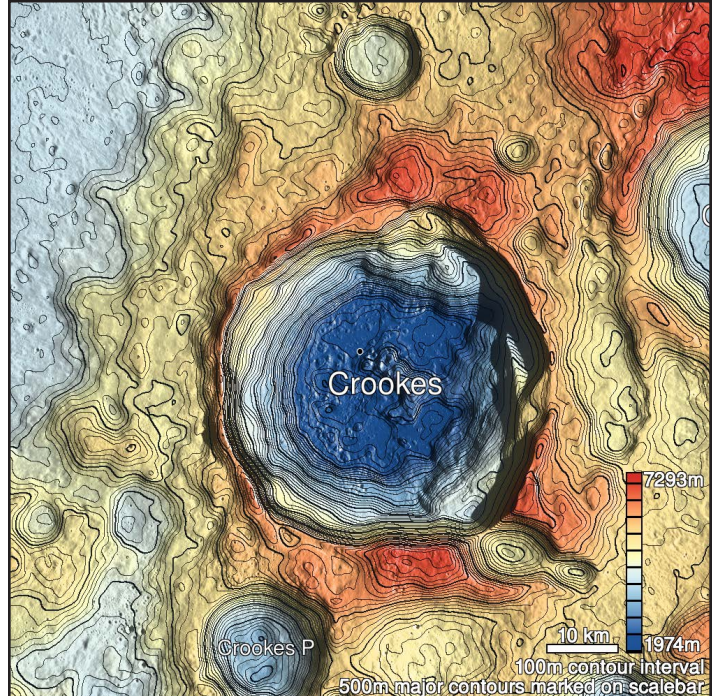
Elliptical pit, northern of a pair of pits ~30m apart at the W base of a PRF. NE wall is a slope to the S end, numerous boulders on the floor (some may have rolled in from the PRF, though there are no tracks). Definitely a possible tunnel across to Crookes 11b, but not provable with orbital images. There are more depressions in a rough line running to the NNE, and Crookes 4 is ~190m NNW.

Crookes 11b

Impact Melt Pit: Crookes Crater



Upper left: NAC M1183552745R. Upper right: NAC M1097573241L. Lower left: NAC M1119966613L. Lower right: Stereo anaglyph of NACs M176359843R (left eye, red) and M176353098R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Crookes 11b. Black dot marks the location of the pit.

Size and Location

Latitude	10.2372°S	Inner pit diameter	28 m × 26 m
Longitude	194.7822°E	Long axis azimuth	30°
Depth	9 m	Funnel diameter	55 m × 34 m

Measurement Source Images

Image ID	M1183552745R	M1097573241L	M1119966613L
Incidence	55.15°	-56.97°	28.45°
Emission	2.40°	0.42°	-1.08°
Time of Day	8.36	15.78	10.24
Pixel Scale	1.02 m/px	1.00 m/px	0.93 m/px
Depth	9.8 m	6.5 m	12.0 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No?	Colinear depressions	Yes?
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1183552745R line 31733, sample 4544

Best stereo pair: M176359843R / M176353098R

Other useful images:

DTM:

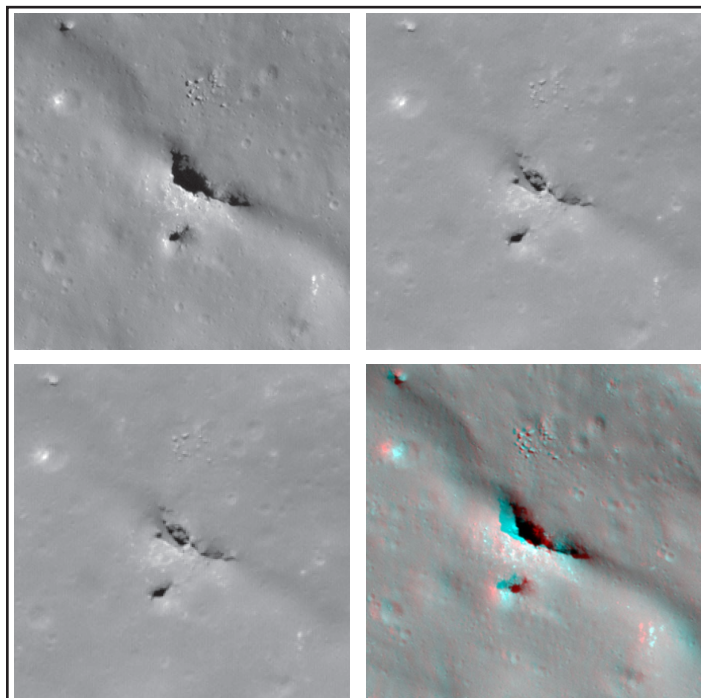
Data notes: Depth 2 is from (lower?) W rim.

Description

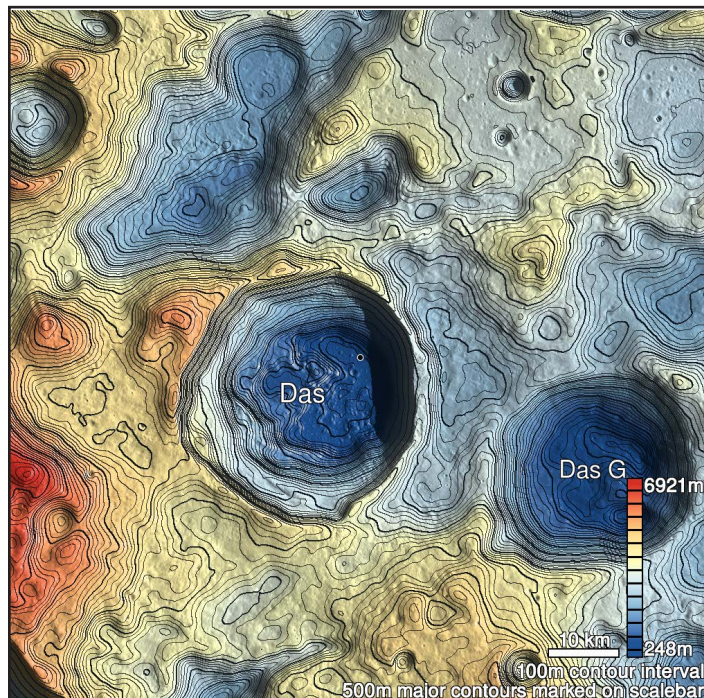
Rectangular pit, southern of the Crookes 11 pair. SW wall is a slope to floor level, and the floor is mostly clear of boulders.

Das 1a

Impact Melt Pit: Das Crater



Upper left: NAC M112489524L. Upper right: NAC M1132739466L. Lower left: NAC M1163359323L. Lower right: Stereo anaglyph of NACs M112489524L (left eye, red) and M127823013L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Das 1a. Black dot marks the location of the pit.

Size and Location

Latitude	26.3088°S	Inner pit diameter	21 m × 5 m
Longitude	223.2603°E	Long axis azimuth	135°
Depth	11 m	Funnel diameter	NA m × NA m

Measurement Source Images

Image ID	M112489524L	M1132739466L	M1163359323L
Incidence	45.15°	-26.05°	-26.22°
Emission	-0.63°	2.41°	1.92°
Time of Day	9.39	12.52	12.53
Pixel Scale	0.58 m/px	0.80 m/px	0.87 m/px
Depth	9.4 m	11.6 m	>15.3 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M112489524L line 13264, sample 4367

Best stereo pair: M112489524L / M127823013L

Other useful images:

DTM:

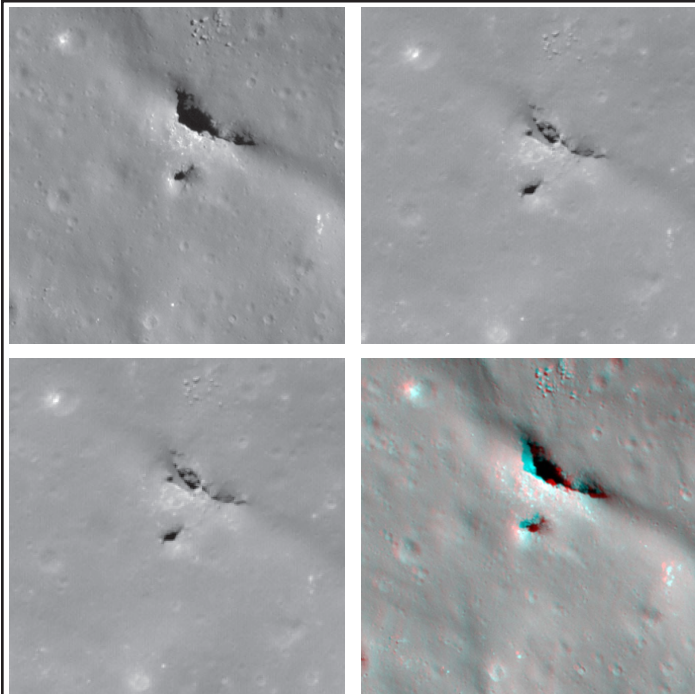
Data notes: North (shadow-casting) wall has some protruding rocks part-way down (~7m below rim?), and depths 1 and 2 are from those rocks. Depth 3 is from rim of host depression to south wall (no floor visible). Stereo pair is accidental, may not produce useful DTM.

Description

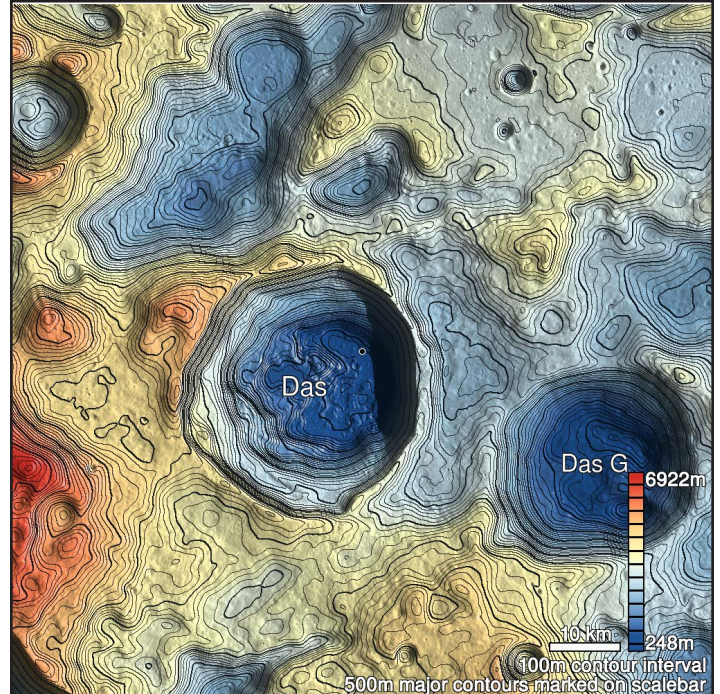
A narrow pit in the floor of a sinuous round-bottomed depression, oriented parallel to the depression. NW wall is collapsed to form a slope from rim to SE wall. 25 m from Das 1b.

Das 1b

Impact Melt Pit: Das Crater



Upper left: NAC M112489524L. Upper right: NAC M1132739466L. Lower left: NAC M1163359323L. Lower right: Stereo anaglyph of NACs M112489524L (left eye, red) and M127823013L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Das 1b. Black dot marks the location of the pit.

Size and Location

Latitude	26.3098°S	Inner pit diameter	6 m × 5 m
Longitude	223.2599°E	Long axis azimuth	100°
Depth	11 m	Funnel diameter	18 m × 13 m

Measurement Source Images

Image ID	M112489524L	M1132739466L	M1163359323L
Incidence	45.15°	-26.05°	-26.22°
Emission	-0.62°	2.42°	1.93°
Time of Day	9.39	12.52	12.53
Pixel Scale	0.58 m/px	0.80 m/px	0.87 m/px
Depth	10.2 m	10.8 m	>6 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M112489524L line 13316, sample 4377

Best stereo pair: M112489524L / M127823013L

Other useful images:

DTM:

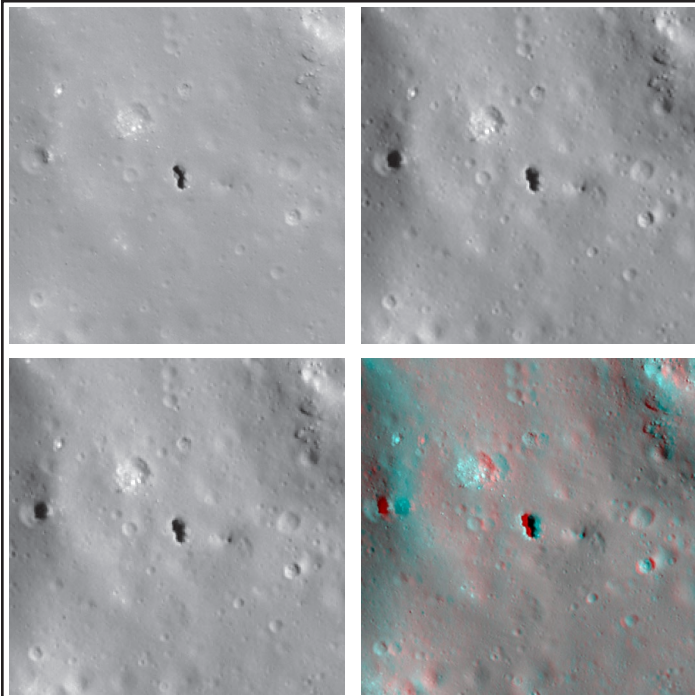
Data notes: Stereo pair is accidental, may not produce useful DTM.

Description

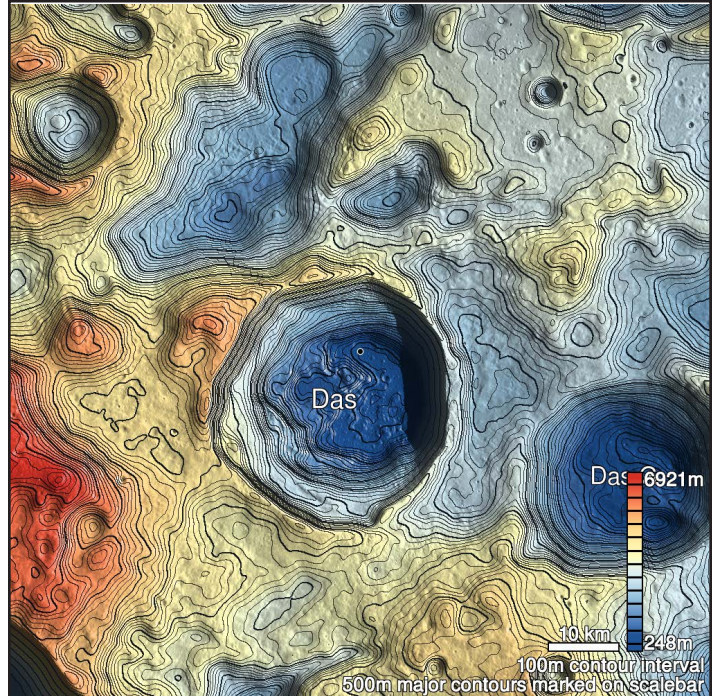
A small pit just outside of the depression that hosts Das 1a. S/E sides have a large funnel down to a likely sharp rim, N/W walls are much taller. No visible floor.

Das 2

Impact Melt Pit: Das Crater



Upper left: NAC M173817722L. Upper right: NAC M191494735L. Lower left: NAC M1183360718L. Lower right: Stereo anaglyph of NACs M176178010R (left eye, red) and M176171262L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Das 2. Black dot marks the location of the pit.

Size and Location

Latitude	26.2518°S	Inner pit diameter	14 m × 5 m
Longitude	223.0906°E	Long axis azimuth	165°
Depth	4 m	Funnel diameter	18 m × 10 m

Measurement Source Images

Image ID	M173817722L	M191494735L	M1183360718L
Incidence	35.33°	59.20°	57.50°
Emission	-1.02°	-1.97°	-1.98°
Time of Day	10.28	8.33	8.44
Pixel Scale	0.58 m/px	0.83 m/px	0.85 m/px
Depth	4.2 m	>4.1 m	>4.5 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M173817722L line 6355, sample 3696

Best stereo pair: M176178010R / M176171262L

Other useful images:

DTM:

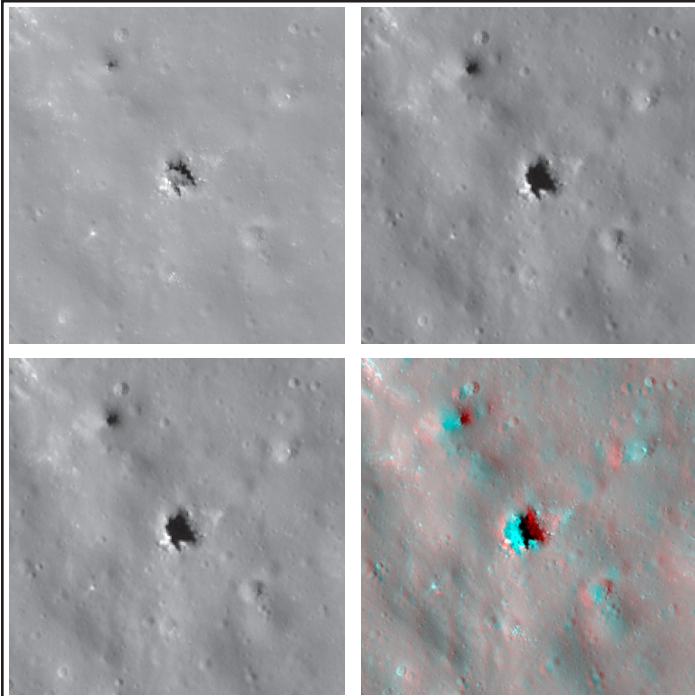
Data notes: Floor is only visible in one image (Depth 1). Depths 2 and 3 are minimum values.

Description

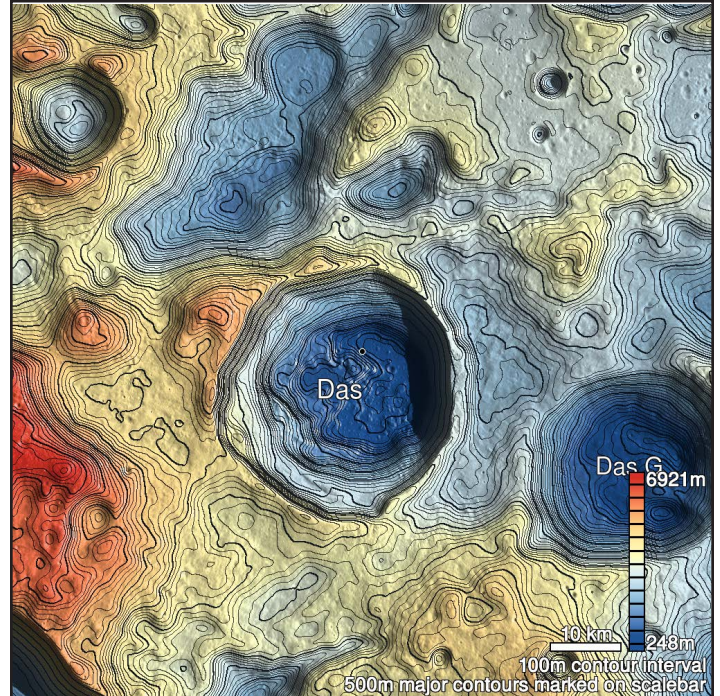
An elliptical pit with crisp rim and minimal funnel. No nearby collapses, although there's a possibly-suspicious depression 25m to the east.

Das 3

Impact Melt Pit: Das Crater



Upper left: NAC M173817722L. Upper right: NAC M191494735L. Lower left: NAC M1183360718L. Lower right: Stereo anaglyph of NACs M176178010R (left eye, red) and M176171262L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Das 3. Black dot marks the location of the pit.

Size and Location

Latitude	26.2963°S	Inner pit diameter	18 m × 13 m
Longitude	223.0729°E	Long axis azimuth	145°
Depth	6 m	Funnel diameter	23 m × 21 m

Measurement Source Images

Image ID	M173817722L	M191494735L	M1183360718L
Incidence	35.37°	59.23°	57.53°
Emission	-0.51°	-1.65°	-1.70°
Time of Day	10.28	8.33	8.44
Pixel Scale	0.58 m/px	0.82 m/px	0.85 m/px
Depth	6.0 m	>8.4 m	>8.4 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	Yes	Beside dome	No
Nearby pits	Yes?	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes?	Colinear fractures	No
In Depression	No		

Location reference: NAC M173817722L line 8507, sample 4563

Best stereo pair: M176178010R / M176171262L

Other useful images:

DTM:

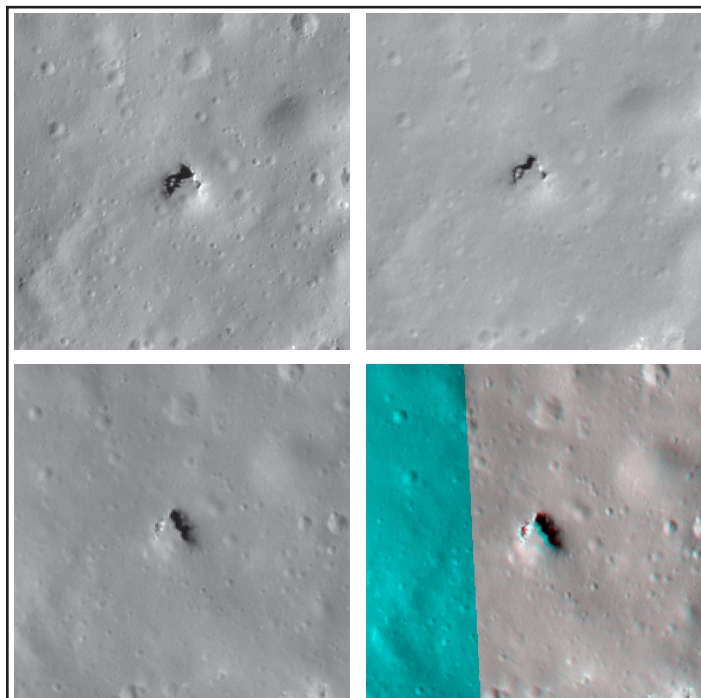
Data notes: Floor is only visible in Depth 1 image (and an unused slewed image). Depths 2 and 3 and minimum values.

Description

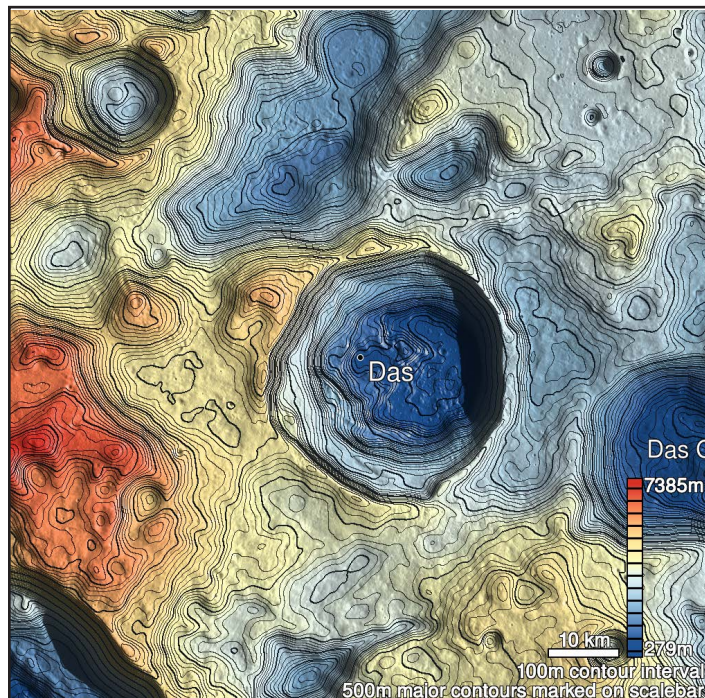
Roughly rectangular pit. There is some degree of collapse on the south wall, but it does not appear to reach the floor. The floor itself has some non-flatness. There is a shadow edge visible in the slewed image M176171262L that is not visible in the slightly higher-Sun nadir image M1183360718L, indicating a ≥ 2 m deep overhang. There is a small (~3m diameter) depression/pit 70m to the NW, a NNW/SSE-trending linear depression ~300m W, and several other possible depressions running in the same direction in the area.

Das 4a

Impact Melt Pit: Das Crater



Upper left: NAC M136085100R. Upper right: NAC M1237491651R. Lower left: NAC M1303331989L. Lower right: Stereo anaglyph of NACs M1198681331R (left eye, red) and M1198674297R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Das 4a. Black dot marks the location of the pit.

Size and Location

Latitude	26.4088°S	Inner pit diameter	18 m × 17 m
Longitude	222.7880°E	Long axis azimuth	55°
Depth	5 m	Funnel diameter	28 m × 27 m

Measurement Source Images

Image ID	M136085100R	M1237491651R	M1303331989L
Incidence	-53.79°	-37.53°	50.57°
Emission	9.17°	-0.50°	-2.08°
Time of Day	15.29	13.75	8.99
Pixel Scale	0.58 m/px	0.88 m/px	0.92 m/px
Depth	5.6 m	5.5 m	4.4 m

Other Features

Entrance Ramp	Yes	In dome	Yes?
Overhang	?	Beside dome	Yes?
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M136085100R line 15532, sample 2394

Best stereo pair: M1198681331R / M1198674297R

Other useful images:

DTM:

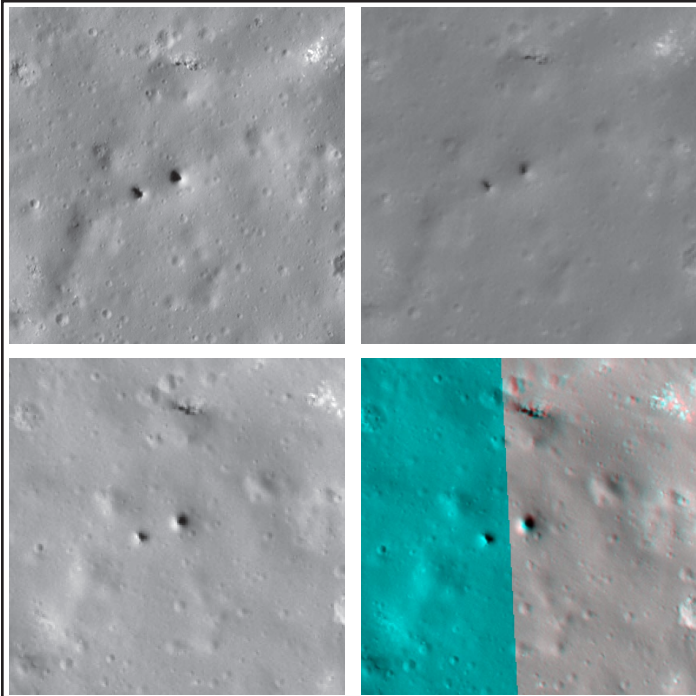
Data notes: Depth 3 is from downward-sloping NE rim, others are from NE rim.

Description

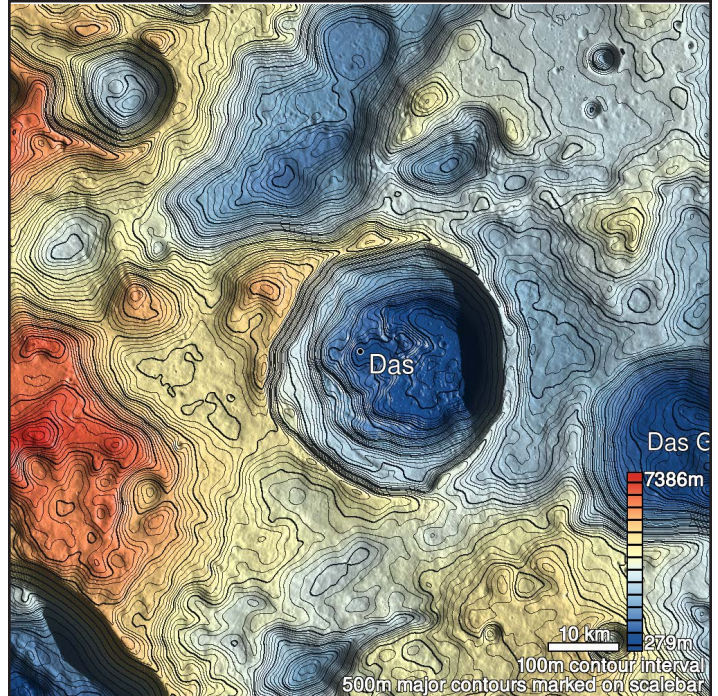
Northernmost and largest of a cluster of 4-5 pits. Southern wall is a slope, other walls are fairly crisp. Large boulder/projection from NW wall. Other pits Das 4b and 4c are 180 m S, Das 4d is 160 m SE of 4b/4c, and Das 4e is 310 m ESE of Das 1a.

Das 4b

Uncertain Impact Melt Pit: Das Crater



Upper left: NAC M136085100R. Upper right: NAC M1237491651R. Lower left: NAC M1303331989L. Lower right: Stereo anaglyph of NACs M1198681331R (left eye, red) and M1198674297R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Das 4b. Black dot marks the location of the pit.

Size and Location

Latitude	26.4148°S	Inner pit diameter	NA m × NA m
Longitude	222.7873°E	Long axis azimuth	0°
Depth	>5 m	Funnel diameter	12 m × 11 m

Measurement Source Images

Image ID	M136085100R	M1237491651R	M1303331989L
Incidence	-53.79°	-37.54°	50.57°
Emission	9.18°	-0.49°	-2.07°
Time of Day	15.29	13.74	8.99
Pixel Scale	0.58 m/px	0.88 m/px	0.92 m/px
Depth	>5.1 m	>4.6 m	4.0 m

Other Features

Entrance Ramp	?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M136085100R line 15826, sample 2361

Best stereo pair: M1198681331R / M1198674297R

Other useful images:

DTM:

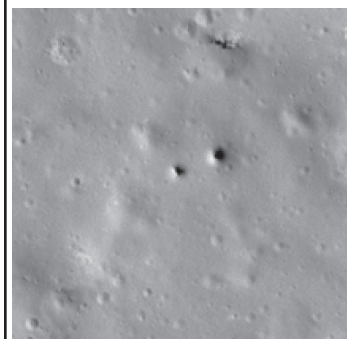
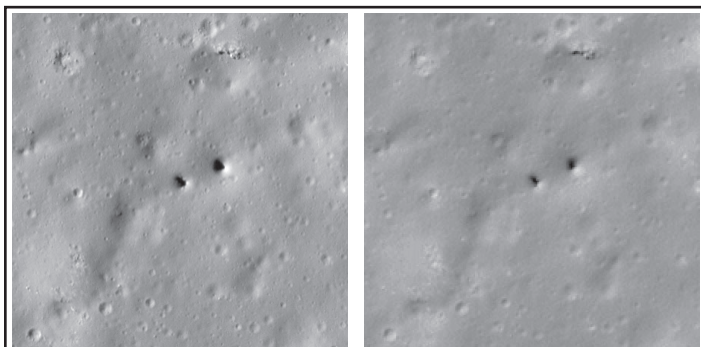
Data notes:

Description

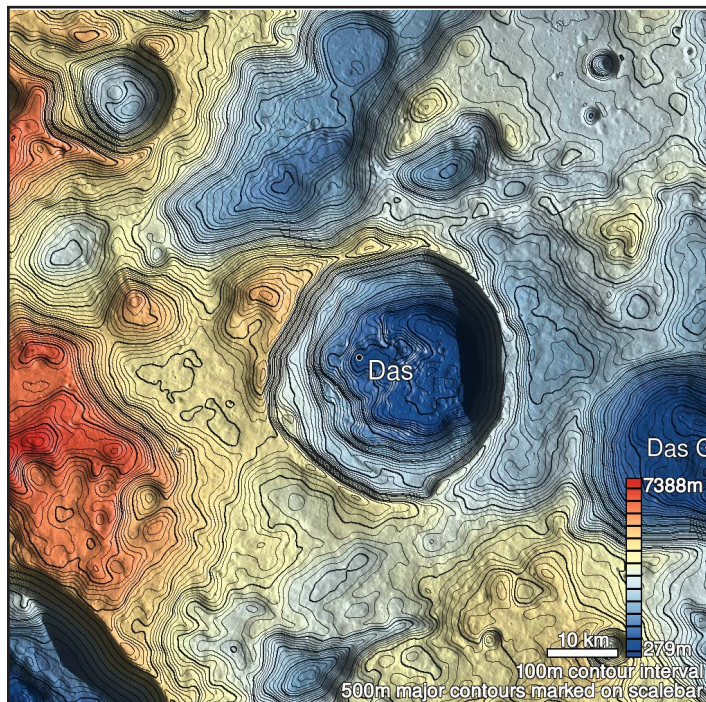
NE of a pair of tiny pits. May only be a deep depression- no rims visible in available images. About 20 m NE from Das 4c. Both pits are too small to make out much detail in the available data, and neither has a visible floor.

Das 4c

Impact Melt Pit: Das Crater



Upper left: NAC M136085100R. Upper right: NAC M1237491651R. Lower left: NAC M1303331989L. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Das 4c. Black dot marks the location of the pit.

Size and Location

Latitude	26.4151°S	Inner pit diameter	4 m × 2 m
Longitude	222.7864°E	Long axis azimuth	130°
Depth	>5 m	Funnel diameter	11 m × 9 m

Measurement Source Images

Image ID	M136085100R	M1237491651R	M1303331989L
Incidence	-53.79°	-37.53°	50.57°
Emission	9.21°	-0.48°	-2.06°
Time of Day	15.29	13.74	8.99
Pixel Scale	0.58 m/px	0.88 m/px	0.92 m/px
Depth	>4.5 m	>5.2 m	>3.0 m

Other Features

Entrance Ramp	?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M136085100R line 15843, sample 2320

Best stereo pair: /

Other useful images:

DTM:

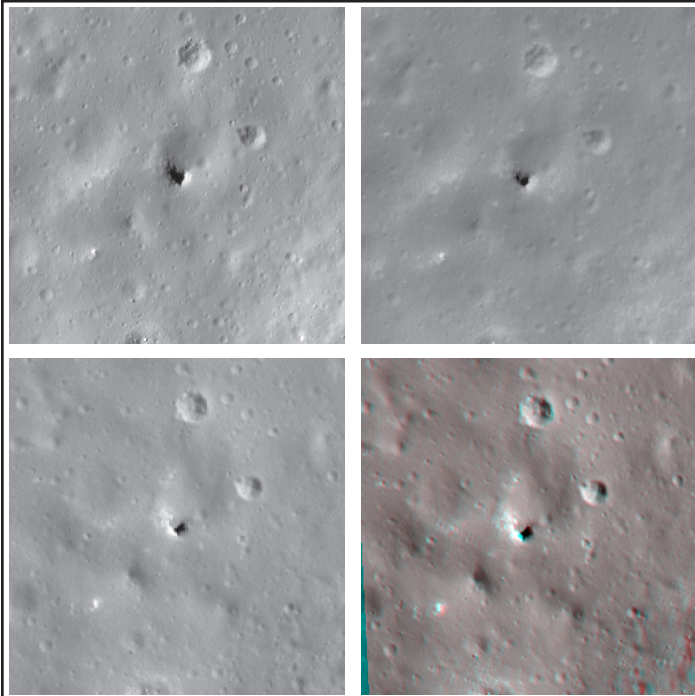
Data notes:

Description

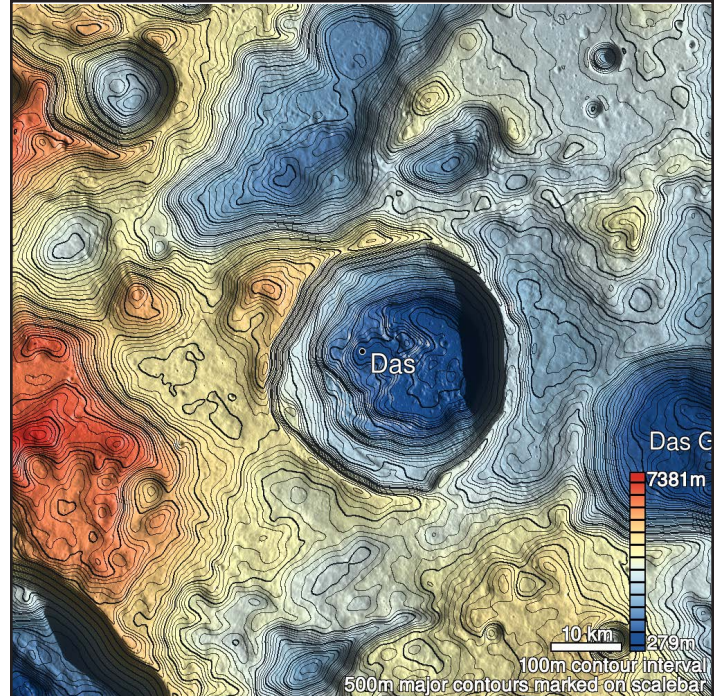
SW of a pair of tiny pits, see Das 4b description for details. Unlike Das 4b, Das 4c does have one rim (NE) visible in the available images, not just a funnel and deep shadow.

Das 4d

Impact Melt Pit: Das Crater



Upper left: NAC M136085100R. Upper right: NAC M1237491651R. Lower left: NAC M1303331989L. Lower right: Stereo anaglyph of NACs M1198681331R (left eye, red) and M1198674297R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Das 4d. Black dot marks the location of the pit.

Size and Location

Latitude	26.4189°S	Inner pit diameter	9 m × 6 m
Longitude	222.7907°E	Long axis azimuth	130°
Depth	>6 m	Funnel diameter	18 m × 12 m

Measurement Source Images

Image ID	M136085100R	M1237491651R	M1303331989L
Incidence	-53.79°	-37.54°	50.57°
Emission	9.09°	-0.56°	-2.14°
Time of Day	15.29	13.75	8.99
Pixel Scale	0.58 m/px	0.88 m/px	0.92 m/px
Depth	>7.7 m	4.8 m	>4.9 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M136085100R line 16031, sample 2520

Best stereo pair: M1198681331R / M1198674297R

Other useful images:

DTM:

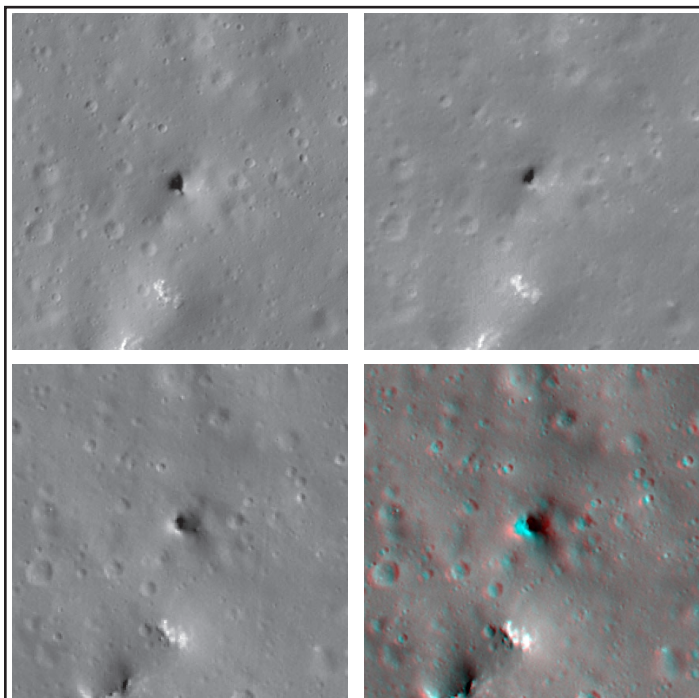
Data notes: Depth 1 is from top of funnel. Funnel measure does not include the shallow depression to the NE. Depth 2 is from rim to N slope; down-sun side of N wall slope also casts a shadow.

Description

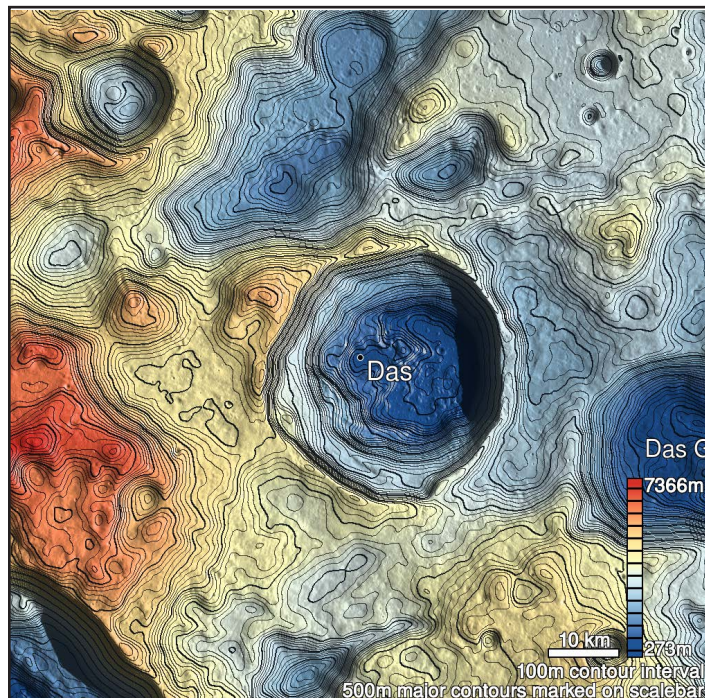
Southernmost of the Das 4 cluster of ~5 pits. N wall seems to be a slope downward to the S wall, and is continuous with a ~30-m-wide depression to the N. W wall is in the side of a small PRF.

Das 4e

Uncertain Impact Melt Pit: Das Crater



Upper left: NAC M136085100R. Upper right: NAC M1237491651R. Lower left: NAC M1303331989L. Lower right: Stereo anaglyph of NACs M1198681331R (left eye, red) and M1198674297R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Das 4e. Black dot marks the location of the pit.

Size and Location

Latitude	26.4126°S	Inner pit diameter	NA m × NA m
Longitude	222.7987°E	Long axis azimuth	0°
Depth	5 m	Funnel diameter	21 m × 13 m

Measurement Source Images

Image ID	M136085100R	M1237491651R	M1303331989L
Incidence	-53.80°	-37.54°	50.56°
Emission	8.87°	-0.70°	-2.27°
Time of Day	15.29	13.75	8.99
Pixel Scale	0.58 m/px	0.88 m/px	0.92 m/px
Depth	6.4 m	5.2 m	4.1 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	Yes?
Nearby depressions	Yes	Colinear fractures	No
In Depression	No?		

Location reference: NAC M136085100R line 15720, sample 2896

Best stereo pair: M1198681331R / M1198674297R

Other useful images:

DTM:

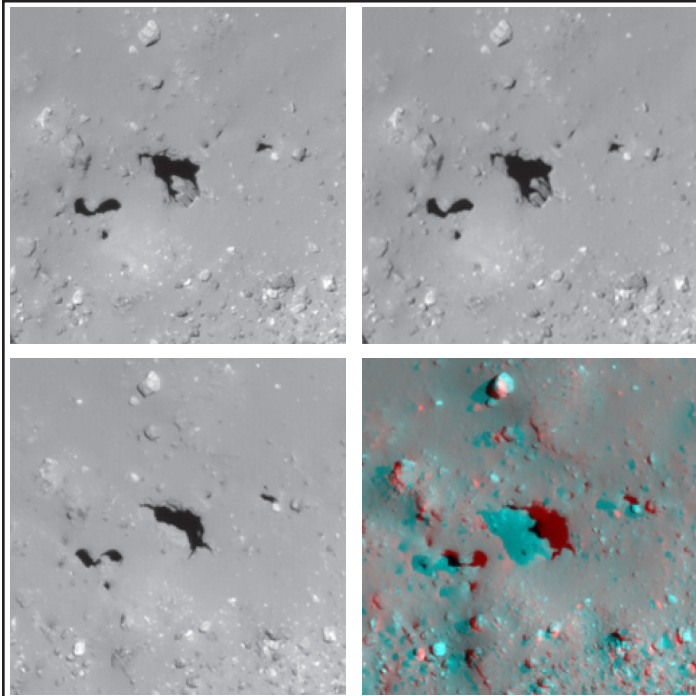
Data notes: Depth is from top of funnel to end of shadow.

Description

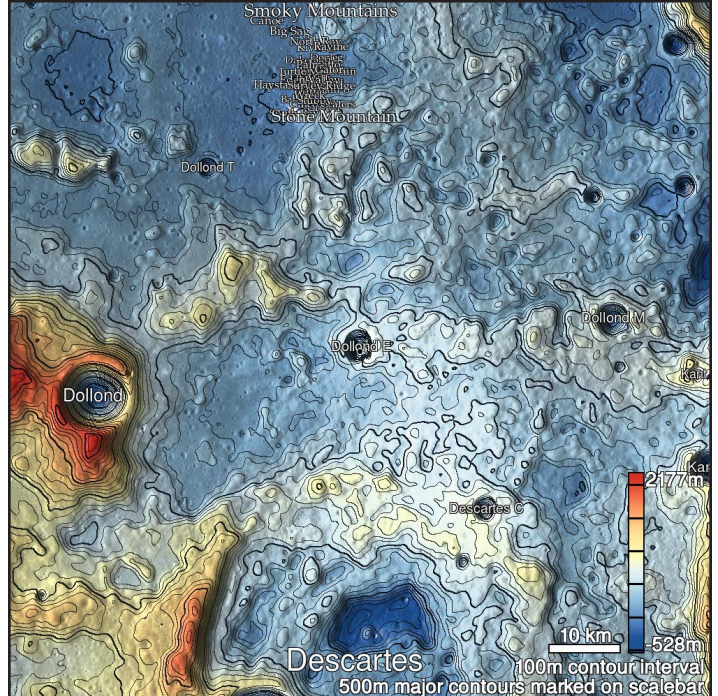
May just be a deep depression. ~250 m east of the Das 4a-d pits. SW end of shadow may be a rim, or may be a high-albedo spot.

Dollond E 1a

Impact Melt Pit: Dollond E Crater



Upper left: NAC M1177656184R. Upper right: NAC M1101110051L. Lower left: NAC M1103467217R. Lower right: Stereo anaglyph of NACs M1121138205R (left eye, red) and M1121124008R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Dollond E 1a. Black dot marks the location of the pit.

Size and Location

Latitude	10.2737°S	Inner pit diameter	36 m × 25 m
Longitude	15.7013°E	Long axis azimuth	140°
Depth	>50 m	Funnel diameter	47 m × 35 m

Measurement Source Images

Image ID	M1177656184R	M1101110051L	M1103467217R
Incidence	-19.18°	-19.45°	13.12°
Emission	-0.58°	0.31°	-0.08°
Time of Day	13.02	13.17	11.36
Pixel Scale	0.87 m/px	0.92 m/px	0.92 m/px
Depth	>43 m	>45 m	>58 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	No?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes?
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	Yes?		

Location reference: NAC M1177656184R line 6678, sample 1520

Best stereo pair: M1121138205R / M1121124008R

Other useful images: M1208262541L

DTM:

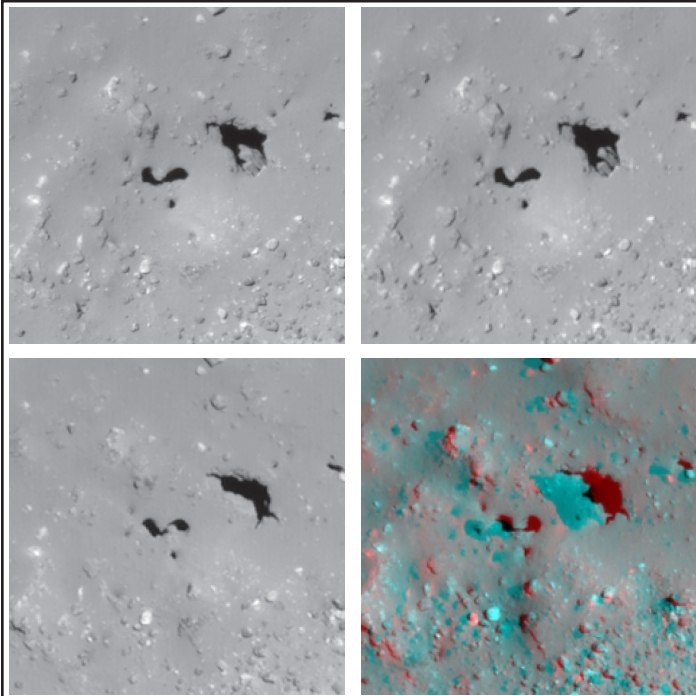
Data notes:

Description

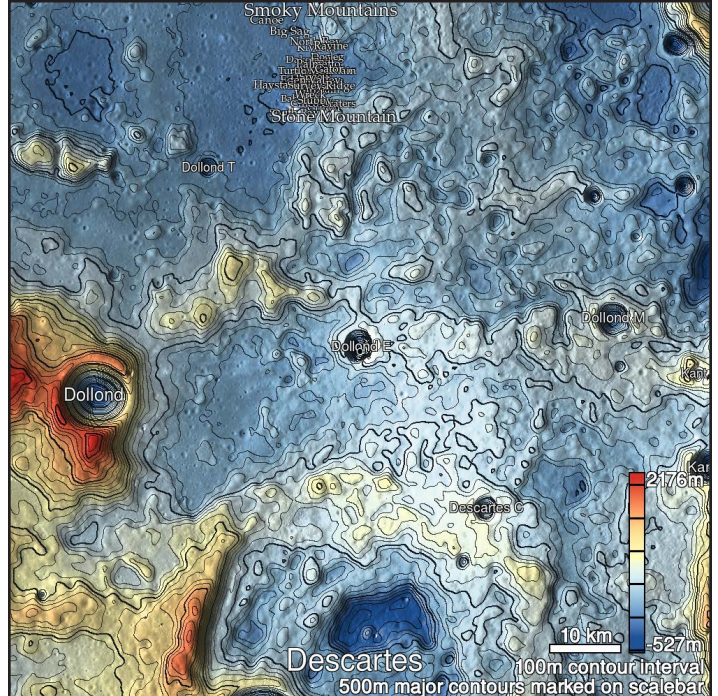
Semicircular pit 200m NW of the crater wall. The west wall appears to slope down at a slightly off-vertical angle, and there are two protruding ~5m boulders/layers at the south end. No floor is visible other than those boulders, so depths are measured to them. Rim-to-rim shadow measures give potential of depths >80m. Slew image M1208262541L shows none of the same rocks as similarly-lit nadir M1177656184R, but reveals ~50m of illuminated vertical east wall, and a small alcove near the rim. Minimal funnel. Dollond 1b is 25m to the SW. There are a pair of ~4m dark spots that may be collapse features 5 and 10m NE.

Dollond E 1b

Impact Melt Pit: Dollond E Crater



Upper left: NAC M1177656184R. Upper right: NAC M1101110051L. Lower left: NAC M1103467217R. Lower right: Stereo anaglyph of NACs M1121138205R (left eye, red) and M1121124008R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Dollond E 1b. Black dot marks the location of the pit.

Size and Location

Latitude	10.2750°S	Inner pit diameter	17 m × NA m
Longitude	15.7004°E	Long axis azimuth	70°
Depth	28 m	Funnel diameter	17 m × 12 m

Measurement Source Images

Image ID	M1177656184R	M1101110051L	M1103467217R
Incidence	-19.18°	-19.45°	13.12°
Emission	-0.56°	0.33°	0.08°
Time of Day	13.02	13.17	11.36
Pixel Scale	0.87 m/px	0.92 m/px	0.92 m/px
Depth	25.3 m	32.2 m	27.9 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes?
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	Yes?		

Location reference: NAC M1177656184R line 6641, sample 1474

Best stereo pair: M1121138205R / M1121124008R

Other useful images: M1208262541L

DTM:

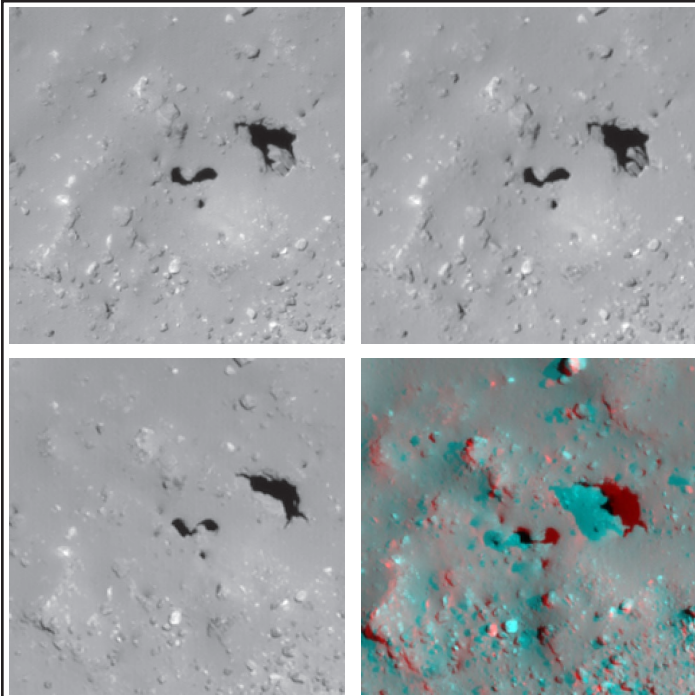
Data notes:

Description

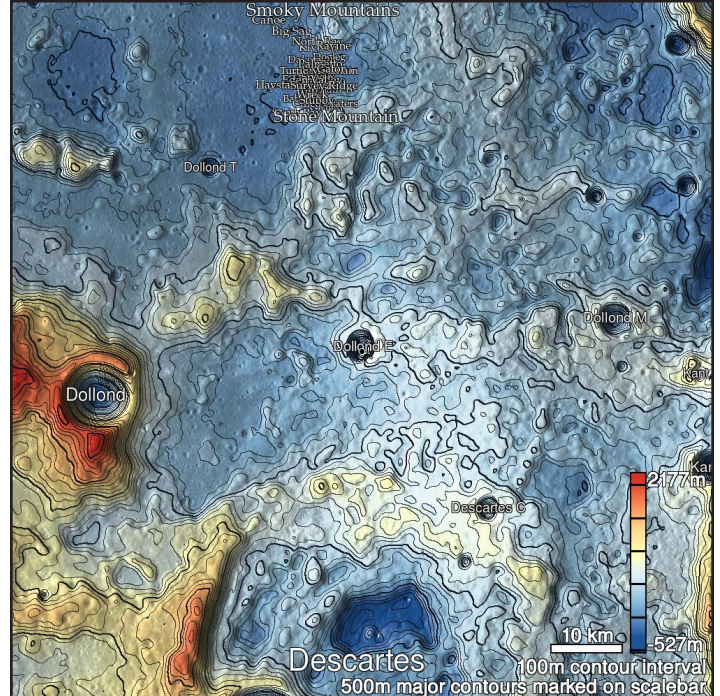
Eastern of a pair of adjacent (joined?) circular pits ~30m SW of Dollond E 1a. S wall might be an off-vertical slope, and may have a protruding lump. There is a tiny (~5m) dark spot ~10m south that might be another collapse.

Dollond E 1c

Impact Melt Pit: Dollond E Crater



Upper left: NAC M1177656184R. Upper right: NAC M1101110051L. Lower left: NAC M1103467217R. Lower right: Stereo anaglyph of NACs M1121138205R (left eye, red) and M1121124008R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Dollond E 1c. Black dot marks the location of the pit.

Size and Location

Latitude	10.2750°S	Inner pit diameter	12 m × 11 m
Longitude	15.6998°E	Long axis azimuth	130°
Depth	32 m	Funnel diameter	12 m × 11 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes?
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	Yes?		

Measurement Source Images

Image ID	M1177656184R	M1101110051L	M1103467217R
Incidence	-19.18°	-19.45°	13.12°
Emission	-0.55°	0.34°	0.09°
Time of Day	13.02	13.17	11.36
Pixel Scale	0.87 m/px	0.92 m/px	0.92 m/px
Depth	33.0 m	38.4 m	25.3 m

Location reference: NAC M1177656184R line 6639, sample 1454

Best stereo pair: M1121138205R / M1121124008R

Other useful images: M1208262541L

DTM:

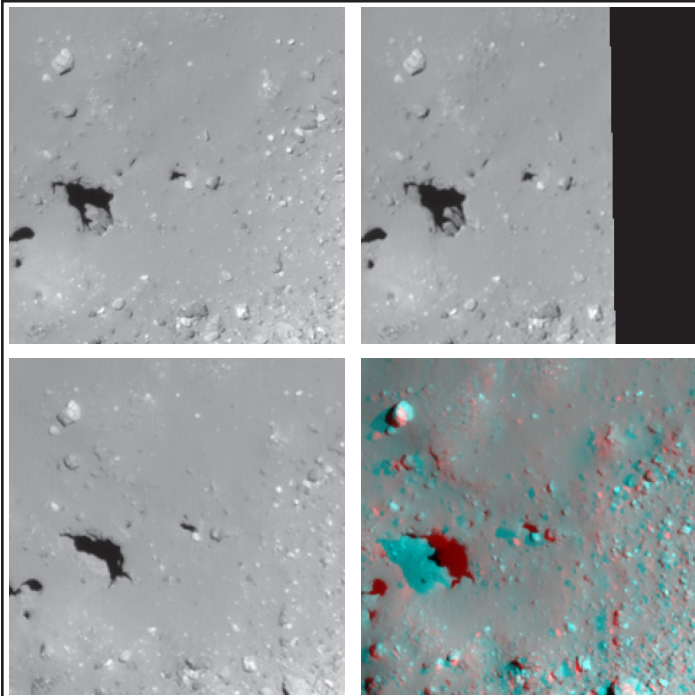
Data notes:

Description

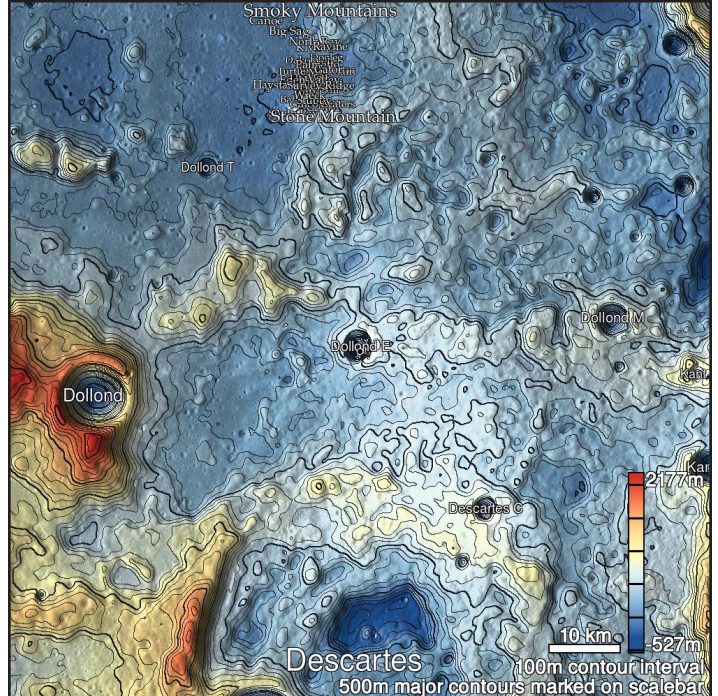
Western of the Dollond E 1b/c pair. All walls appear to be vertical or overhanging- A slewed image indicates an overhang of 5-6m, and corroborates the depth of ~30m.

Dollond E 1d

Impact Melt Pit: Dollond E Crater



Upper left: NAC M1177656184R. Upper right: NAC M1101110051L. Lower left: NAC M1103467217R. Lower right: Stereo anaglyph of NACs M1121138205R (left eye, red) and M1121124008R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Dollond E 1d. Black dot marks the location of the pit.

Size and Location

Latitude	10.2738°S	Inner pit diameter	11 m × NA m
Longitude	15.7035°E	Long axis azimuth	70°
Depth	14 m	Funnel diameter	11 m × 8 m

Measurement Source Images

Image ID	M1177656184R	M1101110051L	M1103467217R
Incidence	-19.19°	-19.45°	13.12°
Emission	-0.62°	0.27°	-0.09°
Time of Day	13.02	13.17	11.36
Pixel Scale	0.87 m/px	0.92 m/px	0.92 m/px
Depth	13.5 m	12.7 m	15.0 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes?
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	Yes?		

Location reference: NAC M1177656184R line 6714, sample 1578

Best stereo pair: M1121138205R / M1121124008R

Other useful images: M1208262541L

DTM:

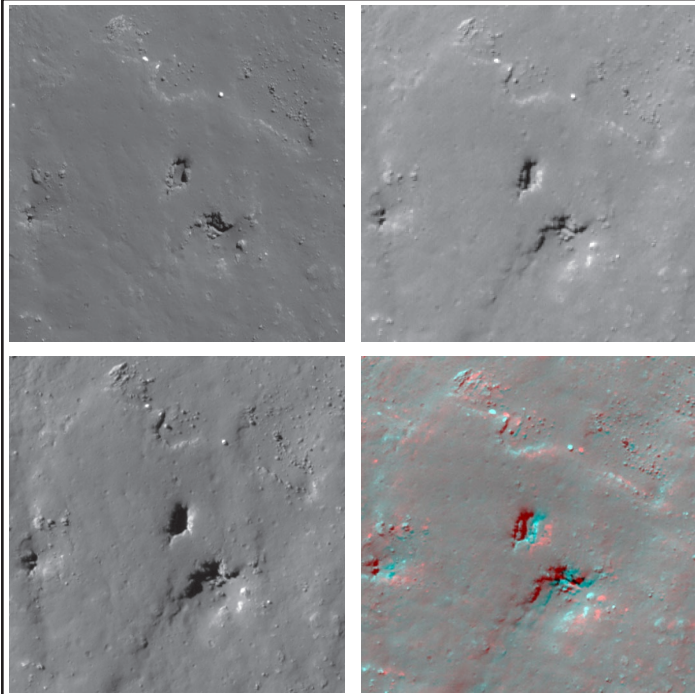
Data notes:

Description

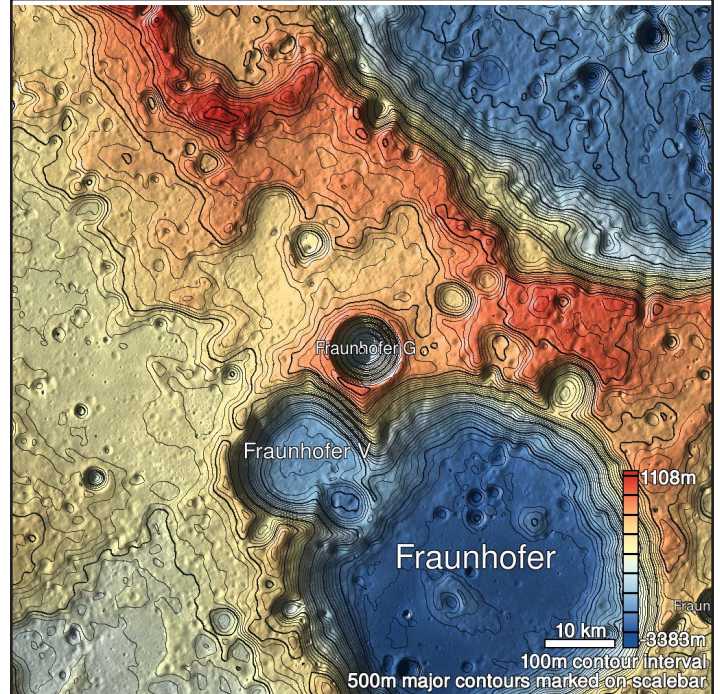
Elliptical depression 40m east of Dollond E 1a. Seems to be a cliff on the north side, and a smooth slope on the south. Can't make out much about the morphology due to resolution and limited incidence angles.

Fraunhofer G 1

Impact Melt Pit: Fraunhofer G Crater



Upper left: NAC M126547168L. Upper right: NAC M1162092747L. Lower left: NAC M1175012025L. Lower right: Stereo anaglyph of NACs M185497131L (left eye, red) and M185489982R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Fraunhofer G 1. Black dot marks the location of the pit.

Size and Location

Latitude	38.5001°S	Inner pit diameter	17 m × 11 m
Longitude	58.3638°E	Long axis azimuth	25°
Depth	4 m	Funnel diameter	23 m × 14 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M126547168L	M1162092747L	M1175012025L
Incidence	45.51°	-43.18°	-58.19°
Emission	-0.62°	1.25°	1.79°
Time of Day	10.42	13.61	15.06
Pixel Scale	0.39 m/px	0.80 m/px	0.60 m/px
Depth	4.0 m	4.9 m	>6.6 m

Location reference: NAC M126547168L line 26253, sample 4366

Best stereo pair: M185497131L / M185489982R

Other useful images:

DTM:

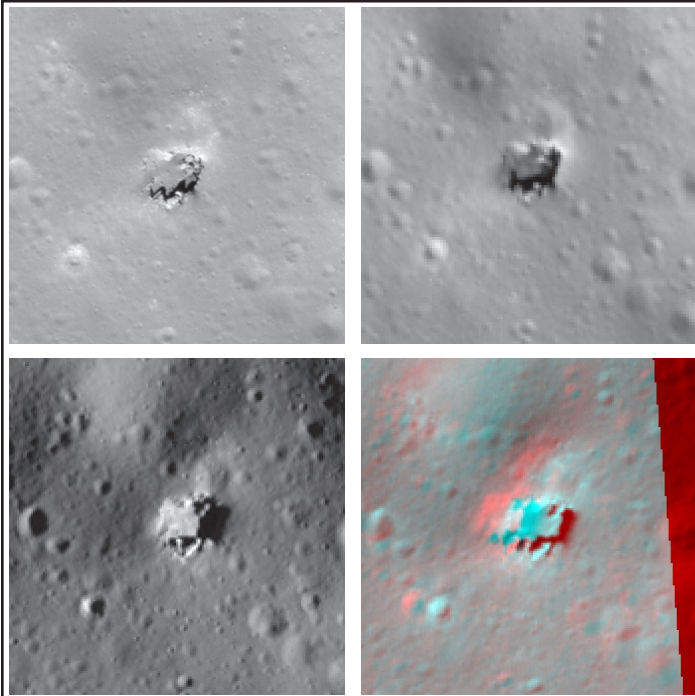
Data notes: Depth 3 is from W rim, other depths are from W.

Description

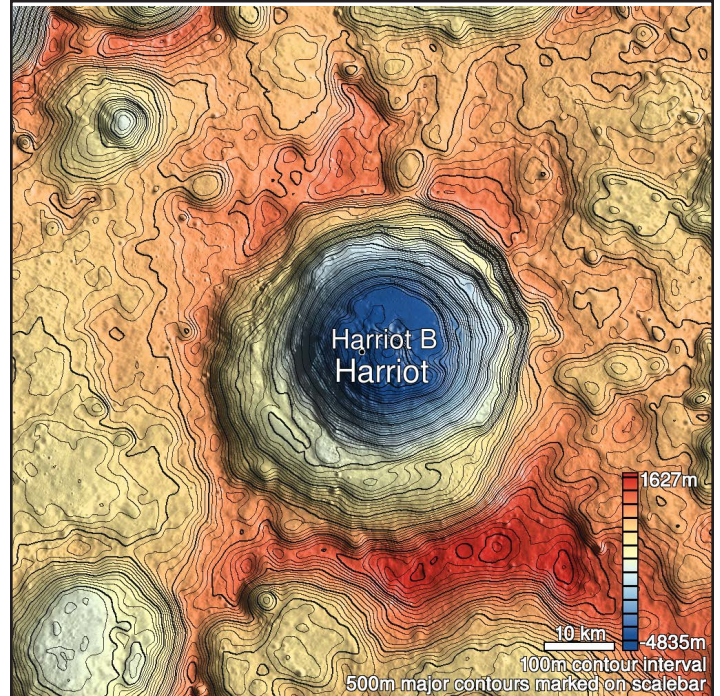
Rectangular pit near a possible melt flow edge. There are several other depressions/collapses in the area: a ~7m deep collapse with vertical northern wall (other edges are shallow slopes) ~25m S, and shallow collapses with some degree of rim ~75m W and ~200m E. This pit has no entrance ramps, and the floor appears smooth.

Harriot 1

Impact Melt Pit: Harriot Crater



Upper left: NAC M123826391L. Upper right: NAC M106123760R. Lower left: NAC M130904815R. Lower right: Stereo anaglyph of NACs M1227613833L (left eye, red) and M1227599762L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Harriot 1. Black dot marks the location of the pit.

Size and Location

Latitude	33.2933°N	Inner pit diameter	27 m × 25 m
Longitude	114.2911°E	Long axis azimuth	50°
Depth	9 m	Funnel diameter	41 m × 34 m

Measurement Source Images

Image ID	M123826391L	M106123760R	M130904815R
Incidence	-32.79°	-46.81°	74.66°
Emission	0.68°	-0.18°	1.18°
Time of Day	12.56	14.26	7.20
Pixel Scale	0.59 m/px	1.65 m/px	0.89 m/px
Depth	12.1 m	10.0 m	4.5 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M123826391L line 12330, sample 4266

Best stereo pair: M1227613833L / M1227599762L

Other useful images:

DTM:

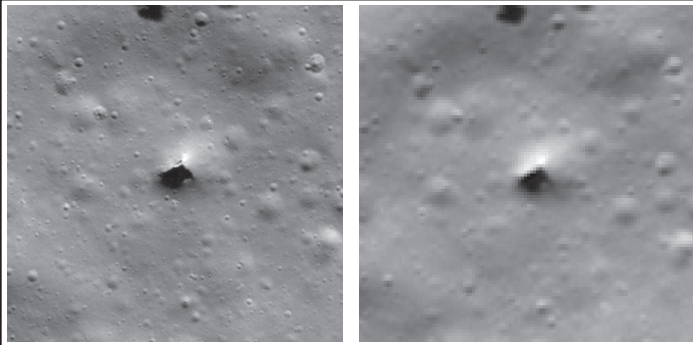
Data notes: Depth 3 is from top of funnel to west slope near what I thought was the floor, and very close to Depth 2.

Description

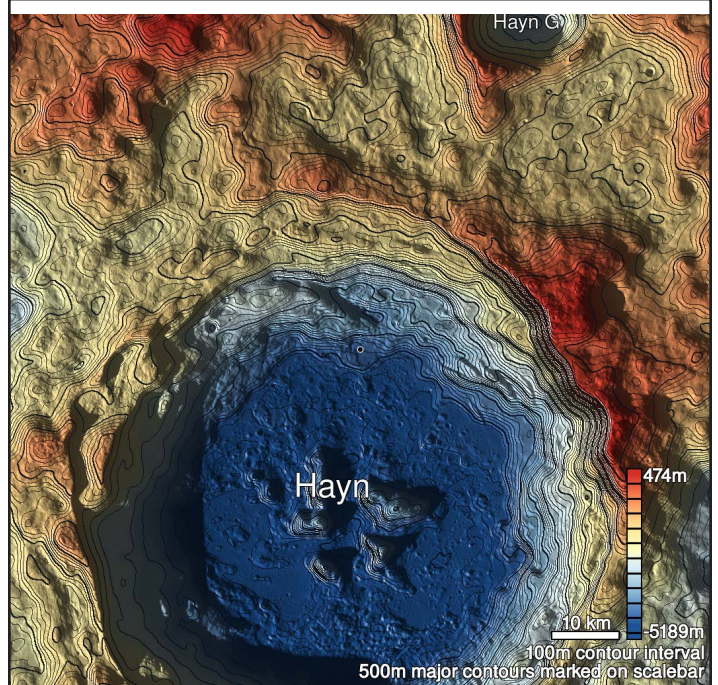
A wide, shallow pit, roughly square. The west wall is a smooth slope to the floor, and there seems to be a boulder pile in the NE corner that reaches the rim. No nearby collapses.

Hayn 1

Impact Melt Pit: Hayn Crater



Upper left: NAC M154705713R. Upper right: NAC M187722274L. Lower left: NAC. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Hayn 1. Black dot marks the location of the pit.

Size and Location

Latitude	65.2233°N	Inner pit diameter	NA m × NA m
Longitude	84.2004°E	Long axis azimuth	60°
Depth	>7 m	Funnel diameter	35 m × 27 m

Measurement Source Images

Image ID	M154705713R	M187722274L	
Incidence	-64.65°	64.05°	
Emission	-2.23°	-1.60°	
Time of Day	13.02	11.58	
Pixel Scale	0.57 m/px	1.88 m/px	
Depth	>7 m	>6.8 m	

Other Features

Entrance Ramp	Yes?	In dome	No?
Overhang	?	Beside dome	No?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M154705713R line 6975, sample 4337

Best stereo pair: /

Other useful images: M1128897934R

DTM:

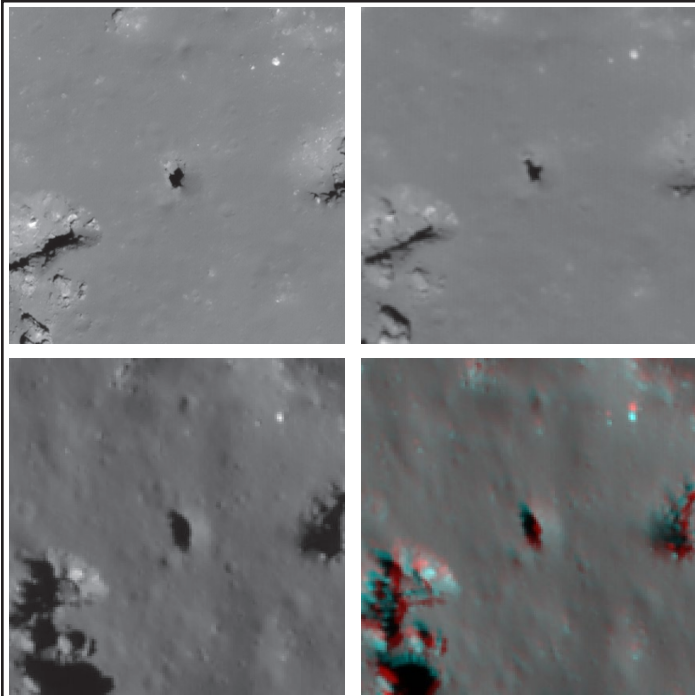
Data notes: Depths are from top of funnel to where shadow ends (probable NE/NW wall junction).

Description

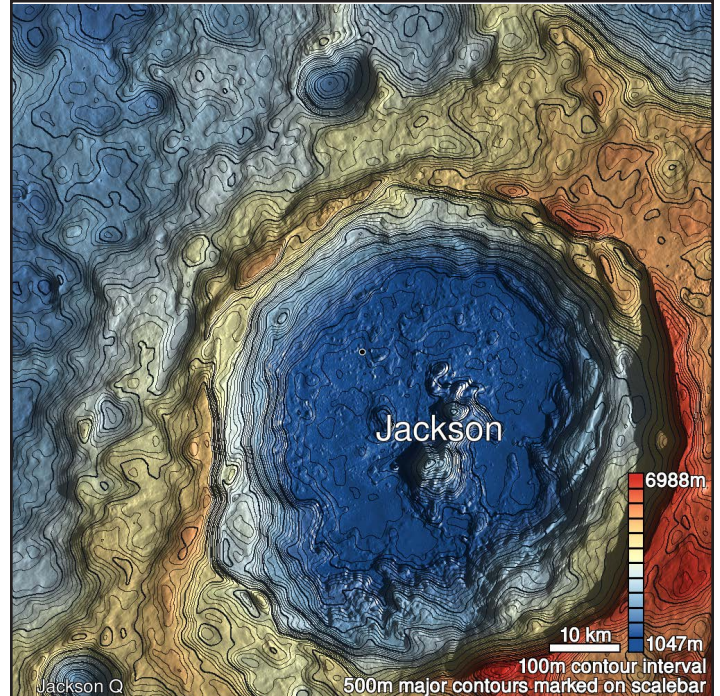
Possibly not a pit. Much darker/larger shadow than nearby craters, but cannot distinguish any walls for certain. There may be a corner between NE and NW walls visible in most images, and a possible outcrop on the SE funnel.

Jackson 1a

Impact Melt Pit: Jackson Crater



Upper left: NAC M125645661L. Upper right: NAC M1178843656L. Lower left: NAC M1097558297L. Lower right: Stereo anaglyph of NACs M105593167L (left eye, red) and M105585995L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Jackson 1a. Black dot marks the location of the pit.

Size and Location

Latitude	22.4208°N	Inner pit diameter	13 m × 8 m
Longitude	196.2868°E	Long axis azimuth	160°
Depth	19 m	Funnel diameter	31 m × 20 m

Measurement Source Images

Image ID	M125645661L	M1178843656L	M1097558297L
Incidence	24.50°	-21.59°	-59.46°
Emission	-0.52°	0.36°	2.35°
Time of Day	11.12	12.21	15.73
Pixel Scale	0.53 m/px	1.35 m/px	1.44 m/px
Depth	15.0 m	22.7 m	>13.5 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M125645661L line 39421, sample 4531

Best stereo pair: M105593167L / M105585995L

Other useful images: M1122318040R

DTM:

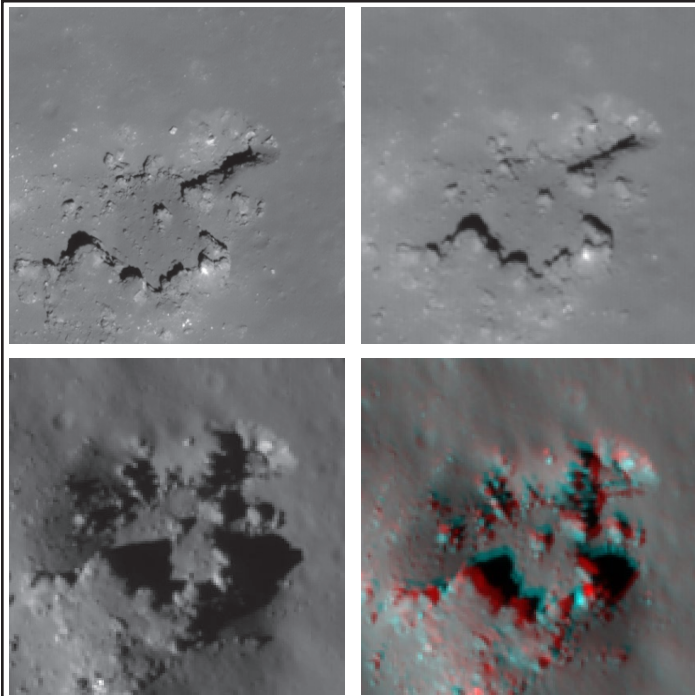
Data notes: Depth 2 is from west rim, which may be higher than south. Depth 3 is from top of funnel, and no floor is visible.

Description

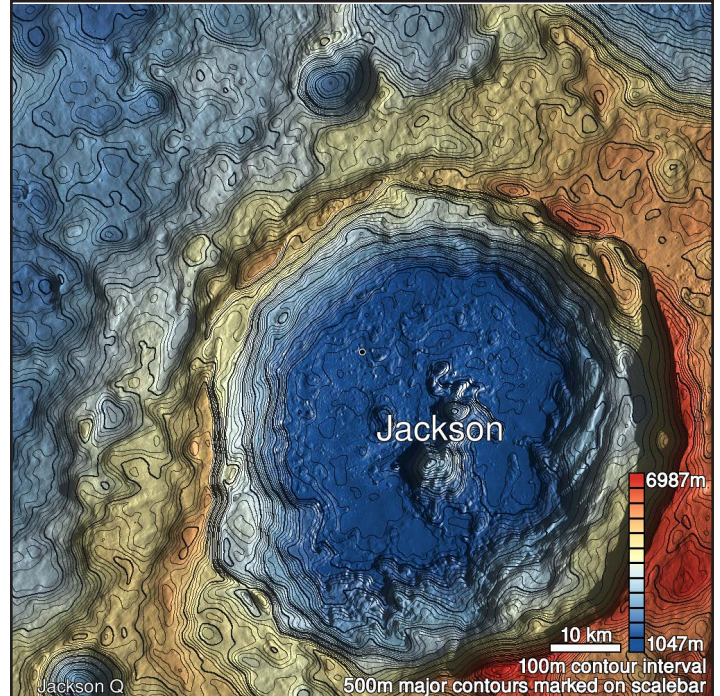
Central of three pits in a rough line (~10m north of the ~150m direct line between the end pits). North wall may be a slope down to the floor, although there seems to be a bit of a rim. Significant funnel, especially on SE side. No depression visible in ground between the end pits of the chain.

Jackson 1b

Impact Melt Pit: Jackson Crater



Upper left: NAC M125645661L. Upper right: NAC M1178843656L. Lower left: NAC M1097558297L. Lower right: Stereo anaglyph of NACs M105593167L (left eye, red) and M105585995L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Jackson 1b. Black dot marks the location of the pit.

Size and Location

Latitude	22.4191°N	Inner pit diameter	30 m × 26 m
Longitude	196.2828°E	Long axis azimuth	60°
Depth	20 m	Funnel diameter	51 m × 49 m

Measurement Source Images

Image ID	M125645661L	M1178843656L	M1097558297L
Incidence	24.50°	-21.59°	-59.46°
Emission	-0.39°	0.41°	2.40°
Time of Day	11.12	12.21	15.73
Pixel Scale	0.53 m/px	1.35 m/px	1.44 m/px
Depth	17.5 m	20.2 m	20.9 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	Yes?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M125645661L line 39338, sample 4734

Best stereo pair: M105593167L / M105585995L

Other useful images: M1122318040R

DTM:

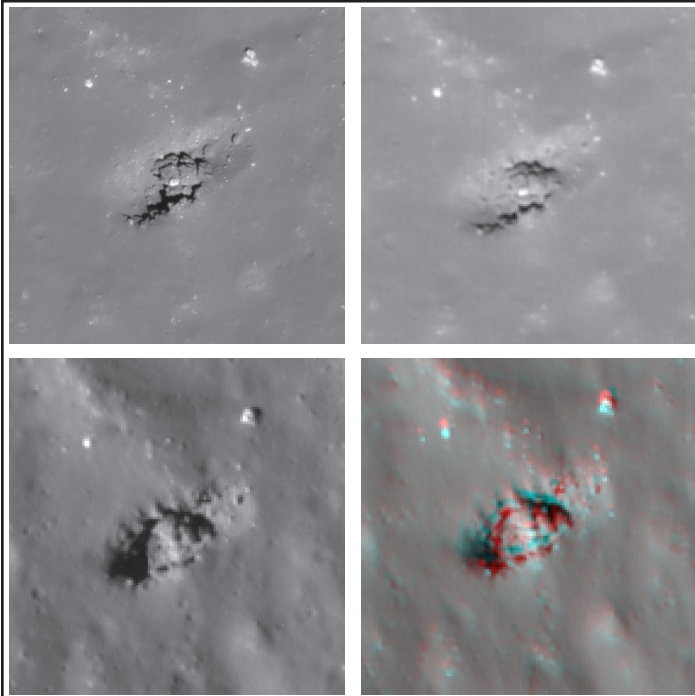
Data notes: Depth 3 is from top of funnel.

Description

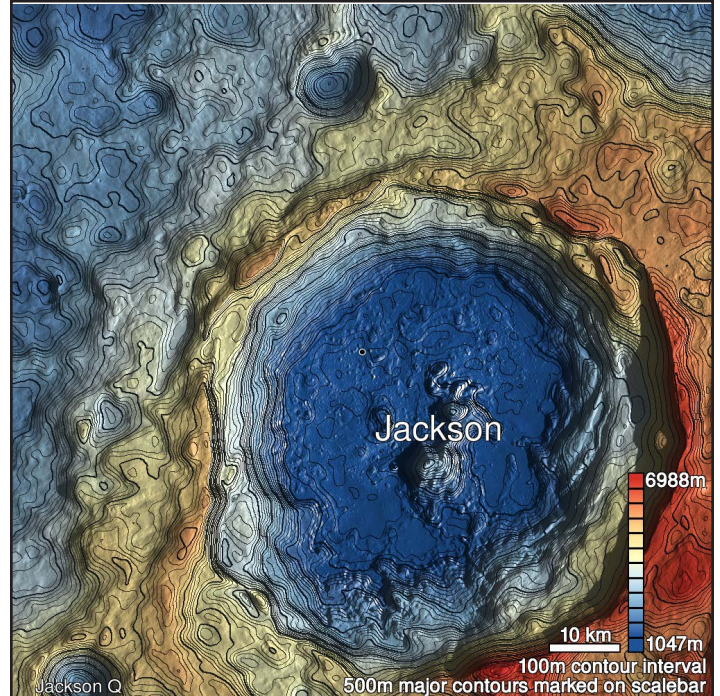
Western of the Jackson 1 pits. Very pronounced funnel. East end opens into a larger depression, ~100m wide, the south side of which is a ~100m long broken boulder (or hill with caprock layer) (it looks like the boulder was impact breccia, and half of it disintegrated and fell into the depression). NW corner may be a smooth slope to the floor. Probable overhang to the east- the (flat) floor is casting a visible shadow in a slewed image looking down-Sun to the east (M105593167L). Funnel is steeper than 39 degrees.

Jackson 1c

Impact Melt Pit: Jackson Crater



Upper left: NAC M125645661L. Upper right: NAC M1178843656L. Lower left: NAC M1097558297L. Lower right: Stereo anaglyph of NACs M105593167L (left eye, red) and M105585995L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Jackson 1c. Black dot marks the location of the pit.

Size and Location

Latitude	22.4214°N	Inner pit diameter	NA m × 31 m
Longitude	196.2907°E	Long axis azimuth	60°
Depth	15 m	Funnel diameter	95 m × 45 m

Measurement Source Images

Image ID	M125645661L	M1178843656L	M1097558297L
Incidence	24.50°	-21.59°	-59.47°
Emission	-0.64°	0.31°	2.31°
Time of Day	11.12	12.21	15.73
Pixel Scale	0.53 m/px	1.35 m/px	1.44 m/px
Depth	15.3 m	10.7 m	18.2 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M125645661L line 39443, sample 4319

Best stereo pair: M105593167L / M105585995L

Other useful images: M1122318040R

DTM:

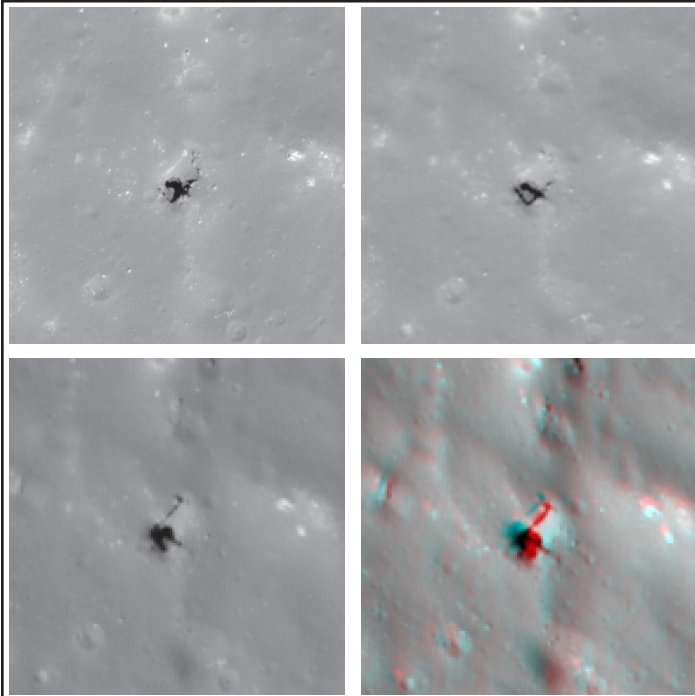
Data notes: Depth 3 is from top of funnel.

Description

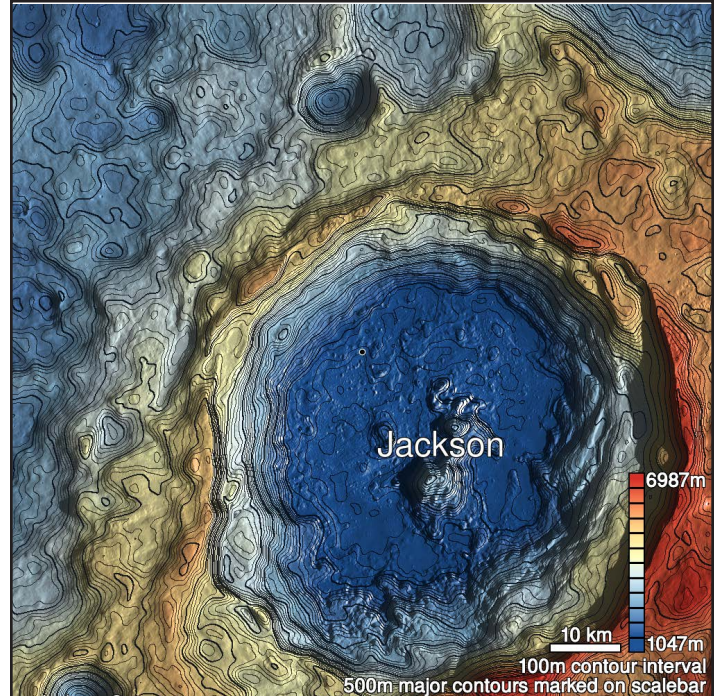
Eastern of the Jackson 1 pit chain. Elliptical, with both east and west ends having a smooth slope to the floor (western end, at least, is in self-cast shadow at 45 degree incidence angle!). Center of the pit is a large block of fractured rock, rising to level with surrounding terrain.

Jackson 2a

Impact Melt Pit: Jackson Crater



Upper left: NAC M125645661L. Upper right: NAC M1314082002R. Lower left: NAC M184604792L. Lower right: Stereo anaglyph of NACs M105593167L (left eye, red) and M105585995L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Jackson 2a. Black dot marks the location of the pit.

Size and Location

Latitude	22.4967°N	Inner pit diameter	25 m × 15 m
Longitude	196.2814°E	Long axis azimuth	40°
Depth	7 m	Funnel diameter	44 m × 27 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	No?		

Measurement Source Images

Image ID	M125645661L	M1314082002R	M184604792L
Incidence	24.57°	-23.98°	-33.02°
Emission	-0.38°	-2.18°	2.17°
Time of Day	11.12	12.34	13.75
Pixel Scale	0.53 m/px	1.00 m/px	1.42 m/px
Depth	7.8 m	5.6 m	8.3 m

Location reference: NAC M125645661L line 43351, sample 4776

Best stereo pair: M105593167L / M105585995L

Other useful images:

DTM:

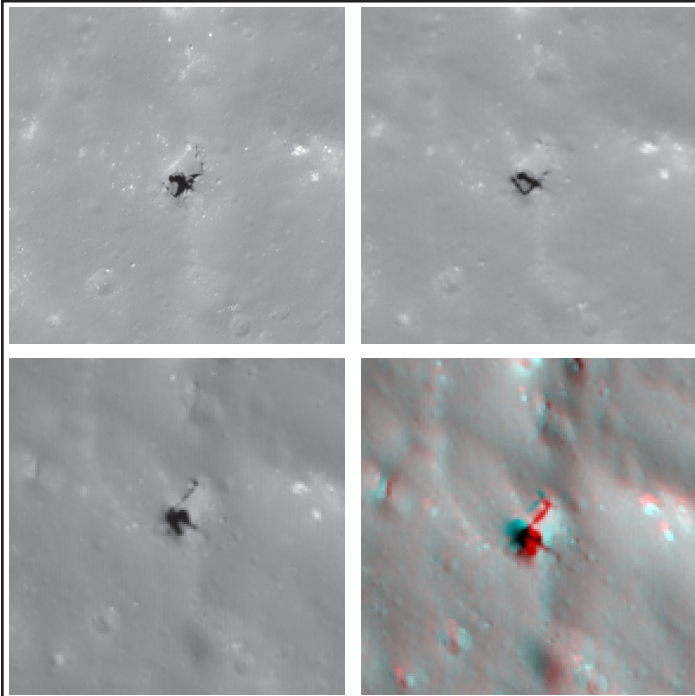
Data notes: Depths measured from S end of pit, N side of floor is at least 2 m shallower.

Description

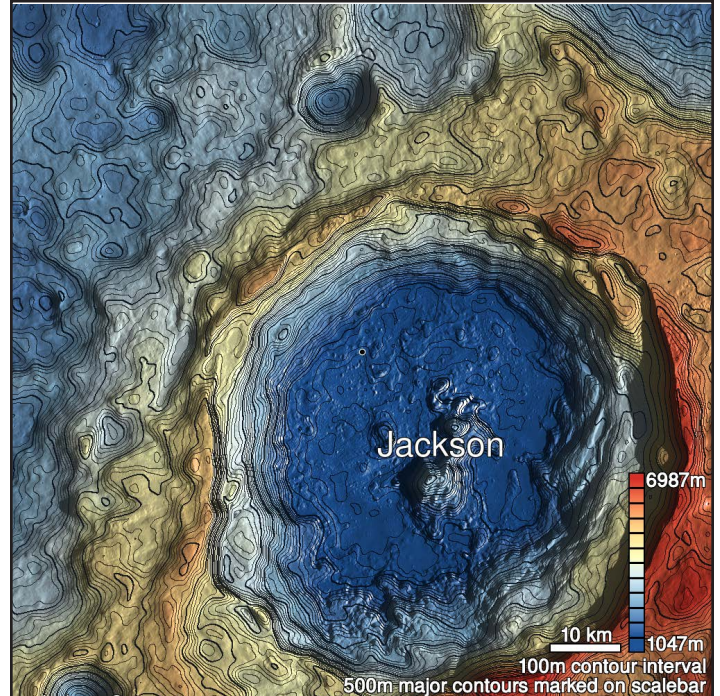
Outer of a pair of concentric pits. Generally rectangular, there is a likely-traversable slope from the north corner to the inner pit, Jackson 2b. Jackson 2b occupies the center of the floor, stretching from SE to NW walls, and ~7m from the SW wall. Surroundings are lumpy, somewhat jagged-looking melt.

Jackson 2b

Impact Melt Pit: Jackson Crater



Upper left: NAC M125645661L. Upper right: NAC M1314082002R. Lower left: NAC M184604792L. Lower right: Stereo anaglyph of NACs M105593167L (left eye, red) and M105585995L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Jackson 2b. Black dot marks the location of the pit.

Size and Location

Latitude	22.4967°N	Inner pit diameter	11 m × 9 m
Longitude	196.2814°E	Long axis azimuth	140°
Depth	11 m	Funnel diameter	N/A m × N/A m

Measurement Source Images

Image ID	M125645661L	M1314082002R	M184604792L
Incidence	24.57°	-23.98°	-33.02°
Emission	-0.38°	-2.18°	2.17°
Time of Day	11.12	12.34	13.75
Pixel Scale	0.53 m/px	1.00 m/px	1.42 m/px
Depth	14.7 m	7.9 m	>10.8 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	No?		

Location reference: NAC M125645661L line 43345, sample 4780

Best stereo pair: M105593167L / M105585995L

Other useful images:

DTM:

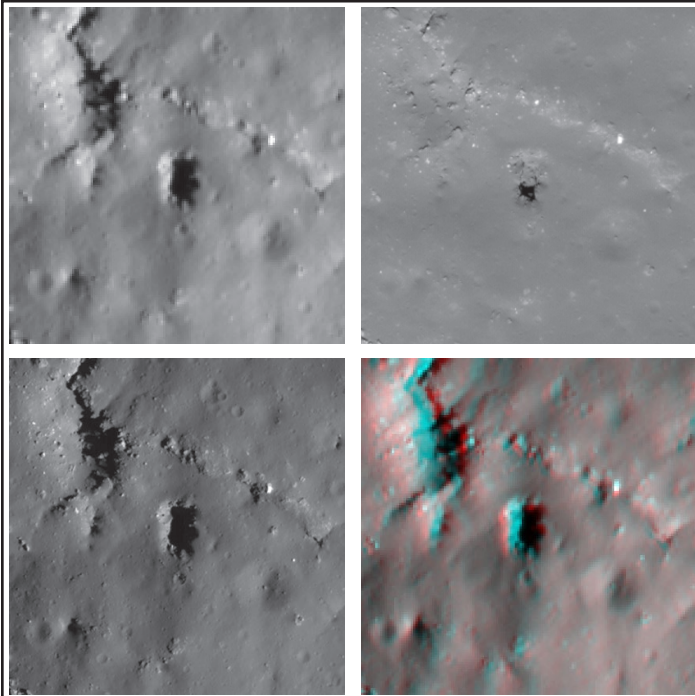
Data notes: Depths 1 and 3 are depth from S rim of Jackson 2a (22.5 m, 19.4 m) minus depth of an adjacent point on Jackson 2a's floor relative to the same rim (7.8 m, 8.3 m).

Description

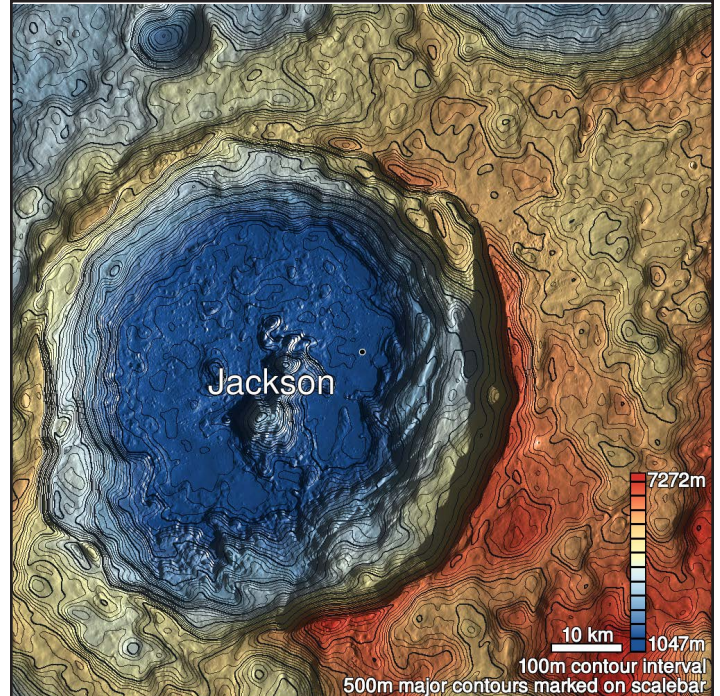
Inner of a pair of concentric pits. Generally rectangular, only a sliver of floor is visible.

Jackson 3

Impact Melt Pit: Jackson Crater



Upper left: NAC M1106981436R. Upper right: NAC M171624375L. Lower left: NAC M176338993R. Lower right: Stereo anaglyph of NACs M1106988580R (left eye, red) and M1106974292R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Jackson 3. Black dot marks the location of the pit.

Size and Location

Latitude	22.1992°N	Inner pit diameter	18 m × 11 m
Longitude	197.1493°E	Long axis azimuth	165°
Depth	17 m	Funnel diameter	34 m × 27 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1106981436R	M171624375L	M176338993R
Incidence	56.05°	23.69°	59.49°
Emission	0.23°	2.55°	2.26°
Time of Day	8.48	11.92	8.23
Pixel Scale	1.42 m/px	0.60 m/px	0.43 m/px
Depth	18.6 m	14.8 m	>8.8 m

Location reference: NAC M1106981436R line 22194, sample 906

Best stereo pair: M1106988580R / M1106974292R

Other useful images:

DTM:

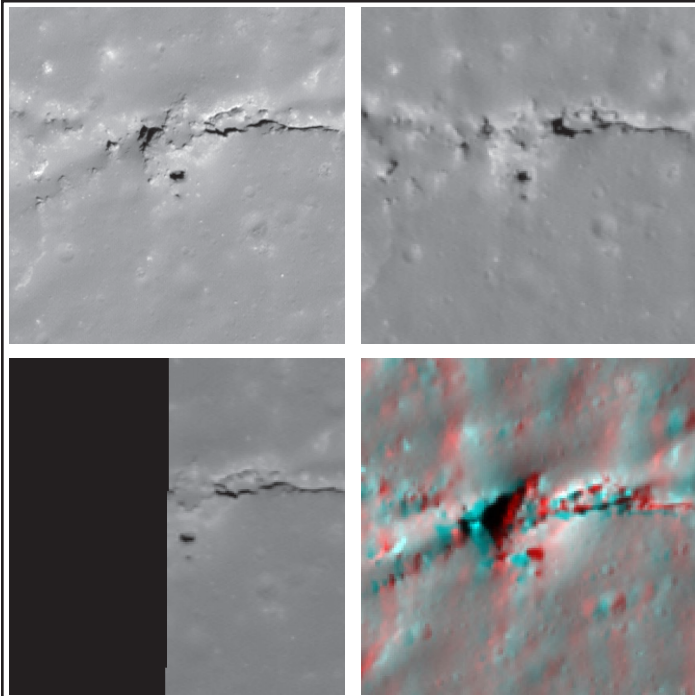
Data notes:

Description

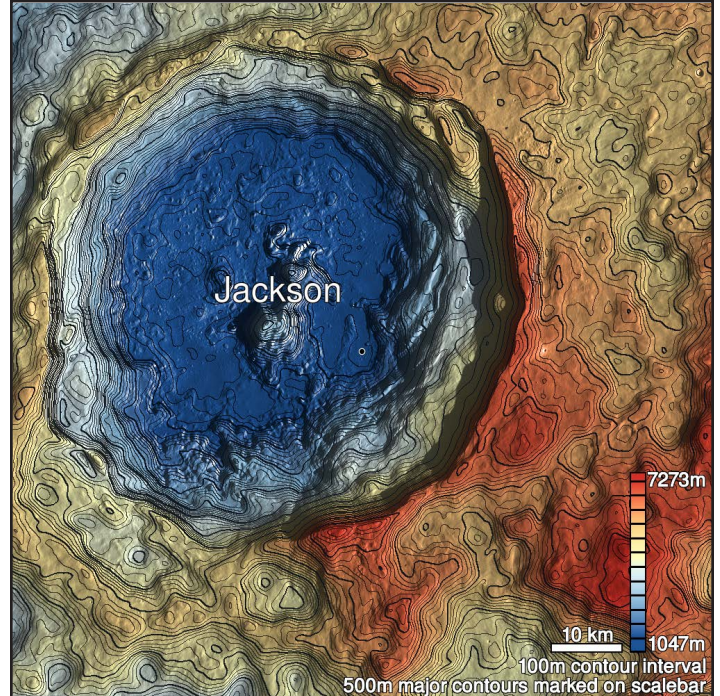
An elliptical collapse in the middle of a collection of large straight fractures, but not in line with any of them (probably). Very pronounced funnel, and several 1-3m boulders visible on the floor. At the northern foot of a subtle rise.

Jackson 4

Impact Melt Pit: Jackson Crater



Upper left: NAC M110302263L. Upper right: NAC M1176484245R. Lower left: NAC M186956552R. Lower right: Stereo anaglyph of NACs M1106988580R (left eye, red) and M1106974292R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Jackson 4. Black dot marks the location of the pit.

