

QA/QC Meeting 19 Sep 2024

Participants: LH, YZ, YW, MR, LS, FT (6)

ALL SITES Data schedule

The last update of the data schedule was on 2023-09-15. The data schedule is available in the following format: [Data schedule](#). The data schedule is available in the following format: [Data schedule](#). The data schedule is available in the following format: [Data schedule](#).

Site	Update date	Update time	Update user
CH-001	2023-09-15	10:00	admin
CH-002	2023-09-15	10:00	admin
CH-003	2023-09-15	10:00	admin
CH-004	2023-09-15	10:00	admin
CH-005	2023-09-15	10:00	admin
CH-006	2023-09-15	10:00	admin
CH-007	2023-09-15	10:00	admin
CH-008	2023-09-15	10:00	admin
CH-009	2023-09-15	10:00	admin
CH-010	2023-09-15	10:00	admin
CH-011	2023-09-15	10:00	admin
CH-012	2023-09-15	10:00	admin
CH-013	2023-09-15	10:00	admin
CH-014	2023-09-15	10:00	admin
CH-015	2023-09-15	10:00	admin
CH-016	2023-09-15	10:00	admin
CH-017	2023-09-15	10:00	admin
CH-018	2023-09-15	10:00	admin
CH-019	2023-09-15	10:00	admin
CH-020	2023-09-15	10:00	admin
CH-021	2023-09-15	10:00	admin
CH-022	2023-09-15	10:00	admin
CH-023	2023-09-15	10:00	admin
CH-024	2023-09-15	10:00	admin
CH-025	2023-09-15	10:00	admin
CH-026	2023-09-15	10:00	admin
CH-027	2023-09-15	10:00	admin
CH-028	2023-09-15	10:00	admin
CH-029	2023-09-15	10:00	admin
CH-030	2023-09-15	10:00	admin
CH-031	2023-09-15	10:00	admin
CH-032	2023-09-15	10:00	admin
CH-033	2023-09-15	10:00	admin
CH-034	2023-09-15	10:00	admin
CH-035	2023-09-15	10:00	admin
CH-036	2023-09-15	10:00	admin
CH-037	2023-09-15	10:00	admin
CH-038	2023-09-15	10:00	admin
CH-039	2023-09-15	10:00	admin
CH-040	2023-09-15	10:00	admin
CH-041	2023-09-15	10:00	admin
CH-042	2023-09-15	10:00	admin
CH-043	2023-09-15	10:00	admin
CH-044	2023-09-15	10:00	admin
CH-045	2023-09-15	10:00	admin
CH-046	2023-09-15	10:00	admin
CH-047	2023-09-15	10:00	admin
CH-048	2023-09-15	10:00	admin
CH-049	2023-09-15	10:00	admin
CH-050	2023-09-15	10:00	admin
CH-051	2023-09-15	10:00	admin
CH-052	2023-09-15	10:00	admin
CH-053	2023-09-15	10:00	admin
CH-054	2023-09-15	10:00	admin
CH-055	2023-09-15	10:00	admin
CH-056	2023-09-15	10:00	admin
CH-057	2023-09-15	10:00	admin
CH-058	2023-09-15	10:00	admin
CH-059	2023-09-15	10:00	admin
CH-060	2023-09-15	10:00	admin
CH-061	2023-09-15	10:00	admin
CH-062	2023-09-15	10:00	admin
CH-063	2023-09-15	10:00	admin
CH-064	2023-09-15	10:00	admin
CH-065	2023-09-15	10:00	admin
CH-066	2023-09-15	10:00	admin
CH-067	2023-09-15	10:00	admin
CH-068	2023-09-15	10:00	admin
CH-069	2023-09-15	10:00	admin
CH-070	2023-09-15	10:00	admin
CH-071	2023-09-15	10:00	admin
CH-072	2023-09-15	10:00	admin
CH-073	2023-09-15	10:00	admin
CH-074	2023-09-15	10:00	admin
CH-075	2023-09-15	10:00	admin
CH-076	2023-09-15	10:00	admin
CH-077	2023-09-15	10:00	admin
CH-078	2023-09-15	10:00	admin
CH-079	2023-09-15	10:00	admin
CH-080	2023-09-15	10:00	admin
CH-081	2023-09-15	10:00	admin
CH-082	2023-09-15	10:00	admin
CH-083	2023-09-15	10:00	admin
CH-084	2023-09-15	10:00	admin
CH-085	2023-09-15	10:00	admin
CH-086	2023-09-15	10:00	admin
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CH-089	2023-09-15	10:00	admin
CH-090	2023-09-15	10:00	admin
CH-091	2023-09-15	10:00	admin
CH-092	2023-09-15	10:00	admin
CH-093	2023-09-15	10:00	admin
CH-094	2023-09-15	10:00	admin
CH-095	2023-09-15	10:00	admin
CH-096	2023-09-15	10:00	admin
CH-097	2023-09-15	10:00	admin
CH-098	2023-09-15	10:00	admin
CH-099	2023-09-15	10:00	admin
CH-100	2023-09-15	10:00	admin



The scripts [bico](#) and [fluxrun](#) are running automatically on the **GROUP-RDS**.

- [bico](#) converts sonicread binary files to ASCII
- [fluxrun](#) calculates fluxes
- execution times are defined in the Windows Task Scheduler
- **all times are CEST (UTC+2)**

Name	Status	Triggers	Next Run Time
[bico] CH-AWS Convert EC raw data binaries		At 06:00 every day	28.05.2024 06:00:00
[bico] CH-CHA Convert EC raw data binaries		At 06:10 every day	28.05.2024 06:10:00
[bico] CH-DAS Convert EC raw data binaries		At 06:20 every day	28.05.2024 06:20:00
[bico] CH-DAV Convert EC raw data binaries		At 06:30 every day	28.05.2024 06:30:00
[bico] CH-FOR Convert EC raw data binaries		At 06:40 every day	28.05.2024 06:40:00
[bico] CH-FRU Convert EC raw data binaries		At 06:50 every day	28.05.2024 06:50:00
[bico] CH-HON Convert EC raw data binaries		At 07:00 every day	28.05.2024 07:00:00
[bico] CH-LAE Convert EC raw data binaries		At 07:10 every day	28.05.2024 07:10:00
[bico] CH-LAS Convert EC raw data binaries	Ready	At 07:20 every day	28.05.2024 07:20:00
[bico] CH-OE2 Convert EC raw data binaries	Ready	At 07:30 every day	28.05.2024 07:30:00
[bico] CH-TAN Convert EC raw data binaries	Ready	At 07:40 every day	28.05.2024 07:40:00
[fluxrun] CH-AWS Calculate fluxes	Ready	At 08:00 every day	28.05.2024 08:00:00
[fluxrun] CH-CHA Calculate fluxes	Ready	At 08:10 every day	28.05.2024 08:10:00
[fluxrun] CH-DAS Calculate fluxes	Ready	At 08:20 every day	28.05.2024 08:20:00
[fluxrun] CH-DAV Calculate fluxes	Ready	At 08:30 every day	28.05.2024 08:30:00
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[fluxrun] CH-FRU Calculate fluxes	Ready	At 08:50 every day	28.05.2024 08:50:00
[fluxrun] CH-HON Calculate fluxes	Ready	At 09:00 every day	28.05.2024 09:00:00
[fluxrun] CH-LAE Calculate fluxes	Ready	At 09:10 every day	28.05.2024 09:10:00
[fluxrun] CH-LAS Calculate fluxes	Ready	At 09:20 every day	28.05.2024 09:20:00
[fluxrun] CH-OE2 Calculate fluxes	Ready	At 09:30 every day	28.05.2024 09:30:00
[fluxrun] CH-TAN Calculate fluxes	Ready	At 09:40 every day	28.05.2024 09:40:00
[ppicos] CH-DAV Convert to ICOS formats	Ready	At 03:35 every day	28.05.2024 03:35:00

The script [dataflow](#) is running automatically on **GL-CALCS**.

- [dataflow](#) uploads data to the database
- [Meteo](#) data upload starts between 7:00 (AWS) and 7:46 (TAN)
- [Flux](#) data upload starts between 11:00 (first site, AWS) and 11:20 (last site, TAN)
- execution times are defined in the *crontab* file
- after upload, data are immediately available in Grafana
- **all times are CET (UTC+1): this means that during summer data uploads start one hour later**

Example AWS during **summer**/**winter** local time:

- [bico](#) starts **6:00** / **6:00**
- [dataflow](#) 10_meteo upload starts **8:00** / **7:00**
- [dataflow](#) 11_meteo_valley upload starts **8:02** / **7:02**
- [dataflow](#) 12_meteo_rainfall upload starts **8:04** / **7:04**
- [dataflow](#) 13_meteo_pressure upload starts **8:06** / **7:06**
- [dataflow](#) 15_meteo_snowheight upload starts **8:08** / **7:08**
- [fluxrun](#) starts **8:00** / **8:00**
- [dataflow](#) flux upload starts **12:00** / **11:00**

The scripts [bico](#) and [fluxrun](#) are running automatically on the **GROUP-RDS**.

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[bico] CH-DAS Convert EC raw data binaries		At 06:20 every day	28.05.2024 06:20:00
[bico] CH-DAV Convert EC raw data binaries		At 06:30 every day	28.05.2024 06:30:00
[bico] CH-FOR Convert EC raw data binaries		At 06:40 every day	28.05.2024 06:40:00
[bico] CH-FRU Convert EC raw data binaries		At 06:50 every day	28.05.2024 06:50:00
[bico] CH-HON Convert EC raw data binaries		At 07:00 every day	28.05.2024 07:00:00
[bico] CH-LAE Convert EC raw data binaries		At 07:10 every day	28.05.2024 07:10:00
[bico] CH-LAS Convert EC raw data binaries	Ready	At 07:20 every day	28.05.2024 07:20:00
[bico] CH-OE2 Convert EC raw data binaries	Ready	At 07:30 every day	28.05.2024 07:30:00
[bico] CH-TAN Convert EC raw data binaries	Ready	At 07:40 every day	28.05.2024 07:40:00
[fluxrun] CH-AWS Calculate fluxes	Ready	At 08:00 every day	28.05.2024 08:00:00
[fluxrun] CH-CHA Calculate fluxes	Ready	At 08:10 every day	28.05.2024 08:10:00
[fluxrun] CH-DAS Calculate fluxes	Ready	At 08:20 every day	28.05.2024 08:20:00
[fluxrun] CH-DAV Calculate fluxes	Ready	At 08:30 every day	28.05.2024 08:30:00
[fluxrun] CH-FOR Calculate fluxes	Ready	At 08:40 every day	28.05.2024 08:40:00
[fluxrun] CH-FRU Calculate fluxes	Ready	At 08:50 every day	28.05.2024 08:50:00
[fluxrun] CH-HON Calculate fluxes	Ready	At 09:00 every day	28.05.2024 09:00:00
[fluxrun] CH-LAE Calculate fluxes	Ready	At 09:10 every day	28.05.2024 09:10:00
[fluxrun] CH-LAS Calculate fluxes	Ready	At 09:20 every day	28.05.2024 09:20:00
[fluxrun] CH-OE2 Calculate fluxes	Ready	At 09:30 every day	28.05.2024 09:30:00
[fluxrun] CH-TAN Calculate fluxes	Ready	At 09:40 every day	28.05.2024 09:40:00
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Example AWS during **summer**/**winter** local time:

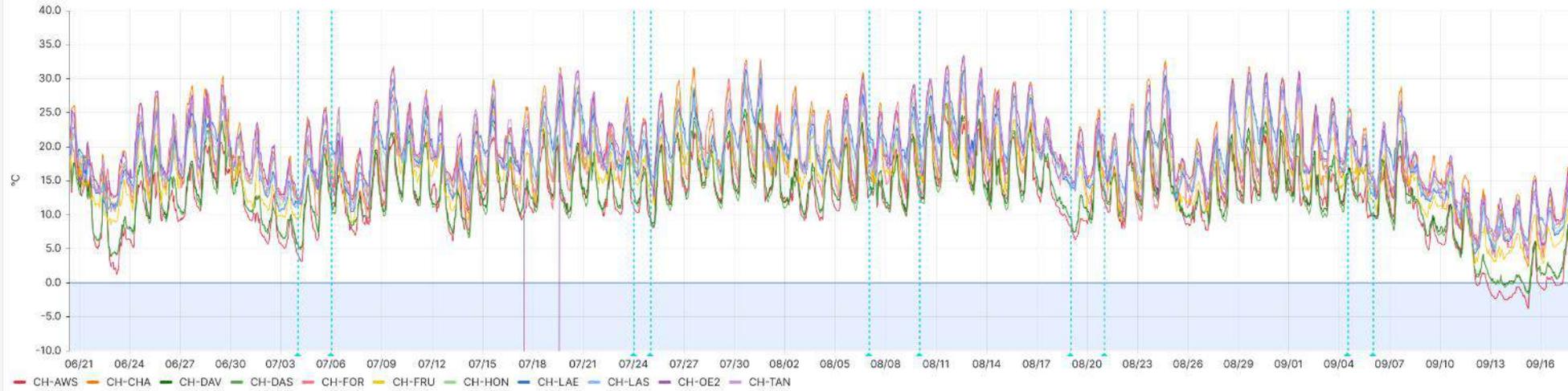
- [bico](#) starts **6:00** / **6:00**
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- [dataflow](#) 12_meteo_rainfall upload starts **8:04** / **7:04**
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General Info

- **Attendance:** If you are (Tech-)SRP, please attend QA/QC meetings or tell LH if you can't, needed for planning of the meetings.
- **Short statement:** SRP & Tech-SRP: please prepare short statement about your site and post it on the slide together with the plot(s). You can also extend the already available text snippet(s) from previous meetings. (max. 2 sentences)
- **Purpose:** The purpose of QA/QC meetings is to check on current, incoming data. SRPs choose specific issues we should look at together and discuss in the group. Fluxes are checked if the respective SRP wishes to do so.
- **Variables:** There is a list of known variable abbreviations that you can use in case you wonder what an abbreviation means: [Variable Abbreviations](#)
- **Check of EC raw data files:**
 - Recommended check for SRPs and T-SRPS: take a look at EC raw data files and check if they look OK
 - Current EC raw data files are automatically converted to ASCII each day (done by the Python script bico)
 - Files and their plots can be found here, e.g. for CH-LAS:
`gl-processing\CH-LAS_Lae-Subcanopy\20_ec_fluxes\2022\raw_data_ascii`
- **Weekly flux calculations on the RDS:**
 - Please calculate fluxes and check them once per week, or more often if you wish to do so.
 - If you cannot calculate the fluxes, try to find a substitute, e.g. LH.
 - Please move your Level-0 results from the RDS to the respective Level-0 folder.
- **RDS folder:** The folder P:\Flux\RDS_calculations is a temporary folder. Please move Level-0 flux calculations (preliminary fluxes) to the Level-0 folder on gl-processing. For example, for CH-CHA move files to Z:\CH-CHA_Chamau\20_ec_fluxes\2022\Level-0 (gl-processing is mounted as drive Z in this example).
- The RDS now has access to the database. This means that we now have a shared working environment where we can run Jupyter notebooks.
- **FluxCoffee:** separate meetings to discuss data related issues, e.g. flux processing and technical issues, started and will continue to take place. There are extensive notes available in the Data/FluxCoffee group on Microsoft Teams.
- **List of QA/QC Meeting dates:** [QA/QC Meetings 2024](#)

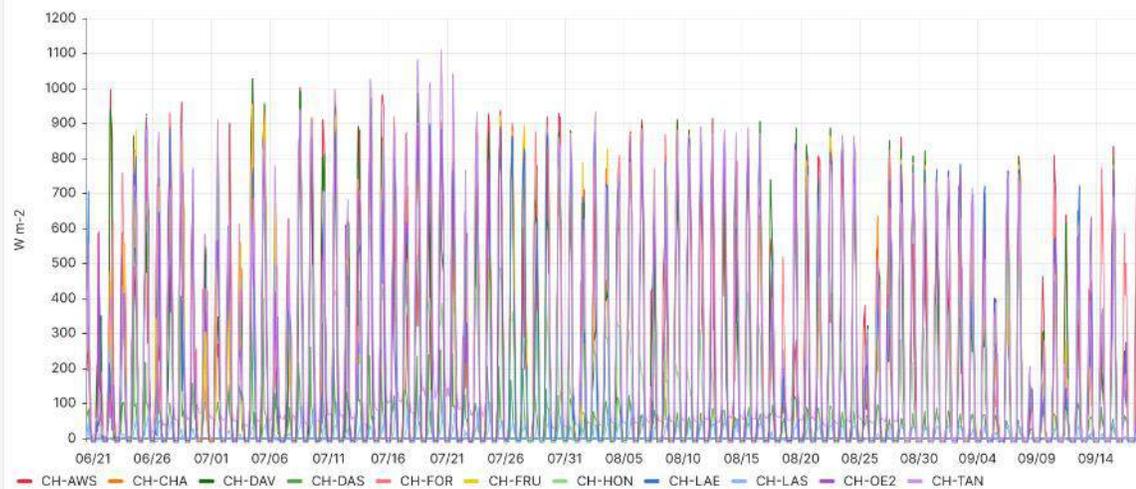


Air Temperature (°C) ♥



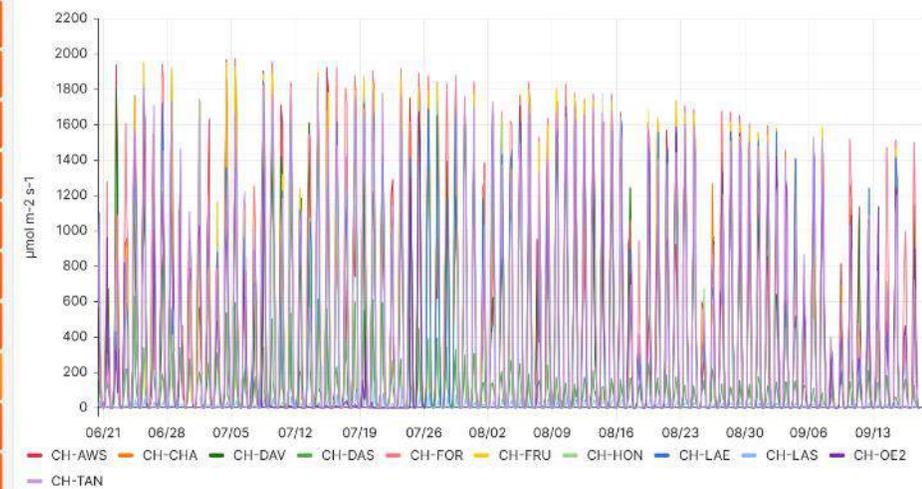
Min	Mean	Max
CH-AWS -4.0 °C	CH-AWS 12.8 °C	CH-AWS 25.9 °C
CH-CHA 1.8 °C	CH-CHA 19.2 °C	CH-CHA 33.3 °C
CH-DAV -1.8 °C	CH-DAV 13.8 °C	CH-DAV 27.4 °C
CH-DAS -1.8 °C	CH-DAS 13.1 °C	CH-DAS 26.2 °C
CH-FOR 2.7 °C	CH-FOR 17.9 °C	CH-FOR 33.4 °C
CH-FRU 0.0 °C	CH-FRU 16.4 °C	CH-FRU 30.4 °C
CH-HON 4.7 °C	CH-HON 18.8 °C	CH-HON 31.9 °C
CH-LAE 4.2 °C	CH-LAE 18.9 °C	CH-LAE 31.8 °C
CH-LAS 0.0 °C	CH-LAS 18.2 °C	CH-LAS 29.9 °C
CH-OE2 -100.0 °C	CH-OE2 16.0 °C	CH-OE2 34.1 °C
CH-TAN 0.0 °C	CH-TAN 19.0 °C	CH-TAN 33.9 °C

Shortwave Incoming Radiation (W m⁻²)



Max
CH-AWS 1416 W/m ²
CH-DAV 1486 W/m ²
CH-DAS 1000 W/m ²
CH-FOR 1398 W/m ²
CH-FRU 1191 W/m ²
CH-HON 1216 W/m ²
CH-LAE 1364 W/m ²
CH-LAS 735 W/m ²
CH-OE2 1315 W/m ²
CH-TAN 1439 W/m ²

Photosynthetically Active Radiation (μmol m⁻² s⁻¹)

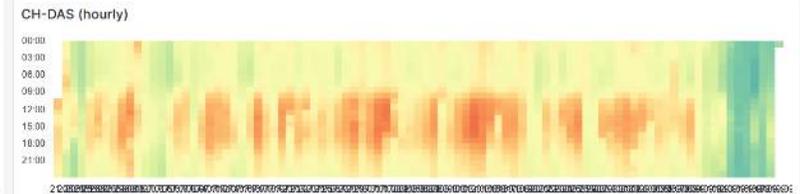
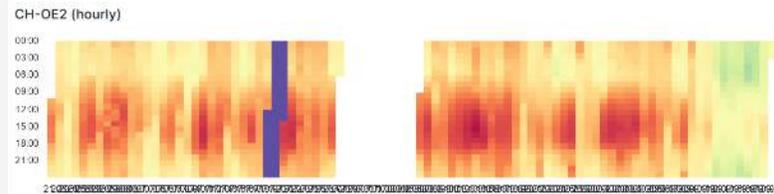
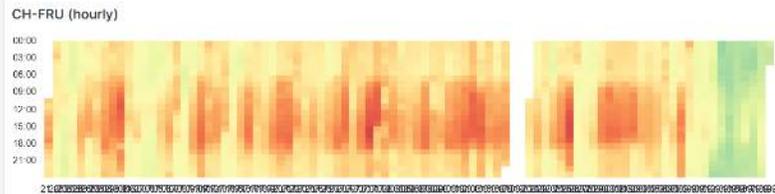
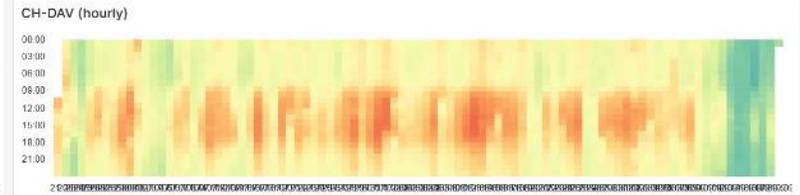
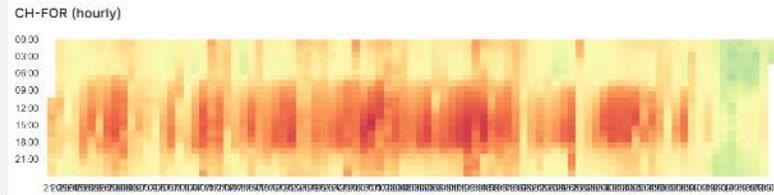
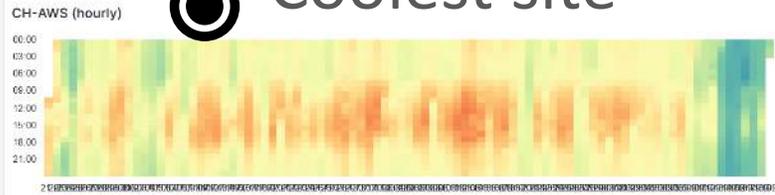


Max
CH-AWS 2189
CH-DAV 2441
CH-DAS 1317
CH-FOR 2268
CH-FRU 2358
CH-HON 2249
CH-LAE 2394
CH-LAS 975
CH-OE2 2021
CH-TAN 2217

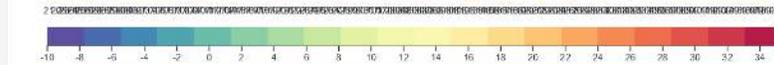
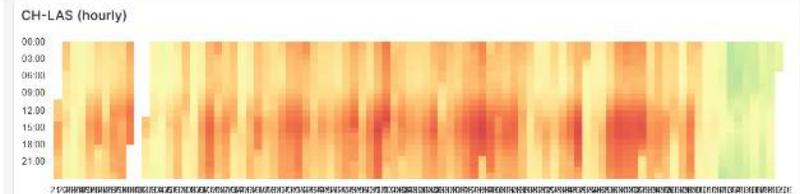
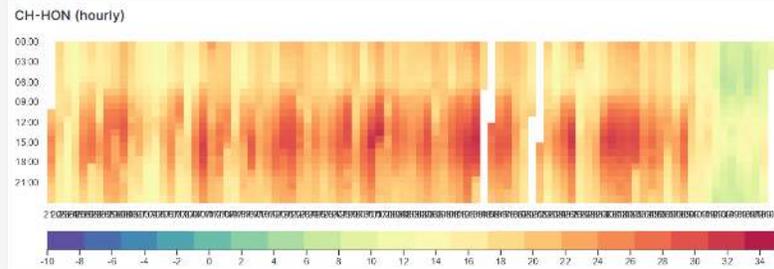
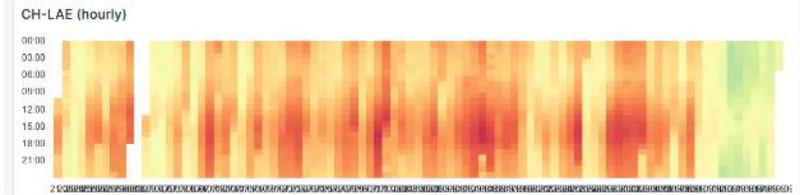
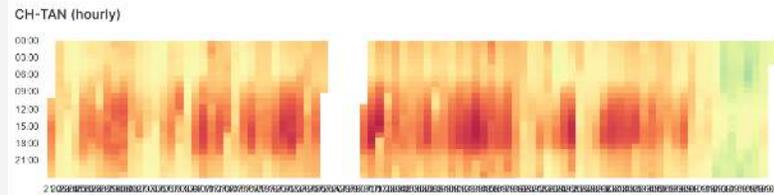
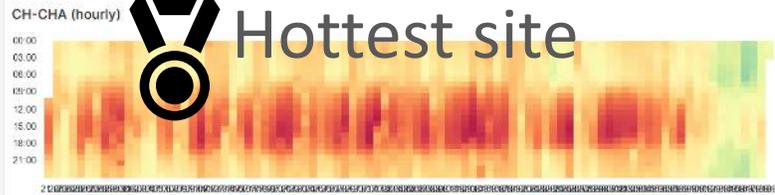
<https://dataviews.swissfluxnet.ethz.ch>



Coollest site



Hottest site

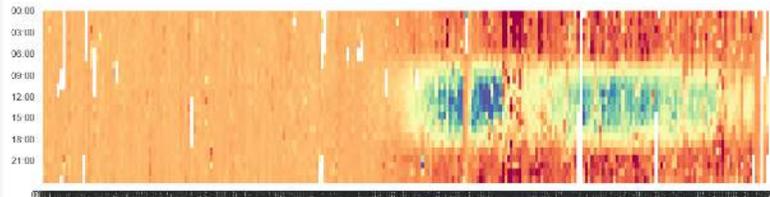


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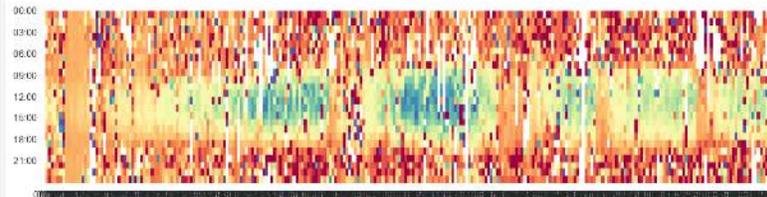
This year so far

FC, CO2 flux: This year so far ...

