

# Two hyperbolas

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## Preface

The introduction is fairly lengthy, however it is worth reading for those not acquainted with this global hypothesis. Many are not aware of the sheer amount of evidence about Martian artifacts and how it all connects together. This has not been hidden from the planetary science community, they considered this subject radioactive many years ago and largely ignored it. Often this was justified with the bizarre claims and poor scientific methods used with this evidence. I don't subscribe to conspiracy theories about this, like many others I have just tried to do good science explaining these mysterious formations. In the last few years I believe this evidence proves artificiality beyond any possible refutation, mainly on geometric evidence. For example I maintain these hyperbolas simply cannot be explained away, the correspondence to the mathematical hyperbola is too close. There are in addition nearly a thousand more geometric structures outlined in the books.

## Introduction

These are excerpts from my books on the subject, they look at about 3000 images all over Mars. I have added some additional comments as well. In the books each image is prefaced with the word Hypothesis. This is to make clear that hypotheses are made about each image, to falsify the null hypothesis that these are random formations. These results have all been published and discussed at length at SPSR, an organization devoted to studying possible Planetary SETI in the solar system.

It's not my intent to point out that some formations looks artificial, or looks like a face, etc. As Karl Popper explains this rarely leads to an actual proof. Instead I look for formations that cannot form naturally, if this is impossible then the only alternative is that they are artificial.

Figure 1 shows the two hyperbolas, they are overlaid with a transparent GIF of a hyperbola which can be provided on request. In some cases here parabolic formations are shown, these use a transparent GIF of a parabola. Then someone can take these images and overlay parabolas and hyperbolas themselves to check these hypotheses.

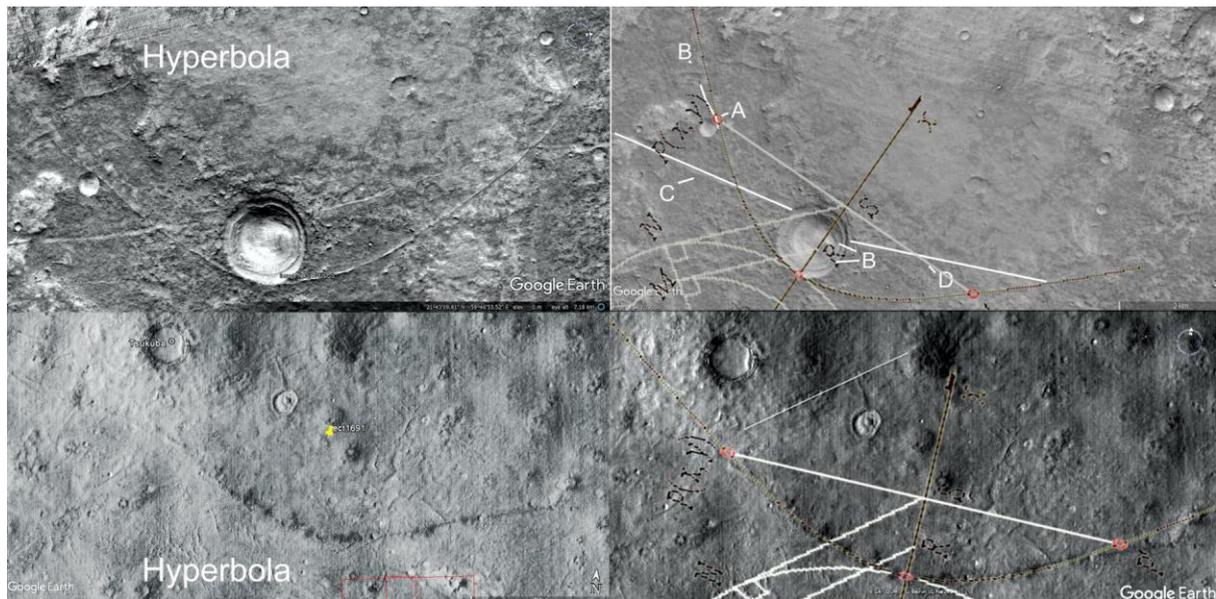


Figure 1

In addition there are some parabolas near one of the hyperbolas which are shown. A video link is attached, this shows some spherical geometry that connects to these hyperbolas. For example the Crowned or King Face forms an Isosceles Triangle with the hyperbolas. The video also explain an initial hypothesis suggested by Tom van Flandern about the Cydonia Face. He thought the face may have been on an old equator, because a previous pole position corresponded to it. This pole was shown in a paper by Schultz at the time, it is west of Hellas.

This suggested in turn another hypothesis, that more possibly artificial formations would be found on this equator. It was approximately defined by the old pole position. It further suggested that the equator might have been marked for a reason, for example a system for navigation. In the video the King Face is shown, I found this in 2000, and the Nefertiti face was later found. I then discovered these almost precisely form a great circle like an old equator with a pole near the former pole suggested by Schultz. So this process has been following a prediction made quite early.

This video explains some of the spherical geometry between these formations, how the great circle was discovered, and how it compared to a previous pole position.

[https://www.youtube.com/watch?v=M9rABoZnq5w&feature=youtu.be&fbclid=IwAR3sprtmoylRxy-3h2gVfSSCTr\\_4j3MgeKrOPRAZiLbLguHCTzjCYJrFDI](https://www.youtube.com/watch?v=M9rABoZnq5w&feature=youtu.be&fbclid=IwAR3sprtmoylRxy-3h2gVfSSCTr_4j3MgeKrOPRAZiLbLguHCTzjCYJrFDI)

Also found on this equator is a formation called the Ferns, this is regarded by NASA as a negative relief of old riverbeds. However I published a paper showing many aspects which I argue cannot be natural, like the leaves of the plants connecting to each other at the tips. This would mean rivers cannot flow into each other without pooling. Also, the branches of these plants are in virtually a perfect Fibonacci pattern. This cannot form naturally because river tributaries form randomly, there are too many ways for the pattern to deviate with so many branches. Plants use a mathematical formula in their branches which forms the Fibonacci sequence. So hypothetical Martians creating plant sculptures would also prove mathematically, probably unintentionally, they are artificial.

Additional information not discussed here also involves geometry, 945 geometric examples are analyzed in the books. Arguably each of these 945 formations is as persuasive as these hyperbolas.

The books also go further, trying to explain how such a civilization could exist and why we haven't pieced it together before. This is also important, one of the main stumbling blocks in this research has been context. Someone sees a face or a possible building, but without explaining how a civilization could have functioned they seem like pareidolia or an overactive imagination. When all these formations are viewed together they imply a global Martian civilization.

The books are also based on falsifying natural processes, however they attempt to look at the whole of Mars by collecting these falsified images. So it's unlikely these images give an accurate idea of this hypothetical civilization, but they do track quite closely all the aspects that are hardest to explain naturally. The books then are about attempted proofs, if successful then many other ideas would be more plausible. For example is the hyperbolas artificial, and many other geometric formations, then that implies some engineering and mathematical knowledge.

They also discuss further hypotheses of where the civilization was relative to volcanoes for heat and this former equatorial zone. When mapped out the possibly artificial formations cluster around this former equator, and around many large volcanoes such as Alba Patera, Olympus Mons, and This implies weather patterns from the temperature differences between and the former oceans. Possible outlines of the ancient oceans are laid out according to where these formations end, often with road like structures.

Finally the many Martian faces are discussed as hypotheses on what these creatures looked like. There are several fish sculptures opposite the King Face, these may show part of the ecosystem along with the representations of plants with the Ferns formation. These are all hypotheses and try to falsify the null hypothesis in each image, then show what emerges as a global hypothesis.

## The first hyperbola and nearby formations

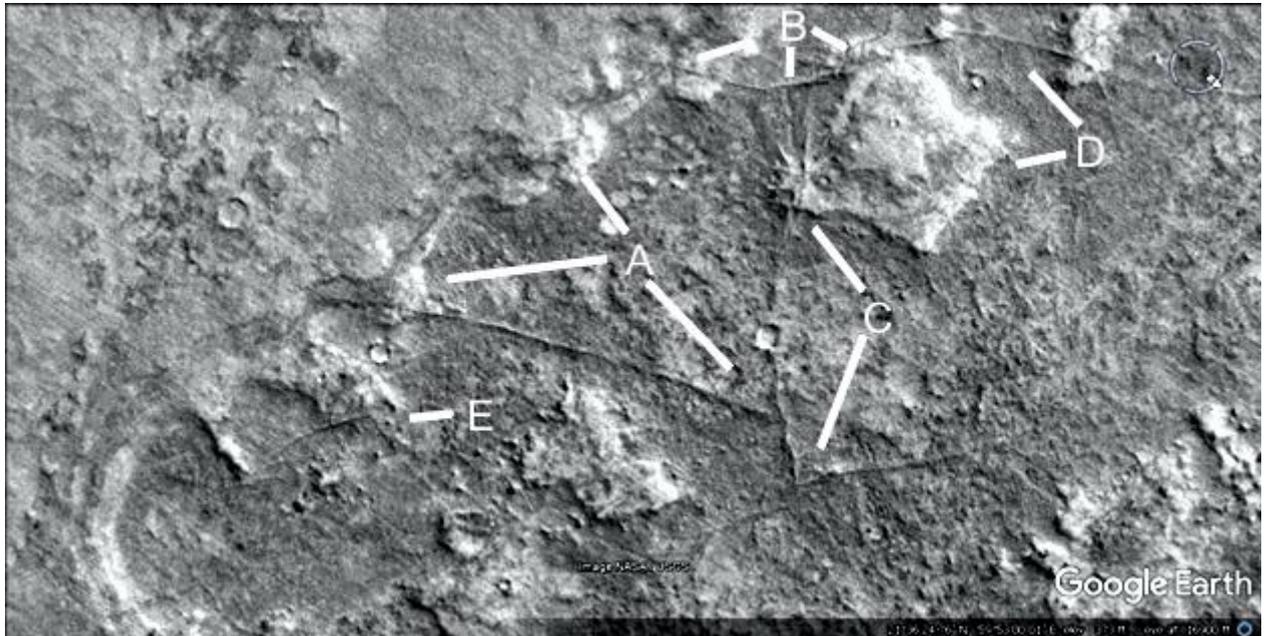
This first set of formations are all close to the first hyperbola. These are all to be regarded as hypotheses, so if this says a road, hyperbola, wall, etc. it means these are hypotheses not assertions. This is to save time writing hypothesis over and over. Each formation is catalogued with letter and numbers to be easily found, Prt for example refers to the Protonilus region.

### Hypothesis

#### Prt1053

A at 8 and 11 o'clock appear to show a tube running along the side of the slope, or perhaps a layer. At 4 o'clock the tubes connect together. This dark line in the cliff connects to a tube at B at 8 o'clock, this goes to the edge of a hill at 4 o'clock. C at 7 o'clock shows where tubes intersect at right angles, a tube then goes up through a crater to the hill at B. D at 8 o'clock shows the straight edge of the hill, and how the tube extends to the right through 11 o'clock. E shows an enclosure with walls or tubes extending from it.

These are the same kinds of walls or tubes that form the hyperbolas, they are all around the same width and height rather than varying randomly. There is no logical flow pattern to form these such as a riverbed or lava tubes because they would be flowing into each other.



Hypothesis

Prt1054

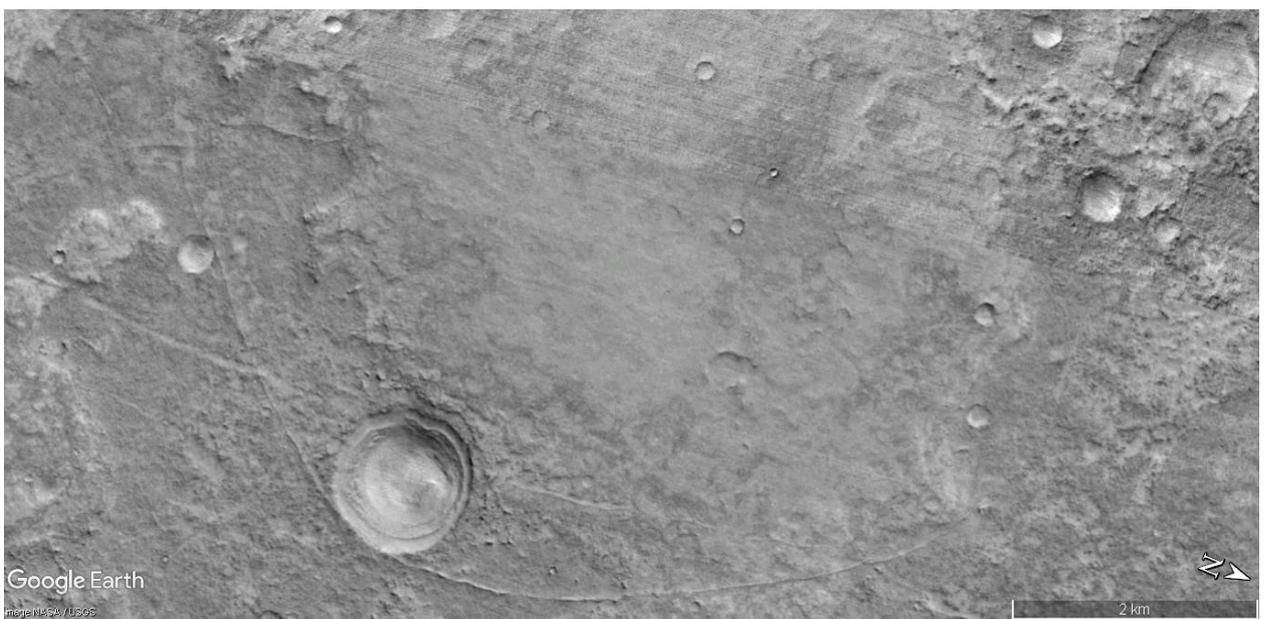
This shows a fairly straight groove, perhaps a road or the representation of a trajectory on the left of the hyperbola. A and D also show wall like shapes about the same size as the hyperbola. B at 11 o'clock show another wall that connects to the left side of the hyperbola. B at 8 o'clock shows the road cutting across the higher area, at 4 o'clock it seems to go through or over the hyperbola wall.



Hypothesis

Prt1055

An overview of the first hyperbola, it grazes the large crater perhaps representing a hyperbolic orbit connecting to a planet or a planetary orbit. It also connects to the smaller crater and bends around it as if affected by gravity. This could then represent a meteor as the small crater grazing the planet. It can also represent slingshotting, using gravity to gain speed from two planets. The road like formation comes in on the left, perhaps representing a trajectory.



## Hypothesis

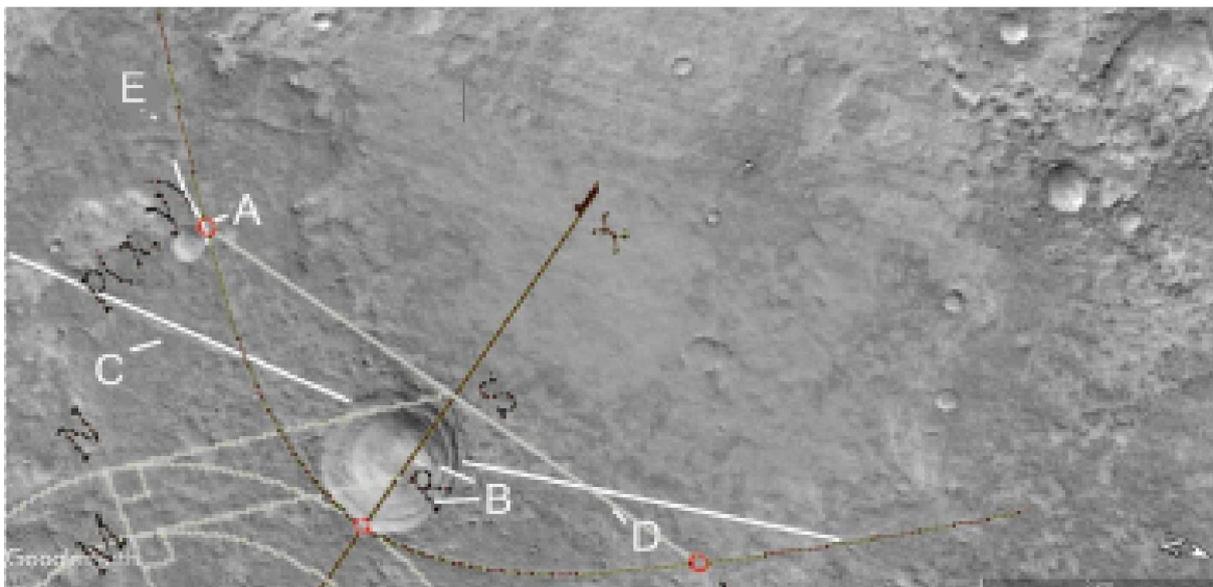
### Prt1055a

This shows a hyperbola overlaid onto the formation, the correspondence is nearly perfect. This can be seen by looking at how much the formation deviates from the hyperbolic lines, only a few pixels at most. This would be a deviation of meters, considering that the ground could have moved over time this is a small error.

