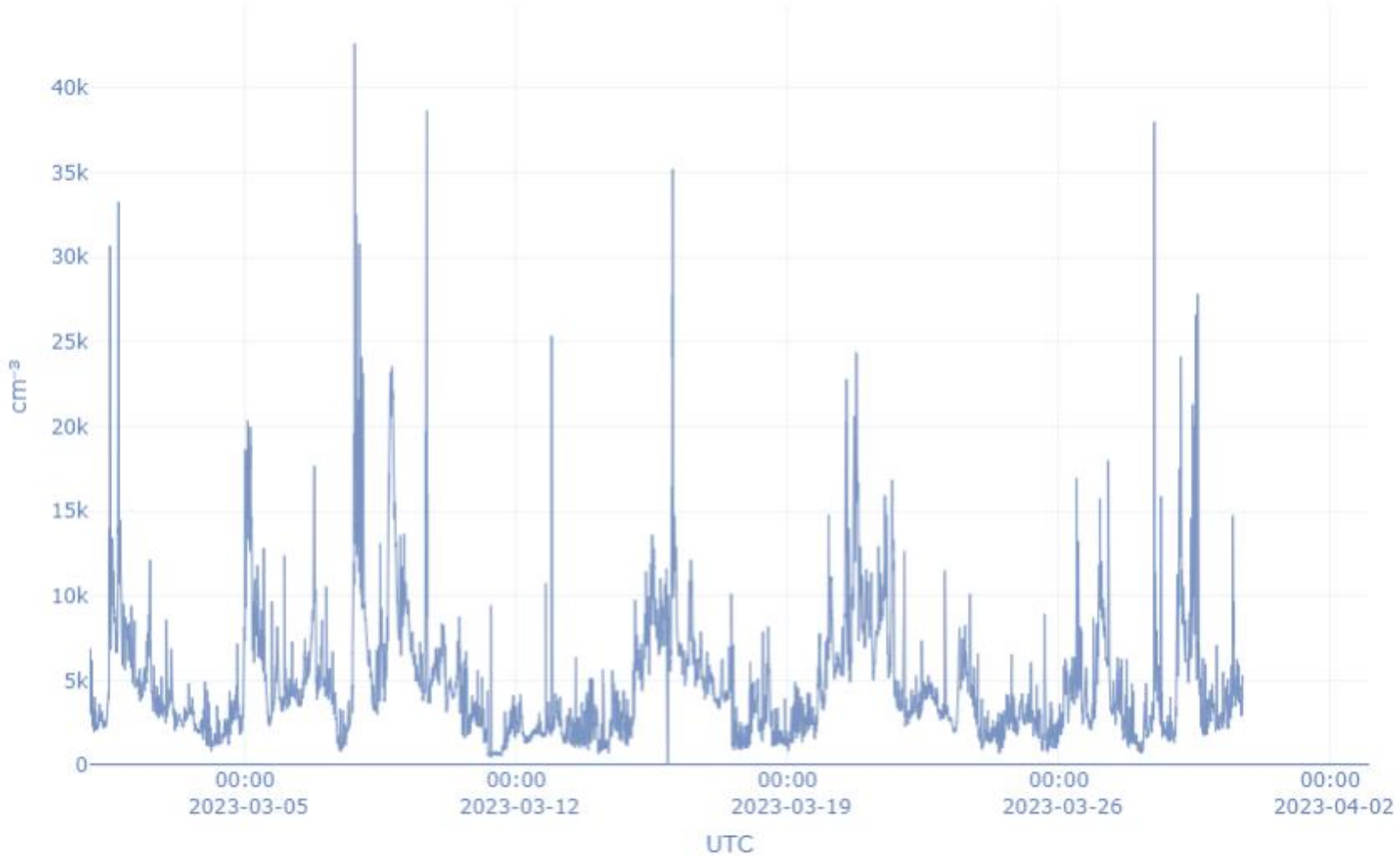
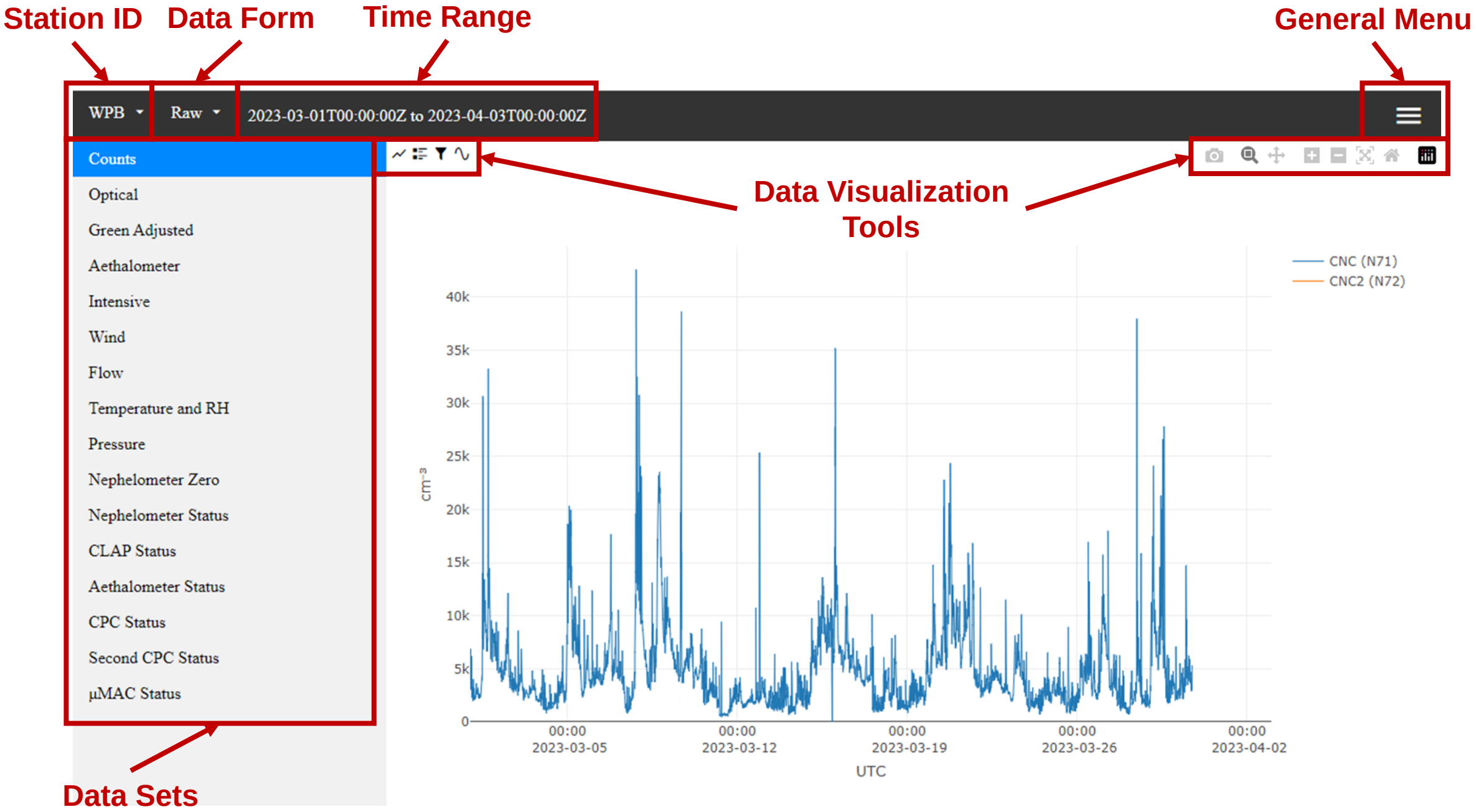
