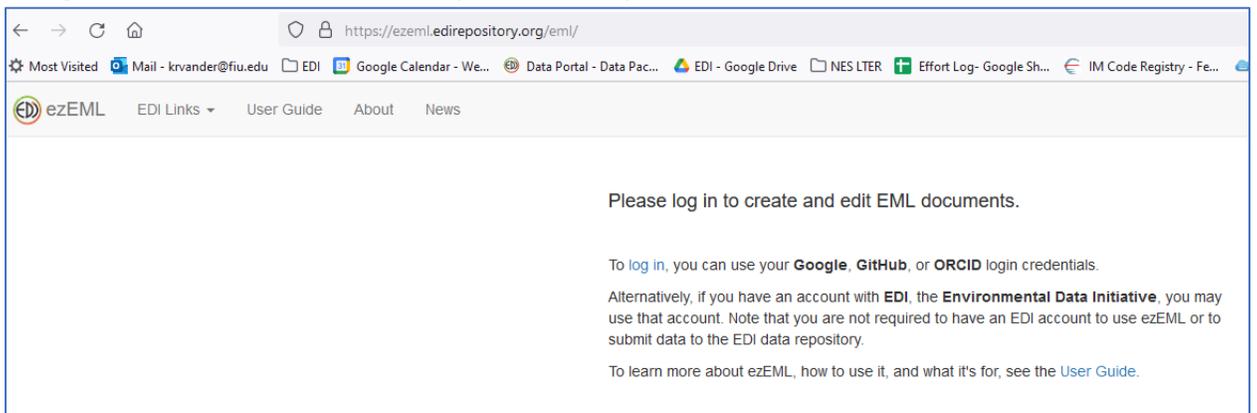
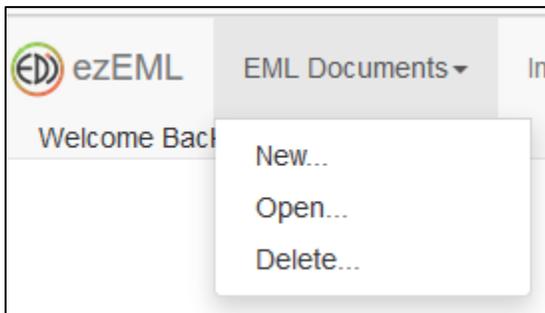


Procedure for entering a new FCE LTER dataset:

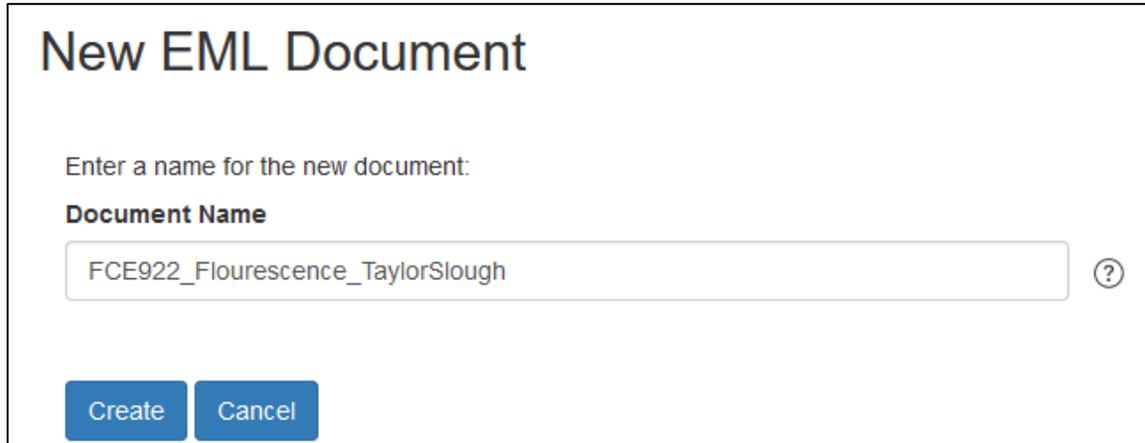
1. Contact Kristin Vanderbilt, FCE Information Manager, at krvander@fiu.edu, to get an FCE ID number for your new dataset.
2. Navigate to the ezEML application: <https://ezeml.edirepository.org/eml/>
3. Click on 'log in'. You can log in with your Google, GitHub or ORCID login credentials. Access to all the metadata you enter is linked to your login, so please login with the same method (Google, ORCID, or GitHub) each time you enter or update metadata and data.



