

Interactive comment on “Simulating more accurate snow maps for Norway with MCMC parameter estimation method” by T. M. Saloranta

Anonymous Referee #2

Received and published: 25 June 2014

The author shows in this paper a Monte Carlo based parameter estimation method for the seNorge snow model. The paper is in general good, but some parts should be improved. I have the following comments:

- The sections 3 and 4 are extremely dense and very hard to follow for a reader who has not a strong statistical background. Its reading should definitely be helped by more charts and tables, and clarity should be improved.
- In section 2.1.2. the descriptive metamorphism is neither mentioned nor included in the model. It is actually an extremely important process during the days immediately after snowfall, when snow is still light, and a model that wants to simulate snow density has to include it. See Anderson (1976) and SNTHERM (1991).

C994

- The parameters f_s and T_{cor} , which are essential, are first mentioned in sections 2.2 and are not explained in the model description
- The Nash-Stucliffe index is first mentioned on page 1978 , but explained only on page 1986

Interactive comment on The Cryosphere Discuss., 8, 1973, 2014.

C995