

**Reviews, and response to reviews, of the essay on:
Ozone**

Reviewer #1

10. Snow		
Page No.	Line No.	Comment
58	1785	June alone doesn't quite cover "spring"! See next comment. The authors are not suggesting that June does cover spring. They are saying that the June snow cover extent anomaly in North America was the fourth lowest on record.
59	1819	Onlu Eurasia for May and June shows reduction. The editors note that line 1819 is on p. 58. The text has been modified to make it clear that it is the May and June anomalies that show a continued reduction from the historical mean.
59	1827	Are these note from published work? Please cite. The editors note that line 1827 is on p. 58, and believe that the reviewer is referring to the linear trend values in Table 3. The data in the table are an update of previously published work (Derksen and Brown, 2012) and this is now indicated in the table caption.
61	1879	What is the accuracy of these data. From field experience in spring 2013 it seems that Scandicnavia /Norway and Greenland is off by quite a deal. The editors note that line 1879 is on p. 60, and believe that the reviewer is referring to the snow depth anomalies in Figure 34. The authors' response to the reviewer's comment is: "Like all gridded snow depth products, there are uncertainties in the CMC analysis. It is produced from in situ observations and a simple snow model, so the primary sources of uncertainty are related to (1) the representativeness of point snow depth observations with respect to the entire grid cell, and (2) performance of the snow model in observation sparse regions. Of relevance to Scandinavia, issue (1) can be a particular problem in alpine terrain, and issue (2) can be an issue in regions of Maritime climate (due to uncertainty in snow/rain partitioning, snow aging, etc.). Intercomparisons with other datasets have shown the CMC dataset accurately captures regional scale variability in snow depth but it's possible that there is uncertainty in Scandinavia over a given season." The editors are satisfied with the author's response and consider no further action to be necessary.

General comments: **Please provide reference in captions for all figures** References have been added for those figures that have been published elsewhere.

Reviewer #2

3. Ozone		
Page No.	Line No.	Comment
11	275	If possible, please insert unit in the figure legend. The editors note that authors provided the anomaly unit (%) in the figure caption. The editors consider this to be adequate for readers of the Report Card.

General comments: The editors note that no general comments were provided.

Reviewer #3

3. Ozone		
Page No.	Line No.	Comment

General comments: The editors note that no general comments were provided. Nor did the reviewer provide any specific comments in the table.

Reviewer #4

3. Ozone		
Page No.	Line No.	Comment
10	250	From caption of Fig. 10 it is unclear what show “open symbols”. Are its show ozone content for Marches or mean values for winters& The caption has been modified to make it clear that the open circles are for March only.

General comments: Very good part of Card except above mentioned caption of Fig.10

Reviewer #5

3. Ozone		
Page No.	Line No.	Comment

General comments: The editors note that no general comments were provided. Nor did the reviewer provide any specific comments in the table.

Reviewer #6

3. Ozone		
Page No.	Line No.	Comment

General comments: The editors note that no general comments were provided. Nor did the reviewer provide any specific comments in the table.