Department of Ecology | EIM Environmental Information Management

EIM Time-Series Submittal Guidelines

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What are Time-Series data?

Time-Series data are results collected from an instrument deployed in the field that automatically takes measurements at a consistent time interval over an extended period of time. In contrast, discrete measurements are collected individually and manually. Time-Series instruments include well water-level transducers, multi-parameter water quality sondes, and TidbiT temperature data loggers, to name a few.

What is the Time-Series Loader?

The Time-Series Loader is a tool within the EIM Loader for importing Time-Series data into EIM. There is a separate template and the submittal process is slightly different than for discrete data.

Key features

- CSV-format template with fewer fields than for discrete data. Designed to handle the large volume of data associated with Time-Series datasets.
- Data summary report and graph for reviewing your data.
- Check Data tool for checking your data against EIM business rules and valid values.

Getting help

Contact your EIM Data Coordinator

Our EIM Data Coordinators can help you with EIM data entry, searching for data, and any other questions. They are assigned to particular Ecology Programs or types of data. Contact your Data Coordinator if you need help!

- Soil and Groundwater Cleanup, Voluntary Cleanup Program (VCP), or RCRA Corrective Action Cleanup data: Email **Jenna.Durkee@ecy.wa.gov** or call (509) 454-7865
- Water Quality Grant or Loan, Municipal or RSMP Stormwater, 303(d), NPDES Receiving Water Study, or NEP data: Email **Jake.Kleinknecht@ecy.wa.gov** or call (360) 407-6562
- Landfill Groundwater Monitoring and Sediment data: Email **Erica.Fot@ecy.wa.gov** or call (360) 407-6692
- Any type of data within the Environmental Assessment Program (Ecology staff only): Email **Carolyn.Lee@ecy.wa.gov** or call (360) 407-6430

Use our online form

If you cannot get ahold of your EIM Data Coordinator, use our online form to send us your questions(s). An EIM Team member will get back to you soon.

Things to note before you start

- **24-hour maximum consistent time interval:** The consistent time interval between automated measurements must be 24 hours or fewer to qualify as Time-Series data. For example, you can submit 15-minute, hourly, or daily measurements, but not weekly measurements.
- **1 EIM Study per Batch:** The Time-Series Loader allows data from only one EIM Study per Batch. This makes it easier to track uploads and back data out of EIM if necessary. (For more information on Batches, see "What is a Batch?" in this document).
- **1 EIM Location per Batch:** The Time-Series Loader allows data from only one EIM Location per Batch. Similar to Studies, this makes it easier to track uploads and back data out of EIM if necessary.
- **150/500K Batch size limit:** If you work outside of Ecology, 150,000 is the maximum number of records allowed in one Batch. If you work at Ecology, 500,000 is the maximum.
- **Raw Time-Series data adjustment:** Raw Time-Series data sometimes require post-deployment adjustment for things like instrument drift before the data are considered usable. If your data need adjustment, this should be done before entry into EIM. See our Adjusted Time-Series Data help document for more information.
- **Grouping data by deployment period**: We recommend grouping Time-Series data in Batches by the period of time in which an instrument was deployed. This allows EIM to store your dataset in a format that mirrors how the data were collected.
- **Time zone and daylight saving time**: You must assign a single time zone to your entire Batch. The time zone must represent all results within your Batch. It helps to understand how your instrument's software handles time zones and time shifts that could happen during a deployment. You most likely need to split your data from an instrument deployment into two Batches if the collection period spans a time shift. EIM accepts Pacific Standard Time (PST), Pacific daylight saving time/Pacific daylight time (PDT), and Greenwich Mean Time/Coordinated Universal Time (UTC).
- **Concatenated date/time fields:** Instruments recording Time-Series measurements often output date and time in the same column. EIM takes date and time in separate columns. See Appendix A for instructions on how to split your dates and times into separate columns.
- **File naming:** Name your files so you will remember what data is in them. If you work outside Ecology, this also really helps our Data Coordinators know what they are looking at when reviewing your data. We recommend incorporating the EIM Study and Location IDs in the filename since these would be unique for each Batch, e.g. "JaneStudyID_SomeLocationID_Tidbit_PDT.csv." **Do not use quotes in your filenames!**
- **Ghost rows:** When you copy and paste your data into the EIM Time-Series Result Template, Excel sometimes reformats entire columns. This can trick the Time-Series Loader into reading rows as though they are populated with data when they are not. If you are having trouble importing your file into EIM, try selecting and deleting a chunk of rows below your actual data.
- **Supported browsers:** The Time-Series Loader supports Microsoft Internet Explorer 10.0 and above, Google Chrome, Mozilla Firefox, and Apple Safari.

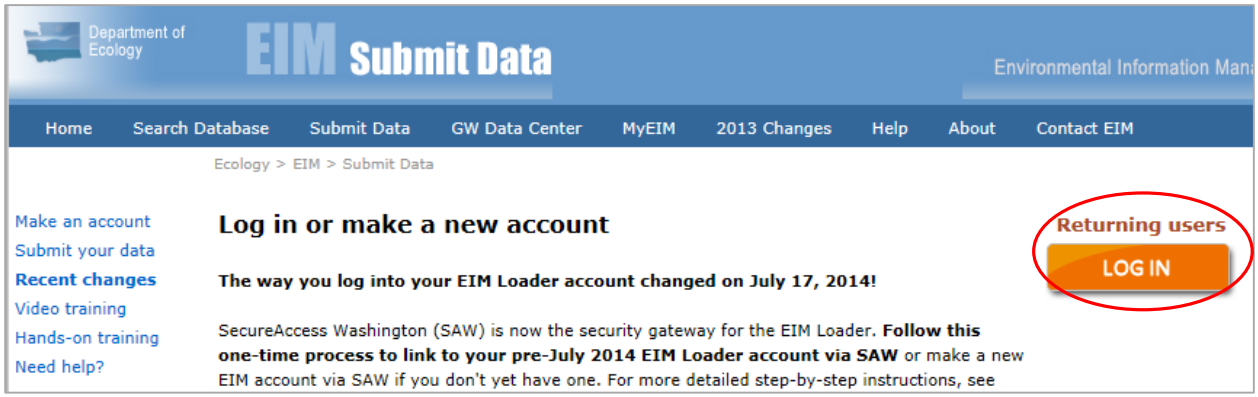
Getting ready to submit your data

There are different ways for getting to the Time-Series Loader depending on whether you work outside of Ecology or at Ecology.

