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Near-infrared Observations of Saturn's Satellites at True Opposition MICHAEL FREED, Northern Arizona University, ANNE VERBISCER, University of Virginia, B. SICARDY, Observatoire de Paris, France, R.G. FRENCH, R. HOCK, Wellesley College — The 2005 opposition of Saturn presented the rare opportunity to observe its satellites at the smallest possible phase angles attainable at Saturn's heliocentric distance. Here we present the analysis of observations obtained at Pic du Midi Observatory using Moicam, an infrared imaging instrument mounted on the 2-m Telescope Bernard Lyot during the period 10 - 17 January 2005 at phase angles ranging from $\alpha=0.37^{\circ}$ to 0.01. Using broadband near-infrared filters JHK, centered at 1.2, 1.6, and 2.2 μ m, respectively, we observed the opposition effect on Enceladus, Tethys, Dione, and Rhea. In addition, observations using the narrowband Paschen beta filter, centered at 1.28 μ m, reveal the opposition effect on Titan and Iapetus.

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