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## Contact Address

Maricar Alberto ([M.Alberto@IRRI.ORG](mailto:M.Alberto@IRRI.ORG))  
Rice Climate Change Consortium, Crop & Environmental Sciences Division,  
International Rice Research Institute, College, 4030 Los Baños, Laguna, Philippines  
Tel:+63(49)536-2701 loc 2300 Fax:+63(49)536-7995

## 1. General Information

Site name (three letter code)	IRRI Flux Research Site (IRI)
Researcher #1 (e-mail)	Maricar Alberto (M.Alberto@IRRI.ORG)
Contact Address#1	Rice Climate Change Consortium, Crop & Environmental Sciences Division, International Rice Research Institute, College, 4030 Los Baños, Laguna, Philippines Tel:+63(49)536-2701 loc 2300 Fax:+63(49)536-7995
Researcher #2 (e-mail)	
Contact Address#2	
Researcher #3 (e-mail)	
Contact Address#3	
Other Researchers (e-mail)	R.Wassmann@IRRI.ORG
Observation period	Jan 2008 to present
Measurement frequency	Continuous
Infrastructure	Aluminum tripod mast, Solar panel
Research fund #1	International Rice Research Institute
Research fund #2	
Research fund #3	
URL	
Other information	

## 2. Site description

Site name (three letter code)	IRRI Flux Research Site (IRI)
Country	Philippines
Location	IRRI, Los Baños, Laguna
Latitude and Longitude (first decimal of second precision), Elevation (geographic coordinates, surveying method)	Latitude: 14.2 N Longitude: 121.3 E Elevation: 21 m a.s.l.
Slope	1-2 deg
Terrain Type	Flat
Area	8 ha
Fetch	100-150 m
Climate (Köppen Climate Classification)	Tropical (hot and humid)
Mean annual air temperature	27.5°C (1979-2007)
Mean annual precipitation	2075 mm (1979-2007)
Vegetation Type	rice
Dominant Species (Overstory)	
Dominant Species (Understory)	
Canopy height	About 1 m
Age	About 120 days
LAI	Average 6.5 m <sup>2</sup> m <sup>-2</sup> (max)
Soil type	Aquandic Epiaquoll

### 3. Measurement Item

#### 3-1. Meteorology

Observation items	Levels / Depth	Instrument
Global solar radiation (incoming)	2.25 m	Pyranometer (LI-200S, LI-COR, USA) Net Radiometer (NR01, Hukseflux, Campbell, USA)
Global solar radiation (outgoing)	2.25 m	Net Radiometer (NR01, Hukseflux, Campbell, USA)
Long-wave radiation (incoming)	2.25 m	Net Radiometer (NR01, Hukseflux, Campbell, USA)
Long-wave radiation (outgoing)	2.25 m	Net Radiometer (NR01, Hukseflux, Campbell, USA)
Net radiation	2.25 m	Net Radiometer (NR01, Hukseflux, Campbell, USA)
PPFD (incoming)	2.25 m	Quantum sensor (LI-190S, LI-COR, USA)
PPFD (outgoing)	2.25 m	Quantum sensor (LI-190S, LI-COR, USA)
Direct/diffuse radiation		
Direct/diffuse PPFD		
Air temperature	2.25 m	Platinum resistance thermometer (HMP45C, Vaisala)
Humidity	2.25 m	Capacitive hygrometer (HMP45C, Vaisala)
Soil temperature	0.025, 0.05, 0.10 m	Type T thermocouple
Soil heat flux		
Soil water content		
Wind speed	2.25 m	Vantage Pro2 Plus weather system (Davis, USA)
Wind direction	2.25 m	Vantage Pro2 Plus weather system (Davis, USA)
Barometric pressure	2.25 m	Vantage Pro2 Plus weather system (Davis, USA)
Precipitation	2.25 m	Vantage Pro2 Plus weather system (Davis, USA)
CO <sub>2</sub> concentration	2.25 m	Open-path CO <sub>2</sub> /H <sub>2</sub> O analyzer (LI7500, LI-COR, USA)

### 3-2. Eddy correlation method

System	Open-path system (CO <sub>2</sub> flux, latent heat flux)
Wind speed	Three-dimensional sonic anemometer-thermometer (CSAT3, Campbell, USA)
Air temperature	Three-dimensional sonic anemometer-thermometer (CSAT3, Campbell, USA)
Water vapor	Open-path CO <sub>2</sub> /H <sub>2</sub> O analyzer (LI7500, LI-COR, USA)
CO <sub>2</sub>	Open-path CO <sub>2</sub> /H <sub>2</sub> O analyzer (LI7500, LI-COR, USA)
Measurement height	2.25 m
Sampling frequency	10 Hz
Averaging time	30 min
Data logger	CR3000 (Campbell, USA)
Data storage	CF card
Original data (Raw data or statistics)	Raw data

### 3-3. Other

Soil respiration	
Photosynthesis	
Ecological Investigation	Biomass, LAI, plant height, tiller no.

## 4. Note (e. g. calibration information, [Publications](#))

<b>Calibration information</b> Open-path CO <sub>2</sub> /H <sub>2</sub> O analyzer was calibrated every 6 months with standard CO <sub>2</sub> gases and a dew point generator (LI610, LI-COR,USA)
<b><a href="#">Publications</a></b> Alberto, M.C.R., Wassmann, R., Hirano, T., Miyata, A., Kumar, A., Padre, A., Amante, M., 2009. CO <sub>2</sub> /heat fluxes in rice fields: Comparative assessment of flooded and non-flooded fields in the Philippines. Agricultural and Forest Meteorology. 149, 1737-1750.  Alberto, M.C.R., Wassmann, R., Hirano, T., Miyata, A., Hatano, R., Kumar, A., Padre, A., Amante, M., 2011. Comparisons of energy balance and evapotranspiration between flooded and aerobic rice fields in the Philippines. Agricultural Water Management. 98, 1417-1430.  Alberto, M.C.R., Hirano, T., Miyata, A., Wassmann, R., Kumar, A., Padre, A., Amante, M., 2012. Influence of climate variability on seasonal and interannual variations of ecosystem CO <sub>2</sub> exchange in flooded and non-flooded rice fields in the Philippines. Field Crops Research (In Press).