



Plate 16. Spacecraft exploration reveals global properties of Phobos and Deimos, and basic differences between them. *Top left:* Viking images revealed that Phobos' surface is relatively rough, with well-preserved craters, and parallel topographic grooves. *Top center:* Deimos' surface is smooth with craters infilled by regolith. *Top right:* Multispectral and hyperspectral imaging from Phobos 2, Mars Express, and the Mars Reconnaissance Orbiter (shown, centered on the sub-Mars hemispheres) reveal spatial variations in Phobos' spectral properties, especially associated with Stickney. Deimos' brightness variations are accompanied by less color variation. *Middle:* Phobos simple cylindrical image map and dynamical height, using shape model from *Gaskell* (2011) and image mosaic from *Stooke* (2011). Red is high, blue low, with a range of heights of 1.8 km. *Bottom:* Deimos simple cylindrical image map and dynamical heights, using shape model and image mosaic updated from *Thomas* (1993). Red is high, blue low, with a range of heights of 1.9 km.

Accompanies chapter by Murchie et al. (pp. xxx–xxx).