Atmospheric Chemistry and Physics An Interactive Open Access Journal of the European Geosciences Union

| Copernicus.org | EGU.eu |

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





■ Volumes and Issues ■ Contents of Issue 3 ■ Special Issue Atmos. Chem. Phys., 4, 649-655, 2004 www.atmos-chem-phys.net/4/649/2004/ © Author(s) 2004. This work is licensed under a Creative Commons License.

The EISCAT meteor-head method – a review and recent observations

A. Pellinen-Wannberg Swedish Institute of Space Physics, Kiruna, Sweden

Abstract. Since the very first meteor observations at EISCAT in December 1990, the experimental method has improved significantly. This is due to a better understanding of the phenomenon and a recent major upgrade of the EISCAT signal processing and data storage capabilities. Now the simultaneous spatial-time resolution is under 100 m-ms class. To illuminate the meteor target for as long as possible and simultaneously get as good altitude resolution as possible, various coding techniques have been used, such as Barker codes and random codes with extremely low side lobe effects. This paper presents some background and the current view of the meteor head echo process at EISCAT as well as the observations which support this view, such as altitude distributions, dual-frequency target sizes and vector velocities. It also presents some preliminary results from recent very high resolution tristatic observations.

■ <u>Final Revised Paper</u> (PDF, 1542 KB) ■ <u>Discussion Paper</u> (ACPD)

Citation: Pellinen-Wannberg, A.: The EISCAT meteor-head method – a review and recent observations, Atmos. Chem. Phys., 4, 649-655, 2004. Bibtex EndNote Reference Manager

| EGU Journals | Contact



Search ACP	
Library Search	•
Author Search	•

News

- Sister Journals AMT & GMD
- Financial Support for Authors
- Journal Impact Factor
- Public Relations & Background Information

Recent Papers

01 | ACPD, 25 Feb 2009: Observational study of aerosol hygroscopic growth factors over rural area near Beijing mega-city

02 | ACPD, 25 Feb 2009: Closure on the single scattering albedo in the WRF-Chem framework using data from the MILAGRO campaign

03 | ACPD, 25 Feb 2009: Dynamical modes associated with the Antarctic ozone hole

04 | ACPD, 25 Feb 2009: