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## Turbulent energy fluxes and surface energy balance closure of a coniferous forest at the complex-terrain site of Renon (Italian Alps)

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Exchanges of mass and energy between a subalpine coniferous forest and the atmosphere have been continuously monitored since few decades at Renon (Bolzano, Italy) applying the eddy covariance (EC) technique. The station is part of the Integrated Carbon Observation System (ICOS) EU Research Infrastructure. The area surrounding the site is characterized by complex topography, with a mean slope angle of about 11° and a Southward aspect. In this study, we focused on the analysis of turbulent energy fluxes (sensible and latent heat) and the energy budget closure of the forest during a period of about three months (August-October 2021), when a below-canopy EC system was additionally deployed to better understand the dynamics of turbulent energy fluxes were processed applying different coordinate rotation methods (double rotation and planar fit). We found significant differences in the magnitude of sensible and latent heat fluxes computed with double rotation or planar fit. These differences were more marked during periods characterized by these winds.