

Author response to reviewers comments

First of all the authors would like to thank the two reviewers for their re-review of the manuscript. Authors comments are in blue (changes in the manuscript in bold blue) and reviewers comments in black.

Report #2

In the revised manuscript, the authors have significantly improved the clarity of the text by adding the requested details and explanations. All the comments I made in my first review were properly taken into account, and the requested corrections were made.

Thanks !

Now I only have a couple of minor corrections to suggest:

- p.6, line 8: "in absence" should perhaps be "due to the absence". The meaning of the sentence is quite different in the two cases...

Ok the sentence now reads : 'The accuracy of the simulated spectral to diffuse solar irradiance ratio has not been evaluated **due to the absence of measurements**'.

- p.7, line 14-15: "...with respect to what would happen for an horizontal surface, then the slope of the surface...". I pointed to the unclarity of this sentence also in my first review, and the authors have indeed provide some text that makes now possible to understand it, but still the sentence is tortuous. I would modify it as "...with respect to the solid angles that would apply in the case of an horizontal surface. With these assumptions, the slope of the surface...

Ok the sentence has been modified according to the reviewer comments and is now :

'In the following, we assume that (i) both diffuse solar radiation and reflected radiation are isotropic and (ii) the surface slope is small and local enough not to modify significantly the solid angles under which the incoming and reflected radiations are measured with respect **to the solid angles that would apply in the case** of an horizontal surface. **With these assumptions**, the slope of the surface only affects the effective sun zenith and azimuth angles and thus the direct solar irradiance (see details in App. A and B)'