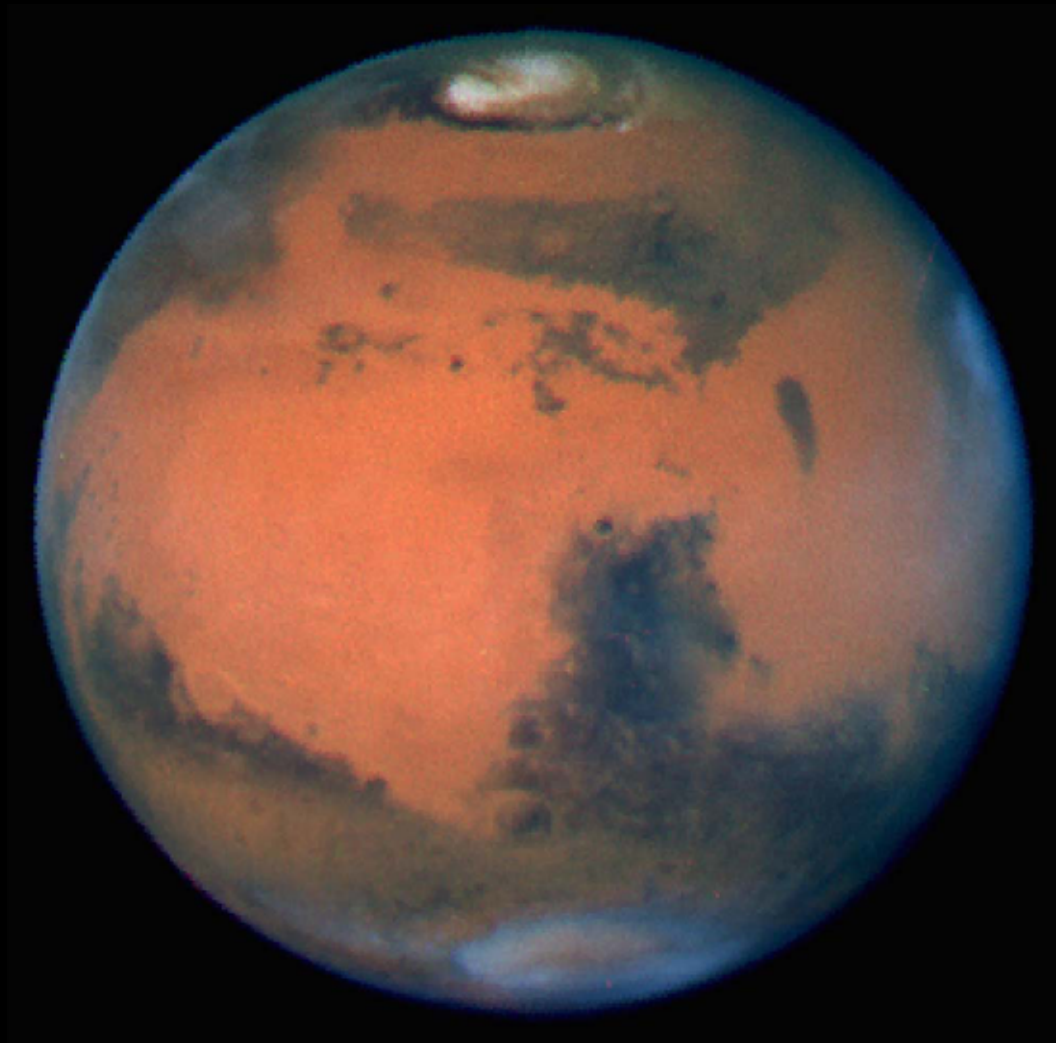


# 火星，人



# Mars Now and Then



# Giovanni Schiaparelli



## Hubble ST



© 2002 Jerry Lodriguss







# Retrograde



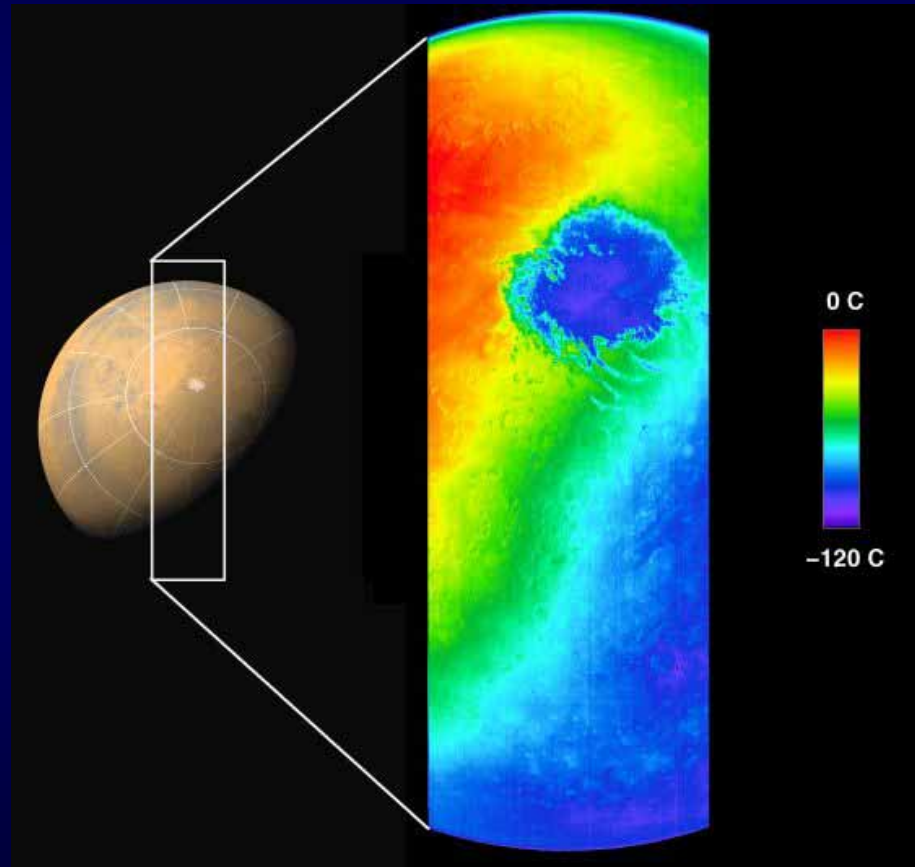








# Temperature Profile



# Phobos



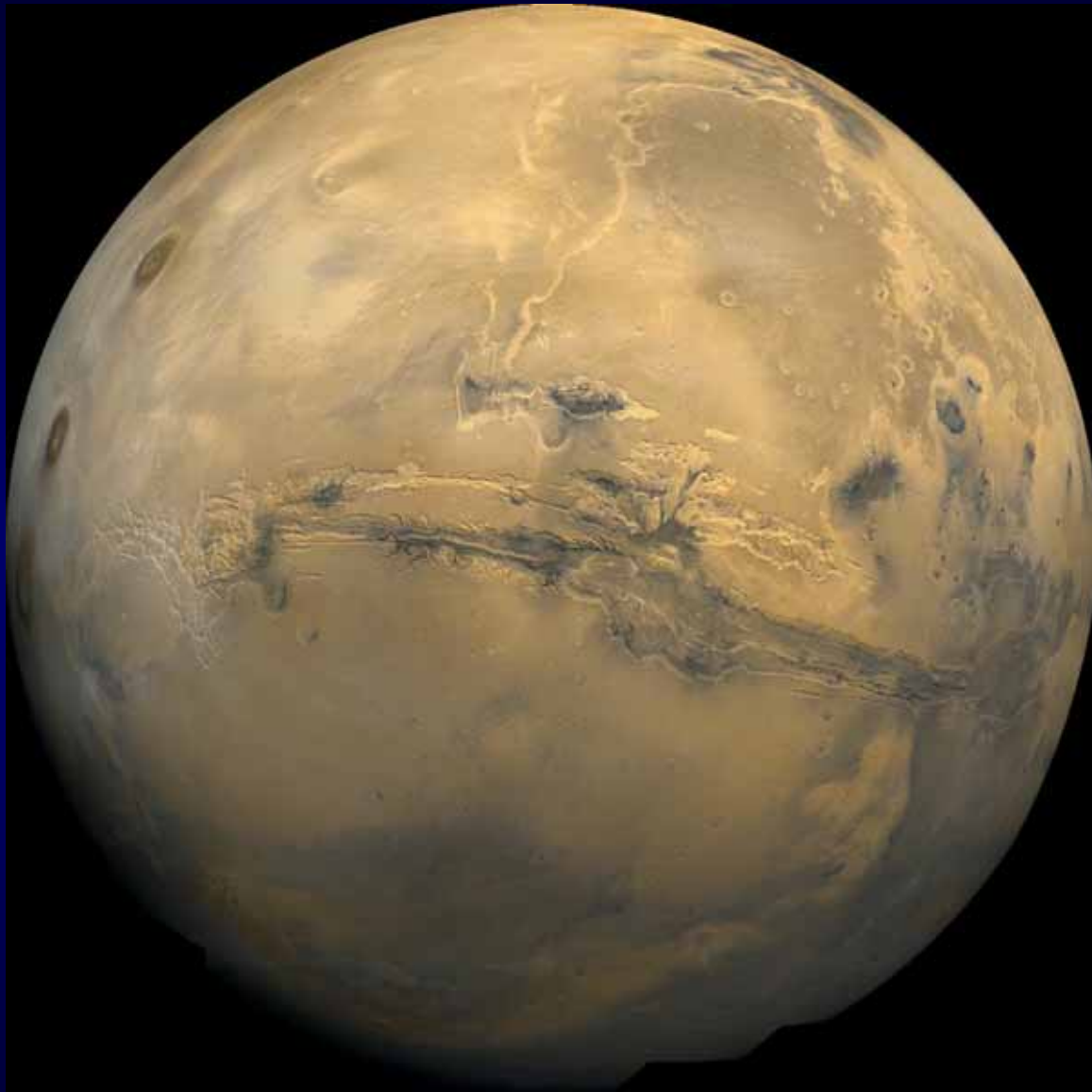
