Uploading data to the ECLAIRE CEH database

You need to know the difference between "UPLOAD" and SUBMIT".

"UPLOAD" means just that. You send your data to the database, but it is not yet ready for the Data Manager to validate.

You can upload the EXCEL data templates as many times as you want without submitting. When you upload a data template, the system will check against other data already in the "upload" state for that submission date.

You will be asked if you wish to over-write previous uploaded templates, append to previously uploaded data or if you want to quit.

This means that you must always upload **a complete EXCEL workbook with all worksheet data present and up-to-date**. Uploading partial workbooks with "updates" only will over-write existing data with blank values.
This way, your latest EXCEL template will contain all the up-to-date data as it is stored in the database.

You cannot edit data "on-line". It must always be done by uploading a new EXCEL template. This ensures compatibility between your EXCEL data template, and the database.

You can view "uploaded" data using the REVIEW function, which allows you to view your data as a table or as a graph.

Uploading might generate error messages. There are 2 main types:
"Fatal" – if there are already data on the database with the same date (or multiple-key-field combinations) as data you are uploading, you will get a message to tell you, and your data will not be uploaded. Ask your data manager for help if need be.
"Warning" – if your data are "out-of-range" this means the values lie outside the fairly wide ranges set on the database. This alerts you to possible problems with your data. *But data are uploaded anyway*. So if your out-of-range values are valid, they will be uploaded.
Other warnings include wrong formats in date or numeric fields. These data are NOT uploaded, and they MUST be corrected.

When you are sure that the uploaded data are complete, then you can "SUBMIT".

This will alert the Data manager that your data are ready for validation. During this validation time you will not be able to "see" the data.

When the data are validated, you will then be able to REPORT (ie download) the data. You will get an automatic message telling you when you can do this.

It is possible to rectify mistakes or make other changes AFTER validation, but this must be done via the Data Manager. Send an email to explain the problem, and we'll "unlock" your submission and "release" it. This will put it back to the "upload" stage, ready for your corrected version.

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1) General comments

EXCEL data templates will be downloadable from the ECLAIRE web-pages, under the DATA page. Alternatively, you can get the "master" data template (all columns for all ecosystems are visible) directly from the relevant DATABASE form. (Log in, press "submit data" button, select the form name, your site and submission date and click the "upload" link at the right. When the next window appears, click on "*Download this form's template*".

2) Prepare your excel data file carefully

Please name your EXCEL data workbook using the following protocol:
eg C1XXXX_A_FR_GRI_010609   (ie ECLAIRE component/Activity code (to be allocated – please ask)
Ecosystem initial A-arable G-grassland F-forest W-wetland S-shrubland;
Country code FR-France in this case
Site code GRI-Grignon in this case
Start date of time series ddmmyy

Please do NOT insert extra columns in time series data sheets, or extra rows in one-off type data sheets. If you want extra fields of data stored, please discuss with your data manager (or email Sue: susa1@ceh.ac.uk. It's easy to accommodate extra data, but we need to advise you on the procedure (via "attached associated files").

Please do NOT change the worksheet names, or insert new worksheets.

3) Please pay particular attention to the pre-upload checks!

Please check that your data are on the **correct template version**. Please check if you are not sure.

1. Please check the ranges of dates for your data, especially for the 30 minute data, whose dates might be automatically generated, or copied over from a previous submission.

2. Please sort all time series data by ascending date to ensure the database date-checking routine works properly

3. Please make sure there are only numbers where numbers are expected: no units, no ranges, no text should be in numeric fields. If this rule is ignored, error messages will be generated and the data will not be available for calculations! (nobody can calculate the mean of numbers entered (for example) as "6, 7, >8 ng L-1, 5, 2")

4. Please ensure that all relevant decimal places are visible in the EXCEL sheet. This is because the ORACLE database can't "see" what EXCEL is hiding from view. Therefore if you have a value of 9.888 and you want to retain those decimal places, please make sure that the EXCEL cell format is not displaying "10" or "9.9", because that will be the number going into the ORACLE database. It's a quick job to re-format a few EXCEL columns.

5. Please remove all default texts eg "fill in here", other instructions and "-" or "_"

6. Please check all "null" values are entered as NaN or are blank – we prefer blanks. Write any explanation for missing data in the "Your comments" sheet. Using something like -999 will result in senseless data analyses.

7. If you are trying to upload data that are in different units to those agreed for the template, you are likely to get a long list of error messages if the resulting values are out of range.
So please use the agreed units. Using the wrong units will result in some senseless cross-site data analyses. Please inform Sue if there are problems with using the units on the templates.