A shows how the hyperbola grazes a second crater, unlikely to occur by chance. It also deviates around it as if affected by its gravity. E shows some more walls connecting to the hyperbola. B shows inner and outer circles in the crater, perhaps representing a planetary atmosphere. C shows a road like formation or trajectory going to the planet.

It was hypothesized in my first book that Mars may have been terraformed by a visiting aliens. Looking at the geology it was suggested shallow impacts were used with meteors, these would send the shock wave along the ground creating rifts and more volcanoes than an impact straight downwards. In the book the initial impact was the Argyre meteor, this would have been directed at the pole. The orbit suggested would have grazed Mars just as this formation appears to suggest, in that case it would be a meteor aimed at the pole. My coauthor Peter Ness is an experienced geologist and planetary scientist.

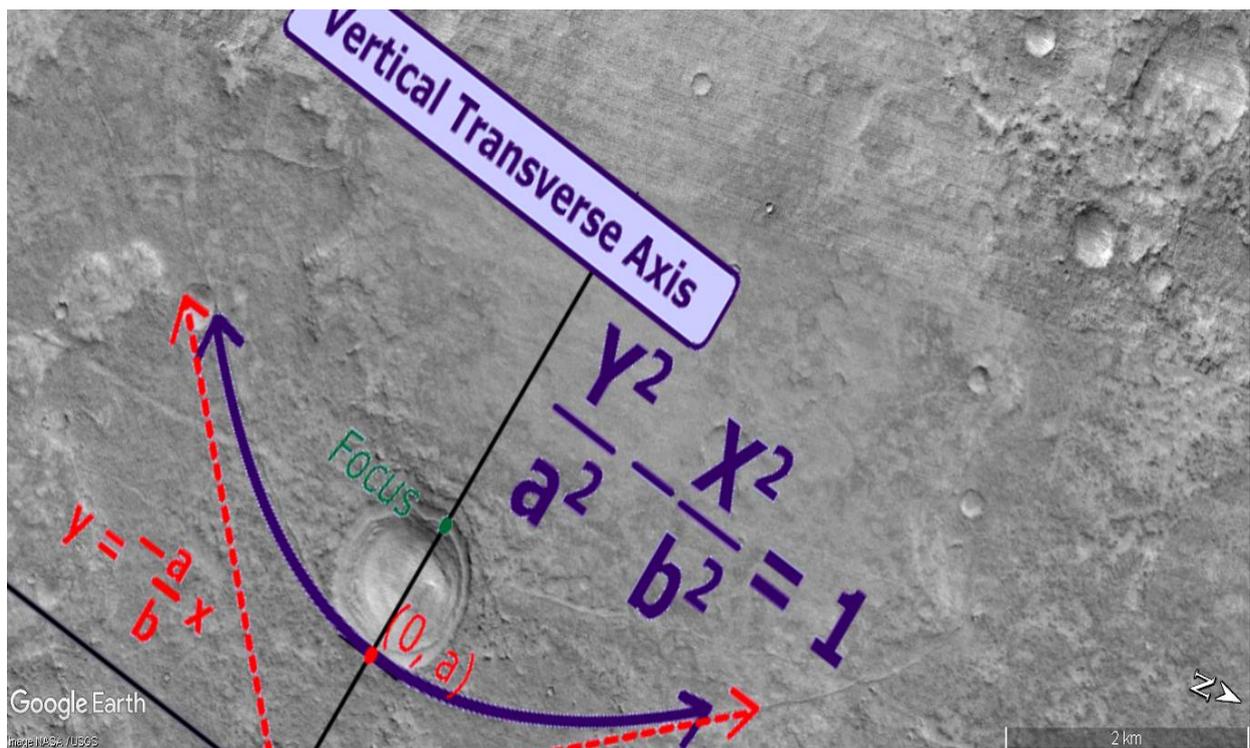
This caused the pole to melt as Tharsis Montes rose on the pole, Valles Marineris was formed by the rifting of the impact. The polar water flowed down into Chryse forming a sea. Antipodal volcanism or another impact created Elysium Mons on the other pole, also sublimating the frozen air and melting the polar ice forming an ocean in Elysium. This hypothesis is still consistent with all Martian geology discovered since then, as the poles wandered across Mars. Eventually they would have settled at the equator the hyperbola was on. Later as Mars froze the poles moved to the current positions.



Hypothesis

Prt1055b

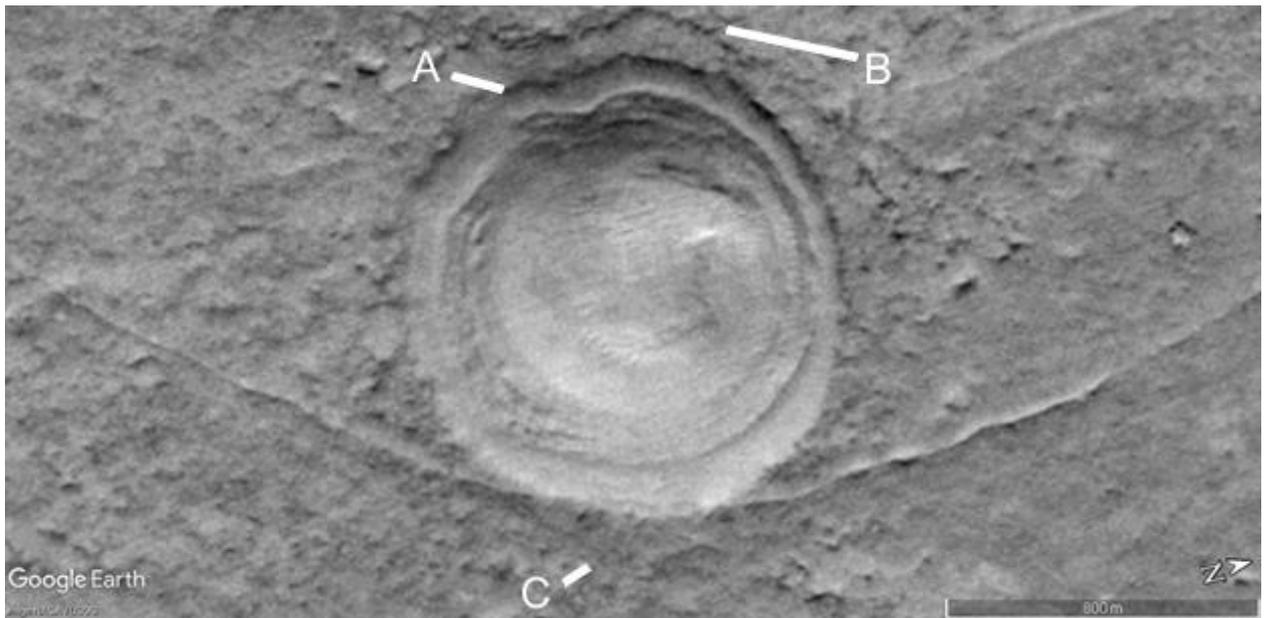
This shows a second overlay of a mathematical hyperbola. I used two transparent GIFs of hyperbolas downloaded. These can be provided so these overlays can be replicated. The ground may well have moved over a long time, so small errors may have occurred from this. I estimate the hyperbola has a ratio of 2:1, this is from a second transparent GIF used later. This hyperbola is connected to a circle, a part of which is shown in the previous image. This becomes an ellipse when the hyperbola is stretched to fit to the formation. It gives a ratio of 2:1 as the circle becomes an ellipse with its major and minor axes. There may be another way to measure this directly from the hyperbola but this seemed to be the simplest way. In this case I maintained the axis of the hyperbola through the center of the crater which caused small deviations in the hyperbola itself. The focus in this case is at the opposite side of the crater. It's not clear which is the best fit of the hyperbola or what was intended.



Hypothesis

### Prt1055c

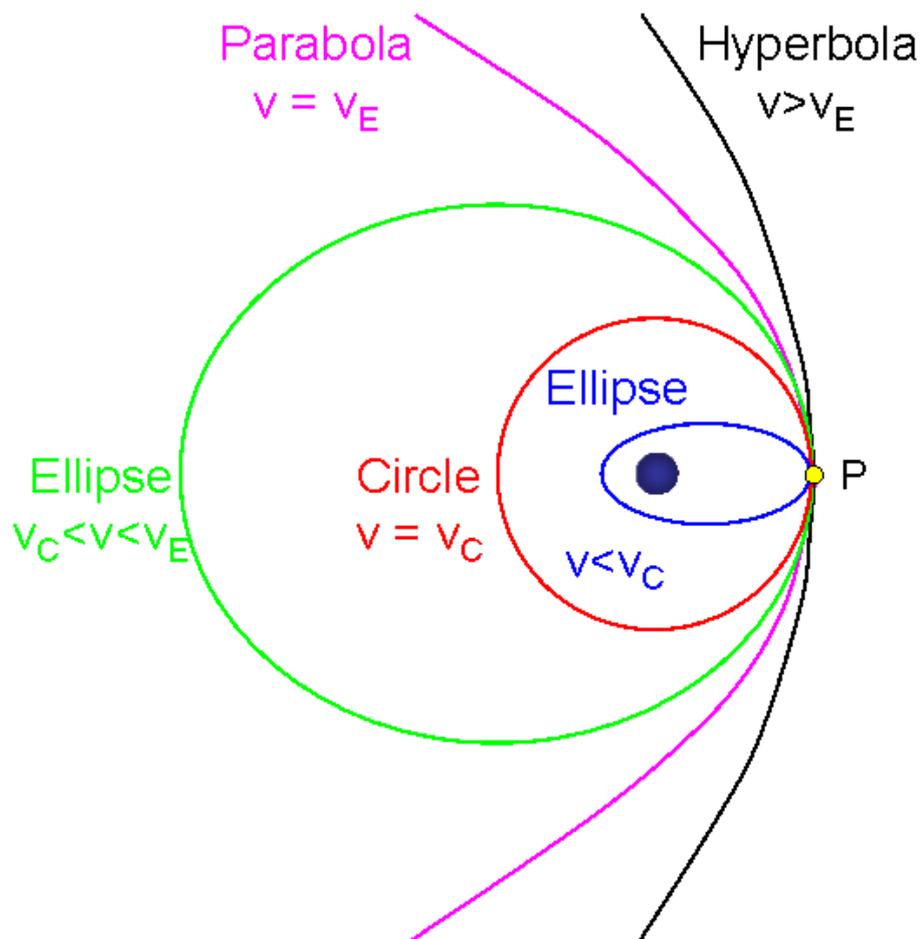
This is a closeup of the large crater, it may have represented Mars or the Martian orbit. There are some features in it but they do not match the current formations on Mars. A shows a dip on the circle shape, this may be where the hyperbola axis is meant to fit into. There may be a groove all around the crater, perhaps meant to represent the atmosphere. This is unusual for a crater. B shows an apex which may also have been used for the hyperbola axis. One of the road shapes extends to the right from B, this may have represented a trajectory.



Hypothesis

### Prt1055d

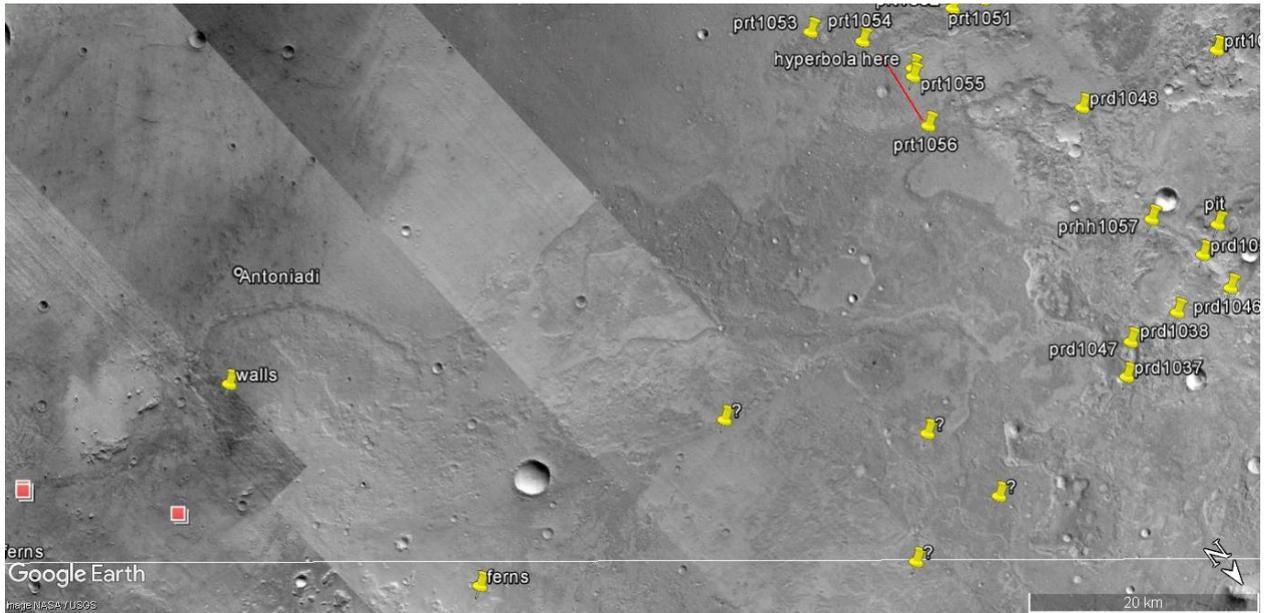
Another possibly explanation, this could represent a conic section with a hyperbola connecting to a circle. In that case it may not be intended to represent a hyperbolic orbit but a mathematical statement.



Hypothesis

Prt1055e

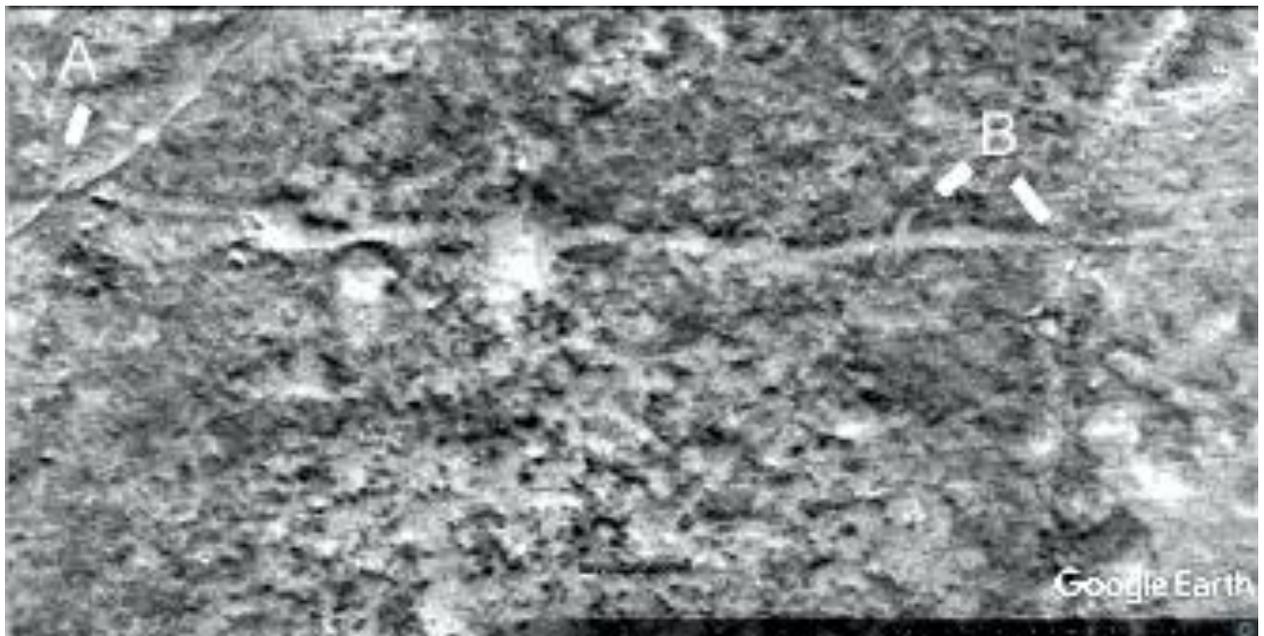
This shows how close the hyperbola is to the great circle the faces are on. The red line represents the hyperbola, the other yellow pins are analyzed formations nearby. At the bottom the word Ferns is seen, this is the Ferns formation also on this old equator.



