

# Magnificent Deficiency: Apollo Hoax Theories

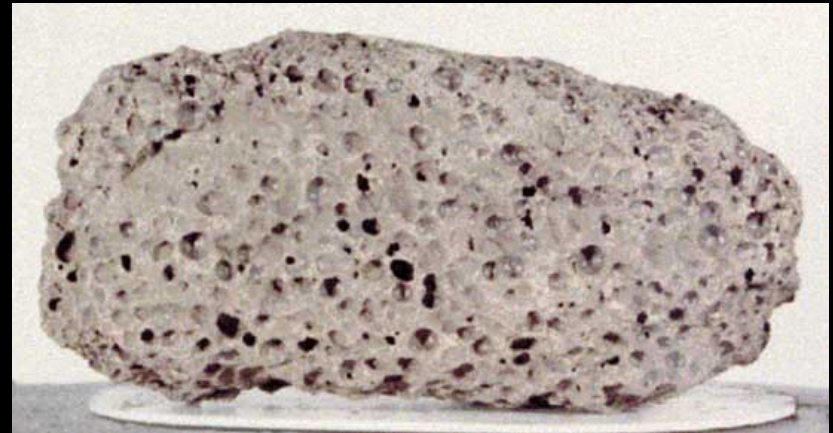
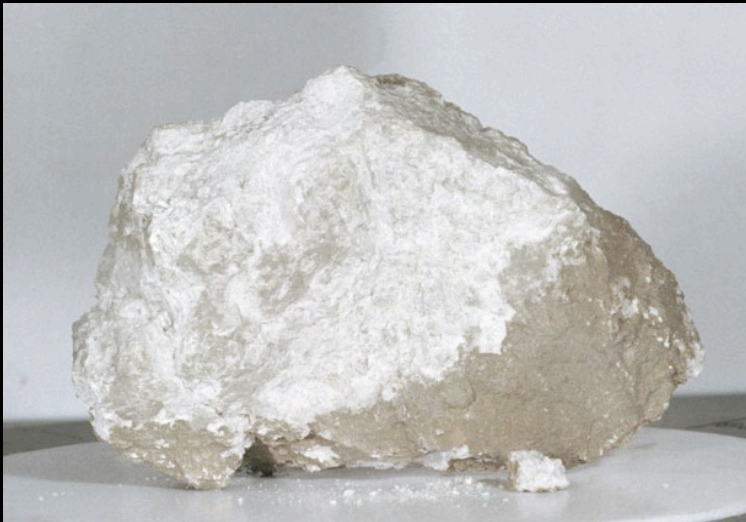
# Ten Leading Hoax Claims



# 10. The Dutch “Moon Rock”



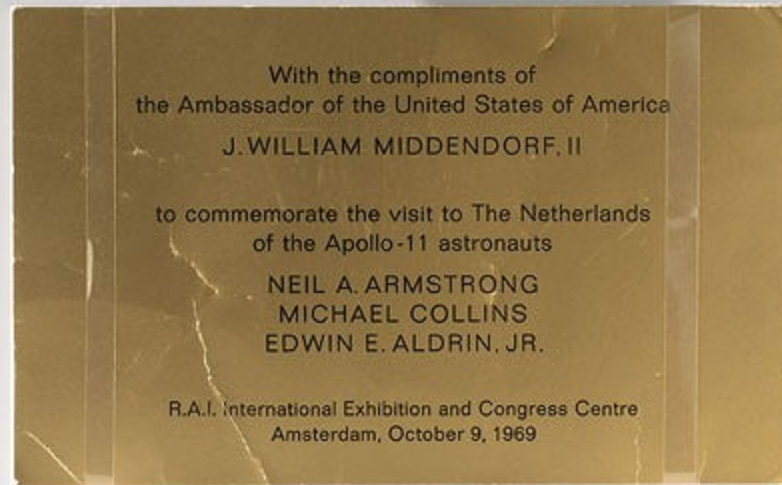
One of these is not like the others



# A Genuine Rembrandt – Honest!



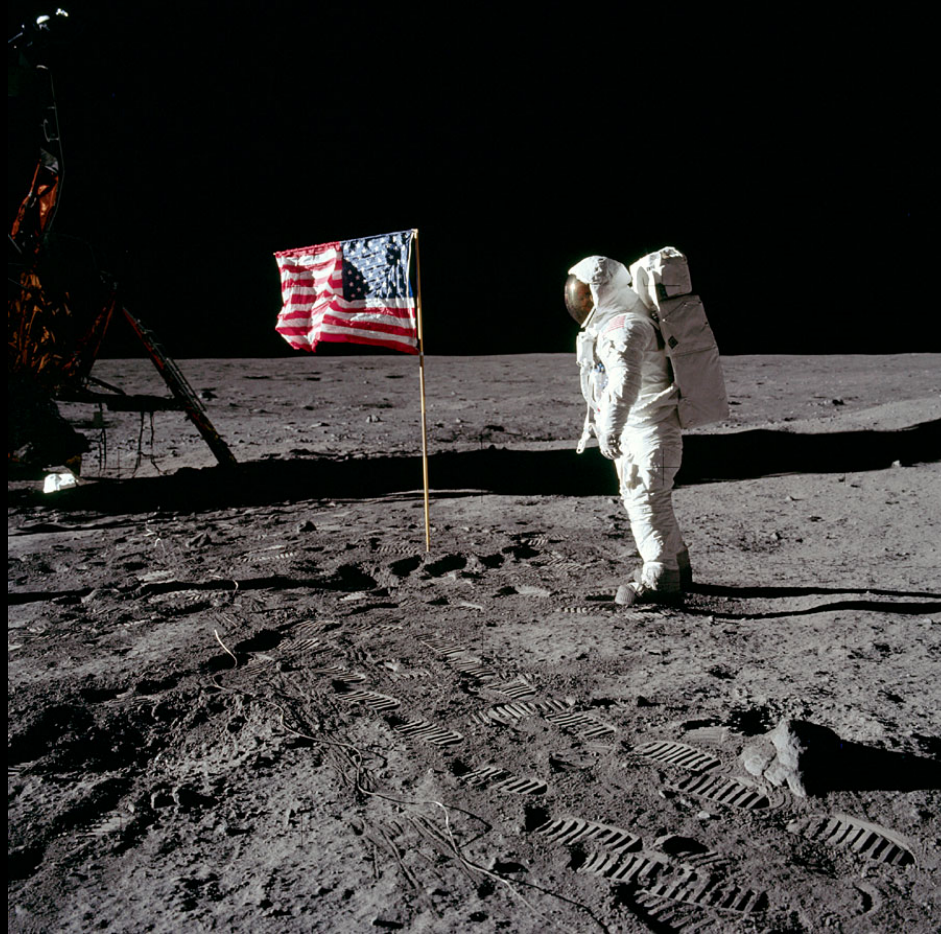
# Plaque doesn't say "Moon rock"



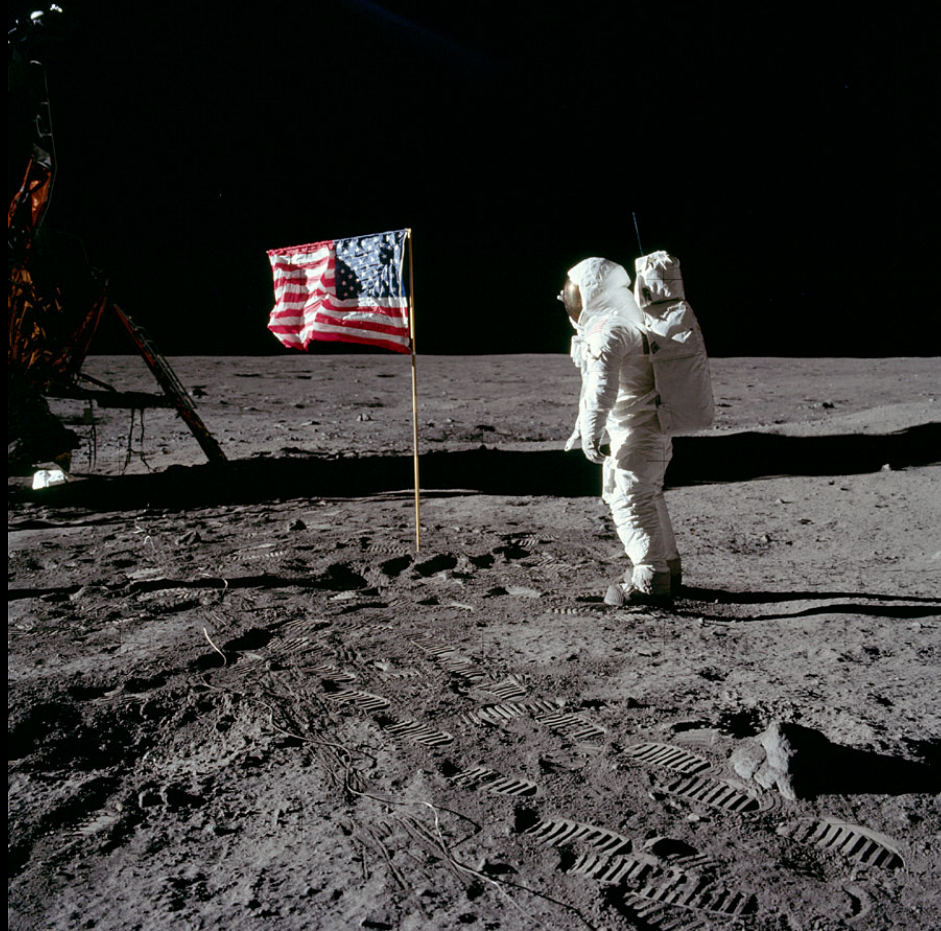
# Rocks actually handed out were much smaller



# 9. The “waving flag”

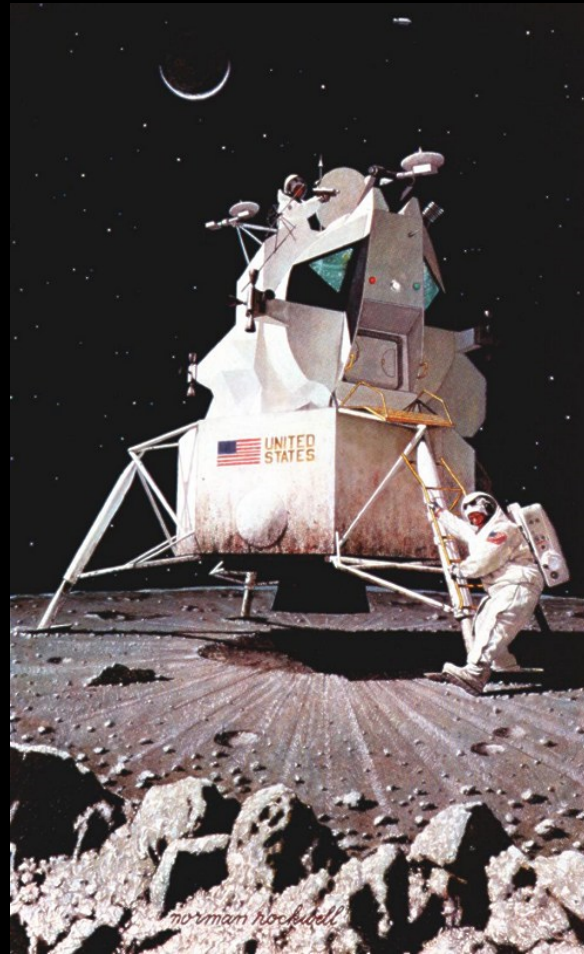


Not!