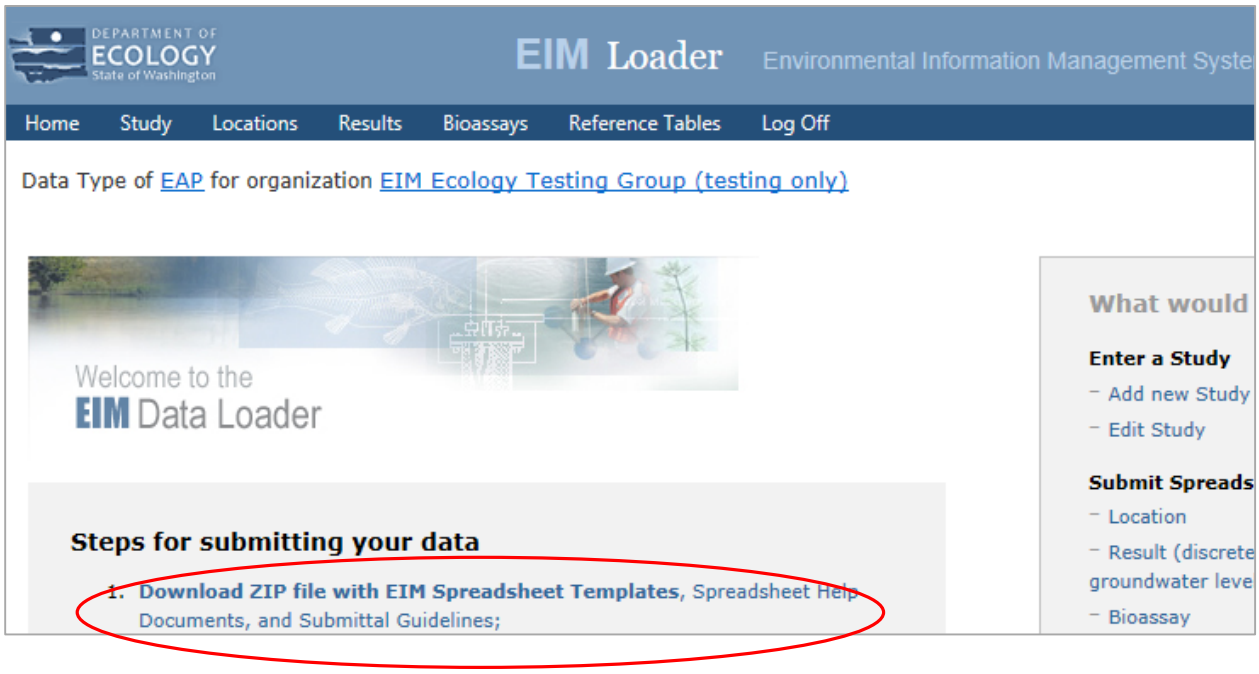
Go to the Time-Series Loader

If you work outside of Ecology

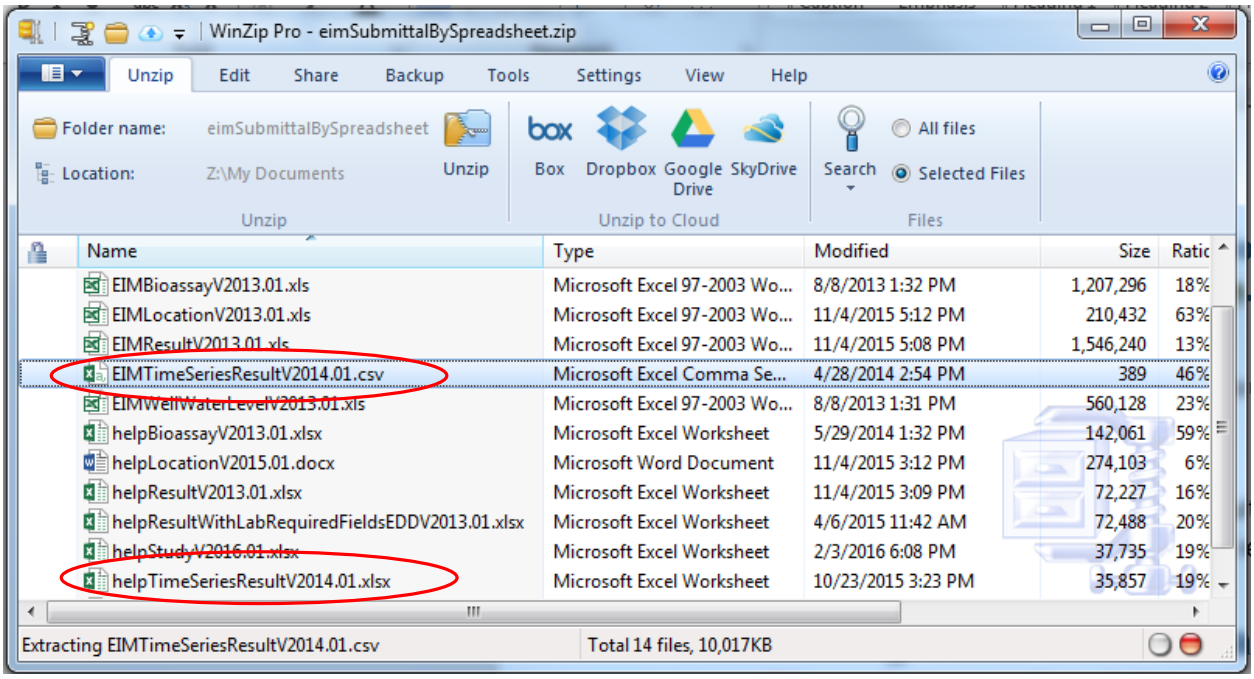
Log into your EIM Loader account. If you don't already have an account, follow the instructions on the page to make a new account.



Click "Download ZIP file…" to open the ZIP file containing the Time-Series Result Template and Help files.



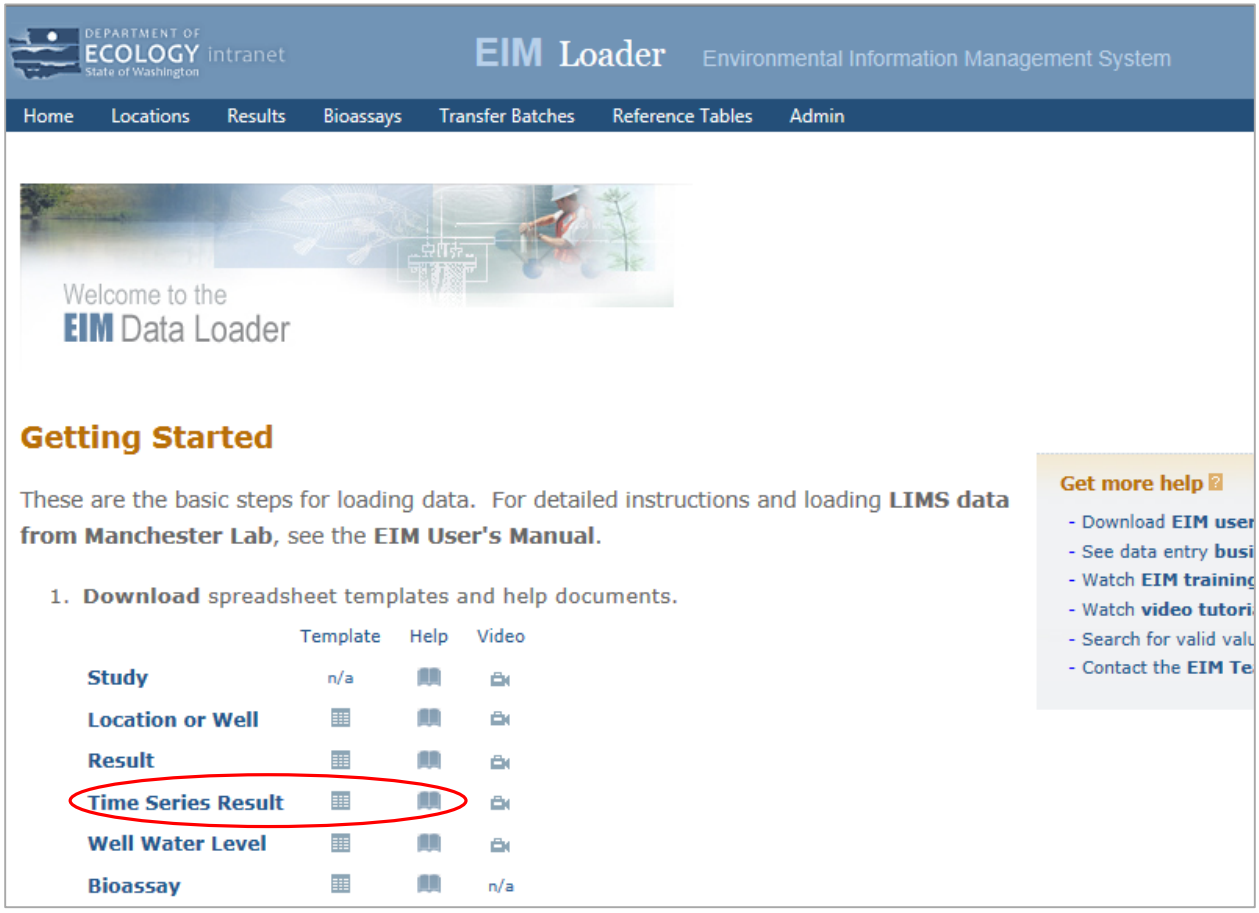
Double-click the filenames to open them.



Next, go to Saving your Time-Series Result Template for special instructions on saving your template .

If you work at Ecology

Go to the EIM Loader. Click the Template and Help icons to download the documents.

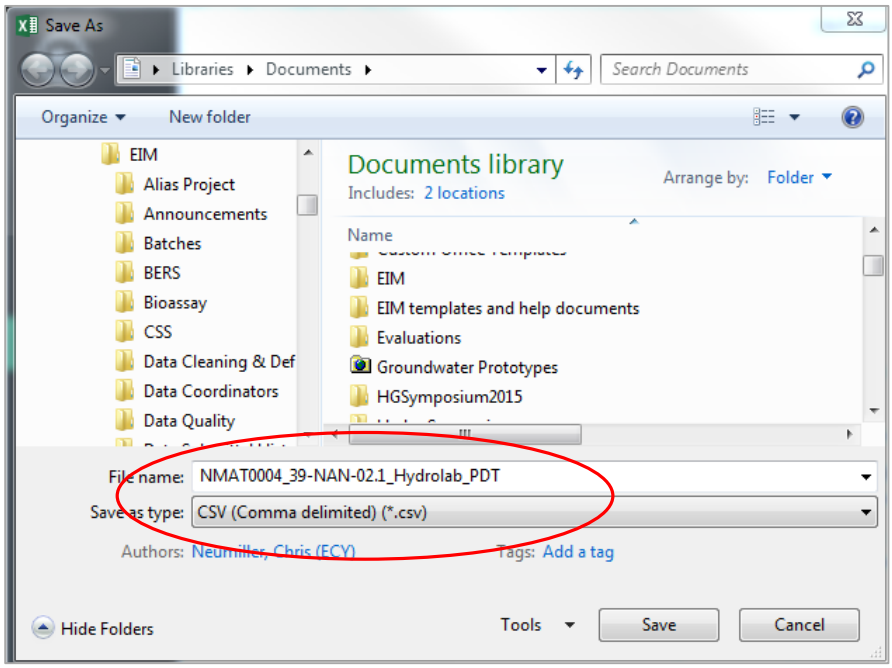


Next, go to Saving your Time-Series Result Template for special instructions on saving your file.

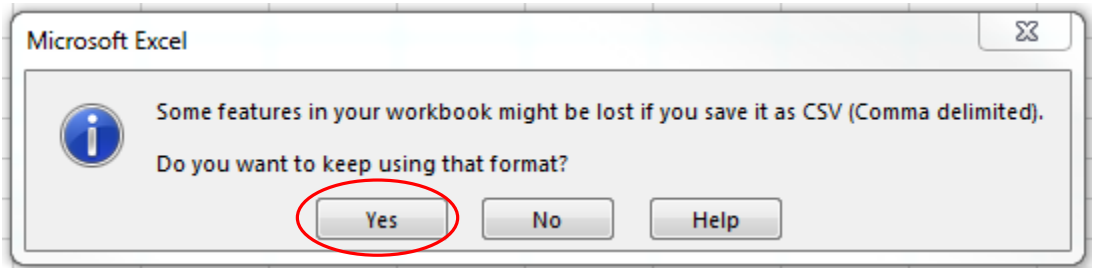
Save your Time-Series Result Template

Note: Unlike the other EIM templates, the Time-Series Result Template is a comma-delimited plain-text file (CSV). **You must keep it in CSV format or it will not load**.

Rename your file before clicking "Save." We suggest a filename that describes its contents. An example is "NMAT0004_39-NAN-02.1_Hydrolab_PDT," where "NMAT0004" is your Study ID, "39-NAN-02.1" is your Location ID, "Hydrolab" indicates the instrument type, and "PDT" indicates it was collected in Pacific Daylight Time.



If you get a prompt about your file format, click "Yes." You want to keep the CSV format.

