



# Spirit and Opportunity: An Exploration of Mars

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Mars Exploration Rover

Deputy Principal Investigator

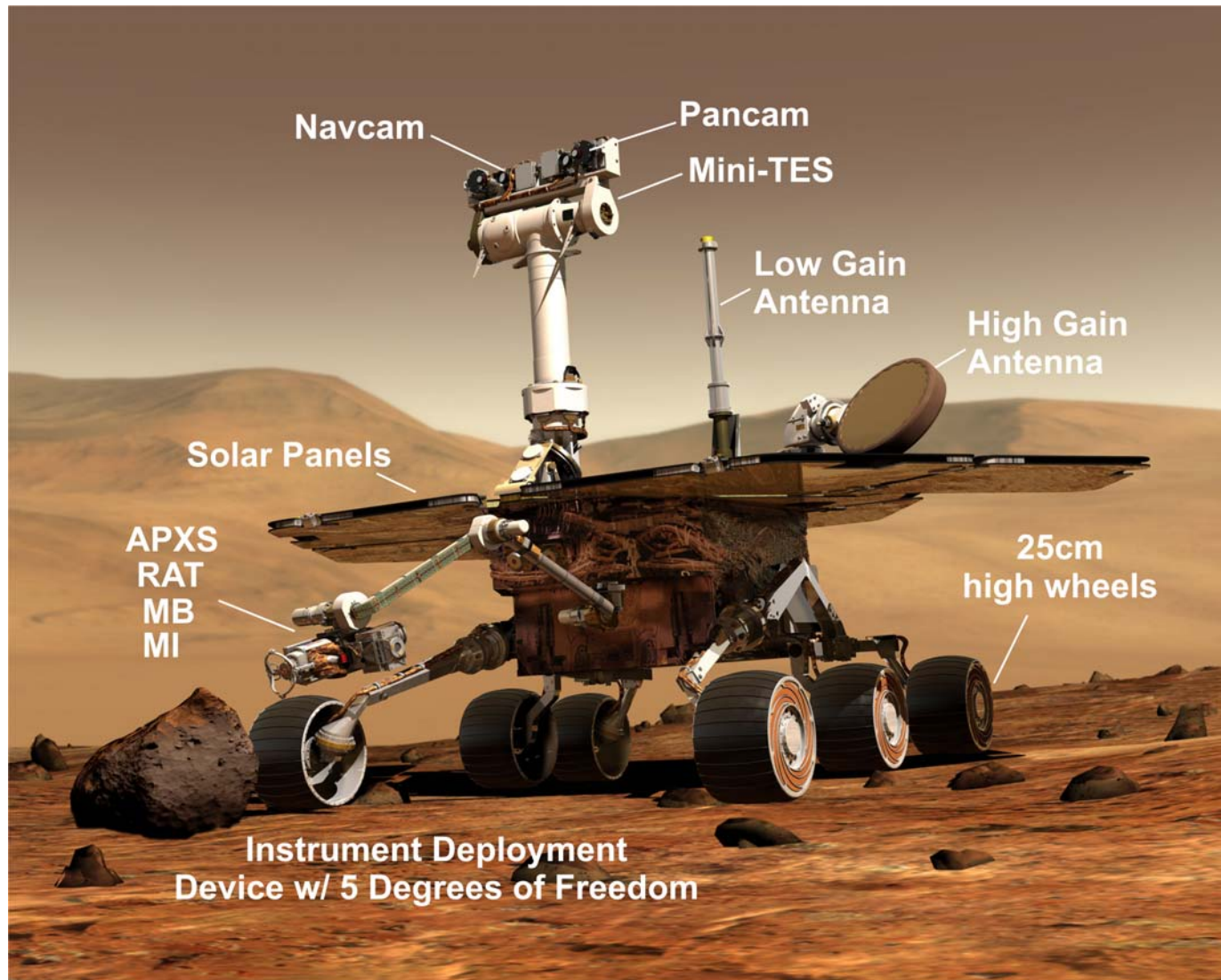
Washington University in St. Louis

2/22/05



# Mars Exploration Rover

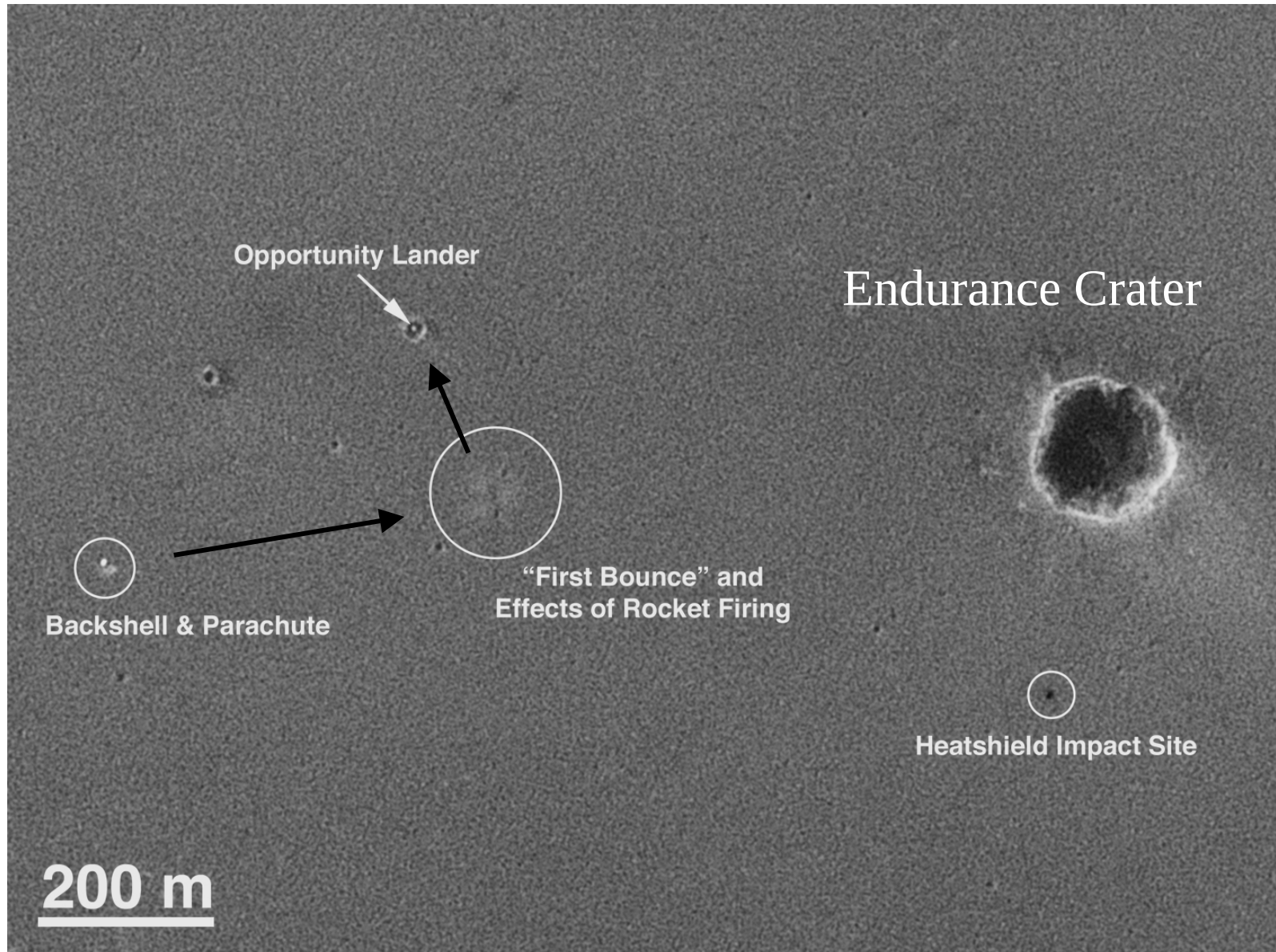
*Mars Exploration Rover*





# MOC: Regional View

*Mars Exploration Rover*

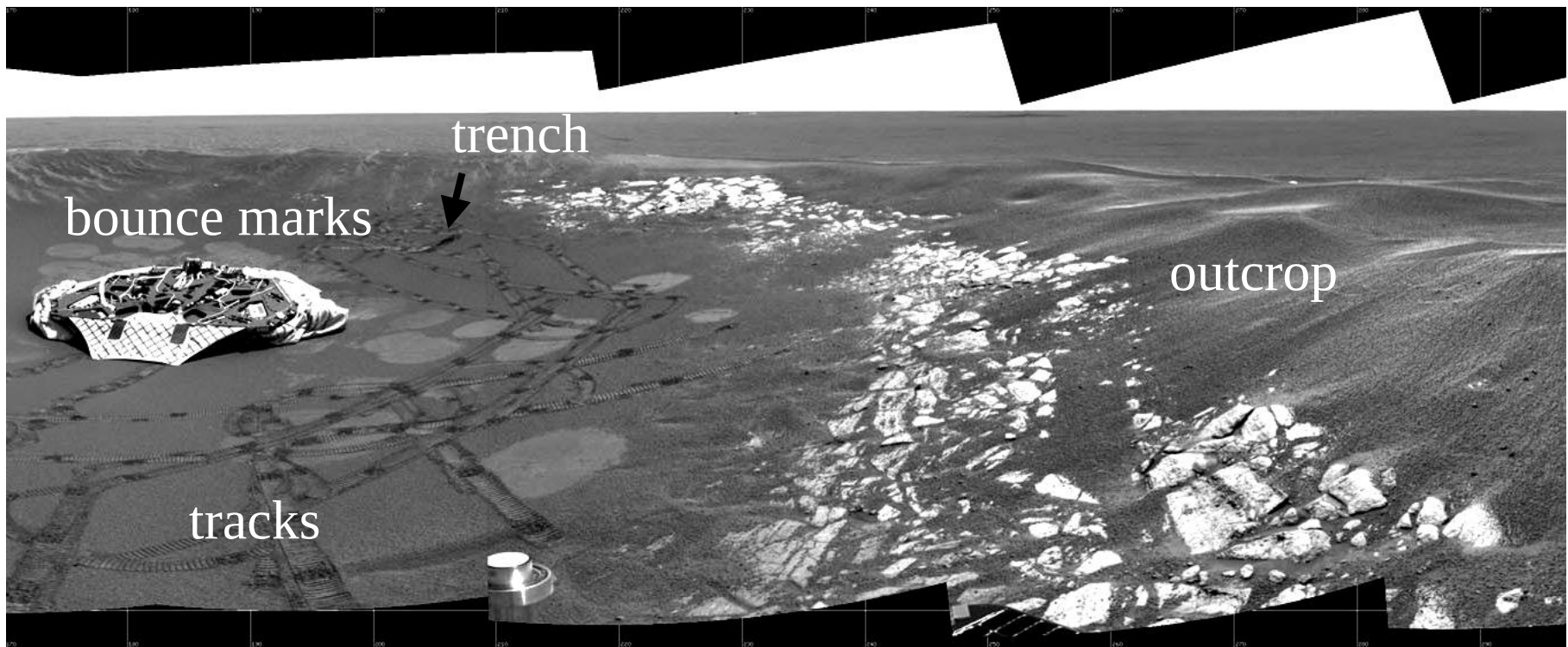






# Eagle Crater

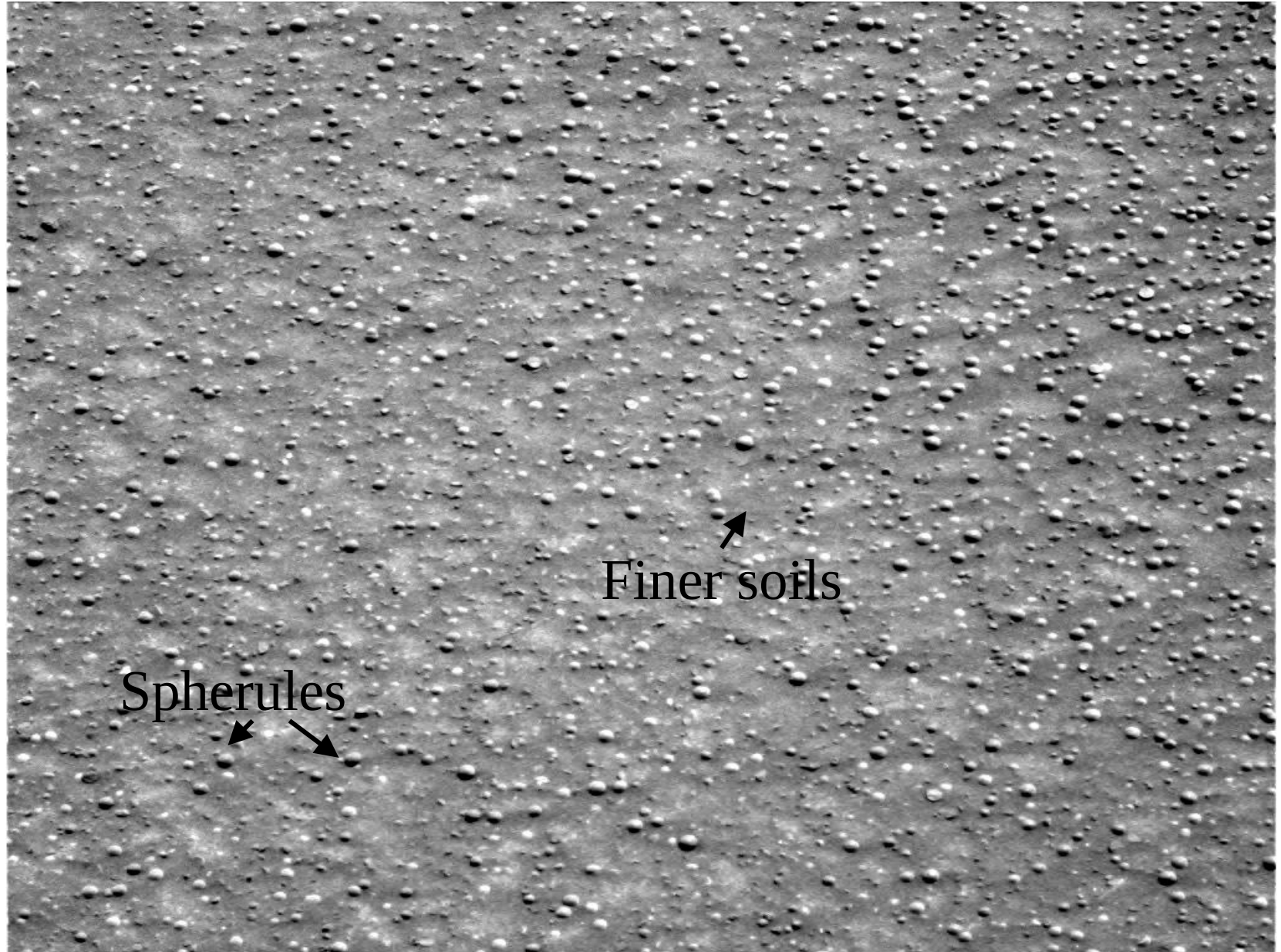
*Mars Exploration Rover*



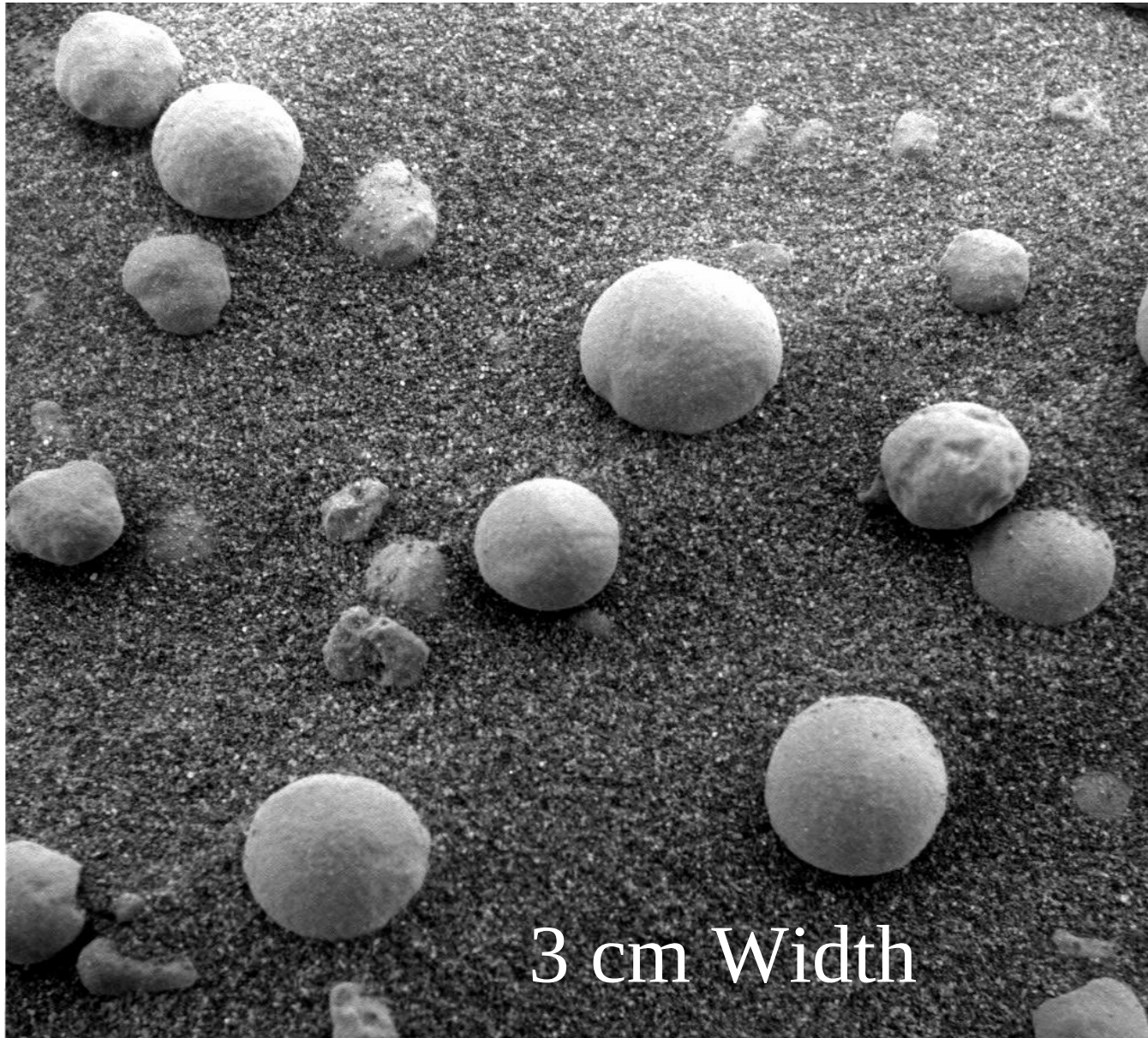
22 m diameter, 3 m deep



# Soils in Eagle Crater



# Microscopic Images of Spherules





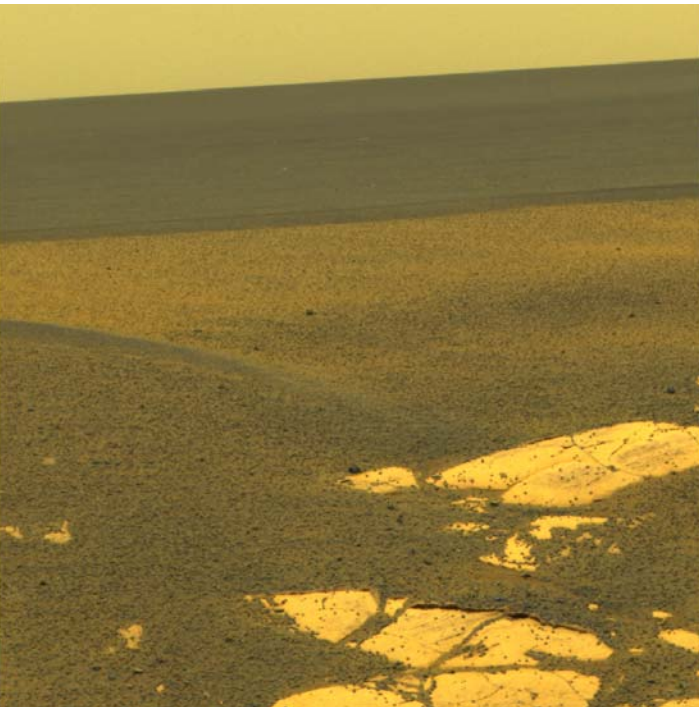


# Sol 23 Photometric Study

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11:25 and 17:10 LST