# Deimos



# Phobos



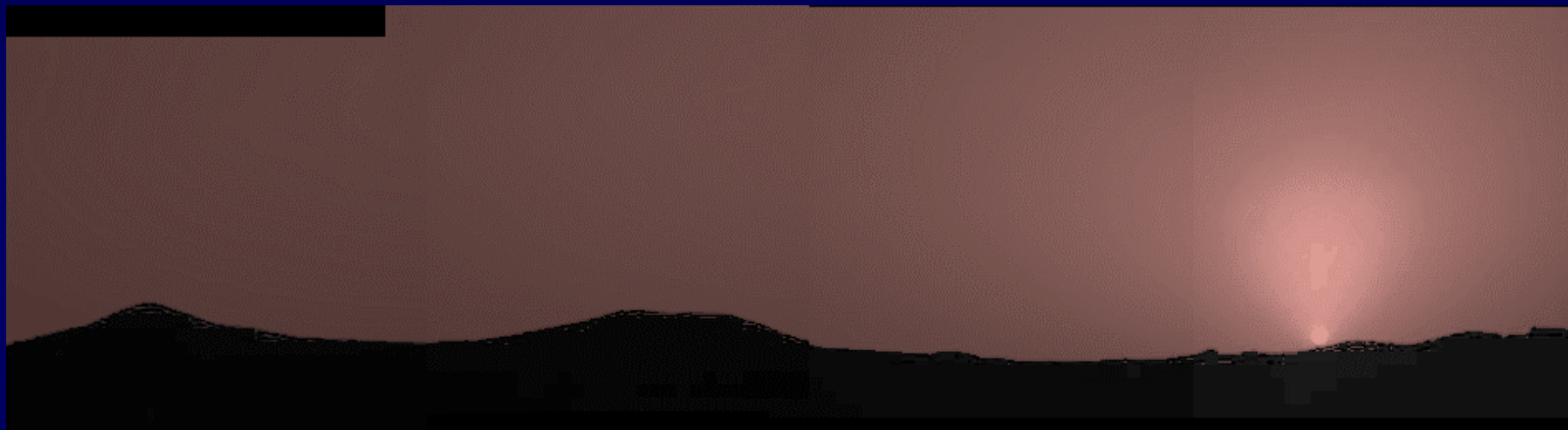




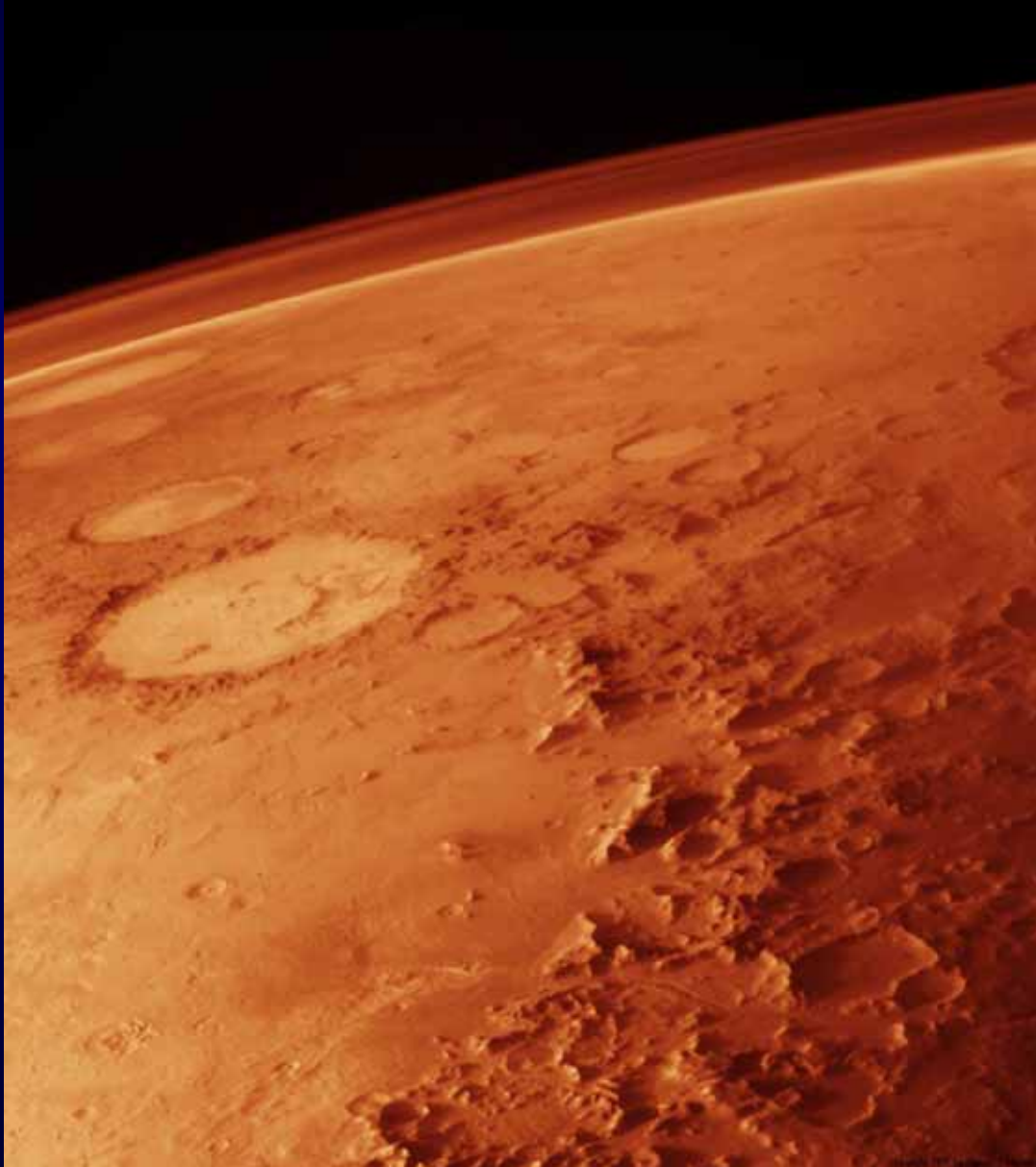




# 夕陽



# Martian Atmosphere



# Martian?

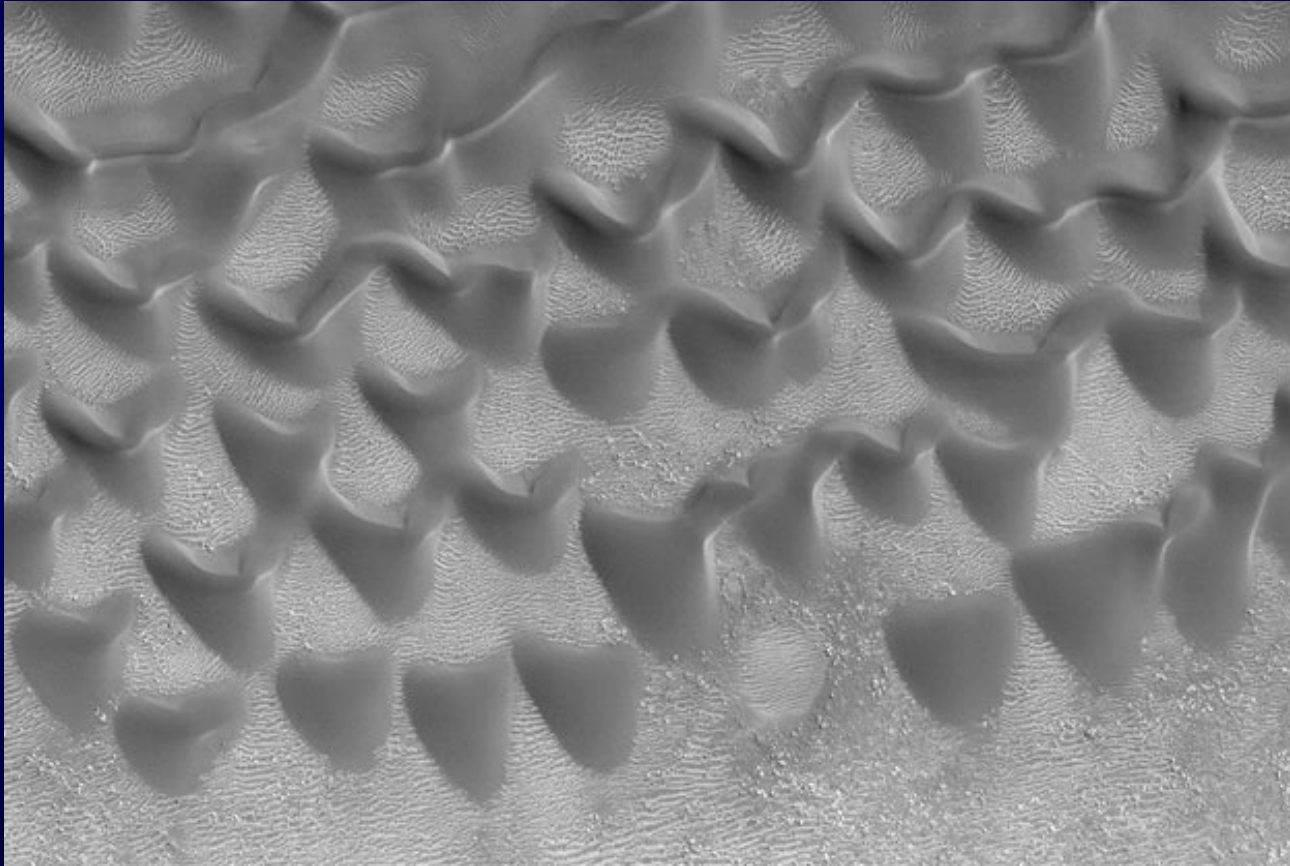




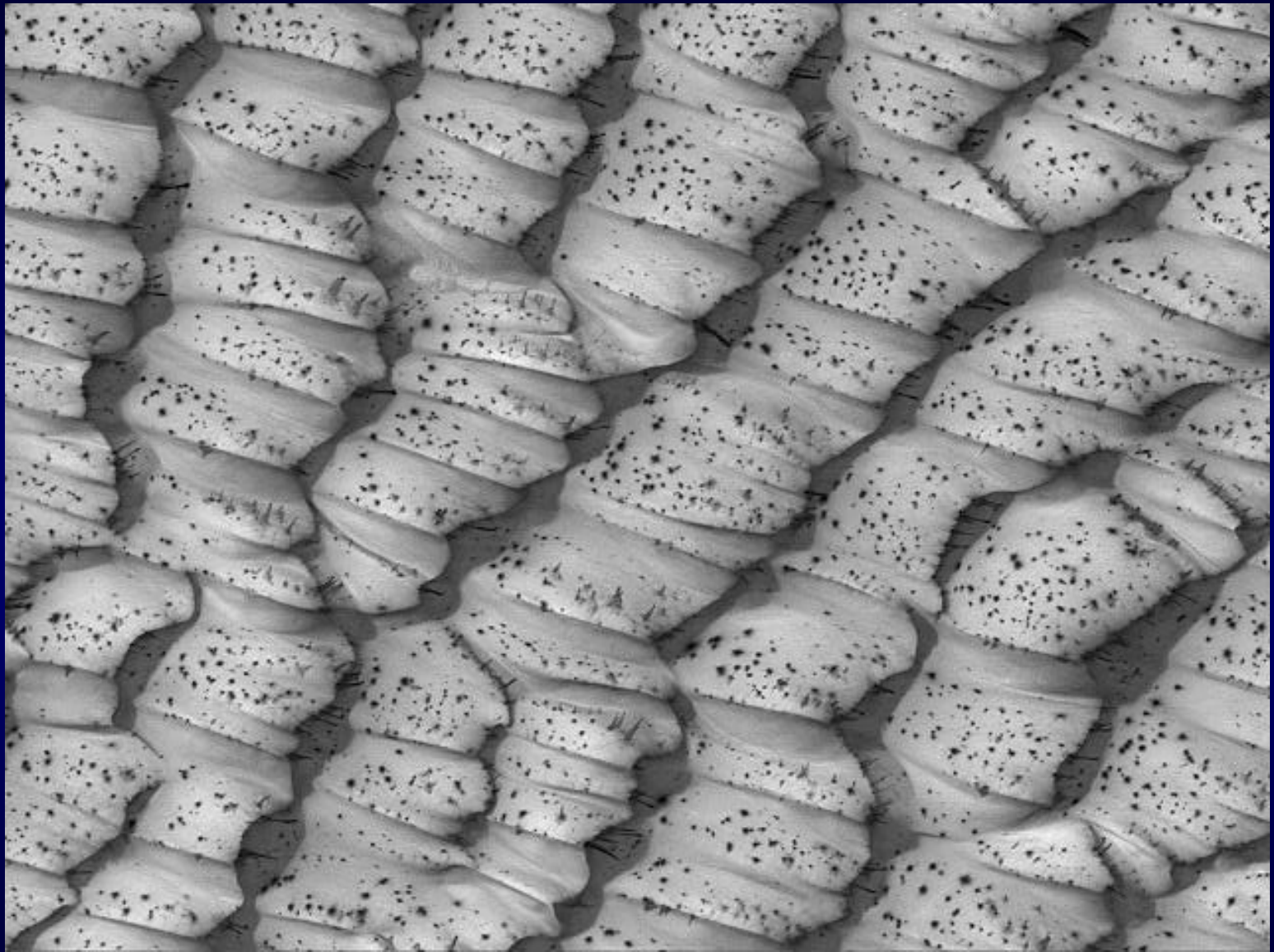
# Olympus Mons Caldera 火山口



# Mars Sand Dunes



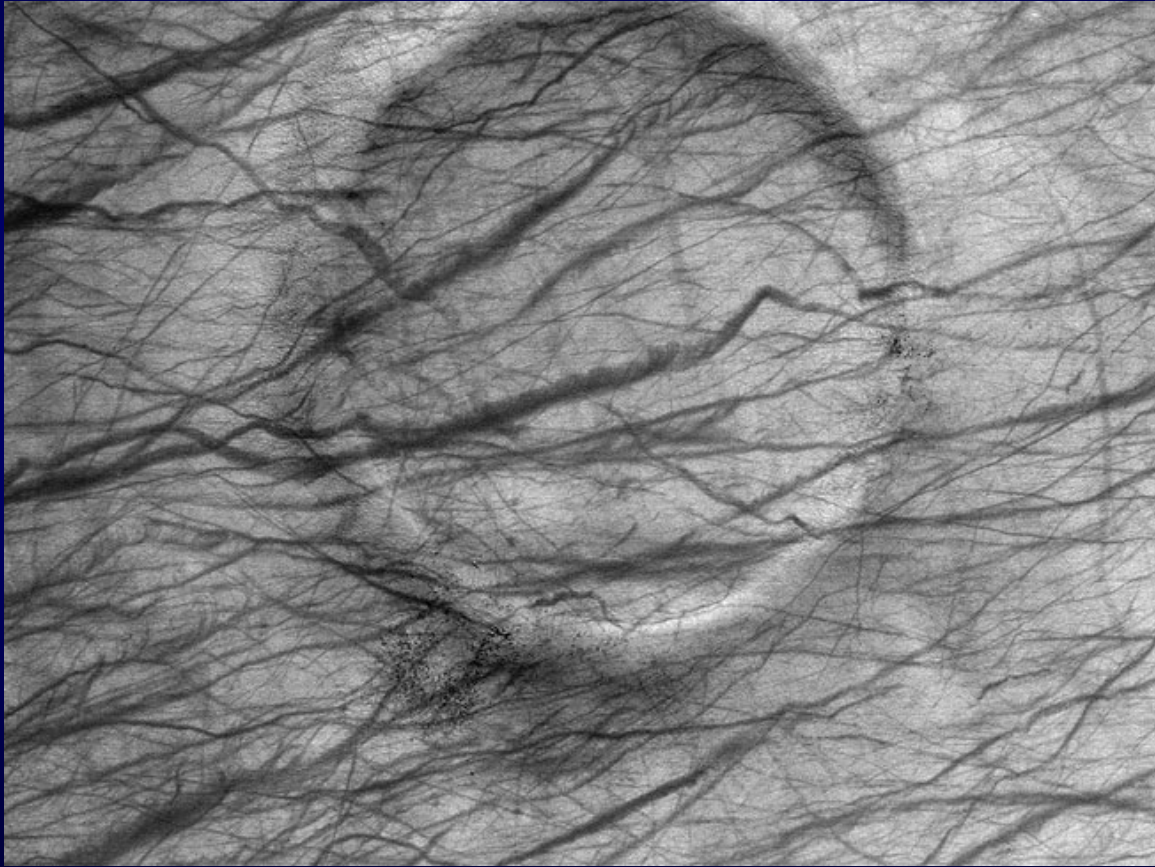