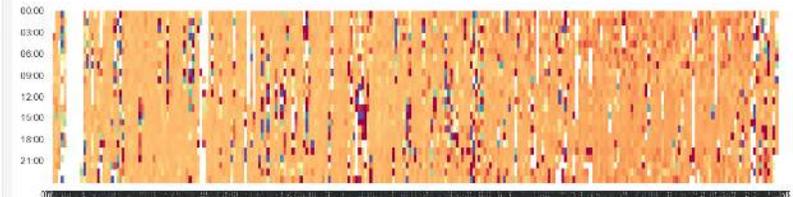
ch-aws_processed: FC (hourly)



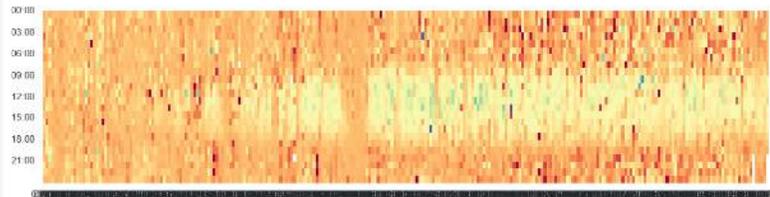
ch-cha_processed: FC (hourly)



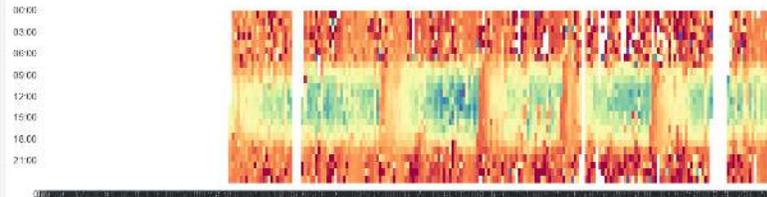
ch-das_processed: FC (hourly)



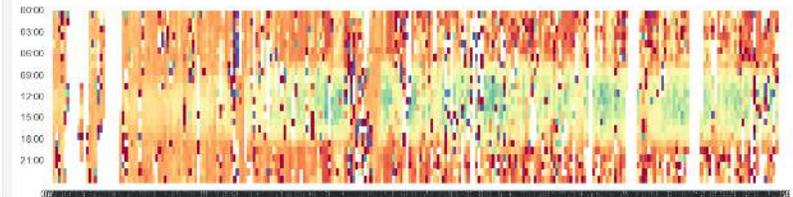
ch-dav_processed: FC (hourly)



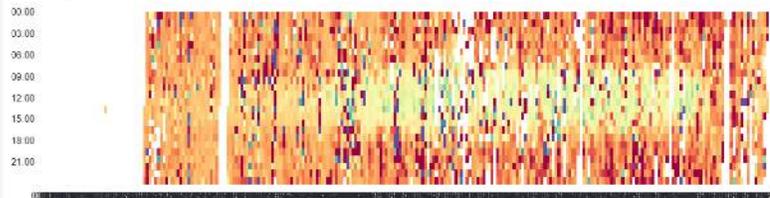
ch-for_processed: FC (hourly)



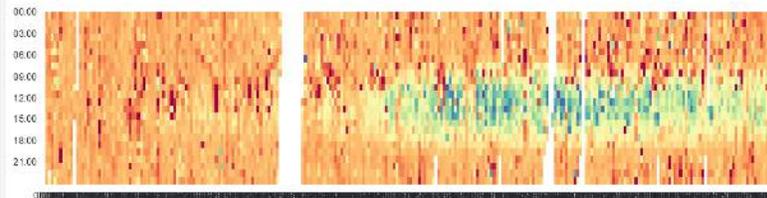
ch-fru_processed: FC (hourly)



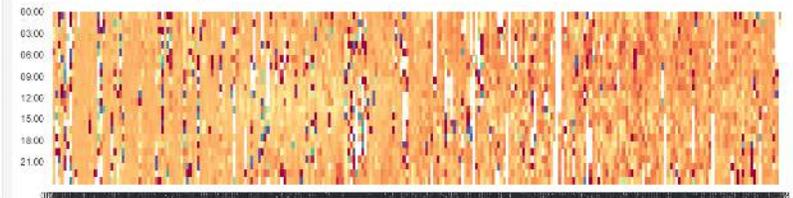
ch-hon_processed: FC (hourly)



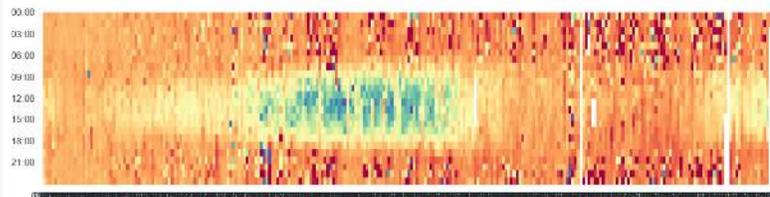
ch-lae_processed: FC (hourly)



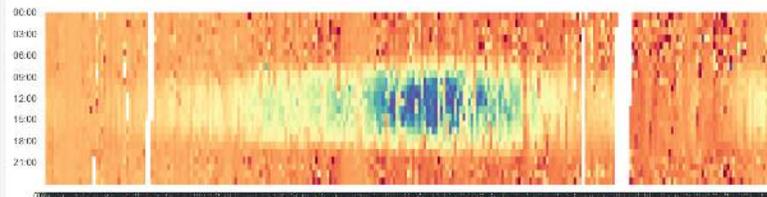
ch-las_processed: FC (hourly)

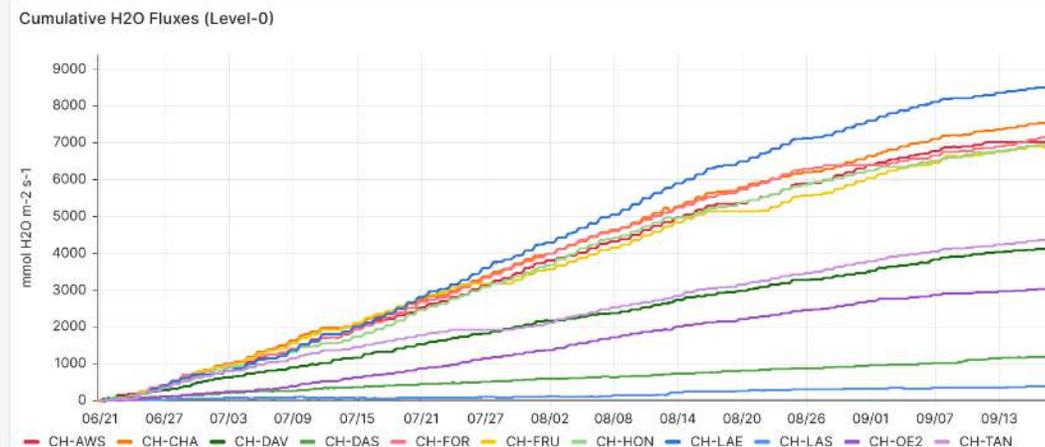
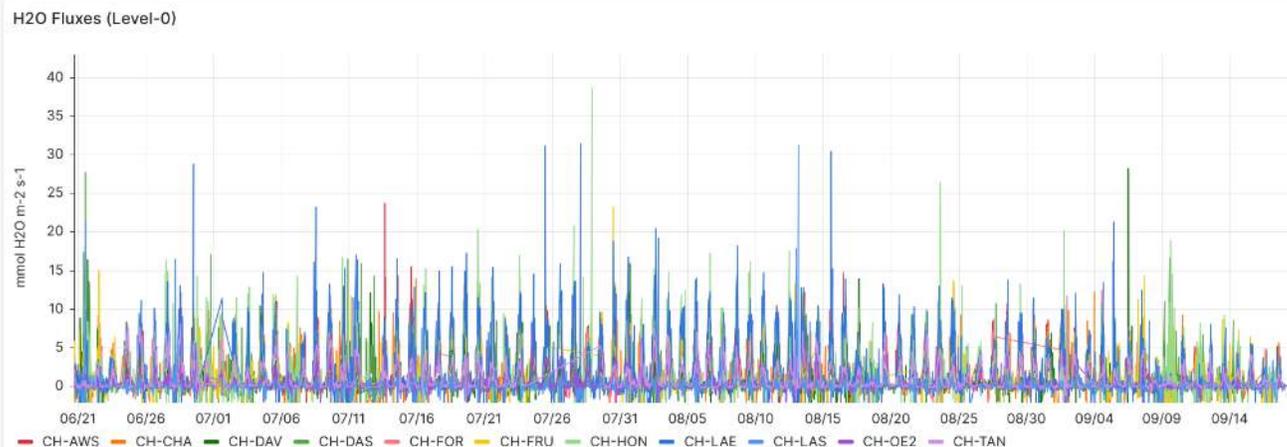
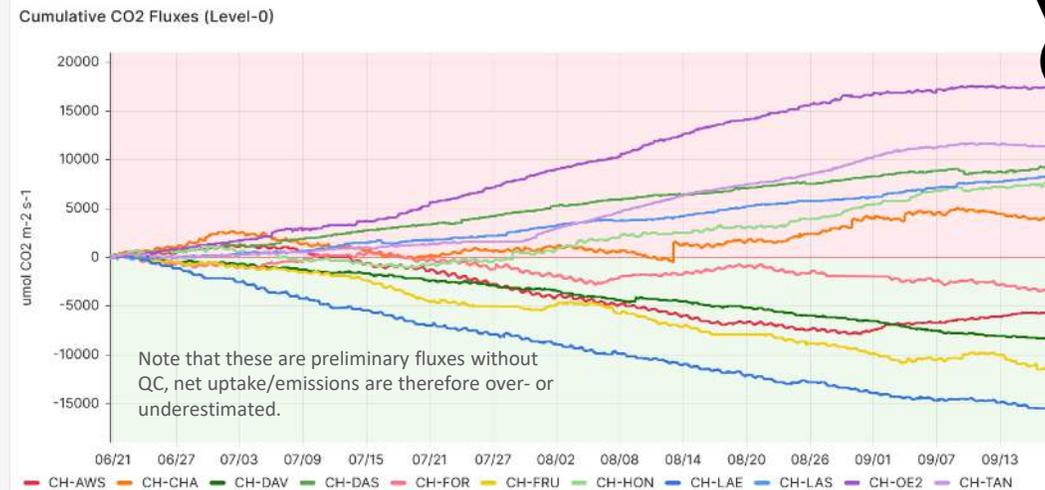
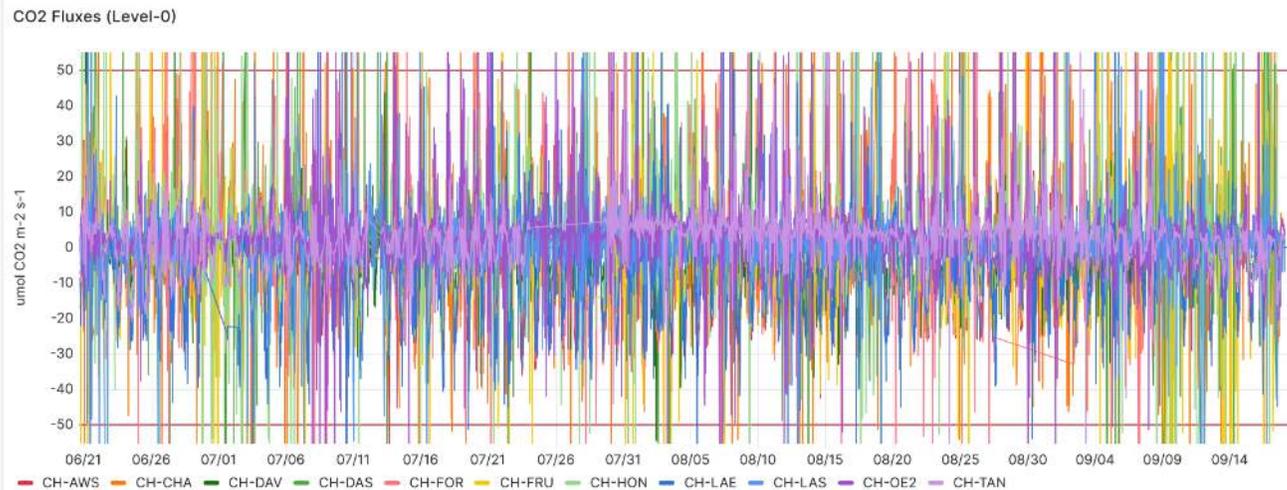


ch-oe2_processed: FC (hourly)



ch-tan_processed: FC (hourly)

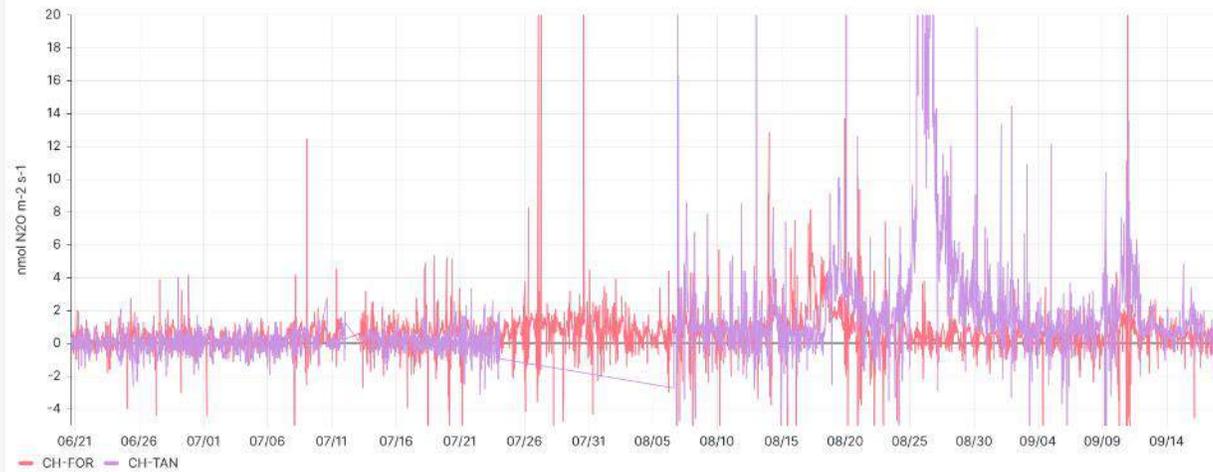
<https://dataviews.swissfluxnet.ethz.ch>



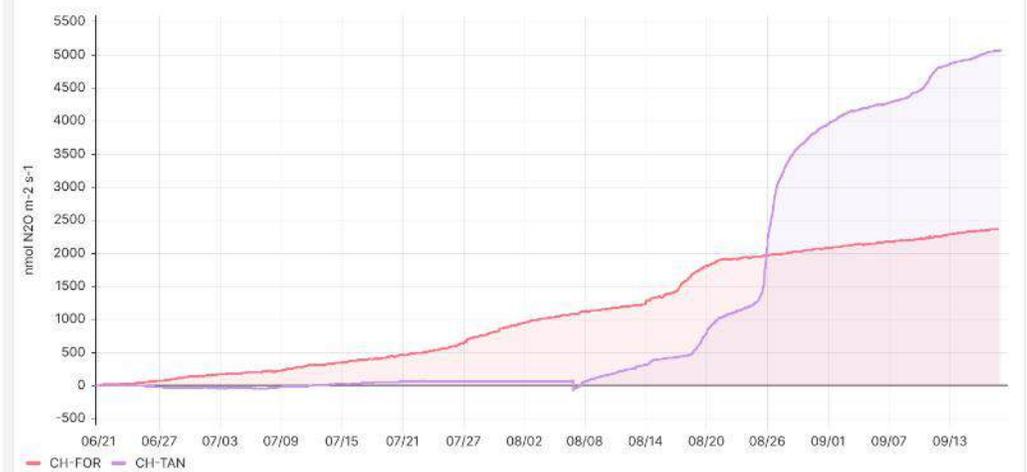
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Last 90 days

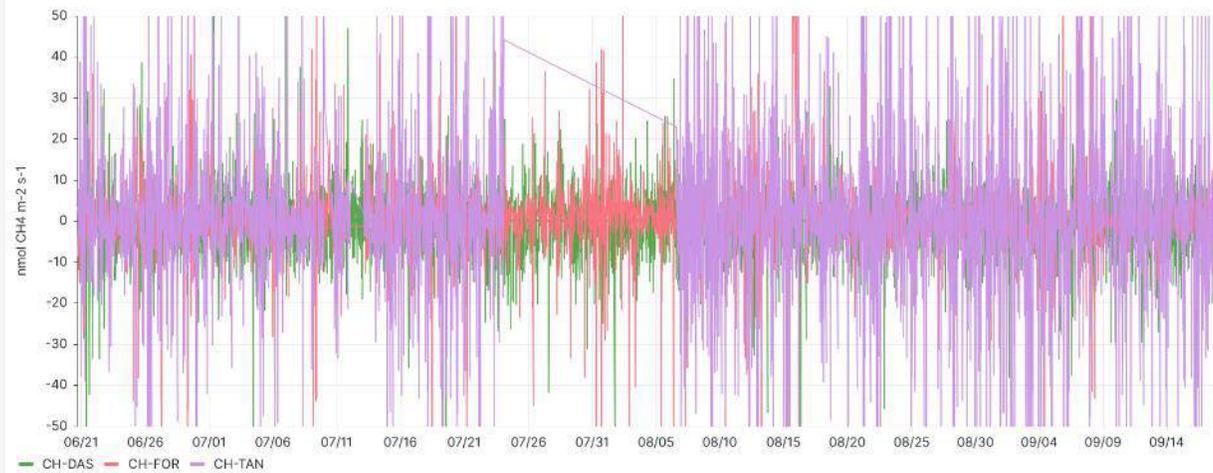
N₂O flux (Level-0)



Cumulative N₂O flux (Level-0)



CH₄ flux (Level-0)



Cumulative CH₄ flux (Level-0)



<https://dataviews.swissfluxnet.ethz.ch>





- Snow 30.5-2.6
- Grazing 13.-21.6
- Site visit 28.6
- 18.-20.8 low temperatures and lots of fog -> low fluxes
- AGC at 86.7%, IRGA should be cleaned soonish but not super urgent

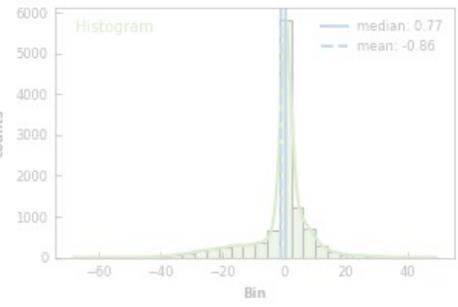
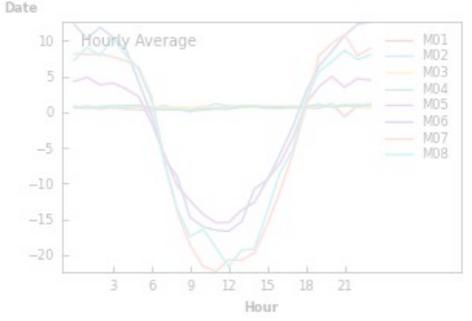
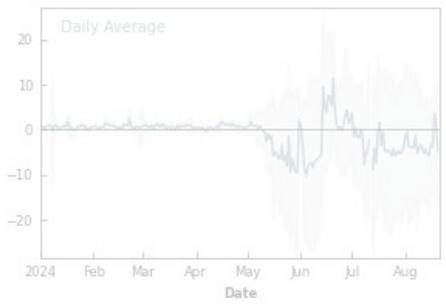
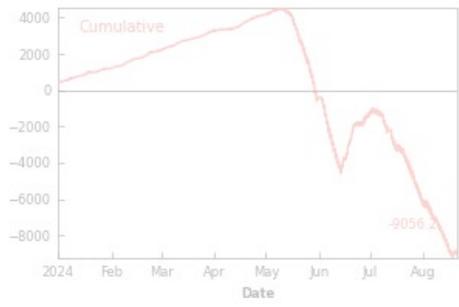
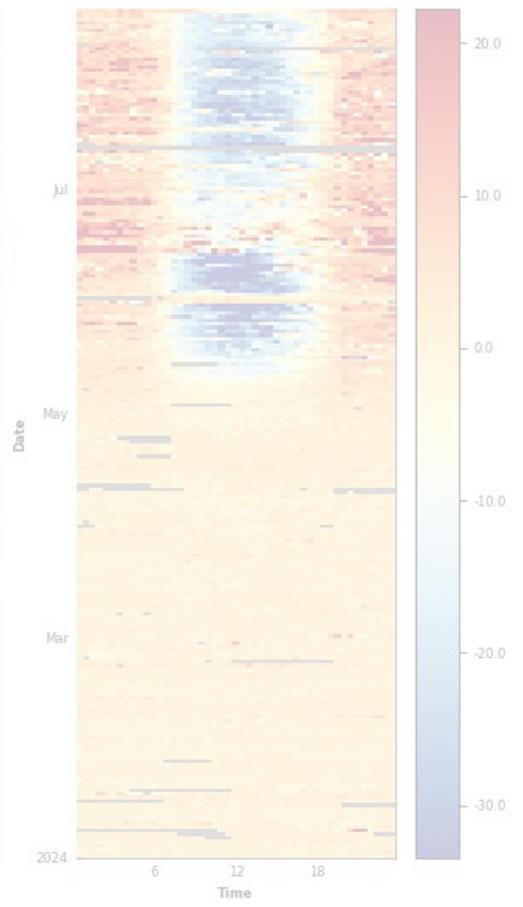
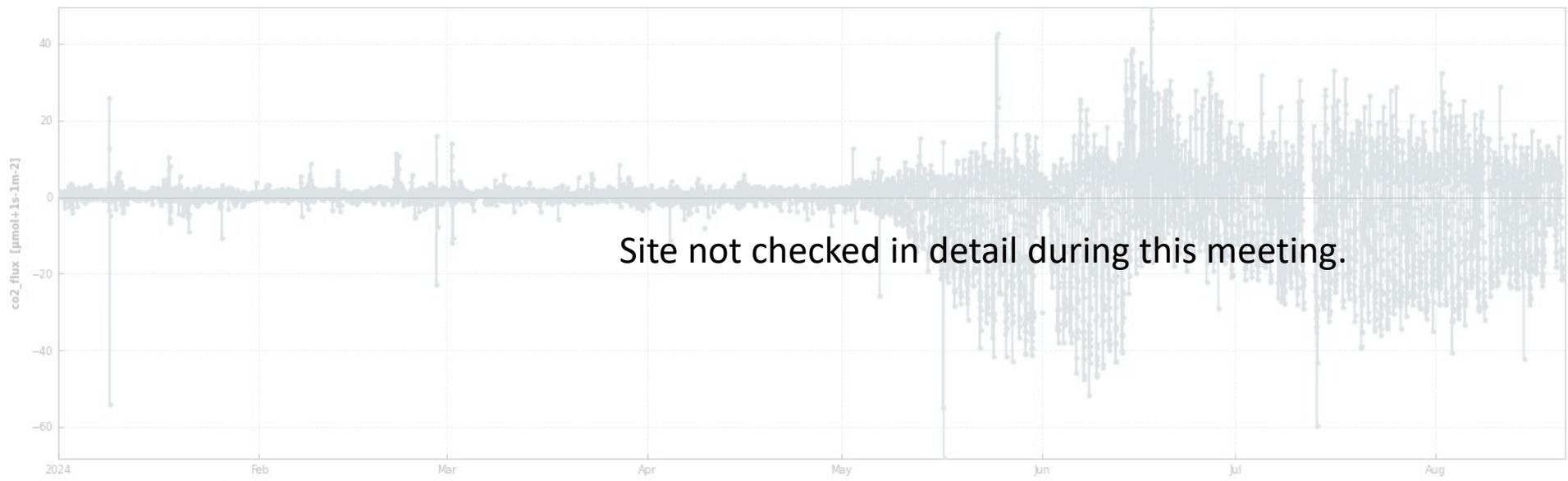