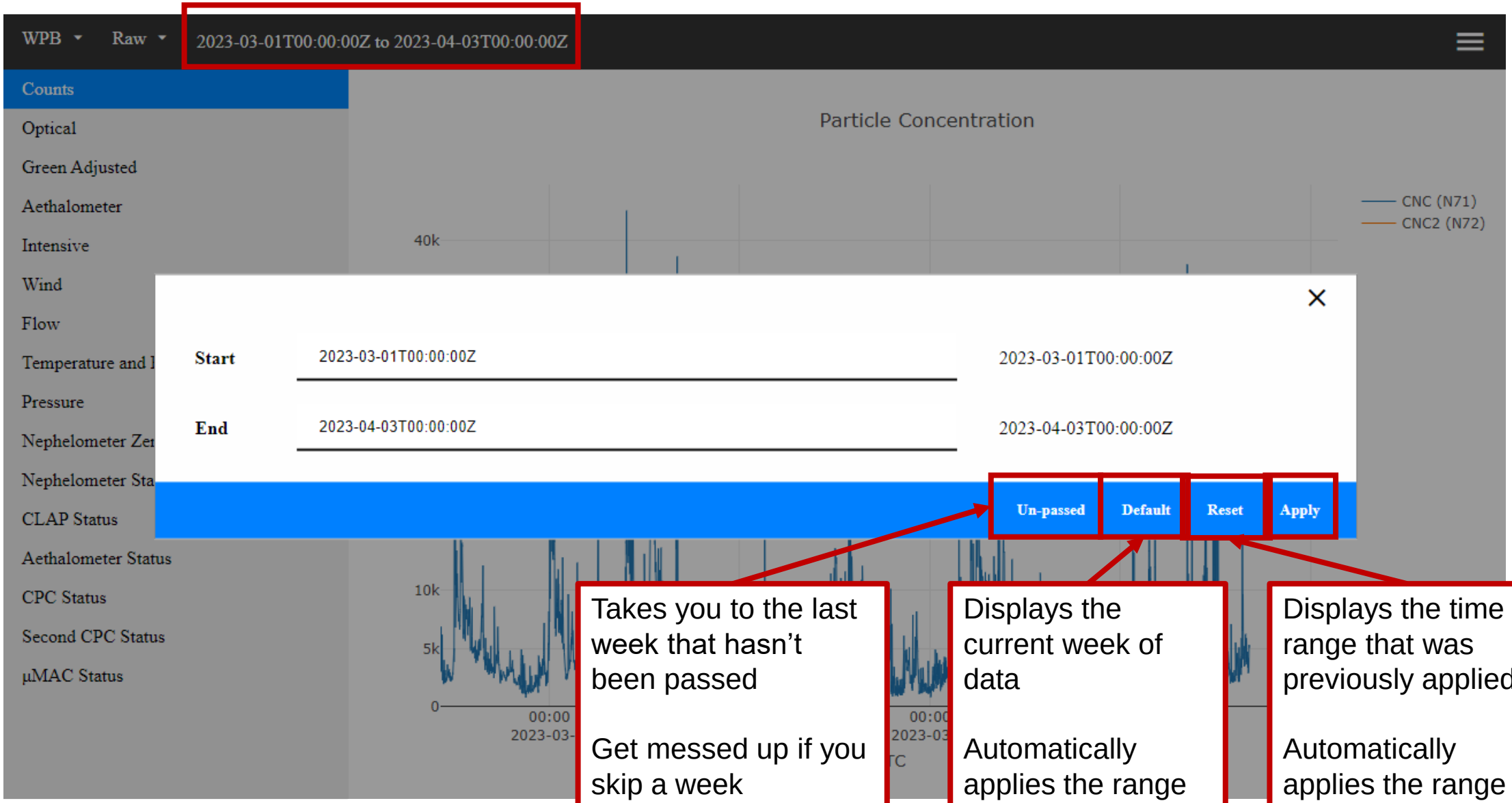
Welcome to Forge