# Dust Devil 塵旋風





# Dust Storms



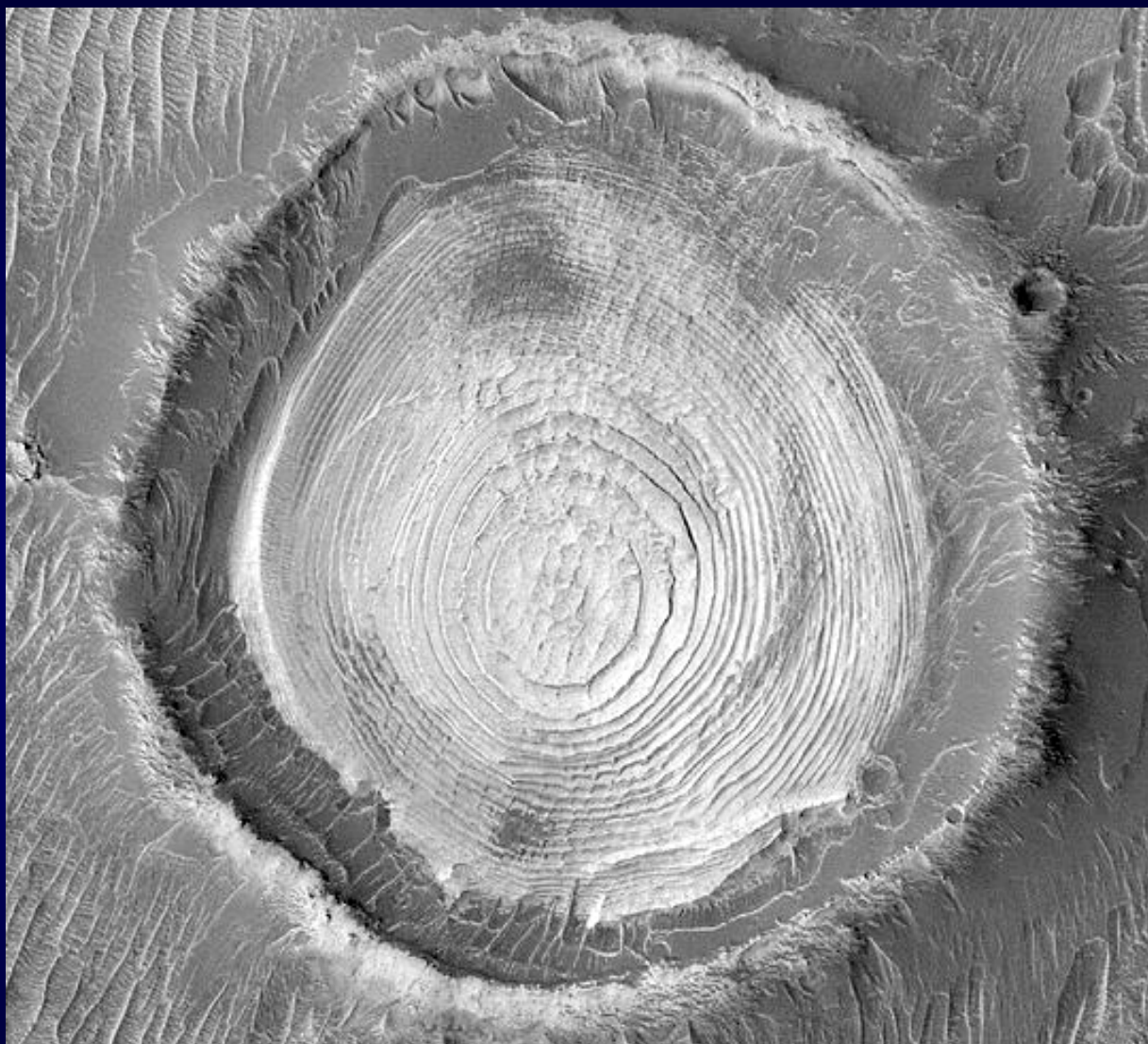
June 26, 2001



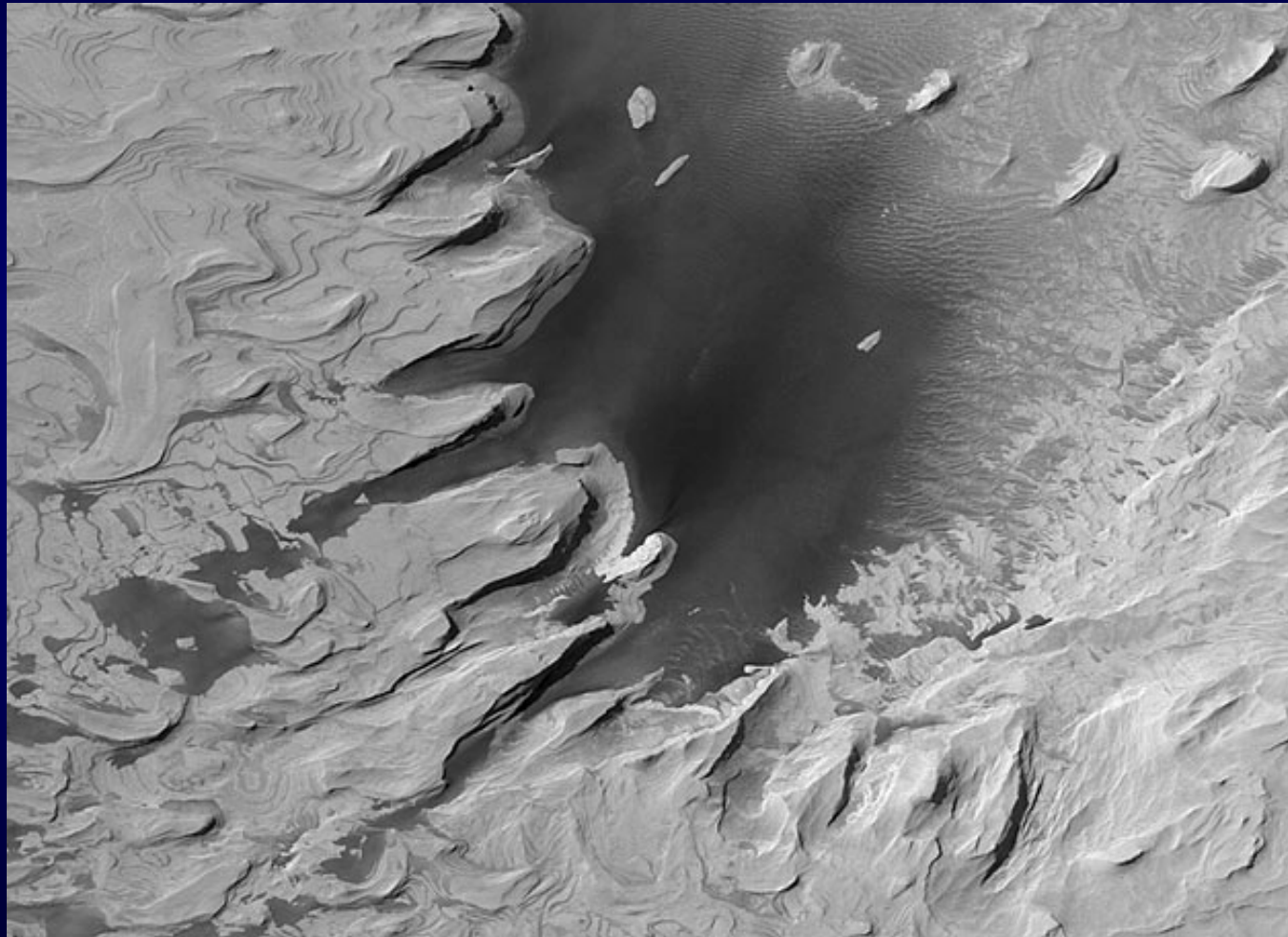
September 4, 2001



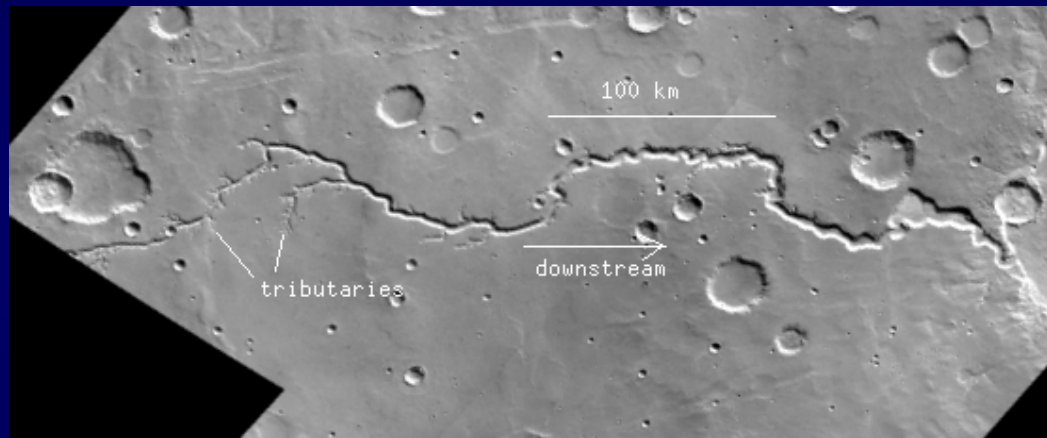




# Layered Rocks

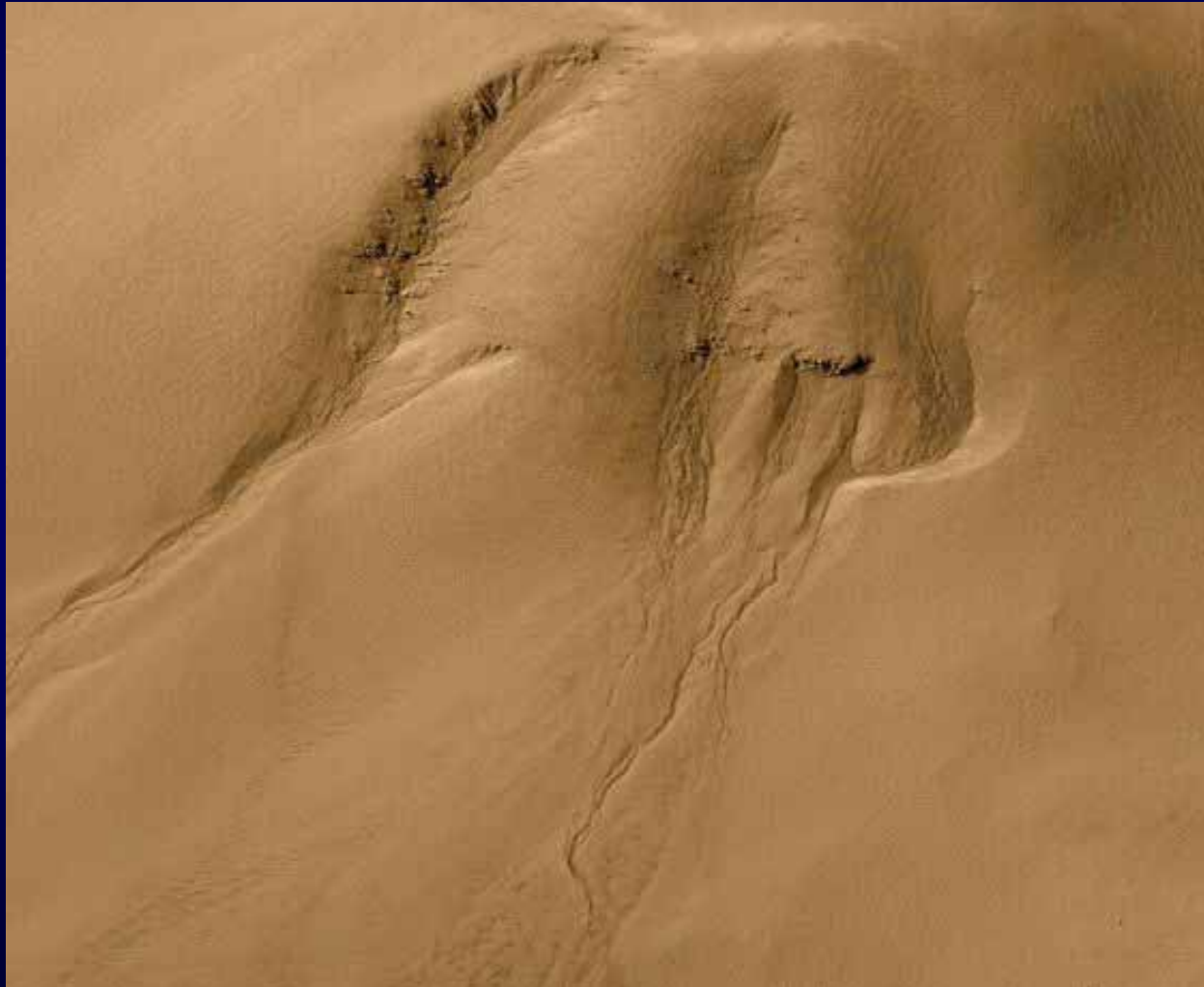




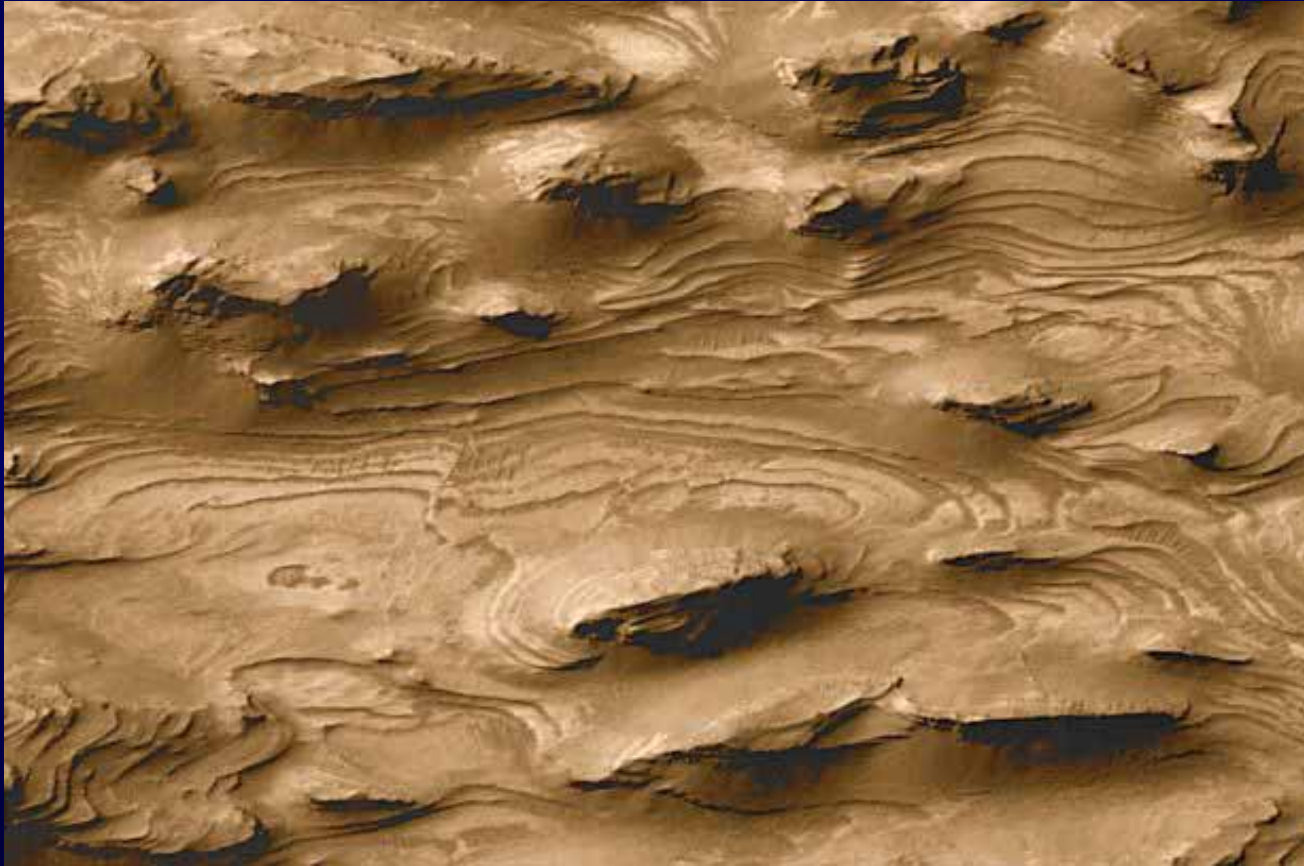




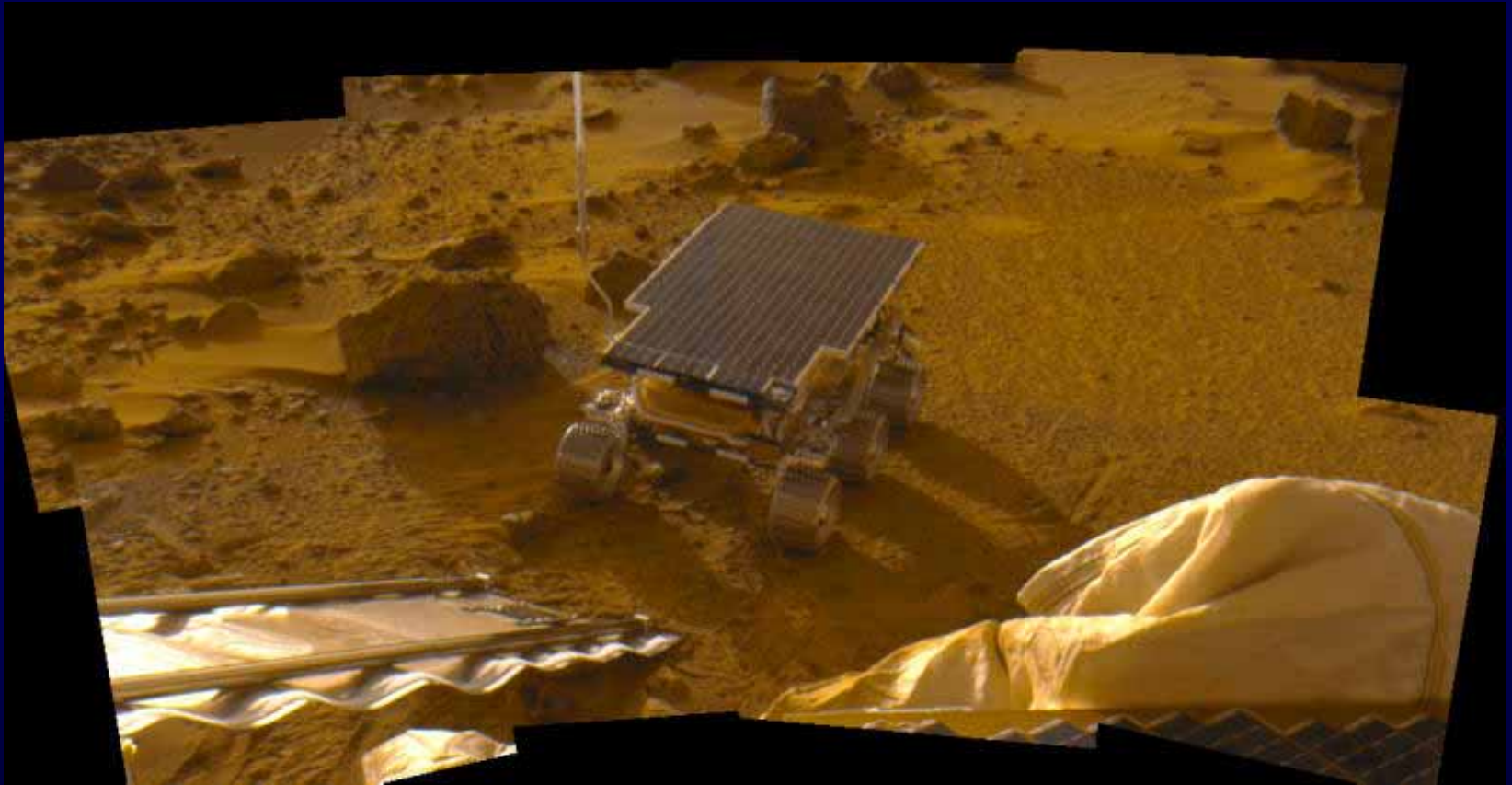
