

ECOSYSTEM STATION

Name:	Borgo Cioffi (IT-BCi)
Location (lat-long):	Sele Plain, Southern Italy, 5 Km from the sea, 40.5238 - 14.9574, 15 m a.s.l.
Environment:	Mediterranean
Operational history:	2001 – present.
Scientific purpose:	To understand how agricultural practices and climate influence GHGs budgets
Station description:	<p>The IT-BCi station is located in a 15 ha field irrigated by means of a centre pivot system. Main cultivated species are corn and alfalfa, along with some winter grass crops, for fresh animal consumption, silage or haying. The eddy covariance and the meteo stations were setup approximately in the centre of the field, which has a rectangular shape with dimensions of 300m × 600 m. The fetch in the prevailing wind directions, southwest and northeast (breeze regime), is about 200 m. The terrain is flat with a gentle slope of approximately 2% toward south</p> <p>The mean annual air temperature is 18 °C , with mean maximum up to 30°C in the summer, and the annual precipitation is 600 mm.</p> <p>The parent material of the soil (sandy-clay type) at the site is carbonate, but most of the material has an alluvial origin, deriving from nearby Sele River. Stones on the surfaces are present in patchy areas, almost absent in others.</p>
Measured ICOS core parameters:	CO ₂ , H ₂ O and H fluxes (eddy covariance), Air H ₂ O and CO ₂ concentrations, Air Temperature and RH, Incoming, Outgoing and Net SW and LW radiations, Incoming and Outgoing PPF, Diffuse SW radiation, Soil Heat flux, Rain precipitation, Soil Water Content profile, Soil Temperature profile, Air Pressure.
Other measured parameters:	Infrared surface temperature
Responsible organization:	National Research Council of Italy
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Soil preparation during intercrop.



The centre pivot irrigation system passing over the monitoring station.



The Lolium italicum winter crop.



The CO₂ automatic chamber system during early corn crop development.