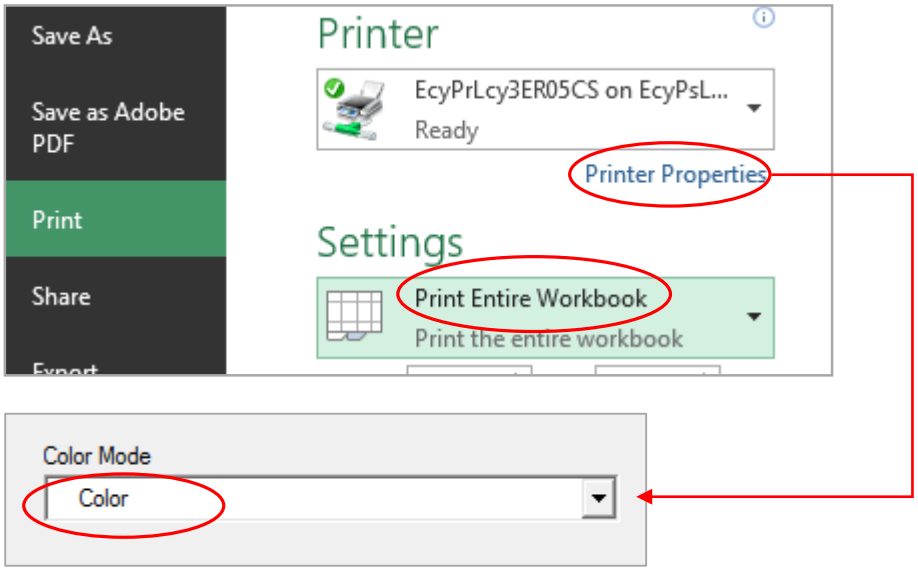


Print the Time-Series Result Help document

The Time-Series Result Help document shows you how to fill out your Time-Series Result Template. We recommend printing this document in color so you can follow it as you populate your Time-Series Result Template.

	A	B	C	D	E	F
1	NOTE: There are other worksheets in this Excel file, linked via the appropriate cells (or use bottom tabs). There are also links to online help documents and reference tables.					
2		Color coding:	Required	Required if Field Collection Type is Measurement	Required if Field Collection Type is Observation	
3	Click here to see data types NOT entered into EIM					
4	Col-umn	Title	Definition	Requirements and Format	Valid Values	Examples and Comments
5	A	Study ID	UNIQUE ID to identify the Study in EIM.	REQUIRED. 20 alpha/numeric. Must be valid EIM Study ID.		Use value from "Study ID" field in your Study form. **Each time series batch must contain only one distinct Study ID for all records.**
6	B	Instrument ID	ID used to uniquely identify the instrument that was used to measure your result values.	REQUIRED. 50 alpha/numeric. Free text.		This field is required to uniquely identify sets of time series data within a batch that were collected by the same instrument. If the instrument used to measure your result values does not have a name or number identifying it, create one. If you have two or more instruments measuring the same parameter over the same period of time at the same location, this is the field you would use to uniquely identify the different datasets based on instrument. Ex: "E-61326", "FlowMeter 3A", "Instrument7"
	C	Location ID	UNIQUE ID to identify the	REQUIRED. 15		Location IDs are from Column A in your

The Help document is pre-formatted to print on 8.5 x 11 paper from Excel. However, you must specify **Print Entire Workbook** under File > Print > Settings because there are three additional worksheets in this file. Also, some printers are not set to print in color by default. Go to Printer Properties to choose color copies.

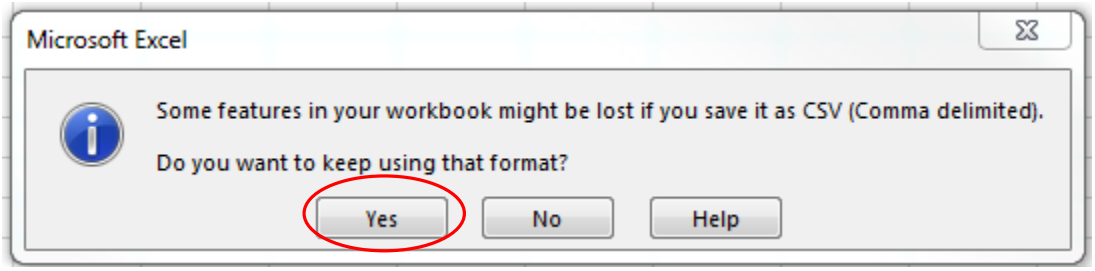


Populate your Template

Open and populate your Time-Series Result Template with the Time-Series results downloaded from your instrument. Contact your EIM Data Coordinator if you have questions.

	A	B	C	D	E	F	G	H	I
1	Study_ID	Instrument_ID	Location_ID	Study-Specific_Location_ID	Field_Collection_Type	Field_Collector	Field_Collection_Reference_Point	Field_Collection_Depth	Field_Collection_Depth_Unit
2	NMat0004	Hydrolab 3	39-NAN-02.1	39-NAN-02.1	Measurement	Ecology			
3	NMat0004	Hydrolab 3	39-NAN-02.1	39-NAN-02.1	Measurement	Ecology			
4	NMat0004	Hydrolab 3	39-NAN-02.1	39-NAN-02.1	Measurement	Ecology			
5	NMat0004	Hydrolab 3	39-NAN-02.1	39-NAN-02.1	Measurement	Ecology			
6	NMat0004	Hydrolab 3	39-NAN-02.1	39-NAN-02.1	Measurement	Ecology			

Once completed, save your Time-Series Result Template. Remember to choose "Yes" if you are asked whether you want to keep your workbook format in CSV.



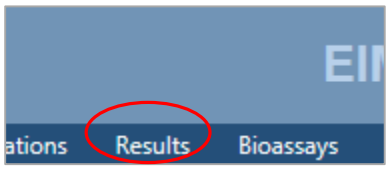
Submitting your data to EIM

Upload your Template

- If you **work outside of Ecology**, log into your EIM Loader account
- If you **are an Ecology employee**, go to the EIM Loader.

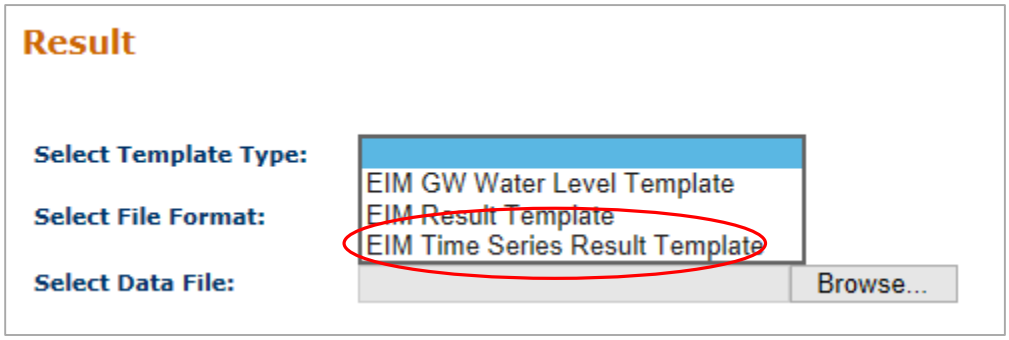
The process is the same from here on forward.

1. Click "Results" in the blue navigation bar.

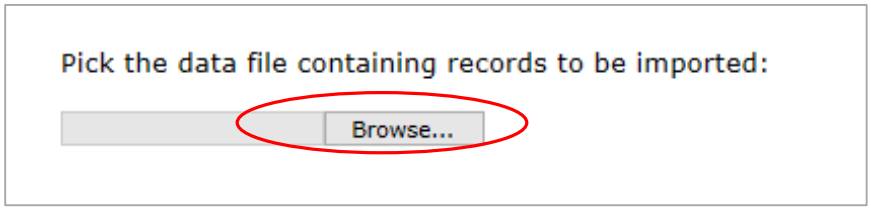


2. Click the "Submit Data" tab.

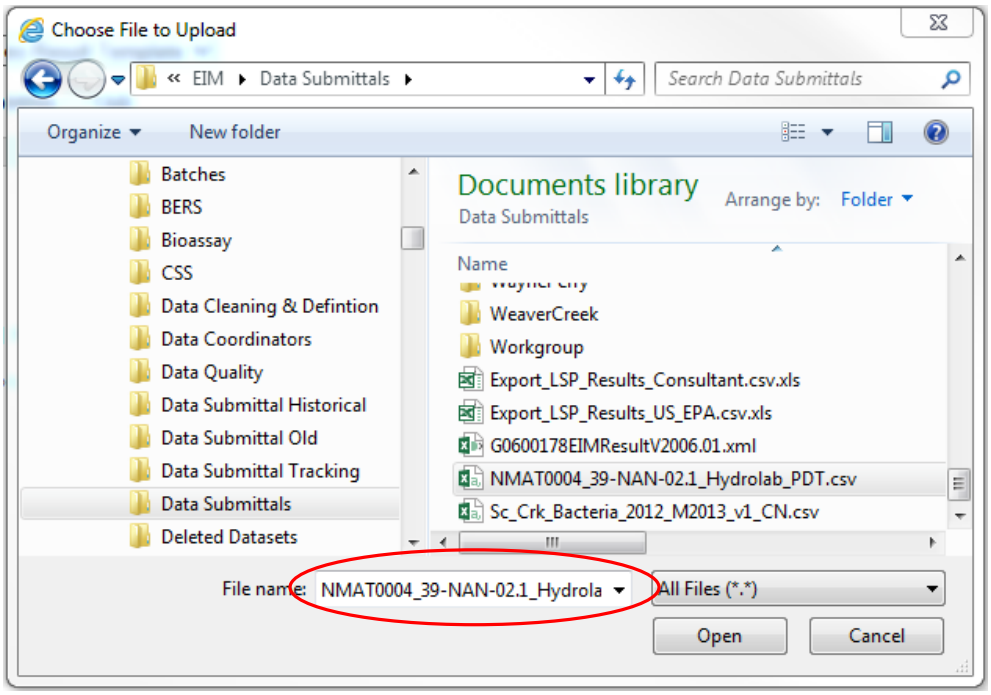
3. Select Template Type: "*EIM Time-Series Result Template.*"



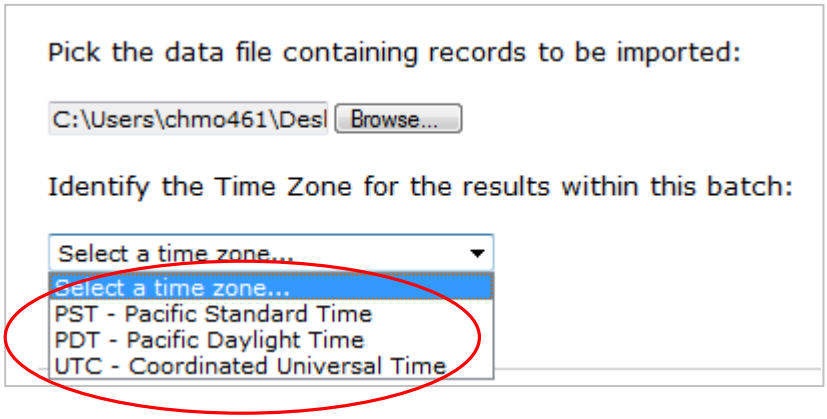
4. Browse for your Template file on your computer.



