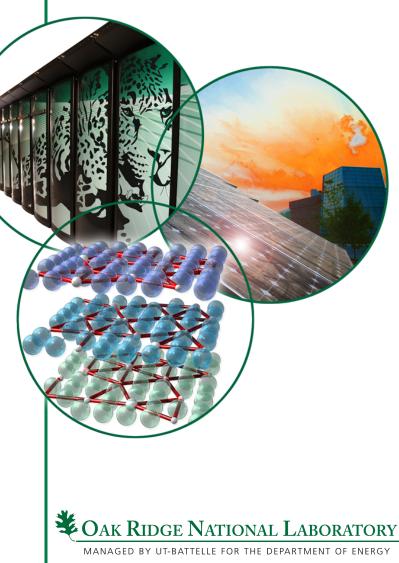
Misha Krassovski, Tom Boden, Bai Yang, Barbara Jackson

CDIAC:

Carbon Dioxide Information and Analysis Center





CDIAC: Carbon Dioxide Information Analysis Center http://cdiac.ornl.gov

- The Carbon Dioxide Information Analysis Center (CDIAC) is the primary climate-change data and information analysis center of the U.S. Department of Energy (DOE). CDIAC is located at DOE's Oak Ridge National Laboratory (ORNL) and includes the World Data Center for Atmospheric Trace Gases.
- CDIAC's data holdings include records of the atmospheric concentrations of carbon dioxide and other radioactively active gases; the role of the terrestrial biosphere and the oceans in the biogeochemical cycles of greenhouse gases; emissions of carbon dioxide from fossil-fuel consumption and land-use changes; long-term climate trends; the effects of elevated carbon dioxide on vegetation; and the vulnerability of coastal areas to rising sea level.
- CDIAC provides data management support for major projects, including the AmeriFlux Network, continuous
 observations of ecosystem level exchanges of CO2, water, energy and momentum at different time scales for
 sites in the Americas; the Ocean CO2 Data Program of CO2 measurements taken aboard ocean research
 vessels; DOE-supported FACE experiments, which evaluate plant and ecosystem response to elevated CO2
 concentrations, and NARSTO, which assesses ozone and fine particle processes in the troposphere over North
 America.
- CDIAC is supported by DOE's Climate Change Research Division of the Office of Biological and Environmental Research.





AmeriFlux Network





http://public.ornl.gov/ameriflux



AmeriFlux Network

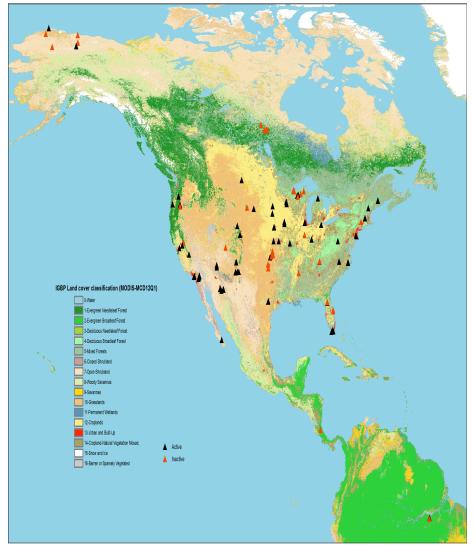
142 sites in 5 countries; 94 active sites, 48 inactive sites

Participation requirements:

- Make year-round core measurements using the eddycovariance technique

- Submit data to the Carbon Dioxide Information Analysis Center (CDIAC) within 1 year of collection

Participate in AmeriFlux
 Science Meetings and synthesis
 Modeling activities





AmeriFlux Data Levels (Products)

For meteorological data:

Level 1 — Processed Data Provided by the Site Investigators: Data files provided by the site measurement teams are processed by CDIAC to produce Level 2 data products (see below). Level 1 data files are archived long-term by CDIAC. Level 1 data are available to users in their native submission formats but users are encouraged to use Level 2, 3 or 4 AmeriFlux data products.

Level 2 — Data Checked & Formatted by CDIAC: Data received from individual sites are reviewed and incorporated into a network-wide AmeriFlux database. The review process includes checks for consistent units, naming conventions, and reporting intervals and reformatting is often necessary to maintain consistency within the larger network-wide database.

Level 3 — Processed Data With Quality Flags Assigned: AmeriFlux Level 2 files are processed by the European flux data activity to produce Level 3 and 4 files identical to the European regional network.

Level 3 files contain the same values as Level 2 files but with quality flags assigned and NEE calculated using standardized techniques.

Level 4 — Gap-filled & Adjusted Data Files with GEP & Re Estimates: Level 4 files contain gap-filled (ANN and MDS techniques) and ustar filtered records, complete with calculated gross productivity and total ecosystem respiration terms on varying time intervals including hourly, daily, weekly, and monthly with flags regarding the quality of the original and gap-filled data.