# Gullies on Mars



# Layered Structures



# Sojourner



1996

# MER

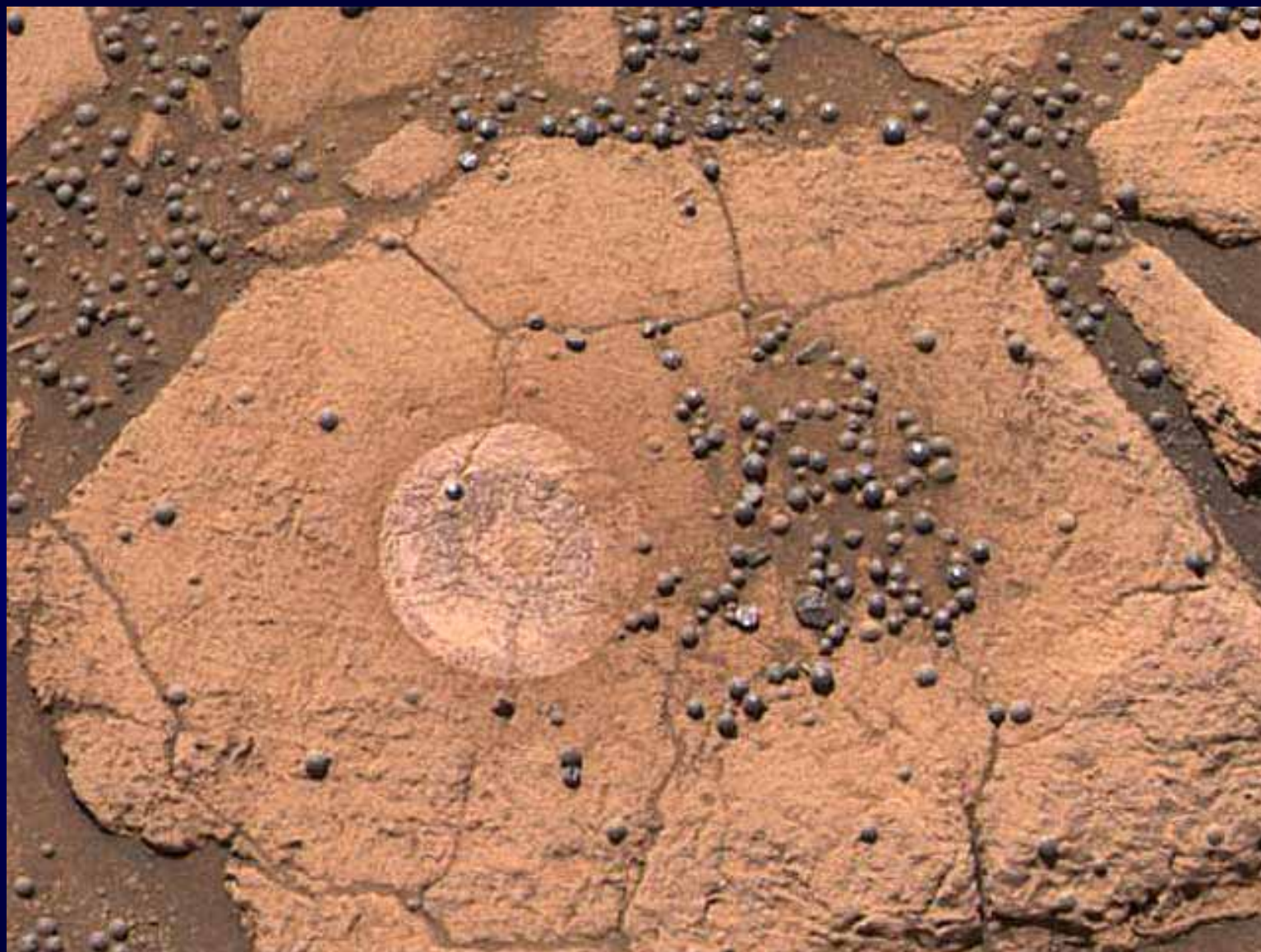


2004



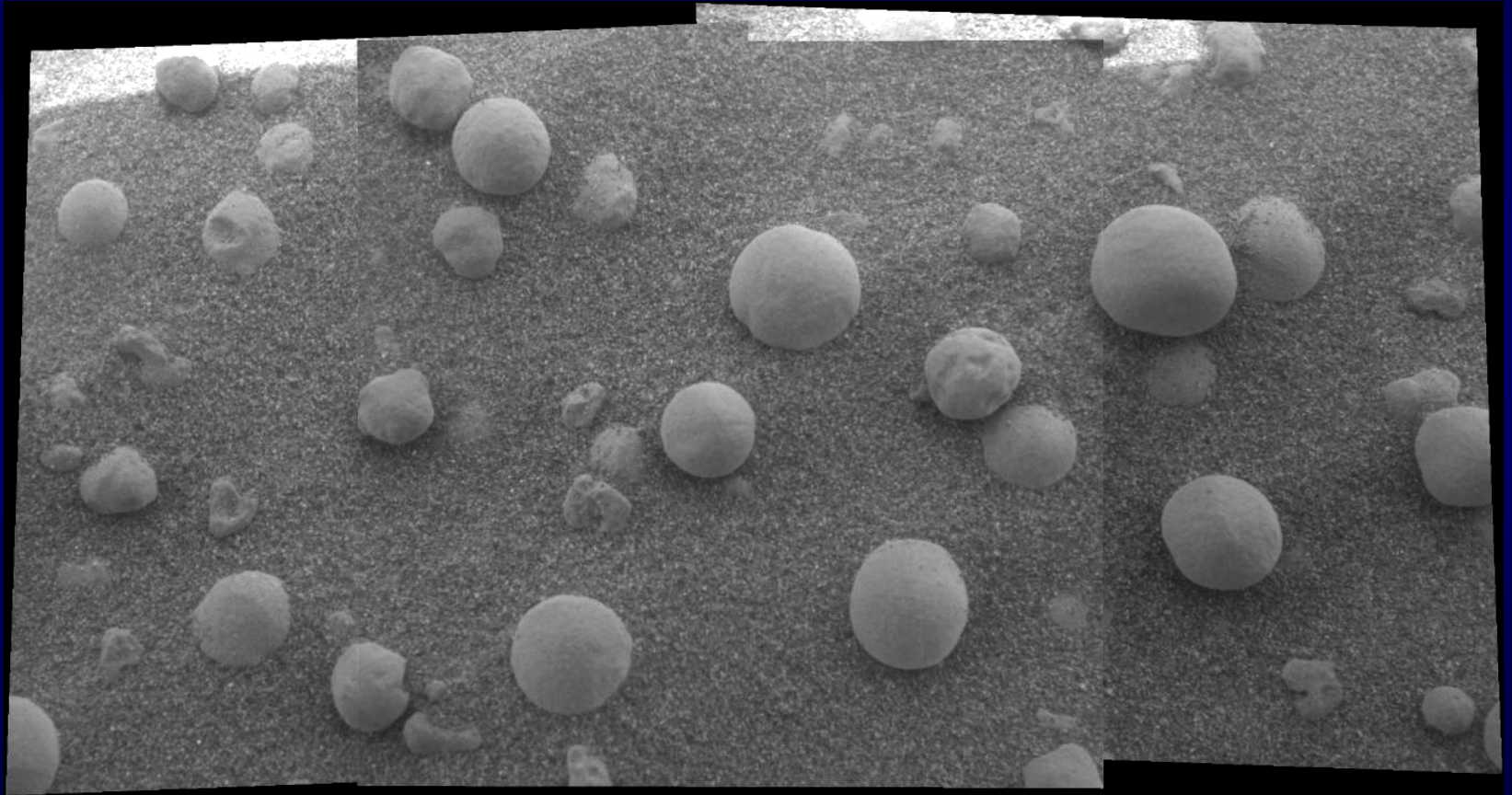
# 灰鐵礦







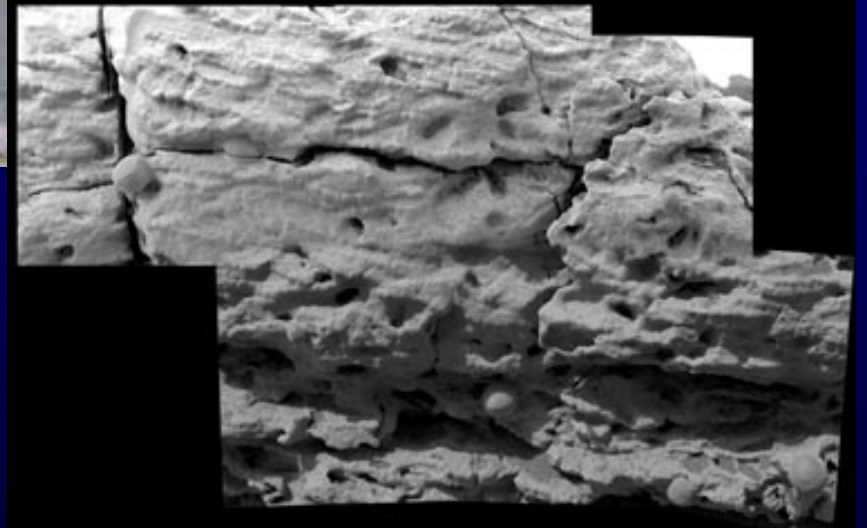
# Blueberry Field



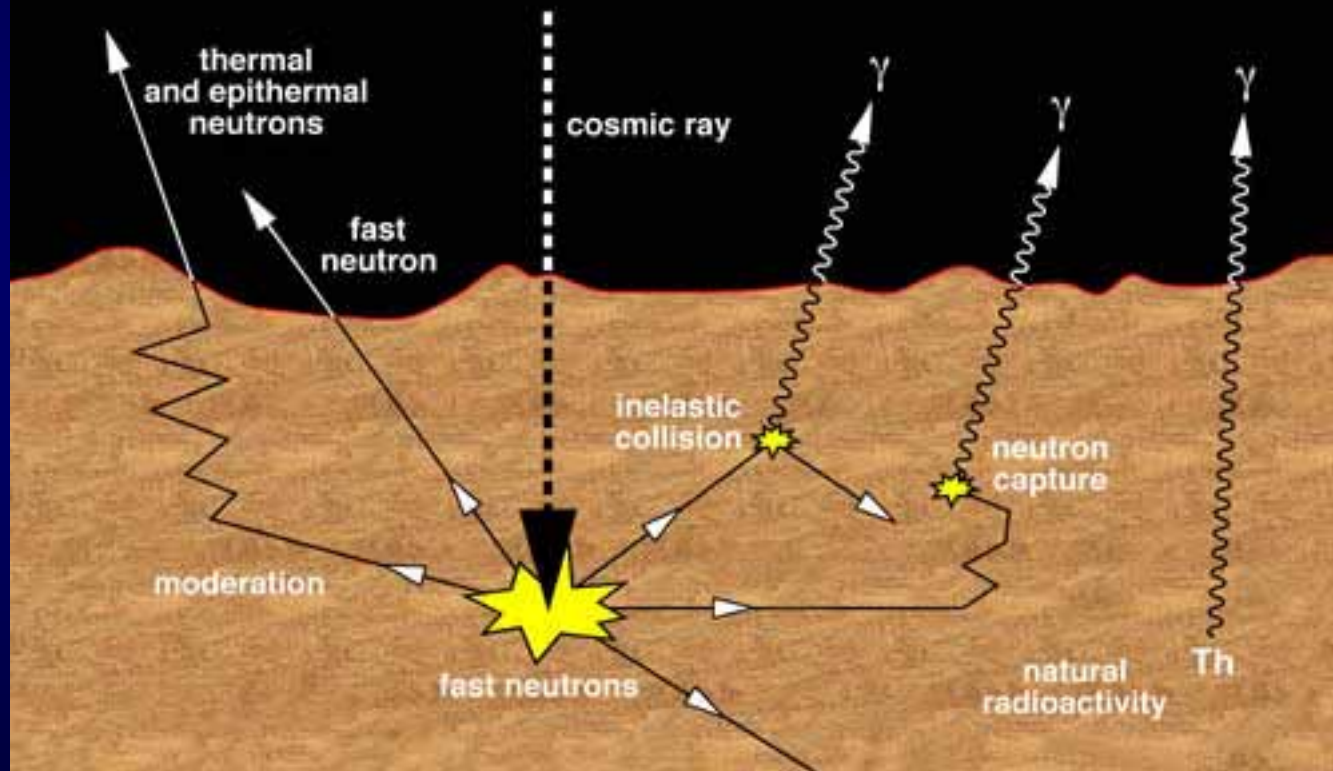
# 水蹟



Concretion