4) Log in to the ECLAIRE website
http://www.eclaire-fp7.eu/

(This section will be "live" by spring 2012)

Click the "data" tab

Click the "ECLAIRE Databases" tab

Click the CEH database icon

Now log in (or request a user – id)

If you have not already registered to use the CEH database, please email susa1@ceh.ac.uk to request a user id, giving the reason for your request.

After first logging on, you can click the "my details" tab to change your password.
You can request registration on the log-in page if you have not been registered automatically from the ECLAIRE web-site. Only ECLAIRE scientists can register to use the database at the moment (according to the ECLAIRE Data Policy). If you want to use any ECLAIRE data and you are not part of the project, please contact (susa1@ceh.ac.uk).

5) Ready to upload data!

How to upload

After logging in to your "home page", click "submit data", and find the forms/site/submission_dates that are waiting for your data.
Click the "upload" button at the end of the row and follow instructions.

Browse to attach your completed EXCEL template, and click "NEXT" to load the document. This process can take a few minutes, so be patient.

If you have previously uploaded data to the same form for the same submission date from the same site, you will be warned. Only "Append" data if you are sure that the current dataset is part of a very long time-series which is too long to submit as a single file. Please email for advice.

Click "next" and a progress bar will show the uploading.

At the end of data upload, you have a choice to "save but not submit" or "save and submit".

"Save but not submit" will store your data *without* making it accessible for the Data Manager to validate.
You can REVIEW your data at this stage, as an on-screen table or graph.

WE RECOMMEND YOU "SAVE BUT NOT SUBMIT" until you are sure all your data are complete and correct. All excel data sheets that you upload should be the most complete data set available – and you simply over-write previously uploaded datasets. Errors or problems will be flagged. You can easily correct any errors and simply re-upload the corrected EXCEL workbook.

"Save and submit" sends the data to the Data Manager for validating. If you know there will be changes to the data quite soon, then DO NOT SUBMIT. If you feel the data are complete, then "**SAVE AND SUBMIT**". Once submitted, you can't view the data again until the Data Manager has validated your submission.

6) Errors during upload

During data upload, errors will be detected and notified to you on-screen. The errors can be downloaded and stored as an EXCEL file. The site managers must deal with these errors before "Save and Submit". WE RECOMMEND THAT YOU SAVE THESE ERROR REPORTS. Sometimes there are a huge number of errors if a defined data range has been exceeded in the 30 minute data (for example) – it makes life easier to sort the error report column alphabetically to group all like errors together. Usually, there are only a few types of error to deal with, even though there could be thousands or rows of them, if there is a systematic problem with your data,

7) Reviewing data

Once you have uploaded data, you can check it out on the screen by using the REVIEW function. This simply displays on the screen all data uploaded to a specified form, on a specified date. This is different from REPORT, where you can select fields and data ranges for download (see later notes).

To REVIEW, click the "submissions" tab at the top of the page.

In the displayed list, find the form and submission date that you want to review.

Click "REVIEW" at the right hand side.

The next window has 4 tabs at the top, and a button to "review data". Click the "review data" button, and on the next window you can select which spreadsheet to review. Press the browser "back" button to return to the main review window.
If you select the "upload history" tab, you can download the original excel spreadsheet that was used to upload for that submission.

At the bottom of the REVIEW windows is a "SUBMIT" button that you can use to submit your data for validation. Once you submit, you can no longer review the data, but once validated, you can see it again using the REPORT function (see later notes).

8) Correcting uploaded data that are not submitted

This is easy, just correct the data in the EXCEL spreadsheet and go through the FORM UPLOAD process again. Choose the option to **over-write** previous uploaded data. Only "Save and submit" when errors are attended to and when the data are complete.

9) Correcting submitted data

You will need to contact the Data Manager if you need to re-submit a data file that has been submitted but needs correcting, or that has further data added. There is no "on-line" editing of data. All changes to the database are made by "rejecting" the old version of the data and re-submitting **complete updated** EXCEL workbooks. This ensures that the database and your EXCEL data

files are always compatible. This is a quick process, but needs the Data Manager to release the data from the database before you can re-submit. Please note that the "rejected" data are held in the "upload" state. Therefore when you re-submit updated data, there will be a message that there are already data with the same dates. Simply click the button to "replace" these data. The "Append Data" button is for C2, who will have very long submissions that need splitting into several EXCEL data files for the same submission date.

10) What happens after submission?

When you "submit" data, the Data Manager receives an email and can review and validate.

You will be notified automatically once the Data Manager has validated the data. At this point you will be able to report from the data.

11) Reporting
A separate guide will help you through the reporting

Let us know of any problems or worries (susa1@ceh.ac.uk)