The Cryosphere
Discussions

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Interactive comment on "Evaluation of snow depth and snow-cover over the Tibetan Plateau in global reanalyses using in-situ and satellite remote sensing observations" *by* Yvan Orsolini et al.

Anonymous Referee #2

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This is a well written concise study of Tibetan snow cover in modern reanalyses that yields clear and well justified, careful conclusions.

While some points could have been analysed or discussed in a bit more detail (for example, the altitudinal distribution of model errors with respect to observations, or the parameterized SD/SCF relationships), I do not think that this would have added much to the paper. My only complaint about the paper is that a little bit more effort could be devoted to the figures which are a bit hard to read (the color maps are not optimal, for example). At some points, the authors use abbreviations where full text would have been nicer ("incl."). In summary, I only recommend a few very minor technical

corrections and congratulate the authors on producing this excellent paper.

Some minor remarks: P3, Line 4: "the representativeness of this in-situ data" -> "these in-situ data" P3, L9: "at a high-resolution (4-km)" -> "at high resolution (4 km)" P3, L30: "Furthermore, re-analyses serve as initial conditions for prediction models, from short-term to monthly and seasonal forecasts." I think that operational analyses are used for such purposes rather than reanalyses? P4, L26: "inter-compare": compare snow cover and snow depth with what? BTW the verb inter-compare actually does not exist.

Interactive comment on The Cryosphere Discuss., https://doi.org/10.5194/tc-2019-49, 2019.