The Cryosphere Discuss.,
doi:10.5194/tc-2016-72-RC2, 2016


The Cryosphere Discussions
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# *Interactive comment on* "The increasing snow cover in the Amur River Basin from MODIS observations during 2000–2014" *by* X. Wang et al.

**Anonymous Referee #2**

Received and published: 9 July 2016

The authors examine the MODIS daily snow cover product in an attempt to improve the monitoring of snow in the Amur River Basin. They employ a cloud free algorithm to generate complete "daily" maps of snow cover extent. They then use the product to examine snow cover within various vegetated landscapes and see how it varies spatially, seasonally and interannually from 2000-2015.

This is an interesting effort that demonstrates the authors' knowledge of the MODIS product and the landscapes within the Basin. Their cloud "removal" algorithm appears to be successful, however it is similar to Hall's previous work, thus not all that original. Their evaluation of the accuracy of snow monitoring within forested areas as compared to more open locations looks to be done well, but, again, does not add greatly to what was already understood regarding the differences between snow extent monitoring over different vegetative covers.



The 14-year analysis of potential trends in snow cover extent within the basin covers too short a period to be considered a trend analysis. Rather it may be considered a useful evaluation of extent variability within the region. Correlations with temperature and extent are as expected, but to state that increasing temperature over the past two years "projects a further decrease of snow cover extent" (line 359) is far too much of a stretch.

To sum up, this contribution demonstrates the firm knowledge possessed by the research team with respect to MODIS snow mapping and the utility of the product in gaining improved knowledge of the distribution of snow cover within the Amur Basin. As such, it can be considered to provide an incremental improvement in our knowledge of these factors. However, in the broader scheme of things it does not provide large incremental improvements.

As such, I do not recommend publication in The Cryosphere. The authors have something to contribute, however they might chose a regional or lesser-known journal for publication.

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