430, 530, 750 nm







# Sol 14 Layering and In-Place Spherules

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430

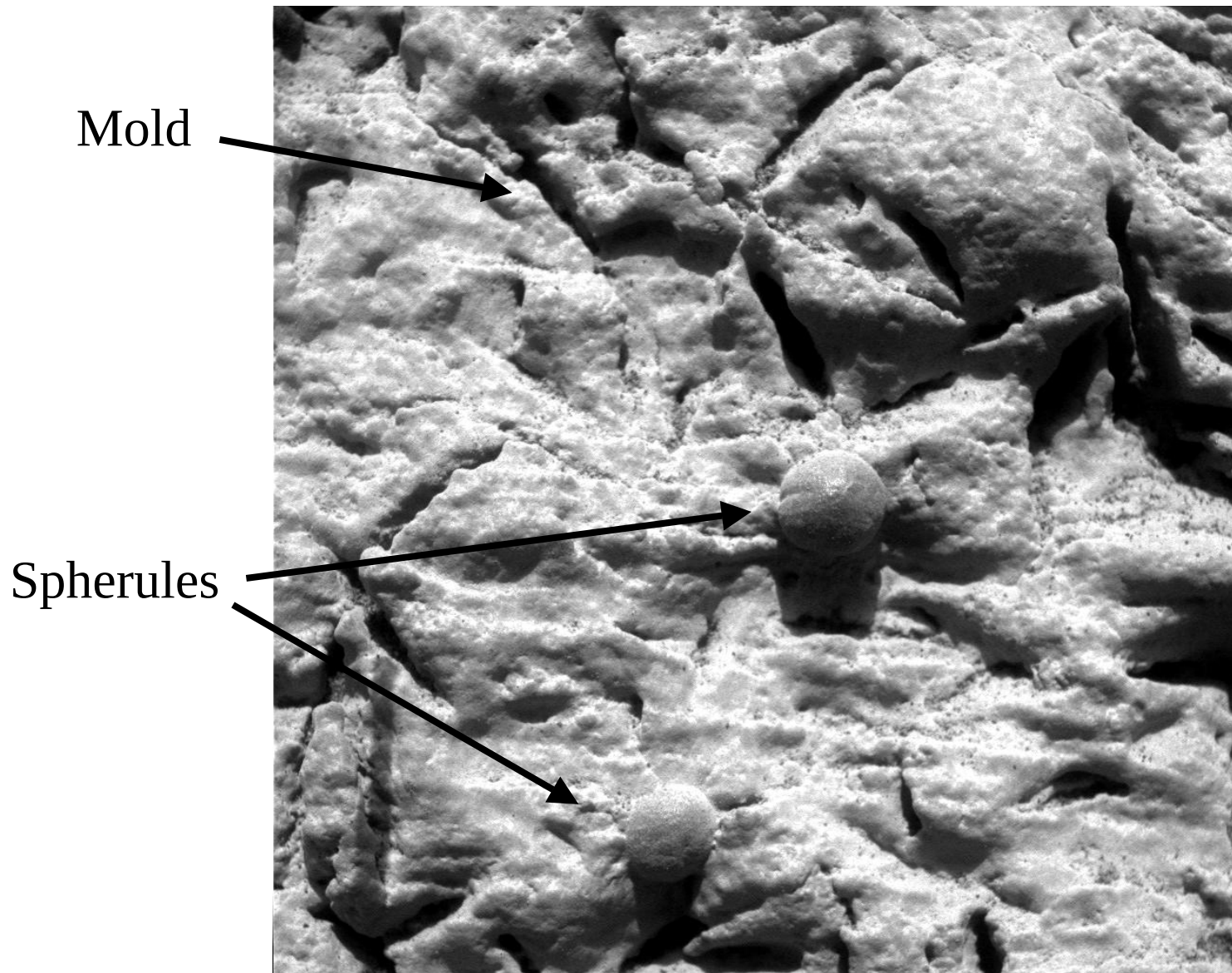
530

750 nm



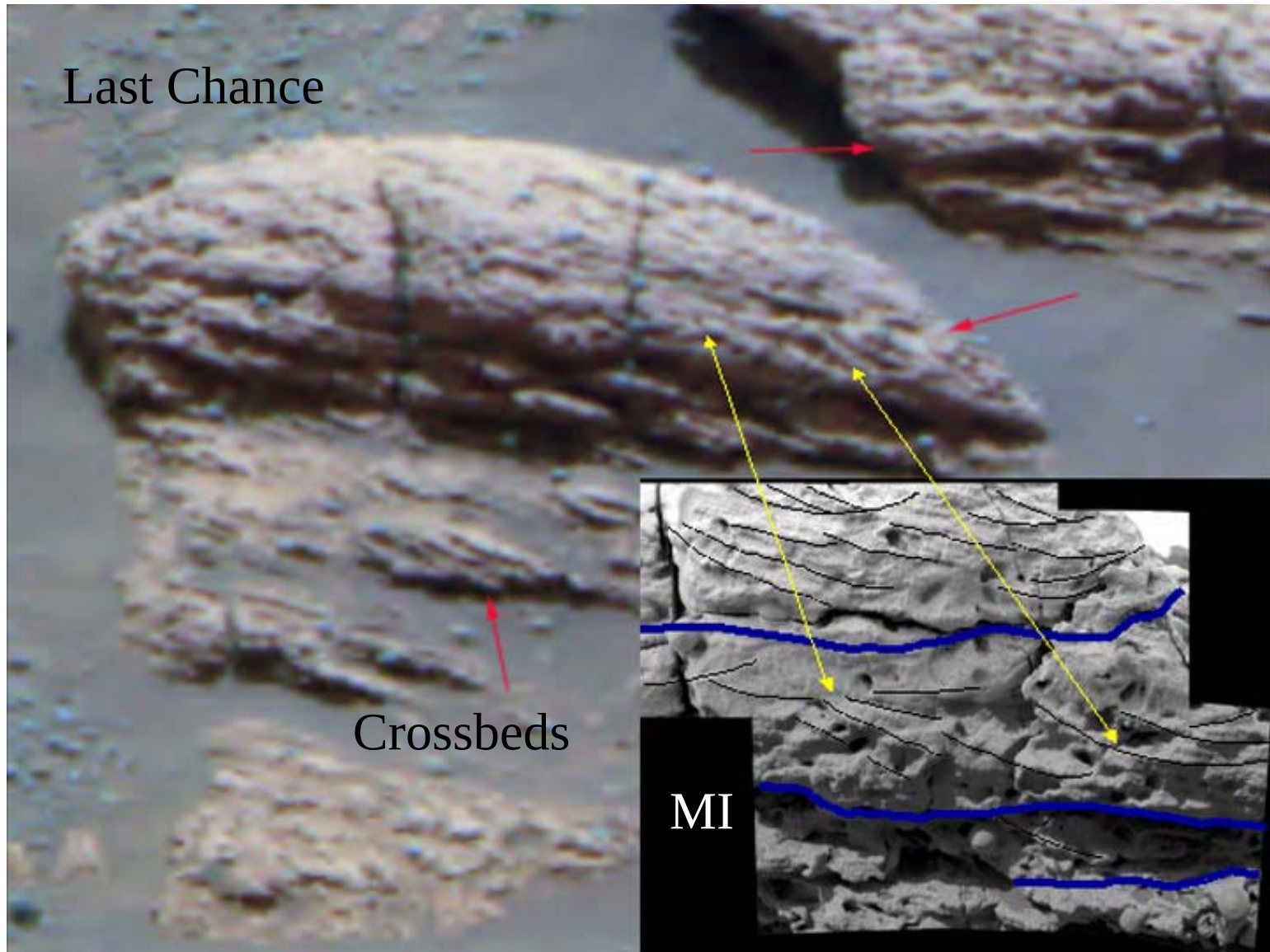
# Sol 29 McKittrick Microscopic Imager Data

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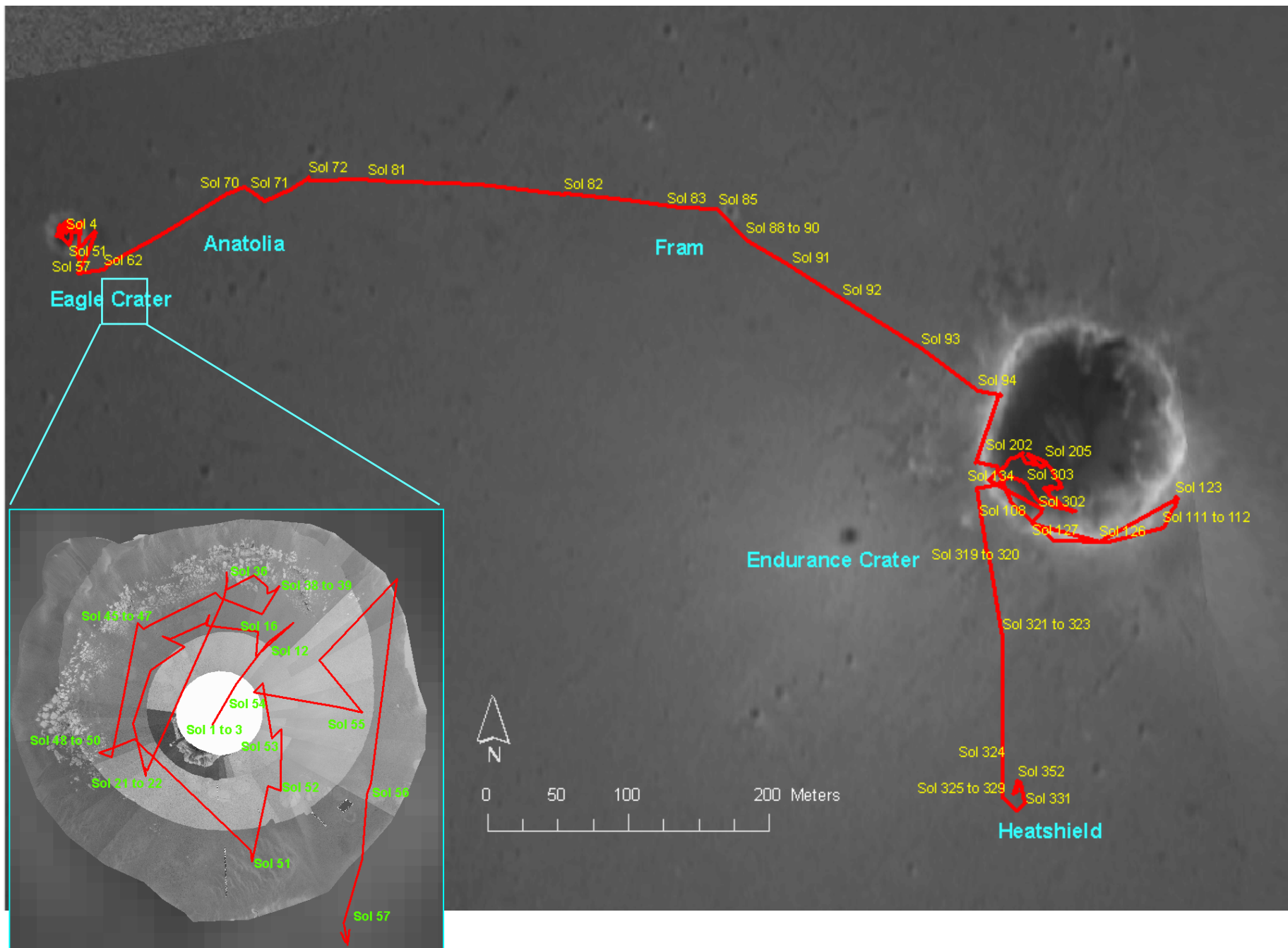




