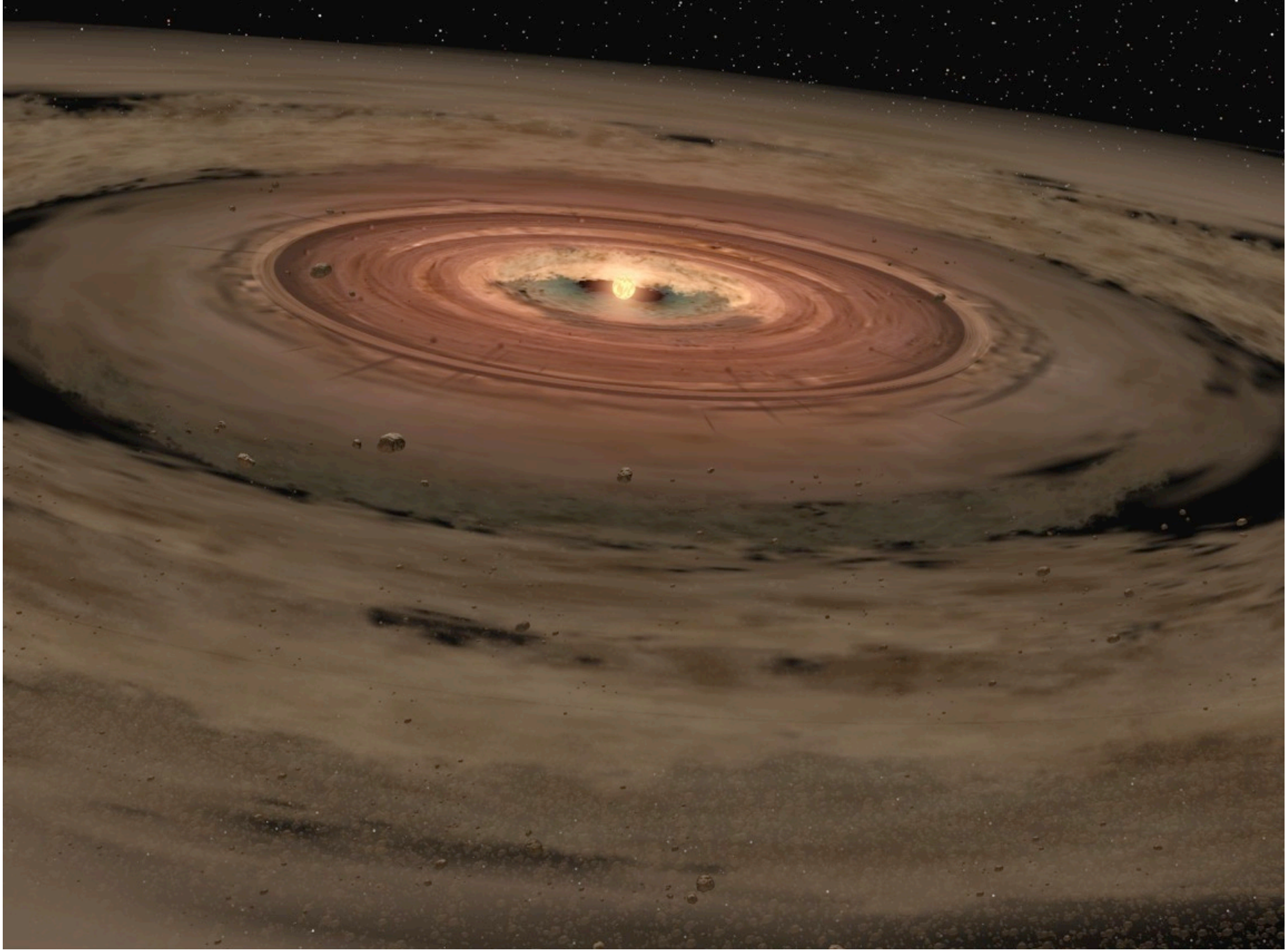


Comparative Planetology

12.001 – 4 December 2013



Courtesy of [NASA](#). Image in the public domain.

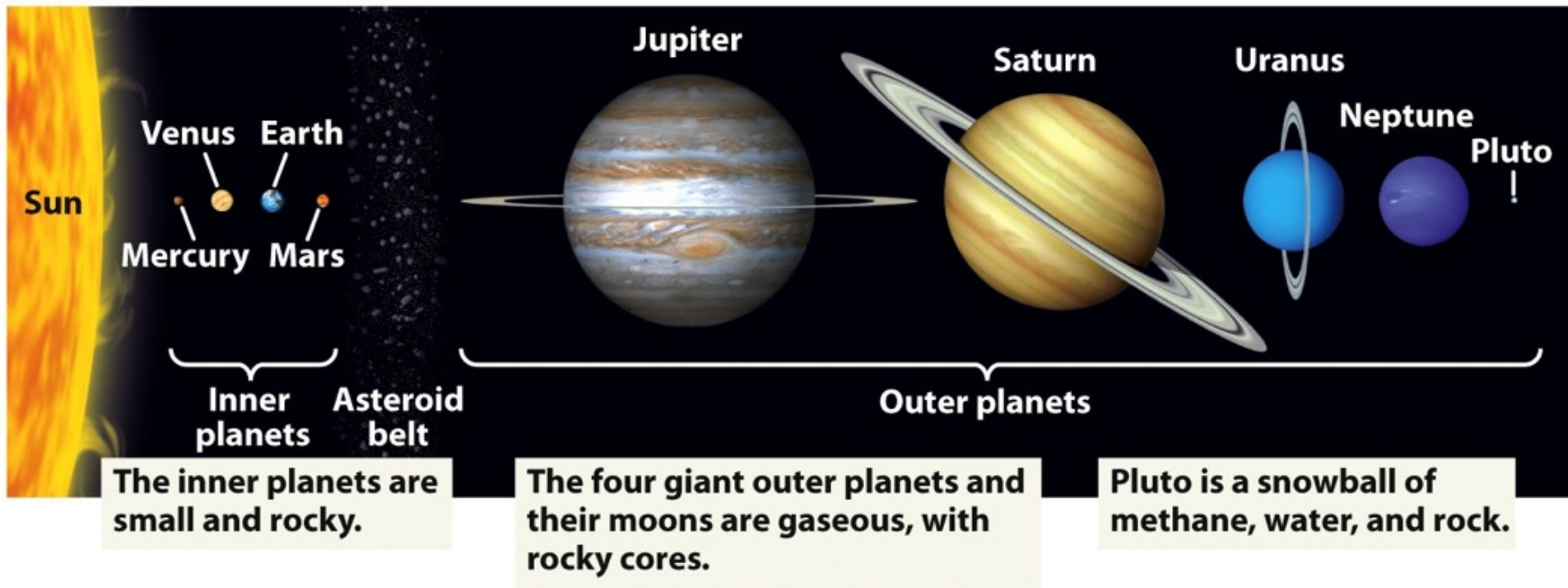
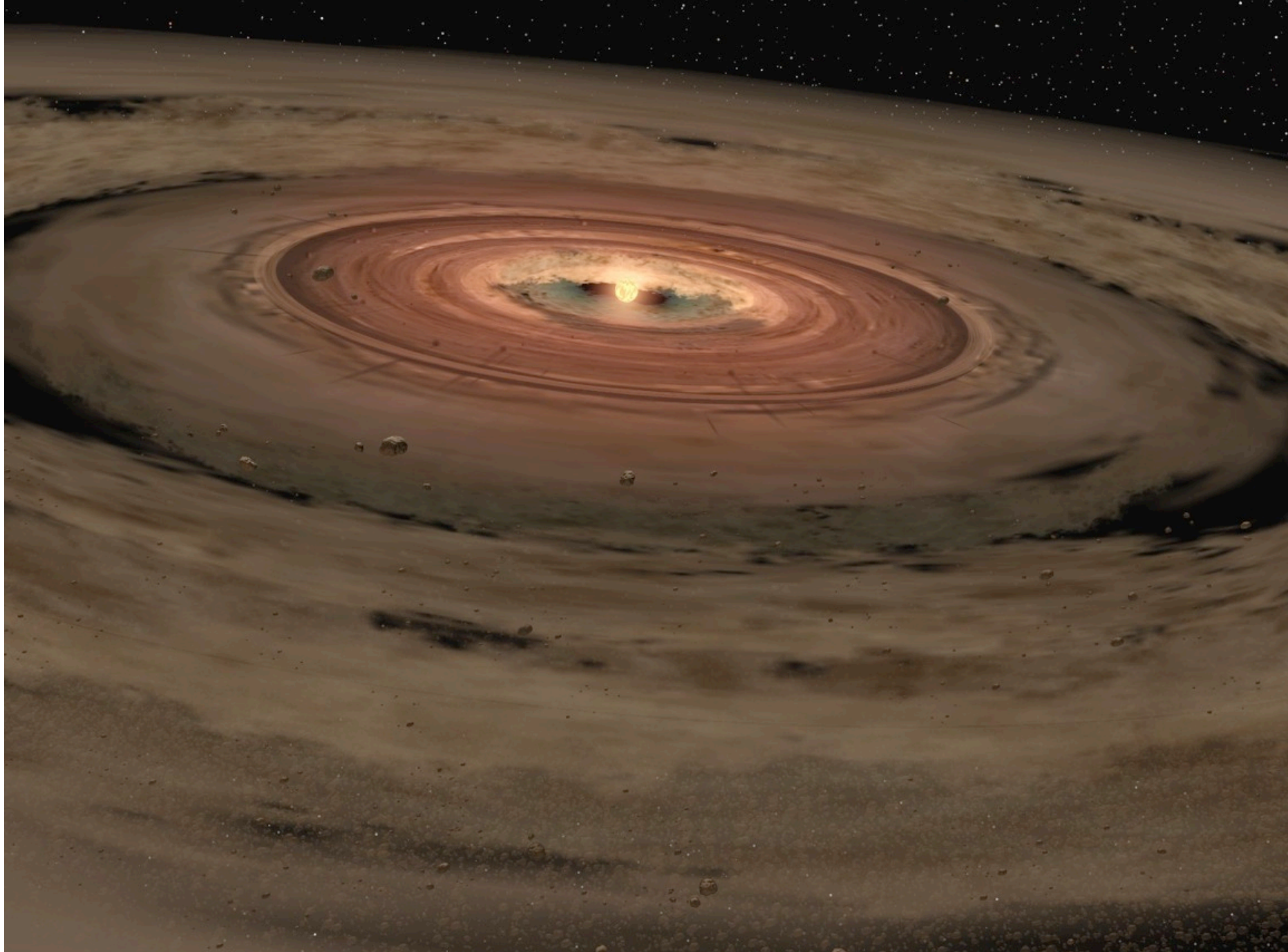


