The study validates McClear model against 1 minutes Global Horizontal Irradiance (G) and Direct normal Irradiance (B_N) in areas where validation was never carried out before. The study reviewed literature related and followed the same procedures for easy comparison of the results. The article is well written and covers some research gaps in the previous studies which validated McClear model in different regions.

Minor comments

Line 18: Please put brackets on (G)

Line 19 : please put bracket on (B_N)

Please be consent with abbreviations to refer Global Horizontal Irradiance (G) and Direct normal Irradiance (B_N) so that the readers will not be confused , use those one through out the article not SSI to refer Global Horizontal Irradiance as used in the abstract.

Line 58: Please replace AOD 1020nm with AOD 1240nm since it is the input to the model.

Line 92: Please paraphrase the sentence , the word **'or'** is and the wrong place , making the statement to be confusing

Line 97 :Please paraphrase the sentence , the are a lot of **'and'**, making in unclear validated the model in which country or region.

Line 120: Please add **horizontal** between direct and component because there is also direct normal component, so that the two components or parameters will be differentiated.

Line 219: Can you please summarise or elucidate how the visual check was implemented and applied , some practitioners or researchers might want to apply it in their studies as well.

On the methodology to differentiate between night and day values its not clear which procedure was used, most studies remove everything that falls in a solar zenith angle greater than 85 degrees, this helps to filter pyranometers and pyrheliometers noise and it influence the overall mean of G and B_N. How did you calculate the mean averages of G and B_N like the ones given in Table 5 ?

Figure 3 in page 15: The 2 2D graphs seems like you only used G and B_N values greater than 600 w/m2 ? was there no values less than 600 W/m2 in your comparison ?