Size and Location

Latitude	21.7636°N	Inner pit diameter	9 m × 5 m
Longitude	197.1197°E	Long axis azimuth	85°
Depth	8 m	Funnel diameter	14 m × 10 m

Measurement Source Images

Image ID	M110302263L	M1176484245R	M186956552R
Incidence	26.77°	-37.07°	20.40°
Emission	-1.90°	-0.95°	2.74°
Time of Day	11.10	14.12	11.90
Pixel Scale	0.59 m/px	1.34 m/px	1.40 m/px
Depth	7.3 m	7.6 m	8.9 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	Yes?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M110302263L line 42822, sample 2223

Best stereo pair: M1106988580R / M1106974292R

Other useful images:

DTM:

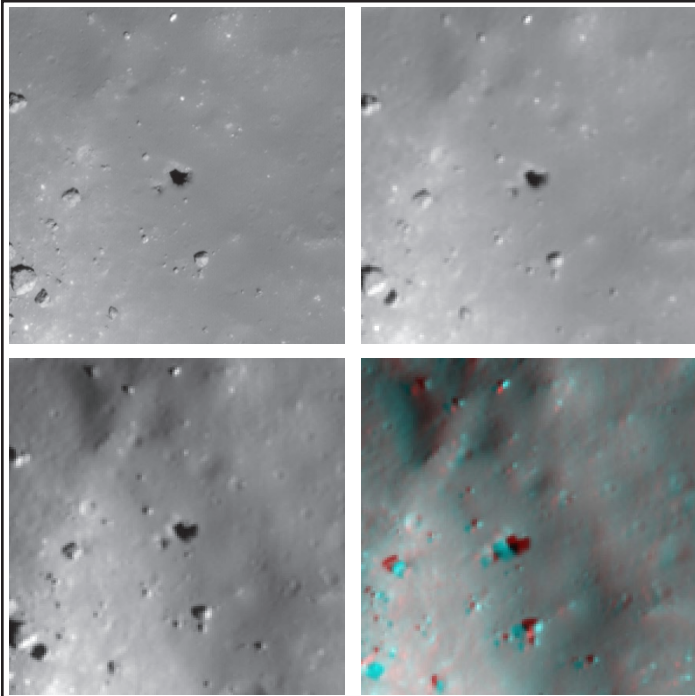
Data notes: Depth 3 is very high Sun, and shadow edges are a bit fuzzy.

Description

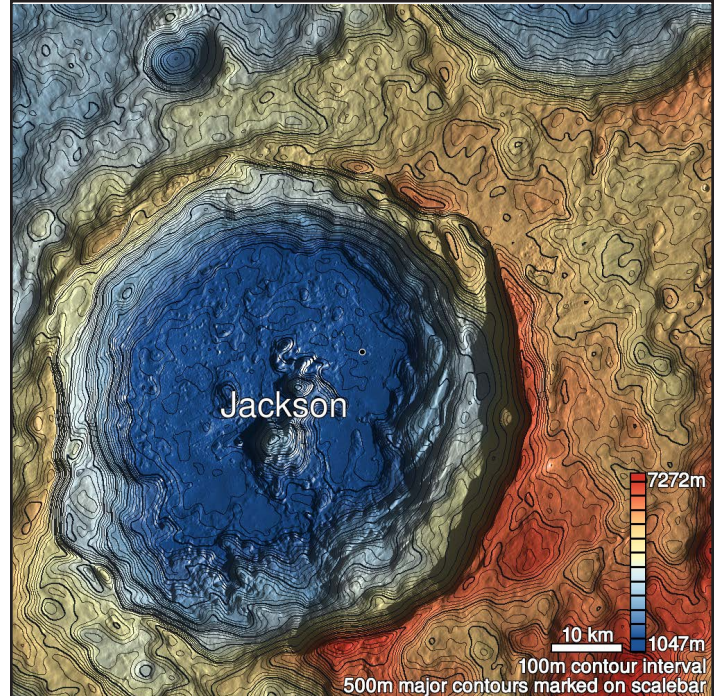
Very deep elliptical pit in the south wall of a positive relief feature. The PRF cuts across a fracture that is running E-W, and there is a confirmed ~5m overhang where a wide fracture pit runs under the PRF (eyeballing the available stereo data and measuring shadows in the fracture pit, the PRF is ~10-15m tall, and the fracture pit is ~5-10m below the surrounding terrain).

Jackson 5

Impact Melt Pit: Jackson Crater



Upper left: NAC M110302263L. Upper right: NAC M1104623779L. Lower left: NAC M1106981436R. Lower right: Stereo anaglyph of NACs M1106988580R (left eye, red) and M1106974292R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Jackson 5. Black dot marks the location of the pit.

Size and Location

Latitude	22.3063°N	Inner pit diameter	11 m × 9 m
Longitude	197.0853°E	Long axis azimuth	120°
Depth	>19 m	Funnel diameter	17 m × 15 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M110302263L	M1104623779L	M1106981436R
Incidence	27.26°	33.81°	56.14°
Emission	-0.66°	2.69°	0.98°
Time of Day	11.10	10.32	8.48
Pixel Scale	0.59 m/px	1.43 m/px	1.42 m/px
Depth	>19.4 m	>16.1 m	>9.2 m

Location reference: NAC M110302263L line 17514, sample 4316

Best stereo pair: M1106988580R / M1106974292R

Other useful images:

DTM:

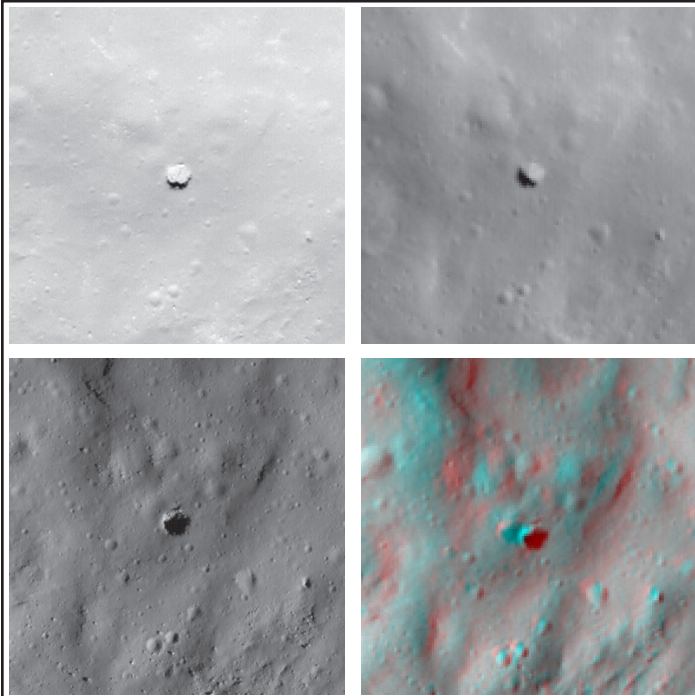
Data notes:

Description

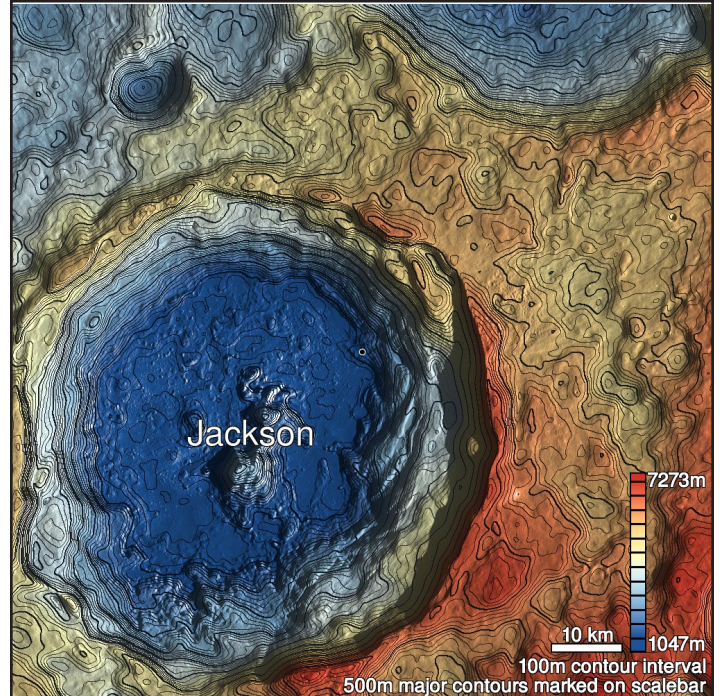
Irregular pit with somewhat pronounced funnel (notably, the funnel depth is even all the way around). Possible 5m wide shallow collapse 8m to the SW. No floor visible in any image. ~30m east of the base of a ~300m-long PRF. There is a subtle round-bottom depression that runs around the N/NW/W sides of that PRF. No other collapses in the area.

Jackson 6

Impact Melt Pit: Jackson Crater



Upper left: NAC M171624375R. Upper right: NAC M105578820L. Lower left: NAC M176338993L. Lower right: Stereo anaglyph of NACs M1106988580L (left eye, red) and M1106974292L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Jackson 6. Black dot marks the location of the pit.

Size and Location

Latitude	22.4434°N	Inner pit diameter	13 m × 13 m
Longitude	197.2553°E	Long axis azimuth	0°
Depth	7 m	Funnel diameter	18 m × 16 m

Measurement Source Images

Image ID	M171624375R	M105578820L	M176338993L
Incidence	23.92°	-45.19°	59.46°
Emission	-0.43°	3.15°	-1.88°
Time of Day	11.93	14.65	8.24
Pixel Scale	0.59 m/px	1.50 m/px	0.43 m/px
Depth	7.7 m	6.0 m	6.5 m

Other Features

Entrance Ramp	No?	In dome	No?
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No?		

Location reference: NAC M171624375R line 27614, sample 1276

Best stereo pair: M1106988580L / M1106974292L

Other useful images:

DTM:

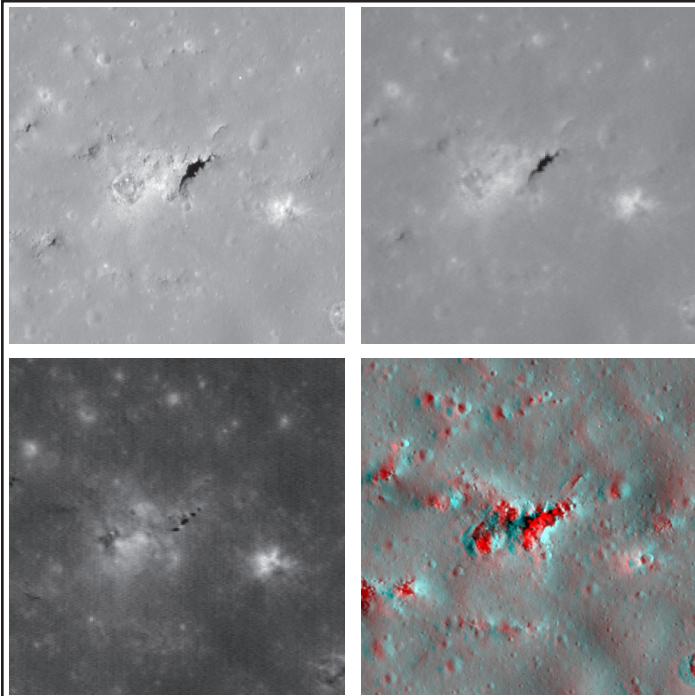
Data notes:

Description

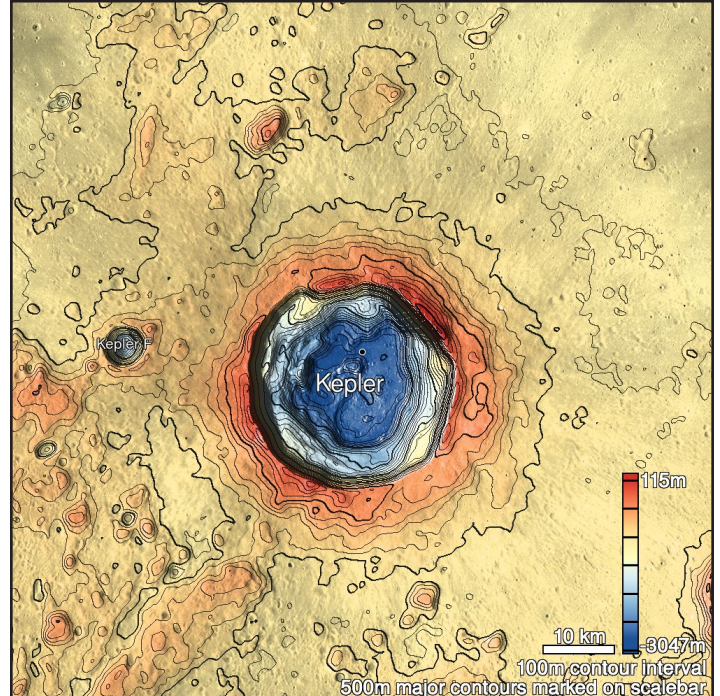
Round depression. Resolution is bad in most images, but shadow shape implies a bowl-shaped floor, possibly flat near the S wall (shadow measures disagree: 1 is from by S wall, 2 is from center, 3 is from NW wall). NE wall may be sloped to very near the rim. Floor is much higher albedo than surroundings, and seems to be covered by ~1m rocks. Pit is at north foot of a rise, no other collapse features nearby, but there is a linear round-bottomed depression, ~40m wide, 175m N.

Kepler 1

Impact Melt Fracture Pit: Kepler Crater



Upper left: NAC M111843702R. Upper right: NAC M188493098L. Lower left: NAC M186134194L. Lower right: Stereo anaglyph of NACs M166100555R (left eye, red) and M166093770R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Kepler 1. Black dot marks the location of the pit.

Size and Location

Latitude	8.2745°N	Inner pit diameter	25 m × 12 m
Longitude	322.0501°E	Long axis azimuth	65°
Depth	10 m	Funnel diameter	42 m × 33 m

Measurement Source Images

Image ID	M111843702R	M188493098L	M186134194L
Incidence	32.65°	21.03°	-10.01°
Emission	0.26°	-1.30°	1.83°
Time of Day	9.92	10.68	12.49
Pixel Scale	0.49 m/px	1.23 m/px	1.24 m/px
Depth	9.4 m	10.4 m	11.4 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes?	Colinear pits	No?
Nearby fractures	Yes	Colinear depressions	No?
Nearby depressions	No?	Colinear fractures	Yes
In Depression	No?		

Location reference: NAC M111843702R line 13367, sample 977

Best stereo pair: M166100555R / M166093770R

Other useful images:

DTM:

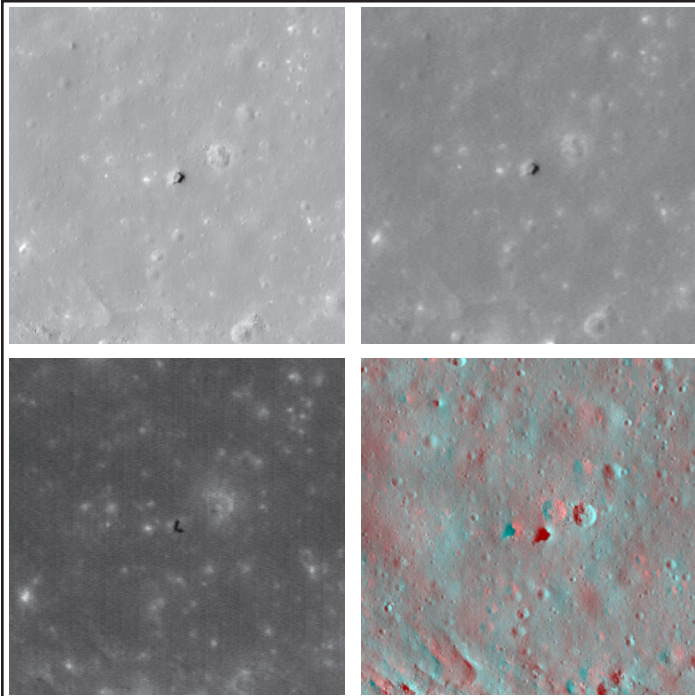
Data notes: Depth 3 is extremely high sun (10 degree incidence), so the 2 degree emission angle may be significant. Also, sun is mostly parallel to the walls.

Description

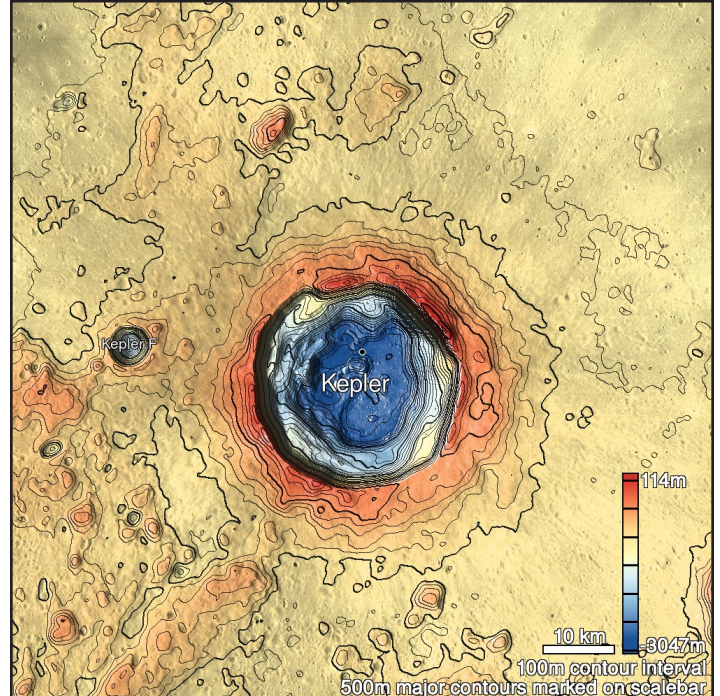
An irregular L-shaped pit in a series of short fractures, though it itself is not directly connected to any fractures. Individual fractures cut diagonally across the main trend of this chain of fractures. No clear slope to the bottom, but the walls don't appear to be perfectly vertical either, and there may be (hand to traverse) entrance slopes on south and east. To the NW (same direction as other individual fractures run) is a shallow linear depression. There is a 16m crater with some bright ejecta ~20m to the west.

Kepler 2

Impact Melt Pit: Kepler Crater



Upper left: NAC M111843702R. Upper right: NAC M188493098L. Lower left: NAC M186134194L. Lower right: Stereo anaglyph of NACs M166100555L (left eye, red) and M166093770R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Kepler 2. Black dot marks the location of the pit.

Size and Location

Latitude	8.2724°N	Inner pit diameter	6 m × 5 m
Longitude	322.0248°E	Long axis azimuth	30°
Depth	9 m	Funnel diameter	14 m × 11 m

Measurement Source Images

Image ID	M111843702R	M188493098L	M186134194L
Incidence	32.67°	21.05°	-9.99°
Emission	1.16°	-0.92°	2.21°
Time of Day	9.92	10.67	12.49
Pixel Scale	0.49 m/px	1.23 m/px	1.24 m/px
Depth	3.9 m	6.5 m	15.3 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M111843702R line 13487, sample 2525

Best stereo pair: M166100555L / M166093770R

Other useful images:

DTM:

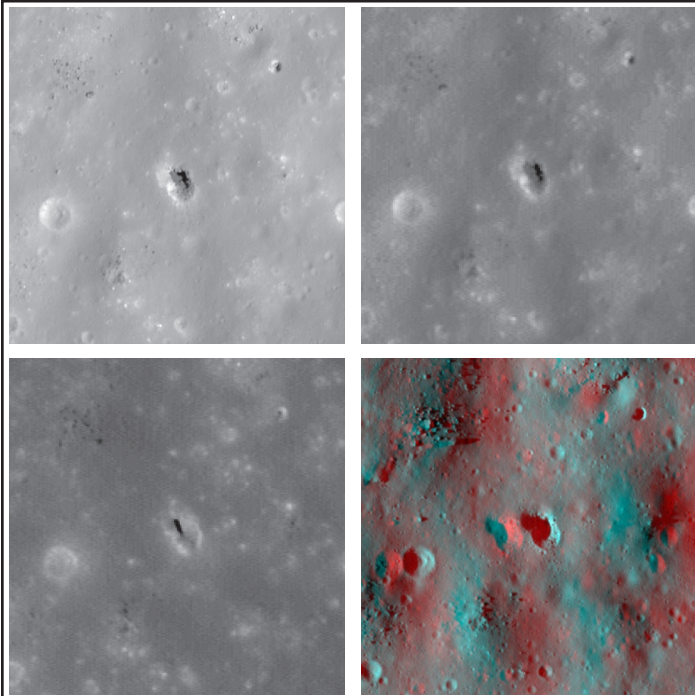
Data notes: Depth 3 is extremely high sun (10 degree incidence), so the 2 degree emission angle may be significant. Also, resolution is low.

Description

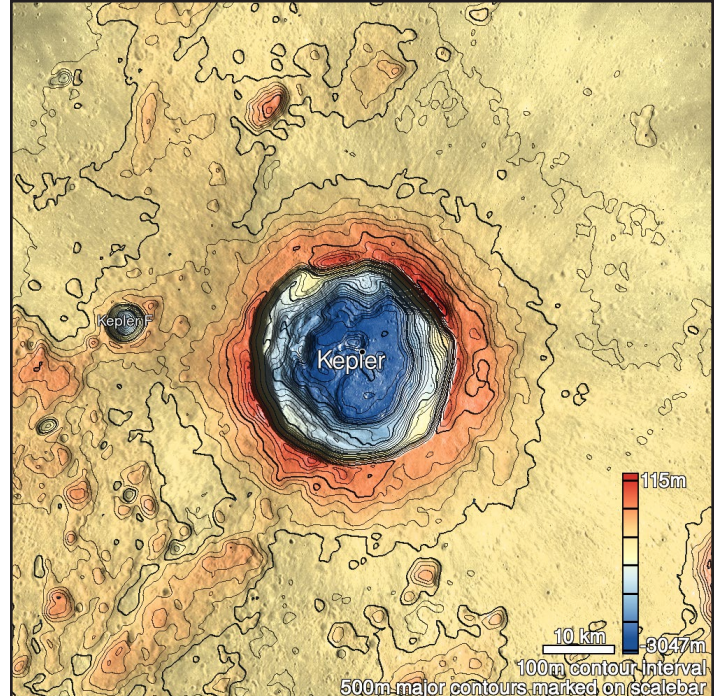
A roundish pit, very much in the Tranquillitatis style. Fairly pronounced funnel. There's a large open fracture ~250m to the NE, and an arc of tiny fractures running from SW to E, approaching to within 75m due south.

Kepler 3

Impact Melt Pit: Kepler Crater



Upper left: NAC M111843702R. Upper right: NAC M188493098L. Lower left: NAC M186134194L. Lower right: Stereo anaglyph of NACs M166100555R (left eye, red) and M166093770R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Kepler 3. Black dot marks the location of the pit.

Size and Location

Latitude	8.1636°N	Inner pit diameter	14 m × 8 m
Longitude	322.0449°E	Long axis azimuth	145°
Depth	13 m	Funnel diameter	25 m × 15 m

Measurement Source Images

Image ID	M111843702R	M188493098L	M186134194L
Incidence	32.63°	21.00°	-9.93°
Emission	0.40°	-1.25°	1.89°
Time of Day	9.92	10.68	12.49
Pixel Scale	0.49 m/px	1.23 m/px	1.24 m/px
Depth	8.1 m	11.7 m	18.1 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M111843702R line 19492, sample 1219

Best stereo pair: M166100555R / M166093770R

Other useful images:

DTM:

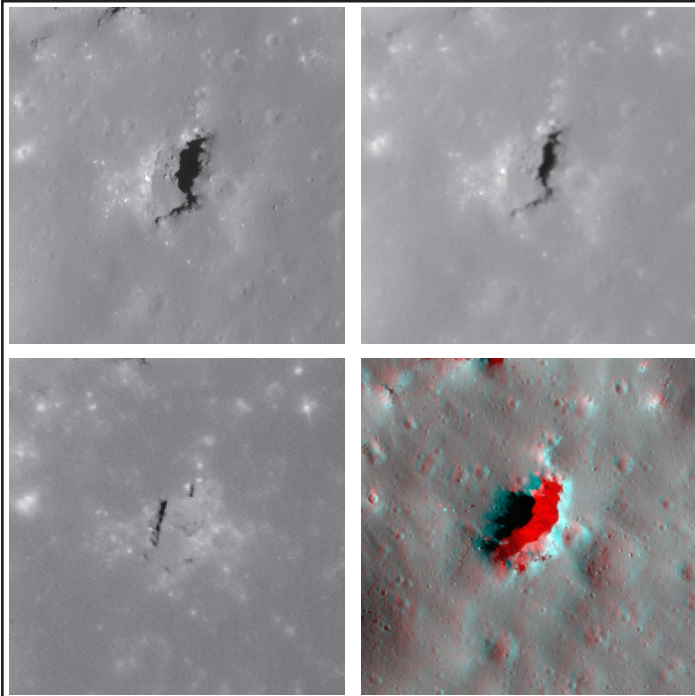
Data notes: Depth 3 is extremely high sun (10 degree incidence), so the 2 degree emission angle may be significant. Also, resolution is low. Measure is from south wall.

Description

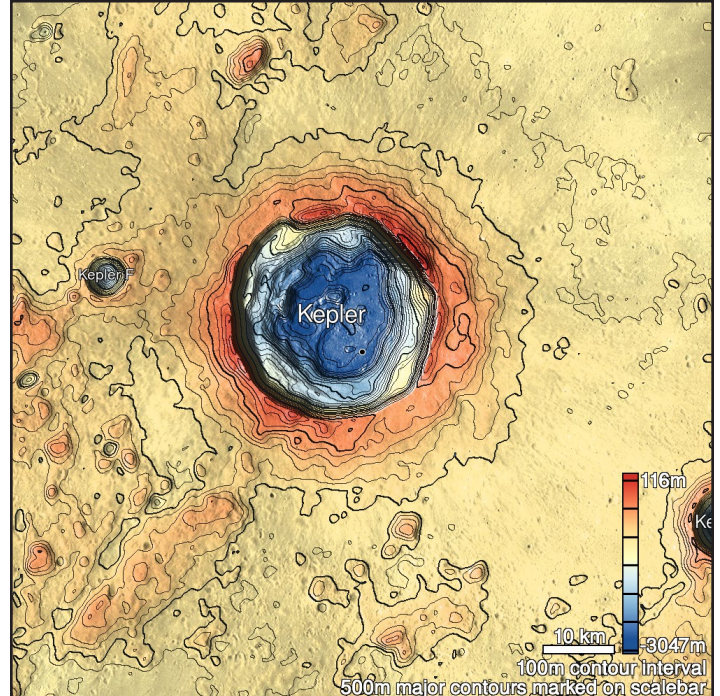
Elliptical pit, mostly consists of funnel (possibly the funnel to the SE is a 17 m impact crater). There appears to be little funnel on the N and E walls, funnel may or may not reach floor on the SW. Floor is significantly darker than funnel, and is what I will use as a measure of the inner pit. ~175m south of the central peak, no collapses in the area.

Kepler 4a

Impact Melt Pit: Kepler Crater



Upper left: NAC M111843702L. Upper right: NAC M188493098L. Lower left: NAC M186134194L. Lower right: Stereo anaglyph of NACs M135439816L (left eye, red) and M135433031R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Kepler 4a. Black dot marks the location of the pit.

Size and Location

Latitude	7.9460°N	Inner pit diameter	56 m × 38 m
Longitude	322.1363°E	Long axis azimuth	30°
Depth	22 m	Funnel diameter	70 m × 45 m

Measurement Source Images

Image ID	M111843702L	M188493098L	M186134194L
Incidence	32.48°	20.84°	-9.85°
Emission	-2.99°	-2.67°	0.48°
Time of Day	9.92	10.68	12.50
Pixel Scale	0.49 m/px	1.23 m/px	1.23 m/px
Depth	18.1 m	19.0 m	28.8 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M111843702L line 31600, sample 344

Best stereo pair: M135439816L / M135433031R

Other useful images: M155485087R

DTM:

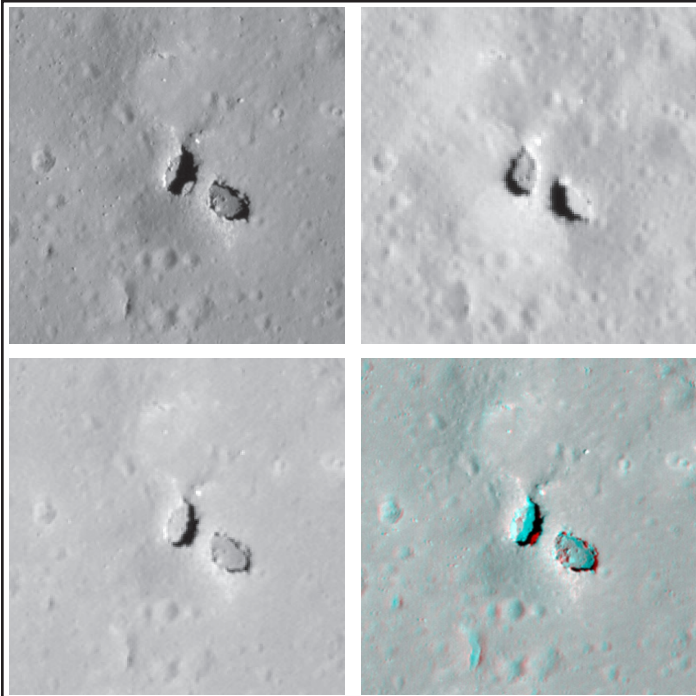
Data notes: Depth 3 is extremely high sun (10 degree incidence), but with only a 0.5 degree emission. Also, resolution is low. Measure is from west wall, others are from east.

Description

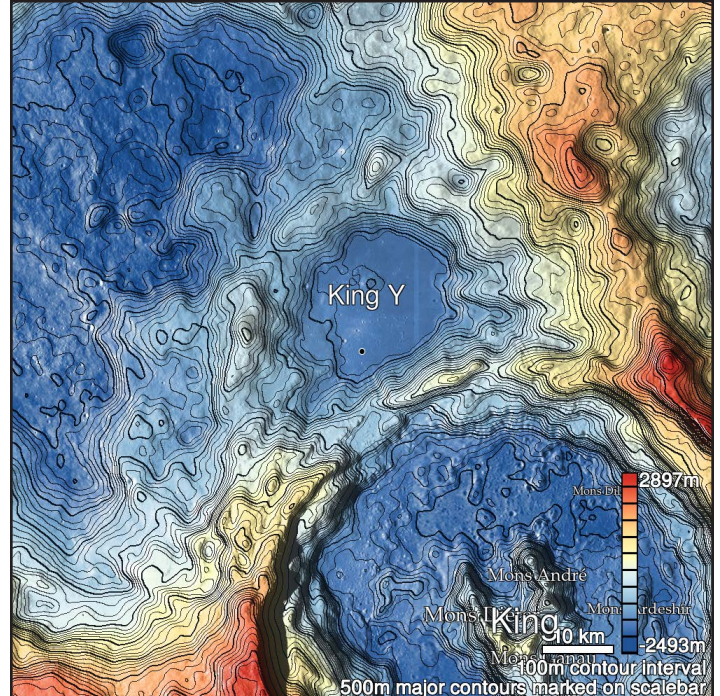
A trapezoidal pit. Kepler 4b is ~200 m E, and there is a band of fractures/depressions WSW-ENE ~100m N of the pit. SW corner of the pit is a slope leading almost all the way to the floor. There is a short ridge cutting across the base of the slope, although it should be possible to go around it. Lighting in slewed images puts all potential overhangs in shadow.

King 1a

Impact Melt Pit: King Crater



Upper left: NAC M113168034R. Upper right: NAC M106088433L. Lower left: NAC M1135766659R. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 1a. Black dot marks the location of the pit.

Size and Location

Latitude	6.2408°N	Inner pit diameter	27 m × 18 m
Longitude	119.7341°E	Long axis azimuth	25°
Depth	11 m	Funnel diameter	30 m × 22 m

Measurement Source Images

Image ID	M113168034R	M106088433L	M1135766659R
Incidence	47.48°	-35.08°	28.94°
Emission	1.17°	1.57°	1.26°
Time of Day	8.87	14.29	10.12
Pixel Scale	0.62 m/px	1.29 m/px	1.17 m/px
Depth	11.0 m	9.3 m	12.1 m

Other Features

Entrance Ramp	No?	In dome	Yes
Overhang	Yes	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M113168034R line 34015, sample 2534

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

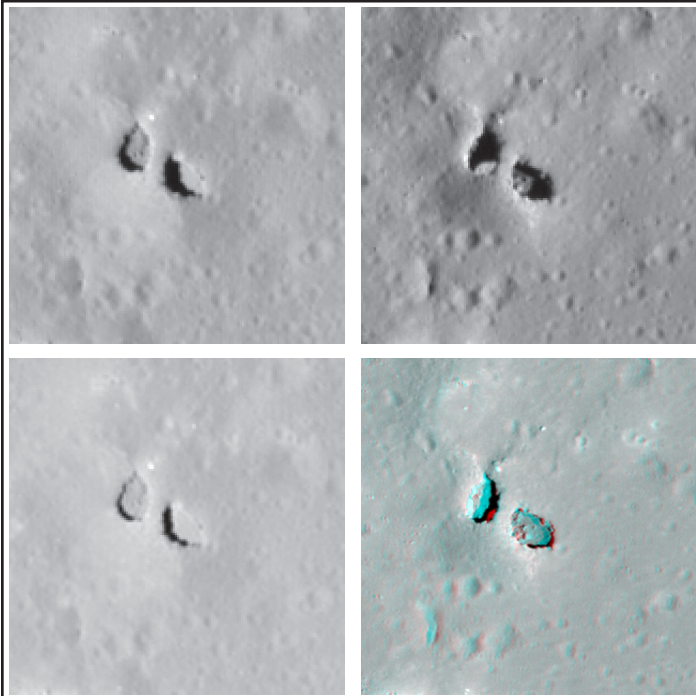
Data notes: Depth 2 is from rim, other depths are from bridge.

Description

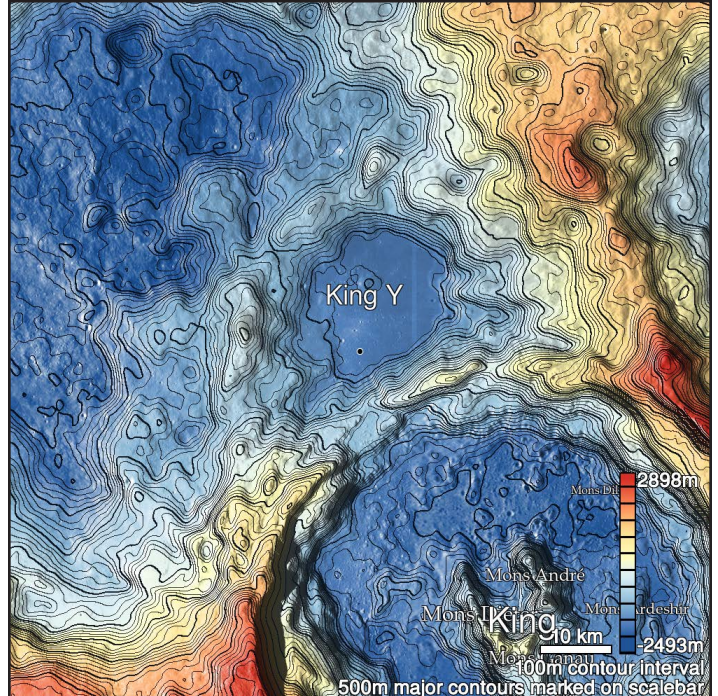
Elliptical pit, northwestern of two pits in a PRF. The two pits are separated by a bridge, 19m long, ~9.5m wide at the narrowest point. The cross-sectional thickness is ~5-7m at an angle ~45 degrees off vertical, depending on the image measured and how close to flat the ground the shadow is on is (implying a ~4m vertical thickness if the bridge has an elliptical cross-section). The S end of the bridge is the highest point on the PRF, and the N end is near the base. The floor of this pit slopes down towards a point under the S end of the bridge, and there is a scattering of 1-3m boulders on the floor. There is a possible 1-2m wide break in the rim in the N, leading into a ~40m wide shallow depression, although high-Sun images suggest that there is still a 1-2m drop at the lowest point. Other nearby features are a string of tiny pits/fractures connected by depressions ~100m N, roughly in line with King 1a and the depression just N of it; a ~5m fracture in a depression ~65m S, also in line with the northern features; and a string of small depressions ~220m S.

King 1b

Impact Melt Pit: King Crater



Upper left: NAC M106088433L. Upper right: NAC M1153439131L. Lower left: NAC M185104801R. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 1b. Black dot marks the location of the pit.

Size and Location

Latitude	6.2402°N	Inner pit diameter	28 m × 18 m
Longitude	119.7351°E	Long axis azimuth	120°
Depth	10 m	Funnel diameter	32 m × 21 m

Measurement Source Images

Image ID	M106088433L	M1153439131L	M185104801R
Incidence	-35.08°	58.51°	-20.75°
Emission	1.56°	-1.34°	-0.46°
Time of Day	14.29	8.12	13.35
Pixel Scale	1.29 m/px	1.28 m/px	1.26 m/px
Depth	12.1 m	7.6 m	11.6 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	Yes	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M106088433L line 41351, sample 2891

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

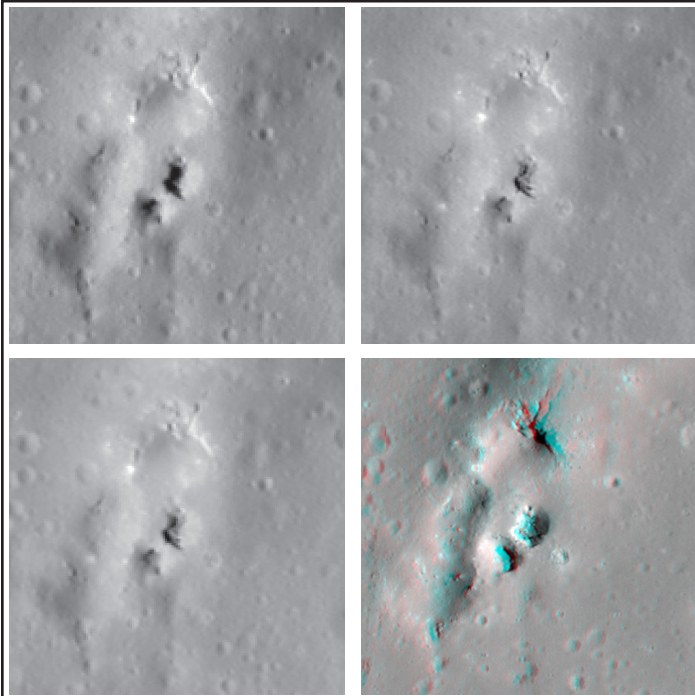
Data notes: Depth 2 is from rim, other depths are from bridge.

Description

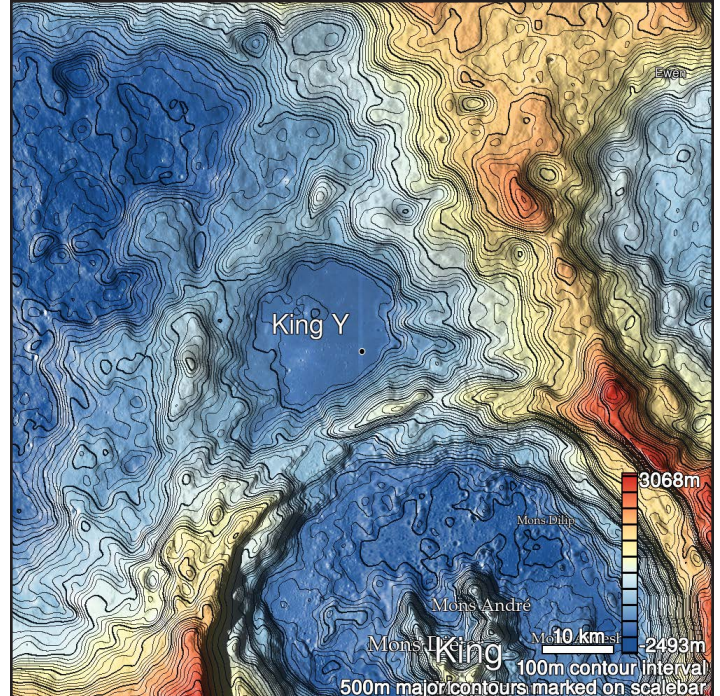
Elliptical pit, southeastern of a pair “separated” by a bridge. Floor slopes from ~2m below E rim to ~5m lower below the S end of the bridge. There is a cluster of 1-5m boulders under the E side of the bridge (there’s a 5m-long block directly under the NE edge). No driving access, except by going under the bridge.

King 2a

Impact Melt Pit: King Crater



Upper left: NAC M182745931R. Upper right: NAC M1131053889R. Lower left: NAC M106088433R. Lower right: Stereo anaglyph of NACs M128509025L (left eye, red) and M128502237L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 2a. Black dot marks the location of the pit.

Size and Location

Latitude	6.3808°N	Inner pit diameter	12 m × 12 m
Longitude	119.9992°E	Long axis azimuth	35°
Depth	7 m	Funnel diameter	24 m × 17 m

Measurement Source Images

Image ID	M182745931R	M1131053889R	M106088433R
Incidence	-48.50°	-27.63°	-35.36°
Emission	-1.29°	-0.16°	-2.24°
Time of Day	15.22	13.77	14.31
Pixel Scale	1.27 m/px	1.17 m/px	1.29 m/px
Depth	5.9 m	9.6 m	5.6 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	No?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M182745931R line 22998, sample 2658

Best stereo pair: M128509025L / M128502237L

Other useful images:

DTM: NAC_DTM_KINGCRATER2

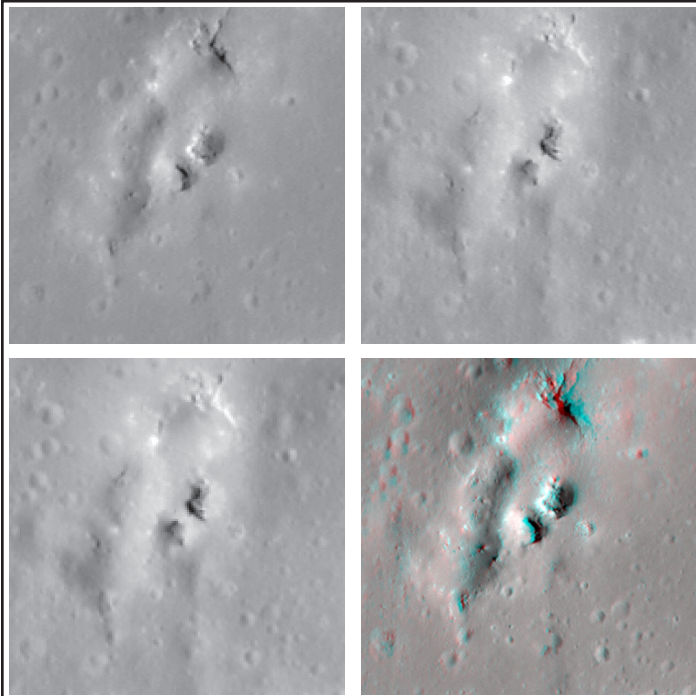
Data notes:

Description

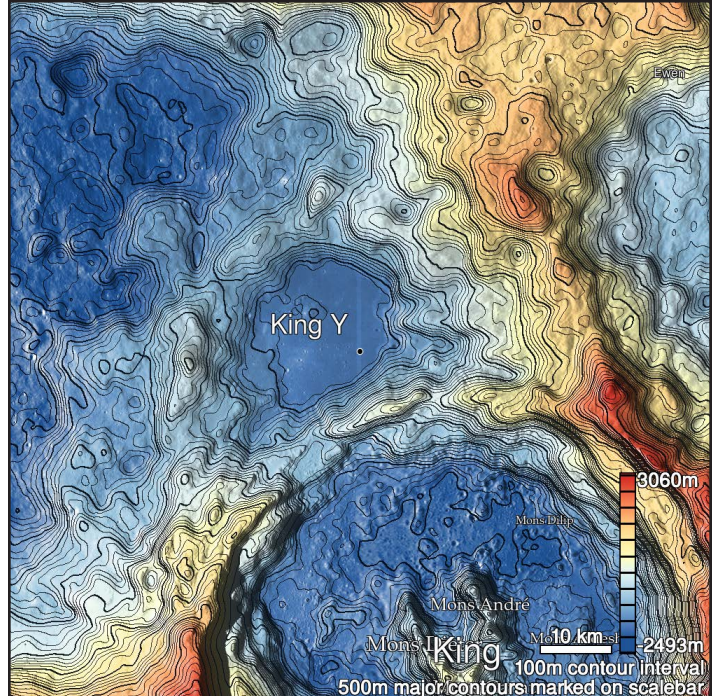
Round/square pit, northern of a pair of pits in the S end of a PRF that look like (but are not) a second natural bridge. N and E walls are a slope from rim to floor, other walls are nearly vertical. Floor looks rough. King 2b is 10m SW, and there are larger collapses in the PRF ~20m to the W and N. There is a set of fractures running N from the N end of the PRF, in line with King 2. King 37 is ~200m E.

King 2b

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M1131053889R. Lower left: NAC M106088433R. Lower right: Stereo anaglyph of NACs M128509025L (left eye, red) and M128502237L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 2b. Black dot marks the location of the pit.

Size and Location

Latitude	6.3802°N	Inner pit diameter	15 m × 9 m
Longitude	119.9972°E	Long axis azimuth	160°
Depth	7 m	Funnel diameter	19 m × 18 m

Measurement Source Images

Image ID	M1120456952R	M1131053889R	M106088433R
Incidence	32.23°	-27.62°	-35.36°
Emission	0.98°	-0.13°	-2.21°
Time of Day	9.88	13.77	14.31
Pixel Scale	1.17 m/px	1.17 m/px	1.29 m/px
Depth	7.1 m	10.5 m	4.2 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	No?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1120456952R line 26993, sample 2126

Best stereo pair: M128509025L / M128502237L

Other useful images:

DTM: NAC_DTM_KINGCRATER2

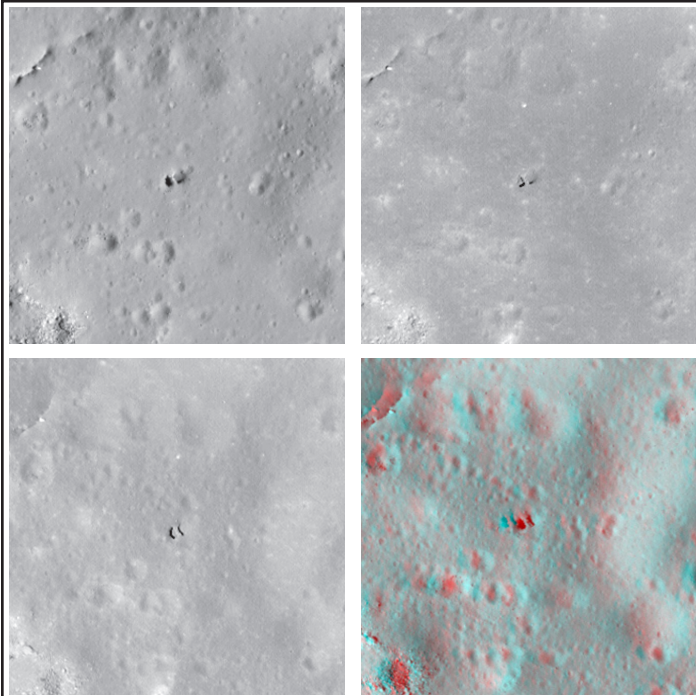
Data notes:

Description

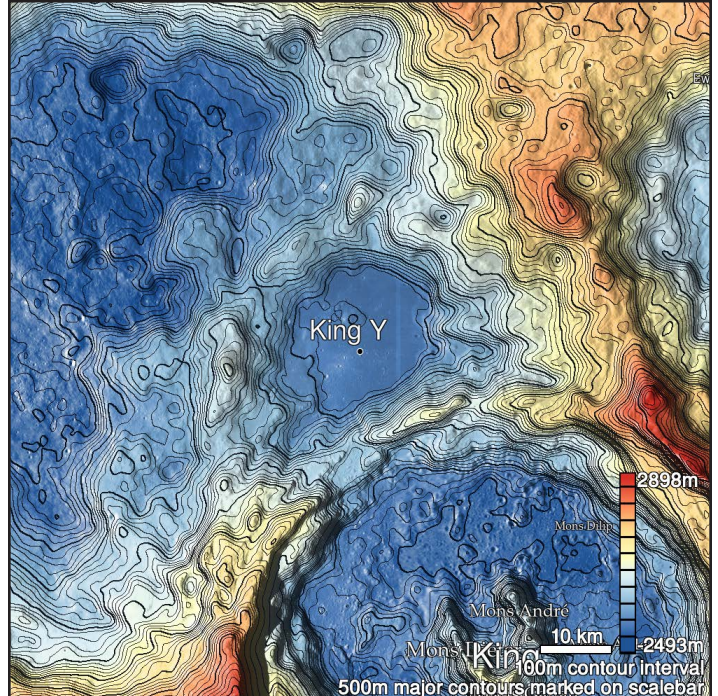
Elliptical pit, southern of pair in PRF. Smooth floor, appears to be slanted from SW to NE.

King 3a

Impact Melt Pit: King Crater



Upper left: NAC M113168034L. Upper right: NAC M141478563R. Lower left: NAC M154453455R. Lower right: Stereo anaglyph of NACs M136762839L (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 3a. Black dot marks the location of the pit.

Size and Location

Latitude	6.4082°N	Inner pit diameter	7 m × 6 m
Longitude	119.8108°E	Long axis azimuth	145°
Depth	3 m	Funnel diameter	9 m × 8 m

Measurement Source Images

Image ID	M113168034L	M141478563R	M154453455R
Incidence	47.43°	14.16°	-16.09°
Emission	-1.05°	0.92°	-0.95°
Time of Day	8.87	11.21	13.02
Pixel Scale	0.62 m/px	0.61 m/px	0.60 m/px
Depth	2.1 m	4.3 m	3.5 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M113168034L line 26333, sample 3673

Best stereo pair: M136762839L / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

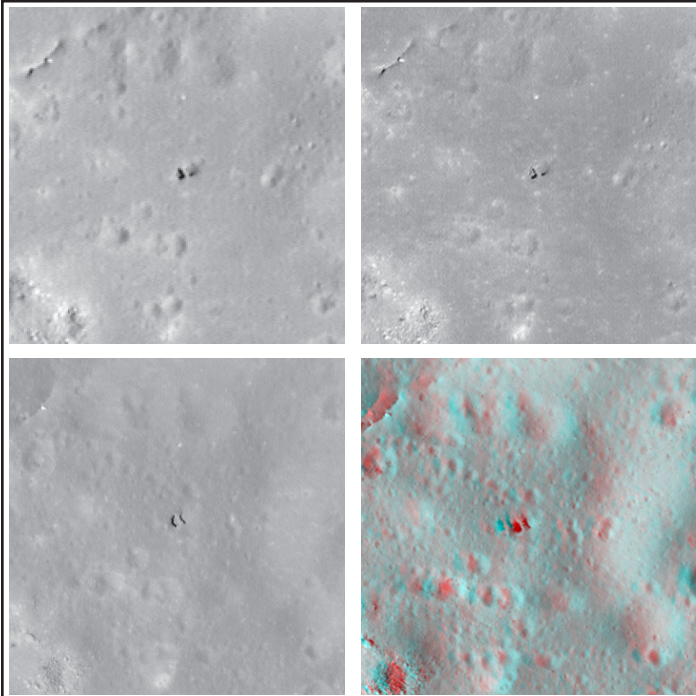
Data notes:

Description

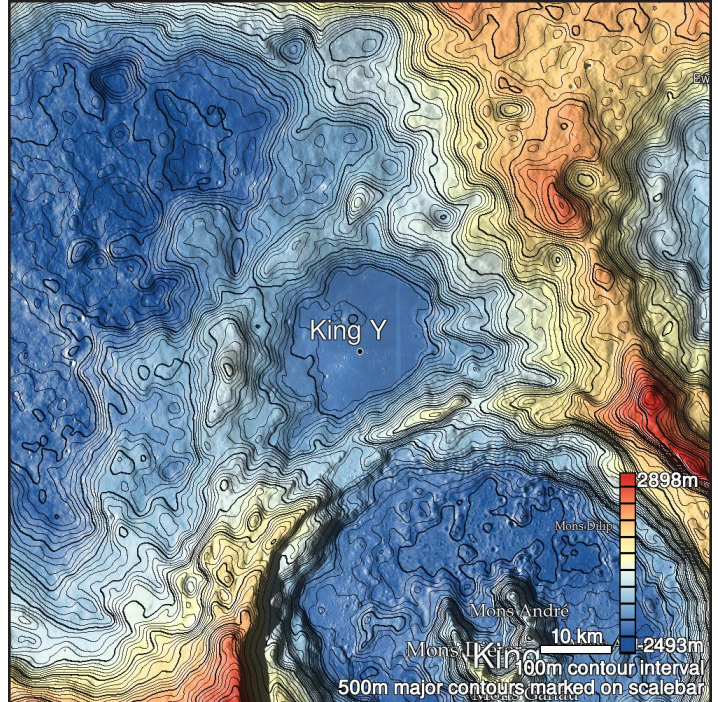
Larger and northeastern of a pair of small pits divided by a ~2m-wide ridge. The ridge does not appear to actually be a bridge- no light shows under it is low-Sun images (e.g. M113168034L), although slewed image M136756054L shows some illuminated terrain adjacent to the dividing ridge that is either an unexpectedly lit down-Sun slope, or light coming under a bridge. Unlike King 1, the dividing ridge slumps down slightly in the middle. King 3a appears to have an entrance ramp from the N corner, and possibly the entire NE rim. There is a large PRF ~60m N, a ~75m-long fracture with 15m-wide pit ~100m NW, and a long fracture that cuts across the PRF ~280m NW.

King 3b

Impact Melt Pit: King Crater



Upper left: NAC M1135766659R. Upper right: NAC M141478563R. Lower left: NAC M154453455R. Lower right: Stereo anaglyph of NACs M136762839L (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 3b. Black dot marks the location of the pit.

Size and Location

Latitude	6.4081°N	Inner pit diameter	6 m × 4 m
Longitude	119.8105°E	Long axis azimuth	160°
Depth	6 m	Funnel diameter	9 m × 9 m

Measurement Source Images

Image ID	M1135766659R	M141478563R	M154453455R
Incidence	28.90°	14.16°	-16.09°
Emission	-0.09°	0.93°	-0.94°
Time of Day	10.13	11.21	13.02
Pixel Scale	1.17 m/px	0.61 m/px	0.60 m/px
Depth	5.6 m	8.2 m	5.2 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1135766659R line 25414, sample 467

Best stereo pair: M136762839L / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

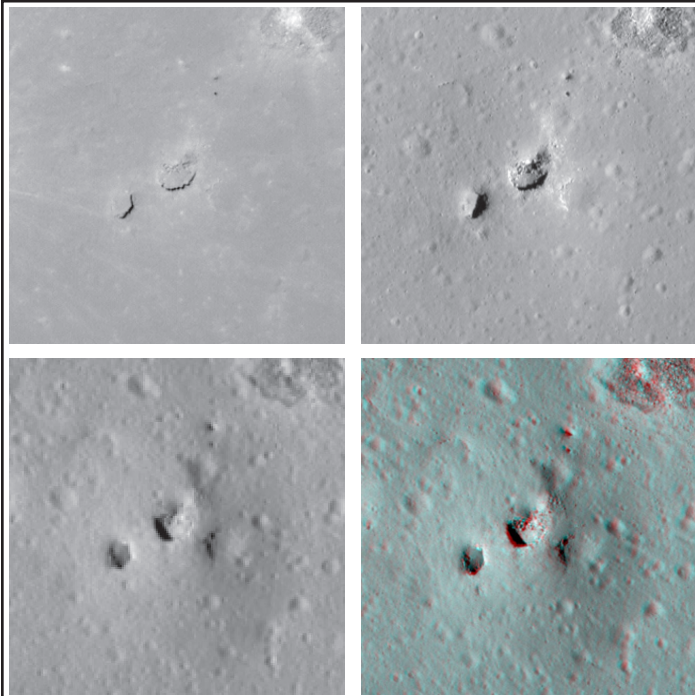
Data notes:

Description

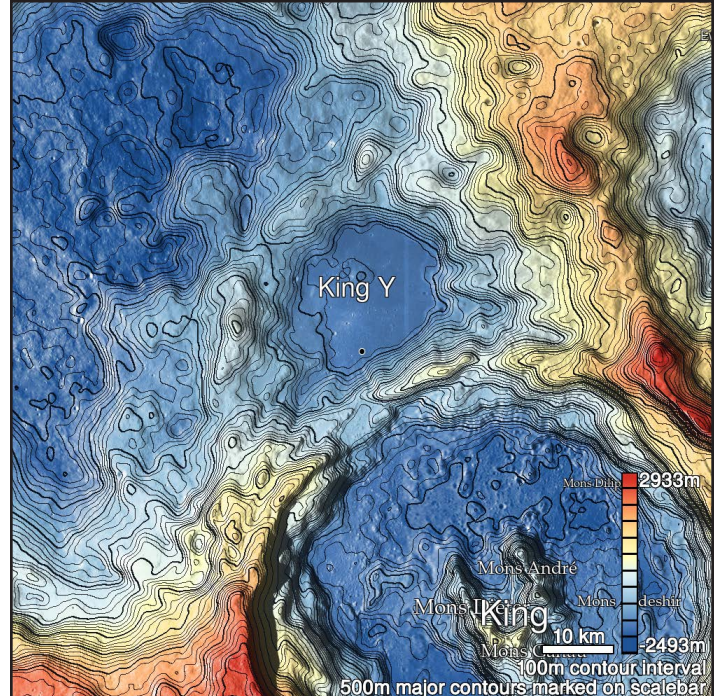
Smaller and southeastern of a pair of pits separated by a ridge that is probably not a bridge.

King 4a

Impact Melt Pit: King Crater



Upper left: NAC M141478563R. Upper right: NAC M113168034R. Lower left: NAC M182745931L. Lower right: Stereo anaglyph of NACs M136762839L (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 4a. Black dot marks the location of the pit.

Size and Location

Latitude	6.2066°N	Inner pit diameter	20 m × 16 m
Longitude	119.7815°E	Long axis azimuth	55°
Depth	6 m	Funnel diameter	28 m × 22 m

Measurement Source Images

Image ID	M141478563R	M113168034R	M182745931L
Incidence	14.08°	47.43°	-48.27°
Emission	1.83°	-0.21°	1.82°
Time of Day	11.21	8.87	15.21
Pixel Scale	0.61 m/px	0.62 m/px	1.27 m/px
Depth	7.2 m	5.5 m	5.8 m

Other Features

Entrance Ramp	No?	In dome	Yes
Overhang	Yes	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M141478563R line 29532, sample 3667

Best stereo pair: M136762839L / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

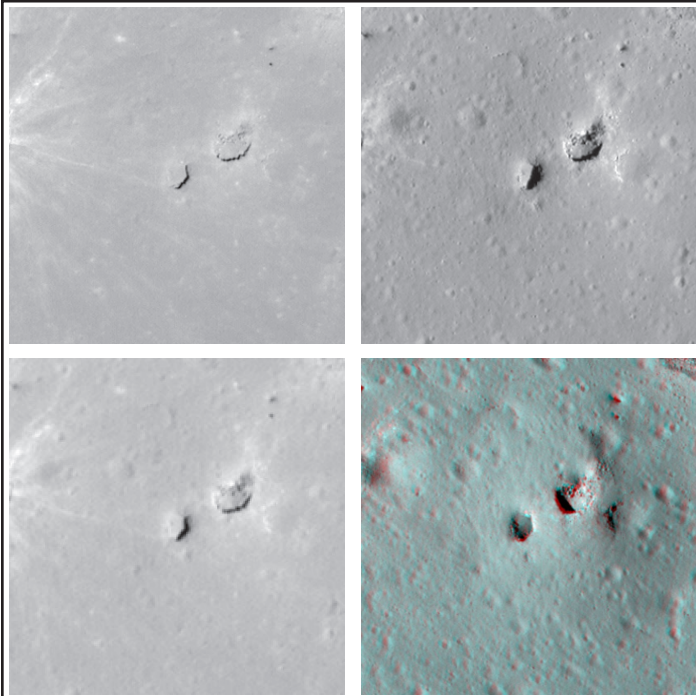
Data notes: Depth 1 is extremely high-Sun

Description

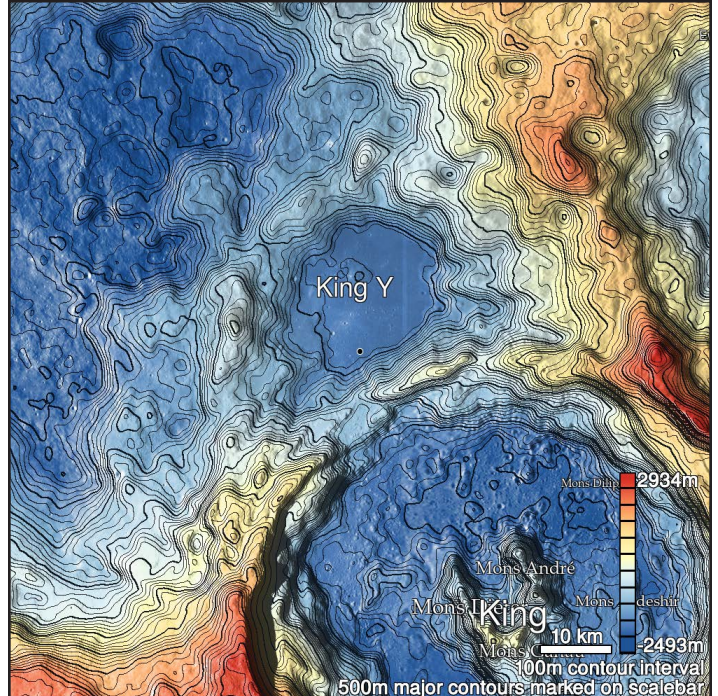
Elliptical pit, northeastern and larger of a pair of pits in a PRF. N wall has a collapse that has a chance of being traversable, especially if bouldering is acceptable. King 4b is 20m west, and there is a 45m long linear depression with a pair of <5m pits in it ~200m to the SW. There is a very fresh crater with bright ejecta ~120m west. No obvious proof that King 4a and 4b connect underground. There is probably another collapse in the east side of this PRF, ~20m SE of King 4a, only expressed as curved cliff on the west side of a circular depression. While no images exist with the correct lighting and slew to verify an overhang under the highest part of the PRF, a couple meters of overhang exist on the east (shallower) side.

King 4b

Impact Melt Pit: King Crater



Upper left: NAC M141478563R. Upper right: NAC M113168034R. Lower left: NAC M1135766659R. Lower right: Stereo anaglyph of NACs M136762839L (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 4b. Black dot marks the location of the pit.

Size and Location

Latitude	6.2061°N	Inner pit diameter	15 m × 14 m
Longitude	119.7804°E	Long axis azimuth	25°
Depth	8 m	Funnel diameter	21 m × 19 m

Measurement Source Images

Image ID	M141478563R	M113168034R	M1135766659R
Incidence	14.08°	47.43°	28.89°
Emission	1.86°	-0.18°	0.56°
Time of Day	11.21	8.87	10.13
Pixel Scale	0.61 m/px	0.62 m/px	1.17 m/px
Depth	10.0 m	6.0 m	7.2 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M141478563R line 29558, sample 3721

Best stereo pair: M136762839L / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

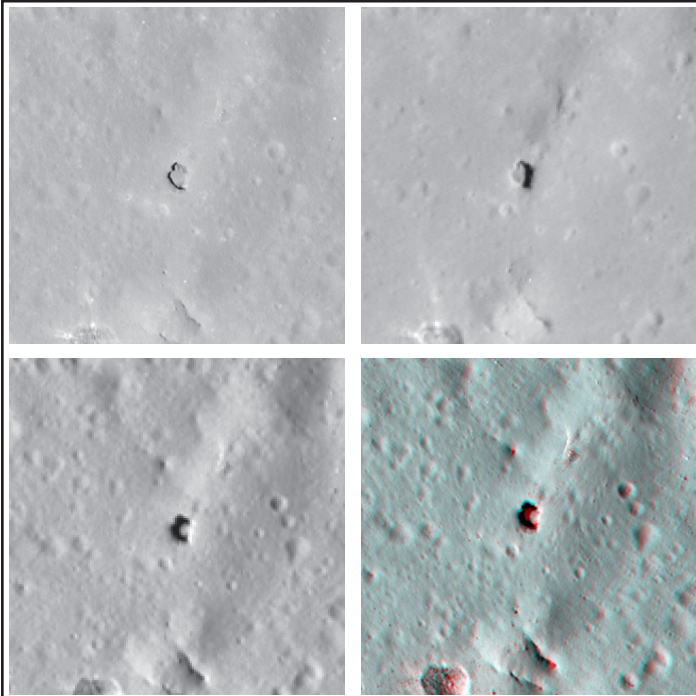
Data notes: Depth 1 is extremely high-Sun

Description

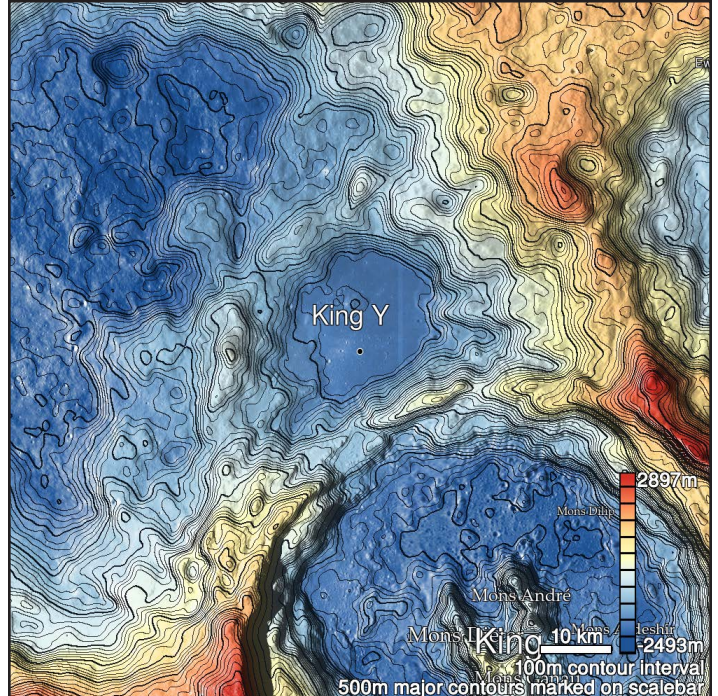
Elliptical pit in the side of a PRF. The floor slopes from N wall to the lowest point against the S wall.

King 5

Impact Melt Pit: King Crater



Upper left: NAC M154453455R. Upper right: NAC M1181692437R. Lower left: NAC M182745931L. Lower right: Stereo anaglyph of NACs M136762839L (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 5. Black dot marks the location of the pit.

Size and Location

Latitude	6.3371°N	Inner pit diameter	16 m × 13 m
Longitude	119.8005°E	Long axis azimuth	180°
Depth	7 m	Funnel diameter	23 m × 20 m

Measurement Source Images

Image ID	M154453455R	M1181692437R	M182745931L
Incidence	-16.06°	32.35°	-48.30°
Emission	-0.67°	1.64°	1.59°
Time of Day	13.02	9.88	15.21
Pixel Scale	0.60 m/px	1.23 m/px	1.27 m/px
Depth	6.0 m	9.6 m	5.3 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	No?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No?	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M154453455R line 12902, sample 1675

Best stereo pair: M136762839L / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

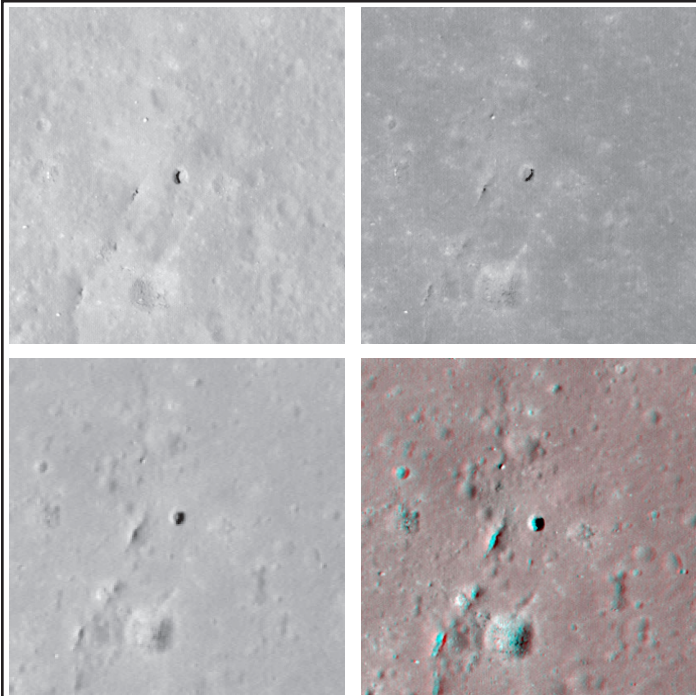
Data notes: Depth 1 is very high-Sun.

Description

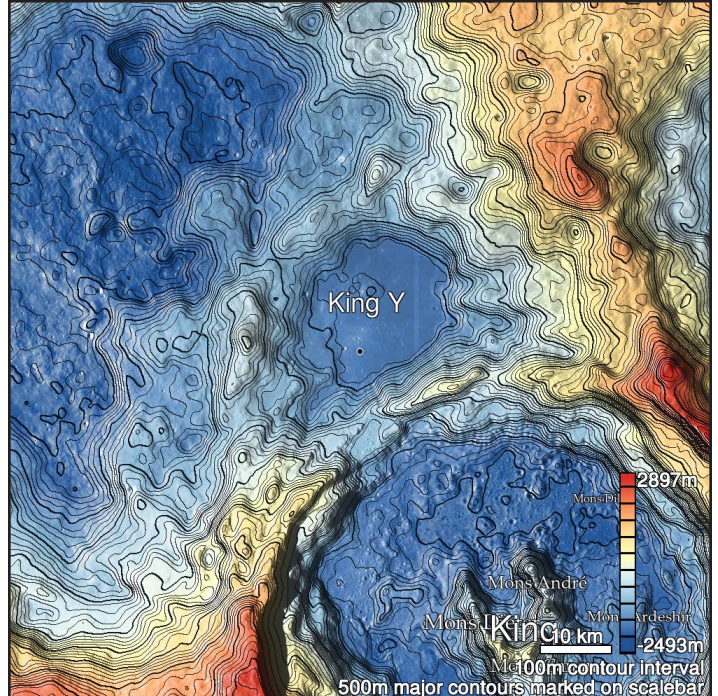
Semicircular pit in SW end of PRF. Does not appear to have any collapsed walls. No significant overhang to the east, no view to west. Floor is definitely lower than terrain around the PRF. There is a pair of fractures in a PRF ~70m S, at the north end of a string of subtle depressions running NNW-SSE.

King 6

Impact Melt Pit: King Crater



Upper left: NAC M154453455L. Upper right: NAC M172133732R. Lower left: NAC M1135766659R. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 6. Black dot marks the location of the pit.

Size and Location

Latitude	6.2776°N	Inner pit diameter	7 m × 6 m
Longitude	119.7247°E	Long axis azimuth	180°
Depth	7 m	Funnel diameter	10 m × 10 m

Other Features

Entrance Ramp	No	In dome	Yes?
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M154453455L	M172133732R	M1135766659R
Incidence	-15.97°	10.07°	28.96°
Emission	1.57°	0.08°	1.38°
Time of Day	13.02	11.57	10.12
Pixel Scale	0.60 m/px	0.62 m/px	1.17 m/px
Depth	7.7 m	9.4 m	4.7 m

Location reference: NAC M154453455L line 10078, sample 2765

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER4

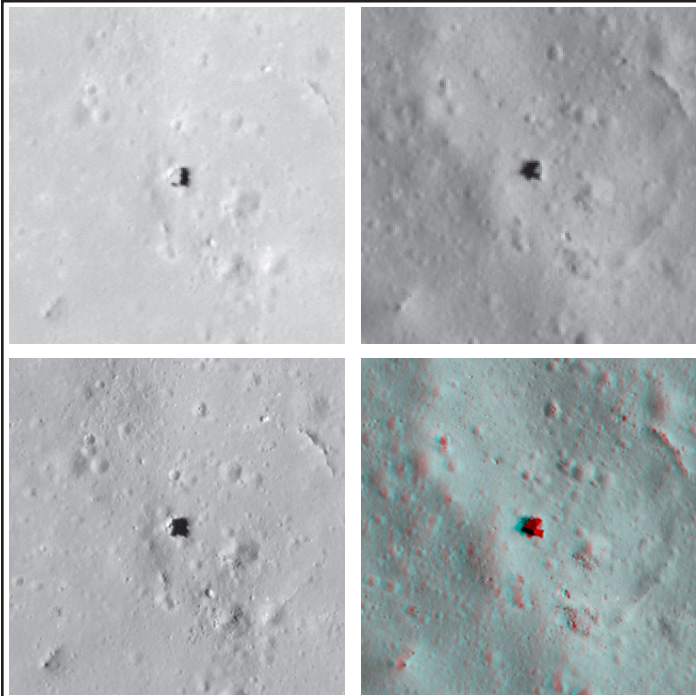
Data notes:

Description

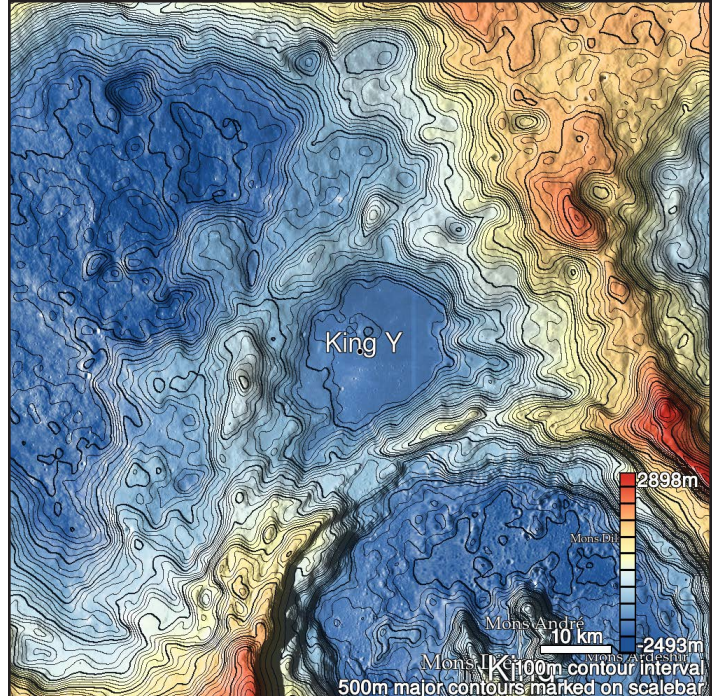
Circular pit, possibly in a very subtle PRF. There are several other pits in the area: A ~10x1m fracture/pit 21m W (and a few more linear features going SSW from there); a diamond-shaped ~5x3m pit 125m NE, and a pair of pits (4x4m and 3x3m, 4m apart) 130m N.

King 7

Impact Melt Pit: King Crater



Upper left: NAC M1135766659R. Upper right: NAC M182745931L. Lower left: NAC M113168034R. Lower right: Stereo anaglyph of NACs M136762839L (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 7. Black dot marks the location of the pit.

Size and Location

Latitude	6.4670°N	Inner pit diameter	14 m × 11 m
Longitude	119.7378°E	Long axis azimuth	35°
Depth	8 m	Funnel diameter	16 m × 15 m

Measurement Source Images

Image ID	M1135766659R	M182745931L	M113168034R
Incidence	28.99°	-48.25°	47.51°
Emission	1.06°	2.54°	1.06°
Time of Day	10.12	15.21	8.87
Pixel Scale	1.17 m/px	1.28 m/px	0.62 m/px
Depth	7.8 m	6.7 m	8.4 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes?	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1135766659R line 23001, sample 2274

Best stereo pair: M136762839L / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

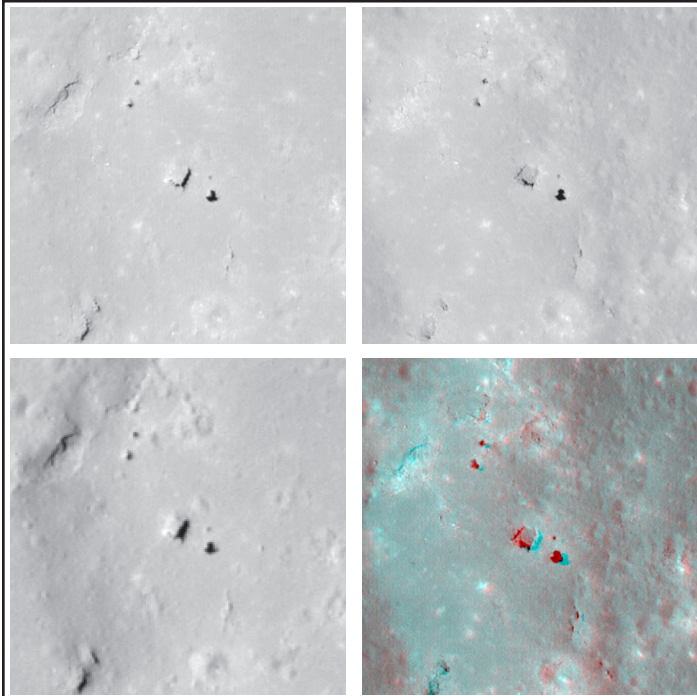
Data notes:

Description

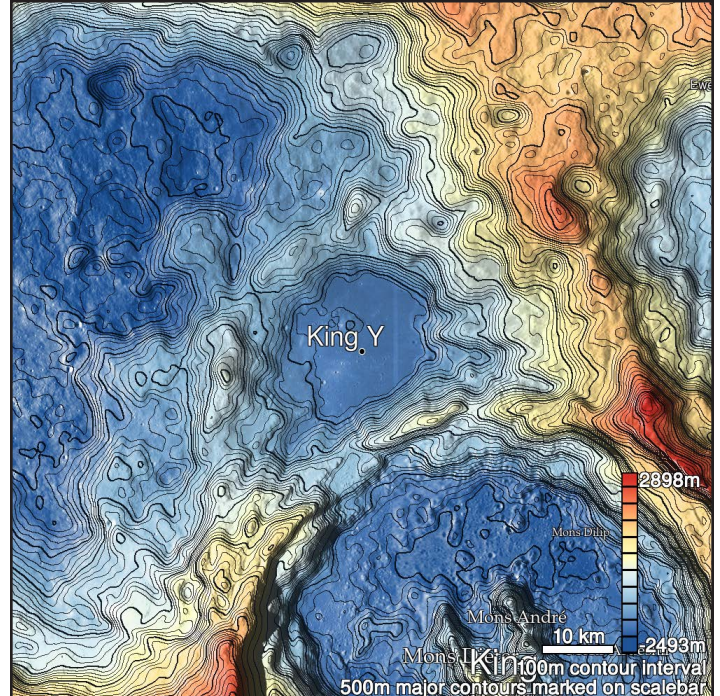
Irregular pit near the base of a PRF. A few 1-2m boulders on the floor. Generally pretty unremarkable. A couple <5m pits(?) ~120 and ~230m N.

King 8a

Impact Melt Pit: King Crater



Upper left: NAC M141478563R. Upper right: NAC M154453455R. Lower left: NAC M1135766659L. Lower right: Stereo anaglyph of NACs M123791947R (left eye, red) and M123785162R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 8a. Black dot marks the location of the pit.

Size and Location

Latitude	6.4369°N	Inner pit diameter	12 m × 10 m
Longitude	119.8329°E	Long axis azimuth	35°
Depth	8 m	Funnel diameter	15 m × 14 m

Measurement Source Images

Image ID	M141478563R	M154453455R	M1135766659L
Incidence	14.16°	-16.12°	28.89°
Emission	0.28°	-1.59°	-0.41°
Time of Day	11.22	13.03	10.13
Pixel Scale	0.61 m/px	0.60 m/px	1.18 m/px
Depth	9.0 m	8.3 m	7.4 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No?
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M141478563R line 18595, sample 1027

Best stereo pair: M123791947R / M123785162R

Other useful images:

DTM: NAC_DTM_KINGCRATER3

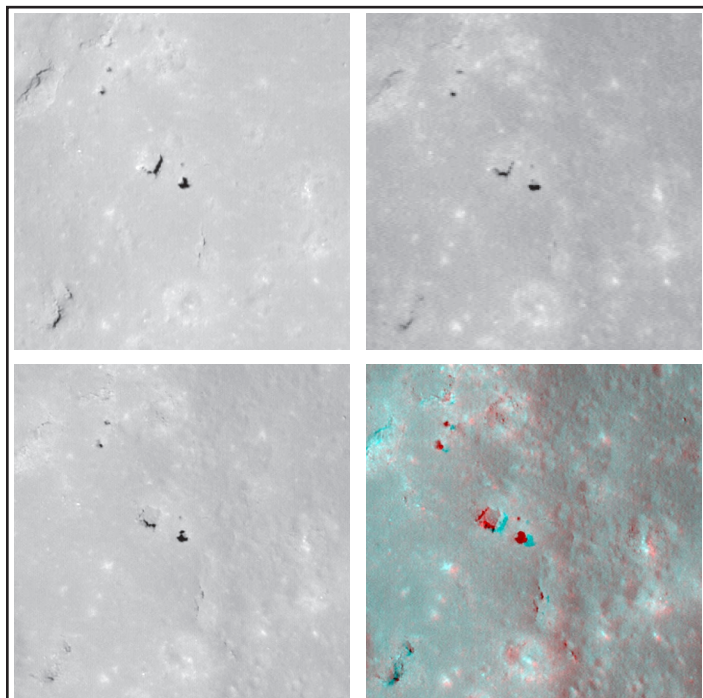
Data notes: Depths 1 and 2 are from very high Sun

Description

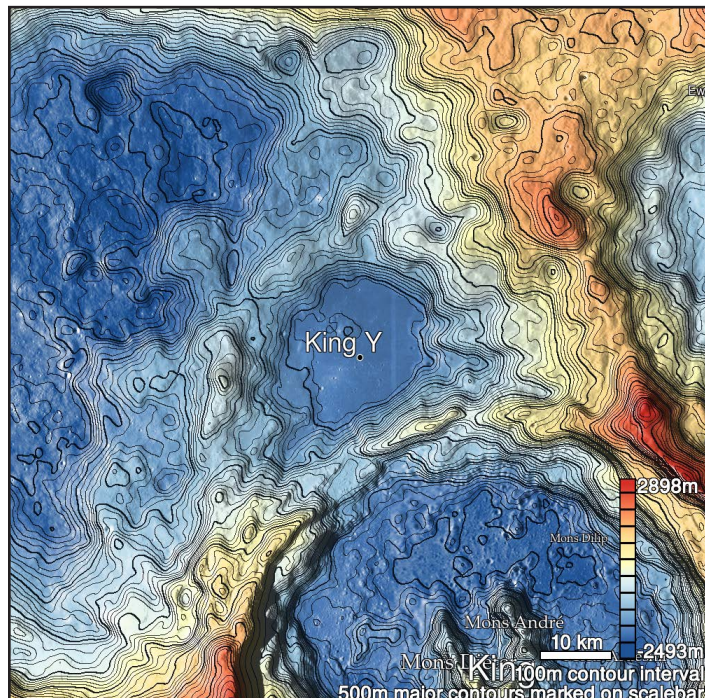
Square pit, largest of three pits and several other collapse features on a large PRF. King 8b is 15m SE, and King 86 is ~120m N. There is a pair of ~3-4m pits ~45m NW. There are several short (~30-40m) fractures/strings of tiny collapses in the area, both on and off the PRF.

King 8b

Impact Melt Pit: King Crater



Upper left: NAC M141478563R. Upper right: NAC M1164027461R. Lower left: NAC M108447638L. Lower right: Stereo anaglyph of NACs M123791947R (left eye, red) and M123785162R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 8b. Black dot marks the location of the pit.

Size and Location

Latitude	6.4365°N	Inner pit diameter	6 m × 6 m
Longitude	119.8335°E	Long axis azimuth	5°
Depth	17 m	Funnel diameter	8 m × 8 m

Measurement Source Images

Image ID	M141478563R	M1164027461R	M108447638L
Incidence	14.16°	7.59°	-10.99°
Emission	0.26°	2.28°	1.55°
Time of Day	11.22	11.94	12.51
Pixel Scale	0.61 m/px	1.17 m/px	0.56 m/px
Depth	15.1 m	18.7 m	17.5 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	Yes?	Beside dome	No
Nearby pits	Yes	Colinear pits	No?
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M141478563R line 18613, sample 996

Best stereo pair: M123791947R / M123785162R

Other useful images: M154453455R

DTM: NAC_DTM_KINGCRATER3

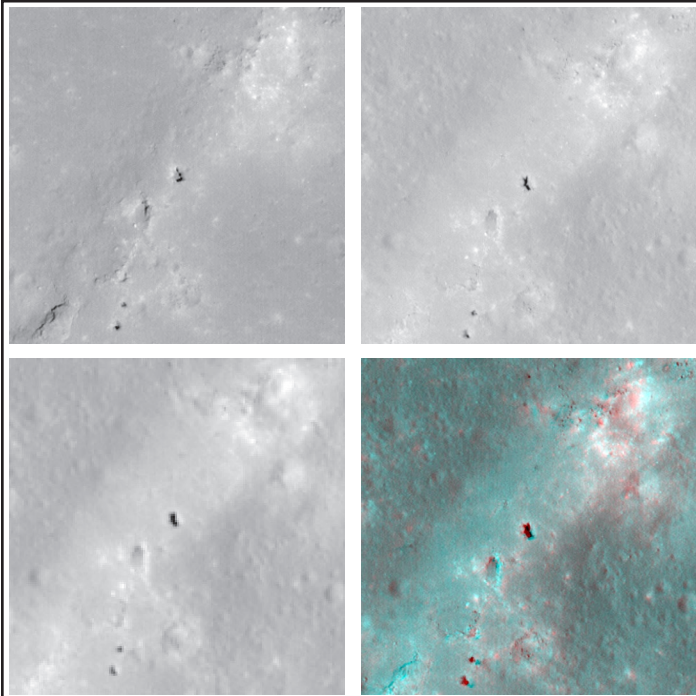
Data notes: All depths are from very high Sun.

Description

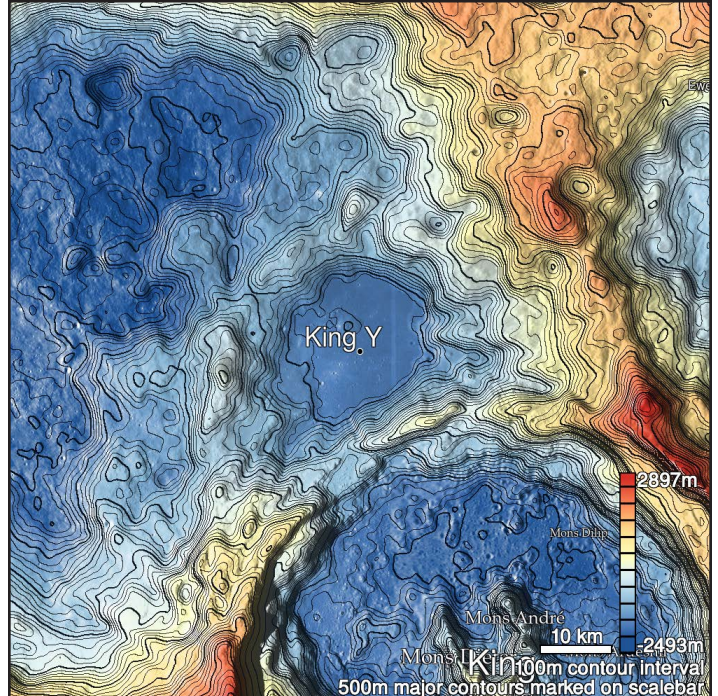
Small irregular pit 15m SE of King 8a. Extremely deep- floor is only visible in highest-Sun images. Sun direction and shadow shape in M108447638L suggest that a protrusion on the NW rim is an overhang, as sunlight appears to pass under it.

King 8c

Impact Melt Pit: King Crater



Upper left: NAC M141478563R. Upper right: NAC M154453455R. Lower left: NAC M185104801R. Lower right: Stereo anaglyph of NACs M123791947R (left eye, red) and M123785162R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 8c. Black dot marks the location of the pit.

Size and Location

Latitude	6.4412°N	Inner pit diameter	7 m × 5 m
Longitude	119.8331°E	Long axis azimuth	155°
Depth	5 m	Funnel diameter	12 m × 7 m

Measurement Source Images

Image ID	M141478563R	M154453455R	M185104801R
Incidence	14.16°	-16.12°	-20.89°
Emission	0.27°	-1.60°	-1.81°
Time of Day	11.22	13.03	13.36
Pixel Scale	0.61 m/px	0.60 m/px	1.27 m/px
Depth	4.8 m	5.5 m	6.0 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No?
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M141478563R line 18388, sample 1013

Best stereo pair: M123791947R / M123785162R

Other useful images:

DTM: NAC_DTM_KINGCRATER3

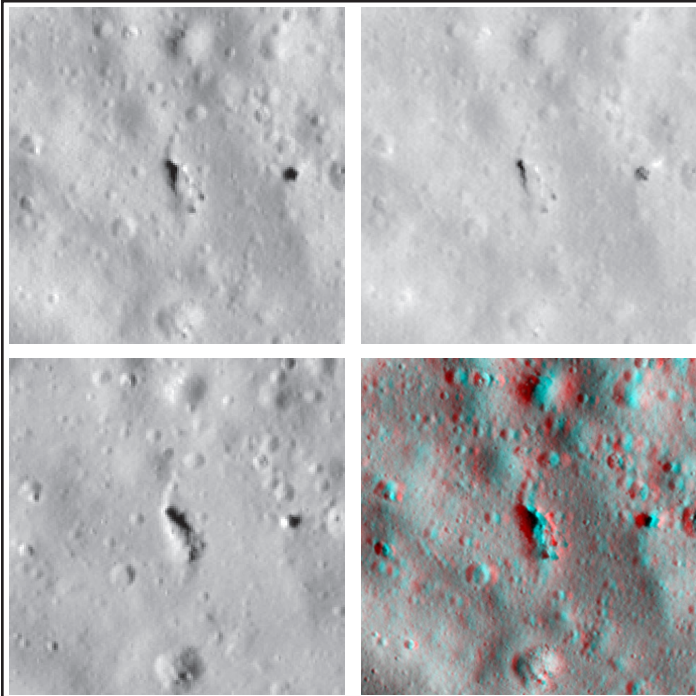
Data notes: All depths are from very high Sun.

Description

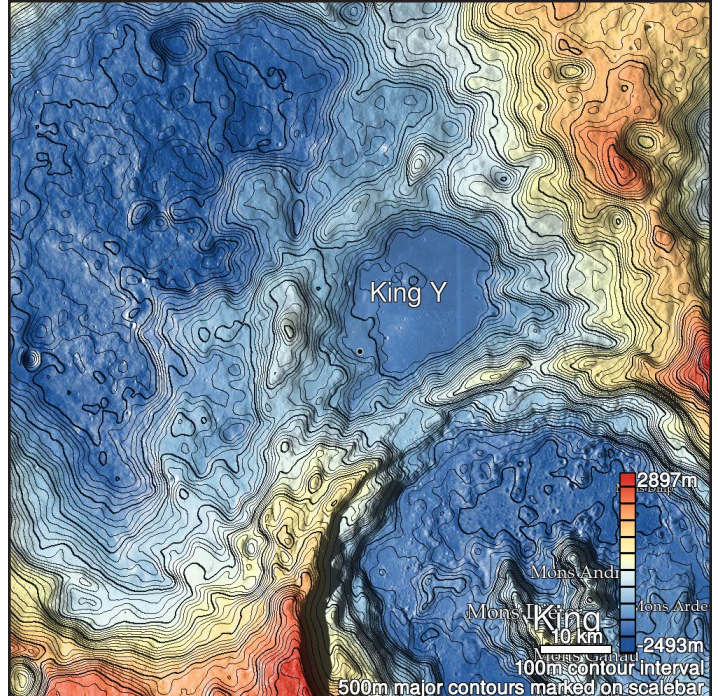
Irregular/elliptical pit in a PRF, ~120m N of King 8a.

King 9a

Impact Melt Pit: King Crater



Upper left: NAC M1098065892L. Upper right: NAC M1115747668R. Lower left: NAC M1153439131R. Lower right: Stereo anaglyph of NACs M134408351R (left eye, red) and M134401565R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 9a. Black dot marks the location of the pit.

Size and Location

Latitude	6.2281°N	Inner pit diameter	22 m × 11 m
Longitude	119.5237°E	Long axis azimuth	150°
Depth	4 m	Funnel diameter	41 m × 15 m

Measurement Source Images

Image ID	M1098065892L	M1115747668R	M1153439131R
Incidence	-51.57°	-24.27°	58.72°
Emission	0.44°	-0.07°	1.71°
Time of Day	15.41	13.59	8.10
Pixel Scale	1.22 m/px	1.20 m/px	1.28 m/px
Depth	3.9 m	4.0 m	4.0 m

Other Features

Entrance Ramp	Yes?	In dome	Yes?
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	No		

Location reference: NAC M1098065892L line 24624, sample 4656

Best stereo pair: M134408351R / M134401565R

Other useful images:

DTM:

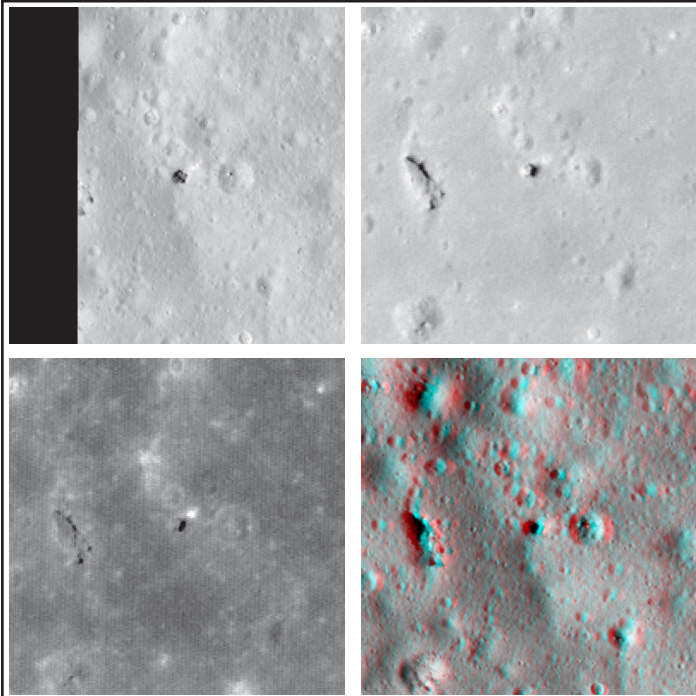
Data notes:

Description

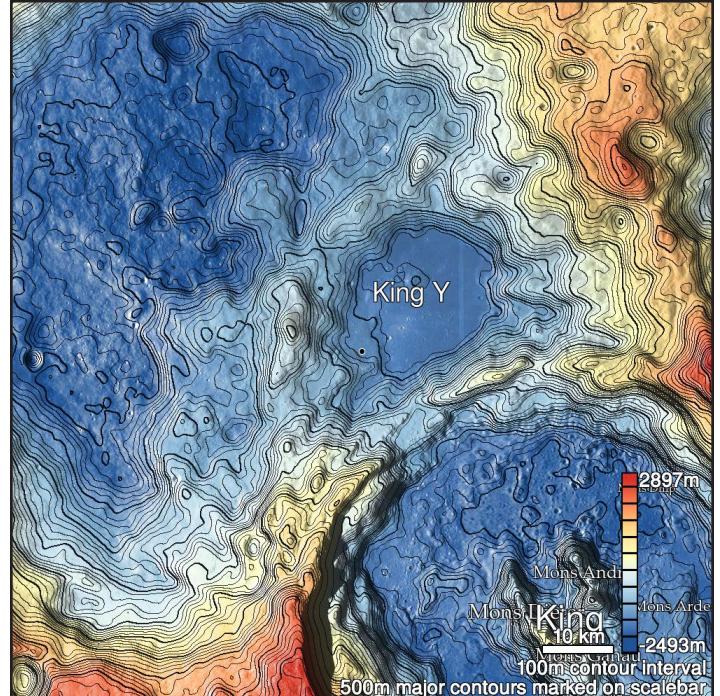
Long, narrow pit ~75m N of a large (90m-wide) “ripple” in the melt sheet. King 9b is ~60m E. S end of floor may be higher than N end, and has ramp to surface at S end. There are a pair of small dark spots, probably pits/collapses just S of the S end of the pit. No other collapse features in the area.

King 9b

Impact Melt Pit: King Crater



Upper left: NAC M121430378L. Upper right: NAC M1105138378L. Lower left: NAC M187463709L. Lower right: Stereo anaglyph of NACs M134408351R (left eye, red) and M134401565R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 9b. Black dot marks the location of the pit.

Size and Location

Latitude	6.2281°N	Inner pit diameter	8 m × 7 m
Longitude	119.5214°E	Long axis azimuth	135°
Depth	6 m	Funnel diameter	10 m × 9 m

Measurement Source Images

Image ID	M121430378L	M1105138378L	M187463709L
Incidence	-36.23°	30.73°	8.89°
Emission	1.46°	-2.79°	-0.37°
Time of Day	14.40	10.00	11.50
Pixel Scale	0.57 m/px	1.21 m/px	1.26 m/px
Depth	3.1 m	4.2 m	9.6 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes?
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	No		

Location reference: NAC M121430378L line 24178, sample 153

Best stereo pair: M134408351R / M134401565R

Other useful images:

DTM:

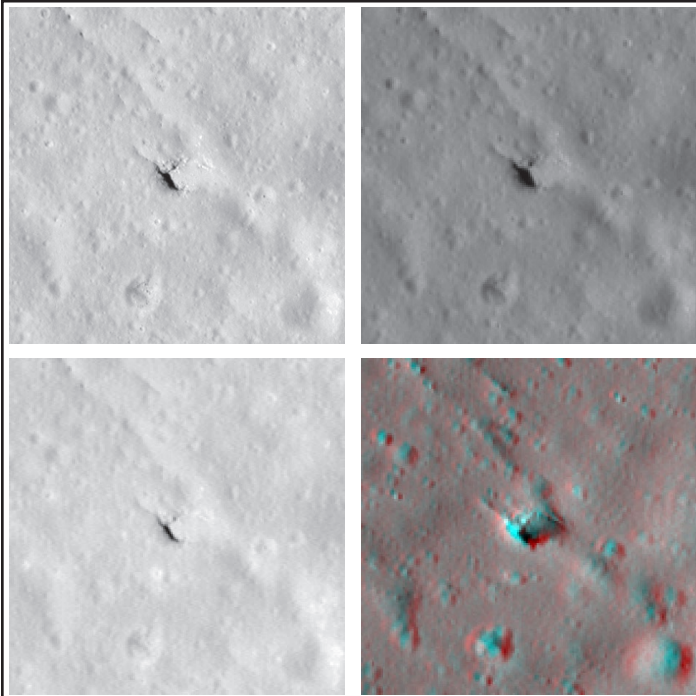
Data notes:

Description

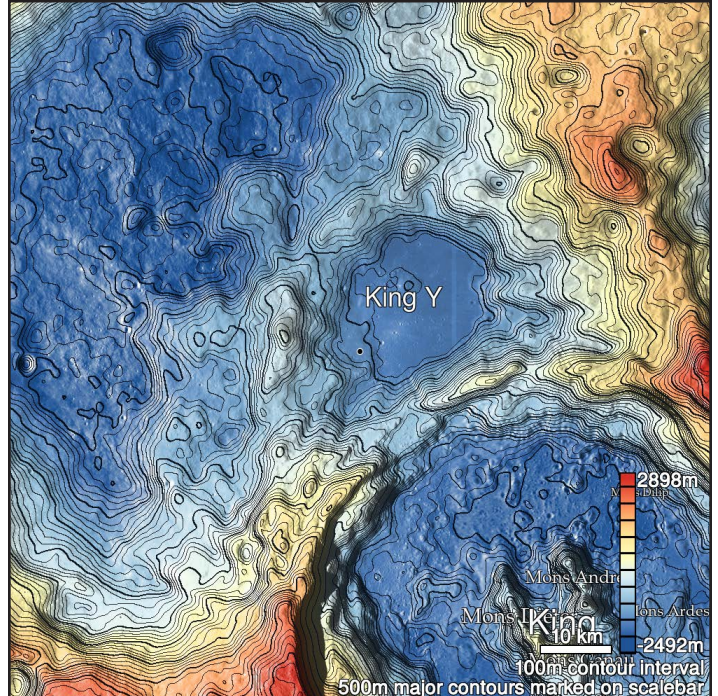
Round pit. Appears to have a deeper 7x2m inner pit running NW-SE, but resolution limits make this hard to confirm- it may just be a shadow from an outcrop on the W wall.

King 10

Impact Melt Pit: King Crater



Upper left: NAC M121430378L. Upper right: NAC M1098065892R. Lower left: NAC M1115747668R. Lower right: Stereo anaglyph of NACs M1153446250R (left eye, red) and M1153432010L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 10. Black dot marks the location of the pit.