# Apollo 15 flag video

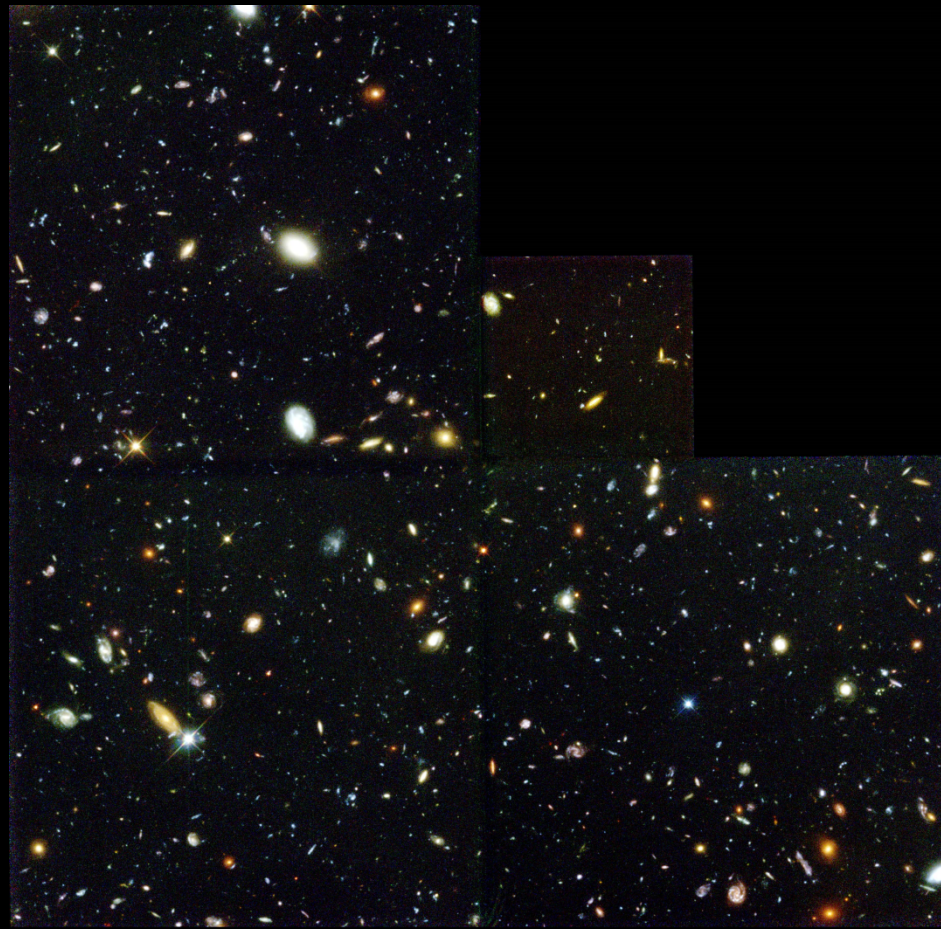
# 8. Why no crater?



# No crater, but still signs



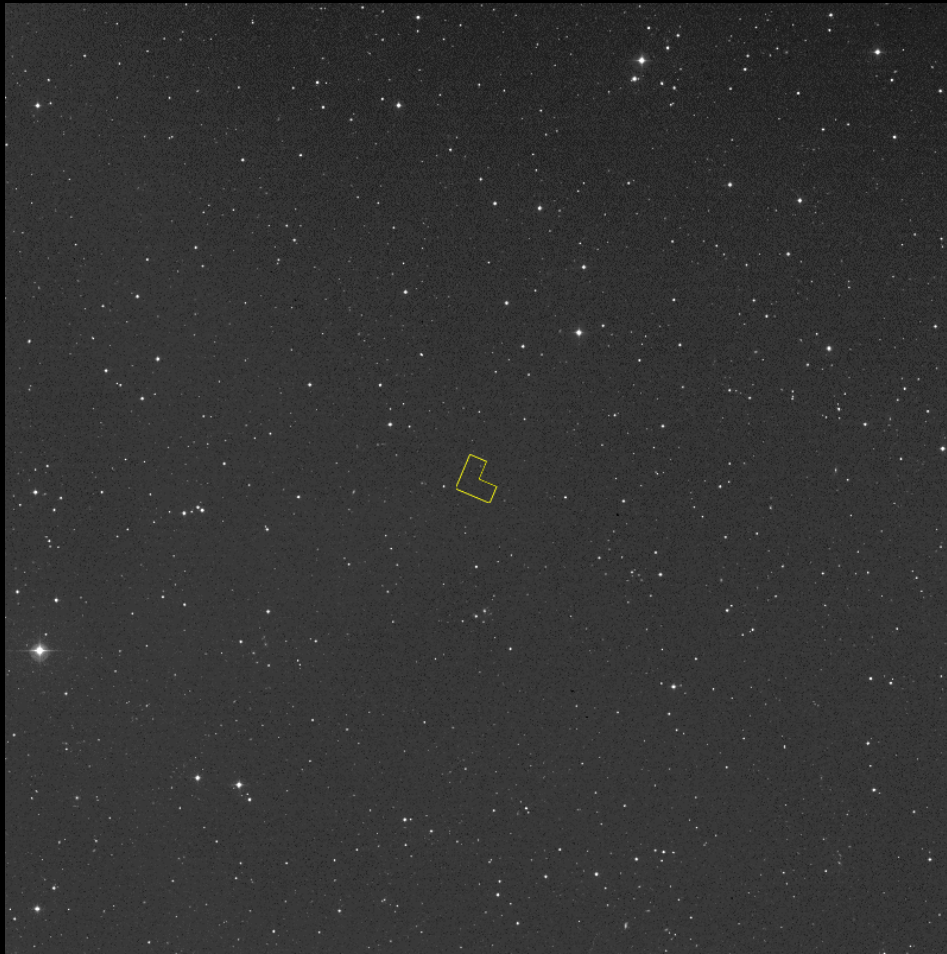
# 7. Why Can't Hubble Prove It?



