ICEUM4, 10-15 July 2000, ESTEC, Noordwijk, The Netherlands

Application of Clementine Data: Mapping Mare Flows and Determining the Thickness of Mare Basalts

S.K. Dunkin and D.J. Heather, Department of Physics & Astronomy, University College London, UK

This talk will provide an example of how the Clementine multispectral UVVIS dataset can be used to map spectrally distinct basaltic flows across a mare region. It will also show how it is possible to determine the changing thickness of the lavas across a region and hence the volume of materials erupted. Southern Oceanus Procellarum will be used as a case study and the results from Clementine data will be compared to those from previous telescopic and photogeological analyses. The advantages and disadvantages of the Clementine dataset will be highlighted through this work, and from this it will be possible to identify the kind of instruments and datasets that we will require from future missions if we are to improve on our current understanding of the Moon.