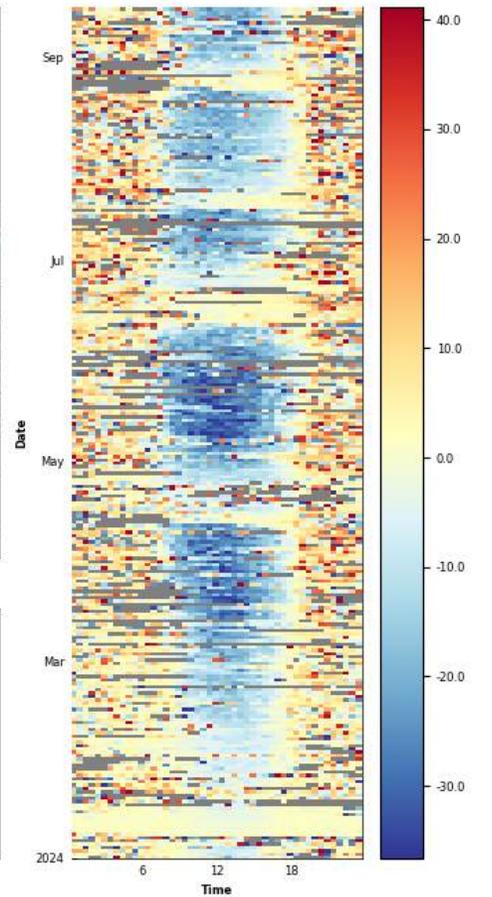
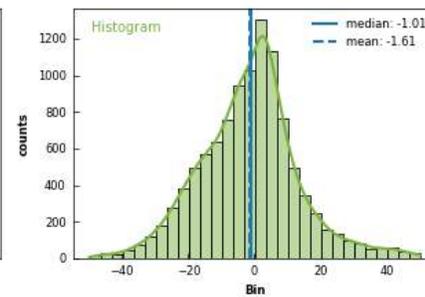
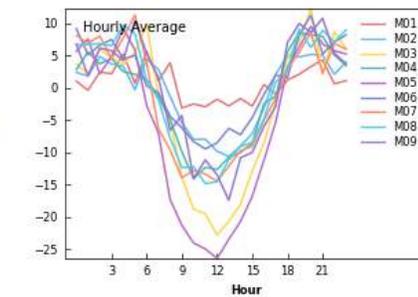
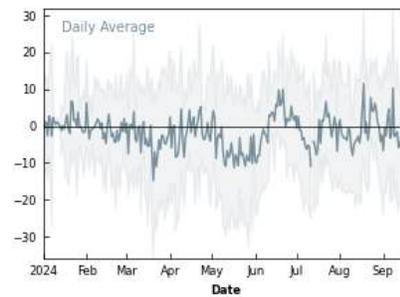
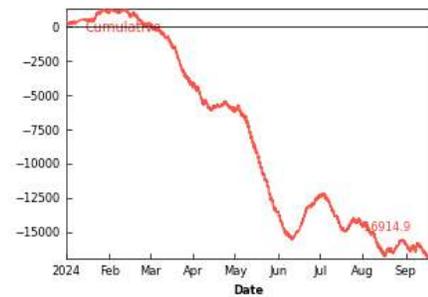
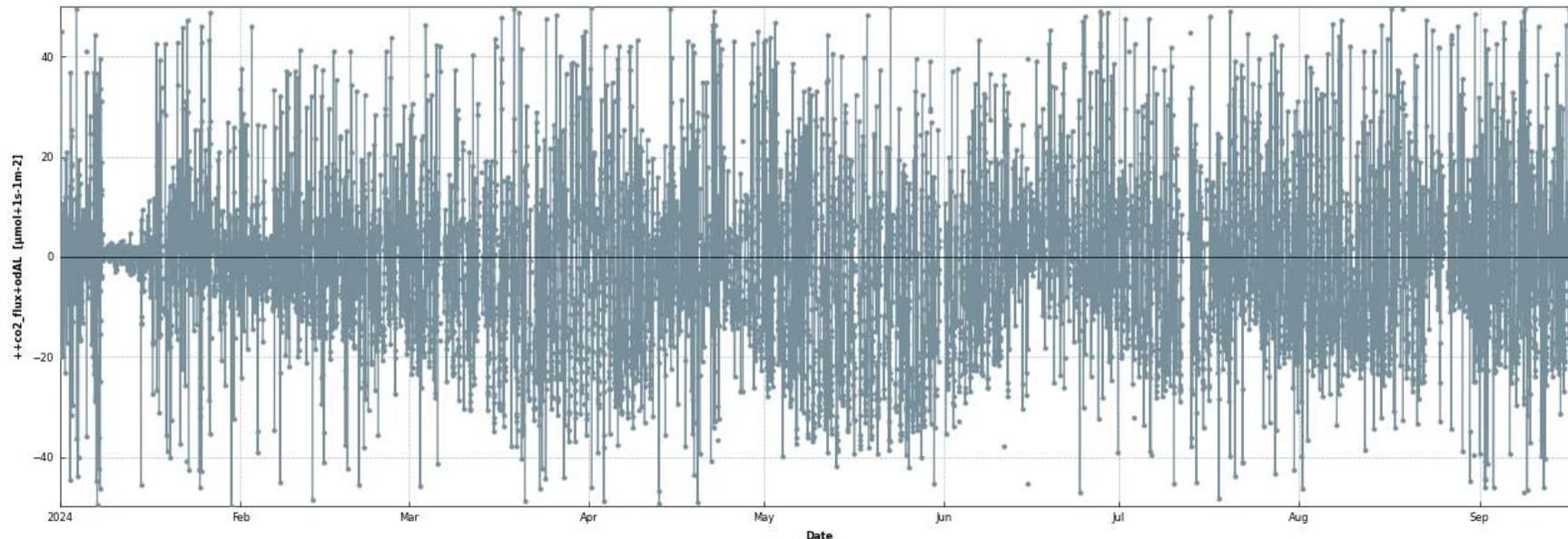


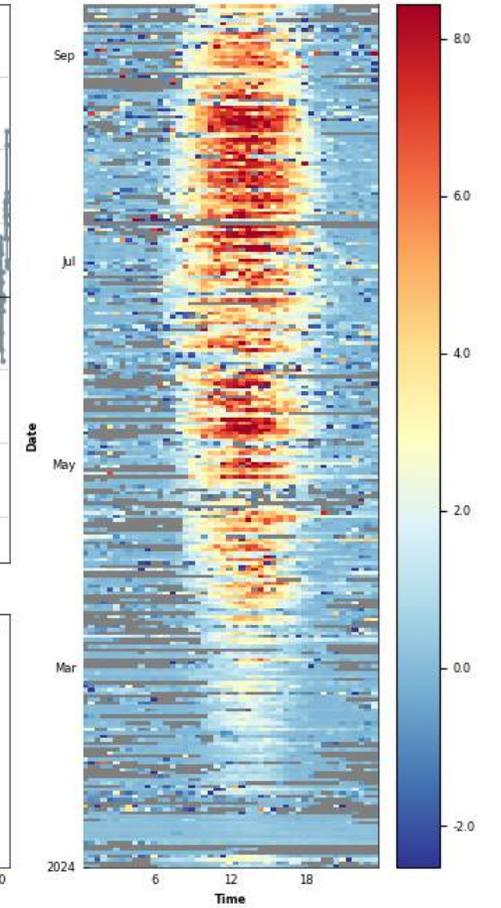
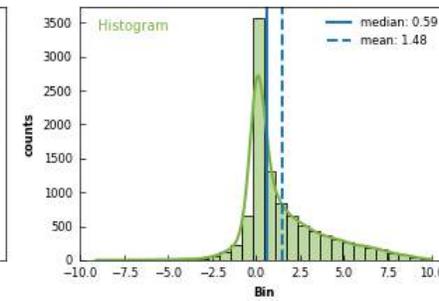
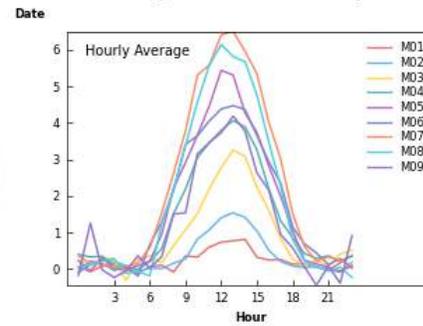
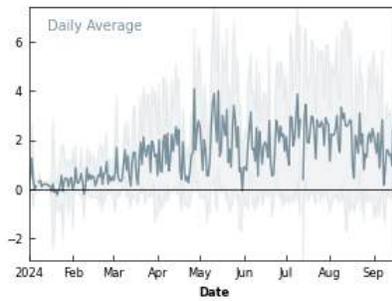
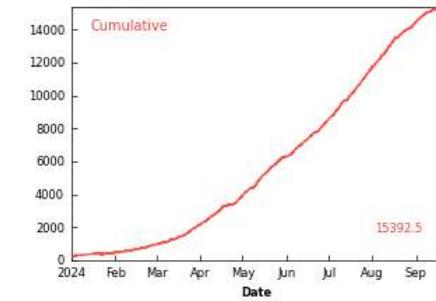
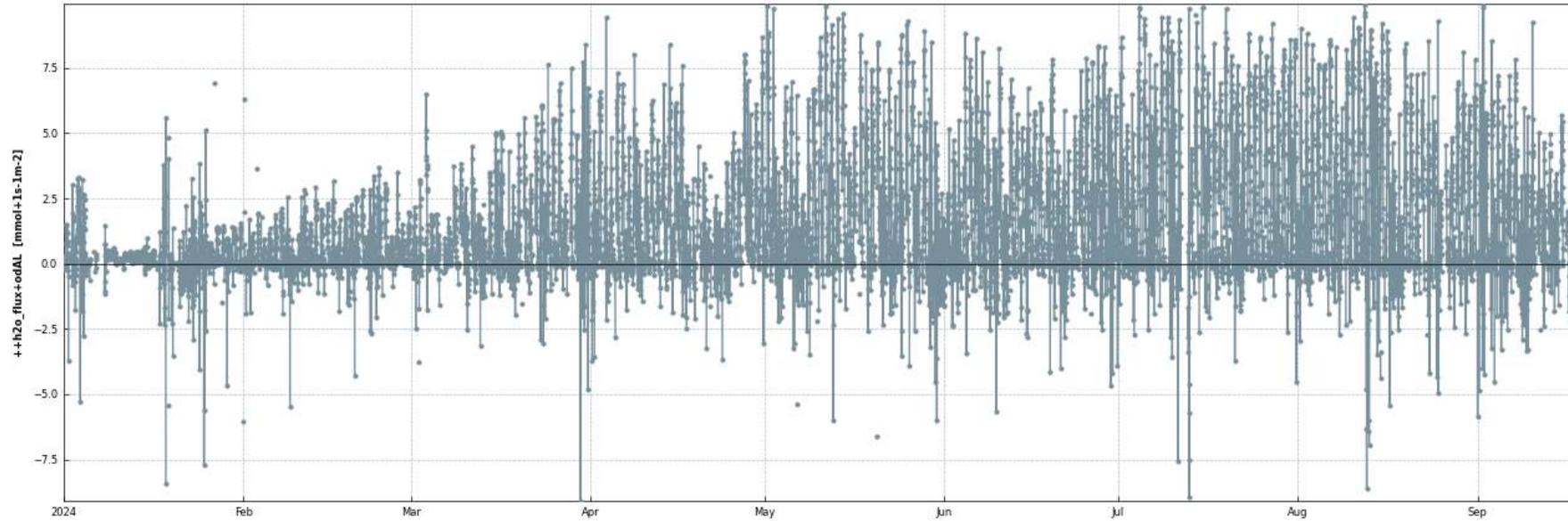
Photo: Lukas Hörtnagl

CH-CHA CO₂ flux



- Grazing: 2024.01.20 - 2024.01.23
- 1st mowing: 2024.04.11
- 2nd mowing: 2024.06.11 (wet areas – 2024.06.19)
- 3rd mowing: 2024.07.17
- 4th mowing: 2024.08.22





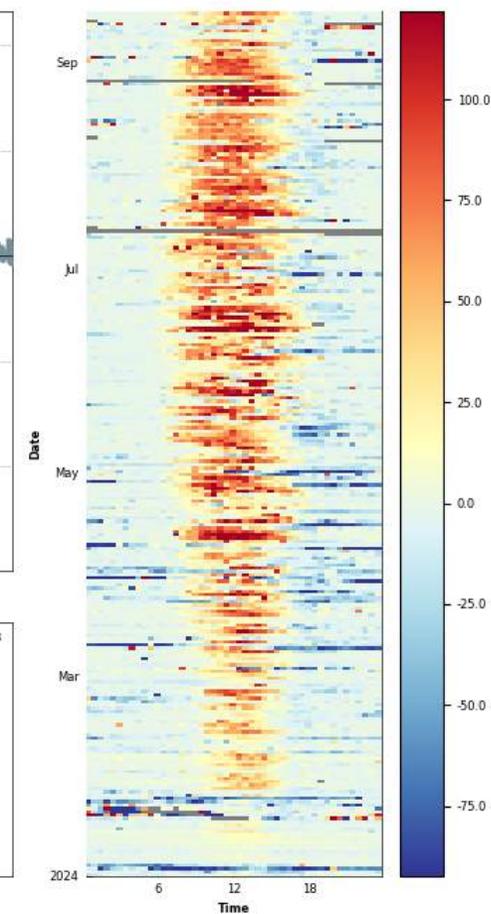
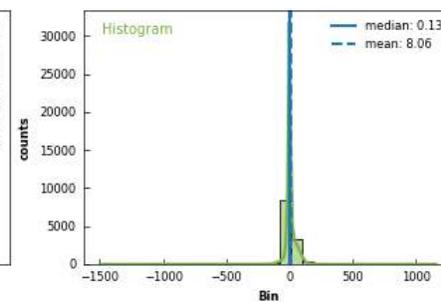
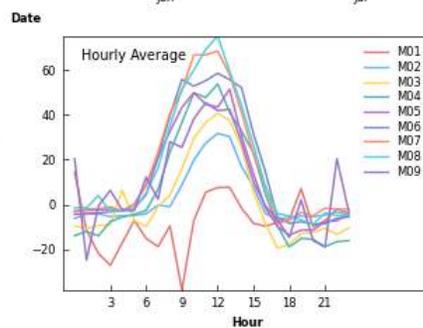
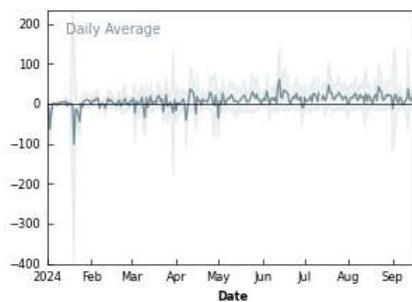
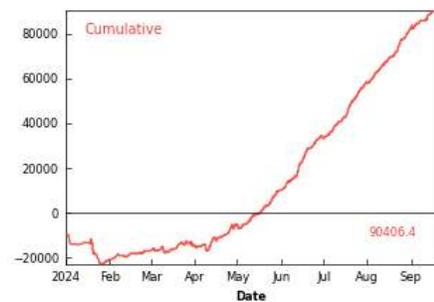
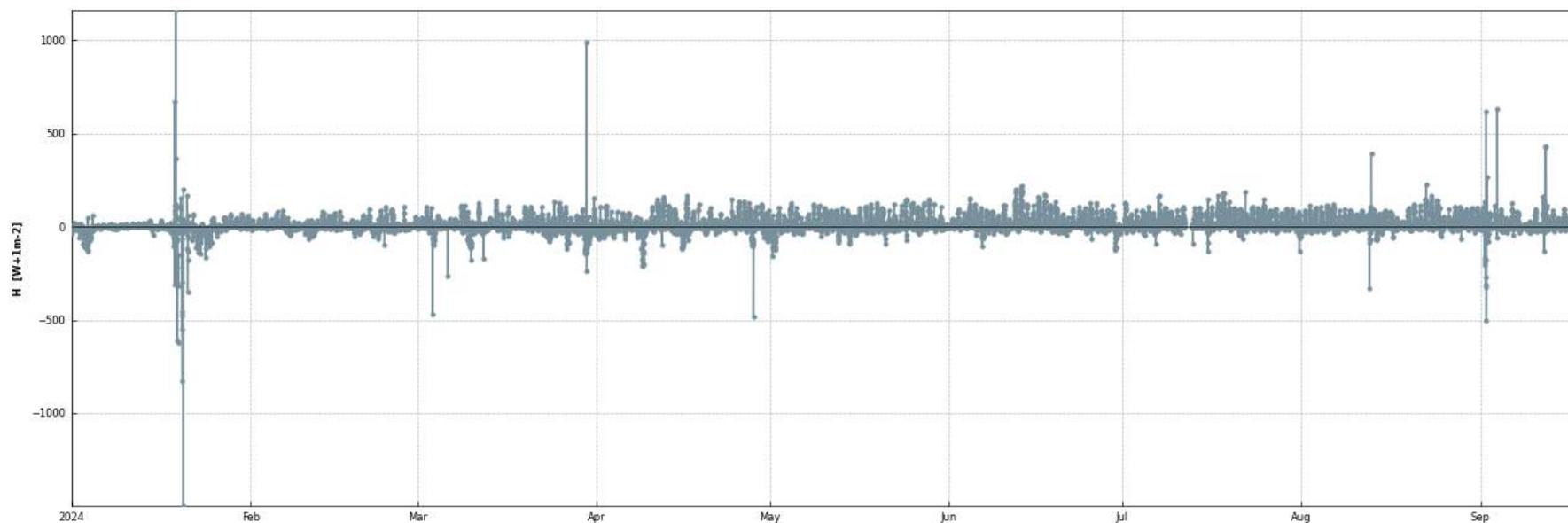
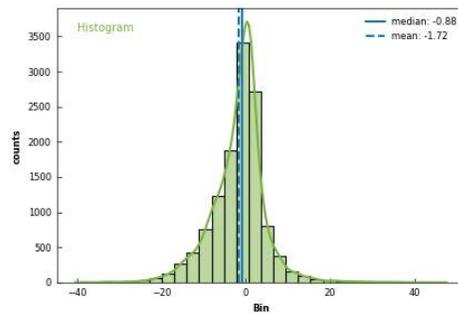
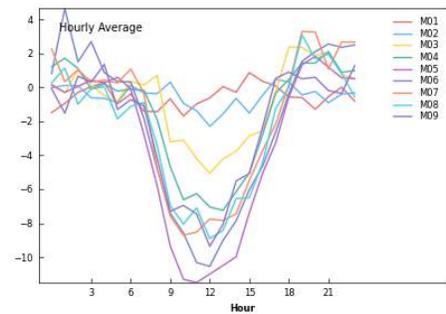
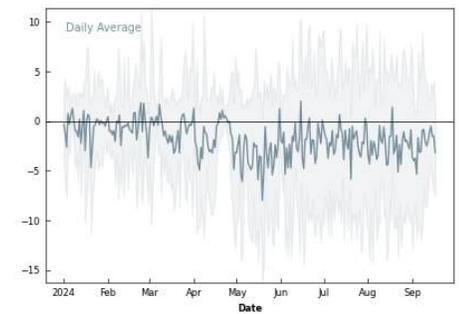
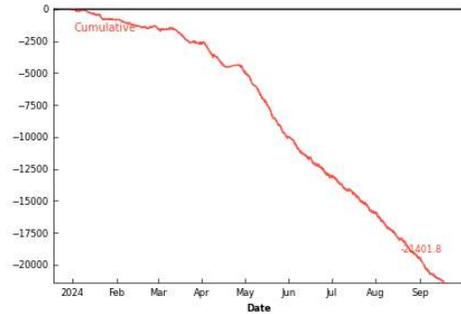
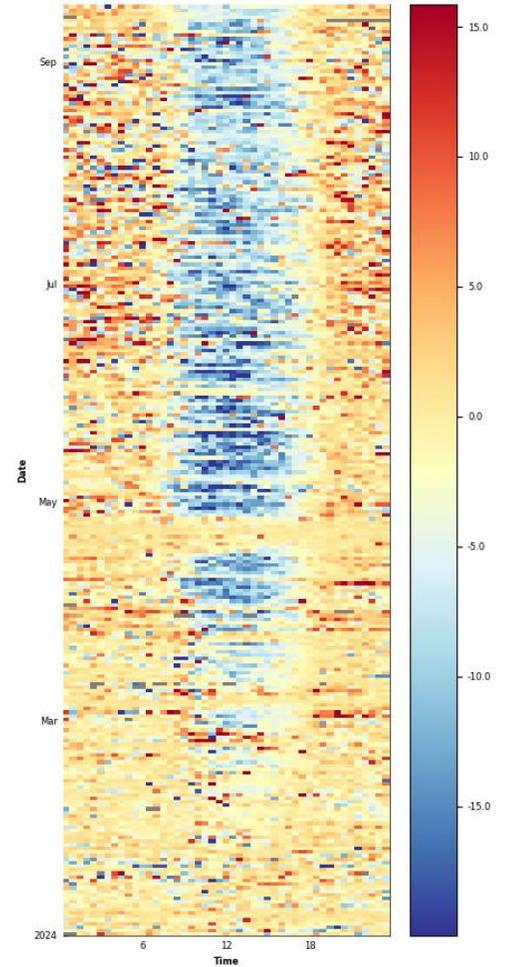
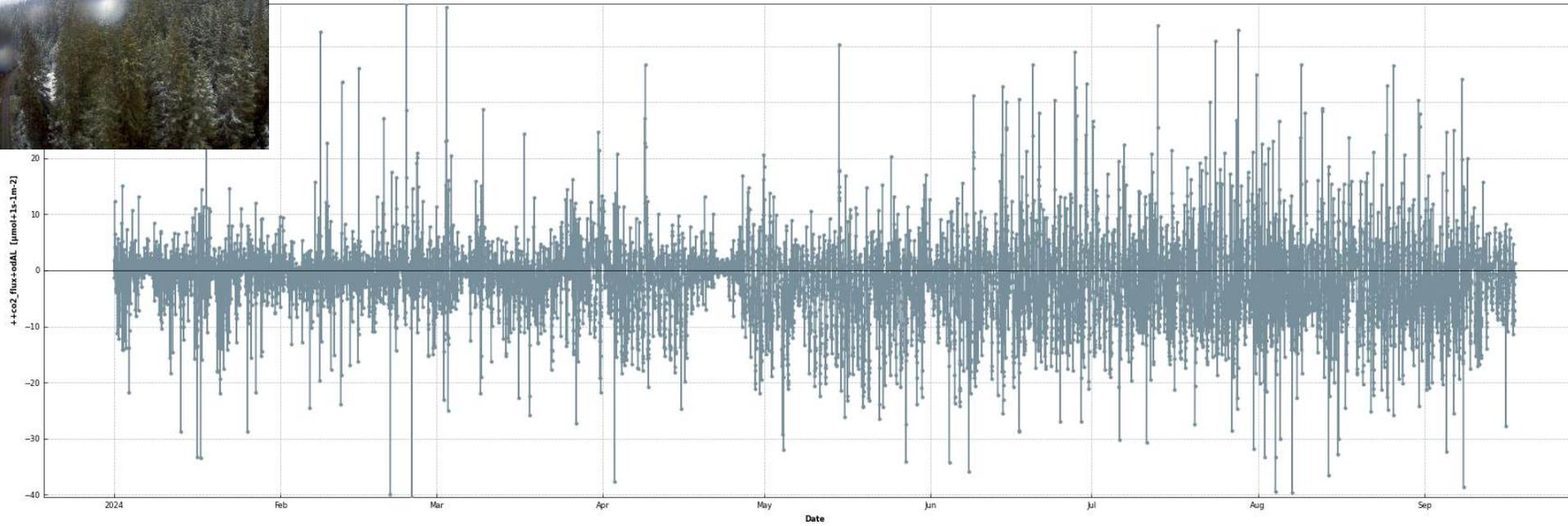


