How to Submit Time-Series Data to EIM

Version 3.5
June 2024

Contents

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Overview

EIM basics

For the basics on submitting data to EIM, like setting up an account or getting permissions, see "How to Submit Data to EIM" (for public users) or "How to Load Data into EIM" (for Ecology Staff)

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.

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Get help

EIM Help Center

The EIM Help Center is a comprehensive resource for getting help on EIM. There are 2 separate links for public users and Ecology staff:

EIM Help Center (for public users)

EIM Help Center (for Ecology Staff)

Features include:

Data entry templates & guidance

Download the data entry templates and step-by-step help documents for filling them out. We recommend that you print the help documents in color.

Topic-specific guidance documents for data entry

We have a library of topic-specific guidance documents such as "Adjusted Time-Series Data."

Training

If you are new to EIM, we highly recommend watching our training videos. Our general "How To" documents (like this one) are also found here.

EIM news

Keep up to date on EIM news and changes.

FAQs

EIM FAQs provide answers to many of the most common questions about EIM.

Valid values

Valid values are specific values accepted by EIM. (See "About EIM Valid Values" for more info). Some lists are too long to put in the help documents. They include Parameters, Methods, and Taxa. For these we provide searchable and downloadable lists.

Data dictionary

The data dictionary contains information about all the fields in EIM, including field names, descriptions, examples, and specifications (requirements, field type and size, valid values). This same information is available throughout EIM in the form of pop-up help when you click on field labels.

Field:	Location Name
Description:	The name assigned by the responsible person, typically the Study Lead, to identify a particular Location. Formerly known as a Station Name in EIM. For wells, the Well Tag Number is often used as the Location Name (AAB123).
Example:	Humptulips River Near Mouth; AAB123.
Specification:	REQUIRED FIELD. Alpha/numeric, 40 characters. Free text.

Contact us

Contact us with your questions and requests using our online form. You can also contact your EIM data coordinator directly. For those outside Ecology, you will be assigned an EIM data coordinator when you make an account to load data into EIM. Log into the Loader to see a list of EIM data coordinators.

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Things to note before you start

- **24-hour maximum consistent time interval:** The consistent time interval between automated measurements must be 24 hours or less to qualify as Time-Series data. For example, you can submit 15-minute, hourly, or daily measurements, but not weekly measurements.

- **1 EIM Study allowed 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 allowed 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.

- **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. All of the times within the entire batch must have the same time zone. EIM accepts Pacific Standard Time (**PST**), Pacific daylight saving time/Pacific daylight time (**PDT**), and Greenwich Mean Time/Coordinated Universal Time (**UTC**). It is important to verify the time zone settings of your instrument. See the Time zone and daylight saving time section below for more information.

- **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:** Every timeseries file submitted to EIM must have a unique filename. Name your files so you will remember what data is in them. If you work outside Ecology, this also helps our EIM data coordinators know what they are looking at when reviewing your data. We recommend incorporating the EIM Study ID, Location ID or Instrument ID, and the deployment dates in the filename since these would be unique for each batch, e.g. "JaneStudyID_SomeLocationID_Tidbitxyz_Summer2017.csv". **Do not use quotes or special characters in your filenames.**

- **Raw Time-Series data adjustment:** Raw Time-Series data sometimes require post-deployment adjustment for things like fouling or calibration drift before the data are considered usable. If your data need adjustment, this should be done before entry into EIM, and the adjusted data should be appropriately qualified. See our Adjusted Time-Series Data help document for more information.

- **Pre- and post-deployment results**. Pre- and post-deployment results should be trimmed from the dataset before submittal. For example, a temperature logger which was started and calibrated in the office and then transported to the field for deployment. The temperature measurements it logged prior to being installed in the stream should be removed from the data batch prior to submittal.

- **Sensor not in intended sample matrix.** Similarly, if you removed a sensor from the intended matrix in the field to download the data, then redeployed the sensor, the measurements taken

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outside the intended matrix should be removed from the batch before submittal.

- **Rejected data.** If you determine records within a batch are not suitable for use, you have the choice of removing them or qualifying them, such as with REJ (rejected). If the bad data are at the beginning or end of the dataset it is easier to just remove them.

- **Consistent time interval.** It is best if distinct "Instrument ID" and "Parameter Name" pairings use a single time interval within a batch. If your dataset is collected with the same "Instrument ID" measuring the same "Parameter Name" and it has multiple time intervals you may need to split that dataset up into distinct batches and re-upload. For example, if you downloaded an instrument at the mid-point of a data collection event, and redeployed it with a different data collection interval, it's the same "dataset" but because there are different intervals, they should be split into two batches. EIM identifies the primary and secondary interval during the check data process by ordering by date/time and then finding the first and second most common time differences. If the primary interval identified within the batch is less than 90% of all records in the batch OR if the secondary interval identified in the batch is greater than 10%, an error will be generated.

