

GOPEX: A deep space optical communications demonstration with the Galileo spacecraft on its way to Jupiter.

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ABSTRACT

The GOPEX (Galileo Optical communications from an Earth-based transmitter) demonstration was performed from transmitter sites at Table Mountain Observatory, CA and Starfire Optical Range, NM. The experiment was done over an eight day period December 9 through December 16 as Galileo receded from Earth on its way to Jupiter. At a range of 6 million kilometers (15 times the Earth-Moon distance), the transmission from Table Mountain Observatory eight days after Earth-flyby represents the longest range for laser transmission and detection.