Size and Location

Latitude	6.2504°N	Inner pit diameter	15 m × 13 m
Longitude	119.5464°E	Long axis azimuth	55°
Depth	6 m	Funnel diameter	25 m × 18 m

Measurement Source Images

Image ID	M121430378L	M1098065892R	M1115747668R
Incidence	-36.26°	-51.59°	-24.30°
Emission	0.69°	0.11°	-0.36°
Time of Day	14.40	15.41	13.59
Pixel Scale	0.57 m/px	1.21 m/px	1.19 m/px
Depth	5.2 m	5.9 m	6.9 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M121430378L line 25326, sample 1353

Best stereo pair: M1153446250R / M1153432010L

Other useful images:

DTM:

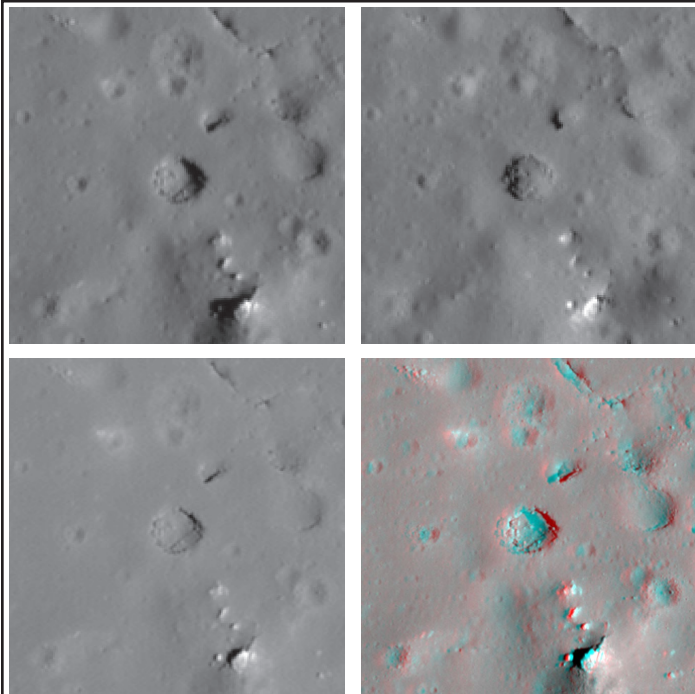
Data notes:

Description

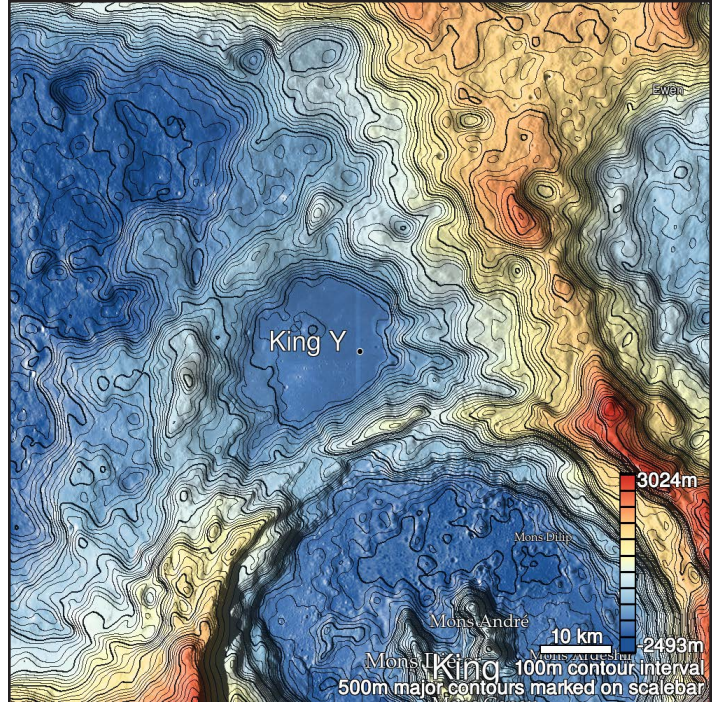
Rectangular pit in a set of NW-SE trending narrow linear depressions. Floor slopes from surface at N corner to lowest point at SW wall. A few 0.5-2m boulders near the walls.

King 11a

Impact Melt Pit: King Crater



Upper left: NAC M1138120053R. Upper right: NAC M182745931R. Lower left: NAC M1120456952R. Lower right: Stereo anaglyph of NACs M128509025L (left eye, red) and M128502237L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 11a. Black dot marks the location of the pit.

Size and Location

Latitude	6.4593°N	Inner pit diameter	29 m × 26 m
Longitude	120.0017°E	Long axis azimuth	100°
Depth	7 m	Funnel diameter	32 m × 28 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1138120053R	M182745931R	M1120456952R
Incidence	56.36°	-48.51°	32.24°
Emission	2.37°	-1.30°	0.96°
Time of Day	8.26	15.23	9.88
Pixel Scale	1.18 m/px	1.27 m/px	1.17 m/px
Depth	6.6 m	5.3 m	7.9 m

Location reference: NAC M1138120053R line 16995, sample 4448

Best stereo pair: M128509025L / M128502237L

Other useful images: M128509025R, U3_0988_M1120456952R

DTM: NAC_DTM_KINGCRATER2

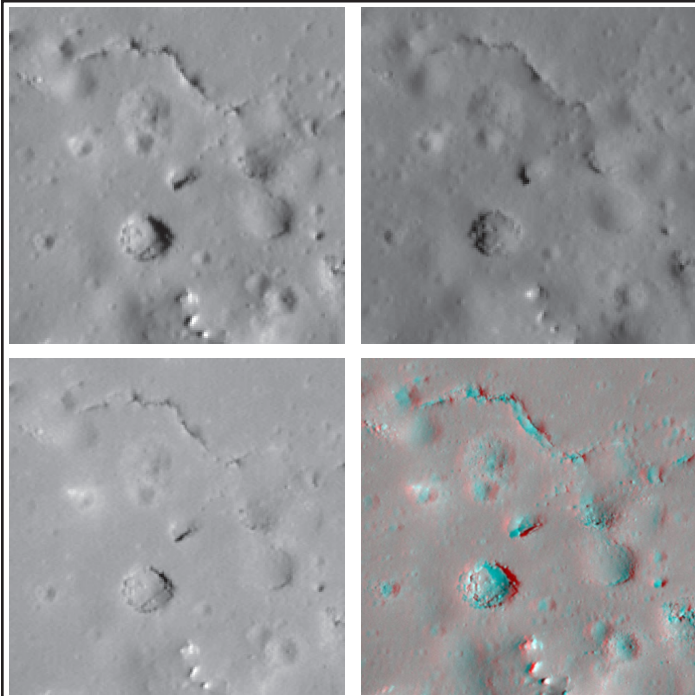
Data notes:

Description

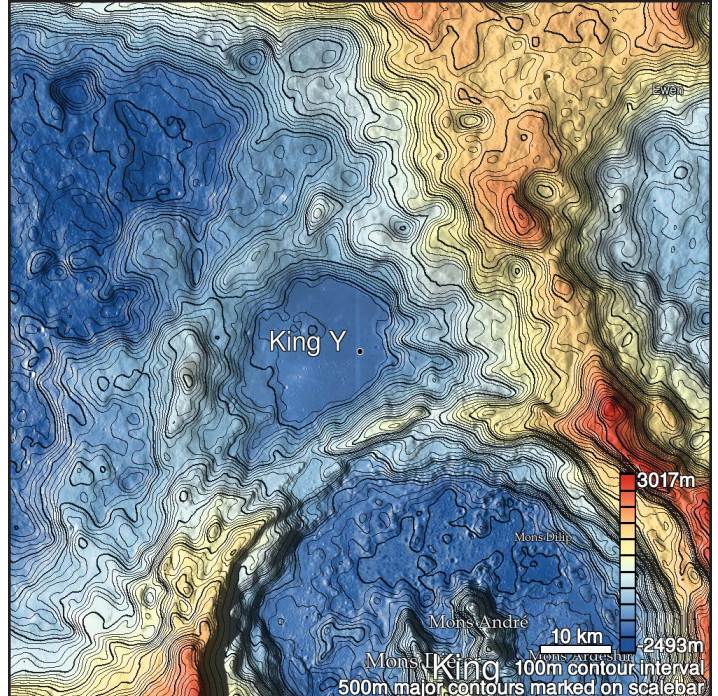
Circular pit with rounded-looking floor, southern of a pair of pits. E wall appears higher than W, W wall appears to have several blocks calving off. King 11b is ~20m N. There is a fracture system running E-W ~80m N, and a PRF (with moat) ~70m SE.

King 11b

Impact Melt Pit: King Crater



Upper left: NAC M1138120053R. Upper right: NAC M182745931R. Lower left: NAC M1120456952R. Lower right: Stereo anaglyph of NACs M128509025L (left eye, red) and M128502237L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 11b. Black dot marks the location of the pit.

Size and Location

Latitude	6.4604°N	Inner pit diameter	12 m × 7 m
Longitude	120.0023°E	Long axis azimuth	55°
Depth	4 m	Funnel diameter	15 m × 14 m

Measurement Source Images

Image ID	M1138120053R	M182745931R	M1120456952R
Incidence	56.36°	-48.51°	32.24°
Emission	2.36°	-1.31°	0.95°
Time of Day	8.26	15.23	9.88
Pixel Scale	1.18 m/px	1.27 m/px	1.17 m/px
Depth	3.7 m	3.5 m	5.6 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	No		

Location reference: NAC M1138120053R line 16967, sample 4430

Best stereo pair: M128509025L / M128502237L

Other useful images: M128509025R, U3_0988_M1120456952R

DTM: NAC_DTM_KINGCRATER2

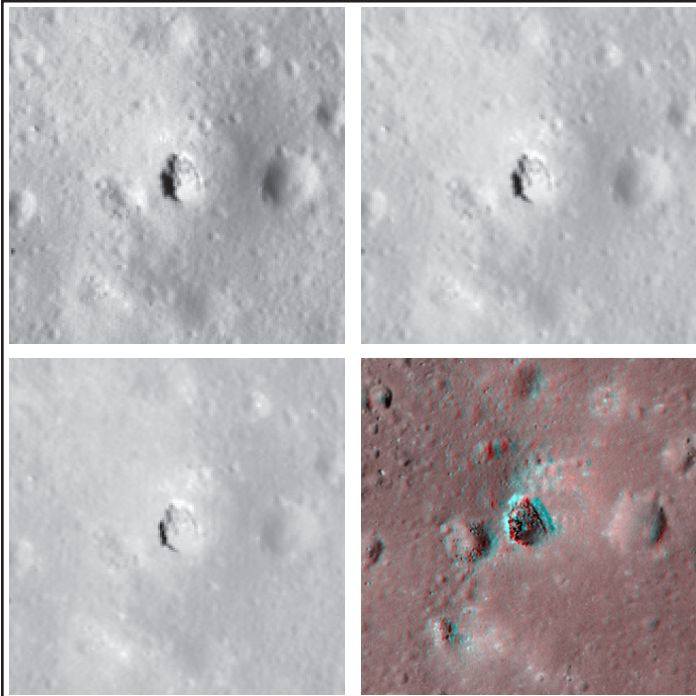
Data notes:

Description

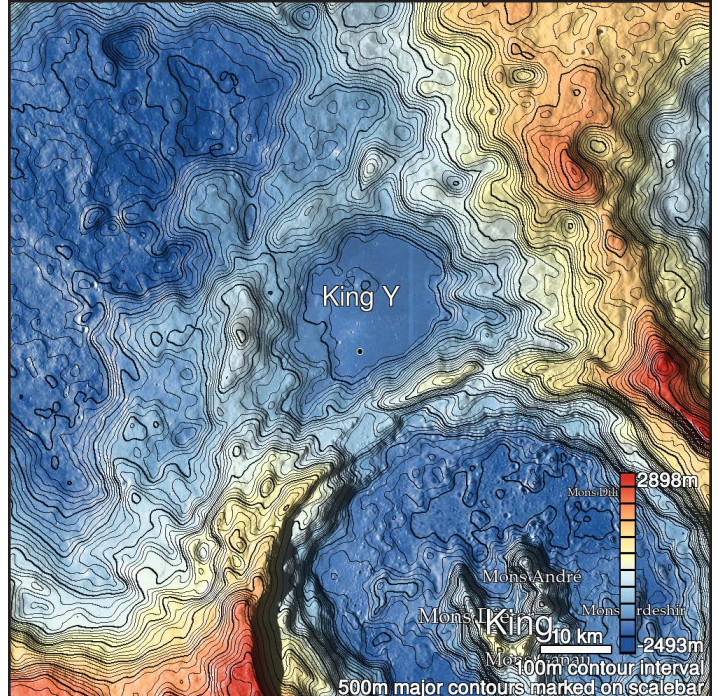
Rectangular pit. N/NE wall is a slope to the S end- if connected to King 11a, it's a perfect entrance ramp. No visible boulders on floor.

King 12

Impact Melt Pit: King Crater



Upper left: NAC M182745931L. Upper right: NAC M106088433L. Lower left: NAC M185104801R. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 12. Black dot marks the location of the pit.

Size and Location

Latitude	6.2487°N	Inner pit diameter	26 m × 22 m
Longitude	119.7506°E	Long axis azimuth	165°
Depth	7 m	Funnel diameter	33 m × 24 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	Yes	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M182745931L	M106088433L	M185104801R
Incidence	-48.25°	-35.09°	-20.77°
Emission	2.28°	1.34°	-0.69°
Time of Day	15.21	14.29	13.35
Pixel Scale	1.27 m/px	1.29 m/px	1.26 m/px
Depth	5.8 m	5.5 m	9.2 m

Location reference: NAC M182745931L line 19792, sample 1703

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

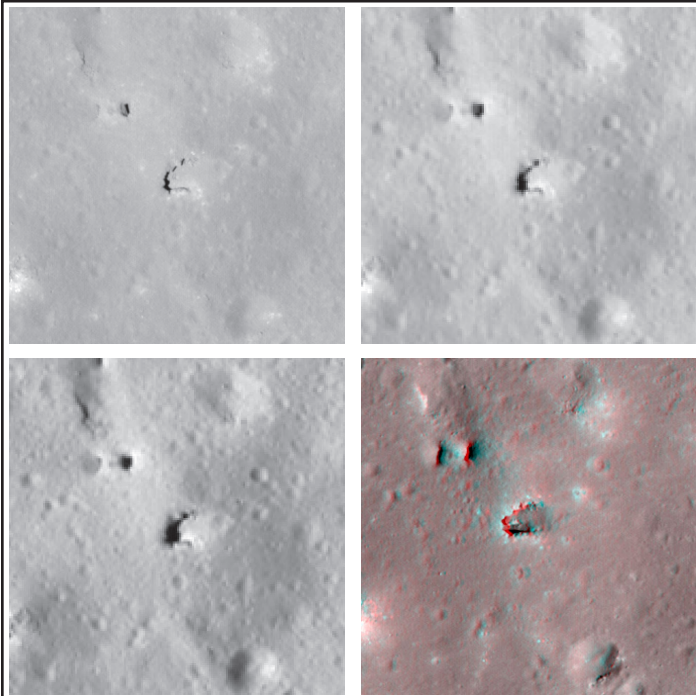
Data notes:

Description

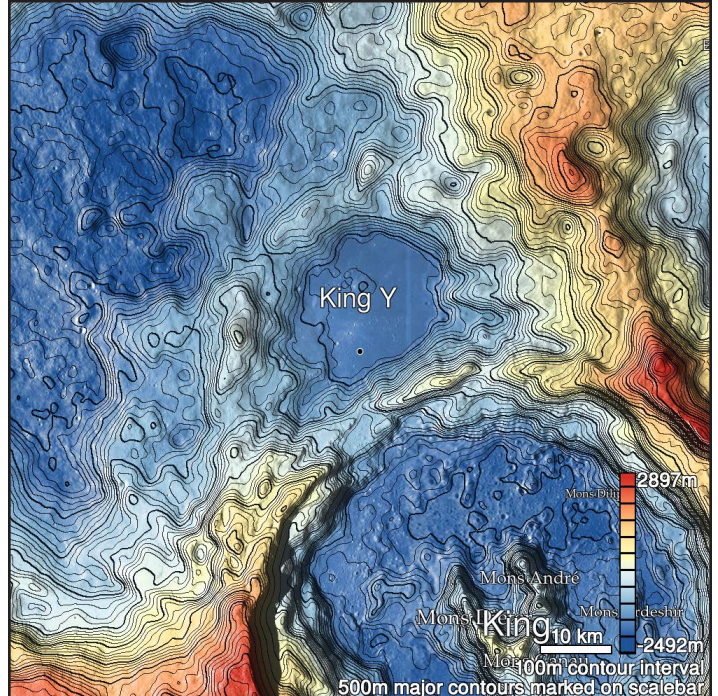
Elliptical pit near the top of a PRF. S wall is a ramp to the floor. N side of floor is a pile of 0.5-3m boulders. Definitely no overhang on the E side; 1-2m overhang on W, but back wall may be visible. There's a similar-diameter but very shallow depression 13m W at the edge of the PRF that, is low-Sun lighting from the E, looks like it could be separated by a bridge. It is not. There are pits ~300m NW and ~280m W.

King 13a

Impact Melt Pit: King Crater



Upper left: NAC M154453455L. Upper right: NAC M106088433L. Lower left: NAC M182745931L. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 13a. Black dot marks the location of the pit.

Size and Location

Latitude	6.2538°N	Inner pit diameter	22 m × 15 m
Longitude	119.7626°E	Long axis azimuth	70°
Depth	8 m	Funnel diameter	28 m × 21 m

Measurement Source Images

Image ID	M154453455L	M106088433L	M182745931L
Incidence	-16.00°	-35.11°	-48.26°
Emission	0.43°	1.16°	2.11°
Time of Day	13.02	14.29	15.21
Pixel Scale	0.60 m/px	1.29 m/px	1.27 m/px
Depth	11.5 m	7.0 m	6.5 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes?	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes?
In Depression	No		

Location reference: NAC M154453455L line 8958, sample 4694

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

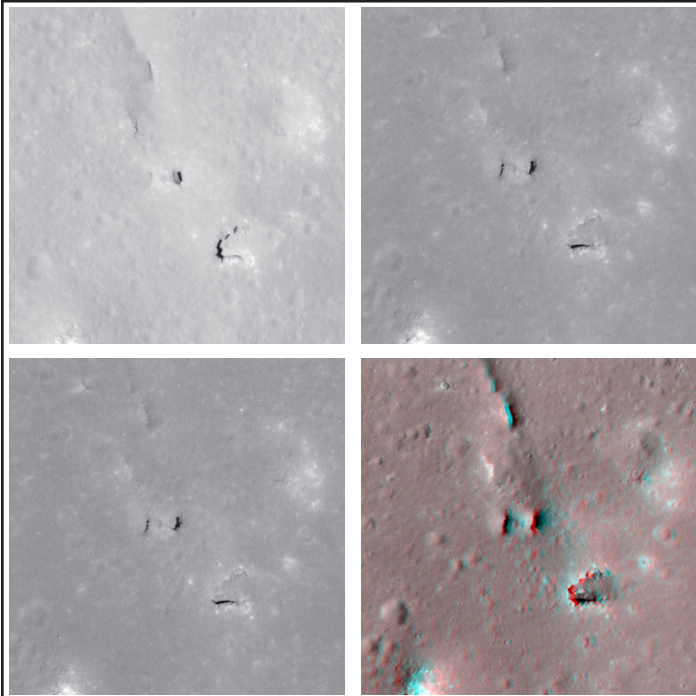
Data notes: Depth 1 is very high-Sun, other depths are to part-way up ramp.

Description

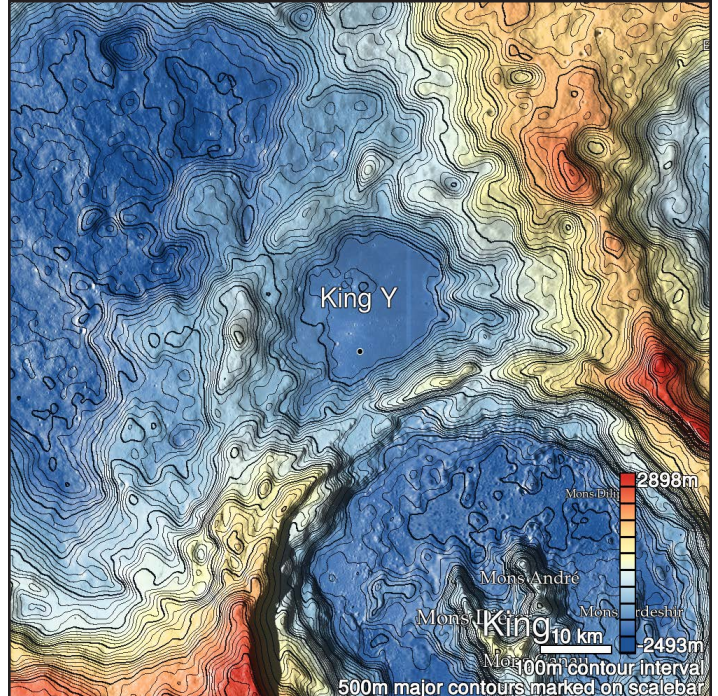
Southern and larger of two pits in a PRF. King 13b is ~40m NW. The E (uphill) wall of this PRF is a ramp to the W wall. There is a NNW-SSE trending linear depression/fracture roughly in line with both King 13 pits, although 13a is slightly off to one side.

King 13b

Impact Melt Pit: King Crater



Upper left: NAC M154453455L. Upper right: NAC M141478563R. Lower left: NAC M172133732L. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 13b. Black dot marks the location of the pit.

Size and Location

Latitude	6.2551°N	Inner pit diameter	7 m × 5 m
Longitude	119.7615°E	Long axis azimuth	165°
Depth	7 m	Funnel diameter	10 m × 8 m

Measurement Source Images

Image ID	M154453455L	M141478563R	M172133732L
Incidence	-15.99°	14.12°	10.03°
Emission	0.46°	2.40°	-1.02°
Time of Day	13.02	11.21	11.57
Pixel Scale	0.60 m/px	0.61 m/px	0.62 m/px
Depth	>5.2 m	6.8 m	7.4 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes?	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes?
In Depression	No		

Location reference: NAC M154453455L line 9021, sample 4640

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

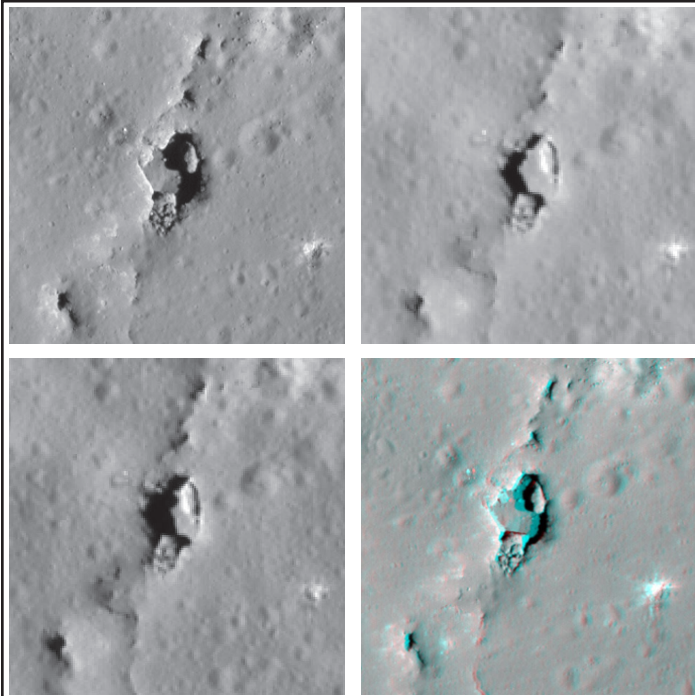
Data notes: All depths are very high-Sun, especially depth 3. Depth 1 is from shelf on W wall, depths 2 and 3 may be to shelf on W wall, or may be minimums.

Description

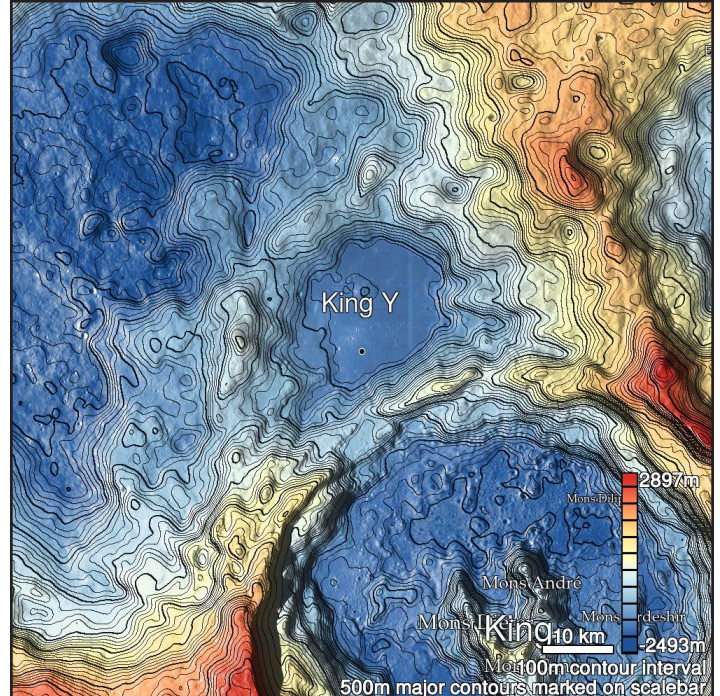
Northern pit of the King 13 pair, on the NW side of the PRF. Does not have an unambiguously-visible floor in any image, even the noontime M172133732L, although there may be a ledge on the W wall ~5m down, leaving a ~6x2m inner pit. There is a similar-diameter depression 14m W at the base of the PRF, although its only vertical wall is the PRF-ward one.

King 14

Impact Melt Pit: King Crater



Upper left: NAC M113168034R. Upper right: NAC M106088433L. Lower left: NAC M182745931L. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 14. Black dot marks the location of the pit.

Size and Location

Latitude	6.2784°N	Inner pit diameter	48 m × 38 m
Longitude	119.7635°E	Long axis azimuth	20°
Depth	14 m	Funnel diameter	94 m × 49 m

Measurement Source Images

Image ID	M113168034R	M106088433L	M182745931L
Incidence	47.46°	-35.11°	-48.26°
Emission	0.33°	1.15°	2.11°
Time of Day	8.87	14.29	15.21
Pixel Scale	0.62 m/px	1.29 m/px	1.27 m/px
Depth	12.3 m	15.0 m	16.0 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes	Beside dome	No
Nearby pits	Yes?	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	Yes?		

Location reference: NAC M113168034R line 32261, sample 1108

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

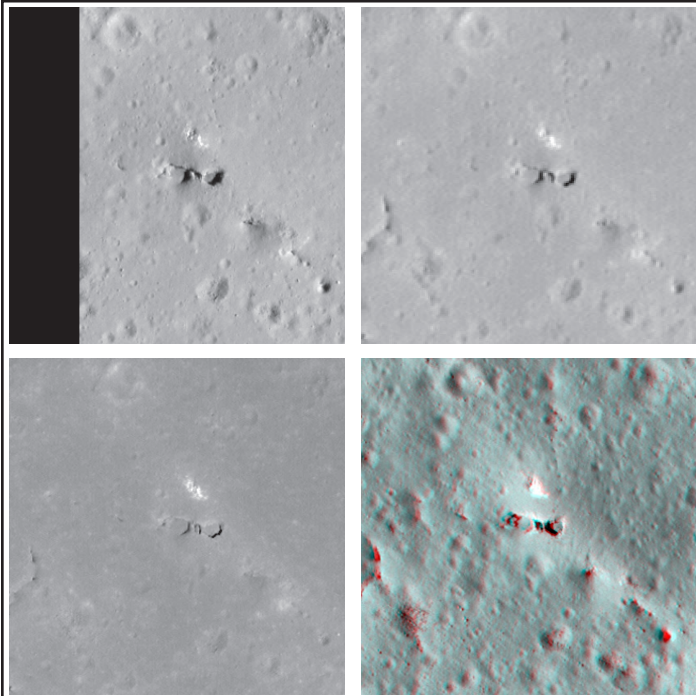
Data notes:

Description

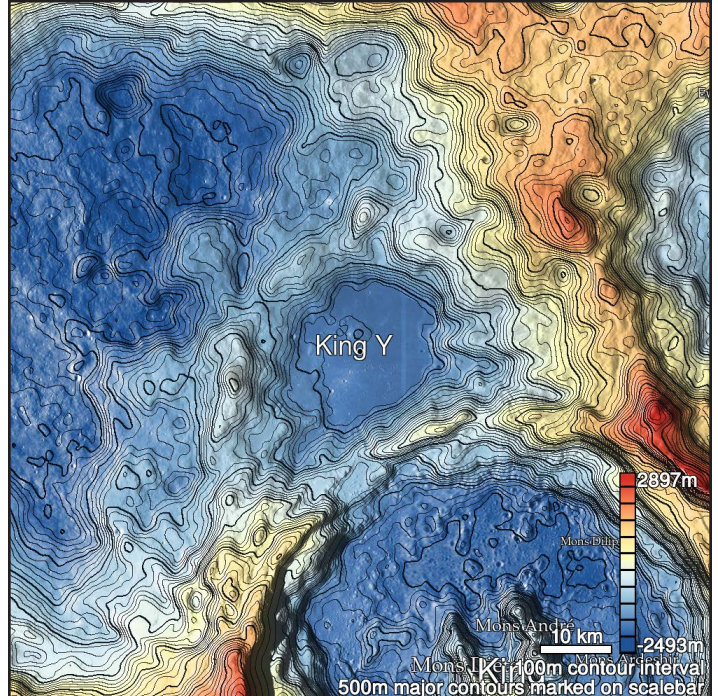
Diamond-shaped pit in a set of N-S trending fractures and sets of tiny pits joined by depressions. This pit is in the easternmost linear feature of the set, one of the aforementioned set-of-tiny-pits-joined-by-depressions, and has a ~30m-wide depression at the S end. Smooth floor with only a few >50cm rocks (possibly sloping down towards the center slightly?), no entrance ramps, although there are ~20m boulders at the N and S ends. Definite few-meter overhang under the W rim (M143832493L). No collapse features in the area other than the fracture/pit chains.

King 15a

Impact Melt Pit: King Crater



Upper left: NAC M113168034L. Upper right: NAC M1135766659R. Lower left: NAC M141478563R. Lower right: Stereo anaglyph of NACs M136762839L (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 15a. Black dot marks the location of the pit.

Size and Location

Latitude	6.4782°N	Inner pit diameter	13 m × 9 m
Longitude	119.7847°E	Long axis azimuth	100°
Depth	4 m	Funnel diameter	19 m × 15 m

Measurement Source Images

Image ID	M113168034L	M1135766659R	M141478563R
Incidence	47.46°	28.94°	14.22°
Emission	-0.30°	0.33°	1.66°
Time of Day	8.87	10.13	11.21
Pixel Scale	0.62 m/px	1.17 m/px	0.61 m/px
Depth	3.4 m	4.0 m	5.5 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	No?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes?
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M113168034L line 23069, sample 4942

Best stereo pair: M136762839L / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

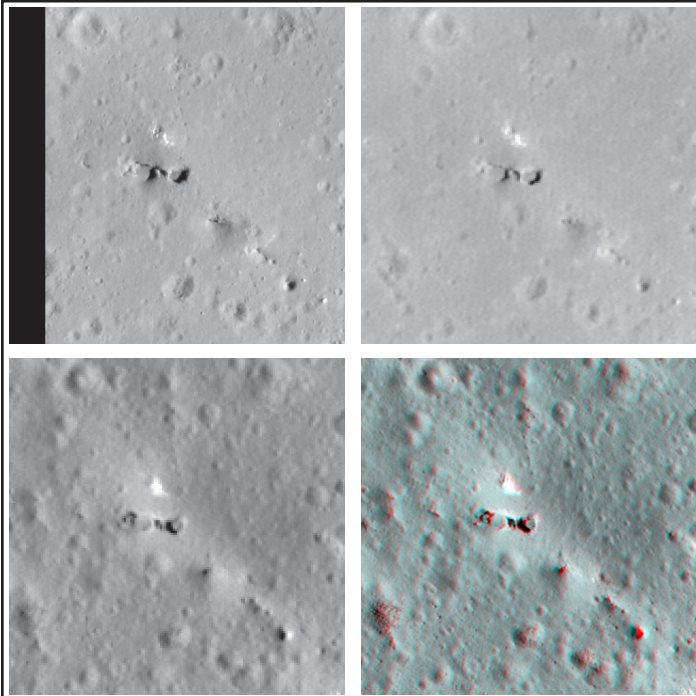
Data notes:

Description

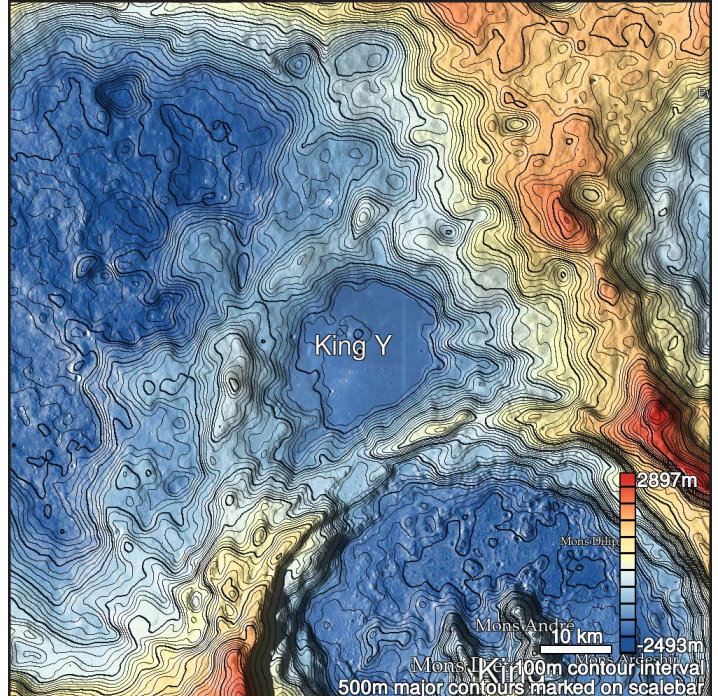
Western of a triplet of pits in a PRF. This pit is at the W edge of the PRF, and the SW rim is a ramp to the floor. King 15b is 9m E, separated from King 15a by two ~2m-wide ridges and an uncatalogued ~6x3x3m pit/collapse. No indications of a bridge-type connection between any of the pits. Other collapse features in the area are a sinuous collection of <5m probably pits joined by depressions ~75m WSW, a small collapse in the S side of the PRF ~40m SE, and sub-5m pits ~100m SE and ~110m SSW.

King 15b

Impact Melt Pit: King Crater



Upper left: NAC M113168034L. Upper right: NAC M1135766659R. Lower left: NAC M182745931L. Lower right: Stereo anaglyph of NACs M136762839L (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 15b. Black dot marks the location of the pit.

Size and Location

Latitude	6.4781°N	Inner pit diameter	12 m × 7 m
Longitude	119.7853°E	Long axis azimuth	60°
Depth	3 m	Funnel diameter	15 m × 13 m

Measurement Source Images

Image ID	M113168034L	M1135766659R	M182745931L
Incidence	47.46°	28.94°	-48.30°
Emission	-0.31°	0.32°	1.86°
Time of Day	8.87	10.13	15.21
Pixel Scale	0.62 m/px	1.17 m/px	1.27 m/px
Depth	4.4 m	2.2 m	3.4 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	No?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes?
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M113168034L line 23071, sample 4909

Best stereo pair: M136762839L / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

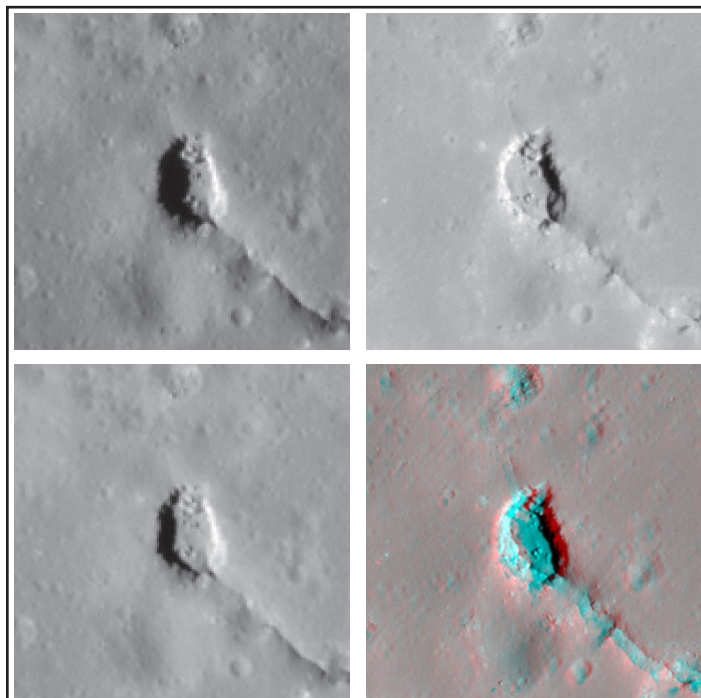
Data notes:

Description

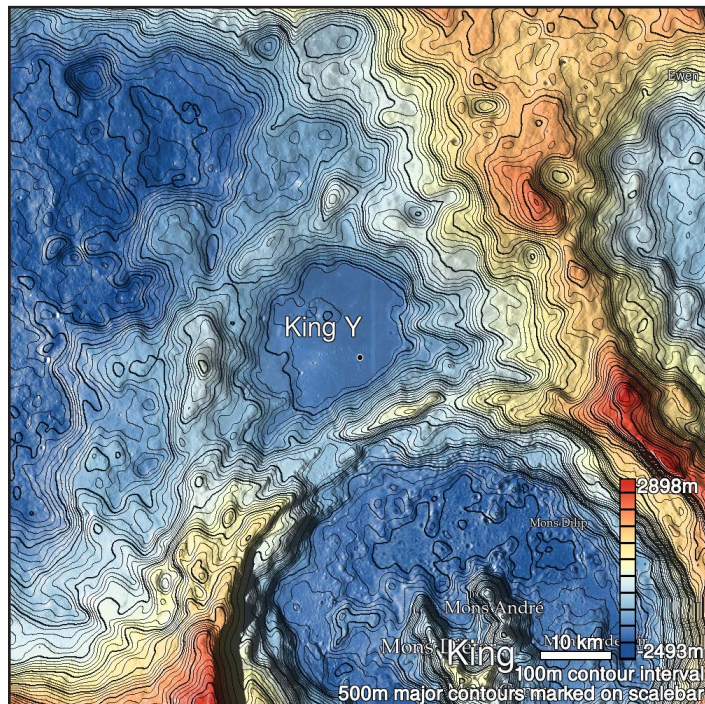
Eastern of a triplet of pits in a PRF. Near the middle of the PRF, no apparent entrance ramps, floor seems to be rough, although no visible boulders at 50cm/px.

King 16

Impact Melt Fracture Pit: King Crater



Upper left: NAC M182745931R. Upper right: NAC M1120456952R. Lower left: NAC M106088433R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 16. Black dot marks the location of the pit.

Size and Location

Latitude	6.3643°N	Inner pit diameter	47 m × 29 m
Longitude	119.9304°E	Long axis azimuth	160°
Depth	16 m	Funnel diameter	57 m × 42 m

Measurement Source Images

Image ID	M182745931R	M1120456952R	M106088433R
Incidence	-48.43°	32.29°	-35.29°
Emission	-0.30°	2.02°	-1.25°
Time of Day	15.22	9.88	14.31
Pixel Scale	1.27 m/px	1.17 m/px	1.29 m/px
Depth	18.9 m	15.1 m	14.1 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	No?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M182745931R line 22557, sample 1032

Best stereo pair: M128509025R / M128502237R

Other useful images: M141478563L, M108447638R

DTM: NAC_DTM_KINGCRATER2

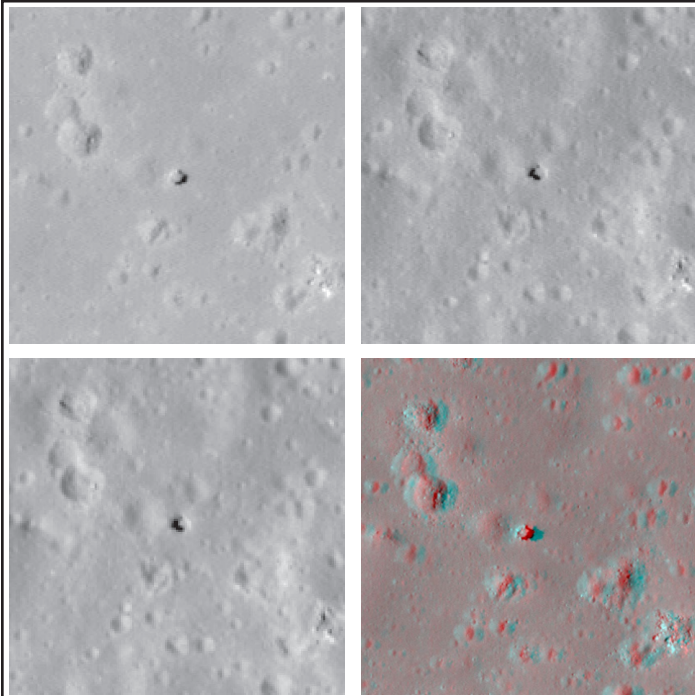
Data notes:

Description

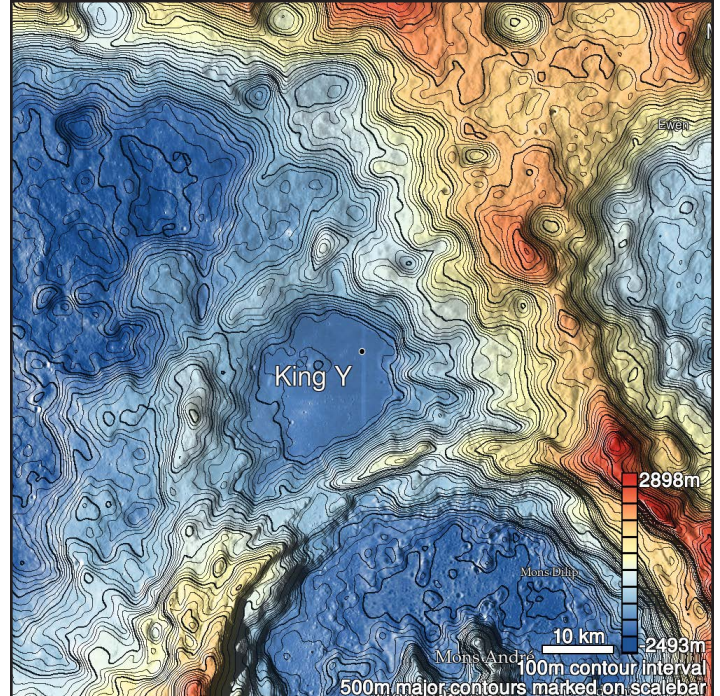
Elliptical pit at the N end of a ~200m long fracture/depression. There is a small (~6m diameter) much shallower pit ~115m SW along the fracture. The floor is flat, with a scattering of 1-5m boulders. The E and W walls appear to be solid down to the floor, with the SE wall having two ledges on the way down. There is a bit of shadowing at the base of the W wall that hints at a down-slope towards the wall. King 38 is ~200m NW, roughly in line with the fracture SE of this pit.

King 17

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M1131053889R. Lower left: NAC M106088433R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 17. Black dot marks the location of the pit.

Size and Location

Latitude	6.6252°N	Inner pit diameter	10 m × 7 m
Longitude	119.9847°E	Long axis azimuth	105°
Depth	5 m	Funnel diameter	14 m × 10 m

Measurement Source Images

Image ID	M1120456952R	M1131053889R	M106088433R
Incidence	32.28°	-27.68°	-35.39°
Emission	1.31°	-0.09°	-2.03°
Time of Day	9.88	13.77	14.31
Pixel Scale	1.17 m/px	1.17 m/px	1.29 m/px
Depth	4.7 m	4.8 m	4.9 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1120456952R line 36545, sample 2699

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

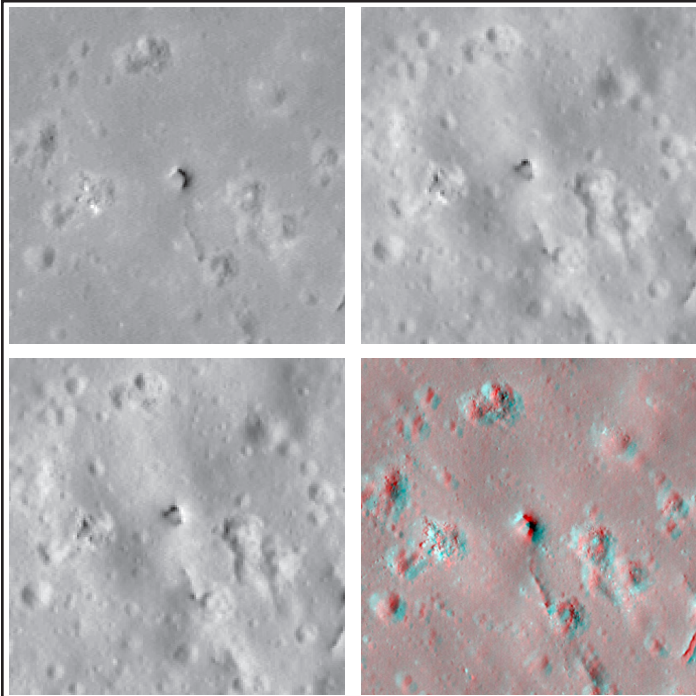
Data notes:

Description

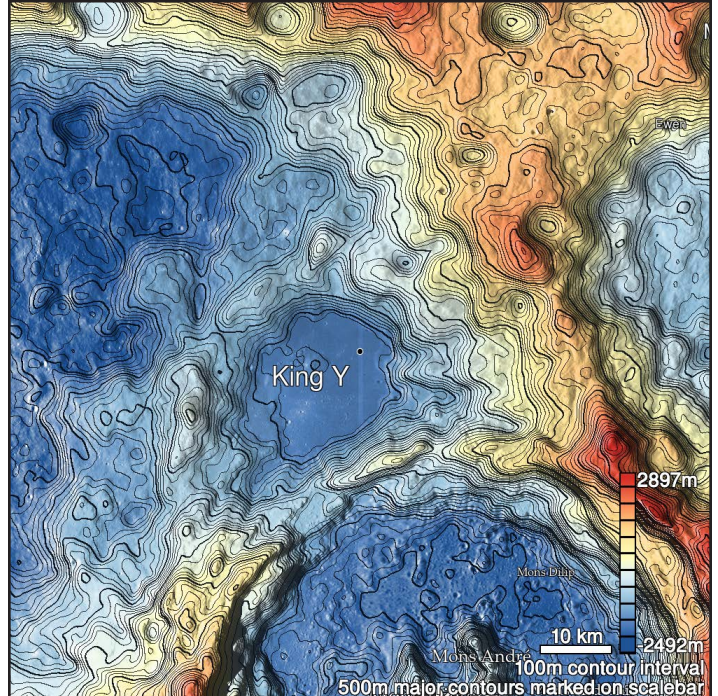
Round pit in fairly flat terrain. Floor has a couple of boulders on W side; no ramps to surface. King 18 is ~140m ESE, and King 39 is ~170m N. There are a few other tiny pit-like features in the area.

King 18

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M106088433R. Lower left: NAC M182745931R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 18. Black dot marks the location of the pit.

Size and Location

Latitude	6.6235°N	Inner pit diameter	14 m × 12 m
Longitude	119.9894°E	Long axis azimuth	160°
Depth	7 m	Funnel diameter	19 m × 18 m

Measurement Source Images

Image ID	M1120456952R	M106088433R	M182745931R
Incidence	32.27°	-35.40°	-48.51°
Emission	1.24°	-2.09°	-1.06°
Time of Day	9.88	14.31	15.22
Pixel Scale	1.17 m/px	1.29 m/px	1.27 m/px
Depth	9.5 m	7.5 m	4.9 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	Yes?
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1120456952R line 36488, sample 2580

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

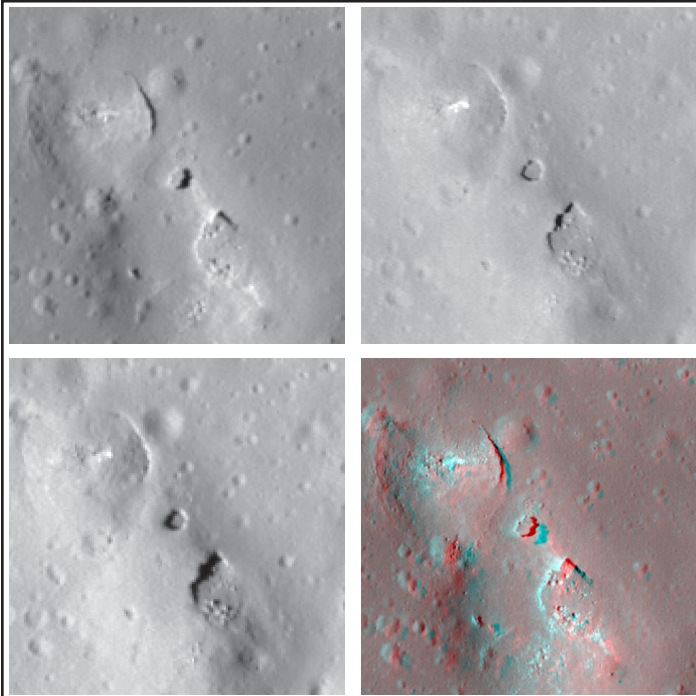
Data notes: Depths 2 and 3 are from W wall, Depth 1 is from E.

Description

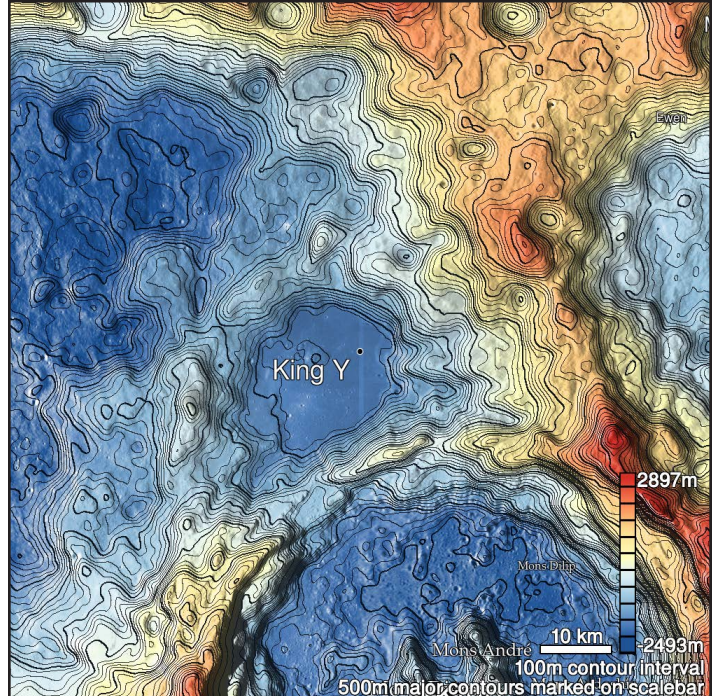
Round/rectangular pit on the SW side of a very subtle (~2-3m?) ~70m-wide rise; N and E walls are significantly taller than S. The floor appears to slope up towards the S rim, and may form a traversable ramp. A fracture/linear depression starts ~20m S and runs ~130m SSE. King 17 is ~140m WNW, and there are several other <5m pit/collapse-looking features in the area.

King 19

Impact Melt Pit: King Crater



Upper left: NAC M1138120053R. Upper right: NAC M1131053889R. Lower left: NAC M182745931R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 19. Black dot marks the location of the pit.

Size and Location

Latitude	6.5931°N	Inner pit diameter	13 m × 11 m
Longitude	119.9861°E	Long axis azimuth	45°
Depth	4 m	Funnel diameter	17 m × 15 m

Measurement Source Images

Image ID	M1138120053R	M1131053889R	M182745931R
Incidence	56.38°	-27.67°	-48.50°
Emission	2.53°	-0.10°	-1.02°
Time of Day	8.26	13.77	15.22
Pixel Scale	1.18 m/px	1.17 m/px	1.27 m/px
Depth	3.3 m	4.5 m	4.4 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	Yes	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1138120053R line 13577, sample 4711

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

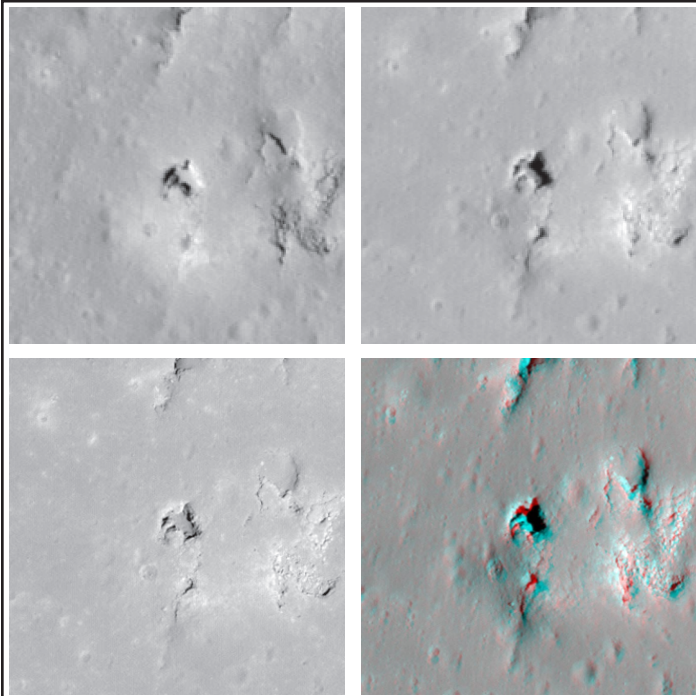
Data notes:

Description

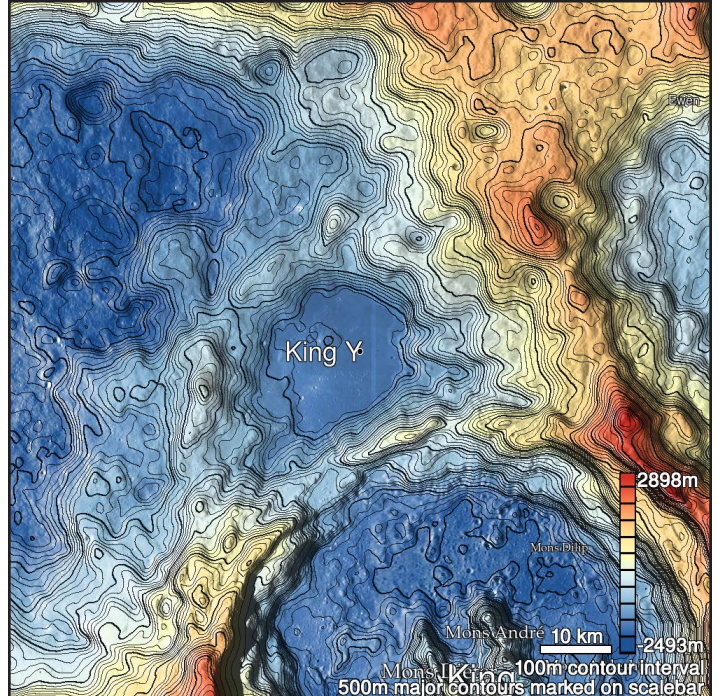
Round pit in the NE flank of a PRF. Floor appears flat, and high-resolution stereo indicates some degree of overhang under the W rim (towards the center of the PRF). There are several other collapses in the PRF: A narrow arcuate one 16m NNW, a wide collapse with a possible overhang at the N end 24m SSE, and a small indentation/pit 23m SSW. There are a handful of small pit-looking features in the area, including a semi-circular set of 1-3m pits/collapses (cluster diameter ~20m) ~300m N.

King 20a

Impact Melt Pit: King Crater



Upper left: NAC M1131053889L. Upper right: NAC M1181692437R. Lower left: NAC M141478563L. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 20a. Black dot marks the location of the pit.

Size and Location

Latitude	6.5098°N	Inner pit diameter	22 m × 12 m
Longitude	119.9269°E	Long axis azimuth	140°
Depth	12 m	Funnel diameter	29 m × 29 m

Measurement Source Images

Image ID	M1131053889L	M1181692437R	M141478563L
Incidence	-27.59°	32.25°	14.12°
Emission	0.93°	-0.15°	-2.48°
Time of Day	13.76	9.89	11.22
Pixel Scale	1.17 m/px	1.23 m/px	0.62 m/px
Depth	11.5 m	14.0 m	9.5 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1131053889L line 22492, sample 3900

Best stereo pair: M128509025R / M128502237R

Other useful images: M1164027461R, M108447638R

DTM: NAC_DTM_KINGCRATER2

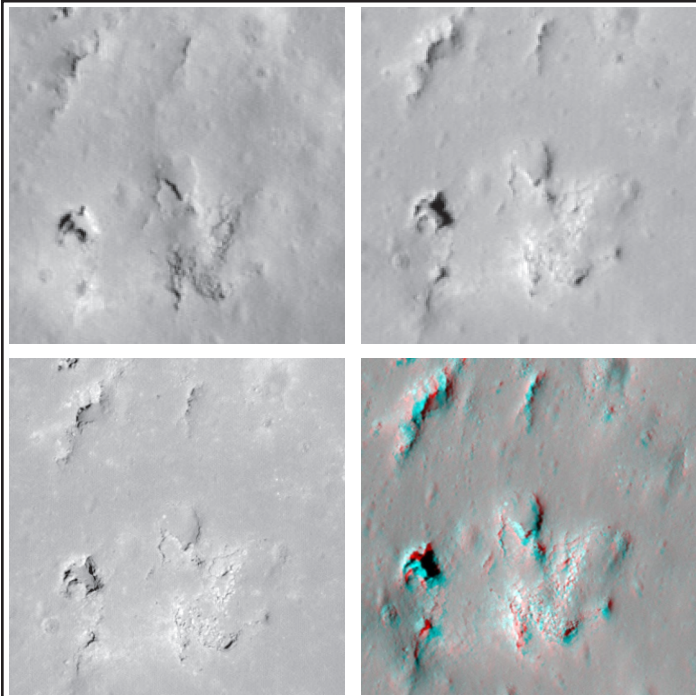
Data notes:

Description

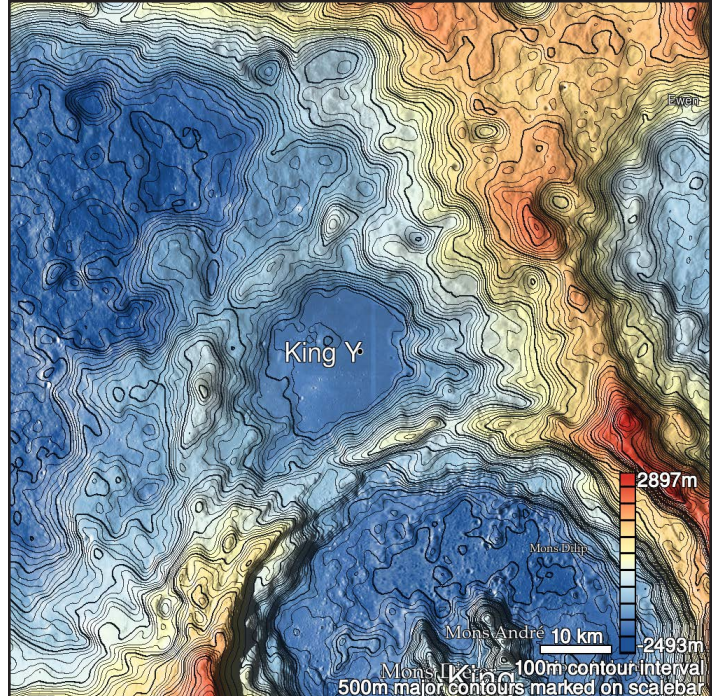
Southernmost and largest of a cluster of pits and other apparent collapse features. Pits are lettered from south to north (see individual entries for details). This pit is in the NW flank of a PRF. Additional features in the area are a shallow collapse at the E base of PRF containing 20a and 20b; a small shallow pit/fracture just S of 20a; a narrow collapse due E of 20d and due N of 20b; and a scattering of ~5m pits to the N and S.

King 20b

Impact Melt Pit: King Crater



Upper left: NAC M1131053889L. Upper right: NAC M1181692437R. Lower left: NAC M141478563L. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 20b. Black dot marks the location of the pit.

Size and Location

Latitude	6.5108°N	Inner pit diameter	23 m × 23 m
Longitude	119.9289°E	Long axis azimuth	180°
Depth	4 m	Funnel diameter	29 m × 24 m

Measurement Source Images

Image ID	M1131053889L	M1181692437R	M141478563L
Incidence	-27.59°	32.25°	14.12°
Emission	0.89°	-0.17°	-2.54°
Time of Day	13.76	9.89	11.22
Pixel Scale	1.17 m/px	1.23 m/px	0.62 m/px
Depth	5.4 m	2.7 m	4.0 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1131053889L line 22460, sample 3954

Best stereo pair: M128509025R / M128502237R

Other useful images: M1164027461R, M108447638R

DTM: NAC_DTM_KINGCRATER2

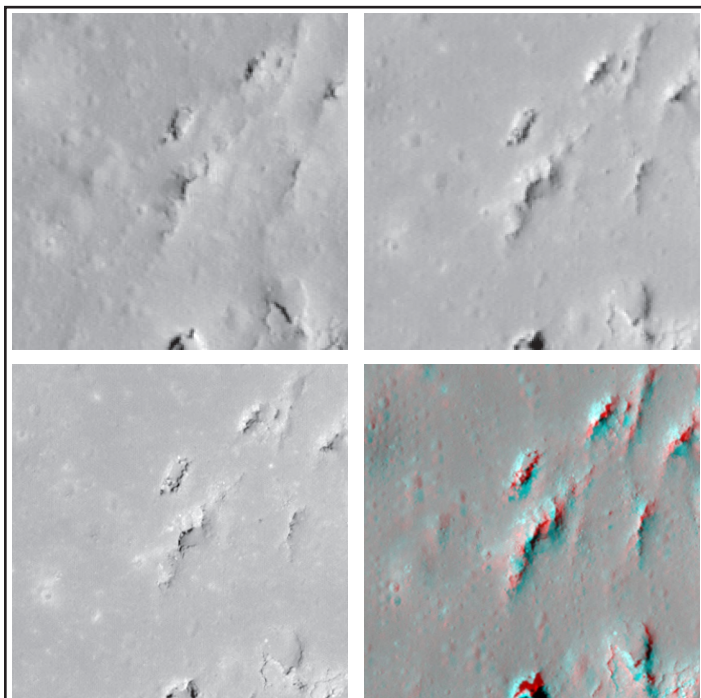
Data notes:

Description

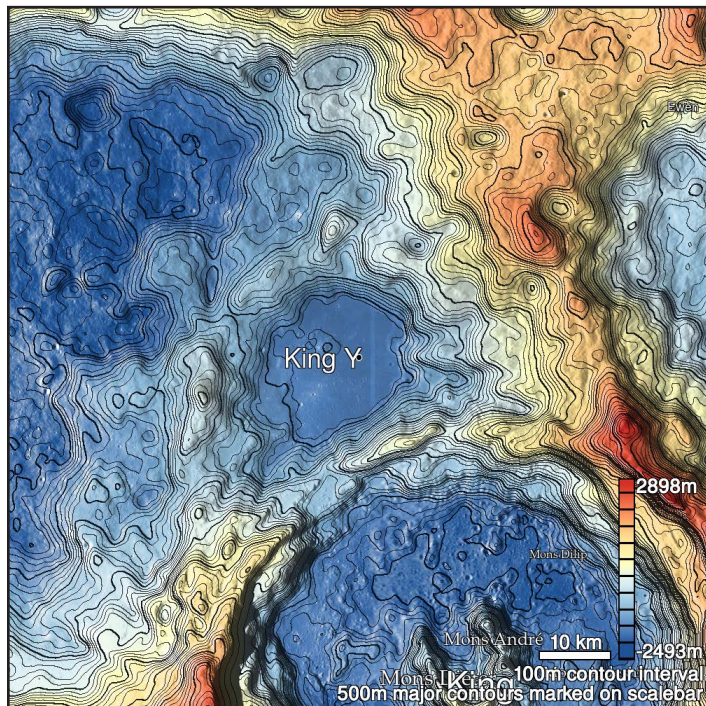
Triangular pit NNE base of PRF, 50m ENE of 20a.

King 20c

Impact Melt Fracture Pit: King Crater



Upper left: NAC M1131053889L. Upper right: NAC M1181692437R. Lower left: NAC M141478563L. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 20c. Black dot marks the location of the pit.

Size and Location

Latitude	6.5130°N	Inner pit diameter	14 m × 3 m
Longitude	119.9269°E	Long axis azimuth	35°
Depth	>6 m	Funnel diameter	34 m × 19 m

Measurement Source Images

Image ID	M1131053889L	M1181692437R	M141478563L
Incidence	-27.59°	32.25°	14.12°
Emission	0.92°	-0.15°	-2.48°
Time of Day	13.76	9.89	11.22
Pixel Scale	1.17 m/px	1.23 m/px	0.62 m/px
Depth	>2.5 m	>4 m	>8 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1131053889L line 22368, sample 3902

Best stereo pair: M128509025R / M128502237R

Other useful images: M1164027461R, M108447638R

DTM: NAC_DTM_KINGCRATER2

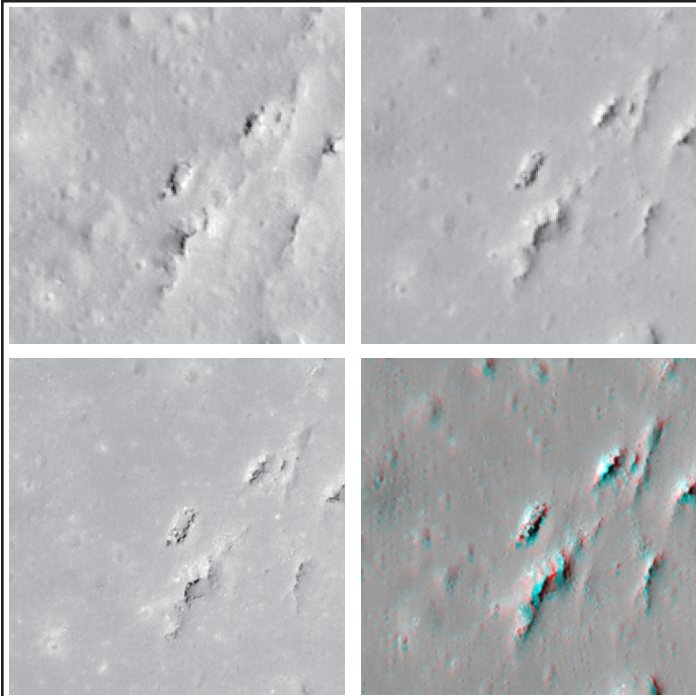
Data notes:

Description

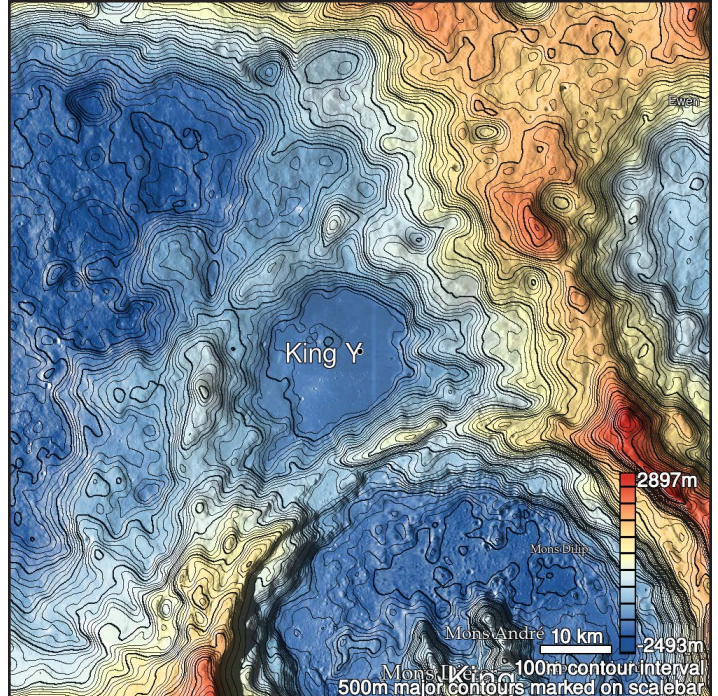
Fracture/pit in 50m long depression 85m due north of 20a.

King 20d

Impact Melt Pit: King Crater



Upper left: NAC M1131053889L. Upper right: NAC M1181692437R. Lower left: NAC M141478563L. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 20d. Black dot marks the location of the pit.

Size and Location

Latitude	6.5142°N	Inner pit diameter	19 m × 7 m
Longitude	119.9266°E	Long axis azimuth	25°
Depth	5 m	Funnel diameter	23 m × 11 m

Measurement Source Images

Image ID	M1131053889L	M1181692437R	M141478563L
Incidence	-27.59°	32.25°	14.13°
Emission	0.93°	-0.14°	-2.47°
Time of Day	13.76	9.89	11.22
Pixel Scale	1.17 m/px	1.23 m/px	0.62 m/px
Depth	4.0 m	4.6 m	5.5 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1131053889L line 22321, sample 3902

Best stereo pair: M128509025R / M128502237R

Other useful images: M1164027461R, M108447638R

DTM: NAC_DTM_KINGCRATER2

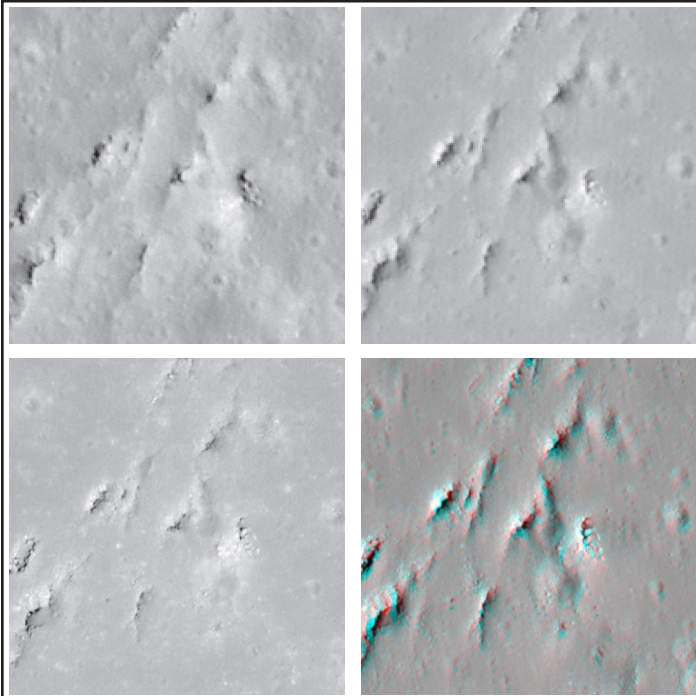
Data notes:

Description

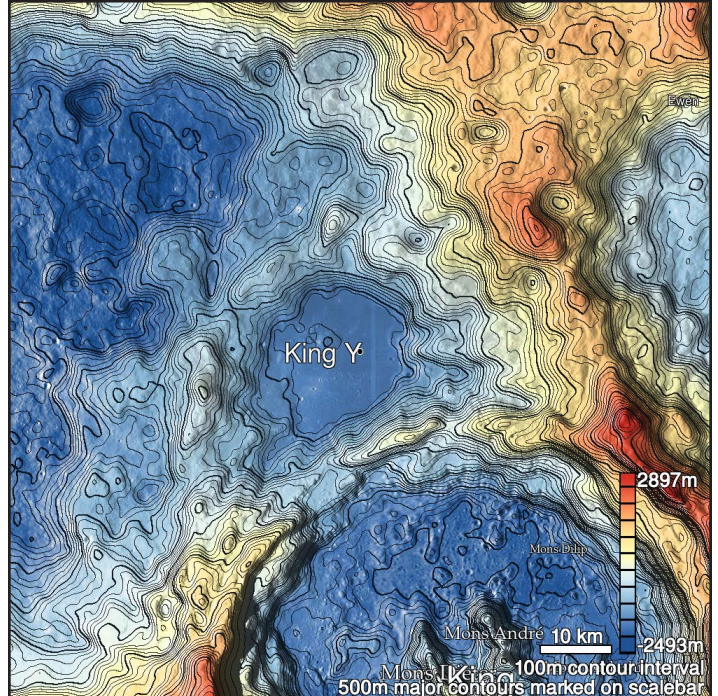
Long, sharp-rimmed pit 25m due north of 20c.

King 20e

Impact Melt Pit: King Crater



Upper left: NAC M1131053889L. Upper right: NAC M1181692437R. Lower left: NAC M141478563L. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 20e. Black dot marks the location of the pit.

Size and Location

Latitude	6.5149°N	Inner pit diameter	6 m × 4 m
Longitude	119.9298°E	Long axis azimuth	40°
Depth	5 m	Funnel diameter	22 m × 14 m

Measurement Source Images

Image ID	M1131053889L	M1181692437R	M141478563L
Incidence	-27.59°	32.25°	14.12°
Emission	0.88°	-0.18°	-2.57°
Time of Day	13.76	9.89	11.22
Pixel Scale	1.17 m/px	1.23 m/px	0.62 m/px
Depth	3.7 m	5.1 m	5.5 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes?
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1131053889L line 22303, sample 3980

Best stereo pair: M128509025R / M128502237R

Other useful images: M1164027461R, M108447638R

DTM: NAC_DTM_KINGCRATER2

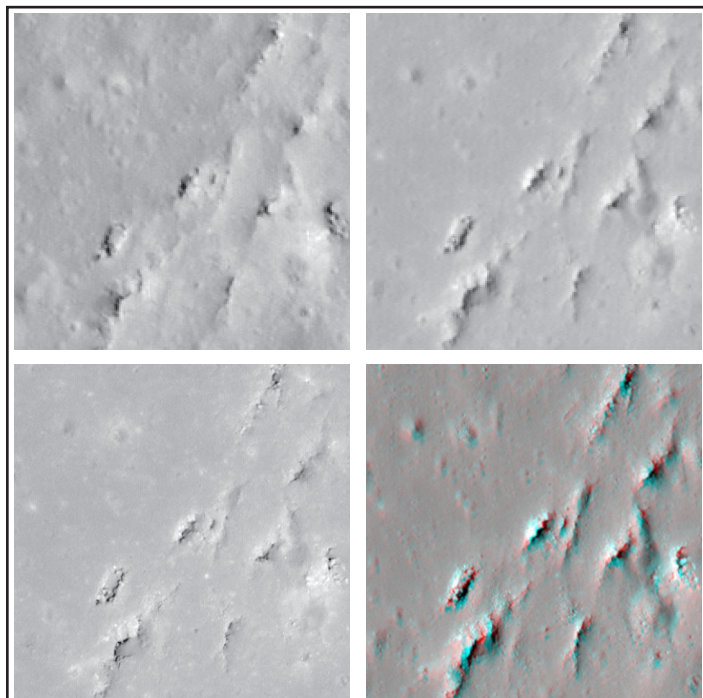
Data notes: Some depths may not be to floor.

Description

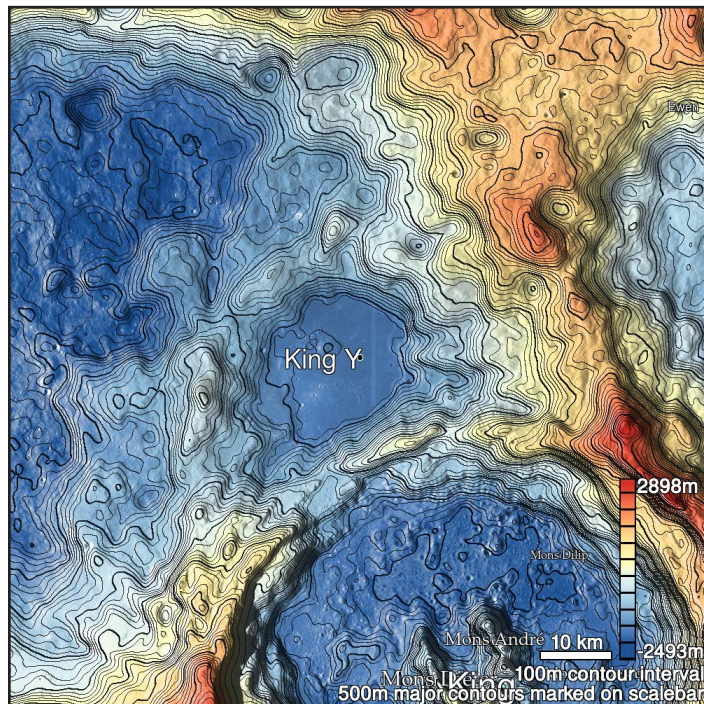
Small triangular pit at the NW base of a PRF, 80m ENE of 20d, slightly E of 20b's longitude.

King 20f

Impact Melt Pit: King Crater



Upper left: NAC M1131053889L. Upper right: NAC M1181692437R. Lower left: NAC M141478563L. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 20f. Black dot marks the location of the pit.

Size and Location

Latitude	6.5153°N	Inner pit diameter	10 m × 5 m
Longitude	119.9282°E	Long axis azimuth	35°
Depth	5 m	Funnel diameter	21 m × 11 m

Measurement Source Images

Image ID	M1131053889L	M1181692437R	M141478563L
Incidence	-27.59°	32.25°	14.12°
Emission	0.90°	-0.16°	-2.52°
Time of Day	13.76	9.89	11.22
Pixel Scale	1.17 m/px	1.23 m/px	0.62 m/px
Depth	6.1 m	3.6 m	6.0 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1131053889L line 22281, sample 3939

Best stereo pair: M128509025R / M128502237R

Other useful images: M1164027461R, M108447638R

DTM: NAC_DTM_KINGCRATER2

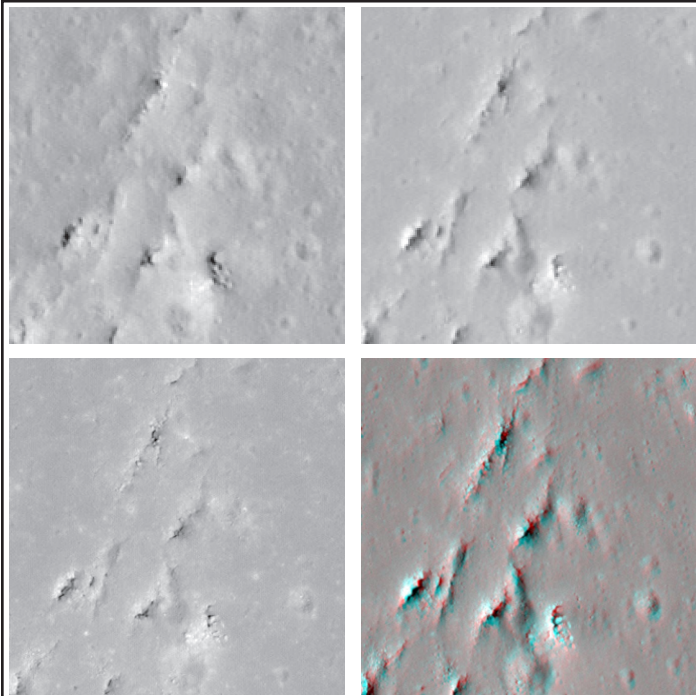
Data notes: Some depths may not be to floor.

Description

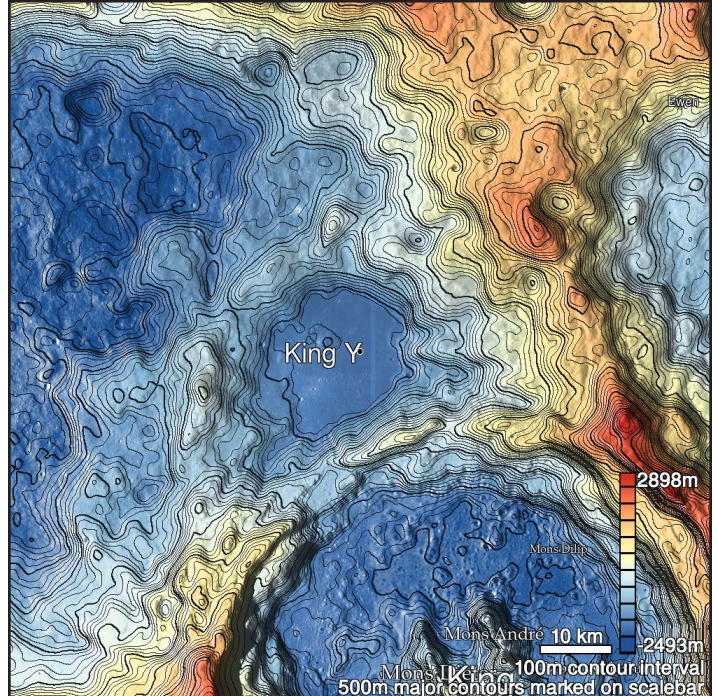
Long, narrow pit 50m NE of 20d, 43m W of 20e, slightly W of 20b's longitude.

King 20g

Impact Melt Pit: King Crater



Upper left: NAC M1131053889L. Upper right: NAC M1181692437R. Lower left: NAC M141478563L. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 20g. Black dot marks the location of the pit.

Size and Location

Latitude	6.5165°N	Inner pit diameter	5 m × 4 m
Longitude	119.9304°E	Long axis azimuth	40°
Depth	4 m	Funnel diameter	13 m × 10 m

Measurement Source Images

Image ID	M1131053889L	M1181692437R	M141478563L
Incidence	-27.60°	32.25°	14.12°
Emission	0.87°	-0.19°	-2.58°
Time of Day	13.76	9.89	11.22
Pixel Scale	1.17 m/px	1.23 m/px	0.62 m/px
Depth	3.0 m	4.4 m	4.0 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1131053889L line 22241, sample 3997

Best stereo pair: M128509025R / M128502237R

Other useful images: M1164027461R, M108447638R

DTM: NAC_DTM_KINGCRATER2

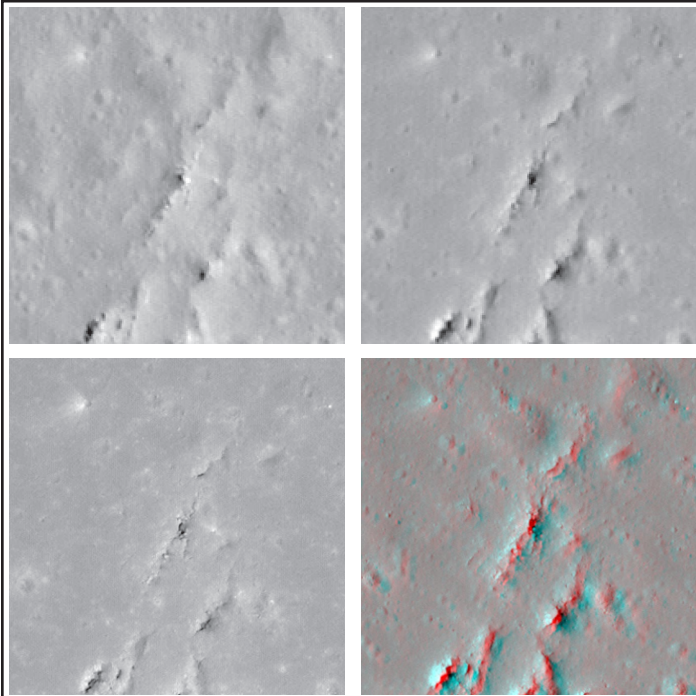
Data notes: Some depths may not be to floor.

Description

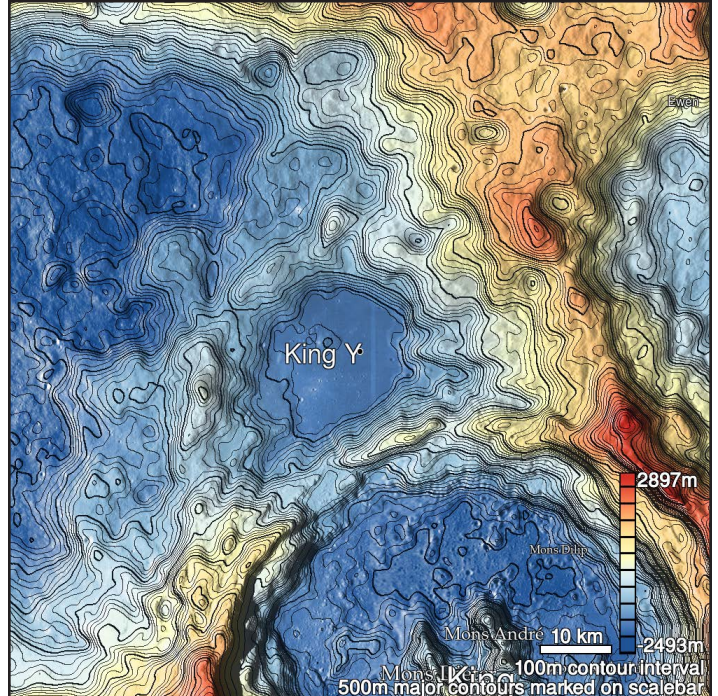
Irregular pit 45m NNE of 20e, 65m ENE of 20f.

King 20h

Impact Melt Fracture Pit: King Crater



Upper left: NAC M1131053889L. Upper right: NAC M1181692437R. Lower left: NAC M141478563L. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 20h. Black dot marks the location of the pit.

Size and Location

Latitude	6.5183°N	Inner pit diameter	6 m × 2 m
Longitude	119.9299°E	Long axis azimuth	30°
Depth	>4 m	Funnel diameter	13 m × 7 m

Measurement Source Images

Image ID	M1131053889L	M1181692437R	M141478563L
Incidence	-27.60°	32.25°	14.12°
Emission	0.87°	-0.18°	-2.57°
Time of Day	13.76	9.89	11.22
Pixel Scale	1.17 m/px	1.23 m/px	0.62 m/px
Depth	>2.5 m	>4 m	>5 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1131053889L line 22169, sample 3987

Best stereo pair: M128509025R / M128502237R

Other useful images: M1164027461R, M108447638R

DTM: NAC_DTM_KINGCRATER2

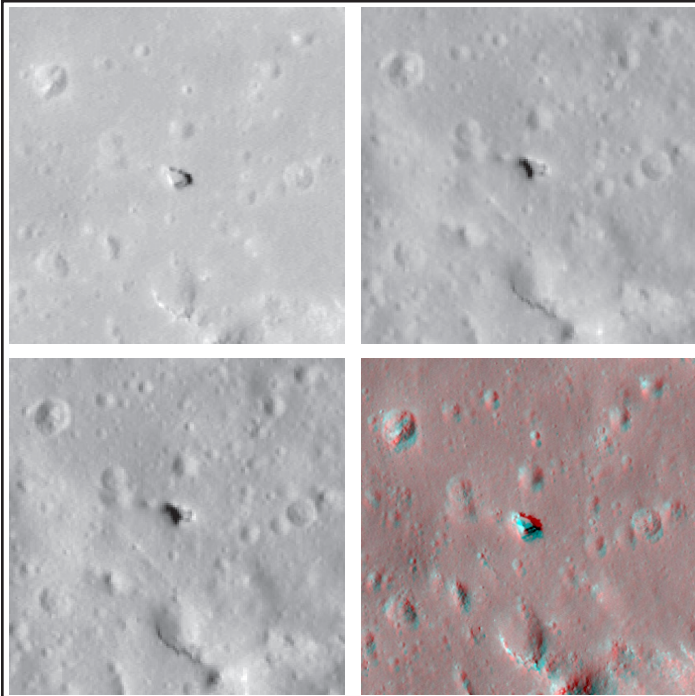
Data notes:

Description

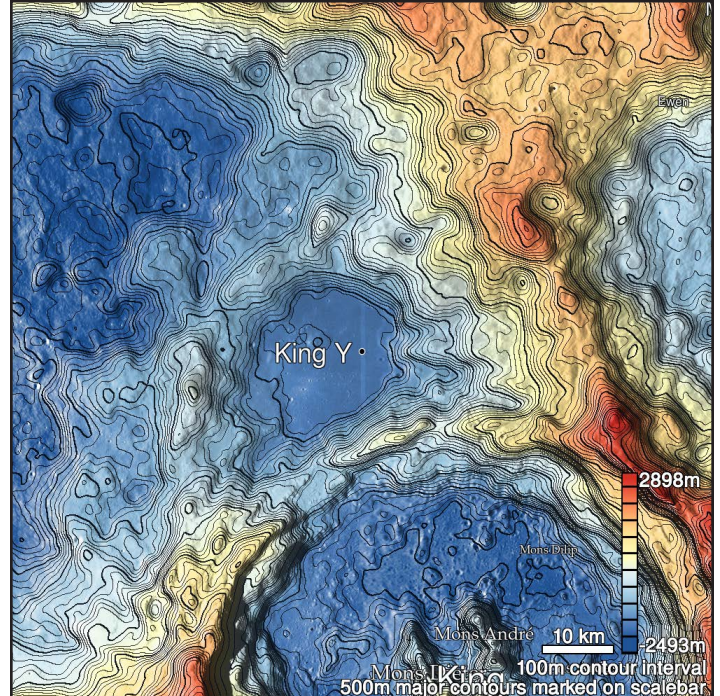
Round (zig-zag shaped with some steeply sloped walls?) pit in a 20m long fracture, 55m NNW of 20g.

King 21

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M106088433R. Lower left: NAC M182745931R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 21. Black dot marks the location of the pit.

Size and Location

Latitude	6.5170°N	Inner pit diameter	15 m × 9 m
Longitude	119.9875°E	Long axis azimuth	125°
Depth	5 m	Funnel diameter	19 m × 14 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Measurement Source Images

Image ID	M1120456952R	M106088433R	M182745931R
Incidence	32.26°	-35.37°	-48.50°
Emission	1.21°	-2.07°	-1.07°
Time of Day	9.88	14.31	15.22
Pixel Scale	1.17 m/px	1.29 m/px	1.27 m/px
Depth	6.3 m	4.5 m	5.5 m

Location reference: NAC M1120456952R line 32326, sample 2534

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

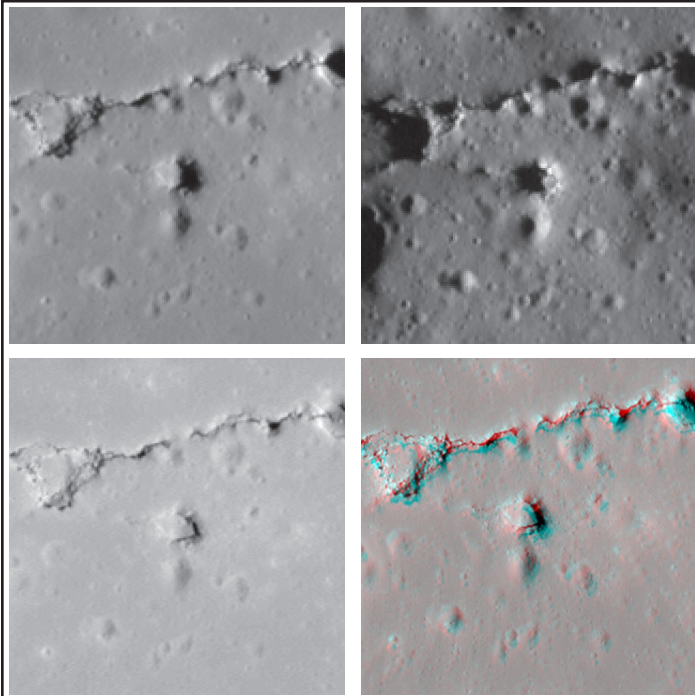
Data notes:

Description

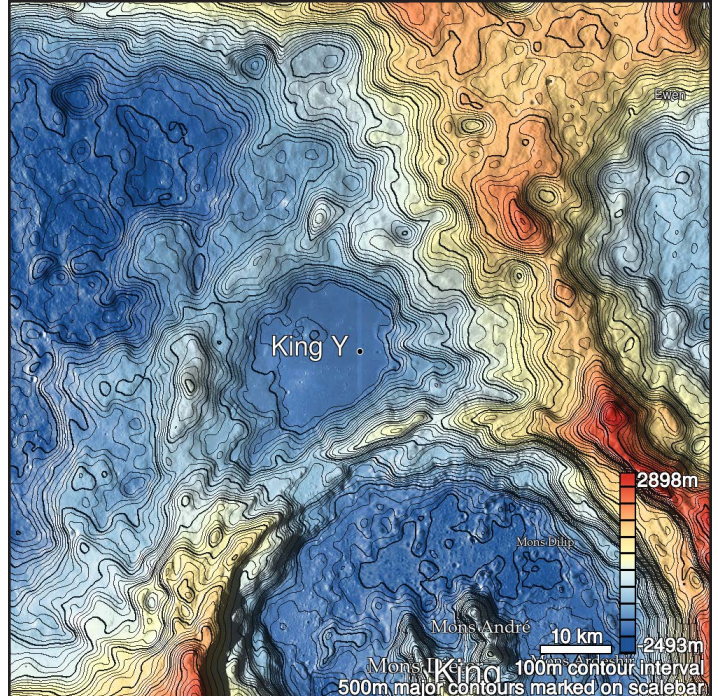
Triangular pit. The floor appears flat, and there appears to be a narrow (~1m wide) shelf halfway down the SE wall. There are several short fractures nearby, tracing a line from NW to SE, with closest approach of that line (albeit with no surface expression) ~60m SW. This pit is in flat ground, but the PRF containing King 31 is ~170m N.

King 22

Impact Melt Pit: King Crater



Upper left: NAC M1138120053R. Upper right: NAC M180387064L. Lower left: NAC M1120456952R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 22. Black dot marks the location of the pit.

Size and Location

Latitude	6.4835°N	Inner pit diameter	25 m × 18 m
Longitude	119.9941°E	Long axis azimuth	110°
Depth	5 m	Funnel diameter	34 m × 24 m

Other Features

Entrance Ramp	Yes	In dome	Yes?
Overhang	?	Beside dome	Yes?
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1138120053R	M180387064L	M1120456952R
Incidence	56.37°	-76.37°	32.25°
Emission	2.48°	1.68°	1.09°
Time of Day	8.26	17.09	9.88
Pixel Scale	1.18 m/px	1.28 m/px	1.17 m/px
Depth	6.6 m	3.5 m	6.0 m

Location reference: NAC M1138120053R line 16373, sample 4621

Best stereo pair: M128509025R / M128502237R

Other useful images: M182745931R

DTM: NAC_DTM_KINGCRATER2

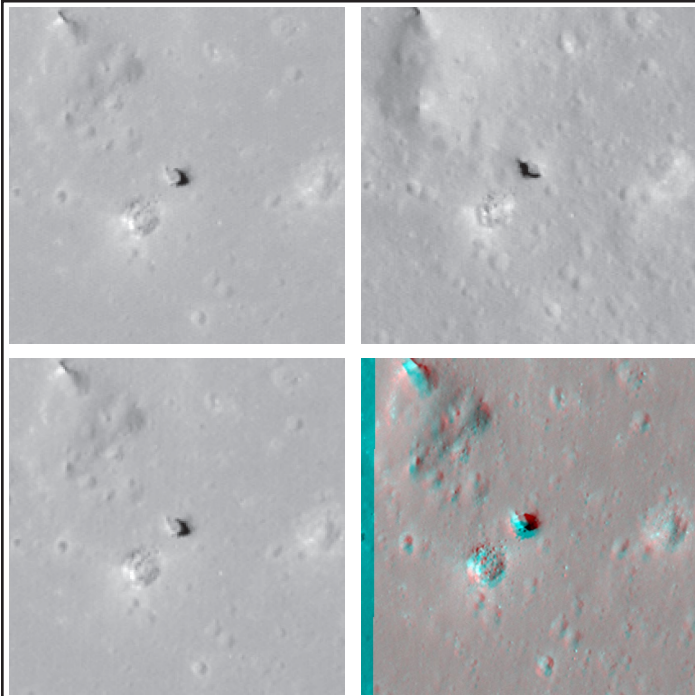
Data notes: Depth 2 is from lower E rim.

Description

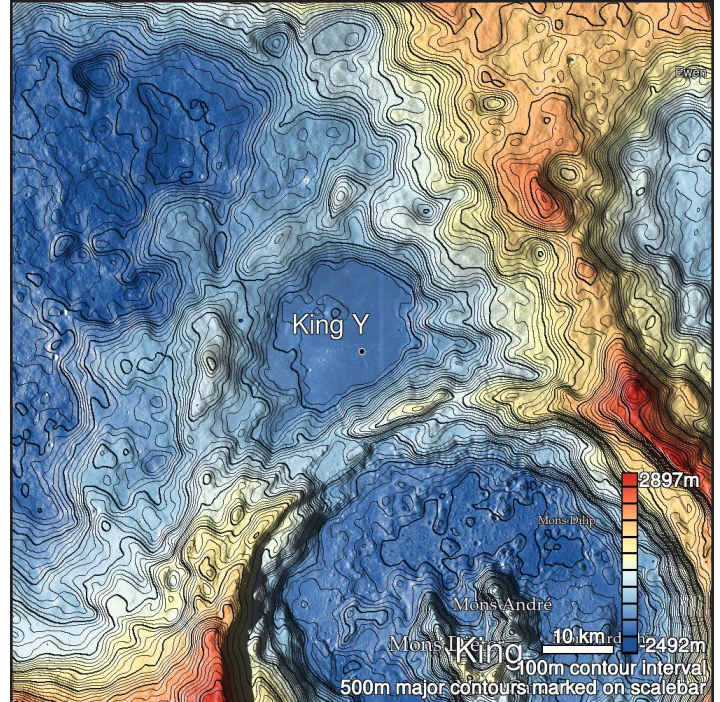
Teardrop-shaped pit between two sets of fractures/fracture-associated pits (~40m N and ~180m S). There are two small (~5m) depressions running W from the W end of this pit to the S corner of a triangular fracture-associated pit in the northern fracture, hinting at a connection. The floor is mostly flat, apparently sloping up in the western third, but does not quite reach the rim. No obvious PRFs, but there may be an extremely subtle (~3m high, ~50m wide) rise immediately to the E. King 40 is ~180m SE.

King 23

Impact Melt Pit: King Crater



Upper left: NAC M1135766659L. Upper right: NAC M1131053889L. Lower left: NAC M1181692437R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 23. Black dot marks the location of the pit.

Size and Location

Latitude	6.3794°N	Inner pit diameter	15 m × 9 m
Longitude	119.9019°E	Long axis azimuth	120°
Depth	8 m	Funnel diameter	18 m × 11 m

Measurement Source Images

Image ID	M1135766659L	M1131053889L	M1181692437R
Incidence	28.81°	-27.53°	32.25°
Emission	-1.46°	1.40°	0.17°
Time of Day	10.13	13.76	9.88
Pixel Scale	1.18 m/px	1.17 m/px	1.23 m/px
Depth	8.7 m	7.5 m	8.0 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1135766659L line 26900, sample 3021

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER3

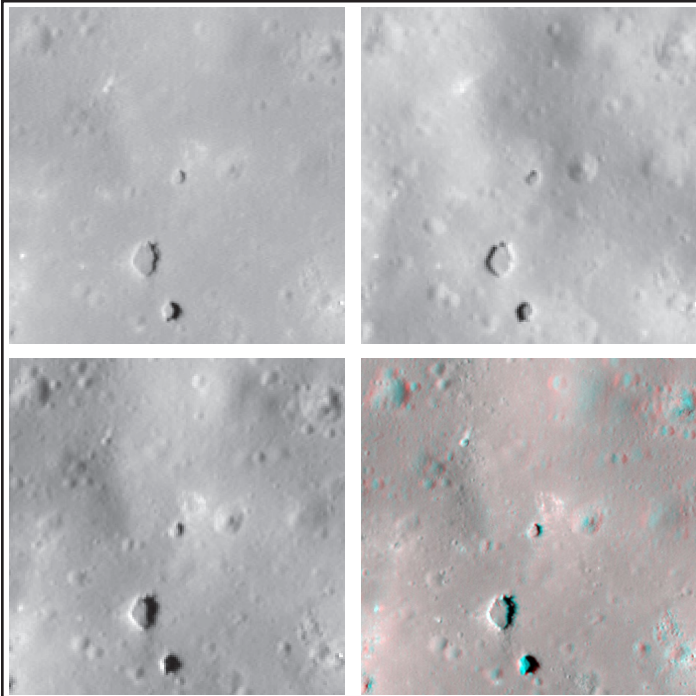
Data notes:

Description

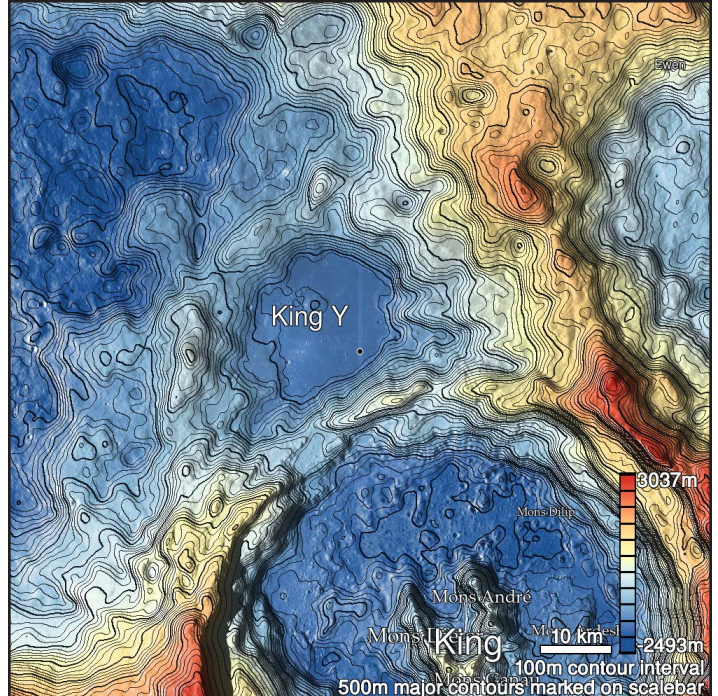
Diamond-shaped pit in a fairly flat area. Floor is fairly flat with a couple boulders. Slew images suggest overhangs of a couple meters. ~50m to the NW is a pair of shallow 60m wide depressions joined by a ~5m wide linear collapse, which is roughly in line with this pit; Starting ~160m E and winding N is a sinuous series of <5m probable pits joined by subtle depressions; ~150m N is a ~5x60m collapse that ends at the foot of a PRF.

King 24a

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M106088433R. Lower left: NAC M1138120053R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 24a. Black dot marks the location of the pit.

