

ECOSYSTEM STATION

Name:	Monte Bondone (IT-MBo)
Location (lat-long):	Italian Alps, 46.0147 – 11.0458, 1550 m a.s.l
Environment:	Permanent alpine meadow
Operational history:	August 2002 – present.
Scientific purpose:	To understand carbon budget dynamic and its inter-annual variation of an alpine grassland in relation to climate
Station description:	The experimental facility was established in August 2002 as part of the EU-project CARBOMONT, and since then it has been continuously operating within the framework of the CARBOEUROPE and FLUXNET networks. The area is managed as an extensive meadow with low mineral fertilisation and is cut annually in mid-July. The canopy is dominated by Festuca rubra (L.) (basal cover of 25%), Nardus stricta (L.) (basal cover of 13%), and Trifolium sp. (L.) (basal cover of 14.5%). The inter-annual variation in species composition is very limited and does not contribute to the IAV of carbon fluxes. This vegetation is typical of low productive meadows of the Alpine region (Gianelle et al., 2009). The maximum canopy height at the peak of the growing season (mid June to early July) can reach up to 30 cm
Measured ICOS core parameters:	CO2, H2O fluxes; Incoming, Outgoing and Net SW and LW radiations; Incoming PPFD; Outgoing PPFD; Soil Heat flux; Air Temperature and RH profile; Rain precipitation; Snow height; Soil Water Content profile; Soil Temperature profile; Air Pressure.
Measured ICOS desirable parameters:	Diffuse PPFD, Incoming SW radiation, Phenology-Camera, Wind speed and wind direction (additional to 3D sonic)
Other measured parameters:	UV-B, UV-A, NDVI,
Website/data portal:	http://www.fmach.it
Responsible organization:	Fondazione Edmund Mach
Principal investigator:	Damiano Gianelle (<u>damiano.gianelle@fmach.it</u>)
Data manager:	Mauro Cavagna, Barbara Marcolla, Roberto Zampedri
Funding:	Fondazione Edmund Mach

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Eddy tower with seasonal ASD Fieldspec spectroradiometer



IT-MBo ICOS Class 2 site





IT-MBo ICOS Class 2 site (old setup)