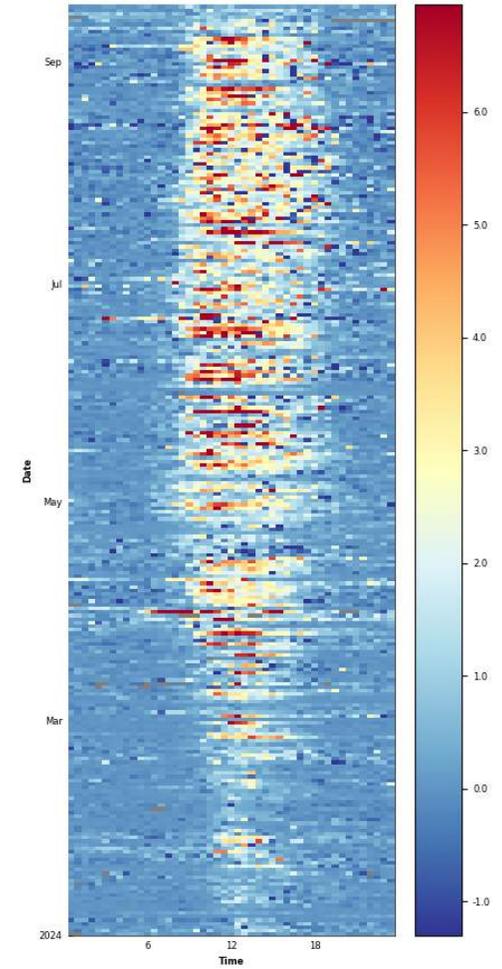
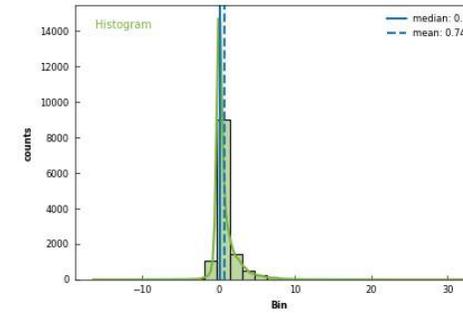
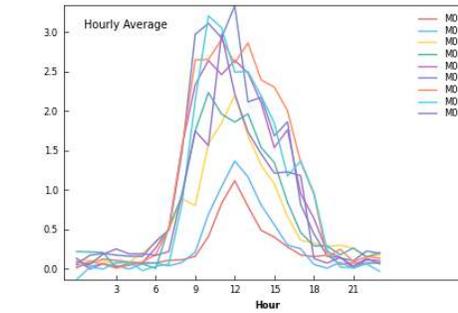
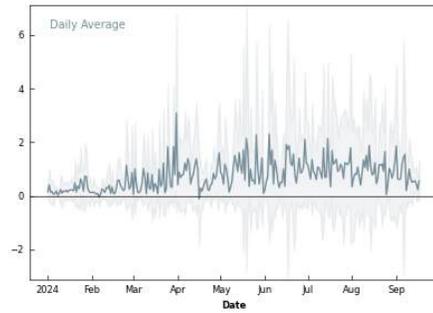
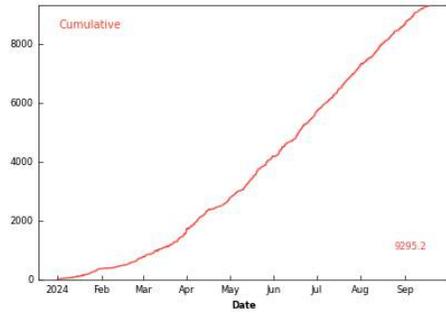
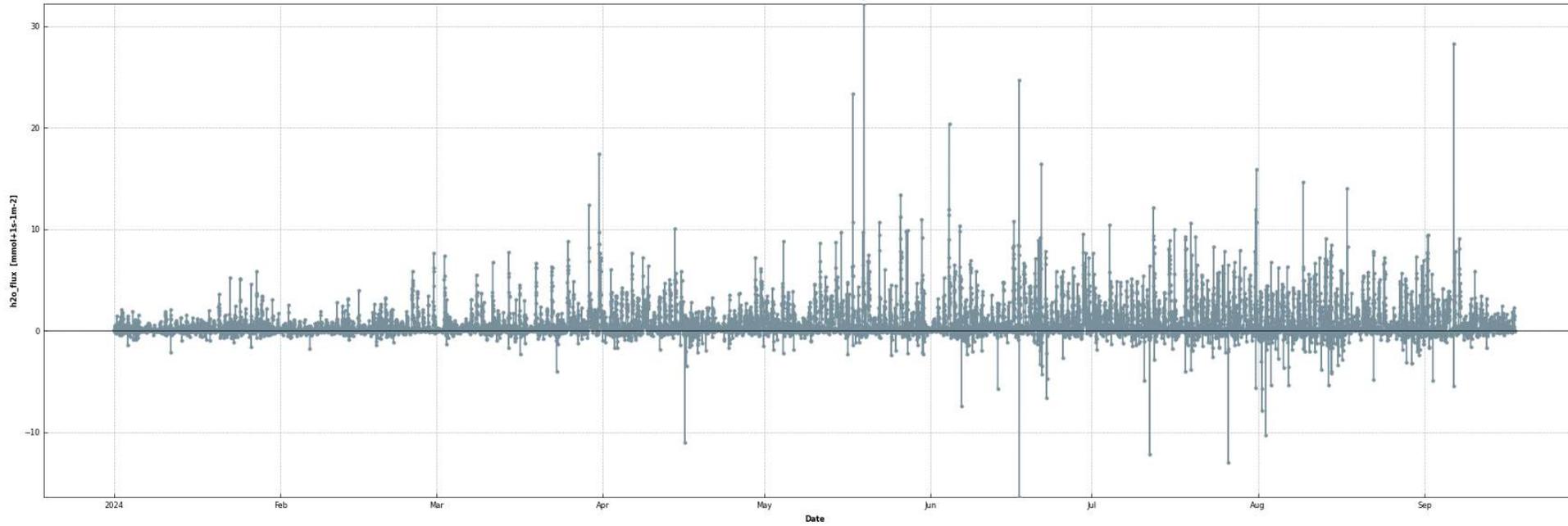


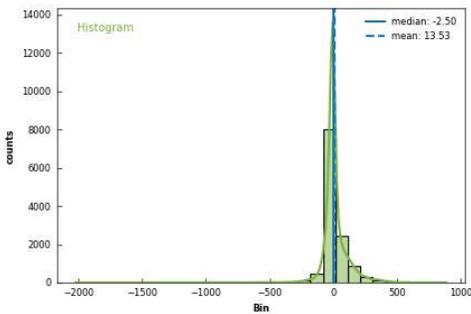
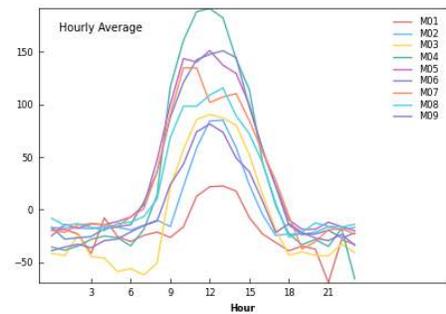
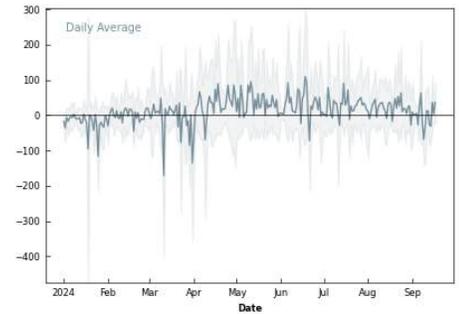
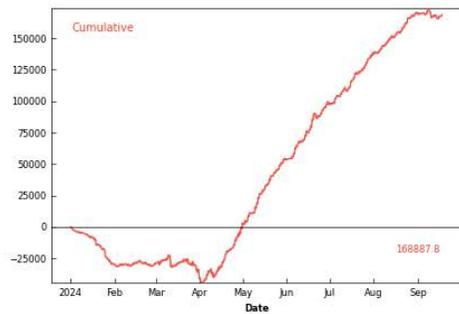
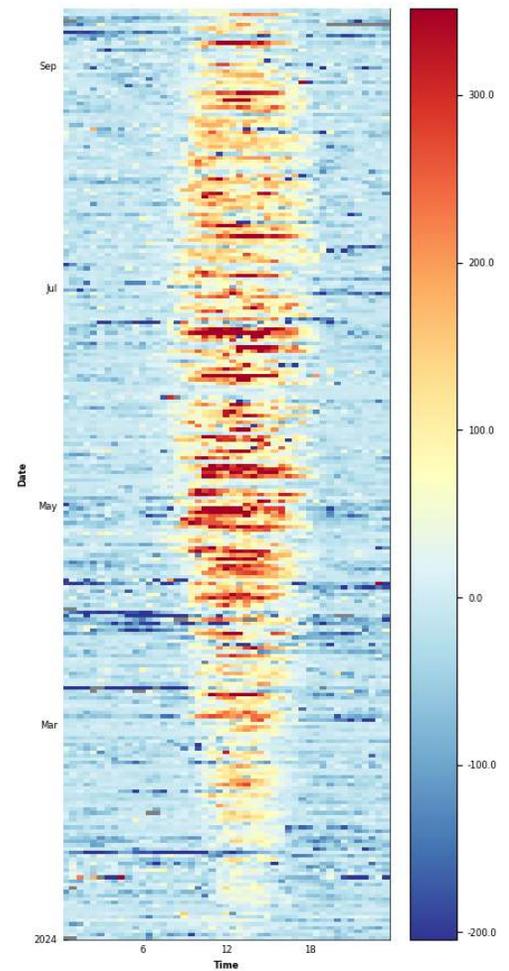
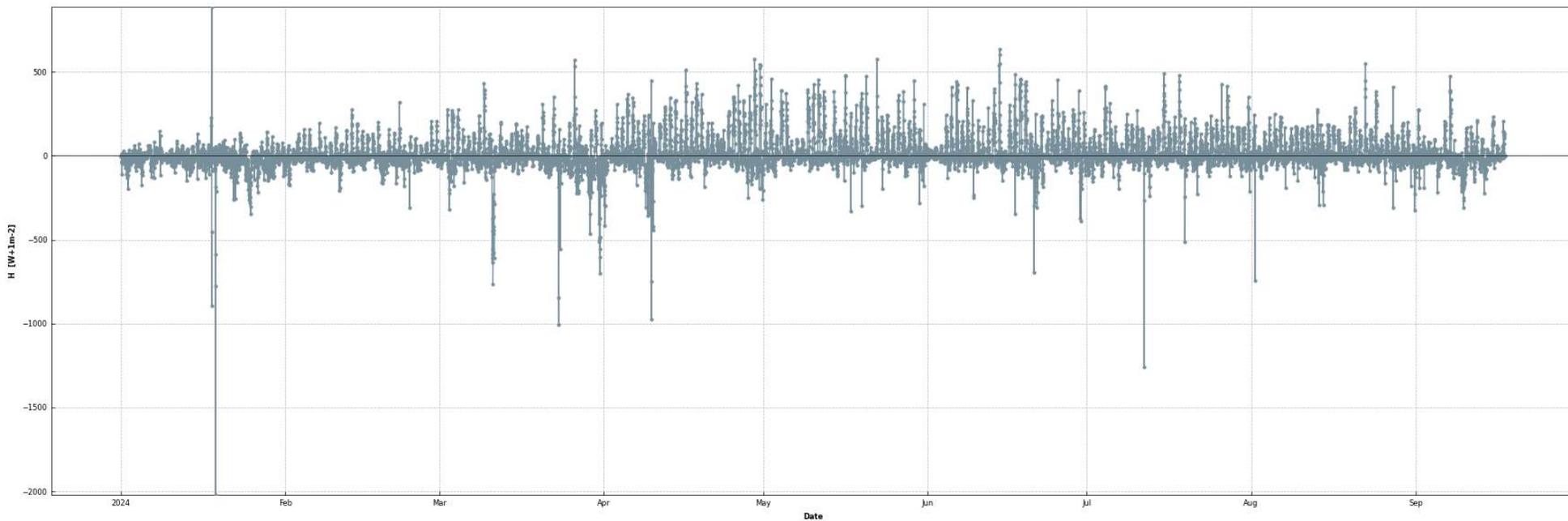
Photo: Lukas Hörtnagl

- Cold period mid-April caused an interruption in CO₂ uptake
- First snow on 13-14th September

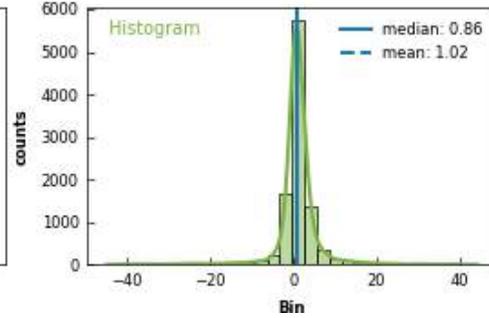
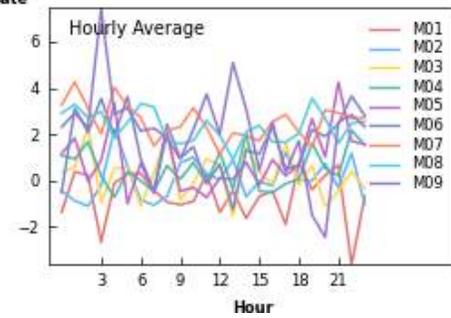
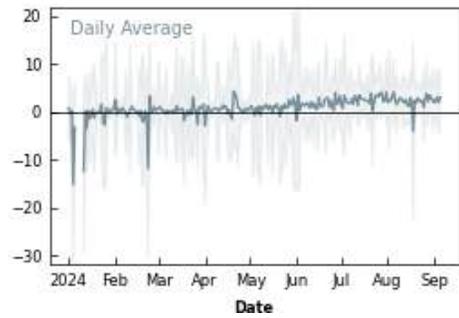
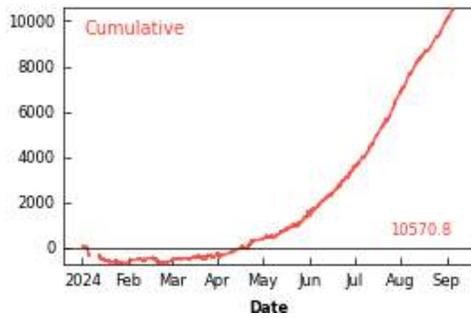
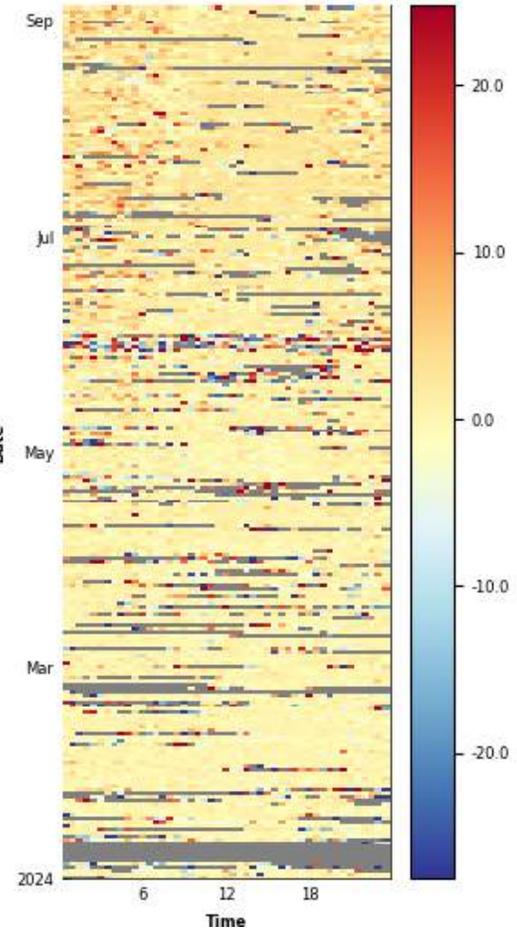
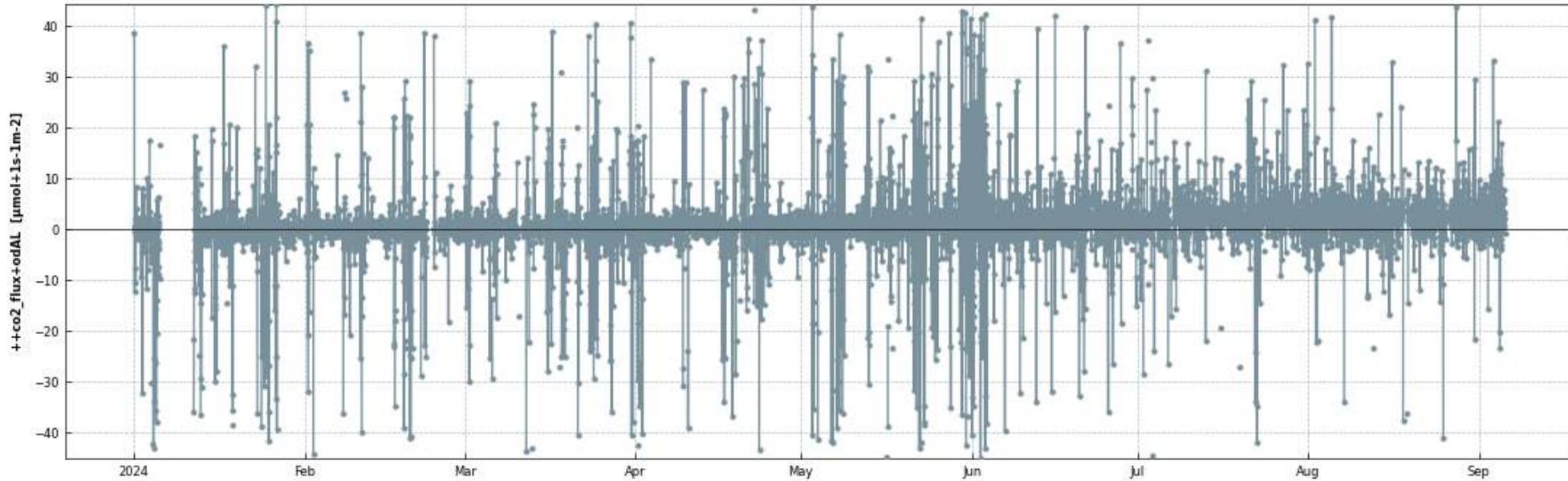


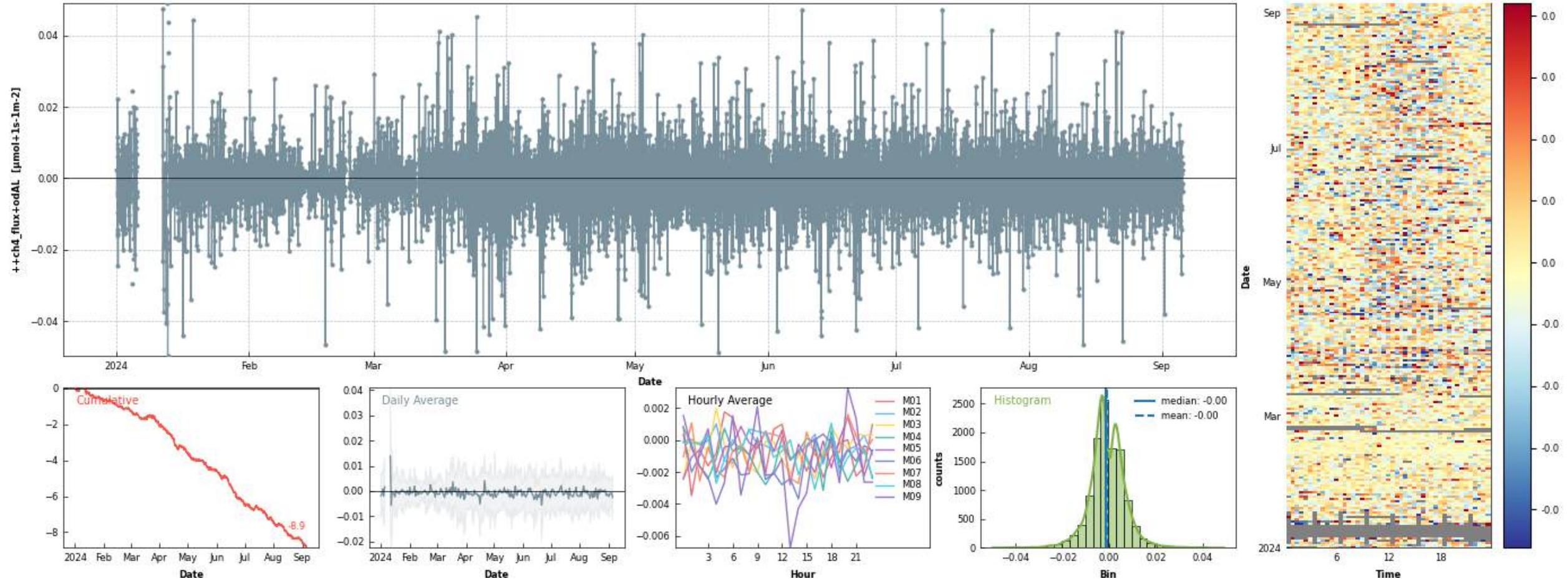
- Diurnal amplitude reduced mid September, coinciding with snowy, cold period

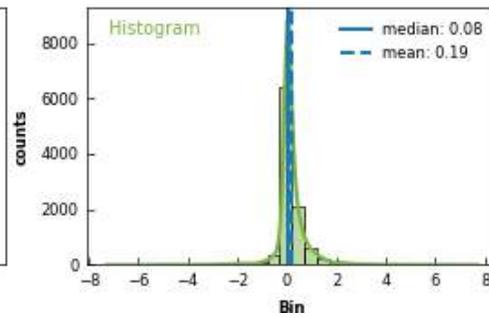
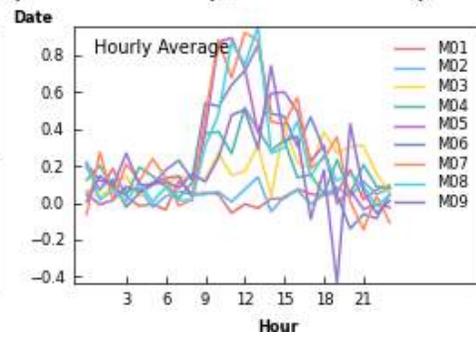
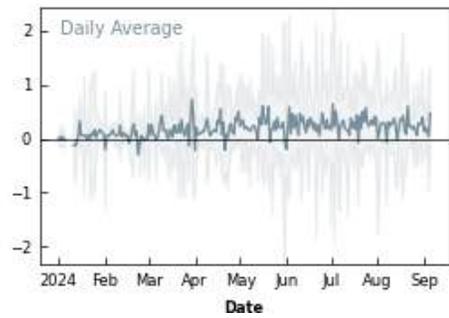
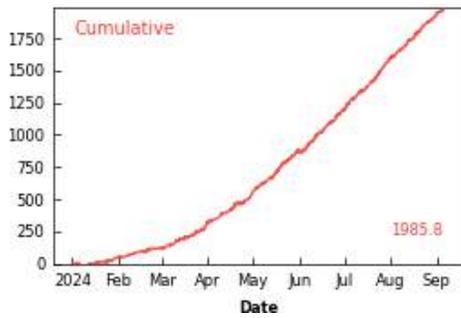
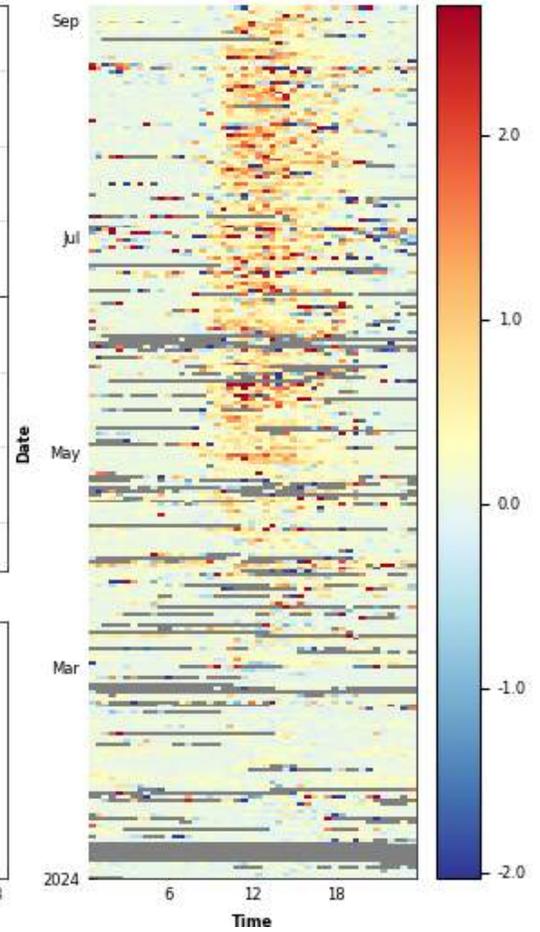
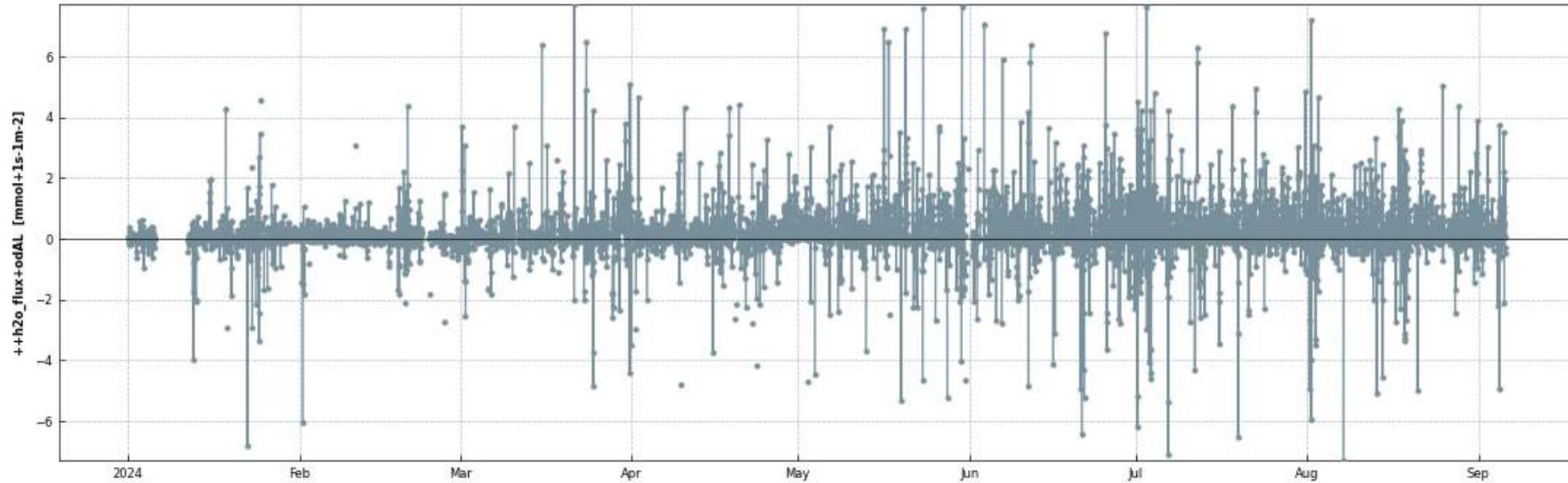