Hypothesis

Prt1056

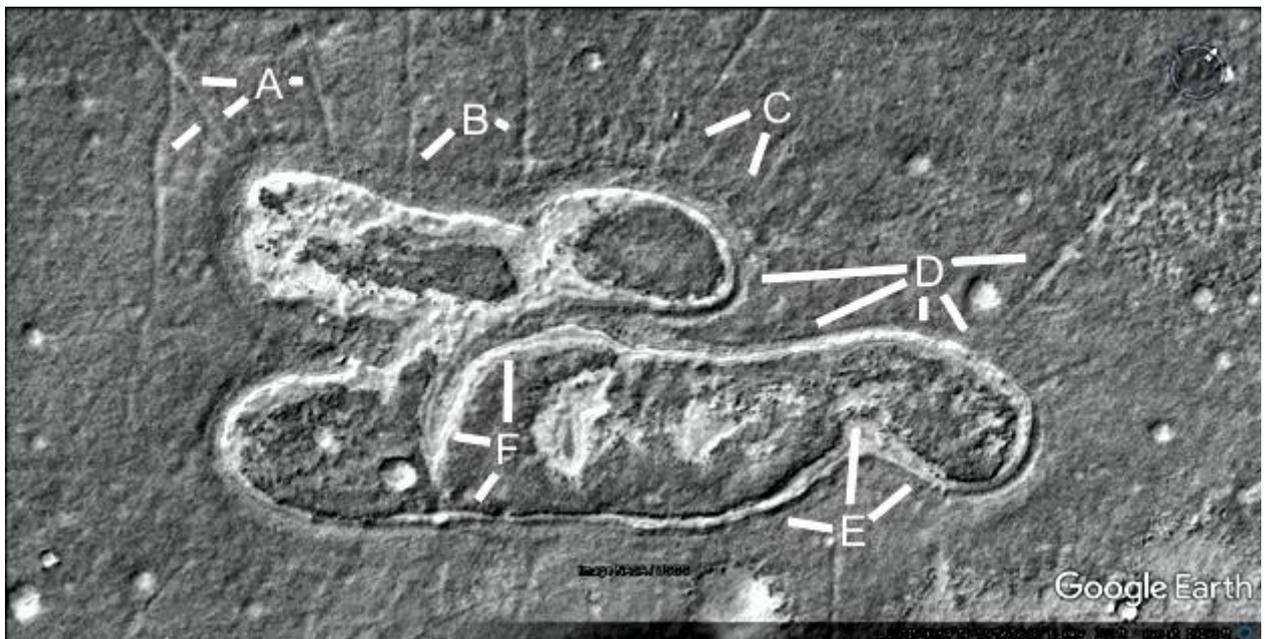
This shows a fairly straight line like a road or trajectory coming from the hyperbola. A shows how there are two ridges, one goes over another like in a knot.



## Hypothesis

The following formations are near the hyperbola, it also contains some geometric shapes hard to explain naturally.

Many tubes come out of this formation, A at 8 and 9 o'clock shows a tube intersection. At 3 o'clock is another tube from the pit wall. B shows two more tubes, below the one at 4 o'clock are two small enclosures, also another two between there and C at 8 o'clock. These may all be dams including the large pits. C at 7 o'clock shows many faint tubes coming out of the pit wall. D at 9 o'clock shows the pit wall is doubled with a groove between them. At 5, 6, and 7 o'clock the pit wall is very even and rounded, at 3 o'clock is another tube coming out of the pit wall. E at 12 o'clock shows one of the pale formations inside the pit, these may have been hollow hills and have a similar albedo to parts of the pit walls. At 2 and 9 o'clock the pit wall gets thicker, this part has a roof like a tube but to the right and left it becomes a groove again. It's likely then most of these pit walls are hollow.

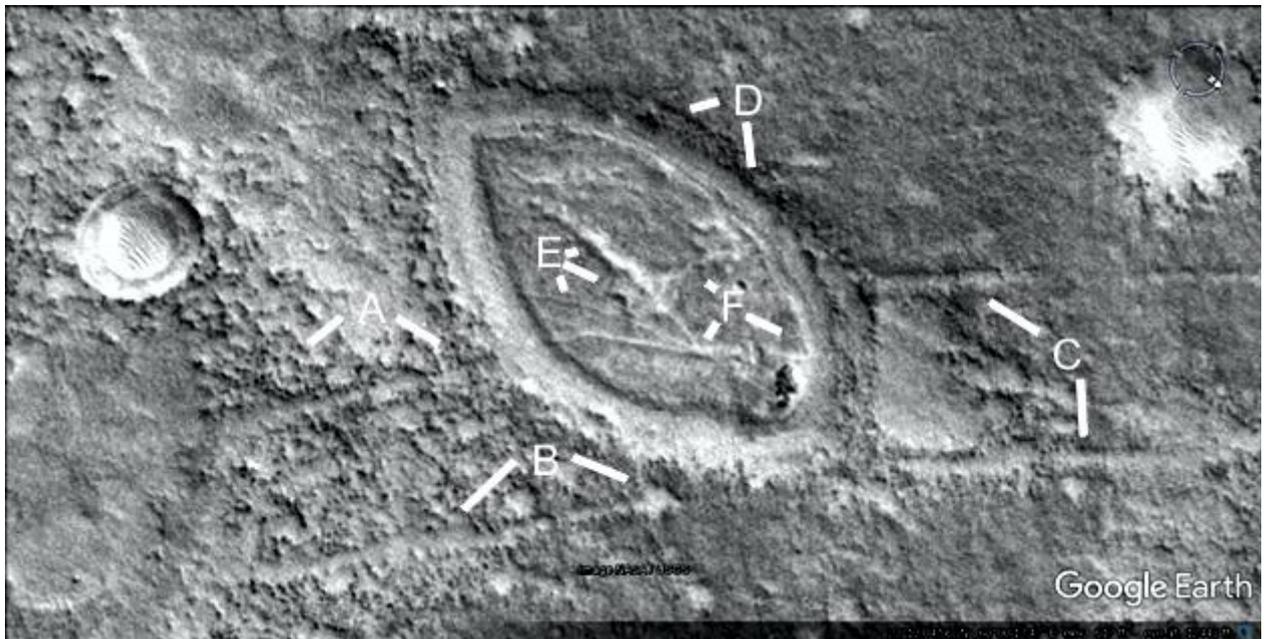


Prhh1019

## Hypothesis

An unusual shape looking like a leaf, this is near the Ferns so it may be related to them. A and B show straight grooves parallel to each other, these connect to C which are also parallel to each other. The spacing between the grooves, the depth of the grooves and their overall shape remain consistent throughout the image. The groove at A appears to connect to a tube shape at F at 4 and 7 o'clock, which then ends near a tube shape at right angles to it. This closes the parallel lines at C. E

shows other tubes on the formation, D shows there is a groove around the leaf shape with a consistent depth and albedo.

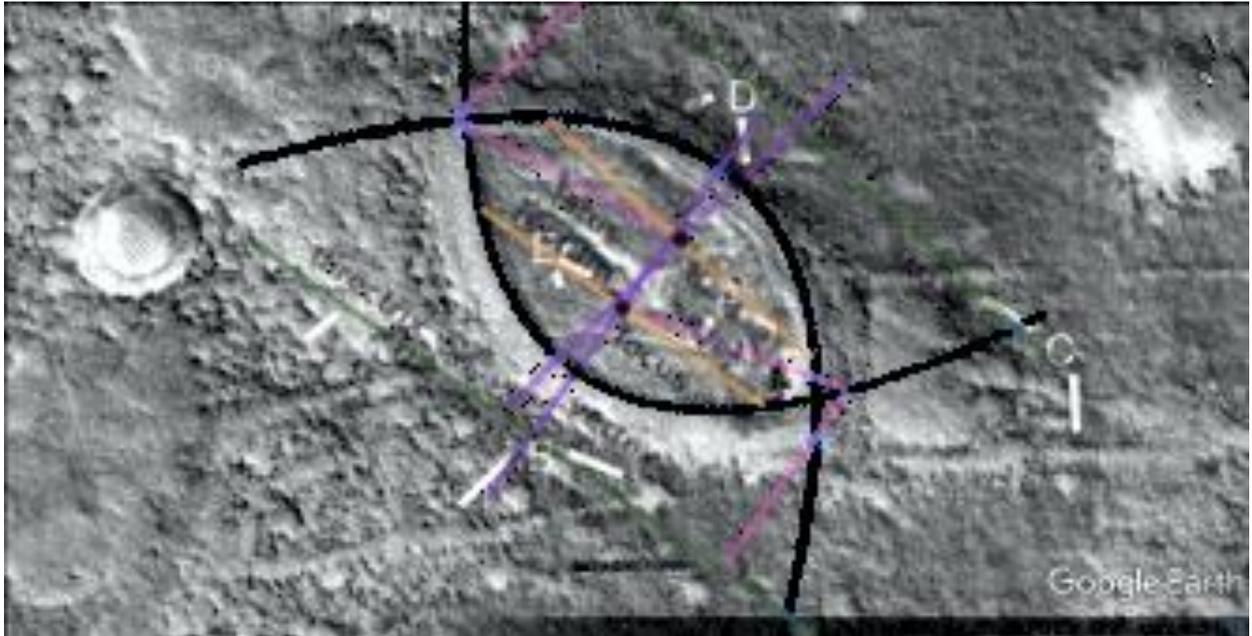


Prhh1019a

### Hypothesis

This shows the leaf shape is formed by a double parabola, the tube at E at 2 o'clock divides the parabolic shape in half. F can be regarded as a chord or line which connects the two parabolas, this may have geometric significance. There are also shapes which may have defined the foci and a line between them on their respective axis of symmetries. If the parabolas were moved a small distance to the right they would still be consistent with the leaf shape and this may then connect the foci. The arrangement of the parallel lines and the double parabolas may mean this is some kind of geometric statement overall. There are two sets of parallel lines with the road like formations connected to it.

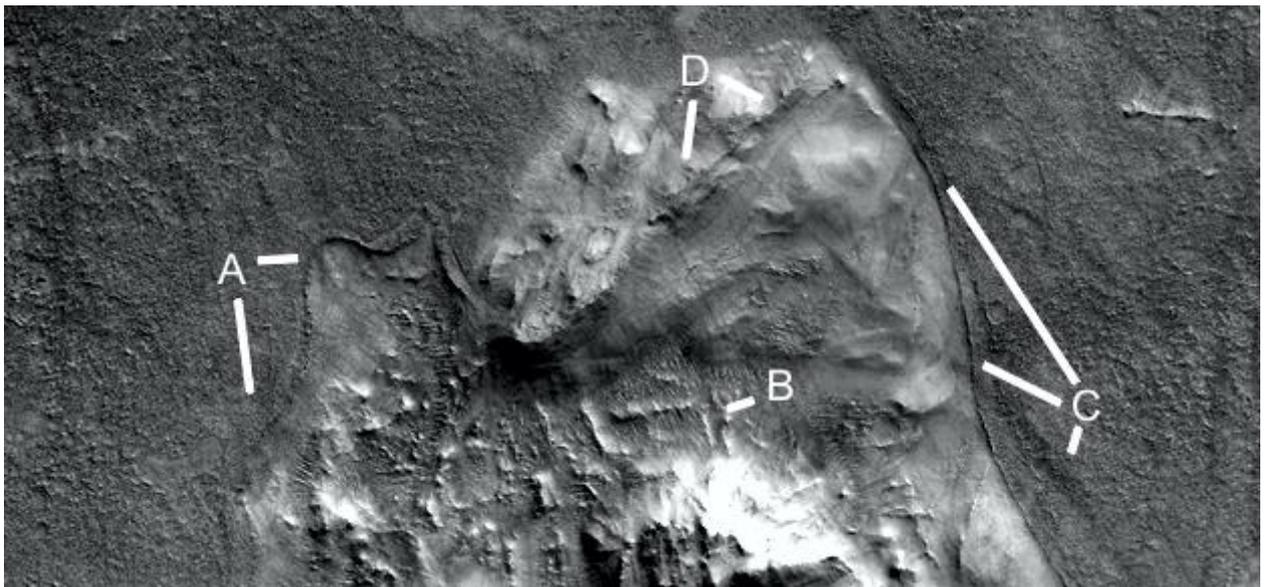
This is also very close to the Ferns formations, a paper linked here shows they may be artificial.



Prhh1031k

### Hypothesis

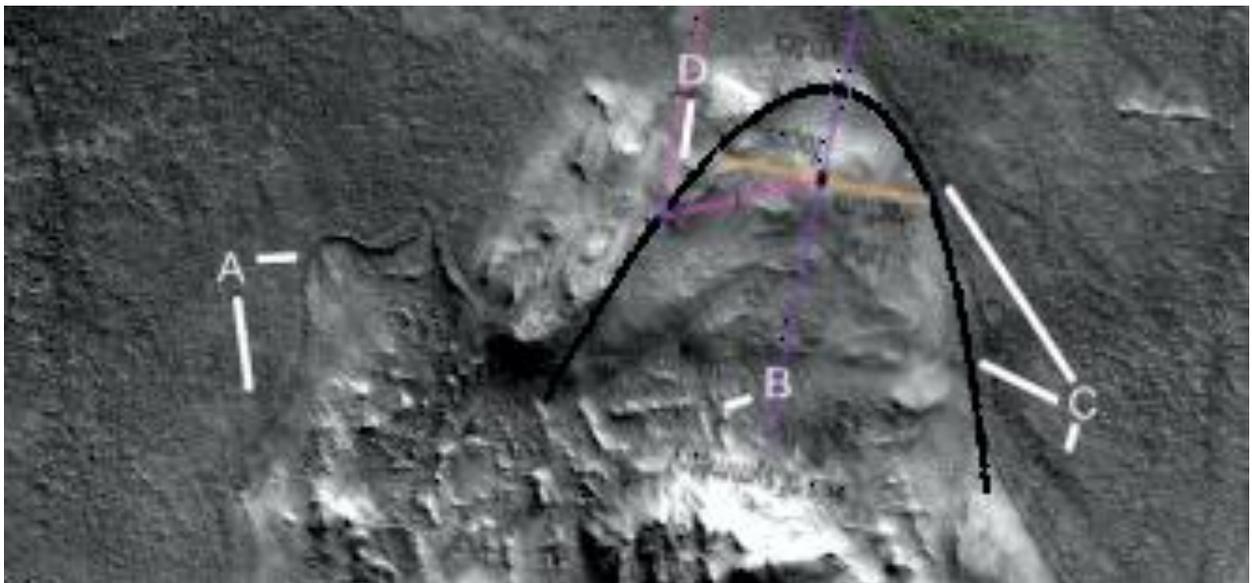
A shows another pit wall, it also has regular grooves across it like the material between the supports has collapsed. It might then be like posts where the material between them has eroded away leaving a series of regular spacings. B is a right angled tube, C is a pit wall in better condition, D shows another wall connecting to C and over to A.