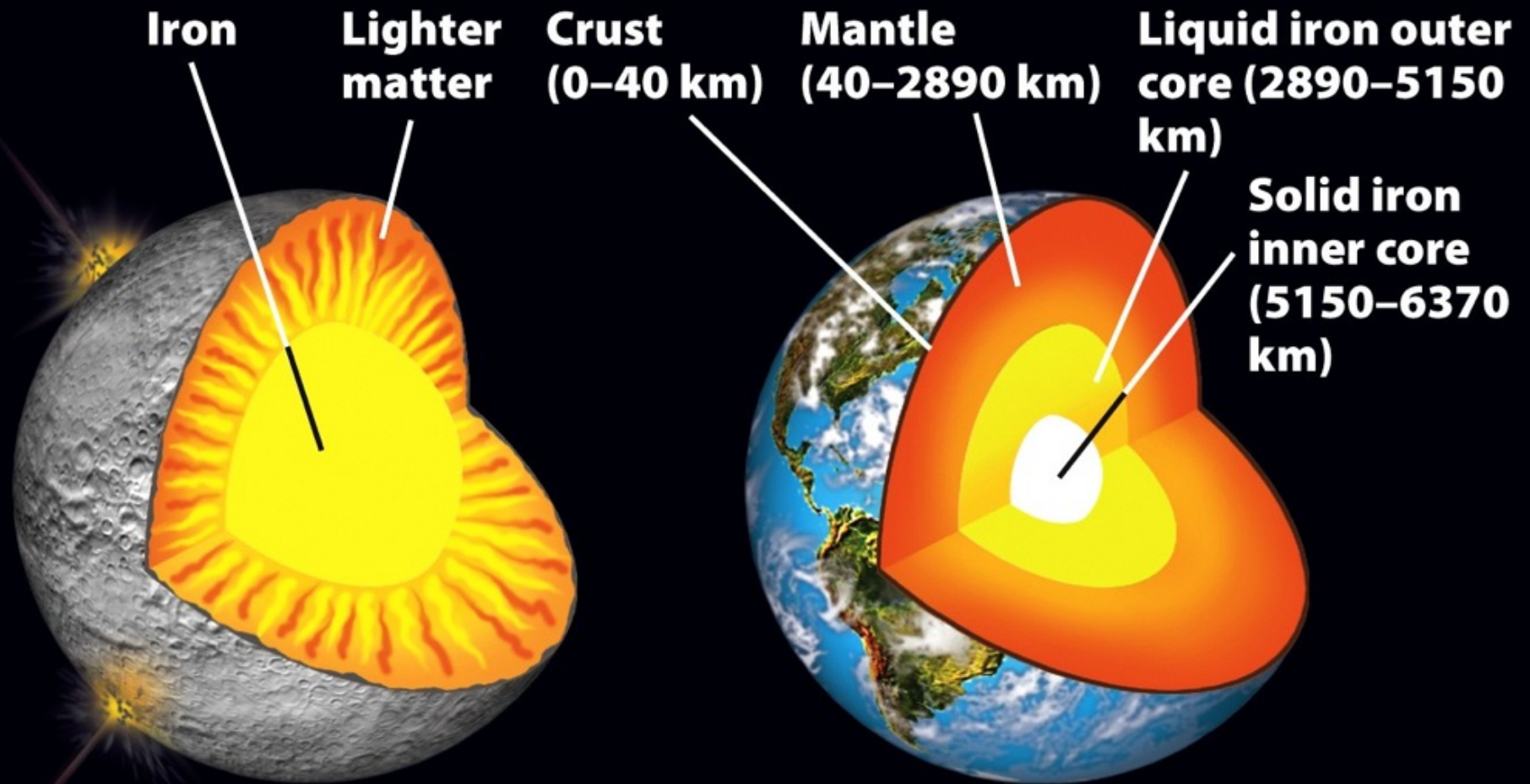
Figure 9.3
Understanding Earth, Sixth Edition
 © 2010 W. H. Freeman and Company

© W. H. Freeman and Company. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <http://ocw.mit.edu/help/faq-fair-use/>.



Courtesy of [NASA](#). Image in the public domain.





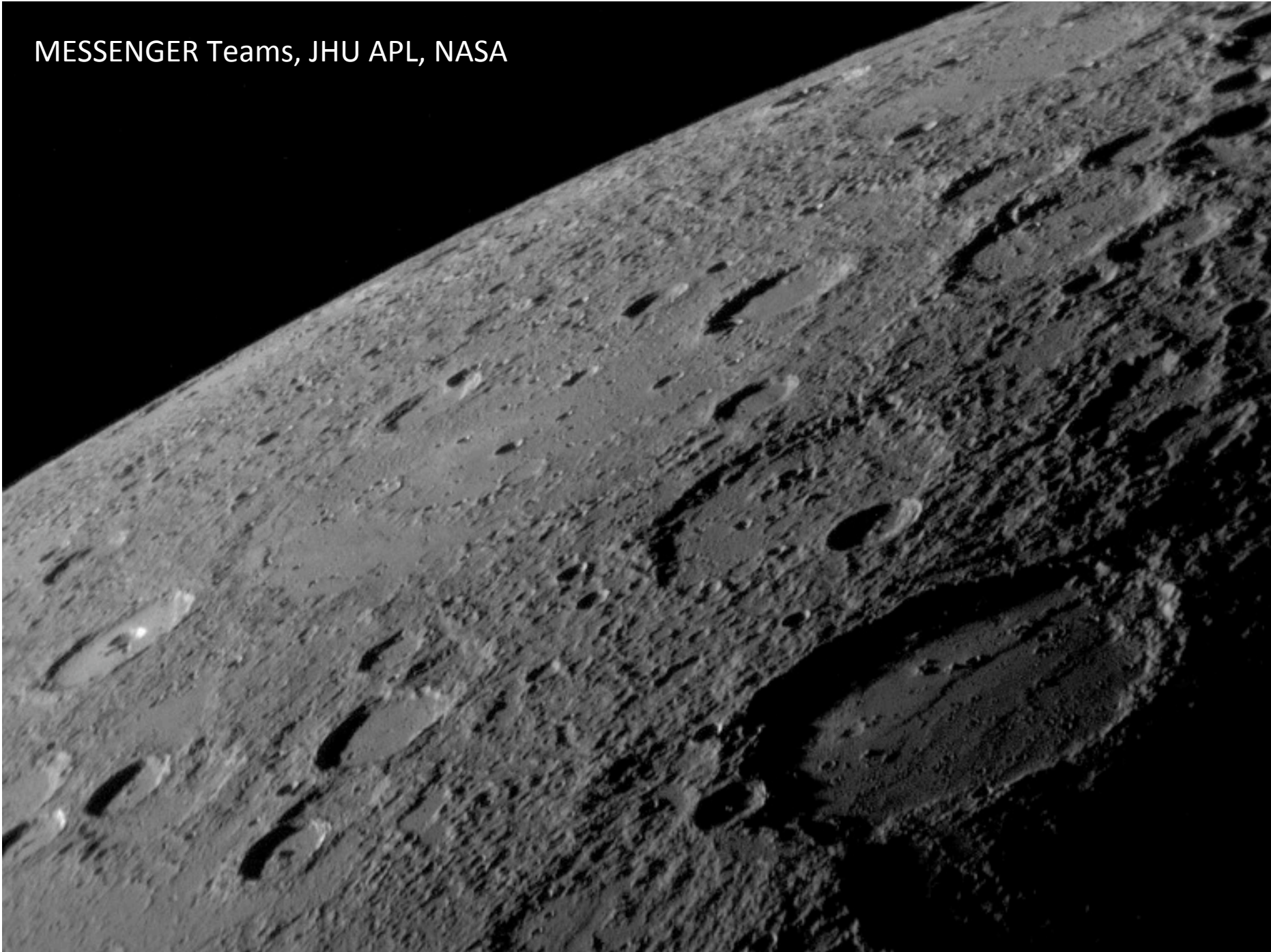
During gravitational differentiation, iron sank to the center and lighter material floated upward...

...to give us Earth as a layered planet.

Figure 9.5
Understanding Earth, Sixth Edition
 © 2010 W. H. Freeman and Company

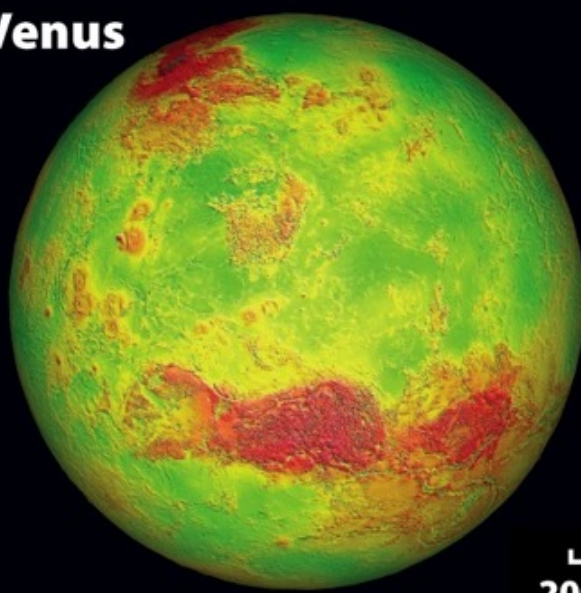
© W. H. Freeman and Company. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <http://ocw.mit.edu/help/faq-fair-use/>.