- Basic Navigation
- Visualizing Your Data
- Introduction to Editing
- “Passing” Your Data

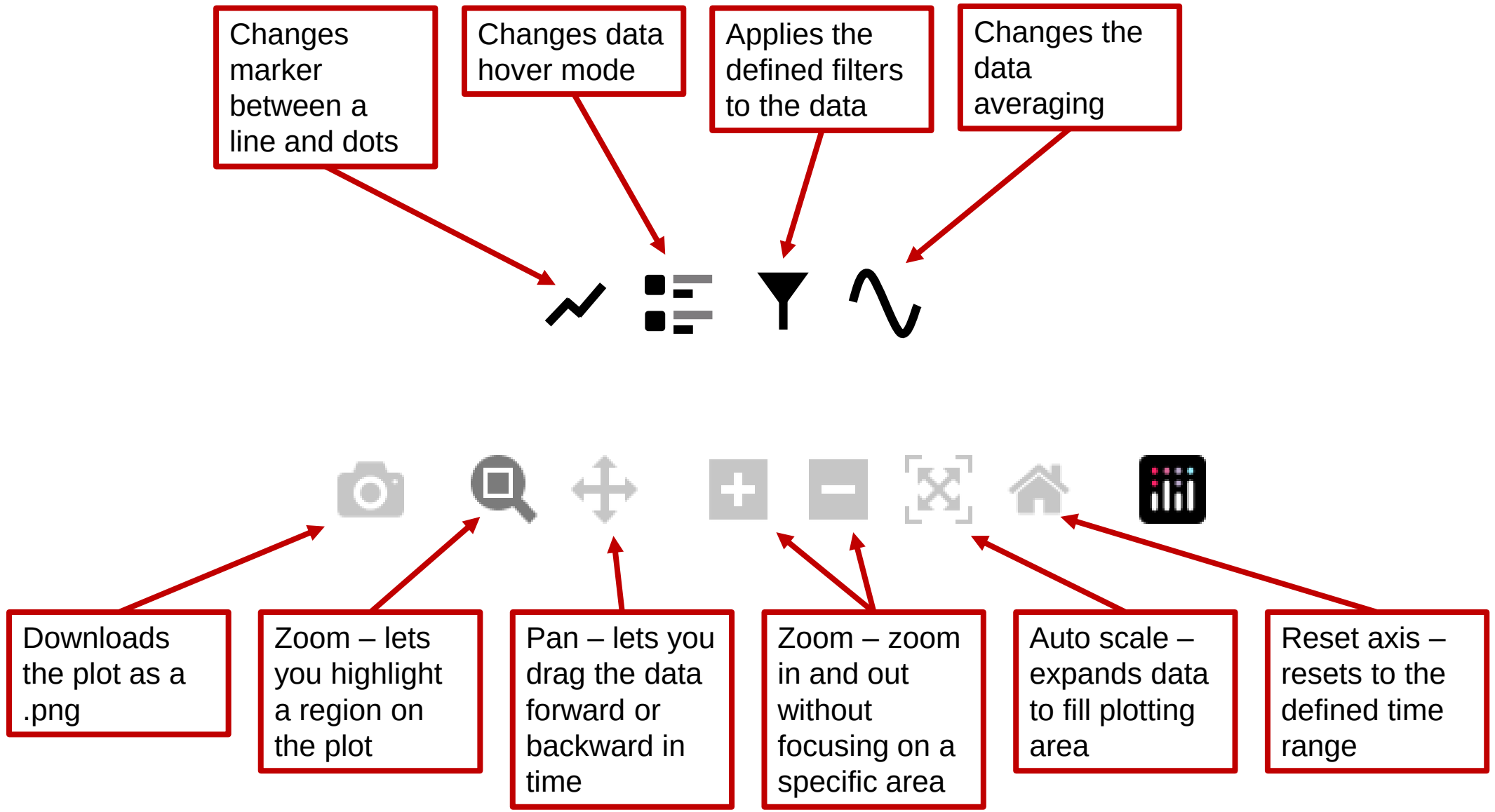



Station ID
Data Form
Time Range
General Menu
WPB
Raw
2023-03-01T00:00:00Z to 2023-04-03T00:00:00Z
Counts
Optical
Green Adjusted
Aethalometer
Intensive
Wind
Flow
Temperature and RH
Pressure
Nephelometer Zero
Nephelometer Status
CLAP Status
Aethalometer Status
CPC Status
Second CPC Status
µMAC Status
Data Visualization Tools
Data Sets
CNC (N71)
CNC2 (N72)
40k
35k
30k
25k
20k
15k
10k
5k
0
cm⁻³
00:00
2023-03-05
00:00
2023-03-12
00:00
2023-03-19
00:00
2023-03-26
00:00
2023-04-02
UTC

