Interactive comment on “Evaluation of OAFlux datasets based on in situ air-sea flux tower observations over the Yongxing Islands in 2016” by Fenghua Zhou et al.

x. bi
biixy@163.com

Received and published: 28 March 2018

This manuscript evaluates OAFlux datasets using observations collected at an in-situ tower in the SCS in 2016. COARE3.0 algorithm of estimating the SHF and LHF are used to yield the two datasets (OAFlux and YXASFT). Before the comparison between OAFlux and YXASFT, the fluxes of YXASFT from COARE3.0 algorithm were validated by using fluxes from eddy covariance method. Such measurements are rare and valuable. The structure of the manuscript is very good and the content is clear. The results will be valuable for understanding the applicability of OAFlux in the SCS and I recommend publication of the paper. I have only a comment. I suggest authors compare mean variables (30 min averaged wind, temperature and humidity) obtained from the fast response instruments and slow response instruments. They should be unequal during rain. Because the fast response instruments of Campbell Scientific are very sensitive to precipitation and the observations during precipitation are not available. However, the slow response instruments of YXASFT are available during precipitation. The comparison should be useful for validating the data quality of fast response system.