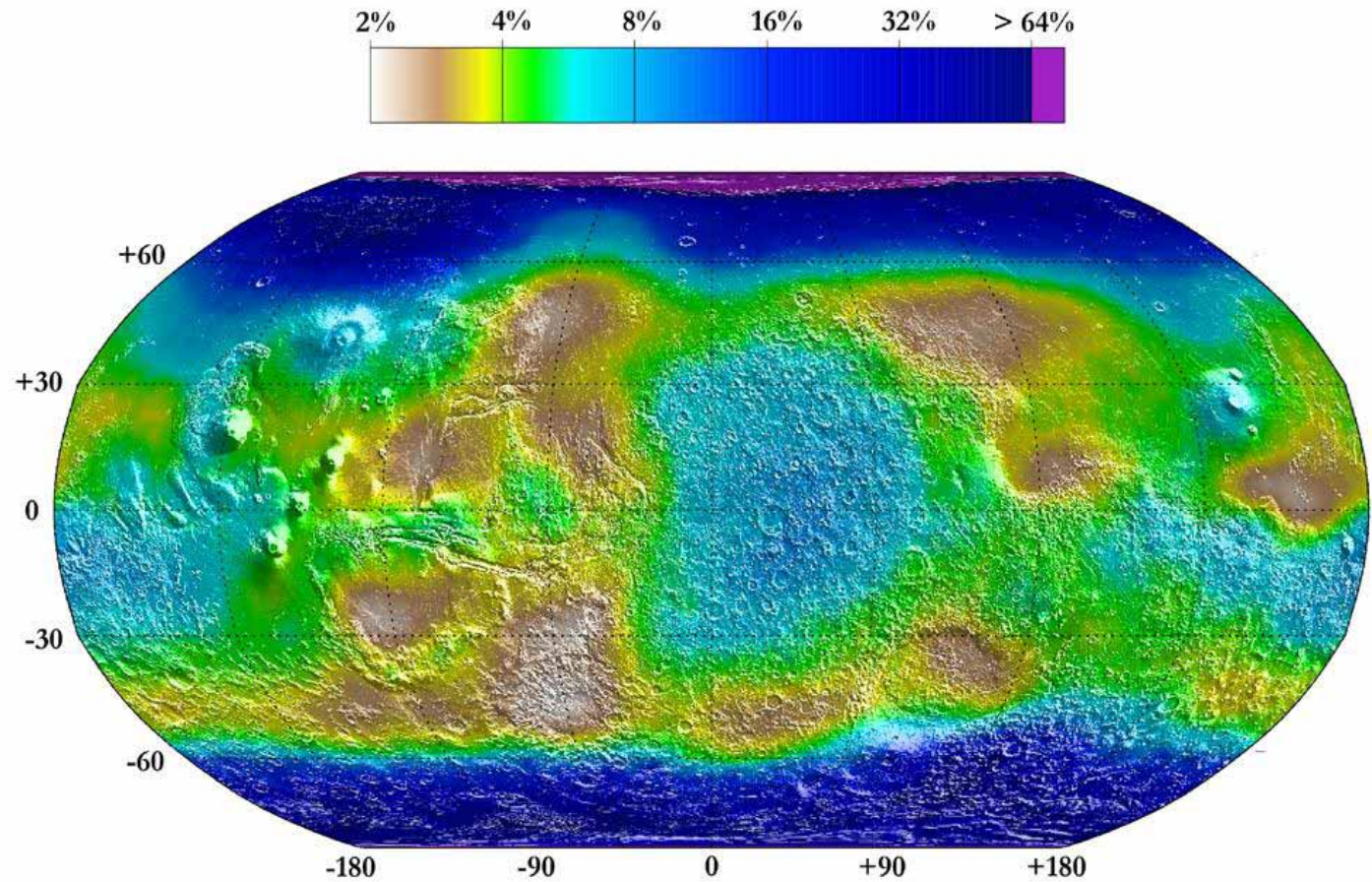


## Nuclear Radiation from a Planetary Surface

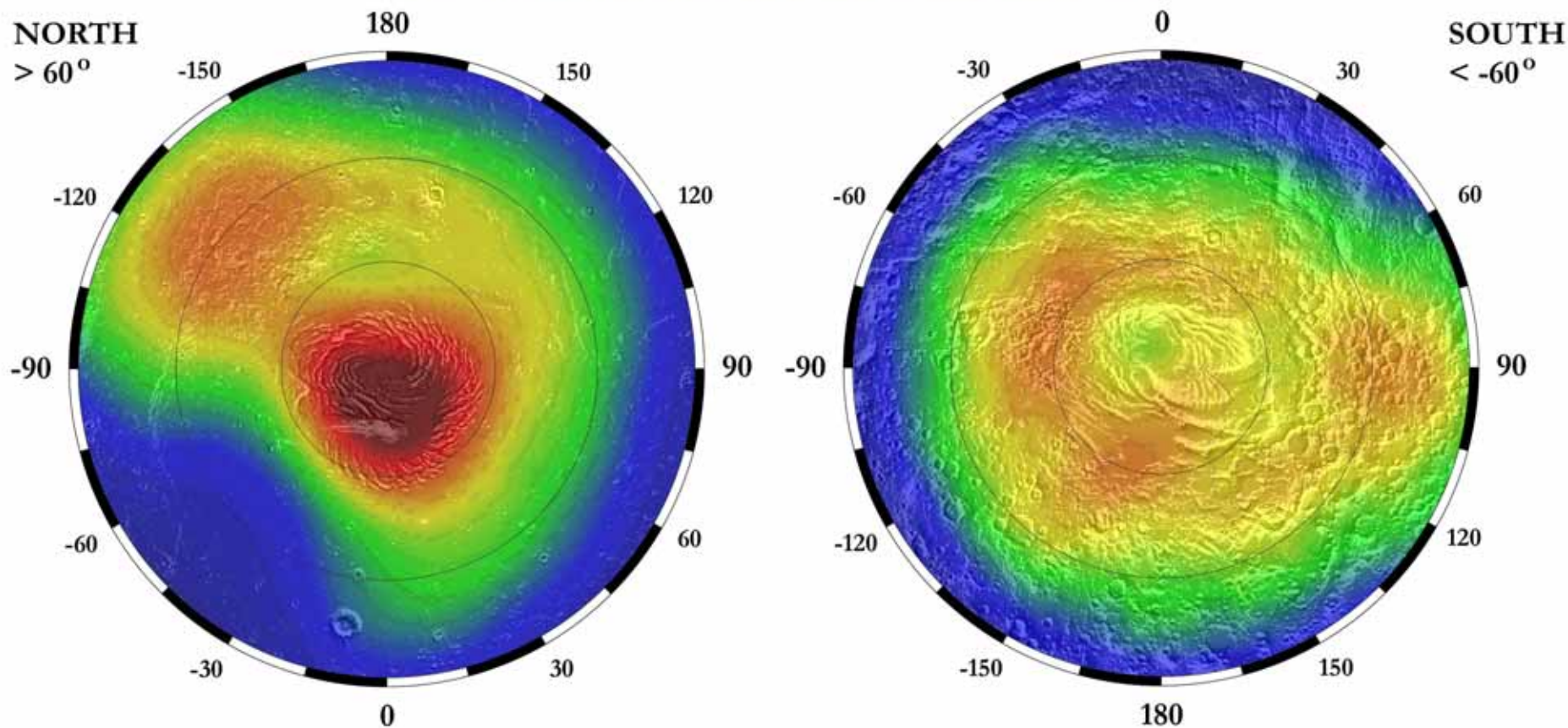
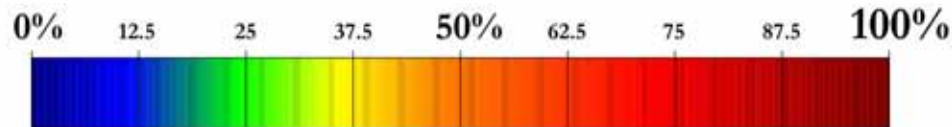




## Lower-Limit of Water Mass Fraction on Mars



# Water Equivalent Hydrogen Abundance



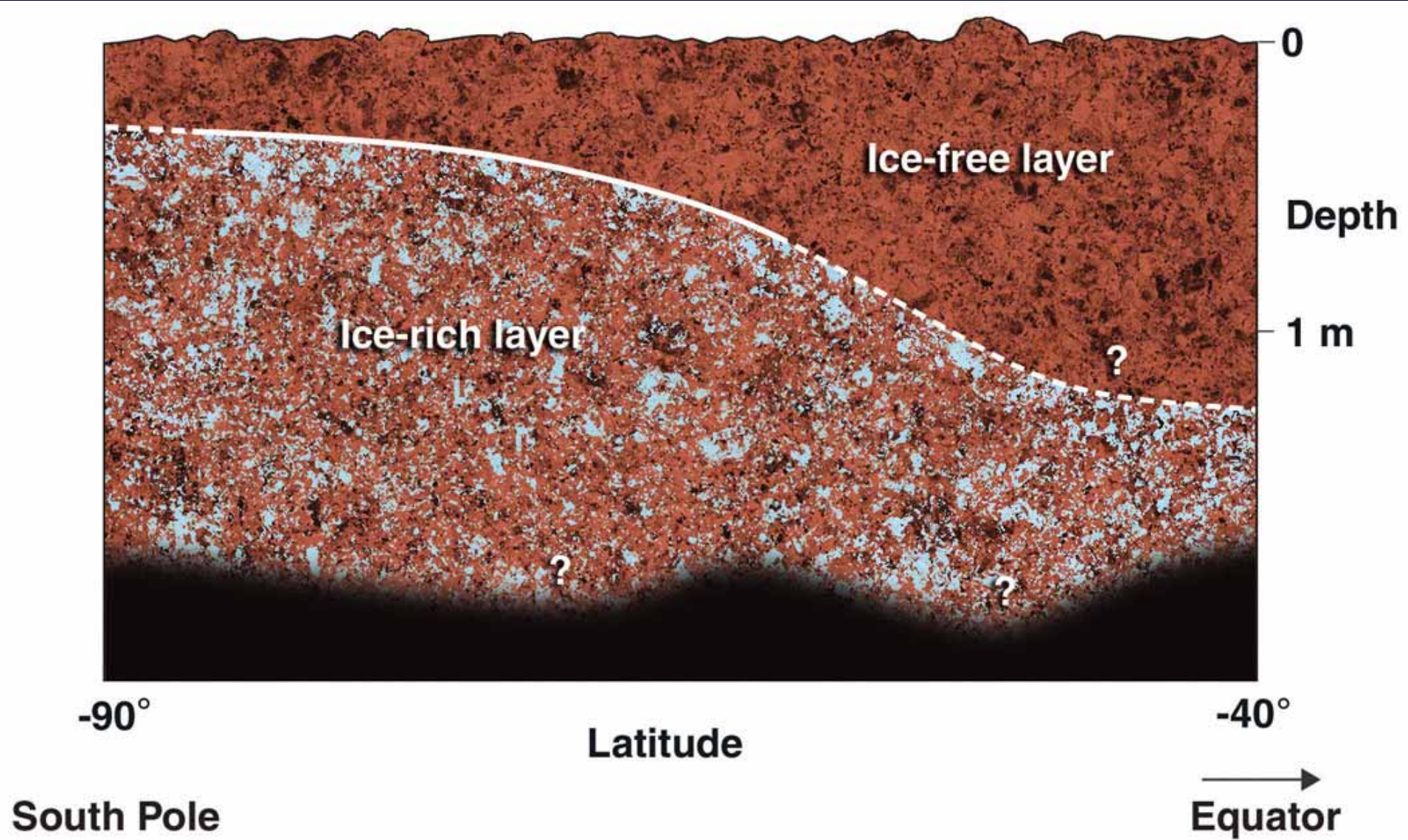