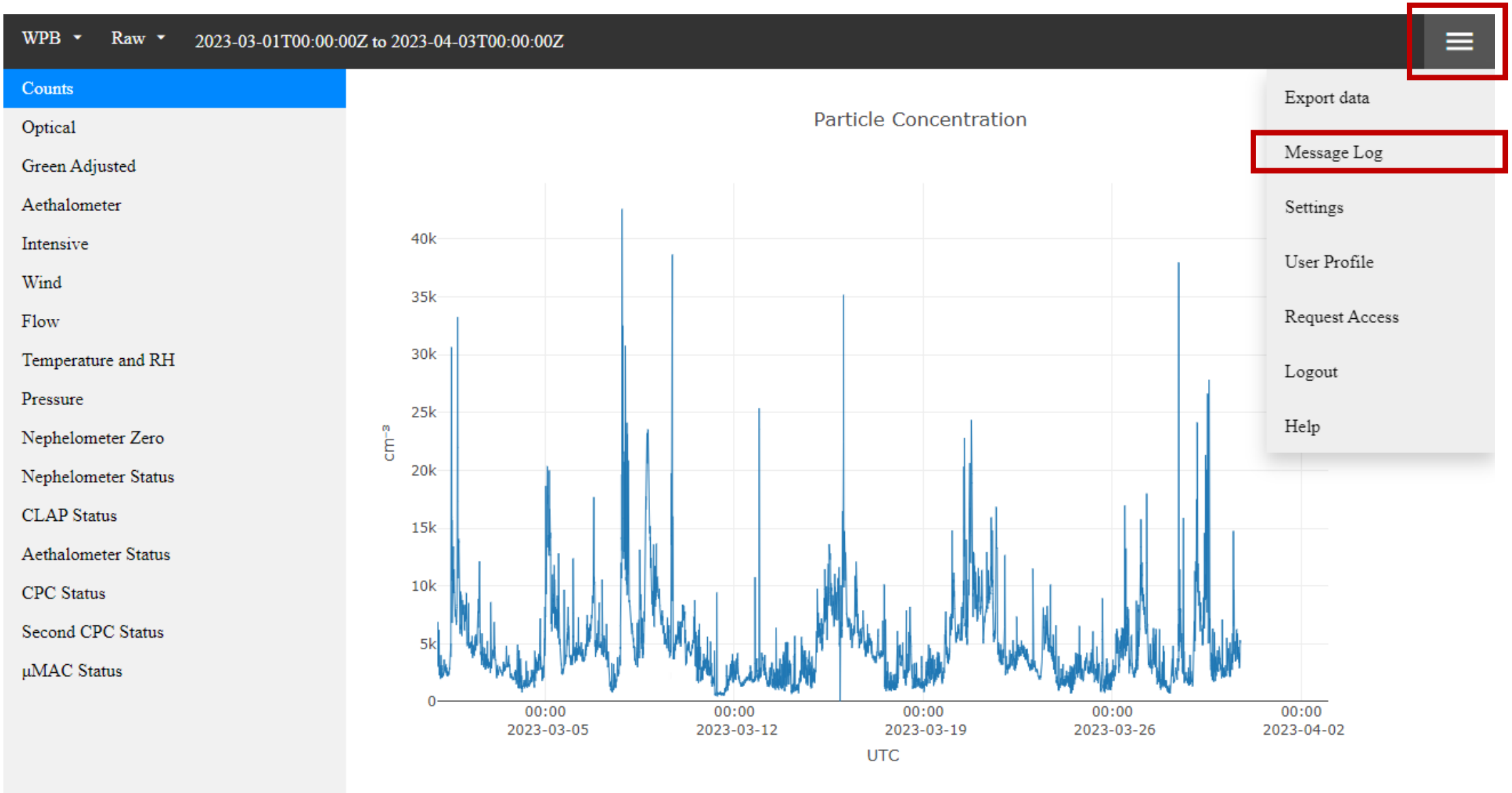
Time and Date Selection

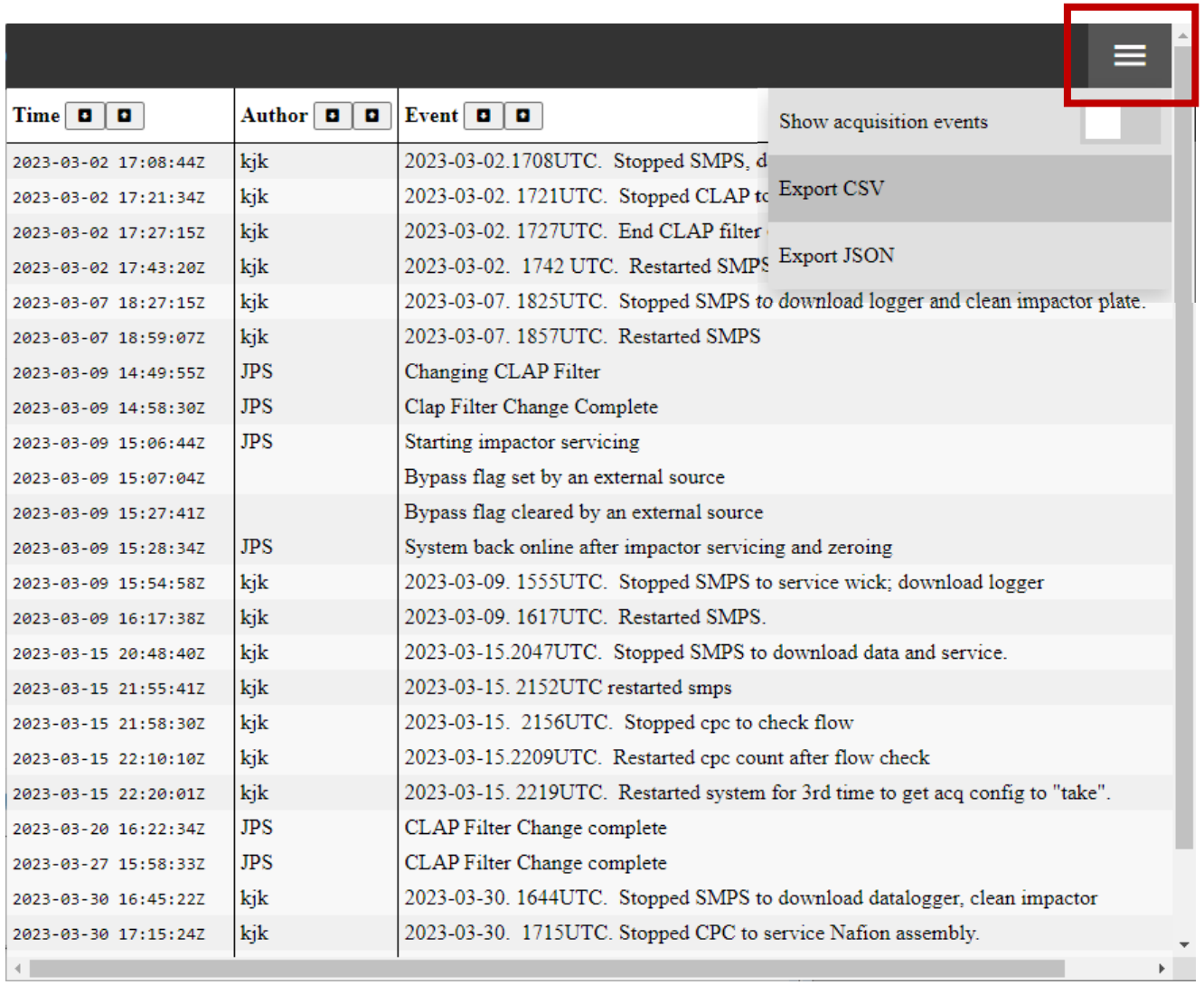


Data Visualization Tools



The Message Log





Time	Author	Event
2023-03-02 17:08:44Z	kjk	2023-03-02.1708UTC. Stopped SMPS, d
2023-03-02 17:21:34Z	kjk	2023-03-02. 1721UTC. Stopped CLAP to
2023-03-02 17:27:15Z	kjk	2023-03-02. 1727UTC. End CLAP filter
2023-03-02 17:43:20Z	kjk	2023-03-02. 1742 UTC. Restarted SMPS
2023-03-07 18:27:15Z	kjk	2023-03-07. 1825UTC. Stopped SMPS to download logger and clean impactor plate.
2023-03-07 18:59:07Z	kjk	2023-03-07. 1857UTC. Restarted SMPS
2023-03-09 14:49:55Z	JPS	Changing CLAP Filter
2023-03-09 14:58:30Z	JPS	Clap Filter Change Complete
2023-03-09 15:06:44Z	JPS	Starting impactor servicing
2023-03-09 15:07:04Z		Bypass flag set by an external source
2023-03-09 15:27:41Z		Bypass flag cleared by an external source
2023-03-09 15:28:34Z	JPS	System back online after impactor servicing and zeroing
2023-03-09 15:54:58Z	kjk	2023-03-09. 1555UTC. Stopped SMPS to service wick; download logger
2023-03-09 16:17:38Z	kjk	2023-03-09. 1617UTC. Restarted SMPS.
2023-03-15 20:48:40Z	kjk	2023-03-15.2047UTC. Stopped SMPS to download data and service.
2023-03-15 21:55:41Z	kjk	2023-03-15. 2152UTC restarted smps
2023-03-15 21:58:30Z	kjk	2023-03-15. 2156UTC. Stopped cpc to check flow
2023-03-15 22:10:10Z	kjk	2023-03-15.2209UTC. Restarted cpc count after flow check
2023-03-15 22:20:01Z	kjk	2023-03-15. 2219UTC. Restarted system for 3rd time to get acq config to "take".
2023-03-20 16:22:34Z	JPS	CLAP Filter Change complete
2023-03-27 15:58:33Z	JPS	CLAP Filter Change complete
2023-03-30 16:45:22Z	kjk	2023-03-30. 1644UTC. Stopped SMPS to download datalogger, clean impactor
2023-03-30 17:15:24Z	kjk	2023-03-30. 1715UTC. Stopped CPC to service Nafion assembly.