MESSENGER Teams, JHU APL, NASA

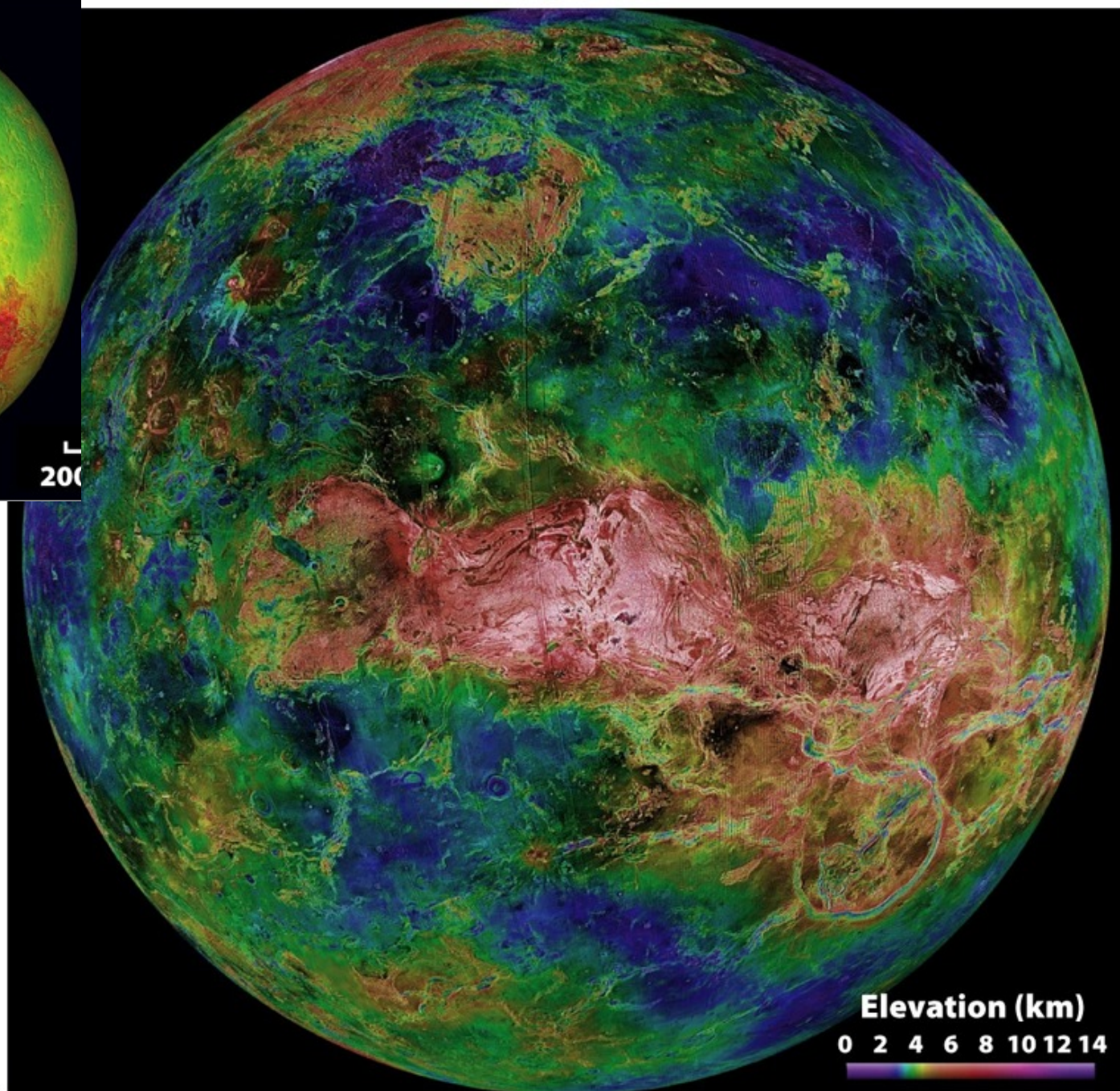


Courtesy of [NASA](#). Photograph in the public domain.

Venus



L
200

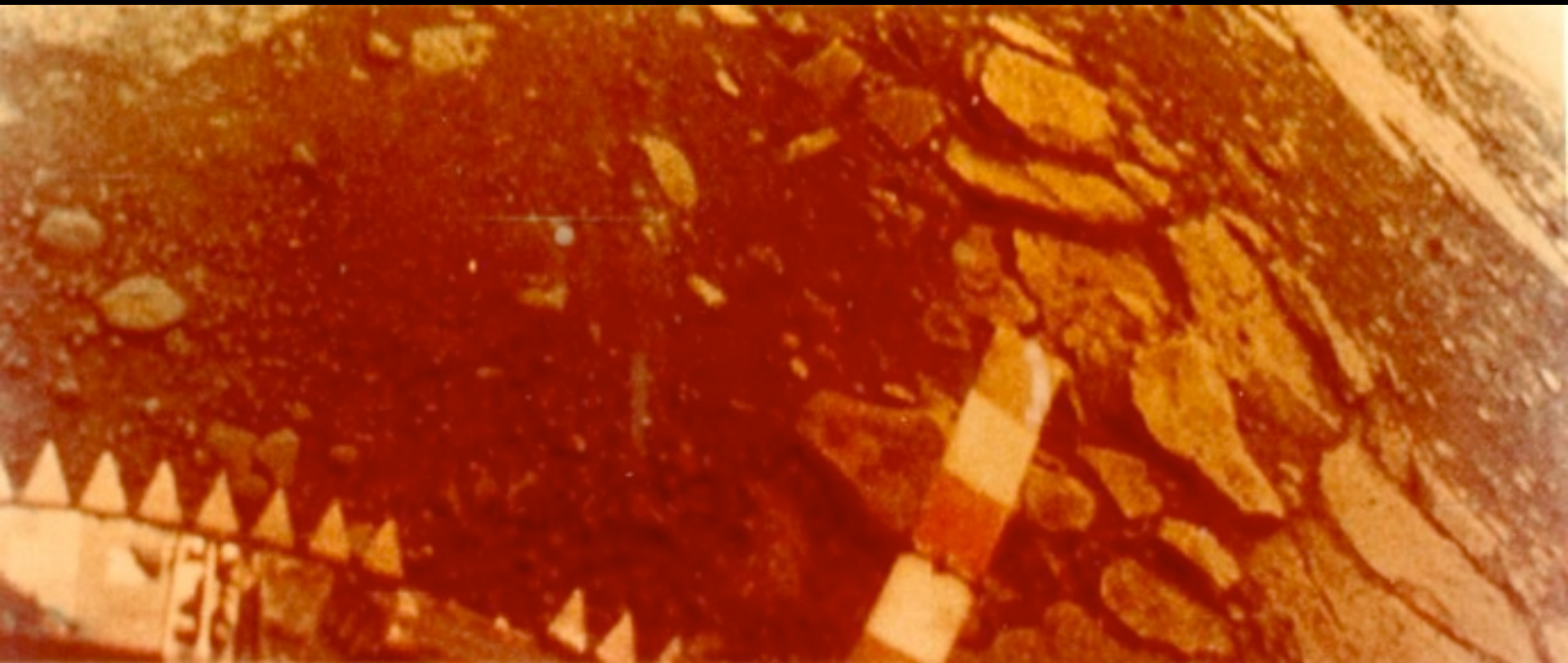


Elevation (km)

0 2 4 6 8 10 12 14

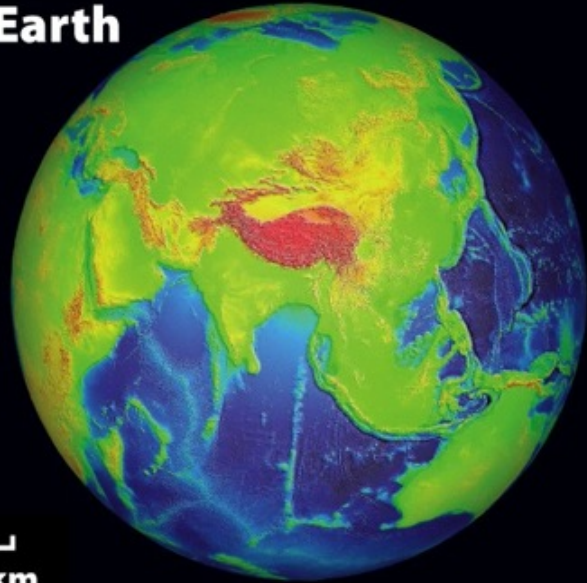


Courtesy of [NASA](#). Images in the public domain.