**Hubble Deep Field**  
ST ScI OPO January 15, 1996 R. Williams and the HDF Team (ST ScI) and NASA

HST WFPC2

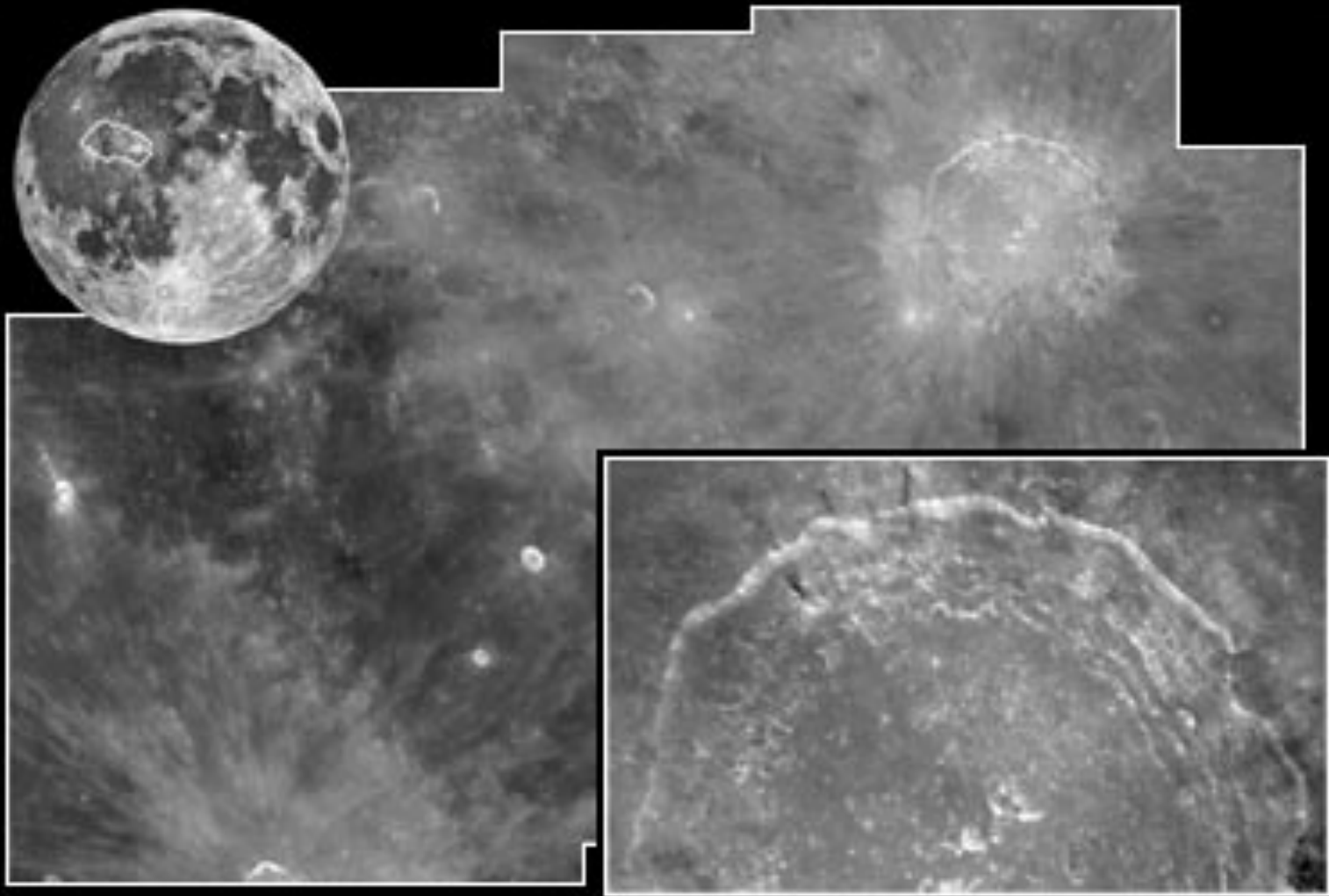
# Resolution not good enough



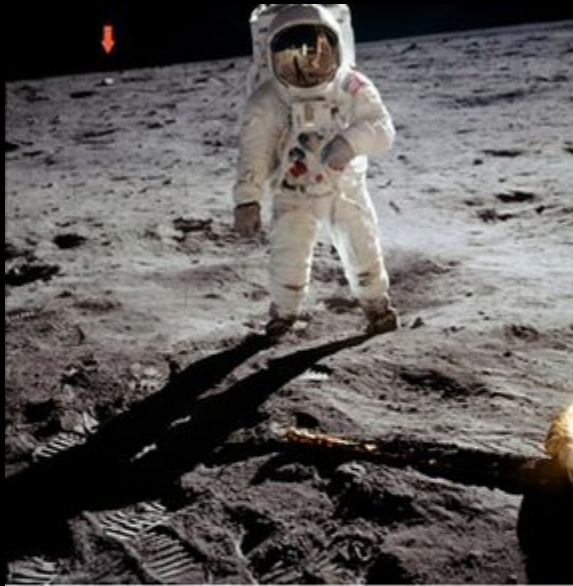
# Resolution not good enough



# Hubble Images the Moon



# 6. Photo anomalies



# APOLLO 11

FAMOUS SHOT OF ALDRIN "WALKING ON THE MOON" - SIGNS OF FAKERY

(1) The face shield (right) shows inconsistent ground lighting, left side spotlight (2) Ground hotspot around astronaut, (top left) but dark horizon, unlike sunshine. (3) Rock in the distance (left) front lit, while astronaut is back lit. Rock shadow should be parallel to astronaut's (4) Dark side of astronaut fully lit, but no flashbulb, while his shadow is solid black

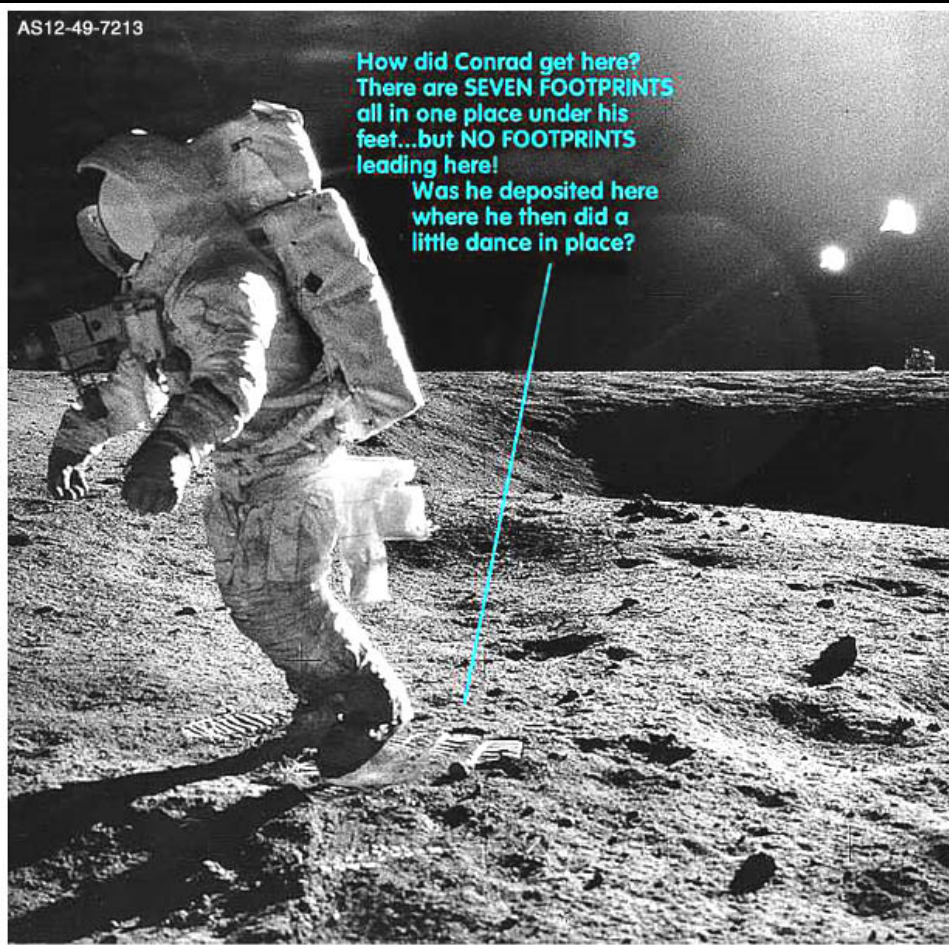
**NOTE:** Later Apollo mission photos look very authentic, so either there was an actual moon landing, or techniques of fakery greatly improved.

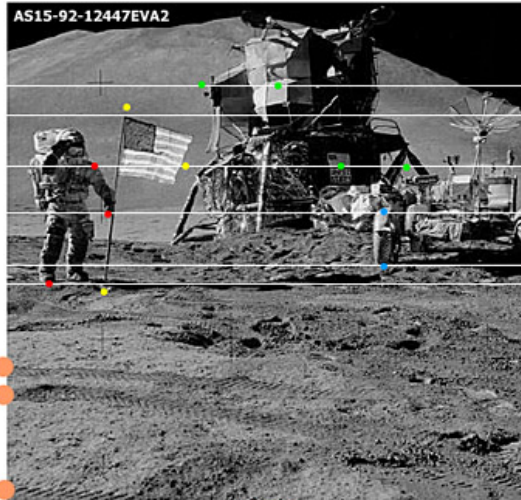
*Deesillustration.com*

AS12-49-7213

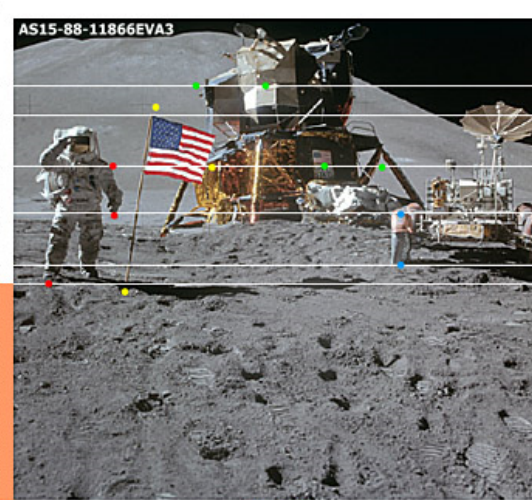
How did Conrad get here?  
There are SEVEN FOOTPRINTS  
all in one place under his  
feet...but NO FOOTPRINTS  
leading here!

Was he deposited here  
where he then did a  
little dance in place?





EVA2



EVA3

## What a difference an EVA makes!

Apollo 15 astronauts Scott and Irwin were on the Moon three days and performed three different Extra Vehicular Activity missions. At the end of EVA2 they shot a "salute the flag" photo in b/w (left). It had several LRV tracks across the foreground, and few bootprints. The next day on EVA3 they started a roll of color film (right) and repeated the flag salute pose from almost the same spot. But "overnight" somebody had changed the foreground! (ORANGE AREA) The rover tracks were gone, and in their place lots of bootprints. But nothing else had moved except the mountain. Like identical notes on a musical scale, the flag, the LEM and LRV were identically relocated (color dots). Even the posing astronaut had achieved the same pose with fingers, shoulder and toes in the same relationship (red dots). Compare all the dots and other points. Achieving such consistency of location on different days is truly remarkable statistically. And the two different foregrounds are much more than remarkable...

...impossible?

# 5. Video anomalies

# 4. Dissing the LM

**PARTS NEEDED TO BUILD YOUR OWN  
HIGH-TECH SCIENTIFIC STURDY  
MULTIMILLION DOLLAR SPACECRAFT:**

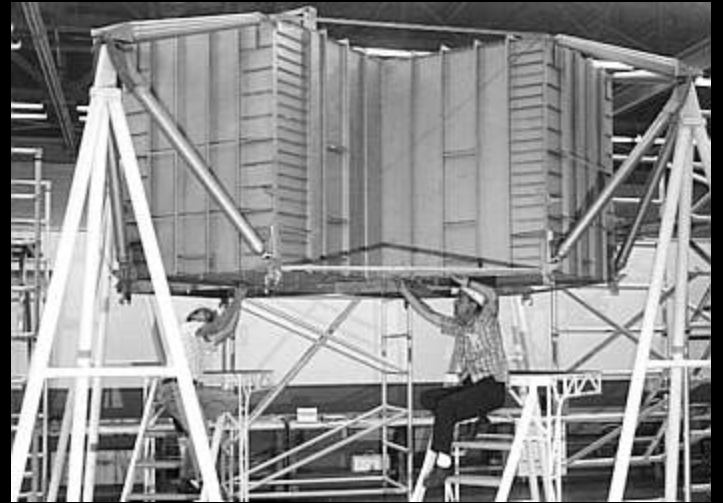
- lots of big sheets of cardboard
- a big roll of roofing paper
- a few old curtain rods
- a few odd gadgets
- some floodlight holders
- an old TV antenna
- a roll of gold foil
- and lots and lots of  
**SCOTCH TAPE TO  
HOLD IT ALL  
TOGETHER IN  
THE HOSTILE  
ENVIRONMENT  
OF THE MOON  
SURFACE**

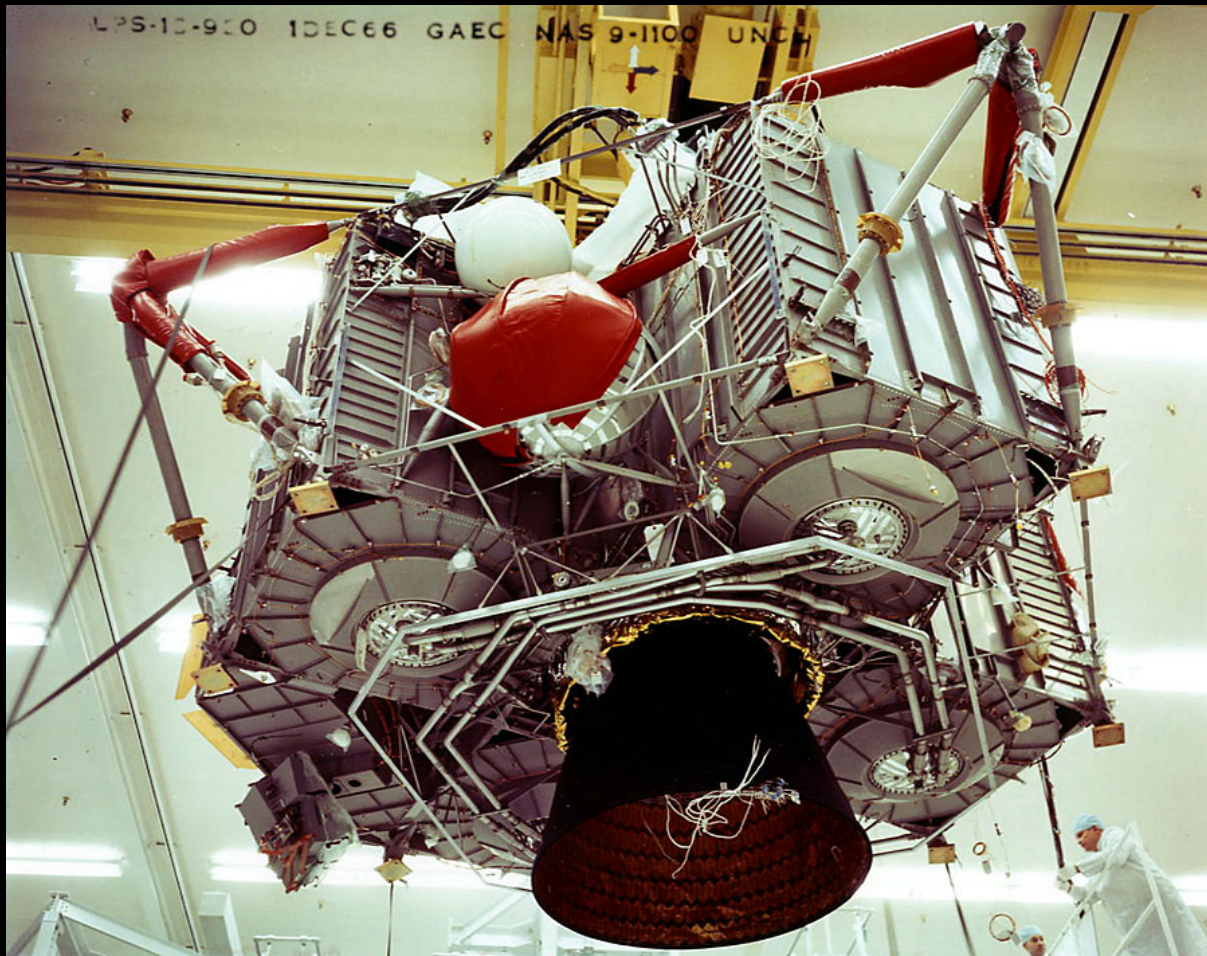
AS11-40-5922

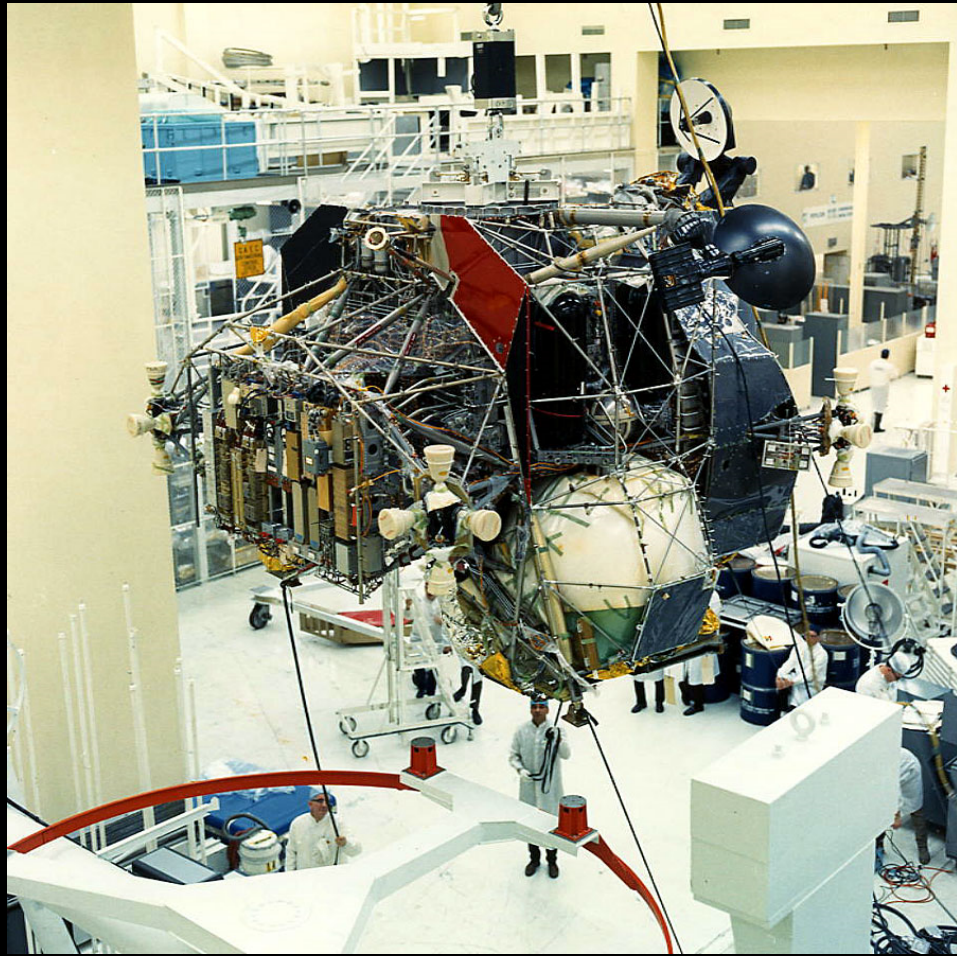


# You tell 'em, Volkswagen!





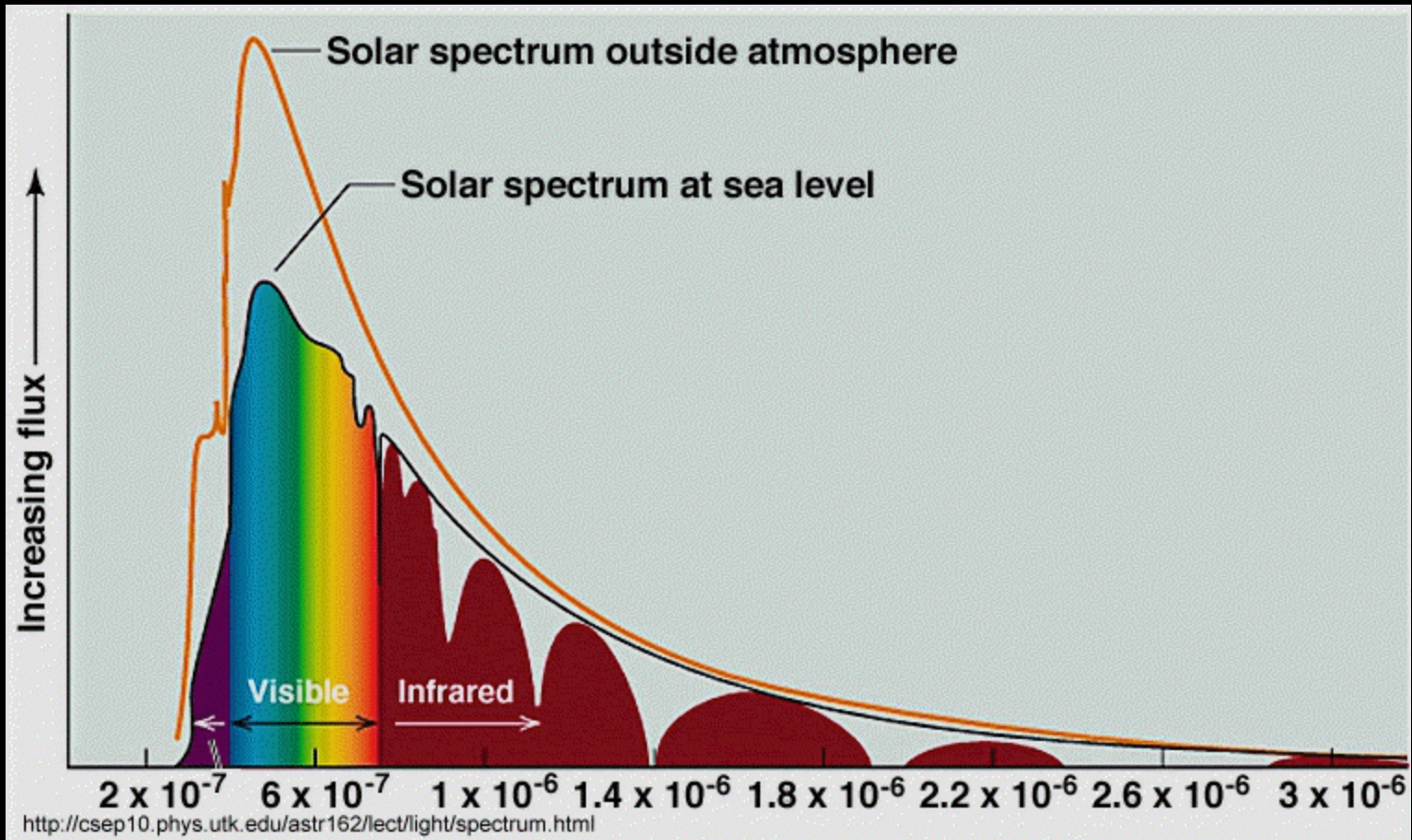




# 3. Hot and cold

- Scary extremes:  $280^{\circ}$  in the Sun,  $-300^{\circ}$  in the shade, but these are equilibrium values
- Apollo missions landed around dawn
- Moon has no atmosphere, only heat transfer through conduction
- Black-body equilibrium actually on the cool side (note that anything that applies to the spacecraft applies to planet Earth)