5. Select your Template file (properly named, as described in "Save your Time-Series Result Template").

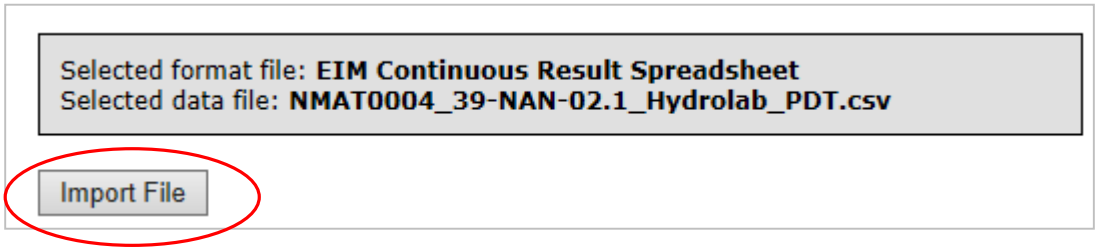


6. Select the Time Zone that your dataset's time values were reported in.



Note: If your instrument's software automatically adjusts for the shift between PST and PDT AND your deployment spanned a time shift, you must divide your dataset into two or more files to accurately reflect when the measurements were collected.

7. Click “Import File.”



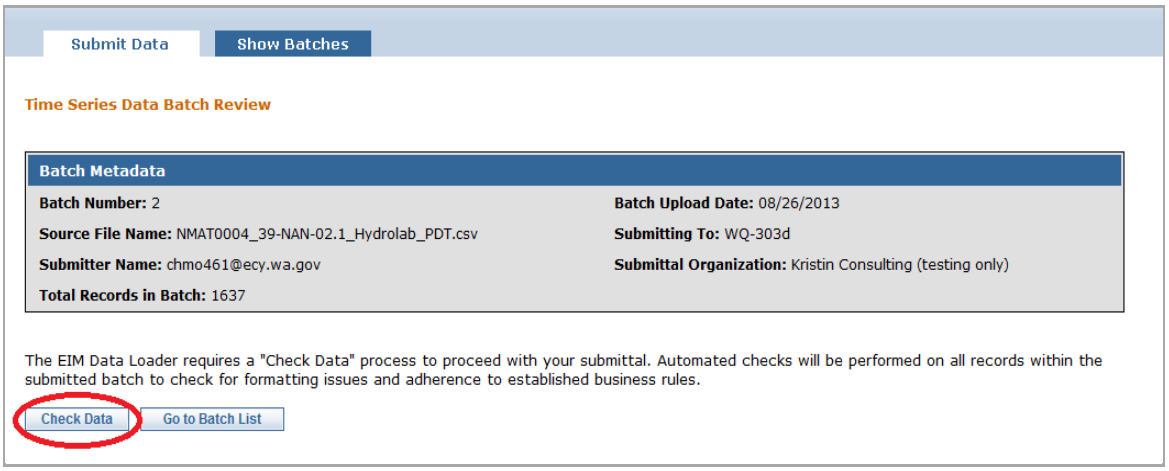
If your file fails to import, you will see an error message. It might be a problem with the file structure or something in one of the columns. See the Time-Series Result Help document for information about field requirements and formatting. If you need help, contact your EIM Data Coordinator.

If your file successfully imports, it becomes a Batch in the EIM Loader. Continue to the next section.

Check your imported data

Run “Check Data”

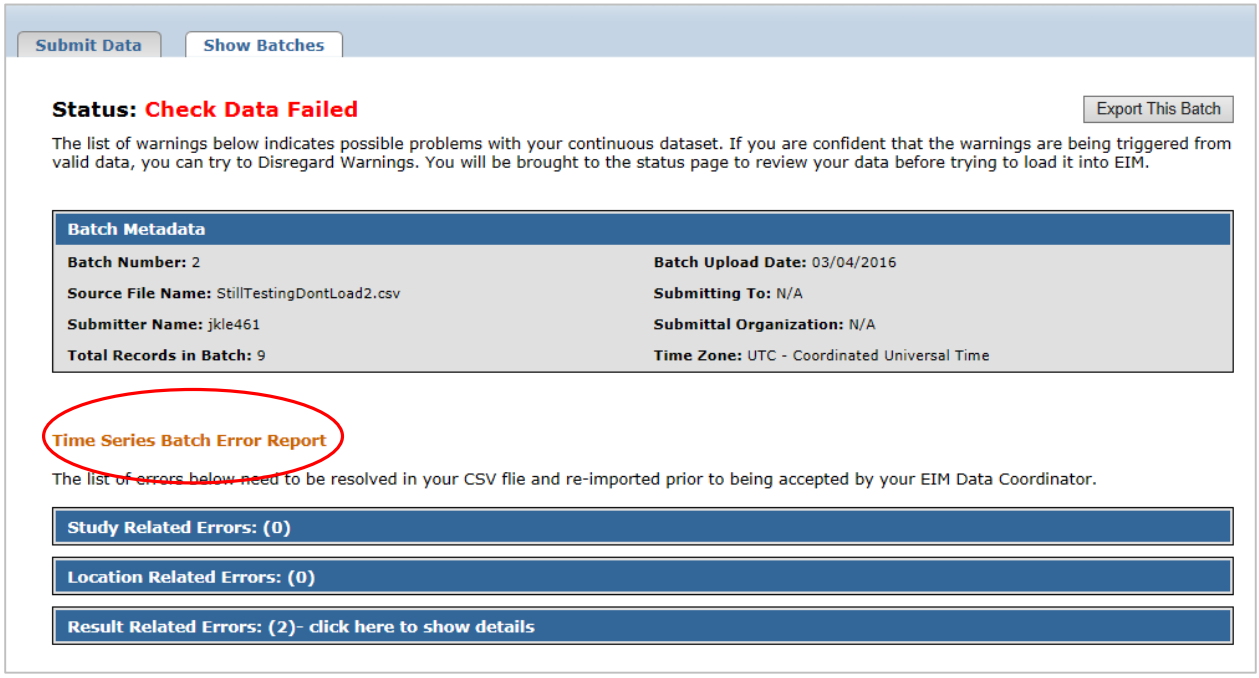
Review the metadata for your Batch. If everything looks good, like number of records, click “Check Data.” This can take some time if you have a large Batch.



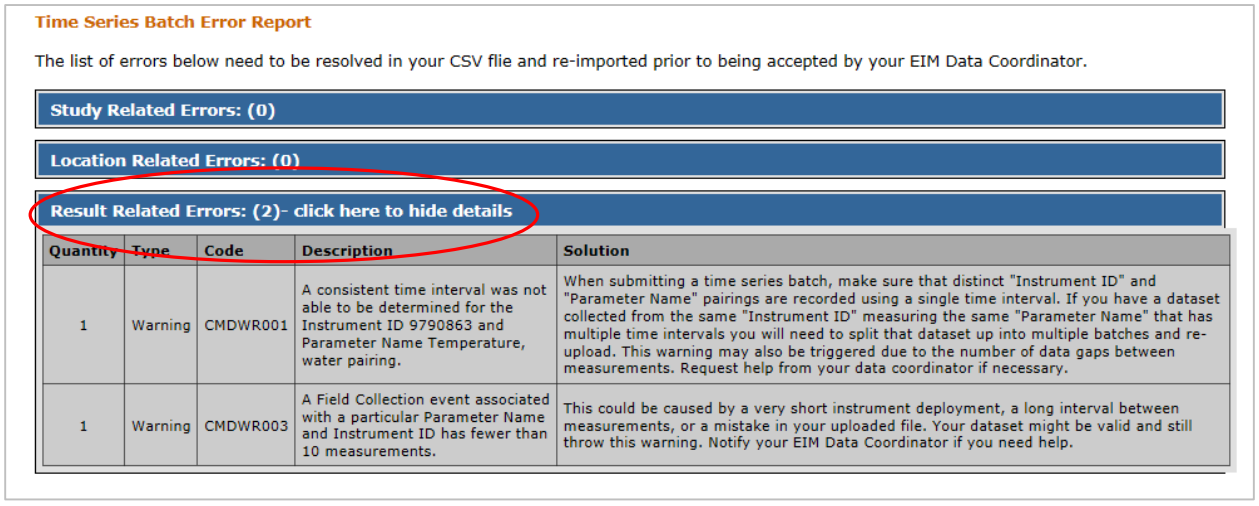
If your Batch fails Check Data

Error Report

If your Batch fails the Check Data process, you will see a Summary Page with an Error Report.



The Error Report is divided into three categories: Study, Location, and Result Errors. Click on a category to open the list of errors.