- **Some data gaps are acceptable:** It is ok if there are gaps in the collection intervals. For example, if a logger didn't read anything for several hours one day or you had to remove a select set of results from the dataset after QA review. If there are frequent and prolonged data gaps in a batch, EIM may have difficulty determining the intended measurement interval resulting in an error message. A summary of the data gaps is generated for your review after the check data process.

- **Documenting data gaps.** If you want to document a data gap (timespan of unsuccessful or rejected measurements) enter an observation record into your time-series template. Enter one observation record, with appropriate start and end date/time values, per timespan. Documenting data gaps in EIM is optional. Download help for "Entering Observations"

- **Significant figures**. Review the significant figures in the result value. In some cases the instrument output may have more significant figures than the precision of the instrument warrants. Format the data with the appropriate amount of significant figures before submitting.

- **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.

Time zone and daylight saving time

Background

In Washington, Pacific Daylight Time (PDT) is observed in the summer (mid-March thru early Nov) and Pacific Standard Time (PST) in the winter (early November thru mid-March). The dates for the change, for years 2023-2026, are shown in the table below. We refer to PST and PDT as "time zones" in this document.

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Year	DST Start (Clock Forward)	DST End (Clock Backward)
2023	Sunday, March 12, 2:00 am	Sunday, November 5, 2:00 am
2024	Sunday, March 10, 2:00 am	Sunday, November 3, 2:00 am
2025	Sunday, March 9, 2:00 am	Sunday, November 2, 2:00 am
2026	Sunday, March 8, 2:00 am	Sunday, November 1, 2:00 am

When collecting and analyzing timeseries data, there is often confusion about time zones, especially when collecting a dataset that spans a time change (clock change) between PDT and PST. It is important to evaluate and understand the time zone of your data, in both the planning of the data collection, and the assembling and QA review of your data after collection.

Why is it confusing? It's confusing for two reasons:

- The first is that you must understand how your logger has recorded the time, and if you are not certain at the beginning of the project, it can cause problems. For example, you might deploy your instrument during a certain time zone, but that does not mean that the instrument you are using is set to record in that time zone. See more information on this topic in the section "Additional tips on Time Zone and your instrumentation and software."

- The second reason is because you can only have data in one time zone for each file loaded into EIM. So, if you have files that have data in two different time zones, you must decide how to manage that data before submitting to EIM. More details are provided in the section "What to do if you have a file that contains data with more than one time zone." Again, it is OK to have data in multiple time zones, it just can't be contained within the same file when uploading to EIM.

Understanding how your instrument records time and time zone prior to data collection

You must first understand how your instrument's software handles time zones and time shifts that could happen during a deployment. For instance, does it automatically adjust for time zone shifts or does it consistently record in just one time zone?

It's important to know what time zone the instrument's clock was set to, which may differ from the time zone in which it was deployed. For example, if an instrument is to be deployed for an entire year, you could decide to set the instrument clock to Pacific Standard Time for the full deployment, even though the deployment begins during Pacific Daylight Time. Records should always be kept regarding which time zone an instrument's clock represents.

Remember, it is OK to have data that is collected/recorded in a time zone that does not match the "current day" time zone. If your instrument is set to record in a certain time zone, then it is adjusting the recorded time to that time zone. So as long as you are submitting that time, with the appropriate time zone recorded by the instrument, then it's ok. The most important part is understanding how your instrument and software are configured and knowing that the time zone you submit to EIM is correct.

Additional tips on Time Zone and your instrumentation and software:

The process for setting up a logger's internal clock and time zone may vary based on the logger model as well as the logger's software and software version. Refer to logger and software user manuals to understand how time and time zones are set for your logger. Below are a few things to be aware of that *may* be applicable to your logger.

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- What time zone does the clock on your probe/logger represent? Computers, tablets, phones, and data shuttles are commonly used to configure and deploy loggers. In some cases, the time zone of those devices may be directly applied to the probe/logger when it is configured or launched. In other cases, logger software will allow you to select a different time zone.

- If the time/time zone of a device (computer, tablet, phone, data shuttle) is being directly applied to the logger, make sure the time is correct and the desired time zone is in use. Computers and tablets may have incorrect times if they have been disconnected from the internet. Computer, tablet, or phone settings may need to be changed to apply the desired time zone.

- The device used to export your data may change your time zone when you download the data to it. If this is the case, make sure your device is in the desired time zone before downloading data.

- Does the logger automatically change the clock between PST/PDT during a deployment? This can also be determined by examining timestamps after downloading the data.