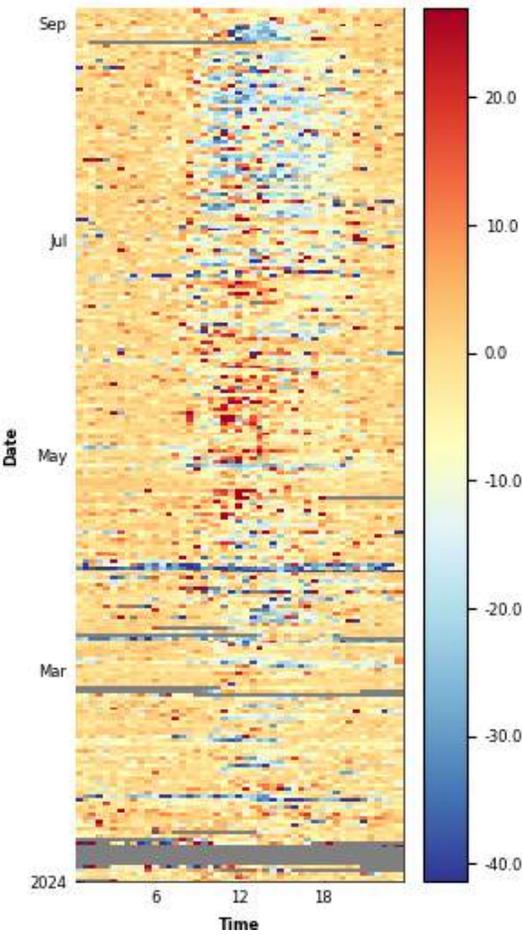
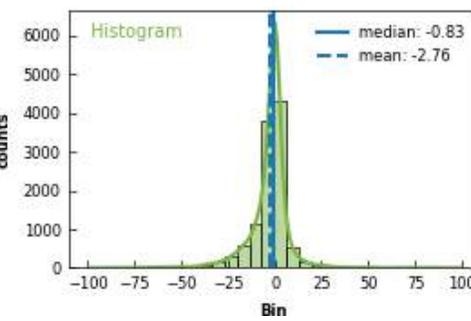
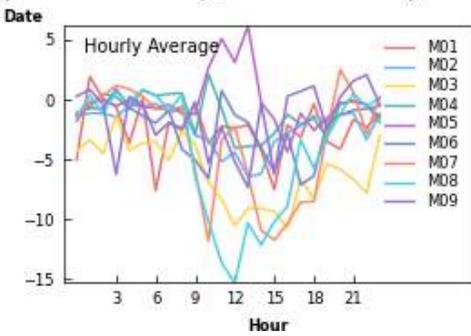
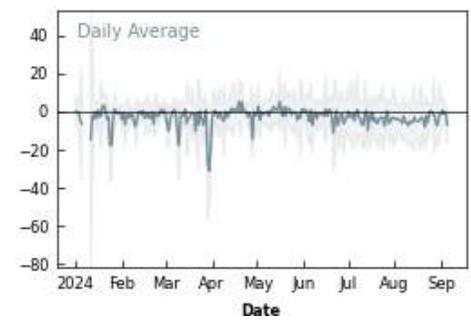
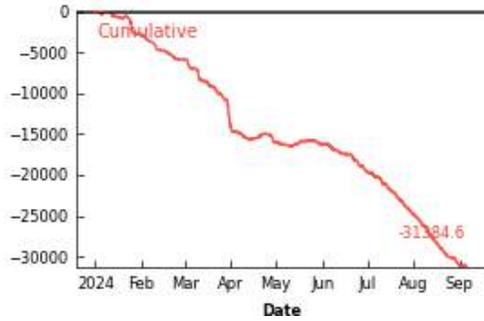
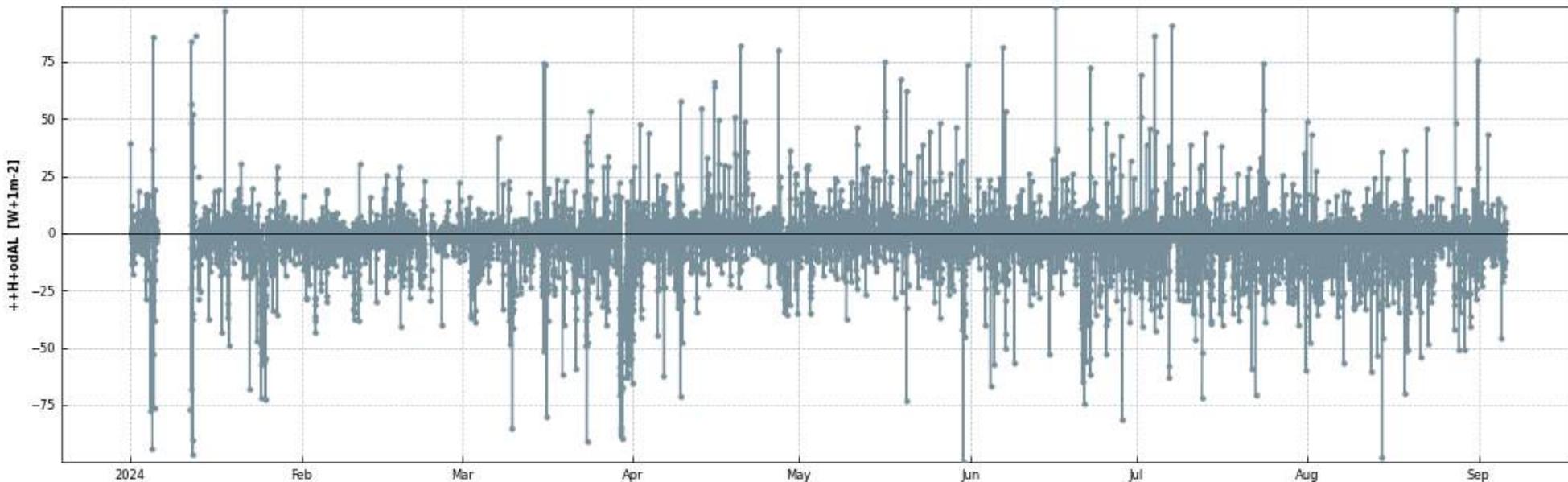












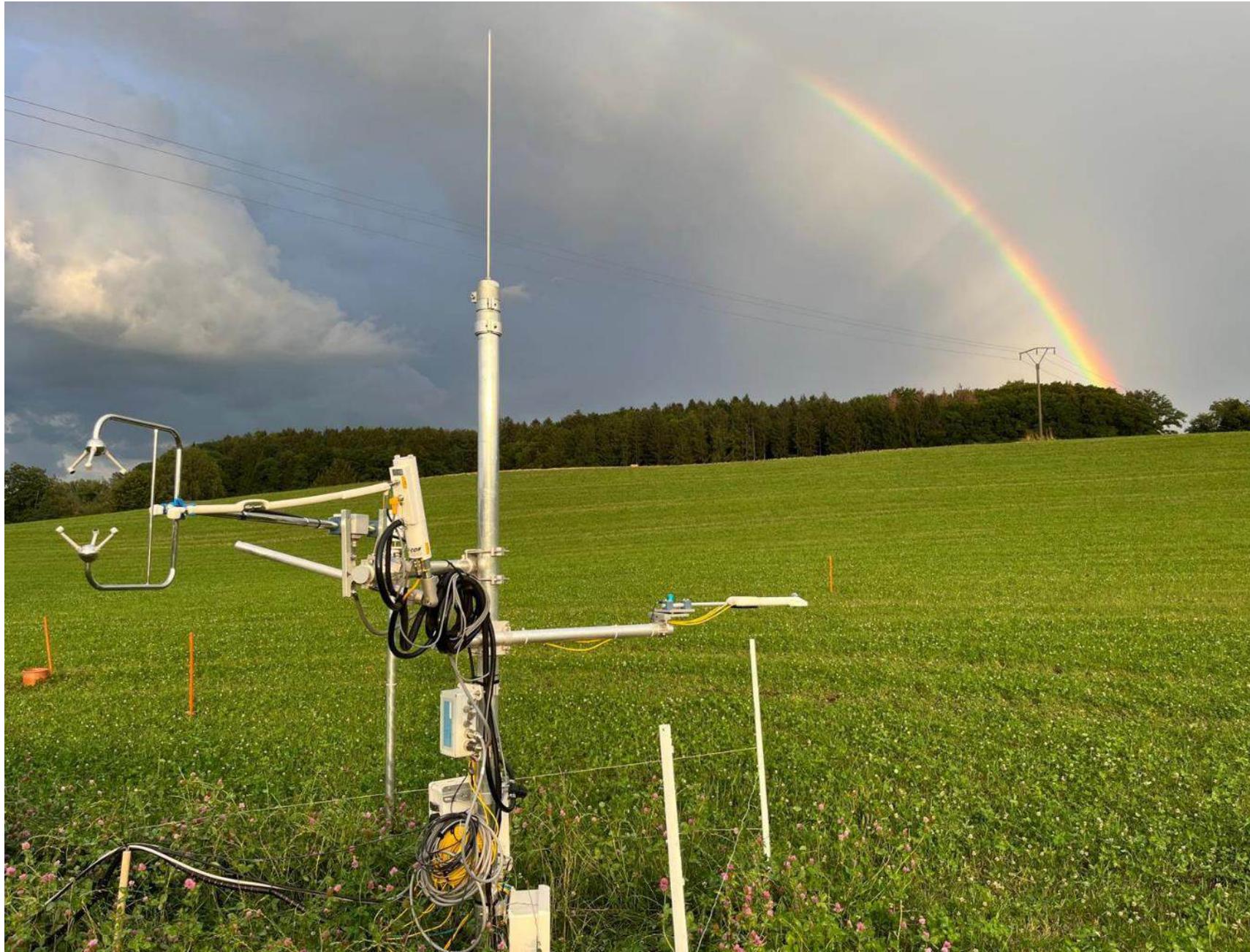
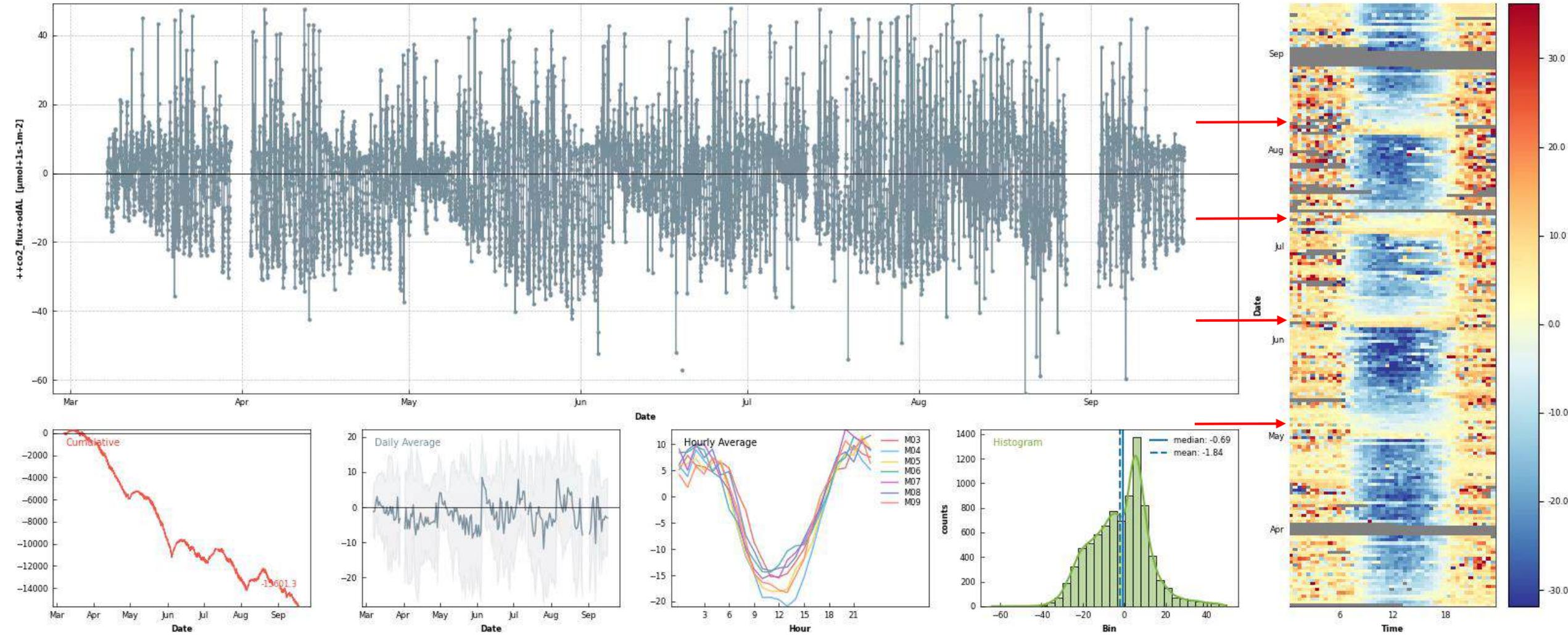


Photo: Lorenz Allemann

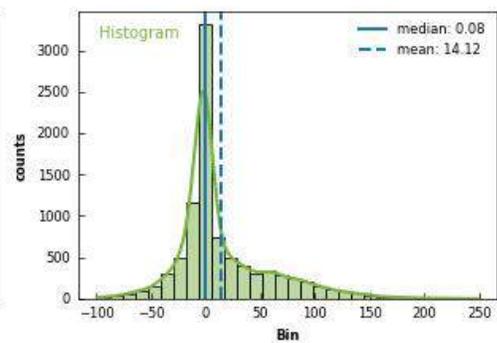
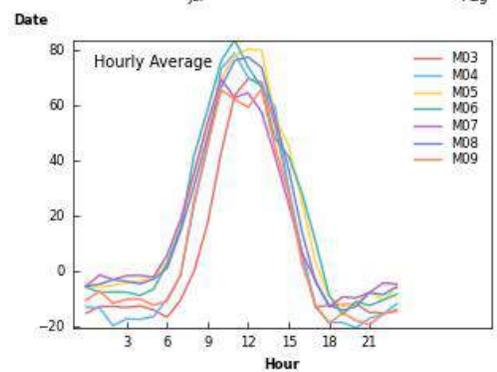
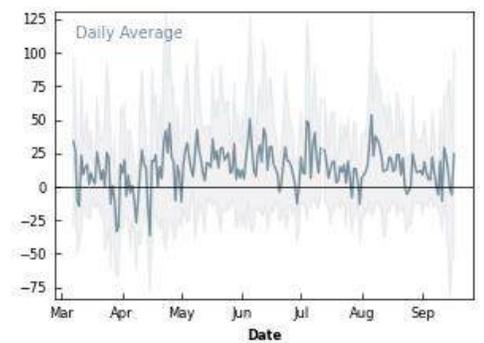
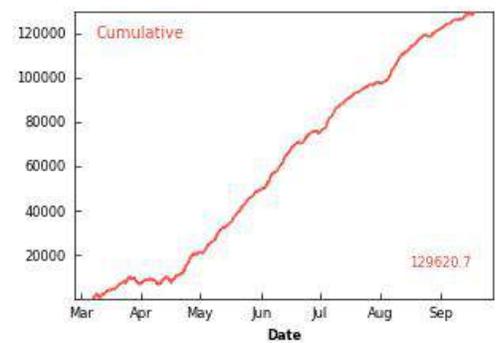
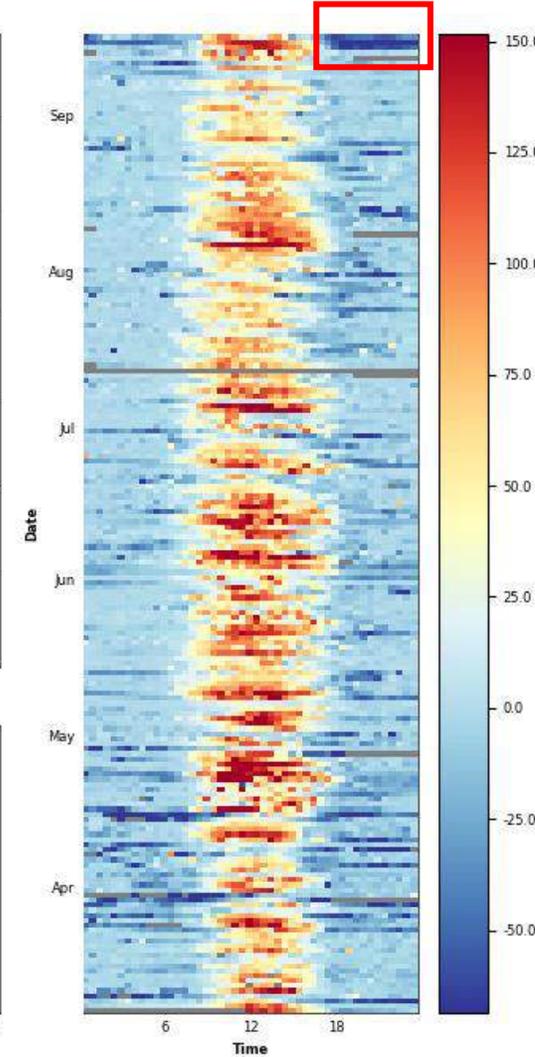
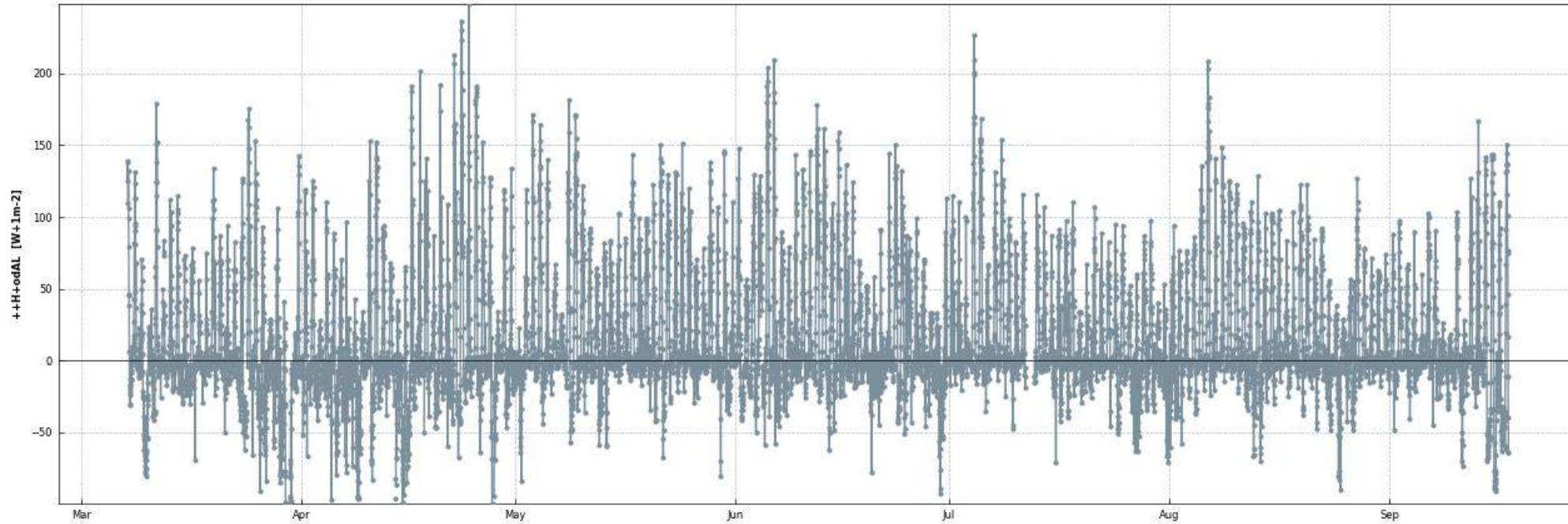
- 1st mowing: 29.04
- 2nd mowing: 4.6
- 3rd mowing: 4.7
- 4th mowing: 5.8
- Fertilization: 8.3, 13.5 and 15.8

Mowings



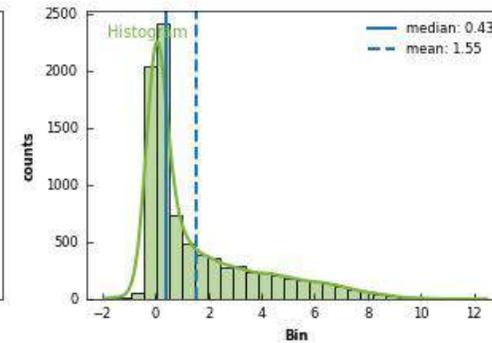
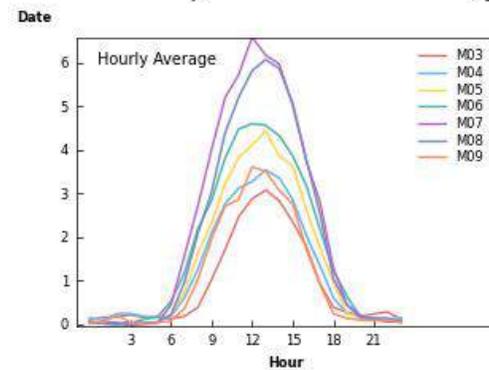
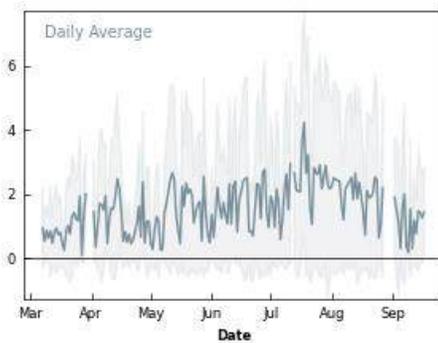
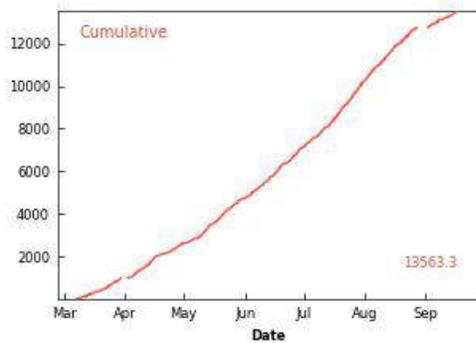
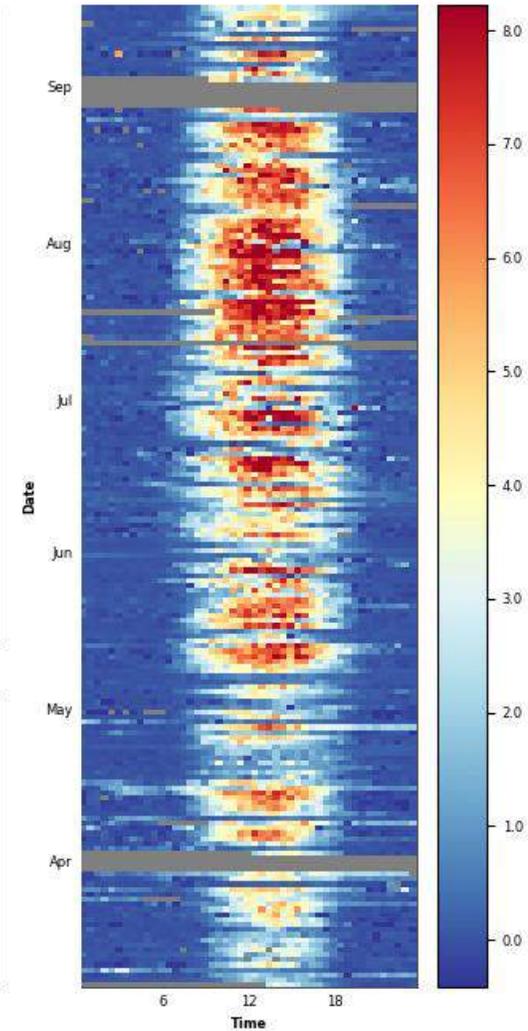
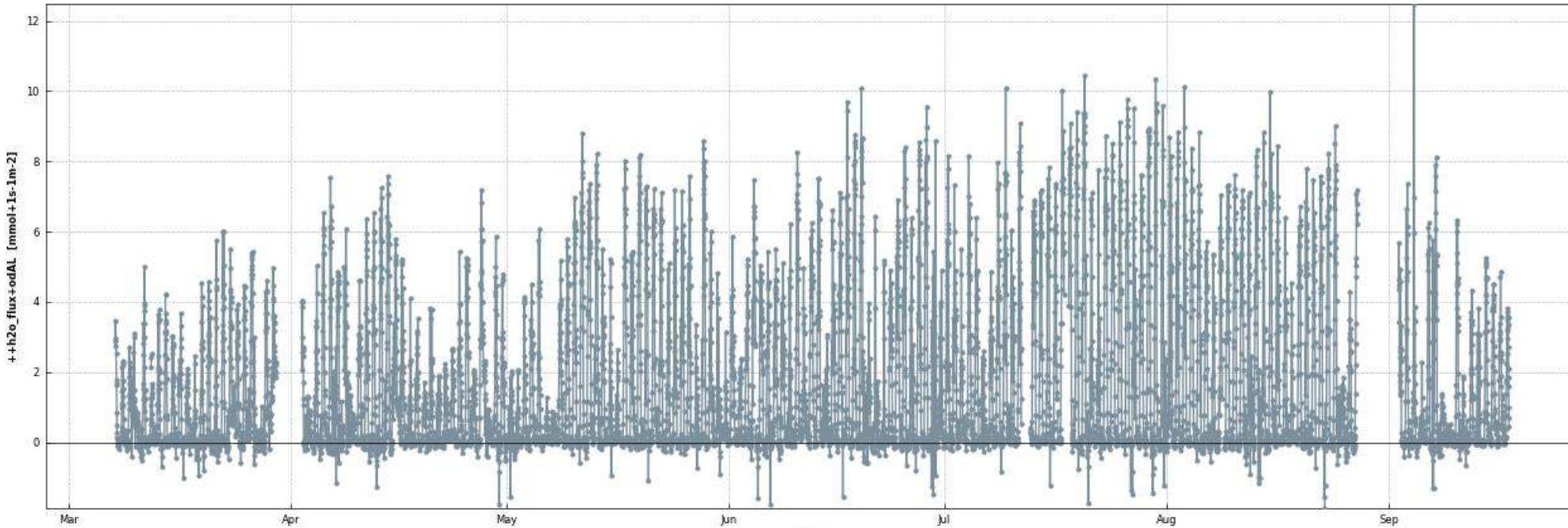
Data gap during retreat and following weekend :(