4. Begin a new metadata file by clicking on 'EML Documents' in the menu bar and selecting 'New.'



5. Enter a name for the EML document by which you will identify this document in the future. *This is not the title of the dataset!* It is the title of the EML document. I suggest using this pattern: <FCEID_SubjectOfDataset>, eg., FCE1207_MangroveExptPorewaterNutrients. You may want to specify location if that is important to distinguish it from other datasets you will enter. Click 'Create'.



New EML Document

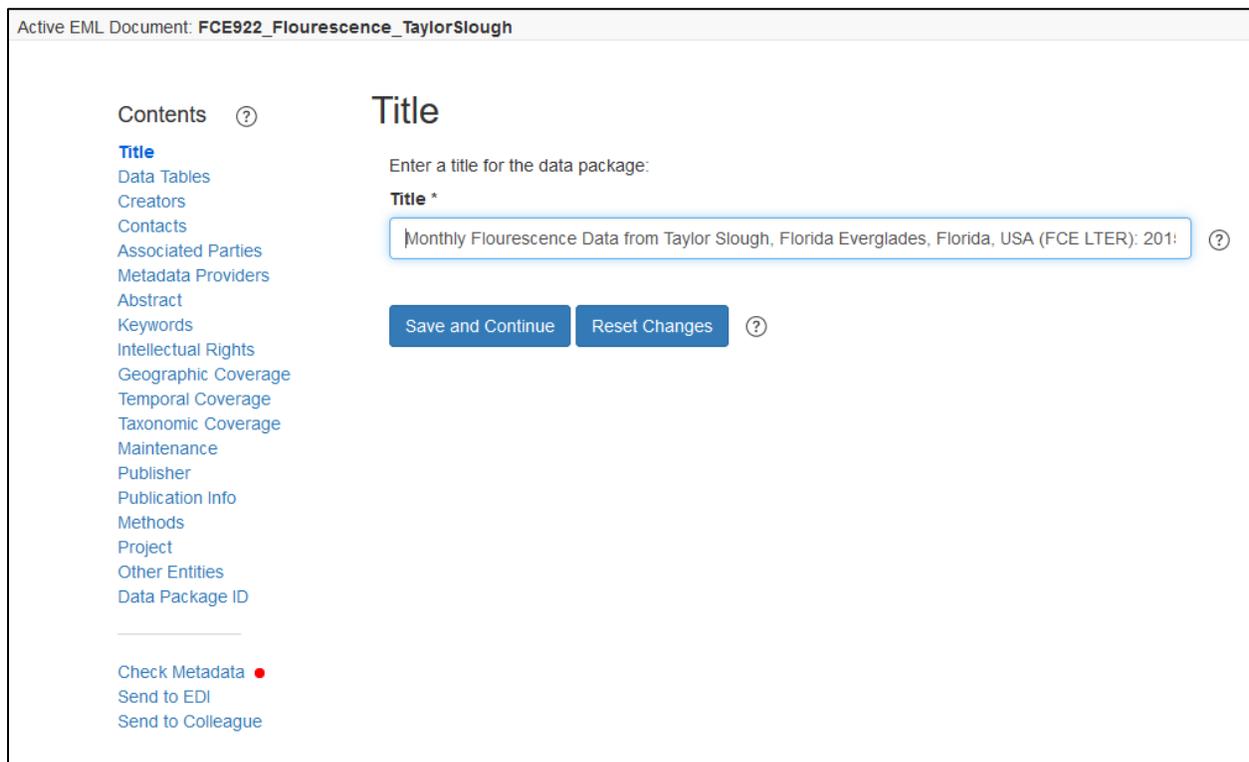
Enter a name for the new document:

Document Name

FCE922_Flourescence_TaylorSlough

Create Cancel

6. Now you will see this window that has links to pages into which you will enter all needed metadata. Here is where you enter the title for your data package. Make sure it is descriptive, including What, Where and When. Here's an example: "Monthly Water Quality Data from Shark River Slough, Florida Everglades, Florida, USA (FCE LTER): 2010-2019" When finished in any window, click "Save and Continue."