- After downloading the data from the logger, is the time zone clearly identified? If not, you may need to manually add time zone info to your downloaded data.

- Watch out for clock resets after sending instruments in for calibration or replacing clock batteries.

Each timeseries CSV file uploaded to EIM must have data in only one time zone

Each time you import a timeseries file into EIM Loader, you must select a time zone for the results in the file (as shown in the figure below). You can only assign one time zone for each file. For this reason, you may need to do some work to organize your files before submitting them to EIM.
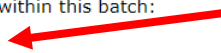
EIM accepts:
- Pacific Standard Time (**PST**) (**winter**)
- Pacific daylight saving time/Pacific daylight time (**PDT**) (**summer**)
- Greenwich Mean Time/Coordinated Universal Time (**UTC**)

What to do if you have a single file that contains data with more than one time zone

You may have a data collection period that spans a time zone change. If that data is contained in one file

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and your instrument was not configured to normalize to one time zone for the entire year, you will have some decisions to make before submitting your data to EIM.

Remember, if you have data in different time zones, but it's separated into separate files for each time zone, that is ok. But if you have data in different time zones **within a single file, you have two options:**

- Normalize the data within the file to one time zone.

    o If you are managing your data in Excel, it is important to understand how Excel is representing time. Normalizing data to a single time zone after collection can be challenging if you are not experienced with performing calculations with dates and times in Excel.

- Split the file up into separate files, each file having only data within a single time zone.

    o Split the batches at the closest time to 2:00 AM on the Sunday of the time shift, as this best follows the U.S. coordinated time change procedure.

    o Please note that during the autumn shift from daylight saving to standard time, the hour between 01:00 and 01:59:59 occurs twice, whereas during the late winter or spring shift from standard to daylight saving time the hour between 02:00 and 02:59:59 disappears. You can see this illustrated in the example dataset below where during a time zone change, the times between 1:00 am and 1:45 am occur twice, but they have a different zone. EIM will recognize that these redundant times are valid because they have different time zones.

Example of time zone change during instrument deployment. The times between 1:00 am and 1:45 am occur twice (in the lighter shading), but they have a different zone.

Start Date	Start Time	Zone	Result Parameter Name	Result Value	Result Unit
11/5/2022	23:30	PDT	Temperature, water	24.1	deg C
11/5/2022	23:45	PDT	Temperature, water	24.6	deg C
11/6/2022	0:00	PDT	Temperature, water	24.6	deg C
11/6/2022	0:15	PDT	Temperature, water	24.6	deg C
11/6/2022	0:30	PDT	Temperature, water	24.6	deg C
11/6/2022	0:45	PDT	Temperature, water	24.6	deg C
11/6/2022	1:00	PDT	Temperature, water	24.3	deg C
11/6/2022	1:15	PDT	Temperature, water	24.3	deg C
11/6/2022	1:30	PDT	Temperature, water	24.3	deg C
11/6/2022	1:45	PDT	Temperature, water	24.3	deg C
11/6/2022	1:00	PST	Temperature, water	24.3	deg C
11/6/2022	1:15	PST	Temperature, water	24.3	deg C
11/6/2022	1:30	PST	Temperature, water	24.3	deg C
11/6/2022	1:45	PST	Temperature, water	24.7	deg C
11/6/2022	2:00	PST	Temperature, water	24.7	deg C
11/6/2022	2:15	PST	Temperature, water	24.7	deg C
11/6/2022	2:30	PST	Temperature, water	24.7	deg C

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## Getting ready to submit your data

Go to the EIM Loader

1. The process is the same after this:

   a. **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.

   b. **If you are an Ecology employee**, go to the EIM Loader.

2. Once you are in the EIM Loader, go to the EIM Help Center to download the Time-Series template and help
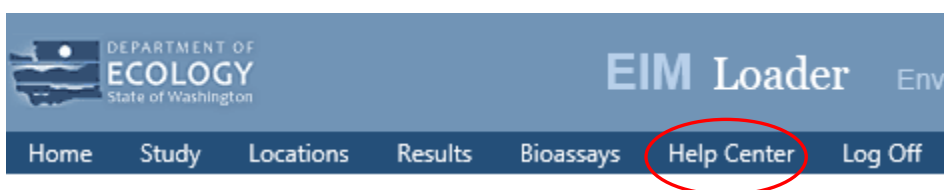
3. In the EIM Help Center, go to Templates & Guidance

