

OSIRIS data from the Rosetta Mars flyby in context with other missions

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Abstract

In this Paper we will present the imaging data acquired by the OSIRIS [1] instrument on board the ESA mission Rosetta during its swing-by maneuver around February 25th, 2007 on the way to Comet 67P/Churyumov-Gerasimenko in context with corresponding data sets acquired by other missions during the period of the flyby, such as Mars Express and the Mars Reconnaissance Orbiter. Despite the long time that has passed since the observations, only few studies based on the data from the wide- (WAC) and narrow- (NAC) angle camera systems of OSIRIS have been published to date (see for example [2]). The OSIRIS images provide a global view of Mars from the UV (245 nm) over the full visible range to the near IR (1000 nm). The image acquisition started at February 24 around 18:00 UTC from a distance of about 260.000 km and continued until 04:51 UTC on February 25 to a distance of 105.000 km. During the Closest Approach to the Planet at 01:54 UTC on February 25 at a distance of 250 km. OSIRIS has imaged parts of the Martian surface and atmosphere up to resolutions of about 5km/pixel and captured many details on the surface, as well as several clouds and dust in the atmosphere.

References

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