Size and Location

Latitude	6.3416°N	Inner pit diameter	7 m × 5 m
Longitude	119.9914°E	Long axis azimuth	35°
Depth	2 m	Funnel diameter	9 m × 9 m

Measurement Source Images

Image ID	M1120456952R	M106088433R	M1138120053R
Incidence	32.23°	-35.34°	56.36°
Emission	1.05°	-2.13°	2.61°
Time of Day	9.88	14.31	8.26
Pixel Scale	1.17 m/px	1.29 m/px	1.18 m/px
Depth	2.4 m	2.0 m	1.7 m

Other Features

Entrance Ramp	No?	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1120456952R line 25474, sample 2279

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

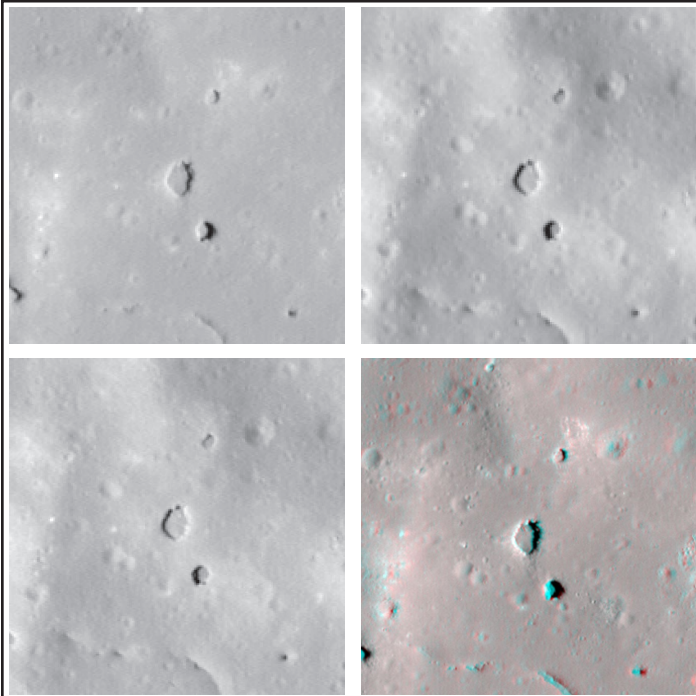
Data notes:

Description

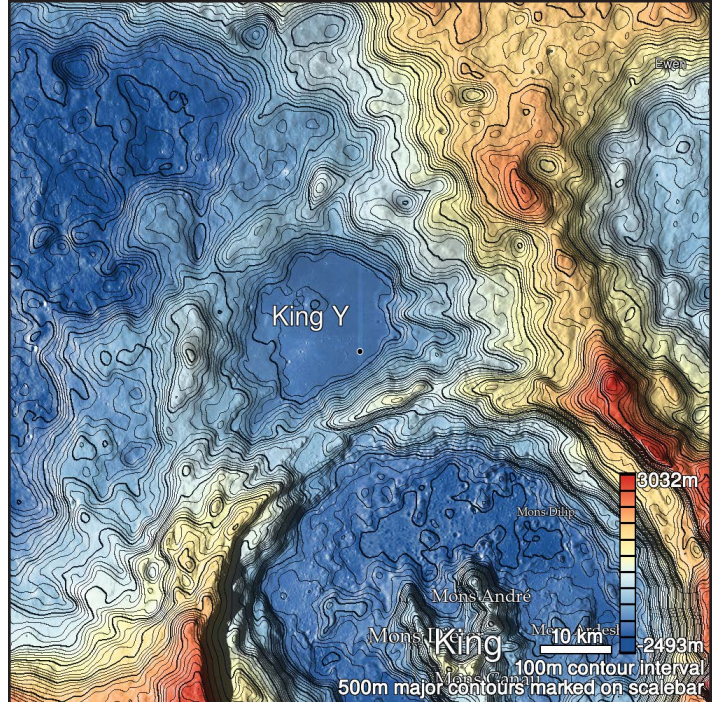
Northernmost (and smallest) of a triplet of pits in a PRF. This pit is near the top of the PRF. King 24b (largest of the triplet) is ~40m SSW, and King 24c is ~70m S. There are collapses at two ends of the PRF: ~220m SE, and ~170m SW, and there is a scattering of other small collapses, depressions, and possible tiny pits to the S. King 30 is ~230m SSE.

King 24b

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M106088433R. Lower left: NAC M1131053889R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 24b. Black dot marks the location of the pit.

Size and Location

Latitude	6.3400°N	Inner pit diameter	20 m × 14 m
Longitude	119.9907°E	Long axis azimuth	15°
Depth	4 m	Funnel diameter	23 m × 19 m

Measurement Source Images

Image ID	M1120456952R	M106088433R	M1131053889R
Incidence	32.23°	-35.34°	-27.61°
Emission	1.06°	-2.12°	0.08°
Time of Day	9.88	14.31	13.77
Pixel Scale	1.17 m/px	1.29 m/px	1.17 m/px
Depth	3.5 m	4.4 m	4.5 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1120456952R line 25411, sample 2295

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

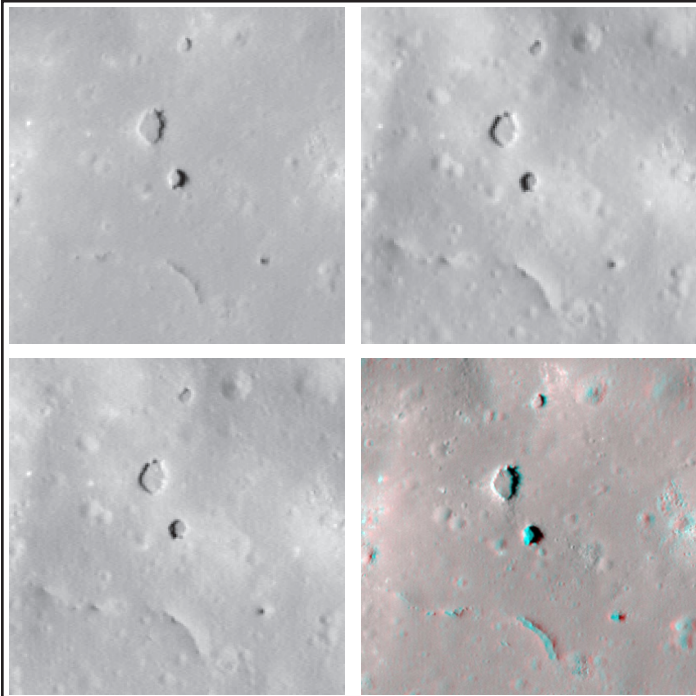
Data notes:

Description

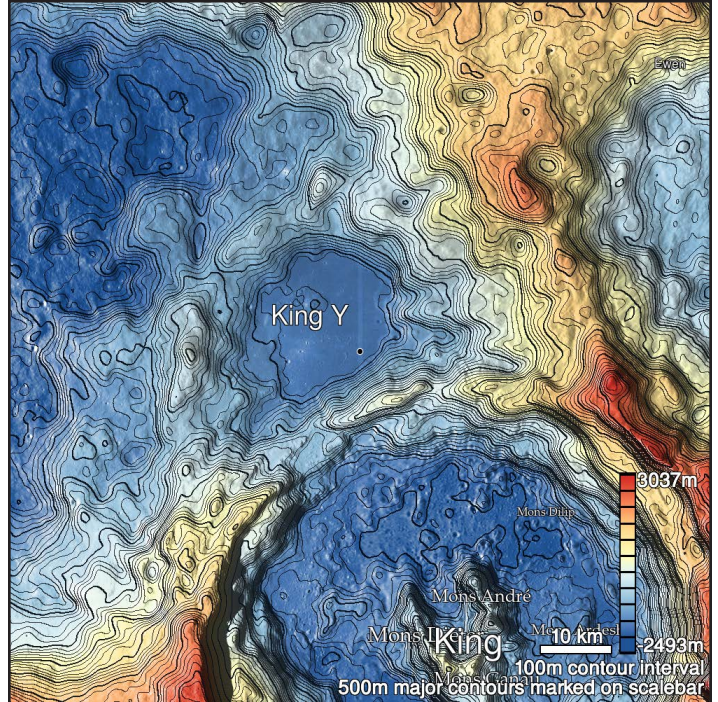
Center of a triplet of pits in a PRF. This pit is near the top of the PRF, has a flat-looking floor with only a couple >1m boulders, and has no entrance ramp.

King 24c

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M106088433R. Lower left: NAC M1131053889R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 24c. Black dot marks the location of the pit.

Size and Location

Latitude	6.3389°N	Inner pit diameter	12 m × 10 m
Longitude	119.9913°E	Long axis azimuth	25°
Depth	7 m	Funnel diameter	13 m × 12 m

Measurement Source Images

Image ID	M1120456952R	M106088433R	M1131053889R
Incidence	32.23°	-35.34°	-27.61°
Emission	1.05°	-2.13°	0.08°
Time of Day	9.88	14.31	13.77
Pixel Scale	1.17 m/px	1.29 m/px	1.17 m/px
Depth	7.5 m	5.8 m	7.8 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1120456952R line 25372, sample 2280

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

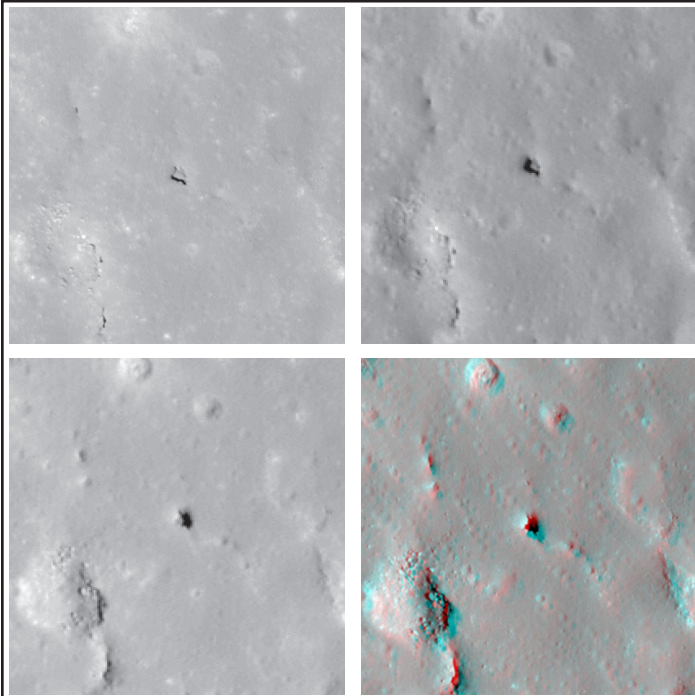
Data notes:

Description

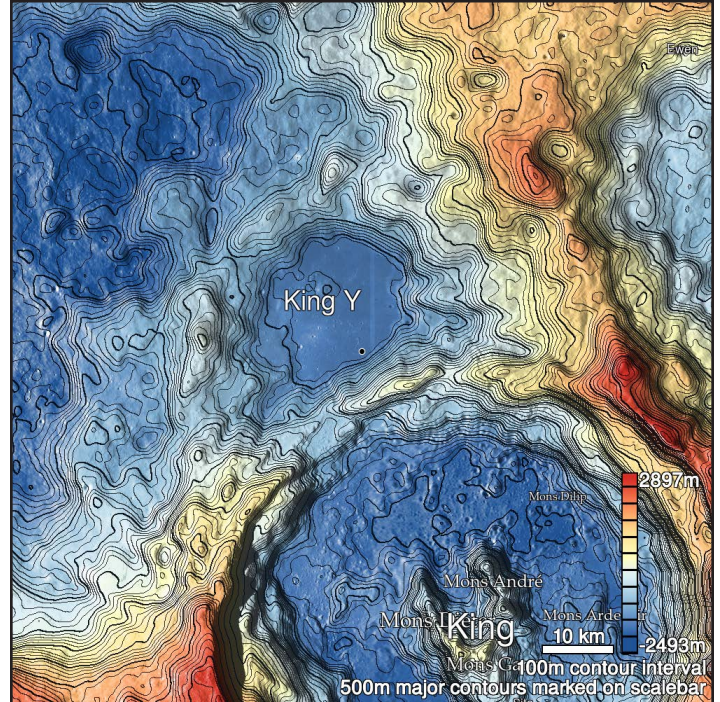
Southernmost of a triplet of round pits in a PRF. This pit is at the southern foot of the PRF.

King 25

Impact Melt Pit: King Crater



Upper left: NAC M108447638R. Upper right: NAC M1131053889L. Lower left: NAC M1120456952R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 25. Black dot marks the location of the pit.

Size and Location

Latitude	6.2691°N	Inner pit diameter	12 m × 8 m
Longitude	119.9429°E	Long axis azimuth	145°
Depth	7 m	Funnel diameter	15 m × 12 m

Measurement Source Images

Image ID	M108447638R	M1131053889L	M1120456952R
Incidence	-10.95°	-27.54°	32.26°
Emission	-1.92°	0.82°	1.78°
Time of Day	12.52	13.76	9.88
Pixel Scale	0.56 m/px	1.17 m/px	1.17 m/px
Depth	7.8 m	7.1 m	7.4 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M108447638R line 36985, sample 3815

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

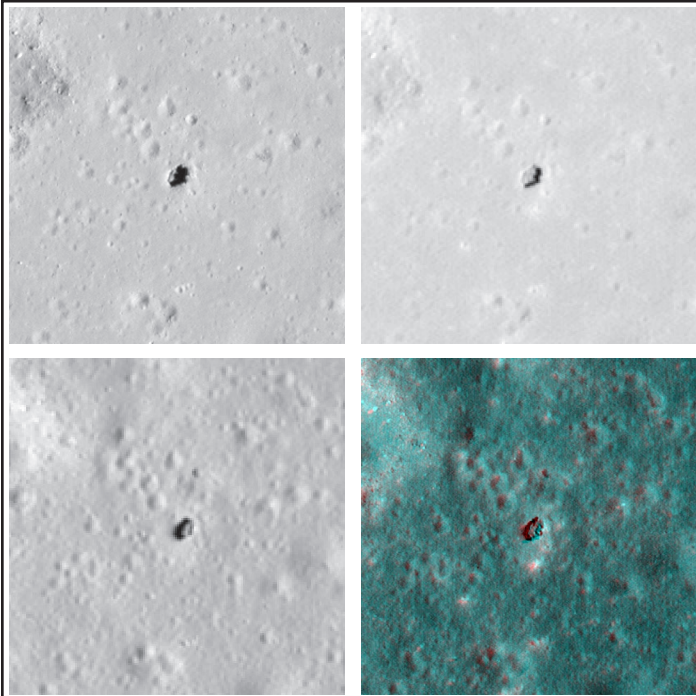
Data notes:

Description

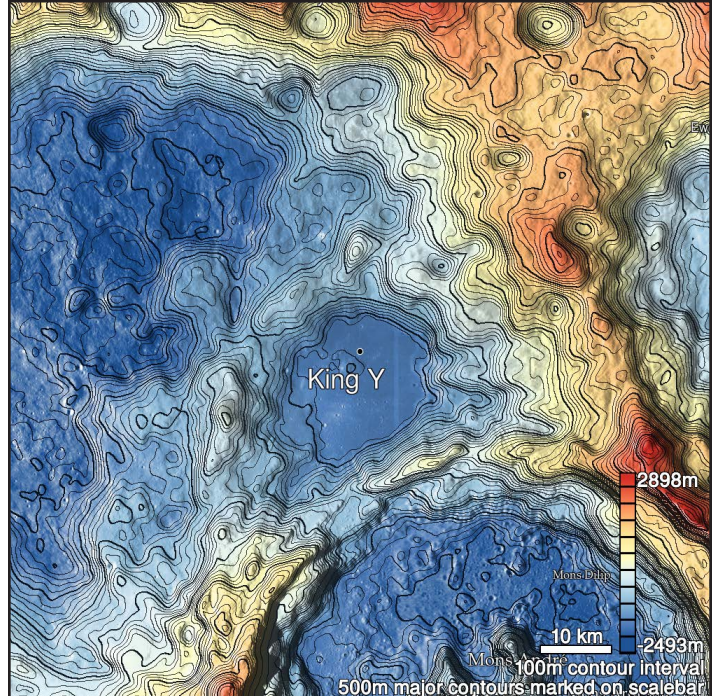
Irregular pit between two branches of a fracture-and-pit system. Floor appears fairly smooth, although there's a downslope next to the W wall (or a boulder shadow- it's hard to tell at these resolutions). Fracture system is ~60m W, ~40m E, and ~120m S, and contains some interesting (and very deep) pits.

King 26

Impact Melt Pit: King Crater



Upper left: NAC M113168034L. Upper right: NAC M1135766659L. Lower left: NAC M182745931L. Lower right: Stereo anaglyph of NACs M123791947L (left eye, red) and M123785162R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 26. Black dot marks the location of the pit.

Size and Location

Latitude	6.6385°N	Inner pit diameter	14 m × 11 m
Longitude	119.8200°E	Long axis azimuth	35°
Depth	5 m	Funnel diameter	16 m × 12 m

Measurement Source Images

Image ID	M113168034L	M1135766659L	M182745931L
Incidence	47.45°	28.95°	-48.34°
Emission	-1.32°	-0.33°	1.41°
Time of Day	8.88	10.13	15.21
Pixel Scale	0.62 m/px	1.18 m/px	1.28 m/px
Depth	6.2 m	6.3 m	3.9 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M113168034L line 15581, sample 3212

Best stereo pair: M123791947L / M123785162R

Other useful images:

DTM: NAC_DTM_KINGCRATER3

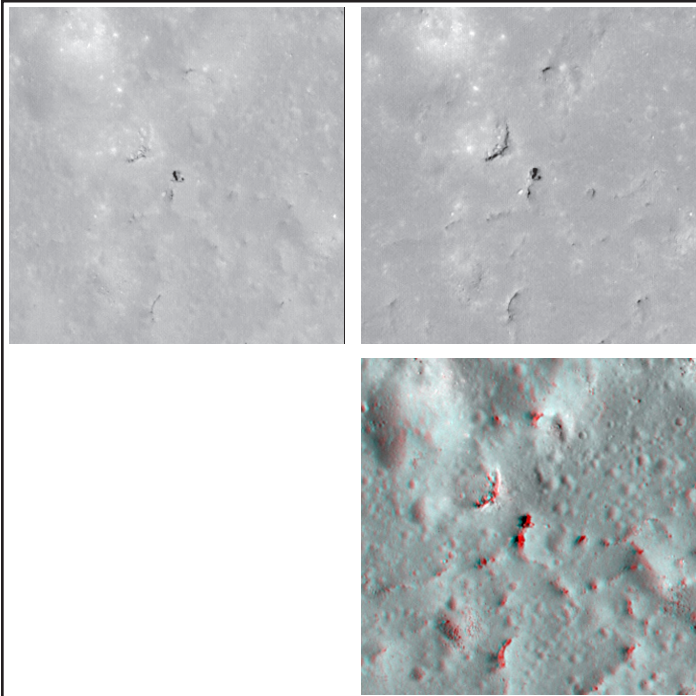
Data notes:

Description

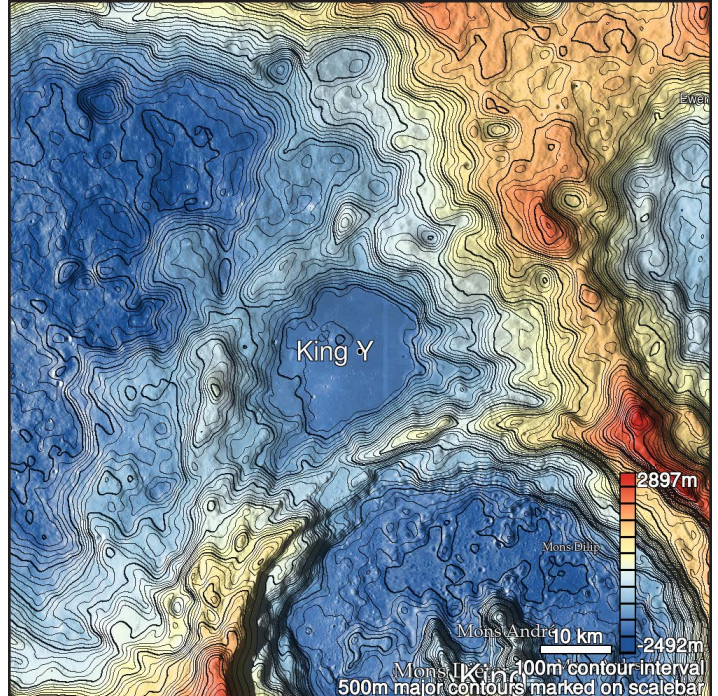
Elliptical pit. Floor is mostly covered in 1-2m boulders. Nearby features of note are a shallow depression/linear collapse ~225m NE (not in line with this pit), and a set of collapses ~275m WNW. No PRFs in the area. King 41 is ~300m E.

King 27

Impact Melt Pit: King Crater



Upper left: NAC M108447638L. Upper right: NAC M141478563L. Lower left: NAC. Lower right: Stereo anaglyph of NACs M136762839R (left eye, red) and M136756054R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 27. Black dot marks the location of the pit.

Size and Location

Latitude	6.5044°N	Inner pit diameter	6 m × 4 m
Longitude	119.8719°E	Long axis azimuth	20°
Depth	9 m	Funnel diameter	9 m × 6 m

Measurement Source Images

Image ID	M108447638L	M141478563L	
Incidence	-11.06°	14.16°	
Emission	0.33°	-0.88°	
Time of Day	12.52	11.22	
Pixel Scale	0.56 m/px	0.62 m/px	
Depth	8.7 m	8.7 m	

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No?		

Location reference: NAC M108447638L line 24619, sample 4860

Best stereo pair: M136762839R / M136756054R

Other useful images:

DTM: NAC_DTM_KINGCRATER3

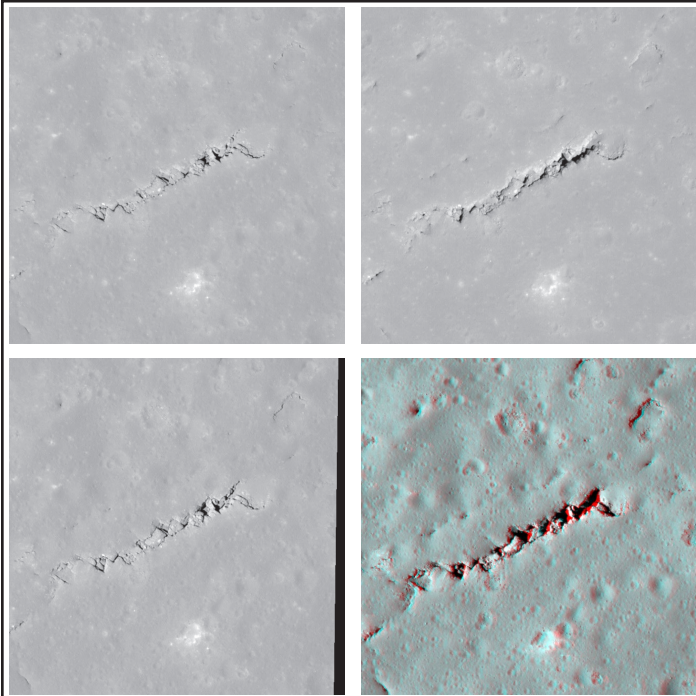
Data notes: Floor is only visible in the three highest-Sun images, and M1164027461R is too high-Sun and low-resolution to use.

Description

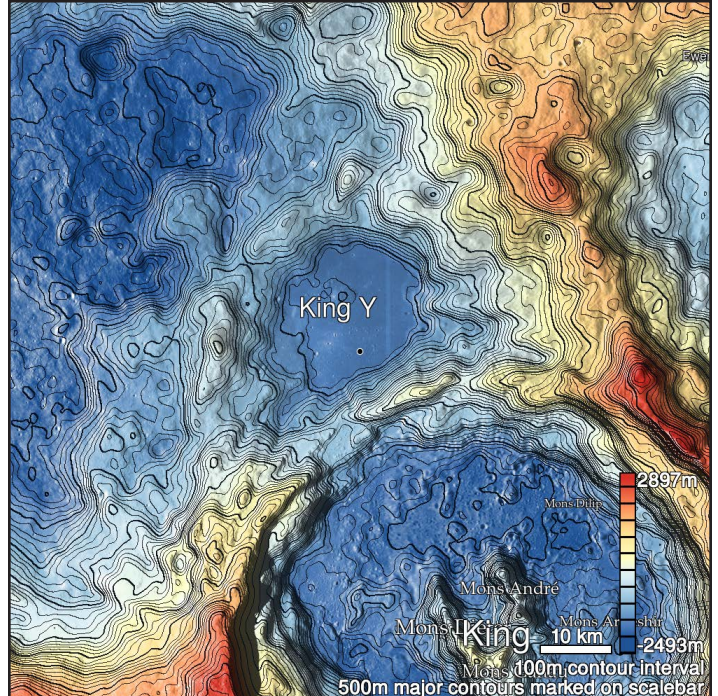
Round pit at the SE edge of a PRF. The NW edge of the PRF (17m away) is collapsed, and there is an extensive fracture network to the S and E. There's some odd geometry on the S wall of the pit that is hard to parse.

King 28

Impact Melt Pit: King Crater



Upper left: NAC M108447638L. Upper right: NAC M141478563L. Lower left: NAC M154453455R. Lower right: Stereo anaglyph of NACs M136762839R (left eye, red) and M136756054R (right eye, blue). All images are 400 m wide.



Color shaded relief map of the area around King 28. Black dot marks the location of the pit.

Size and Location

Latitude	6.3016°N	Inner pit diameter	156 m × 15 m
Longitude	119.8593°E	Long axis azimuth	60°
Depth	22 m	Funnel diameter	223 m × 20 m

Measurement Source Images

Image ID	M108447638L	M141478563L	M154453455R
Incidence	-10.91°	14.06°	-16.10°
Emission	0.73°	-0.46°	-2.43°
Time of Day	12.52	11.22	13.03
Pixel Scale	0.56 m/px	0.62 m/px	0.60 m/px
Depth	24.4 m	26.0 m	16.3 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M108447638L line 35161, sample 4194

Best stereo pair: M136762839R / M136756054R

Other useful images: M1135766659L

DTM: NAC_DTM_KINGCRATER3

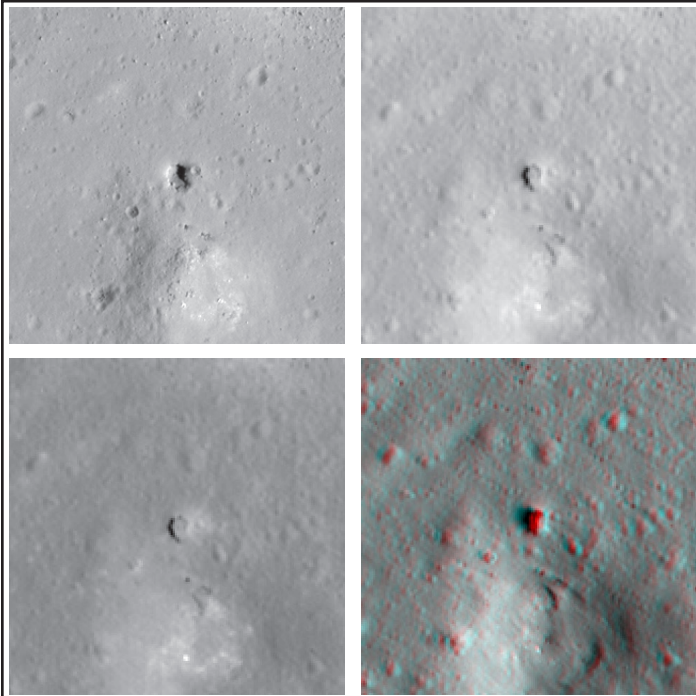
Data notes:

Description

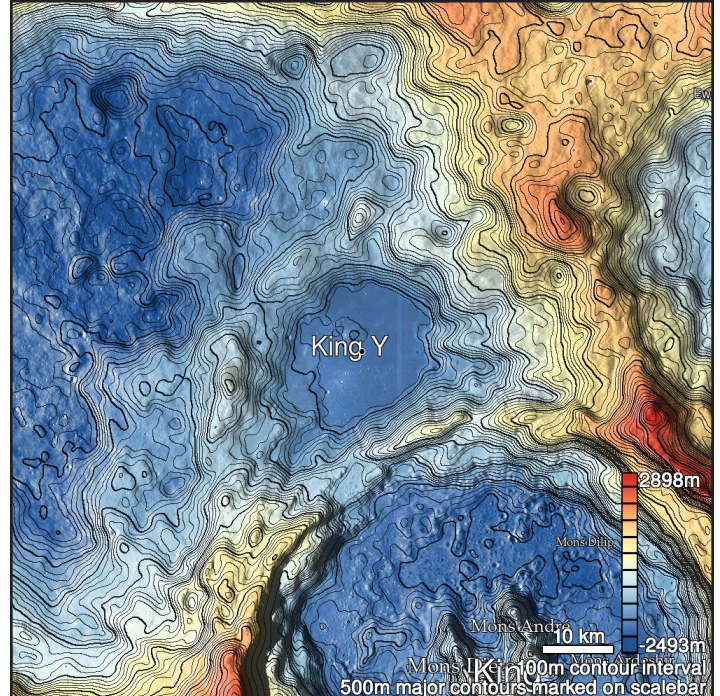
Large linear collapse feature- looks like two parallel fractures formed over a void and the ground between them dropped. Mostly filled with blocks and boulders. The NE end forms a ramp to the surface, and there are a few places with fairly deep openings (depth measurements are in one such 11x9m opening near the NE end). Several tiny depressions/pits parallel this feature ~40m N, and there are several other shallow collapses and depressions in the area that hint at a larger connected network of voids.

King 29

Impact Melt Pit: King Crater



Upper left: NAC M113168034L. Upper right: NAC M106088433L. Lower left: NAC M185104801R. Lower right: Stereo anaglyph of NACs M103732241L (left eye, red) and M103725084L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 29. Black dot marks the location of the pit.

Size and Location

Latitude	6.4827°N	Inner pit diameter	14 m × 11 m
Longitude	119.8145°E	Long axis azimuth	155°
Depth	6 m	Funnel diameter	18 m × 15 m

Measurement Source Images

Image ID	M113168034L	M106088433L	M185104801R
Incidence	47.43°	-35.20°	-20.88°
Emission	-1.15°	0.42°	-1.53°
Time of Day	8.87	14.30	13.36
Pixel Scale	0.62 m/px	1.29 m/px	1.27 m/px
Depth	4.1 m	6.4 m	6.6 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M113168034L line 22857, sample 3485

Best stereo pair: M103732241L / M103725084L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

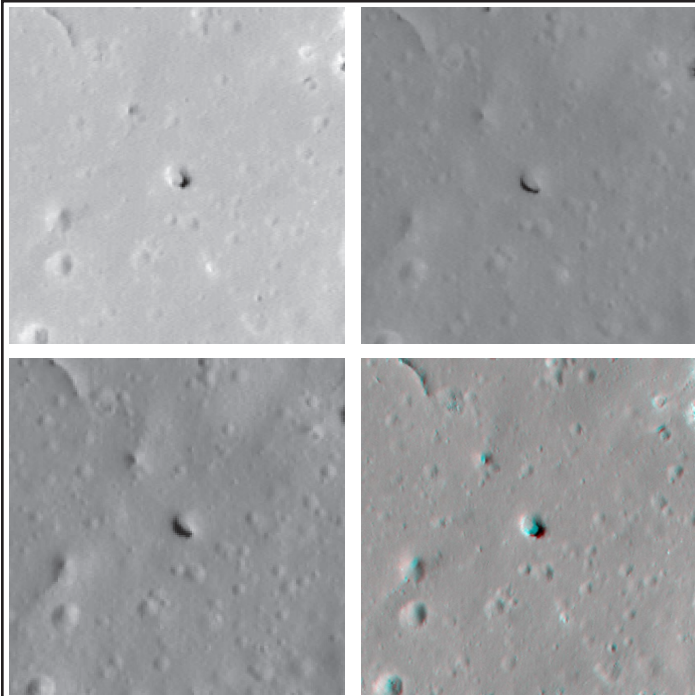
Data notes:

Description

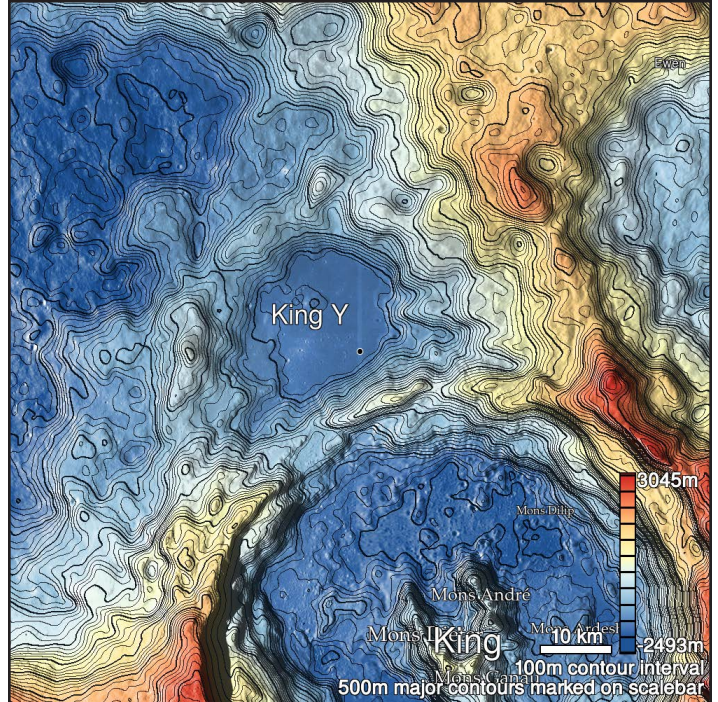
Elliptical pit ~20m N of a ~100m wide PRF. There's a 20x2m fracture ~130m SW, oriented towards this pit, and some subtle, very straight linear depressions running NE-SW ~60m to the NW.

King 30

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M1131053889R. Lower left: NAC M182745931R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 30. Black dot marks the location of the pit.

Size and Location

Latitude	6.3339°N	Inner pit diameter	13 m × 8 m
Longitude	119.9937°E	Long axis azimuth	135°
Depth	6 m	Funnel diameter	20 m × 15 m

Measurement Source Images

Image ID	M1120456952R	M1131053889R	M182745931R
Incidence	32.22°	-27.61°	-48.49°
Emission	1.01°	-0.08°	-1.23°
Time of Day	9.88	13.77	15.22
Pixel Scale	1.17 m/px	1.17 m/px	1.27 m/px
Depth	6.3 m	6.1 m	5.4 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes?
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1120456952R line 25180, sample 2211

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

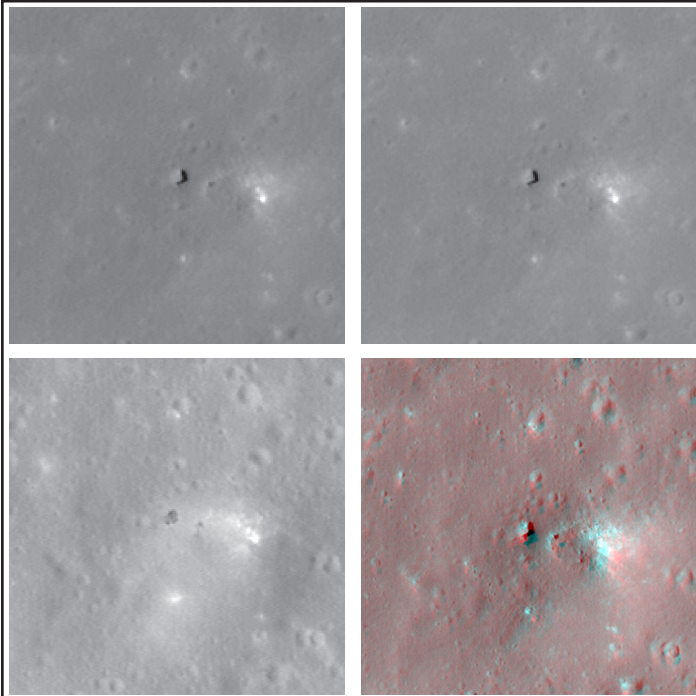
Data notes:

Description

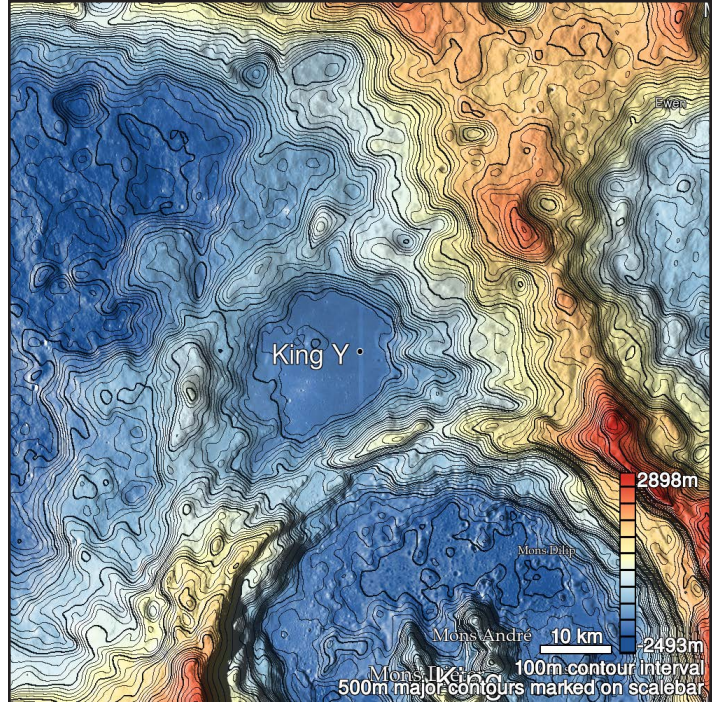
Elliptical pit in a field of collapses. N rim may be a ramp to floor level. King 24c is ~150m NNW, King 34a is ~135m NE, and there are several other collapse features in the area.

King 31

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M1135766659L. Lower left: NAC M1131053889R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 31. Black dot marks the location of the pit.

Size and Location

Latitude	6.5229°N	Inner pit diameter	9 m × 6 m
Longitude	119.9879°E	Long axis azimuth	25°
Depth	5 m	Funnel diameter	12 m × 12 m

Measurement Source Images

Image ID	M1120456952R	M1135766659L	M1131053889R
Incidence	32.26°	28.76°	-27.65°
Emission	1.21°	-2.88°	-0.09°
Time of Day	9.88	10.14	13.77
Pixel Scale	1.17 m/px	1.18 m/px	1.17 m/px
Depth	4.7 m	4.2 m	5.7 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1120456952R line 32552, sample 2530

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

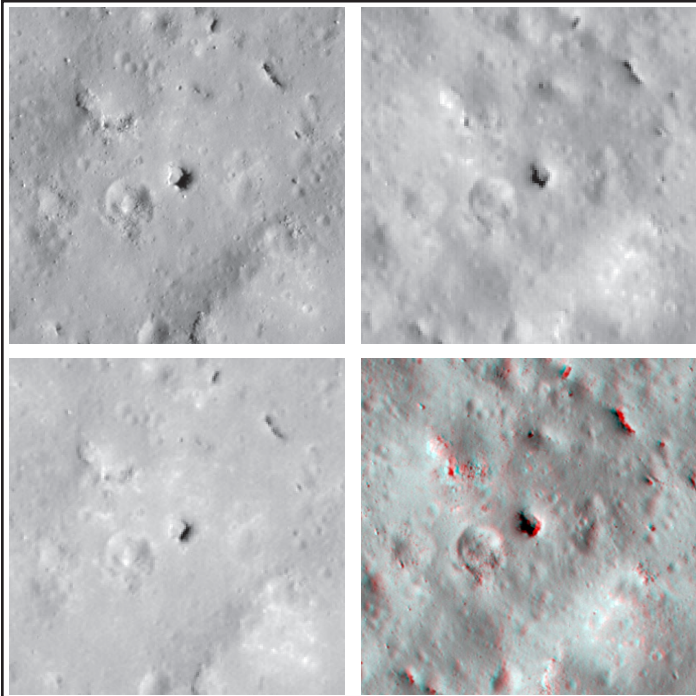
Data notes:

Description

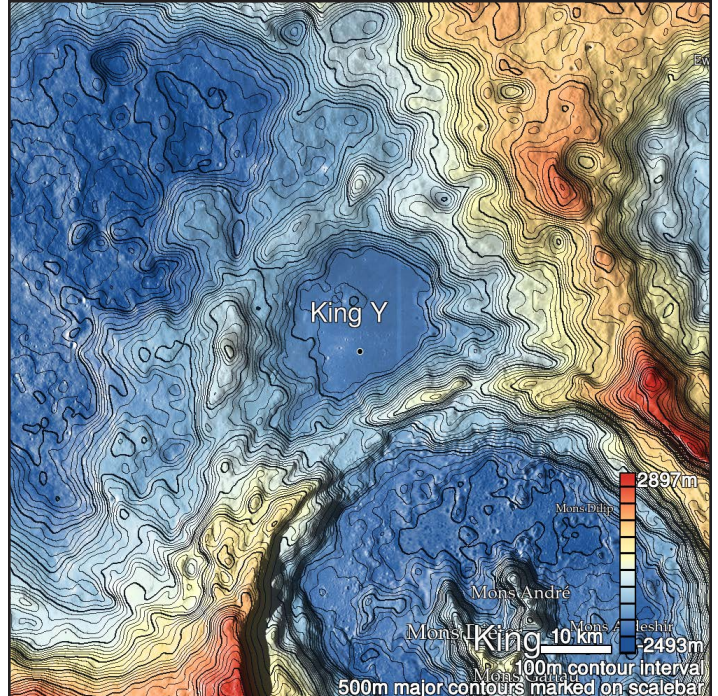
Round pit at the NW edge of a PRF. W (lower) wall might have a ramp to floor, but it's not certain. There are short fractures ~250m W and ~200m SW, and King 21 is ~165m S.

King 32

Impact Melt Pit: King Crater



Upper left: NAC M113168034L. Upper right: NAC M106088433L. Lower left: NAC M1135766659R. Lower right: Stereo anaglyph of NACs M136762839L (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 32. Black dot marks the location of the pit.

Size and Location

Latitude	6.3231°N	Inner pit diameter	12 m × 11 m
Longitude	119.8067°E	Long axis azimuth	120°
Depth	6 m	Funnel diameter	20 m × 16 m

Measurement Source Images

Image ID	M113168034L	M106088433L	M1135766659R
Incidence	47.42°	-35.16°	28.89°
Emission	-0.92°	0.53°	0.10°
Time of Day	8.87	14.30	10.13
Pixel Scale	0.62 m/px	1.29 m/px	1.17 m/px
Depth	6.0 m	6.2 m	6.3 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	No?	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M113168034L line 30303, sample 3877

Best stereo pair: M136762839L / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

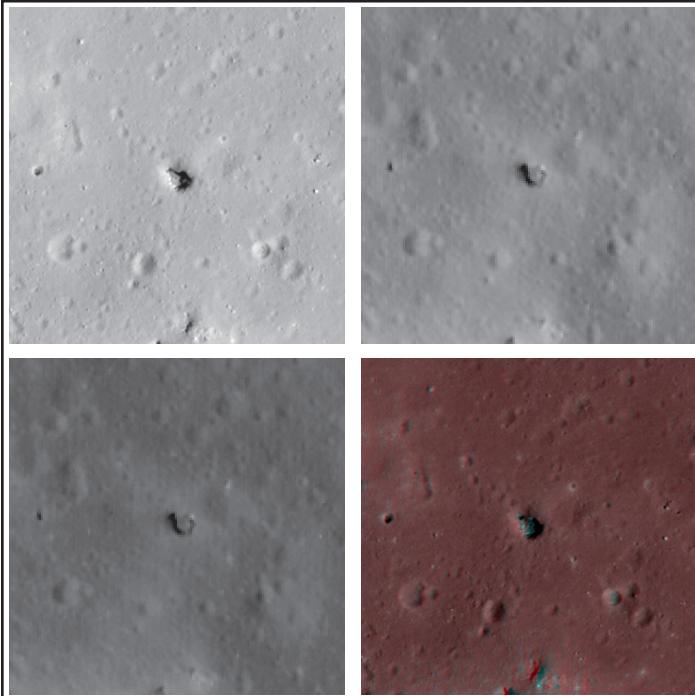
Data notes:

Description

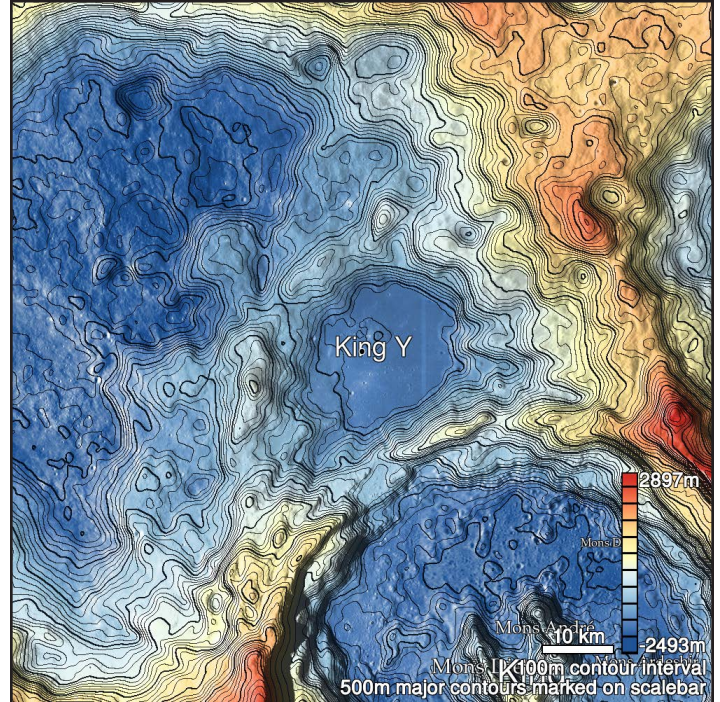
Round pit in a PRF in a group of NW-SE-trending fractures. One such fracture is in line with the pit, but stops ~150m SE at the edge of a nearby PRF. The N (uphill) rim is a slope from rim to floor.

King 33

Impact Melt Pit: King Crater



Upper left: NAC M113168034R. Upper right: NAC M106088433L. Lower left: NAC M185104801R. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 33. Black dot marks the location of the pit.

Size and Location

Latitude	6.4873°N	Inner pit diameter	15 m × 11 m
Longitude	119.6998°E	Long axis azimuth	135°
Depth	7 m	Funnel diameter	19 m × 15 m

Measurement Source Images

Image ID	M113168034R	M106088433L	M185104801R
Incidence	47.55°	-35.09°	-20.77°
Emission	2.15°	2.06°	0.16°
Time of Day	8.87	14.29	13.35
Pixel Scale	0.62 m/px	1.29 m/px	1.27 m/px
Depth	6.4 m	5.7 m	9.2 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes?
In Depression	No		

Location reference: NAC M113168034R line 22490, sample 4190

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER4

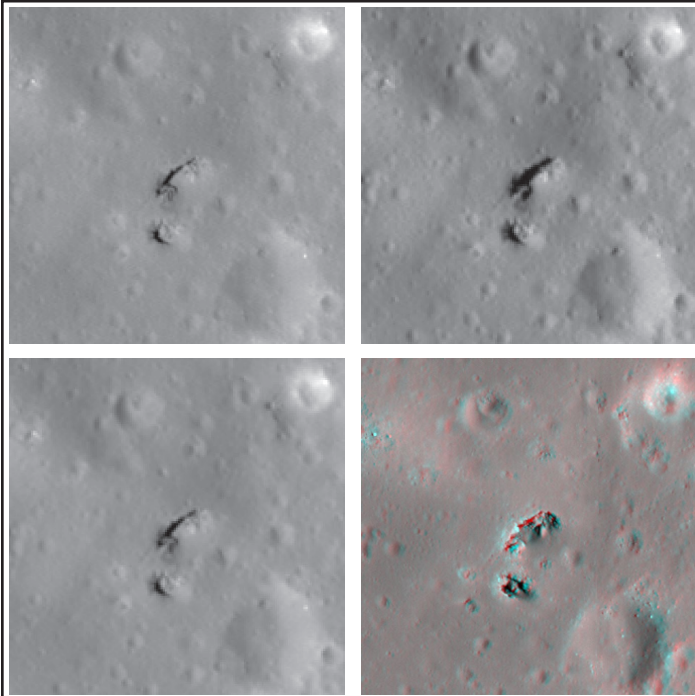
Data notes:

Description

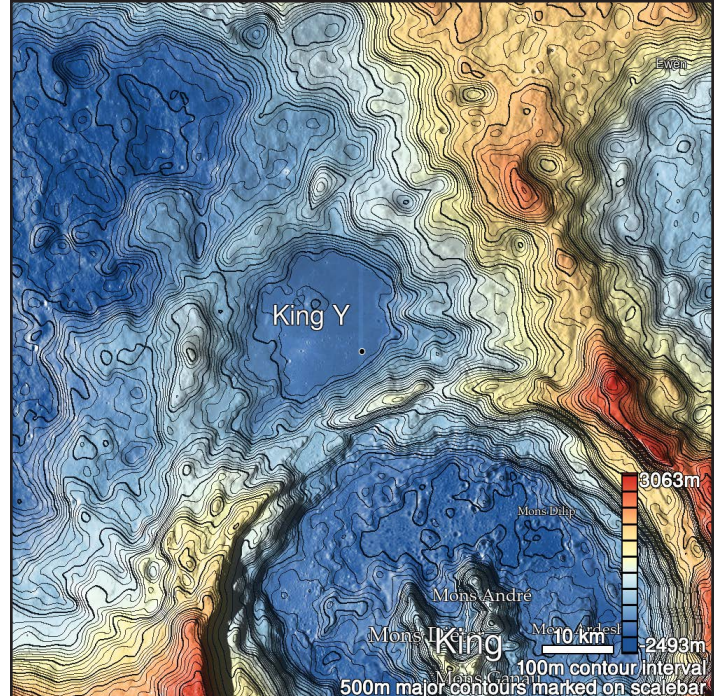
Teardrop-shaped pit. Floor has a scattering of 0.5-1m boulders, and there's a ~5m boulder at the S end. There are a few small linear collapse features in the general area, but nothing else that could be called a "pit".

King 34a

Impact Melt Pit: King Crater



Upper left: NAC M1131053889R. Upper right: NAC M182745931R. Lower left: NAC M106088433R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 34a. Black dot marks the location of the pit.

Size and Location

Latitude	6.3372°N	Inner pit diameter	34 m × 12 m
Longitude	119.9975°E	Long axis azimuth	55°
Depth	7 m	Funnel diameter	37 m × 26 m

Measurement Source Images

Image ID	M1131053889R	M182745931R	M106088433R
Incidence	-27.61°	-48.50°	-35.35°
Emission	-0.12°	-1.28°	-2.22°
Time of Day	13.77	15.22	14.31
Pixel Scale	1.17 m/px	1.27 m/px	1.29 m/px
Depth	6.7 m	8.0 m	5.6 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	Yes?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1131053889R line 29702, sample 688

Best stereo pair: M128509025R / M128502237R

Other useful images: M1120456952R

DTM: NAC_DTM_KINGCRATER2

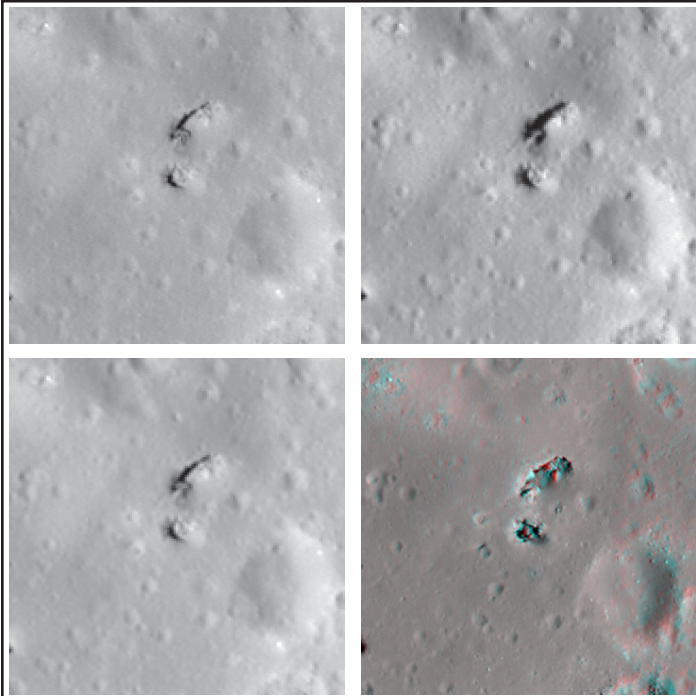
Data notes:

Description

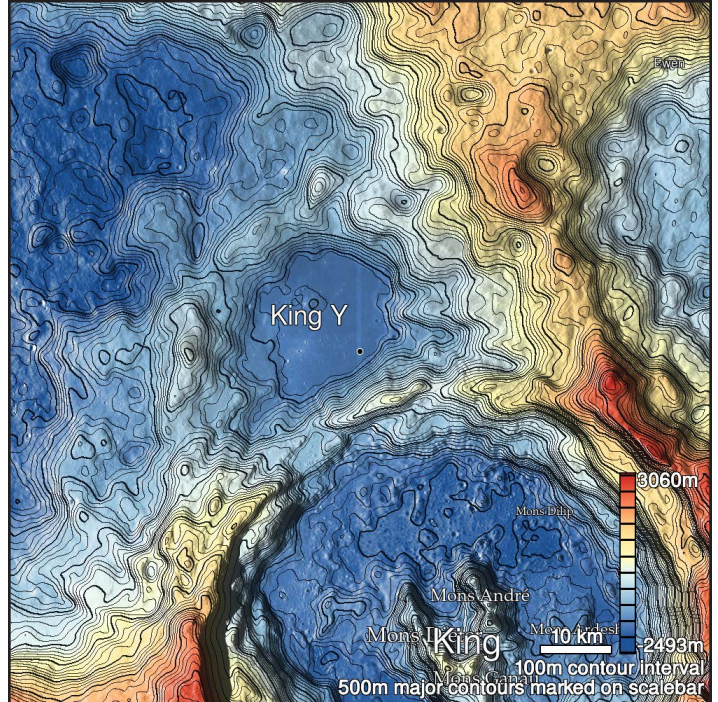
Elliptical pit at the far SE end of the PRF that contains King 24. King 34b is 15m S. SE side is a ramp from surface to floor. NE half of floor is filled with 1-2m boulders, but remainder of floor is clear. Hints of a possible overhang on the NW side (under the PRF). King 24c is ~175m WNW, King 30 is ~125m SW, and King 42 is ~290m ESE. There are a few other collapse features and <5m pits in the area.

King 34b

Impact Melt Pit: King Crater



Upper left: NAC M1131053889R. Upper right: NAC M182745931R. Lower left: NAC M106088433R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 34b. Black dot marks the location of the pit.

Size and Location

Latitude	6.3361°N	Inner pit diameter	13 m × 10 m
Longitude	119.9972°E	Long axis azimuth	125°
Depth	4 m	Funnel diameter	24 m × 21 m

Measurement Source Images

Image ID	M1131053889R	M182745931R	M106088433R
Incidence	-27.61°	-48.50°	-35.35°
Emission	-0.11°	-1.28°	-2.21°
Time of Day	13.77	15.22	14.31
Pixel Scale	1.17 m/px	1.27 m/px	1.29 m/px
Depth	5.2 m	3.5 m	4.4 m

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1131053889R line 29744, sample 680

Best stereo pair: M128509025R / M128502237R

Other useful images: M1120456952R

DTM: NAC_DTM_KINGCRATER2

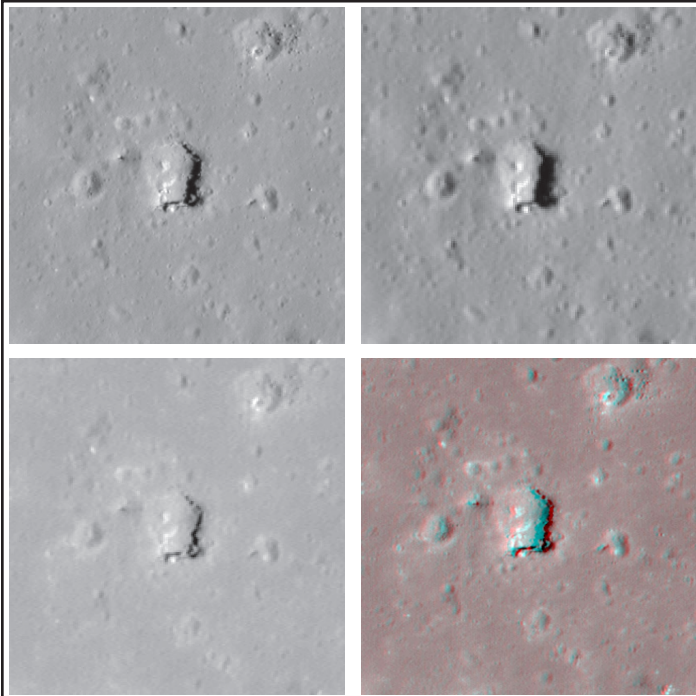
Data notes:

Description

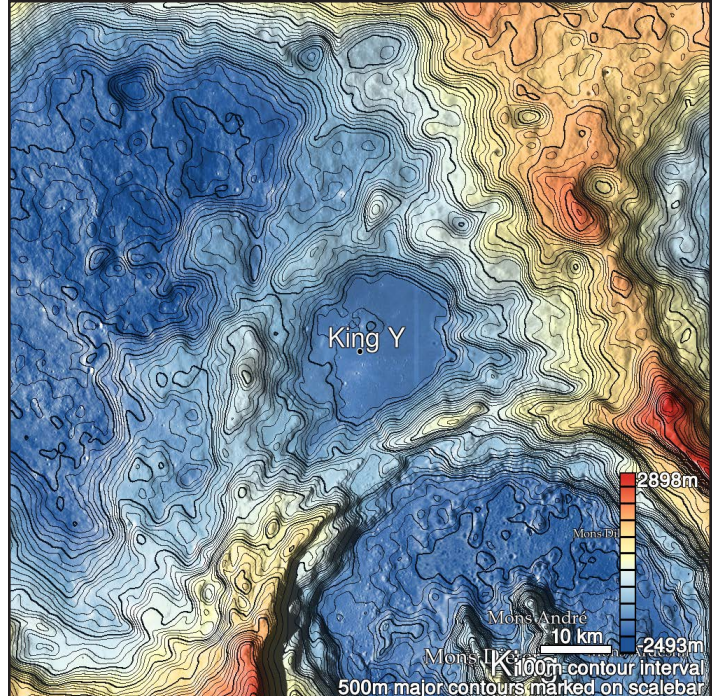
Irregular pit at the far SE end of the PRF that contains King 24. Mostly filled with 1-5m boulders; SE wall appears to be an entrance ramp.

King 35

Impact Melt Pit: King Crater



Upper left: NAC M113168034R. Upper right: NAC M1153439131L. Lower left: NAC M1135766659R. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 35. Black dot marks the location of the pit.

Size and Location

Latitude	6.4417°N	Inner pit diameter	35 m × 24 m
Longitude	119.7252°E	Long axis azimuth	5°
Depth	6 m	Funnel diameter	44 m × 39 m

Measurement Source Images

Image ID	M113168034R	M1153439131L	M1135766659R
Incidence	47.52°	58.53°	28.99°
Emission	1.42°	-1.07°	1.28°
Time of Day	8.87	8.12	10.12
Pixel Scale	0.62 m/px	1.29 m/px	1.17 m/px
Depth	5.0 m	5.8 m	6.1 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No?	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M113168034R line 24625, sample 2954

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER4

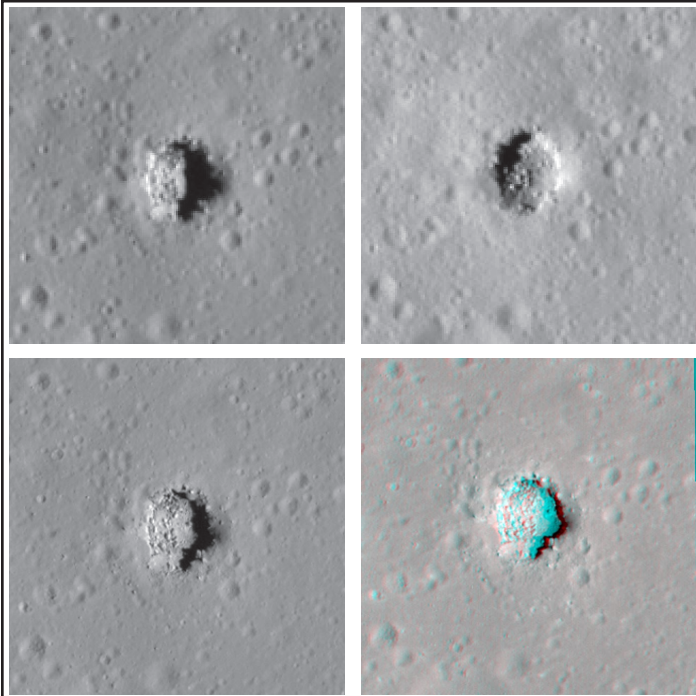
Data notes:

Description

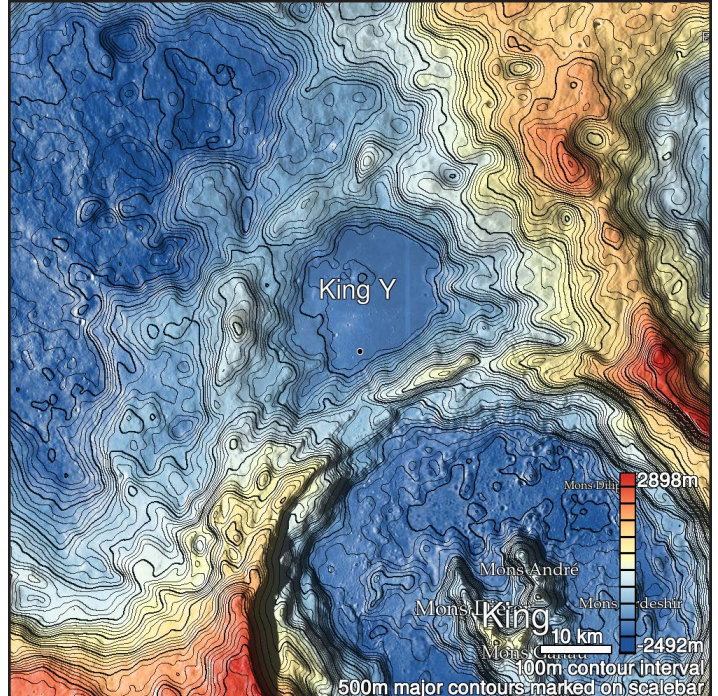
Pentagonal pit, NW rim is a slope to the floor. There's a tiny pit-like depression ~20m W of the entrance ramp. There are a few fractures running E-W ~100-150m S.

King 36

Impact Melt Pit: King Crater



Upper left: NAC M1153439131L. Upper right: NAC M182745931L. Lower left: NAC M113168034R. Lower right: Stereo anaglyph of NACs M143839277L (left eye, red) and M143832493L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 36. Black dot marks the location of the pit.

Size and Location

Latitude	6.2140°N	Inner pit diameter	46 m × 40 m
Longitude	119.7664°E	Long axis azimuth	180°
Depth	11 m	Funnel diameter	51 m × 45 m

Measurement Source Images

Image ID	M1153439131L	M182745931L	M113168034R
Incidence	58.48°	-48.26°	47.44°
Emission	-1.81°	2.04°	0.25°
Time of Day	8.12	15.21	8.87
Pixel Scale	1.28 m/px	1.27 m/px	0.62 m/px
Depth	12.9 m	11.6 m	9.0 m

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1153439131L line 29528, sample 2481

Best stereo pair: M143839277L / M143832493L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

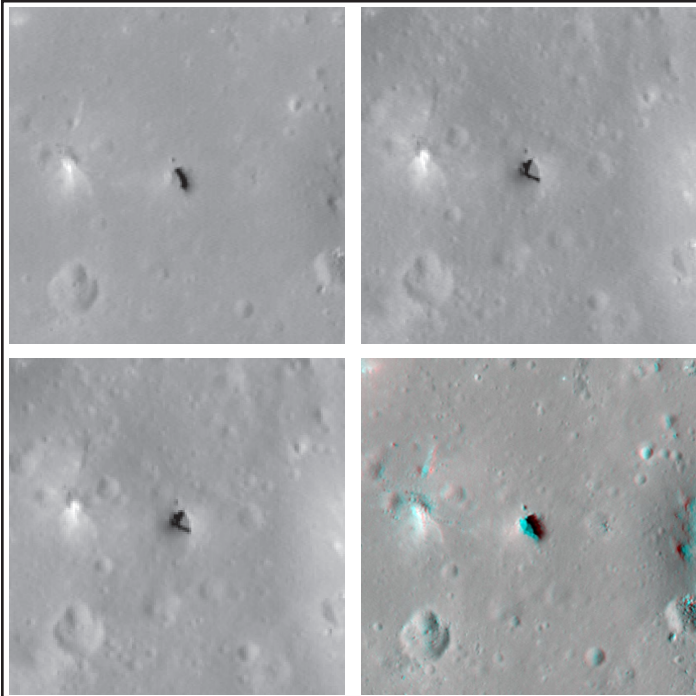
Data notes: Depth 1 is to lowest point, other measurements are to higher parts of the floor.

Description

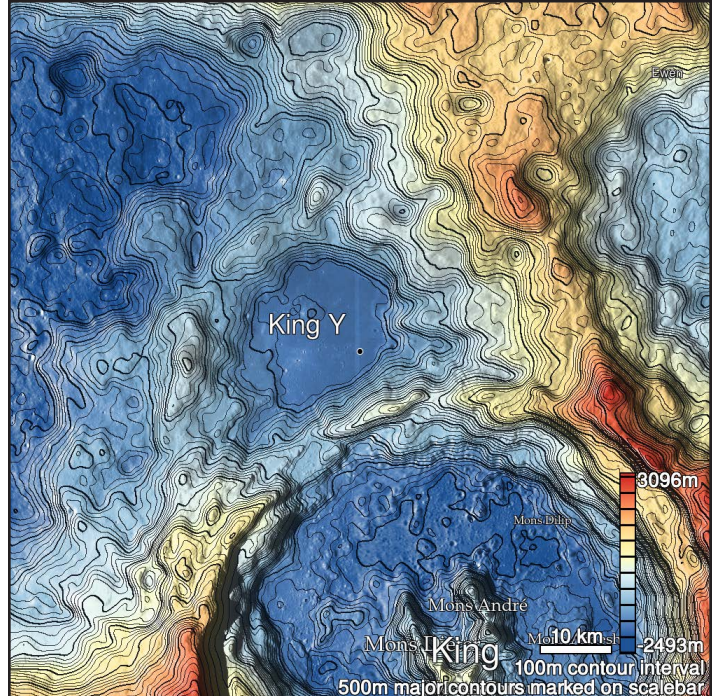
Elliptical pit with a rounded or conical floor, in a very subtle (~2-3m high?) rise. Most of the floor is covered in boulders, and the W half appears to slope towards the center at a ~30 degree angle. Wall height is up to ~10m (based on very high-Sun images), although there is a (very steep?) ramp from a point on the SW rim. No other collapse features in the area.

King 37

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M1131053889R. Lower left: NAC M106088433R. Lower right: Stereo anaglyph of NACs M128509025L (left eye, red) and M128502237L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 37. Black dot marks the location of the pit.

Size and Location

Latitude	6.3814°N	Inner pit diameter	14 m × 9 m
Longitude	120.0056°E	Long axis azimuth	150°
Depth	9 m	Funnel diameter	21 m × 20 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes?
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1120456952R	M1131053889R	M106088433R
Incidence	32.22°	-27.63°	-35.37°
Emission	0.85°	-0.25°	-2.33°
Time of Day	9.88	13.77	14.31
Pixel Scale	1.17 m/px	1.17 m/px	1.29 m/px
Depth	7.9 m	9.6 m	9.6 m

Location reference: NAC M1120456952R line 27052, sample 1947

Best stereo pair: M128509025L / M128502237L

Other useful images: M128509025L, M110804868L

DTM: NAC_DTM_KINGCRATER2

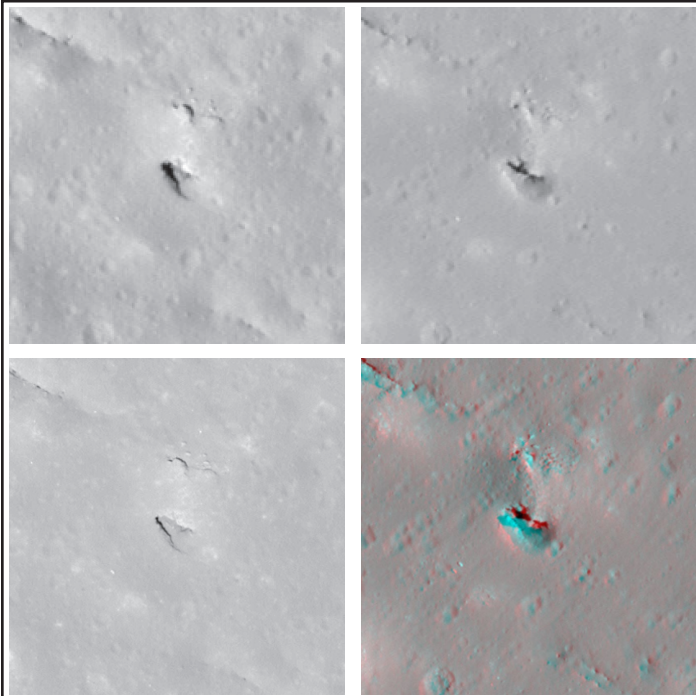
Data notes:

Description

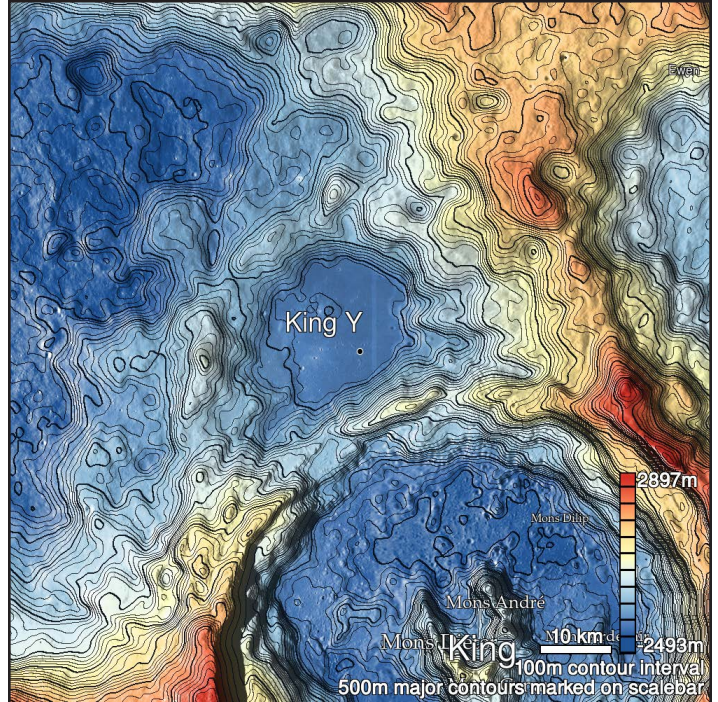
Triangular pit, about half-way between two PRFs with edge collapses. Clean floor, possible slight overhang under W rim, although other images suggest that that wall slopes to nearly the floor. ~200m E of King 2.

King 38

Impact Melt Pit: King Crater



Upper left: NAC M1131053889L. Upper right: NAC M1120456952R. Lower left: NAC M108447638R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 38. Black dot marks the location of the pit.

Size and Location

Latitude	6.3700°N	Inner pit diameter	24 m × 11 m
Longitude	119.9252°E	Long axis azimuth	125°
Depth	8 m	Funnel diameter	35 m × 16 m

Measurement Source Images

Image ID	M1131053889L	M1120456952R	M108447638R
Incidence	-27.55°	32.30°	-11.00°
Emission	1.04°	2.11°	-1.36°
Time of Day	13.76	9.88	12.52
Pixel Scale	1.17 m/px	1.17 m/px	0.56 m/px
Depth	4.0 m	10.7 m	8.2 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes?
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1131053889L line 28090, sample 3718

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

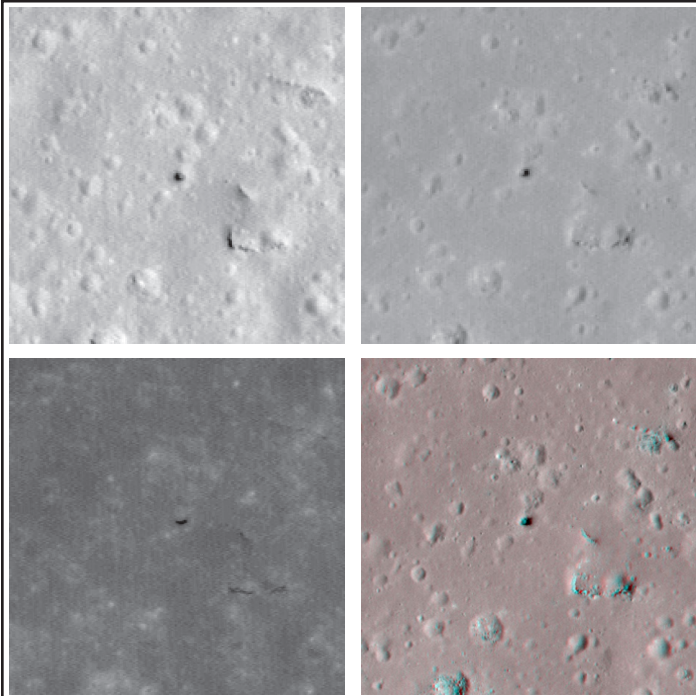
Data notes: Depth 2 is from higher N wall; Depth 3 is very high-Sun.

Description

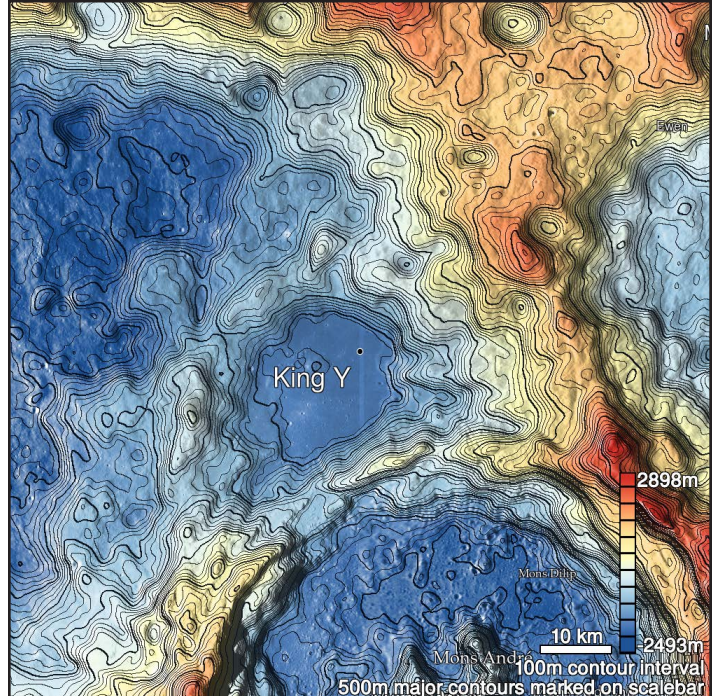
Triangular pit at the S base of a PRF. The SE wall is a ramp from rim to N wall; other walls are vertical. There is a ~100m long fracture running NW-SE ~100m NW (not quite in line with this pit), and a ~50m-long fracture ~130m N. King 16 is ~200m SE.

King 39

Impact Melt Pit: King Crater



Upper left: NAC M1131053889R. Upper right: NAC M1181692437L. Lower left: NAC M1164027461R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 39. Black dot marks the location of the pit.

Size and Location

Latitude	6.6308°N	Inner pit diameter	5 m × 4 m
Longitude	119.9842°E	Long axis azimuth	55°
Depth	5 m	Funnel diameter	8 m × 6 m

Measurement Source Images

Image ID	M1131053889R	M1181692437L	M1164027461R
Incidence	-27.68°	32.22°	7.77°
Emission	-0.09°	-0.89°	-0.24°
Time of Day	13.77	9.89	11.95
Pixel Scale	1.17 m/px	1.24 m/px	1.17 m/px
Depth	4.0 m	4.0 m	7.3 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1131053889R line 18233, sample 620

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

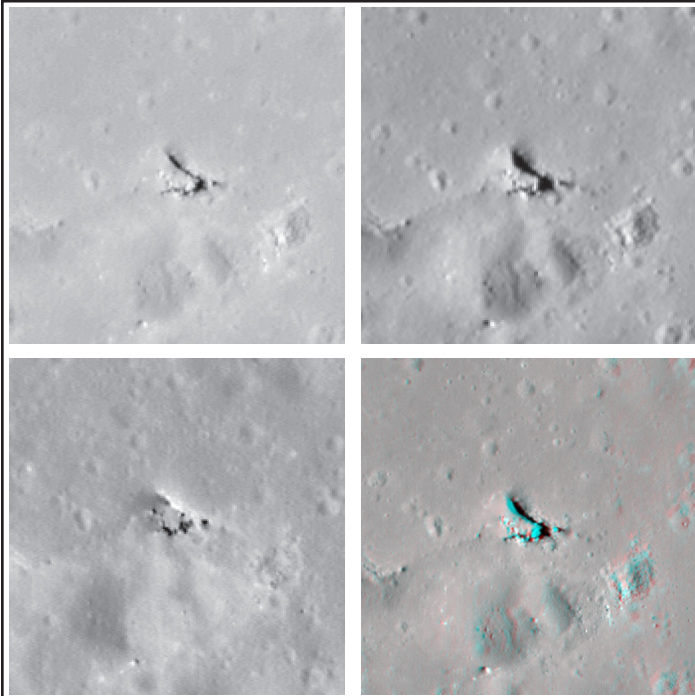
Data notes: Depth 3 is extremely high-Sun

Description

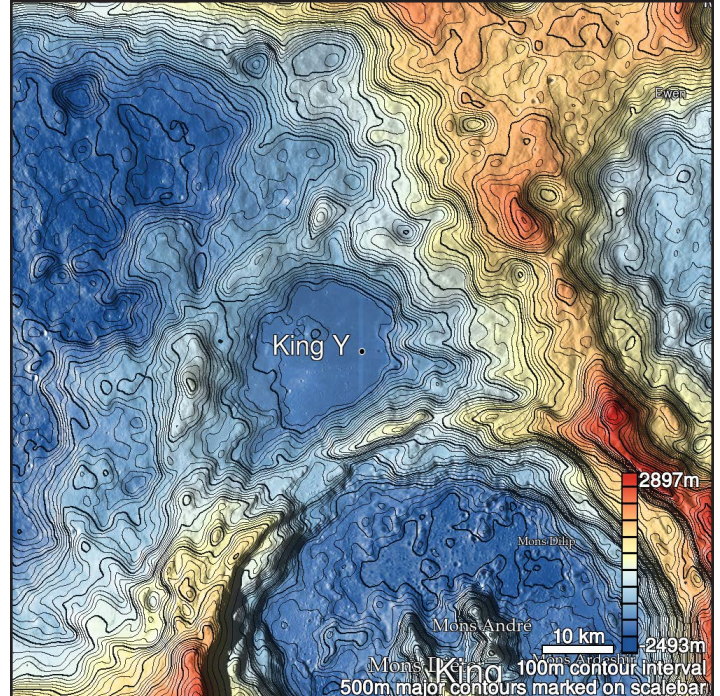
Elliptical pit. King 17 is ~165m S, there's a wide collapse in a PRF ~150m E, and there are a few other even smaller pits in the general area.

King 40

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M1138120053R. Lower left: NAC M1131053889R. Lower right: Stereo anaglyph of NACs M128509025R (left eye, red) and M128502237R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 40. Black dot marks the location of the pit.

Size and Location

Latitude	6.4779°N	Inner pit diameter	26 m × 17 m
Longitude	119.9976°E	Long axis azimuth	110°
Depth	6 m	Funnel diameter	50 m × 31 m

Measurement Source Images

Image ID	M1120456952R	M1138120053R	M1131053889R
Incidence	32.24°	56.36°	-27.65°
Emission	1.03°	2.43°	-0.18°
Time of Day	9.88	8.26	13.77
Pixel Scale	1.17 m/px	1.18 m/px	1.17 m/px
Depth	6.2 m	5.6 m	4.8 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes?
In Depression	No		

Location reference: NAC M1120456952R line 30811, sample 2238

Best stereo pair: M128509025R / M128502237R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

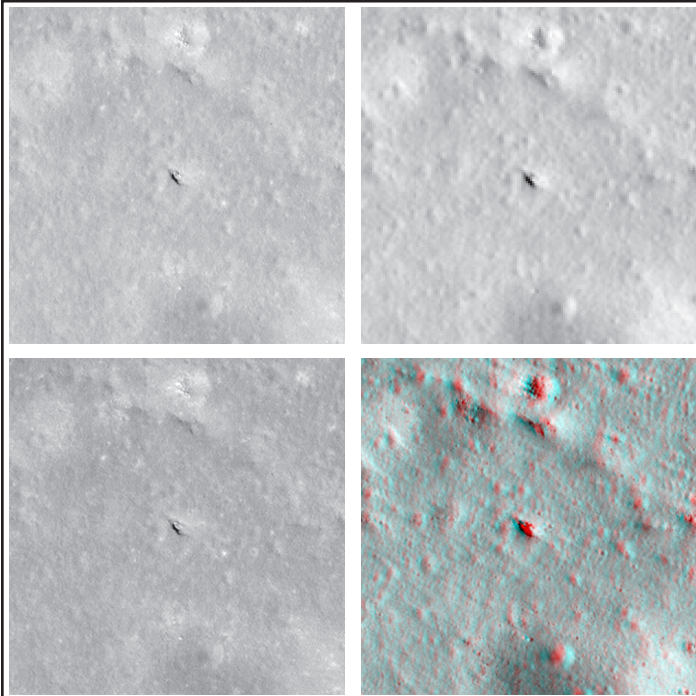
Data notes:

Description

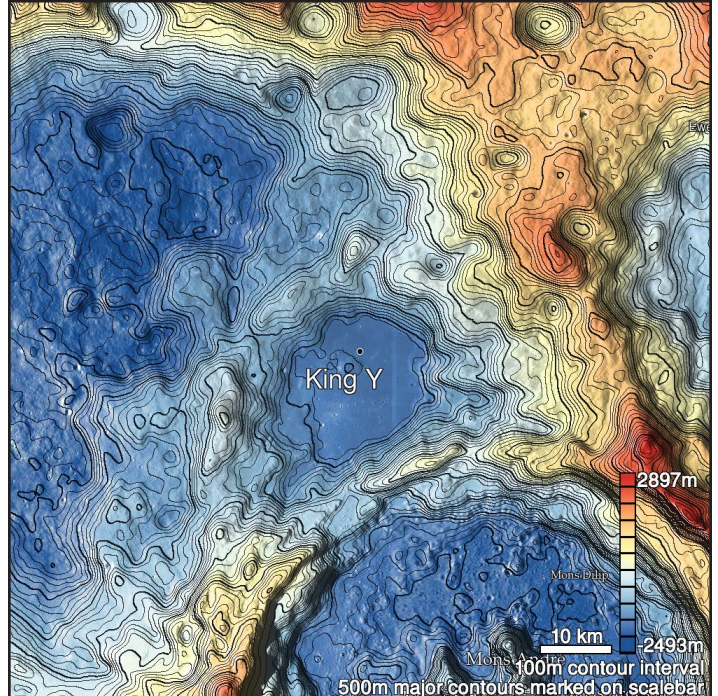
Rectangular pit in a system of fractures. Not technically connected to any fractures, although there is a line of divots running WSW from the pit, passing through a similarly-sized collapse ~120m W, and joining up with a line of fractures ~180m to the W. The NW rim is a ramp from surface to floor. There's a ~2m pit 4m E of the E corner of the pit, and King 22 is ~185m NW.

King 41

Impact Melt Pit: King Crater



Upper left: NAC M154453455R. Upper right: NAC M106088433R. Lower left: NAC M108447638L. Lower right: Stereo anaglyph of NACs M136762839R (left eye, red) and M136756054L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 41. Black dot marks the location of the pit.

Size and Location

Latitude	6.6376°N	Inner pit diameter	12 m × 5 m
Longitude	119.8299°E	Long axis azimuth	135°
Depth	6 m	Funnel diameter	16 m × 7 m

Measurement Source Images

Image ID	M154453455R	M106088433R	M108447638L
Incidence	-16.17°	-35.24°	-11.13°
Emission	-1.42°	0.21°	1.66°
Time of Day	13.03	14.30	12.51
Pixel Scale	0.60 m/px	1.29 m/px	0.56 m/px
Depth	5.2 m	3.5 m	8.6 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No?	Colinear pits	No
Nearby fractures	No?	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M154453455R line 27545, sample 2958

Best stereo pair: M136762839R / M136756054L

Other useful images:

DTM: NAC_DTM_KINGCRATER3

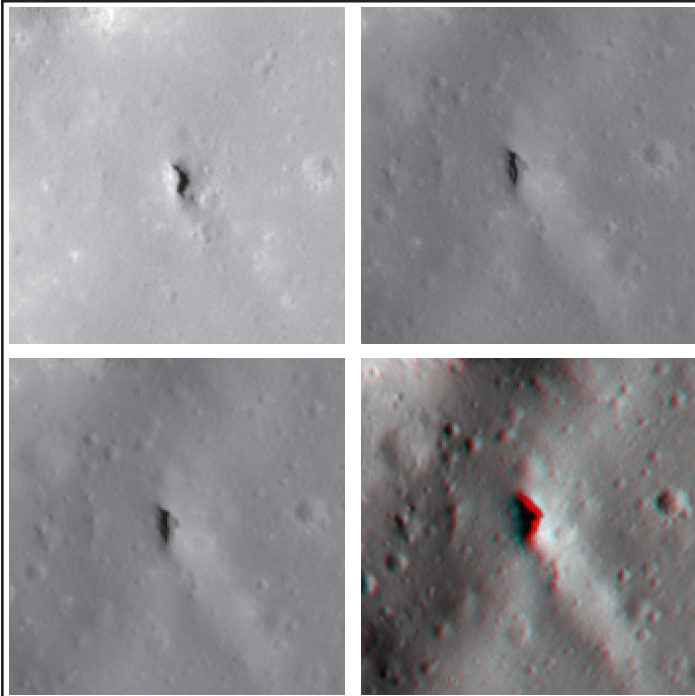
Data notes: Depth 3 is very high-Sun

Description

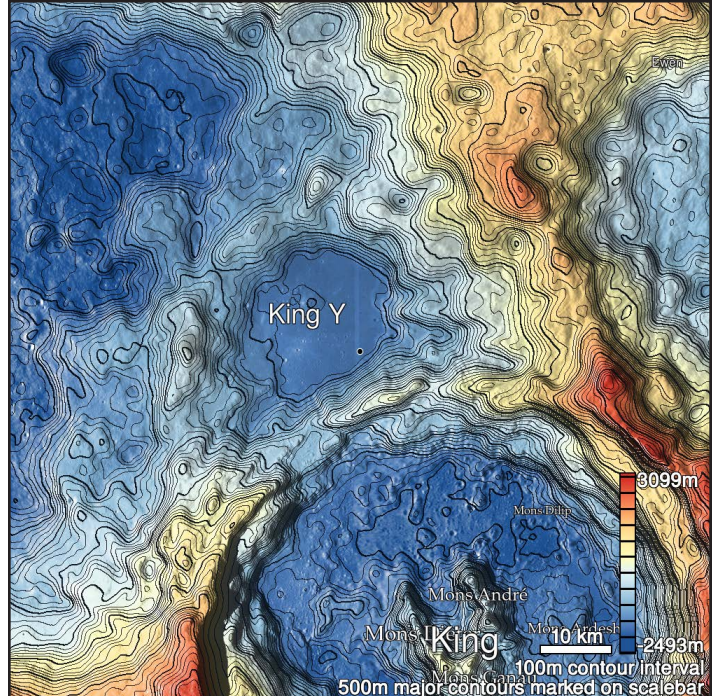
Long, narrow pit ~60m S of a NW-SE trending linear depression containing a few fractures and collapses. SE rim is a ramp from surface to floor. NW end of floor is filled with 0.5-2m boulders. King 26 is ~300m W.

King 42

Impact Melt Pit: King Crater



Upper left: NAC M1120456952R. Upper right: NAC M1131053889R. Lower left: NAC M106088433R. Lower right: Stereo anaglyph of NACs M103732241R (left eye, red) and M103725084R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around King 42. Black dot marks the location of the pit.

Size and Location

Latitude	6.3321°N	Inner pit diameter	16 m × 10 m
Longitude	120.0066°E	Long axis azimuth	145°
Depth	6 m	Funnel diameter	30 m × 16 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Measurement Source Images

Image ID	M1120456952R	M1131053889R	M106088433R
Incidence	32.21°	-27.62°	-35.36°
Emission	0.81°	-0.24°	-2.35°
Time of Day	9.88	13.77	14.31
Pixel Scale	1.17 m/px	1.17 m/px	1.29 m/px
Depth	7.8 m	4.8 m	4.9 m

Location reference: NAC M1120456952R line 25137, sample 1879

Best stereo pair: M103732241R / M103725084R

Other useful images:

DTM: NAC_DTM_KINGCRATER2

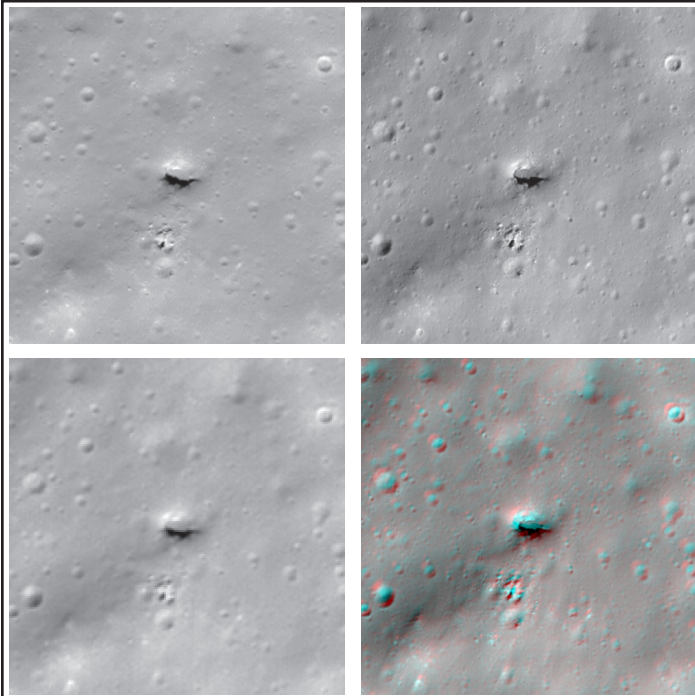
Data notes:

Description

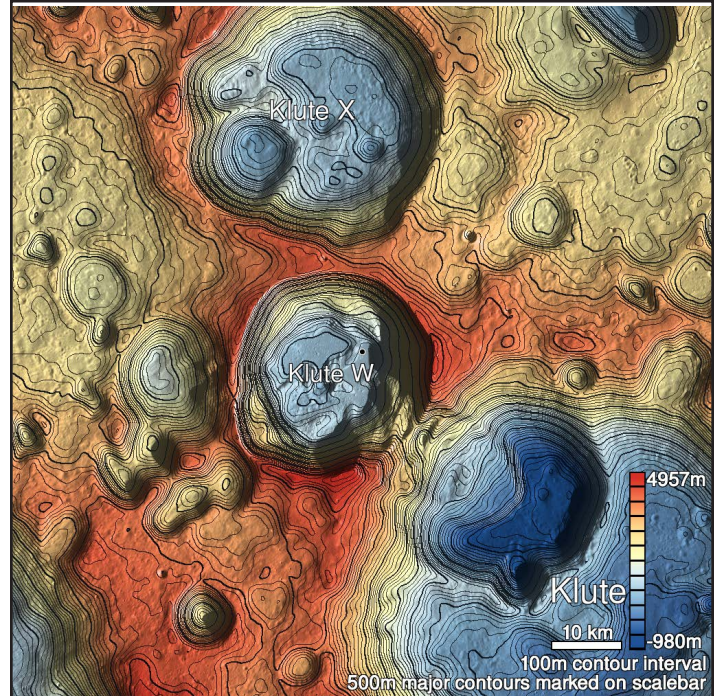
Triangular pit just SW of a saddle between two PRFs. S corner appears to be ramp from rim to floor, and there is a slight depression running ~100m further to the SE. W wall appears very steeply sloped (>80 degrees?), not quite vertical. King 34a is ~290m WNW, and there are several small collapse features running NW-SE to the E.

Klute W 1

Impact Melt Pit: Klute W Crater



Upper left: NAC M140840176R. Upper right: NAC M127871750L. Lower left: NAC M1119832662L. Lower right: Stereo anaglyph of NACs M143201144L (left eye, red) and M143194361L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Klute W 1. Black dot marks the location of the pit.

Size and Location

Latitude	38.0860°N	Inner pit diameter	16 m × 10 m
Longitude	216.8850°E	Long axis azimuth	100°
Depth	7 m	Funnel diameter	25 m × 19 m

Measurement Source Images

Image ID	M140840176R	M127871750L	M1119832662L
Incidence	39.85°	50.83°	42.96°
Emission	1.15°	-2.52°	-2.15°
Time of Day	11.67	9.45	10.45
Pixel Scale	0.62 m/px	0.47 m/px	1.41 m/px
Depth	6.0 m	6.6 m	7.5 m

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	Yes?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes?	Colinear depressions	No?
Nearby depressions	Yes	Colinear fractures	No?
In Depression	No		

Location reference: NAC M140840176R line 12918, sample 2500

Best stereo pair: M143201144L / M143194361L

Other useful images:

DTM:

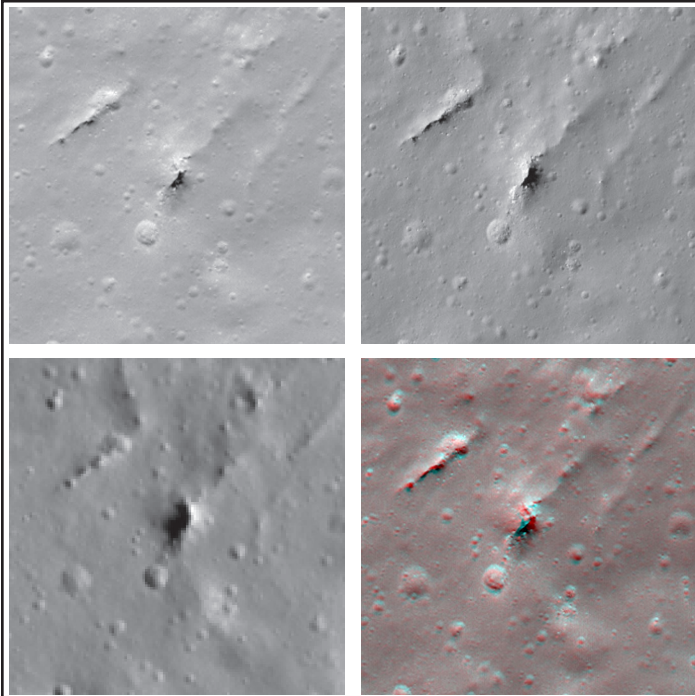
Data notes:

Description

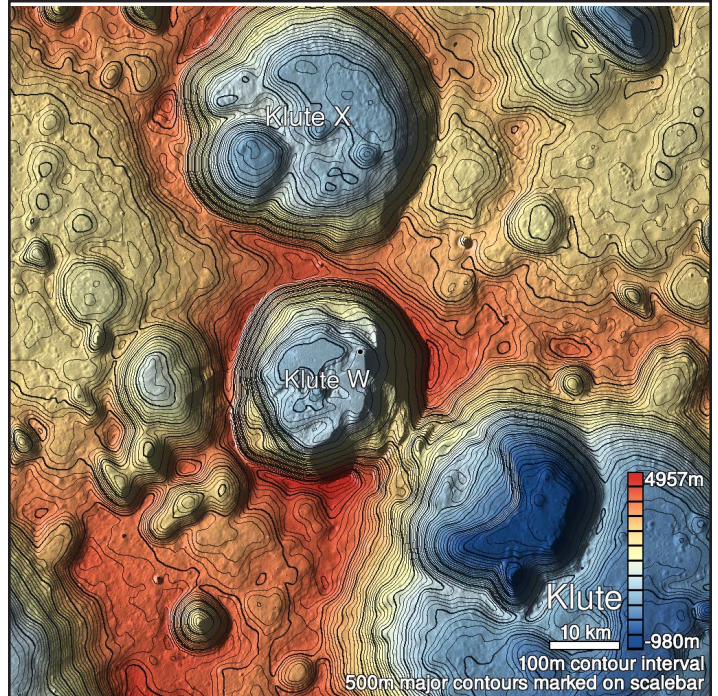
An elliptical pit with fairly pronounced funnel. A slope in the NE appears to reach the surrounding surface with no wall. There is an edge of a shadow visible in the slewed image M143194361L that indicates a slight (~1-2m) overhang with no illuminated back wall. Possible fracture with collapses starting ~100m N, possible round-bottomed linear depression ~200m E.

Klute W 2

Impact Melt Pit: Klute W Crater



Upper left: NAC M140840176R. Upper right: NAC M127871750L. Lower left: NAC M182117615R. Lower right: Stereo anaglyph of NACs M171495141L (left eye, red) and M171488353L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Klute W 2. Black dot marks the location of the pit.

Size and Location

Latitude	38.1157°N	Inner pit diameter	12 m × 9 m
Longitude	216.8965°E	Long axis azimuth	25°
Depth	5 m	Funnel diameter	30 m × 19 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M140840176R	M127871750L	M182117615R
Incidence	39.88°	50.84°	-63.59°
Emission	0.89°	-2.87°	-1.27°
Time of Day	11.67	9.45	15.78
Pixel Scale	0.62 m/px	0.47 m/px	1.54 m/px
Depth	3.8 m	3.9 m	6.4 m

Location reference: NAC M140840176R line 11580, sample 2050

Best stereo pair: M171495141L / M171488353L

Other useful images:

DTM:

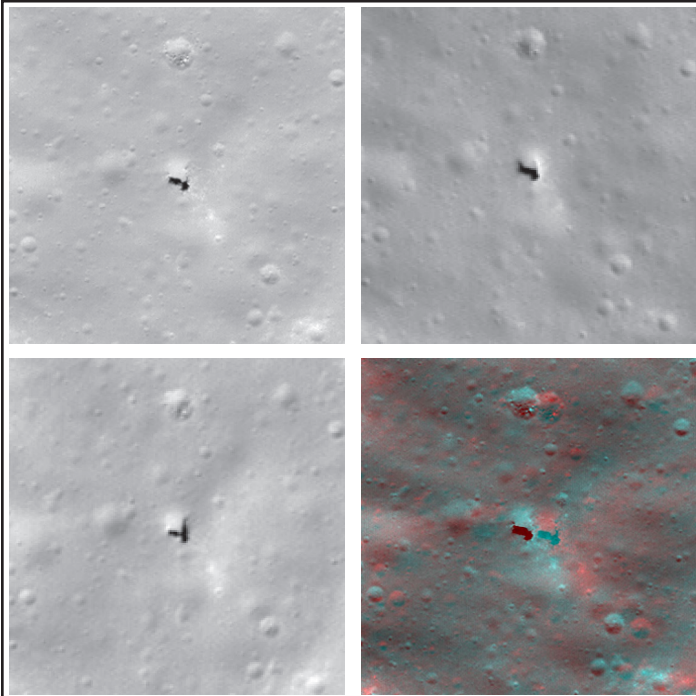
Data notes:

Description

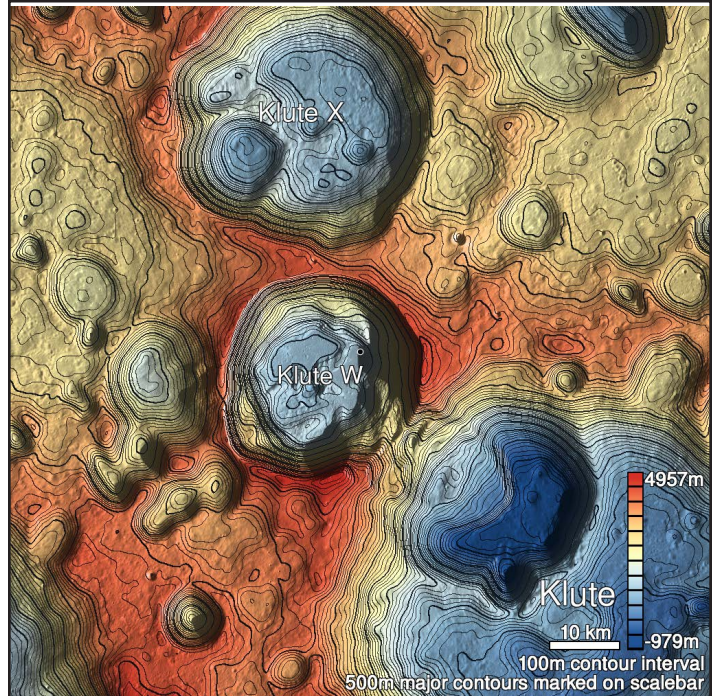
Pit at the south end of a cluster/string of linear features trending NNE/SSW. This pit is in a ~80m long depression. The NW wall appears to be a slope from surface to floor, other walls are vertical (perhaps with protruding rocks). There's a ~40m long linear fracture/depression ~60m NW, a ~60-m long S-shaped fracture/narrow pit ~150m N, and Klute W 6 is ~300m NNE.

Klute W 3

Impact Melt Pit: Klute W Crater



Upper left: NAC M140840176R. Upper right: NAC M1115116170L. Lower left: NAC M1119832662L. Lower right: Stereo anaglyph of NACs M171495141L (left eye, red) and M171488353L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Klute W 3. Black dot marks the location of the pit.

Size and Location

Latitude	38.0980°N	Inner pit diameter	18 m × 13 m
Longitude	216.9385°E	Long axis azimuth	145°
Depth	6 m	Funnel diameter	20 m × 19 m

Measurement Source Images

Image ID	M140840176R	M1115116170L	M1119832662L
Incidence	39.86°	-47.01°	42.95°
Emission	-0.11°	2.82°	-2.70°
Time of Day	11.67	14.15	10.46
Pixel Scale	0.62 m/px	1.43 m/px	1.42 m/px
Depth	6.0 m	4.7 m	6.7 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes?
Nearby fractures	Yes?	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M140840176R line 12390, sample 425

Best stereo pair: M171495141L / M171488353L

Other useful images:

DTM:

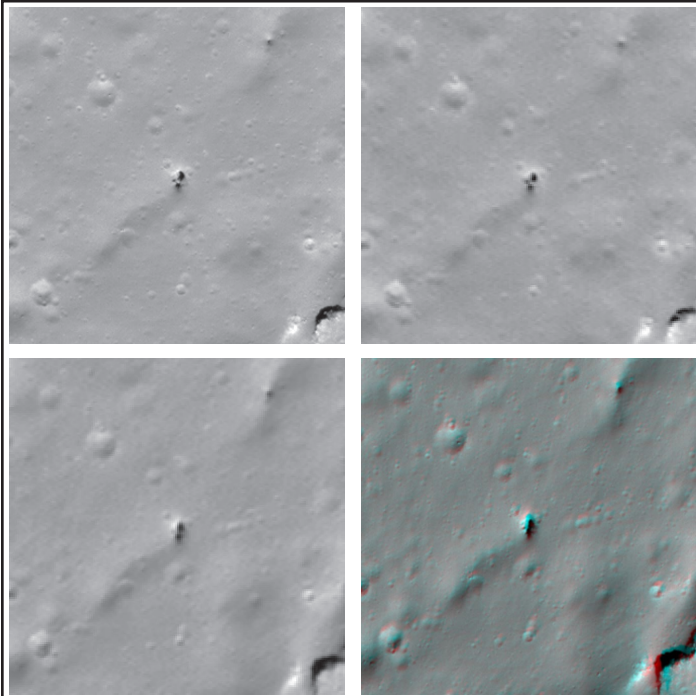
Data notes:

Description

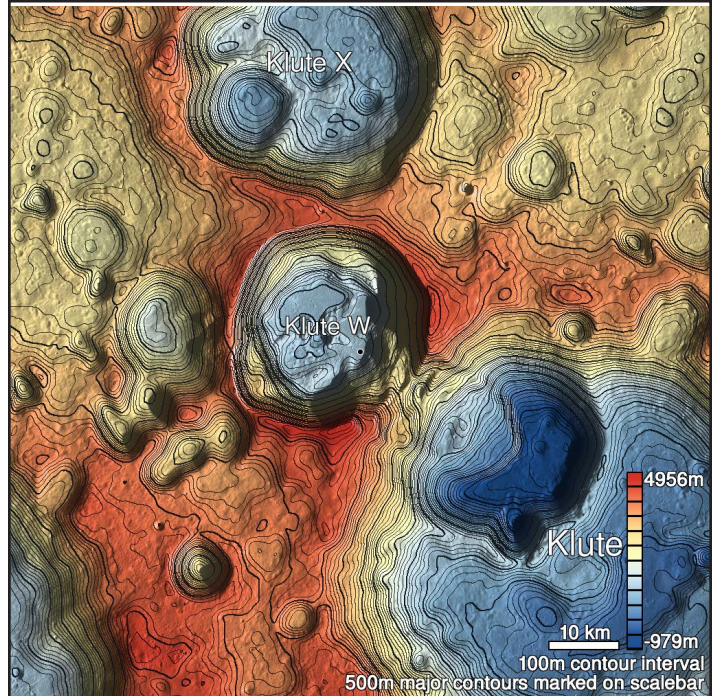
Pit in the north side of a slight rise. North wall is a slope to floor level, other walls appear uncollapsed. ~200m NW of a NNE/SSW trending 50m-long fracture, and ~200m SE of Klute W 5.