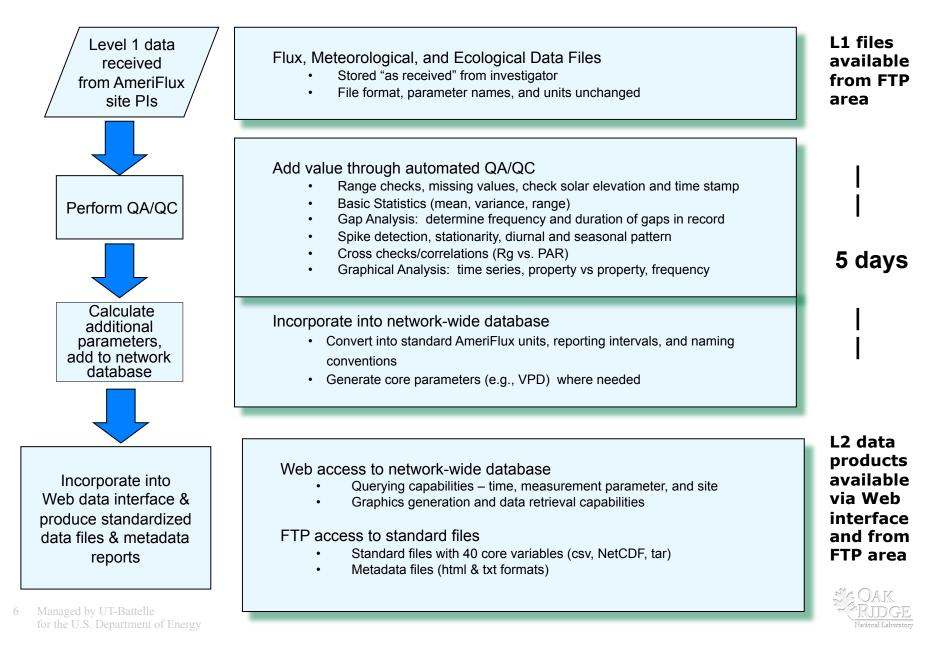
For biological data:

Level 1 — Processed Data Provided by the Site Investigators: Site investigators provide ecological data and disturbance information in various ways including submission of the Law et al. Biological-Ancillary-Disturbance-Methodology (BADM) template. Level 1 biological data are available to users in their native submission formats.

Level 2 — Uniform Law et al. Biological-Ancillary-Disturbance-Methodology (BADM) Templates: The original BADM templates submitted by the site measurement teams are processed by the Microsoft/LBL data team to produce improved templates with uniform fields (e.g., consistent date representations) and better suited for automated processing.



Level 1 to Level 2 Data Processing Scheme



QA/QC in Standardizing AmeriFlux Datasets

- Check for time-stamps, missing or repeated entries
- Threshold check
- Check for nighttime radiation
- Check for inter-relationships
- Check for spikes
- Check for stationarity
- Check for diurnal and seasonal cycles
- Graphic and visual checks



Diversity of Data Submitted by AmeriFlux Sites

Category	Example
Time-stamp	Local time vs. Universal Standard Time; beginning or ending of a sampling period vs. its midpoint
File format	Excel format, text format, Matlab format
Nomenclature and	Water vapor flux vs. evapotranspiration; symbols for photosynthetically active radiation PAR vs. PPFD
symbolic convention	
Unit	CO_2 in mg m ⁻³ vs. CO_2 in ppm
Sign convention	Carbon uptake negative (downward) CO_2 flux vs. positive values (photosynthetic production)
Data representative	A single measurement vs. an average of spatial repetitions; Soil temperature measured at a single level (10 cm) vs. an average within a vertical extent (0-30 cm)
Variable definition	Soil heat flux defined as heat flux through the soil heat plate vs. the sum of heat flux through the soil heat plate and heat storage in the soil layer above the plate
Data handling and	Different coordinate rotations (planar vs. two-dimensional rotation) and corrections for CO ₂ flux term (WPL vs. WPL plus Burba correction); different
processing	levels of screening and cleaning; gap-filled vs. with-gaps
Metadata	Different level of details from a simple file header (symbolic variable names and units only) to a full document (measurement techniques, variable definition, sign convention and others)
Data quality	From publishing quality to data-logger quality





Primary Site Information Site name: All Sites 4 Primary Investigator(s): All PIs + Country: State/Province: All countries 🛟 All States/Provinces 🗍 Measurement status: All -----Data availability status: All -----4 Types of available data products: L2 L2st L3 L4 Bio data Date available (mm/dd/yyyy): From 10/28/1991 To 06/23/2010 Vegetation (IGBP): All classes \$ Elevation (m): From 0 **To** 3190 Longitude (+/-, E/W): From -157.4089 To -54.9589 Latitude (+/-, N/S): From -3.018 To 71.3225 Instruments Instrumentation All instruments Brand + All brands Model All models

Meteorolo	gical variables	Biologica	l variables			
AdvtFC*	APAR	APARpct	CO *			
CO2	CO2den*	DryAirDen*	DV03*			
FC	FG	FH20*	FNOy*			
F03*	GC*	GEP	GPP*			
🗏 Н	H20	H2Oden*	🗌 L*			
📃 LE	Leafwetness*	NEE NEE	ΝΟγ*			
03*	PAR	PARdif	PARdir*			
PARout	PREC	PRECcum*	PRESS			
📃 RE	Rg	Rgdif	Rgdir*			
📃 Rgl	RglOut	RgNIR*	RgNIROut*			
📃 RgOut	RgRed*	RgRedOut*	RH			
Rn	RS*	SFC	SFG*			
SFH20*	SH	SHbio*	SHbole*			
SHleaf*	SLE	SNOWdepth*	SVP*			
swc	SWCdepth*	SWP*	TA			
TAdb*	TAmax*	TAmin*	TAU*			
TAwb*	Tbole*	Tdew*	Tleaf*			
TS	TSdepth*	Tskin*	Tsky*			
Tsnow*	Tsonic*	Ubar*	UST			
VPD	WATERdepth*	🔲 WD	WetAirDen*			
ws	ZEC*	ZL				
*not available in L2st, L3 and L4 files						

