

Geosci. Model Dev. Discuss., referee comment RC1 https://doi.org/10.5194/gmd-2021-245-RC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

## Comment on gmd-2021-245

Anonymous Referee #1

Referee comment on "A validation standard for area of habitat maps for terrestrial birds and mammals" by Prabhat Raj Dahal et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-245-RC1, 2021

The article is well written and clearly describes a two-stage approach for evaluating area of occupancy models with presence only species occurrence data. This is a significant contribution to global biodiversity studies. The authors acknowledge the limitations of the data available and take a pragmatic approach to improving models and their evaluation. It is a well thought through study and the issues of taxonomy, spatial uncertainly and errors related to cross-walking land cover to habitat classes are discussed. Finally the data and code are accessible in keeping with the open science principles.

Line 327 the work "with" is unnecessary in this sentence.

Figure 3 and 4 - No critical but could be helpful - would it be possible to change the colors to a color ramp?

Figure A4 This figure requires more explanation or different graphics to better make the point.

Figure A6 & A7 – says colors are in A5 – in that legend the colors represent taxa, in this with or without validation points A6 Mammals – A7 Birds?