Comments to the Author:

The reviewers are basically satisfied with the revised manuscript. However, I have a few suggestions before the manuscript can finally be accepted for publication by The Cryosphere:

(1) Comments from Referees: What are the dashed-lines for in Fig. 2 and 3? By reading the figure caption, the readers cannot know what are these dashed lines for. The authors need to add more text in the caption to explain. If these dashed lines are linear trends, the authors need to show the significant test value (p value) and correlation coefficients.

Author's Response: The dashed-lines are linear tends, the p value and correlation coefficients are added in Fig. 2 and 3. Thank you for the comments.

Author's changes in manuscript:

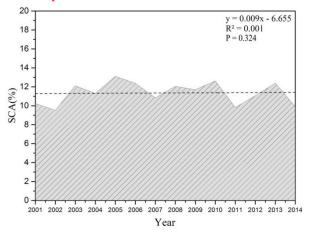


Figure 2: Average annual SCA in China between 2001 and 2014.

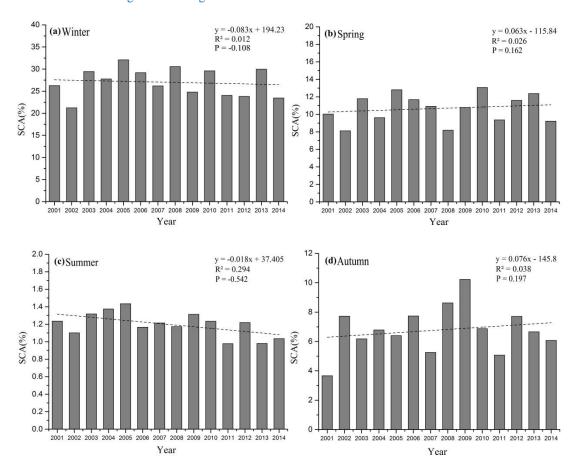


Figure 3: Histograms of the average SCA in each season in China from December 2000 to November 2014. (a), (b), (c), and (d) are the average SCA in winter, spring, summer, and fall, respectively.

(2) Comments from Referees: Figure 3: suggest after (a), (b), (c), and (d), add winter, spring, summer, and autumn, respectively.

Author's Response: Did as your suggestion. Thanks.

Author's changes in manuscript: Please see Fig. 3 attached.

(3) Comments from Referees: Figure 4: the scale is too coarse. Suggest to remove the scale for snow covered days more than 180 days and expand the remaining.

Non-public comments to the Author:

I have these detailed suggestions:

1). Fig. 4, remove any scales >180 days, use the following: <10; 11-60; 61-120; 121-180; >180. Author's Response: Did as your suggestion. But the snow-covered days bigger than 360d is discussed separately in the manuscript, so we reclassified the snow-covered days as the following: <10; 11-60; 61-120; 121-180; 180-350; >350. Thanks.

Author's changes in manuscript:

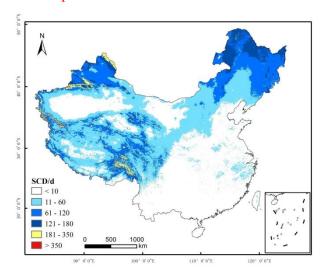


Figure 4: Spatial distribution of the average annual number of snow-covered days during 2001-2014 in China.