Data Products

Full datasets for selected site(s) are available at: All sites all data products



click on marker to see full information about a site

Show sites Create dataset Reset

Supported by: <u>Misha Krassovski</u> <u>AmeriFlux</u> • <u>Contact Us</u> • <u>Comments</u> • <u>CDIAC</u> • <u>ESD</u> • <u>ORNL</u> • <u>Disclaimers</u> This site is provided by the Oak Ridge National Laboratory ORNL is managed by <u>UT-Batelie LLC</u>, for the <u>U.S. Department of Energy</u>

National Laboratory

Site name:			
Fermi Agricultur	al / US-IB1		ŧ
Primary Inve	stigator(s):	
Matamala, R	oser		
Country:	State	e/Province:	
USA	Illino	ois, IL	
Measuremen	t status:		
Active, core made	measuren	nents presently being	
Data availabi		s:	
Data availab			
Types of ava			
L2 🗹 🛛 L2st 🛛	🗹 L3 🗹	L4 🗹 🛛 Bio data 🗹	
Date availab	l e (mm/dd/	yyyy):	
From 03/28/2	005	To 10/31/2009	
Vegetation (IGBP):		
Croplands			
Elevation (m):		
225			
Longitude (+	/-, E/W)	:	
-88.2227			
Latitude (+/	-, N/S):		
41.8593			
Instruments			_
		nd: AccuPAR; Model: PAR-80 Rain Gauge; Brand: Belfort;)
Instrument: 3-D Windmaster Pro	Sonic Anemo	nd: Cropscan; Model: MSR87 ometer; Brand: Gill; Model:	,
instrument: Qua I-190SA	ntum Sensor	r; Brand: LI-COR; Model:	
nstrument: Ope I-COR; Model: L	1-7500	H2O Gas Analyzer; Brand: ssure Sensor; Brand: Met On	ie;

Meteorolo	gical variables	Biologica	l variables
AdvtFC*			CO*
🗹 co2	CO2den*	DryAirDen*	DV03*
FC	FG	FH20*	FNOy*
F03*	GC*	GEP	GPP*
🗹 н	H20	H2Oden*	L*
🗹 LE	Leafwetness*	NEE	ΝΟγ*
03*	PAR	PARdif	PARdir*
PARout	PREC	PRECcum*	PRESS
RE	🗹 Rg	Rgdif	Rgdir*
Rgl	RglOut	RgNIR*	RgNIROut*
🗹 RgOut	RgRed*	RgRedOut*	RH
🗹 Rn	RS*	SFC	SFG*
SFH20*	SH	SHbio*	SHbole*
SHleaf*	SLE	SNOWdepth*	SVP*
🗹 swc	SWCdepth*	SWP*	TA 🖸
TAdb*	TAmax*	TAmin*	TAU*
TAwb*	Tbole*	Tdew*	Tleaf*
TS	TSdepth*	Tskin*	Tsky*
Tsnow*	Tsonic*	Ubar*	🗹 UST
VPD	WATERdepth*	WD WD	WetAirDen*
🗹 ws	ZEC*	ZL	
*not availab	le in L2st, L3 and I	.4 files	
Data Prod	ucts		

Full datasets for selected site(s) are available at: Level 2 files Level 2 standardized files - ASCII (*.csv) and netCDF (*.nc) Level 3 files Level 4 files Biological data



click on marker to see full information about a site

Show sites Create dataset Reset

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Fermi Agricultu	ıral / US-IB1
	estigator(s):
Matamala, F	
Country:	State/Province:
USA	Illinois, IL
Measureme	nt status:
Active, core made	measurements presently being
Data availat	pility status:
Data availal	ble
Types of ava	ailable data products:
L2 🗹 L2st	🗹 L3 🗹 L4 🗹 Bio data 🗹
Date availat	ble (mm/dd/yyyy):
From 03/28/2	2005 To 10/31/2009
Vegetation	(IGBP):
Croplands	
Elevation (n	n):
225	
Longitude (·	+/-, E/W):
-88.2227	
Latitude (+,	/-, N/S):
41.8593	
Instruments	5
	otometer; Brand: AccuPAR; Model: PAR-80 ping Bucket Rain Gauge; Brand: Belfort; 2
Instrument: 3-D Nindmaster Pro	
Instrument: Qua	antum Sensor; Brand: LI-COR; Model:
I-COR; Model:	en Path CO2/H2O Gas Analyzer; Brand: LI-7500 rometeric Pressure Sensor; Brand: Met One;

Meteorological vari	ables Bio	logical variables	
☑ DIST	ASA	MaxSA	
SPPUperc			
	_	LAIclump	
	AgBiomassTI		
AgBiomassTT			
AgBiomassST			
AgBiomassCH			
CropResid	CWD	FWD	
StMass	SNAG	CRBiomass	
FRBiomass	RTBiomass	WoodIncr	
AgProdTF	AgProdTW	AgProdTT	
AgProdSF	AgProdSW	AgProdST	
AgProdNWT	AgProdCF	AgProdCH	
AgProdCT	CRProd	FRProd	
RTProd	NEPdur	LitProd	
LMA	FolN	FoIC	
WoodN	WoodC	LitN	
LitC	RootN	RootC	
SoilType	SoilBD	SoilC	
SoilN	SoilPH	SandPerc	
SiltPerc	ClayPerc	RockPerc	
SoilDepth	SoilWaterCa	SWC	
RsMean	BudBkDate	CotDate	
FlowerDate	LeafFullDate	LeafSenDate	
LeafOffDate			
Leafondate			