**Distribution of Water on Mars:** Overlay of water equivalent hydrogen abundances and a shaded relief map derived from MOLA topography. Mass percents of water were determined from epithermal neutron counting rates using the Neutron Spectrometer aboard Mars Odyssey between Feb. 2002 and Apr. 2003.

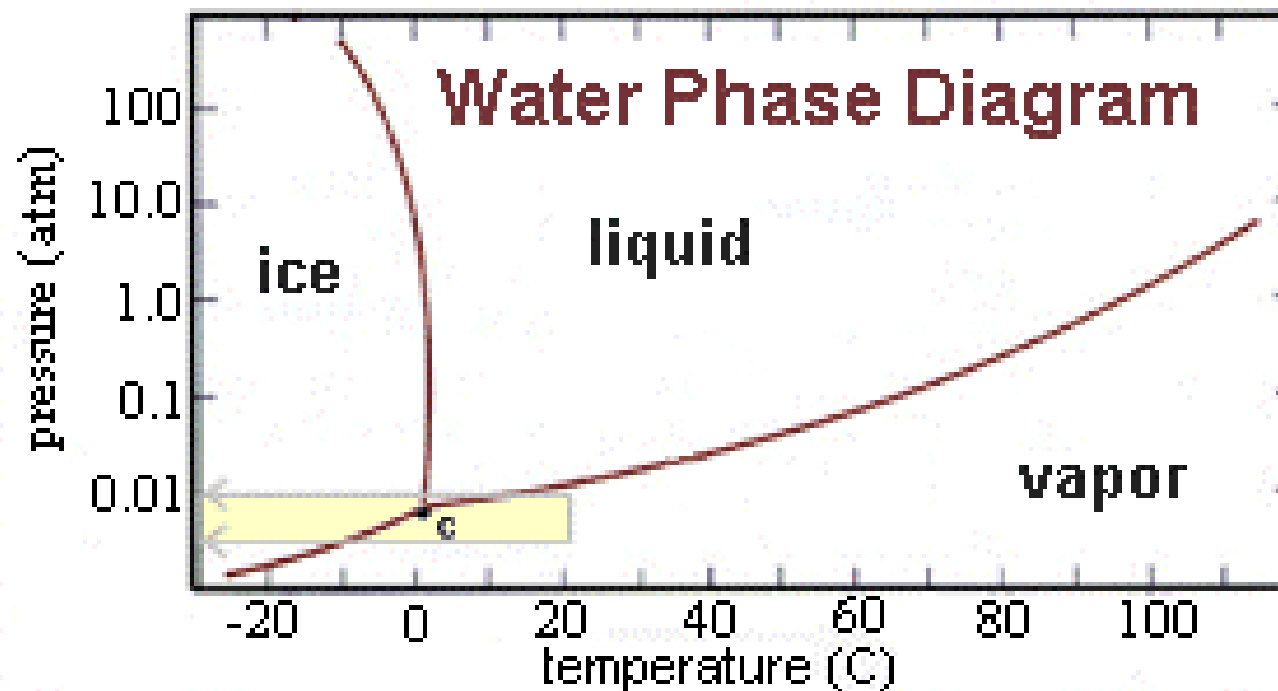
Reference: Feldman W. C., T. H. Prettyman, S. Maurice, J. J. Plant, D. L. Bish, D. T. Vaniman, M. T. Mellon, A. E. Metzger, S. W. Squyres, S. Karantinelake, W. V. Boynton, R. C. Elphic, H. O. Funsten, D. J. Lawrence, and R. L. Tokar, The global distribution of near-surface hydrogen on Mars, *JGR-planet*, submitted July 2003.