Klute W 4

Impact Melt Pit: Klute W Crater



Upper left: NAC M140840176R. Upper right: NAC M1148101020L. Lower left: NAC M1135119263R. Lower right: Stereo anaglyph of NACs M143201144L (left eye, red) and M143194361L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Klute W 4. Black dot marks the location of the pit.

Size and Location

Latitude	37.8581°N	Inner pit diameter	6 m × 5 m
Longitude	216.8911°E	Long axis azimuth	10°
Depth	>8 m	Funnel diameter	16 m × 12 m

Measurement Source Images

Image ID	M140840176R	M1148101020L	M1135119263R
Incidence	39.63°	-37.05°	43.94°
Emission	1.04°	3.06°	1.38°
Time of Day	11.67	12.38	10.50
Pixel Scale	0.62 m/px	1.49 m/px	1.58 m/px
Depth	>7.9 m	>5.8 m	>7.9 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes?	Beside dome	No
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No?
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M140840176R line 23163, sample 2316

Best stereo pair: M143201144L / M143194361L

Other useful images:

DTM:

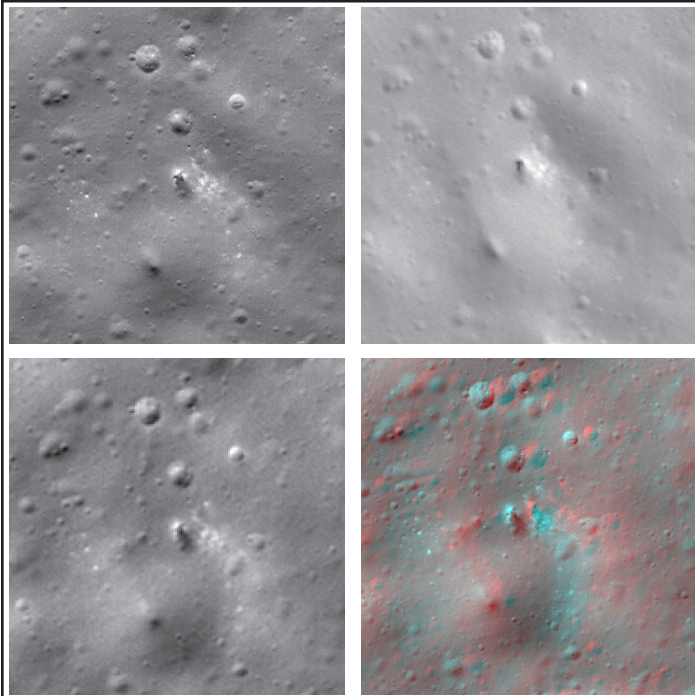
Data notes: There seems to be a lit floor at 4.2 m depth in M140840176R, but the shadow edge does not agree with the sun direction. If it is a floor, and not wall, then the depth is ~4m, but there is a deeper section.

Description

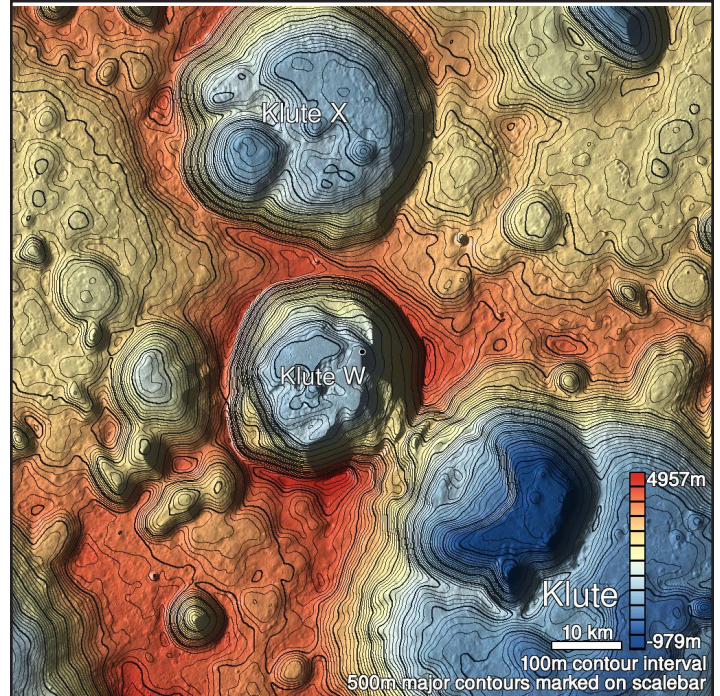
An elliptical pit at the north end of a ~60m long linear depression. Another ~60m segment start ~70 NE of the pit's segment, in line with that segment, ending when it runs into a small rise. There is another ~150m long linear depression, with some cliffs along it, ~100m to the SE. There appears to be a small boulder filling much of the south end of the pit. A slewed image (M171488353L) may be showing a few meters of overhang to the west.

Klute W 5

Uncertain Impact Melt Pit: Klute W Crater



Upper left: NAC M140840176R. Upper right: NAC M1115116170L. Lower left: NAC M1119832662L. Lower right: Stereo anaglyph of NACs M143201144L (left eye, red) and M143194361L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Klute W 5. Black dot marks the location of the pit.

Size and Location

Latitude	38.1018°N	Inner pit diameter	5 m × 4 m
Longitude	216.9323°E	Long axis azimuth	140°
Depth	2 m	Funnel diameter	21 m × 14 m

Measurement Source Images

Image ID	M140840176R	M1115116170L	M1119832662L
Incidence	39.86°	-47.01°	42.96°
Emission	0.10°	2.89°	-2.63°
Time of Day	11.67	14.15	10.46
Pixel Scale	0.62 m/px	1.43 m/px	1.42 m/px
Depth	NA m	2.1 m	NA m

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes?
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M140840176R line 12214, sample 670

Best stereo pair: M143201144L / M143194361L

Other useful images:

DTM:

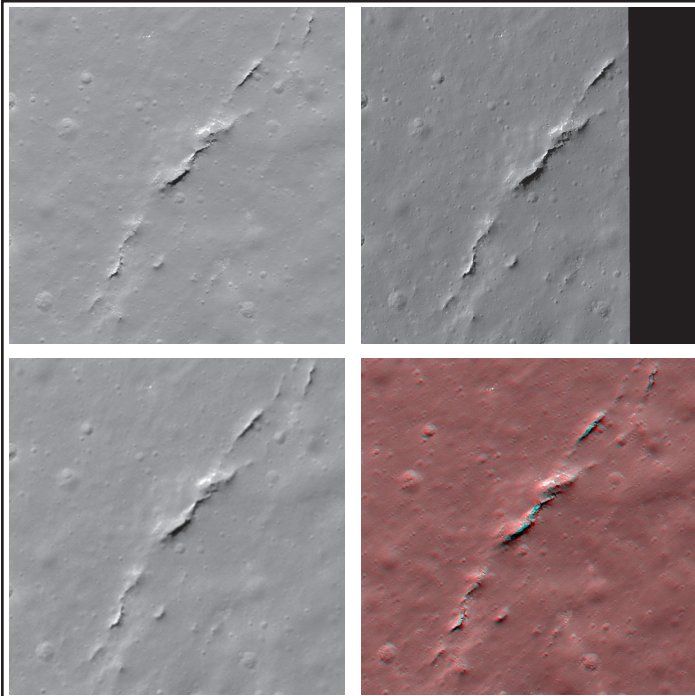
Data notes: Might be able to get multiple shadow depths, but most images are either slewed, low-res, or have the sun shining straight down the collapsed slope.

Description

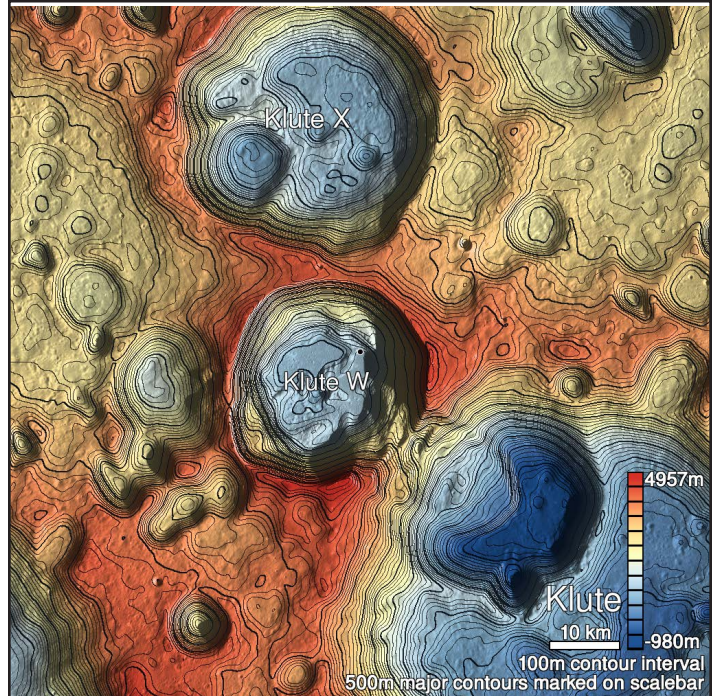
Small pit(?) on the SW side of a slight rise. Funnel is very pronounced, and south wall is a slope down to floor level (probably). Hard to make out the morphology. ~200m NW of Klute W 3, ~150m SE of a feature that appears to be a cliff cutting off the end of yet another small rise.

Klute W 6

Impact Melt Pit: Klute W Crater



Upper left: NAC M140840176R. Upper right: NAC M127871750L. Lower left: NAC M1135119263R. Lower right: Stereo anaglyph of NACs M171495141L (left eye, red) and M171488353L (right eye, blue). All images are 400 m wide.



Color shaded relief map of the area around Klute W 6. Black dot marks the location of the pit.

Size and Location

Latitude	38.1256°N	Inner pit diameter	28 m × 12 m
Longitude	216.9010°E	Long axis azimuth	55°
Depth	7 m	Funnel diameter	53 m × 29 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No?
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	Yes?		

Measurement Source Images

Image ID	M140840176R	M127871750L	M1135119263R
Incidence	39.89°	50.84°	44.15°
Emission	0.78°	-3.01°	1.15°
Time of Day	11.67	9.45	10.50
Pixel Scale	0.62 m/px	0.47 m/px	1.59 m/px
Depth	7.0 m	6.9 m	6.2 m

Location reference: NAC M140840176R line 11143, sample 1874

Best stereo pair: M171495141L / M171488353L

Other useful images:

DTM:

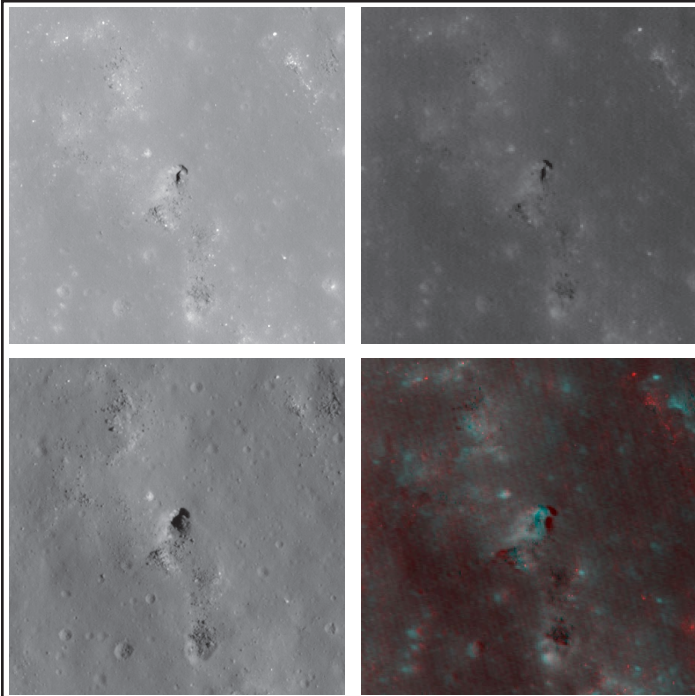
Data notes:

Description

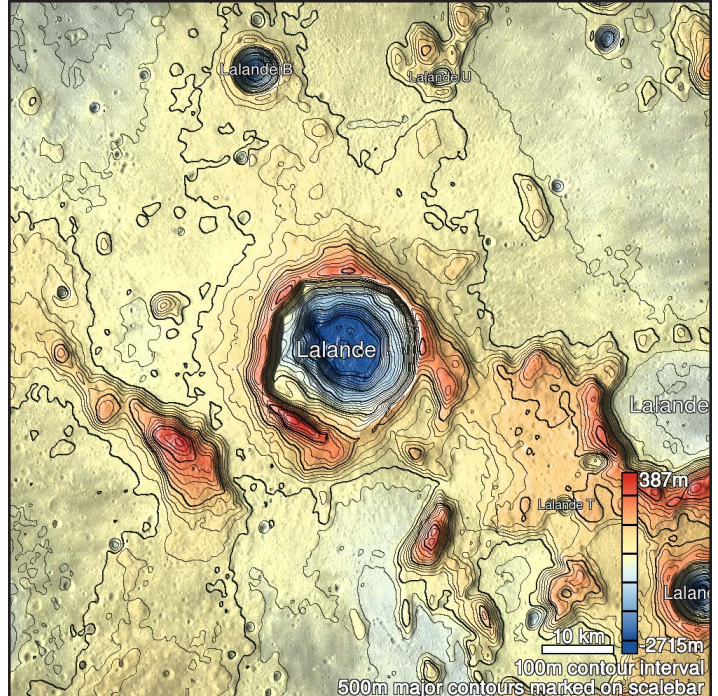
Rectangular pit in a series of NE-SW-trending fractures and depressions. The NW wall is a slope from rim to floor. There's a 22m long fracture 12m NE (arguably part of the same pit- the SE rim appears continuous, though more of a slight rise than a sharp rim in the space between pit and fracture). There's another NE-SW fracture ~120m NE of Klute W 6. Klute W 2 is ~300m SSW.

Lalande 1

Impact Melt Pit: Lalande Crater



Upper left: NAC M172975608L. Upper right: NAC M1118936862R. Lower left: NAC M114009947L. Lower right: Stereo anaglyph of NACs M172975608L (left eye, red) and M1243695049L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Lalande 1. Black dot marks the location of the pit.

Size and Location

Latitude	4.4579°S	Inner pit diameter	7 m × NA m
Longitude	351.4667°E	Long axis azimuth	40°
Depth	8 m	Funnel diameter	21 m × 15 m

Measurement Source Images

Image ID	M172975608L	M1118936862R	M114009947L
Incidence	16.36°	15.84°	56.61°
Emission	-2.27°	0.74°	-0.80°
Time of Day	10.93	11.01	8.23
Pixel Scale	0.47 m/px	0.96 m/px	0.50 m/px
Depth	8.5 m	7.8 m	>4.9 m

Other Features

Entrance Ramp	Yes	In dome	No?
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M172975608L line 22312, sample 1550

Best stereo pair: M172975608L / M1243695049L

Other useful images:

DTM:

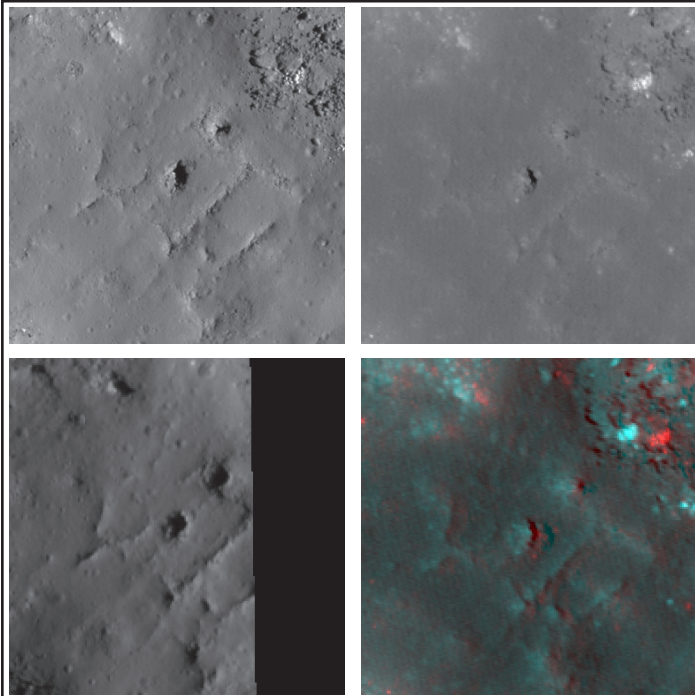
Data notes: Depth 3 is to half-way up the funnel; Depth 2 is a ~3px shadow. Stereo is accidental and probably only works for manual viewing.

Description

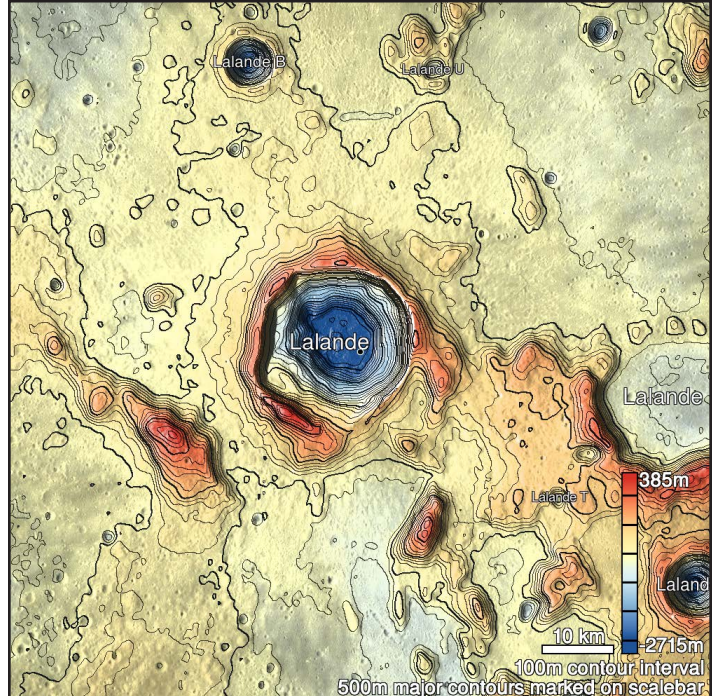
A semicircular collapse that seems to be mostly funnel. The east wall is a cliff, other walls are just slopes. There is a pair of straight parallel fractures/depressions ~280m SW, and a small linear pit(?) ~280m NW.

Lalande 2

Impact Melt Pit: Lalande Crater



Upper left: NAC M114009947L. Upper right: NAC M1118936862R. Lower left: NAC M1096551351L. Lower right: Stereo anaglyph of NACs M1118936862R (left eye, red) and M1243695049L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Lalande 2. Black dot marks the location of the pit.

Size and Location

Latitude	4.4949°S	Inner pit diameter	19 m × 12 m
Longitude	351.4992°E	Long axis azimuth	15°
Depth	6 m	Funnel diameter	22 m × 15 m

Measurement Source Images

Image ID	M114009947L	M1118936862R	M1096551351L
Incidence	56.58°	15.82°	-68.54°
Emission	-1.97°	0.13°	0.26°
Time of Day	8.23	11.01	16.57
Pixel Scale	0.50 m/px	0.96 m/px	1.03 m/px
Depth	5.0 m	7.0 m	>3.9 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No?
Nearby pits	?	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M114009947L line 29349, sample 2082

Best stereo pair: M1118936862R / M1243695049L

Other useful images:

DTM:

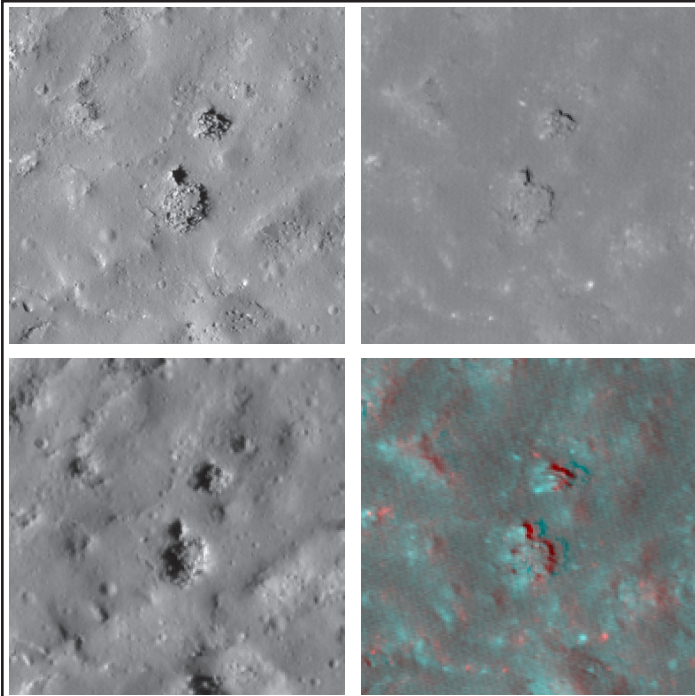
Data notes: Stereo is accidental and probably only works for manual viewing.

Description

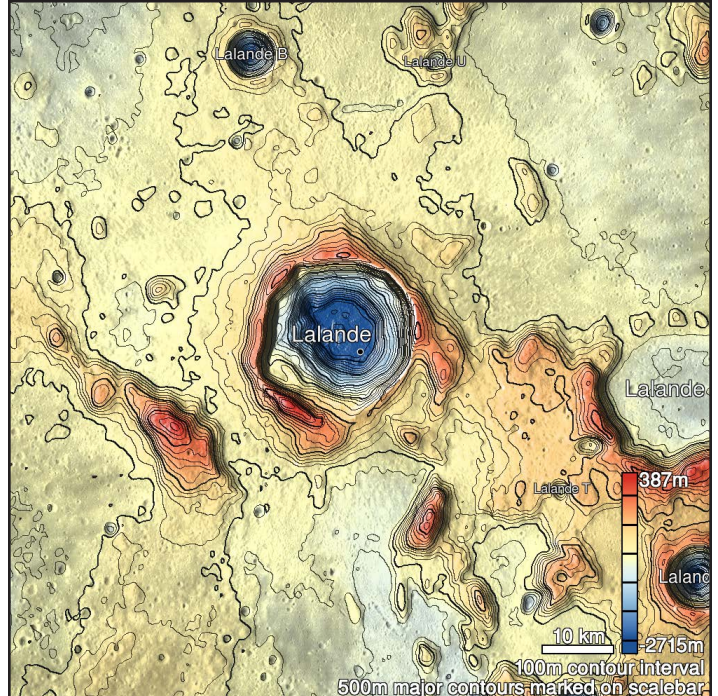
An elliptical pit in, but not connected to, a set of NE-SW trending fractures. E wall is vertical, W and SW walls are slopes interrupted by blocks. A few other small collapses in the area, and a 90m linear collapse/fracture is 250m SE.

Lalande 3a

Impact Melt Pit: Lalande Crater



Upper left: NAC M114009947L. Upper right: NAC M1180172051R. Lower left: NAC M1096551351L. Lower right: Stereo anaglyph of NACs M1180172051R (left eye, red) and M1243695049L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Lalande 3a. Black dot marks the location of the pit.

Size and Location

Latitude	4.5322°S	Inner pit diameter	8 m × 7 m
Longitude	351.4893°E	Long axis azimuth	45°
Depth	8 m	Funnel diameter	13 m × 10 m

Measurement Source Images

Image ID	M114009947L	M1180172051R	M1096551351L
Incidence	56.59°	15.44°	-68.53°
Emission	-1.63°	0.11°	0.45°
Time of Day	8.23	11.03	16.57
Pixel Scale	0.50 m/px	1.00 m/px	1.03 m/px
Depth	>5.9 m	7.6 m	>2.3 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No?
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No?
In Depression	No		

Location reference: NAC M114009947L line 31422, sample 2652

Best stereo pair: M1180172051R / M1243695049L

Other useful images:

DTM:

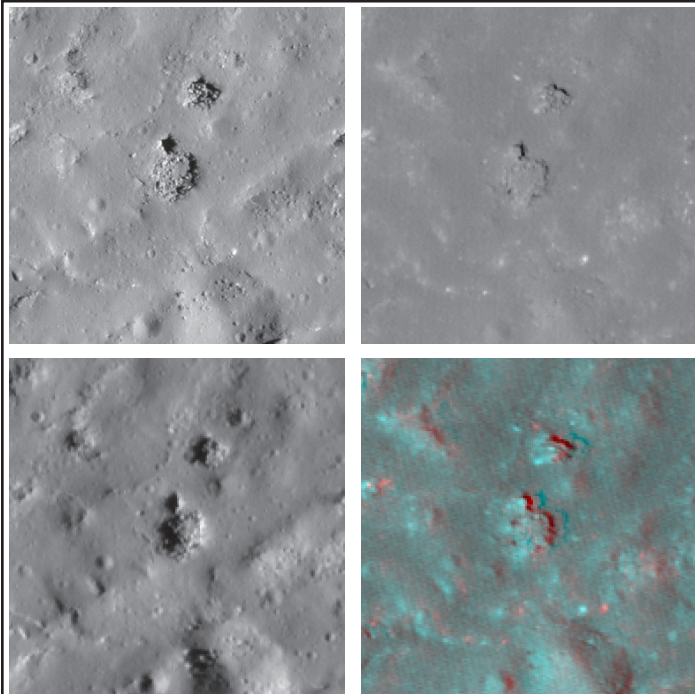
Data notes: Stereo is accidental and probably only works for manual viewing.

Description

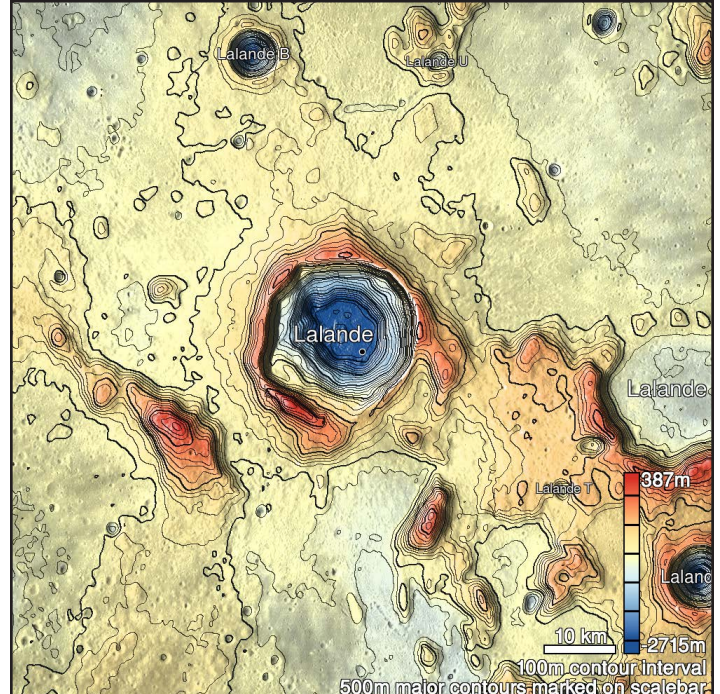
Rectangular pit flanked by two much shallower pits (3b and 3c). Floor appears smooth in only (low-res) image we have of it. There is a heavily-fractured and collapsed region ~135m NE, and several sub-5m possible pits to the E.

Lalande 3b

Impact Melt Pit: Lalande Crater



Upper left: NAC M114009947L. Upper right: NAC M1180172051R. Lower left: NAC M1096551351L. Lower right: Stereo anaglyph of NACs M1180172051R (left eye, red) and M1243695049L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Lalande 3b. Black dot marks the location of the pit.

Size and Location

Latitude	4.5328°S	Inner pit diameter	28 m × 23 m
Longitude	351.4895°E	Long axis azimuth	40°
Depth	4 m	Funnel diameter	31 m × 28 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No?
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No?
In Depression	No		

Measurement Source Images

Image ID	M114009947L	M1180172051R	M1096551351L
Incidence	56.59°	15.44°	-68.53°
Emission	-1.64°	0.11°	0.45°
Time of Day	8.23	11.03	16.57
Pixel Scale	0.50 m/px	1.00 m/px	1.03 m/px
Depth	3.3 m	3.6 m	4.0 m

Location reference: NAC M114009947L line 31456, sample 2639

Best stereo pair: M1180172051R / M1243695049L

Other useful images:

DTM:

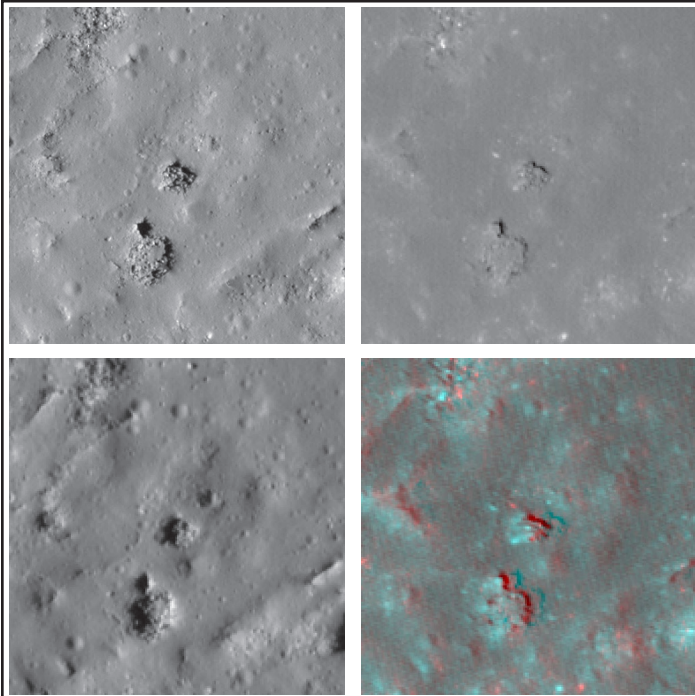
Data notes: Stereo is accidental and probably only works for manual viewing.

Description

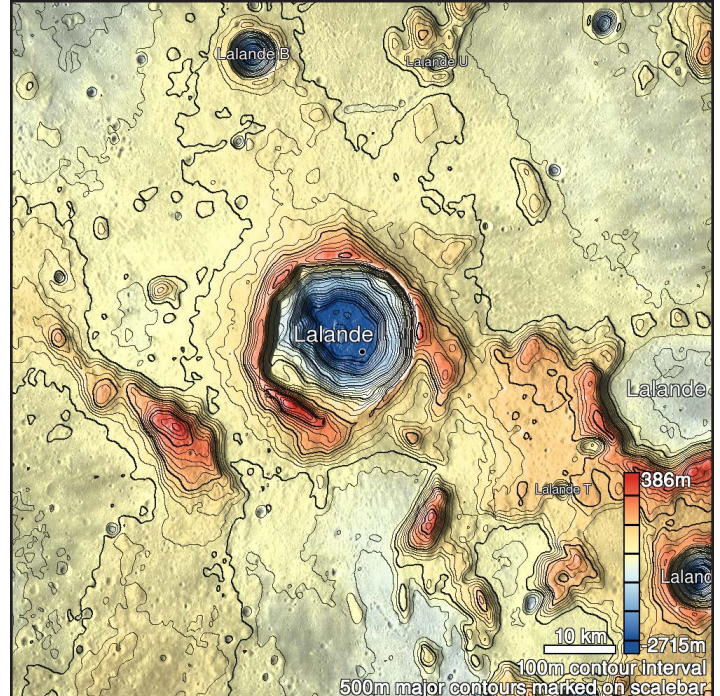
Elliptical pit abutting on the S corner of 3a. Most of the floor is covered by ~1m boulders. Possible access slope on the SW side, depending on boulder density.

Lalande 3c

Impact Melt Pit: Lalande Crater



Upper left: NAC M114009947L. Upper right: NAC M1180172051R. Lower left: NAC M1096551351L. Lower right: Stereo anaglyph of NACs M1180172051R (left eye, red) and M1243695049L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Lalande 3c. Black dot marks the location of the pit.

Size and Location

Latitude	4.5312°S	Inner pit diameter	16 m × 15 m
Longitude	351.4900°E	Long axis azimuth	125°
Depth	5 m	Funnel diameter	23 m × 20 m

Other Features

Entrance Ramp	No	In dome	No?
Overhang	?	Beside dome	No?
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No?
In Depression	No		

Measurement Source Images

Image ID	M114009947L	M1180172051R	M1096551351L
Incidence	56.59°	15.44°	-68.53°
Emission	-1.66°	0.11°	0.44°
Time of Day	8.23	11.03	16.57
Pixel Scale	0.50 m/px	1.00 m/px	1.03 m/px
Depth	3.1 m	7.2 m	3.3 m

Location reference: NAC M114009947L line 31364, sample 2611

Best stereo pair: M1180172051R / M1243695049L

Other useful images:

DTM:

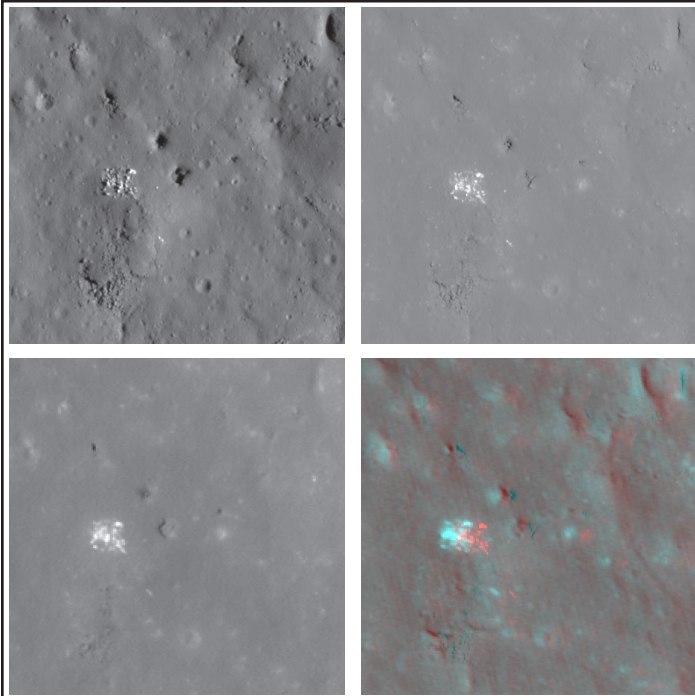
Data notes: Stereo is accidental and probably only works for manual viewing.

Description

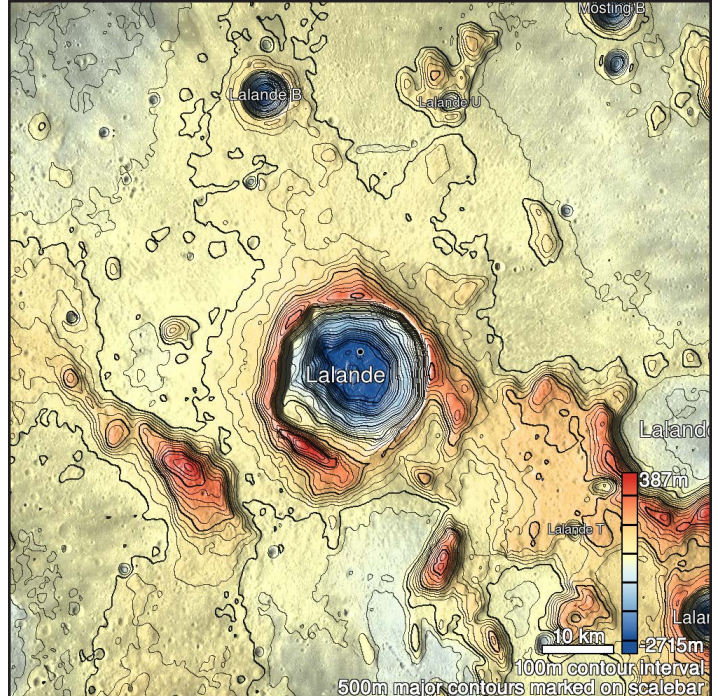
Roughly square pit ~20m NE of 3a. Floor is entirely covered in ~1m boulders.

Lalande 5a

Impact Melt Pit: Lalande Crater



Upper left: NAC M114009947R. Upper right: NAC M172975608L. Lower left: NAC M1101267085R. Lower right: Stereo anaglyph of NACs M172975608L (left eye, red) and M1243695049L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Lalande 5a. Black dot marks the location of the pit.

Size and Location

Latitude	4.3408°S	Inner pit diameter	7 m × 6 m
Longitude	351.4229°E	Long axis azimuth	125°
Depth	4 m	Funnel diameter	13 m × 12 m

Measurement Source Images

Image ID	M114009947R	M172975608L	M1101267085R
Incidence	56.65°	16.38°	-15.57°
Emission	0.82°	-0.64°	-2.33°
Time of Day	8.22	10.92	13.02
Pixel Scale	0.50 m/px	0.47 m/px	1.03 m/px
Depth	2.3 m	3.4 m	5.4 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes?	Colinear pits	No?
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M114009947R line 20735, sample 1939

Best stereo pair: M172975608L / M1243695049L

Other useful images:

DTM:

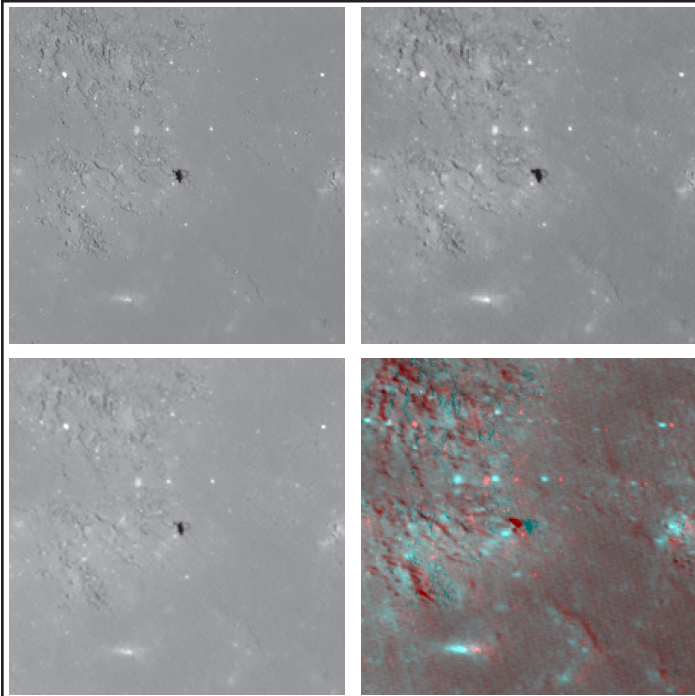
Data notes: Stereo is accidental and probably only works for manual viewing.

Description

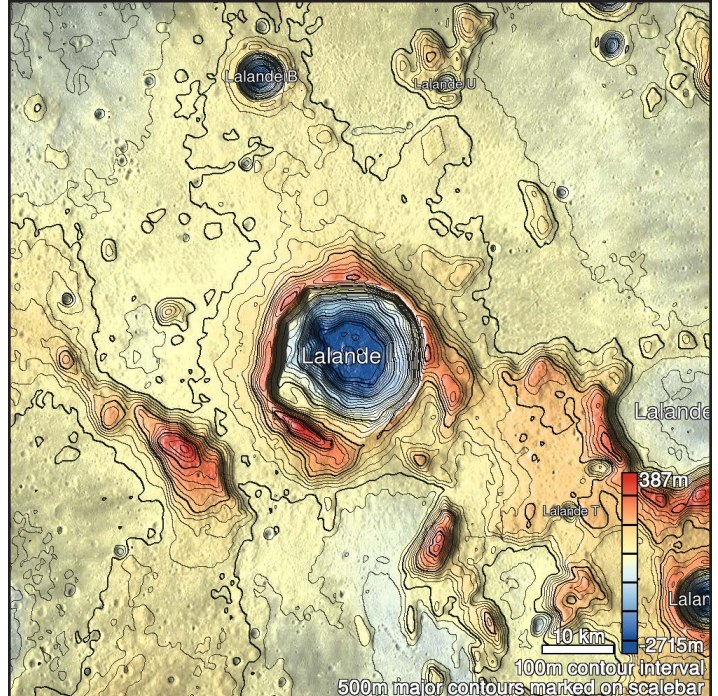
Rectangular pit, NE wall protrudes into pit interior (possibly as a ramp?). Smaller collapse features (pits?) 15 and 50 m NW, and 135m E.

Lalande 12

Impact Melt Pit: Lalande Crater



Upper left: NAC M172975608L. Upper right: NAC M1118936862R. Lower left: NAC M1103624254L. Lower right: Stereo anaglyph of NACs M172975608L (left eye, red) and M1243695049L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Lalande 12. Black dot marks the location of the pit.

Size and Location

Latitude	4.4275°S	Inner pit diameter	8 m × 4 m
Longitude	351.4436°E	Long axis azimuth	150°
Depth	11 m	Funnel diameter	11 m × 9 m

Measurement Source Images

Image ID	M172975608L	M1118936862R	M1103624254L
Incidence	16.38°	15.85°	12.14°
Emission	-1.40°	1.19°	-3.05°
Time of Day	10.93	11.01	11.22
Pixel Scale	0.47 m/px	0.96 m/px	1.03 m/px
Depth	11.3 m	9.9 m	10.6 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes?
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M172975608L line 20631, sample 3026

Best stereo pair: M172975608L / M1243695049L

Other useful images:

DTM:

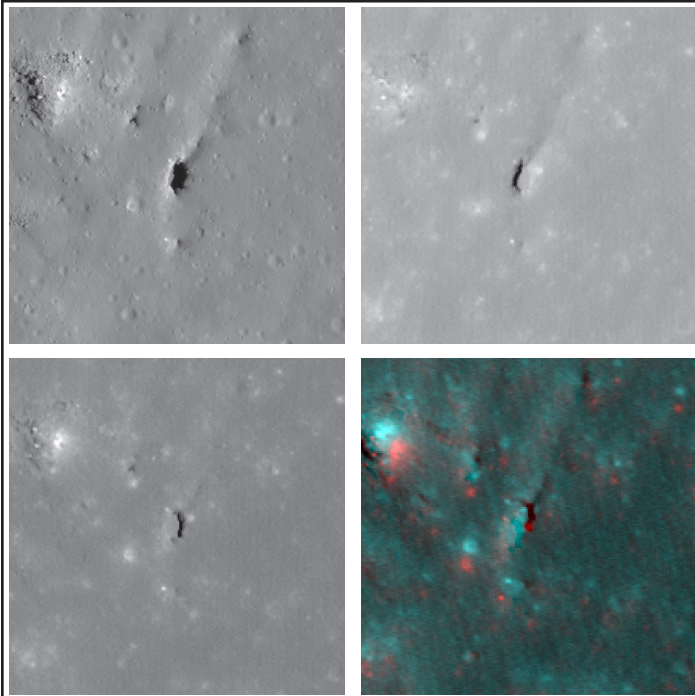
Data notes: All depths might be minimums. Floor is only unambiguously visible in M109290998L, but incidence (~3 degrees) is approximately the same as emission (~2 degrees). Stereo is accidental and probably only works for manual viewing.

Description

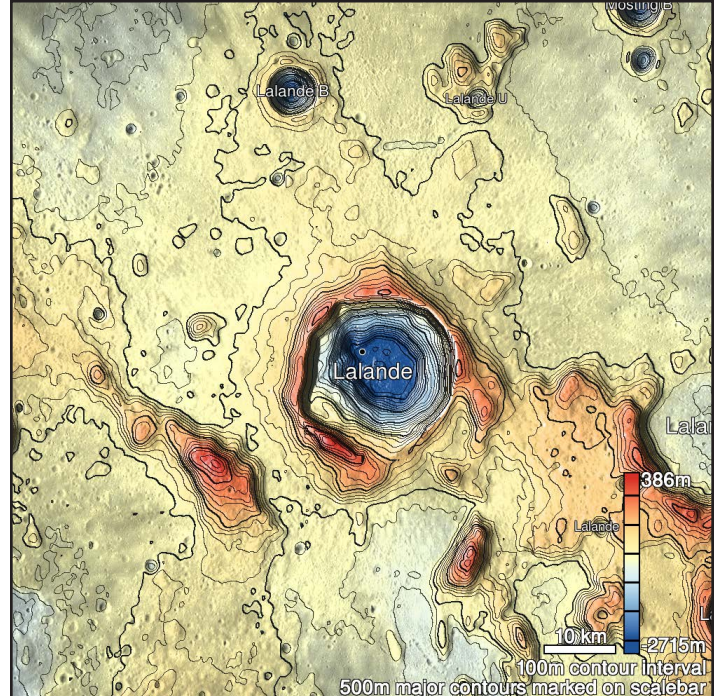
Irregular pit. "Funnel" is odd- it looks like there is an outer rim with vertical walls, in addition to the normal inner pit. On the east edge of a ~150x100m rough area (probably slightly raised, possibly a fracture field- no stereo and lack of low-Sun images make it hard to classify). There is a pair of shallow pits ~250m SE, and a complex set of fractures ~150m SW.

Lalande 13

Impact Melt Pit: Lalande Crater



Upper left: NAC M144680975L. Upper right: NAC M1101267085R. Lower left: NAC M1103624254L. Lower right: Stereo anaglyph of NACs M1103624254L (left eye, red) and M1243695049R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Lalande 13. Black dot marks the location of the pit.

Size and Location

Latitude	4.3571°S	Inner pit diameter	13 m × 10 m
Longitude	351.3054°E	Long axis azimuth	25°
Depth	8 m	Funnel diameter	NA m × 16 m

Measurement Source Images

Image ID	M144680975L	M1101267085R	M1103624254L
Incidence	48.99°	-15.46°	12.25°
Emission	-3.04°	-0.24°	-0.60°
Time of Day	8.74	13.01	11.21
Pixel Scale	0.49 m/px	1.03 m/px	1.02 m/px
Depth	7.0 m	9.0 m	9.3 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	Yes		

Location reference: NAC M144680975L line 22205, sample 261

Best stereo pair: M1103624254L / M1243695049R

Other useful images:

DTM:

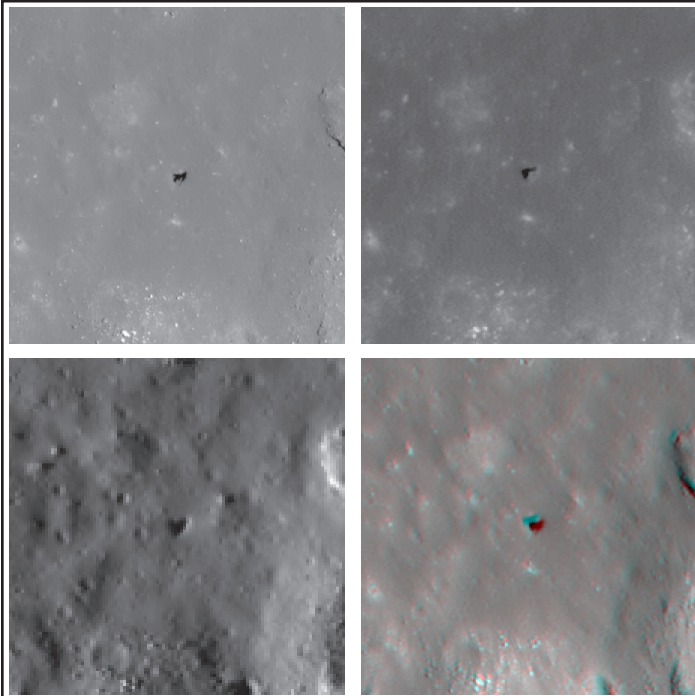
Data notes: Depths 2 and 3 are very low incidence angles (15 and 12 degrees, respectively). Stereo is accidental and probably only works for manual viewing.

Description

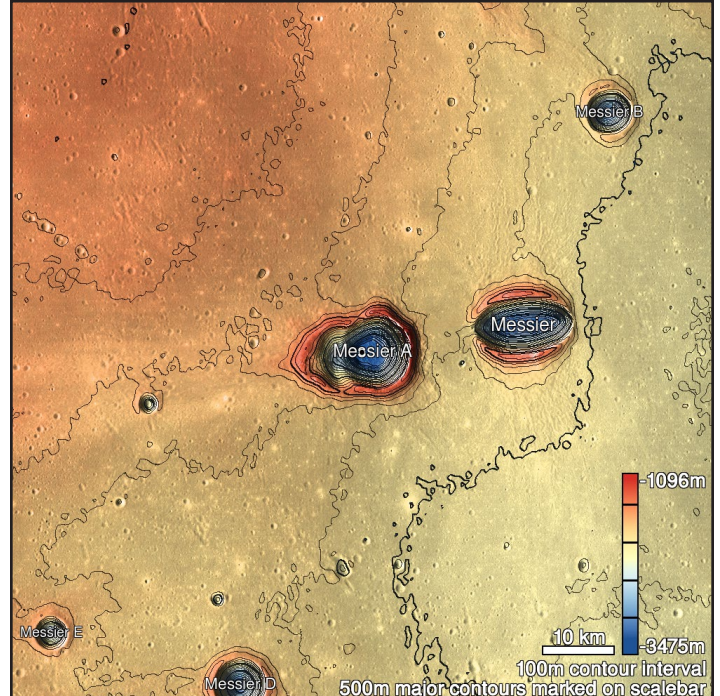
Pit at the end of a ~100m long linear depression in a set of similar parallel depressions. Looks like a set of fractures, but I don't see any actual fracturing. Flat floor, no entrance slopes.

Messier A 1

Impact Melt Pit: Messier A Crater



Upper left: NAC M126622485R. Upper right: NAC M185576460R. Lower left: NAC M1188052583L. Lower right: Stereo anaglyph of NACs M190294287L (left eye, red) and M190287137L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Messier A 1. Black dot marks the location of the pit.

Size and Location

Latitude	2.0279°S	Inner pit diameter	8 m × 4 m
Longitude	46.8995°E	Long axis azimuth	50°
Depth	15 m	Funnel diameter	13 m × 9 m

Measurement Source Images

Image ID	M126622485R	M185576460R	M1188052583L
Incidence	24.72°	-14.28°	-73.42°
Emission	0.56°	-2.04°	3.02°
Time of Day	10.37	12.92	16.90
Pixel Scale	0.44 m/px	1.04 m/px	1.32 m/px
Depth	15.2 m	14.5 m	>9.1 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M126622485R line 16286, sample 1502

Best stereo pair: M190294287L / M190287137L

Other useful images:

DTM:

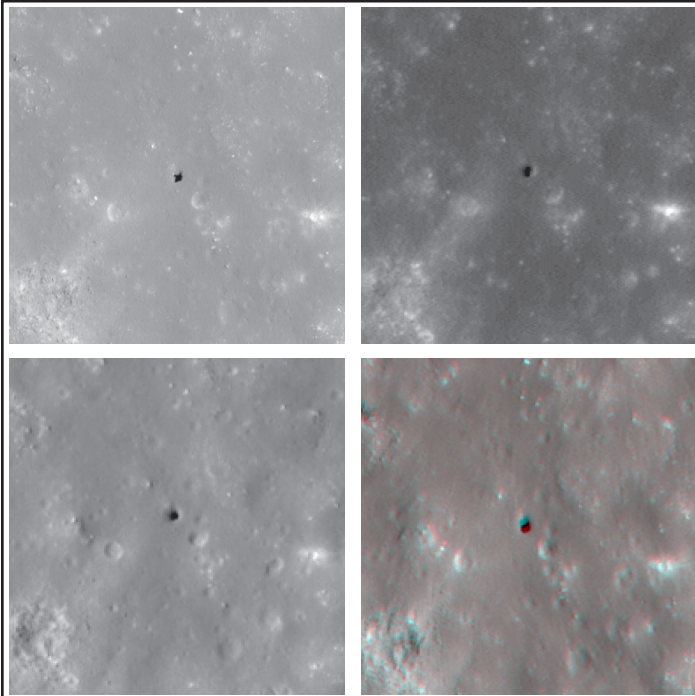
Data notes: Depth 1 may be to west wall, not floor. Depth 2 may be to south wall/slope. Depth 3 is minimum, west wall to east wall.

Description

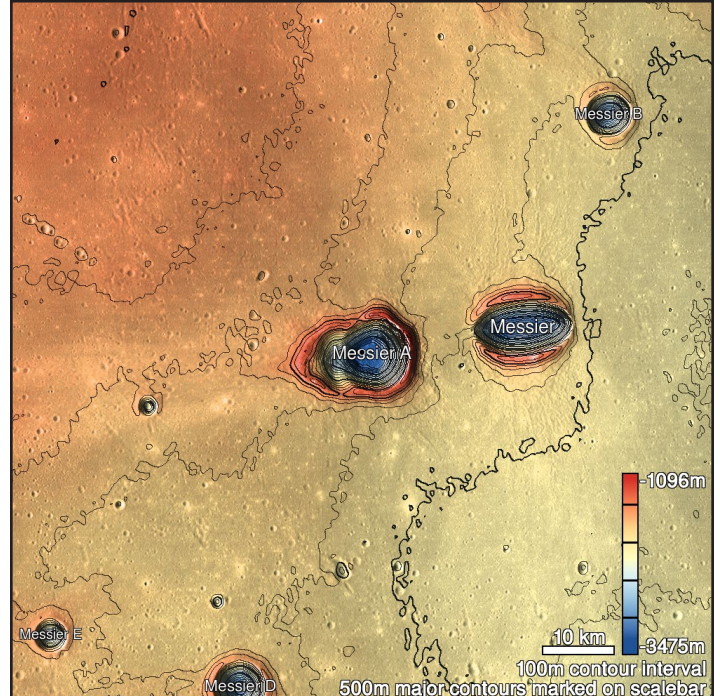
Irregular/trapezoidal pit, south wall/corner appears to have a sloping collapse, but is probably not continuous to rim. No good view of floor. Several much larger fracture-associated pits ~200m to the SW, otherwise the immediate surroundings are very flat.

Messier A 2b

Impact Melt Pit: Messier A Crater



Upper left: NAC M126622485R. Upper right: NAC M185576460R. Lower left: NAC M183217585L. Lower right: Stereo anaglyph of NACs M190294287L (left eye, red) and M190287137L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Messier A 2b. Black dot marks the location of the pit.

Size and Location

Latitude	2.0166°S	Inner pit diameter	5 m × 4 m
Longitude	46.9017°E	Long axis azimuth	160°
Depth	10 m	Funnel diameter	11 m × 8 m

Measurement Source Images

Image ID	M126622485R	M185576460R	M183217585L
Incidence	24.71°	-14.28°	-41.68°
Emission	0.48°	-2.07°	1.70°
Time of Day	10.37	12.92	14.77
Pixel Scale	0.44 m/px	1.04 m/px	1.05 m/px
Depth	8.5 m	11.8 m	>6.5 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M126622485R line 16898, sample 1346

Best stereo pair: M190294287L / M190287137L

Other useful images:

DTM:

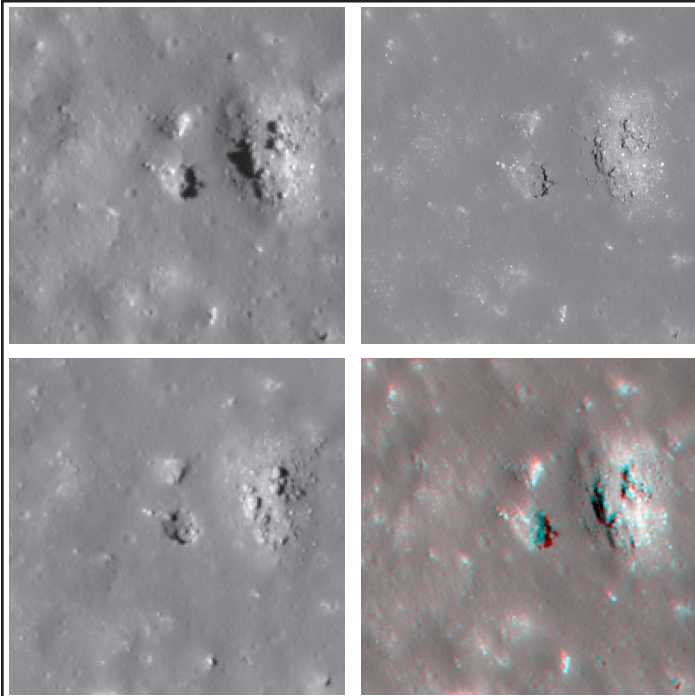
Data notes: Depths 1 and 2 might be to floor, but it's unclear due to resolution.

Description

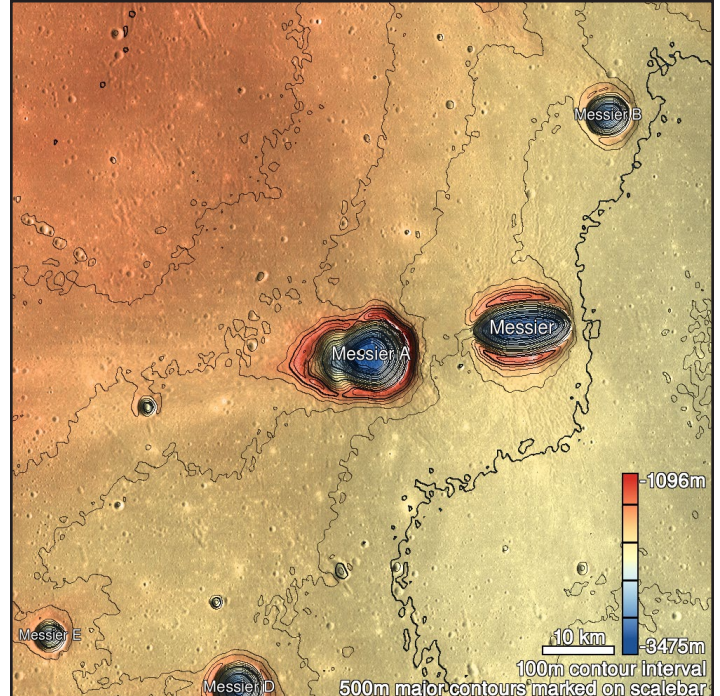
Small irregular pit with no visible floor ~350m north of Messier A 1, and 150m SW of Messier A 2a. See Messier A 2a description for nearby features.

Messier A 2a

Impact Melt Pit: Messier A Crater



Upper left: NAC M1138603796R. Upper right: NAC M126622485R. Lower left: NAC M183217585L. Lower right: Stereo anaglyph of NACs M190294287L (left eye, red) and M190287137L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Messier A 2a. Black dot marks the location of the pit.

Size and Location

Latitude	2.0140°S	Inner pit diameter	20 m × 17 m
Longitude	46.9059°E	Long axis azimuth	125°
Depth	5 m	Funnel diameter	22 m × 21 m

Measurement Source Images

Image ID	M1138603796R	M126622485R	M183217585L
Incidence	60.96°	24.71°	-41.69°
Emission	0.57°	0.31°	1.62°
Time of Day	7.94	10.37	14.77
Pixel Scale	1.05 m/px	0.44 m/px	1.05 m/px
Depth	5.2 m	6.2 m	3.8 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1138603796R line 26785, sample 1489

Best stereo pair: M190294287L / M190287137L

Other useful images:

DTM:

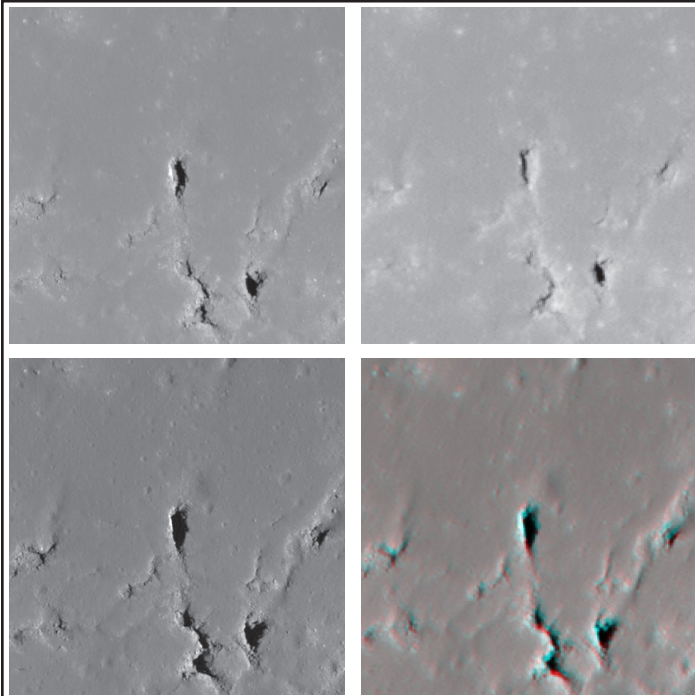
Data notes: Depths 1 and 2 are to south-center of pit floor. Depth 3 is measured right next to east wall.

Description

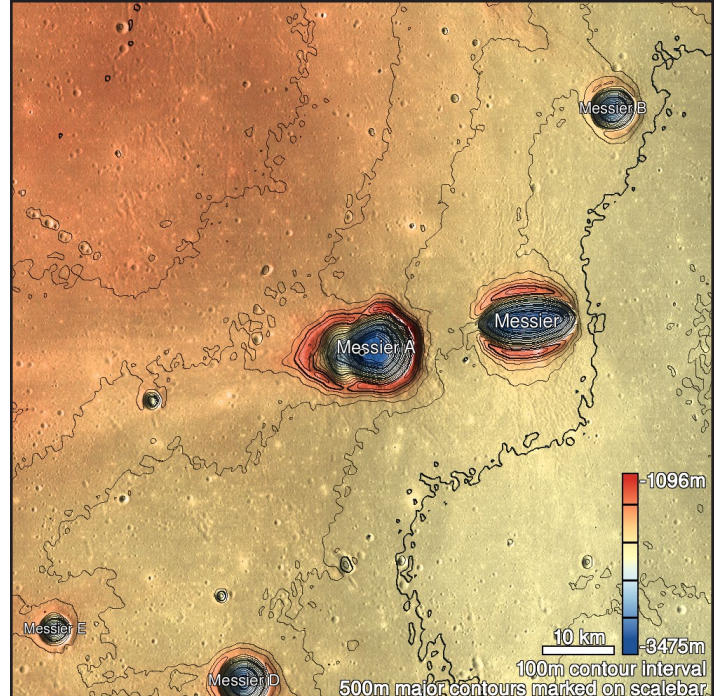
Wide pit with very bowl-shaped floor- much deeper in center than at edges. ~50 m NE of Messier A 2b. Several ~2-3m boulders on the floor. No entrance ramps. Several much larger fracture-associated pits ~150m to the NW, otherwise the immediate surroundings are very flat.

Messier A 4a

Impact Melt Fracture Pit: Messier A Crater



Upper left: NAC M126622485R. Upper right: NAC M185576460R. Lower left: NAC M159643869L. Lower right: Stereo anaglyph of NACs M190294287L (left eye, red) and M190287137L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Messier A 4a. Black dot marks the location of the pit.

Size and Location

Latitude	2.0440°S	Inner pit diameter	22 m × 9 m
Longitude	46.8825°E	Long axis azimuth	175°
Depth	14 m	Funnel diameter	33 m × 14 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	Yes
In Depression	No		

Measurement Source Images

Image ID	M126622485R	M185576460R	M159643869L
Incidence	24.74°	-14.27°	45.12°
Emission	1.25°	-1.74°	-2.94°
Time of Day	10.37	12.92	9.00
Pixel Scale	0.44 m/px	1.04 m/px	0.43 m/px
Depth	16.0 m	11.8 m	>8.5 m

Location reference: NAC M126622485R line 15398, sample 2687

Best stereo pair: M190294287L / M190287137L

Other useful images:

DTM:

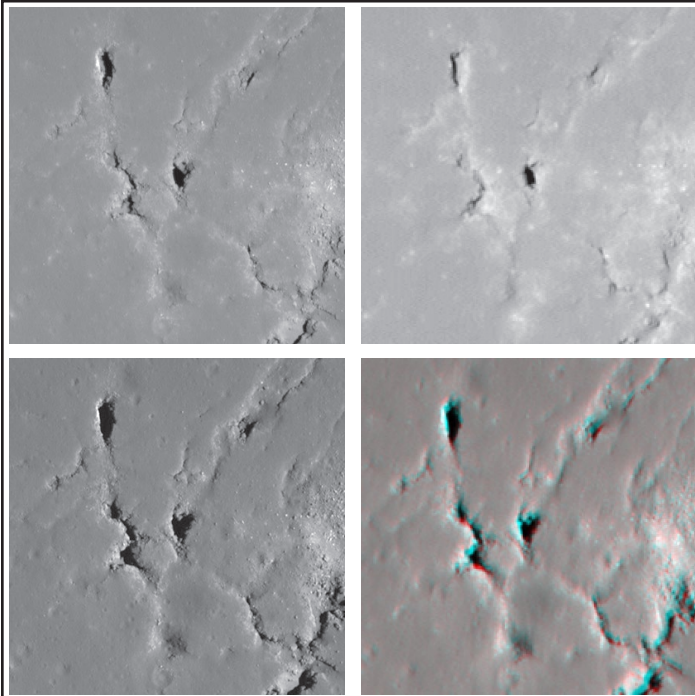
Data notes:

Description

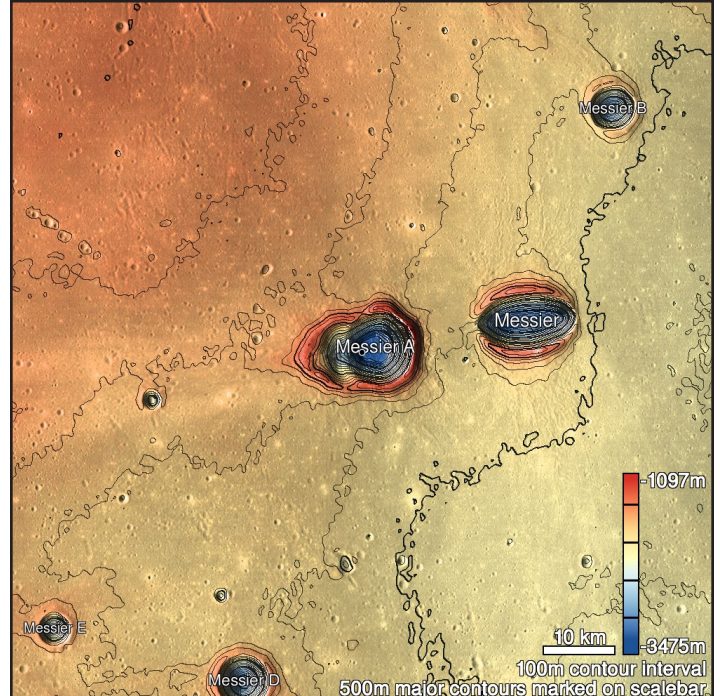
Elongated pit, clearly associated with a fracture system that covers most of a square kilometer, but is not itself attached to a fracture. There's a slight depression running south, where it joins up with some open fractures. There are a couple of other fracture-associate pits in the area of similar depth and lack of open fractures connected to them. Definitely a possibility for sub-surface passageways, if you don't mind falling dust.

Messier A 4b

Impact Melt Fracture Pit: Messier A Crater



Upper left: NAC M126622485R. Upper right: NAC M185576460R. Lower left: NAC M159643869L. Lower right: Stereo anaglyph of NACs M190294287L (left eye, red) and M190287137L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Messier A 4b. Black dot marks the location of the pit.

Size and Location

Latitude	2.0459°S	Inner pit diameter	16 m × 13 m
Longitude	46.8839°E	Long axis azimuth	155°
Depth	>20 m	Funnel diameter	NA m × 16 m

Measurement Source Images

Image ID	M126622485R	M185576460R	M159643869L
Incidence	24.73°	-14.27°	45.12°
Emission	1.19°	-1.77°	-2.99°
Time of Day	10.37	12.92	9.00
Pixel Scale	0.44 m/px	1.04 m/px	0.43 m/px
Depth	>13 m	>23 m	>11 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M126622485R line 15282, sample 2587

Best stereo pair: M190294287L / M190287137L

Other useful images:

DTM:

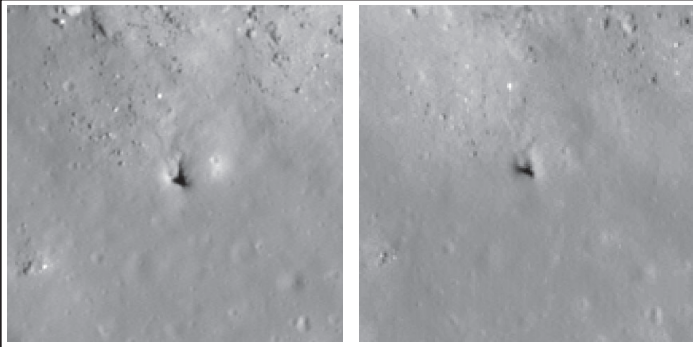
Data notes: No floor visible in any images.

Description

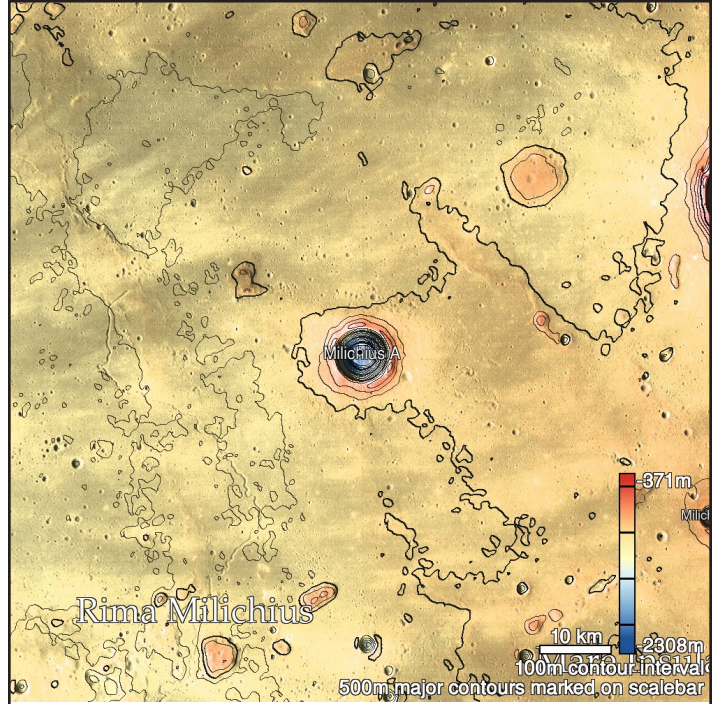
Like Messier 4a, but rounder, and with depressions running from both N and S ends to nearby open fractures. 60m SSE of Messier 4a.

Milichius A 1

Impact Melt Pit: Milichius A Crater



Upper left: NAC M1121450954R. Upper right: NAC M183739611R. Lower left: NAC . Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Milichius A 1. Black dot marks the location of the pit.

Size and Location

Latitude	9.2642°N	Inner pit diameter	17 m × 9 m
Longitude	327.9268°E	Long axis azimuth	135°
Depth	9 m	Funnel diameter	21 m × 14 m

Measurement Source Images

Image ID	M1121450954R	M183739611R	
Incidence	44.23°	-36.56°	
Emission	0.43°	-0.34°	
Time of Day	9.10	14.39	
Pixel Scale	1.11 m/px	1.25 m/px	
Depth	7.5 m	11.1 m	

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1121450954R line 21290, sample 1258

Best stereo pair: /

Other useful images:

DTM:

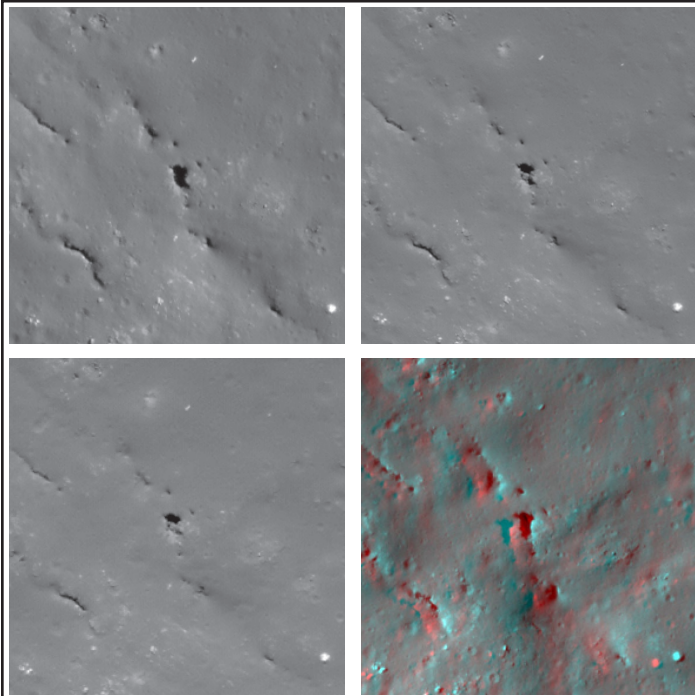
Data notes: In M1188565412L, pit is right on the edge of the shadow from the crater rim.

Description

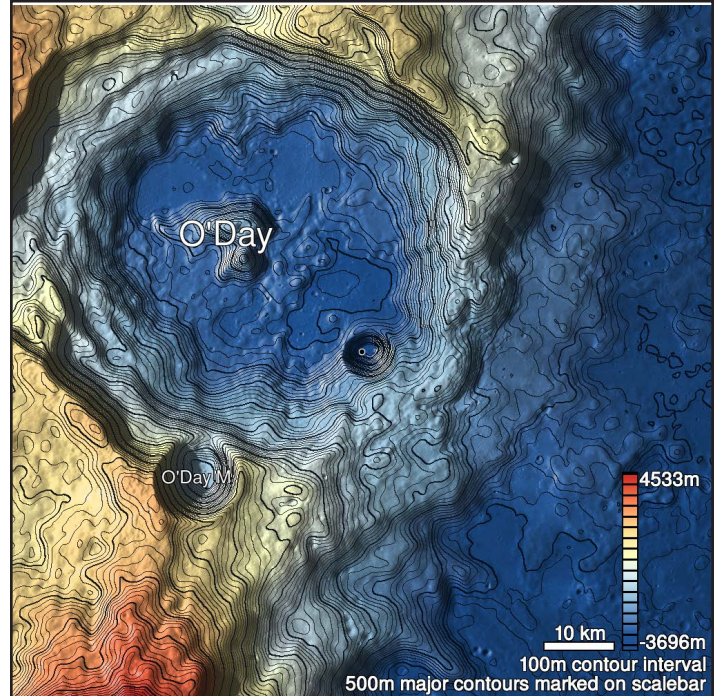
A roughly triangular pit. North wall appears to be a slope to the south and east walls, though it may not be traversable. Cannot see any floor that is not part of the north wall slope. ~50m SW of a ~300m long raised rocky feature, but otherwise nothing nearby.

Oday 1

Impact Melt Pit: Oday Crater



Upper left: NAC M112917460R. Upper right: NAC M125895771L. Lower left: NAC M1117842450L. Lower right: Stereo anaglyph of NACs M1250880175R (left eye, red) and M1250873142R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Oday 1. Black dot marks the location of the pit.

Size and Location

Latitude	30.9692°S	Inner pit diameter	17 m × 9 m
Longitude	158.0535°E	Long axis azimuth	145°
Depth	>7 m	Funnel diameter	20 m × 14 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Measurement Source Images

Image ID	M112917460R	M125895771L	M1117842450L
Incidence	51.07°	35.91°	32.33°
Emission	0.88°	-0.85°	1.79°
Time of Day	9.07	10.93	11.83
Pixel Scale	0.69 m/px	0.58 m/px	0.74 m/px
Depth	>6.6 m	>6.2 m	>7.6 m

Location reference: NAC M112917460R line 17934, sample 2033

Best stereo pair: M1250880175R / M1250873142R

Other useful images:

DTM:

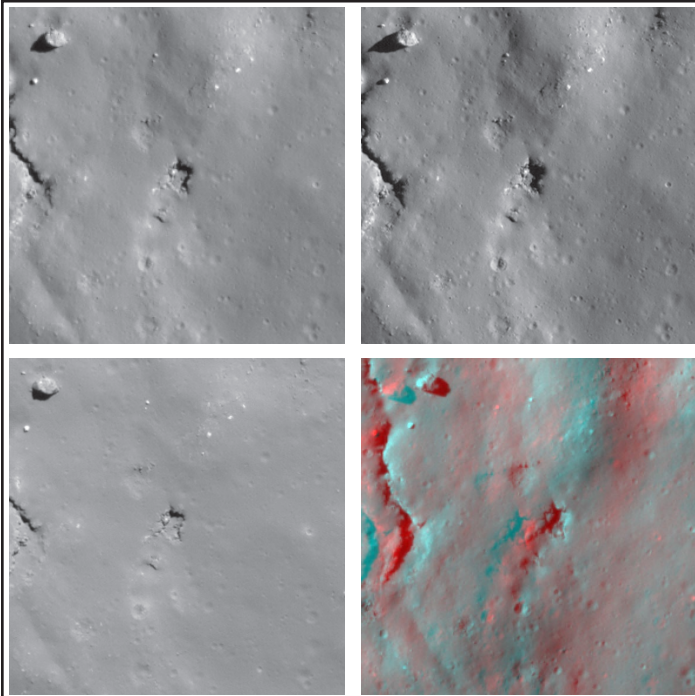
Data notes:

Description

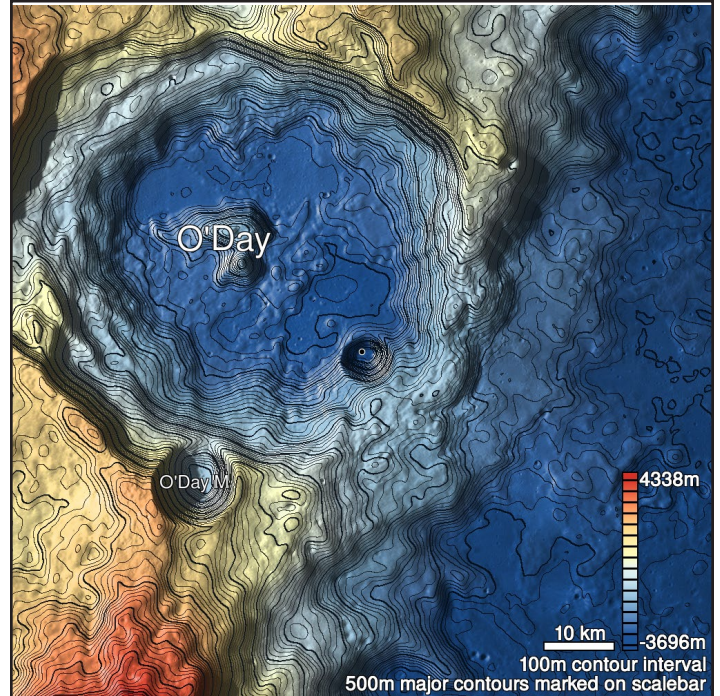
Comma-shaped pit in a region of NE-SW trending linear depressions/fractures. Southern end of pit is filled with boulders (tops ~6m below rim), northern end floor has never been visible. South end has a ramp leading into the boulder field. Several tiny probably pits surround this one.

Oday 2

Impact Melt Pit: Oday Crater



Upper left: NAC M112917460R. Upper right: NAC M176603102L. Lower left: NAC M125895771L. Lower right: Stereo anaglyph of NACs M1250880175R (left eye, red) and M1250873142R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Oday 2. Black dot marks the location of the pit.

Size and Location

Latitude	30.9463°S	Inner pit diameter	14 m × 12 m
Longitude	158.0644°E	Long axis azimuth	25°
Depth	4 m	Funnel diameter	34 m × 16 m

Measurement Source Images

Image ID	M112917460R	M176603102L	M125895771L
Incidence	51.05°	63.04°	35.89°
Emission	0.65°	-1.08°	-1.14°
Time of Day	9.07	8.11	10.93
Pixel Scale	0.69 m/px	0.53 m/px	0.58 m/px
Depth	4.0 m	4.1 m	4.7 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M112917460R line 16938, sample 1637

Best stereo pair: M1250880175R / M1250873142R

Other useful images:

DTM:

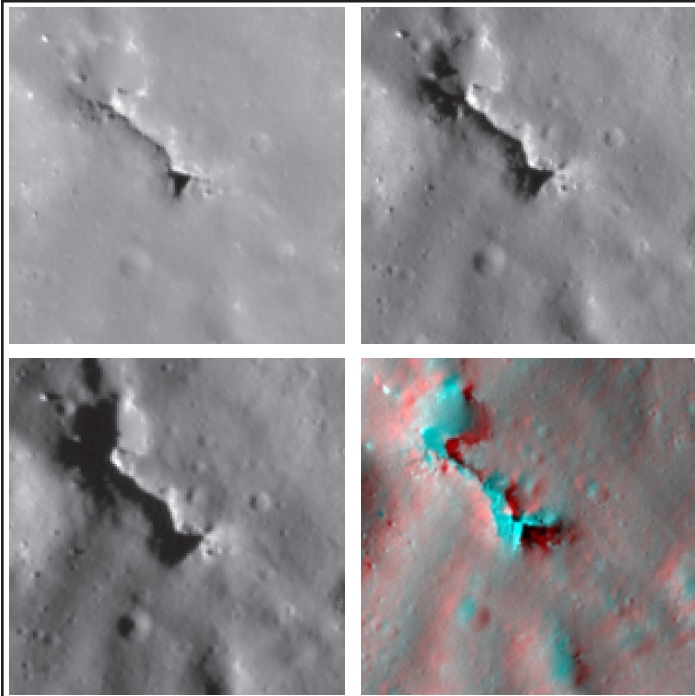
Data notes: All depths measured from NW wall (adjacent to PRF)

Description

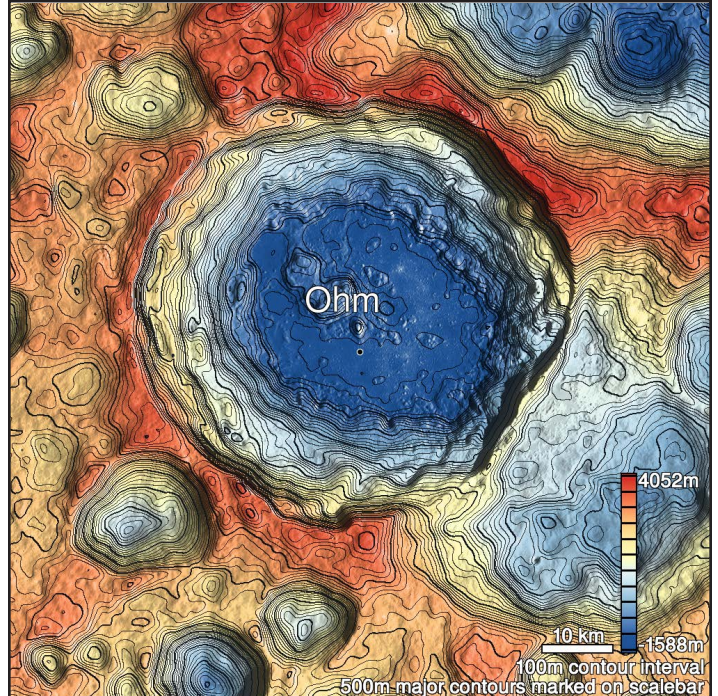
Rectangular pit ~150m from the crater wall, SW wall is a nearly uninterrupted slope to surface. There are more depressions and collapses to the SW suggesting a larger partially-collapsed void space, with possible uncollapsed bridge. Subtle PRF just to the NE. Linear collapse/fracture ~65m W.

Ohm 1

Impact Melt Fracture Pit: Ohm Crater



Upper left: NAC M184275909R. Upper right: NAC M181917051L. Lower left: NAC M102901755R. Lower right: Stereo anaglyph of NACs M1213833178L (left eye, red) and M1213819108L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Ohm 1. Black dot marks the location of the pit.

Size and Location

Latitude	18.0805°N	Inner pit diameter	15 m × 13 m
Longitude	246.3187°E	Long axis azimuth	130°
Depth	>16 m	Funnel diameter	31 m × 30 m

Measurement Source Images

Image ID	M184275909R	M181917051L	M102901755R
Incidence	-33.67°	-59.20°	-71.26°
Emission	-0.79°	1.83°	-1.60°
Time of Day	13.99	15.86	16.68
Pixel Scale	1.30 m/px	1.31 m/px	1.42 m/px
Depth	>16.5 m	>8.2 m	>10.9 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes?	Beside dome	No
Nearby pits	Yes?	Colinear pits	Yes?
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M184275909R line 20314, sample 1844

Best stereo pair: M1213833178L / M1213819108L

Other useful images:

DTM:

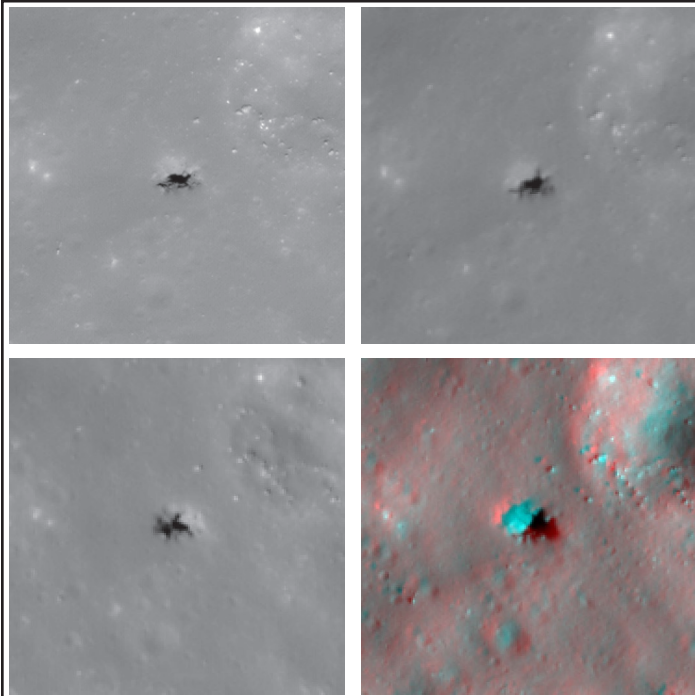
Data notes: No high-Sun images are non-slewed. Floor is only visible in 16 degree slewed image M125313001R, and complex lighting geometry makes shadow measurements from that image untenable.

Description

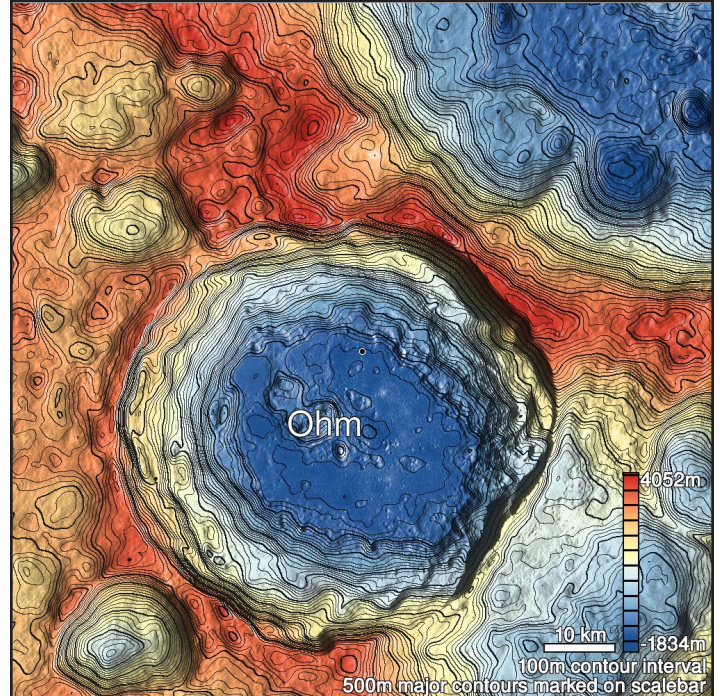
Triangular pit at the end of a ~57m fracture, which is in line with a larger set or arcuate fractures/collapses. Possible overhang of a meter or two revealed by slewed image in stereo pair. At other end of fracture is a 40x35m bean-shaped funnel, with lowest point at the opening into the fracture. Floor appears smooth.

Ohm 2

Impact Melt Pit: Ohm Crater



Upper left: NAC M140650524L. Upper right: NAC M1134934841R. Lower left: NAC M184275909R. Lower right: Stereo anaglyph of NACs M1213833178L (left eye, red) and M1213819108L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Ohm 2. Black dot marks the location of the pit.

Size and Location

Latitude	18.6687°N	Inner pit diameter	12 m × NA m
Longitude	246.4141°E	Long axis azimuth	75°
Depth	16 m	Funnel diameter	36 m × 26 m

Measurement Source Images

Image ID	M140650524L	M1134934841R	M184275909R
Incidence	20.31°	27.08°	-34.01°
Emission	-1.20°	1.17°	-1.83°
Time of Day	11.85	10.73	14.00
Pixel Scale	0.62 m/px	1.34 m/px	1.31 m/px
Depth	14.3 m	15.6 m	18.5 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No?		

Location reference: NAC M140650524L line 30040, sample 3402

Best stereo pair: M1213833178L / M1213819108L

Other useful images:

DTM:

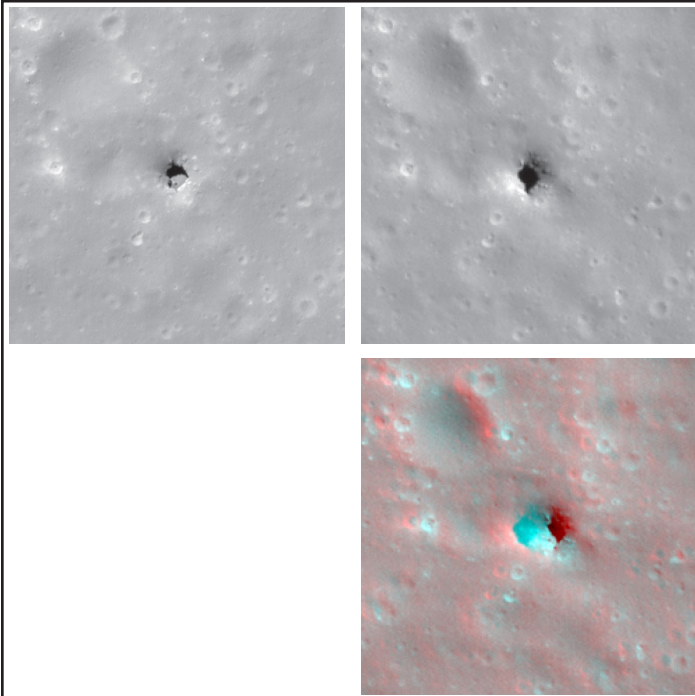
Data notes:

Description

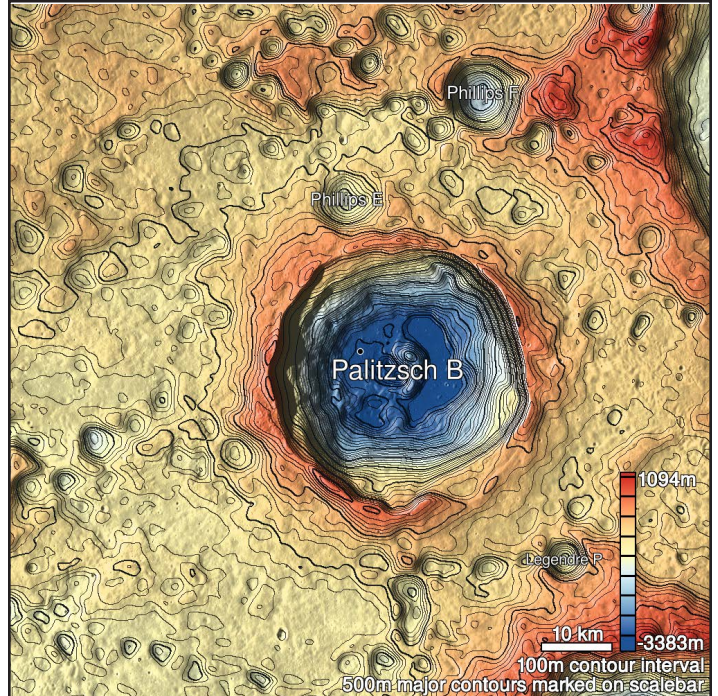
Irregular pit with very pronounced funnel. No visible floor in the available images. North wall appears to slope down to the south wall, may be traversable. There is a 150m long, 40m wide straight, round-bottomed depression lies ~100m NW. Possible subtle depression running parallel to that with Ohm 2 at its E end.

Palitzsch B 1

Impact Melt Pit: Palitzsch B Crater



Upper left: NAC M170118311R. Upper right: NAC M1105481938L. Lower left: NAC M1105489082R. Lower right: Stereo anaglyph of NACs M1105489082R (left eye, red) and M1105474794L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Palitzsch B 1. Black dot marks the location of the pit.

Size and Location

Latitude	26.3162°S	Inner pit diameter	15 m × 14 m
Longitude	68.1911°E	Long axis azimuth	175°
Depth	13 m	Funnel diameter	32 m × 28 m

Measurement Source Images

Image ID	M170118311R	M1105481938L	
Incidence	-29.87°	40.61°	
Emission	-0.95°	-1.80°	
Time of Day	13.16	9.81	
Resolution	0.54 m/px	0.86 m/px	
Depth	13.0 m	12.4 m	

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M170118311R line 9087, sample 2167

Best stereo pair: M1105489082R / M1105474794L

Other useful images:

DTM:

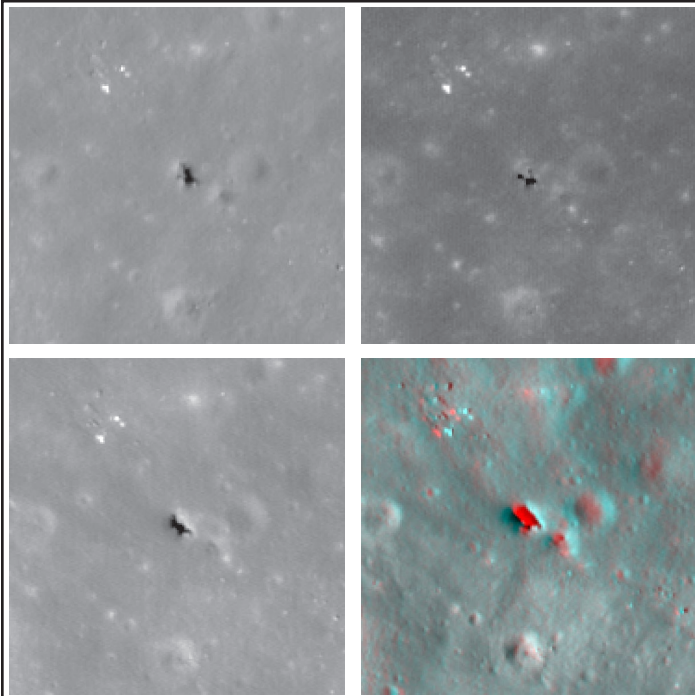
Data notes: Floor is only visible in two images.

Description

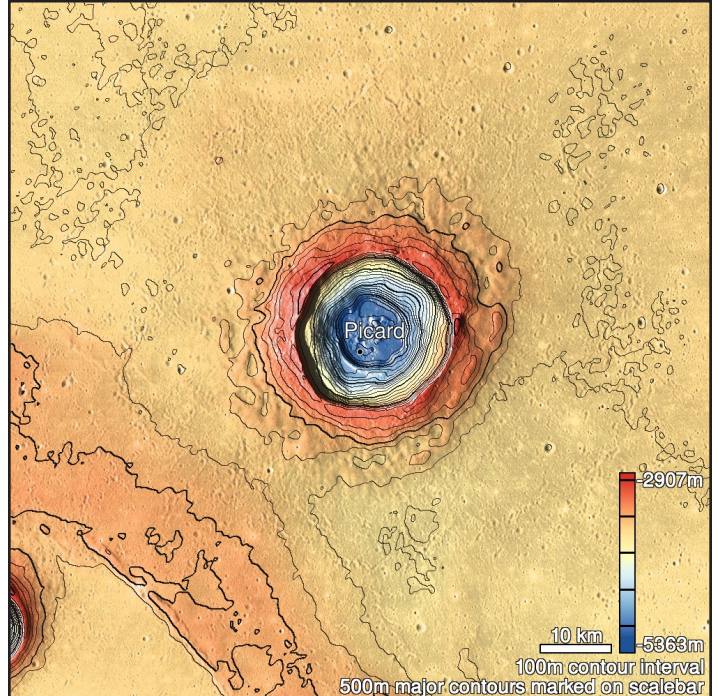
Heart-shaped pit, no collapsed walls, but a very pronounced funnel. One ~2m boulder visible on the floor, and several comparable boulders exposed in the funnel.

Picard 1

Impact Melt Pit: Picard Crater



Upper left: NAC M1166807824L. Upper right: NAC M1149153951L. Lower left: NAC M1131480463R. Lower right: Stereo anaglyph of NACs M1144452219R (left eye, red) and M1144437995R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Picard 1. Black dot marks the location of the pit.

Size and Location

Latitude	14.4714°N	Inner pit diameter	12 m × 8 m
Longitude	54.6591°E	Long axis azimuth	135°
Depth	10 m	Funnel diameter	25 m × 17 m

Measurement Source Images

Image ID	M1166807824L	M1149153951L	M1131480463R
Incidence	36.15°	15.54°	-26.53°
Emission	-1.12°	-1.96°	-0.18°
Time of Day	9.78	11.47	13.43
Resolution	1.23 m/px	1.22 m/px	1.27 m/px
Depth	6.8 m	15.0 m	8.0 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1166807824L line 39804, sample 3584

Best stereo pair: M1144452219R / M1144437995R

Other useful images: M134829026R

DTM:

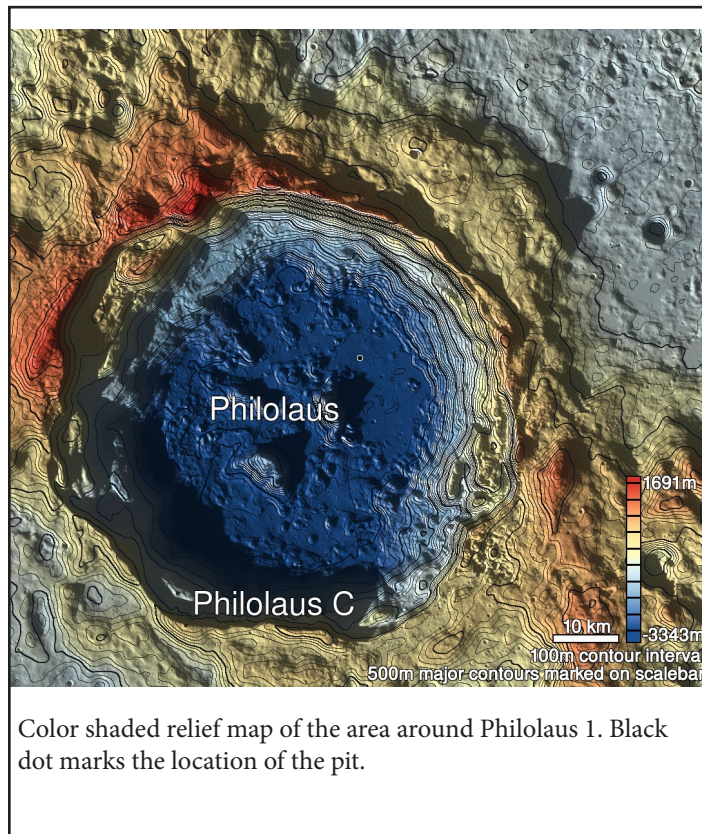
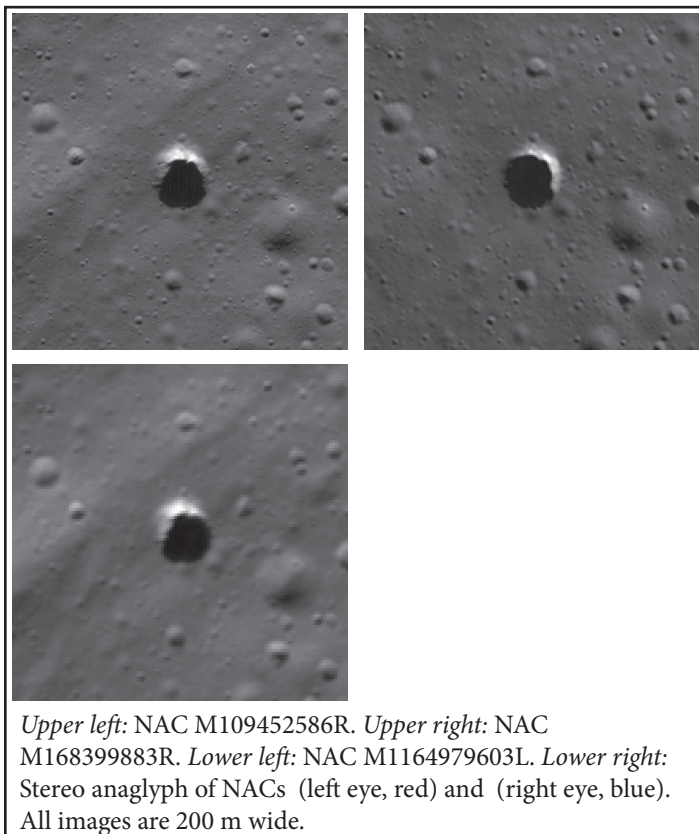
Data notes: All shadow measures are on <4px shadow lengths.

Description

Irregular pit, resolution in well-lit images is too low to make out details. No apparent collapsed walls, although there may be a boulder sticking out of the SW wall. In the middle of a very generic-looking cratered slope.