Data Products

Full datasets for selected site(s) are available at: Level 2 files Level 2 standardized files - ASCII (*.csv) and netCDF (*.nc) Level 3 files Level 4 files Biological data

Show sites Create dataset Reset

National Laboratory



General Site Information

- Sitename/FLUXNET ID: Fermi Agricultural / US-IB1
- Country: USA
 State/Province: Illinois, IL
 Sponsor: DOE/TCP
- Latitude (+N/-S): 41.8593
 Longitude (+E/-W): -88.2227

- Status: Active, core measurements presently being made
 Vegetation (IGBP): Croplands
- Principal Investigator(s)

• Cook, David R. Argonne National Laboratory

Environmental Science Division, Climate Research Section Building 203, 9700 South Cass Avenue Argonne, IL USA 60439

Phone: 630-252-5840 Fax: 630-252-2959

Email: drcook@anl.gov • Matamala, Roser

Matamala, Koser Argonne National Laboratory Biosciences Division Building 203, 9700 S. Cass Avenue Argonne, IL USA 60439 Phone: 630-252-9270

Fax: 630-252-8895 Email: matamala@anl.gov

Data and additional information

- Types of available data products: L2 L2st L3 L4 Biodata
- Period of available data: from 03/28/2005 to 10/31/2009
 L2st summary report: Fermi Agricultural SummaryReport
 History of data changes and submissions: <u>History changes</u>

- CDIAC L2st processing report: Report Fermi Agricultural
 Research topics: The primary objectives of the proposed study are to (1) compare net ecosystem production derived by integrating eddy covariance estimates time with independent biometric measurements of ecosystem carbon stocks, and (2) compare carbon dynamics and stocks for the two management practices. Th American Carbon Program by providing information on the magnitude and distribution of carbon stocks and the processes that control carbon dynamics in cultival U.S. Midwest.
- U.S. minutest. Land history: Two eddy correlation systems are installed at Fermi National Accelerator Laboratory: one on a restored prairie (established October 2004) and one agricultural field (established in July 2005). The prairie site had been farmed for more than 100 years, but was converted to prairie in 1989. The agricultural site I than 100 years, but the first documented instance of agricultural activity dates back to a picture taken in 1952.
- Soil type: Silty clay loam topsoil with clay subsoil
 Dominant species composition: Corn (C4) 2006, 2008 and Soybean (C3) 2005, 2007, 2009

- Dominant species composition: Com (C Tower height: 4.05 m Vegetation type: Corn/Soybean rotation AmeriFlux hetwork data: <u>Data link</u> AmeriFlux biological data: <u>Data link</u> Modis 5 data: <u>Data link</u> Additional information: <u>Data link</u>

Meteorological/Flux measurements

Variable	Units		Description	Repeat	Processing	Offset	Offset units	Sign convention
APAR u	umol/m2/s	Absorbed PAR					(n/a)	
APAR u	umol/m2/s	Absorbed PAR			Filled		(n/a)	

Biological

Variable	Units	Description	
AgBiomassCH gC/m	2 (ground)	Aboveground biomass of cro	os harvest
ASA years		Mean stand age in years	
mentation			
Name		Brand	Mode
Ceptometer		AccuPAR	PAR-80
Tipping Bucket Rain Ga	auge	Belfort	OMC-212

Ceptometer	AccuPAR	PAR-80
Tipping Bucket Rain Gauge	Belfort	OMC-212
Radiometer	Cropscan	MSR87

Publications

• J. D. Jastrow; 1987; Changes in Soil Aggregation Associated with Tallgrass Prairie Restoration; American Journal of Botany; Volume: 74; Issue: 11; Pages: 1656-1664; • J. D. Jastrow, R. M. Miller: J. Lussenhop; 1998; Contributions of interacting biological mecannisms to soil aggregate stabilization in restored prairie; Soil Biology and Biochemistry, Volume: 30; Issue: 7; Pages: 905-916;

J. D. Jastrow, R. M. Miller: J. Lussenhop; 1998; Contributions of interacting biological mecahnisms to soil aggregate stabilization in restored prairie; Soil Biology and Biochemistry; Volume: 30; Issue: 7; Pages: 905-916;

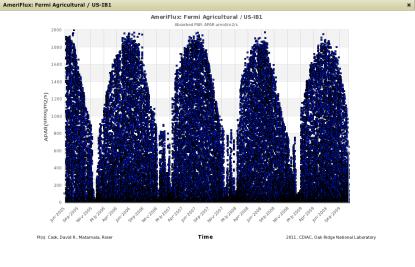
R. M. Miller, S. P. Miller, J. D. Jastrow, C. B. Rivetta; 2002; Mycorrhizal mediated feedbacks influence net carbon gain and nutrient uptake in Andropogon geradii; New Phytologist; Volume: 155; Pages: 149-162;

