

## ***Interactive comment on “Snow cover thickness estimation by using radial basis function networks” by A. Guidali et al.***

**Anonymous Referee #1**

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The paper by Guidali et al. presents a statistical method to estimate snow cover thickness. Unfortunately, what they model is not snow cover thickness, but presence and absence of snow, a much simpler problem.

The presented paper is mainly of statistical and methodological nature. However, first and foremost, the authors seem unaware of the very vast body of methods to estimate snow cover thickness and snow depth. A short search of the literature would have revealed a very large number of papers dealing with the statistical questions the authors pose.

The reviewer was unable to see any advantage of the proposed method over more standard methods as multiple regression, generalized kriging, etc.. Only a much enlarged dataset (currently only one winter), improved comparison with other methods

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and prediction of snow depth (and not presence/absence) could make this paper a valuable contribution to the literature.

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Interactive comment on The Cryosphere Discuss., 6, 2437, 2012.