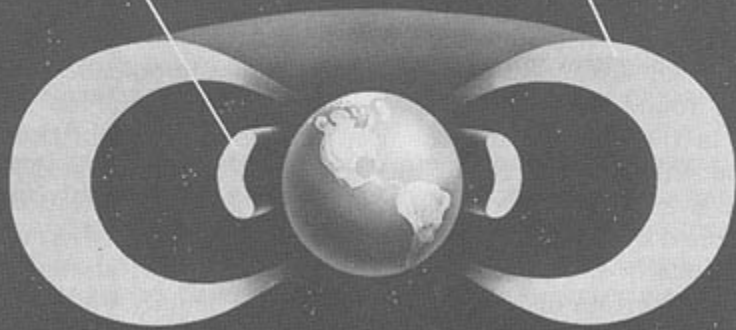
# 2. Radiation



## VAN ALLEN RADIATION BELTS

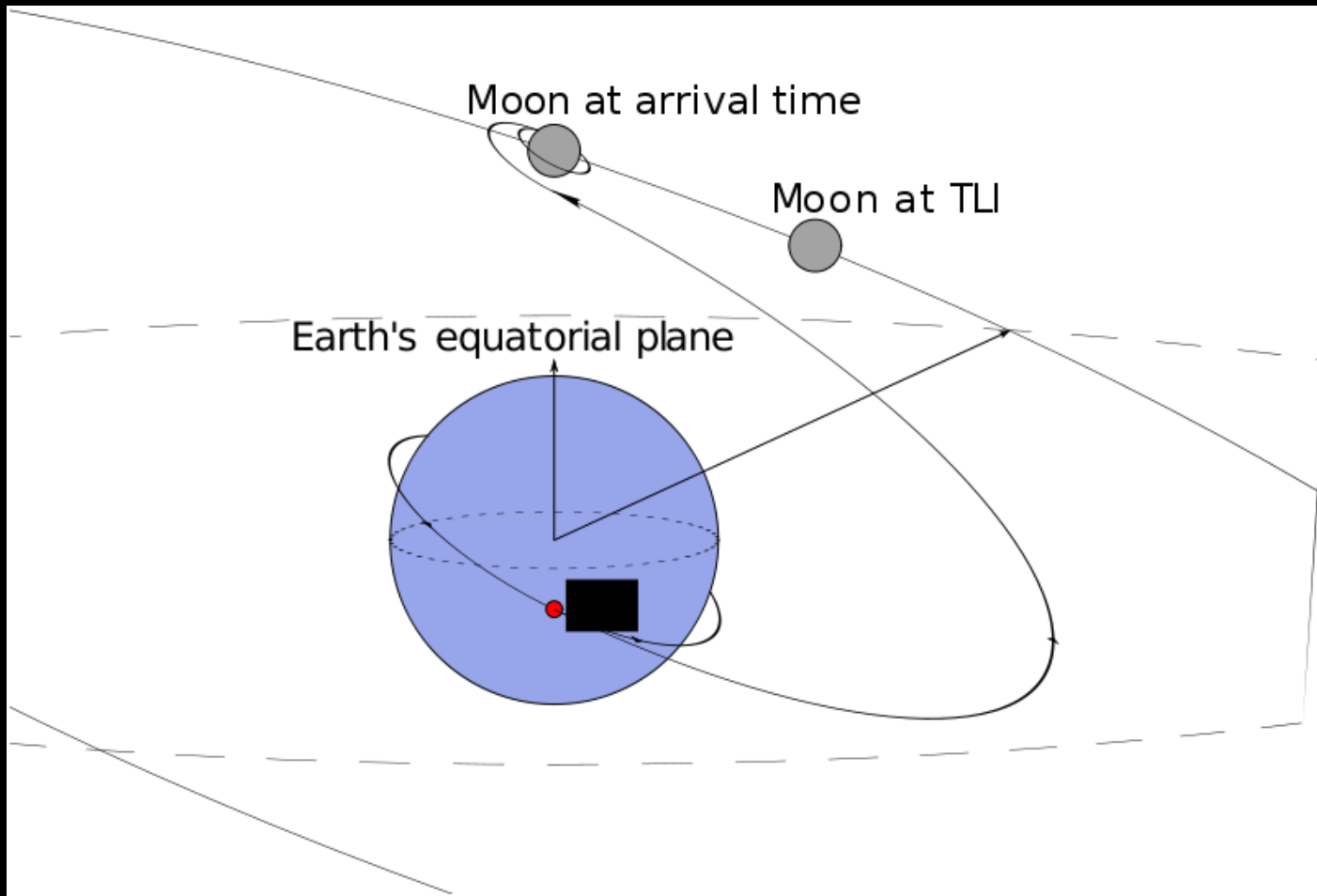
INNER VAN ALLEN BELT

OUTER VAN ALLEN BELT



561-479

# Avoiding the belts



# Radiation dose by mission

<b>Apollo</b>	<b>Skin dosage</b>
<b>Mission</b>	<b>(rads)</b>
7	0.16
8	0.16
9	0.2
10	0.48
11	0.18
12	0.58
13	0.24
14	1.14
15	0.3
16	0.51
17	0.55

# Career radiation exposures

Astronaut	Career time (years)	Exposure Time	Space Radiation Dose (in rem)	Diagnostic X-Ray and Other Radiation Doses (in rem)
X	15	9 days, 15 minutes	0.64	2.29
Y	10	12 days, 11 hours, 4 minutes	0.18	2.01
Z	18	22 days, 2 hours, 45 minutes (4 flights)	1.83	2.76
A	15	28 days	1.66	2.82
B	15	59 days	3.71	2.36
C	2	84 days	8.01	2.65

# 1. Why haven't we gone back?

- The amazing thing is that we went the first time:
  - NASA budget in 1966 was \$36 billion in 2007 dollars (with no space telescopes, etc.)
  - 4% of entire federal budget – if had kept pace, would be over \$100 billion now
- A battle in the Cold War, but the Cold War is over

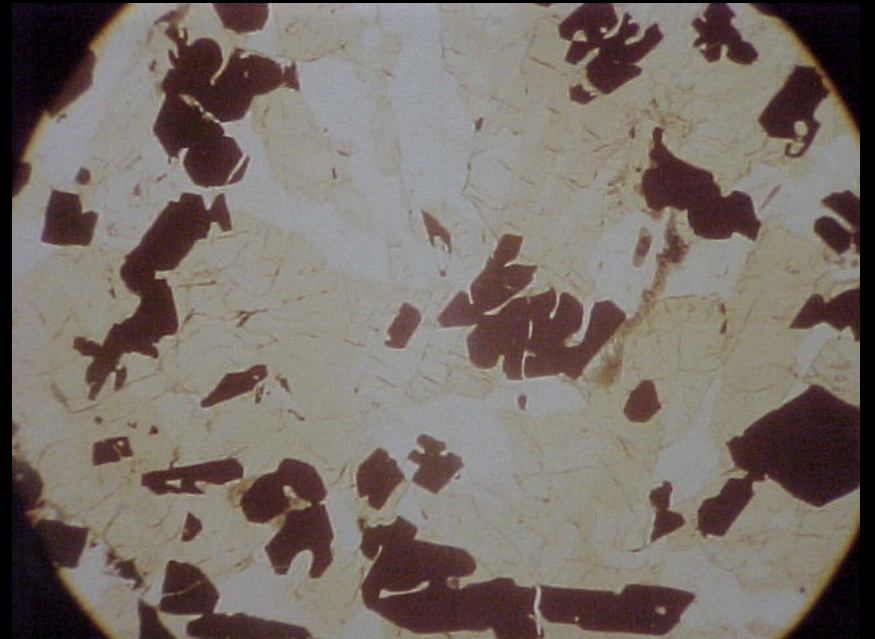
# Reasons to Believe



1. We have the rocks. We win.



# Earth vs. Moon



# Faked? No way!

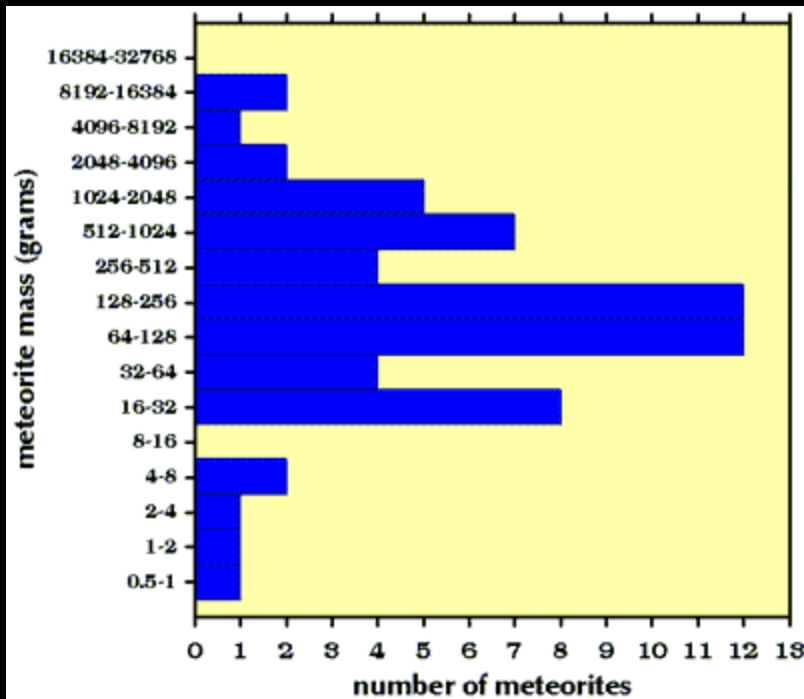
- “This could not have been faked. These rocks have grains easily visible to the unaided eye, which means they cooled slowly. To have made these materials synthetically would have required keeping the rocks at 1100 C for years, cooling them slowly at thousands of pounds per square inch pressure. It would have taken years to create the apparatus, years more to get the hang of making the materials, and then years more to create the final result. Starting from Sputnik I in 1957, there would not have been enough time to do it. And, you'd have to synthesize several different types of rock in hundred-pound lots.
- “ If you believe NASA has the technical ability to pull all this off, going to the Moon is a piece of cake in comparison.”
- – Steven Dutch, University of Wisconsin–Green Bay