Active EML Document: FCE922_Flourescence_TaylorSlough

Contents

- Title
- Data Tables
- Creators
- Contacts
- Associated Parties
- Metadata Providers
- Abstract
- Keywords
- Intellectual Rights
- Geographic Coverage
- Temporal Coverage
- Taxonomic Coverage
- Maintenance
- Publisher
- Publication Info
- Methods
- Project
- Other Entities
- Data Package ID

Title

Enter a title for the data package:

Title *

Monthly Flourescence Data from Taylor Slough, Florida Everglades, Florida, USA (FCE LTER): 2010-2019

Save and Continue Reset Changes

Check Metadata Send to EDI Send to Colleague

7. The next window prompts you to upload your data table. ezEML will infer some characteristics of your file and will fill in some of the metadata. The below figure shows the result of uploading a data file. Here you should enter the Description of the dataset. At the bottom of the window are the names of the columns from the file. You will need to “Edit Column Properties”.

Data Table ?

Enter information about the data table object:

Name *

 ?

Description (Recommended)

 ?

Filename *

 ?

<p>Field Delimiter</p> <input type="text" value="comma"/> ?	<p>Record Delimiter (Optional)</p> <input type="text" value="\\n"/> ?
<p>Quote Character</p> <input "="" type="text" value="double quote - \"/> ?	<p>Case Sensitive</p> <input type="text" value="no"/> ?
<p>Size (Optional)</p> <input type="text" value="76319"/> ?	<p>MD5 Checksum (Optional)</p> <input type="text" value="54ce20d494c0adbcd415f9ae8ba073df"/> ?
<p>Number of Records (Optional)</p> <input type="text" value="736"/> ?	<p>Online Distribution URL (Optional)</p> <input type="text"/> ?

Columns:

SITENAME, Date, Max_WL, Max_I, FI, %285, Peak_1, A_254, SUVA254, H_C, NH_C, %H_C, %NH_C, %DOC, Carbohydrates, %Carb_C, DOC

[Edit Column Properties](#) [Clone Column Properties from Another Data Table](#) ?

8. In this window you can edit the “Type” of variable if ezEML incorrectly inferred whether the variable is of type “Numerical”, “Text”, “DateTime” or “Categorical”. Then you must ‘Edit Properties’ to finish describing each variable. For each variable, you will need to enter a Definition, choose a Standard Unit or create a Custom Unit, and describe any Missing Value Codes. Filling out other fields is optional.

Numerical Column

Name *

Definition *

Label (Optional)

Enter a standard unit value or a custom unit value:

Standard Unit	Custom Unit
<input type="text" value="nanometer"/> 	<input type="text"/>
	Description (Recommended)
	<input type="text"/>

Number Type

Precision (Optional)