W. M. Post, R. C. Izarralde, J. D. Jastrow, B. A. McCarl, J. E. Amonette, V. L. Balley, P. M. Jardine, T. O. West, and J. Z. Zhou; 2004; Enhancement of carbon sequestration in U. S. soils; BioScience; Volume: 54; Issue: 10; Pages: 895-908;

V. J. Allison, R. M. Miller, J. D. Jastrow, R. Matamala, D. R. Zak; 2005; Changes in soil microbial community structure in a tallgrass prairie chronosequence; Soil Science Society of America Journal; Volume: 69; Issue: 5; Pages: 1412-1421;









Close

Site name:	Meteorolo	gical variables	Biologica	l variables	
Fermi Agricultural / US-IB1	AdvtFC*			CO *	
Primary Investigator(s):		CO2den*	DryAirDen*	DV03*	Contraction of the Party of the
Matamala, Roser	FC		FH20*	FNOy*	
Country: State/Province:		0	_		
USA Illinois, IL	F03*	GC*	GEP	GPP*	
Measurement status:	м	H20	H2Oden*	L*	Canada
Active, core measurements presently being made		Leafwetness*	NEE	NOy*	CUTIEN
Data availability status:	03*		PARdif	PARdir*	
Data available	PARout		PRECcum*	PRESS	th Pacific
Types of available data products:	RE	🗹 Rg	Rgdif	Rgdir*	rth Pacific Ocean
L2 🗹 L2st 🗹 L3 🗹 L4 🗹 Bio data 🗹	📃 Rgl	RglOut	RgNIR*	RgNIROut*	
Date available (mm/dd/yyyy):	RgOut	RgRed*	RgRedOut*	RH	México
From 03/28/2005 To 10/31/2009	🗹 Rn	RS*	SFC	SFG*	
Vegetation (IGBP):	SFH20*	SH	SHbio*	SHbole*	Venezuela
Croplands	SHleaf*	SLE	SNOWdepth*	SVP*	COUNTERS
Elevation (m):	swc	SWCdepth*	SWP*	TA 🗹	Brasi
225	TAdb*	TAmax*	TAmin*		Bolivia
Longitude (+/-, E/W): -88,2227	TAwb*	Tbole*	Tdew*		A A A A A A A A A A A A A A A A A A A
Latitude (+/-, N/S):	√ тs	TSdepth*	Tskin*	Tsky*	South Chile 2 Pacific Ocean
41.8593		Tsonic*	Ubar*	⊠ UST	
To show on he		WATERdepth*		WetAirDen*	Argentina
Instruments Instrument: Ceptometer; Brand: AccuPAR; Model: PAR-80	™ ws	ZEC*	I ZL	WetAn Den	
Instrument: Tipping Bucket Rain Gauge; Brand: Belfort; Model: OMC-212	_	le in L2st, L3 and			
Instrument: Radiometer; Brand: Cropscan; Model: MSR87 🛛 💆		-	L4 mes		
Instrument: 3-D Sonic Anemometer; Brand: Gill; Model: Windmaster Pro	Data Prod				Consta
Instrument: Quantum Sensor; Brand: LI-COR; Model: LI-190SA	Level 2 files	ets for selecte			Google Imagery ©2011 NASA, TerraMeters -
Instrument: Open Path CO2/H2O Gas Analyzer; Brand: LI-COR; Model: LI-7500	Level 2 stand Level 3 files	lardized files - ASC	II (¹ .csv) and ne	:CDF (*.nc)	click on marker to see full information about a
Instrument: Barometeric Pressure Sensor; Brand: Met One;	Level 4 files Biological da				
	biological da	ta			
		Show sites	reate dataset (F	eset	
		Sup	ported by: Misha K	assovski	
	Ame	riFlux • Contact Us •	Comments • CDIA	C • ESD • ORNL • Discla	aimers
	0			e National Laboratory U.S. Department of Ene	erov



Index of ftp://cdiac.ornl.gov/pub/ameriflux/data/Level2/Sites_ByName /Fermi_Agricultural/with_gaps/

🚹 Up to higher level directory

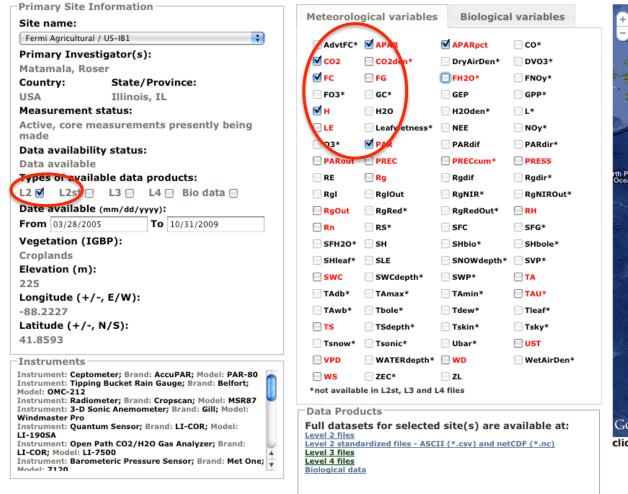
Name	Size	Last Modified
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AMF_USIB1_2005_L2_WG_V004.nc	2364 KB	6/21/10 12:00:00 AM
AMF_USIB1_2006_L2_WG_V004.csv	3817 KB	6/21/10 12:00:00 AM
AMF_USIB1_2006_L2_WG_V004.nc	3096 KB	6/21/10 12:00:00 AM
AMF_USIB1_2007_L2_WG_V004.csv	3835 KB	6/21/10 12:00:00 AM
AMF_USIB1_2007_L2_WG_V004.nc	3096 KB	6/21/10 12:00:00 AM
AMF_USIB1_2008_L2_WG_V004.csv	3840 KB	6/21/10 12:00:00 AM
AMF_USIB1_2008_L2_WG_V004.nc	3104 KB	6/21/10 12:00:00 AM
AMF_USIB1_2009_L2_WG_V004.csv	3154 KB	6/21/10 12:00:00 AM
AMF_USIB1_2009_L2_WG_V004.nc	2579 KB	6/21/10 12:00:00 AM
Fermi_Agricultural_SummaryReport.htm	36 KB	6/21/10 12:00:00 AM
history_changes.txt	2 KB	6/21/10 12:00:00 AM
📦 report_Fermi_Agricultural.html	124 KB	6/21/10 12:00:00 AM

