MS No.: bg-2010-88

Reply to BG about the manuscript: "Upscaling reflectance information of lichens and mosses using a singularity index: A case study of the Hudson Bay Lowlands, Canada".

1. The article presents results of upscaling reflectance experiments and information of lichens and mosses using singularity index from an area located in the Hudson Bay Lowlands, in north-eastern Manitoba, Canada. The theme is relevant and actual problem of international frontier

2. The title reflects the content of the paper, but the abstract need to be improved. It is a little confused and it does not reflect a concise and complete summary. In it needs to add the relevant results obtained.

3. This paper is interesting for an international audience. However, there are some minor corrections to be made before to be publishing:

4. Upscaling experimental design:

Which were the criteria used or assumed to select the four representative sites, constant height 2.20 m and the sensor's field of view? This is important for the other researchers that want to make similar experiments.

5. The section of results needs to be improved. It is difficult to follow and to understand. Perhaps the authors would be able to separate in sections, starting by the visible reflectance and after that the near-infrared one.

In page 3560, line 3Data obtained in site 101,is progressing (data of all sites and dates are not presented here, and are available upon request) why??, what did the authors mean to say?...

6. In the second paragraph the same page, the discussion is associated to the experimental design and scale problems: incident irradiation, spatial resolution, uneven reflectance at different incident angle, vegetation species, etc. So, here is very important to describe briefly the schema experimental utilized, this must be accomplished in the section 3, upscaling experimental design. The results here are associated to the way of how the reflectance measures were realized?.

7. Also in page 3562, Up-scaling spectral reflectance indices: the discussion is interesting but it needs improved linking the text discussion and the figures from 6 to 9. It would be better in table 1 to associate the R2 values to the spectral indices., etc.

8. Summary and conclusions: again the affirmation 1 is associated to the experimental scheme utilized, so it need explain the reflectance measures (in section 3).

9. A general question: the R2 does not a good statistics indicator parameter, way the author did not use another indicator, for example the mean square error?...or other based in the residual coefficient.