

Materials List for:

Measurements of CO₂ Fluxes at Non-Ideal Eddy Covariance Sites

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Materials

Name	Company	Catalog Number	Comments
Adjustable mast with metal rails and electric engine (24 V)	maszty.net	-	Alternative basic construction. To be designed and made by professionals
EddyPro	LI-COR, Inc.	ver. 6.2.0.	Free commercial software for fluxes calculation. Available on a website: https://www.licor.com/env/products/eddy_covariance/software.html , on request
Enclosed-path infrared gas analyzer	LI-COR, Inc.	LI-7200	One of two instruments of the eddy covariance system (EC) used for CO ₂ fluxes measurements. Other types of fast analyzers (>10Hz sampling frequency) can be used
REddyProc	-	-	Free software for EC fluxes gap filling and partitioning. Available on Max Planck Institute for Biogeochemistry: https://www.bgc-jena.mpg.de/bgi/index.php/Services/REddyProcWeb . Both online tool and R package are provided.
Short aluminum tower base with concrete foundation	maszty.net	-	Alternative basic construction (pioneering solution). To be designed and made by professionals
Sonic anemometer	Gill Instruments	Gill Windmaster	One of two instruments of the eddy covariance system (EC) used for wind speed measurements. Other types of three-dimensional sonic anemometers can be used
Stainless-steel tripod	Campbel Scientific, Inc.	CM110 10 ft	The basic construction for eddy covariance (EC) system. Can be constructed by yourself- materials to be found in a hardware store
Sunshine sensor	Delta-T Devices Ltd.	BF5	One of the exemplary instruments for photosynthetic photon flux density measurements (PPFD). To be bought from several commercial companies. Remember to place it above the canopy, far from reflective surfaces.
Thermistors	Campbel Scientific, Inc.	T107	One of the exemplary instruments for soil temperature measurements. To be bought from several commercial companies. It is advisable to have a profile of soil temperature

Thermohygrometer	Vaisala Oyj	HMP155	One of the exemplary instruments for air temperature and humidity measurements. To be bought from several commercial companies. Remember to place it inside radiation shield at similar height as the EC system.
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