Fixing errors

Most errors need to be fixed back in your Time-Series Result Template. Once completed, resubmit your Template using the instructions above. Keep the filename name you used previously.

Delete any previously "failed" versions from your "Show Batches" list in the Loader. It will help you stay organized. If you are submitting data from outside of Ecology, it helps your Data Coordinator know which Batches to review.

If you have "Warning" errors, your data still might be loadable in some scenarios. If you think your data are valid, request help from your Data Coordinator.

If you have any other questions about fixing your errors, contact your Data Coordinator.

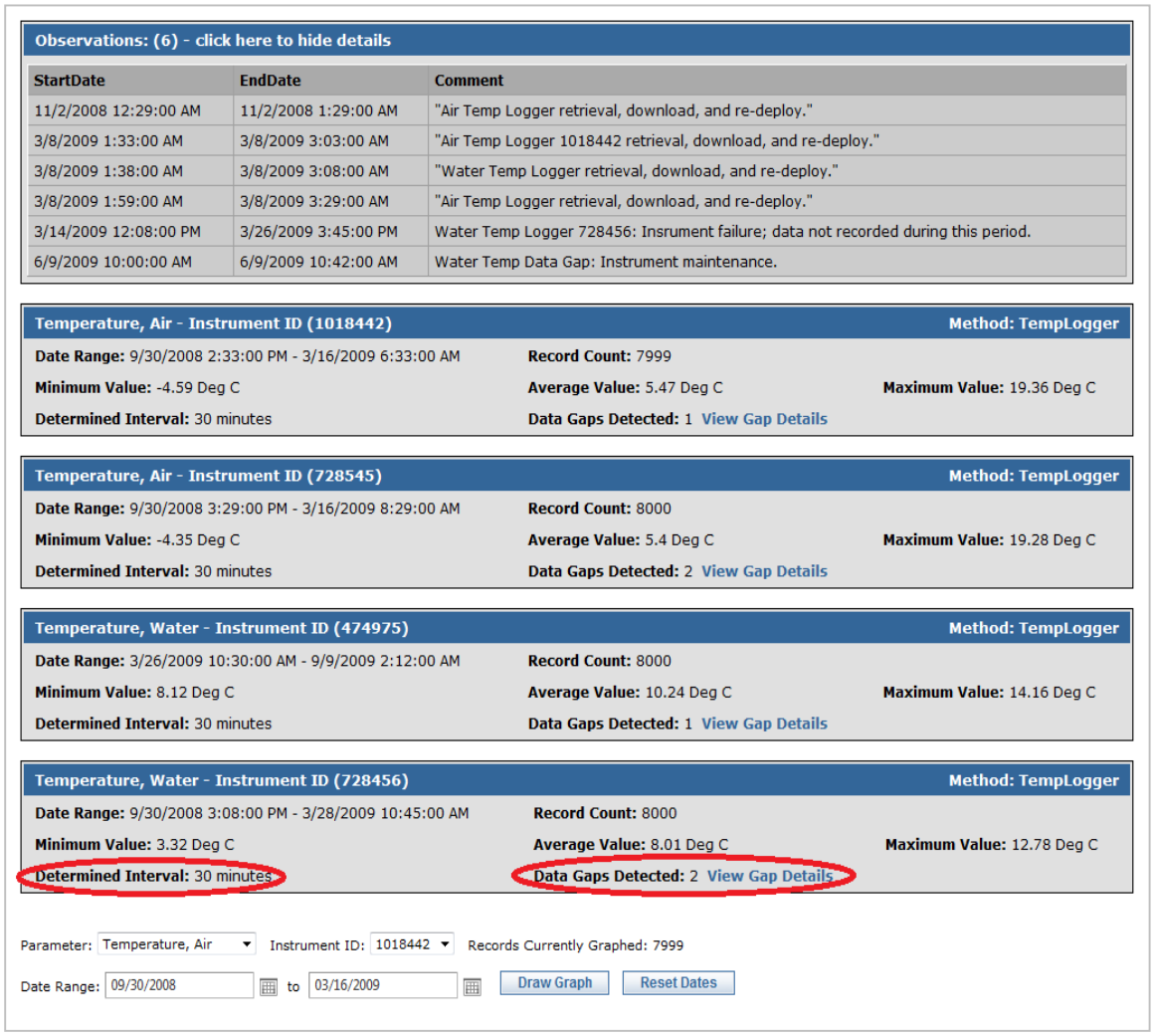
If your Batch passes "Check Data"

Summary page

If your Batch passes "Check Data," you will see a summary page with each Parameter/Instrument ID pairing and Observation in your Batch. We refer to these as "datasets." Review this information for accuracy.

Each dataset contains two key pieces of information:

1. **Determined Interval** is the Result time stamp interval that EIM detects for each Parameter/Instrument ID combination in your Batch.
2. **Data Gaps Detected** are based on the Determined Interval for each Parameter/Instrument ID combination in your Batch. Any Result time stamps that differ from the Determined Interval will display as a data gap.



Observations: (6) - click here to hide details

StartDate	EndDate	Comment
11/2/2008 12:29:00 AM	11/2/2008 1:29:00 AM	"Air Temp Logger retrieval, download, and re-deploy."
3/8/2009 1:33:00 AM	3/8/2009 3:03:00 AM	"Air Temp Logger 1018442 retrieval, download, and re-deploy."
3/8/2009 1:38:00 AM	3/8/2009 3:08:00 AM	"Water Temp Logger retrieval, download, and re-deploy."
3/8/2009 1:59:00 AM	3/8/2009 3:29:00 AM	"Air Temp Logger retrieval, download, and re-deploy."
3/14/2009 12:08:00 PM	3/26/2009 3:45:00 PM	Water Temp Logger 728456: Insrument failure; data not recorded during this period.
6/9/2009 10:00:00 AM	6/9/2009 10:42:00 AM	Water Temp Data Gap: Instrument maintenance.

Temperature, Air - Instrument ID (1018442) — **Method: TempLogger**

Date Range: 9/30/2008 2:33:00 PM - 3/16/2009 6:33:00 AM **Record Count:** 7999
Minimum Value: -4.59 Deg C **Average Value:** 5.47 Deg C **Maximum Value:** 19.36 Deg C
Determined Interval: 30 minutes **Data Gaps Detected:** 1 View Gap Details

Temperature, Air - Instrument ID (728545) — **Method: TempLogger**

Date Range: 9/30/2008 3:29:00 PM - 3/16/2009 8:29:00 AM **Record Count:** 8000
Minimum Value: -4.35 Deg C **Average Value:** 5.4 Deg C **Maximum Value:** 19.28 Deg C
Determined Interval: 30 minutes **Data Gaps Detected:** 2 View Gap Details

Temperature, Water - Instrument ID (474975) — **Method: TempLogger**

Date Range: 3/26/2009 10:30:00 AM - 9/9/2009 2:12:00 AM **Record Count:** 8000
Minimum Value: 8.12 Deg C **Average Value:** 10.24 Deg C **Maximum Value:** 14.16 Deg C
Determined Interval: 30 minutes **Data Gaps Detected:** 1 View Gap Details

Temperature, Water - Instrument ID (728456) — **Method: TempLogger**

Date Range: 9/30/2008 3:08:00 PM - 3/28/2009 10:45:00 AM **Record Count:** 8000
Minimum Value: 3.32 Deg C **Average Value:** 8.01 Deg C **Maximum Value:** 12.78 Deg C
Determined Interval: 30 minutes **Data Gaps Detected:** 2 View Gap Details

Parameter: Temperature, Air Instrument ID: 1018442 Records Currently Graphed: 7999
Date Range: 09/30/2008 to 03/16/2009 Draw Graph Reset Dates