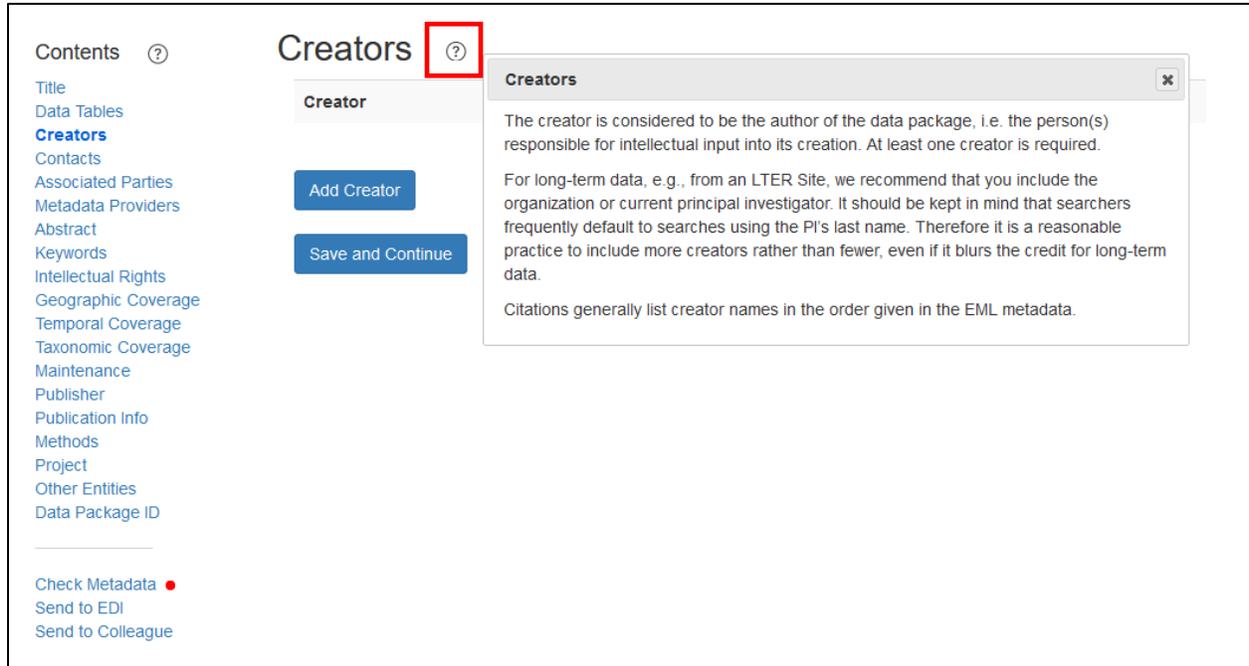
Bounds (Optional):

Bounds Minimum	<input type="text"/>	<input type="checkbox"/> Bounds Minimum is Exclusive
Bounds Maximum	<input type="text"/>	<input type="checkbox"/> Bounds Maximum is Exclusive

Optionally, enter up to 3 missing value codes with accompanying explanations:

Missing Value Code	Explanation
<input type="text" value="-9999"/>	<input type="text" value="data not collected"/>
Missing Value Code	Explanation

9. From the menu at the left on the main screen you can then visit the other windows to enter other required metadata. When finished in any window, click “Save and Continue.” **When you have questions, please review the tips available by clicking on the circled question mark that are found next to most fields in ezEML.** You can also contact me at krvander@fiu.edu.



The screenshot shows the 'Creators' window in the ezEML interface. On the left is a navigation menu with 'Creators' highlighted. The main area has a 'Creator' header, a circled question mark icon, and two buttons: 'Add Creator' and 'Save and Continue'. A help tip box is open, containing the following text:

Creators

The creator is considered to be the author of the data package, i.e. the person(s) responsible for intellectual input into its creation. At least one creator is required.

For long-term data, e.g., from an LTER Site, we recommend that you include the organization or current principal investigator. It should be kept in mind that searchers frequently default to searches using the PI's last name. Therefore it is a reasonable practice to include more creators rather than fewer, even if it blurs the credit for long-term data.

Citations generally list creator names in the order given in the EML metadata.

10. Here are some notes about various sections.

- **Creators:** These are the individuals whose names you want to appear in the citation to the dataset.
- **Contacts:** You must enter at least one.
- **Associated parties** are field crew members, lab technicians, etc.
- **Metadata providers:** Enter FCE LTER in the 'Organization' field
- **Abstract:** Your abstract should describe the dataset. It will not be the same as an abstract provided for a paper derived from the dataset.
- **Intellectual Rights:** Please select CC-BY.
- **Project:** If the umbrella project that supported your research is the FCE LTER, please enter which iteration of the proposal supplied the funds. I can enter the rest of project information.