Prhh1031k1

Hypothesis

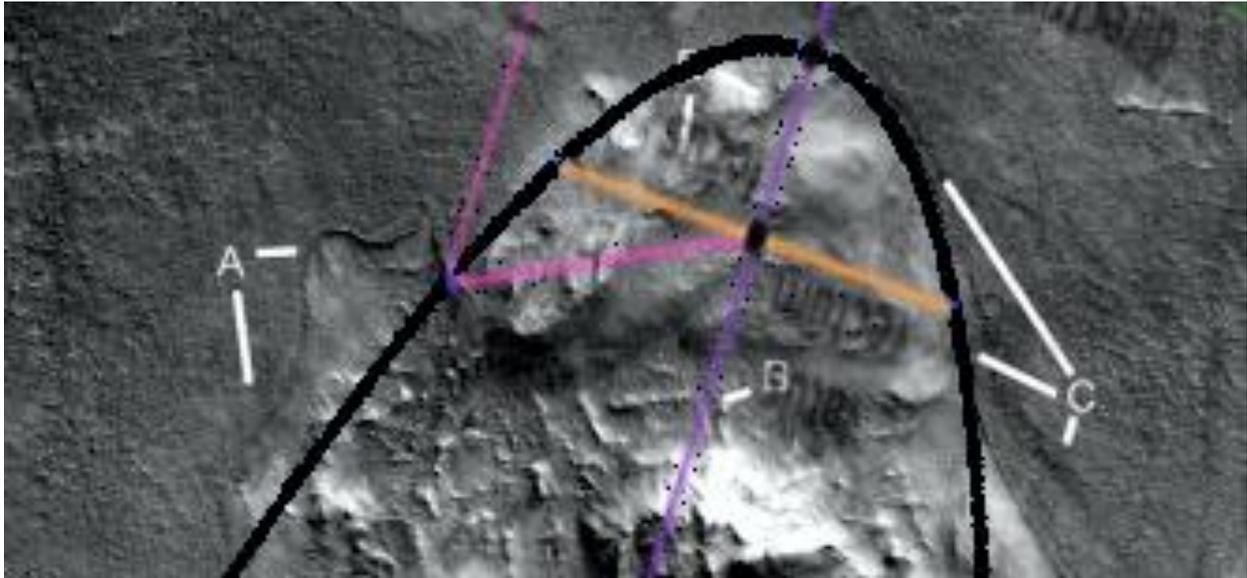
This shows how part of the formation is a parabola.



Prhh1031k2

Hypothesis

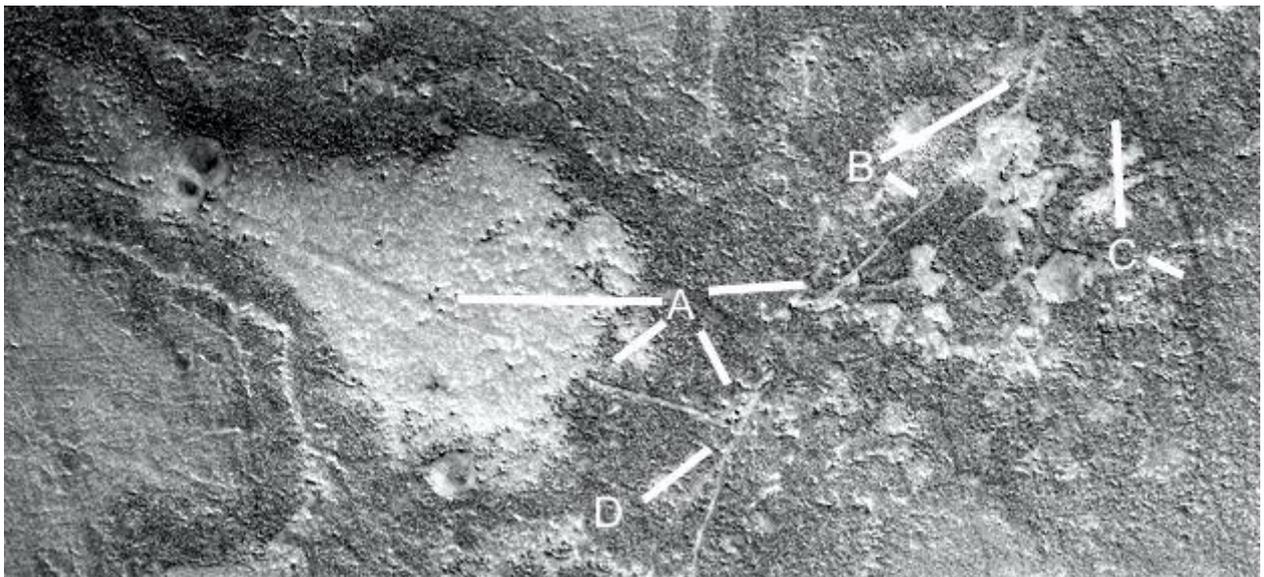
The outer pit wall also fits well into a parabola.



Prhh10311

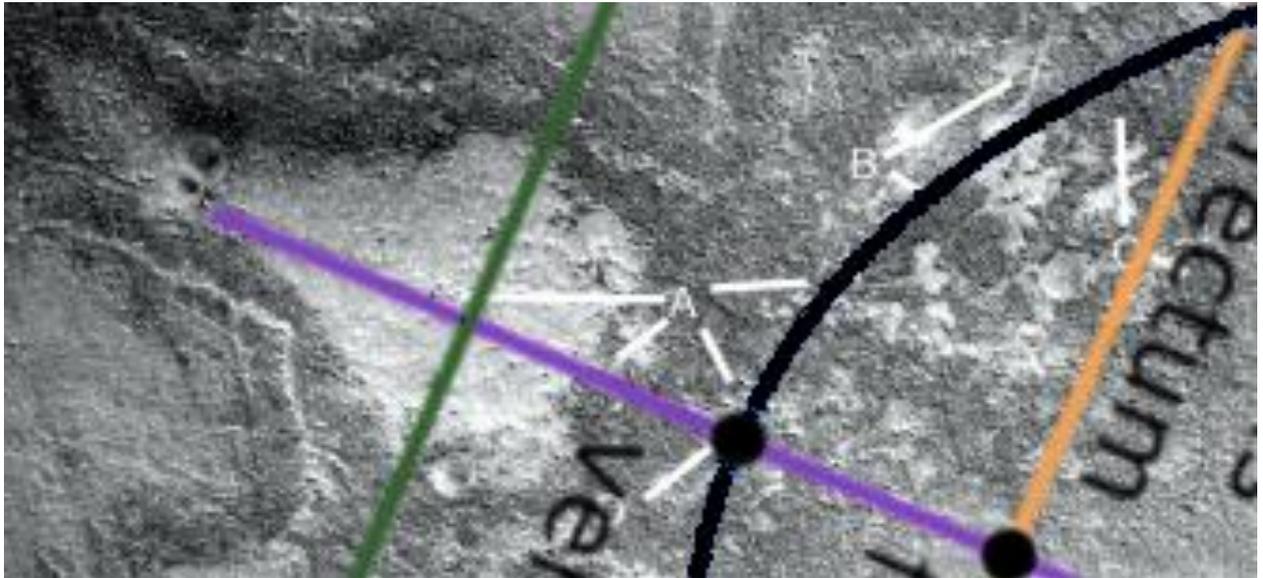
Hypothesis

A shows a probable road that comes to a T junction at D, B shows one of these roads going through a pit up the image. A from 9 to 5 o'clock closely bisects the large pale pit which has some symmetry, this may have lost some of its shape due to erosion. C shows a dark line like a curved road. This is also near the first hyperbola.



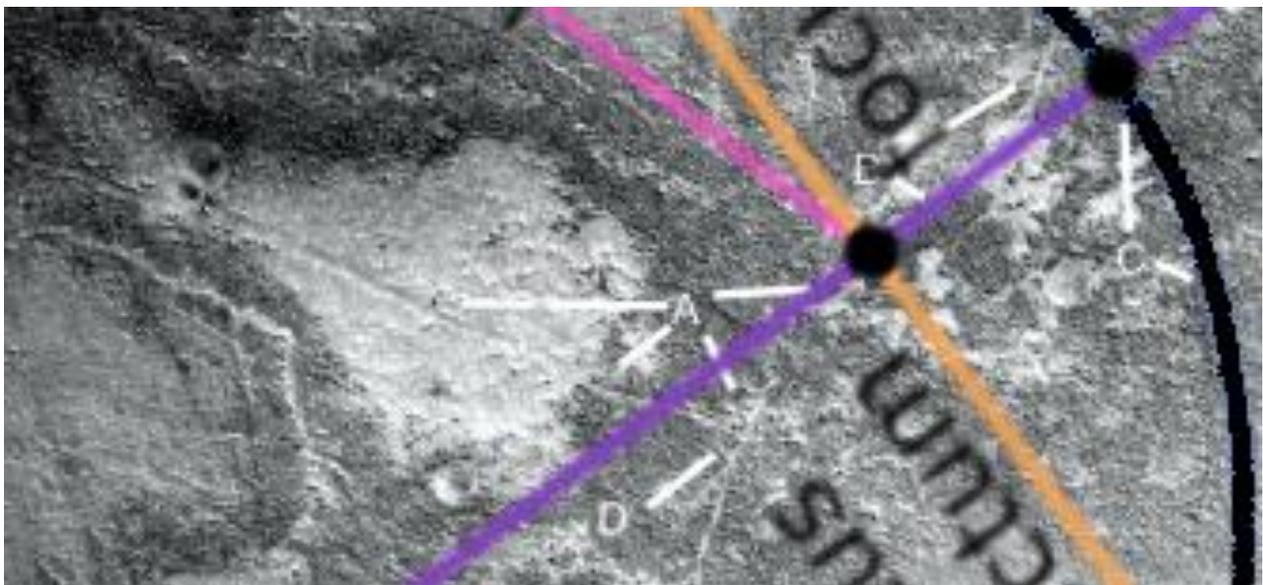
Prhh10312

The curved road is also a parabola.



Prhh103113

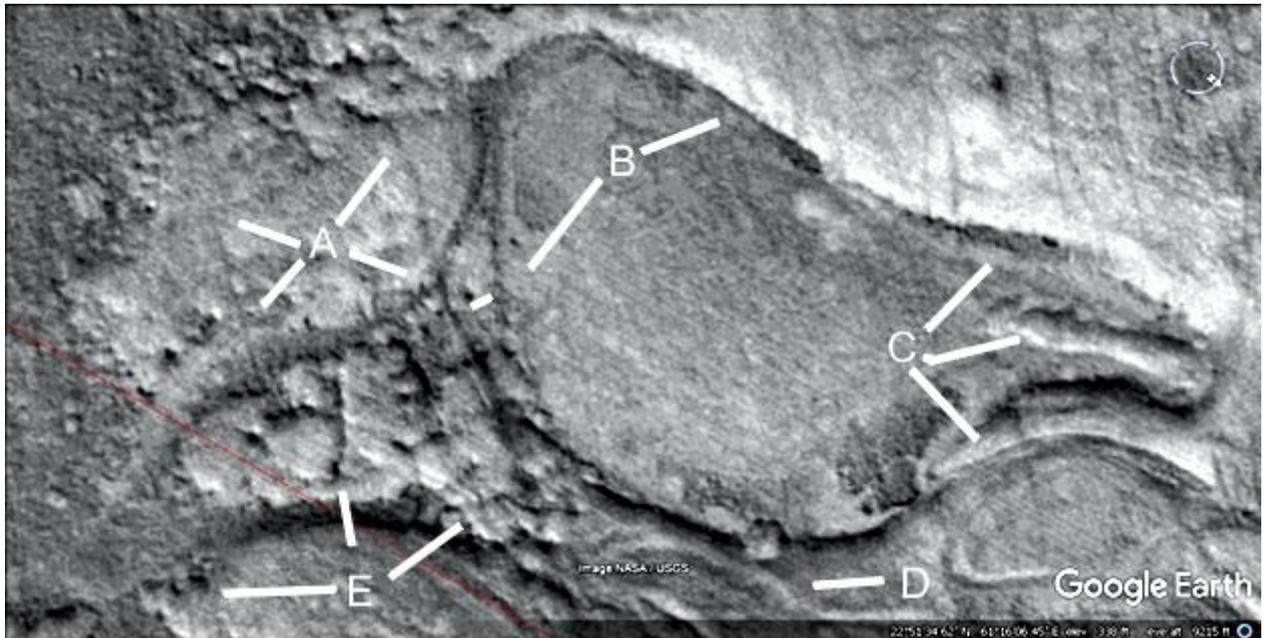
A second parabola is shown.



Prhh1032

Hypothesis

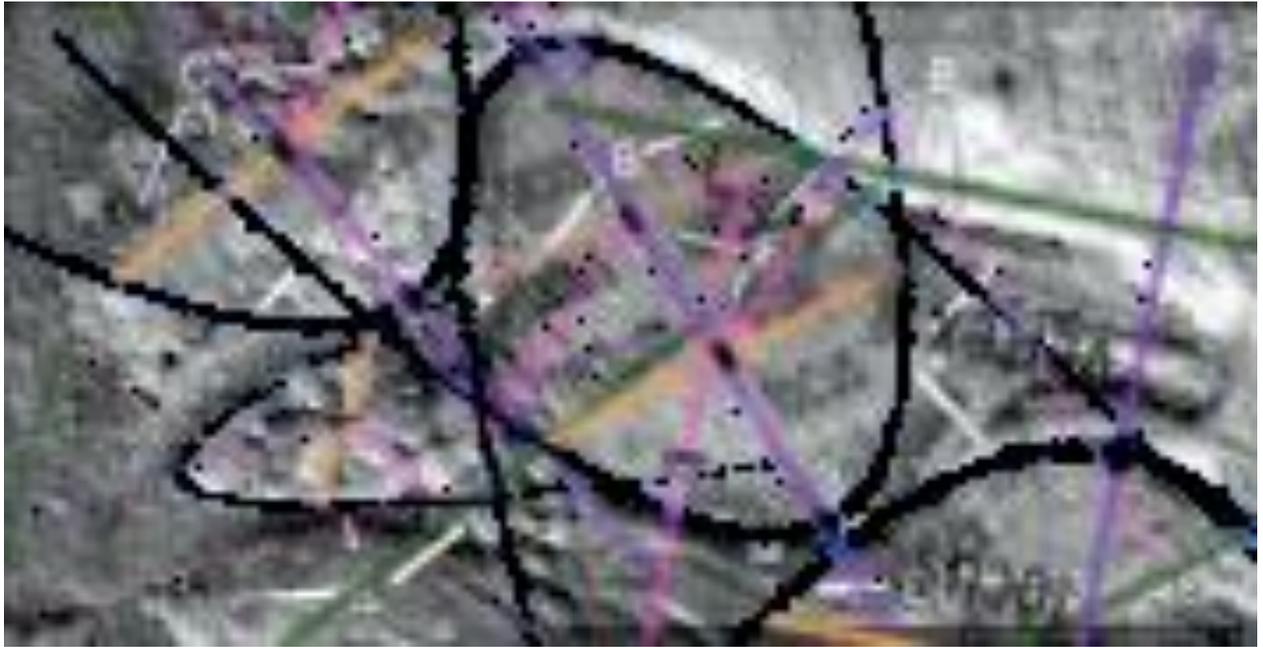
A shows some walls in close to right angles between them. B shows more walls, at 2 o'clock the slope is very even as is the height of the wall. At 7 o'clock and beyond there are many walls intersecting at right angles. C shows a cavity at 1 o'clock and 2 o'clock perhaps from a collapse, at 4 o'clock there is a curved wall or tube. D shows another possible tube, E shows a tube or wall intersection at 12 o'clock, more walls at 2 o'clock and a pit wall at 9 o'clock.



Prhh1032a

Hypothesis

Many of these curved walls form parabolas as shown.



