



Contribution ID: 30 Contribution code: S02-AA-107

Type: Oral presentation

Polarization of the Daytime Sky

Tuesday, 30 August 2022 15:00 (15 minutes)

Polarization is a property of light widely used as a source of additional information in astronomy. The primary source of polarization in the atmosphere is the scattering by gas molecules although meteorological conditions, sky pattern, underlying surface reflectance, etc. may influence the observed sky polarization. In order to explicate polarization measurements correctly, it is important to understand how partially polarized skylight varies. We present results for the daytime sky degree of polarization. Our equipment includes linear polarization filter attached to a photo camera as well as digital polarization camera. We determine the dependence of polarized daylight on the peculiarities of the landscape, altitude of the observer and the season.

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Session Classification: S02 Astronomy and Astrophysics

Track Classification: Scientific Sections: S02 Astronomy and Astrophysics