

I thank once again both reviewers for their comments and detailed reading of this long manuscript. I have implemented all changes suggested below.

REPORT #1

The author has provided a thorough and careful response to reviewer comments, addressing the major issues raised by both reviewers. I think the manuscript is largely ready for publication. It could use another round of careful proofreading.

Here I list typos and syntax issues that I noted as I read.

line 85. Remove "due to" to achieve parallel structure.

line 205. "consist" --> "encompasses" or "comprises"

line 250. "authors" --> "author's"

line 251. "comparable method as" --> "method comparable"

line 263. "Heights" --> "Height"

line 310. "similar as" --> "similar to that"

line 313. "first order" --> "first-order"

line 323. "bit smaller" --> "bit smaller than evaporation"

line 323. "about that" --> "about the same as"

line 331. "die to". Intended meaning is unclear. Maybe change to "of"

line 339. "calculated" --> "converted"

line 350. "to GMSL" --> "to a GMSL"

line 354. To avoid misinterpretation, I would use an Oxford comma: "sensible heat flux, latent heat flux, and long-wave heat flux"

line 357. "between" --> "from"

line 374. "as observed" --> "as the observed"

line 375. "in where" --> "in which"

line 376. "impact" --> "impacts"

line 377. "that from" --> "those from"

line 398. "impact" --> "impacts" (twice)

line 404. missing verb. "decreasing" --> "these decrease"

line 414. "that by" --> "the impact of"

line 437. "that" --> "those"

line 487. "globally integrated" --> "global integration"

line 491. add comma after "neutral"

line 570. "impact GMSL" --> "impact on GMSL"

REPORT #2

Minor revision: Once the title is adjusted to better reflect the manuscript scope, and the remaining language/typos above are corrected, I recommend it for publication.