Prd1033

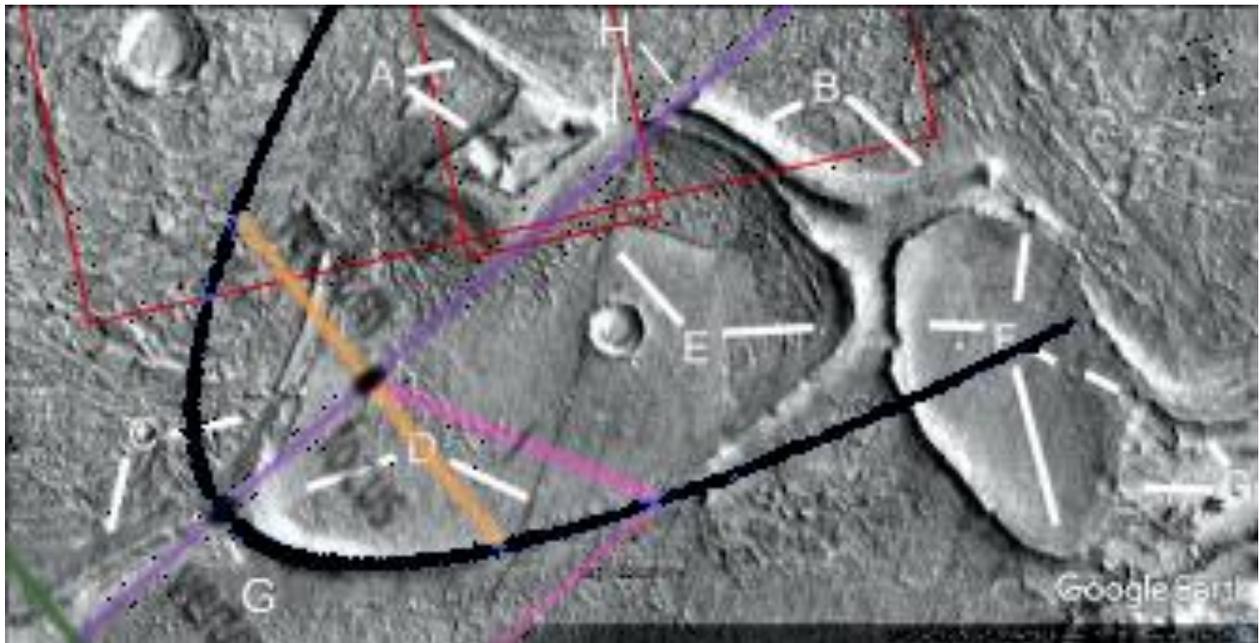
Hypothesis



Prhh1033a1

Hypothesis

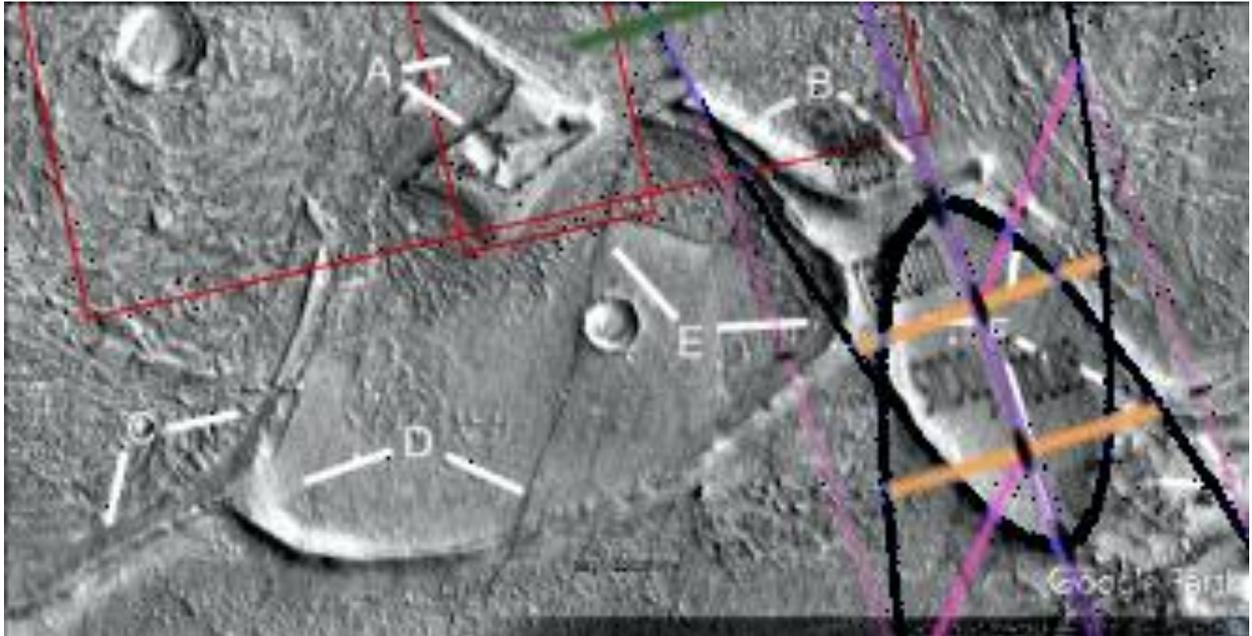
This shows another series of pits or dams, A looks to be a collapsed hollow hill with a wall at 2 o'clock. B shows another wall segment with a smooth slope as does C. D shows how the interior of this pit is much smoother than outside, as if the external erosion forces like water have been kept out. It implies then this has remained largely sealed with some material slowly coming in from the entrances at the top of the pit such as at E. F shows another pit which seems more concave, G shows walls or tubes connecting to it. Part of the pit fits to a parabola as shown.



Prhh1033a2

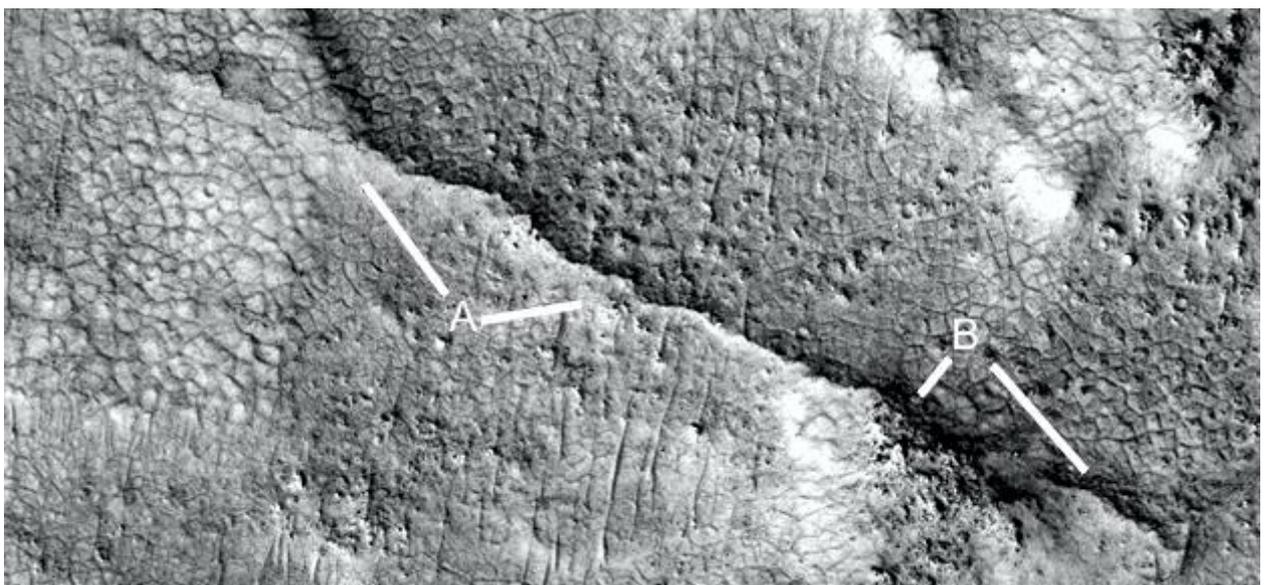
Hypothesis

The other pit also closely fits to two parabolas with parallel latis rectums.



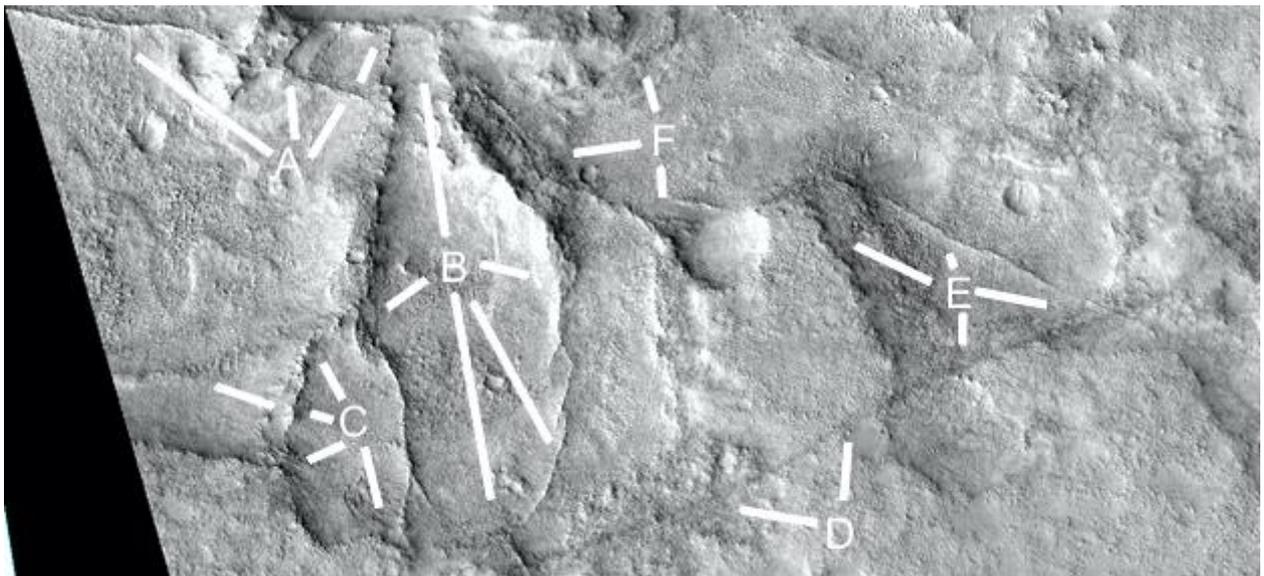
Prd1050e

This is probably another tube, A shows how this goes into the higher segment at 10 o'clock as if it becomes a tunnel, then it is more eroded at 2 o'clock. The markings on the ground are approximately vertical in the image as if going through the tube, this may indicate it was built after these marks were formed. The tube would tend to block the wind or water flow otherwise. It goes into B at 7 o'clock, at 5 o'clock there is a pit which may have been a hollow hill. The polygons have formed in many areas but not in the tube, this may indicate it is cement and resisted the same geological forces like freeze thaw or drying out.



## Prt1051a

A shows another tube or wall with a gap in it at 10 o'clock, this may have been an entrance. At 12 and 1 o'clock there is a small walled enclosure. B shows another walled enclosure, extending up to B at 12 o'clock connecting to the smaller walled enclosure. At 6 o'clock the walls connect to another short wall which then connects to the longer wall along D. C shows another walled enclosure, a separate enclosure also is at 10 o'clock around the second leg. E also shows an enclosure, the wall or tube is wavy at 10 o'clock and at 4 o'clock the walls cross each other. F at 6 o'clock shows a wall connecting to a pit or crater, other walls at 9 and 12 o'clock.



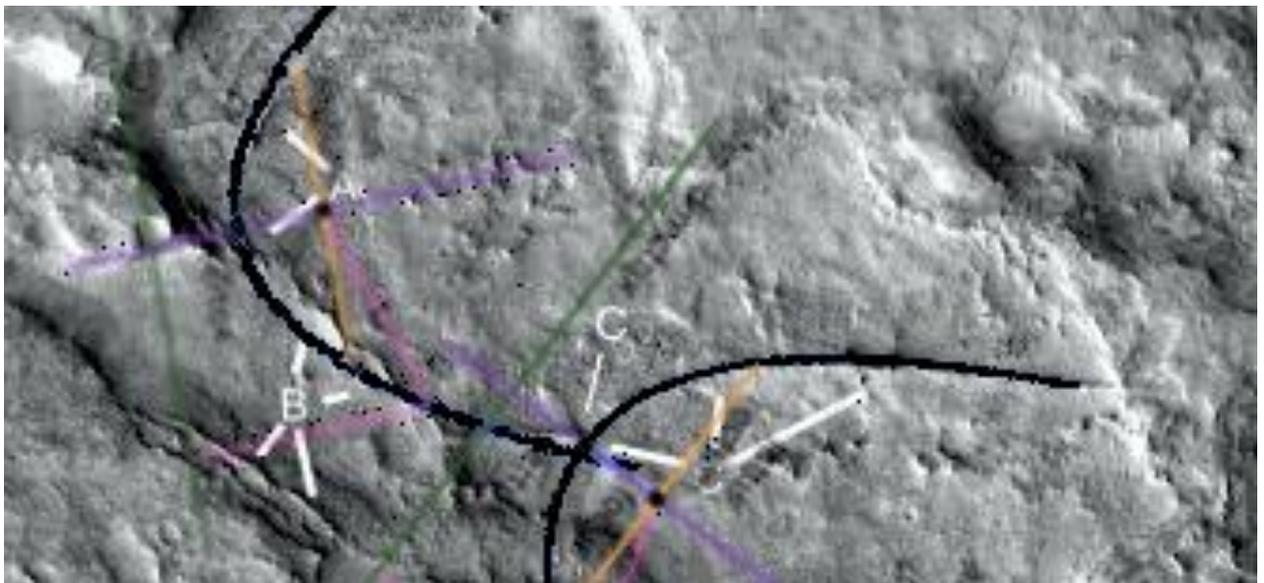
## Prt1051c

A shows a tube that forks at B at 1 and 2 o'clock, then recombines into a single tube connecting to C at 10 o'clock. B at 5 and 7 o'clock shows another tube going into the hill. C goes into a hill further to the right, this has a cavity in its roof as if hollow. If so then many of these other hills may be hollow as well.



Prt1051c2

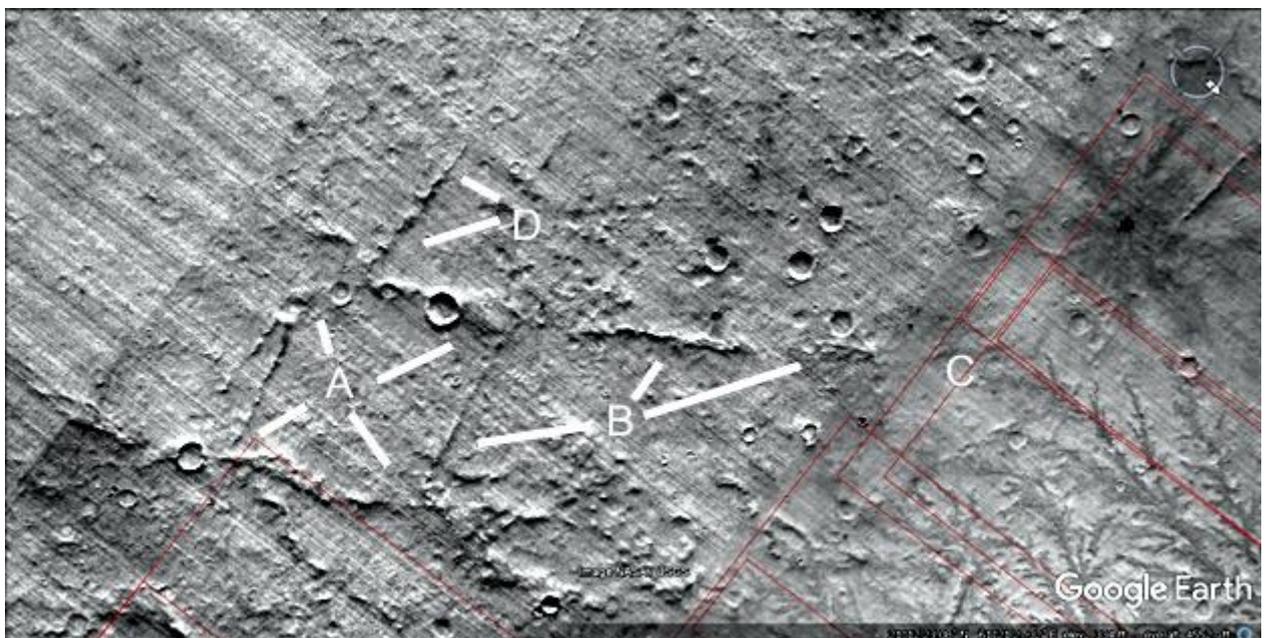
The curved wall on the left is close to a parabola with some deviations, the curved wall on the right is nearly a perfect parabola.