# Retrieved from Antarctica?



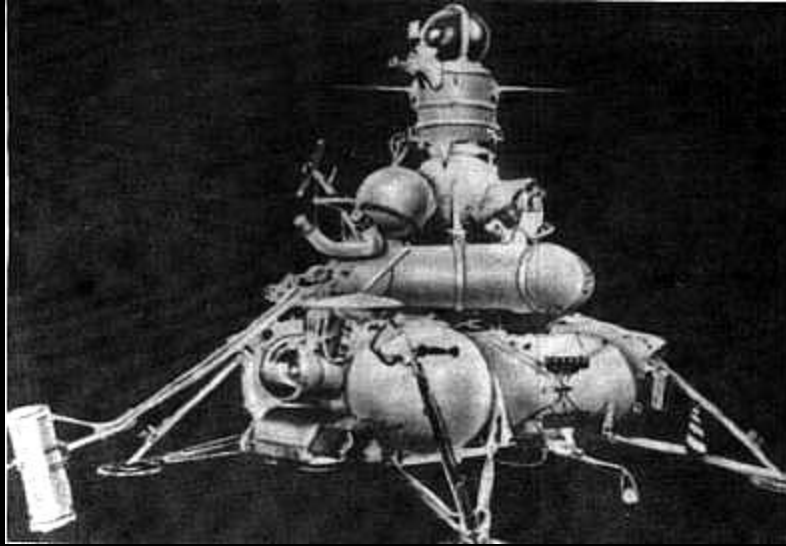
- Wernher von Braun went to Antarctica in 1967

# Doesn't work



- Far fewer lunar meteorites found on Earth than returned by Apollo (48 kg versus 382 kg)
- First one not identified until 1982 and then only by comparison with Apollo rocks

# Retrieved as a separate mission?



- Russians did it, but only 326 grams worth
- Would have been whole separate, super-secret program
- Actual rocks were clearly picked out by trained humans

