

Mars in the 2005-2006 apparition: Pre-Opposition

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We report Mars in the 2005-2006 apparition, observed by a professional-amateur cooperative international Earth-based network. Observations in this apparition started on December 28, 2004. The opposition was November 7, 2005.

Roughly said, Mars in this period was as usual. Many interesting phenomena was observed. Some observers reported "red spots" on the surface. South polar hood was cleared on March 11. Bright spots were seen on the limb of the receding south polar cap, which were similar to the 2003 apparition. Active water ice clouds were continuously observed in Mare Acidalius and the low-latitude region of Xanthe. Dust activity was complicated. Possible dust veils were frequently reported. Among them, certification of the apparent veil around the south polar cap is important because the polar dust should influence the recession rate of the cap and thus affect the global circulation. Besides, two conspicuous dust storms were observed. The storm which occurred around the opposition was so active that it had the second and the third core.