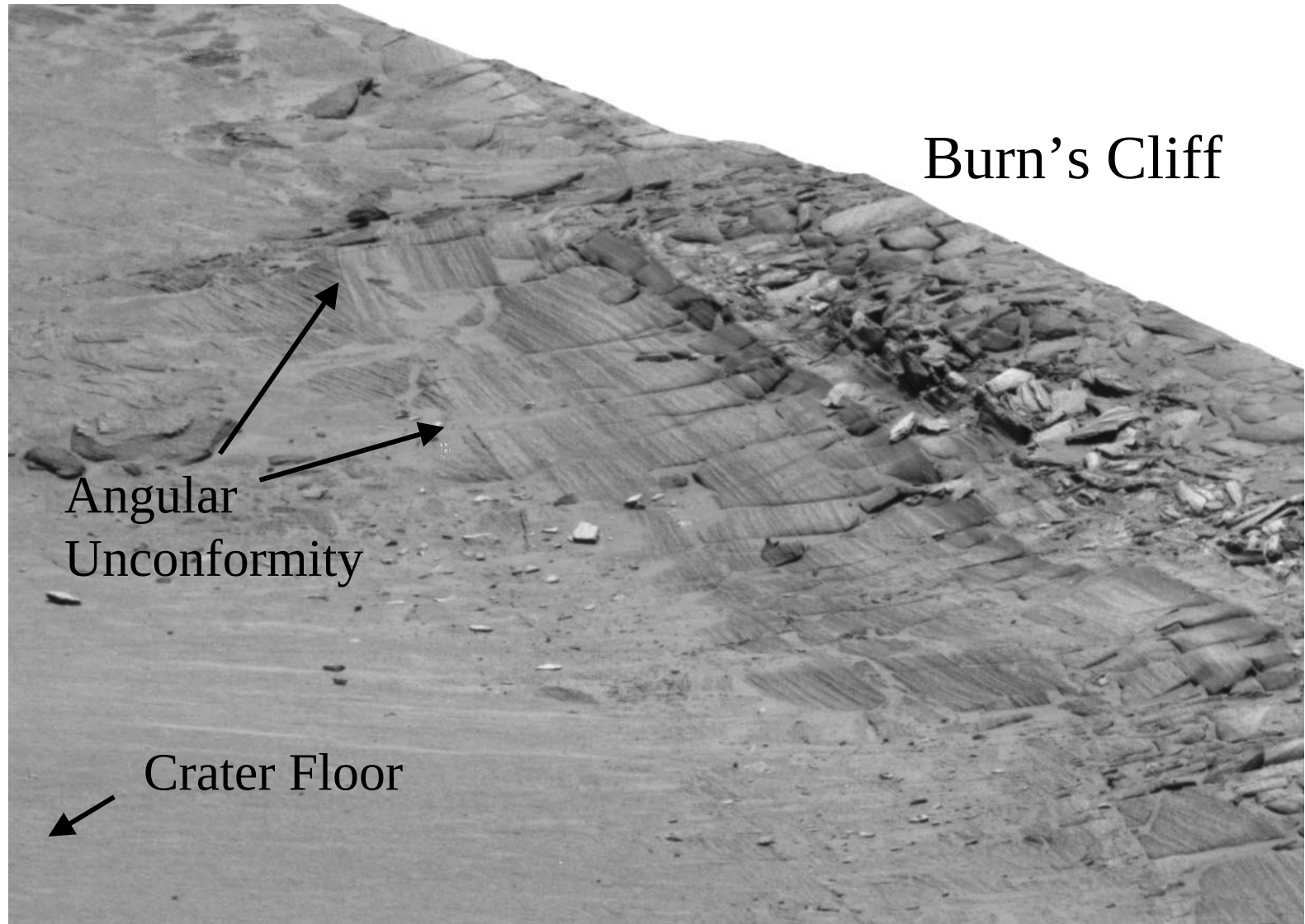
# Cross Bedding Indicates Surface Water





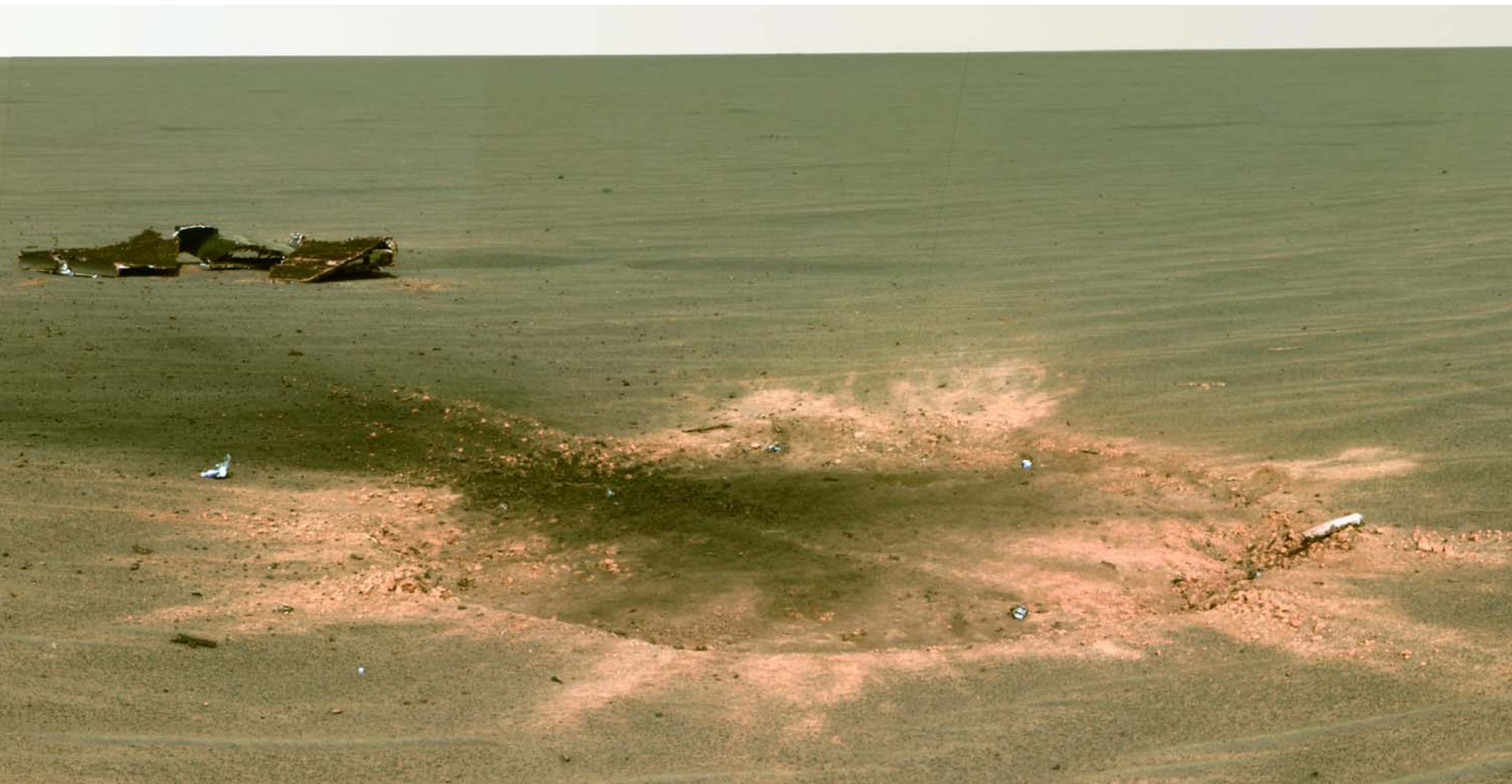


# Stratigraphy of Upper Endurance Crater Wall





# Heat Shield Impact



# Iron-Nickel Meteorite!





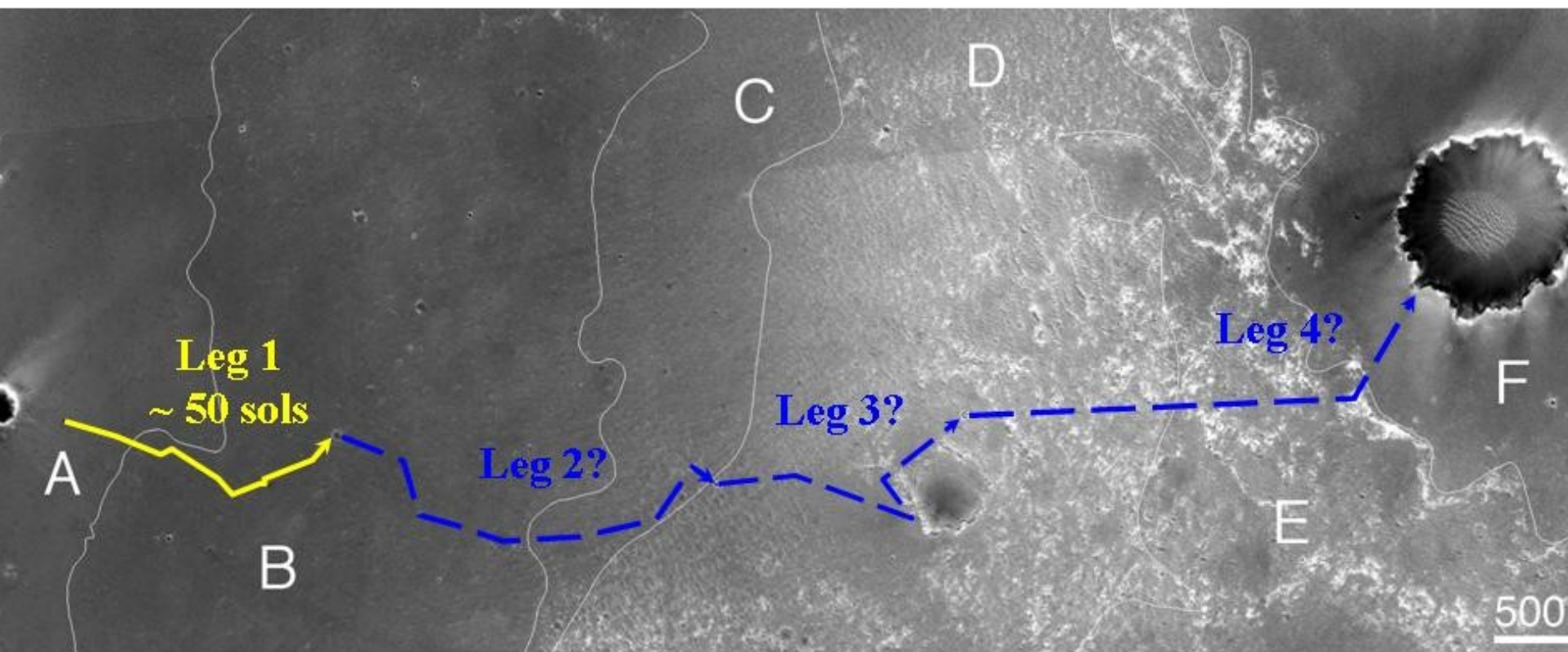