The message log has every comment you entered into cpd and more!

All events / messages are time stamped and have a corresponding author

You can export your message log and keep a backup or if you are sharing your data, send it along with it!

Selecting a message from the log puts a marker on that time stamp in the data plot!

Time	Author	Event
2023-03-02 17:08:44Z	kjk	2023-03-02.1708UTC. Stopped SMPS, downloaded datalogger.
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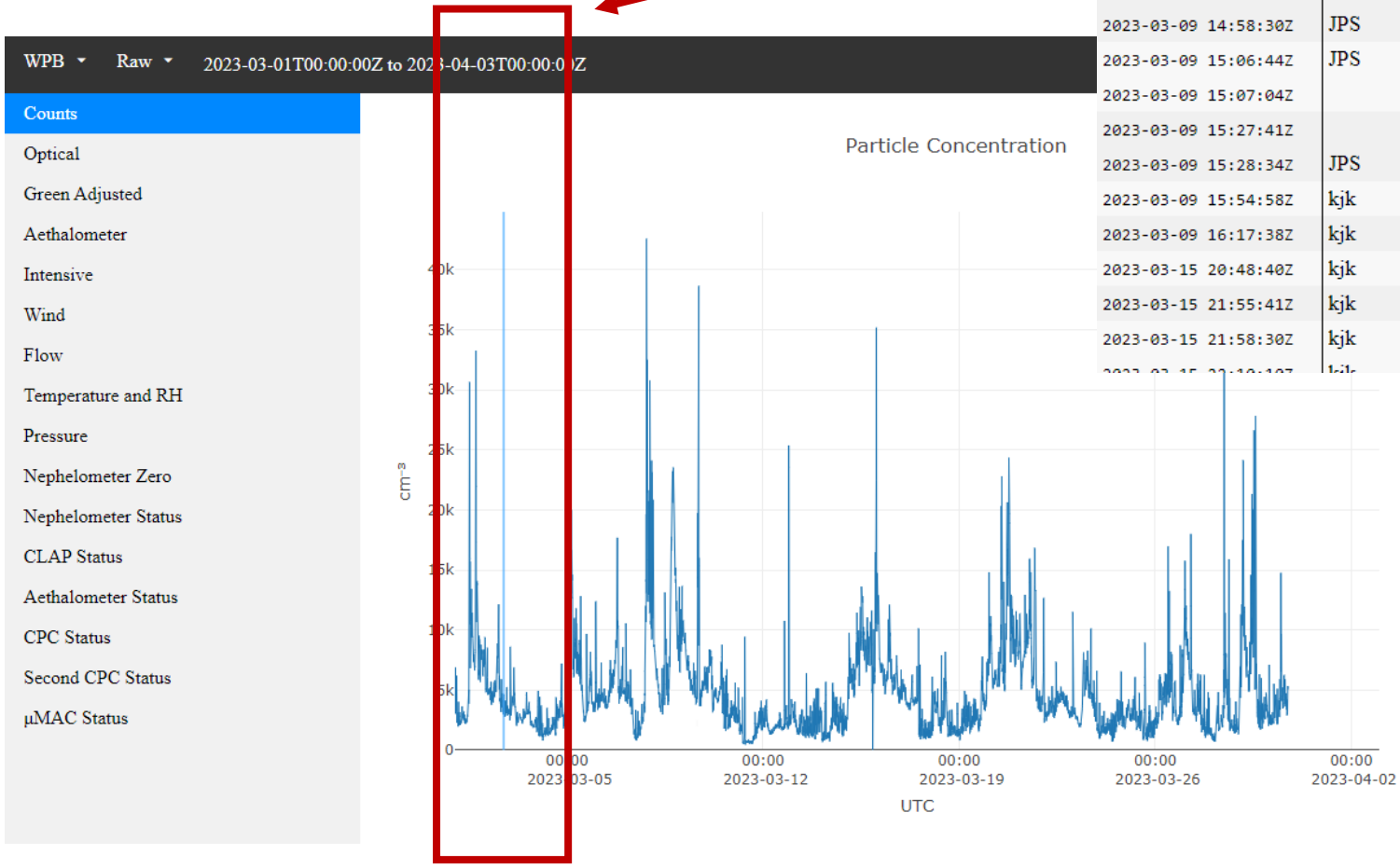
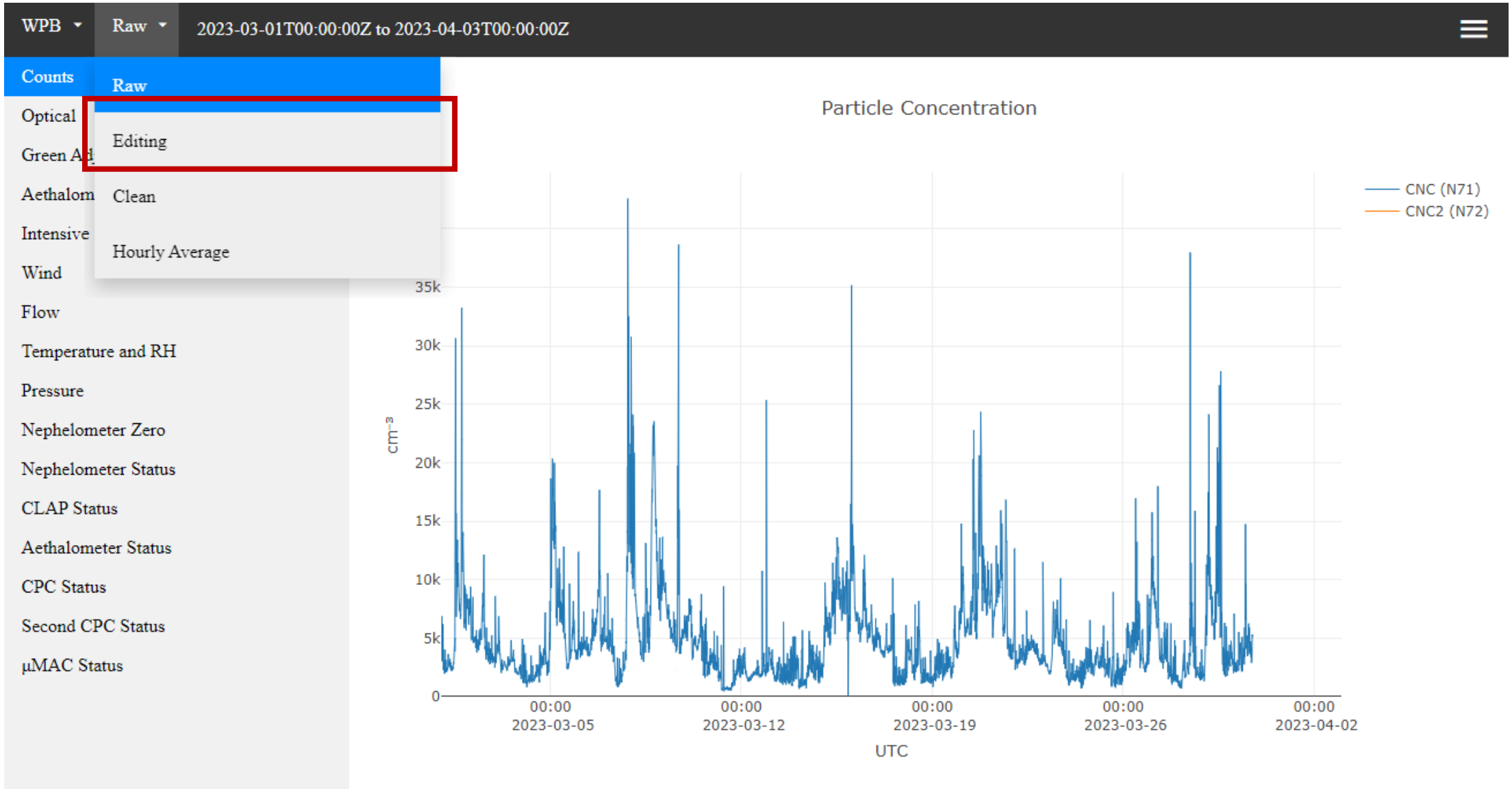
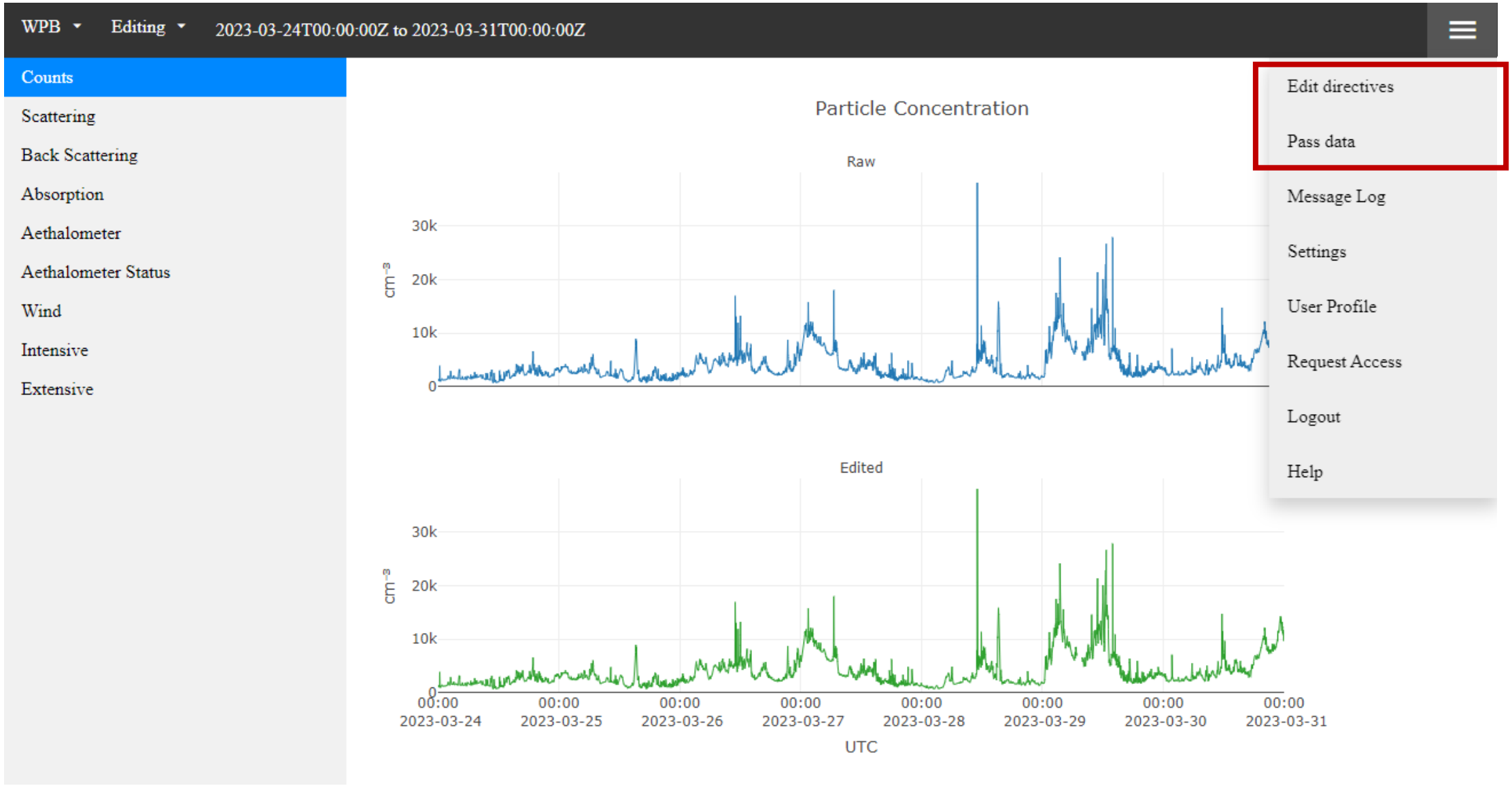