## 2. Some things you just can't fake.



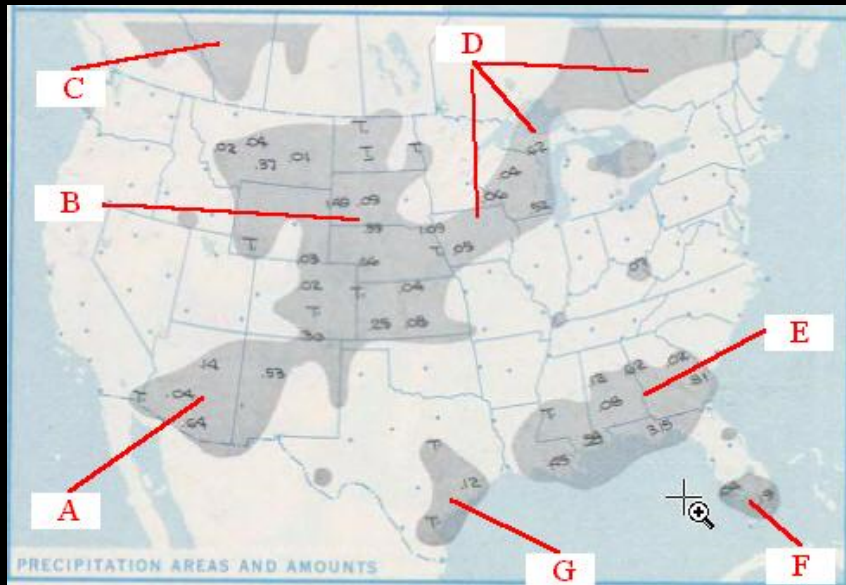
# Looking back at the Earth



# Checking the weather

7/17/69 precipitation

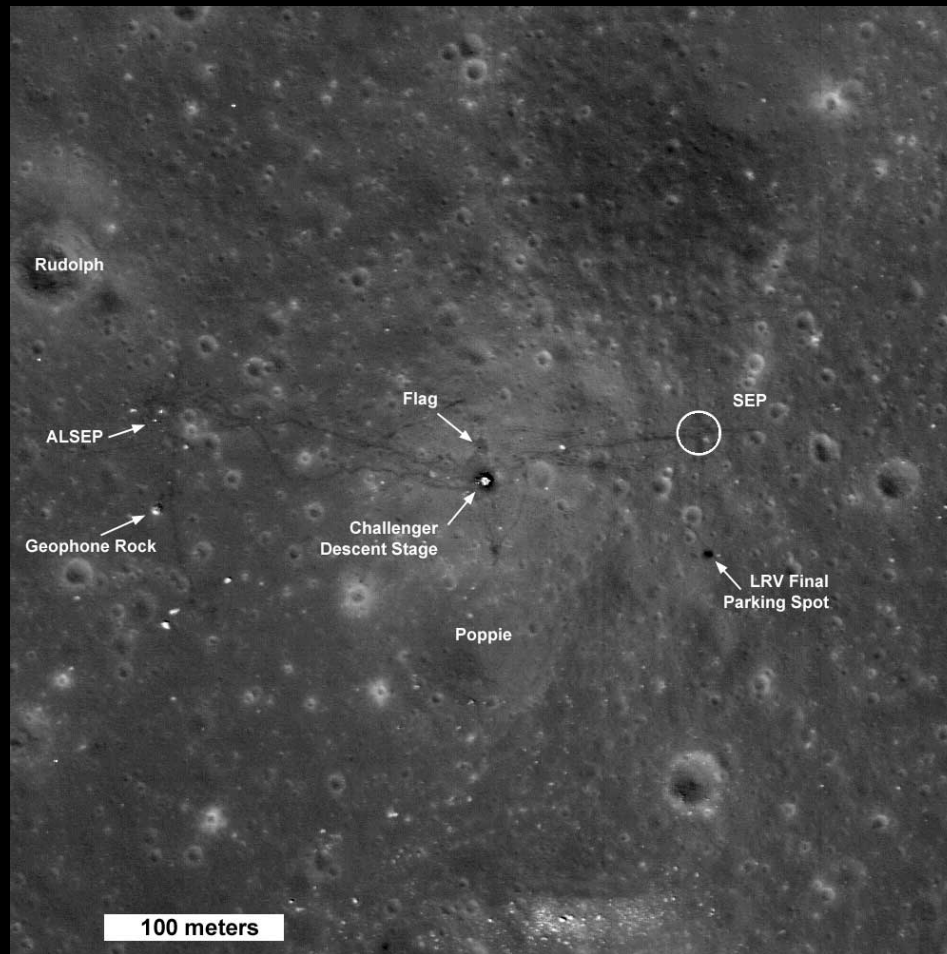
Closeup of  
AS11-36-5373



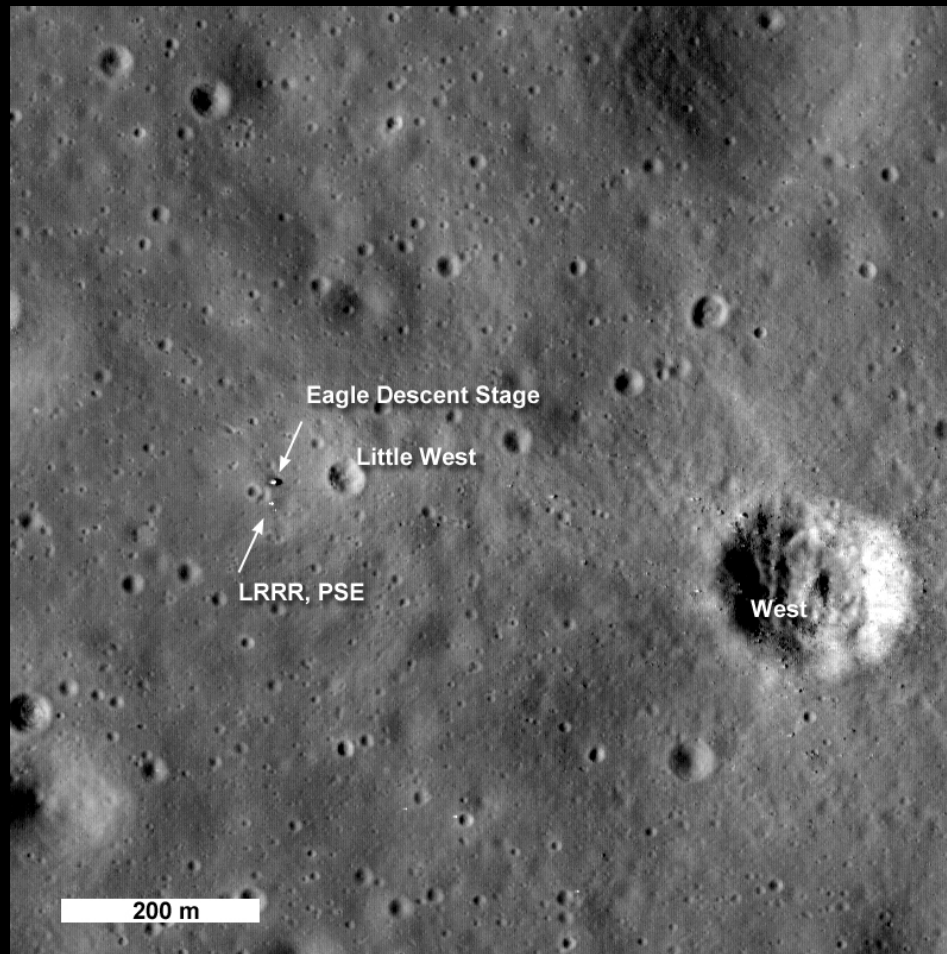
# Videos

- Apollo 15 liftoff from LM
- Apollo 17 liftoff from surface
- Apollo 15 digging

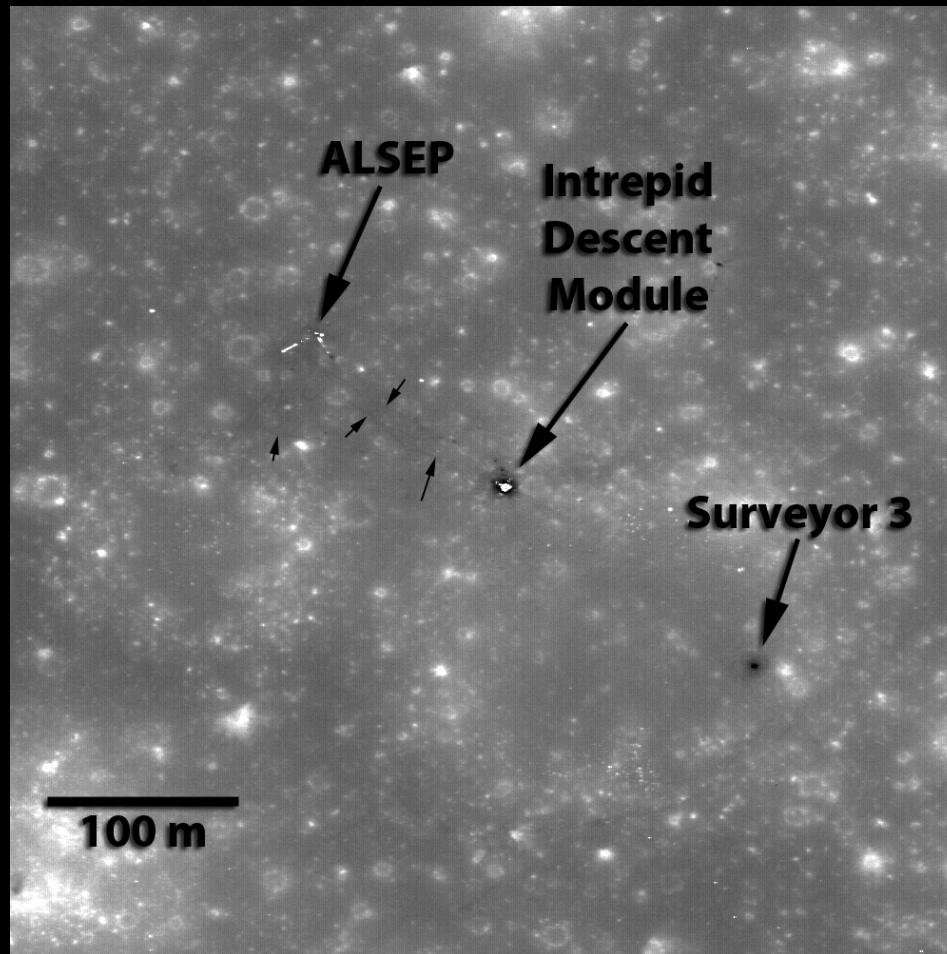
# 3. I spy something beginning with “L”.



# Apollo 11 from LRO

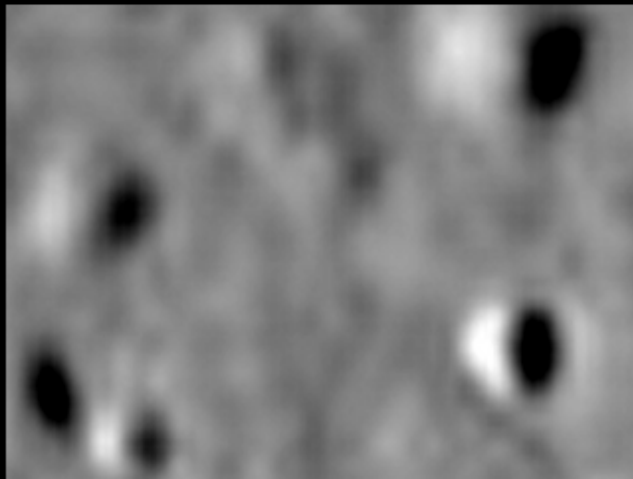


# Apollo 12 from LRO



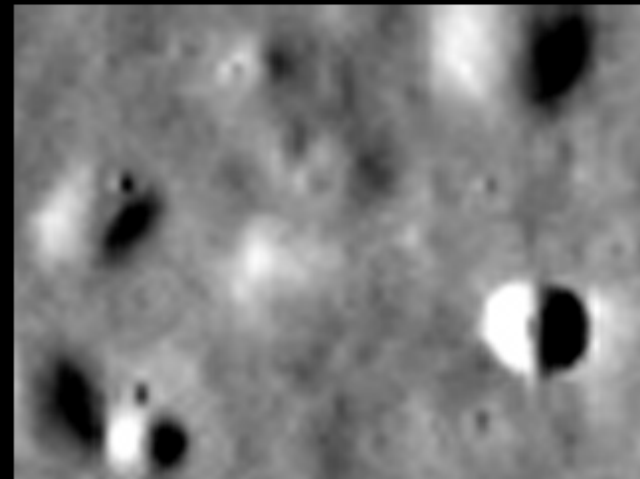
# Apollo 11 landing site from Kaguya

July 1969. pre-landing  
no bright spot



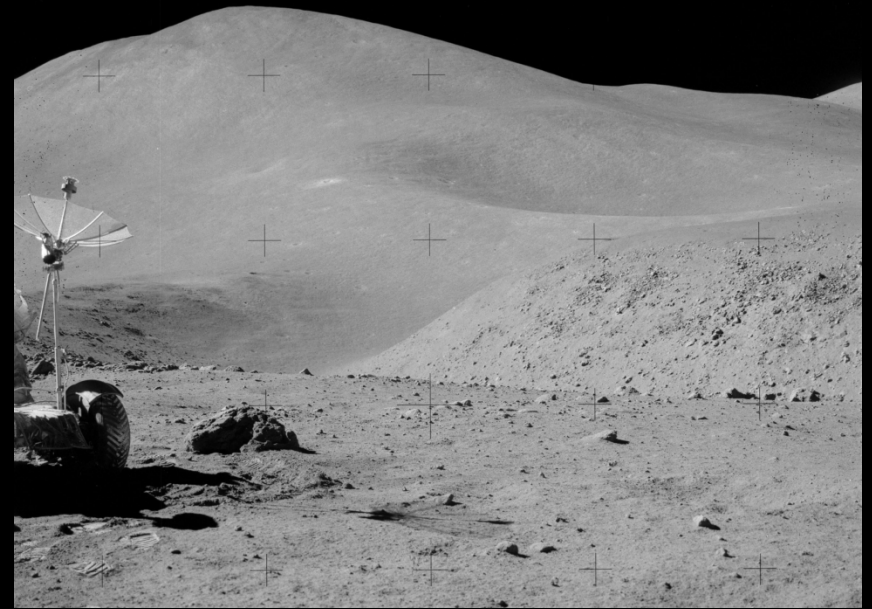
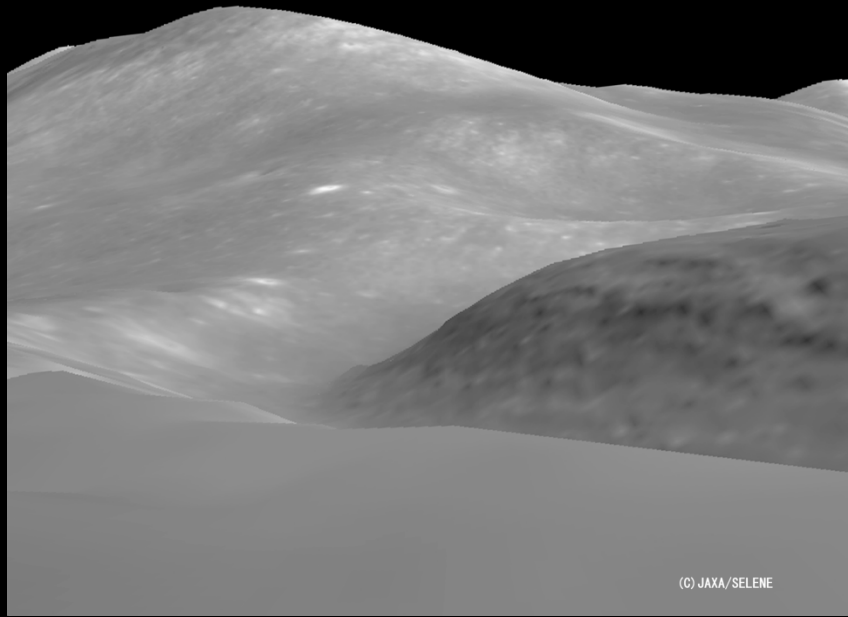
AS11-37-5447