Philolaus 1

Impact Melt Pit: Philolaus Crater



Size and Location

Latitude	72.4657°N	Inner pit diameter	NA m × NA m
Longitude	328.5804°E	Long axis azimuth	180°
Depth	>8 m	Funnel diameter	37 m × 37 m

Measurement Source Images

Image ID	M109452586R	M168399883R	M1164979603L
Incidence	73.99°	-77.08°	74.14°
Emission	-0.15°	0.09°	-1.32°
Time of Day	11.87	14.31	10.82
Pixel Scale	0.62 m/px	0.74 m/px	1.71 m/px
Depth	>8.2 m	>8.0 m	>8.1 m

Other Features

Entrance Ramp	?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M109452586R line 35986, sample 455

Best stereo pair: /

Other useful images:

DTM:

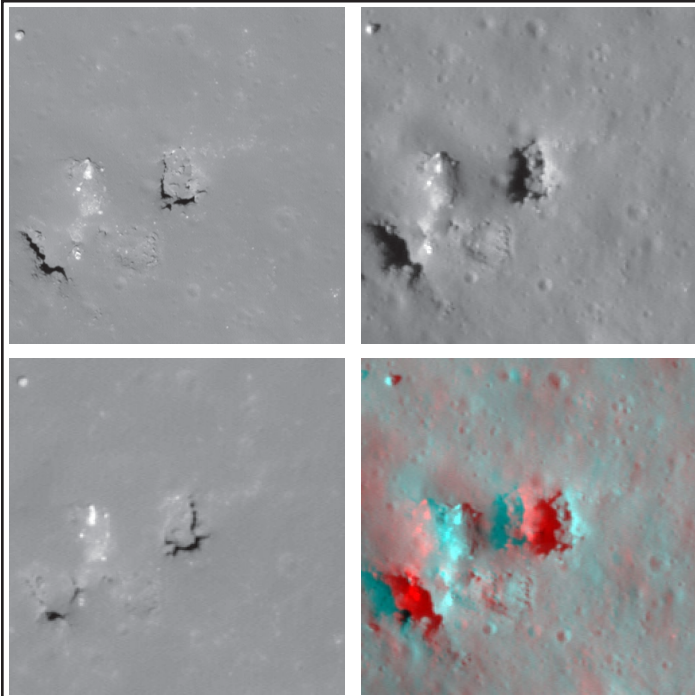
Data notes:

Description

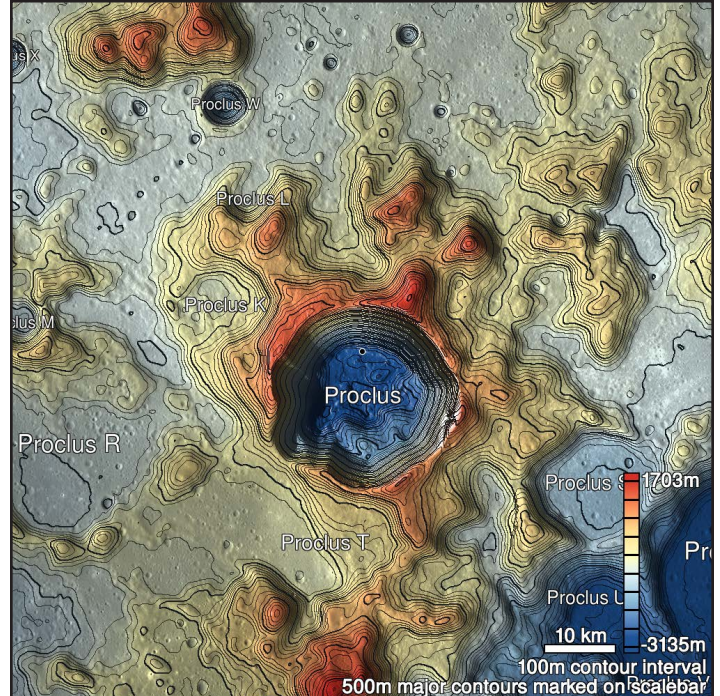
Round funnel. Sun is too low in all images to determine if there are vertical walls. Definitely too deep to be an impact crater. SW-NW trending depression (mostly, but not entirely, consisting of round depressions that may be degraded impact craters) is ~1 radius NE.

Proclus 1a

Impact Melt Pit: Proclus Crater



Upper left: NAC M139598775R. Upper right: NAC M1175105466L. Lower left: NAC M187935731R. Lower right: Stereo anaglyph of NACs M1175112574L (left eye, red) and M1175098358L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Proclus 1a. Black dot marks the location of the pit.

Size and Location

Latitude	16.2972°N	Inner pit diameter	33 m × 18 m
Longitude	46.8941°E	Long axis azimuth	135°
Depth	11 m	Funnel diameter	40 m × 32 m

Measurement Source Images

Image ID	M139598775R	M1175105466L	M187935731R
Incidence	-20.40°	-49.07°	20.04°
Emission	-0.80°	1.75°	1.46°
Time of Day	12.67	15.17	11.10
Pixel Scale	0.47 m/px	1.15 m/px	1.29 m/px
Depth	10.7 m	9.1 m	12.4 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	No?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M139598775R line 11581, sample 1926

Best stereo pair: M1175112574L / M1175098358L

Other useful images:

DTM:

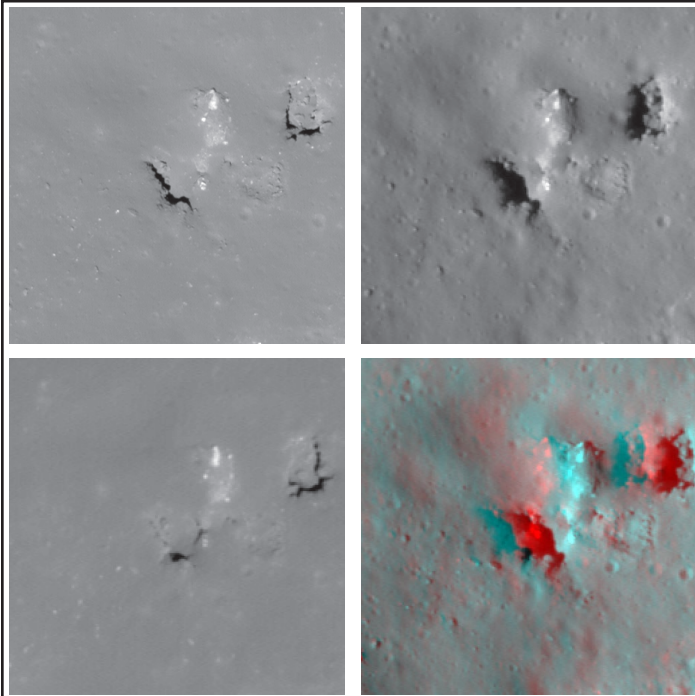
Data notes: Depth 3 may be high, due to combinations of high Sun and low resolution.

Description

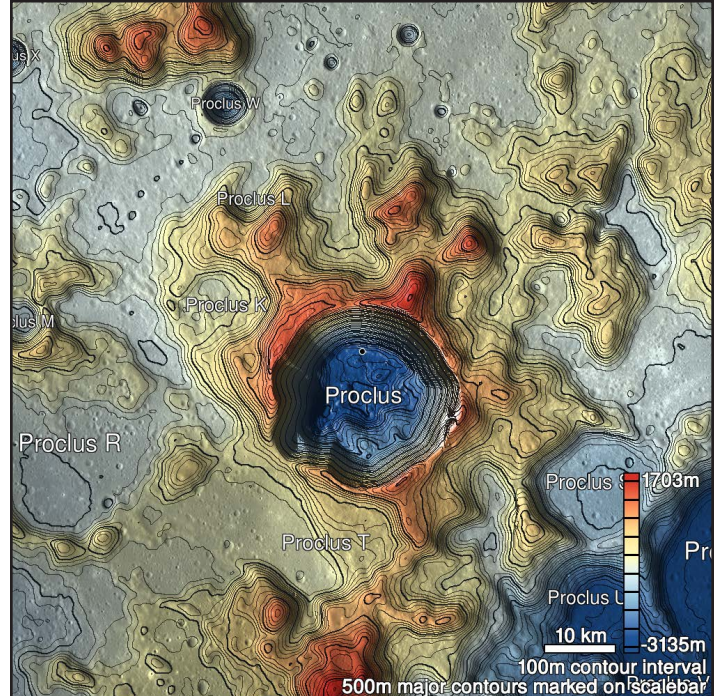
NE (and more clearly-defined) of a pair of pits ~65m apart. There is a ridge of rock (perhaps a half-buried boulder?), ~30m long, situated between them, and a series of subtle depressions loops around that rock to the NW. This pit has a few 2-8m boulders on the floor. A slewed image towards the east wall does not reveal any significant overhang, but that is the far wall from Proclus 1b and the other adjacent depressions. There is a shallow depression/cliff/fracture thing ~150m to the SE.

Proclus 1b

Impact Melt Pit: Proclus Crater



Upper left: NAC M139598775R. Upper right: NAC M1175105466L. Lower left: NAC M187935731R. Lower right: Stereo anaglyph of NACs M1175112574L (left eye, red) and M1175098358L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Proclus 1b. Black dot marks the location of the pit.

Size and Location

Latitude	16.2959°N	Inner pit diameter	36 m × 23 m
Longitude	46.8916°E	Long axis azimuth	175°
Depth	14 m	Funnel diameter	42 m × 30 m

Measurement Source Images

Image ID	M139598775R	M1175105466L	M187935731R
Incidence	-20.40°	-49.07°	20.04°
Emission	-0.71°	1.79°	1.50°
Time of Day	12.67	15.17	11.10
Pixel Scale	0.47 m/px	1.15 m/px	1.29 m/px
Depth	12.8 m	12.6 m	16.5 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M139598775R line 11654, sample 1768

Best stereo pair: M1175112574L / M1175098358L

Other useful images:

DTM:

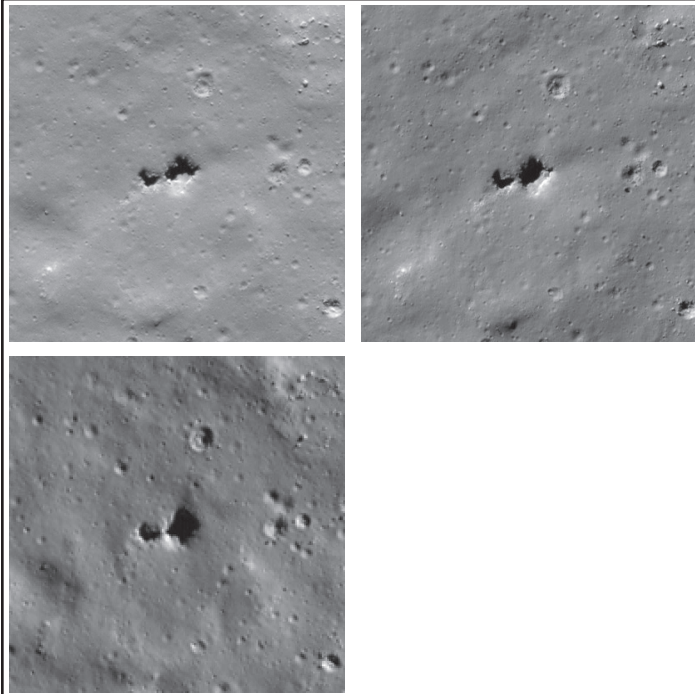
Data notes: Depth 3 may be high, due to combinations of high Sun and low resolution.

Description

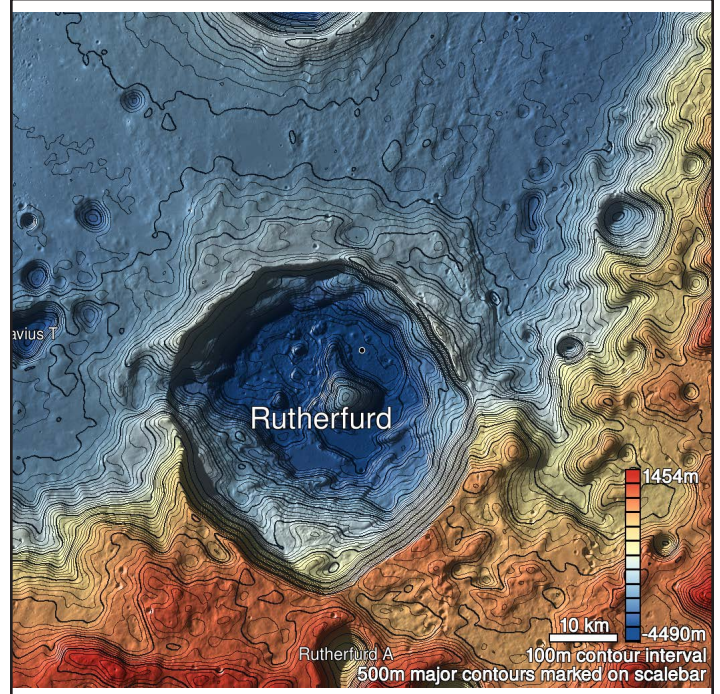
The SW pit of the Proclus 1 pair. The N and SE walls of this pit appear to be at least partially collapsed, and may be smooth down to floor level.

Rutherford 1a

Impact Melt Pit: Rutherford Crater



Upper left: NAC M109305653L. Upper right: NAC M168287020R. Lower left: NAC M114024557R. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Rutherford 1a. Black dot marks the location of the pit.

Size and Location

Latitude	60.7788°S	Inner pit diameter	14 m × 13 m
Longitude	348.1876°E	Long axis azimuth	70°
Depth	5 m	Funnel diameter	18 m × 17 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No?
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109305653L	M168287020R	M114024557R
Incidence	59.32°	-66.14°	73.87°
Emission	-0.75°	-1.73°	2.45°
Time of Day	11.80	14.56	8.15
Pixel Scale	0.53 m/px	0.44 m/px	0.79 m/px
Depth	5.6 m	4.7 m	>3.4 m

Location reference: NAC M109305653L line 5001, sample 4150

Best stereo pair: /

Other useful images: M1361100396L, M13202480613R

DTM:

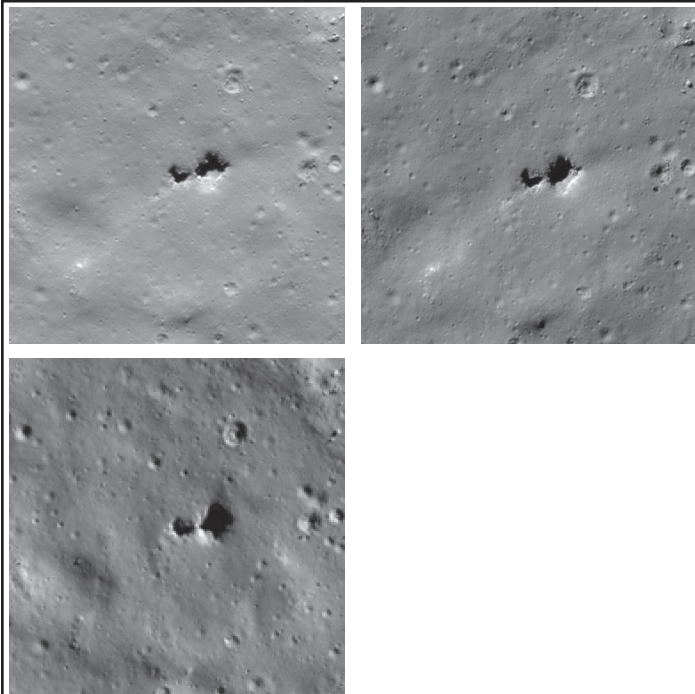
Data notes:

Description

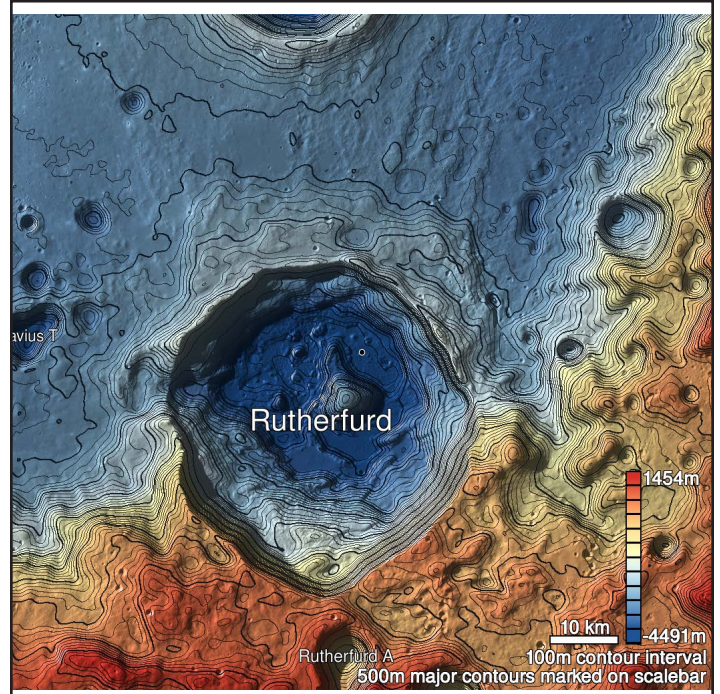
Larger of a pair of adjacent pits. Roughly square, with walls oriented ~45 degrees away from a line drawn through the pair of pits. Has a clear floor, appears to have a slope running from south corner to floor, maybe traversable. May be in a very subtle depression that is aligned with the pair of pits, but I think that's an optical illusion. ~300m ENE roughly along the line of the pits is another cliff/depression/collapse (Rutherford 3).

Rutherford 1b

Impact Melt Pit: Rutherford Crater



Upper left: NAC M109305653L. Upper right: NAC M168287020R. Lower left: NAC M114024557R. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Rutherford 1b. Black dot marks the location of the pit.

Size and Location

Latitude	60.7789°S	Inner pit diameter	9 m × NA m
Longitude	348.1862°E	Long axis azimuth	65°
Depth	>3 m	Funnel diameter	15 m × 14 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No?
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109305653L	M168287020R	M114024557R
Incidence	59.32°	-66.14°	73.87°
Emission	-0.73°	-1.70°	2.48°
Time of Day	11.80	14.56	8.15
Pixel Scale	0.53 m/px	0.44 m/px	0.79 m/px
Depth	>2.8 m	>3.3 m	>1.8 m

Location reference: NAC M109305653L line 5008, sample 4184

Best stereo pair: /

Other useful images: M1361100396L, M13202480613R

DTM:

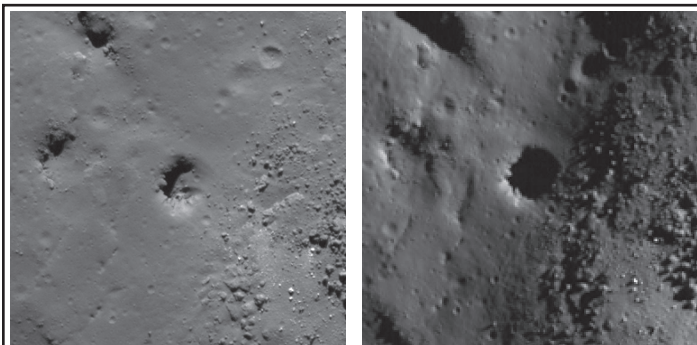
Data notes:

Description

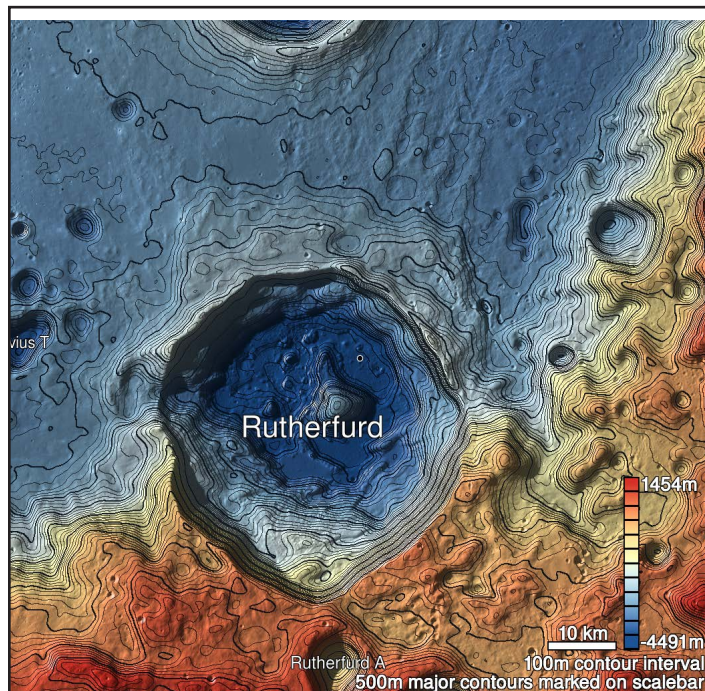
Smaller of the Rutherford 1 pair, may just be a cliff, not a pit- data is ambiguous. The pair is probably not a bridge, as I think that some light would pass under it visibly in M114024557R, but nothing is visible.

Rutherford 2

Impact Melt Pit: Rutherford Crater



Upper left: NAC M109305653L. Upper right: NAC M114024557R. Lower left: NAC. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Rutherford 2. Black dot marks the location of the pit.

Size and Location

Latitude	60.7757°S	Inner pit diameter	24 m × 19 m
Longitude	348.2530°E	Long axis azimuth	10°
Depth	9 m	Funnel diameter	36 m × 30 m

Measurement Source Images

Image ID	M109305653L	M114024557R	
Incidence	59.31°	73.84°	
Emission	-1.84°	1.38°	
Time of Day	11.81	8.15	
Pixel Scale	0.53 m/px	0.79 m/px	
Depth	8.9 m	>9 m	

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M109305653L line 4795, sample 2305

Best stereo pair: /

Other useful images: M1361100396L, M13202480613R

DTM:

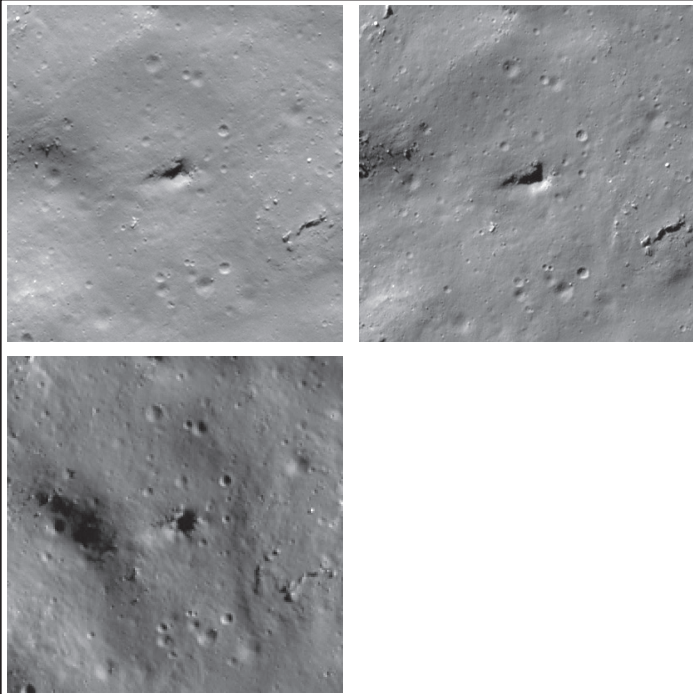
Data notes:

Description

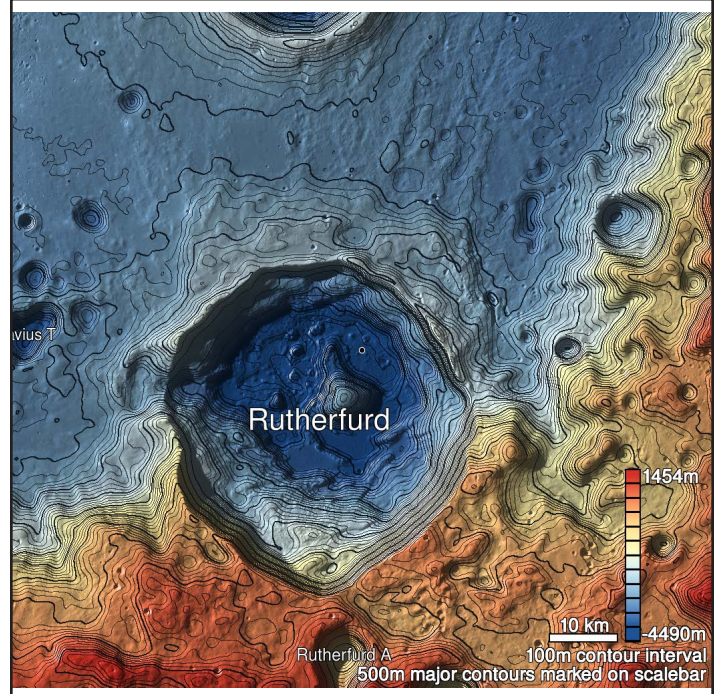
Round pit, east wall slopes down to floor. There's a ~200m long, 35m wide, ~7m deep linear depression running NW/SE starting ~60m to the NW, and a few more round to elliptical depressions with some degree of vertical wall/rim outcropping running in a chain ~50m south of that.

Rutherford 3

Uncertain Impact Melt Pit: Rutherford Crater



Upper left: NAC M109305653L. Upper right: NAC M168287020R. Lower left: NAC M114024557R. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Rutherford 3. Black dot marks the location of the pit.

Size and Location

Latitude	60.7751°S	Inner pit diameter	18 m × 8 m
Longitude	348.2076°E	Long axis azimuth	70°
Depth	3 m	Funnel diameter	31 m × 18 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109305653L	M168287020R	M114024557R
Incidence	59.31°	-66.14°	73.86°
Emission	-1.08°	-2.12°	2.13°
Time of Day	11.80	14.56	8.15
Pixel Scale	0.53 m/px	0.44 m/px	0.79 m/px
Depth	3.9 m	3.3 m	3.5 m

Location reference: NAC M109305653L line 4791, sample 3587

Best stereo pair: /

Other useful images: M1361100396L, M13202480613R

DTM:

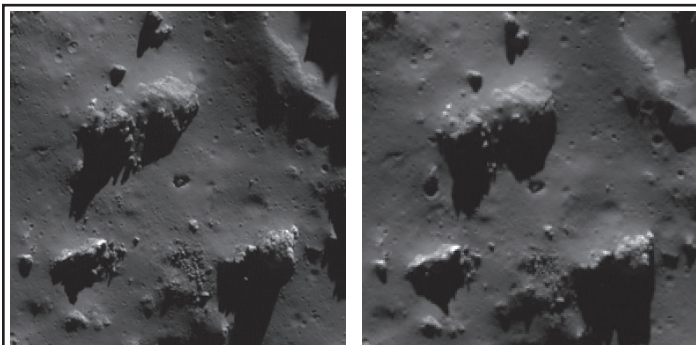
Data notes:

Description

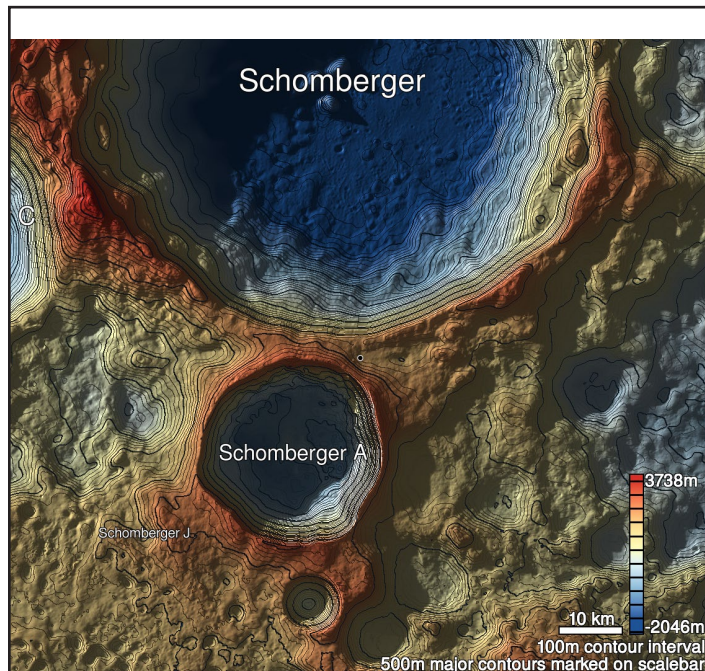
Collapse ~300m ENE of Rutherford 1a/b, roughly in line with those two pits. Only north wall is vertical (and maybe a few meters of SE wall), others are slopes.

Schomberger A 1

Impact Melt Pit: Schomberger A Crater



Upper left: NAC M188041160L. Upper right: NAC M1164712203R. Lower left: NAC. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Schomberger A 1. Black dot marks the location of the pit.

Size and Location

Latitude	78.0579°S	Inner pit diameter	10 m × 6 m
Longitude	25.3441°E	Long axis azimuth	70°
Depth	>1.4 m	Funnel diameter	13 m × 9 m

Measurement Source Images

Image ID	M188041160L	M1164712203R	
Incidence	80.07°	-77.16°	
Emission	-1.21°	1.73°	
Time of Day	10.65	12.09	
Pixel Scale	0.47 m/px	0.73 m/px	
Depth	>1 m	>1.4 m	

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No?	Colinear fractures	No
In Depression	No		

Location reference: NAC M188041160L line 38860, sample 1673

Best stereo pair: /

Other useful images:

DTM:

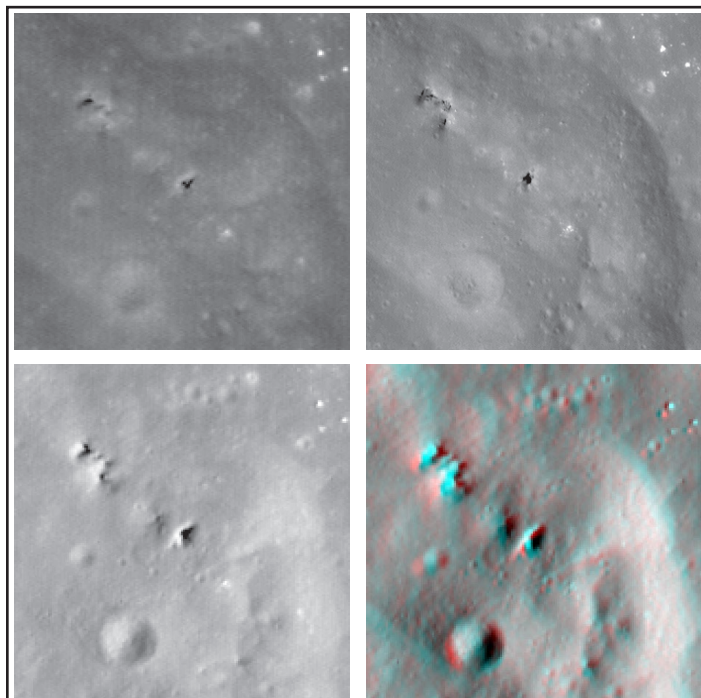
Data notes: In M124414905L and M170411216L, the north rim of the pit is covered by a shadow from a nearby hill.

Description

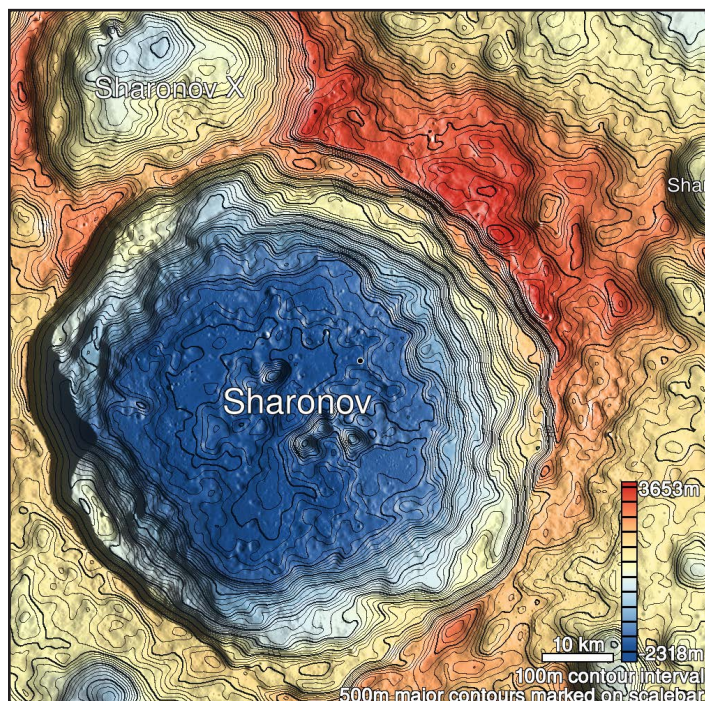
An apparent pit with a very large boulder in the middle (~3m wide visible, but that fills much of the pit). Due to the latitude, no floor is visible, but the rim morphology is a classic pit. Immediate surroundings are flat, but it's in the middle of a field of ~50m long hill/ boulder things.

Sharonov 1a

Impact Melt Pit: Sharonov Crater



Upper left: NAC M1148378060R. Upper right: NAC M154100698R. Lower left: NAC M1150734112L. Lower right: Stereo anaglyph of NACs M1107145968R (left eye, red) and M1107131676R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Sharonov 1a. Black dot marks the location of the pit.

Size and Location

Latitude	12.5745°N	Inner pit diameter	7 m × 6 m
Longitude	173.4036°E	Long axis azimuth	20°
Depth	>12 m	Funnel diameter	19 m × 13 m

Measurement Source Images

Image ID	M1148378060R	M154100698R	M1150734112L
Incidence	-11.53°	-21.97°	28.91°
Emission	-0.15°	-0.52°	-1.67°
Time of Day	12.09	13.28	10.23
Pixel Scale	1.30 m/px	0.58 m/px	1.31 m/px
Depth	21.0 m	>13.8 m	>10 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1148378060R line 12903, sample 747

Best stereo pair: M1107145968R / M1107131676R

Other useful images:

DTM:

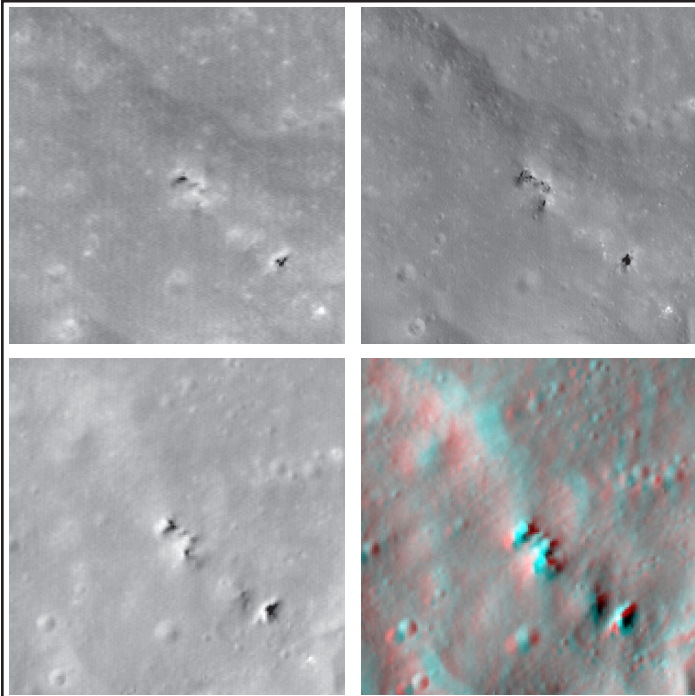
Data notes: Depth 1 may be high, due to combinations of high Sun and low resolution. All measurements may be affected by low resolutions.

Description

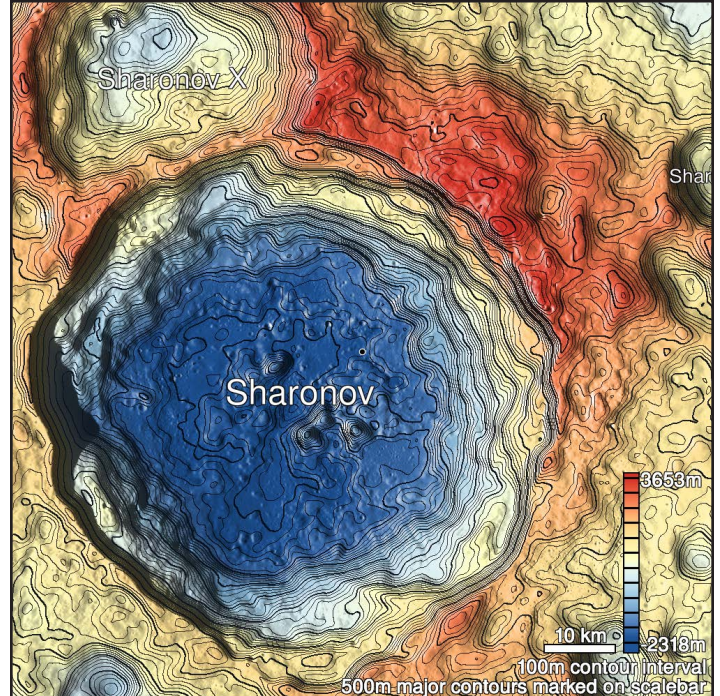
Small pit with no apparent wall collapses, and probably no floor visible. Located on top of what appears to be a wrinkle ridge. ~75m further NW along the ridge is a cluster of depressions/pit/collapses, including Sharonov 1b.

Sharonov 1b

Impact Melt Pit: Sharonov Crater



Upper left: NAC M1148378060R. Upper right: NAC M154100698R. Lower left: NAC M1150734112L. Lower right: Stereo anaglyph of NACs M1107145968R (left eye, red) and M1107131676R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Sharonov 1b. Black dot marks the location of the pit.

Size and Location

Latitude	12.5762°N	Inner pit diameter	7 m × 6 m
Longitude	173.4015°E	Long axis azimuth	45°
Depth	8 m	Funnel diameter	15 m × 12 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1148378060R	M154100698R	M1150734112L
Incidence	-11.53°	-21.97°	28.92°
Emission	-0.12°	-0.46°	-1.64°
Time of Day	12.09	13.28	10.23
Pixel Scale	1.30 m/px	0.58 m/px	1.31 m/px
Depth	13.0 m	4.5 m	6.7 m

Location reference: NAC M1148378060R line 12963, sample 700

Best stereo pair: M1107145968R / M1107131676R

Other useful images:

DTM:

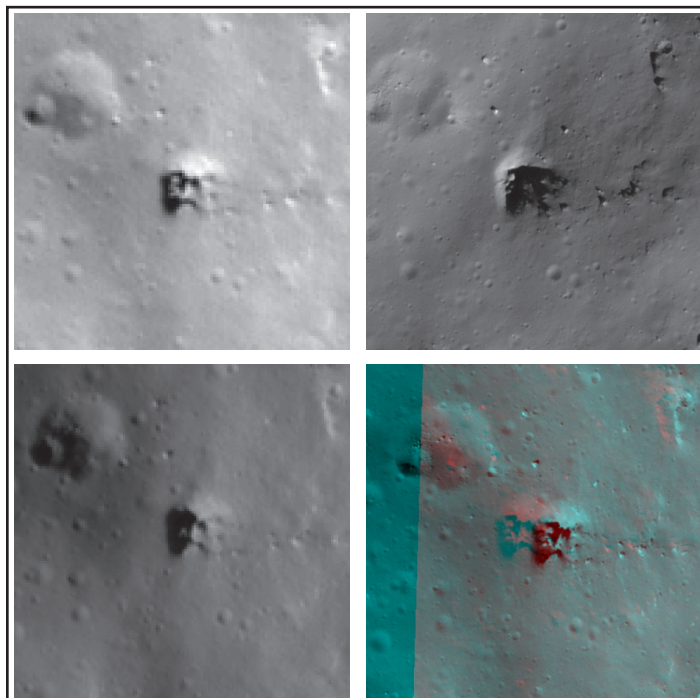
Data notes: Depth 1 may be high, due to combinations of high Sun and low resolution. All measurements may be affected by low resolutions.

Description

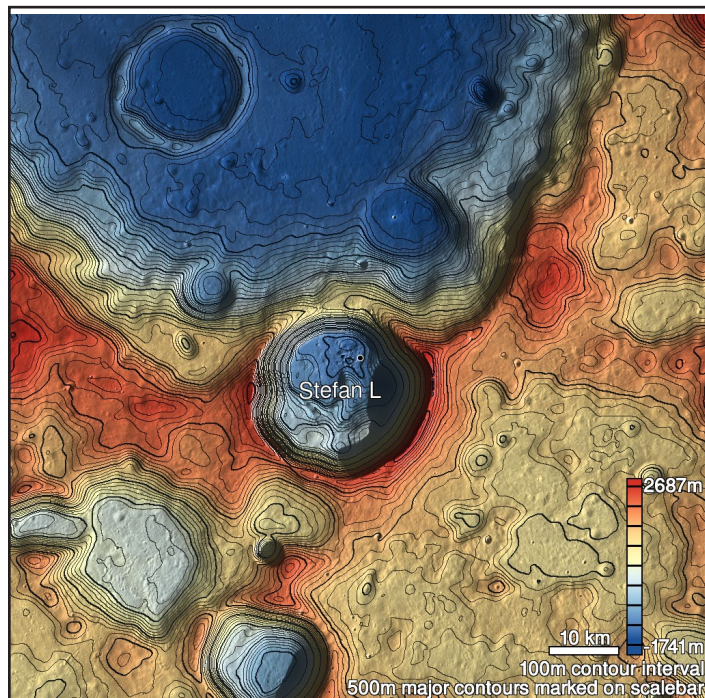
Rounder and shallower pit than Sharonov 1a. SW wall appears to be a rough slope down to the floor, possibly traversable. One visible 2m boulder on the floor. Two other notable depressions adjacent (funnels have merged), but neither appears to have collapsed to the point of having vertical walls.

Stefan L 1

Uncertain Impact Melt Pit: Stefan L Crater



Upper left: NAC M1099544198L. Upper right: NAC M158307753L. Lower left: NAC M1189042601L. Lower right: Stereo anaglyph of NACs M153592303L (left eye, red) and M153585515L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stefan L 1. Black dot marks the location of the pit.

Size and Location

Latitude	44.5370°N	Inner pit diameter	16 m × N/A m
Longitude	252.0302°E	Long axis azimuth	30°
Depth	13 m	Funnel diameter	41 m × 39 m

Measurement Source Images

Image ID	M1099544198L	M158307753L	M1189042601L
Incidence	-54.35°	50.34°	-69.35°
Emission	1.24°	-1.02°	0.77°
Time of Day	14.16	10.07	15.91
Pixel Scale	1.68 m/px	0.51 m/px	1.40 m/px
Depth	4.1 m	19.4 m	7.0 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1099544198L line 34806, sample 3457

Best stereo pair: M153592303L / M153585515L

Other useful images:

DTM:

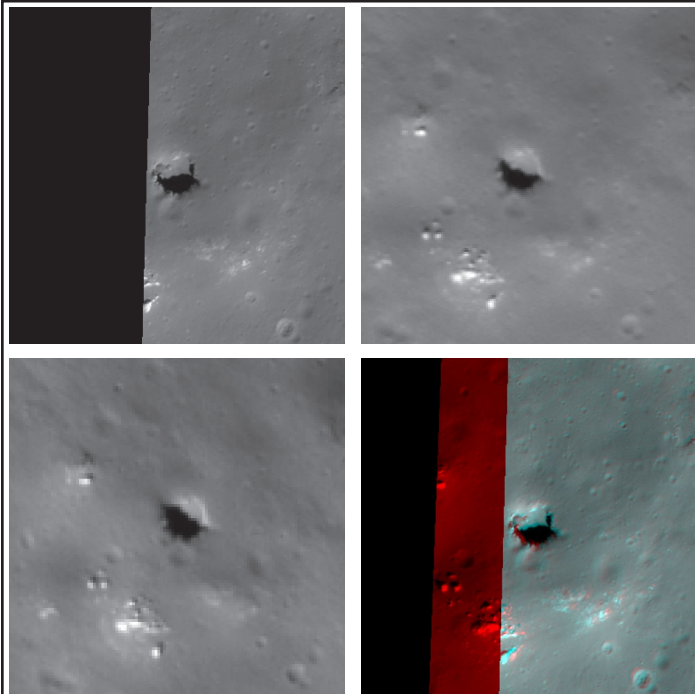
Data notes: Depth 1 is from lowest boulder to north wall. Depth 2 is from top of southern funnel to part-way down the north wall, Depth 3 is from west wall to similar location.

Description

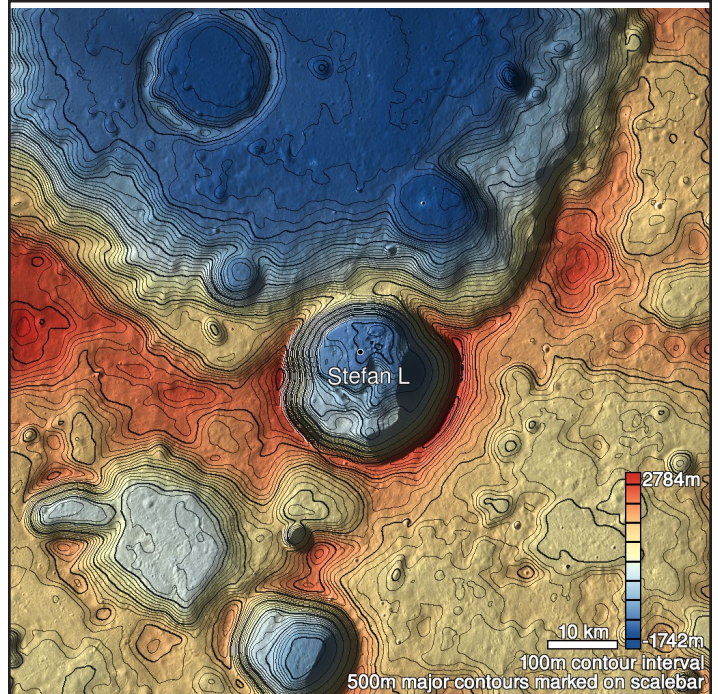
Semicircular pit/cliff. North wall is a smooth slope, south half is a series of large (~8m) boulders descending towards the north. No clear floor or vertical walls other than the boulders. May not actually qualify as a pit, but it's definitely some sort of collapse. Is on the north side of a small rise, but no other collapse/depression features in the area.

Stefan L 2

Impact Melt Pit: Stefan L Crater



Upper left: NAC M158307753R. Upper right: NAC M1132531922L. Lower left: NAC M1099544198L. Lower right: Stereo anaglyph of NACs M158314541R (left eye, red) and M158307753R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stefan L 2. Black dot marks the location of the pit.

Size and Location

Latitude	44.4982°N	Inner pit diameter	20 m × 19 m
Longitude	251.8344°E	Long axis azimuth	80°
Depth	10 m	Funnel diameter	30 m × 28 m

Measurement Source Images

Image ID	M158307753R	M1132531922L	M1099544198L
Incidence	50.39°	-46.30°	-54.23°
Emission	3.83°	1.75°	2.84°
Time of Day	10.06	12.47	14.15
Pixel Scale	0.51 m/px	1.58 m/px	1.68 m/px
Depth	8.7 m	10.5 m	10.1 m

Other Features

Entrance Ramp	No	In dome	No?
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M158307753R line 25565, sample 4981

Best stereo pair: M158314541R / M158307753R

Other useful images:

DTM:

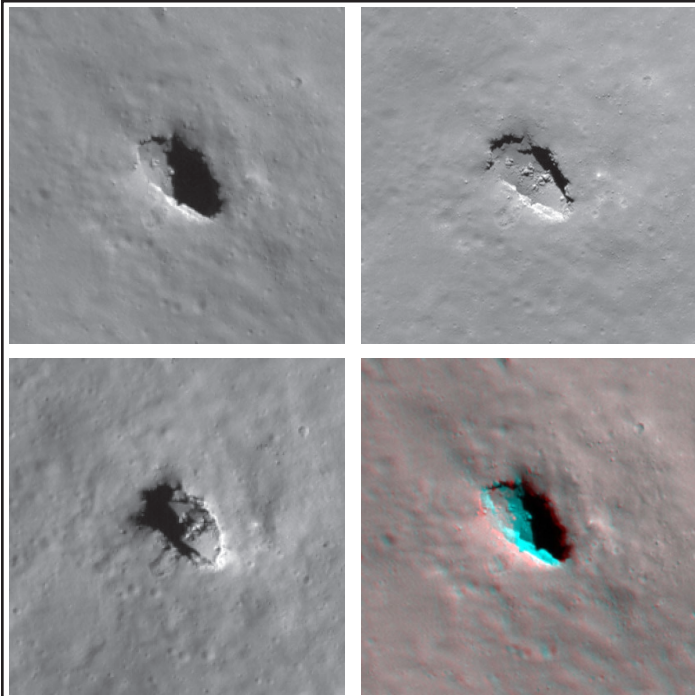
Data notes:

Description

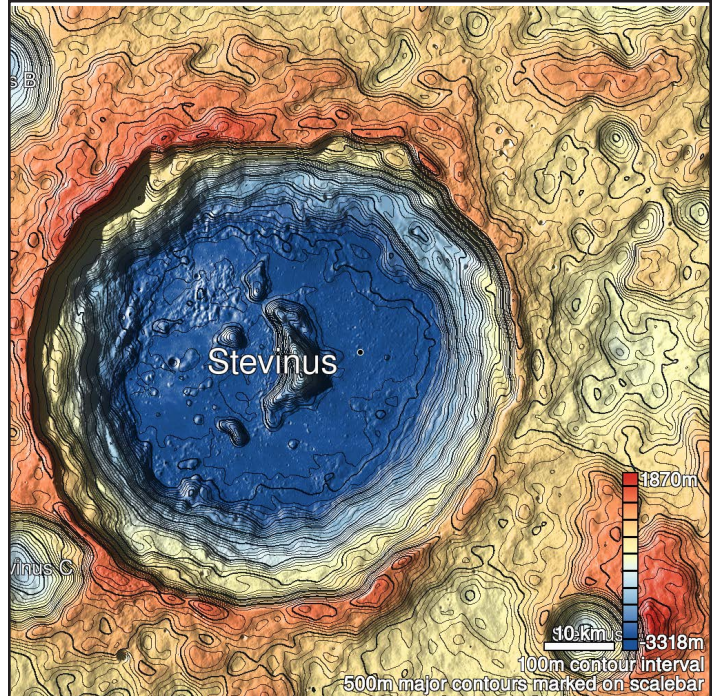
Roughly square pit. No collapsed walls, but floor is slightly rounded up at least at the NE corner. Some 3-7m boulders in the NW corner. Nearby terrain is somewhat lumpy, but no obvious depressions or collapses.

Stevinus 1

Impact Melt Pit: Stevinus Crater



Upper left: NAC M1105574923R. Upper right: NAC M124212055L. Lower left: NAC M1098502551R. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 1. Black dot marks the location of the pit.

Size and Location

Latitude	32.4259°S	Inner pit diameter	60 m × 33 m
Longitude	54.6378°E	Long axis azimuth	135°
Depth	16 m	Funnel diameter	69 m × 39 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No?
Nearby depressions	No?	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1105574923R	M124212055L	M1098502551R
Incidence	0.00°	-34.04°	-54.55°
Emission	0.00°	0.66°	-2.11°
Time of Day	0.00	12.20	15.19
Pixel Scale	0.00 m/px	0.43 m/px	0.81 m/px
Depth	12.4 m	20.0 m	15.9 m

Location reference: NAC M1105574923R line 21668, sample 3248

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

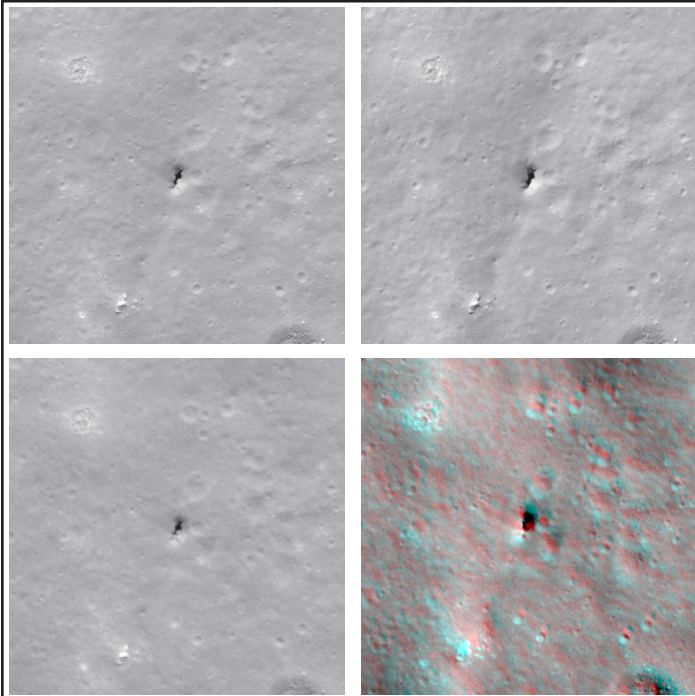
Data notes:

Description

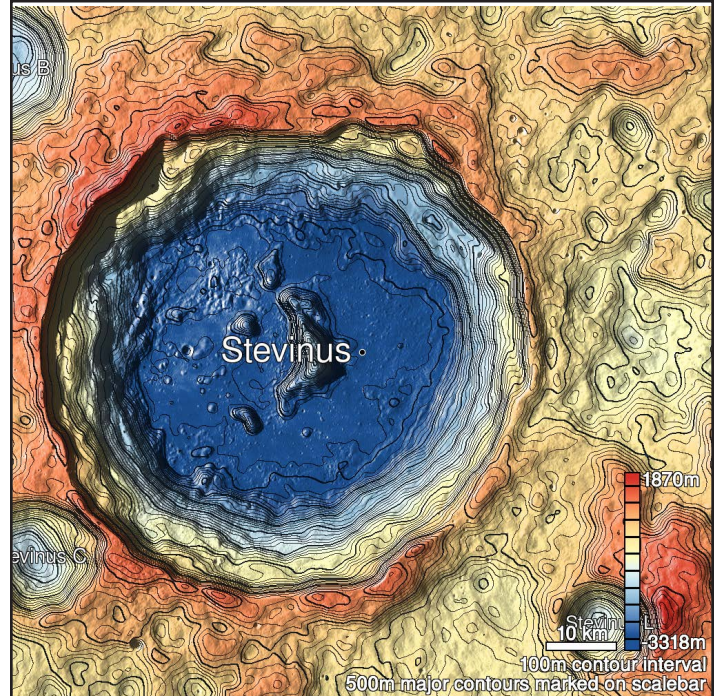
Elliptical pit. The floor slopes down from west to east, coming within a couple meters of the rim at the west end. There are a few clusters of 1-5m boulders on the floor. May be in a very subtle rise. No other collapses or depressions in the area.

Stevinus 2

Impact Melt Pit: Stevinus Crater



Upper left: NAC M124212055L. Upper right: NAC M1116158959L. Lower left: NAC M1103217633L. Lower right: Stereo anaglyph of NACs M1105567778R (left eye, red) and M1151494998L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 2. Black dot marks the location of the pit.

Size and Location

Latitude	32.4828°S	Inner pit diameter	9 m × 4 m
Longitude	54.5722°E	Long axis azimuth	15°
Depth	>7 m	Funnel diameter	22 m × 18 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M124212055L	M1116158959L	M1103217633L
Incidence	-34.09°	-37.55°	31.70°
Emission	2.95°	2.57°	-2.82°
Time of Day	12.20	13.12	11.61
Pixel Scale	0.43 m/px	0.60 m/px	0.80 m/px
Depth	>5.9 m	>6.2 m	>8.1 m

Location reference: NAC M124212055L line 41146, sample 397

Best stereo pair: M1105567778R / M1151494998L

Other useful images:

DTM:

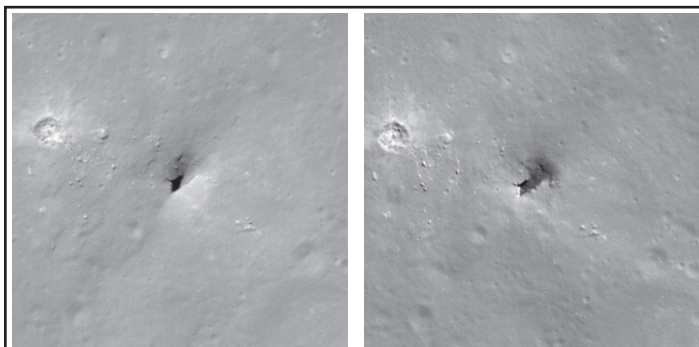
Data notes: Stereo is accidental, and may not be useful for anything other than manual viewing.

Description

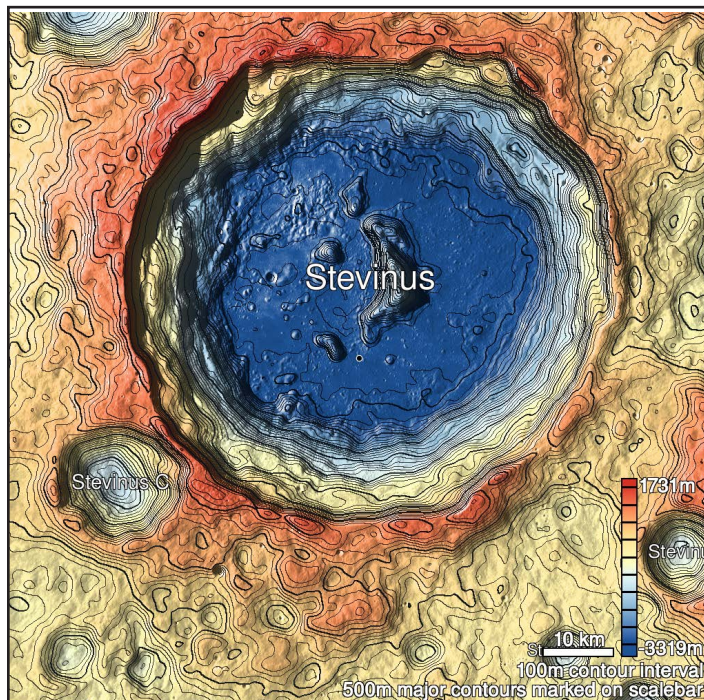
Very narrow pit in a subtle N-S trending depression, with the long axis of the pit oriented along the depression. No floor visible. No other collapses in the area.

Stevinus 3

Impact Melt Pit: Stevinus Crater



Upper left: NAC M170213482R. Upper right: NAC M111240262R. Lower left: NAC M1190372454L. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 3. Black dot marks the location of the pit.

Size and Location

Latitude	32.8592°S	Inner pit diameter	15 m × 6 m
Longitude	54.0796°E	Long axis azimuth	40°
Depth	9 m	Funnel diameter	56 m × 45 m

Measurement Source Images

Image ID	M170213482R	M111240262R	M1190372454L
Incidence	-35.00°	38.64°	-55.43°
Emission	-2.00°	0.86°	1.47°
Time of Day	13.11	10.39	15.26
Pixel Scale	0.56 m/px	0.61 m/px	0.64 m/px
Depth	9.0 m	>6.8 m	>8.3 m

Other Features

Entrance Ramp	Yes	In dome	No?
Overhang	?	Beside dome	Yes?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	Yes		

Location reference: NAC M170213482R line 45861, sample 3955

Best stereo pair: /

Other useful images:

DTM:

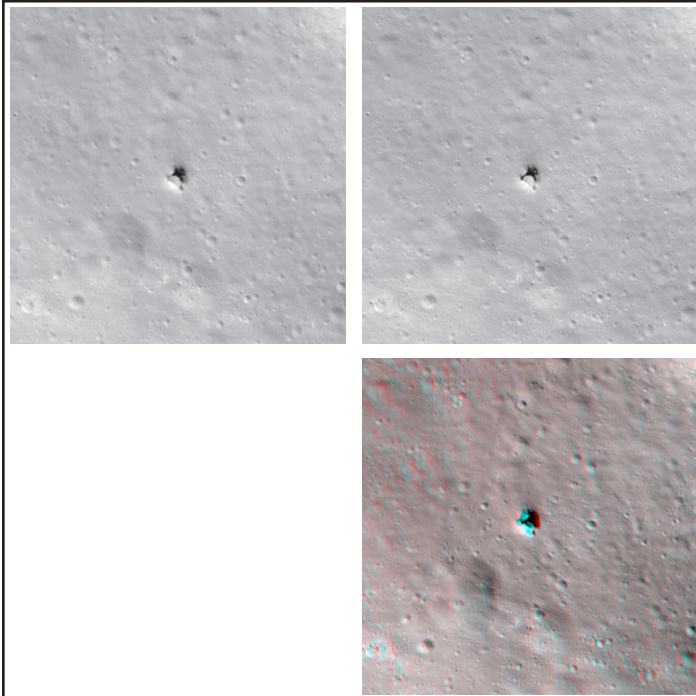
Data notes: Depth 2 is from lowest point on sharp rim to SW wall (sun is pointing directly down the NE slope); Depth 3 is from mid-way down the funnel to the upper part of the NW slope.

Description

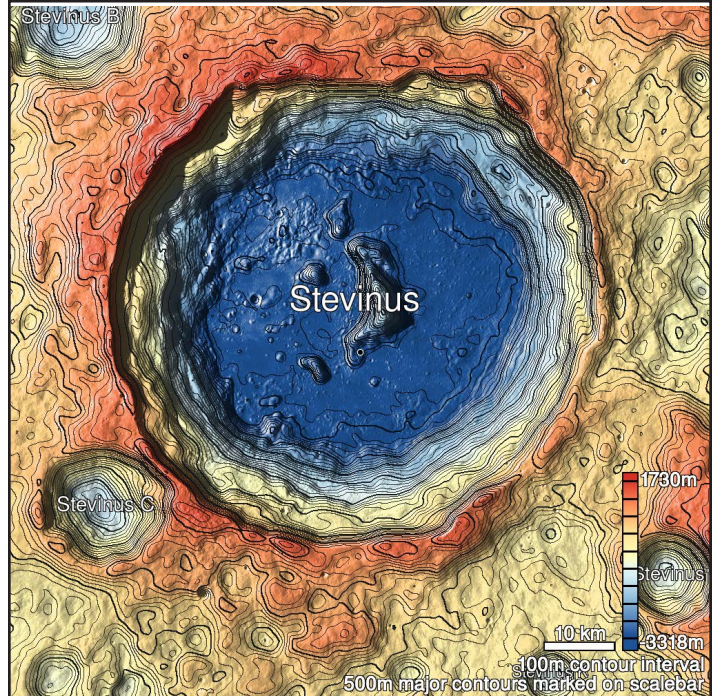
Rectangular pit with an extremely pronounced funnel. NE wall is an even (albeit rocky) slope from rim of funnel to SW wall. There are some weird features ~200m to the SE that look like wide flat (pancake-shaped) PRFs, although there is no stereo data to confirm that impression.

Stevinus 4

Impact Melt Pit: Stevinus Crater



Upper left: NAC M111240262L. Upper right: NAC M157234690R. Lower left: NAC . Lower right: Stereo anaglyph of NACs M174929871R (left eye, red) and M174923123R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 4. Black dot marks the location of the pit.

Size and Location

Latitude	32.7245°S	Inner pit diameter	11 m × 10 m
Longitude	54.1735°E	Long axis azimuth	30°
Depth	8 m	Funnel diameter	15 m × 15 m

Measurement Source Images

Image ID	M111240262L	M157234690R	
Incidence	38.48°	38.12°	
Emission	-1.48°	1.66°	
Time of Day	10.40	10.80	
Pixel Scale	0.61 m/px	0.39 m/px	
Depth	8.2 m	7.0 m	

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M111240262L line 32771, sample 2921

Best stereo pair: M174929871R / M174923123R

Other useful images:

DTM:

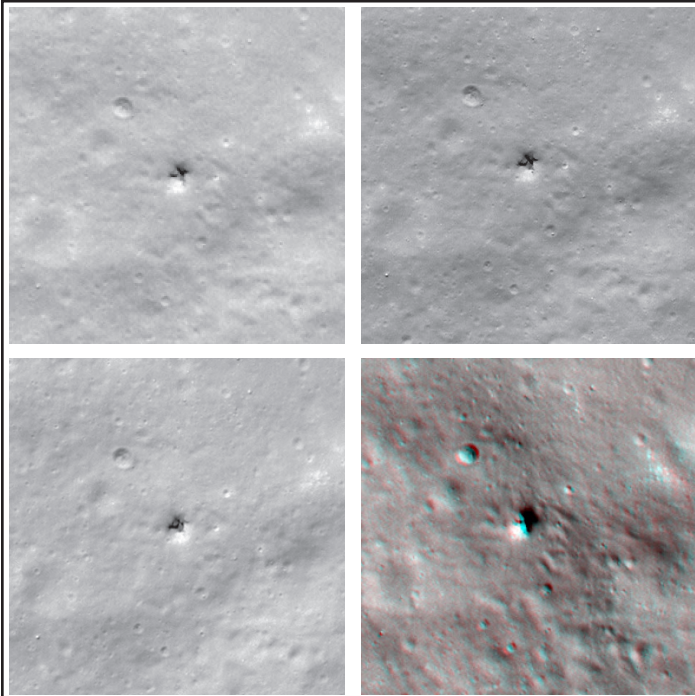
Data notes: Depths may be from top of funnel, not inner rim.

Description

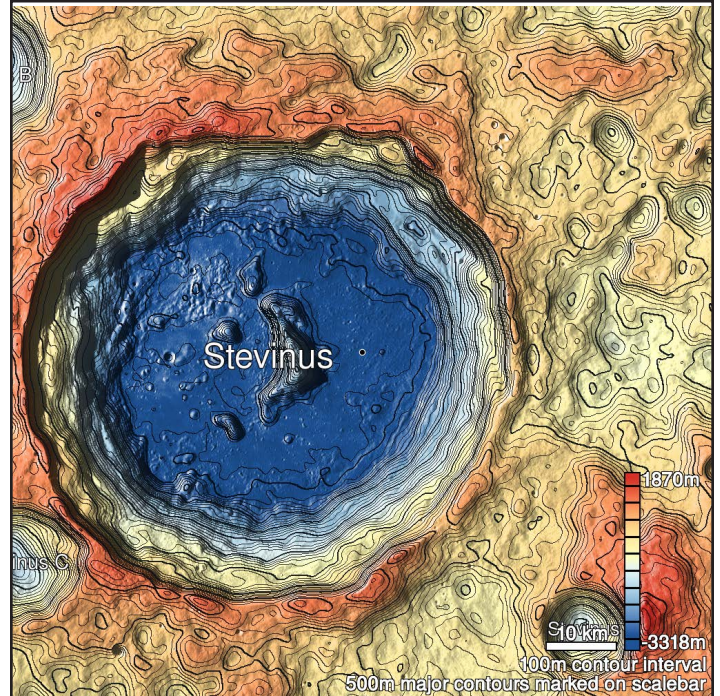
Semicircular pit, no slopes leading into it, no nearby features.

Stevinus 5

Impact Melt Pit: Stevinus Crater



Upper left: NAC M1164469403R. Upper right: NAC M124212055R. Lower left: NAC M1146783545R. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 5. Black dot marks the location of the pit.

Size and Location

Latitude	32.4519°S	Inner pit diameter	6 m × 6 m
Longitude	54.6746°E	Long axis azimuth	0°
Depth	6 m	Funnel diameter	18 m × 17 m

Measurement Source Images

Image ID	M1164469403R	M124212055R	M1146783545R
Incidence	31.65°	-34.07°	-38.04°
Emission	0.44°	-0.65°	-1.47°
Time of Day	11.76	12.21	13.21
Pixel Scale	0.84 m/px	0.43 m/px	0.60 m/px
Depth	7.5 m	4.1 m	>2.8 m

Other Features

Entrance Ramp	No?	In dome	Yes
Overhang	Yes?	Beside dome	Yes?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1164469403R line 52107, sample 1266

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

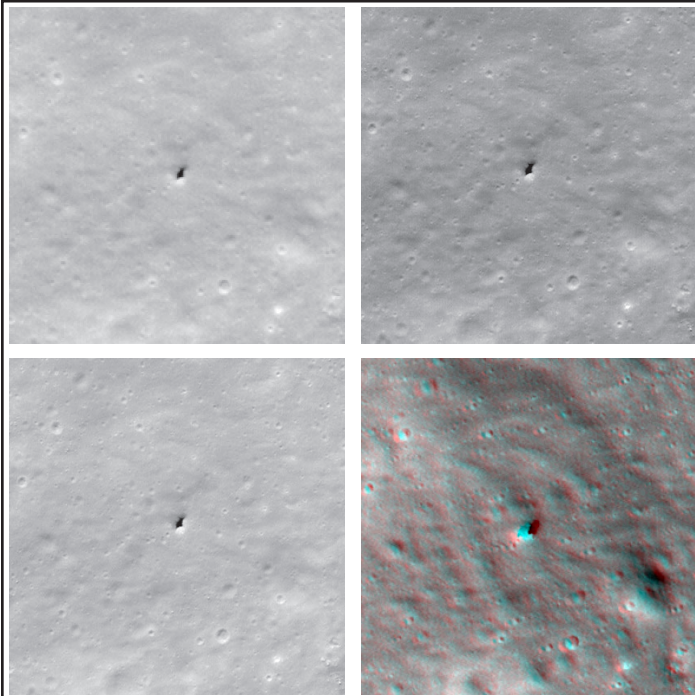
Data notes: Depth 1 may be from funnel, not rim; Depth 2 is at very high Sun; Depth 3 is from low point on NW wall. No good lighting for shadow measurements of this pit. No long axis.

Description

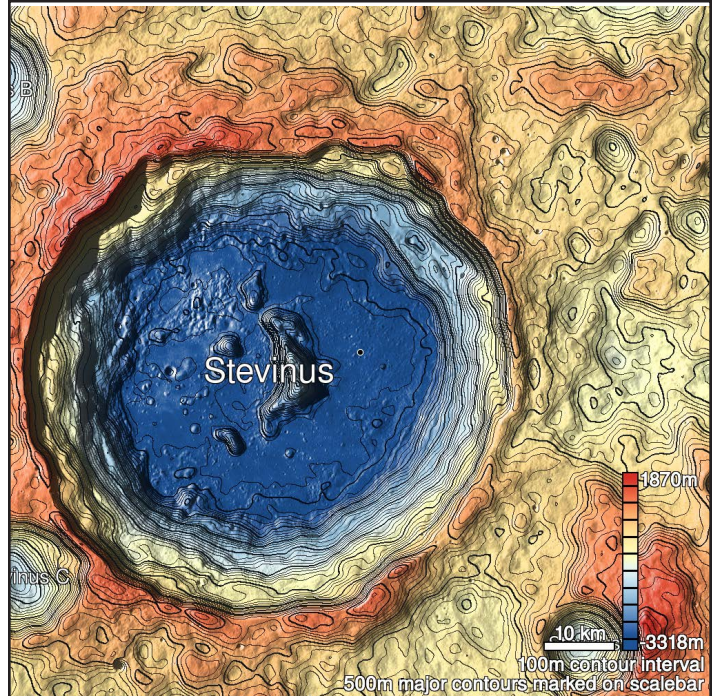
Small hourglass-shaped pit with pronounced funnel and probably rounded floor. NW wall has a large projecting section that appears lower than most of the rest of the rim. South side of funnel is deeper than the rest, but probably still has a couple meters of vertical wall. 45 degree slewed image shows a shadow where a lit wall would be expected if there were no overhang, so there may be an overhang, deeper section, or hard-to-identify boulder on the eastern side. No nearby features of note.

Stevinus 6

Impact Melt Pit: Stevinus Crater



Upper left: NAC M1164469403R. Upper right: NAC M124212055R. Lower left: NAC M154873550L. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 6. Black dot marks the location of the pit.

Size and Location

Latitude	32.3828°S	Inner pit diameter	7 m × 4 m
Longitude	54.6579°E	Long axis azimuth	45°
Depth	7 m	Funnel diameter	13 m × 8 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1164469403R	M124212055R	M154873550L
Incidence	31.58°	-34.00°	-35.05°
Emission	0.66°	-0.09°	2.47°
Time of Day	11.76	12.21	12.63
Pixel Scale	0.84 m/px	0.42 m/px	0.41 m/px
Depth	7.5 m	7.4 m	6.7 m

Location reference: NAC M1164469403R line 49735, sample 1643

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

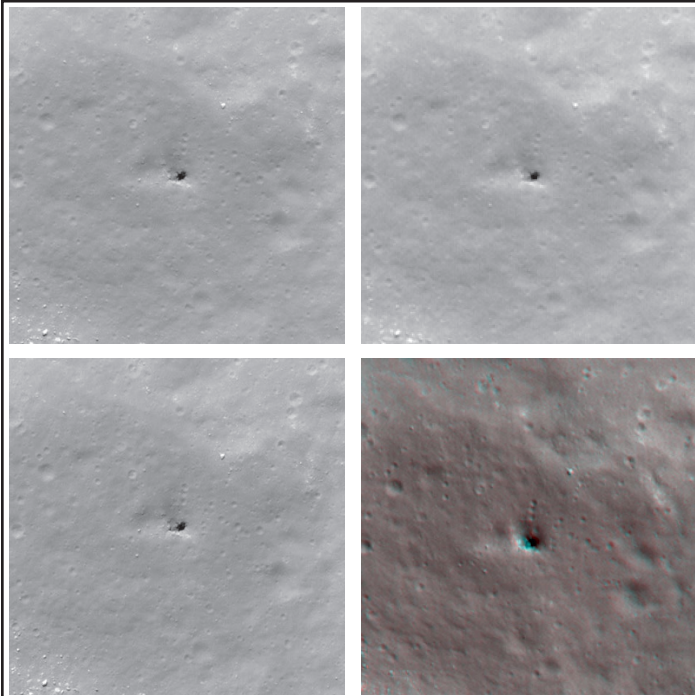
Data notes:

Description

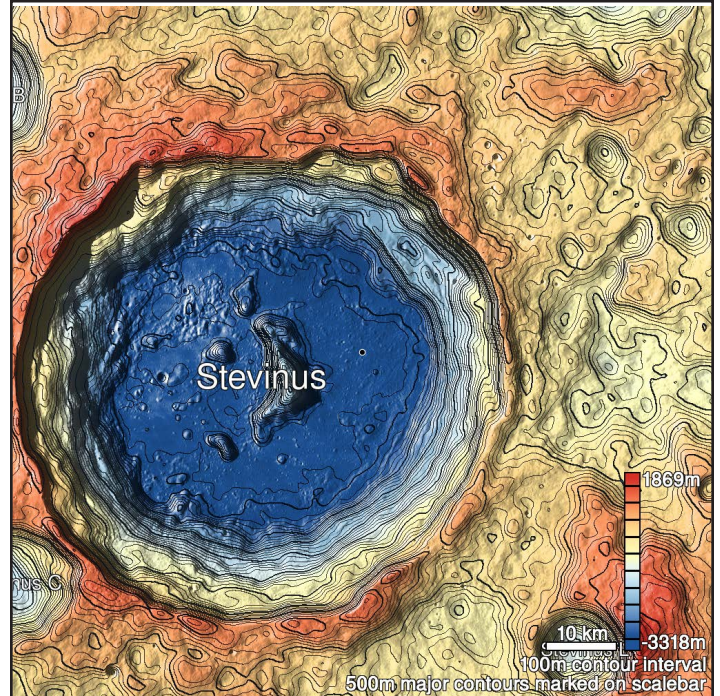
Small irregular pit. No floor visible, significant funnel. No features of note other than some subtle PRFs in the area.

Stevinus 7

Impact Melt Pit: Stevinus Crater



Upper left: NAC M124212055R. Upper right: NAC M1164469403L. Lower left: NAC M154873550L. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 7. Black dot marks the location of the pit.

Size and Location

Latitude	32.3554°S	Inner pit diameter	7 m × 4 m
Longitude	54.7126°E	Long axis azimuth	103°
Depth	>7 m	Funnel diameter	14 m × 12 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M124212055R	M1164469403L	M154873550L
Incidence	-33.97°	31.55°	-35.04°
Emission	-1.96°	-0.38°	0.48°
Time of Day	12.21	11.77	12.63
Pixel Scale	0.43 m/px	0.84 m/px	0.41 m/px
Depth	>6.3 m	>7.8 m	>5.4 m

Location reference: NAC M124212055R line 48072, sample 3913

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

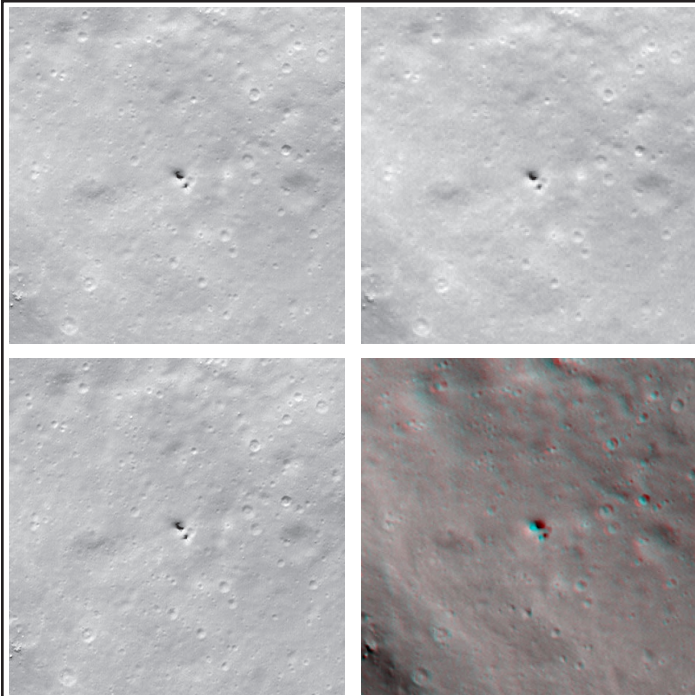
Data notes:

Description

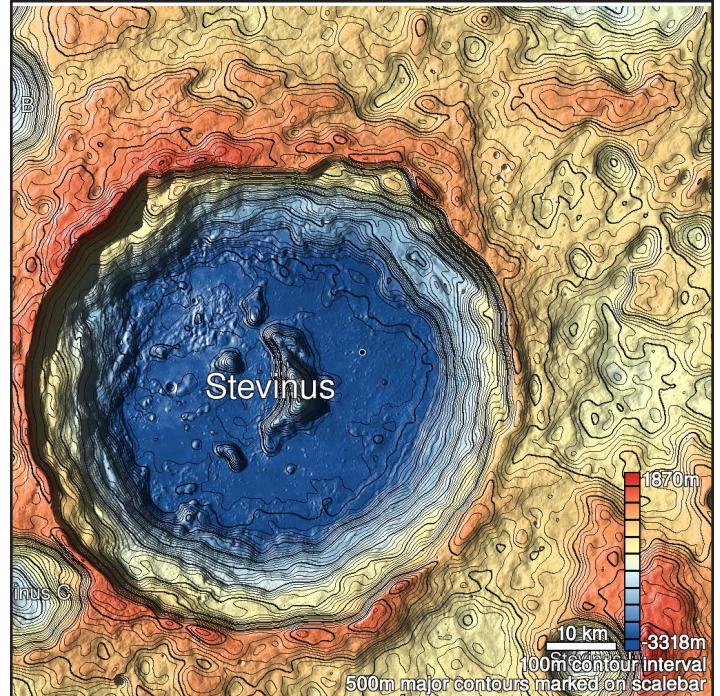
Elliptical pit, with a comparably-sized elliptical depression running at right-angles NW from the SW end. This second depression appears to have a 1-2m rounded(?) rim, and slopes down into the main pit, but may not get near the floor. It is unclear if the floor of the main pit is visible in any images, though the very tip of a boulder may be slightly illuminated ~2m down in M154873550L. No nearby features of note.

Stevinus 8

Impact Melt Pit: Stevinus Crater



Upper left: NAC M124212055R. Upper right: NAC M1164469403R. Lower left: NAC M154873550L. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 8. Black dot marks the location of the pit.

Size and Location

Latitude	32.3088°S	Inner pit diameter	5 m × 4 m
Longitude	54.6614°E	Long axis azimuth	130°
Depth	>6 m	Funnel diameter	10 m × 8 m

Measurement Source Images

Image ID	M124212055R	M1164469403R	M154873550L
Incidence	-33.92°	31.50°	-34.98°
Emission	-0.20°	0.48°	2.36°
Time of Day	12.21	11.76	12.63
Pixel Scale	0.42 m/px	0.84 m/px	0.41 m/px
Depth	>6 m	>5.7 m	>5.4 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	Yes?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M124212055R line 50629, sample 809

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

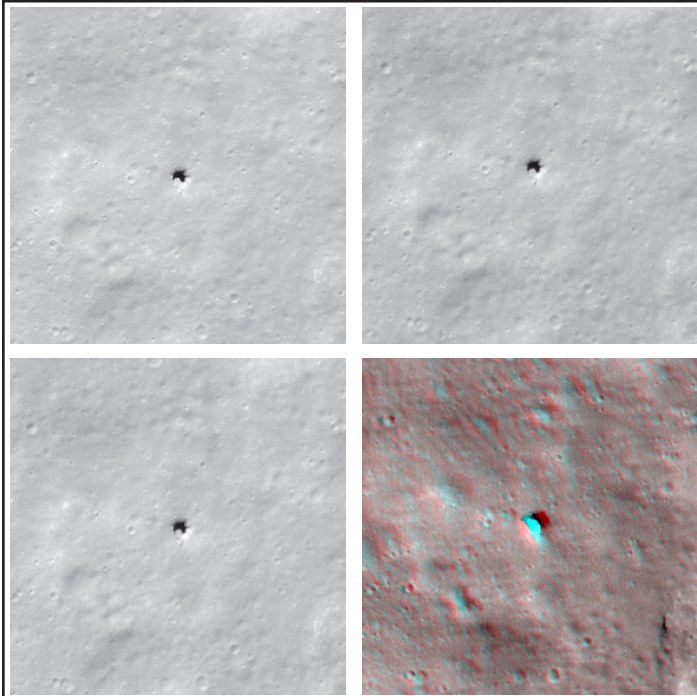
Data notes:

Description

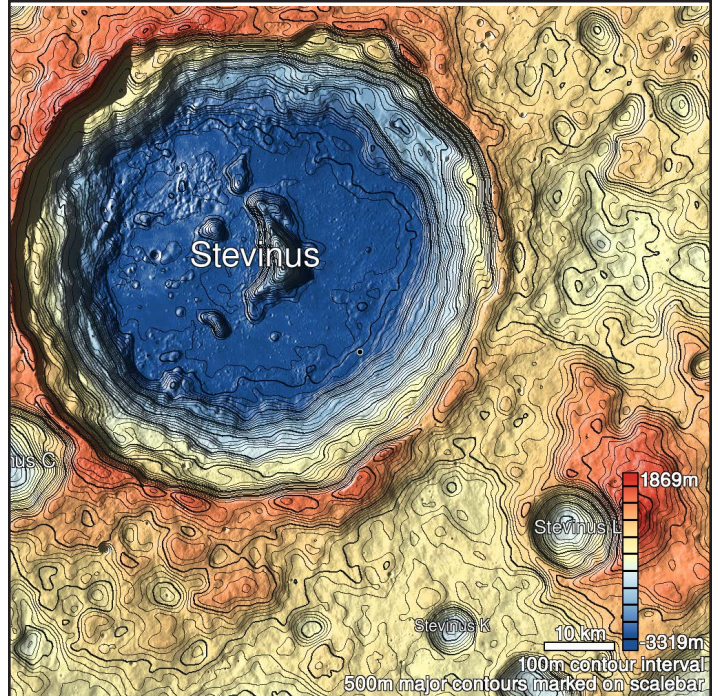
Small elliptical pit at the NE base of a NW-SE trending ridge/PREF. There is a ~2m wide dark spot with funnel, probably a tiny pit, 4m to the SE. The east wall is a slope that vanishes into shadow before any rim is visible.

Stevinus 9a

Impact Melt Pit: Stevinus Crater



Upper left: NAC M154873550R. Upper right: NAC M185518687L. Lower left: NAC M1177392814L. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 9a. Black dot marks the location of the pit.

Size and Location

Latitude	32.9401°S	Inner pit diameter	7 m × 7 m
Longitude	54.7446°E	Long axis azimuth	145°
Depth	6 m	Funnel diameter	22 m × 13 m

Measurement Source Images

Image ID	M154873550R	M185518687L	M1177392814L
Incidence	-35.61°	-36.78°	-38.04°
Emission	-1.13°	2.65°	0.55°
Time of Day	12.63	12.90	13.16
Pixel Scale	0.40 m/px	0.64 m/px	0.64 m/px
Depth	5.2 m	6.5 m	5.6 m

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M154873550R line 8508, sample 2545

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

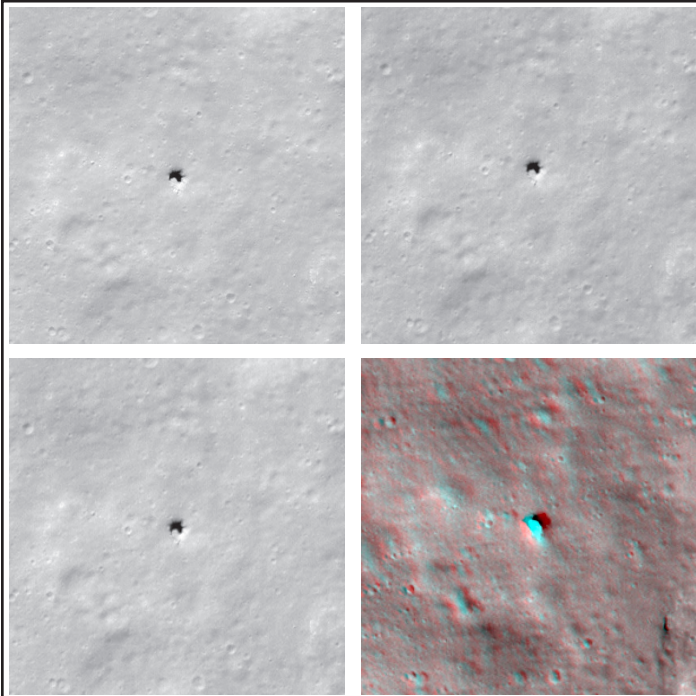
Data notes:

Description

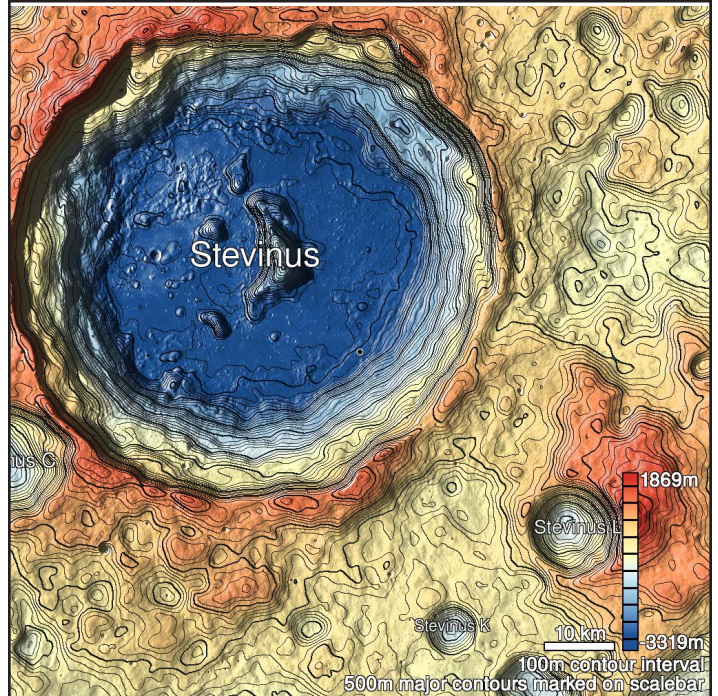
Round pit with vertical walls and flat floor. There is a much deeper section on the E side of the floor (Stevinus 9b). The S wall may have a slope from the rim to the Stevinus 9a section of the pit. Stevinus 10 is ~200m west, otherwise no nearby features of note.

Stevinus 9b

Impact Melt Pit: Stevinus Crater



Upper left: NAC M154873550R. Upper right: NAC M185518687L. Lower left: NAC M1177392814L. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 9b. Black dot marks the location of the pit.

Size and Location

Latitude	32.9401°S	Inner pit diameter	6 m × 4 m
Longitude	54.7446°E	Long axis azimuth	155°
Depth	>9 m	Funnel diameter	NA m × NA m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M154873550R	M185518687L	M1177392814L
Incidence	-35.61°	-36.78°	-38.04°
Emission	-1.13°	2.65°	0.55°
Time of Day	12.63	12.90	13.16
Pixel Scale	0.40 m/px	0.64 m/px	0.64 m/px
Depth	>9.3 m	>9.3 m	>8.8 m

Location reference: NAC M154873550R line 8508, sample 2549

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

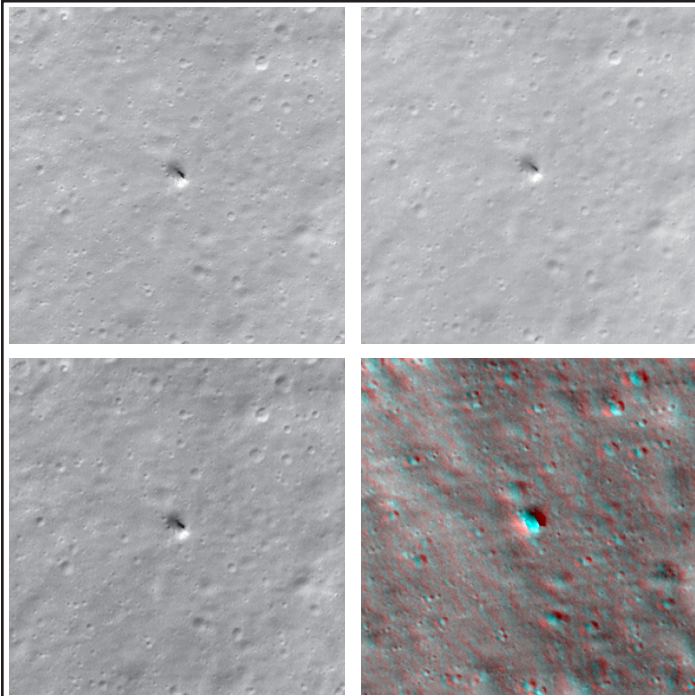
Data notes:

Description

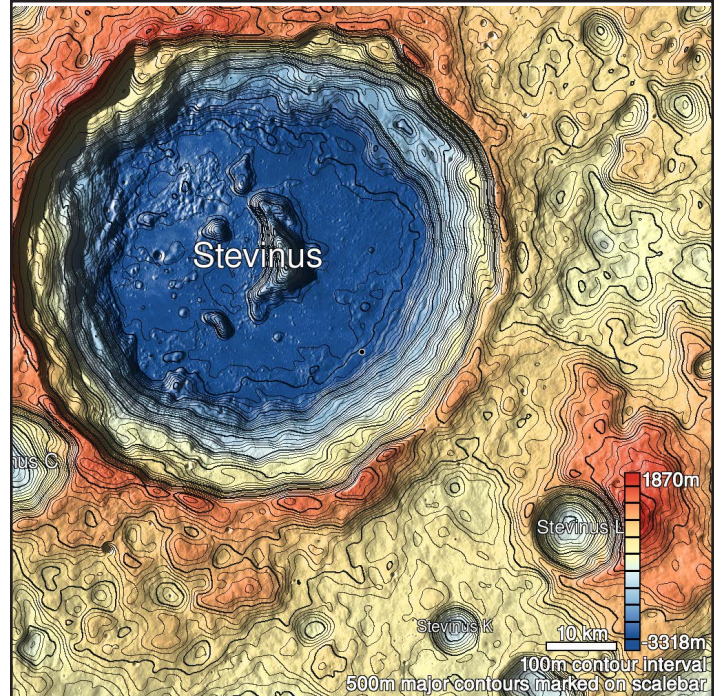
Deeper inner pit on E side of Stevinus 9a's floor. Depths are measured from Stevinus 9a's rim, not its floor.

Stevinus 10

Impact Melt Pit: Stevinus Crater



Upper left: NAC M154873550R. Upper right: NAC M185518687L. Lower left: NAC M1177392814L. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 10. Black dot marks the location of the pit.

Size and Location

Latitude	32.9383°S	Inner pit diameter	7 m × 5 m
Longitude	54.7378°E	Long axis azimuth	130°
Depth	5 m	Funnel diameter	16 m × 10 m

Measurement Source Images

Image ID	M154873550R	M185518687L	M1177392814L
Incidence	-35.60°	-36.78°	-38.04°
Emission	-0.88°	2.81°	0.71°
Time of Day	12.63	12.90	13.16
Pixel Scale	0.40 m/px	0.64 m/px	0.64 m/px
Depth	4.9 m	5.8 m	5.5 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M154873550R line 8602, sample 2066

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

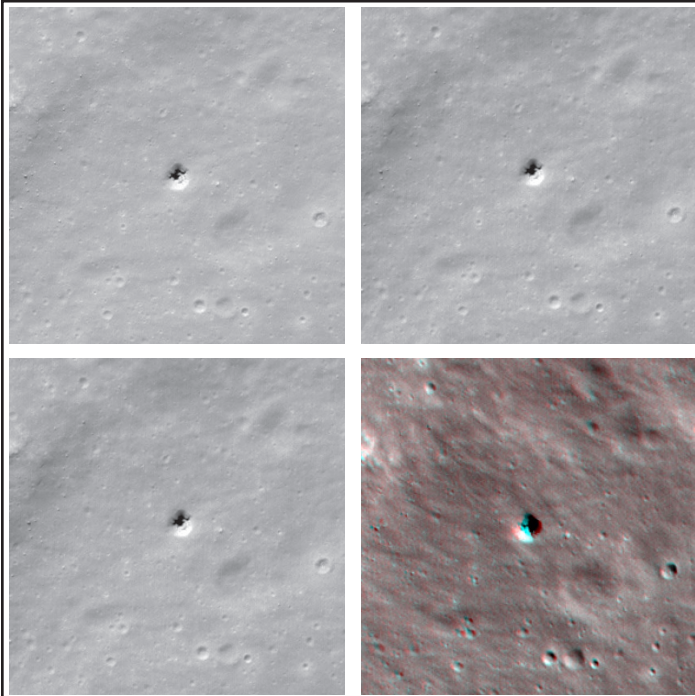
Data notes:

Description

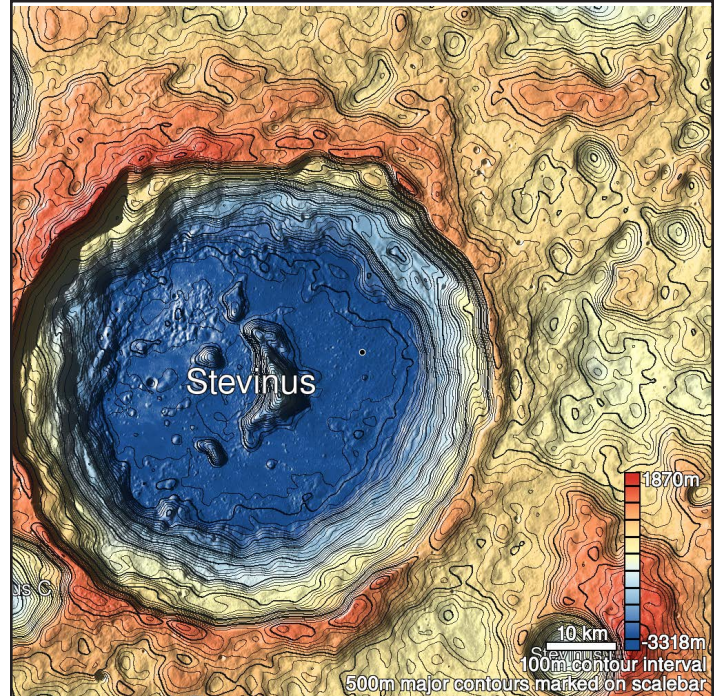
Elliptical pit, 200m from Stevinus 9, with long axis of ellipse oriented generally towards Stevinus 9. Floor slopes from within a meter or two of the rim on the west to its lowest point on the east. NW wall is a continuous slope from funnel to floor.

Stevinus 11

Impact Melt Pit: Stevinus Crater



Upper left: NAC M154873550R. Upper right: NAC M185518687L. Lower left: NAC M185518687L. Lower right: Stereo anaglyph of NACs M1105574923L (left eye, red) and M1105567778L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 11. Black dot marks the location of the pit.

Size and Location

Latitude	32.3302°S	Inner pit diameter	6 m × 4 m
Longitude	54.7743°E	Long axis azimuth	30°
Depth	>6 m	Funnel diameter	15 m × 14 m

Measurement Source Images

Image ID	M154873550R	M185518687L	M185518687L
Incidence	-35.03°	-36.23°	-36.23°
Emission	-1.78°	2.45°	2.45°
Time of Day	12.63	12.91	12.91
Pixel Scale	0.41 m/px	0.65 m/px	0.65 m/px
Depth	>5.8 m	>6.1 m	>5.7 m

Other Features

Entrance Ramp	Yes?	In dome	No?
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M154873550R line 41965, sample 3606

Best stereo pair: M1105574923L / M1105567778L

Other useful images:

DTM:

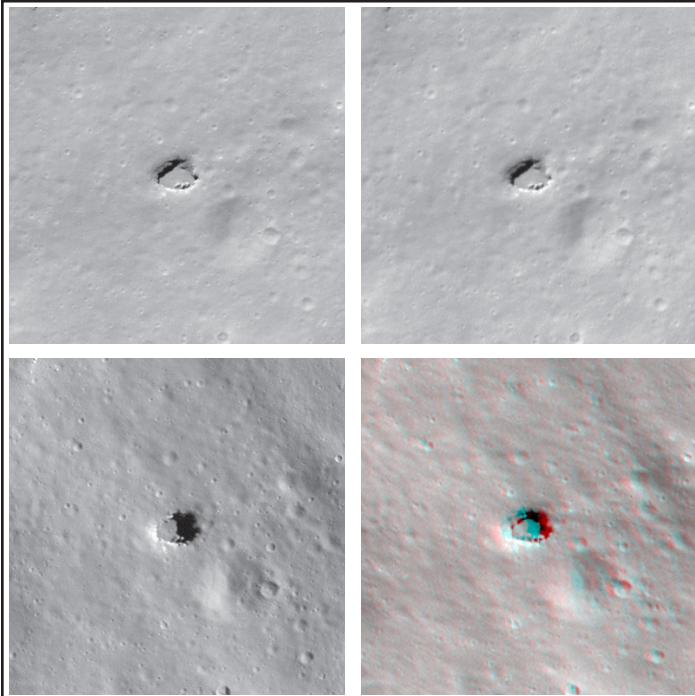
Data notes:

Description

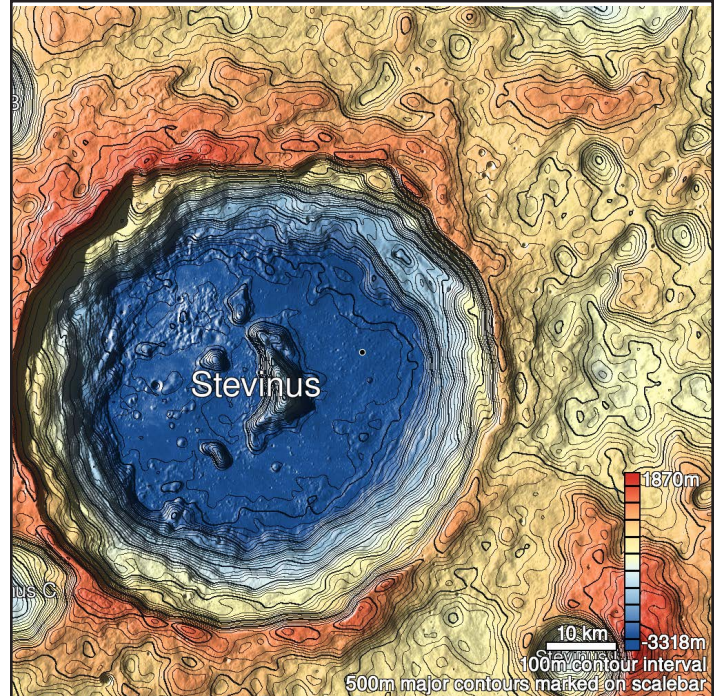
Irregular pit with very pronounced funnel and somewhat complicated SE wall. There is no clear floor visible, although there is some sort of arc of material sticking in from the SE wall (see M154873550R) (maybe a sloping E wall with some coincidentally-positioned shadows?). No nearby features of note.

Stevinus 12

Impact Melt Pit: Stevinus Crater



Upper left: NAC M154873550R. Upper right: NAC M1177392814L. Lower left: NAC M113596581L. Lower right: Stereo anaglyph of NACs M1105574923L (left eye, red) and M1105567778L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 12. Black dot marks the location of the pit.

Size and Location

Latitude	32.3174°S	Inner pit diameter	24 m × 18 m
Longitude	54.7460°E	Long axis azimuth	100°
Depth	7 m	Funnel diameter	30 m × 24 m

Measurement Source Images

Image ID	M154873550R	M1177392814L	M113596581L
Incidence	-35.01°	-37.50°	57.47°
Emission	-0.73°	1.51°	-2.35°
Time of Day	12.63	13.16	8.57
Pixel Scale	0.41 m/px	0.65 m/px	0.59 m/px
Depth	5.7 m	6.1 m	8.0 m

Other Features

Entrance Ramp	No	In dome	No?
Overhang	No?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M154873550R line 42605, sample 1796

Best stereo pair: M1105574923L / M1105567778L

Other useful images:

DTM:

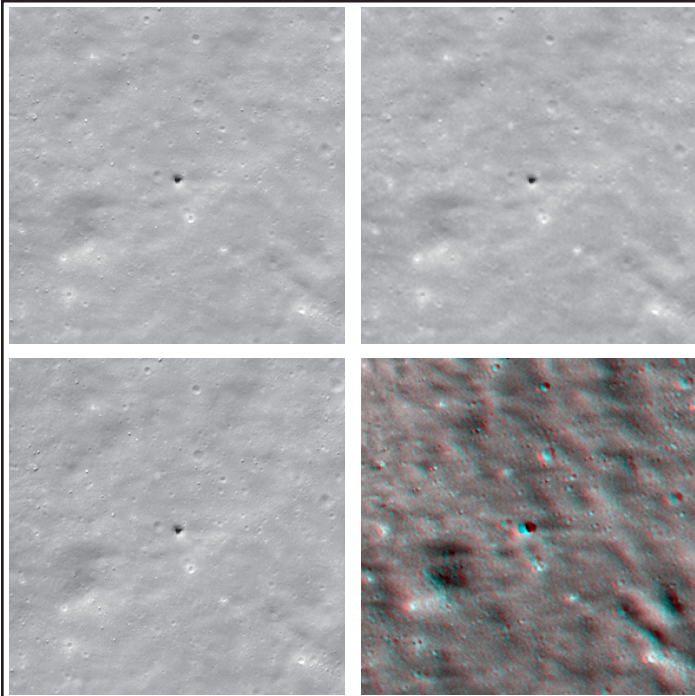
Data notes: Depths 1 and 2 are from western rim, Depth 3 is from eastern funnel.

