

[Home](#)[Online Library ACP](#)

- Recent Final Revised Papers
- [Volumes and Issues](#)
- Special Issues
- Library Search
- Title and Author Search

[Online Library ACPD](#)[Alerts & RSS Feeds](#)[General Information](#)[Submission](#)[Review](#)[Production](#)[Subscription](#)[Comment on a Paper](#)

Impact
Factor
4.927

ISI
indexed

[Volumes and Issues](#) [Contents of Issue 22](#) [Special Issue](#)

Atmos. Chem. Phys., 9, 8967-8973, 2009

www.atmos-chem-phys.net/9/8967/2009/

© Author(s) 2009. This work is distributed under the Creative Commons Attribution 3.0 License.

Technical note: Scintillations of the double star α Cru observed by GOMOS/Envisat

V. F. Sofieva¹, F. Dalaudier², V. Kan³, and A. S. Gurvich³¹Earth observation, Finnish Meteorological Institute, Helsinki, Finland²LATMOS, Université Versailles Saint-Quentin; CNRS/INSU, Verrières-le-Buisson, France³Organization of Russian Academy of Sciences A. M. Obukhov Institute of Atmospheric Physics RAS, Moscow, Russia

Abstract. In this paper, we discuss scintillation time-spectra of the double star α Cru, which were measured by the GOMOS/Envisat photometer. The components of α Cru are not resolved by the angular field of view of the detector. The double structure of the light source reveals itself in the modulation of the observed scintillation spectra; this modulation is caused by anisotropic irregularities of the stratospheric air density. We present a qualitative and quantitative explanation of the properties of the double-star scintillation spectra. Possibilities of using double star scintillations for studying atmospheric air density irregularities are also discussed in the paper.

[Final Revised Paper](#) (PDF, 376 KB) [Discussion Paper](#) (ACPD)

Citation: Sofieva, V. F., Dalaudier, F., Kan, V., and Gurvich, A. S.: Technical note: Scintillations of the double star α Cru observed by GOMOS/Envisat, Atmos. Chem. Phys., 9, 8967-8973, 2009. [Bibtex](#) [EndNote](#) [Reference Manager](#)

[Search ACP](#)Library Search [»](#)Author Search [»](#)[News](#)

- [Sister Journals AMT & GMD](#)
- [Public Relations & Background Information](#)

[Recent Papers](#)**01 | ACP, 03 Dec 2009:**

Increase of upper troposphere/lower stratosphere wave baroclinicity during the second half of the 20th century

02 | ACPD, 03 Dec 2009:

Aerosol analysis using a Proton-Transfer-Reaction Thermo-Desorption Mass Spectrometer (PTR-TD-MS): a new approach to study processing of organic aerosols

03 | ACP, 03 Dec 2009:

Retrieval of atmospheric