

Two way ranging on Lunar Reconnaissance Orbiter at Grasse MéO station

Authors :

H. Mariey¹, J-M. Torre¹, M. Aimar¹, N. Maurice¹, C. Courde¹, F.Lemoine², E.Mazarico², T.Carlucci³, S.Bouquillon³

Affiliation:

¹ Université Côte d'Azur, CNRS, Observatoire de la Côte d'Azur, IRD, Géoazur, 2130 Route de l'Observatoire 06460 CAUSSOLS France

²NASA Goddard Space Fligth Center,Greenbelt,MD,USA

³SYRTE, Observatoire de Paris, Université PSL, CNRS, Sorbonne Université, LNE, 61 avenue de l'Observatoire, 75014 Paris France

Name and contact of the first author:

Hervé MARIEY, Observatoire de la Côte d'Azur, 2130 Route de l'Observatoire, 06460 CAUSSOLS France

Phone : +33(0)493405439

Email : herve.mariey@oca.eu

Abstract :

Lunar Reconnaissance Orbiter (LRO) is a NASA spacecraft orbiting the Moon. Among several experiments, LOLA altimeter allow to perform one way ranging, and there is also a retroreflector array which has never been used for two way ranging thus far. In september 2018 the MéO station performed the first succesful two way ranging on LRO. The first results and the method use to achieve this goal will be presented.

Topics code :

Session 2 : Improving current station performance

Session 3 : Synergies and new applications

Type :

Oral presentation