Description

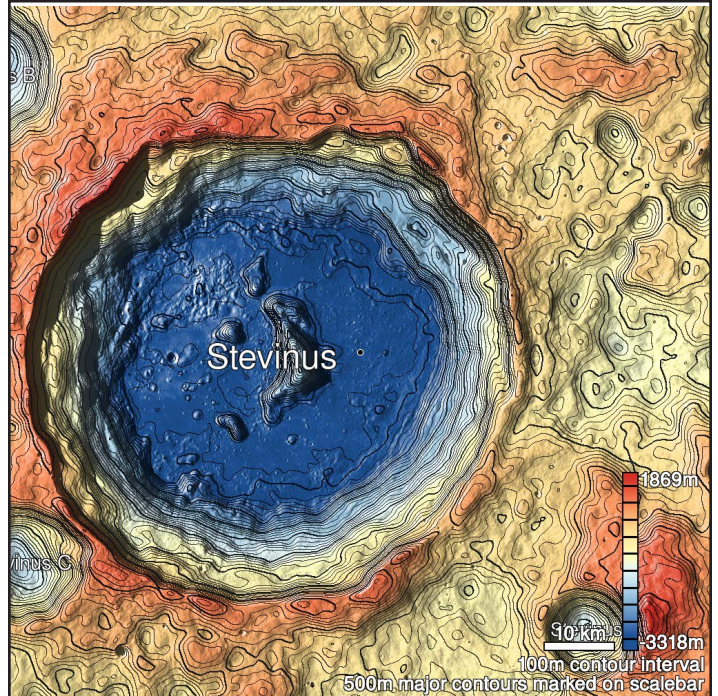
Elliptical pit with smooth flat floor. There are 3 4m boulders next to the S wall. No overhang exists to the east- wall is continuous to floor. Pit is at the intersection of a couple of subtle linear depressions (or maybe lies between ~4 PRFs).

Stevinus 13

Impact Melt Pit: Stevinus Crater



Upper left: NAC M124212055L. Upper right: NAC M1164469403R. Lower left: NAC M154873550L. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 13. Black dot marks the location of the pit.

Size and Location

Latitude	32.4490°S	Inner pit diameter	4 m × 4 m
Longitude	54.6446°E	Long axis azimuth	0°
Depth	4 m	Funnel diameter	8 m × 7 m

Measurement Source Images

Image ID	M124212055L	M1164469403R	M154873550L
Incidence	-34.06°	31.65°	-35.11°
Emission	0.41°	0.98°	2.91°
Time of Day	12.21	11.76	12.63
Pixel Scale	0.43 m/px	0.84 m/px	0.41 m/px
Depth	3.8 m	>4.2 m	>4.1 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M124212055L line 43036, sample 4725

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

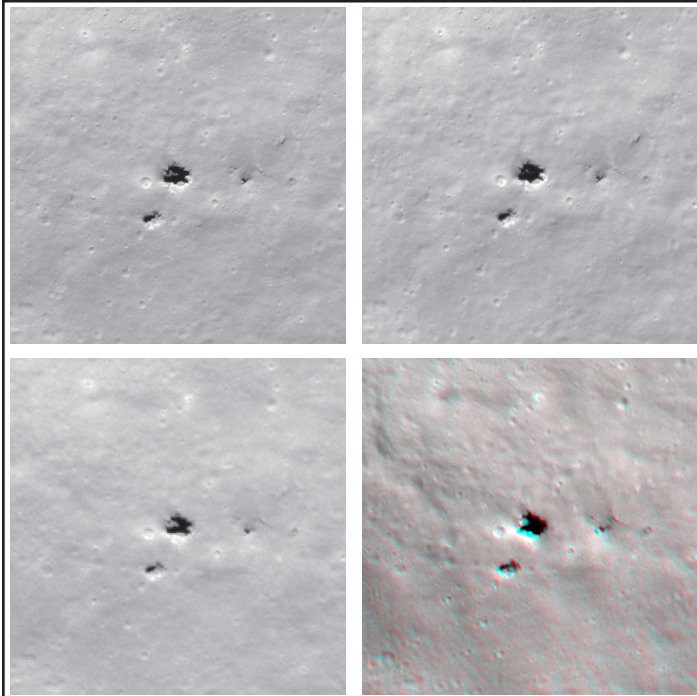
Data notes:

Description

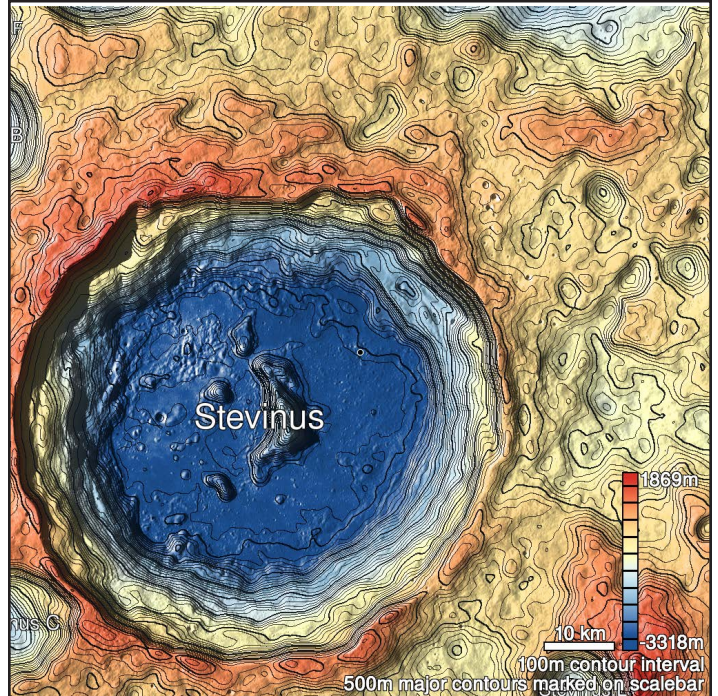
Small triangular pit with pronounced funnel. No visible floor, except possibly in M124212055L. No features of note nearby.

Stevinus 14a

Impact Melt Pit: Stevinus Crater



Upper left: NAC M154873550L. Upper right: NAC M1116158959R. Lower left: NAC M1164469403L. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 14a. Black dot marks the location of the pit.

Size and Location

Latitude	32.1634°S	Inner pit diameter	14 m × 12 m
Longitude	54.7124°E	Long axis azimuth	115°
Depth	14 m	Funnel diameter	20 m × 16 m

Measurement Source Images

Image ID	M154873550L	M1116158959R	M1164469403L
Incidence	-34.86°	-37.32°	31.36°
Emission	0.63°	-0.60°	-0.61°
Time of Day	12.63	13.13	11.77
Pixel Scale	0.41 m/px	0.60 m/px	0.84 m/px
Depth	13.1 m	13.8 m	13.9 m

Other Features

Entrance Ramp	No	In dome	Yes?
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M154873550L line 51114, sample 4352

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

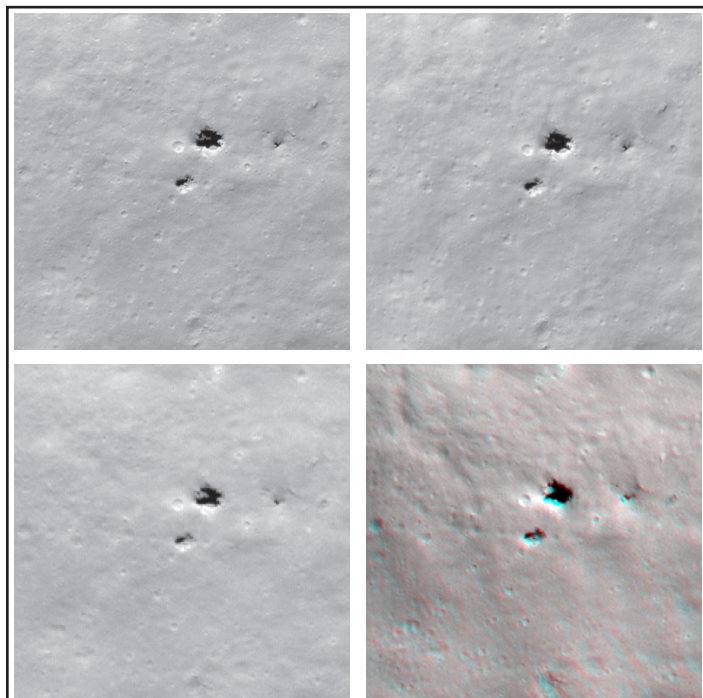
Data notes:

Description

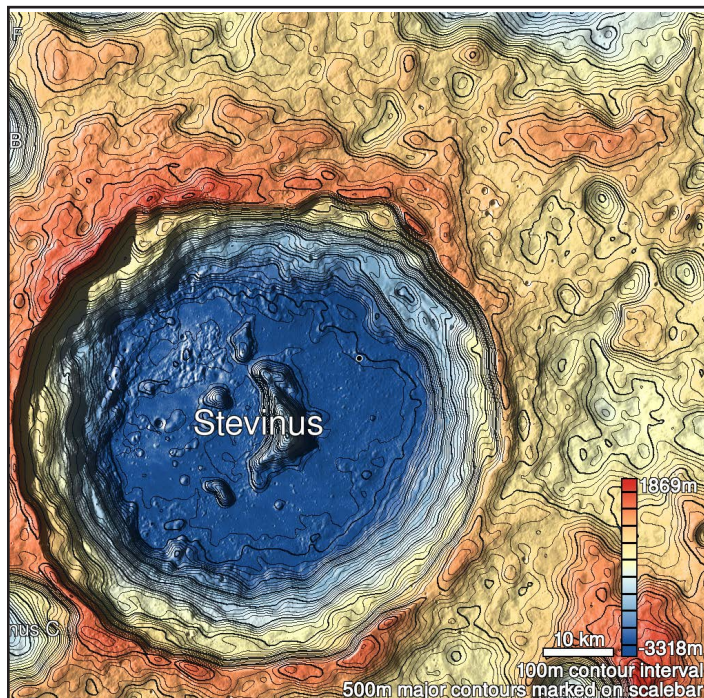
Irregular squarish pit, northern of a pair (Stevinus 14b is ~20m south). NW wall has a spur/shelf protruding in by about 7m, 3 meters below the rim. 45 degree slewed image cannot determine if there is any overhang, because the applicable region is in deep shadow due to the depth of the pit. There is a ~2m dark spot that might be either a pit or a cliff ~30m east. No other depressions in the area.

Stevinus 14b

Impact Melt Pit: Stevinus Crater



Upper left: NAC M154873550L. Upper right: NAC M1116158959R. Lower left: NAC M1164469403L. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 14b. Black dot marks the location of the pit.

Size and Location

Latitude	32.1643°S	Inner pit diameter	9 m × 7 m
Longitude	54.7118°E	Long axis azimuth	65°
Depth	5 m	Funnel diameter	12 m × 9 m

Measurement Source Images

Image ID	M154873550L	M1116158959R	M1164469403L
Incidence	-34.86°	-37.32°	31.36°
Emission	0.65°	-0.59°	-0.60°
Time of Day	12.63	13.13	11.77
Pixel Scale	0.41 m/px	0.60 m/px	0.84 m/px
Depth	5.0 m	5.3 m	4.9 m

Other Features

Entrance Ramp	Yes	In dome	Yes?
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M154873550L line 51069, sample 4311

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

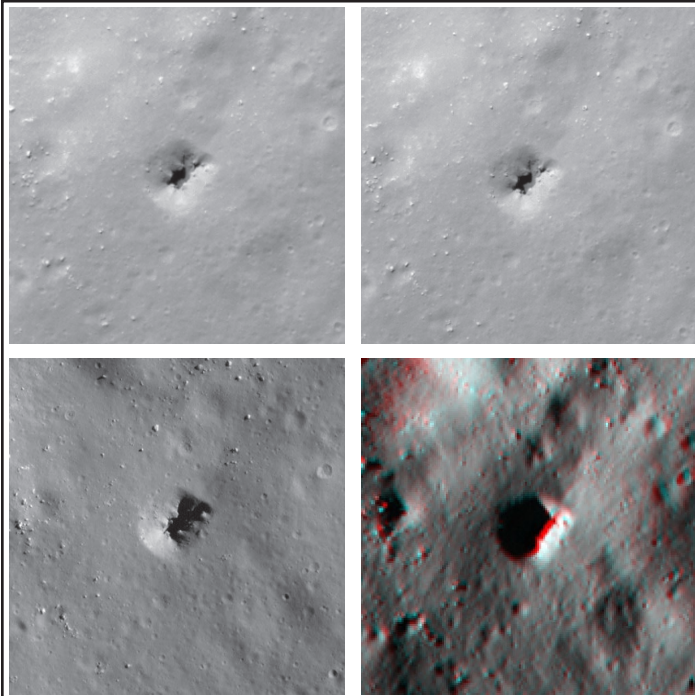
Data notes:

Description

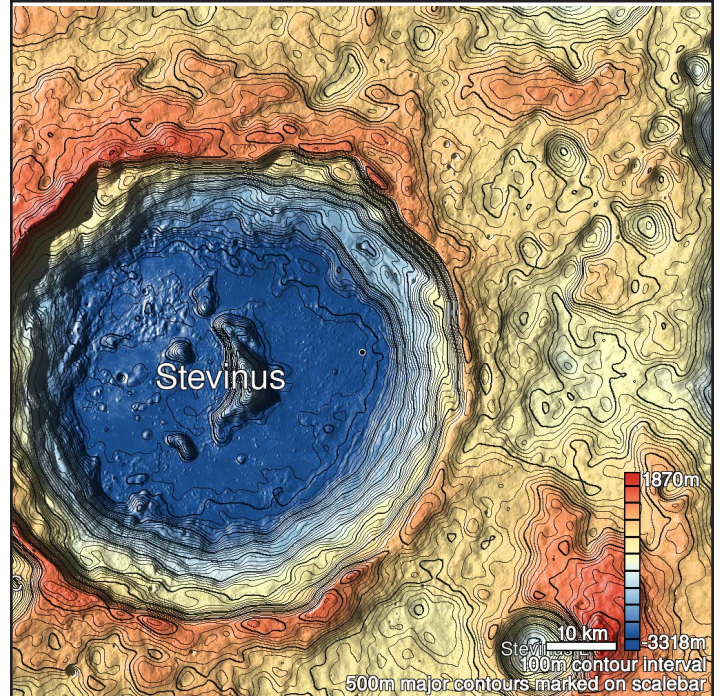
Shallow elliptical pit ~20m S of Stevinus 14a. E wall seems to be a slope from rim to floor, floor is very rough/bouldery.

Stevinus 15

Impact Melt Pit: Stevinus Crater



Upper left: NAC M185518687R. Upper right: NAC M170206690L. Lower left: NAC M128929066L. Lower right: Stereo anaglyph of NACs M1218619638R (left eye, red) and M1218612603L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 15. Black dot marks the location of the pit.

Size and Location

Latitude	32.3568°S	Inner pit diameter	18 m × 11 m
Longitude	54.9433°E	Long axis azimuth	40°
Depth	10 m	Funnel diameter	42 m × 34 m

Measurement Source Images

Image ID	M185518687R	M170206690L	M128929066L
Incidence	-36.31°	-34.52°	58.23°
Emission	-1.52°	1.67°	-2.32°
Time of Day	12.92	13.11	8.63
Pixel Scale	0.65 m/px	0.57 m/px	0.42 m/px
Depth	9.2 m	10.2 m	>8 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	Yes?
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M185518687R line 37546, sample 3128

Best stereo pair: M1218619638R / M1218612603L

Other useful images:

DTM:

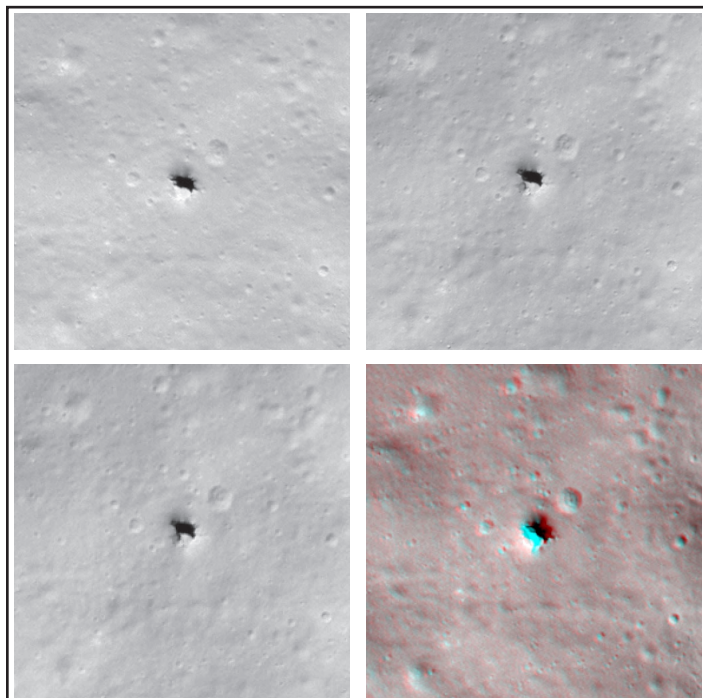
Data notes:

Description

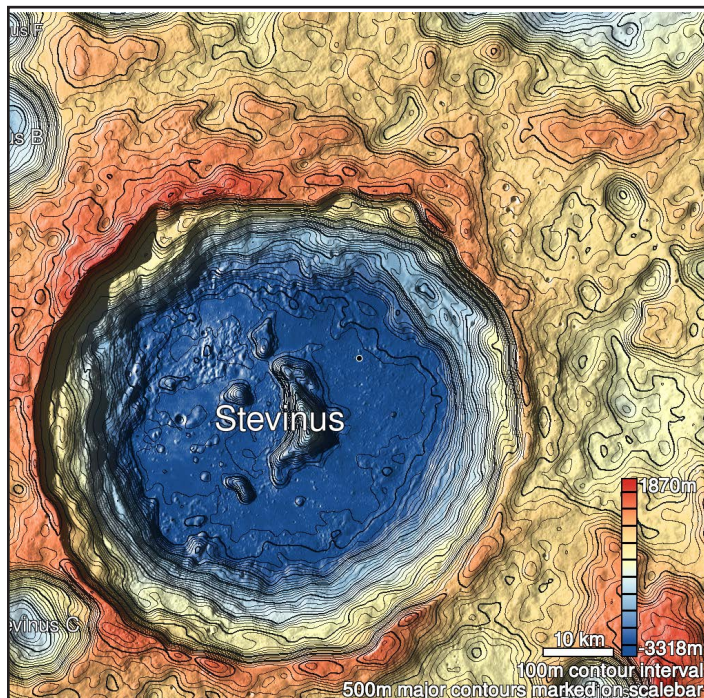
Rectangular/irregular pit in an extremely (relatively) large funnel. There's a narrowing about 2/3rds of the way to the NE wall, and the floor slopes up in that direction to a very short vertical wall most of the way up the funnel that prevents true traversability. No features of note nearby.

Stevinus 16

Impact Melt Pit: Stevinus Crater



Upper left: NAC M1149138828R. Upper right: NAC M1116158959L. Lower left: NAC M1131495601R. Lower right: Stereo anaglyph of NACs M1105574923R (left eye, red) and M1105567778R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 16. Black dot marks the location of the pit.

Size and Location

Latitude	32.1817°S	Inner pit diameter	17 m × 13 m
Longitude	54.5943°E	Long axis azimuth	115°
Depth	11 m	Funnel diameter	28 m × 23 m

Measurement Source Images

Image ID	M1149138828R	M1116158959L	M1131495601R
Incidence	34.55°	-37.29°	-37.84°
Emission	0.52°	2.37°	-2.29°
Time of Day	11.33	13.12	13.57
Pixel Scale	0.62 m/px	0.60 m/px	0.79 m/px
Depth	9.1 m	11.1 m	12.9 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1149138828R line 6282, sample 1410

Best stereo pair: M1105574923R / M1105567778R

Other useful images:

DTM:

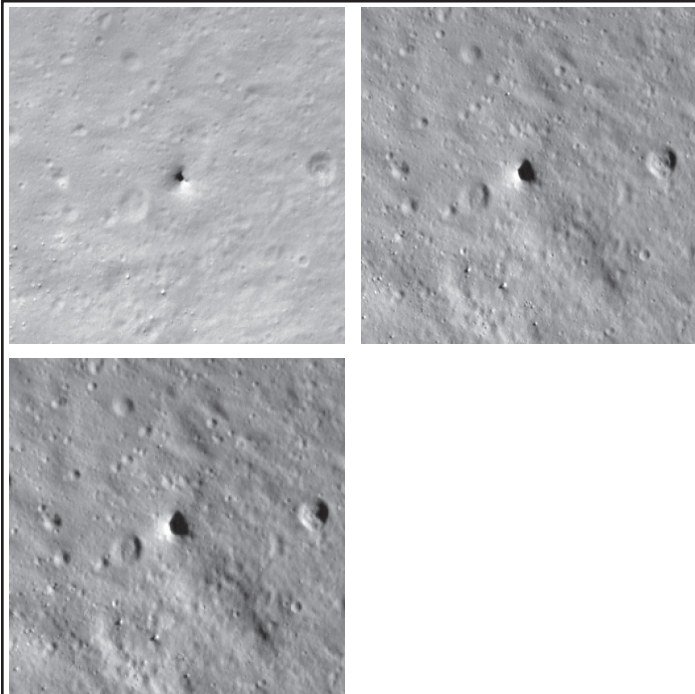
Data notes:

Description

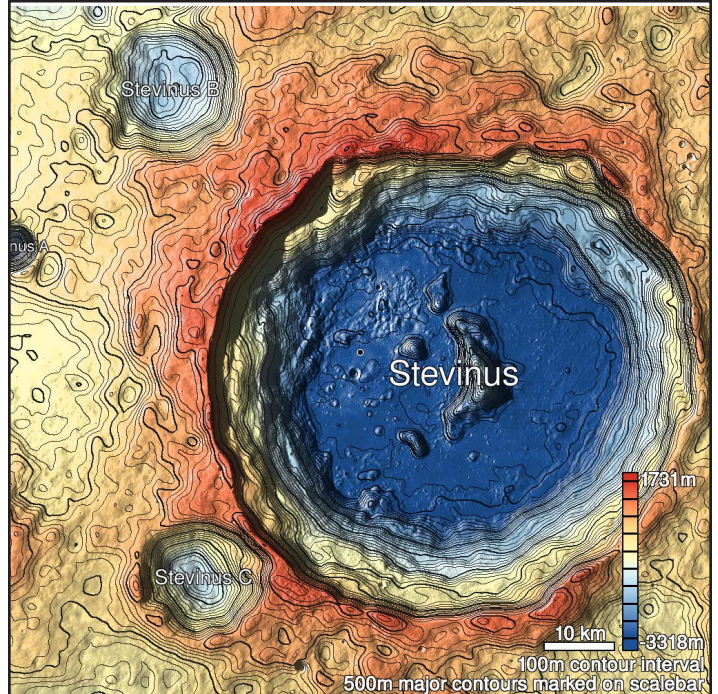
Irregular pit. Appears to have a flat floor. No other collapses in the area, no PRFs, no suspicious depressions.

Stevinus 17

Impact Melt Pit: Stevinus Crater



Upper left: NAC M1177399921L. Upper right: NAC M113603383R. Lower left: NAC M1138568830R. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 17. Black dot marks the location of the pit.

Size and Location

Latitude	32.3695°S	Inner pit diameter	5 m × 4 m
Longitude	53.6121°E	Long axis azimuth	30°
Depth	7 m	Funnel diameter	18 m × 14 m

Measurement Source Images

Image ID	M1177399921L	M113603383R	M1138568830R
Incidence	-37.49°	57.63°	64.47°
Emission	2.17°	0.73°	1.16°
Time of Day	13.15	8.56	8.06
Pixel Scale	0.65 m/px	0.59 m/px	0.77 m/px
Depth	7.0 m	>6.3 m	>5.1 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No?
Nearby depressions	No?	Colinear fractures	No
In Depression	No		

Location reference: NAC M1177399921L line 28911, sample 1757

Best stereo pair: /

Other useful images:

DTM:

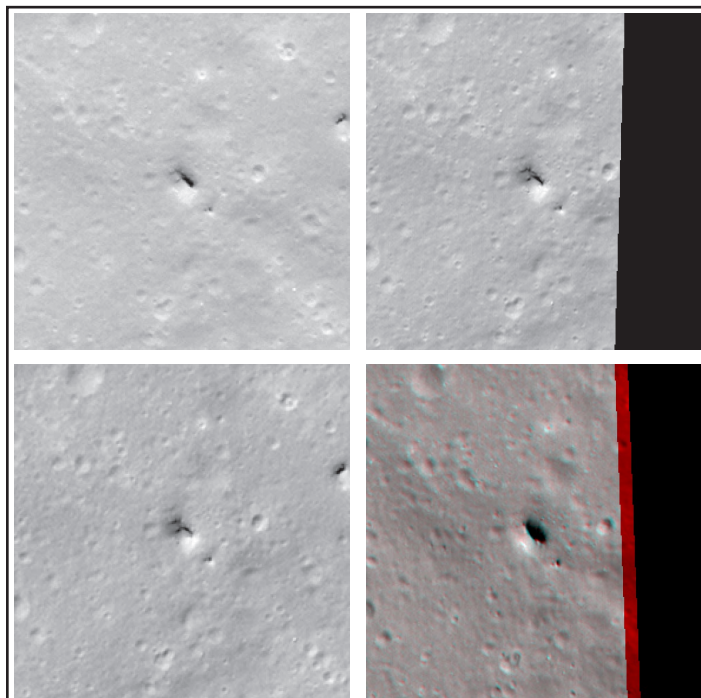
Data notes: Depths 2 and 3 are from funnel to funnel, not rim.

Description

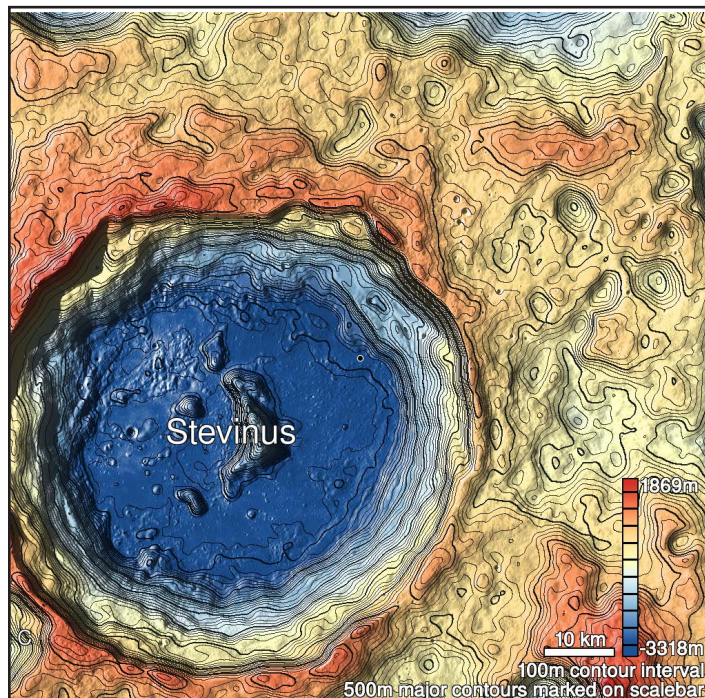
Squarish pit, SE wall appears to be a ramp from rim to interior. No floor visible. No other collapses in area, no obvious PRFs.

Stevinus 18

Impact Melt Pit: Stevinus Crater



Upper left: NAC M1133848318R. Upper right: NAC M185518687L. Lower left: NAC M1162113981R. Lower right: Stereo anaglyph of NACs M1105574923L (left eye, red) and M1105567778L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 18. Black dot marks the location of the pit.

Size and Location

Latitude	32.1226°S	Inner pit diameter	9 m × 9 m
Longitude	54.8746°E	Long axis azimuth	140°
Depth	6 m	Funnel diameter	21 m × 13 m

Measurement Source Images

Image ID	M1133848318R	M185518687L	M1162113981R
Incidence	31.20°	-36.07°	-37.95°
Emission	1.82°	0.28°	-2.00°
Time of Day	11.75	12.91	13.58
Pixel Scale	0.79 m/px	0.65 m/px	0.84 m/px
Depth	5.9 m	6.9 m	5.8 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1133848318R line 51737, sample 3594

Best stereo pair: M1105574923L / M1105567778L

Other useful images: M128929066R

DTM:

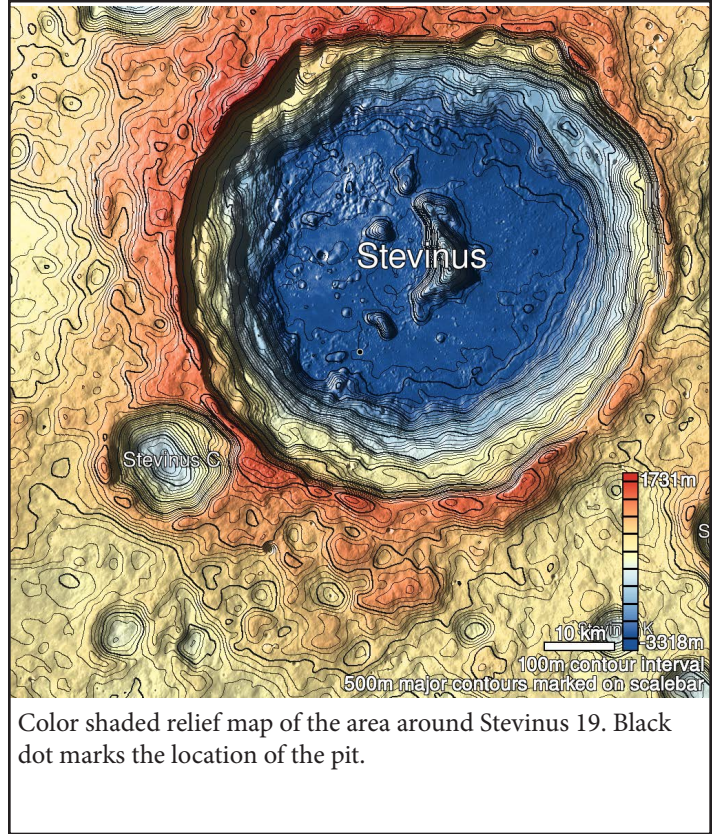
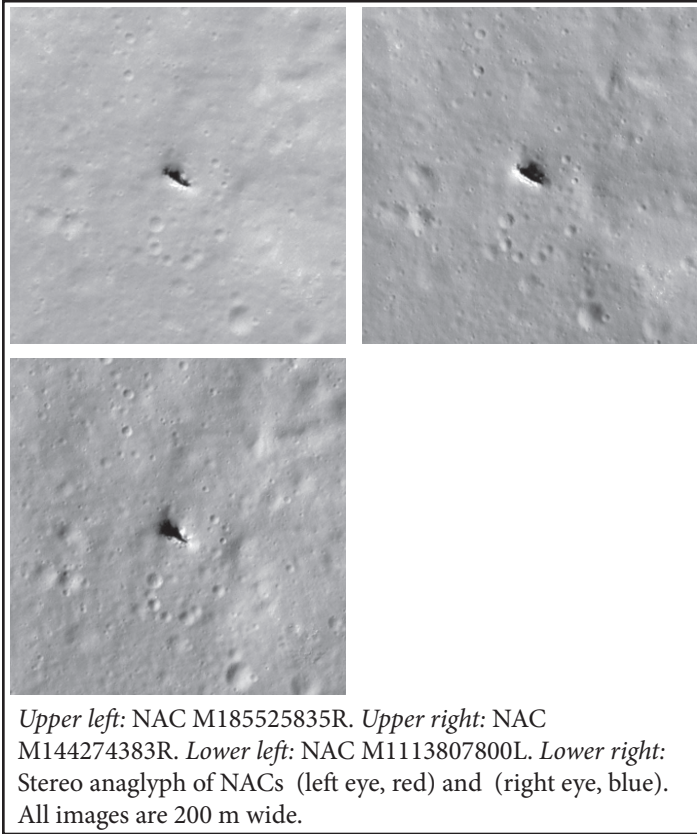
Data notes:

Description

Irregular pit. South wall might be a ramp from rim to floor. There's a small collapse ~90m ENE (~4x3x2m), and a tiny collapse-looking dark spot 18m SE. There appears to be a linear depression running ESE from the pit, and a subtle ridge running WNW from it.

Stevinus 19

Impact Melt Pit: Stevinus Crater



Size and Location

Latitude	32.9337°S	Inner pit diameter	16 m × 6 m
Longitude	53.7983°E	Long axis azimuth	120°
Depth	>13 m	Funnel diameter	25 m × 14 m

Measurement Source Images

Image ID	M185525835R	M144274383R	M1113807800L
Incidence	-36.79°	51.89°	-54.58°
Emission	-1.29°	0.25°	1.43°
Time of Day	12.91	9.09	15.00
Pixel Scale	0.64 m/px	0.58 m/px	0.60 m/px
Depth	>10 m	>6.7 m	>12.8 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M185525835R line 12086, sample 2731

Best stereo pair: /

Other useful images: M1157415551L

DTM:

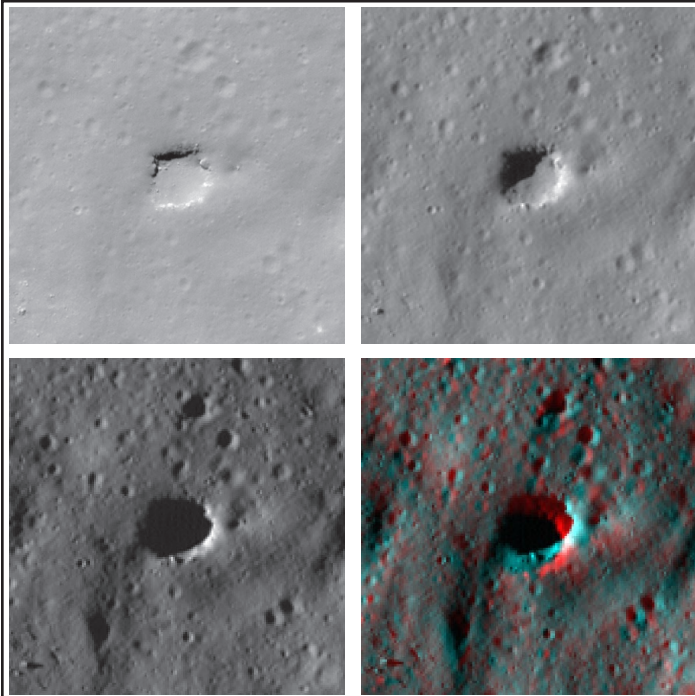
Data notes: Depth 3 is from top of funnel, and runs the full length of the pit.

Description

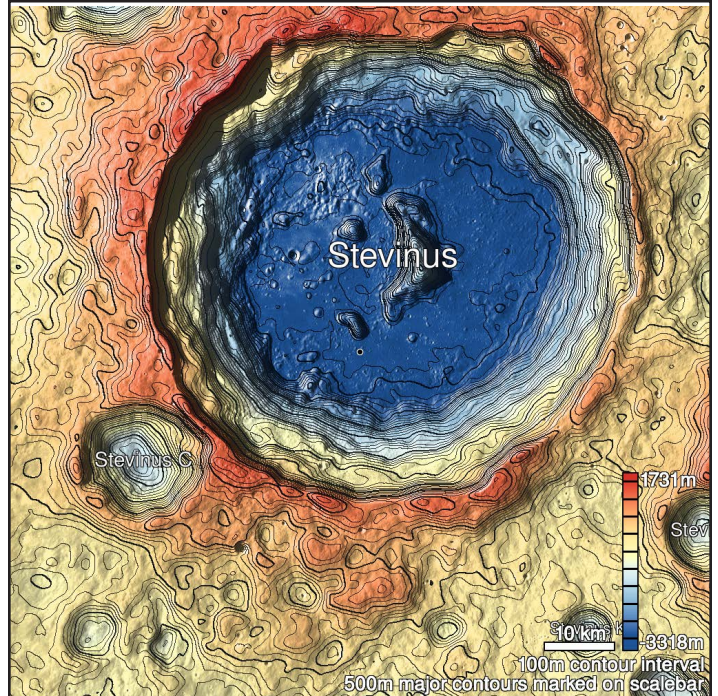
Linear pit, running WNW-ESE, with a wider section near the W end. No floor visible. There's a chain of ~30m wide bowl-shaped collapses running ESE from a point ~175m S of this pit. No other collapses in the area, but there are PRFs ~30m SE and ~120m E.

Stevinus 22

Impact Melt Pit: Stevinus Crater



Upper left: NAC M170213482L. Upper right: NAC M104162457L. Lower left: NAC M1142076438L. Lower right: Stereo anaglyph of NACs M1157415551R (left eye, red) and M1142076438L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 22. Black dot marks the location of the pit.

Size and Location

Latitude	32.9349°S	Inner pit diameter	38 m × 35 m
Longitude	53.9595°E	Long axis azimuth	40°
Depth	9 m	Funnel diameter	44 m × 41 m

Measurement Source Images

Image ID	M170213482L	M104162457L	M1142076438L
Incidence	-35.01°	-61.93°	-78.05°
Emission	1.25°	1.43°	2.99°
Time of Day	13.10	15.75	16.99
Pixel Scale	0.57 m/px	0.85 m/px	0.88 m/px
Depth	7.1 m	10.1 m	>8.6 m

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes?		

Location reference: NAC M170213482L line 49558, sample 3306

Best stereo pair: M1157415551R / M1142076438L

Other useful images:

DTM:

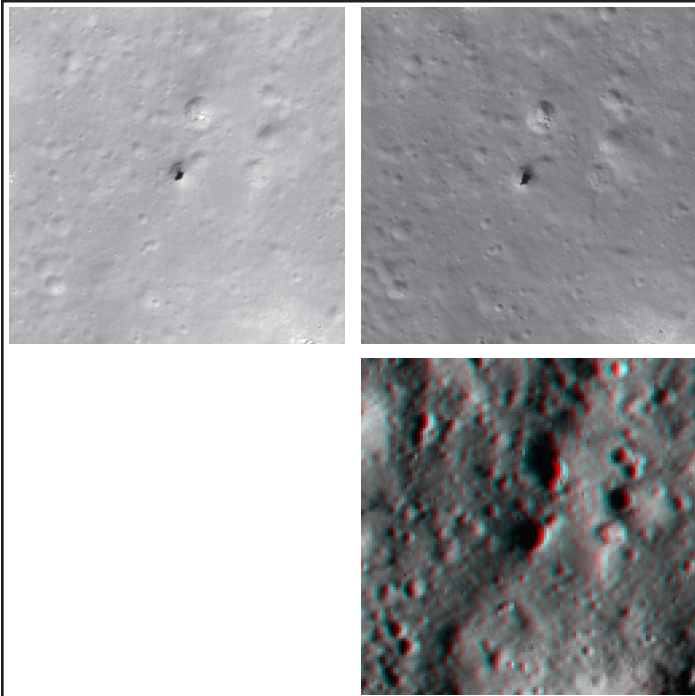
Data notes: Depth 2 is from funnel to center of floor. Long axis is ~perpendicular to obvious depression trend. Stereo is accidental, and may not be useful for anything other than manual viewing.

Description

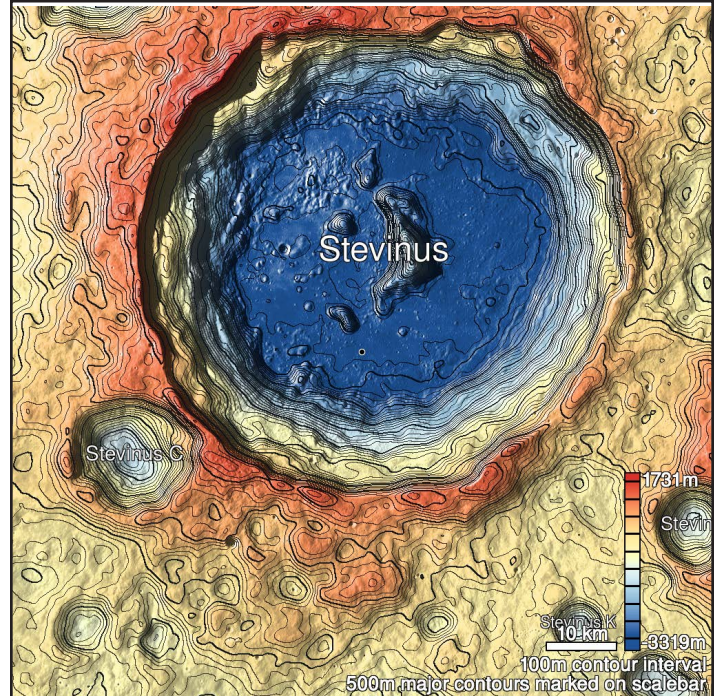
Wide shallow pit. Floor is bowl-shaped. SW corner of floor almost reaches rim, but not quite. There is a 20x15m collapse, ~4m deep, 180m to the E, which only has N and S walls- the E and W are slopes from surroundings to floor. There are a couple of other depressions in line with these two pits, although they could be degraded impact craters. The eastern collapse is at the S foot of a PRF, but Stevinus 22 is not adjacent to that PRF, though it is in a possible valley between two PRFs.

Stevinus 23

Impact Melt Pit: Stevinus Crater



Upper left: NAC M170213482R. Upper right: NAC M111240262R. Lower left: NAC . Lower right: Stereo anaglyph of NACs M1157415551R (left eye, red) and M1157408430L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 23. Black dot marks the location of the pit.

Size and Location

Latitude	32.9642°S	Inner pit diameter	7 m × 4 m
Longitude	54.0249°E	Long axis azimuth	30°
Depth	>8 m	Funnel diameter	14 m × 14 m

Measurement Source Images

Image ID	M170213482R	M111240262R	
Incidence	-35.06°	38.75°	
Emission	-0.47°	2.21°	
Time of Day	13.11	10.39	
Pixel Scale	0.56 m/px	0.61 m/px	
Depth	>7.3 m	>8.1 m	

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	Yes?		

Location reference: NAC M170213482R line 51335, sample 1350

Best stereo pair: M1157415551R / M1157408430L

Other useful images:

DTM:

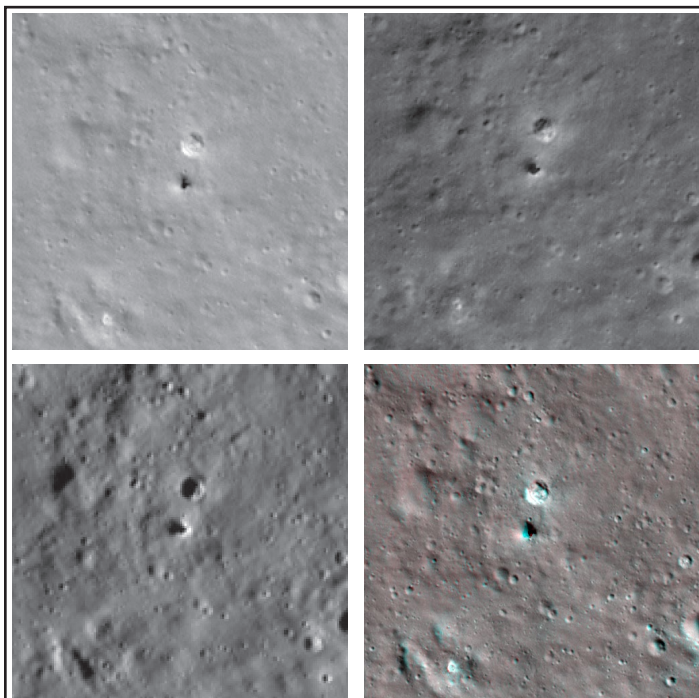
Data notes:

Description

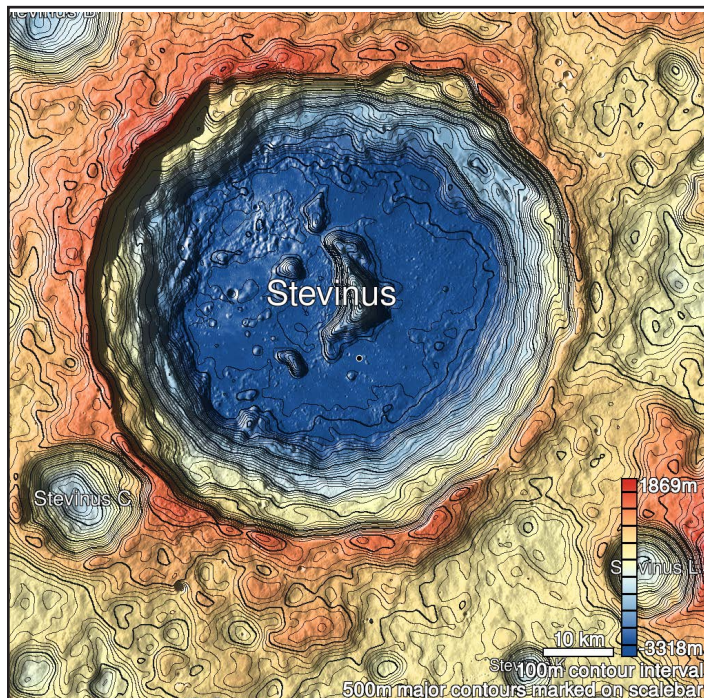
Trapezoidal pit, off-center in a circular depression (funnel? It has a rim on three sides, but I'll call it the funnel). No floor visible. The pit is situated within a N-S trending linear depression. There is a suspiciously sharp rimless(?) 16m crater 15m N along the depression, but I cannot tell for sure if it was caused by impact or drainage. There is a PRF ~125m SE.

Stevinus 24

Uncertain Impact Melt Pit: Stevinus Crater



Upper left: NAC M1136208157R. Upper right: NAC M1100860480L. Lower left: NAC M180808072R. Lower right: Stereo anaglyph of NACs M174929871L (left eye, red) and M174923123L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 24. Black dot marks the location of the pit.

Size and Location

Latitude	32.7823°S	Inner pit diameter	NA m × NA m
Longitude	54.2992°E	Long axis azimuth	0°
Depth	4 m	Funnel diameter	12 m × 12 m

Measurement Source Images

Image ID	M1136208157R	M1100860480L	M180808072R
Incidence	43.64°	-36.91°	-73.63°
Emission	2.39°	2.70°	-2.06°
Time of Day	9.92	13.39	16.65
Pixel Scale	0.78 m/px	0.80 m/px	0.98 m/px
Depth	4.4 m	>11 m	>3.5 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1136208157R line 36667, sample 4556

Best stereo pair: M174929871L / M174923123L

Other useful images:

DTM:

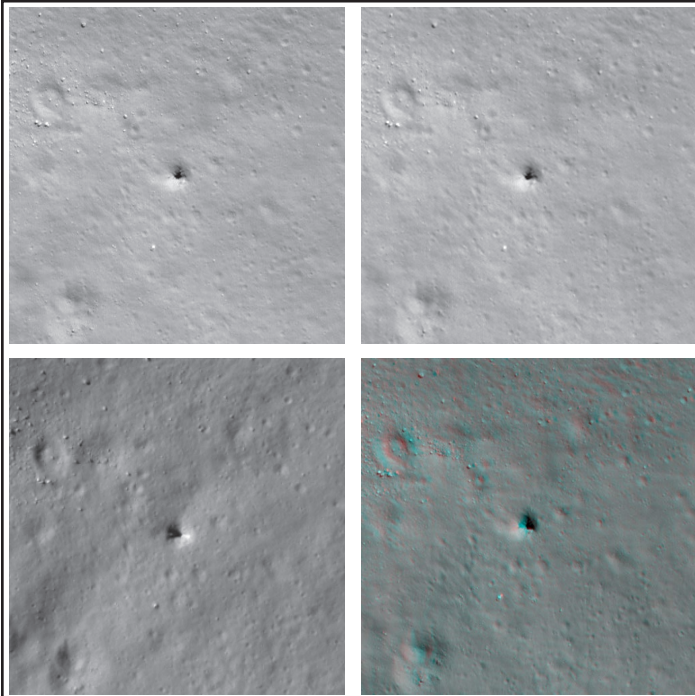
Data notes: Depths 2 and 3 are from funnel to floor.

Description

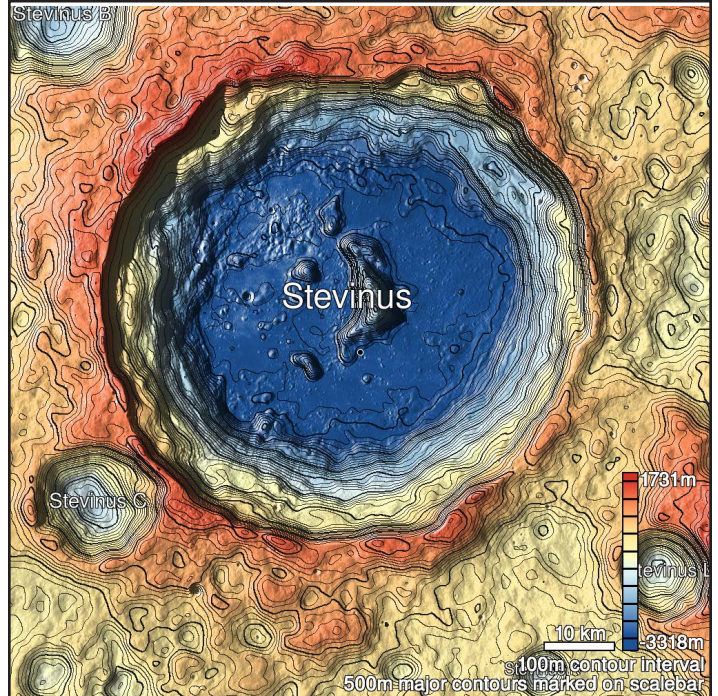
Probable pit. Appears to have vertical wall on the east side, but other sides are just funnel. ~10m south of a 15m diameter impact crater. No other depressions or PRFs of note in the area.

Stevinus 25

Impact Melt Pit: Stevinus Crater



Upper left: NAC M157234690R. Upper right: NAC M111240262L. Lower left: NAC M1190372454R. Lower right: Stereo anaglyph of NACs M174929871R (left eye, red) and M174923123R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 25. Black dot marks the location of the pit.

Size and Location

Latitude	32.7393°S	Inner pit diameter	4 m × 4 m
Longitude	54.2171°E	Long axis azimuth	0°
Depth	6 m	Funnel diameter	14 m × 13 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M157234690R	M111240262L	M1190372454R
Incidence	38.12°	38.47°	-55.49°
Emission	-0.08°	-2.56°	-1.97°
Time of Day	10.80	10.40	15.26
Pixel Scale	0.39 m/px	0.61 m/px	0.64 m/px
Depth	6.0 m	5.0 m	>3 m

Location reference: NAC M157234690R line 14082, sample 513

Best stereo pair: M174929871R / M174923123R

Other useful images:

DTM:

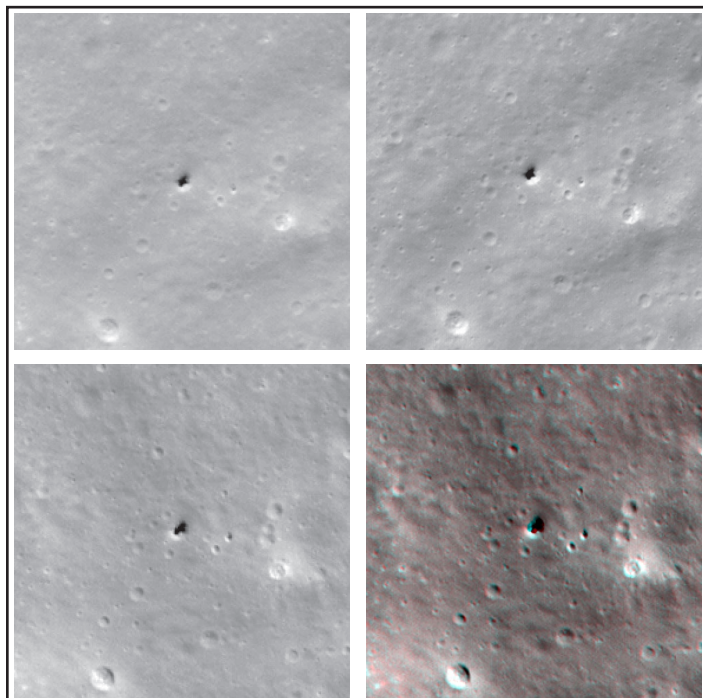
Data notes:

Description

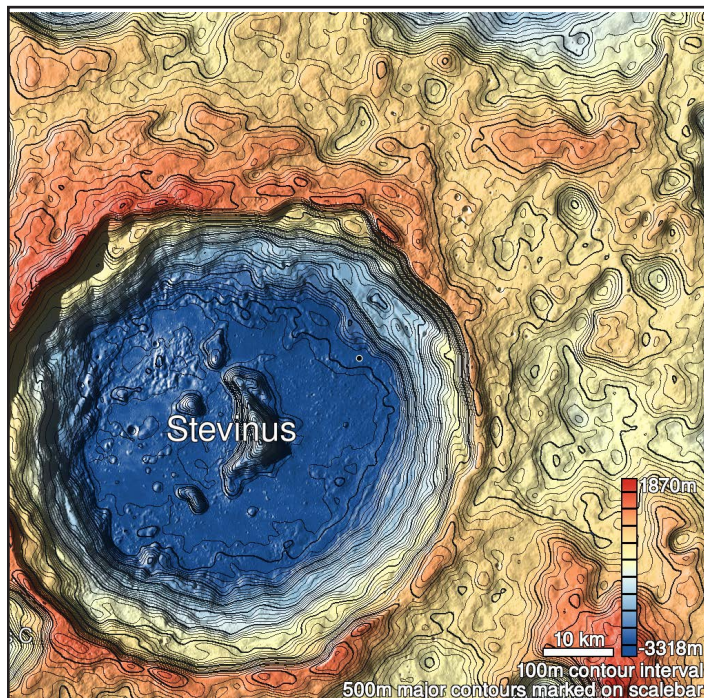
Round pit with an enormous funnel relative to the inner pit. No floor is visible within the inner pit. Might be on N edge of a very large PRF- stereo is somewhat unclear without proper calibration. No other collapses in the area.

Stevinus 26

Impact Melt Pit: Stevinus Crater



Upper left: NAC M1133848318R. Upper right: NAC M185518687L. Lower left: NAC M1166822959R. Lower right: Stereo anaglyph of NACs M1105574923L (left eye, red) and M1105567778L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Stevinus 26. Black dot marks the location of the pit.

Size and Location

Latitude	32.1328°S	Inner pit diameter	7 m × 3 m
Longitude	54.8650°E	Long axis azimuth	35°
Depth	>9 m	Funnel diameter	13 m × 10 m

Measurement Source Images

Image ID	M1133848318R	M185518687L	M1166822959R
Incidence	31.21°	-36.08°	43.21°
Emission	2.01°	0.49°	-0.20°
Time of Day	11.75	12.91	9.93
Pixel Scale	0.79 m/px	0.65 m/px	0.81 m/px
Depth	>9.1 m	>6.8 m	>8.5 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1133848318R line 52083, sample 3886

Best stereo pair: M1105574923L / M1105567778L

Other useful images:

DTM:

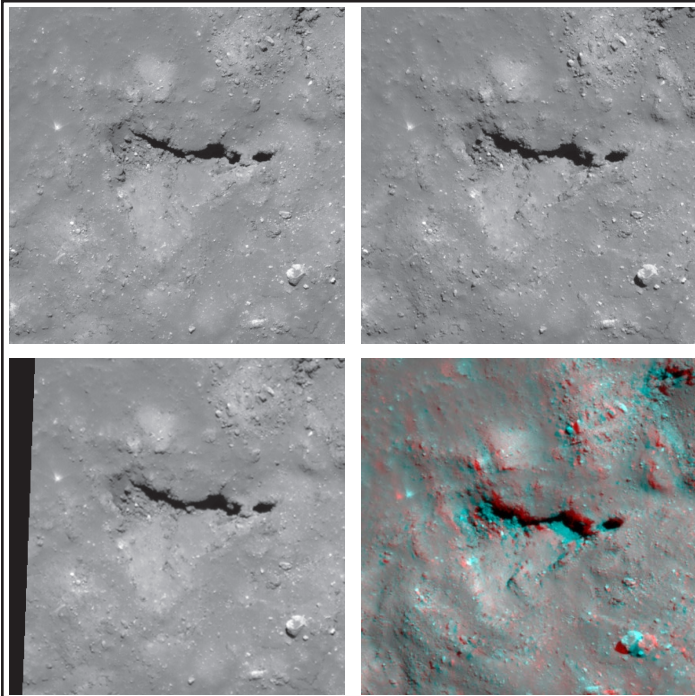
Data notes:

Description

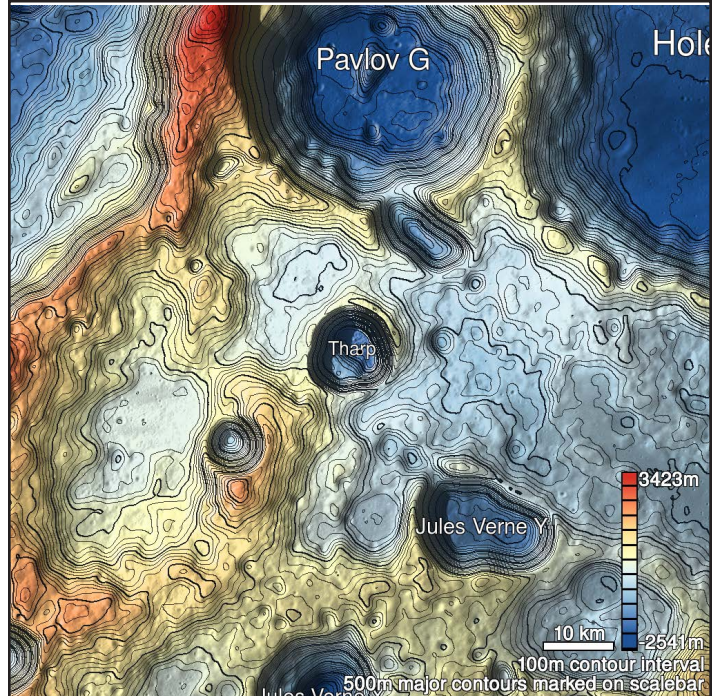
Elliptical pit in a subtle N-S-trending linear depression. No visible floor. There is a pair(?) of tiny spots that appear to be ~1m and ~2m-diameter pits 135m to the W. No other obvious collapses or PRFs in the area.

Tharp 1a

Impact Melt Pit: Tharp Crater



Upper left: NAC M108278624R. Upper right: NAC M125977218R. Lower left: NAC M1148548012L. Lower right: Stereo anaglyph of NACs M1181514179R (left eye, red) and M1181507077R (right eye, blue). All images are 300 m wide.



Color shaded relief map of the area around Tharp 1a. Black dot marks the location of the pit.

Size and Location

Latitude	30.6002°S	Inner pit diameter	116 m × 88 m
Longitude	145.6809°E	Long axis azimuth	10°
Depth	23 m	Funnel diameter	140 m × 121 m

Other Features

Entrance Ramp	No?	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M108278624R	M125977218R	M1148548012L
Incidence	-30.63°	35.93°	31.78°
Emission	-0.85°	0.59°	-0.33°
Time of Day	12.64	10.87	11.85
Pixel Scale	0.51 m/px	0.57 m/px	0.79 m/px
Depth	24.5 m	20.0 m	23.5 m

Location reference: NAC M108278624R line 7072, sample 1996

Best stereo pair: M1181514179R / M1181507077R

Other useful images:

DTM:

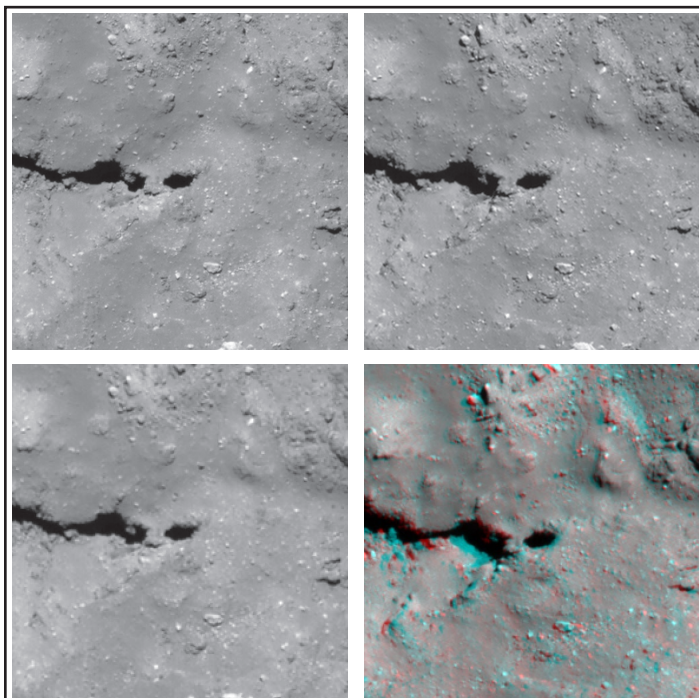
Data notes:

Description

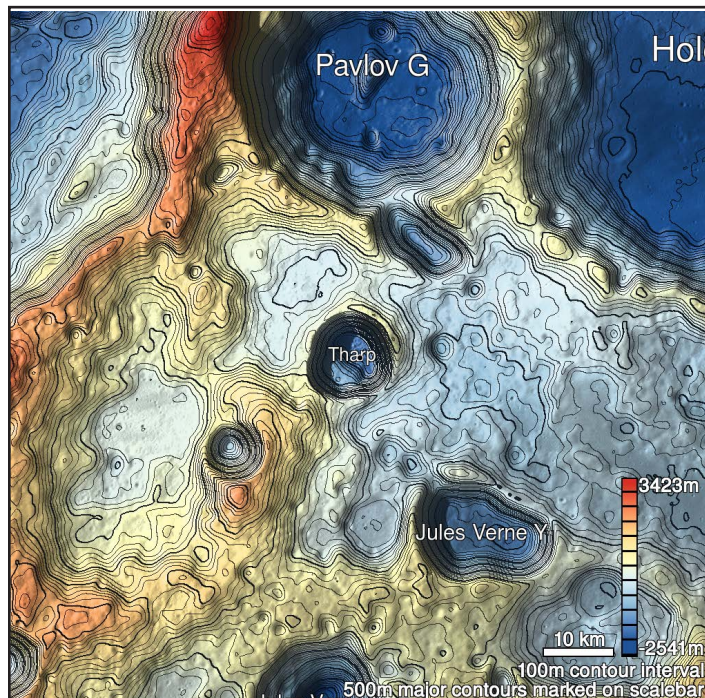
Large, shallow, roughly triangular pit at the base of a PRF. S wall is mostly a slope down from rim (in places near the top of the PRF) to the floor, but there is usually a bit of a vertical wall at the top. There is a small pit (Near Pavlov G 1b) adjacent on the E side, close enough that there may be a bridge. No available Sun angle confirms a connection, though. There is another pair of much smaller and shallower collapses ~280m north.

Tharp 1b

Impact Melt Pit: Tharp Crater



Upper left: NAC M108278624R. Upper right: NAC M125977218R. Lower left: NAC M1148548012L. Lower right: Stereo anaglyph of NACs M1181514179R (left eye, red) and M1181507077R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tharp 1b. Black dot marks the location of the pit.

Size and Location

Latitude	30.5999°S	Inner pit diameter	21 m × 10 m
Longitude	145.6841°E	Long axis azimuth	75°
Depth	>16 m	Funnel diameter	NA m × NA m

Measurement Source Images

Image ID	M108278624R	M125977218R	M1148548012L
Incidence	-30.63°	35.93°	31.78°
Emission	-0.94°	0.50°	-0.39°
Time of Day	12.64	10.87	11.85
Pixel Scale	0.51 m/px	0.57 m/px	0.79 m/px
Depth	>16.4 m	>15.6 m	>16.2 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M108278624R line 7041, sample 2147

Best stereo pair: M1181514179R / M1181507077R

Other useful images:

DTM:

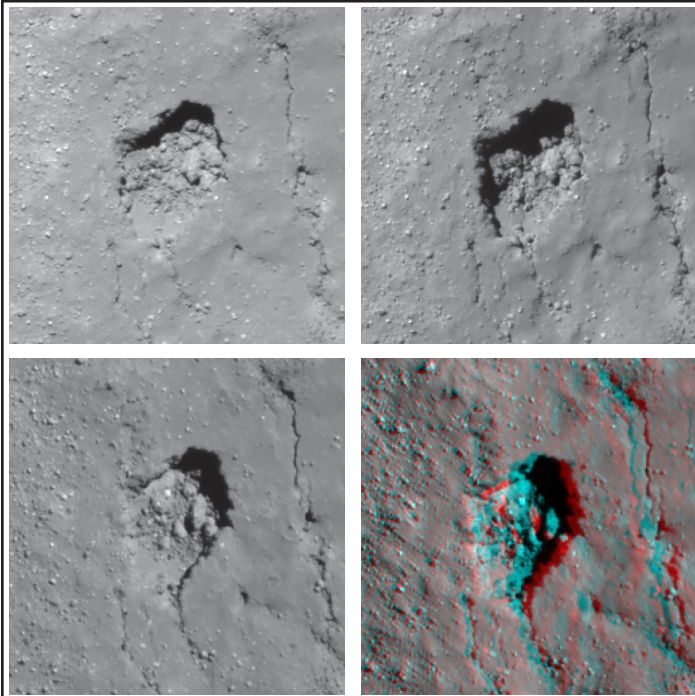
Data notes:

Description

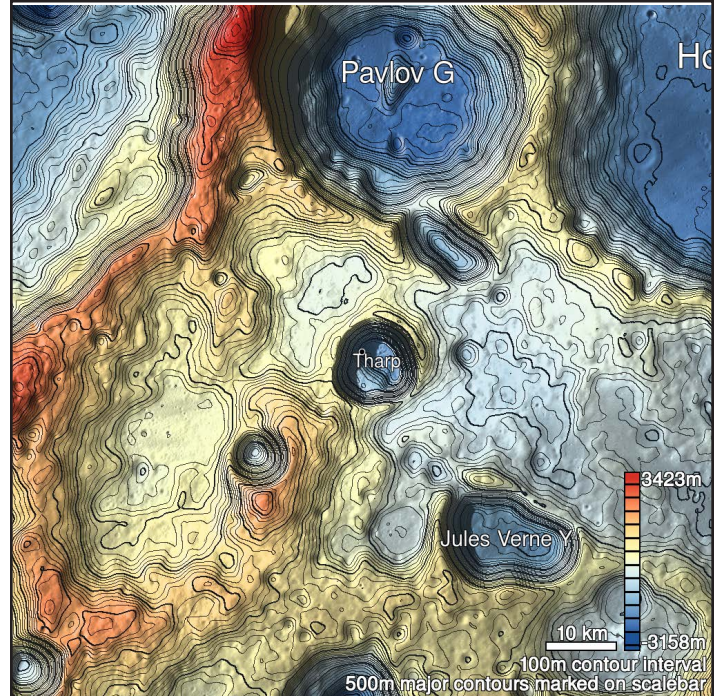
Elliptical pit with no identifiable funnel adjacent to Near Pavlov G 1a. No floor visible in any images, and cannot tell if there is a sub-lunarian connection between the two.

Tharp 2

Impact Melt Pit: Tharp Crater



Upper left: NAC M1133251236L. Upper right: NAC M1146193359L. Lower left: NAC M1150904064L. Lower right: Stereo anaglyph of NACs M1168585439L (left eye, red) and M1168578332L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tharp 2. Black dot marks the location of the pit.

Size and Location

Latitude	30.5395°S	Inner pit diameter	88 m × 56 m
Longitude	145.5548°E	Long axis azimuth	20°
Depth	24 m	Funnel diameter	91 m × 70 m

Measurement Source Images

Image ID	M1133251236L	M1146193359L	M1150904064L
Incidence	-29.37°	-40.47°	42.32°
Emission	1.31°	0.73°	-0.39°
Time of Day	12.17	13.73	9.98
Pixel Scale	0.79 m/px	0.77 m/px	0.80 m/px
Depth	24.0 m	27.5 m	20.3 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1133251236L line 16075, sample 3249

Best stereo pair: M1168585439L / M1168578332L

Other useful images: M108278624L

DTM:

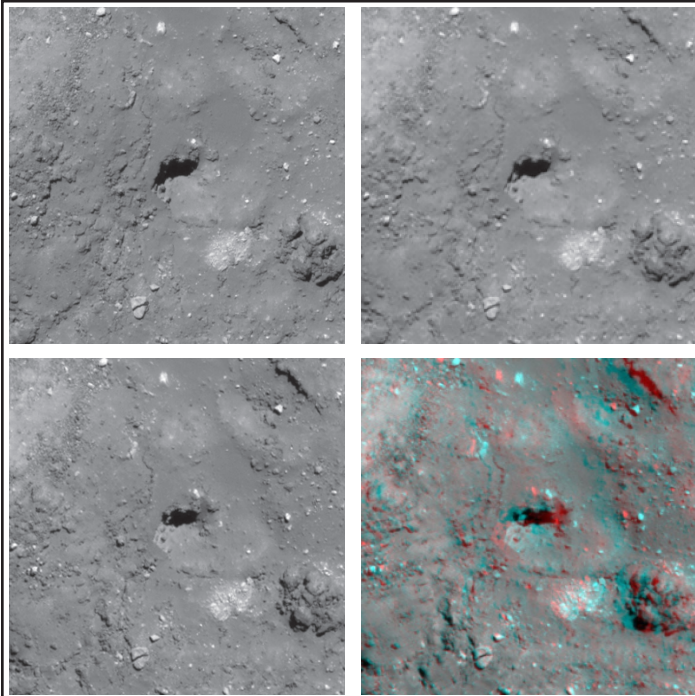
Data notes:

Description

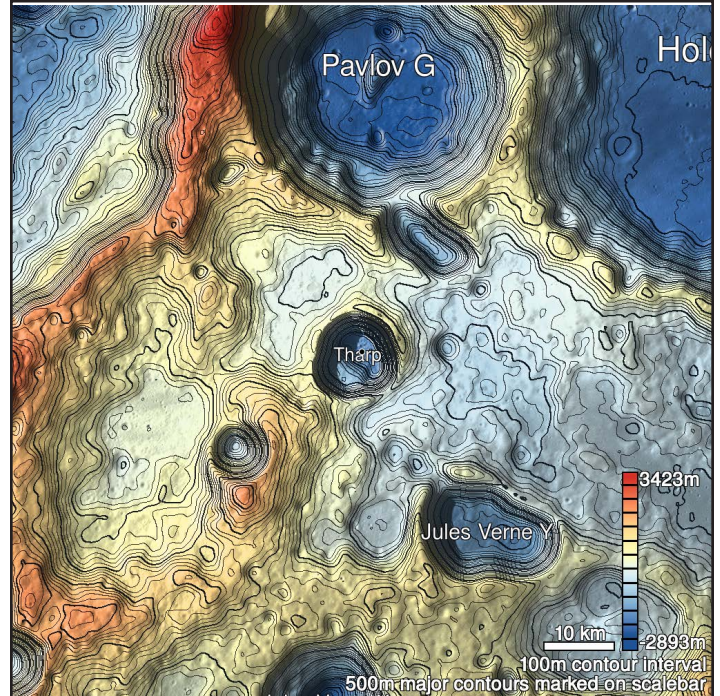
A rectangular pit ~150m E of the crater wall. The floor is covered in 1-18m boulders, and there are no collapsed walls. There is a very thin fracture running 50m S from the S corner of the pit, and several more thin fractures running N-S to the east of the pit. There are a couple of large (~100m diameter) fracture-associated collapses ~120m and ~260m SE.

Tharp 3

Impact Melt Pit: Tharp Crater



Upper left: NAC M108278624R. Upper right: NAC M1148548012R. Lower left: NAC M125977218R. Lower right: Stereo anaglyph of NACs M1181514179R (left eye, red) and M1181507077R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tharp 3. Black dot marks the location of the pit.

Size and Location

Latitude	30.5713°S	Inner pit diameter	31 m × NA m
Longitude	145.6634°E	Long axis azimuth	60°
Depth	16 m	Funnel diameter	40 m × 37 m

Measurement Source Images

Image ID	M108278624R	M1148548012R	M125977218R
Incidence	-30.60°	31.75°	35.91°
Emission	-0.31°	0.09°	1.05°
Time of Day	12.64	11.85	10.87
Pixel Scale	0.51 m/px	0.79 m/px	0.57 m/px
Depth	18.6 m	17.0 m	13.1 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M108278624R line 5473, sample 1060

Best stereo pair: M1181514179R / M1181507077R

Other useful images:

DTM:

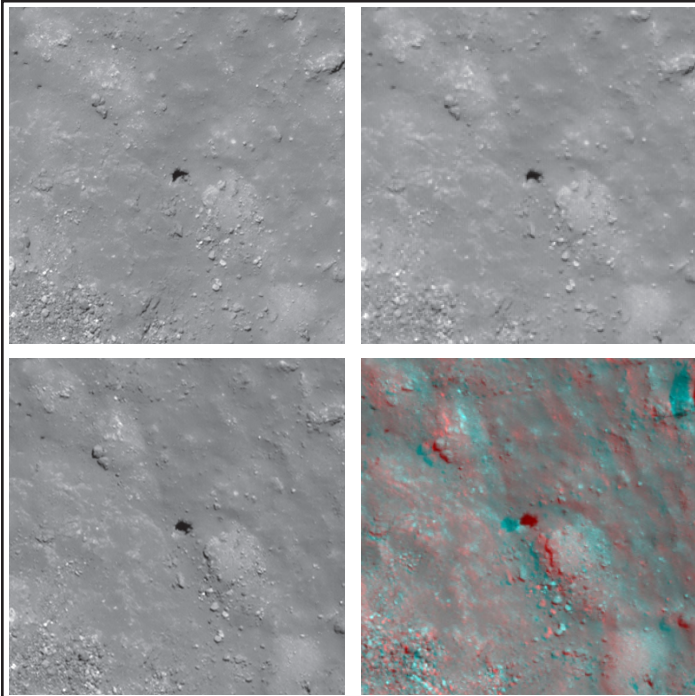
Data notes:

Description

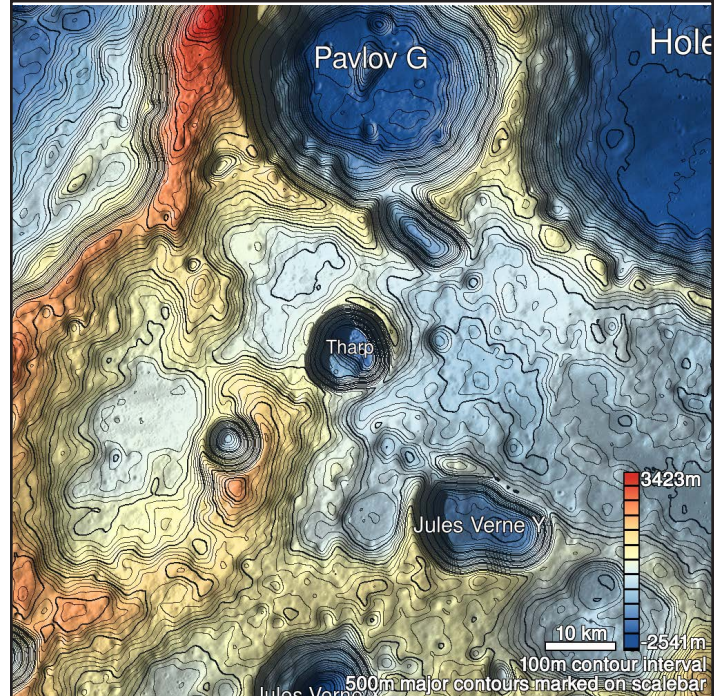
Collapse near the base of a PRF (floor is lower than non-PRF terrain). The S (upslope) wall seems to be a smooth (rocky?) slope to the bottom, N and W walls appear vertical. No other obvious collapses in the area.

Tharp 4

Impact Melt Pit: Tharp Crater



Upper left: NAC M108278624R. Upper right: NAC M1148548012L. Lower left: NAC M125977218R. Lower right: Stereo anaglyph of NACs M1181514179R (left eye, red) and M1181507077R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tharp 4. Black dot marks the location of the pit.

Size and Location

Latitude	30.6063°S	Inner pit diameter	10 m × 8 m
Longitude	145.7057°E	Long axis azimuth	60°
Depth	9 m	Funnel diameter	12 m × 12 m

Measurement Source Images

Image ID	M108278624R	M1148548012L	M125977218R
Incidence	-30.65°	31.79°	35.93°
Emission	-1.59°	-0.83°	-0.11°
Time of Day	12.65	11.85	10.88
Pixel Scale	0.51 m/px	0.79 m/px	0.57 m/px
Depth	8.6 m	9.3 m	7.9 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M108278624R line 7405, sample 3269

Best stereo pair: M1181514179R / M1181507077R

Other useful images:

DTM:

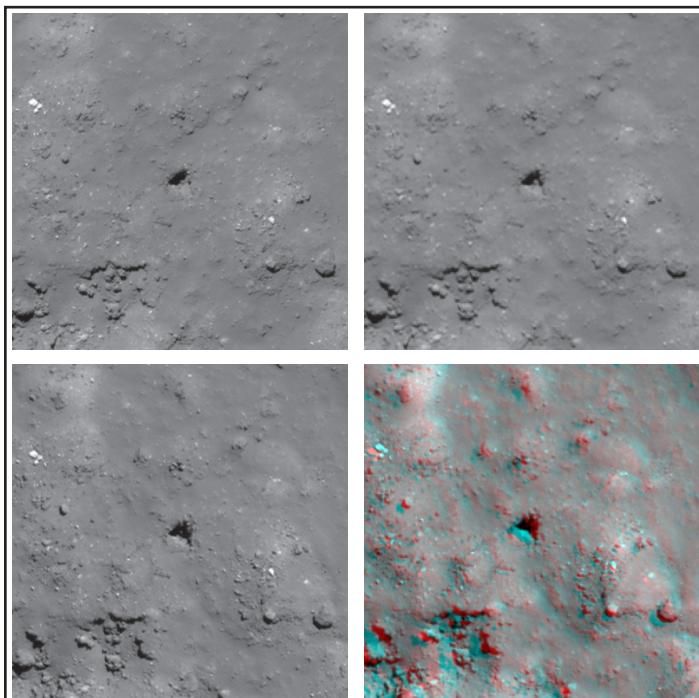
Data notes:

Description

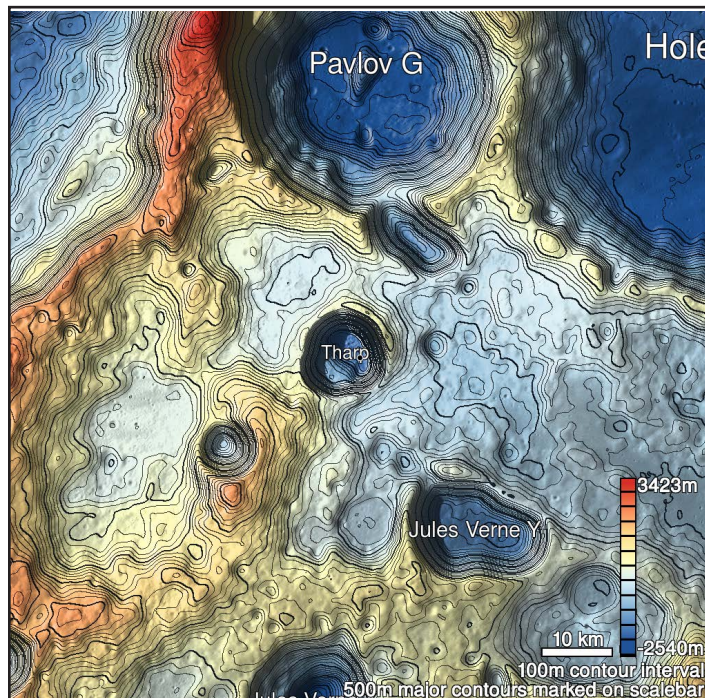
Circular pit at the base of a large (~1km diameter?) PRF. Walls appear vertical, although E side may be protruding slightly. Several smaller (~100m diameter) mounds in the area that look like they were oozed-out piles of melt. There is a 100-150m diameter bowl-shaped collapse ~275m to the NW.

Tharp 5

Impact Melt Pit: Tharp Crater



Upper left: NAC M108278624R. Upper right: NAC M1148548012L. Lower left: NAC M125977218L. Lower right: Stereo anaglyph of NACs M1181514179R (left eye, red) and M1181507077R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tharp 5. Black dot marks the location of the pit.

Size and Location

Latitude	30.6106°S	Inner pit diameter	14 m × 12 m
Longitude	145.7199°E	Long axis azimuth	55°
Depth	12 m	Funnel diameter	17 m × 17 m

Measurement Source Images

Image ID	M108278624R	M1148548012L	M125977218L
Incidence	-30.65°	31.79°	35.92°
Emission	-2.02°	-1.11°	-0.47°
Time of Day	12.65	11.85	10.88
Pixel Scale	0.51 m/px	0.79 m/px	0.57 m/px
Depth	9.7 m	12.5 m	12.4 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M108278624R line 7626, sample 3991

Best stereo pair: M1181514179R / M1181507077R

Other useful images:

DTM:

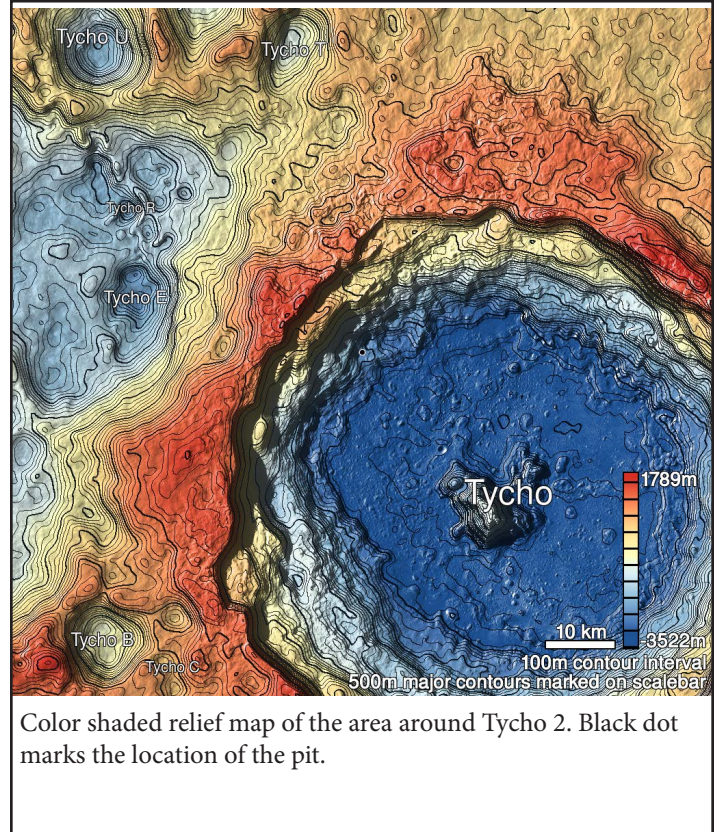
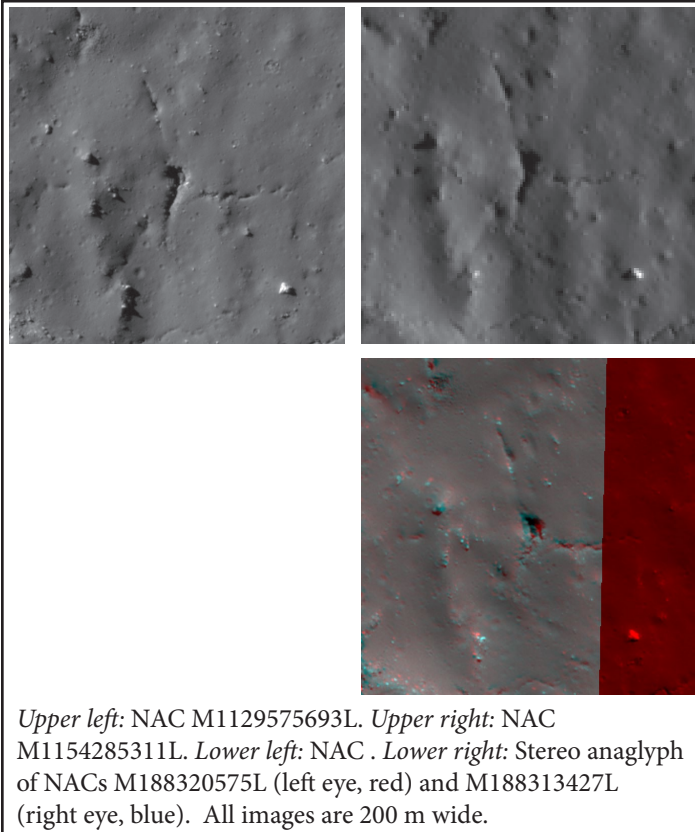
Data notes:

Description

Triangular pit in a field of low, rounded domes (ooze domes?). SE corner may be sloped off-vertical, but there's too much vertical wall to drive in. ~100m S is a large PRF surrounded by ~50m wide, shallow collapses. There is a 100x50m shallow collapse ~330m NE.

Tycho 2

Impact Melt Pit: Tycho Crater



Size and Location

Latitude	42.5978°S	Inner pit diameter	13 m × 6 m
Longitude	347.8196°E	Long axis azimuth	15°
Depth	3 m	Funnel diameter	18 m × 12 m

Measurement Source Images

Image ID	M1129575693L	M1154285311L	
Incidence	-57.44°	75.40°	
Emission	1.54°	-1.19°	
Time of Day	15.00	7.30	
Pixel Scale	0.56 m/px	1.10 m/px	
Depth	2.7 m	>3.1 m	

Other Features

Entrance Ramp	No	In dome	No
Overhang	Yes?	Beside dome	No
Nearby pits	Yes?	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M1129575693L line 14162, sample 2799

Best stereo pair: M188320575L / M188313427L

Other useful images:

DTM:

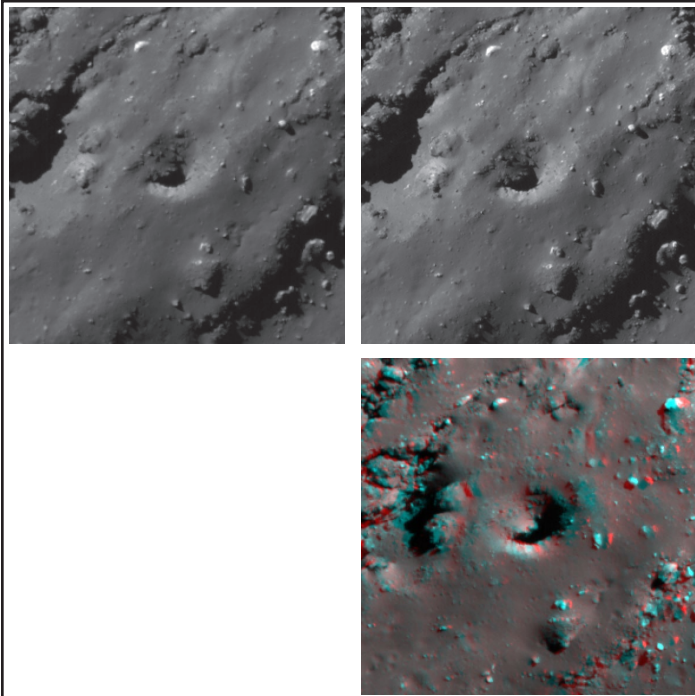
Data notes: Funnel measure does not include connected fracture/ depression. Depth from top of funnel is 6.4m in M1129575693L.

Description

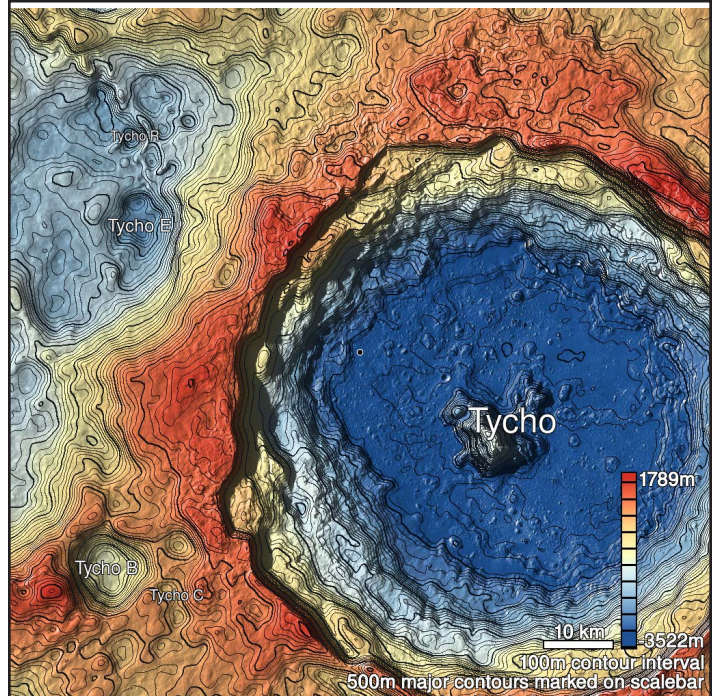
Semicircular pit, possibly fracture-associated (at corner between two small fractures' trends, and there's a depression/fracture running ~20m south). There's a larger series of fractures running N-S ~120m west. Possibly overhang visible in slewed image M188313427L, but don't have a good non-slewed comparison image.

Tycho 3

Impact Melt Pit: Tycho Crater



Upper left: NAC M183602781R. Upper right: NAC M1129575693L. Lower left: NAC . Lower right: Stereo anaglyph of NACs M1182543691R (left eye, red) and M1182529486R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 3. Black dot marks the location of the pit.

Size and Location

Latitude	42.9449°S	Inner pit diameter	18 m × 9 m
Longitude	347.7857°E	Long axis azimuth	50°
Depth	>6 m	Funnel diameter	43 m × 40 m

Measurement Source Images

Image ID	M183602781R	M1129575693L	
Incidence	-55.19°	-57.61°	
Emission	-2.15°	2.70°	
Time of Day	14.44	15.00	
Pixel Scale	0.67 m/px	0.57 m/px	
Depth	>6.1 m	>6.5 m	

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M183602781R line 40111, sample 4180

Best stereo pair: M1182543691R / M1182529486R

Other useful images: M188313427L, M188320575L

DTM:

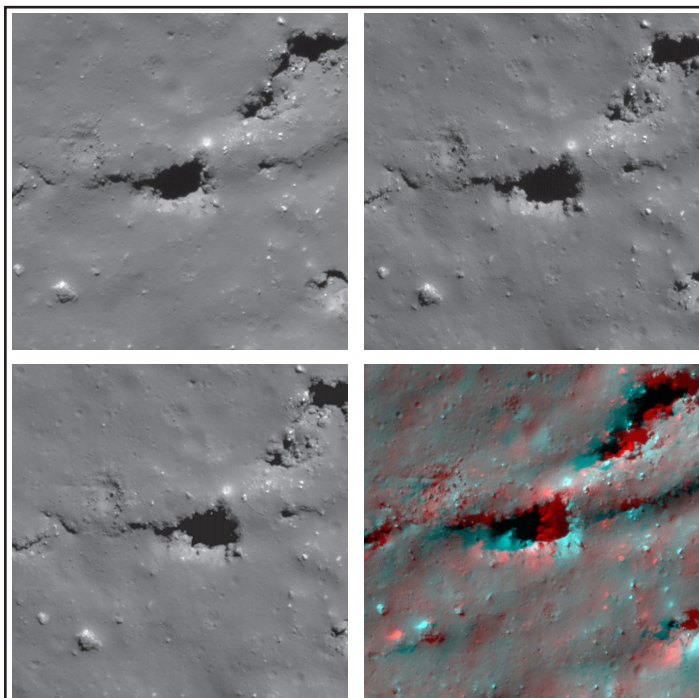
Data notes: The only images that show the floor are part of a stereo pair.

Description

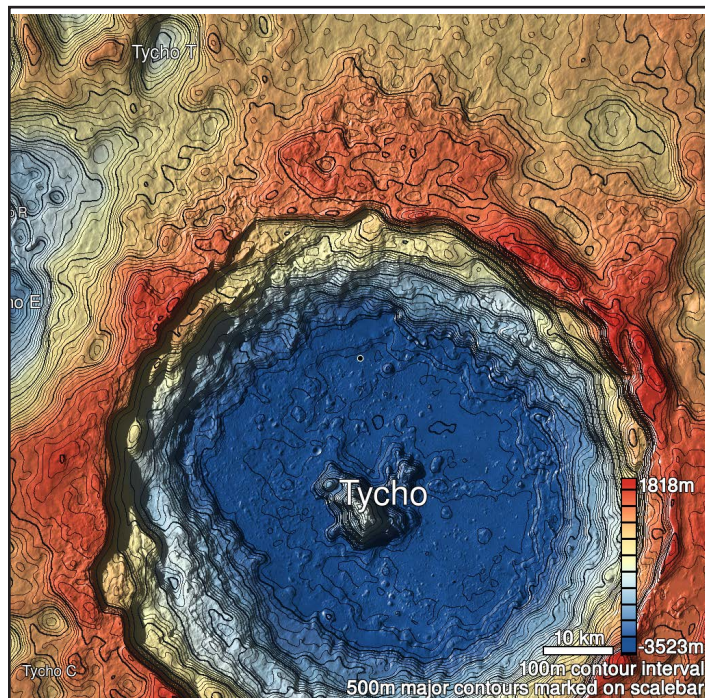
A curved pit with a very pronounced funnel. The floor/wall slopes evenly down from the north rim. Is at the top of a positive relief features, and is in line with three other collapse features ~120, ~180, and ~200m to the south. There is a large fracture-associated pit ~50m west, on the west edge of the host PRF.

Tycho 5a

Impact Melt Pit: Tycho Crater



Upper left: NAC M139979870R. Upper right: NAC M127008391L. Lower left: NAC M111661378L. Lower right: Stereo anaglyph of NACs M1206074763R (left eye, red) and M1206067729R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 5a. Black dot marks the location of the pit.

Size and Location

Latitude	42.6199°S	Inner pit diameter	31 m × 21 m
Longitude	348.6332°E	Long axis azimuth	70°
Depth	22 m	Funnel diameter	54 m × 35 m

Measurement Source Images

Image ID	M139979870R	M127008391L	M111661378L
Incidence	-41.33°	50.91°	49.22°
Emission	-0.22°	-0.02°	15.16°
Time of Day	12.36	10.11	9.98
Pixel Scale	0.50 m/px	0.49 m/px	0.57 m/px
Depth	21.6 m	>23.6 m	

Other Features

Entrance Ramp	Yes?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M139979870R line 15209, sample 882

Best stereo pair: M1206074763R / M1206067729R

Other useful images: M111661378L

DTM:

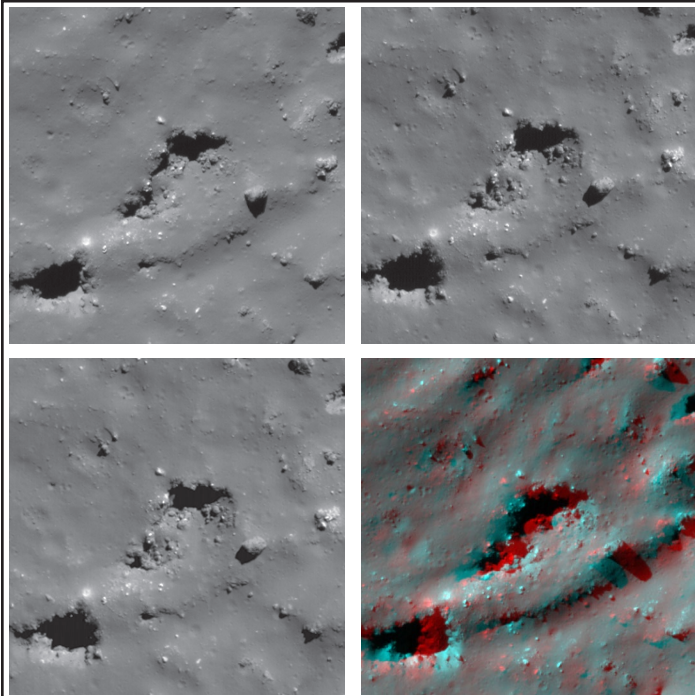
Data notes:

Description

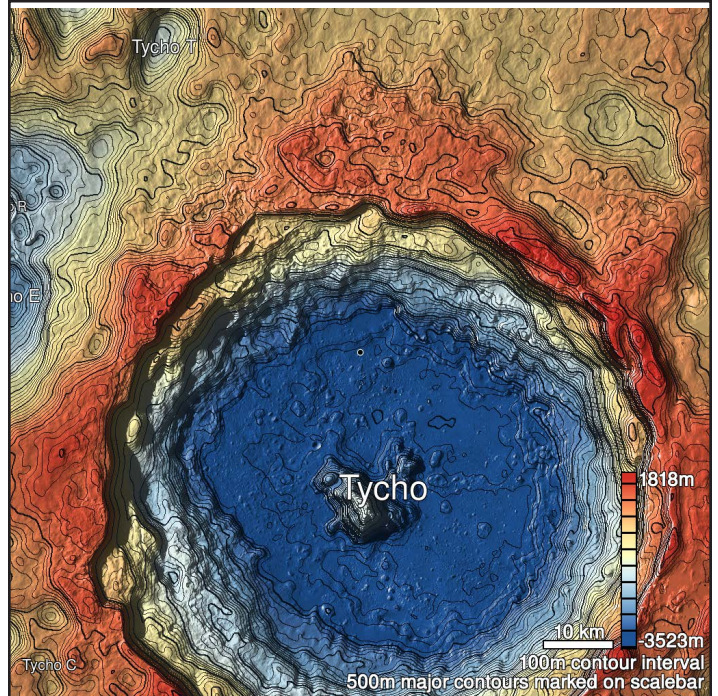
Southwesternmost of a ~kilometer-long chain of pits and other collapses, and the only one in the line that does not have an obviously round-bottomed or mostly-filled-in floor (no floor is visible in available images?) . S wall may be steeply sloped, not truly vertical, or there may be a bit of floor visible in M139979870R. At the NE end of the chain, it turns into a series of fracture-associated pits. There is also a possible ~5m wide pit 25m east of this one, and Tycho 5e is out of the line of pits ~85m to the SE of Tycho 5a.

Tycho 5b

Uncertain Impact Melt Pit: Tycho Crater



Upper left: NAC M139979870R. Upper right: NAC M127008391L. Lower left: NAC M111661378L. Lower right: Stereo anaglyph of NACs M1206074763R (left eye, red) and M1206067729R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 5b. Black dot marks the location of the pit.

Size and Location

Latitude	42.6179°S	Inner pit diameter	77 m × 42 m
Longitude	348.6363°E	Long axis azimuth	50°
Depth	15 m	Funnel diameter	86 m × 50 m

Measurement Source Images

Image ID	M139979870R	M127008391L	M111661378L
Incidence	-41.33°	50.90°	49.21°
Emission	-0.29°	-0.09°	15.09°
Time of Day	12.36	10.11	9.98
Pixel Scale	0.50 m/px	0.49 m/px	0.57 m/px
Depth	15.9 m	14.6 m	

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M139979870R line 15095, sample 1021

Best stereo pair: M1206074763R / M1206067729R

Other useful images: M111661378L

DTM:

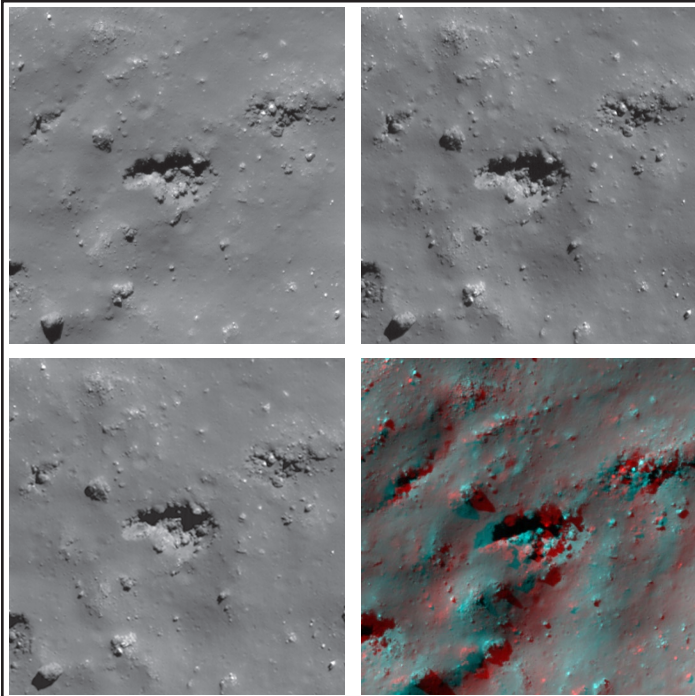
Data notes:

Description

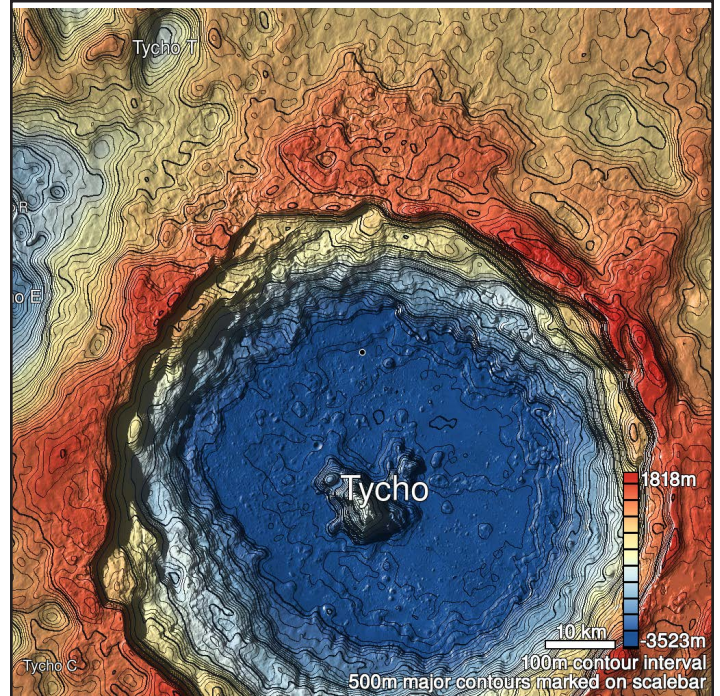
Second pit going NE in the chain. Rounded floor over most of the area, but the north wall appears to be vertical, with no floor rounding visible before the floor disappears into shadow. There is also a bit of a drop-off at the SW end. There is a slight ridge between this pit and Tycho 5a.

Tycho 5c

Uncertain Impact Melt Pit: Tycho Crater



Upper left: NAC M139979870R. Upper right: NAC M127008391L. Lower left: NAC M111661378L. Lower right: Stereo anaglyph of NACs M1206074763R (left eye, red) and M1206067729R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 5c. Black dot marks the location of the pit.