- 1st mowing: 29.04
- 2nd mowing: 4.6
- 3rd mowing: 4.7
- 4th mowing: 5.8
- Fertilization: 8.3, 13.5 and 15.8



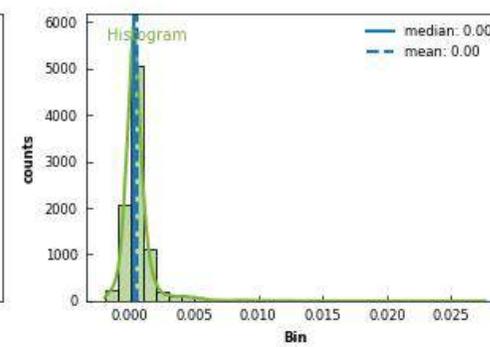
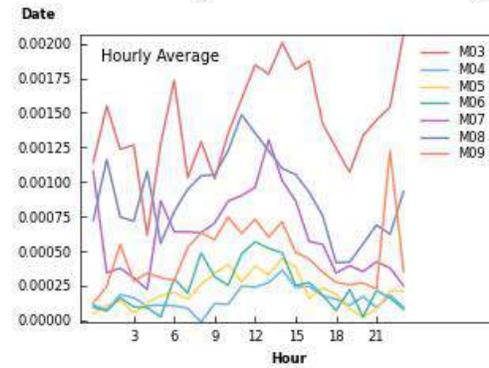
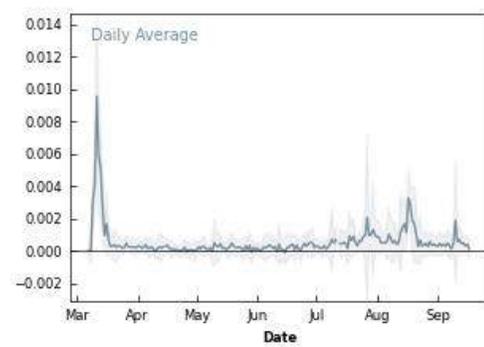
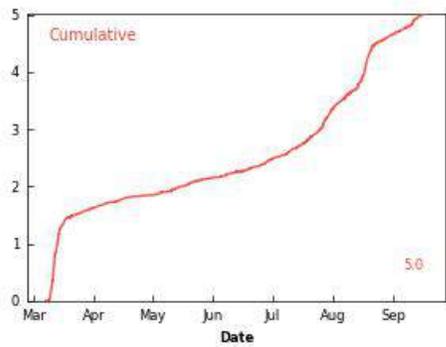
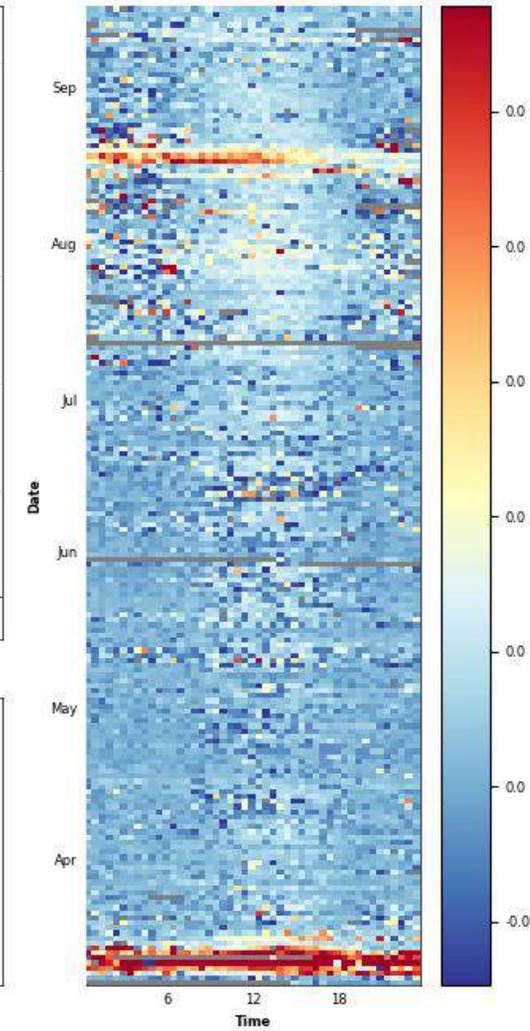
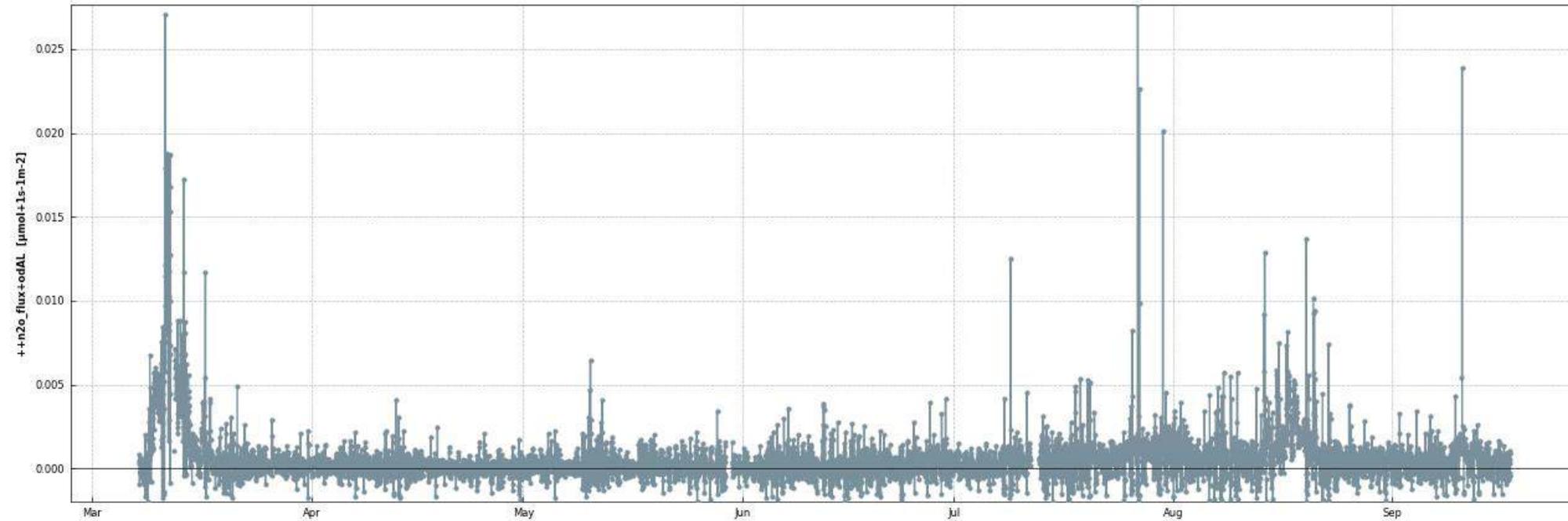
Very negative values at the end of period. Due to drastic drop in air temp?

- 1st mowing: 29.04
- 2nd mowing: 4.6
- 3rd mowing: 4.7
- 4th mowing: 5.8
- Fertilization: 8.3, 13.5 and 15.8



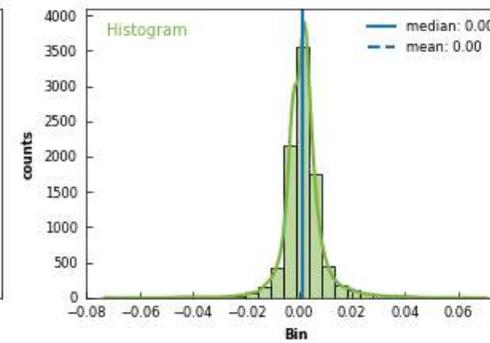
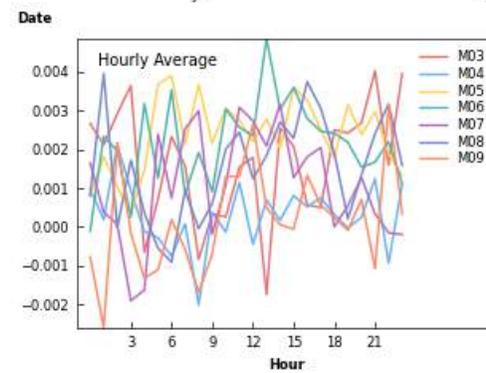
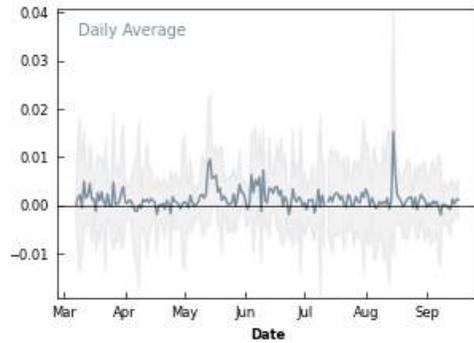
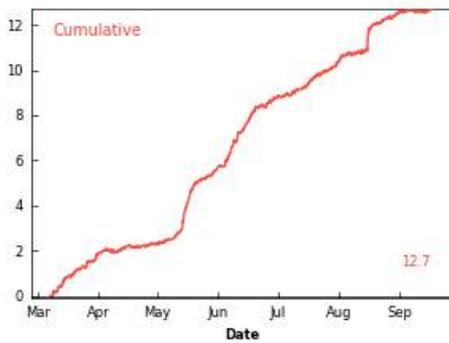
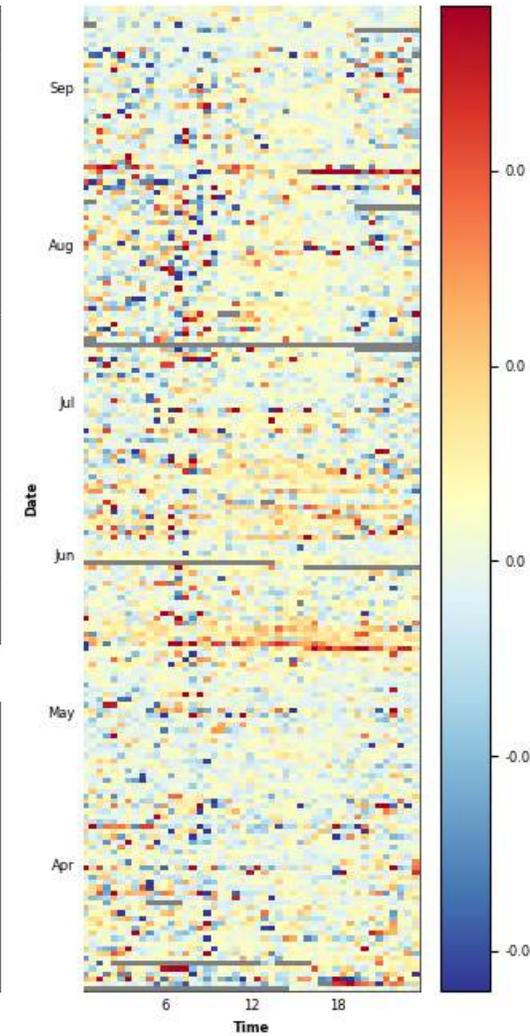
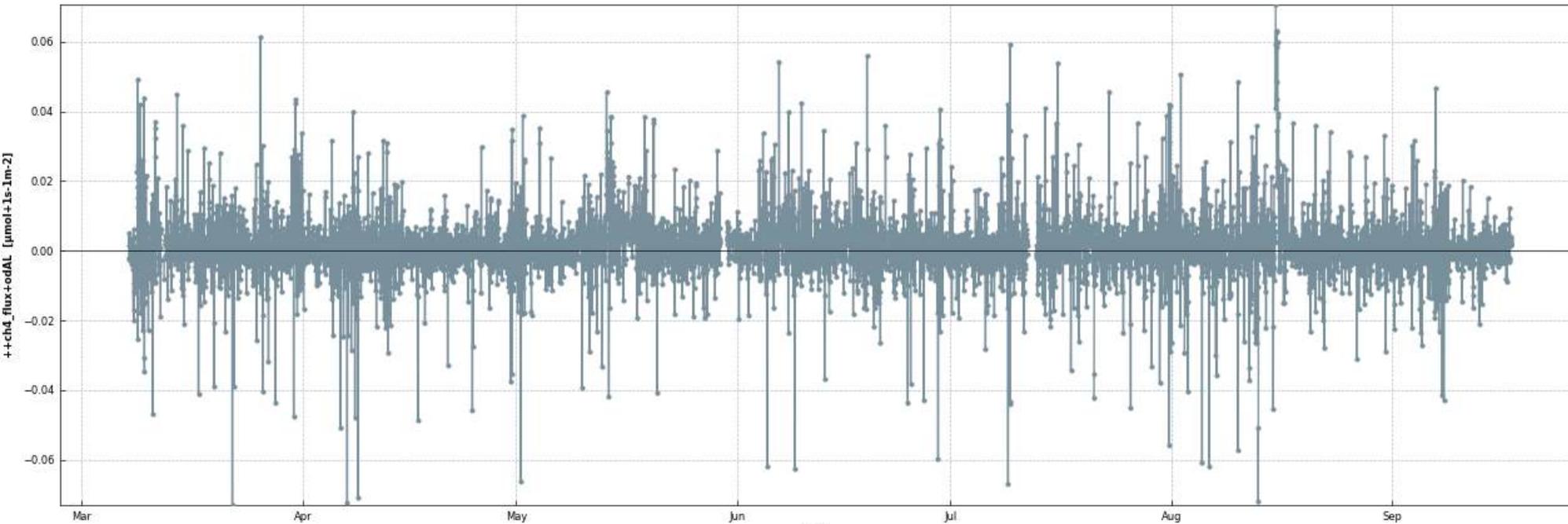
Everything looks fine.

- 1st mowing: 29.04
- 2nd mowing: 4.6
- 3rd mowing: 4.7
- 4th mowing: 5.8
- Fertilization: 8.3, 13.5 and 15.8



All fine.

- 1st mowing: 29.04
- 2nd mowing: 4.6
- 3rd mowing: 4.7
- 4th mowing: 5.8
- Fertilization: 8.3, 13.5 and 15.8



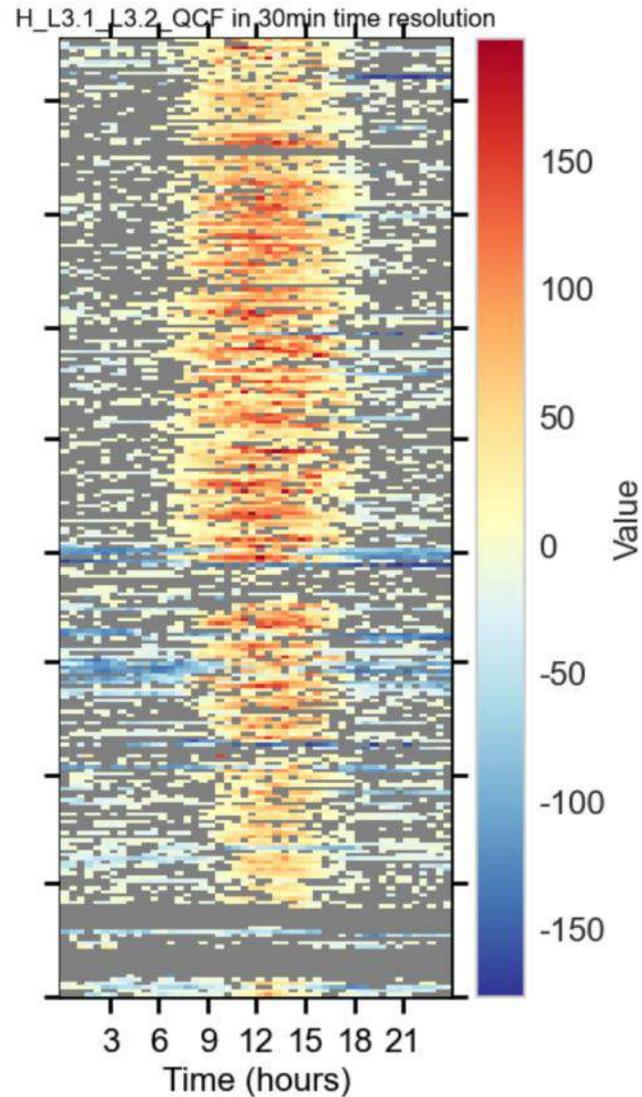
Everything looks fine.



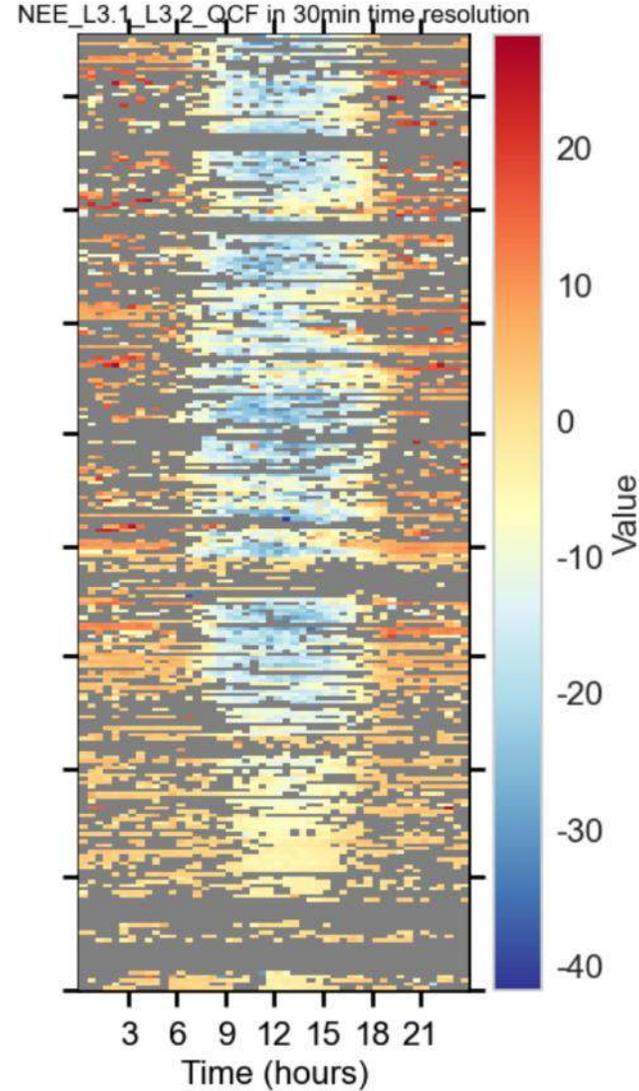
Photo: Lukas Hörtnagl

This year so far

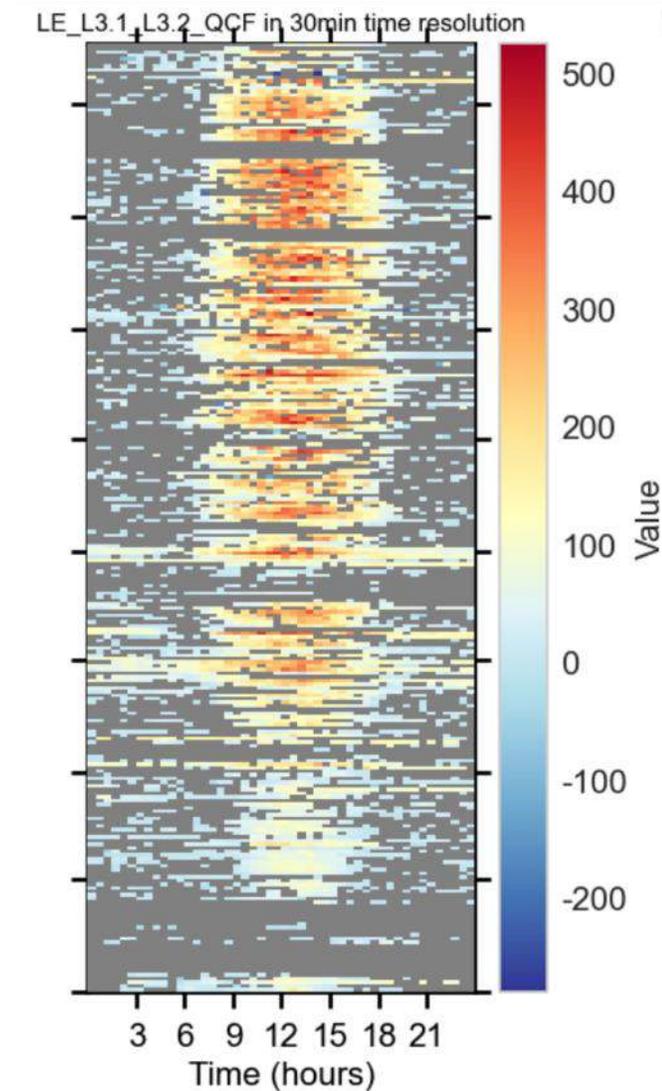
H



CO2 flux



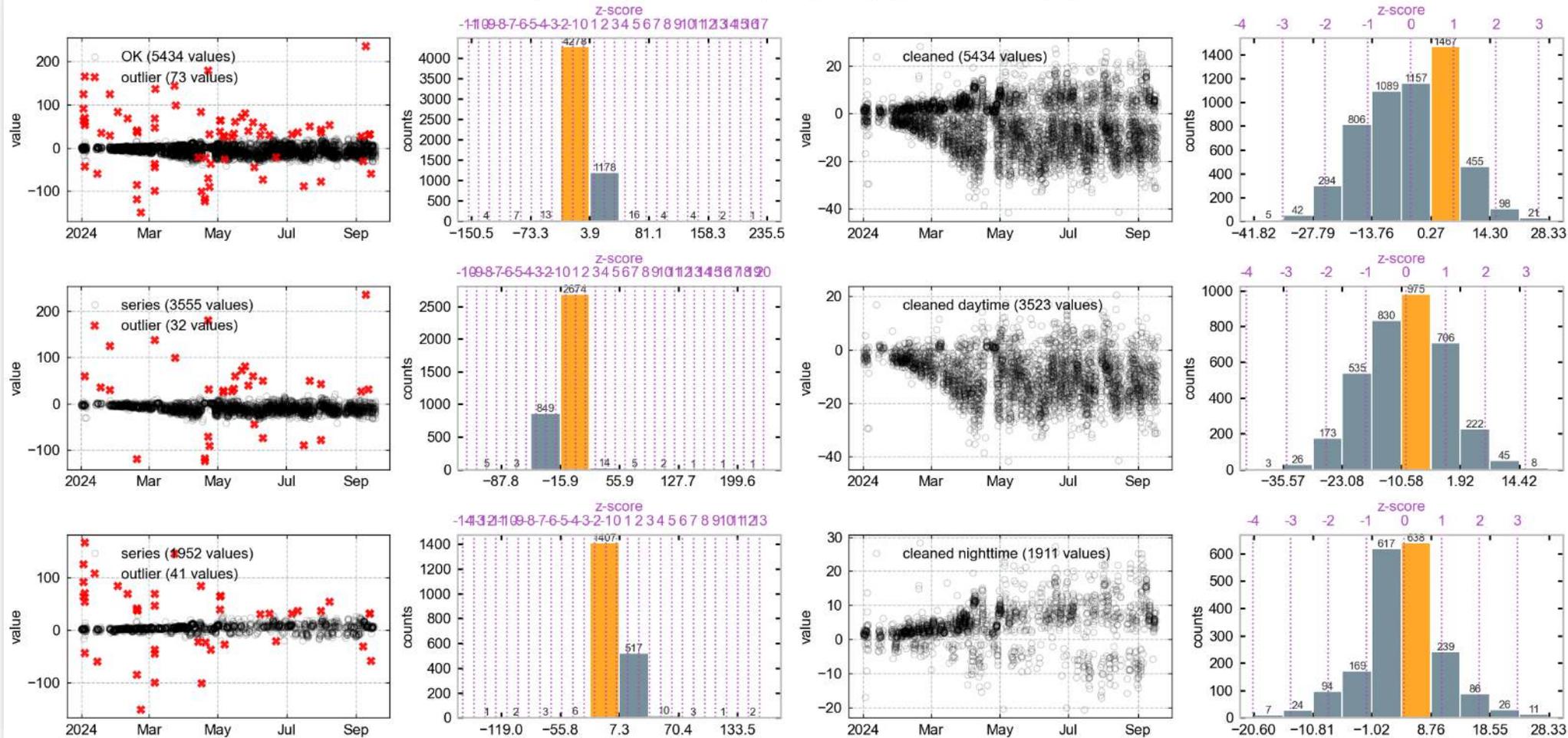
LE



- With preliminary QCF using the diive notebook notebooks/FluxProcessingChain/QuickFluxProcessingChain.ipynb
- Highest-quality fluxes only
- Preliminary outlier removal
- Without USTAR filtering