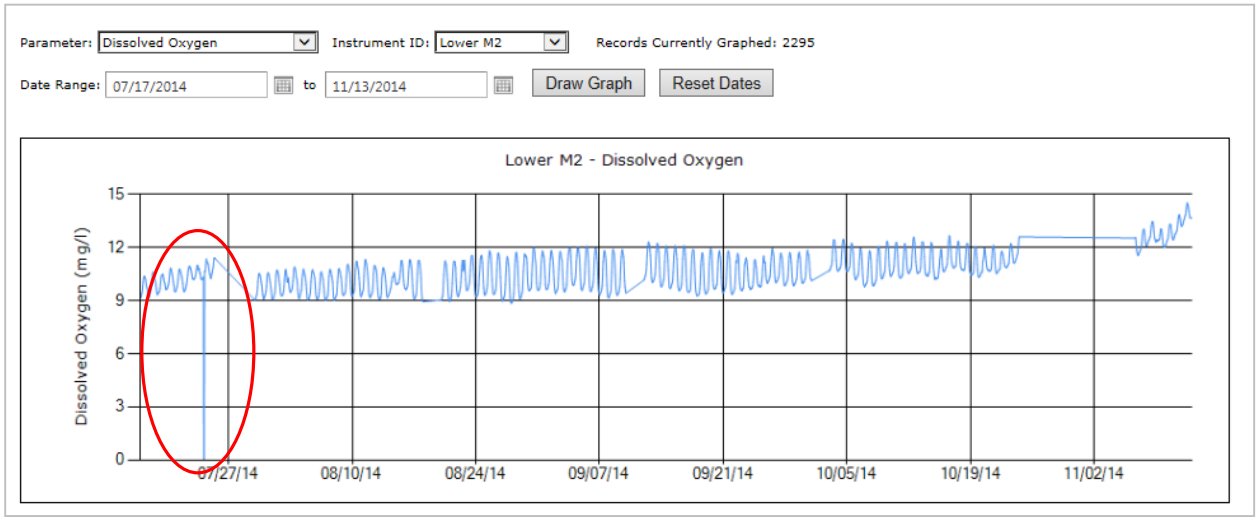
Graphing tool

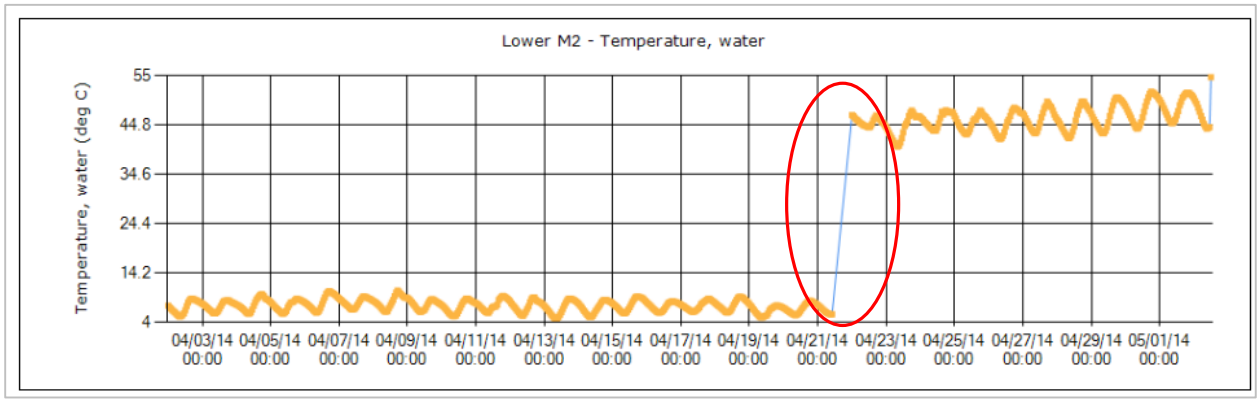
The "Draw Graph" tool at the bottom of the summary page enables you to graph and review your data for each Parameter/Instrument ID pairing.

Follow these steps to use this tool:

1. Select a Parameter.
2. Select an Instrument ID.
3. Select a Date Range. By default, Date Range is set to the entire dataset. If you want to view a graph of the entire dataset, leave it as is. If you want to "zoom in" to a particular area on the graph, change the Date Range. To go back to the entire Date Range, click "Reset Dates."
4. Click "Draw Graph."

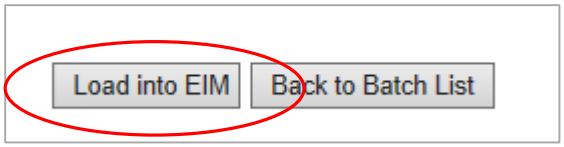
Use the graphs to look closely at your data. Unusual spikes or dips (see below) indicate a possible instrument malfunction. **You must qualify anomalous data in Column S (Result Data Qualifier**) of your Time-Series Result Template.





Load your data

If you are an Ecology employee, you are responsible for loading your own data into EIM. If your Batch passed Check Data and you have qualified your data as necessary, click "Load into EIM." If you have trouble loading your Batch, contact your EIM Data Coordinator.



Notify your EIM Data Coordinator

If you work outside of Ecology, your EIM Data Coordinator will load your data into EIM for you after thoroughly reviewing it for completeness and errors. If your Batch passed Check Data and you have qualified your data as necessary, you are ready to let your Data Coordinator know it is ready for review. Click "Submit to Data Coordinator."

What to expect after you submit your data

Your Data Coordinator will be notified and will begin reviewing your submittal as soon as they can.

If your Data Coordinator finds problems with your submittal, they will contact you to clarify any questions about your data.

Once your Data Coordinator has completed their review, they will load your data into EIM.

After all Batches for a particular Study have been successfully loaded to the EIM system, your Data Coordinator will send you a notification email. They will ask that you view your Study's data via EIM Search to confirm that everything looks good.

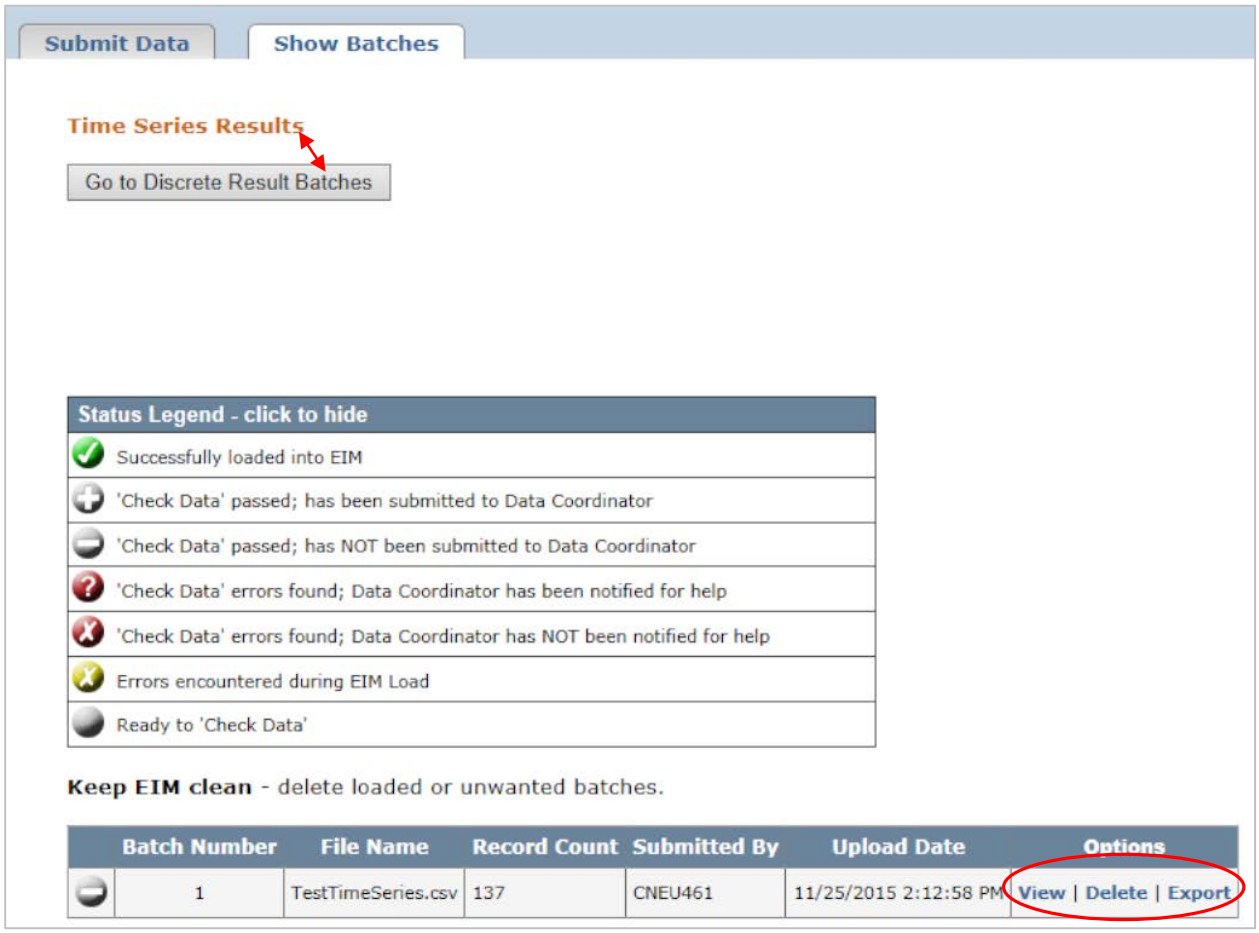
Managing your Batches in the Loader

What is a Batch?

When you import a data file into the EIM Loader, it becomes a Batch.

Show Batches

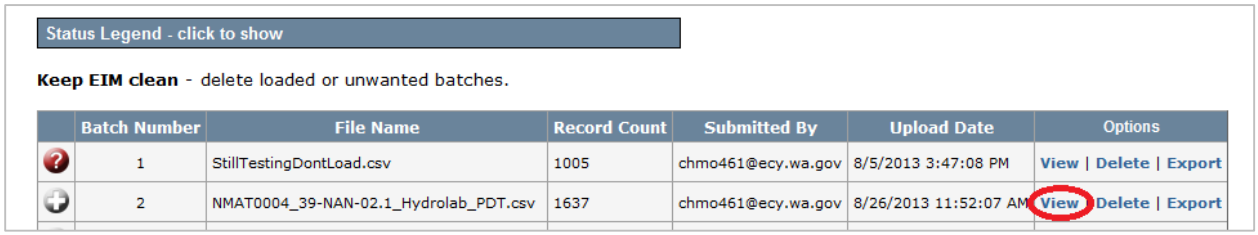
Under the "Show Batches" tab is a list of Batches you have imported into EIM. You can toggle between Discrete and Time-Series Result Batches. You can view, delete, or export Batches.