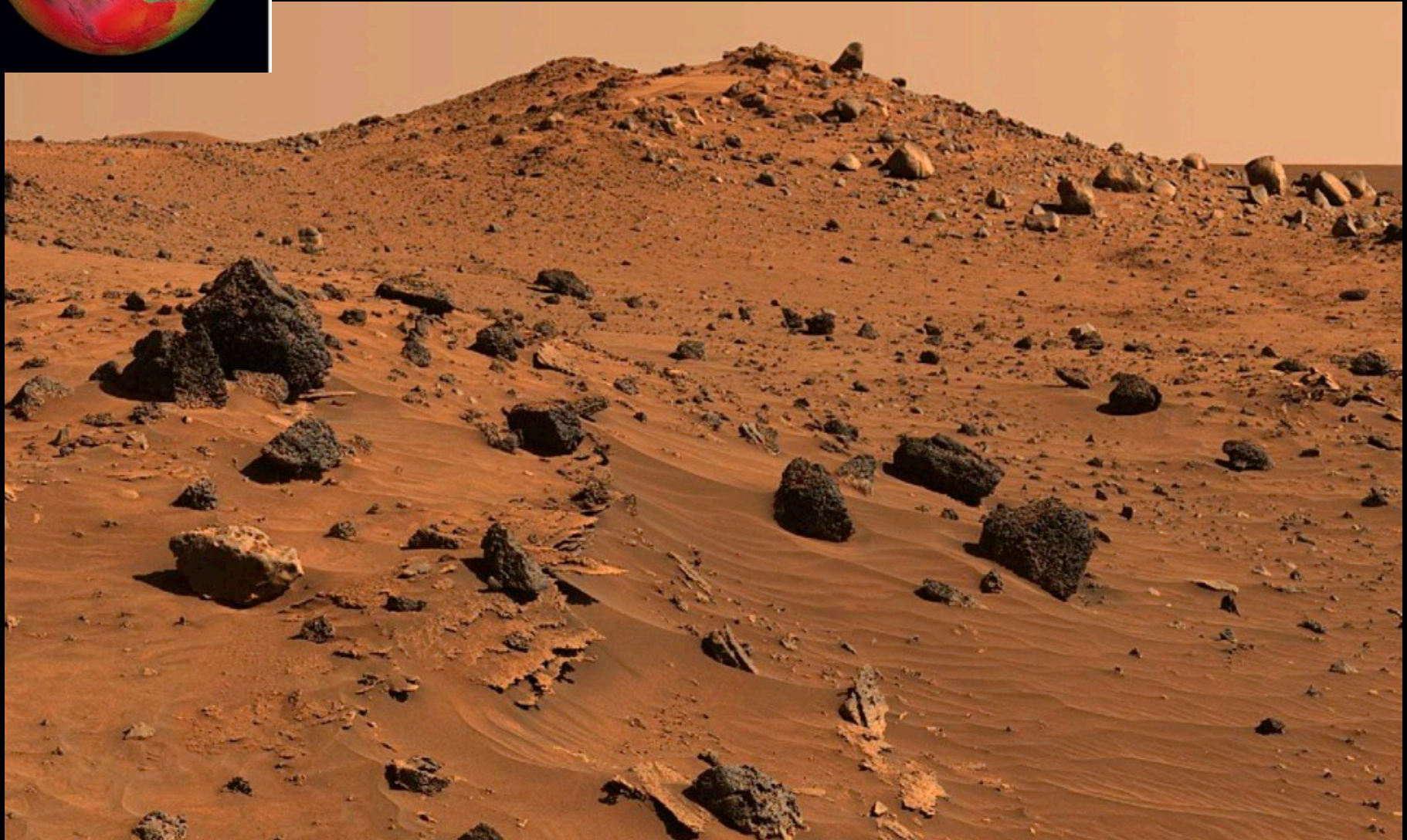
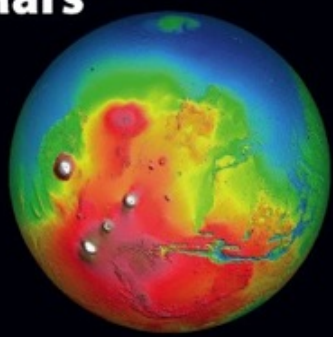
Courtesy of [NASA](#). Photograph in the public domain.

Earth

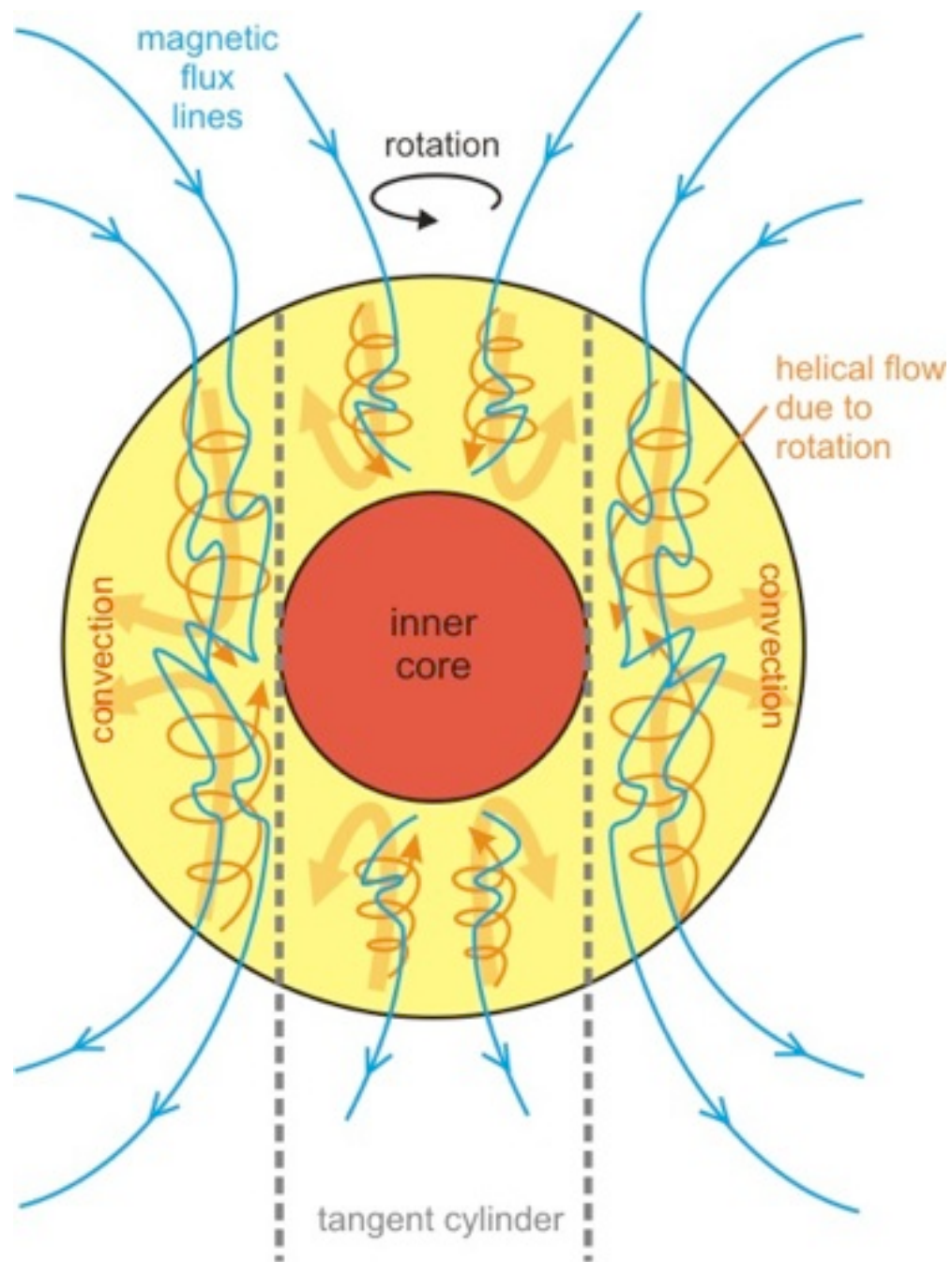


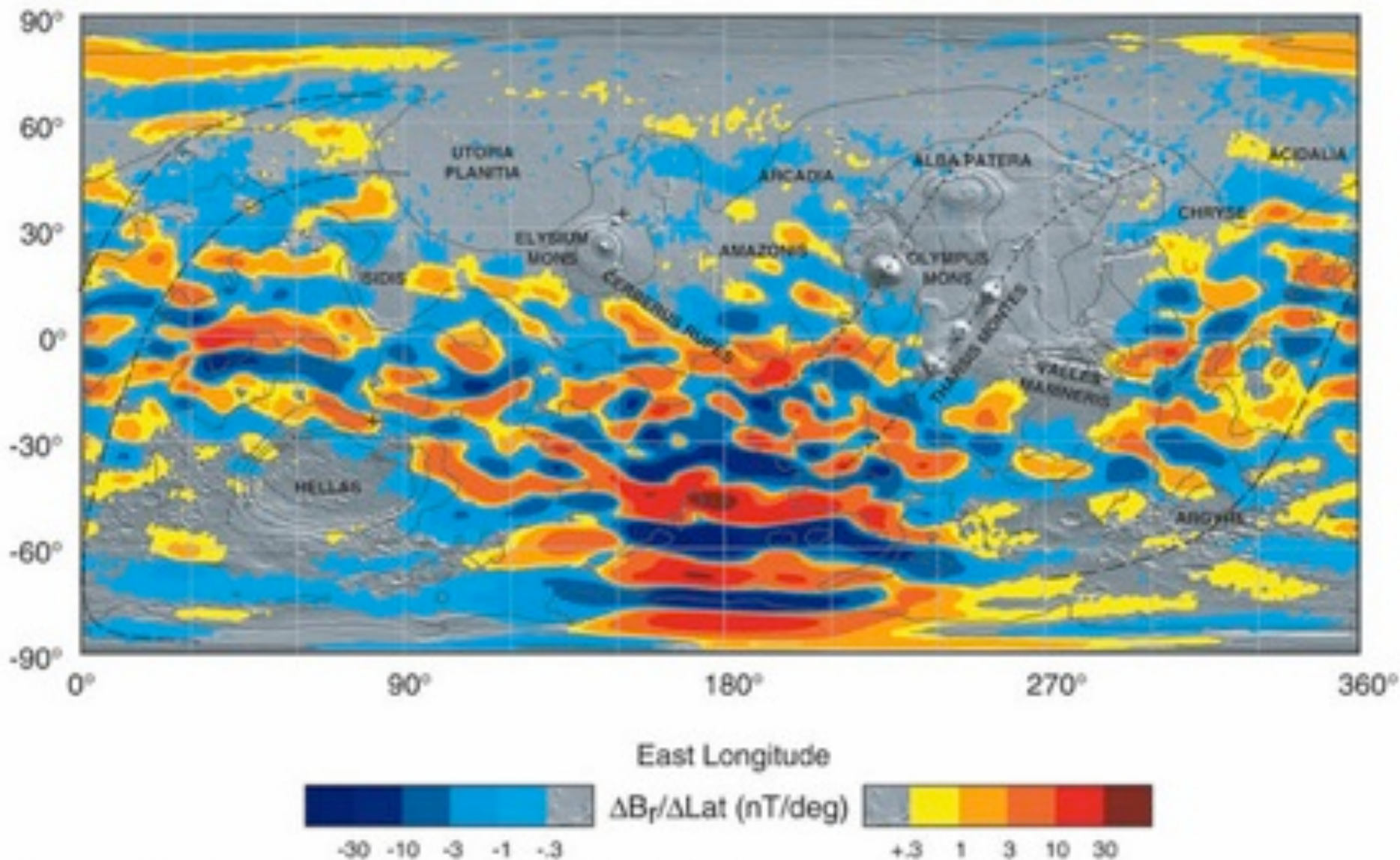
Courtesy of NASA. Image in the public domain.

