ESSDD

Interactive
comment

Interactive comment on "A dataset of microclimate and radiation and energy fluxes from the Lake Taihu Eddy Flux Network" *by* Zhen Zhang et al.

Anonymous Referee #1

Received and published: 5 July 2020

The manuscript describes a dataset measured by the Lake Taihu Eddy Flux Network which consists of seven eddy covariance (EC) flux stations over Lake Taihu and one EC flux tower over the land as a reference. Although EC flux measurements over inland waters have increased worldwide, such a flux network over a single lake is rare. Besides the uniqueness of the dataset stated in the manuscript, it could provide a valuable perspective in terms of spatial variability in fluxes and associated controlling factors. The dataset should benefit to broader communities in micrometeorology, hydrology, remote sensing, water resource managements, and modeling to name a few. The descriptions of the sites, instruments, and methods are clear and adequate. The dataset is of high quality as also reflected by their published research articles (I read most of them in the past). The manuscript is well written and structured. I would

Printer-friendly version

Discussion paper

recommend its publication.

Here are a few minor comments:

I understand water levels vary, but would it be good to provide the lake bathymetry also with the tower locations to give users a better understanding of the lake?

Do you have water level measurements or provide information that helps users to find how water levels vary?

Lines 130-131: This may be a little bit misleading since the heights for the lake sites vary from 3.5 to 9.4 m and the EC height for the land site is 20 m.

Line 137: please explain how you keep these sensors in such fixed depths.

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2020-64, 2020.