4. Download the Time-Series Template and Help

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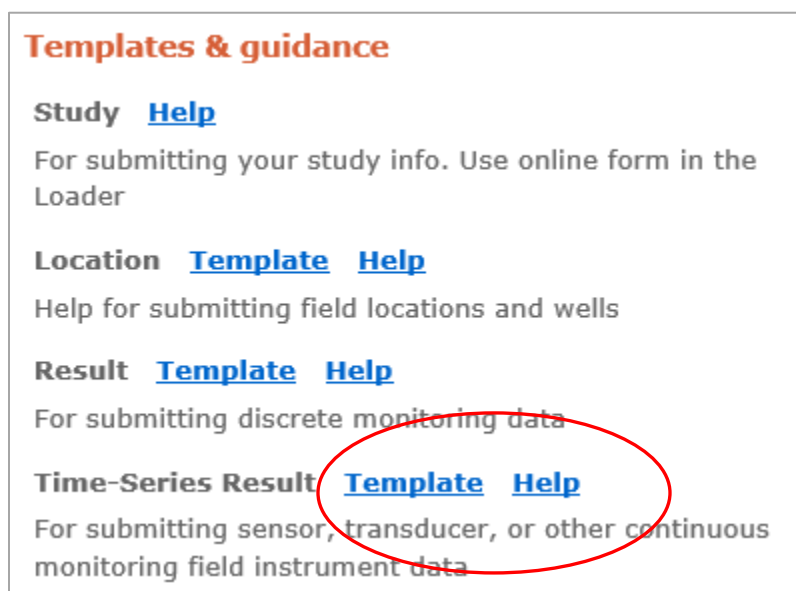
5. We recommend printing the Help document in color. It is formatted to print on 8.5x11 paper.

	Help for EIM Time-Series Result Template – Version 3.0						Page 1

Template color coding: **YELLOW/BOLD** – required; PURPLE - required if Field Collection Type is Measurement; ORANGE - required if Field Collection Type is Observation

Col	Field Name	Description	Requirements	Type	Size	Valid Values and Conditions	Examples and Guidance
A	Study ID	UNIQUE ID to identify the Study in EIM.	REQUIRED	Alpha	20	Must be valid EIM Study ID. Each time-series batch must contain only one distinct Study ID for all records.	Use value from "Study ID" field in your Study form.
B	Instrument ID	ID used to uniquely identify the instrument that was used to measure your result values.	REQUIRED	Alpha	50	Free text Use the ID on the instrument. If it doesn't have one, create one.	Ex: "E-61326", "FlowMeter 3A", "Instrument7" This field is required to uniquely identify sets of time-series data within a batch that were collected by the same instrument.

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.

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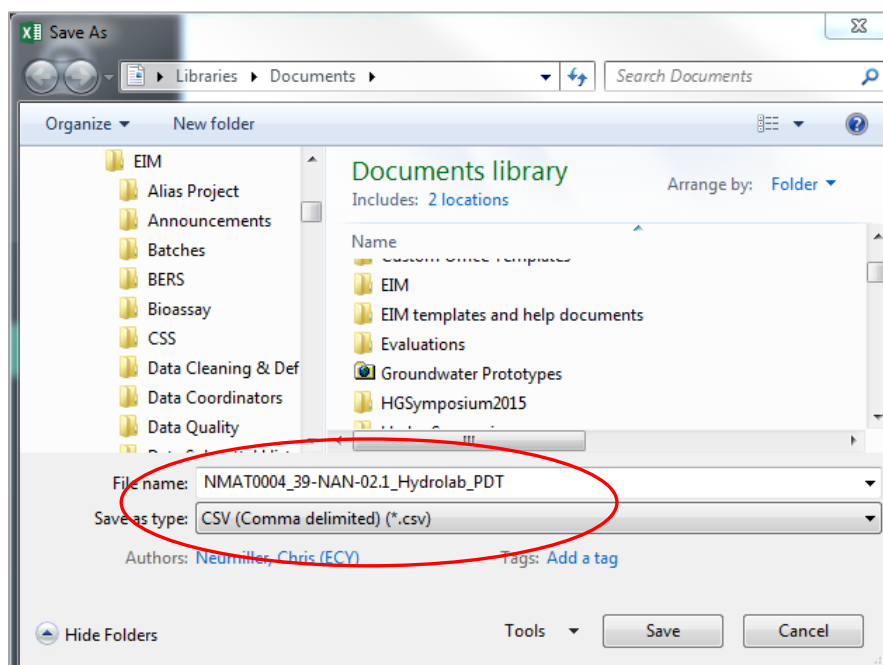
If you get a prompt about your file format, click "Yes." You want to keep the CSV format.
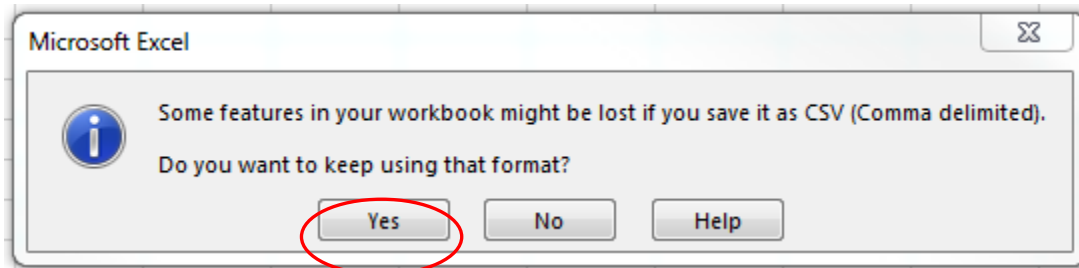
Populate your Template