# Looking Forward

**Opportunity**

Long Term Planning

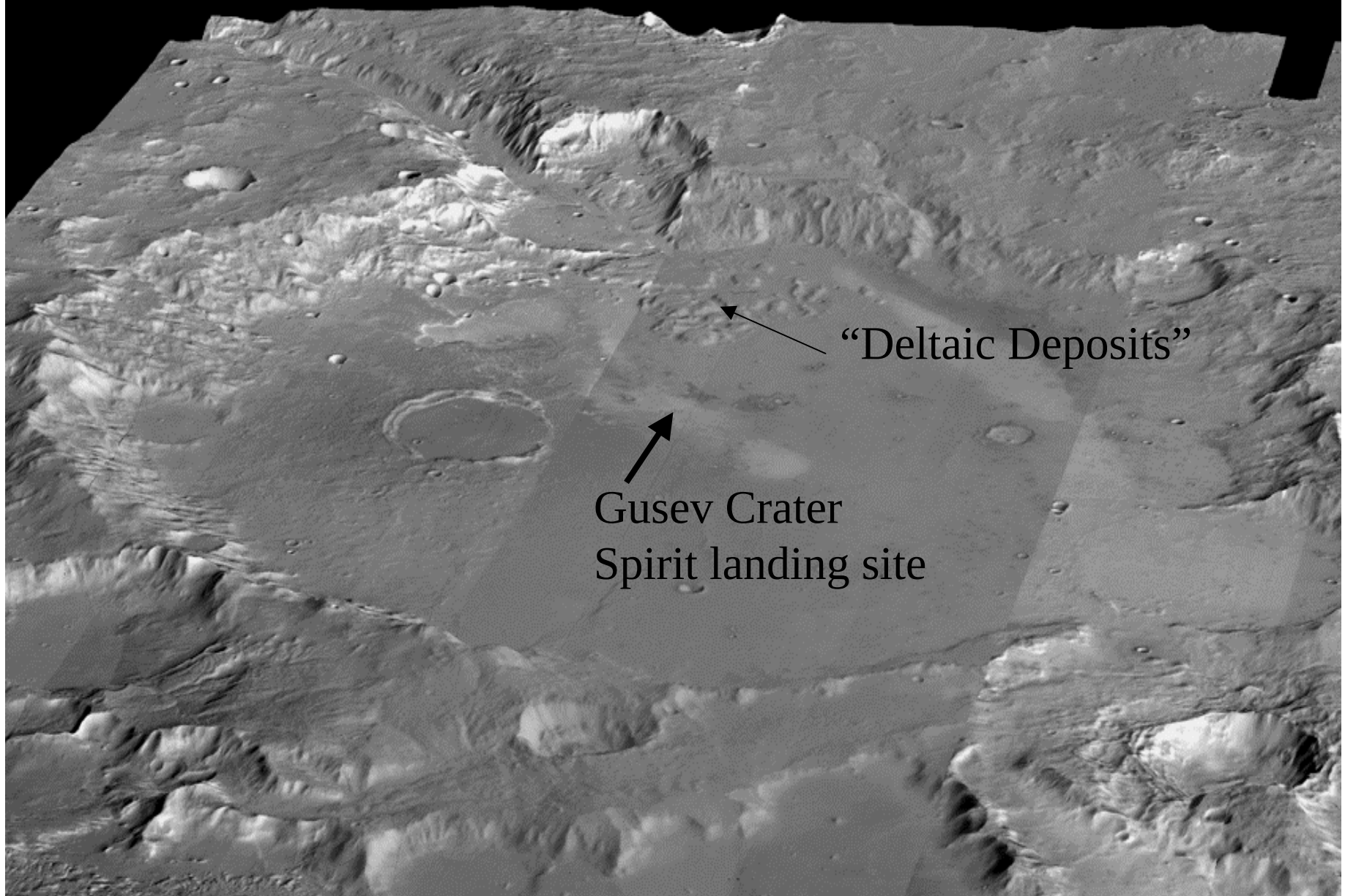
Mars Exploration Rover

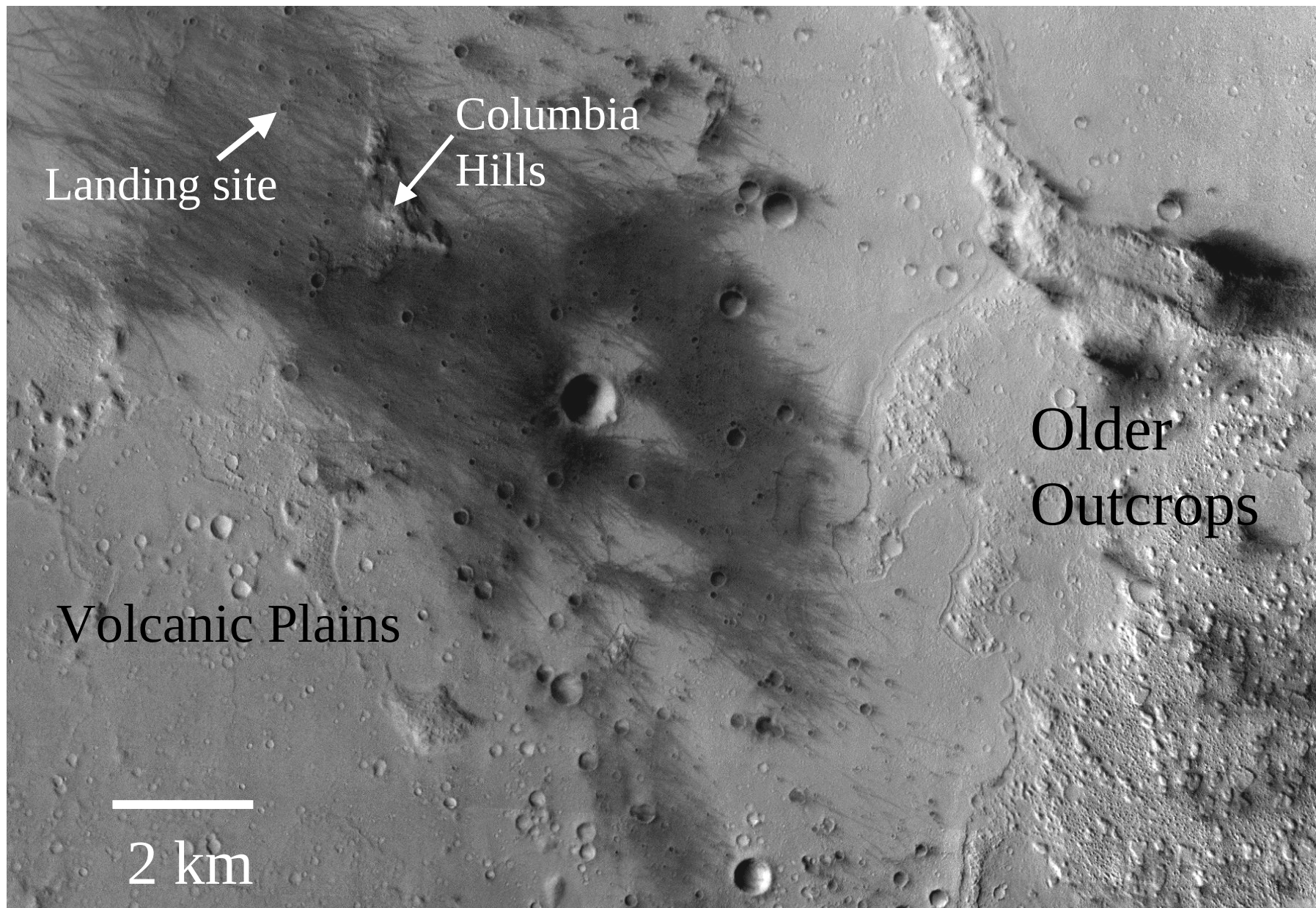


North



# Ma'adim Valles





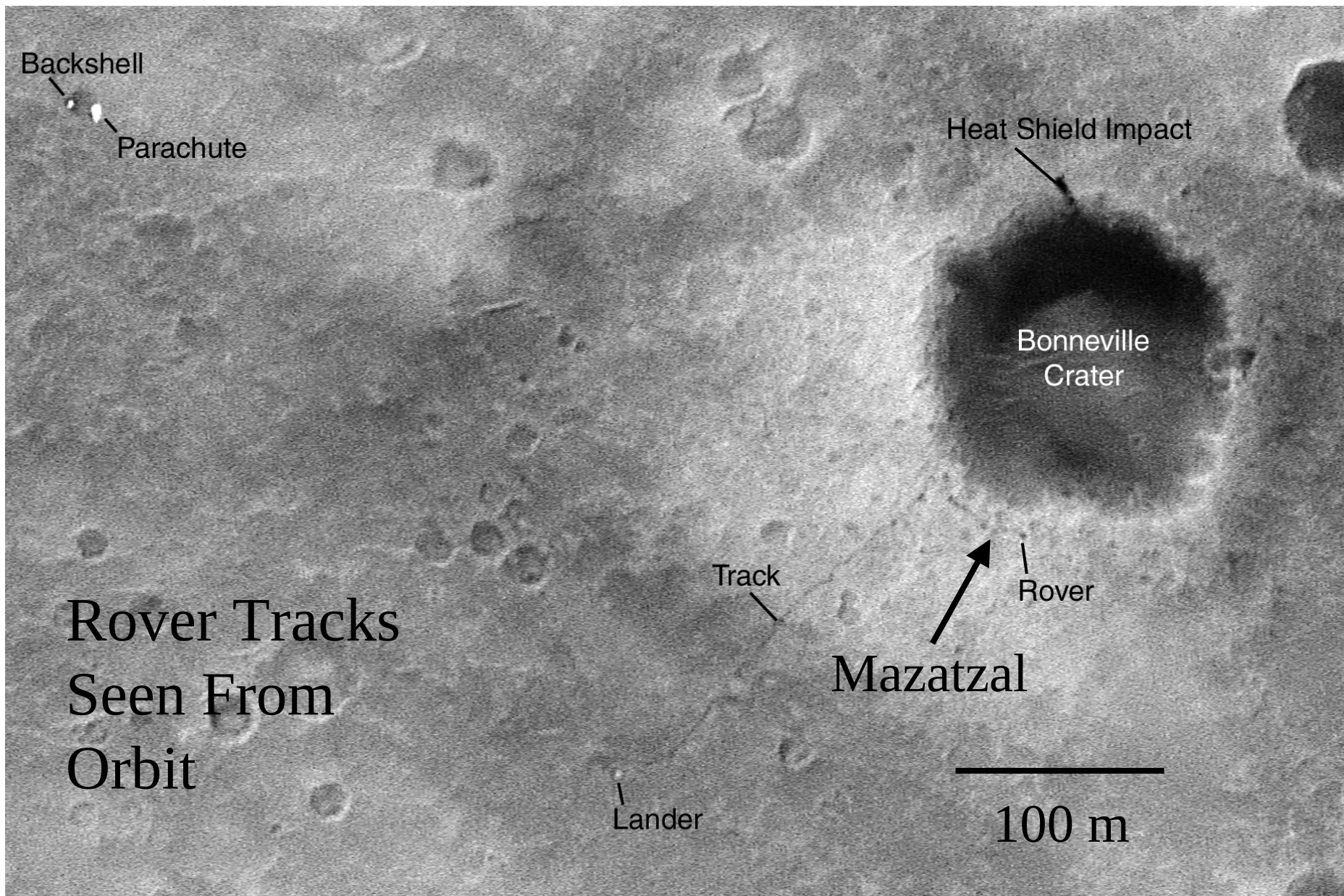
