13th International Atmospheric Limb Workshop



Contribution ID: 60

Type: Talk

Odin and Noctilucent Clouds – Thoughts about the Limb Analysis of Inhomogeneous Layers

Odin's database of noctilucent clouds (NLCs) is approaching 25 years. NLCs are readily identified in the limb profiles of scattered sunlight measured by OSIRIS onboard Odin. However, quantitative data products are needed in order to relate NLC observations to geophysical processes or to other measurements. Unfortunately, the notoriously inhomogeneous nature of NLCs prevents an analysis of limb data in terms of vertical profiles and local cloud properties. This presentation promotes a limb analysis in terms of vertically integrated NLC properties that are representative for a defined cloud volume. This concerns e.g. cloud albedo or ice water content. Analysis ideas are tested using simulated clouds and comparisons to tomographic data.

Topic

Current and past limb and occultation instruments: algorithms, products, validation

Author:GUMBEL, Jörg (Stockholm University)Presenter:GUMBEL, Jörg (Stockholm University)