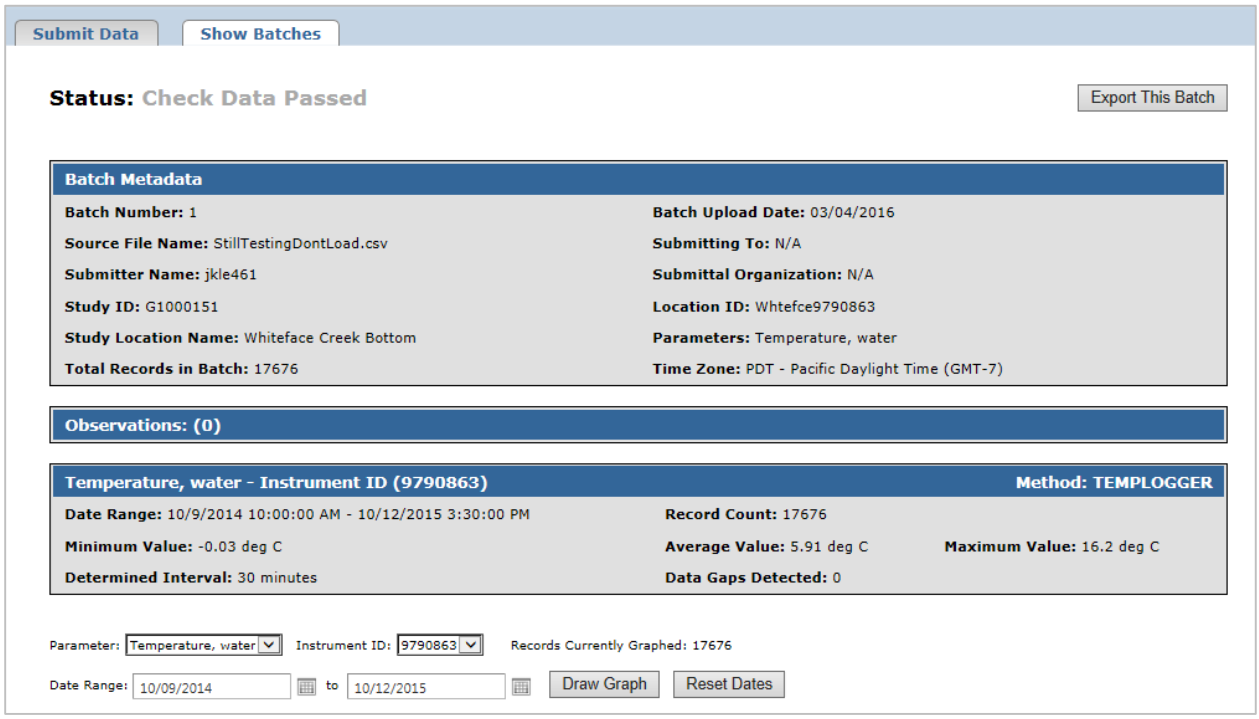
Note: When you resubmit a file after fixing errors, delete the old Batch.

View your Batch records

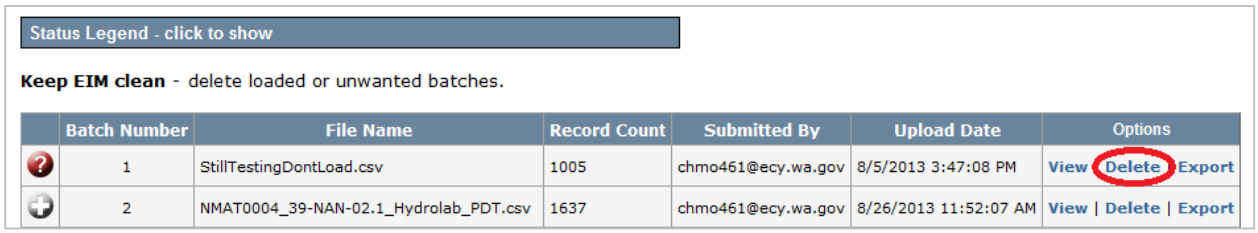
Click "View" under "Options."



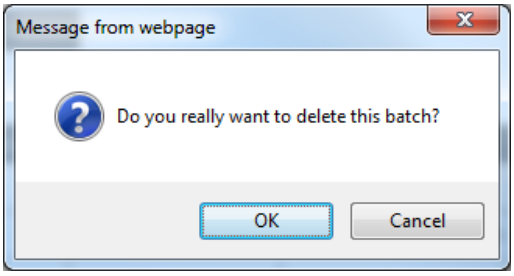
The page you see will look like the Check Data summary page. You can export your Batch in CSV format if you wish.



Deleting Batches



When you select "Delete" for one of your Time-Series Batches, you will receive a "Do you really want to delete this Batch" message. Selecting "OK" will delete the Batch from your Show Batches list.



If a Batch in your Show Batches list was loaded into EIM by you or your Data Coordinator, it is delineated by a green checkmark. Deleting it will not remove any records from EIM. It will just remove the Batch from the EIM holding area (aka EIMTrans).

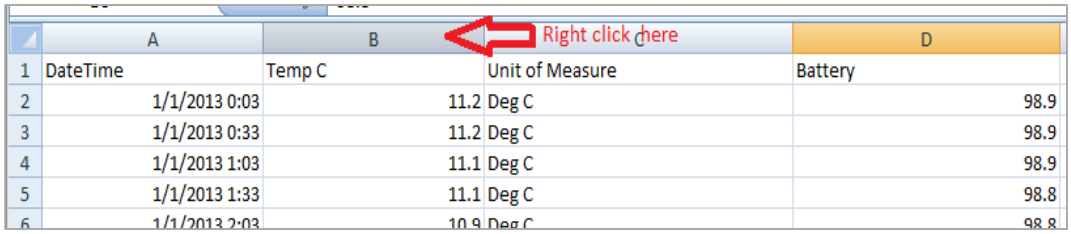
Revision History

Revision Date	Revision No.	Summary of Changes	Reviser(s)
8/29/13	2013.01	Original Document for submitters who work outside of Ecology	CM
3/21/16	2016.01	Revised to include submitters who work at Ecology, cleaned up text and format, new screenshots, updates on some aspects if T-S submittal.	CN, JK

Appendix A – How to separate a combined date/time column in Excel

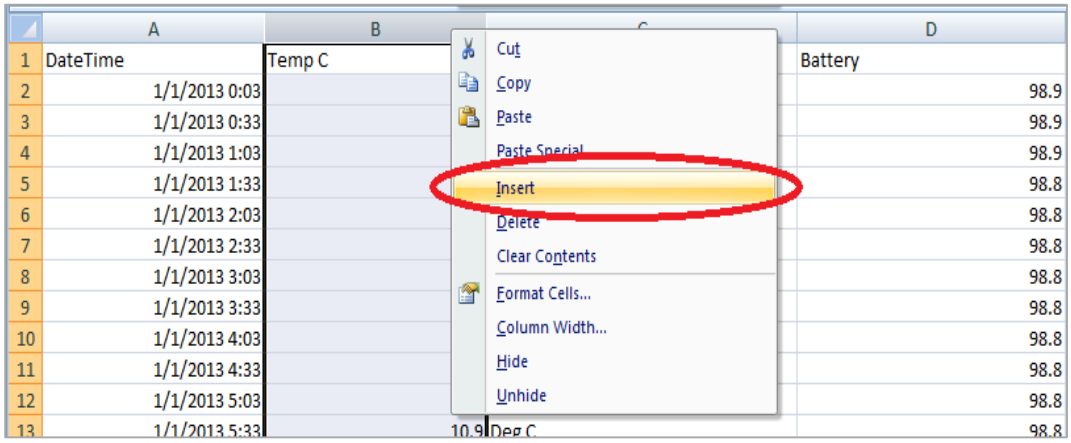
Step 1: Add two new columns to your source data file (the output from your instrument, opened in Excel).

1. Right click on a column close to your combined date and time column.



	A	B	C	D
1	DateTime	Temp C	Unit of Measure	Battery
2	1/1/2013 0:03	11.2	Deg C	98.9
3	1/1/2013 0:33	11.2	Deg C	98.9
4	1/1/2013 1:03	11.1	Deg C	98.9
5	1/1/2013 1:33	11.1	Deg C	98.8
6	1/1/2013 2:03	10.9	Deg C	98.8

2. From the menu that pops up, choose “Insert.”



	A	B	C	D
1	DateTime	Temp C		Battery
2	1/1/2013 0:03			98.9
3	1/1/2013 0:33			98.9
4	1/1/2013 1:03			98.9
5	1/1/2013 1:33			98.8
6	1/1/2013 2:03			98.8
7	1/1/2013 2:33			98.8
8	1/1/2013 3:03			98.8
9	1/1/2013 3:33			98.8
10	1/1/2013 4:03			98.8
11	1/1/2013 4:33			98.8
12	1/1/2013 5:03			98.8
13	1/1/2013 5:33	10.9	Deg C	98.8

3. Do this twice. You are creating two new columns - one for dates and one for times.

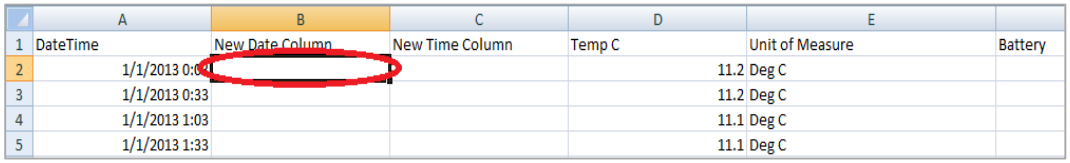
	A	B	C	D	E	F
1	DateTime			mp C	Unit of Measure	Battery
2	1/1/2013 0:03			11.2	Deg C	98.9
3	1/1/2013 0:33			11.2	Deg C	98.9
4	1/1/2013 1:03			11.1	Deg C	98.9
5	1/1/2013 1:33			11.1	Deg C	98.8

4. Give them appropriate column names.

	A	B	C	D	E	F
1	DateTime	New Date Column	New Time Column	Temp C	Unit of Measure	Battery
2	1/1/2013 0:03			11.2	Deg C	98.9
3	1/1/2013 0:33			11.2	Deg C	98.9
4	1/1/2013 1:03			11.1	Deg C	98.9
5	1/1/2013 1:33			11.1	Deg C	98.8

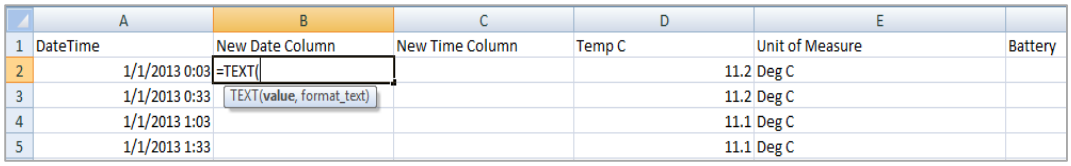
Step 2: Separate date from the combined date/time column

1. Select the empty cell adjacent to the combined date and time column. The first non-header row is a good place to start.