Index of ftp://cdiac.ornl.gov/pub/ameriflux/data/Level1/Sites_ByName /Fermi_Agricultural/biological_data/

Dp to higher level directory

Name	Size	Last M	lodified
2005_Fermi_FF_MSR_LAI.txt	80 KB	11/10/05	12:00:00 AM
AmeriFlux_Biological_Data_Fermicrop.Version1.xls	138 KB	8/12/09	12:00:00 AM
US-IB1_CADM_LATEST.xls	66 KB	5/4/09	12:00:00 AM







click on marker to see full information about a site





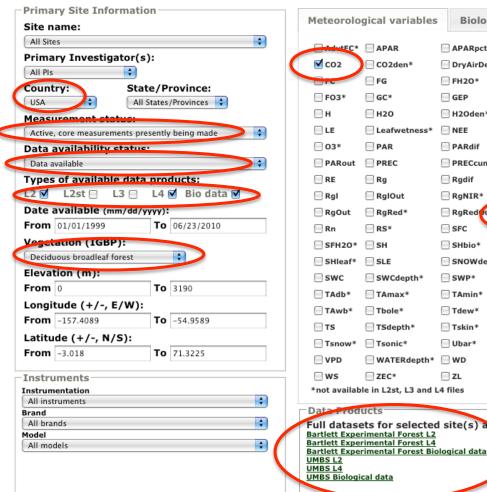
Primary Site Information					
Site name:	Meteorologica	l variables Biological variables			
Fermi Agricultural / US-IB1			Creenland		
Primary Investigator(s): Matamala, Roser	AmeriFlux Data Ext		×		
Country: State/Province:	The AmeriFlux data you ar	e about to download are available without co	est and were furnished		
USA Illinois, IL	by individual AmeriFlux scientists who encourage their use.				
Measurement status:	Users are requested to inform the appropriate AmeriFlux scientist or scientists of your plans for usage or publication. Once you have made your data selections, our data system will				
Active, core measurements presently bein made	provide an opportunity to send an e-mail to the investigators immediately with the appropriate e-mail addresses provided for you. In addition, the AmeriFlux scientists will be notified by our				
Data availability status:		t you have downloaded data from their site(s			
Data available		data contributors may result in a loss of acc at the Carbon Dioxide Information Analysis C			
Types of available data products:	Once you have contacted t	the AmeriFlux scientists, we expect you will a	acknowledge the data Atlantic		
L2 🗹 L2st 🗌 L3 📄 L4 📄 Bio data 📄		he acknowledgments if the data are not yet p gators feel that they should be acknowledged	published. If the		
Date available (mm/dd/yyyy):		ney will let you know and we assume that an			
From 03/28/2005 To 10/31/2009		fore publishing and/or use of the data for pu			
Vegetation (IGBP):	directly competes with the Principal Investigators analysis they may ask that they have the opportunity to submit a manuscript before you submit one that uses unpublished data. In Colombia				
Croplands	addition, when publishing, please acknowledge the agency that supported the research.				
Elevation (m): 225	First na	ame: Misha	Peru Brasil		
Longitude (+/-, E/W):	Last na	ime: Krassovski	Bolivia		
-88.2227	Affiliati	on: ORNL			
Latitude (+/-, N/S):			Chine		
41.8593	Email:	krassovskimb@ornl.gov			
			Argentina		
Instruments					
Instrument: Ceptometer; Brand: AccuPAR; Model: PAR- Instrument: Tipping Bucket Rain Gauge; Brand: Belfort					
Model: OMC-212 Instrument: Radiometer; Brand: Cropscan; Model: MSR			(Lagree) (Cancel)		
Instrument: 3-D Sonic Anemometer; Brand: Gill; Model Windmaster Pro	Data Floracts				
Instrument: Quantum Sensor; Brand: LI-COR; Model: LI-190SA	Full datasets fo	or selected site(s) are available at:	Google Imagery ©2011 NASA, TerraMetrics - Terms of Use		
Instrument: Open Path CO2/H2O Gas Analyzer; Brand:	Level 2 standardize	ed files - ASCII (*.csv) and netCDF (*.nc)	click on marker to see full information about a site		
LI-COR; Model: LI-7500 Instrument: Barometeric Pressure Sensor; Brand: Met C	ne; Level 3 files				
Model: 7120	Biological data				
			_		
	Sh	ow sites Create dataset Reset			



