

Phobos observations by the OMEGA/Mars Express hyperspectral imager

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Abstract

As a complement to Mars observations, Phobos spectral imaging was implemented in order to acquired compositional mapping with the prime objective to answer to the following questions :

1. Is Phobos a "primitive"(undifferentiated) body, or is its mass sufficient for this small body to have suffered some degree of internal differentiation, so as to exhibit surface compositional variations reflecting variation with depth?
2. Can one detect surface material containing either volatile or organic compounds?

We will present an overview of the results acquired, and discuss them in terms of planetary differentiation.