Landing site

Columbia  
Hills

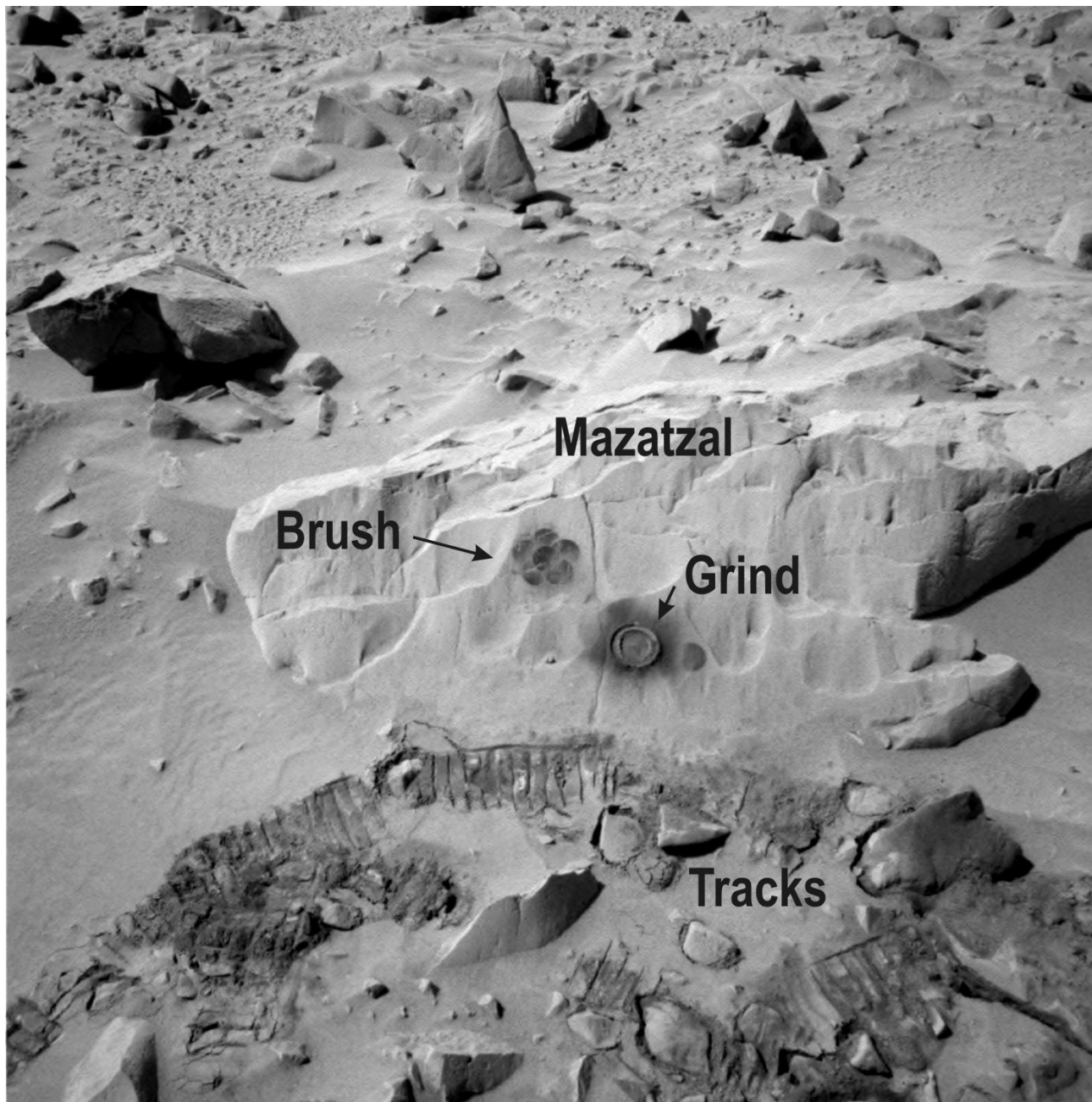
Volcanic Plains

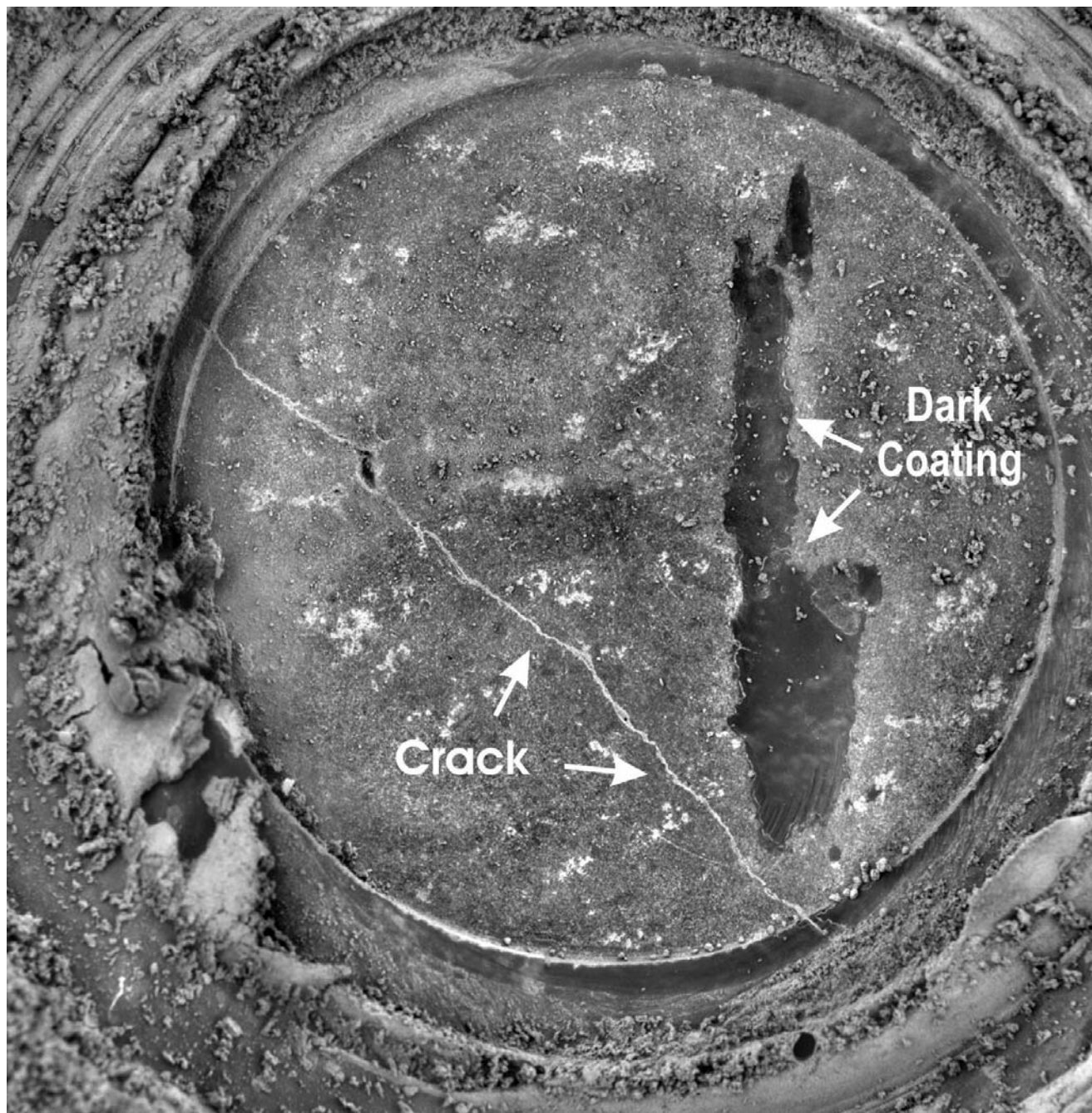
Older  
Outcrops

2 km

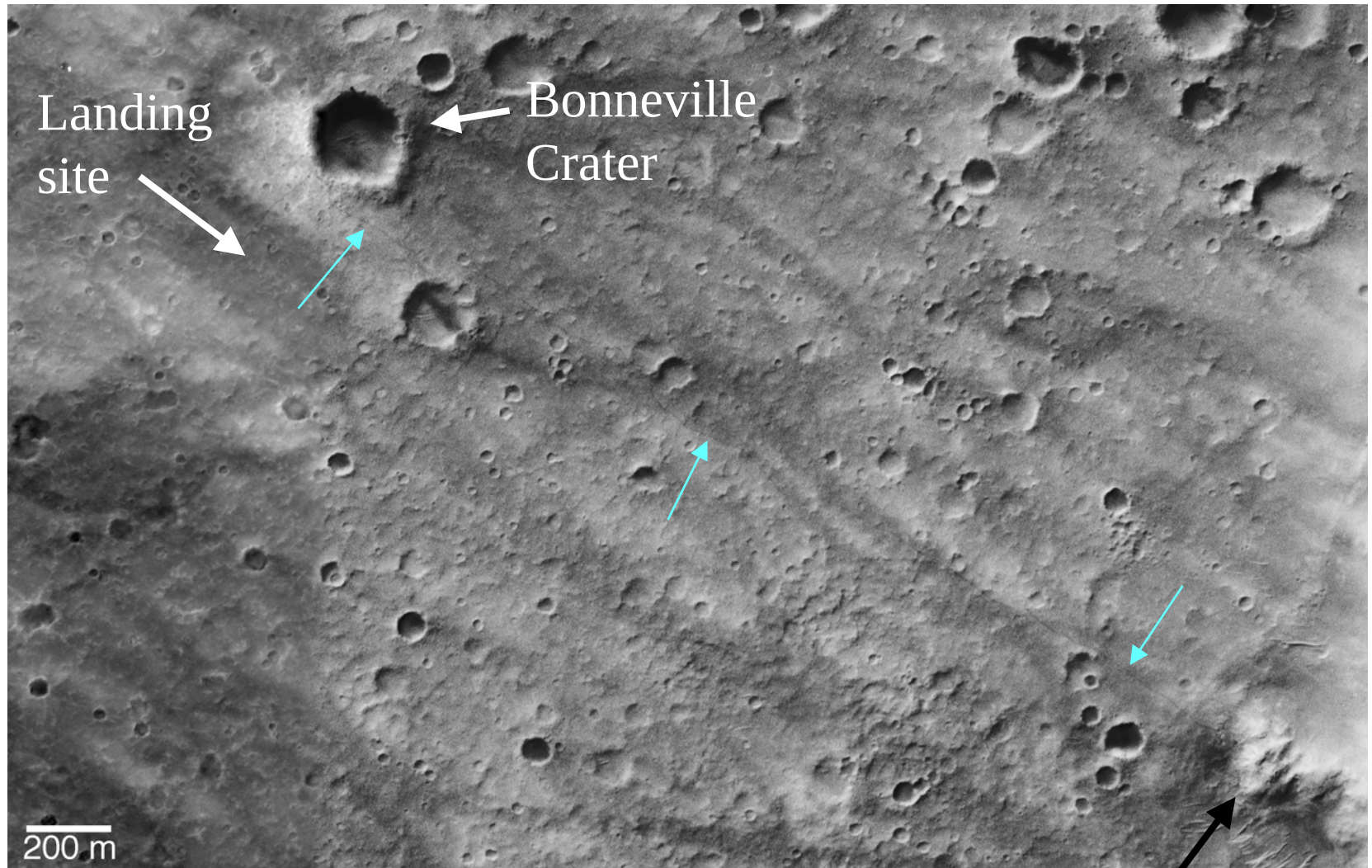






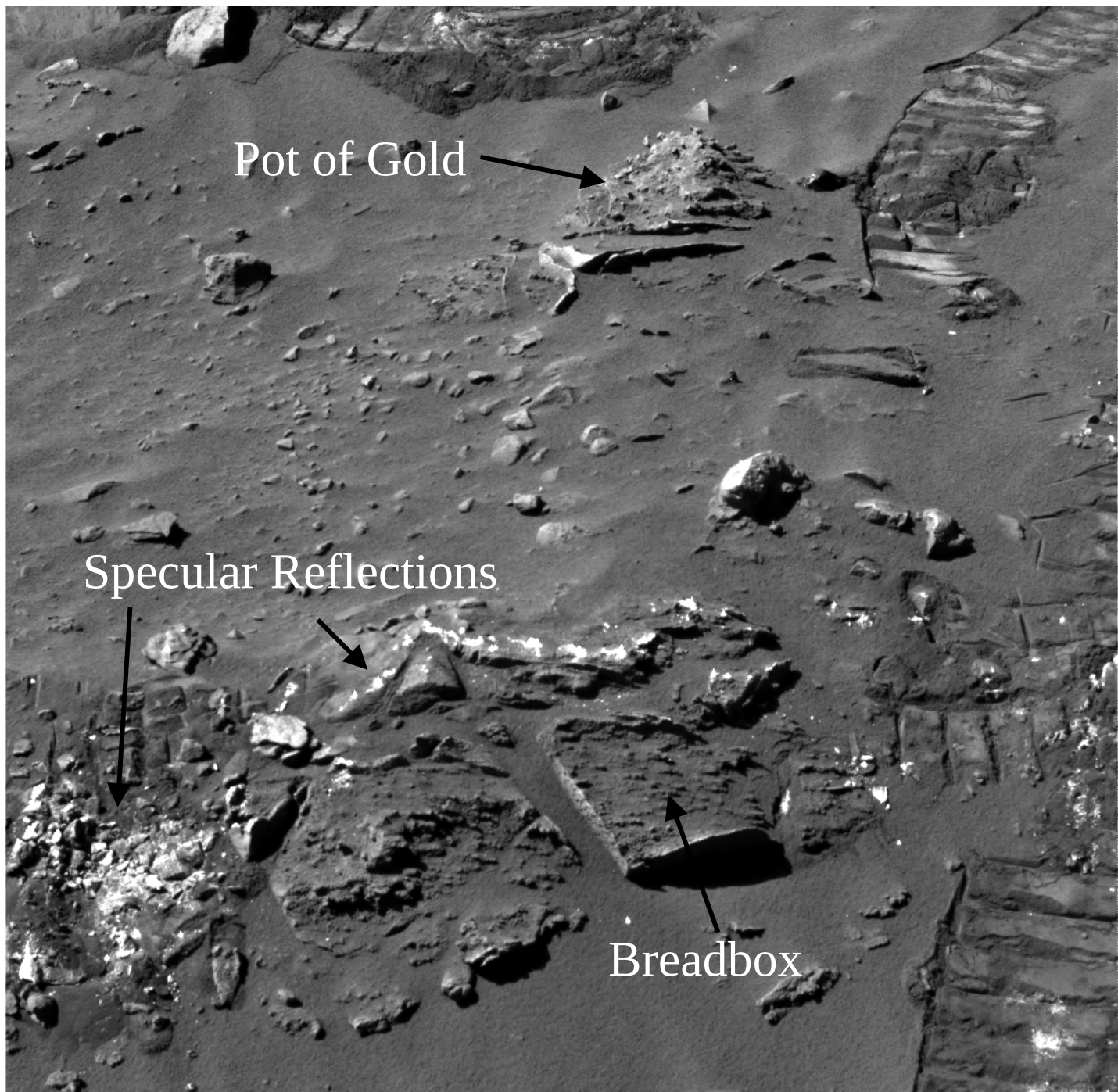