Open and populate your Time-Series Result Template with the Time-Series results downloaded from your instrument.

	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			

As explained in Things to note before you start you should adjust, qualify or remove any data as appropriate.

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.

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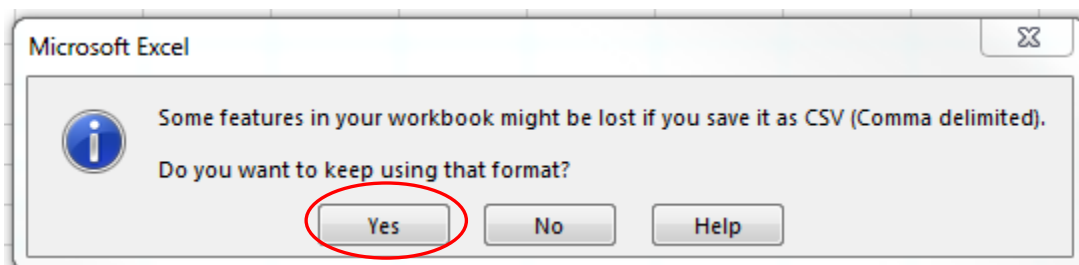
Submitting your data to EIM

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.
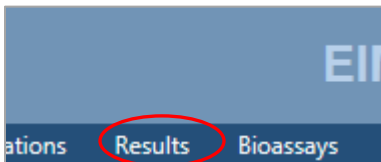
2. Click the "Submit Data" tab.

3. Select Template Type: "*EIM Time-Series Result Template.*"
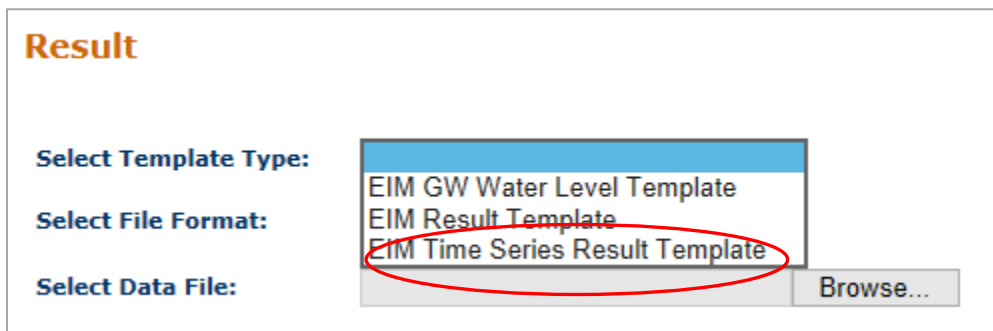
4. Browse for your Template file on your computer.