Editing Your Data



In Editing mode you have options for adding mentor edits and passing the data

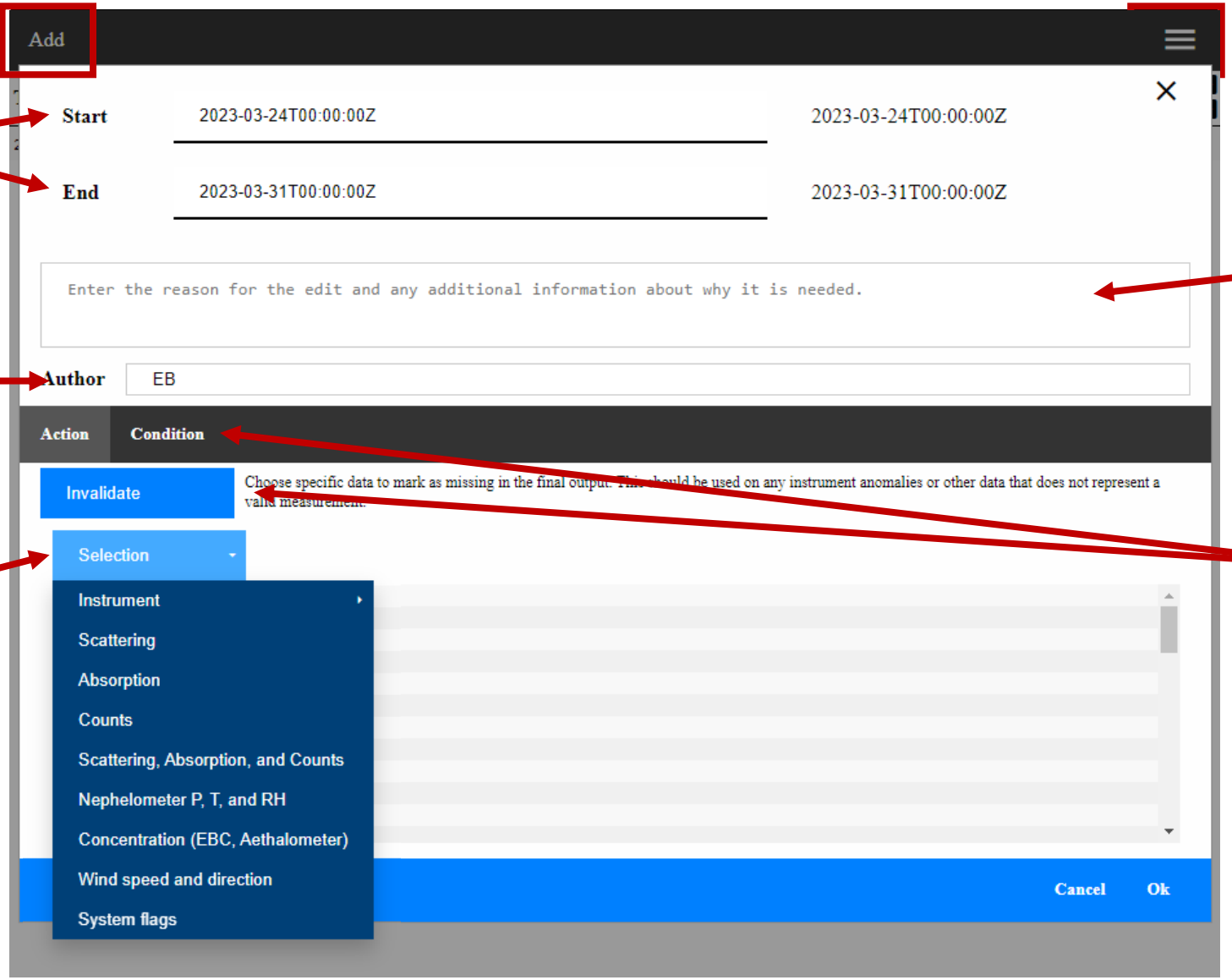


Adding an edit to your data

Takes initial time range from the plot

Initials of the editor

What instruments/ variables are affected



Notes about why the edit is being made

What kind of edit is being made, and if it has a conditional application

Types of Edits

Invalidate

Choose specific data to mark as missing in the final output. This should be used on any instrument anomalies or other data that does not represent a valid measurement.

Contaminate

Mark the whole data stream as not representative of ambient conditions (e.g. a nearby truck emitting aerosol). The data are considered valid in high resolution (1-minute) but are not included in the final averages for analysis.

Calibration

Apply a calibration polynomial to data values. This is used to adjust values based by applying a polynomial to the original data (e.g. using a slope and offset).

0 + 1 x + ...

Recalibrate

Reverse a calibration polynomial and apply a new one. This is used to reverse an old calibration polynomial applied to values and then apply an updated one.

Reverse: 0 + 1 x + ...

Apply: 0 + 1 x + ...

Flow Correction

Reverse a calibration polynomial applied to a measurement flow and then apply a new one. This is used to simultaneously correct a measurement flow and parameters derived from the sampled air volume (e.g. a CLAP flow).

Reverse: 0 + 1 x + ...

Apply: 0 + 1 x + ...

Size Cut Fix

Apply a fix to the size cut of the data. This is used to alter or invalidate data when a specific cut size is active (e.g. invalidate a leaking impactor or change the effective size when it is stuck).

Original: PM1

Updated: Invalidate

Types of Conditions

None

The edit is unconditionally applied.

Threshold

Compare a value to threshold limits and apply the edit only when those limits are met. The edit is applied when a value is inside a range (e.g. transmittance less than 0.5).