Prt1066

This shows some wall like shapes next to the fern formations, these are also found on the great circle along with the faces. I published a paper on these ferns showing they may be artificial. They appear to represent many different kinds of plants. Also the branches seem to be a Fibonacci sequence, this is a deterministic mathematical relationship used by plants. Rivers would not follow this except by chance. I haven't been able to find any that are in this sequence. So someone creating plant sculptures would also prove they are artificial because they would incorporate this mathematical sequence in it. The paper is here:

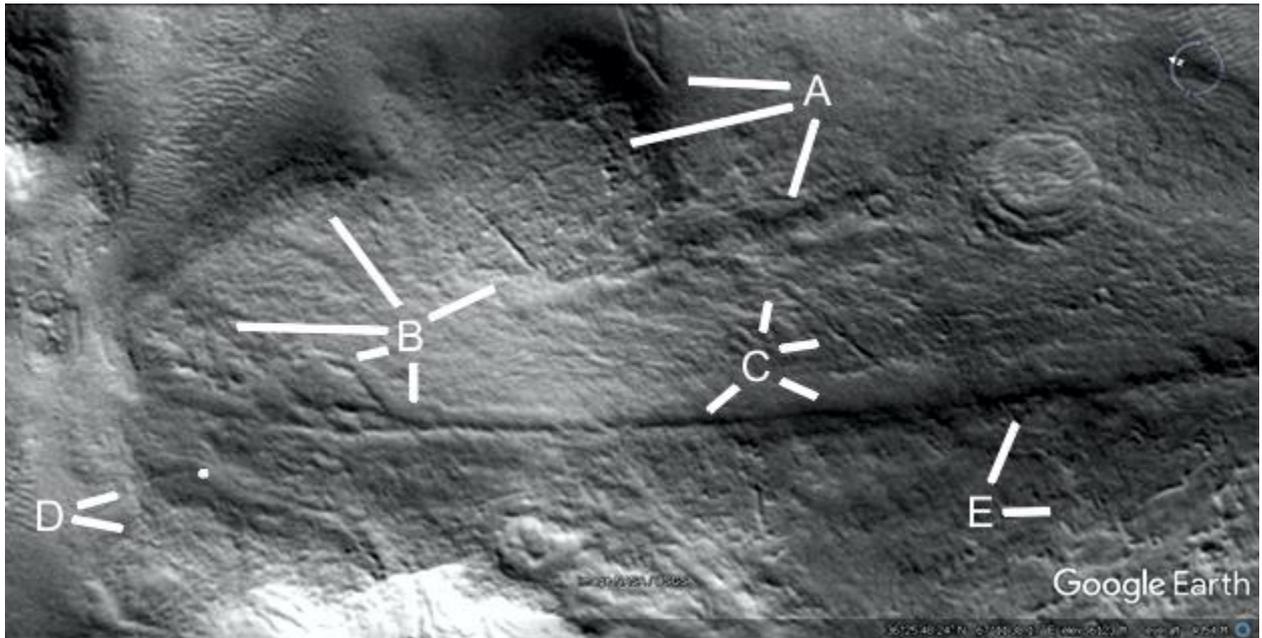
<https://www.tsijournals.com/articles/the-ferns-artefacts-or-natural-formations.pdf>



Prhh1000

Hypothesis

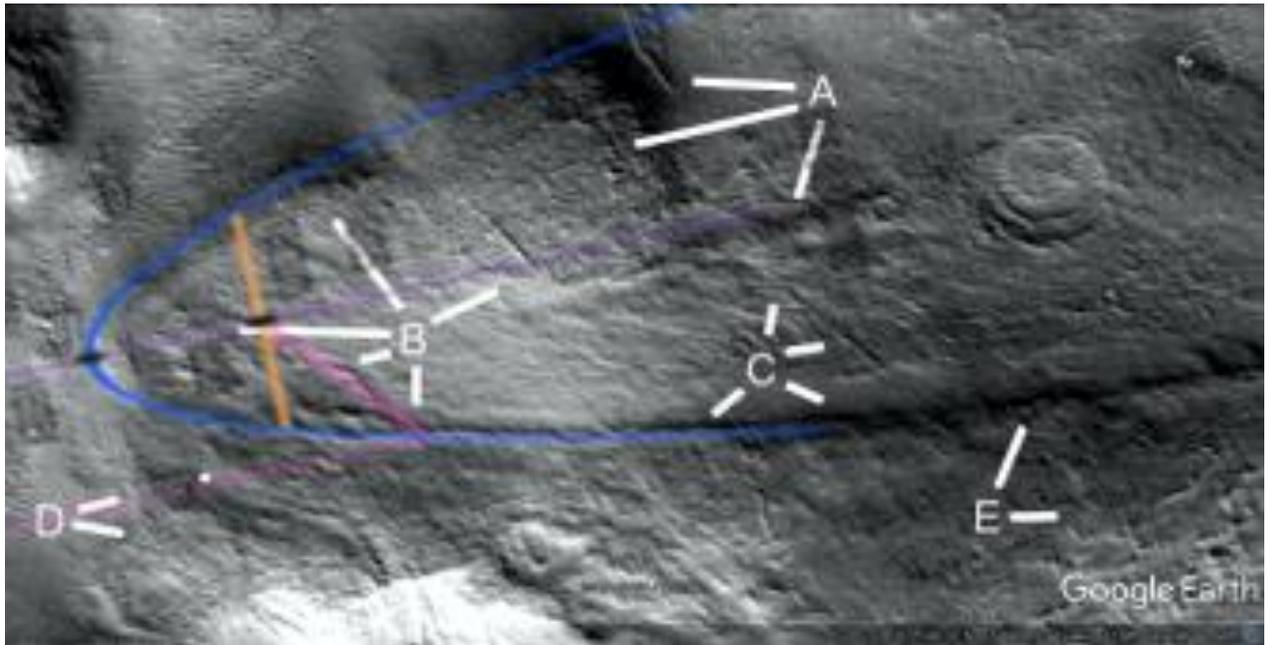
A shows a tube shape at 9 o'clock, at 8 o'clock there are patches or tubes on the roof of the hollow hill. At 7 o'clock there is a large tube going directly to a small crater and terminating at it, there may also have been an extension of this going to the large crater beyond it. B at 2 o'clock shows the edge of the hollow hill with a tube just above it. At 1 and 6 o'clock there is a large wall or tube in a parabolic shape, 8 and 9 o'clock show other tubes. C at 5 and 7 o'clock shows this parabolic ridge or tube, at 1 and 3 o'clock is another tube. D shows another tube. E at 1 o'clock shows the parabolic tube and at 3 o'clock some disconnected tubes.



Prhh1000a

Hypothesis

B at 2 o'clock is the start of a ridge or tube, this is also close to the axis of symmetry of the parabola extending to the right. There is a small hill near the apex of the parabola in line with this axis of symmetry which may have been used to construct it accurately. B at 9 o'clock also points to a straight tube like a chord from one side of the parabola to the other. This may have gone through the focus, drawing on top of an image like this would have some inaccuracies. It may have been used to help construct the shape. B at 8 o'clock would be close to going through the focus as drawn. Other lines and tubes may have been intended to measure where the parabolic tube would go. This would be an easier construction technique to create a parabola, the tubes would have a known length further up and at right angles to the axis of symmetry.

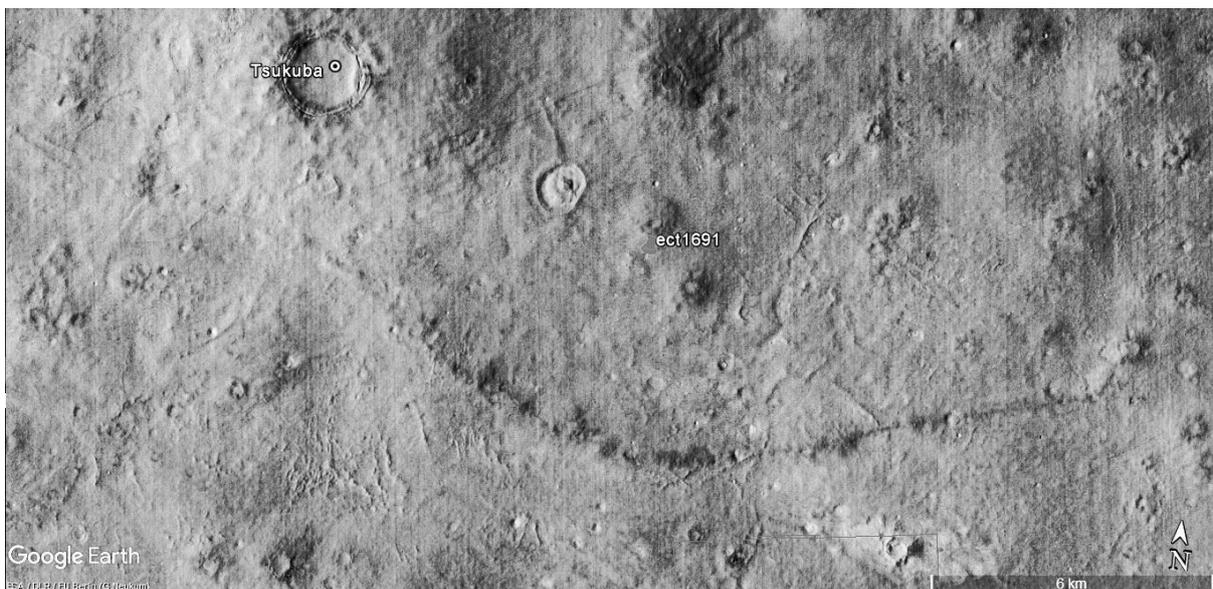


## The second hyperbola

Ect1691a

Hypothesis

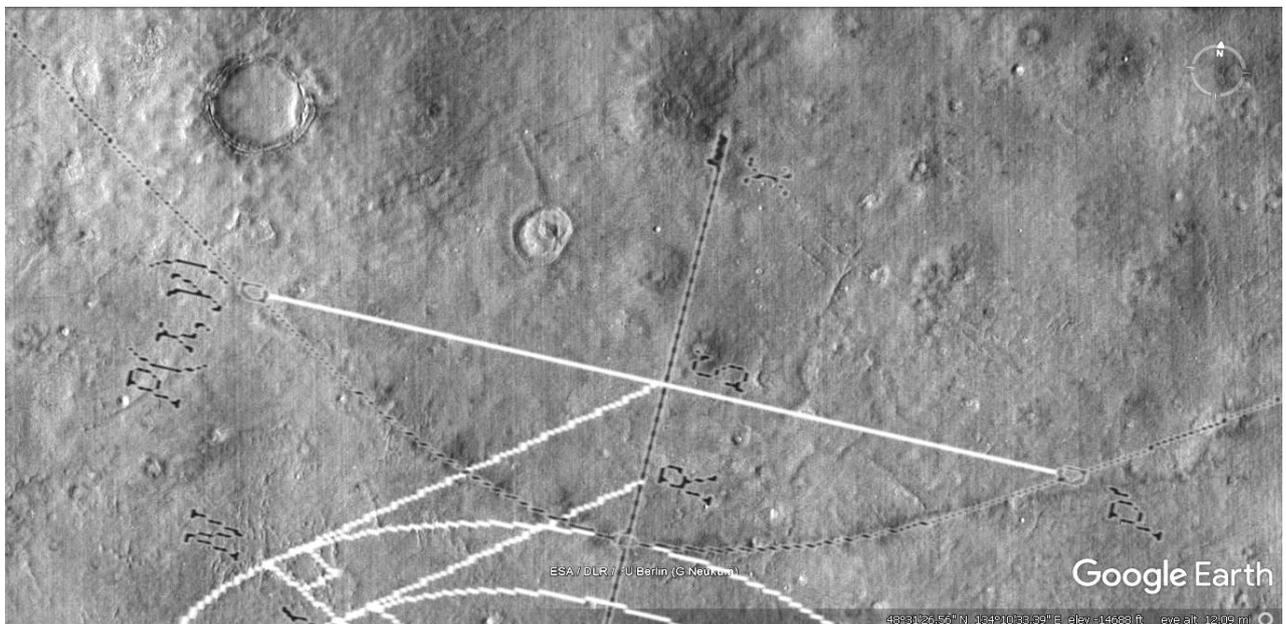
The dark line appears to be dark soil that has blown against a wall in the shape of a hyperbola.



Ect1691a2

### Hypothesis

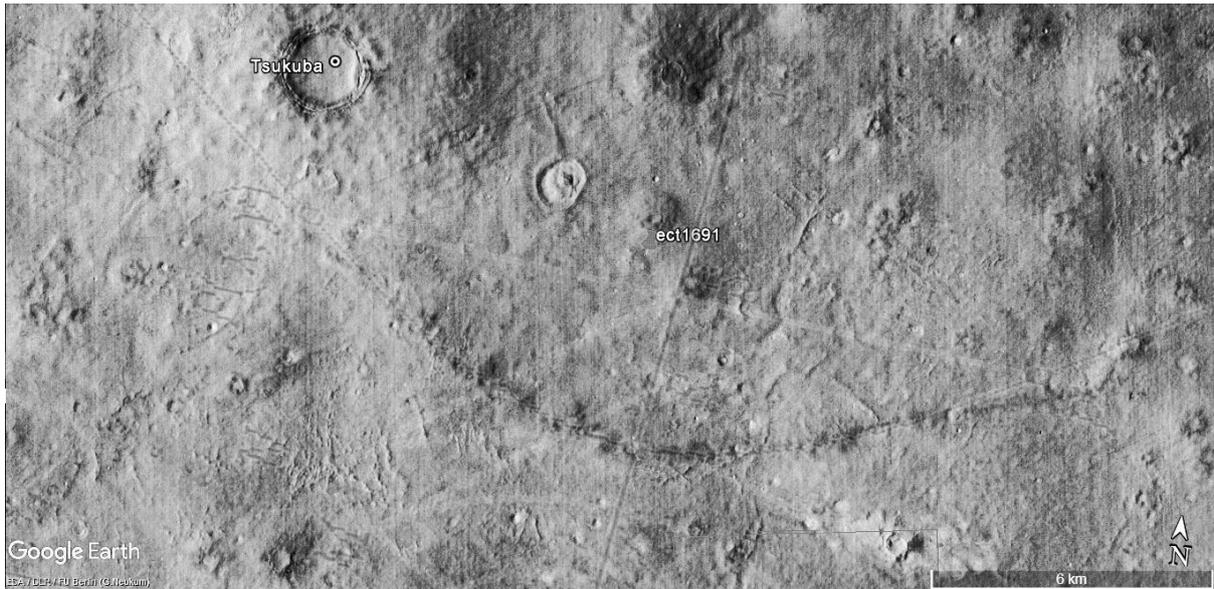
This is an overlay of a hyperbola on the formation. Just under the edges of the white line it deviates downwards from a perfect hyperbolic shape, but in a symmetrical way. The first hyperbola also deviates alike this on the edges. As with the first hyperbola the deviation from the mathematical overlay is very slight, only a few pixels. This is highly unlikely to occur by chance as a ridge could go in any direction. The ellipse connected to the hyperbola has approximately the major and minor axes of 3:2. This is formed by stretching the hyperbola to fit onto the formation, originally in the transparent GIF the ellipse is a circle. It gives an easier way to measure the formula for the hyperbola.



Ect1691a3

### Hypothesis

This is a fainter hyperbola overlaid on the formation to show how close the ridge is to the hyperbolic shape. The deviation is so slight that the odds of this being natural are very low.



