Five years of eddy covariance flux measurements in Alqueva reservoir

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Talk Abstract

From 2017 to 2022, micrometeorologic measurements of the three components of the wind together with water vapour and carbon dioxide densities were performed continuoulsy in a floating platform over the Alqueva reservoir. The eddy covariance method was applied to the 20 Hz data to generate 30 minutes fluxes enclosing smaller and bigger turbulent eddies from the atmosphere over the water surface. The resultant fluxes are the momentum, latent heat, sensible heat and carbon dioxide. Results and discussion from the resultant fluxes are presented from seasonal to annual scale and relations with the thermal stratification of the reservoir.

Keywords: Eddy Covariance, Fluxes, Reservoir, Micrometeorology.

Acknowledgements

This research was supported by national funds through the Fundação para a Ciência e Tecnologia, FCT, under the projects UIDB/04683/2020 (https://doi.org/10.54499/UIDB/04683/2020), ALOP Project (ALT20-03-0145-FEDER-000004) and under the reference CEECINST/00069/2021/CP2811/-CT0003 with the DOI 10.54499/CEECINST/00069/2021/CP2811/CT0003 (https://doi.org/10.54499/CEECINST/00069/2021/CP2811/CT0003).

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