

Dear Editor,

Thank you for your comments.

We answered to the two comments, see below :

1) Provide a second estimate of precipitation for the whole continent, not just the CloudSat domain. This will make the work more valuable and will avoid misinterpretation of your results.

The following sentence has been added lines 346-347 : *“Extrapolating CloudSat snowfall observations to the region south of 82°S using ERA Interim data, the mean snowfall rate over the full Antarctic ice sheet amounts to 148 mm/year. ”*

2) Do not use "Flag" as the terminology for "sample" or "observation". "Flag" properly refers to the field denoting solid or liquid.

All the “flag” in the text and in the labels of the figures have been replaced by “sample”, except when it refers to the original flags from the CloudSat 2C-PRECIP-COLUMN product. “Sample” is now used to refer to the expression “precipitation certain”, “precipitation possible”, and “period without precipitation”.

Best regards