This year so far

z-score filter daytime/nighttime: NEE_L3.1_QCF, n_iterations = 4, n_outliers = 73

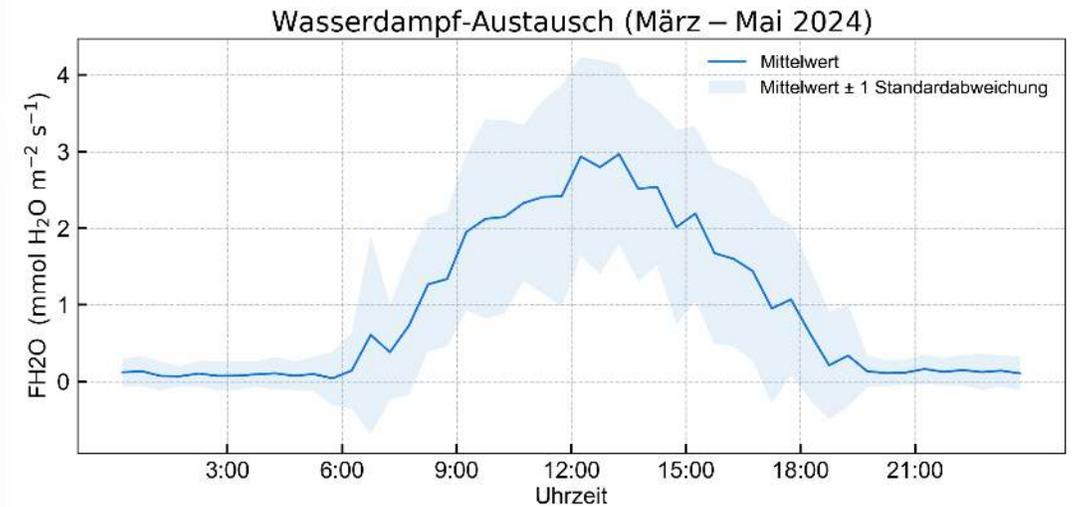
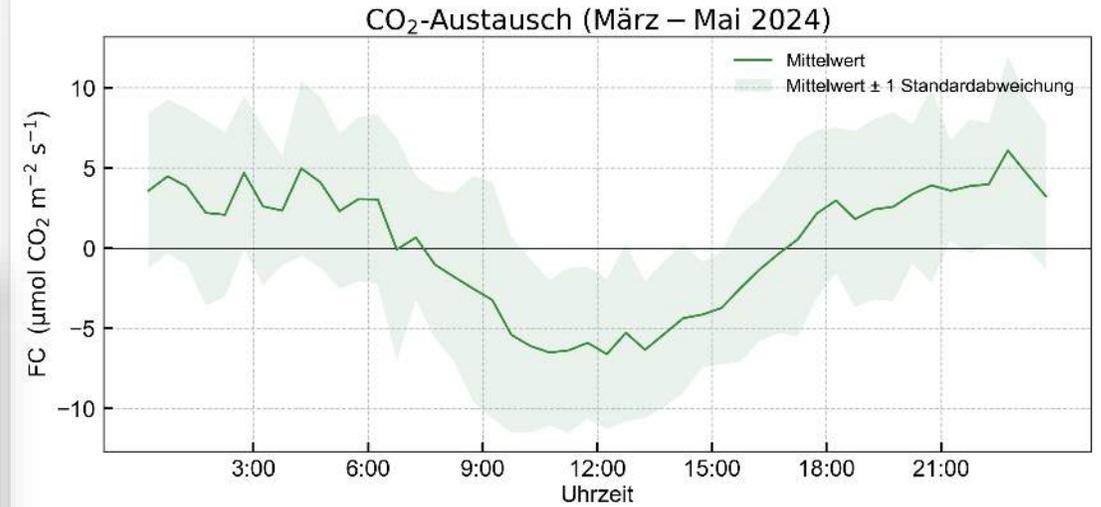


- With preliminary QCF using the diive notebook notebooks/FluxProcessingChain/QuickFluxProcessingChain.ipynb
- Highest-quality fluxes only
- Without USTAR filtering



Photo: Lukas Hörtnagl

- First fluxes for CH-HON
- Test plantations with coniferous and deciduous tree species from different places of origin, research is being carried out into what the forest of tomorrow could look like. This area in the Zurich forest laboratory is one of 59 test areas throughout Switzerland. The site is part of the [Waldlabor Zürich](#).



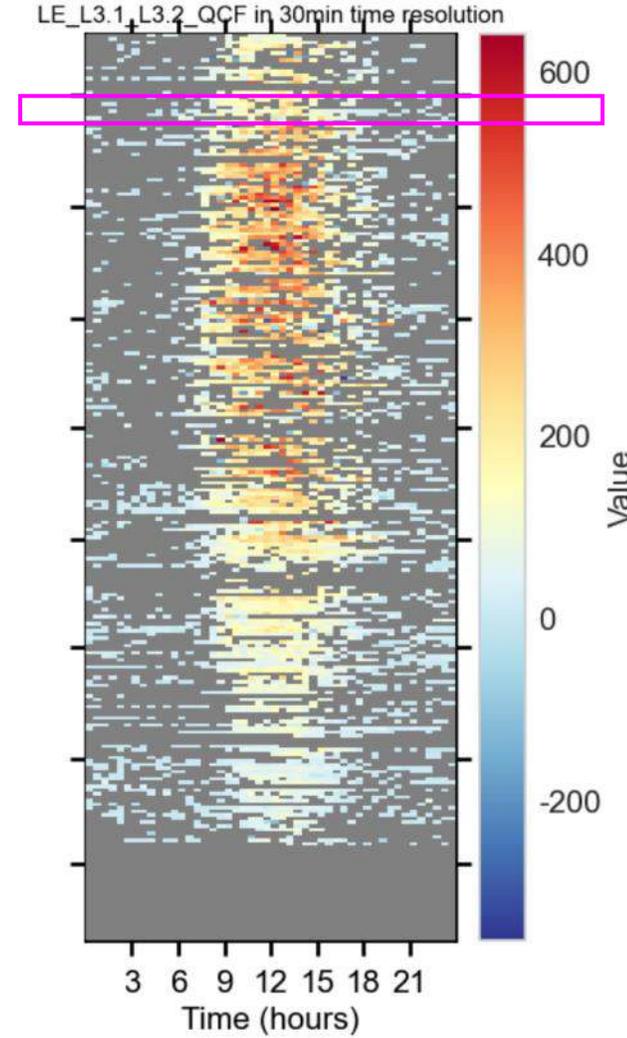
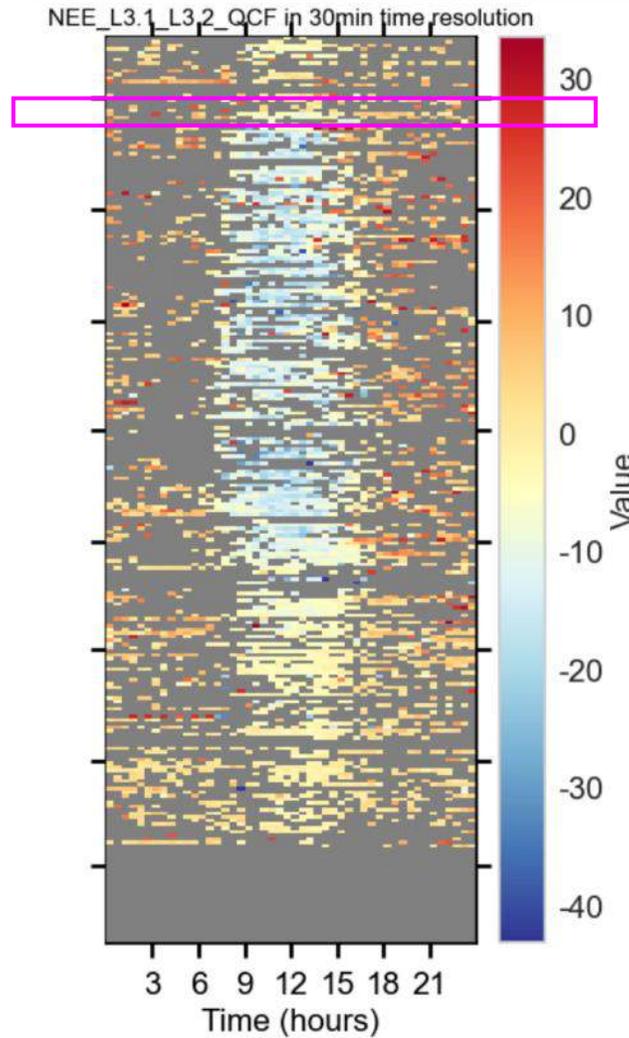
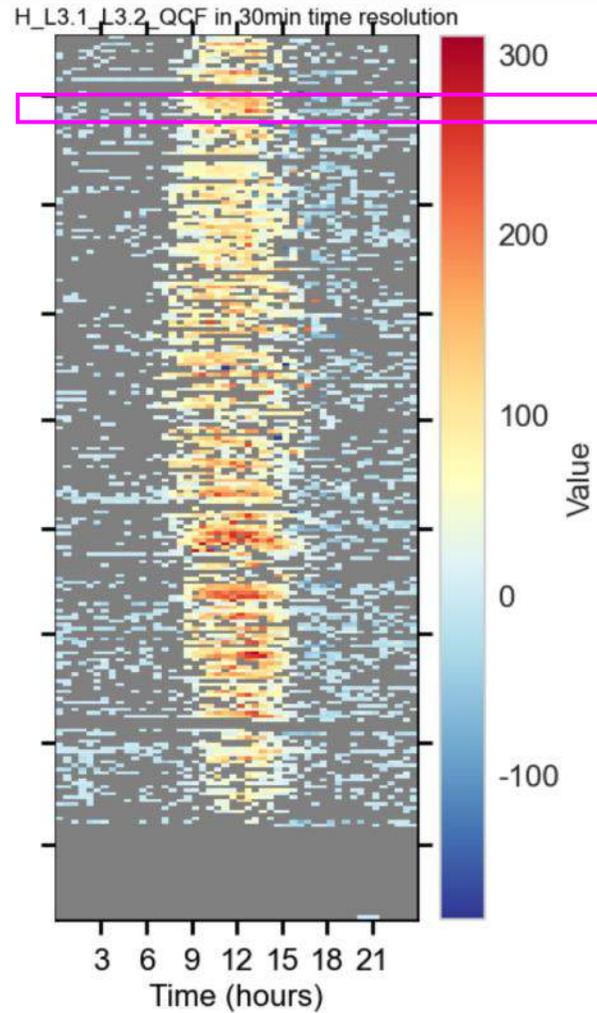
This year so far

H

undergrowth removed

CO₂ flux

LE

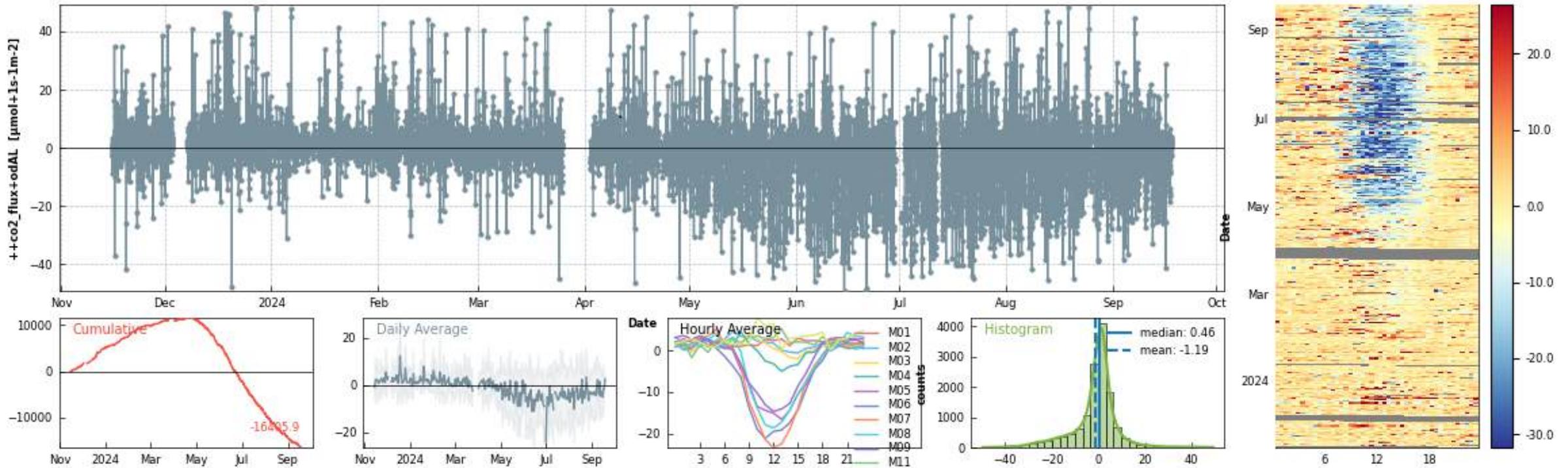


- With preliminary QCF using the diive notebook notebooks/FluxProcessingChain/QuickFluxProcessingChain.ipynb
- Highest-quality fluxes only
- Preliminary outlier removal
- Without USTAR filtering

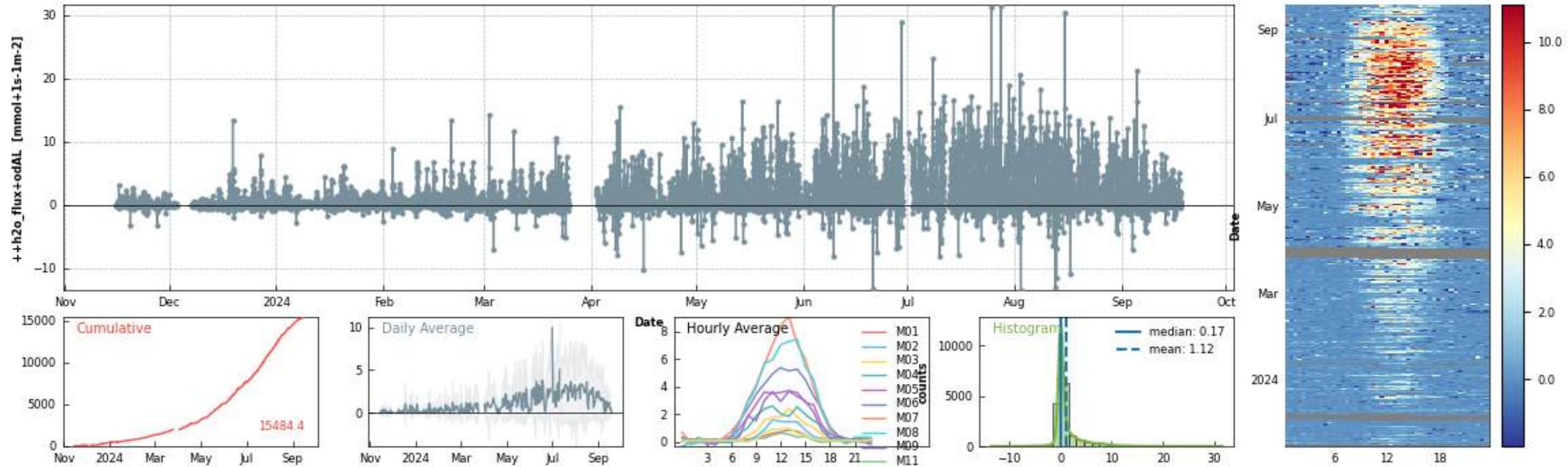


Photo: Markus Staudinger

Outlier removed CO₂ flux. Lägeren is tired of doing awesome stuff (now time to rest!!).



Outlier removed h2o flux.



Outlier removed H flux. Transition from high H flux to low H flux with increase in LE flux (in previous slides from May onwards) and now again increase in H as end of season is approaching

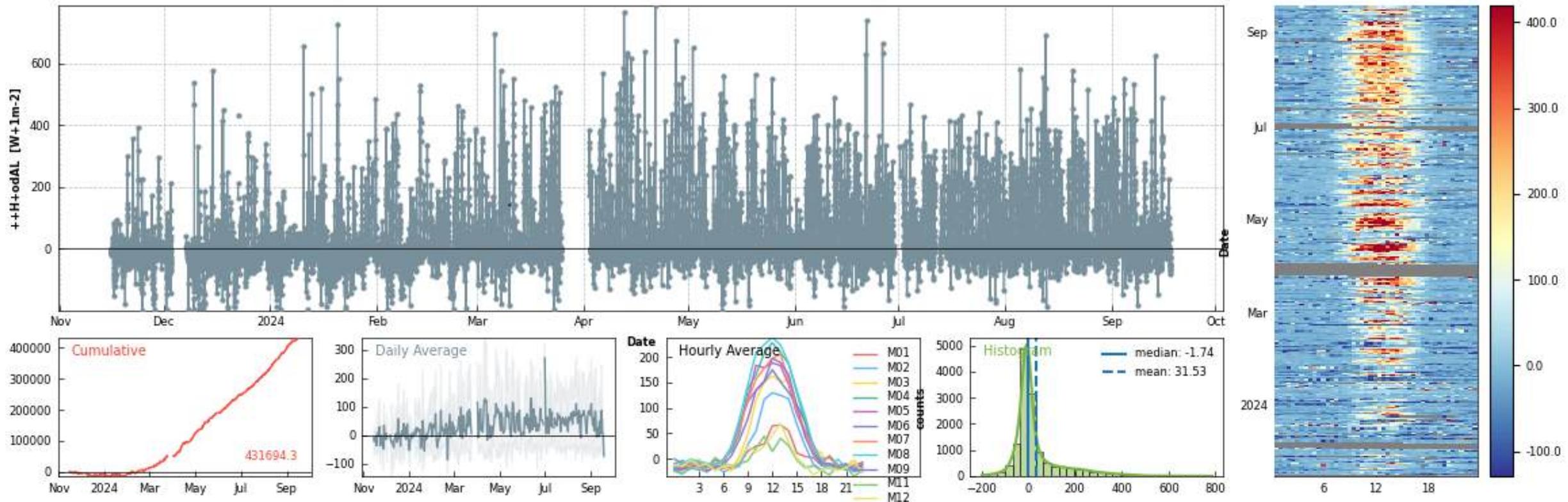
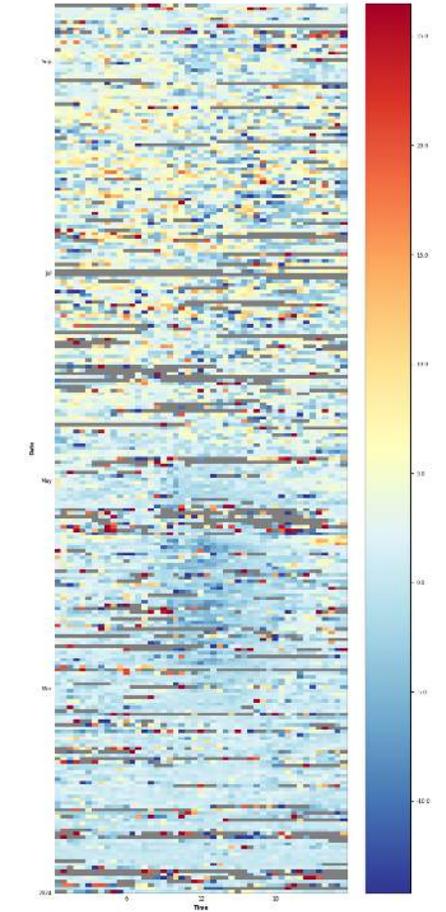
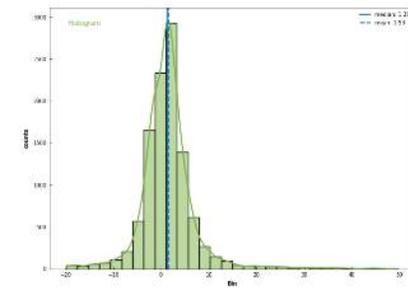
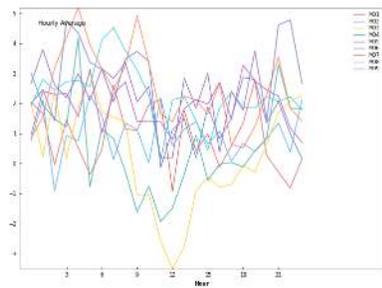
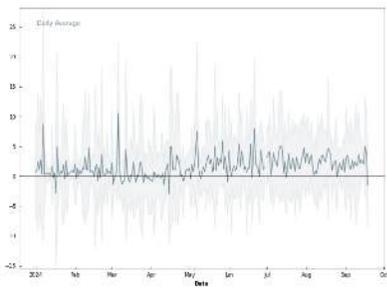
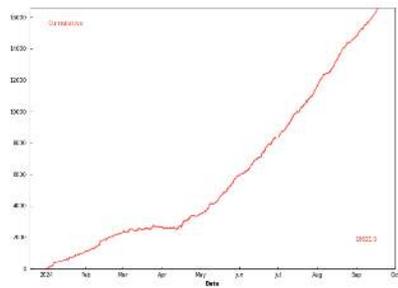
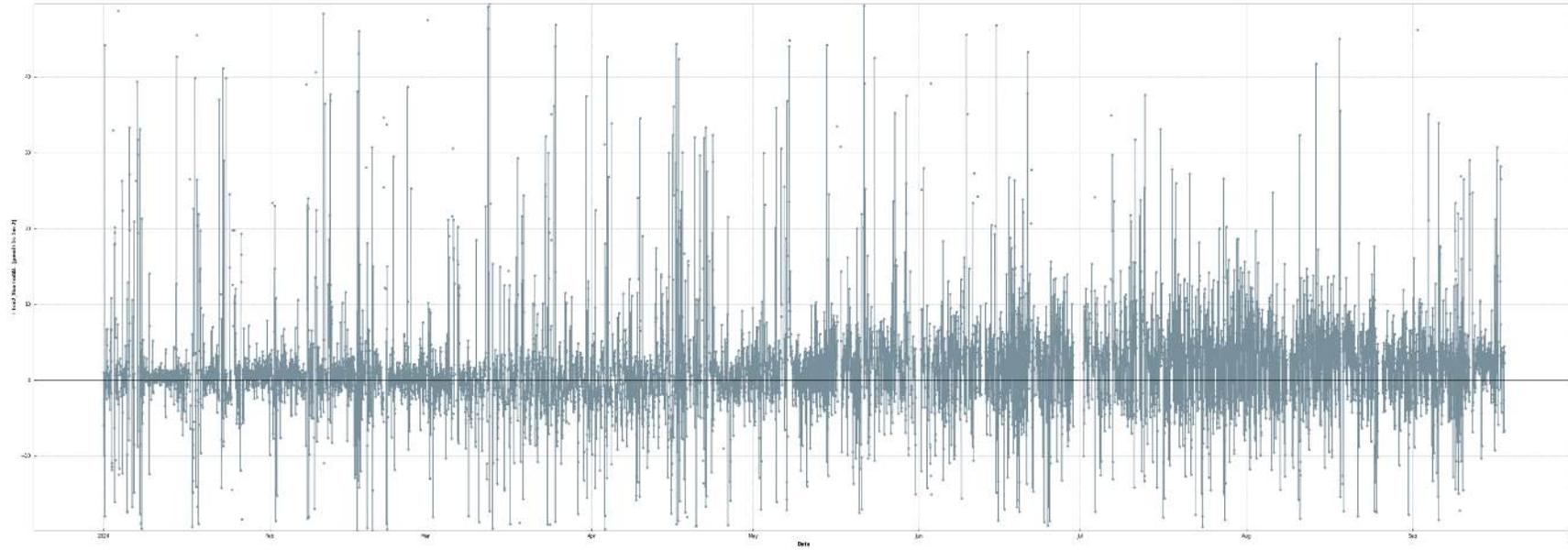
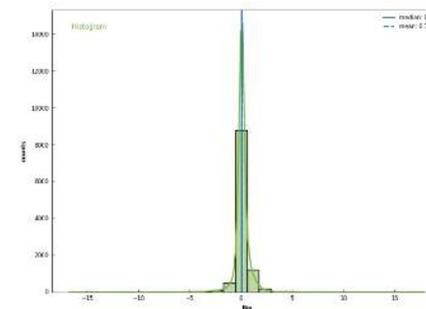
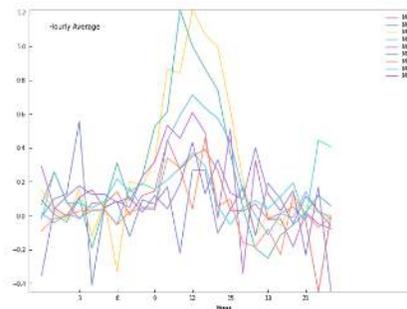
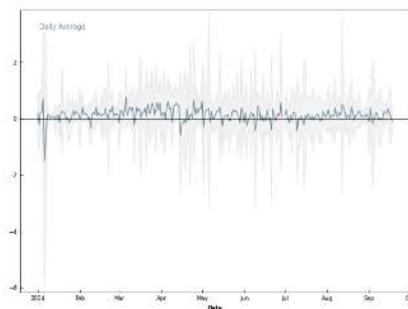
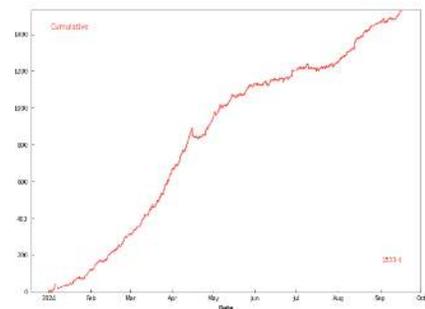
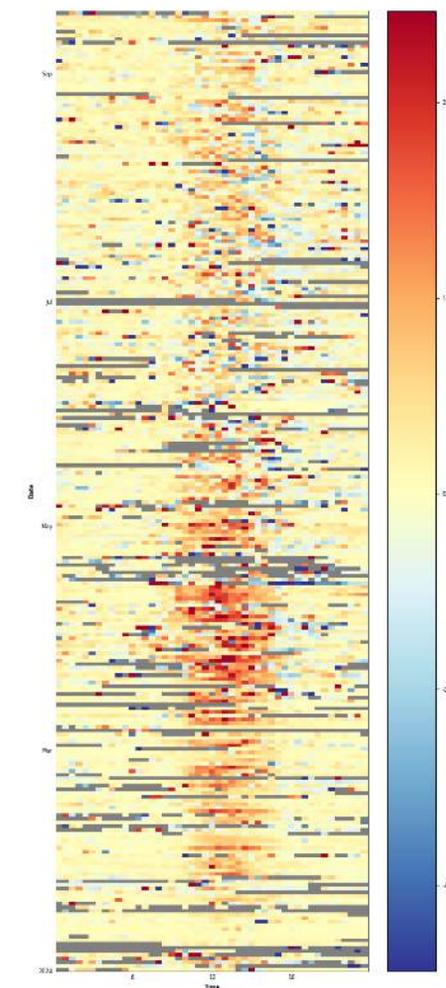
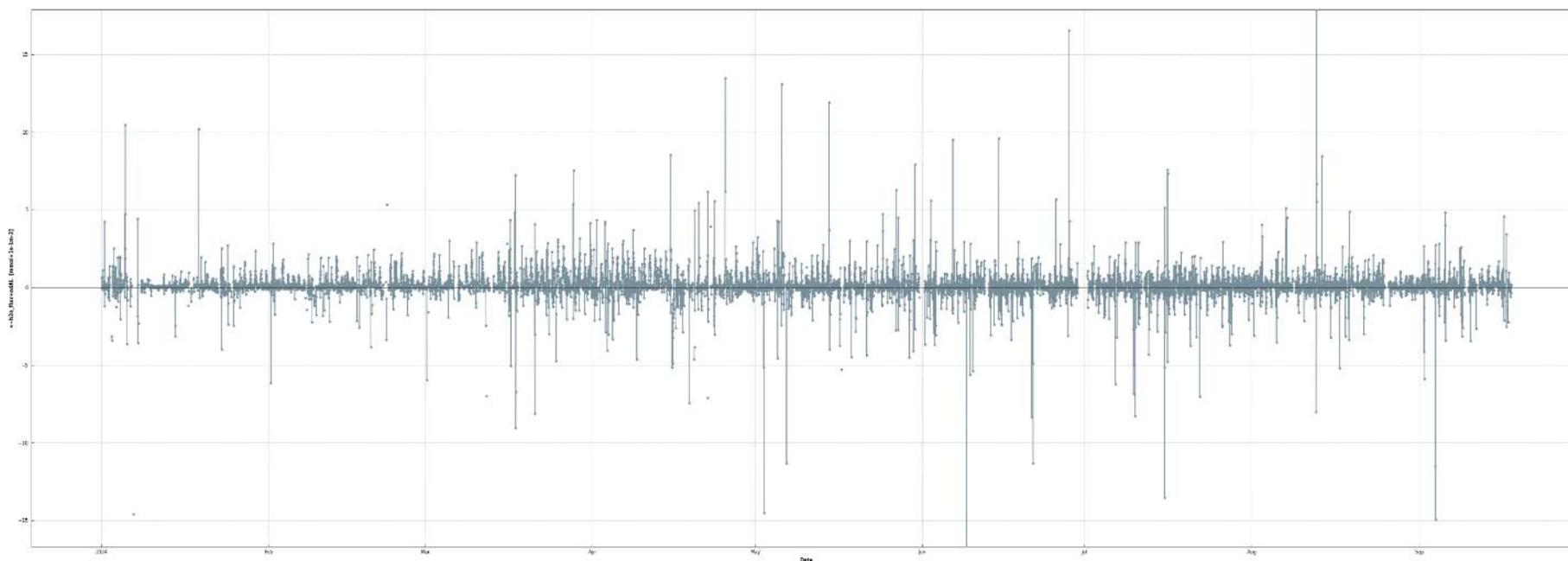




