



## **Assessment of CO<sub>2</sub> fluxes and forest productivity (NPP/GPP) estimates from eddy covariance measurement and field observations**

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Eddy covariance (EC) measurements were carried out at the Jastrebarsko site, Croatia, in lowland forest dominated by pedunculate oak. For validation of CO<sub>2</sub> fluxes measured with EC method bi-weekly field measurements of increment of 640 trees in 24 plots set in a 100m x 100m grid, height increment and litterfall have been used. In our work we compared annual productivity (GPP and NPP) assessments from EC measurements with field measurements. The comparison was made on a seven year dataset of measurements, spanning from 2008 to 2014. Also, flux dependence on groundwater level has been investigated.

Results are showing that forest productivity estimates with EC method are in good agreement with the estimates from field measurements in the dry years. Agreement is slightly lower for years with high precipitation.