These data were generated by the Planetary Science Team at Los Alamos: B. Barraclough, D. Bish, D. Delapp, R. Elphic, W. Feldman, H. Funsten, O. Gasnault\*, D. Lawrence, S. Maurice\*, G. McKinney, K. Moore, T. Prettyman, R. Tokar, D. Vaniman, and R. Wiens. \* Also at Observatoire Midi-Pyrénées, France

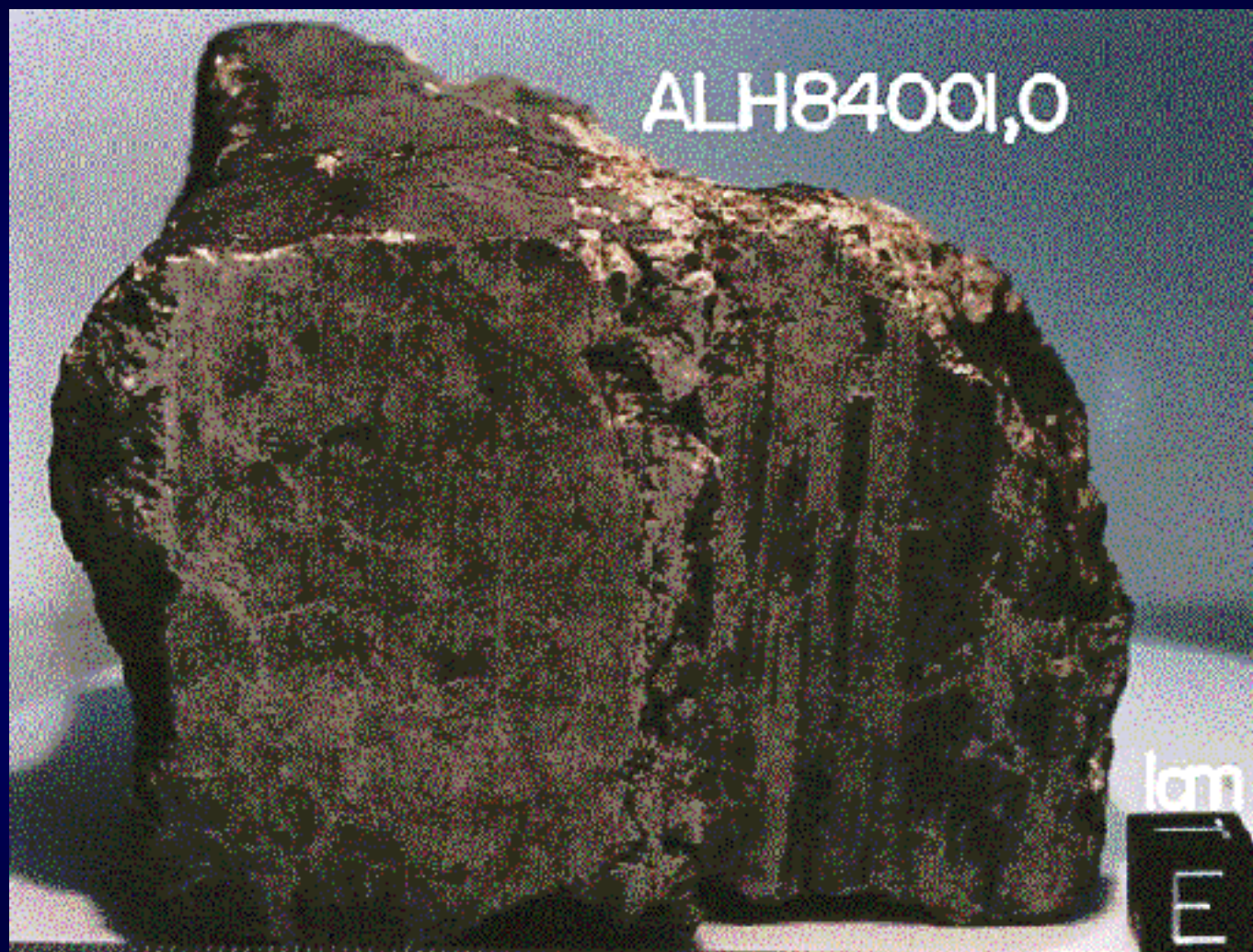
The neutron spectrometer aboard Mars Odyssey, a component of the Gamma-ray Spectrometer suite of instruments, was designed and built by the Los Alamos National Laboratory and is operated by the University of Arizona in Tucson. The Mars Odyssey mission is managed by the Jet Propulsion Laboratory.

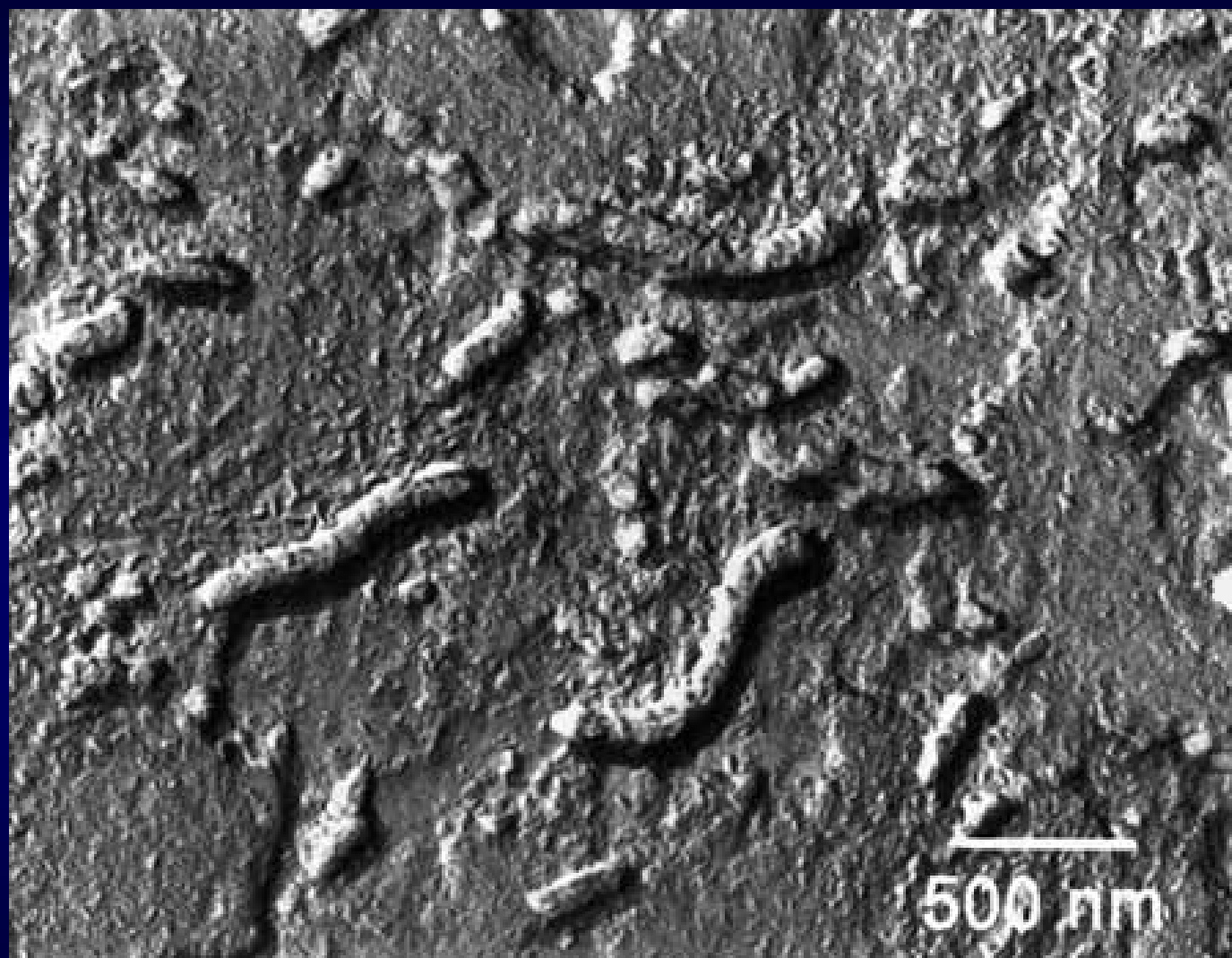




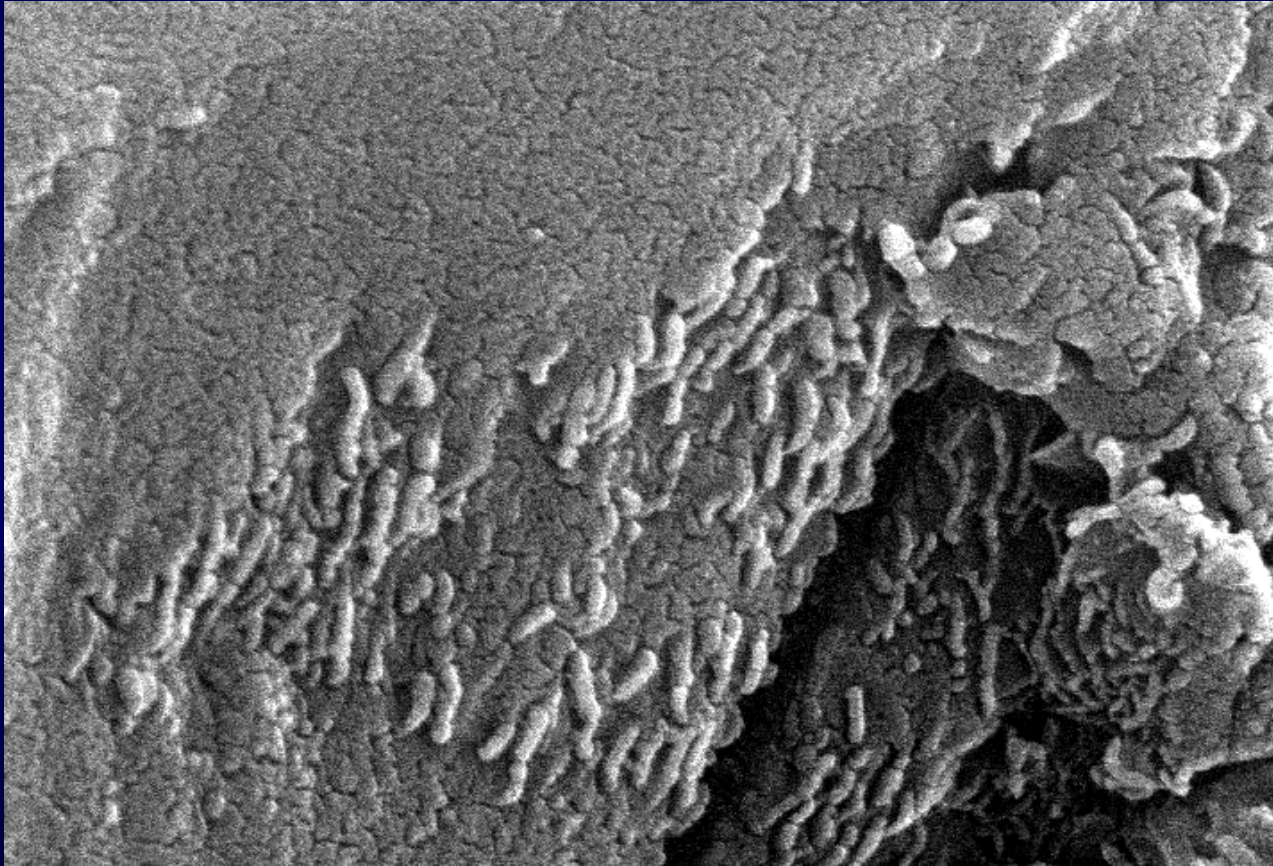








# Ancient Life?





# Ancient Life?

