



Eddy-Covariance Browser-Based Software





FLUX Web is a service of Campbell Scientific | Gas Flux & Turbulence

Overview

EasyFlux® Web is a web-based multi-user software system used for monitoring Internet-connected Campbell Scientific data logger stations. EasyFlux® Web builds on our EasyFlux® DL series for the IRGASON or EC150/CSAT3A and CPEC200/CPEC300 series to provide real-time display of fully corrected 30-minute fluxes, energy-balance sensors, and overall health of the network. EasyFlux® Web gives you the ability to track your eddy-covariance sites, as well as other types of sites, in one easy-to-use interface.

EasyFlux® Web functions with the EasyFlux® DL program running on a Campbell Scientific data logger. When a station is added, EasyFlux® Web automatically pulls station information available from the program running in the data logger (ecosystem, latitude, and longitude). After adding your stations, you can graphically monitor data, including QA/QC values and download data, compare data between sta-

Benefits and Features

- > Set up custom alerts with email notification
- > Monitor a variety of station types, not just flux stations
- > Quickly reference metadata for each station

tions, and set up alerts to notify you by email of data values outside of user-entered thresholds.

An administrator can set up user accounts and control the rights of each user. The following installation options are offered for EasyFlux® Web.

- 1. EasyFlux[®] Web Self-Hosted: You install the software directly on your server, which also installs SQL Server Express. EasyFlux[®] Web is then accessed by typing the IP address of the server into a web browser.
- 2. EasyFlux[®] Web CSI-Hosted: Campbell Scientific installs the software and automatically updates the software for you in a Microsoft Azure-based environment and provides a link to access the software.
- Remotely download data
- View map of all stations in network with quick view of critical data and alerts available on a computer, tablet, or smartphone device (See next page for more »)

More info: 435.227.9120
campbellsci.com/easyflux-webs



- > Flexible product offering with ability to purchase a local copy or a subscription to a cloud-based plan
- Administrator choices on read/write abilities of users
- Fully compatible with EasyFlux® DL series

- > Field camera integration
- > Old data file import
- > Translation utility to view EasyFlux® Web in language of choice

Station Setup

EasyFlux® Web allows for users to add all of their stations within a network that has remote communication access. Adding your station's IP address to the program immediately adds your station to



Adding a station is quick and easy. Just select *Manage LoggerNet Dataloggers*, fill in your data logger's information, and then customize your station using the *New Station* interface. Once you click Save, you're all done! the interface. You can uniquely modify each station with site images, ecosystem type, and location information. Once added, your site will display on the interactive map, making your data one click away.



Once your site has been added, it will appear on the interactive **Over**view **Map** where you can see snapshots of data at your site for easy monitoring. For example: Texas Water Observatory at Riesel Farm – Native Prairie Site: <u>http://two.tamu.edu/sites/primary/rfpr.aspx</u>

Station Info

The *Station Info* section is a great tool for checking the status of important station data variables, metadata, and data logger information.

Station notes can be logged here after site visits to provide important information that you may need to be aware of for future reference.

⊜ EasyFlux Web			@ Ove	erview 0 Station Info	O Monitor Data	🗮 Download Data	Alerts	۰ 💻	?
Manage Station -		s	tation: OPEC N40 -						
and the second second		TYPE EasyFlux DL CR6			Station Notes				
SET.		ECOSYSTEM Grass		1/14/2020				×	
		LOCATION 865, West 1800 North, Logan States of America	, Cache County, Utah, 84321, United	Calibrated today					
Zu		LATITUDE 41.7658702		rechinician 1					
1 Alexandress of the second se		LONGITUDE -111.8551045	1/14/2020				×	•	
IRGASON		ELEVATION 1350		Station is up and Technician 1	Station is up and running Technician 1				
NAME OPEC N40									v
ABBREVIATION									
INSTITUTION Campbell Scientific									
Gas analyzer and sonic anemometer									
IRGASON-Ux IRGASON-Uy			IRGASON-UZ		IRGASON-Fc				
0.5830125	-1.377657		0.1138529	-0.3240348					
IRGASON-H	IRGASON-LE		CO2_sig_strgth		H2O_sig_strgt	h			-
-8.846025	1.670611		0.954269		0.9404233				
Datalogger									
Model		Serial Number		OS Version					
CR6	1	930		CR6.Std.09.01 CR6-W	1FI.01				
		Last Calibrated							
		12/19/2019	1						

Monitor Data

EasyFlux® Web gives you the capability to monitor your fully corrected fluxes and other sensor data. The *Monitor Data* section allows you to add and customize which station variables are visible to you. This tool helps track your data over time to give you a better understanding of the important environmental processes that occur at your site.



Monitor Data section can be easily customized for your application



Ability to view camera images within Monitor Data section

Download Data

You can instantly download data in EasyFlux® Web. Just specify what data tables to collect, what data format you would prefer, and how much data you need.

Alerts

EasyFlux® Web helps notify you of potential problems with your eddy-covariance station. Customizable alerts help to inform you when system conditions have triggered a data flag. You can set thresholds to your station variables that will alert you when your data has fallen within these values. You can subscribe to those alerts for which you want to be notified by email.

Download Data Select the Table to Collect Flux_AmeriFluxFormat • Data File Format Comma Separated with Header (TOA5) • Collection Mode All Data •

L Download Now

Title	Status	Value	Threshold	Message		Actions
No Data	۲			No data received for over one hour	C	٥
Skipped Scans	\bigcirc	0	value > 0		0	٥
Watchdog Errors	\bigcirc	0	value > 0		0	•
Card Storage Running Low	۲	0.8756945	value < 7	There are less than seven days of card storage on the datalogger.	C	٥
FC OK		NAN	value = NAN	Invalid value for FC	O	٥
LE OK		NAN	value = NAN	Invalid value for LE	O	٥
нок		NAN	value = NAN	Invalid value for H	O	٥
TAU OK		NAN	value = NAN	Invalid value for TAU	ଟ	٥
USTAR OK	\bigcirc	0.2280097	value = NAN		O	٥

Compatibility

Required Campbell Systems

> Any Campbell Scientific data logger-based system with an Internet connection.

Required Computer Software

- Windows 8.1 or newer and Windows Server 2012 R2 or newer 64-bit only.
-) 10 GB of hard-disk space
- > 4 GB RAM
- > 2.0 GHz or faster processor
- > x64 processors only



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