Mars



Photograph courtesy of NASA. Image in the public domain.



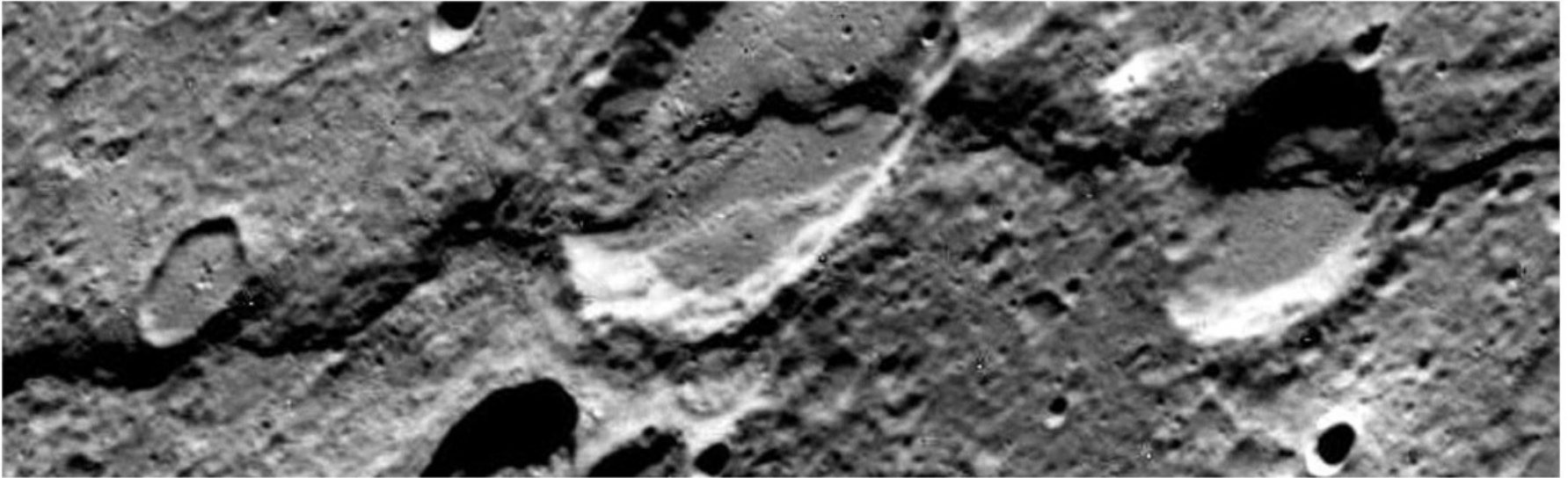


Connerney, J. E. P. et al., (2005) Proc. Natl. Acad. Sci. USA, 102, No. 42, 14970-14975.

R1198_1/06

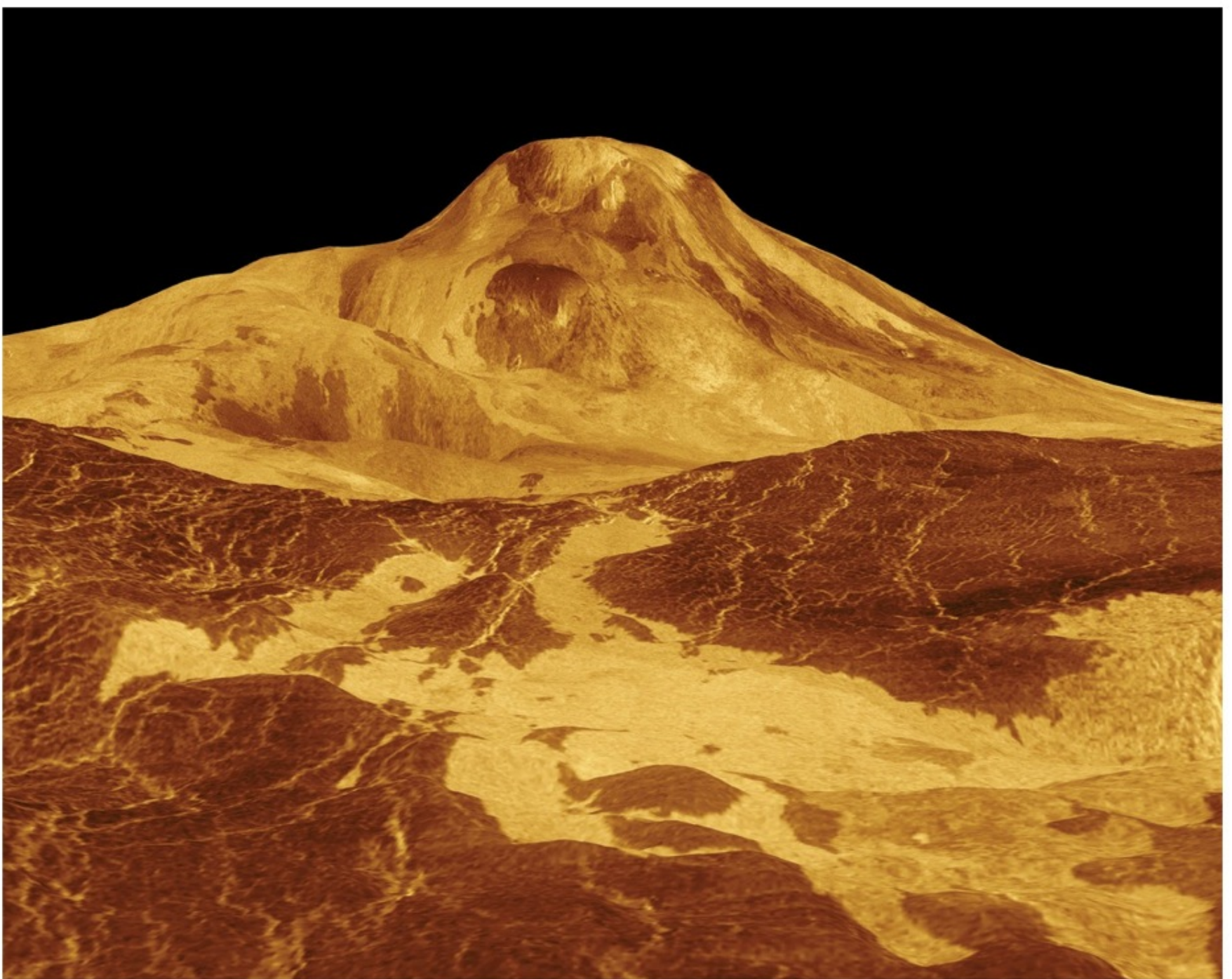
Courtesy of NASA. Figure in the public domain.

Source: Connerney, J. E. P., M. H. Acuña, et al. "Tectonic Implications of Mars Crustal Magnetism." *Proceedings of the National Academy of Sciences of the United States of America* 102, no. 42 (2005): 14970-75.

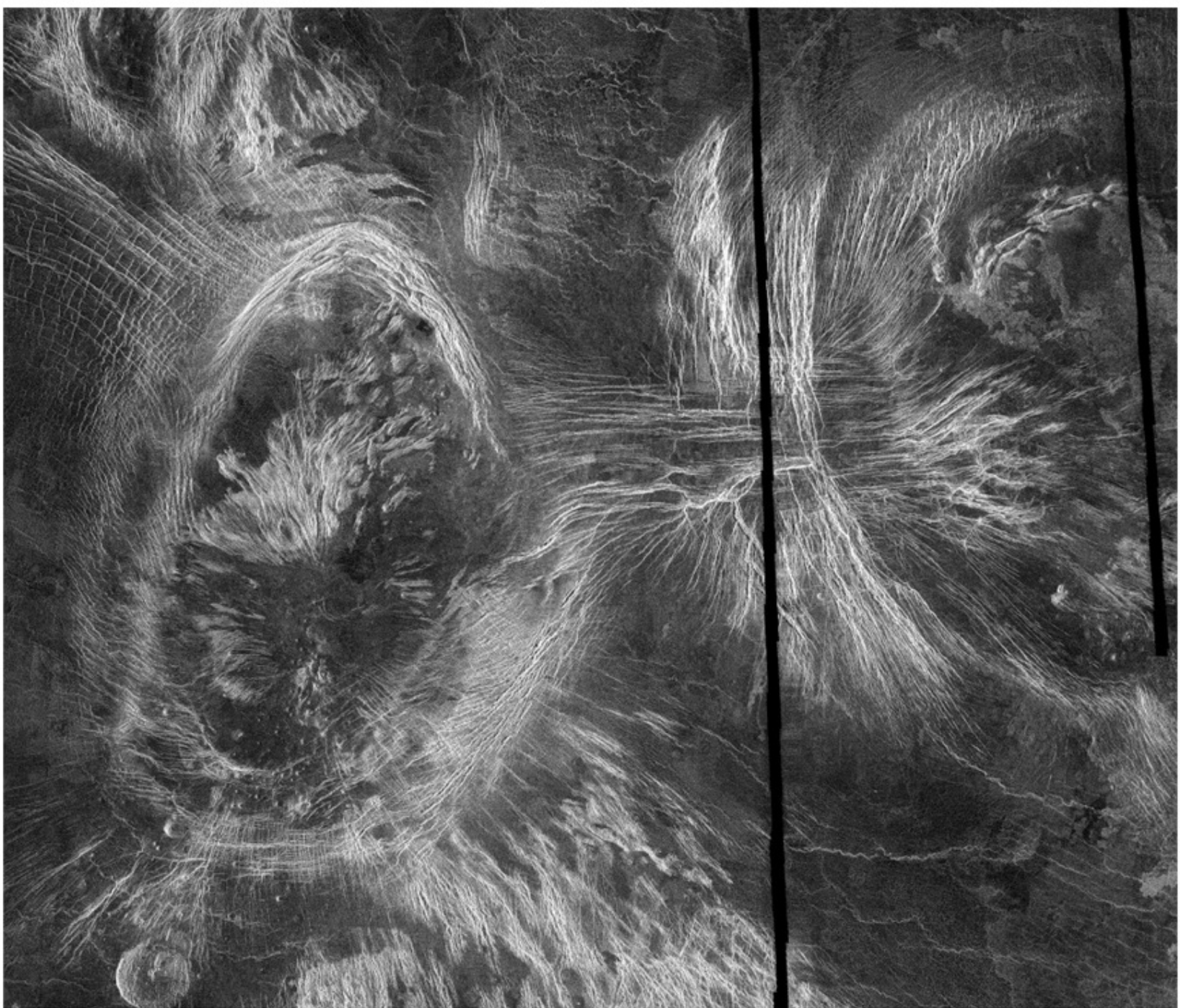


Courtesy of NASA. Image in the public domain.

