



WATER VAPOUR AND SENSIBLE HEAT FLUXES OVER FOREST: A MULTI-YEAR STUDY

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The interannual variability in water vapour and sensible heat fluxes over beech forest in Denmark is analysed. A time-series from seven years (half hourly values) are investigated in regard to extremes and the interannual variability at daily and monthly time-scales. The fluxes are measured by the eddy correlation technique from a tall mast in the center of the forest. The experimental site is part of the CARBO-EUROFLUX network and observations include precipitation, soil water, CO₂, temperature, humidity, solar radiation and plant parameters. In the current study focus is on the water balance. A comparison between the water balance components, CO₂ and environmental parameters is undertaken. The results are part of EO-FLUX-BUDGET project (<http://www.geogr.ku.dk/projects/eoflux/>) aiming for spatial and temporal predictions of the water vapour, sensible heat and CO₂ balance over the island Zealand (7.200 km²) in Denmark based on satellite Earth Observation data at high resolution. The validation part is based on the in-situ heat and water vapour flux observations presented here.