Ect1691a4

Hypothesis

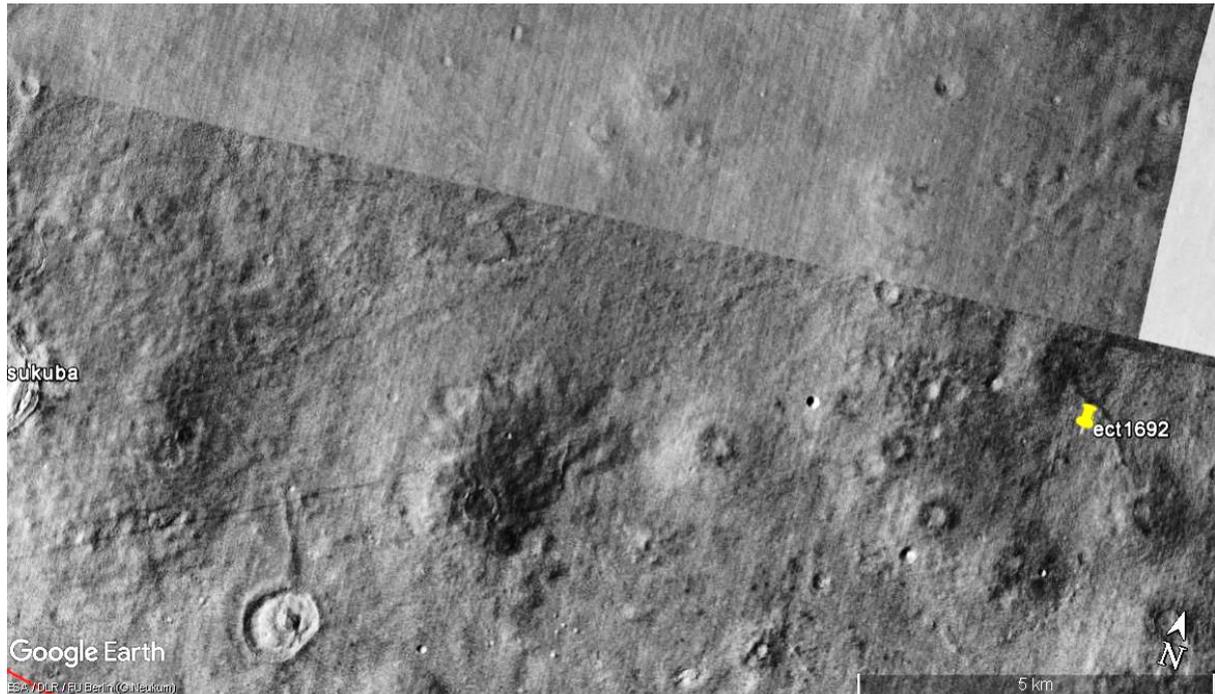
This shows a line between two mounds on the formation. There is a slight flattening of the hyperbola under the ends of this line. It may be the right side of the line as a crater represents a destination for a hyperbolic orbit. This is similar to the first hyperbola except the small crater was on the left.



Ect1691a8

Hypothesis

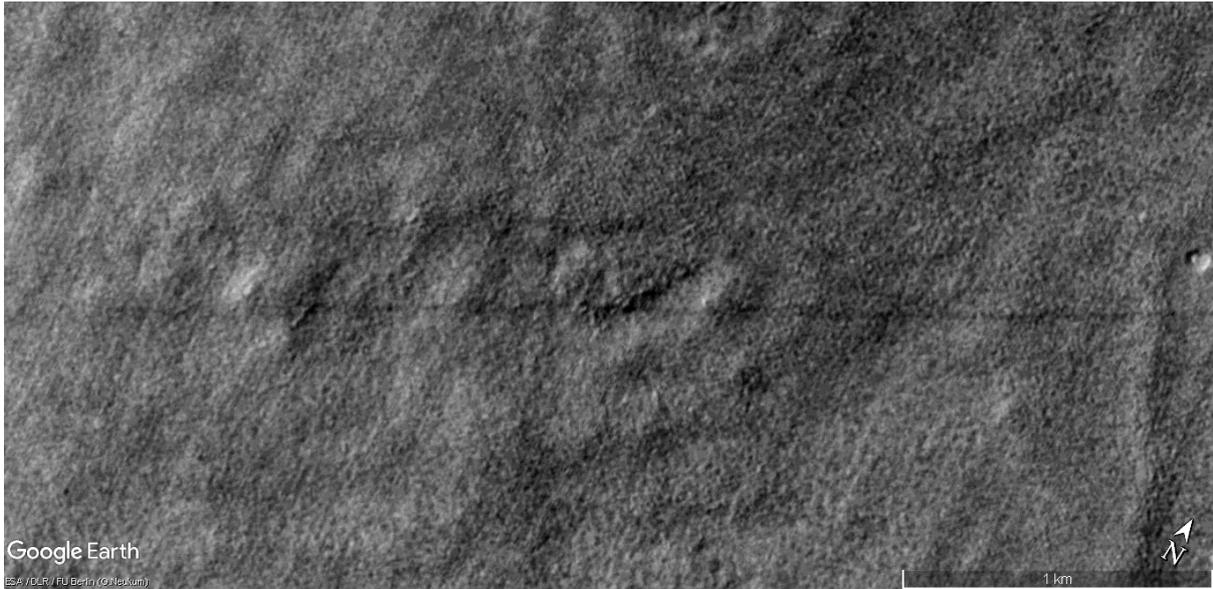
Just above the hyperbola there are a long dark line that is nearly perfectly straight, it is arguably as close to perfect geometrically as the hyperbola. It might seem that the line is an artifact of joining images together or pixilation, but is at an angle to these.



Ect1691a10

Hypothesis

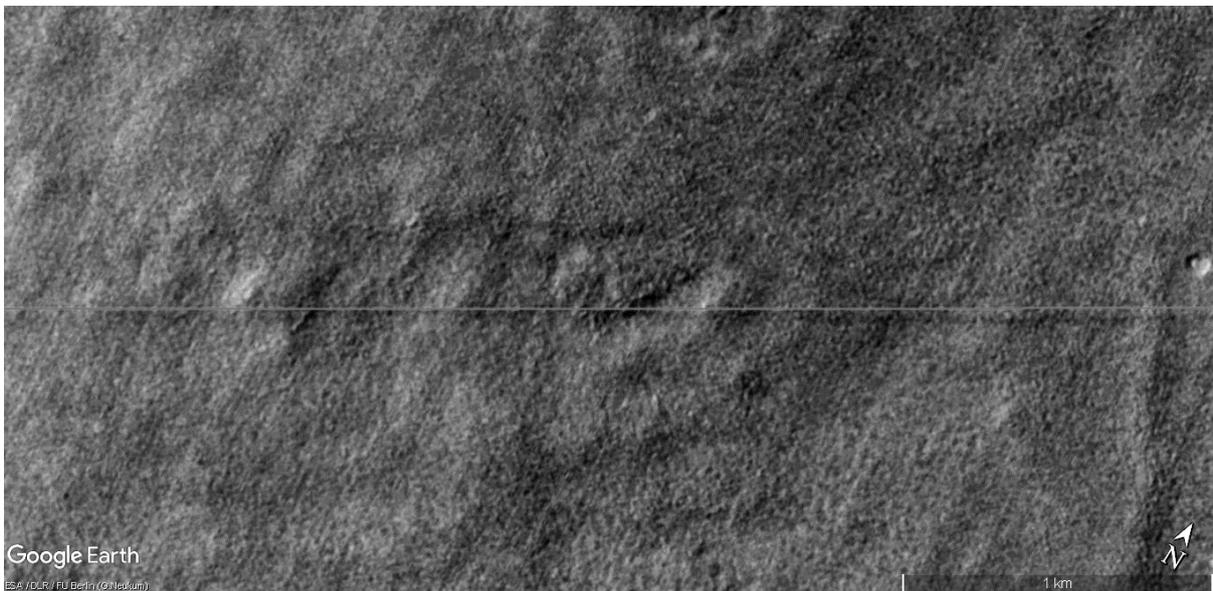
This is a closeup of the straight line, a dust devil can leave a similar track but these are usually curved.



Ect1691a11

Hypothesis

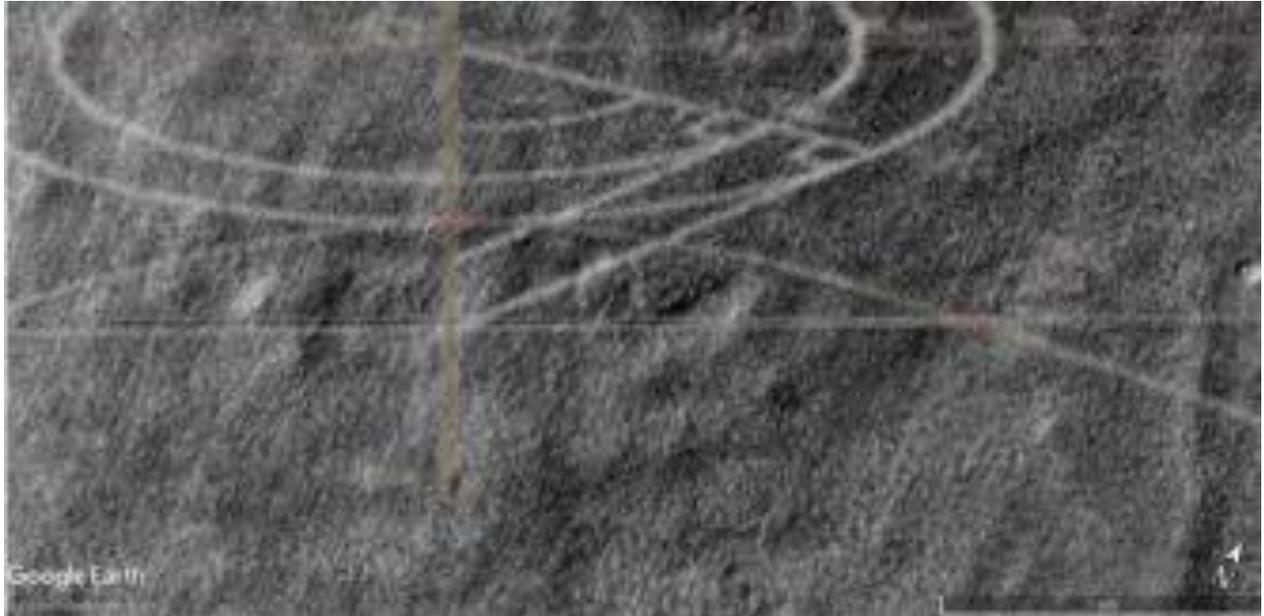
Here there is a line drawn over the dark line to show how close it is to being straight. The line is drawn just above it so both can be seen.



Ect1691a11a

## Hypothesis

There is a dark curve over the straight line, this conforms closely to a more flattened hyperbola.

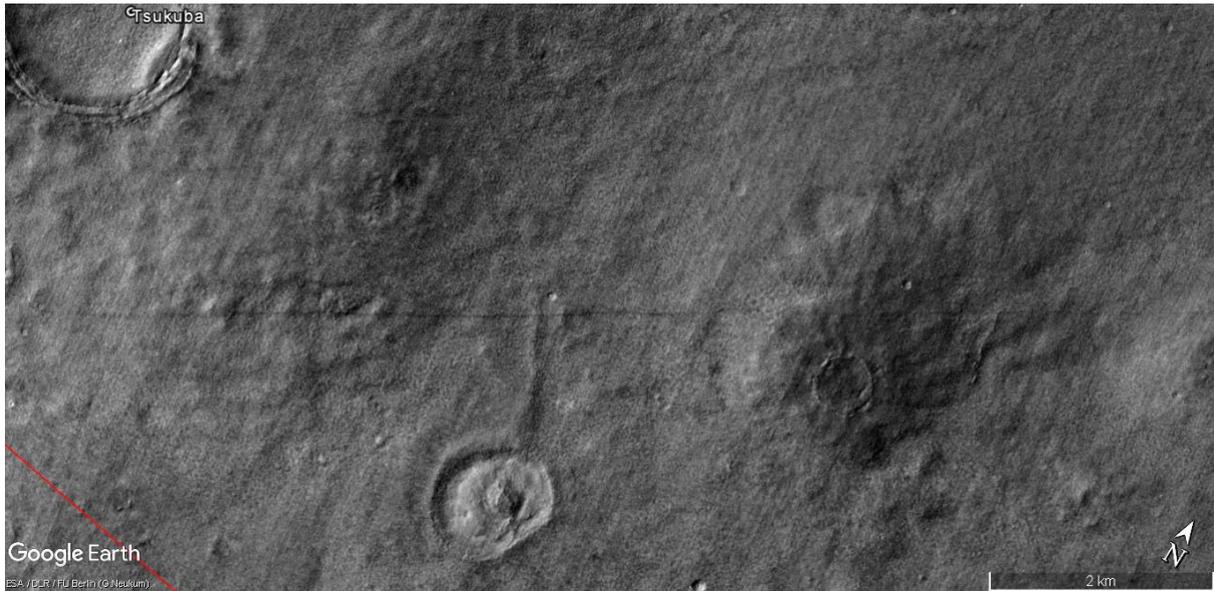


## Ect1691a12

### Hypothesis

This shows the dark line, also there is a vertical ridge or tube from the crater that intersects the dark line at right angles. This may also be representing an orbital trajectory. The line goes into the large crater on the right, this might represent a planet or the sun. There can be other explanations, even purely geometric, but the other hyperbola in this book looks like a hyperbolic orbit. This one then may be a similar representation.

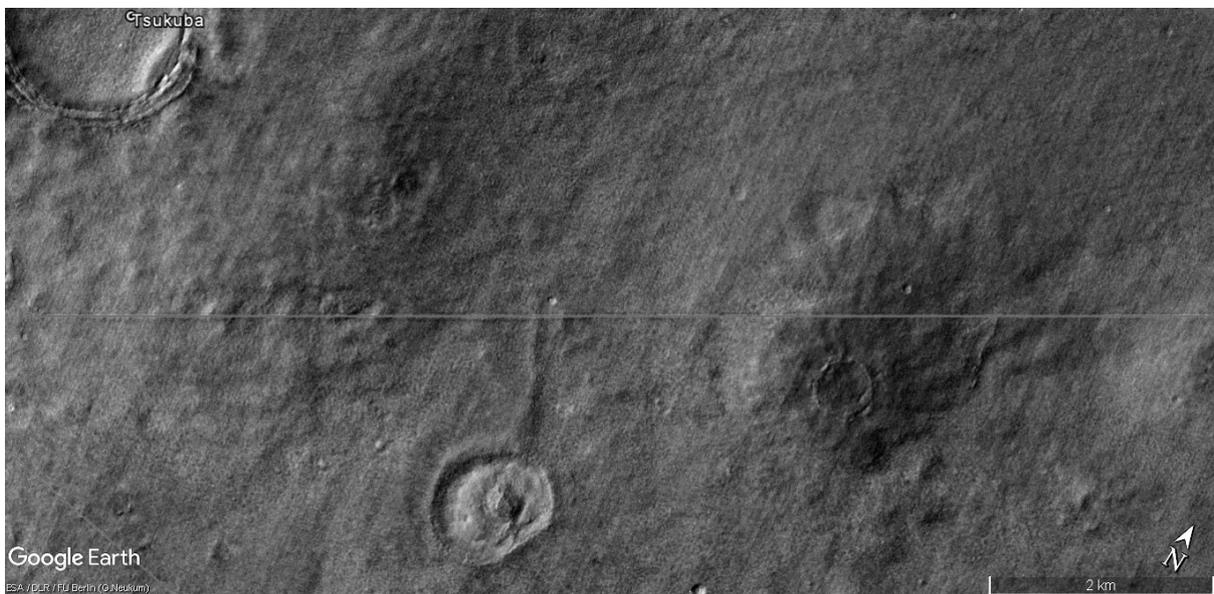
The ridge going down to the crater may also represent dropping onto the planet. Alternatively it points fairly precisely towards the face Nefertiti. A line drawn from this hyperbola to Nefertiti intersects the great circle at approximately 90 degrees, shown in the video earlier.



Ect1691a13

Hypothesis

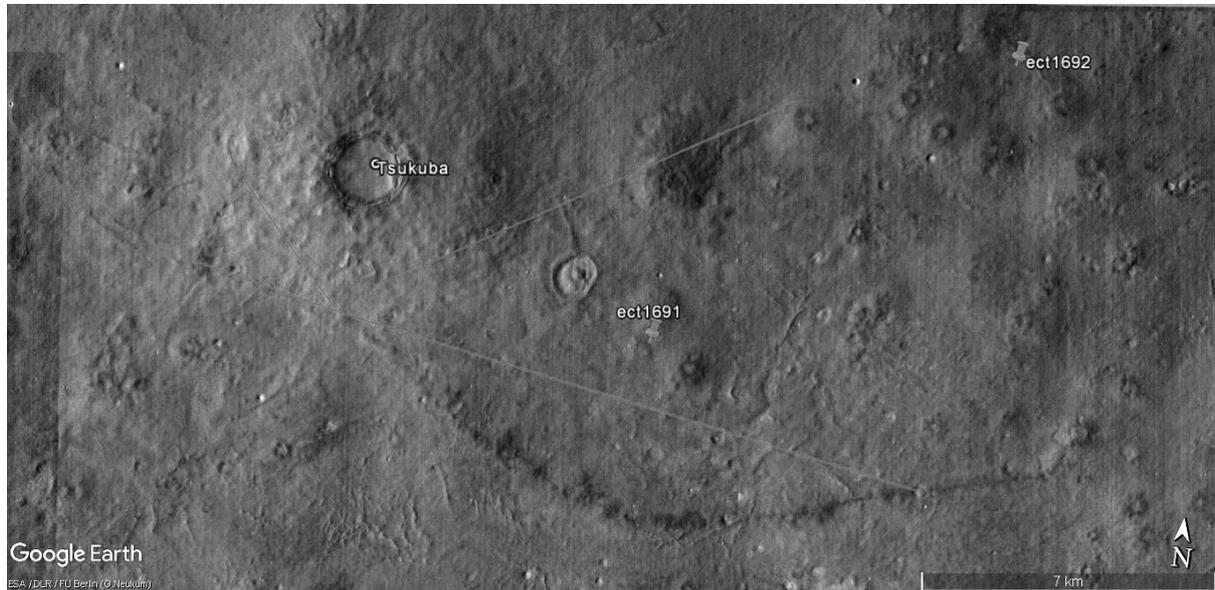
This shows a line drawn over the dark line on the terrain.