Fault scarp produced by cooling and contraction of Mercury

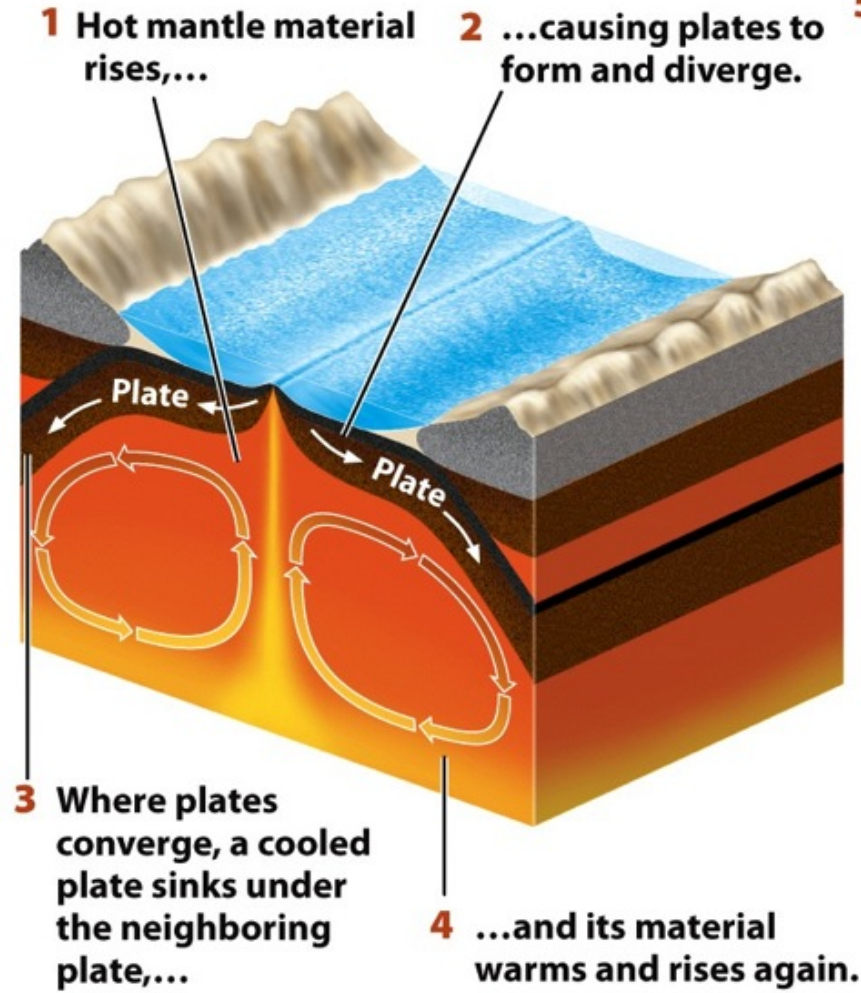


Courtesy of NASA. Images in the public domain.



Courtesy of NASA. Images in the public domain.

(a) Plate tectonics on Earth



(b) Flake tectonics on Venus

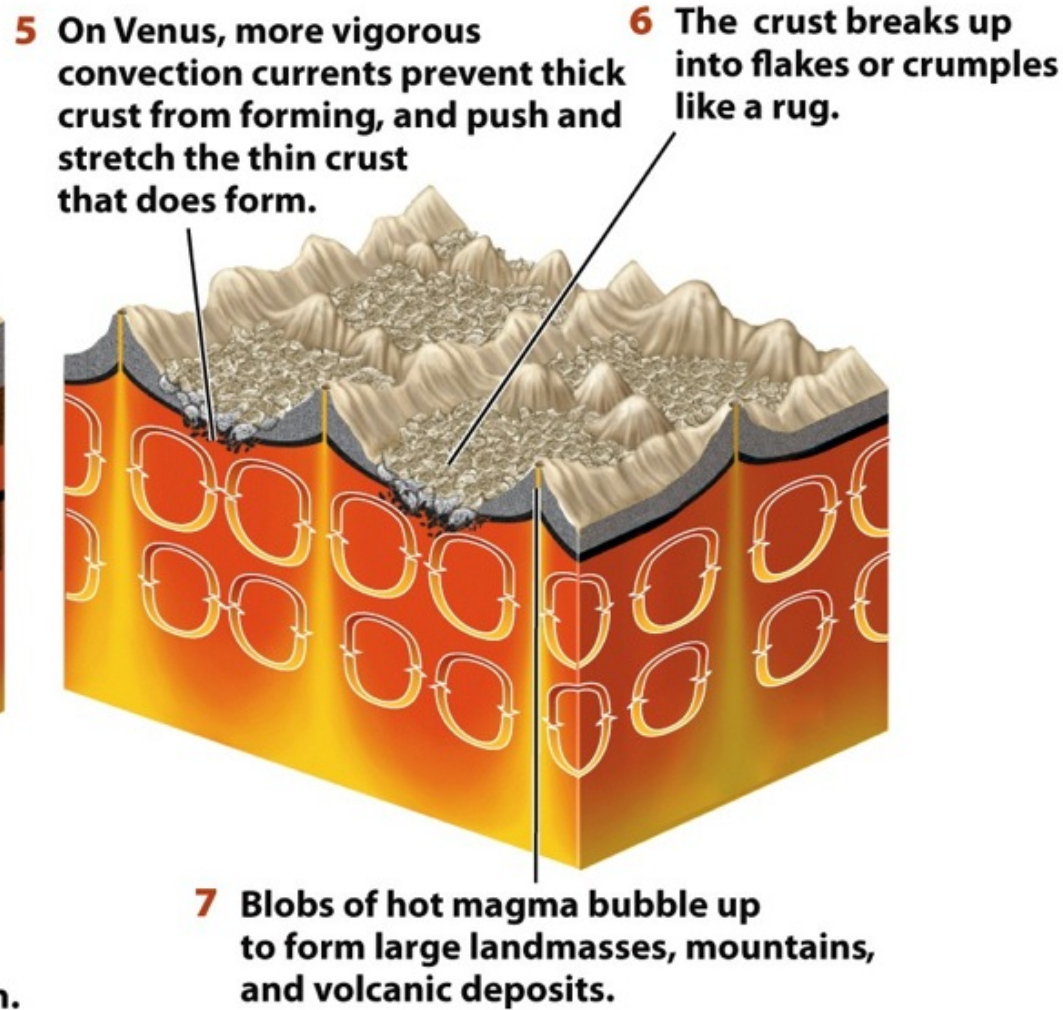
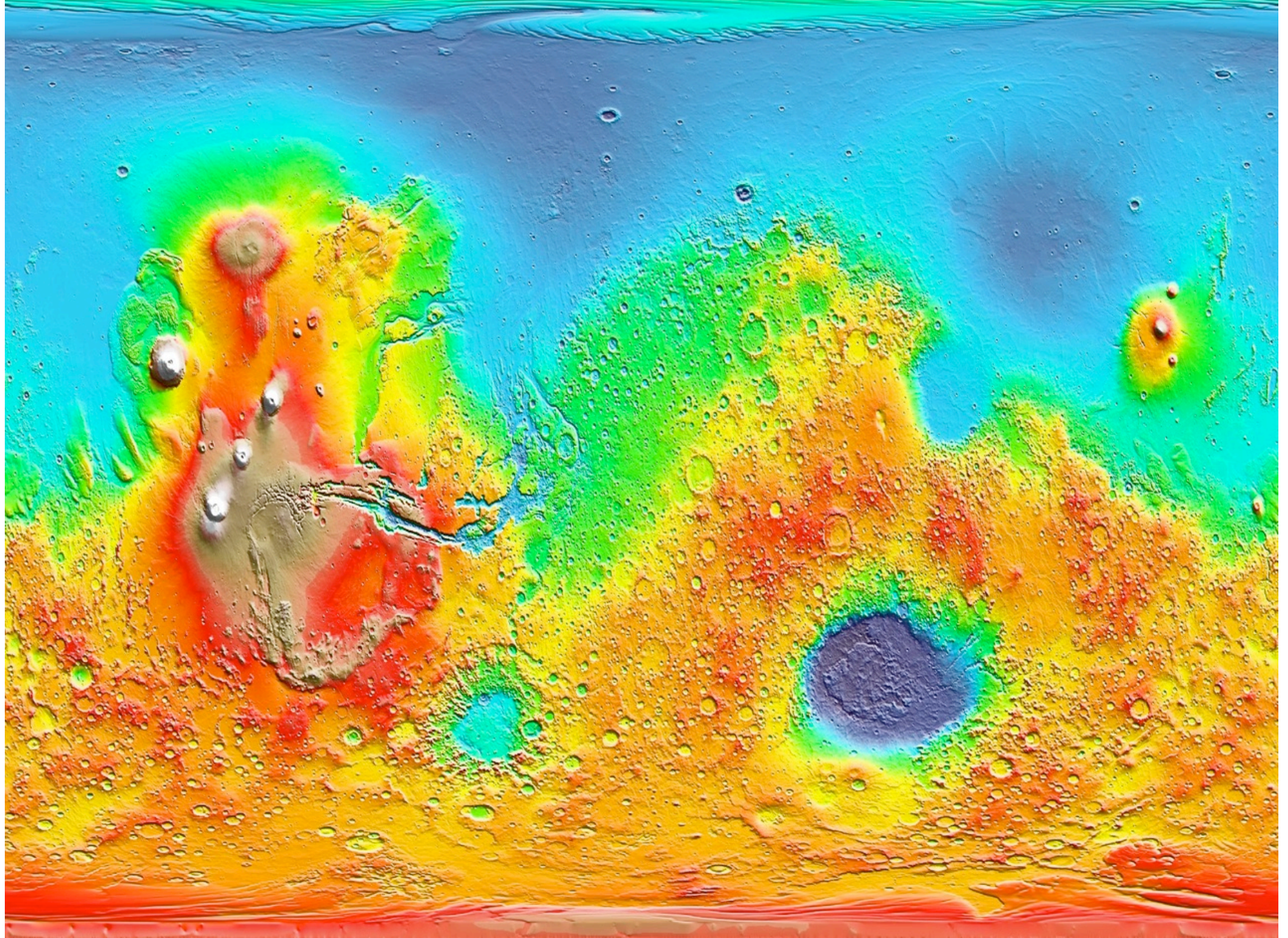
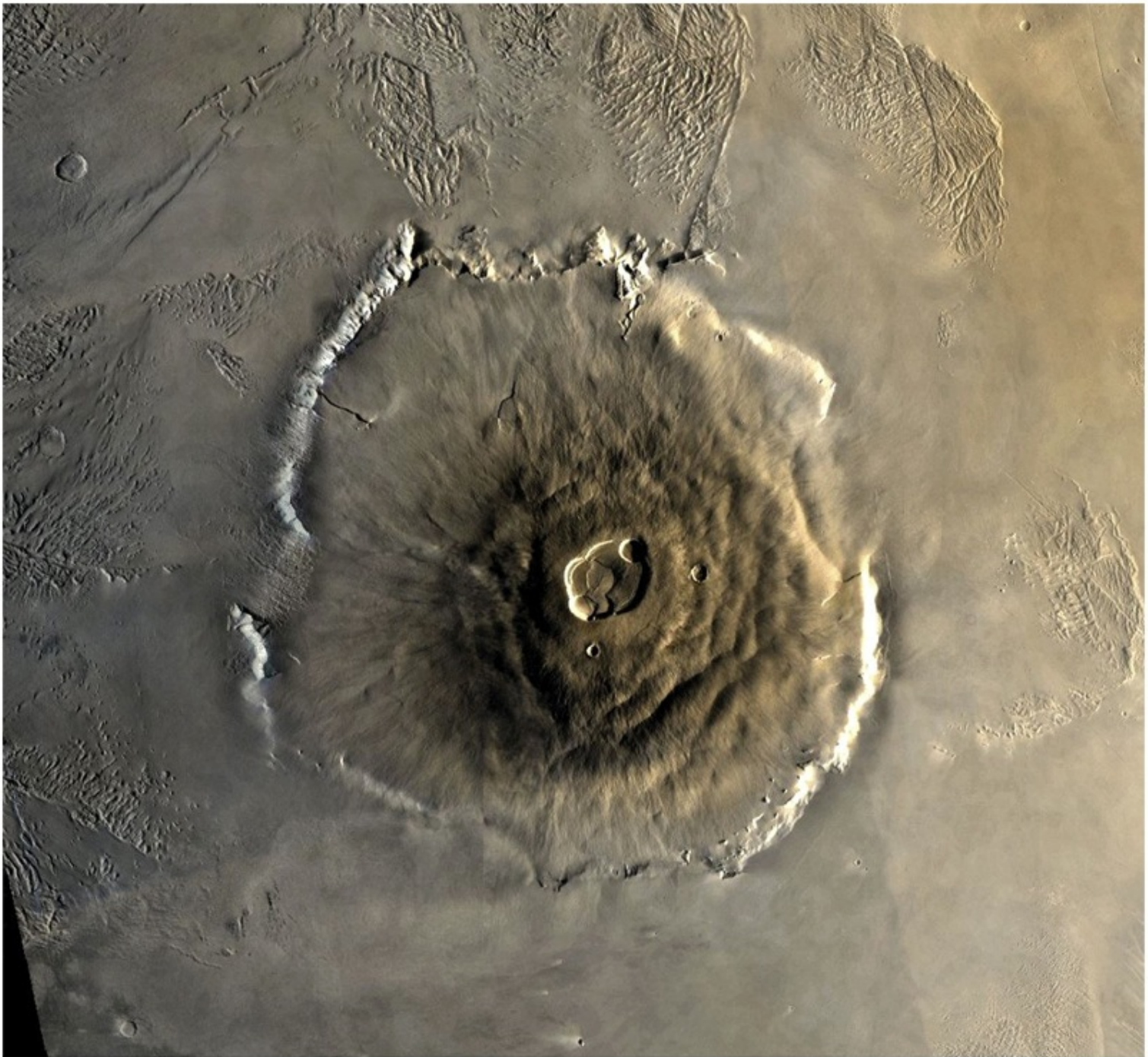


