



Terrestrial albedo determinations using Earthshine: First results from the new Telescope - system characteristics and impacts of observing strategies on albedo data quality.

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Terrestrial albedo can be determined from ground-based observations of Earthshine intensity, and used in climate change studies. The data describe the mean albedo for a given viewing angle and constitute a source of information independent to satellite observations. A new Telescope system has been constructed and tested and we present it here. The quality of terrestrial albedo data obtainable from such Earthshine observations depend on the system properties, atmospheric conditions and our ability to remove scattered light from the images of the Moon. The system observes in four modes and these have different characteristics in terms of the amount of scattered light they contain, and the sensitivity to atmospheric properties. We present first results that allow an inter-comparison of the four observing modes.