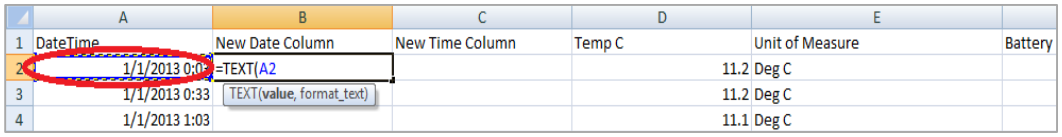
	A	B	C	D	E	
1	DateTime	New Date Column	New Time Column	Temp C	Unit of Measure	Battery
2	1/1/2013 0:03			11.2	Deg C	
3	1/1/2013 0:33			11.2	Deg C	
4	1/1/2013 1:03			11.1	Deg C	
5	1/1/2013 1:33			11.1	Deg C	

2. In the cell you have selected, type the Excel function =TEXT(.



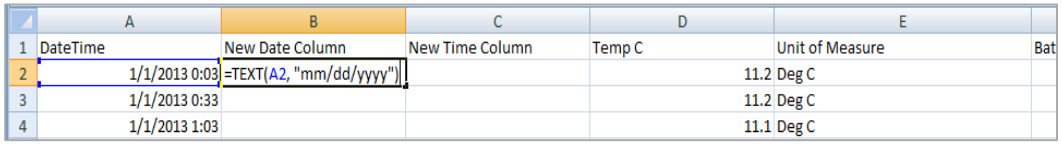
	A	B	C	D	E	
1	DateTime	New Date Column	New Time Column	Temp C	Unit of Measure	Battery
2	1/1/2013 0:03	=TEXT(		11.2	Deg C	
3	1/1/2013 0:33	TEXT(value, format_text)		11.2	Deg C	
4	1/1/2013 1:03			11.1	Deg C	
5	1/1/2013 1:33			11.1	Deg C	

3. Using your mouse, select the adjacent value from the combined date and time column.



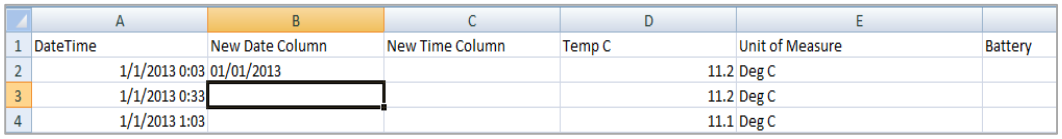
	A	B	C	D	E	
1	DateTime	New Date Column	New Time Column	Temp C	Unit of Measure	Battery
2	1/1/2013 0:03	=TEXT(A2		11.2	Deg C	
3	1/1/2013 0:33	TEXT(value, format_text)		11.2	Deg C	
4	1/1/2013 1:03			11.1	Deg C	

4. Finish off the Excel function by typing "mm/dd/yyyy") and click "Enter" on your keyboard.



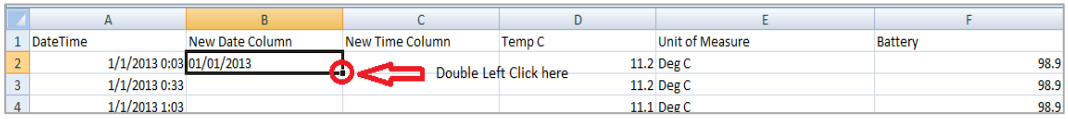
	A	B	C	D	E	
1	DateTime	New Date Column	New Time Column	Temp C	Unit of Measure	Bat
2	1/1/2013 0:03	=TEXT(A2, "mm/dd/yyyy")		11.2	Deg C	
3	1/1/2013 0:33			11.2	Deg C	
4	1/1/2013 1:03			11.1	Deg C	

5. The date portion of the combined date and time column should now be populated in one cell of your new Date column.



	A	B	C	D	E	
1	DateTime	New Date Column	New Time Column	Temp C	Unit of Measure	Battery
2	1/1/2013 0:03	01/01/2013		11.2	Deg C	
3	1/1/2013 0:33			11.2	Deg C	
4	1/1/2013 1:03			11.1	Deg C	

6. To populate the remaining rows in the new Date column, select the date cell and double left click on the lower right corner.



	A	B	C	D	E	F
1	DateTime	New Date Column	New Time Column	Temp C	Unit of Measure	Battery
2	1/1/2013 0:03	01/01/2013		11.2	Deg C	98.9
3	1/1/2013 0:33			11.2	Deg C	98.9
4	1/1/2013 1:03			11.1	Deg C	98.9

7. Assuming a contiguous dataset, all your dates should now be separated from the combined date and time column.

	A	B	C	D	
1	DateTime	New Date Column	New Time Column	Temp C	Unit of M
2	1/1/2013 0:03	01/01/2013		11.2	Deg C
3	1/1/2013 0:33	01/01/2013		11.2	Deg C
4	1/1/2013 1:03	01/01/2013		11.1	Deg C
5	1/1/2013 1:33	01/01/2013		11.1	Deg C
6	1/1/2013 2:03	01/01/2013		10.9	Deg C
7	1/1/2013 2:33	01/01/2013		10.5	Deg C
8	1/1/2013 3:03	01/01/2013		10.8	Deg C
9	1/1/2013 3:33	01/01/2013		10.7	Deg C
10	1/1/2013 4:03	01/01/2013		10.9	Deg C
11	1/1/2013 4:33	01/01/2013		10.4	Deg C
12	1/1/2013 5:03	01/01/2013		10.6	Deg C
13	1/1/2013 5:33	01/01/2013		10.9	Deg C
14	1/1/2013 6:03	01/01/2013		11	Deg C
15	1/1/2013 6:33	01/01/2013		11	Deg C
16	1/1/2013 7:03	01/01/2013		11	Deg C
17	1/1/2013 7:33	01/01/2013		11.4	Deg C
18	1/1/2013 8:03	01/01/2013		11.7	Deg C
19	1/1/2013 8:33	01/01/2013		11.6	Deg C
20	1/1/2013 9:03	01/01/2013		11.7	Deg C
21	1/1/2013 9:33	01/01/2013		11.9	Deg C
22	1/1/2013 10:03	01/01/2013		12	Deg C
23	1/1/2013 10:33	01/01/2013		12	Deg C
24	1/1/2013 11:03	01/01/2013		11.9	Deg C
25	1/1/2013 11:33	01/01/2013		11.9	Deg C
26	1/1/2013 12:03	01/01/2013		12.3	Deg C
27	1/1/2013 12:33	01/01/2013		15	Deg C
28	1/1/2013 13:03	01/01/2013		15.3	Deg C
29	1/1/2013 13:33	01/01/2013		15.3	Deg C
30	1/1/2013 14:03	01/01/2013		15.2	Deg C
31	1/1/2013 14:33	01/01/2013		15.1	Deg C
32	1/1/2013 15:03	01/01/2013		15	Deg C
33	1/1/2013 15:33	01/01/2013		15.6	Deg C
34	1/1/2013 16:03	01/01/2013		15.8	Deg C

Step 3: Separate time from the combined date/time column

1. For the new Time column, use the same process you used for the date separation, except the Excel function is =TEXT(A2, “HH:MM:SS”). (This assumes your combined date/time column starts in cell A2).

	A	B	C	D	E	
1	DateTime	New Date Column	New Time Column	Temp C	Unit of Measure	Batter
2	1/1/2013 0:03	01/01/2013	=TEXT(A2, "HH:MM:SS")	11.2	Deg C	
3	1/1/2013 0:33	01/01/2013		11.2	Deg C	
4	1/1/2013 1:03	01/01/2013		11.1	Deg C	

2. The new Time column should look like this after you populate the remaining rows.

	A	B	C	
1	DateTime	New Date Column	New Time Column	Temp C
2	1/1/2013 0:03	01/01/2013	00:03:00	
3	1/1/2013 0:33	01/01/2013	00:33:00	
4	1/1/2013 1:03	01/01/2013	01:03:00	
5	1/1/2013 1:33	01/01/2013	01:33:00	
6	1/1/2013 2:03	01/01/2013	02:03:00	
7	1/1/2013 2:33	01/01/2013	02:33:00	
8	1/1/2013 3:03	01/01/2013	03:03:00	
9	1/1/2013 3:33	01/01/2013	03:33:00	
10	1/1/2013 4:03	01/01/2013	04:03:00	
11	1/1/2013 4:33	01/01/2013	04:33:00	
12	1/1/2013 5:03	01/01/2013	05:03:00	
13	1/1/2013 5:33	01/01/2013	05:33:00	
14	1/1/2013 6:03	01/01/2013	06:03:00	
15	1/1/2013 6:33	01/01/2013	06:33:00	
16	1/1/2013 7:03	01/01/2013	07:03:00	
17	1/1/2013 7:33	01/01/2013	07:33:00	
18	1/1/2013 8:03	01/01/2013	08:03:00	
19	1/1/2013 8:33	01/01/2013	08:33:00	
20	1/1/2013 9:03	01/01/2013	09:03:00	
21	1/1/2013 9:33	01/01/2013	09:33:00	
22	1/1/2013 10:03	01/01/2013	10:03:00	
23	1/1/2013 10:33	01/01/2013	10:33:00	
24	1/1/2013 11:03	01/01/2013	11:03:00	
25	1/1/2013 11:33	01/01/2013	11:33:00	
26	1/1/2013 12:03	01/01/2013	12:03:00	
27	1/1/2013 12:33	01/01/2013	12:33:00	
28	1/1/2013 13:03	01/01/2013	13:03:00	
29	1/1/2013 13:33	01/01/2013	13:33:00	
30	1/1/2013 14:03	01/01/2013	14:03:00	
31	1/1/2013 14:33	01/01/2013	14:33:00	
32	1/1/2013 15:03	01/01/2013	15:03:00	
33	1/1/2013 15:33	01/01/2013	15:33:00	
34	1/1/2013 16:03	01/01/2013	16:03:00	
35				

The values in the new Date and Time columns can be copied and pasted into your Time-Series Results Template. Use Paste Special > Paste Values. Simply copying the cell values will copy the Excel formula, not the dates/times themselves).