Primary Site Information						100	A 1. 18	
Site name:		Meteorolo	gical variables	Biologi	cal variables	+		
Fermi Agricultural / US-IB1	\$							Greenland
Primary Investigator(s):								AS 8 5 1
Matamala, Roser	Ame	eriFlux Data	Extraction				×	Par & J
Country: State/Province:	Your file is ready:							
USA Illinois, IL							X	
Measurement status:							- Friend	A A
Active, core measurements presently bein made	Download Canada							
Data availability status:				Filesize: 1.90	18 MB			Y 2ml
Data available				(12.4171278476			United States	A DA
Types of available data products:	Prep. time: 0.097427845001221 Atlantic				Atlantic			
L2 🗹 L2st 🗌 L3 📄 L4 🗎 Bio data 🗎	Query time: 8.7500638961792 Ocean				Occan			
Date available (mm/dd/yyyy):							México	
From 03/28/2005 To 10/31/2009							State State	
Vegetation (IGBP):							ose	Venezuela
Croplands							use of the second se	Colombia
Elevation (m):		SWC	SWCdepth*	SWP*			and the second	Brasil
225		_			_			Perú Brazil Bolivia
Longitude (+/-, E/W):		TAdb*		TAmin*	TAU*			Bolivia C. C. A
-88.2227		TAwb*	Tbole*	Tdew*	Tleaf*		uth :ific	Chile,
Latitude (+/-, N/S):		TS	TSdepth*	Tskin*	Tsky*	Oct		
41.8593		Tsnow*	Tsonic*	Ubar*	UST			Argentina
Instruments		VPD	WATERdepth*	WD	WetAirDen*			
Instrument: Ceptometer; Brand: AccuPAR; Model: PAR-	-80	ws	ZEC*	ZL				
Instrument: Tipping Bucket Rain Gauge; Brand: Belfort; Model: OMC-212		*not availab	le in L2st, L3 and L	4 files				War and
Instrument: Radiometer; Brand: Cropscan; Model: MSR Instrument: 3-D Sonic Anemometer; Brand: Gill; Model:	87	- Data Drad	uete					
Windmaster Pro	Dutu Products							
Instrument: Quantum Sensor; Brand: LI-COR; Model: LI-190SA	Level 2 files							
Instrument: Open Path CO2/H2O Gas Analyzer; Brand: LI-COR; Model: LI-7500	Brand: Level 2 standardized files - ASCII (*.csv) and netCDF (*.nc) Click on marker to see full information about a site							
Instrument: Barometeric Pressure Sensor; Brand: Met (Model: 7120	d: Met One; Level 4 files Biological data							
		protogreat det						

Show sites Create dataset Reset





Meteorological variables Biological variables				
	APAR	APARpct	□ co*	
✓ co2	CO2den*	DryAirDen*	DV03*	
Git	🔲 FG	FH20*	FNOy*	
F03*	GC*	GEP	GPP*	
н	🗏 H2O	H2Oden*	🔲 L*	
📃 LE	Leafwetness*		NOy*	
03*	PAR	PARdif	PARdir*	
PARout	PREC	PRECcum*	PRESS	
📃 RE	Rg	Rgdif	🗌 Rgdir*	
📃 Rgl	RglOut	RgNIR*	RgNIROut*	
📃 RgOut	RgRed*	RgRed Out*	RH	
📃 Rn	RS*	SFC SFC	C.C.S.*	
SFH2O*	SH	SHbio*	SHbole*	
SHleaf*	SLE	SNOWdepth*	SVP*	
swc	SWCdepth*	SWP*	TA	
TAdb*	TAmax*	TAmin*	TAU*	
TAwb*	Tbole*	Tdew*	📃 Tleaf*	
TS	TSdepth*	Tskin*	Tsky*	
Tsnow*	Tsonic*	Ubar*	UST	
VPD	WATERdepth*	WD	WetAirDen*	
ws	ZEC*	📃 ZL		
*not available in L2st, L3 and L4 files				
Data Froducts				
Full datasets for selected site(s) are available at: Bartlett Experimental Forest L2 Bartlett Experimental Forest L4				

reate dataset

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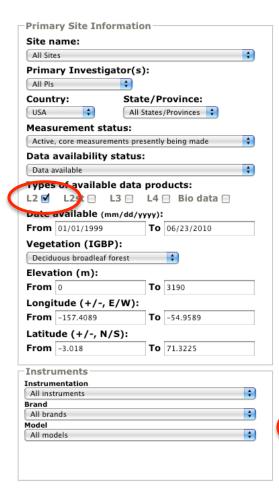
Reset



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Meteorolo	gical variables	Biologica	l variables
AdvtFC*	APAR	APARpct	□ co *
🗹 CO2	CO2den*	DryAirDen*	DV03*
FC	FG	FH20*	FNOy*
F03*	GC*	GEP	GPP*
🗏 Н	🗌 H2O	H2Oden*	🗌 L*
ELE	Leafwetness*	NEE NEE	📃 ΝΟγ*
03*	PAR	PARdif	PARdir*
PARout	PREC	PRECcum*	PRESS
RE	Rg	Rgdif	🗌 Rgdir*
📃 Rgl	RglOut	RgNIR*	RgNIROut*
RgOut	RgRed*	RgRedOut*	RH
📃 Rn	RS*	SFC	SFG*
SFH2O*	SH	SHbio*	SHbole*
SHleaf*	SLE	SNOWdepth*	SVP*
swc			
SWC	SWCdepth*	SWP*	TA 🗌
TAdb*	SWCdepth*	SWP*	🗌 TA 🗌 TAU*
_		_	
TAdb*	TAmax*	TAmin*	TAU*
TAdb*	TAmax*	TAmin*	TAU*
TAdb*	TAmax*	TAmin*	Tleaf*
TAdb* TAwb* TS Ts VPD WS	TAmax* Tbole* TSdepth* Tsonic*	TAmin* Tdew* Tskin* Ubar* UDar ZL	TAU* Tieaf* Tsky* UST