2008. post-landing  
bright spot

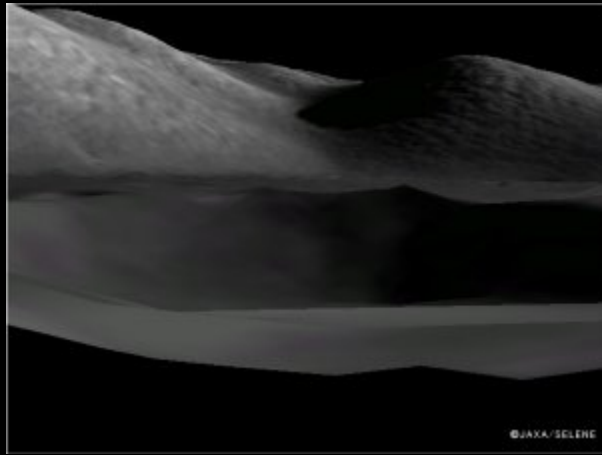


mi\_002\_1\_l.jpg

# Apollo 15 terrain from Kaguya

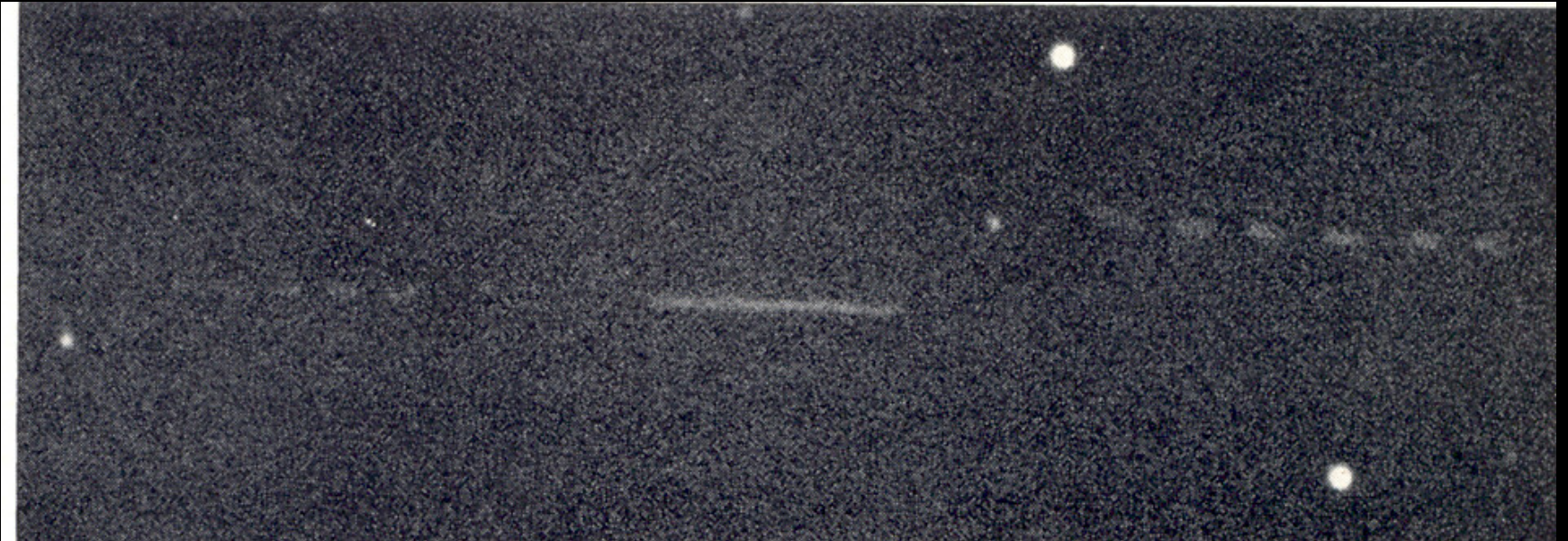


# Apollo 17 terrain from Kaguya

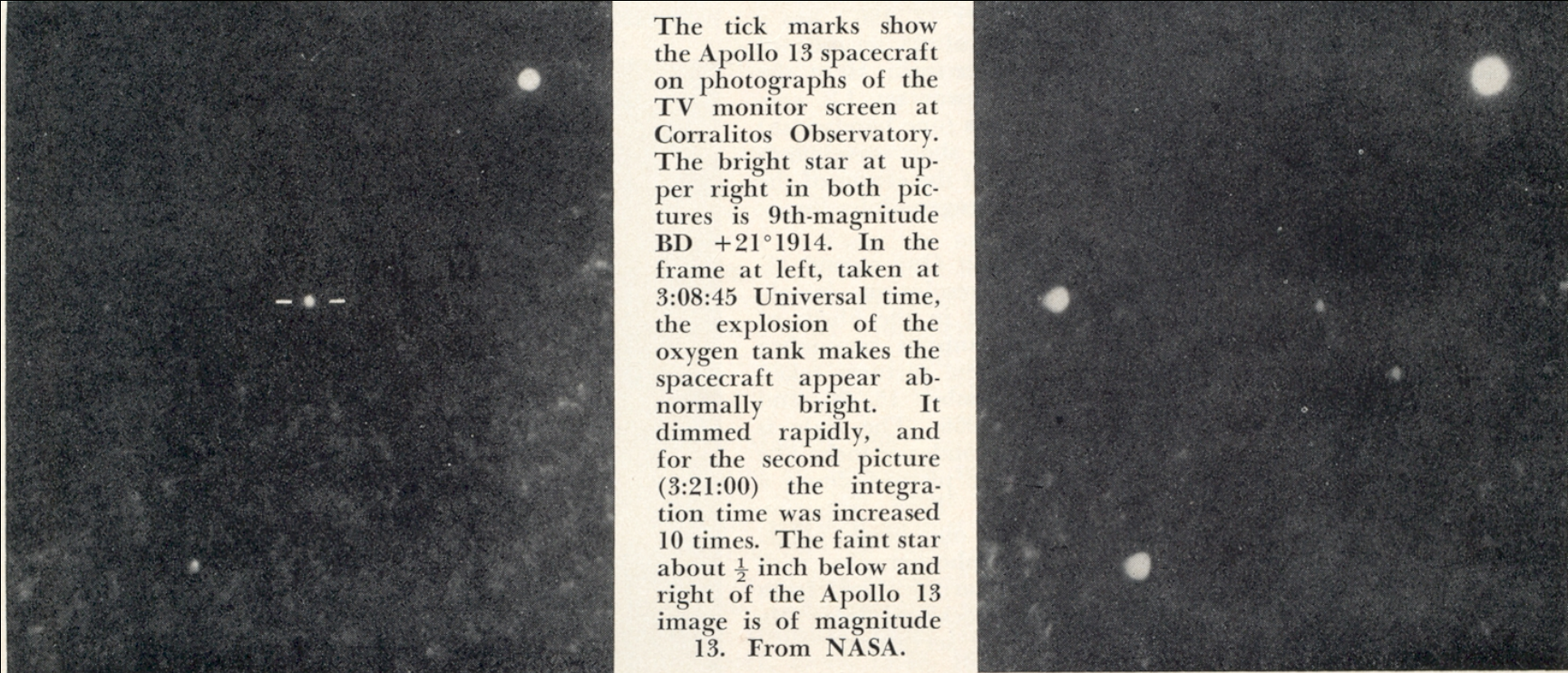




# And Photography (Apollo 8)

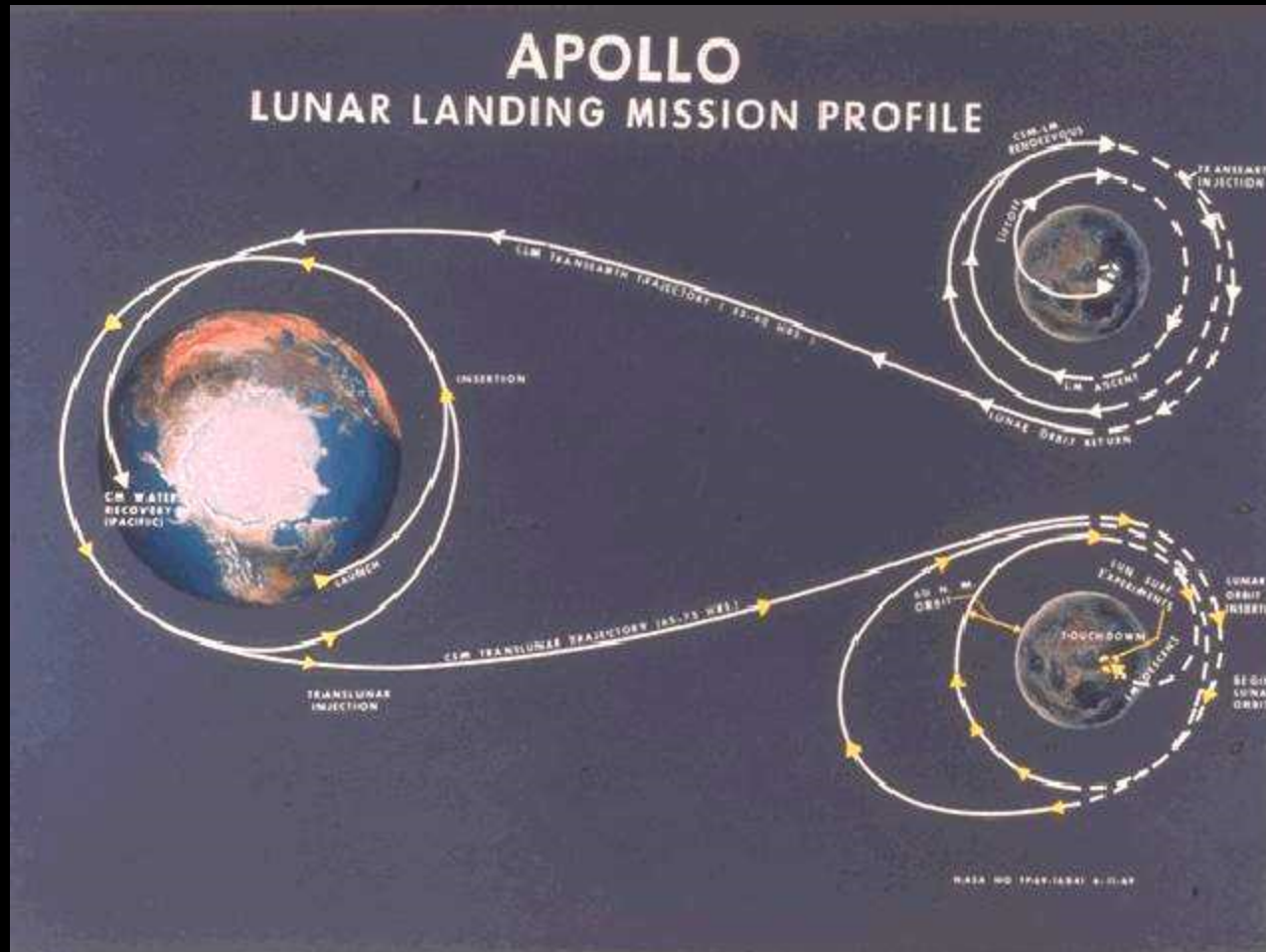


# Apollo 13 accident observed



The tick marks show the Apollo 13 spacecraft on photographs of the TV monitor screen at Corralitos Observatory. The bright star at upper right in both pictures is 9th-magnitude BD +21°1914. In the frame at left, taken at 3:08:45 Universal time, the explosion of the oxygen tank makes the spacecraft appear abnormally bright. It dimmed rapidly, and for the second picture (3:21:00) the integration time was increased 10 times. The faint star about  $\frac{1}{2}$  inch below and right of the Apollo 13 image is of magnitude 13. From NASA.

# 5. What's your story?



# Make up your minds!

- Bart Sibrel – Astronauts never left Earth orbit
- Bill Kaysing – Astronauts never lifted off
- Richard Hoagland – Astronauts went to the Moon but found alien temples
- Most of the rest don't even offer an alternative explanation

# Pro

- Photos
- Videos
- Eyewitness testimony
- Material evidence
- A complex, coherent, copiously documented account

# Con

- Some issues, hardly any of which hold up once one understands the science and technology
- No showstoppers, just a lot of nitpicks
- Shotgun approach: lots of claims in the hopes that a few will hit the target