



Towards an automatic System for observing terrestrial Albedo: EARTHSHINE.

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A pilot project to construct an automatic Earthshine telescope has been conducted at the DMI. Terrestrial albedo can be determined from observations of the ratio of the intensities of Moonshine to Earthshine. Earthshine is the light from Earth due to reflection on clouds etc. The albedo data can be used in climate studies and for calibration of the visual channel images from weather satellites. We report on our preliminary findings on the basis of extensive bench tests and two field trips. The system is based on a small telescope (600 mm focal length) and a CCD camera and automatic guidance systems. We will describe the system as well as discuss some of the problems unveiled during tests. First results of the illumination ratio from field trials at the observatory on La Palma, on the Canary Islands, in May 2004, will be presented.