-∞ < x < ∞

Selection

```
Ba1_A81
Ba2_A81
Ba3_A81
Ba4_A81
Ba5_A81
Ba6_A81
```

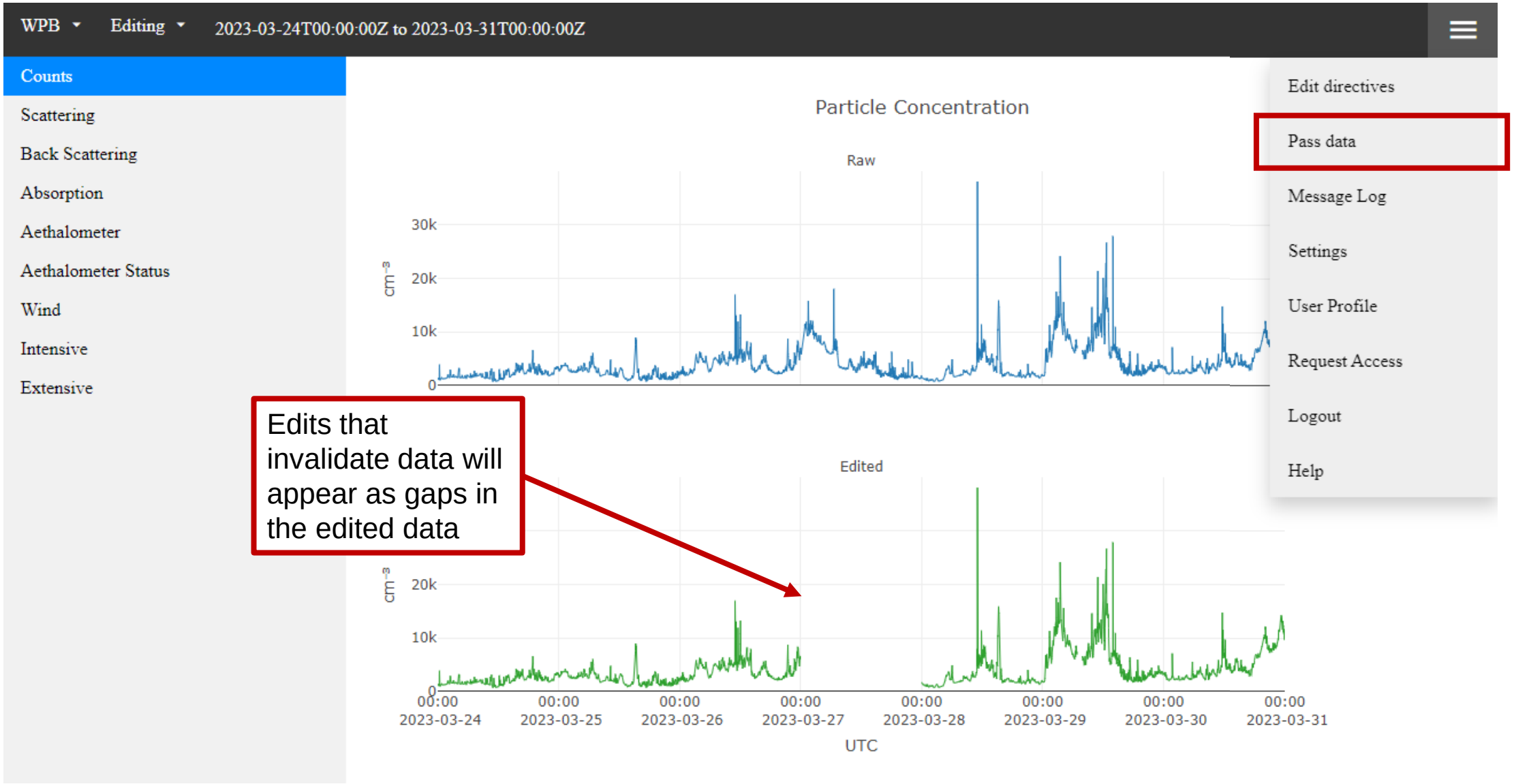
Periodic

Divide time into periodic (UTC) intervals and apply the edit only for certain points in the period. The edit is applied when the current time is within one of the selected moments in the total period.

Hourly **By Minute**

```
00:00:00
00:01:00
00:02:00
00:03:00
00:04:00
```

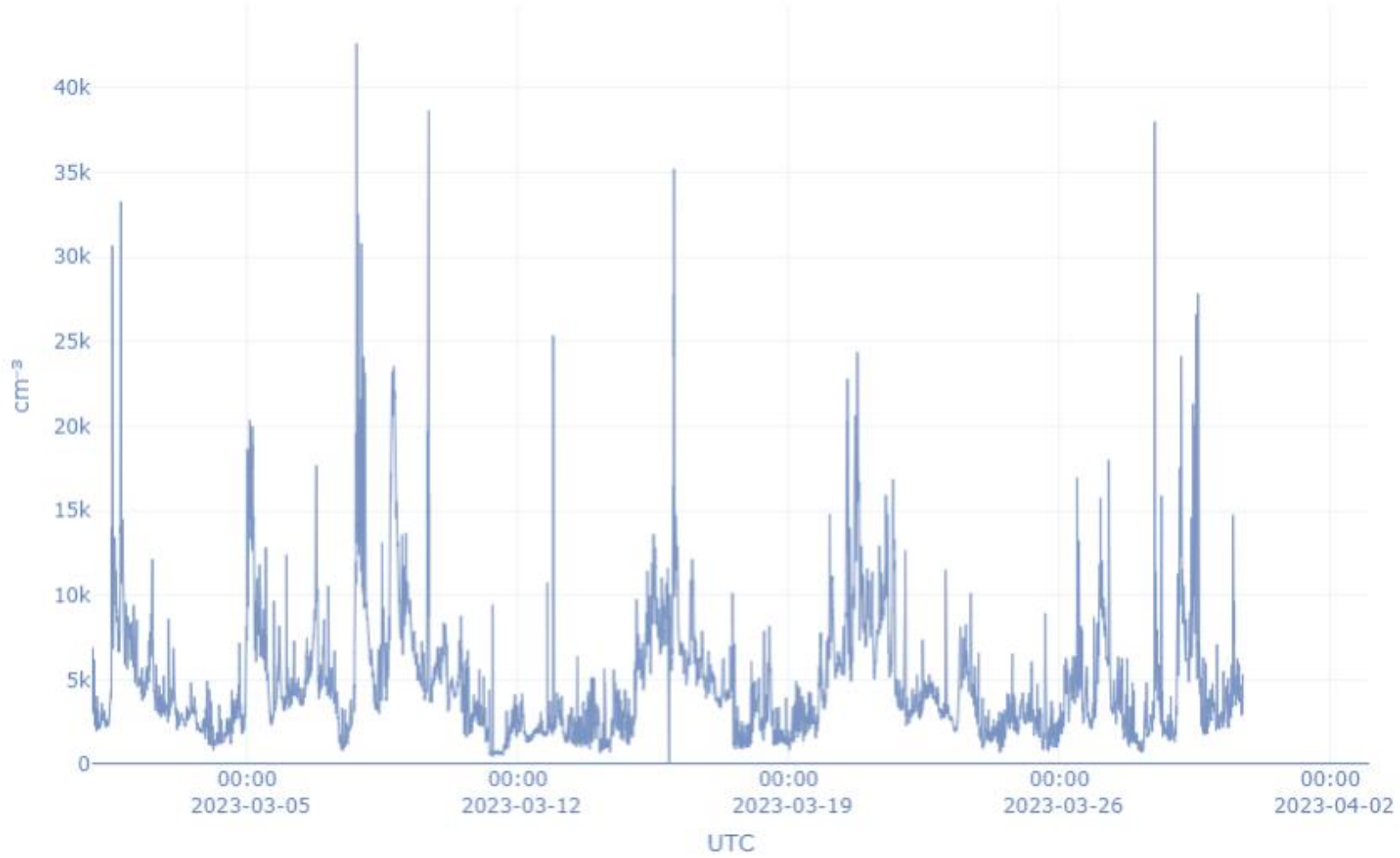
Once you have finished adding edits you can pass your data



Notes and Caveats about Passing Data

- Once you pass your data, you'll be able to see it in the "clean" and "hourly average" data format types on forge (passed data = clean data), which is a great place to check that all of your edits saved and applied correctly

- Data can be passed over any time range
- ***Please do not pass a year of data at once – it slows the system down for everyone who is trying to edit / pass data***

- Data can be passed multiple times – if you miss an edit that you need to go back and add its not an issue
- ***Once you pass data from the very end of the year the data formatting for the WDC starts, and re-passing resends them the data which complicates the system – this can be disabled if you anticipate needing have multiple passes over a year of data***

Questions, comments, concerns?