

**Session**

Current Space Weather capabilities in
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Abstract Title:

Implementation of a portable site-testing instrument for solar
Observations

Authors:

[1]J.SANCHEZ.G.;[2]S.VARGAS.D.;[3]C.TRIANA.;[4]R.JOYA.;
[5]D.BONACCI.C.

Affiliations:

[1],[2]Universidad Nacional de Colombia-Observatorio Astronomico Nacional,Bogotá
-Colombia

[3]Observatorio AstroSur , Colombia

[4]Universidad Sergio Arboleda,Bogotá-Colombia

[5]European Southern Observatory, Germany

Abstract:

One of the factors that most affect ground-based astronomical observations is the seeing caused by atmospheric turbulence. To counteract this effect, adaptive optics elements are used in modern telescopes. In order to quantify this phenomenon, an instrument called scintillator can interpret thermodynamic fluctuations within an atmospheric cell (Seykora, 1993). With a series of photodetectors, which respond to the twinkling of moonlight, the scintillator probes the turbulence structure along the line of sight through the atmosphere (Hickson, 2002). The measured quantities are time series of intensity fluctuations received by the individual detectors in the array, from which the turbulence profile can be inferred. This work describes the implementation of a site-testing instrument that measures solar scintillation, therefore used to examine the quality of the sky in order to find favorable places for installing a ground-based facility for observing and monitoring the Sun from Colombia.