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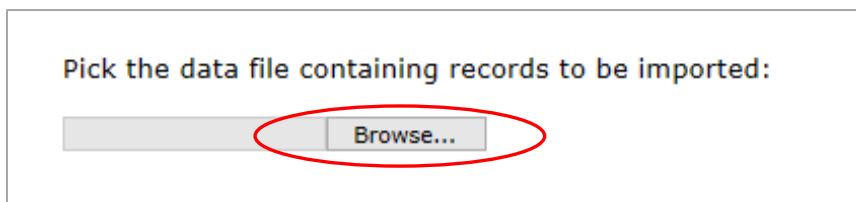
5. Select your Template file (properly named, as described in "Save your Time-Series Result Template").
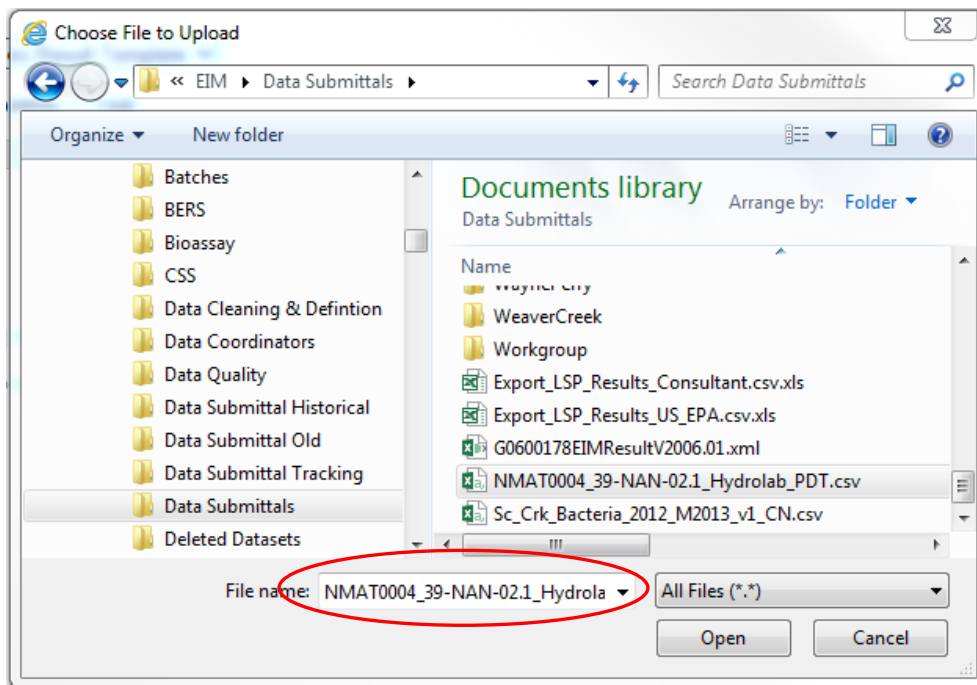
6. Select the Time Zone that your dataset's time values were reported in.
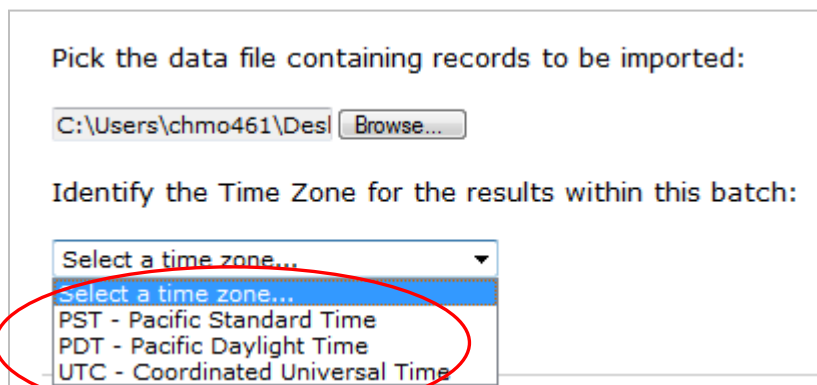
Note: If your instrument's software automatically adjusts for the shift between PST and PDT AND your deployment spanned a time shift, you must divide your dataset into two or more files to accurately reflect when the measurements were collected.

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7. Click "Import File."

Selected format file: **EIM Time Series Result Template**
Selected data file: **NMAT0004_39-NAN-02.1_Hydrolab_PDT.csv**

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.

Browse...

Error Summary
  • There are only column headers in your file.

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

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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.

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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. First, delete the unwanted batch from your batches list. Once you have completed the edits in your template, resubmit it using the instructions above. Keep the filename 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 EIM 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 EIM data coordinator.

If you have any other questions about fixing your errors, contact your EIM data coordinator.

If you are submitting data from outside of Ecology, you can click the "Request Assistance from Data Coordinator" button at the bottom of the error report:

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

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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

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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

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

Date Range: 3/26/2009 10:30:00 AM - 9/9/2009 2:12:00 PM   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

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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

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Parameter: Temperature, Air ▾   Instrument ID: 1018442 ▾   Records Currently Graphed: 7999

Date Range: 09/30/2008 🔲 to 03/16/2009 🔲   [Draw Graph]   [Reset Dates]

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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.