Octa Products

Full datasets for selected site(s) are available at: <u>Bartlett Experimental Forest L2</u> <u>Silas Little Experimental Forest L2</u> <u>UMBS L2</u>

Create dataset

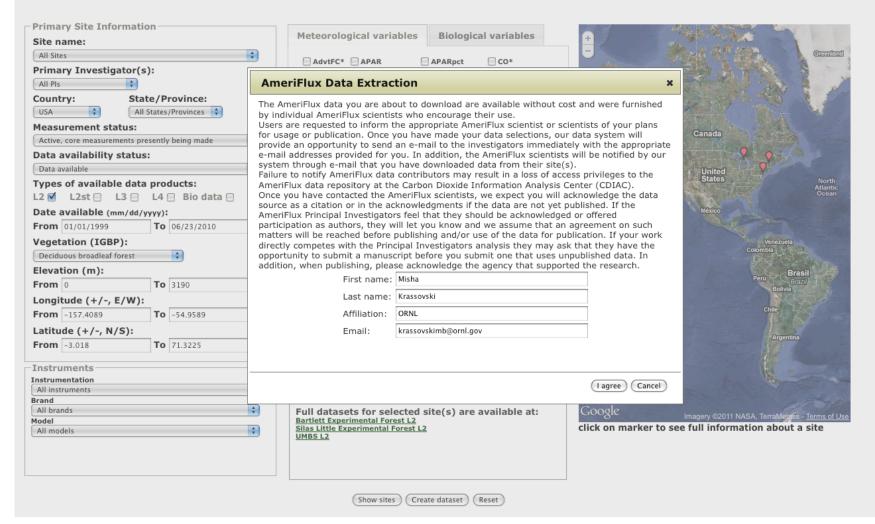
Reset

Show sites



click on marker to see full information about a site

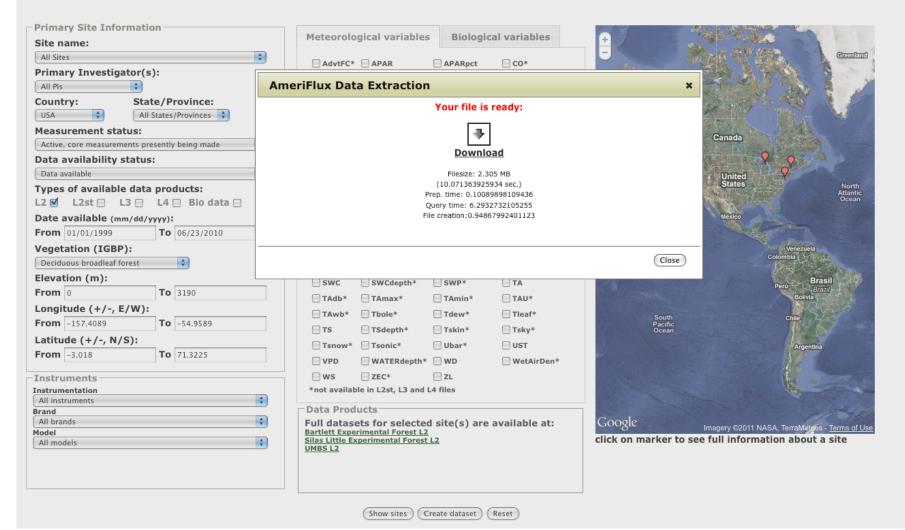






Primary Site Information	
Site name:	Meteorological variables Biological variables
All Sites	Greenting
Primary Investigator(s):	
All PIs	AmeriFlux Data Extraction ×
Country: State/Province:	
USA 🗘 All States/Provinces 🗘	Please verify sites that you want to include into the dataset:
Measurement status:	Bartlett Experimental Forest
Active, core measurements presently being made	Image: Second
Data availability status:	Silas Little Experimental Forest
Data available	WMBS
Types of available data products:	*If you need all data (all variables, all dates) please use precompiled datasets using links in Data Products Atlantic Ocean
L2 🗹 L2st 🗌 L3 📄 L4 📄 Bio data 📄	section below Ocean
Date available (mm/dd/yyyy):	México
From 01/01/1999 To 06/23/2010	
Vegetation (IGBP):	Venezuela
Deciduous broadleaf forest	Commade
Elevation (m):	Brasil
From 0 To 3190	Bolivia Bolivia
Longitude (+/-, E/W):	
From -157.4089 To -54.9589	Chile 25
Latitude (+/-, N/S):	
From -3.018 To 71.3225	Argentina
Instruments Instrumentation	
All instruments	Create dataset Cancel
Brand	
All brands Model	Full datasets for selected site(s) are available at: Bartlett Experimental Forest L2 GOOgle Imagery ©2011 NASA, TerraMetrics - Terms of Use
All models	Silas Little Experimental Forest L2 UMBS L2
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Thank you!