Figure 9.16
Understanding Earth, Sixth Edition
© 2010 W. H. Freeman and Company

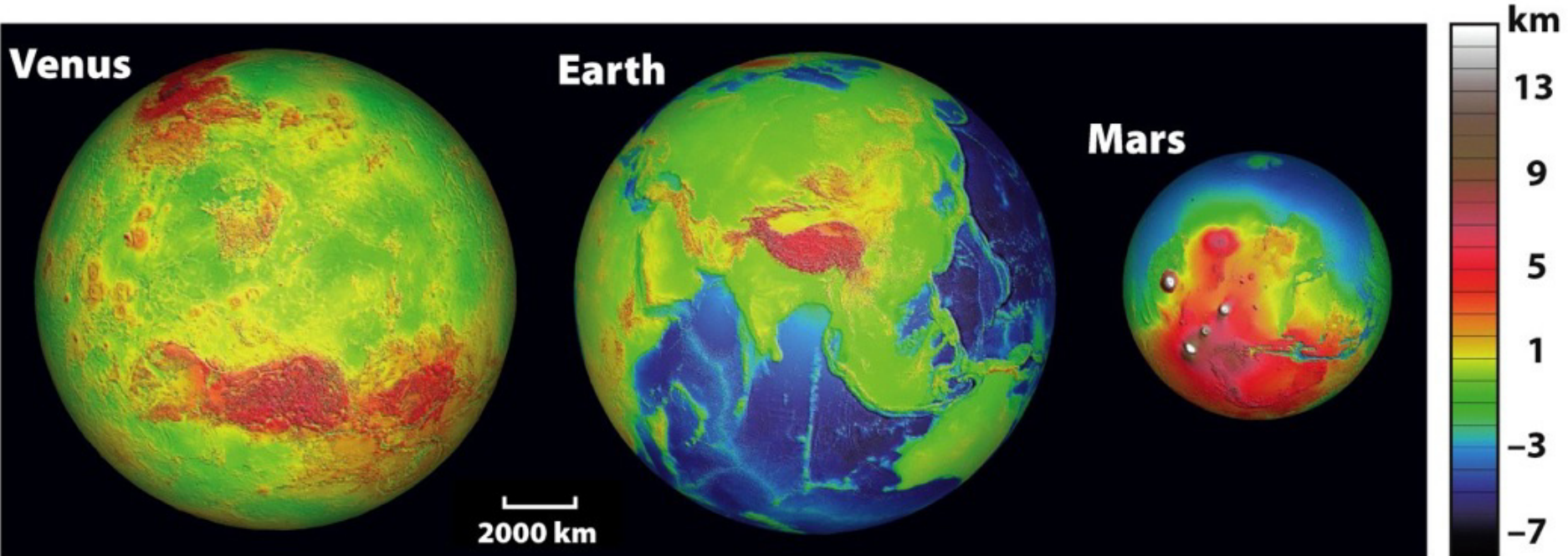
© W. H. Freeman and Company. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <http://ocw.mit.edu/help/faq-fair-use/>.



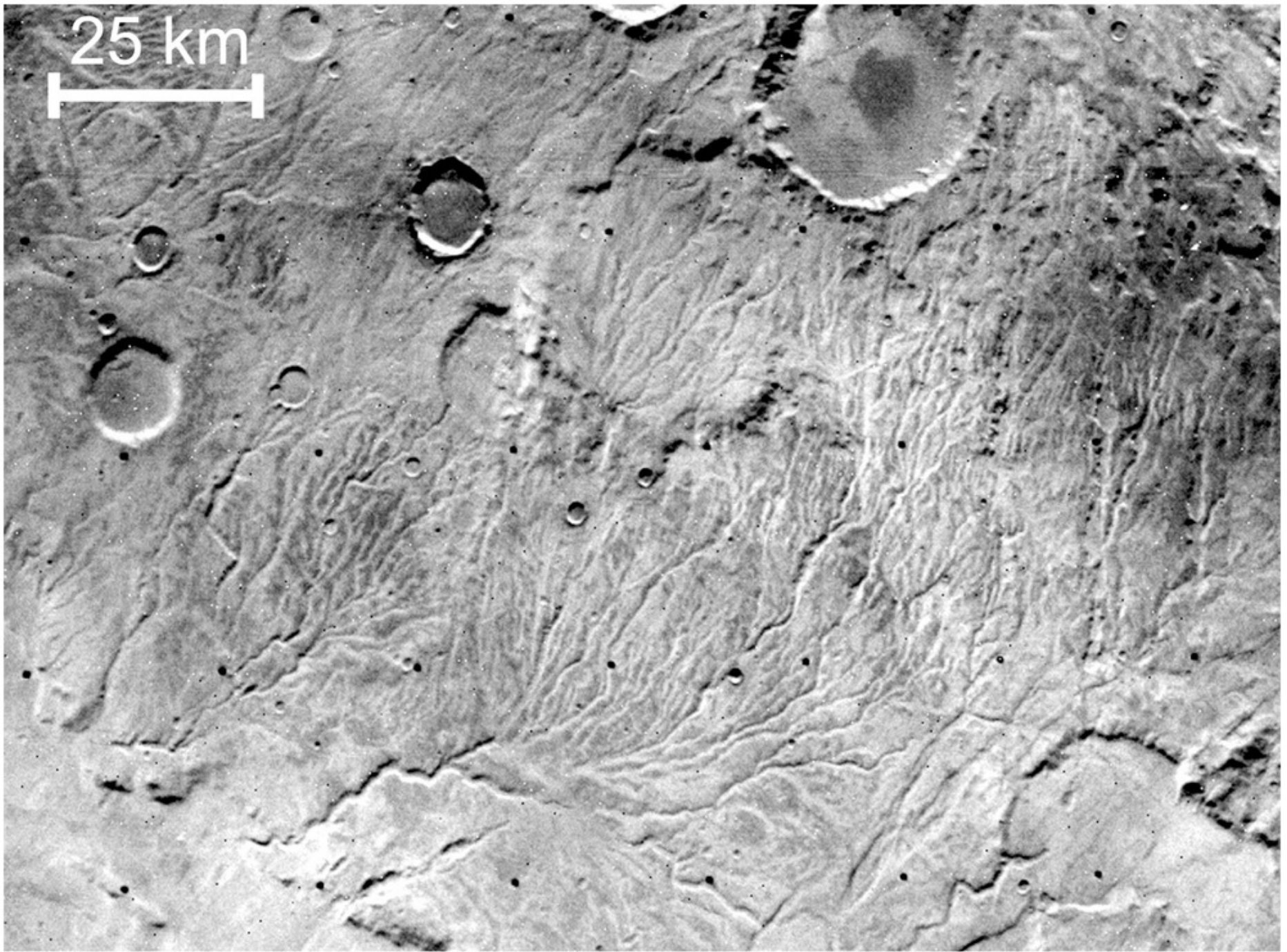
Courtesy of NASA. Image in the public domain.