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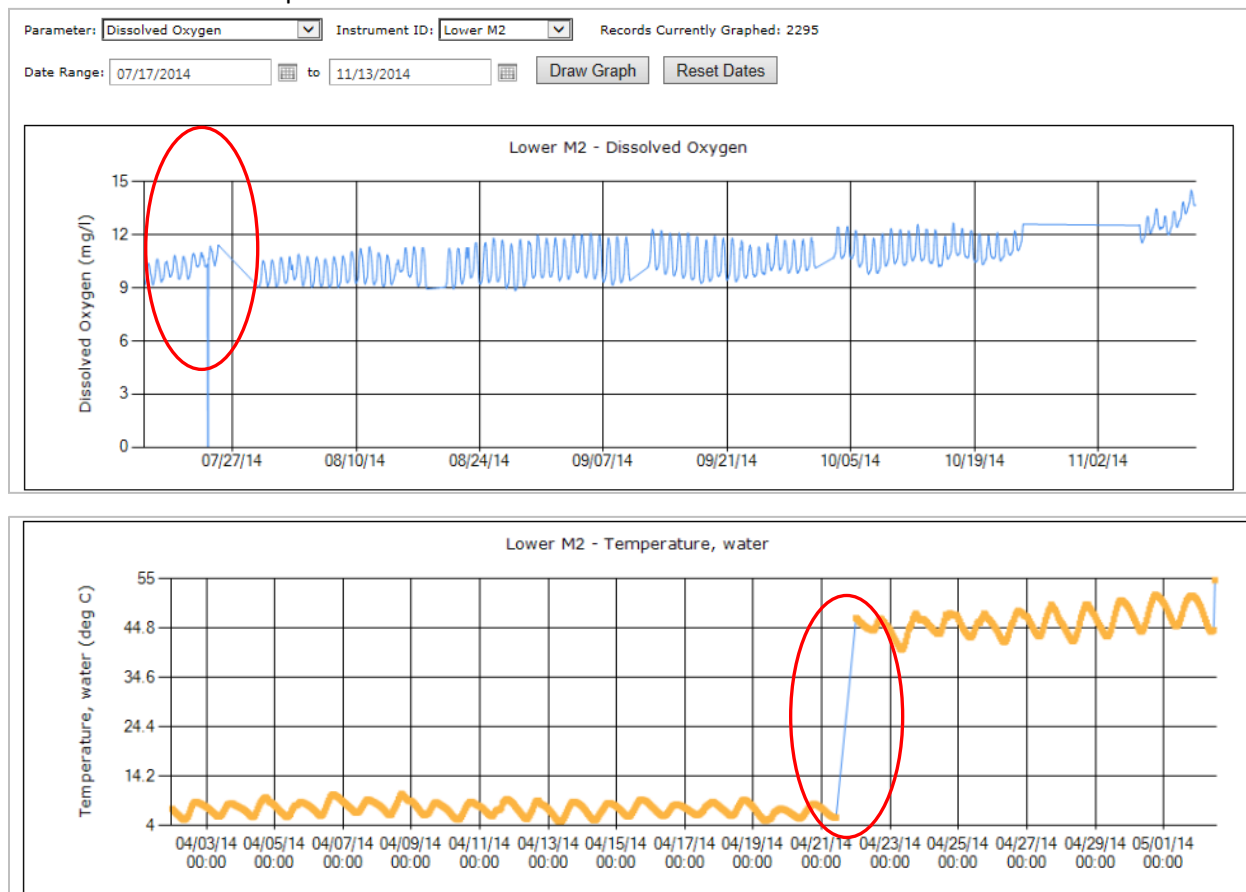
Load your data

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.
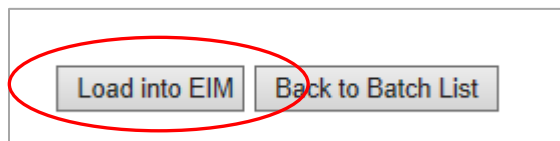
Notify your EIM data coordinator

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 EIM data coordinator know it is ready for review. Click "Submit to Data Coordinator."

What to expect next

Your EIM data coordinator will be notified and will begin reviewing your submittal as soon as they can.

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

Once your EIM 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 EIM 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.

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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.

Status Legend

Click on the "Status Legend" heading to reveal the key to the symbols preceding each batch.

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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.

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Deleting batches

	Batch Number	File Name	Record Count	Submitted By	Upload Date	Options
		Status Legend - click to show				
		Keep EIM clean - delete loaded or unwanted batches.				
❓	1	StillTestingDontLoad.csv	1005	chmo461@ecy.wa.gov	8/5/2013 3:47:08 PM	View	Delete	Export
➕	2	NMAT0004_39-NAN-02.1_Hydrolab_PDT.csv	1637	chmo461@ecy.wa.gov	8/26/2013 11:52:07 AM	View	Delete	Export