11. If you want to associate an R script or word document or something other than a data table with the tabular data you have uploaded, you can do this via “Other Entities”. ++

The screenshot shows the 'Other Entities' page. On the left is a navigation menu with items like 'Title', 'Data Tables', 'Creators', 'Contacts', 'Associated Parties', 'Metadata Providers', 'Abstract', 'Keywords', 'Intellectual Rights', 'Geographic Coverage', 'Temporal Coverage', 'Taxonomic Coverage', 'Maintenance', 'Publisher', 'Publication Info', 'Methods', 'Project', 'Other Entities' (highlighted), and 'Data Package ID'. Below the menu are links for 'Check Metadata', 'Send to EDI', and 'Send to Colleague'. The main content area has a header 'Other Entities' with a help icon. Below it is a form with a label 'Entity Name'. There are two buttons: 'Load Other Entity from File' and 'Add Other Entity from Scratch' (with a help icon). A 'Save and Continue' button is positioned below these.

The window below shows that an R script has been uploaded to accompany the data file.

The screenshot shows the 'Other Entity' form with a light blue header bar that says 'Loaded FCE922_DataCleaningScript.R'. The form title is 'Other Entity' with a help icon. Below the title is the instruction 'Enter information about the data entity object:'. The form fields are: 'Name *' with the value 'FCE922_DataCleaningScript'; 'Entity Type (e.g., photograph) *' with the value 'R'; 'Description (Recommended)' with the value 'R script used for formatting and quality checking the dataset before publication'; 'Source Name (e.g., filename)' with the value 'FCE922_DataCleaningScript.R'; 'Data Format (e.g., PNG) *' with the value 'R'; 'Size (Optional)' with the value '72412'; 'MD5 Checksum (Optional)' with the value '31533ec26b43acc5491c0f355dd299f4'; and 'Online Distribution URL (Optional)' which is empty. At the bottom are 'Save and Continue' and 'Cancel' buttons.

12. Do not enter a Data Package ID. I will do that.

13. Now you can check your metadata to learn whether or not you have entered everything that is required. In the below figure, you see a red dot next to “Check Metadata.” This means that some required fields have not been completed. Please resolve the issues detected by this checker that result in an Error. Other issues are listed as Warnings, and you should consider adding or updating content to resolve those, as well. The dot should eventually turn green.

The screenshot shows a web interface for checking metadata. On the left is a navigation menu with 'Check Metadata' highlighted with a red dot. The main area is titled 'Check Metadata: Results' and contains a table of errors for 'Data Tables'.

Item	Severity	Reason	Explanation
Column Definition	Error	Required	A column Definition is required.
Column Definition	Error	Required	A column Definition is required.
Column Definition	Error	Required	A column Definition is required.
Explanation	Error	Required	A Missing Value Code Explanation is required.
Numerical Variable Unit	Error	Required	A Numerical variable is required to have a Standard Unit or Custom Unit defined.
Column Definition	Error	Required	A column Definition is required.
Explanation	Error	Required	A Missing Value Code Explanation is required.
Numerical Variable Unit	Error	Required	A Numerical variable is required to have a Standard Unit or Custom Unit defined.
Column Definition	Error	Required	A column Definition is required.
Explanation	Error	Required	A Missing Value Code Explanation is required.
Numerical Variable Unit	Error	Required	A Numerical variable is required to have a Standard Unit or Custom Unit defined.
Column Definition	Error	Required	A column Definition is required.
Explanation	Error	Required	A Missing Value Code Explanation is required.
Numerical Variable Unit	Error	Required	A Numerical variable is required to have a Standard Unit or Custom Unit defined.
Column Definition	Error	Required	A column Definition is required.
Explanation	Error	Required	A Missing Value Code Explanation is required.
Numerical Variable Unit	Error	Required	A Numerical variable is required to have a Standard Unit or Custom Unit defined.

14. Finally, select “Send to Colleague” from the menu on the left and send your metadata to me at krvander@fiu.edu. I will review it and may make suggestions for you. Once the metadata is complete and high quality, I will put the metadata and data into the EDI staging environment so you can let me know what cosmetic changes are needed before the data are published.