Ect1691a14

## Hypothesis

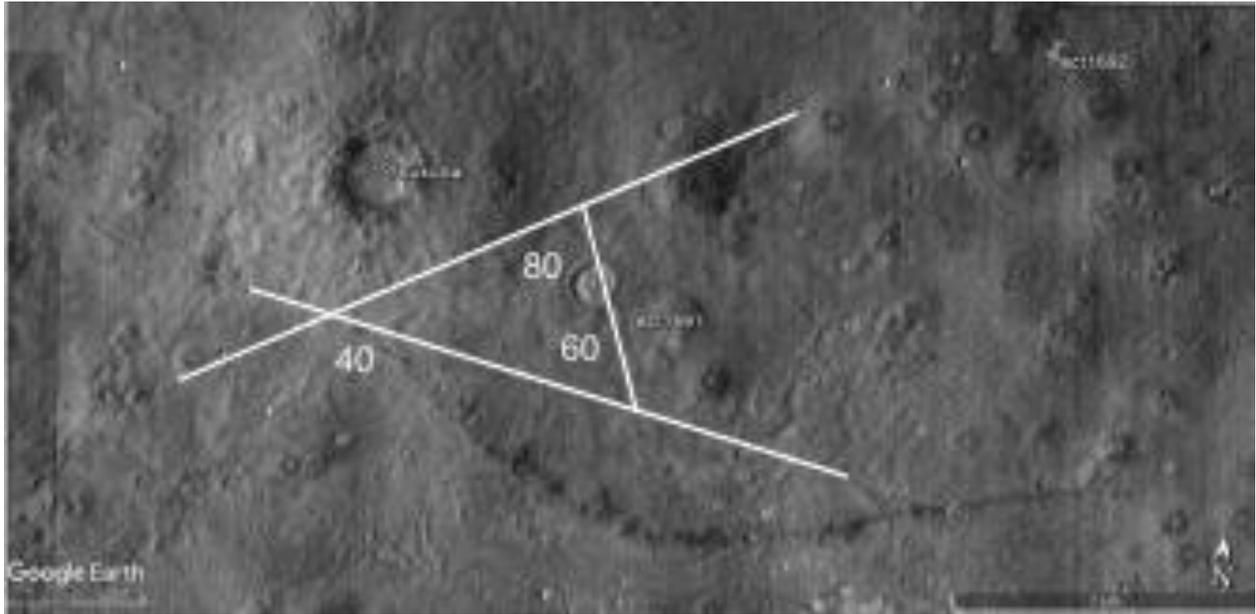
This shows a pale line drawn on the dark line, also a line drawn between two edges of the hyperbola.



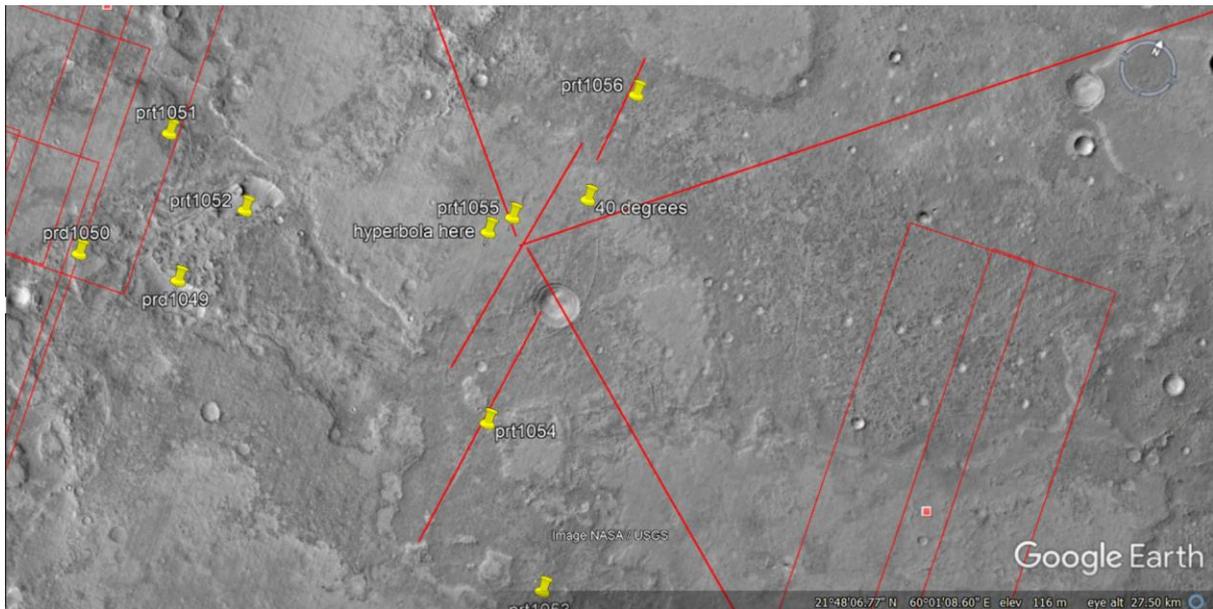
## Ect1691a14a

## Hypothesis

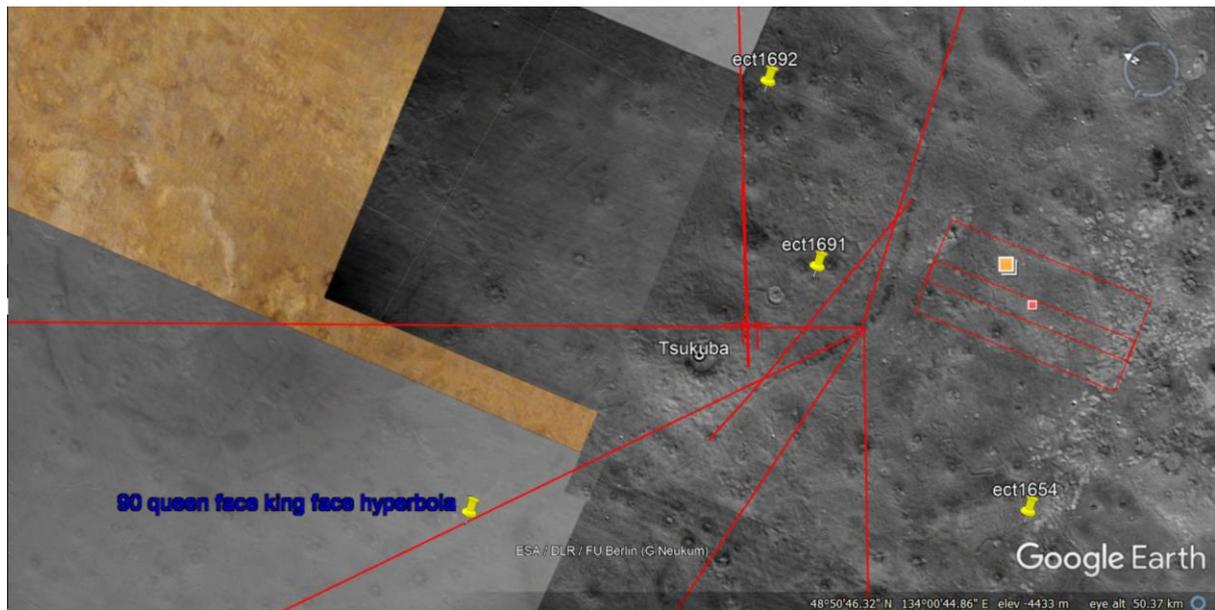
The ridge extending out from the crater to the dark line can make a third side to a triangle. This gives angles of 40, 60, and 80 degrees. It's not known what significance these angles would have, if any.



When a line is drawn across the ends of the first hyperbola it also gives a 40 degree angle, the other red lines are from the road like formations.



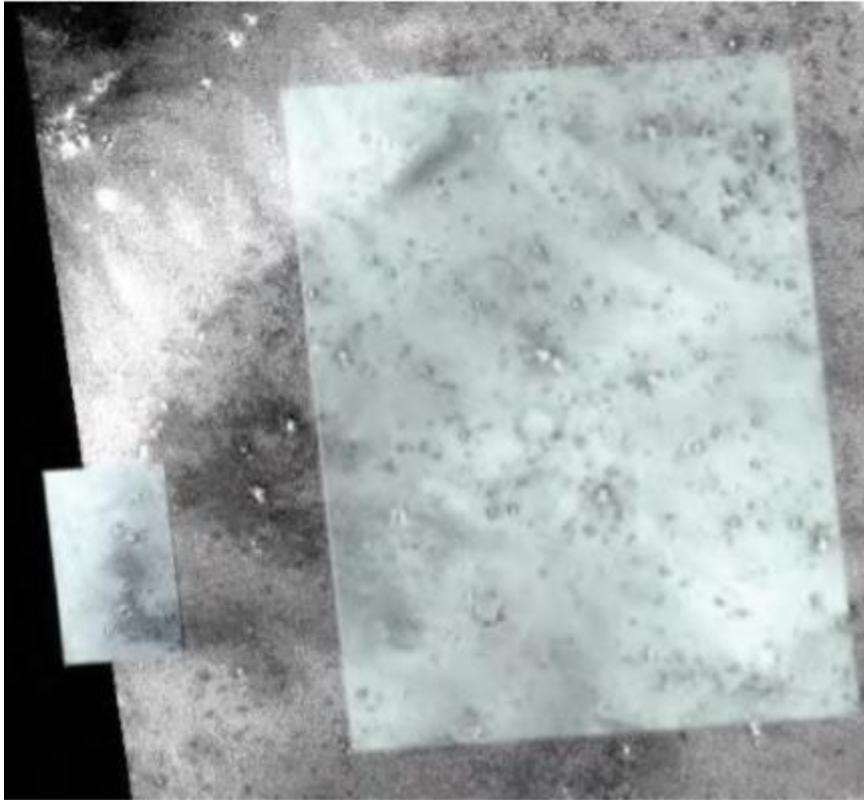
The dark line is extended vertically, it points approximately to the Crowned Face, the line to it goes vertically downward. This also forms a right angle as shown with the line going to Nefertiti, that also follows the ridge extending from the crater. The two hyperbolas and the Crowned Face form approximately an Isosceles Triangle. The dark line then may have been for surveying, to point at the third vertex of the triangle.



These are the 3 faces on the great circle, hypothesized to be a former equator. Later the first hyperbola was found nearly exactly on this great circle.

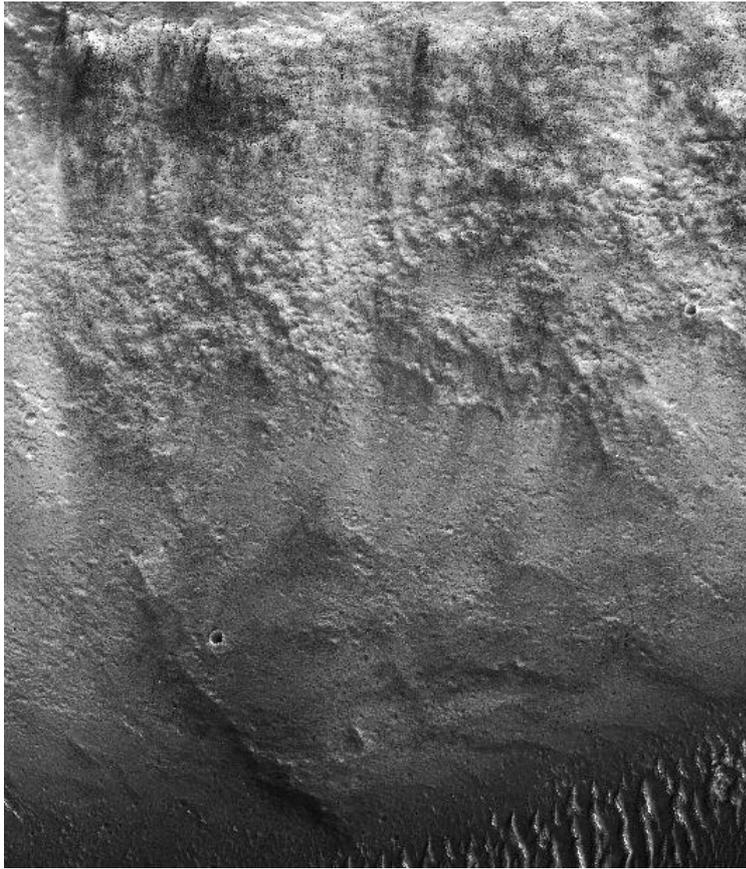
Nefertiti

Two parts of Nefertiti have been reimaged by HiRise, these are the lighter rectangles in the image. They show it has become more face like with a higher resolution, rather than looking more natural.

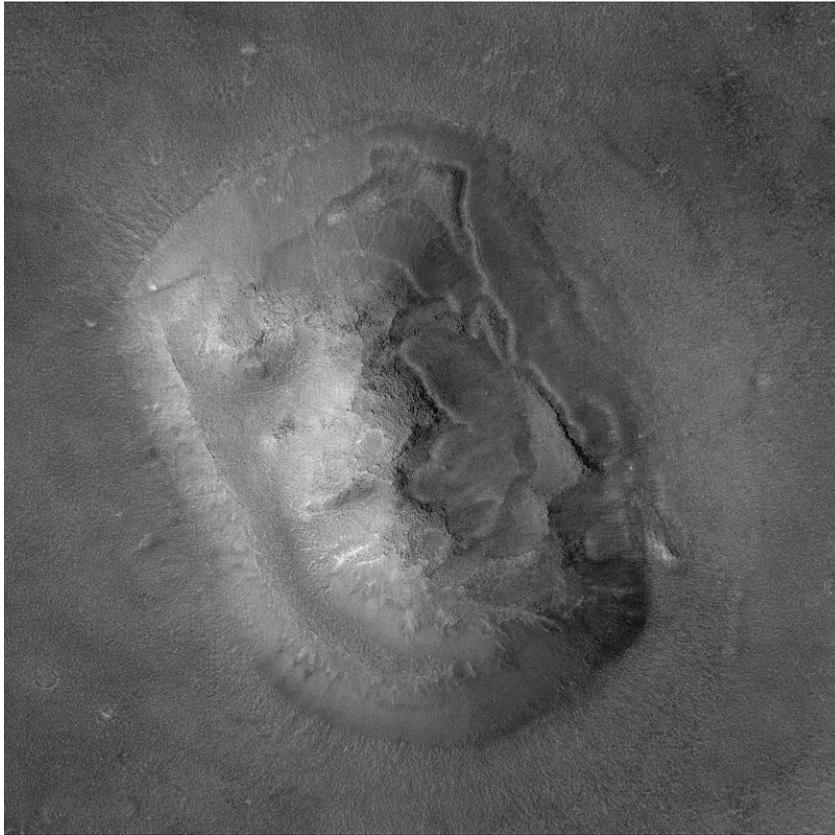


The Crowned or King Face

This was discovered by the author in 2000, it was reimaged by HiRise as shown. This resulted in it looking more face like with more details around the eyes and nose.



The Cydonia Face



## Conclusions

The hyperbolae appear to be too exact to form by chance. Also the ridge forming each one is fairly constant in width and height throughout, it does not vary as a natural formation should. There are other ridges shown near the first hyperbola also associated with geometric shapes. The first hyperbola was found by hypothesizing a great circle or former equator, this fits well with a former pole position.