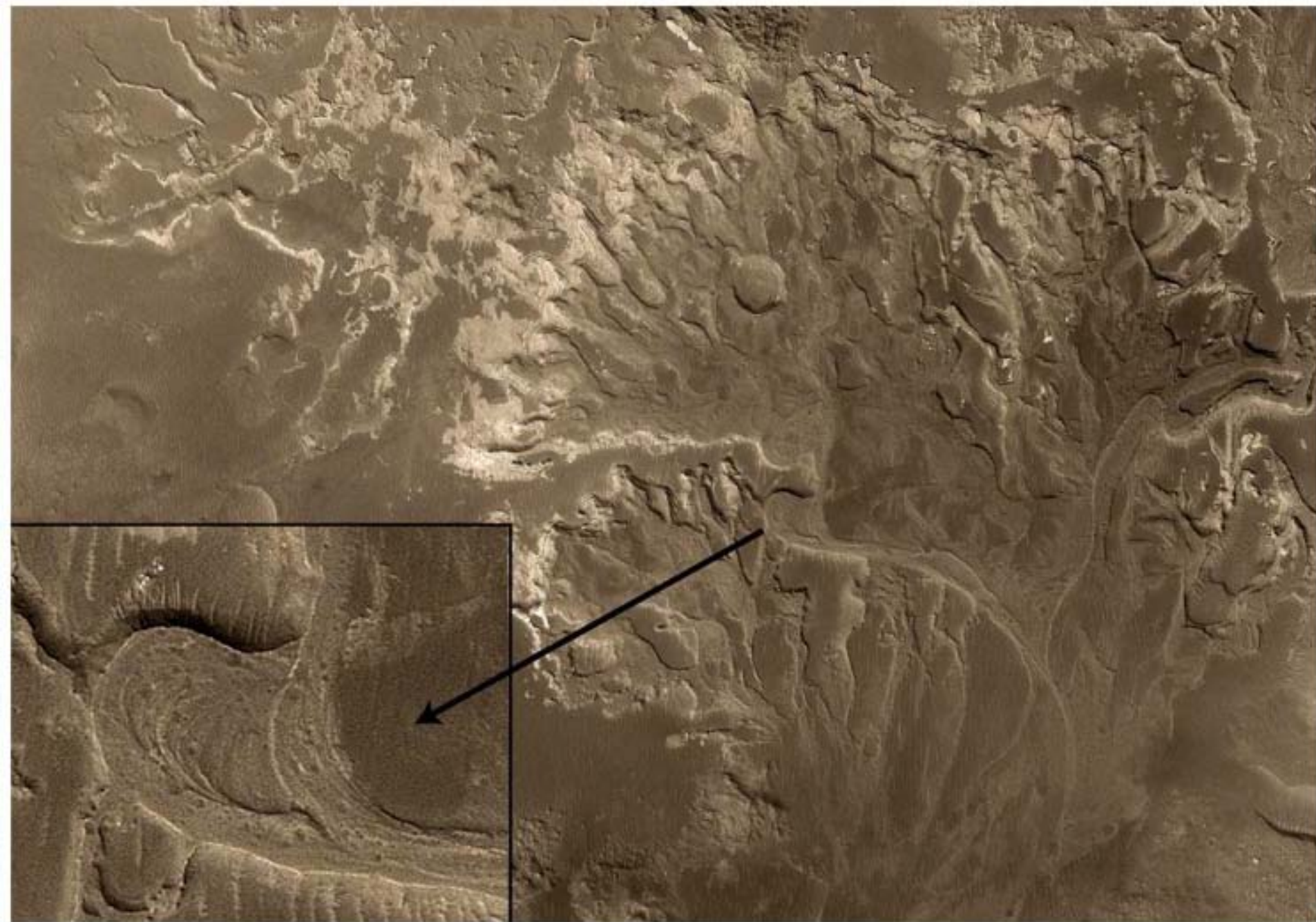
Courtesy of NASA. Image in the public domain.



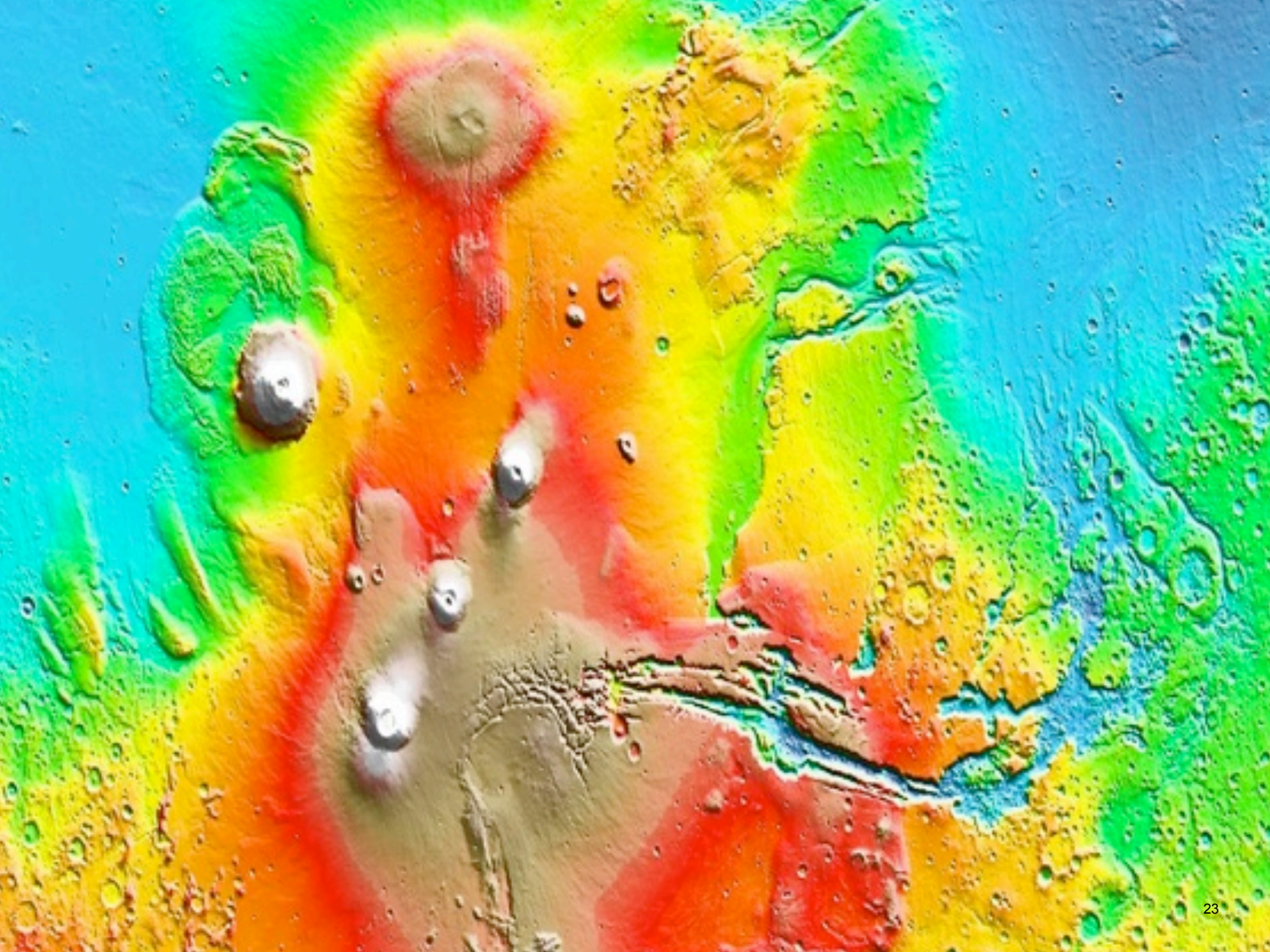
Courtesy of NASA. Images in the public domain.



Courtesy of NASA. Image in the public domain.



Courtesy of NASA. Image in the public domain.



Hubble Ultra Deep Field
HST WFC3 IR



Courtesy of NASA. Photograph in the public domain.

MIT OpenCourseWare
<http://ocw.mit.edu>

12.001 Introduction to Geology
Fall 2013

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.