Photo: Liliana Scapucci





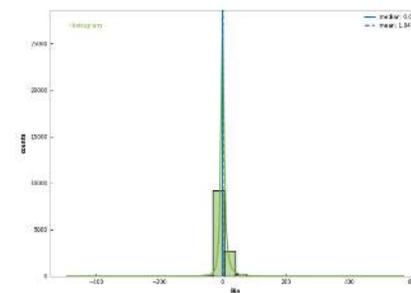
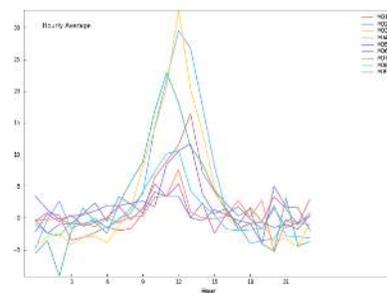
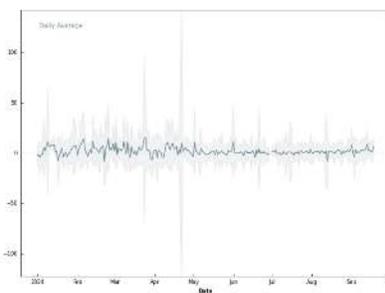
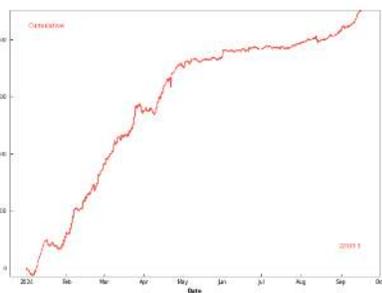
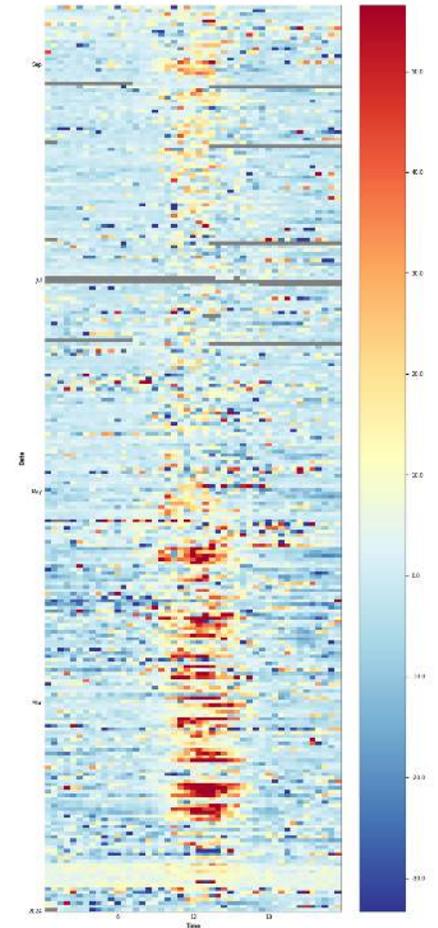
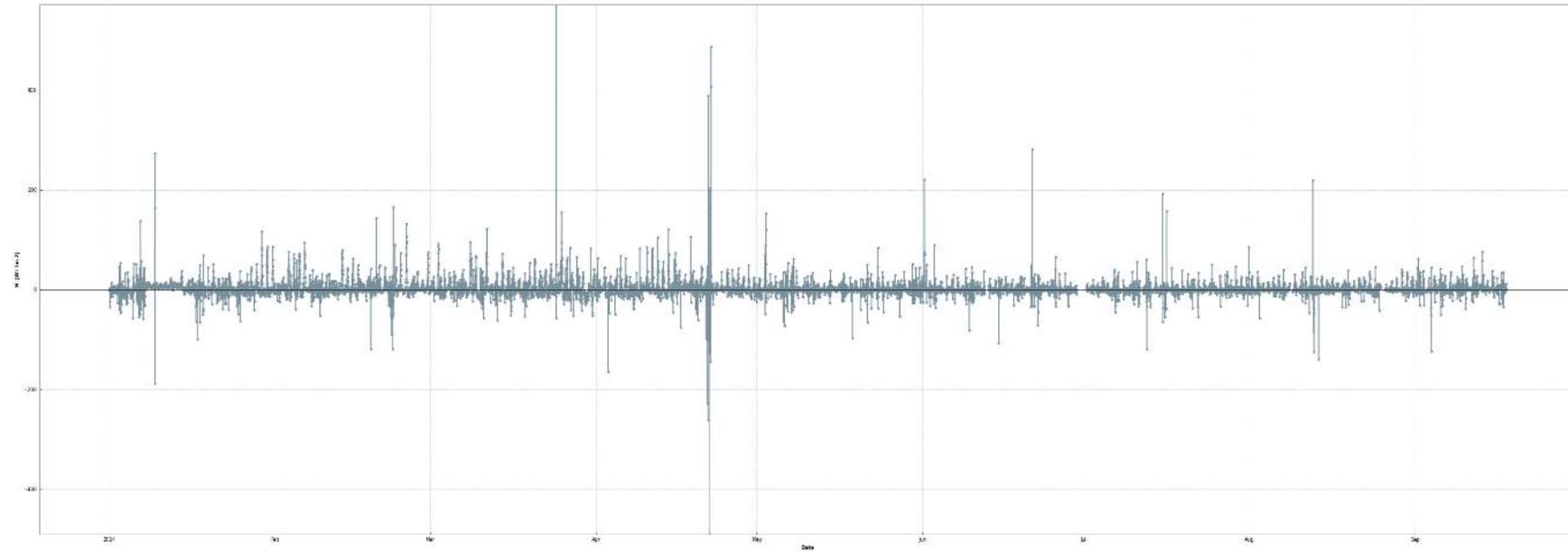


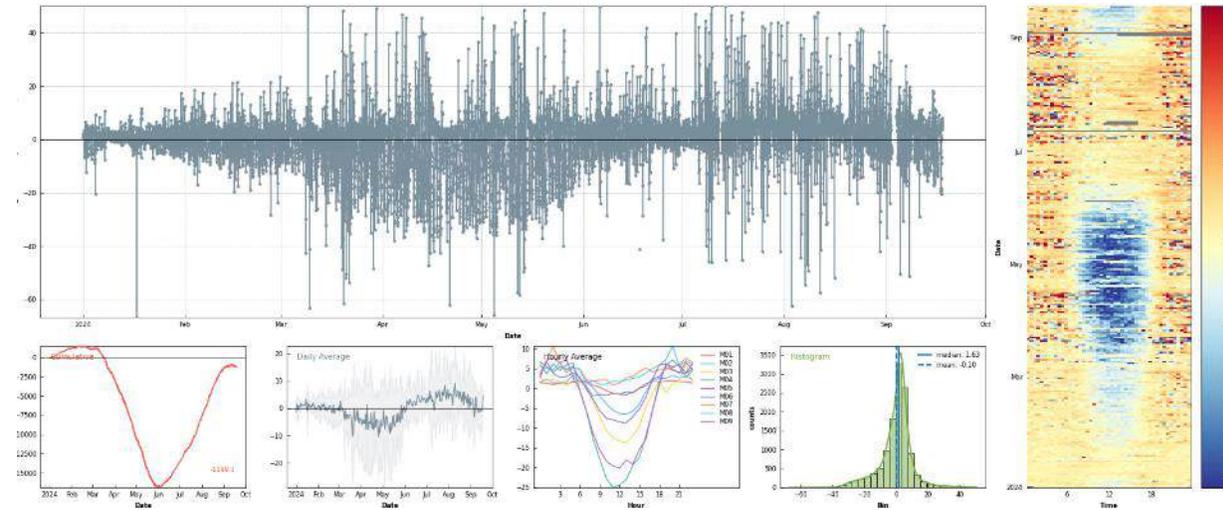


Photo: Regine Maier

- All good!
- Grass-clover is growing (sowing: Aug 8)

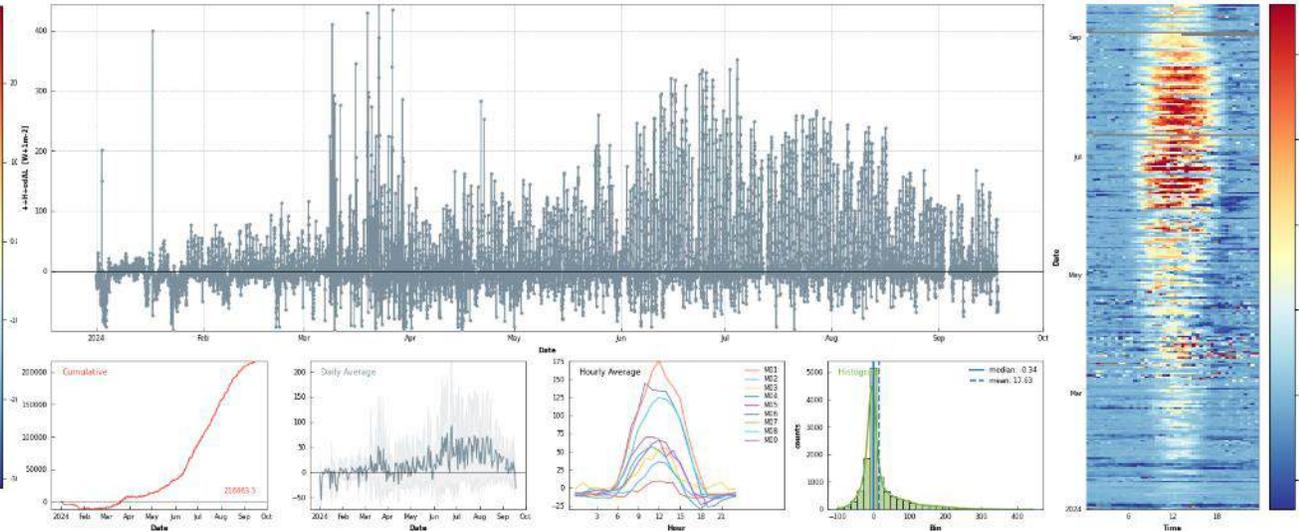
CO2 flux

Abs limits: -70+50



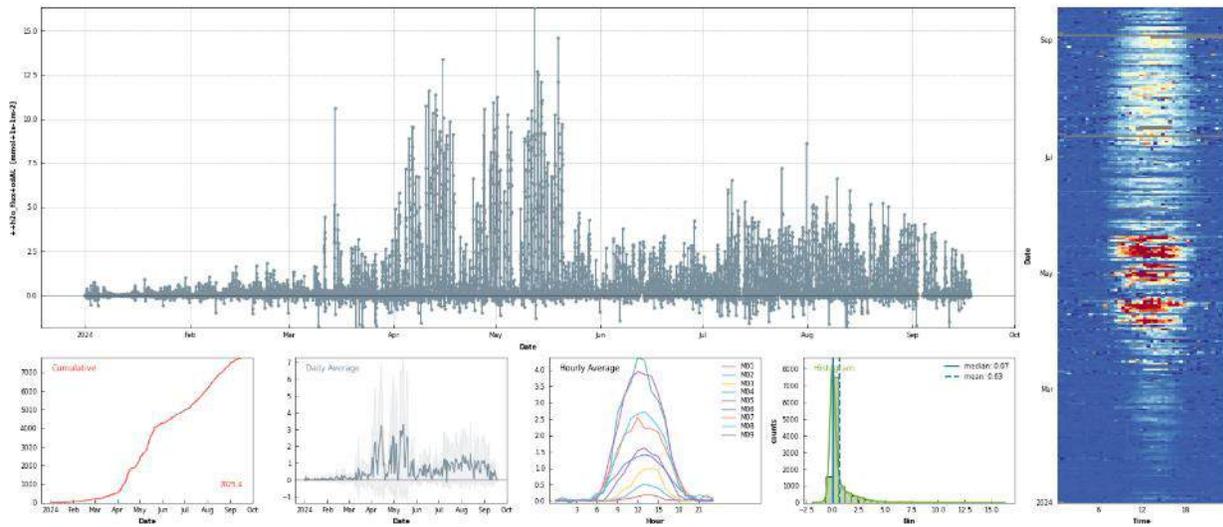
H

Abs limits: -100+450



H2O flux

Abs limits: -2+20



w_rot

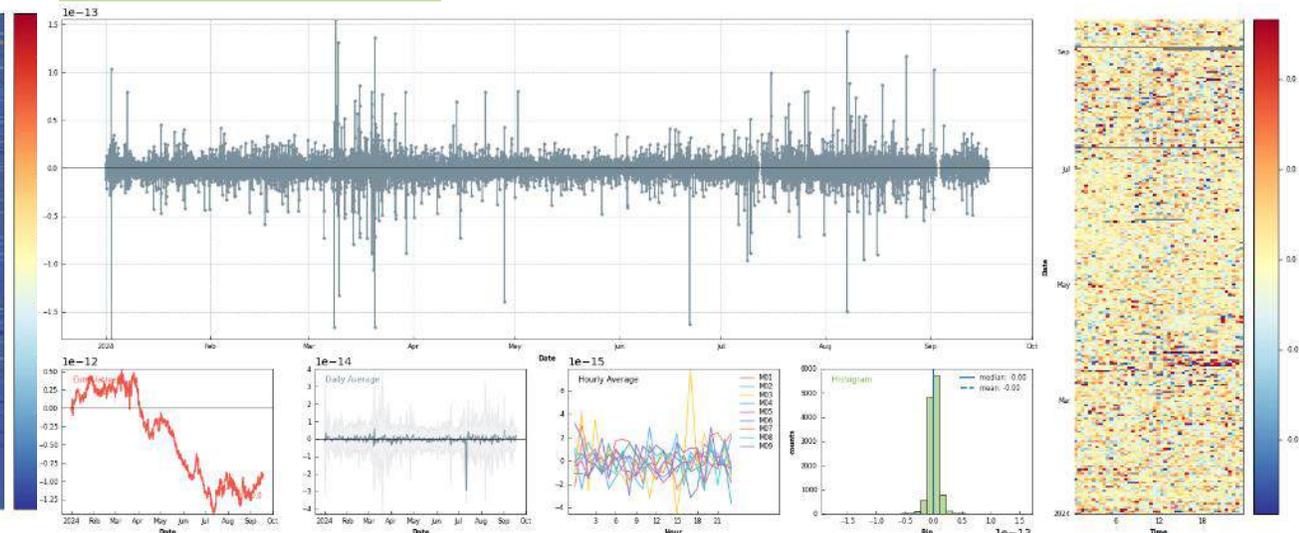




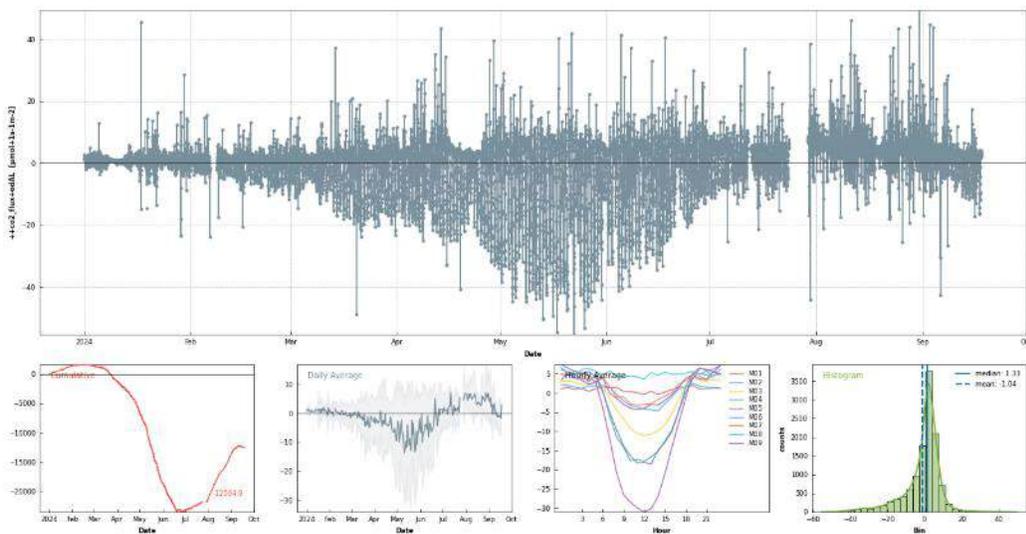
Photo: Fabio Turco

- The grass-legume mixture is growing (sowing: Aug 23)
- Huge N₂O peak after the application of compost on Aug 22 → probably won the race against FOR this year 😊



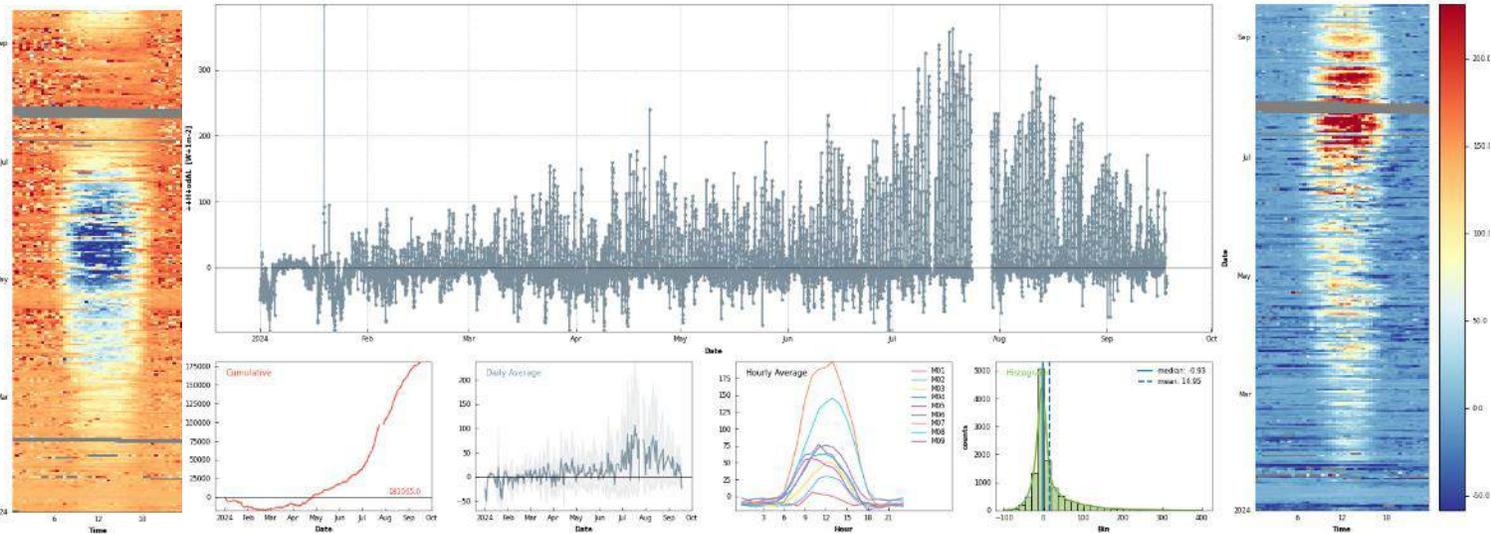
CO₂ flux

Abs limits: -70+50



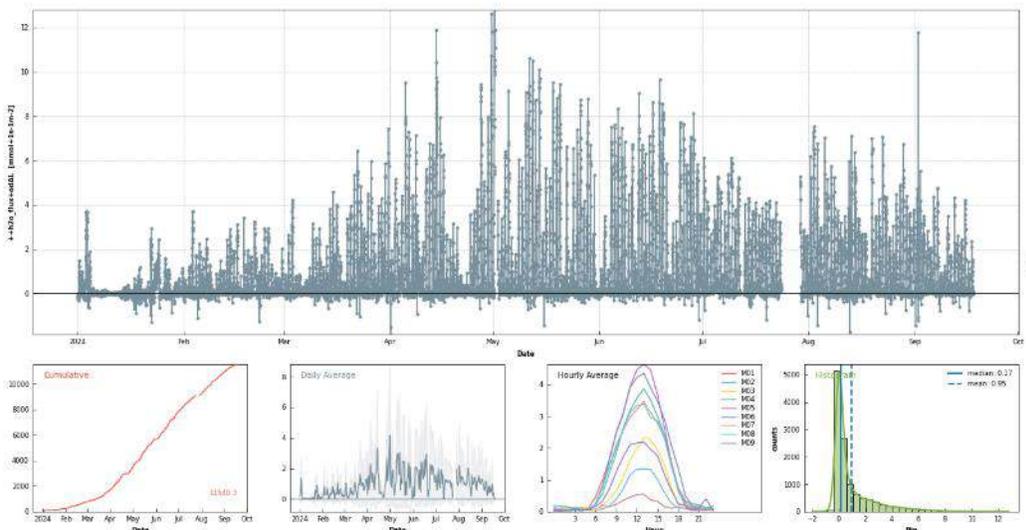
H

Abs limits: -100+450



H₂O flux

Abs limits: -2+20



N₂O

Abs limits: -0.002+0.05

