Interactive comment on “Thermal regime, energy budget and lake evaporation at Paiku Co, a deep alpine lake in the central Himalayas” by Yanbin Lei et al.

Yanbin Lei et al.
leiyb@itpcas.ac.cn

Received and published: 14 September 2020

(1) In line 25-26 the last sentence in abstract seems has not clear connection with the other contents, I suggest to revise the sentence to keep it coherent with previous contents.

Reply: Thanks for the suggestion. We will revise this sentence to keep it coherent with the main purpose of the paper.

(2) In line 120-125, in equation (2), Ra is the downward longwave radiation to lake, while in equation (3) Ra is rewritten as the longwave radiation from lake. Here, in equation (3) and line 125, I think it should be Rw.

Reply: Thanks for pointing out this error. We will change Ra to Rw in Equation (3).

(3) In line 129-130, as daily averaged water temperature is used, in addition to the surface mixing by wind and convection, Here I suggest to add information that “there exists surface warming during the day and surface cooling at night for high elevation lakes, thus the two uncertainties by surface warming and cooling can cancel each other at a temporal resolution of daily.”

Reply: Thanks for the good suggestion. We will add this information in the revision.

(4) In line 161, I suggest to use “period” instead of “time” here; in line 262, it should be “in low values” rather than “in low value”; Figure 3 caption, “at different depths” rather than “at different depth”; Figure 4, a unit of (OC) should be added for the color bar.

Reply: Thanks for pointing out these errors. We will revise them in the revision.