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.
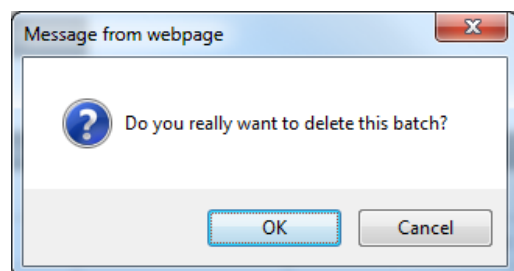
If a batch in your Show Batches list was loaded into EIM by you or your EIM data coordinator, it is delineated by a green checkmark ✅ . Deleting it will not remove any records from EIM. It will just remove the batch from the EIM holding area.
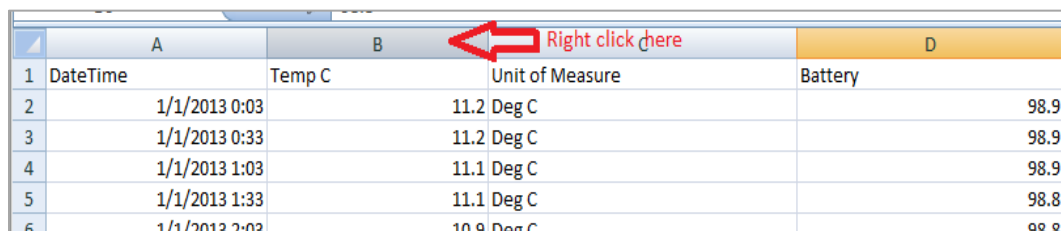
Document revision history

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 of submittal.	CN, JK
11/6/17	3.0	New versioning. Updates for new EIM Help Center.	CN
01/16/18	3.1	Added several bullets to the "Things to note before you start" section. Minor edits to wording and screen shots throughout the document for clarification.	KC
01/27/20	3.2	Removed "formerly EIM Time-Series Submittal Guidelines" from subtitle, added additional language to the bullet about observations on page 5.	KC
10/12/21	3.3	Added bold formatting and bullet points about data gaps and consistent time intervals to the "things to note before you start" section on page 5.	KC
10/31/23	3.4	Added section on time zone.	KS, MP, AL, EN, KC
06/11/24	3.5	Rewrote the "Time zone and daylight saving time" section.	KC

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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.

2. From the menu that pops up, choose "Insert."
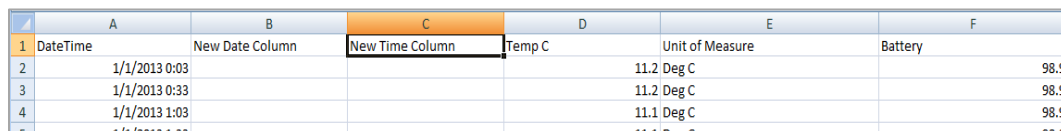
3. Do this twice. You are creating two new columns - one for dates and one for times.

4. Give them appropriate column names.

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

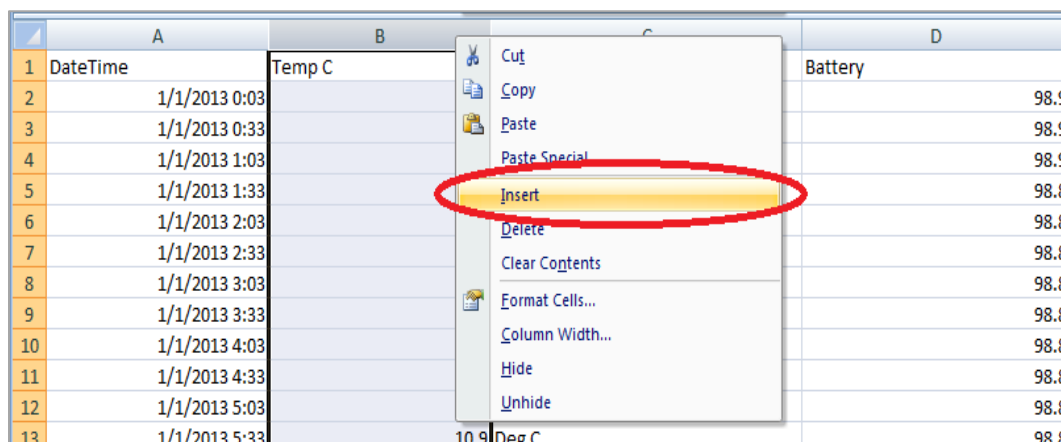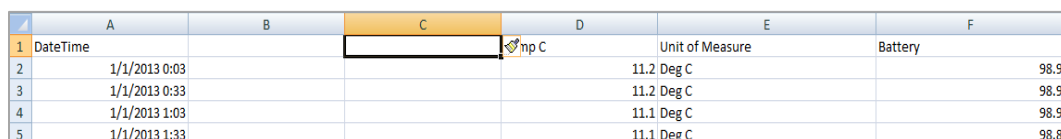1. Select the empty cell adjacent to the combined date and time column. The first non-header row is a good place to start.

	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

Double Left Click here

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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	

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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).