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Interactive comment on "The EISCAT meteor-head method - a review and recent observations" *by* A. Pellinen-Wannberg

Anonymous Referee #1

Received and published: 19 January 2004

Paper Title: "The EISCAT meteor-head method Ű a review and recent observations"

Authors: A. Pellinen-Wannberg

General Comments

This paper includes an excellent summary of the meteor results obtained with the EIS-CAT radars. It includes also a list of future research given the recent capabilities added to systems. Although the author has tried to include references to research performed at other radars, I think some improvement is needed (see specific comments below).

Specific Comments

1. Abstract. What do you mean by alternating Barker codes? I could not find in the main text if these codes were used or not.

2. Page 24. I suggest adding a figure of the electron time series when a meteor is observed. I know they can be found in the references, but it will help the reader to understand what is mentioned in the text.

3. Page 26. ŞThe HPLA radars Ě due to their optics ĚŤ what do you mean by optics? Please clarify.

4. Page 28. How do the EISCAT dual frequency altitude distribution compare to those observed at other radars? E.g., ALTAIR, Jicamarca vs Arecibo or Millstone Hill.

5. Page 30. Add a Figure describing the old and new tristatic configuration to make the point clearer.

6. Page 30. ŞHowever at high latitudes one should probably get still higher rates during autumn observing periodsŤ Why is this? Could you add a reference for this fact or explain?

7. Page 30. Velocities. I was under the impression that VHF meteors had larger velocities than the UHF meteors. Although you cannot measure absolute velocities with single radar, how do the VHF and UHF meteor radial velocities compared at Tromso?

Technical comments

1. Page 28. I suggest using signal power instead of signal temperature. I think it does not make sense to use signal temperature for the meteor signals.

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