# Rover Tracks observed from orbit



West Spur, Columbia Hills



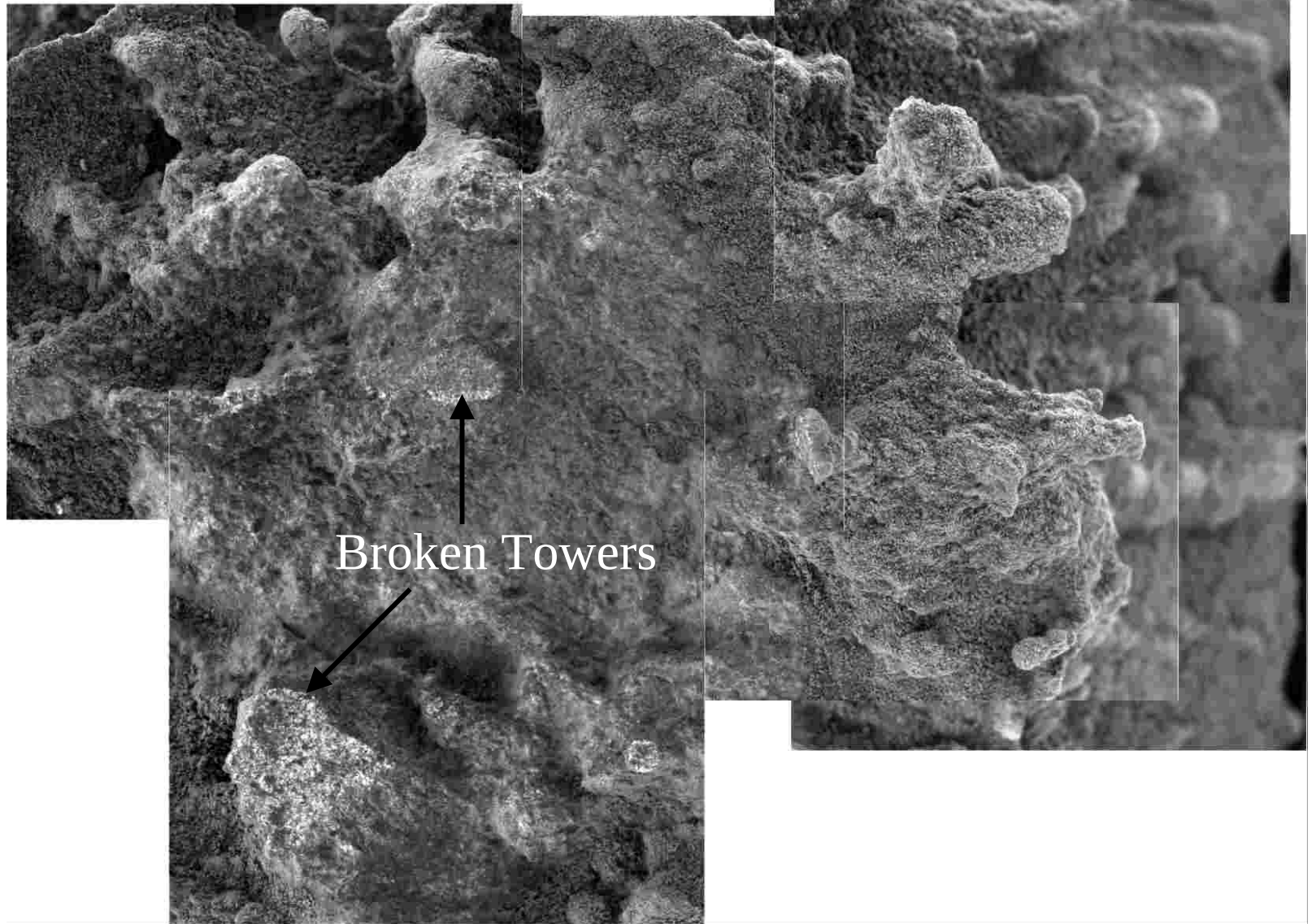


Pot of Gold

Specular Reflections

Breadbox

# Post-RAT MI Mosaic

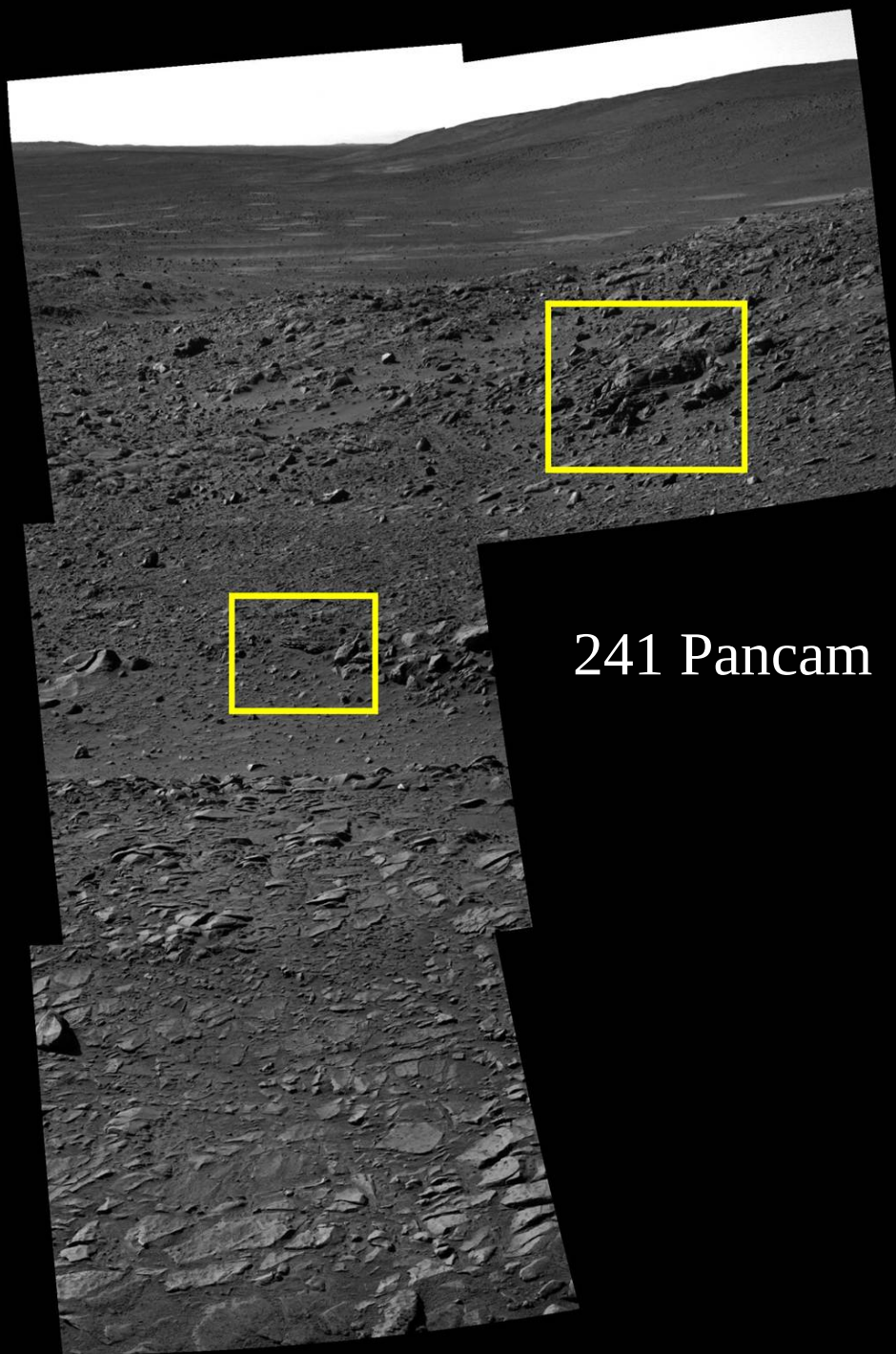




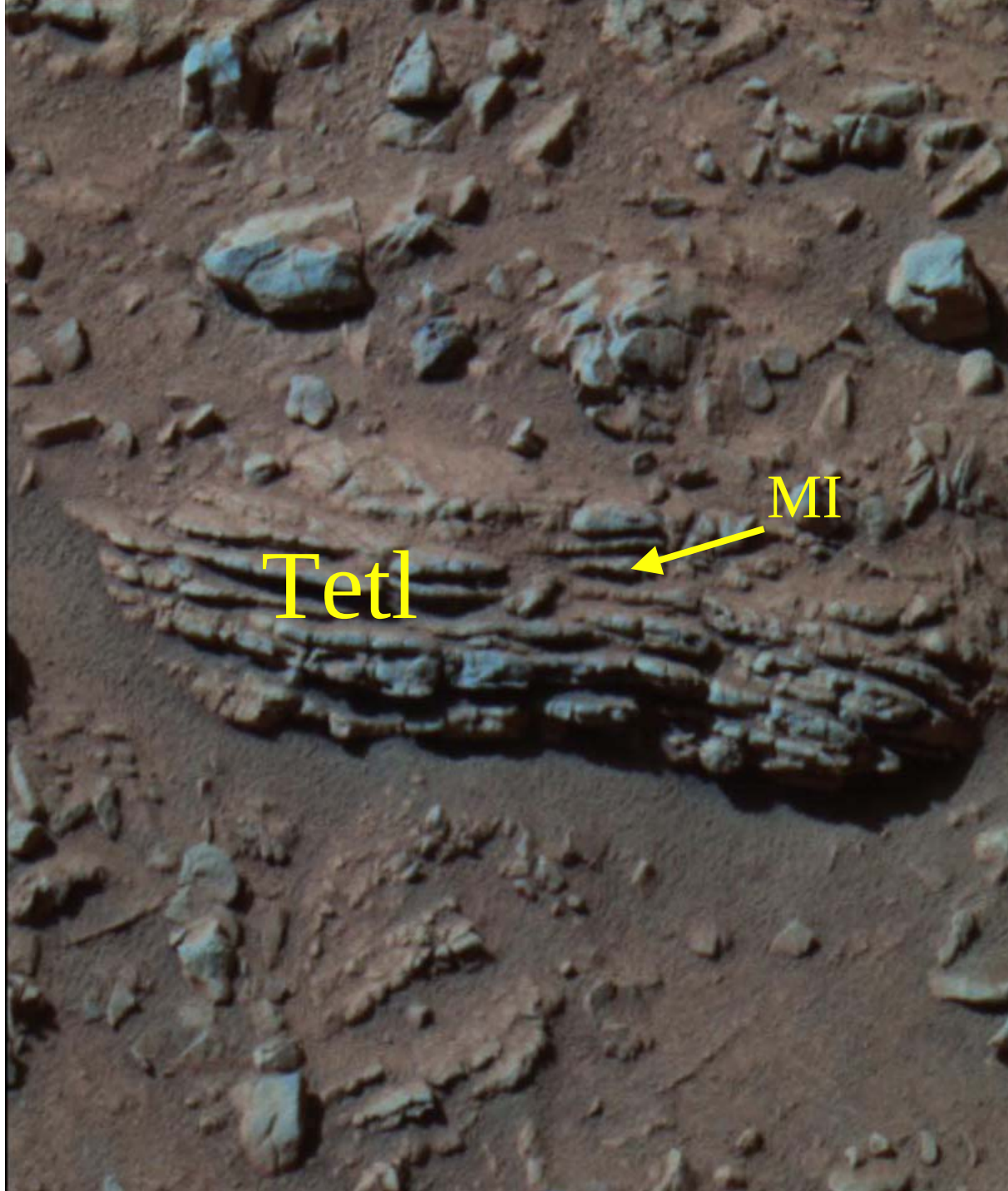
# Cahokia Panorama





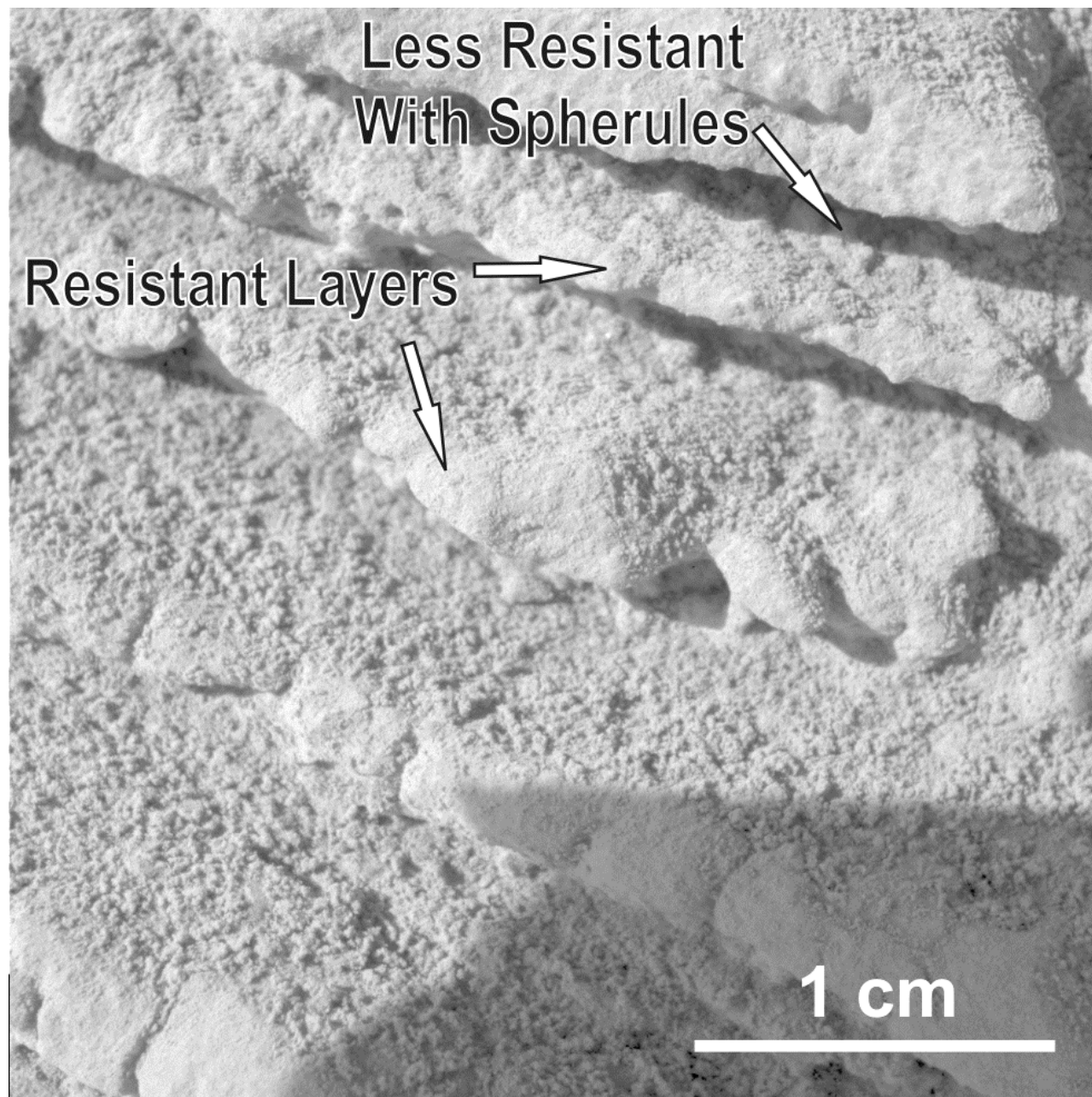


241 Pancam



Tetl

MI





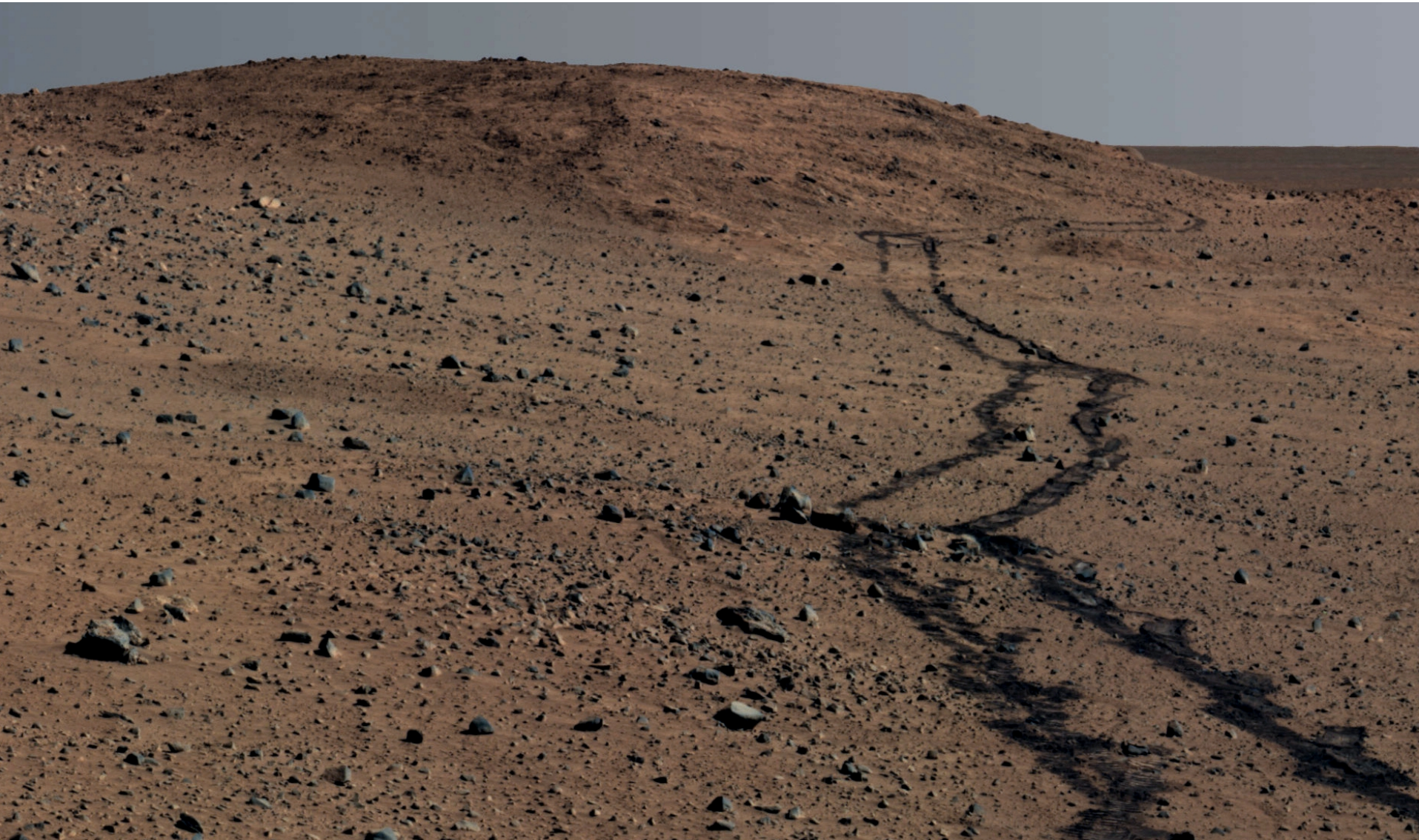
# Palenque

Angular  
Unconformity





# Thanksgiving Pan-Looking Back





# Spirit Moves Up Husband Hill