Size and Location

Latitude	42.6152°S	Inner pit diameter	NA m × NA m
Longitude	348.6417°E	Long axis azimuth	90°
Depth	10 m	Funnel diameter	57 m × 34 m

Measurement Source Images

Image ID	M139979870R	M127008391L	M111661378L
Incidence	-41.33°	50.90°	49.21°
Emission	-0.43°	-0.24°	14.97°
Time of Day	12.36	10.11	9.98
Pixel Scale	0.50 m/px	0.49 m/px	0.57 m/px
Depth	9.1 m	11.8 m	

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M139979870R line 14959, sample 1262

Best stereo pair: M1206074763R / M1206067729R

Other useful images: M111661378L

DTM:

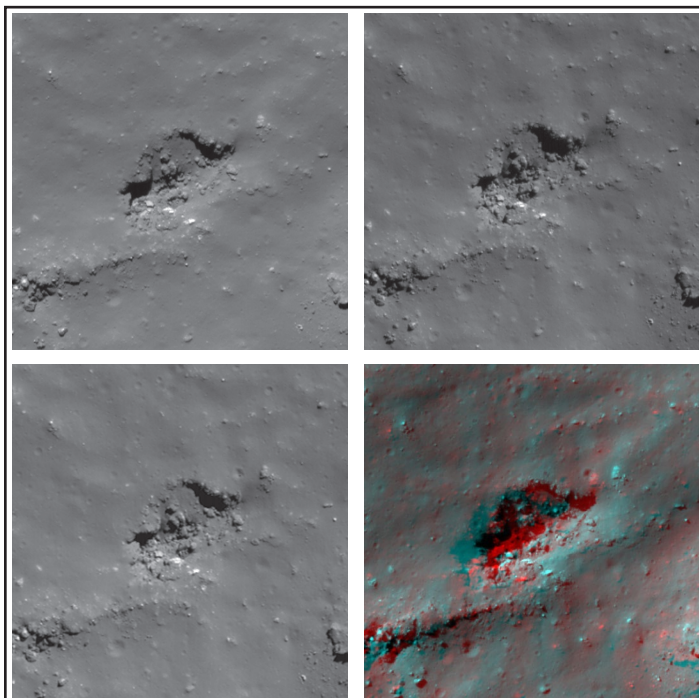
Data notes:

Description

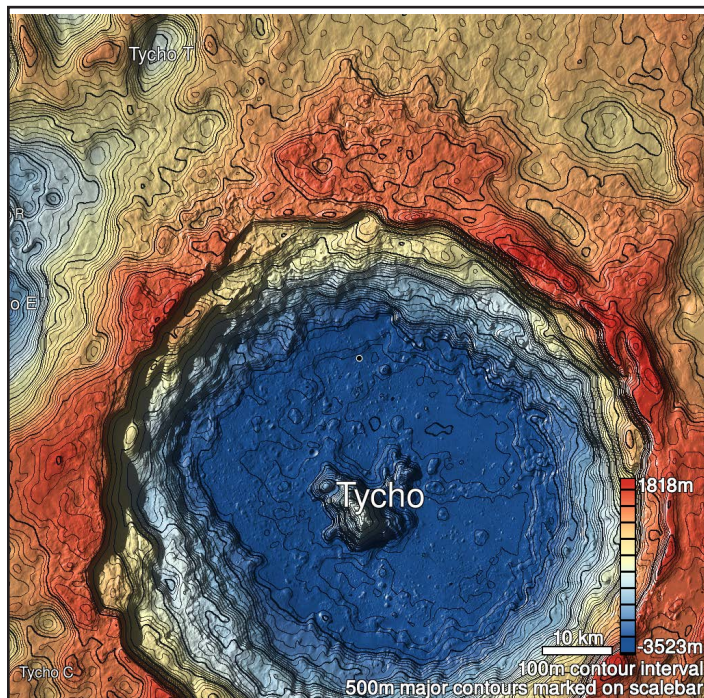
Third pit going NE in the chain. Very rough/sloped walls, lots of boulders. Not much in the way of vertical walls, but also not particularly traversable due to boulders.

Tycho 5d

Uncertain Impact Melt Pit: Tycho Crater



Upper left: NAC M139979870R. Upper right: NAC M127008391L. Lower left: NAC M111661378L. Lower right: Stereo anaglyph of NACs M1206074763R (left eye, red) and M1206067729R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 5d. Black dot marks the location of the pit.

Size and Location

Latitude	42.6120°S	Inner pit diameter	62 m × 37 m
Longitude	348.6483°E	Long axis azimuth	60°
Depth	10 m	Funnel diameter	88 m × 51 m

Measurement Source Images

Image ID	M139979870R	M127008391L	M111661378L
Incidence	-41.32°	50.89°	49.20°
Emission	-0.60°	-0.42°	14.82°
Time of Day	12.36	10.11	9.98
Pixel Scale	0.50 m/px	0.49 m/px	0.57 m/px
Depth	10.8 m	9.8 m	

Other Features

Entrance Ramp	No?	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M139979870R line 14777, sample 1558

Best stereo pair: M1206074763R / M1206067729R

Other useful images: M111661378L

DTM:

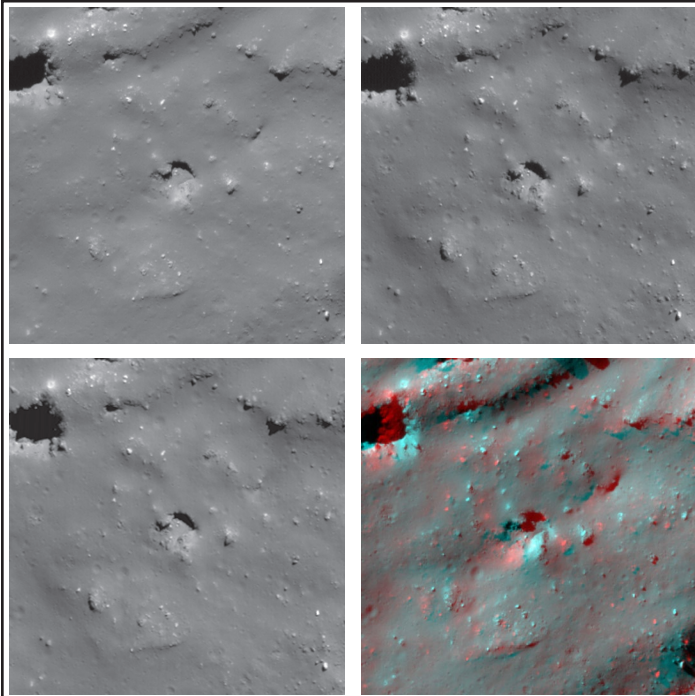
Data notes:

Description

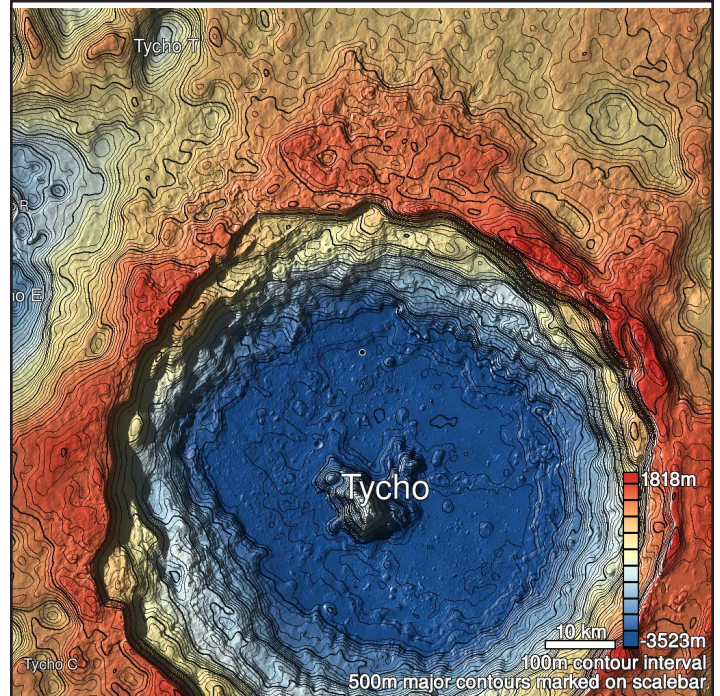
Fourth pit going NE in the chain. Very rounded bottom, lots of boulders. NE and SW walls are vertical, others are slopes. Probably not traversable. The two pits further NE in the chain are both fracture-associated.

Tycho 5e

Impact Melt Pit: Tycho Crater



Upper left: NAC M139979870R. Upper right: NAC M127008391L. Lower left: NAC M111661378L. Lower right: Stereo anaglyph of NACs M1206074763R (left eye, red) and M1206067729R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 5e. Black dot marks the location of the pit.

Size and Location

Latitude	42.6218°S	Inner pit diameter	15 m × 14 m
Longitude	348.6372°E	Long axis azimuth	60°
Depth	5 m	Funnel diameter	20 m × 19 m

Measurement Source Images

Image ID	M139979870R	M127008391L	M111661378L
Incidence	-41.33°	50.90°	49.22°
Emission	-0.32°	-0.12°	15.07°
Time of Day	12.36	10.11	9.98
Pixel Scale	0.50 m/px	0.49 m/px	0.57 m/px
Depth	5.4 m	5.3 m	

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M139979870R line 15321, sample 1063

Best stereo pair: M1206074763R / M1206067729R

Other useful images: M111661378L

DTM:

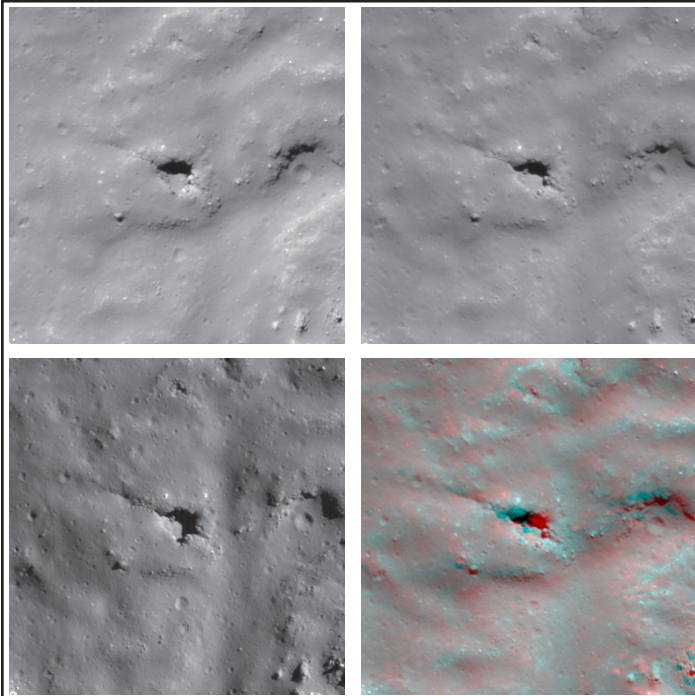
Data notes:

Description

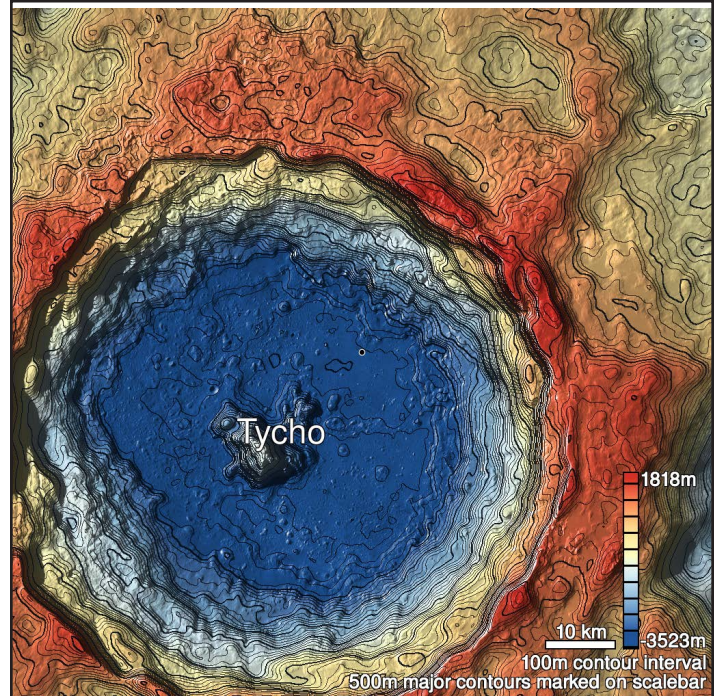
Square pit, off the line of the other Tycho 5 pits (100m SE of Tycho 5a). SW wall is a smooth slope down to where it gets hidden by the shadow from the north wall.

Tycho 6

Impact Melt Pit: Tycho Crater



Upper left: NAC M1131922380L. Upper right: NAC M118943218L. Lower left: NAC M129363095L. Lower right: Stereo anaglyph of NACs M1164903641L (left eye, red) and M118943218L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 6. Black dot marks the location of the pit.

Size and Location

Latitude	42.8894°S	Inner pit diameter	20 m × 19 m
Longitude	349.3296°E	Long axis azimuth	120°
Depth	7 m	Funnel diameter	30 m × 27 m

Measurement Source Images

Image ID	M1131922380L	M118943218L	M129363095L
Incidence	-44.59°	46.30°	65.79°
Emission	0.90°	-0.38°	-1.41°
Time of Day	13.23	10.93	8.34
Pixel Scale	0.57 m/px	0.62 m/px	0.50 m/px
Depth	8.6 m	8.4 m	4.3 m

Other Features

Entrance Ramp	No	In dome	No?
Overhang	?	Beside dome	No?
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M1131922380L line 27258, sample 3871

Best stereo pair: M1164903641L / M118943218L

Other useful images:

DTM:

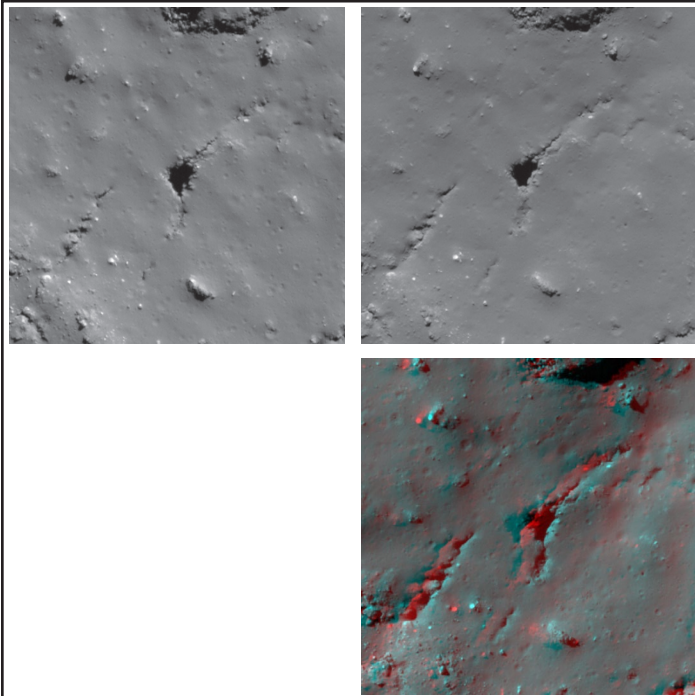
Data notes: Depth 3 is from further south on the floor than Depths 1 and 2. The floor may slope up towards the south. Stereo is accidental, and may not work for manual viewing.

Description

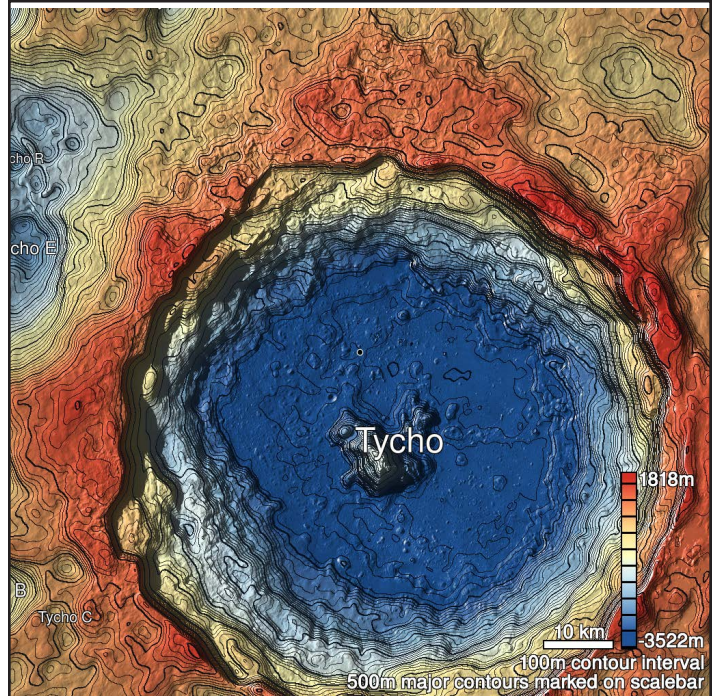
Small, triangular flat-floored, vertical-walled pit. 5m fractures from E and W ends. Lots of curved depressions and little collapses around.

Tycho 7

Impact Melt Fracture Pit: Tycho Crater



Upper left: NAC M127008391R. Upper right: NAC M139979870L. Lower left: NAC . Lower right: Stereo anaglyph of NACs M1206074763L (left eye, red) and M1206067729L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 7. Black dot marks the location of the pit.

Size and Location

Latitude	42.8468°S	Inner pit diameter	16 m × 12 m
Longitude	348.5347°E	Long axis azimuth	50°
Depth	>15 m	Funnel diameter	24 m × 21 m

Measurement Source Images

Image ID	M127008391R	M139979870L	
Incidence	51.13°	-41.54°	
Emission	2.69°	2.32°	
Time of Day	10.10	12.35	
Pixel Scale	0.49 m/px	0.51 m/px	
Depth	>13.7 m	>15.8 m	

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No		

Location reference: NAC M127008391R line 35692, sample 3833

Best stereo pair: M1206074763L / M1206067729L

Other useful images:

DTM:

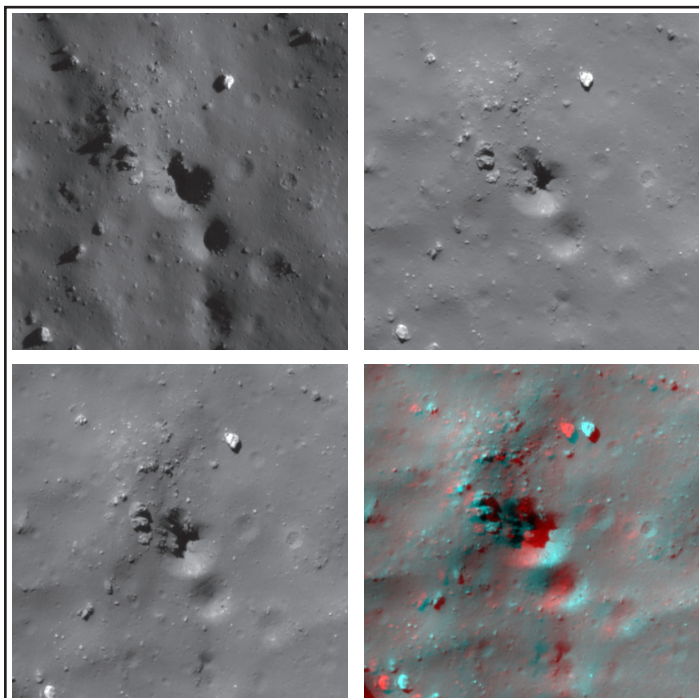
Data notes:

Description

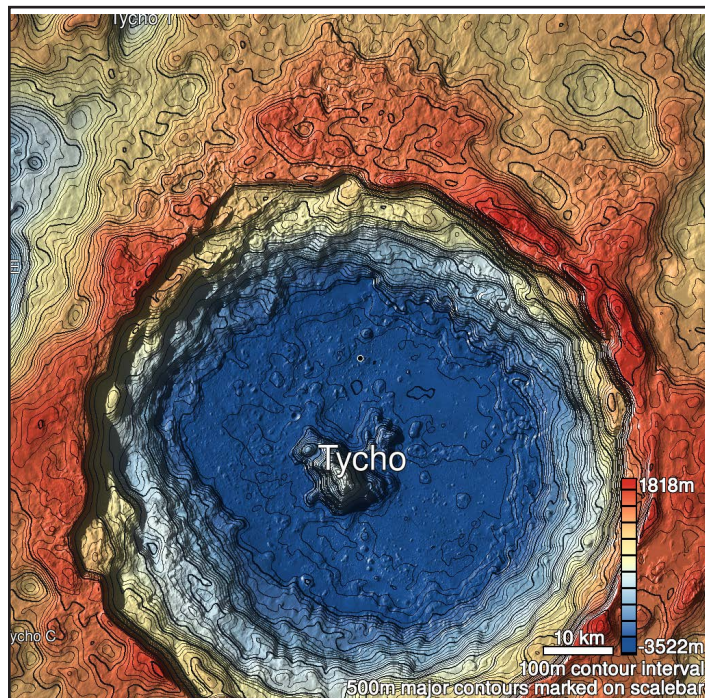
Round pit with a ~10m fracture running from the NE corner. No floor visible in any image, no sign of any wall collapses. 100m of smooth ground from large set of fractures with collapses that curves W->S->E. ~100m E is a set of three pits (Tycho 29a,b,c) in line with the fractures, but with no collapses/fractures between them, running up a PRF.

Tycho 8

Impact Melt Pit: Tycho Crater



Upper left: NAC M114024246R. Upper right: NAC M124646397R. Lower left: NAC M122291425R. Lower right: Stereo anaglyph of NACs M1267233917R (left eye, red) and M1267226882R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 8. Black dot marks the location of the pit.

Size and Location

Latitude	42.7882°S	Inner pit diameter	8 m × 8 m
Longitude	348.7741°E	Long axis azimuth	135°
Depth	10 m	Funnel diameter	42 m × 37 m

Measurement Source Images

Image ID	M114024246R	M124646397R	M122291425R
Incidence	65.76°	44.34°	-49.99°
Emission	0.59°	7.19°	-8.48°
Time of Day	8.18	11.89	13.75
Pixel Scale	0.51 m/px	0.51 m/px	0.52 m/px
Depth	>10.4 m	13.3 m	7.2 m

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M114024246R line 2109, sample 1574

Best stereo pair: M1267233917R / M1267226882R

Other useful images:

DTM:

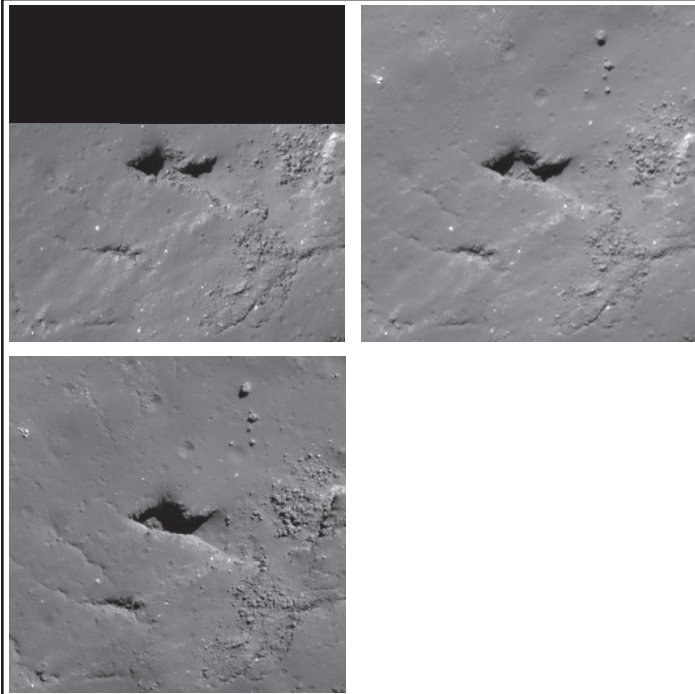
Data notes: No high-Sun images are non-slewed. Depths 2 and 3 are measured looking with the Sun at a slew angle of 7-8 degrees, and so are likely too low. Depth 1 is measured from top of funnel to above the W wall. Depth 2 is from N wall, Depth 3 is from W wall.

Description

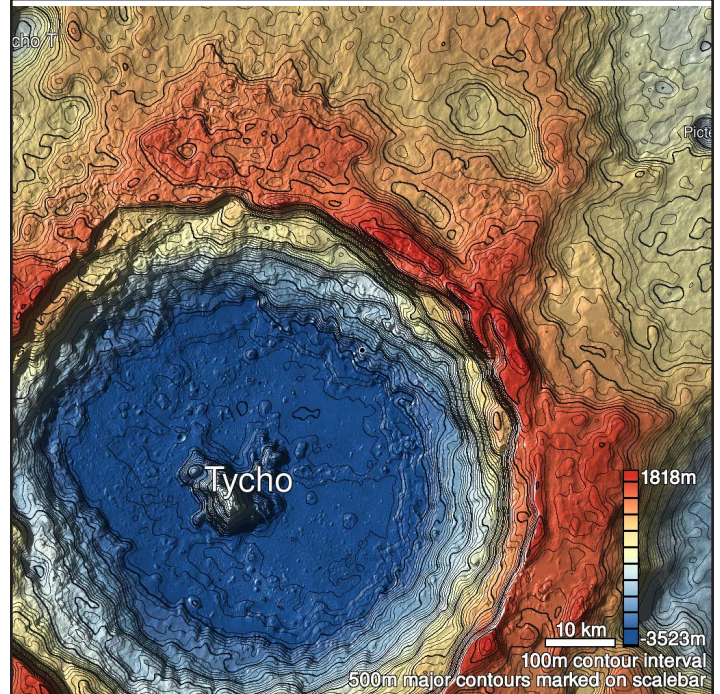
Large funnel at the base of a PRF, with vertical walls on the N and W sides part-way down the funnel (there appears to be a gap between N and W walls). Cannot tell if there is much actual "pit" to this feature. There is a depression with similarly steep walls to the funnel adjacent to the SE, and a string of subtle depressions running ~100m S from there. There is a wide, shallow collapse of some sort ~200m N.

Tycho 9

Impact Melt Pit: Tycho Crater



Upper left: NAC M152945986R. Upper right: NAC M185947368L. Lower left: NAC M157661677L. Lower right: Stereo anaglyph of NACs (left eye, red) and (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 9. Black dot marks the location of the pit.

Size and Location

Latitude	42.6506°S	Inner pit diameter	58 m × 16 m
Longitude	349.5415°E	Long axis azimuth	100°
Depth	11 m	Funnel diameter	77 m × 29 m

Measurement Source Images

Image ID	M152945986R	M185947368L	M157661677L
Incidence	-52.82°	-44.83°	48.40°
Emission	-1.54°	0.84°	-1.39°
Time of Day	14.16	12.57	10.50
Pixel Scale	0.47 m/px	0.66 m/px	0.46 m/px
Depth	9.1 m	10.6 m	13.3 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No?	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M152945986R line 52169, sample 3170

Best stereo pair: /

Other useful images: M1221397994R

DTM:

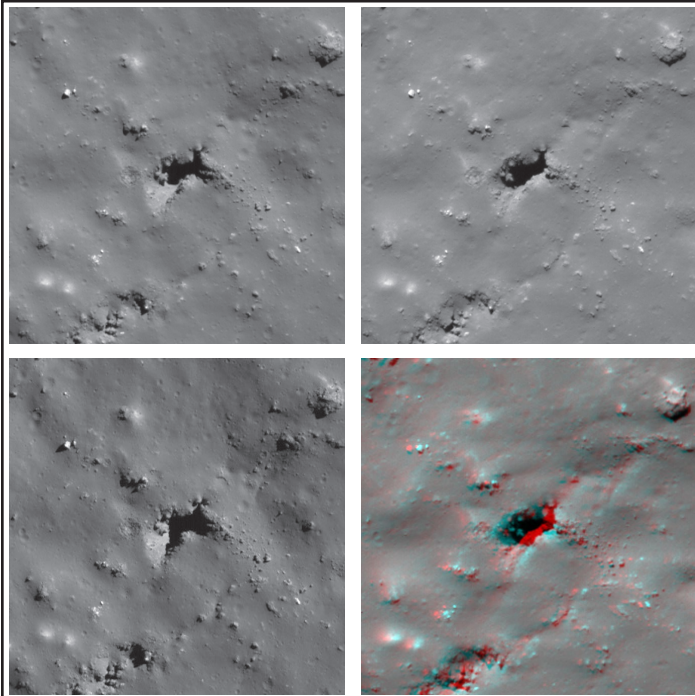
Data notes:

Description

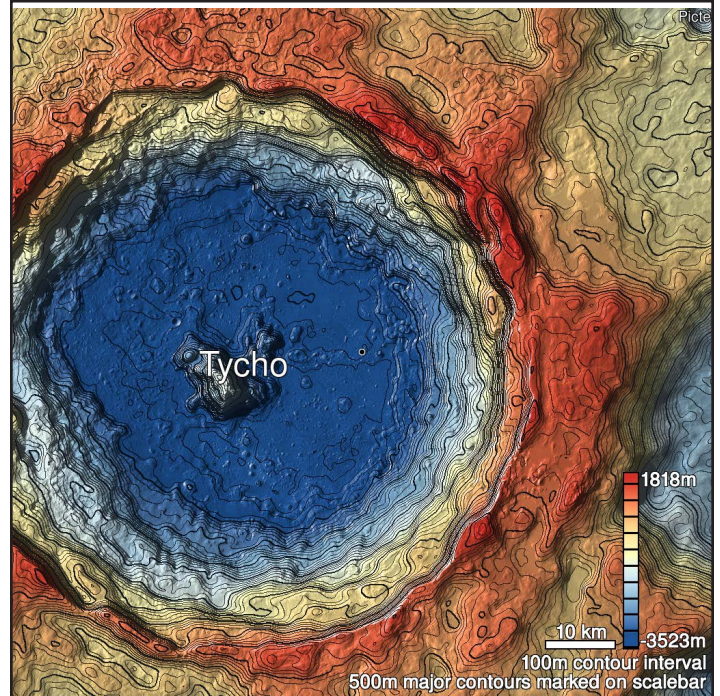
Long pit, sort of shaped like a butterfly stretched horizontally. W “wing” is a vertical-walled flat-floored pit, E “wing” is much the same, except that the E wall is a smooth slope to the floor, reaching the floor around the centerpoint of the pit. There is a ~3m crater (and possibly two more ~2m craters) on the slope, and several 1-2m boulders on the floor. There are several nearby fractures (closest is ~40m SW), and a semi-circular crumbling cliff starts ~50m E. Is in line with some nearby fractures and the cliff, but is not physically connected to either.

Tycho 12

Impact Melt Pit: Tycho Crater



Upper left: NAC M157661677L. Upper right: NAC M139973084L. Lower left: NAC M175348372L. Lower right: Stereo anaglyph of NACs M1177818994L (left eye, red) and M1177811886L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 12. Black dot marks the location of the pit.

Size and Location

Latitude	43.2169°S	Inner pit diameter	34 m × 16 m
Longitude	349.5787°E	Long axis azimuth	50°
Depth	15 m	Funnel diameter	47 m × 31 m

Other Features

Entrance Ramp	Yes	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No?	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M157661677L	M139973084L	M175348372L
Incidence	48.87°	-41.92°	57.38°
Emission	-2.49°	2.95°	-1.53°
Time of Day	10.50	12.36	9.11
Pixel Scale	0.47 m/px	0.51 m/px	0.34 m/px
Depth	13.1 m	16.8 m	16.0 m

Location reference: NAC M157661677L line 2079, sample 1170

Best stereo pair: M1177818994L / M1177811886L

Other useful images:

DTM:

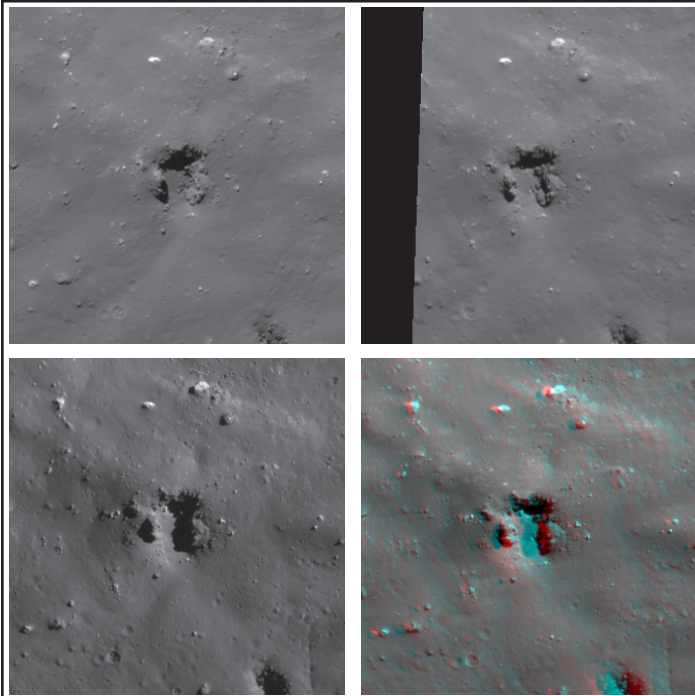
Data notes: Depths are from varied points on the rim, which are at varied heights.

Description

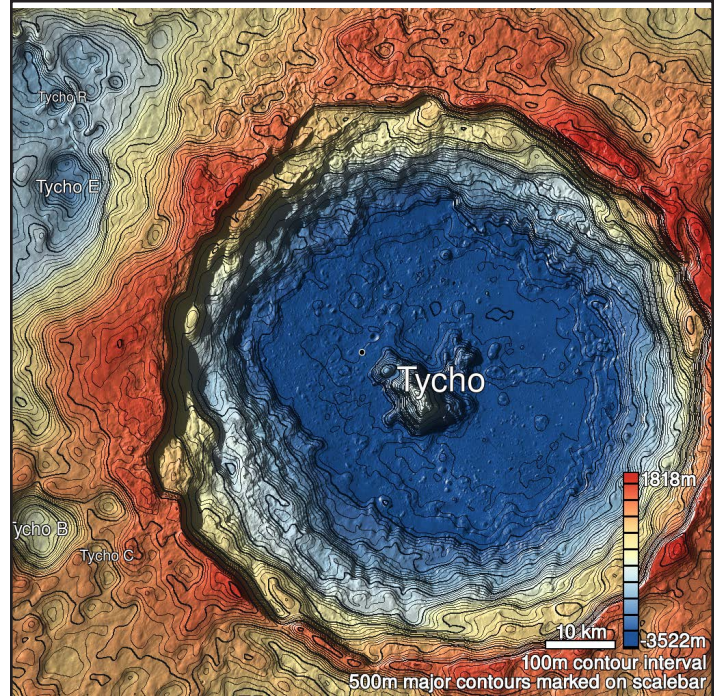
Crescent-shaped pit. SW wall is ramp from rim to [lost in shadow], other walls appear vertical. ~65m ENE of, and slightly out of line with, the N end of a NE-SW-trending perfectly straight sharp-bottomed depression- there are a couple other depressions paralleling it at 1-200m spacing. Some large collapses nearby, and a probable ooze dome two linear depressions (~250m) to the SE.

Tycho 13

Impact Melt Pit: Tycho Crater



Upper left: NAC M170641394R. Upper right: NAC M1118950329L. Lower left: NAC M129369888R. Lower right: Stereo anaglyph of NACs M1167263804L (left eye, red) and M1167256697L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 13. Black dot marks the location of the pit.

Size and Location

Latitude	43.1399°S	Inner pit diameter	33 m × 27 m
Longitude	348.2689°E	Long axis azimuth	180°
Depth	12 m	Funnel diameter	45 m × 39 m

Measurement Source Images

Image ID	M170641394R	M1118950329L	M129369888R
Incidence	-42.74°	46.54°	65.97°
Emission	-1.19°	-0.36°	0.25°
Time of Day	12.75	10.92	8.34
Pixel Scale	0.49 m/px	0.62 m/px	0.50 m/px
Depth	14.8 m	11.3 m	8.5 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	Yes?	Colinear pits	Yes?
Nearby fractures	No?	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No?
In Depression	No		

Location reference: NAC M170641394R line 31938, sample 2414

Best stereo pair: M1167263804L / M1167256697L

Other useful images:

DTM:

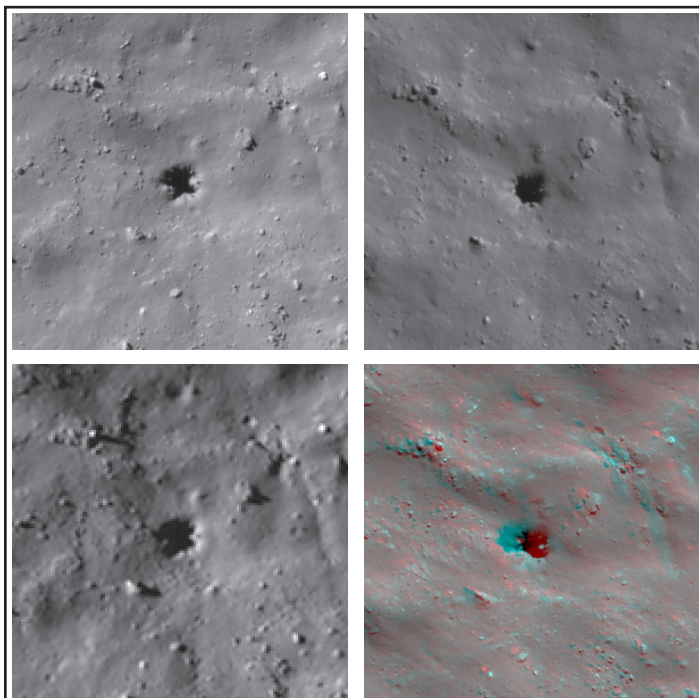
Data notes: Depth 3 is from different point on N rim (far east end) from other depths(center). Measure from middle of E rim gives depth of ~6m.

Description

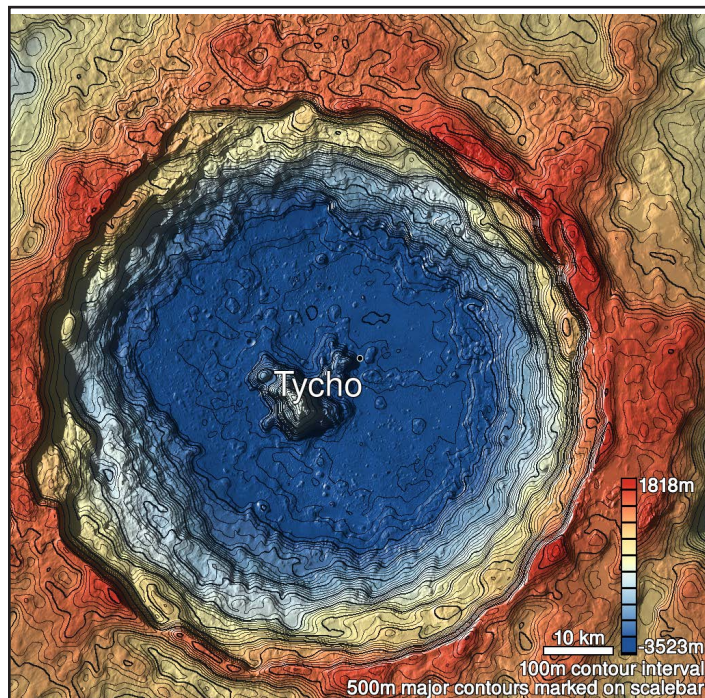
Rectangular pit, south wall is ramp to surface. There's a large linear-ish collapse/fracture running S from a point ~85m SE, with this pit sort of in line with it. There are a couple other small linear collapse features in the general vicinity (~30x5m). The pit appears to be in a slight PRF, and uncalibrated stereo indicates that the floor may be level with the exterior, with the rim sloping up from S to N.

Tycho 14

Impact Melt Pit: Tycho Crater



Upper left: NAC M1144856403R. Upper right: NAC M1151921968L. Lower left: NAC M181236753R. Lower right: Stereo anaglyph of NACs M1210779685L (left eye, red) and M1210772651L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 14. Black dot marks the location of the pit.

Size and Location

Latitude	43.1467°S	Inner pit diameter	16 m × 10 m
Longitude	349.0718°E	Long axis azimuth	160°
Depth	>12 m	Funnel diameter	30 m × 27 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M1144856403R	M1151921968L	M181236753R
Incidence	-57.94°	57.98°	-72.62°
Emission	-0.74°	-1.57°	-2.26°
Time of Day	14.74	9.13	16.32
Pixel Scale	0.62 m/px	0.73 m/px	1.01 m/px
Depth	>12.5 m	>12.5 m	>7.4 m

Location reference: NAC M1144856403R line 15906, sample 1790

Best stereo pair: M1210779685L / M1210772651L

Other useful images:

DTM:

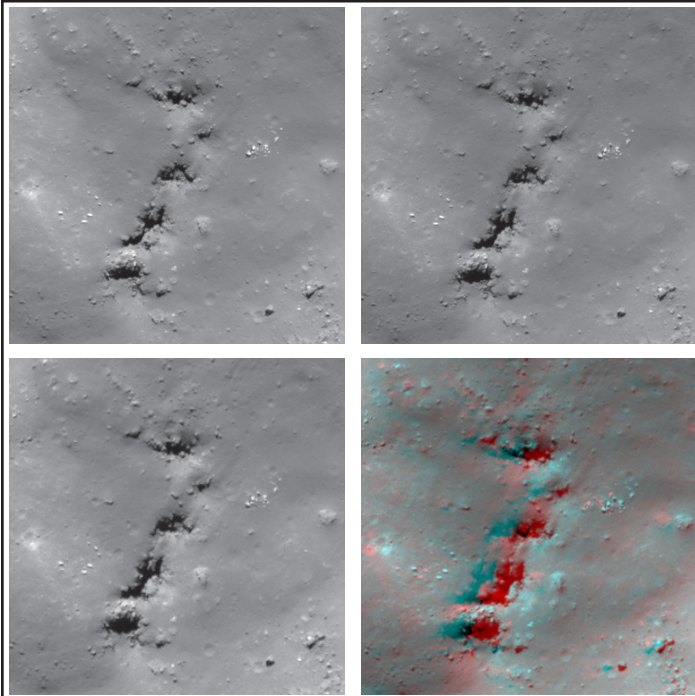
Data notes:

Description

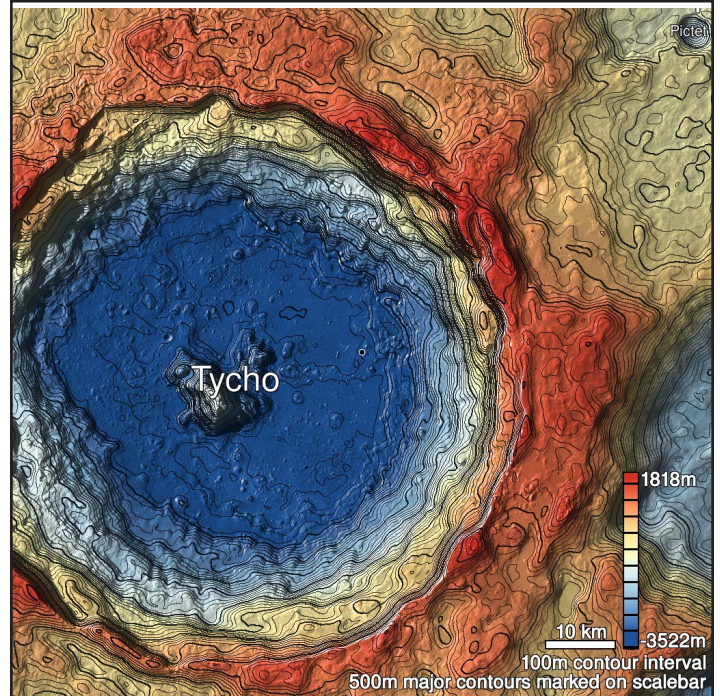
Round pit in a rather lumpy field. No floor visible, but a slewed near-noon image shows a probable boulder/wall protrusion that is not lit in other images. There's a ~60m wide linear depression/collapse ~250m S, running E-W, and some sort of broken/collapsed looking features ~150m N, but otherwise there's not much around.

Tycho 15a

Impact Melt Pit: Tycho Crater



Upper left: NAC M109298521R. Upper right: NAC M139973084L. Lower left: NAC M185947368R. Lower right: Stereo anaglyph of NACs M1177818994L (left eye, red) and M1177811886L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 15a. Black dot marks the location of the pit.

Size and Location

Latitude	43.1445°S	Inner pit diameter	18 m × 9 m
Longitude	349.6332°E	Long axis azimuth	95°
Depth	4 m	Funnel diameter	27 m × 16 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M109298521R	M139973084L	M185947368R
Incidence	41.70°	-41.85°	-45.33°
Emission	2.30°	1.57°	-1.26°
Time of Day	11.83	12.36	12.58
Pixel Scale	0.52 m/px	0.51 m/px	0.66 m/px
Depth	3.9 m	3.9 m	4.7 m

Location reference: NAC M109298521R line 24962, sample 4474

Best stereo pair: M1177818994L / M1177811886L

Other useful images:

DTM:

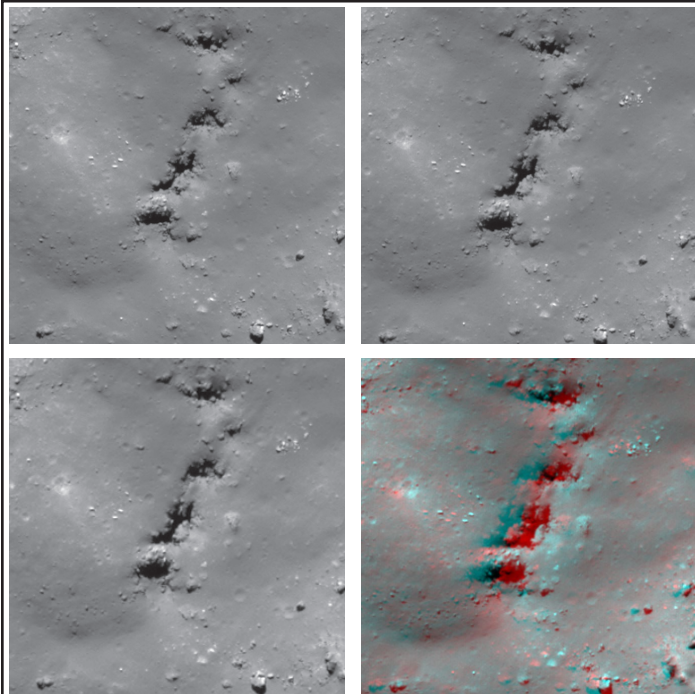
Data notes: There are several other linear depressions running in the same direction in the area.

Description

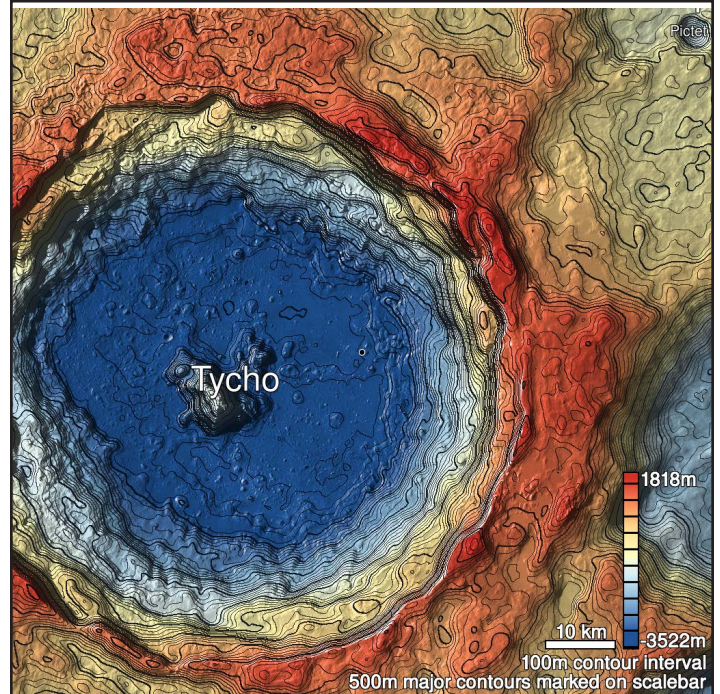
Triangular pit at northern end of a 100m chain of collapses at the edge of a hill. Floor is sloped from N to S, and shadow measures are to N end of floor. Tycho 15b is the center pit, and the southernmost collapse is more an alcove in the hillside level with the surrounding terrain (with an ~8m high N wall). The ground appears slightly sagged between the pits in the chain. There are several other linear depressions running in the same direction in the area.

Tycho 15b

Impact Melt Pit: Tycho Crater



Upper left: NAC M109298521R. Upper right: NAC M139973084L. Lower left: NAC M185947368R. Lower right: Stereo anaglyph of NACs M1177818994L (left eye, red) and M1177811886L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 15b. Black dot marks the location of the pit.

Size and Location

Latitude	43.1456°S	Inner pit diameter	26 m × 6 m
Longitude	349.6325°E	Long axis azimuth	40°
Depth	>9 m	Funnel diameter	37 m × 22 m

Measurement Source Images

Image ID	M109298521R	M139973084L	M185947368R
Incidence	41.70°	-41.85°	-45.33°
Emission	2.32°	1.58°	-1.25°
Time of Day	11.83	12.36	12.58
Pixel Scale	0.52 m/px	0.51 m/px	0.66 m/px
Depth	>8.4 m	>9.3 m	>9.1 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	No	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M109298521R line 25022, sample 4508

Best stereo pair: M1177818994L / M1177811886L

Other useful images:

DTM:

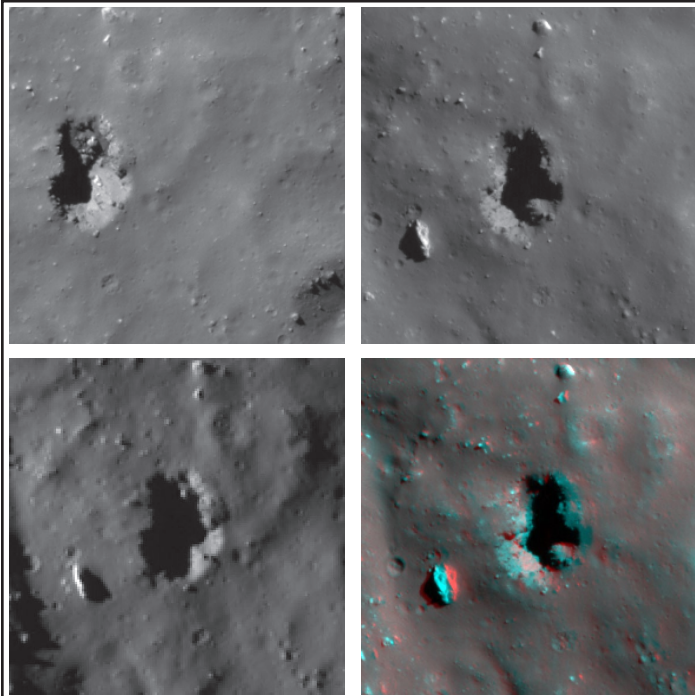
Data notes:

Description

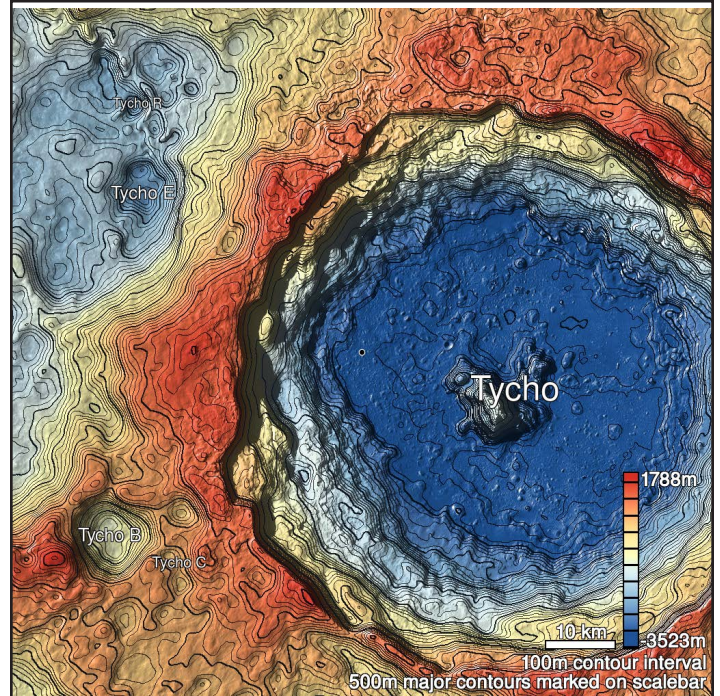
Roughly linear collapse, running along the trend of this pit sequence. No floor visible.

Tycho 16

Impact Melt Pit: Tycho Crater



Upper left: NAC M183602781R. Upper right: NAC M1182536589R. Lower left: NAC M1173121560R. Lower right: Stereo anaglyph of NACs M1182543691R (left eye, red) and M1182529486R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 16. Black dot marks the location of the pit.

Size and Location

Latitude	43.1020°S	Inner pit diameter	60 m × 40 m
Longitude	347.7799°E	Long axis azimuth	165°
Depth	18 m	Funnel diameter	68 m × 48 m

Measurement Source Images

Image ID	M183602781R	M1182536589R	M1173121560R
Incidence	-55.30°	58.76°	-75.95°
Emission	-2.12°	1.49°	-1.91°
Time of Day	14.43	9.02	16.61
Pixel Scale	0.67 m/px	0.68 m/px	1.05 m/px
Depth	17.6 m	>20.9 m	>8.3 m

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	No?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	Yes
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M183602781R line 33160, sample 4199

Best stereo pair: M1182543691R / M1182529486R

Other useful images: M188313427L, M188320575L

DTM:

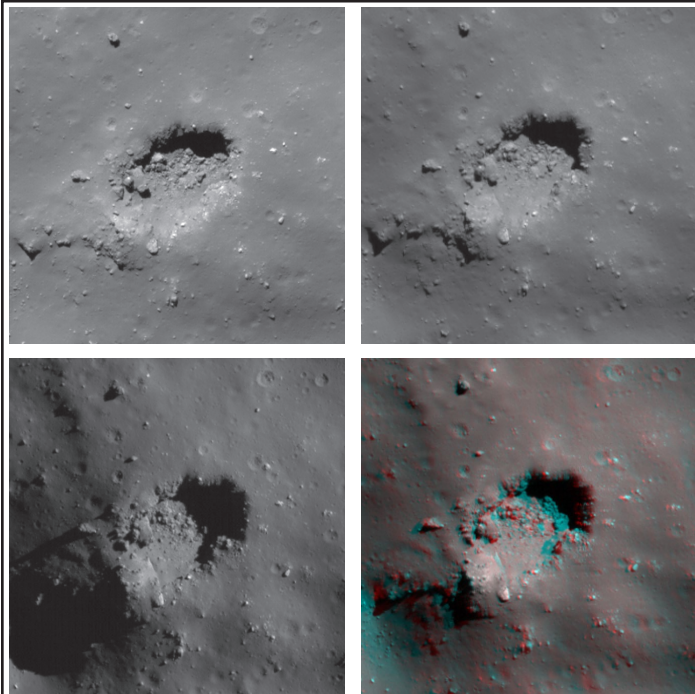
Data notes: Only one non-slewed image shows floor, but shadow in that image is near lowest point.

Description

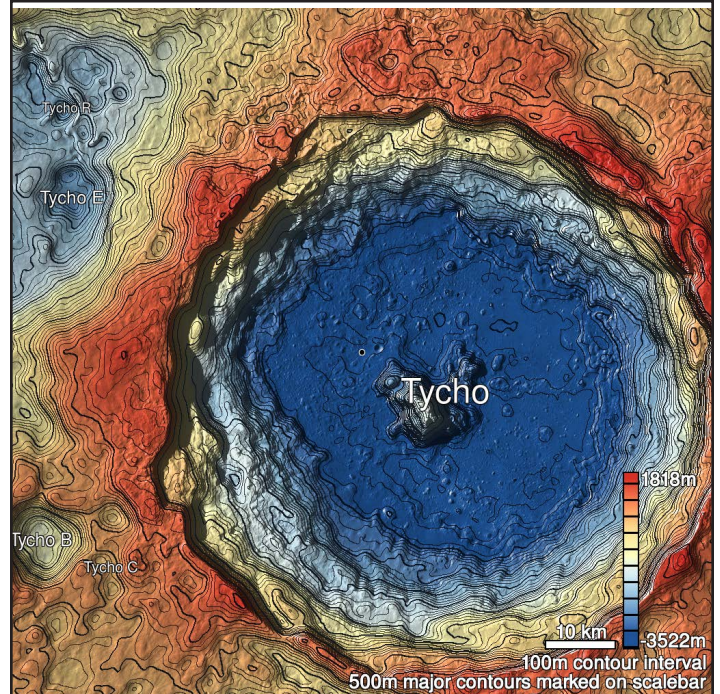
Irregular pit in the top of a positive feature/between some linear-ish depressions. Floor is somewhat rounded, and walls have several protrusions. North wall is a slope almost from the surface to the floor. S wall is extremely steep slope to floor. West wall appears solid (albeit tiered) in slewed image. East wall is unseen. There is a fracture system with some large openings ~300m to the west. No linear features are in line with the pit.

Tycho 17a

Impact Melt Pit: Tycho Crater



Upper left: NAC M170641394R. Upper right: NAC M1118950329R. Lower left: NAC M129369888R. Lower right: Stereo anaglyph of NACs M1167263804L (left eye, red) and M1167256697L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 17a. Black dot marks the location of the pit.

Size and Location

Latitude	43.0855°S	Inner pit diameter	72 m × 42 m
Longitude	348.2422°E	Long axis azimuth	50°
Depth	16 m	Funnel diameter	86 m × 61 m

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M170641394R	M1118950329R	M129369888R
Incidence	-42.68°	46.50°	65.96°
Emission	-0.52°	0.28°	0.93°
Time of Day	12.74	10.92	8.34
Pixel Scale	0.49 m/px	0.62 m/px	0.50 m/px
Depth	17.3 m	16.3 m	15.1 m

Location reference: NAC M170641394R line 28915, sample 1377

Best stereo pair: M1167263804L / M1167256697L

Other useful images:

DTM:

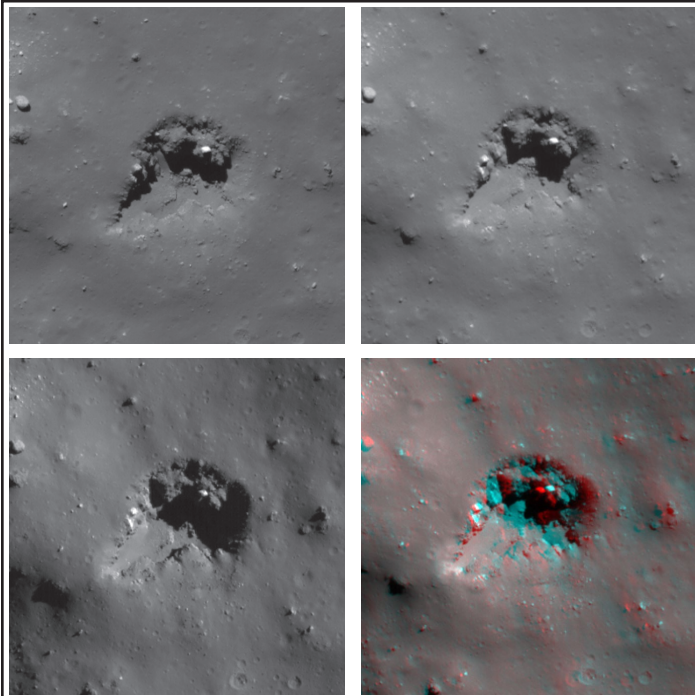
Data notes:

Description

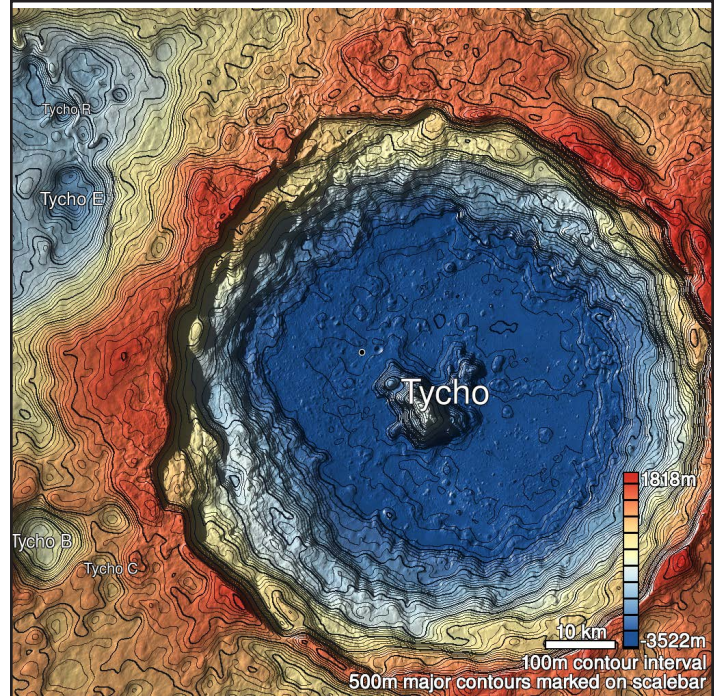
Southern of two large bowl-shaped pits in a hill. 17a is at the peak, 17b is on the northeastern flank (150m N). There is a ~N-S-trending depression to the west. The SW wall of this pit is a ramp from ~surface to floor; the other walls appear uncollapsed. The floor is covered in 1-5m boulders.

Tycho 17b

Impact Melt Pit: Tycho Crater



Upper left: NAC M170641394R. Upper right: NAC M118950329R. Lower left: NAC M129369888R. Lower right: Stereo anaglyph of NACs M1167263804L (left eye, red) and M1167256697L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 17b. Black dot marks the location of the pit.

Size and Location

Latitude	43.0794°S	Inner pit diameter	68 m × 53 m
Longitude	348.2427°E	Long axis azimuth	50°
Depth	20 m	Funnel diameter	98 m × 76 m

Measurement Source Images

Image ID	M170641394R	M118950329R	M129369888R
Incidence	-42.67°	46.49°	65.96°
Emission	-0.53°	0.27°	0.91°
Time of Day	12.74	10.92	8.34
Pixel Scale	0.49 m/px	0.62 m/px	0.50 m/px
Depth	19.5 m	19.9 m	>12.5 m

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M170641394R line 28579, sample 1403

Best stereo pair: M1167263804L / M1167256697L

Other useful images:

DTM:

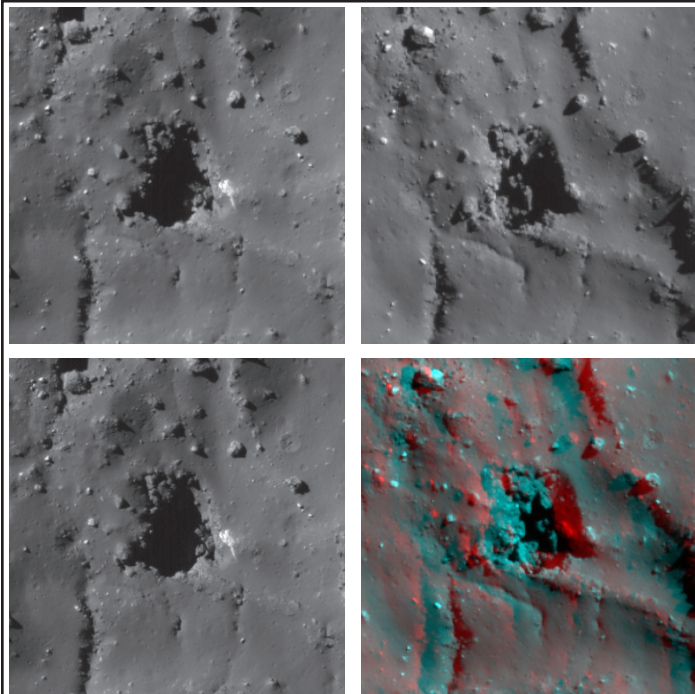
Data notes: Depth 3 is to SW ramp.

Description

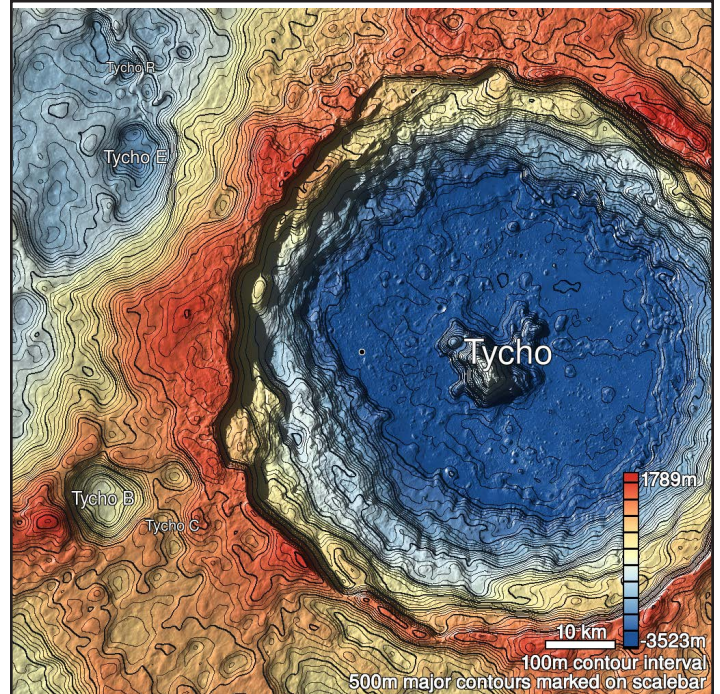
Northern of two large bowl-shaped pits. This one is roughly triangular, with less rubble on the floor. There's a ramp from the SW corner to the floor, but there appears to be a bit of a vertical drop at the top of the slope. Other walls are fairly vertical, but with some gully-like gaps. Much larger funnel than Tycho 17a.

Tycho 18

Impact Melt Pit: Tycho Crater



Upper left: NAC M1114240826R. Upper right: NAC M1182536589R. Lower left: NAC M1129575693L. Lower right: Stereo anaglyph of NACs M1182543691L (left eye, red) and M1182529486L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 18. Black dot marks the location of the pit.

Size and Location

Latitude	43.2779°S	Inner pit diameter	61 m × 40 m
Longitude	347.8259°E	Long axis azimuth	10°
Depth	17 m	Funnel diameter	70 m × 61 m

Other Features

Entrance Ramp	No	In dome	No
Overhang	?	Beside dome	Yes
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No?
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	No?		

Measurement Source Images

Image ID	M1114240826R	M1182536589R	M1129575693L
Incidence	-57.24°	58.83°	-57.82°
Emission	-0.51°	0.35°	2.16°
Time of Day	14.65	9.02	15.00
Pixel Scale	0.64 m/px	0.68 m/px	0.56 m/px
Depth	17.7 m	>13.6 m	17.0 m

Location reference: NAC M1114240826R line 51851, sample 1171

Best stereo pair: M1182543691L / M1182529486L

Other useful images:

DTM:

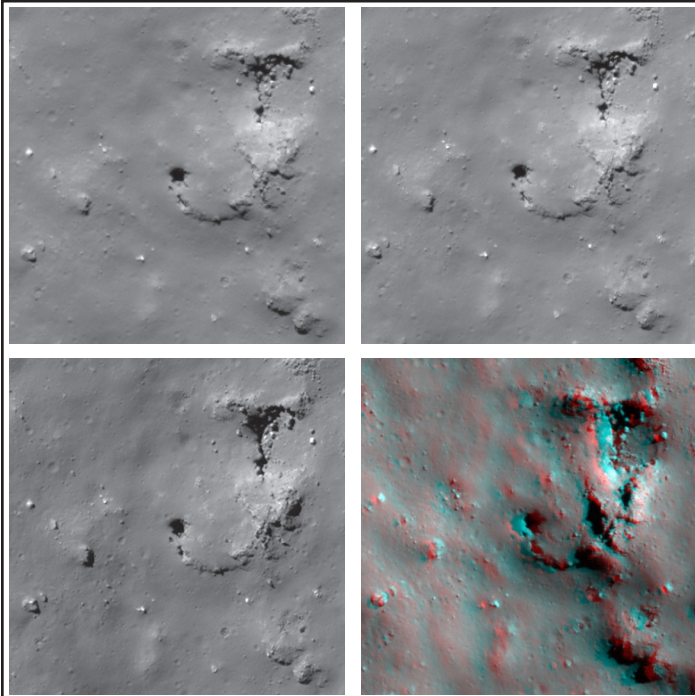
Data notes: Depths, particularly 2 and 3, may be to sides of boulders, not actual floor.

Description

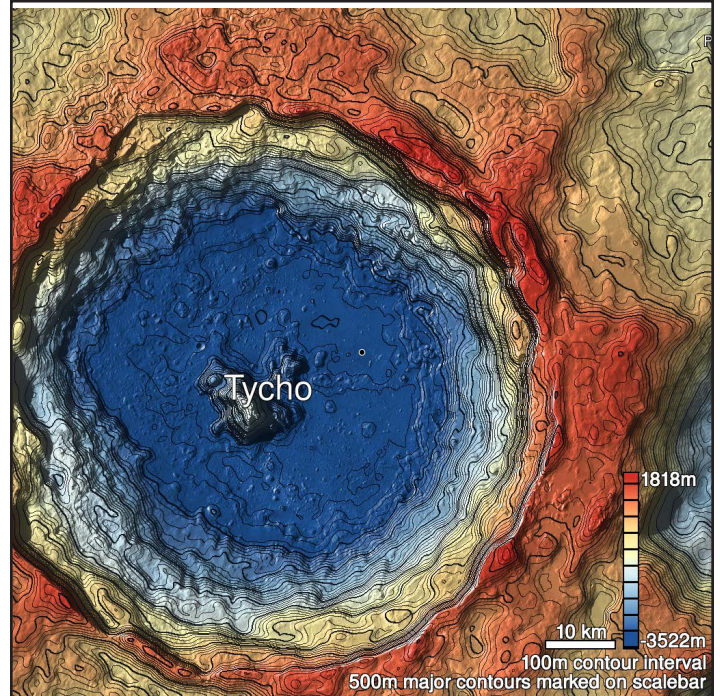
Semicircular pit, floor is largely in shadow in available images. Several large boulders are visible sticking up above floor (including one ~7m tall one near the center). In a region of N-S trending fractures, but not connected to any of them.

Tycho 19

Impact Melt Pit: Tycho Crater



Upper left: NAC M185947368L. Upper right: NAC M1131922380R. Lower left: NAC M152945986L. Lower right: Stereo anaglyph of NACs M1213128685R (left eye, red) and M1213121651R (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 19. Black dot marks the location of the pit.

Size and Location

Latitude	43.0996°S	Inner pit diameter	11 m × 9 m
Longitude	349.4182°E	Long axis azimuth	180°
Depth	7 m	Funnel diameter	15 m × 14 m

Measurement Source Images

Image ID	M185947368L	M1131922380R	M152945986L
Incidence	-45.25°	-44.81°	-53.09°
Emission	3.02°	-0.89°	1.76°
Time of Day	12.57	13.23	14.16
Pixel Scale	0.67 m/px	0.57 m/px	0.48 m/px
Depth	7.0 m	7.6 m	>7 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	No?	Colinear pits	No
Nearby fractures	No	Colinear depressions	No?
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M185947368L line 22791, sample 348

Best stereo pair: M1213128685R / M1213121651R

Other useful images:

DTM:

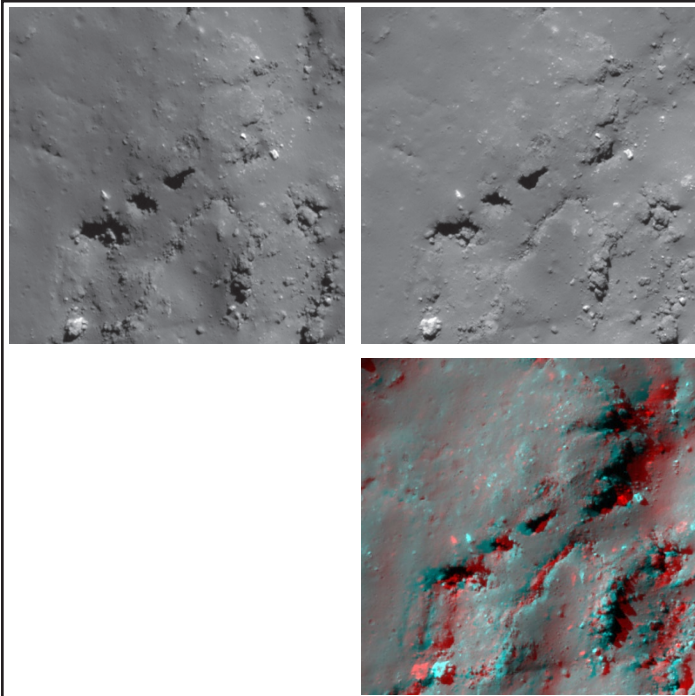
Data notes:

Description

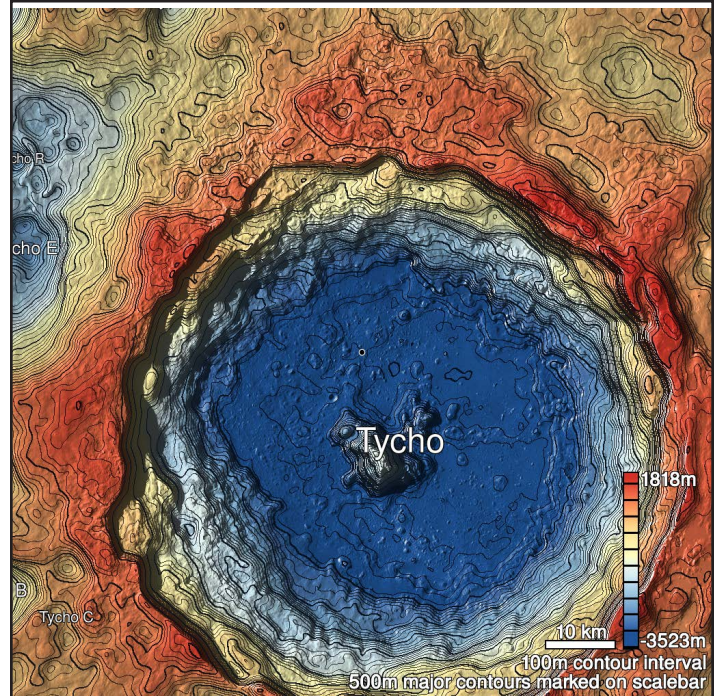
Small circular pit on edge of PRF. Possible visible floor in highest-Sun images, or south wall is slightly sloped. There are a couple of probable sub-5m pits a 3-10m S, and a possible ~30m wide collapse of the PRF ~60m NE. There are some more PRFs to the SW, and some subtle depressions arcing from SW to N at distances of ~200, 250, 350m.

Tycho 29a

Impact Melt Pit: Tycho Crater



Upper left: NAC M127008391R. Upper right: NAC M139979870L. Lower left: NAC . Lower right: Stereo anaglyph of NACs M1206074763L (left eye, red) and M1206067729L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 29a. Black dot marks the location of the pit.

Size and Location

Latitude	42.8468°S	Inner pit diameter	18 m × 9 m
Longitude	348.5424°E	Long axis azimuth	50°
Depth	>10 m	Funnel diameter	20 m × 12 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M127008391R	M139979870L	
Incidence	51.13°	-41.55°	
Emission	2.49°	2.12°	
Time of Day	10.10	12.36	
Pixel Scale	0.49 m/px	0.51 m/px	
Depth	>10.3 m	>9 m	

Location reference: NAC M127008391R line 35703, sample 3478

Best stereo pair: M1206074763L / M1206067729L

Other useful images:

DTM:

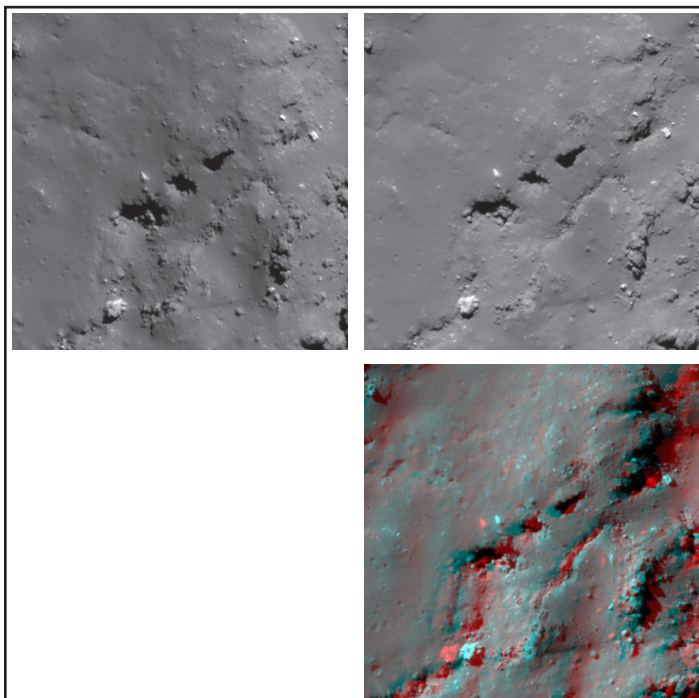
Data notes:

Description

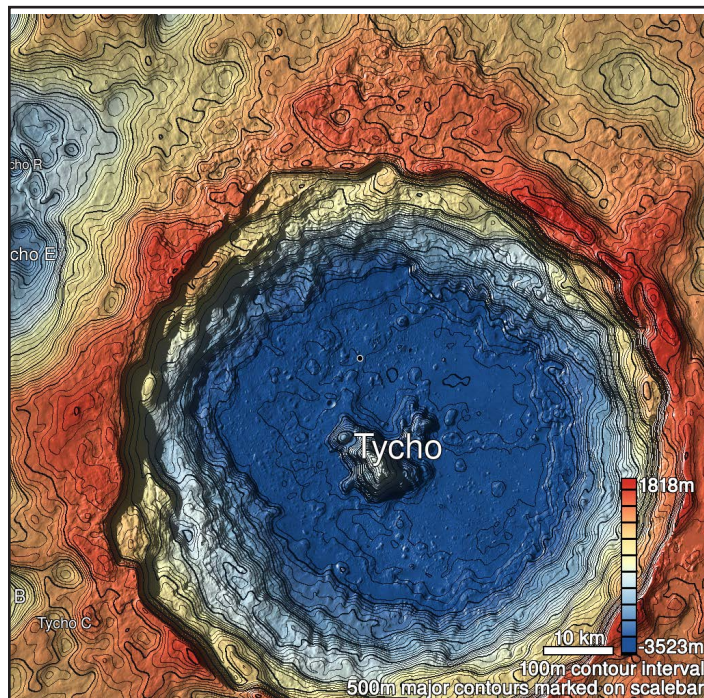
Triangular pit near the top of a PRF, northeasternmost and most vertical-walled of a line of three pits. The pits have no collapses between them, and are spaced ~12m apart. There is a set of fractures in line with these pits.

Tycho 29b

Impact Melt Pit: Tycho Crater



Upper left: NAC M127008391R. Upper right: NAC M139979870L. Lower left: NAC . Lower right: Stereo anaglyph of NACs M1206074763L (left eye, red) and M1206067729L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 29b. Black dot marks the location of the pit.

Size and Location

Latitude	42.8473°S	Inner pit diameter	14 m × 9 m
Longitude	348.5415°E	Long axis azimuth	140°
Depth	8 m	Funnel diameter	18 m × 14 m

Measurement Source Images

Image ID	M127008391R	M139979870L	
Incidence	51.13°	-41.55°	
Emission	2.51°	2.15°	
Time of Day	10.10	12.36	
Pixel Scale	0.49 m/px	0.51 m/px	
Depth	6.8 m	9.3 m	

Other Features

Entrance Ramp	Yes?	In dome	Yes
Overhang	?	Beside dome	No
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	No
In Depression	No		

Location reference: NAC M127008391R line 35677, sample 3522

Best stereo pair: M1206074763L / M1206067729L

Other useful images:

DTM:

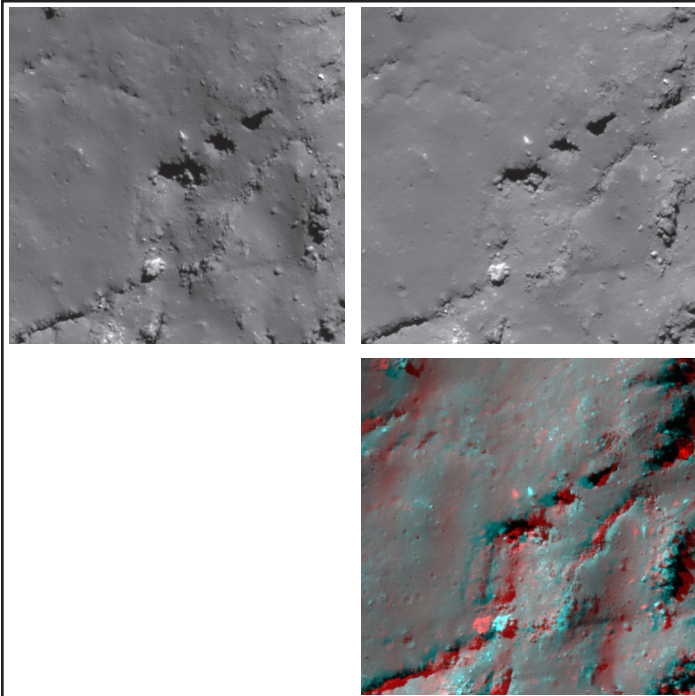
Data notes: Depths are to SW wall/slope, Depth 1 from lower Sun than Depth 2

Description

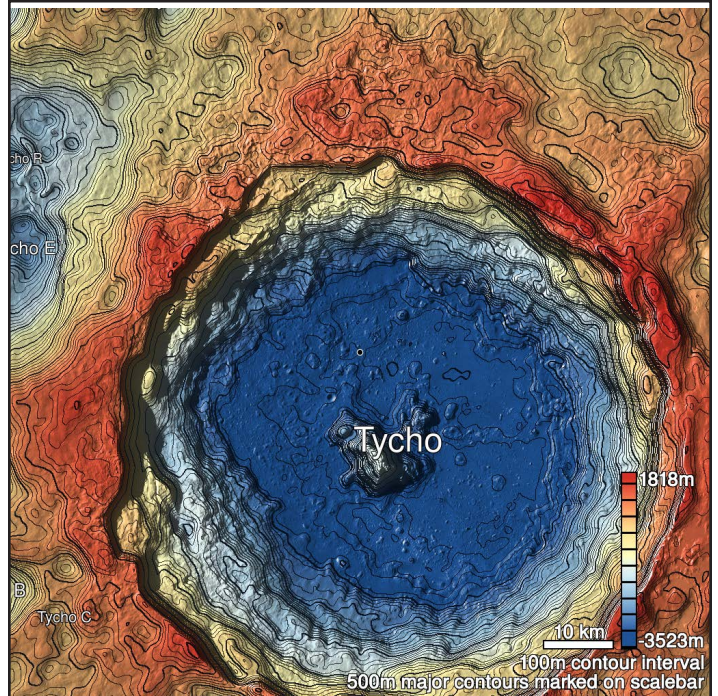
Rectangular pit part-way up a PRF, center pit of the chain of three. SW wall appears to be a smooth slope to where it disappears into shadow.

Tycho 29c

Impact Melt Pit: Tycho Crater



Upper left: NAC M127008391R. Upper right: NAC M139979870L. Lower left: NAC . Lower right: Stereo anaglyph of NACs M1206074763L (left eye, red) and M1206067729L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Tycho 29c. Black dot marks the location of the pit.

Size and Location

Latitude	42.8478°S	Inner pit diameter	25 m × 17 m
Longitude	348.5405°E	Long axis azimuth	50°
Depth	10 m	Funnel diameter	37 m × 35 m

Measurement Source Images

Image ID	M127008391R	M139979870L	
Incidence	51.13°	-41.55°	
Emission	2.54°	2.17°	
Time of Day	10.10	12.36	
Pixel Scale	0.49 m/px	0.51 m/px	
Depth	11.3 m	9.0 m	

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	Yes
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes	Colinear fractures	Yes
In Depression	Yes?		

Location reference: NAC M127008391R line 35639, sample 3573

Best stereo pair: M1206074763L / M1206067729L

Other useful images:

DTM:

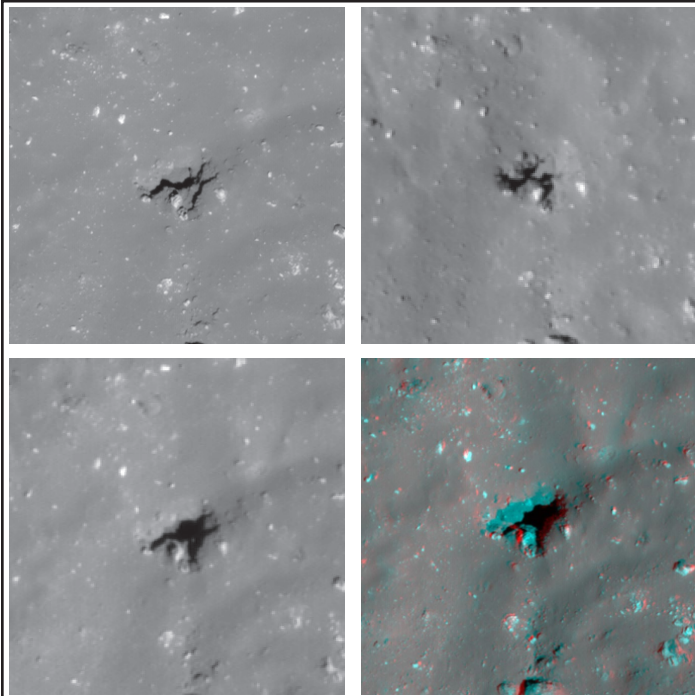
Data notes: Depths are to same point, but Depth 2 is from lower point on rim than Depth 1.

Description

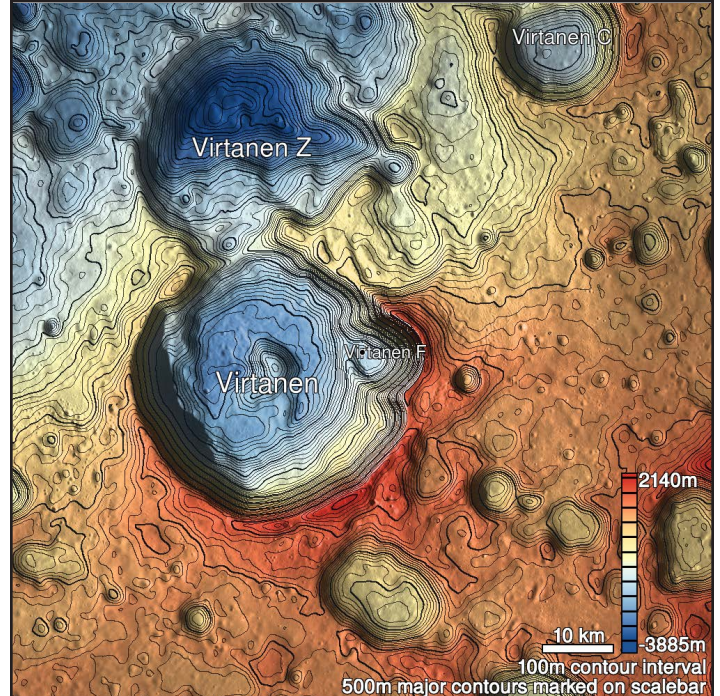
Irregular pit at base of a PRF, widest and southwesternmost of the chain of three. There are several 2-6m boulders covering the floor. The south wall is a smooth slope from surface to floor. Pit is ~70m NE of nearest fractures.

Virtanen F 1

Impact Melt Pit: Virtanen F Crater



Upper left: NAC M156435317L. Upper right: NAC M1115371417R. Lower left: NAC M1166004711L. Lower right: Stereo anaglyph of NACs M158795840L (left eye, red) and M158789053L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Virtanen F 1. Black dot marks the location of the pit.

Size and Location

Latitude	15.7946°N	Inner pit diameter	20 m × 14 m
Longitude	177.2069°E	Long axis azimuth	55°
Depth	17 m	Funnel diameter	49 m × 42 m

Measurement Source Images

Image ID	M156435317L	M1115371417R	M1166004711L
Incidence	16.28°	-31.51°	29.10°
Emission	-2.66°	0.10°	-0.66°
Time of Day	11.47	13.90	10.38
Pixel Scale	0.58 m/px	1.28 m/px	1.27 m/px
Depth	16.8 m	15.8 m	17.8 m

Other Features

Entrance Ramp	No?	In dome	No?
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	Yes?	Colinear fractures	No
In Depression	Yes?		

Location reference: NAC M156435317L line 35405, sample 955

Best stereo pair: M158795840L / M158789053L

Other useful images:

DTM: NAC_DTM_FRESHMELT1

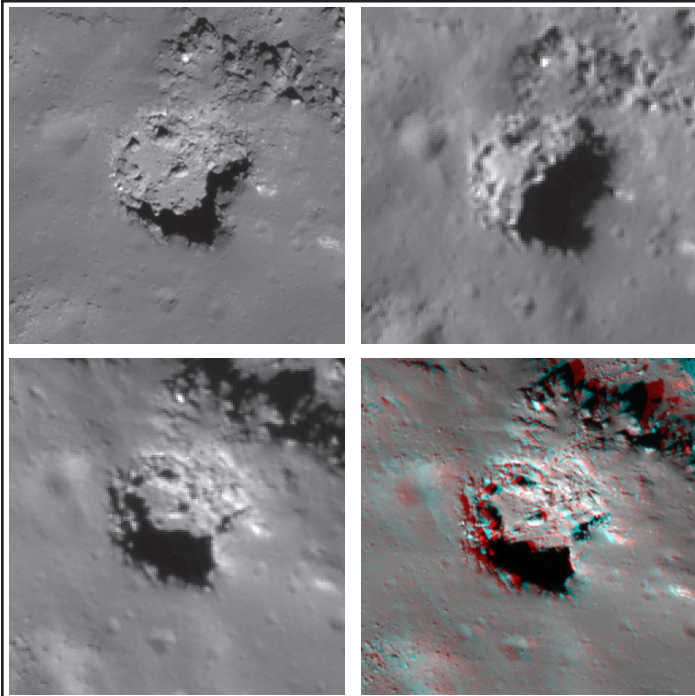
Data notes:

Description

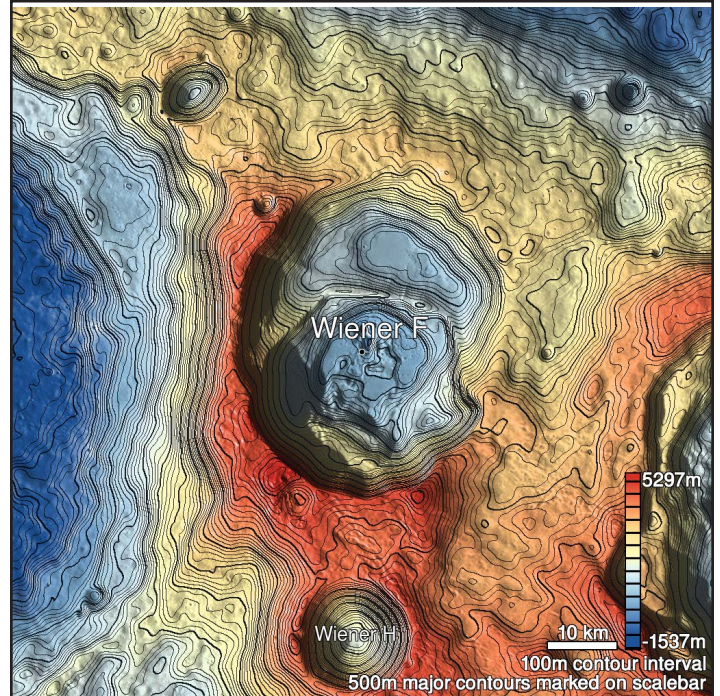
Complex pit (probably) in the NW wall of a PRF. SE wall is a multi-tiered cliff (depth from top layer of cliff is ~32m)- probable inner pit is rather small, and hidden in shadow in most images, including stereo pair. N and W inner rims are barely visible from lighting, but seem to cast a bit of shadow in one or two images. A few surface fractures in the general area, but no other collapses.

Weiner F 1

Impact Melt Pit: Weiner F Crater



Upper left: NAC M125944637R. Upper right: NAC M1122624174L. Lower left: NAC M1176797281R. Lower right: Stereo anaglyph of NACs M154257291L (left eye, red) and M154250505L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Weiner F 1. Black dot marks the location of the pit.

Size and Location

Latitude	41.0722°N	Inner pit diameter	63 m × 62 m
Longitude	149.9284°E	Long axis azimuth	120°
Depth	22 m	Funnel diameter	82 m × 82 m

Other Features

Entrance Ramp	No	In dome	No?
Overhang	?	Beside dome	No
Nearby pits	No	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M125944637R	M1122624174L	M1176797281R
Incidence	42.50°	65.03°	-47.43°
Emission	2.11°	-0.75°	0.10°
Time of Day	10.85	8.27	13.92
Pixel Scale	0.62 m/px	1.64 m/px	1.58 m/px
Depth	21.8 m	24.8 m	19.1 m

Location reference: NAC M125944637R line 37829, sample 4254

Best stereo pair: M154257291L / M154250505L

Other useful images:

DTM:

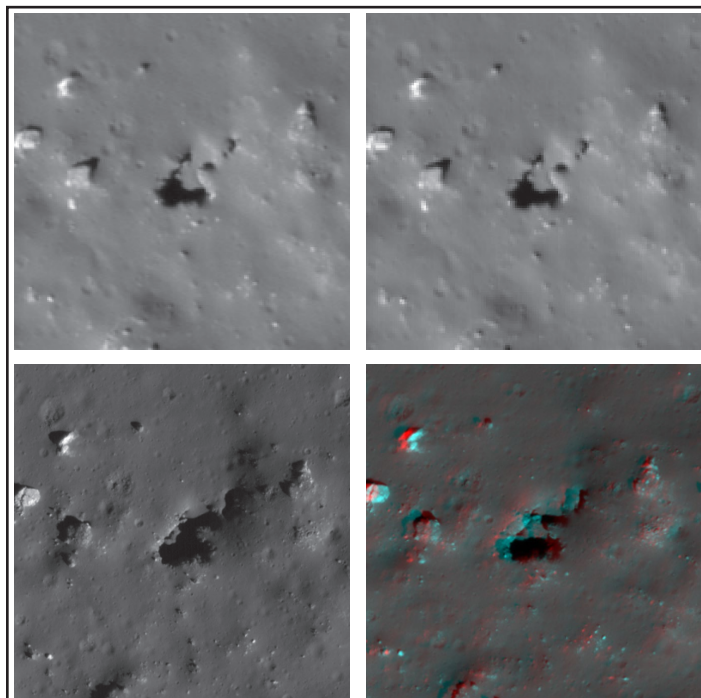
Data notes:

Description

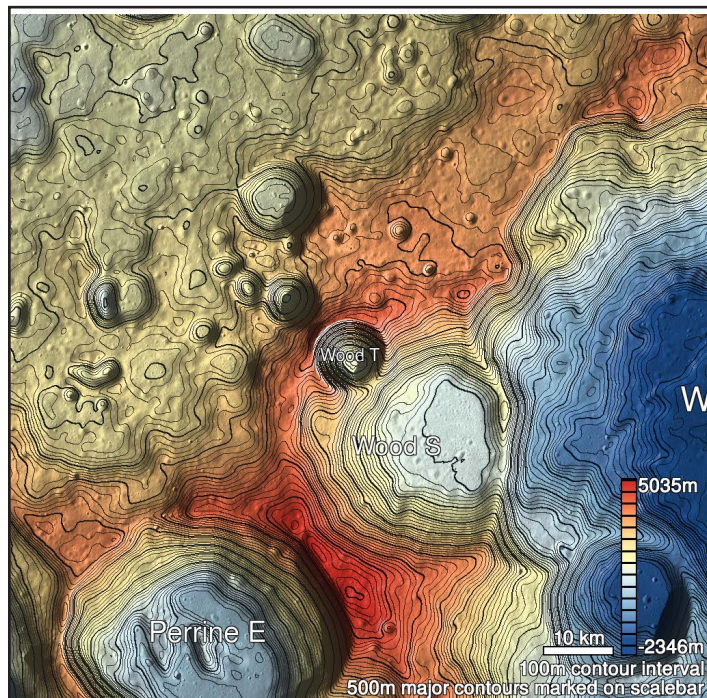
Roughly square pit, wide and shallow. North wall is largely covered by a pile of <10m boulders. ~60m SW of the top edge of a cliff/depression of some sort.

Wood T 1a

Impact Melt Pit: Wood T Crater



Upper left: NAC M1145626072L. Upper right: NAC M1114995520L. Lower left: NAC M176082220L. Lower right: Stereo anaglyph of NACs M143078925L (left eye, red) and M143072142L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Wood T 1a. Black dot marks the location of the pit.

Size and Location

Latitude	43.8876°N	Inner pit diameter	40 m × 25 m
Longitude	235.7540°E	Long axis azimuth	40°
Depth	11 m	Funnel diameter	46 m × 33 m

Measurement Source Images

Image ID	M1145626072L	M1114995520L	M176082220L
Incidence	-53.16°	-52.01°	65.42°
Emission	1.69°	2.75°	-0.42°
Time of Day	14.41	14.27	8.40
Pixel Scale	1.47 m/px	1.43 m/px	0.48 m/px
Depth	11.1 m	11.3 m	10.5 m

Other Features

Entrance Ramp	Yes	In dome	Yes
Overhang	No?	Beside dome	Yes
Nearby pits	Yes	Colinear pits	No
Nearby fractures	No	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Location reference: NAC M1145626072L line 25321, sample 2695

Best stereo pair: M143078925L / M143072142L

Other useful images:

DTM:

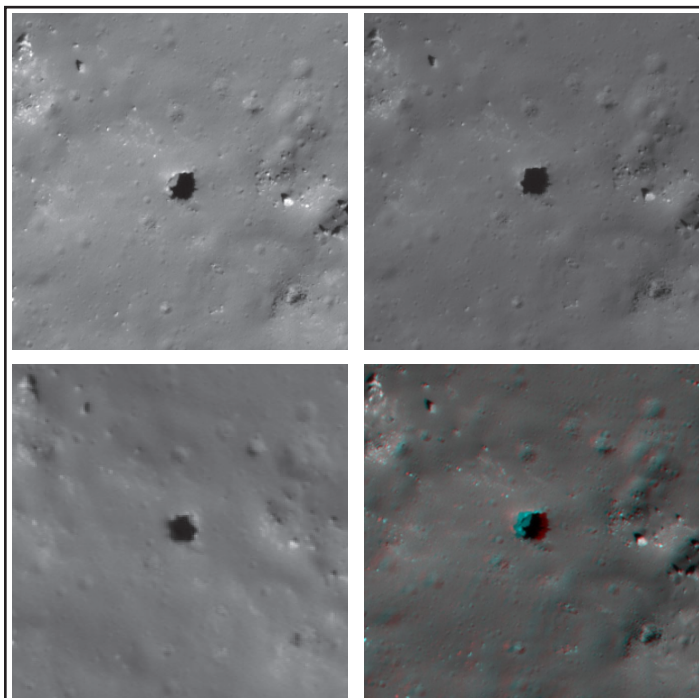
Data notes: M193783245R and M1158545901R are lit by crater wall-shine.

Description

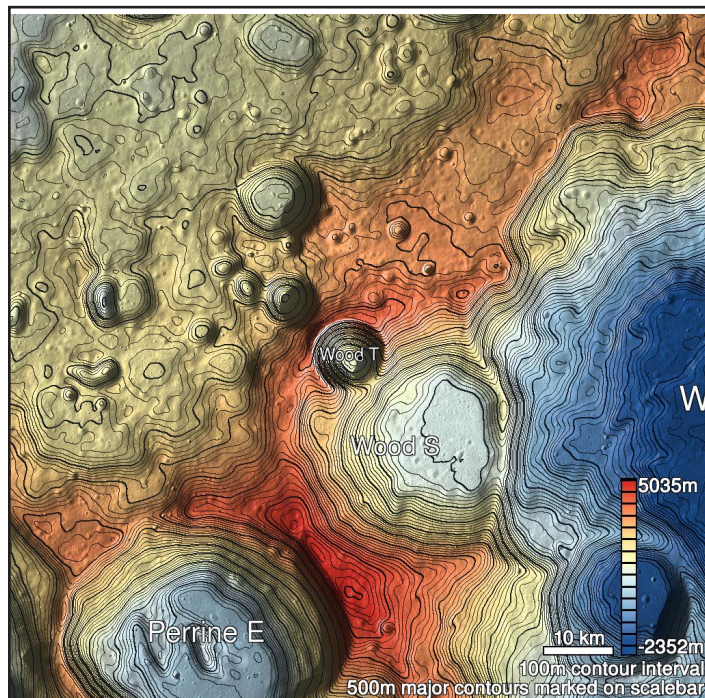
Roughly triangular pit, with a fan-shaped extension to the NE where the north half of the NE wall has collapsed (straight down, not into pit) to form a slope from surroundings to floor. Some potential tiny pits (~2m) ~10m NE of that extended section. Subtle depression to the E/NE (lowest point at edge of pit) that looks like the surroundings sagged a few meters. Possible visible west wall in slewed image (12 degrees), opposite wall from possible sag. ~150m W of Nameless A 1b. Region is a bit lumpy, but no depressions or fractures other than the two pits.

Wood T 1b

Impact Melt Pit: Wood T Crater



Upper left: NAC M143072142L. Upper right: NAC M143078925L. Lower left: NAC M1145626072L. Lower right: Stereo anaglyph of NACs M143078925L (left eye, red) and M143072142L (right eye, blue). All images are 200 m wide.



Color shaded relief map of the area around Wood T 1b. Black dot marks the location of the pit.

Size and Location

Latitude	43.8862°N	Inner pit diameter	17 m × 14 m
Longitude	235.7613°E	Long axis azimuth	30°
Depth	11 m	Funnel diameter	23 m × 18 m

Other Features

Entrance Ramp	No	In dome	Yes
Overhang	Yes?	Beside dome	Yes?
Nearby pits	Yes	Colinear pits	No
Nearby fractures	Yes	Colinear depressions	No
Nearby depressions	No	Colinear fractures	No
In Depression	No		

Measurement Source Images

Image ID	M143072142L	M143078925L	M1145626072L
Incidence	53.18°	52.73°	-53.16°
Emission	8.82°	-12.80°	1.62°
Time of Day	9.91	9.97	14.41
Pixel Scale	0.64 m/px	0.66 m/px	1.47 m/px
Depth	9.5 m	12.0 m	10.8 m

Location reference: NAC M143072142L line 27283, sample 3907

Best stereo pair: M143078925L / M143072142L

Other useful images:

DTM:

Data notes: Depths 1 and 2 are from stereo pair M143072142L/ M143078925L (the only images which unambiguously show floor), which have emission angles of 8.8 and 12.8 degrees, respectively. M193783245R and M1158545901R are lit by crater wall-shine.

Description

Very circular pit- no image shows much of the floor, but it looks like an absolutely classic Tranquillitatis-style pit with minimal funnel. In stereo image, no visible back wall at 12 degree slew.