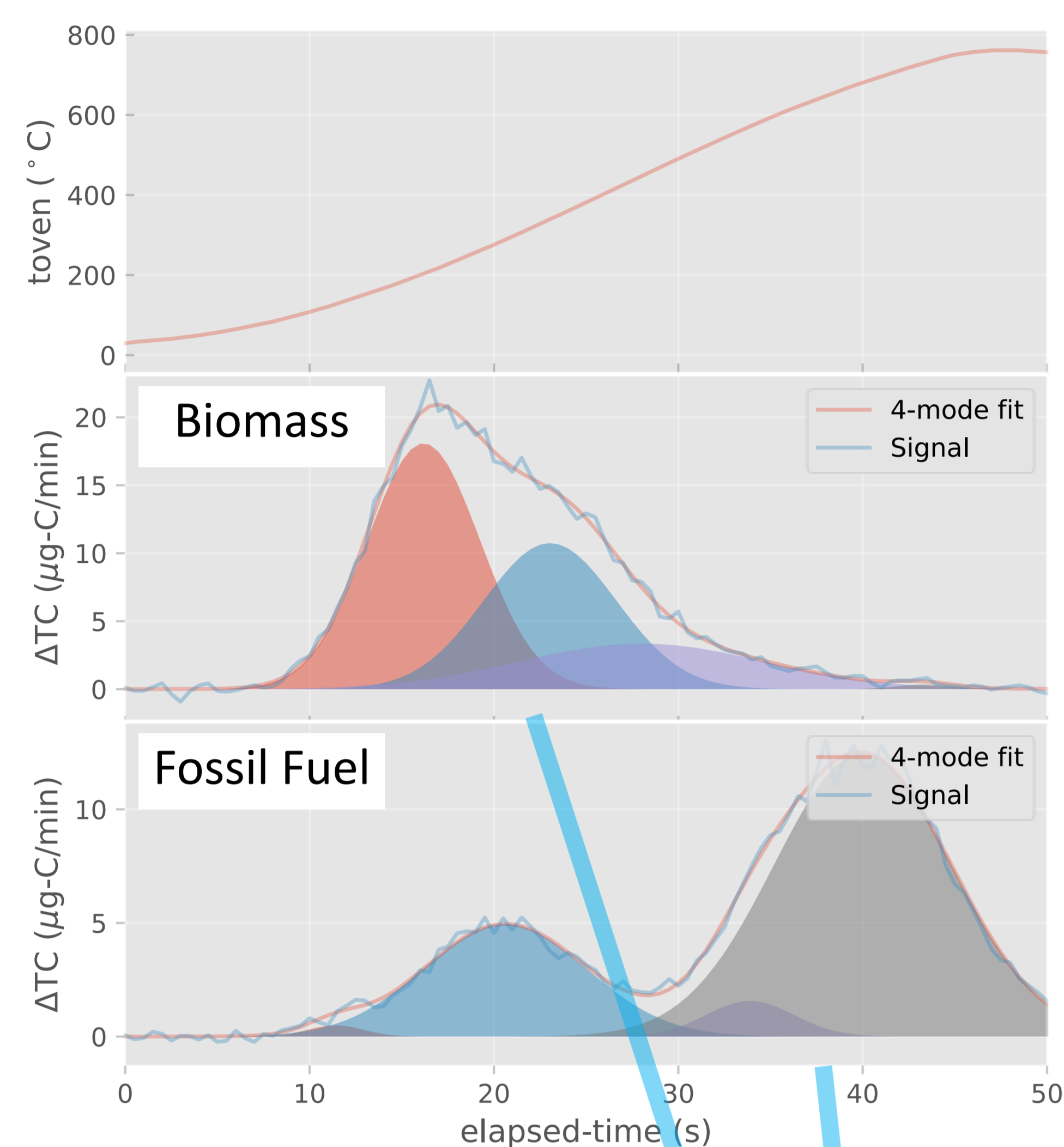


Unique: fast thermograms

Identification of source fingerprints



Key specifications

Limit of detection: 0.1 μg of carbon (μg-C)

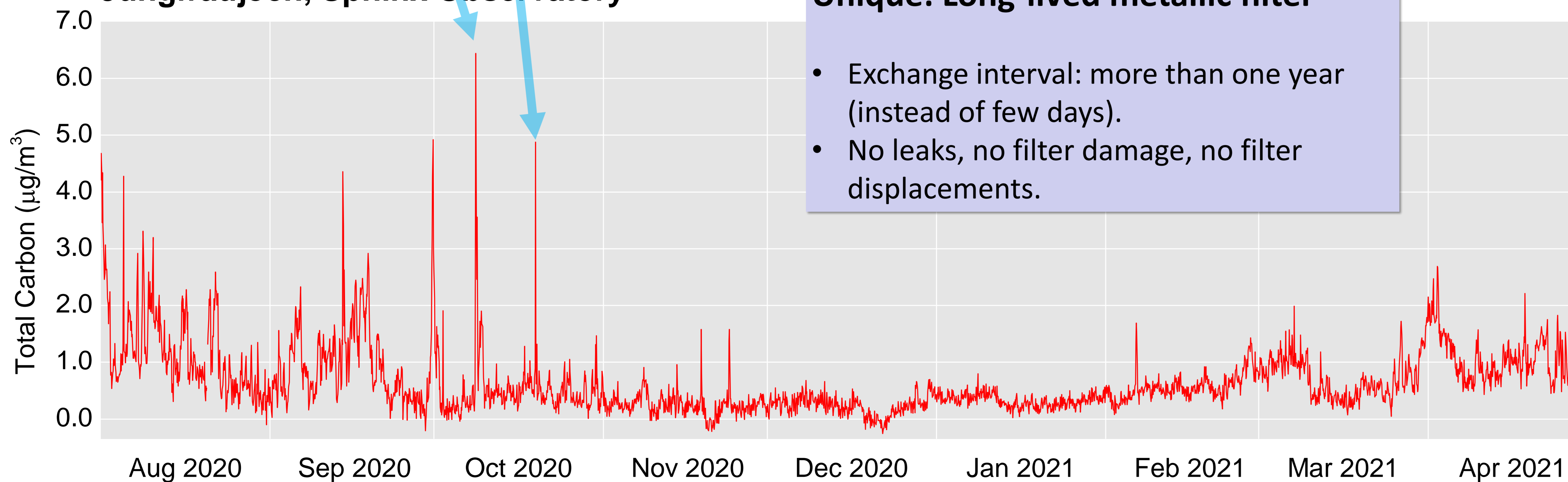
Dynamic range: > 10³ μg-C

Sampling flowrate: ≤ 0.6 m³/hour

The low limit of detection (LoD) makes our device the **most precise total carbon measuring system currently available**. For ambient samples, this LoD translates to concentrations of 0.08 μg-C/m³ and 0.16 μg-C/m³ for a time resolution of two and one hours, respectively.

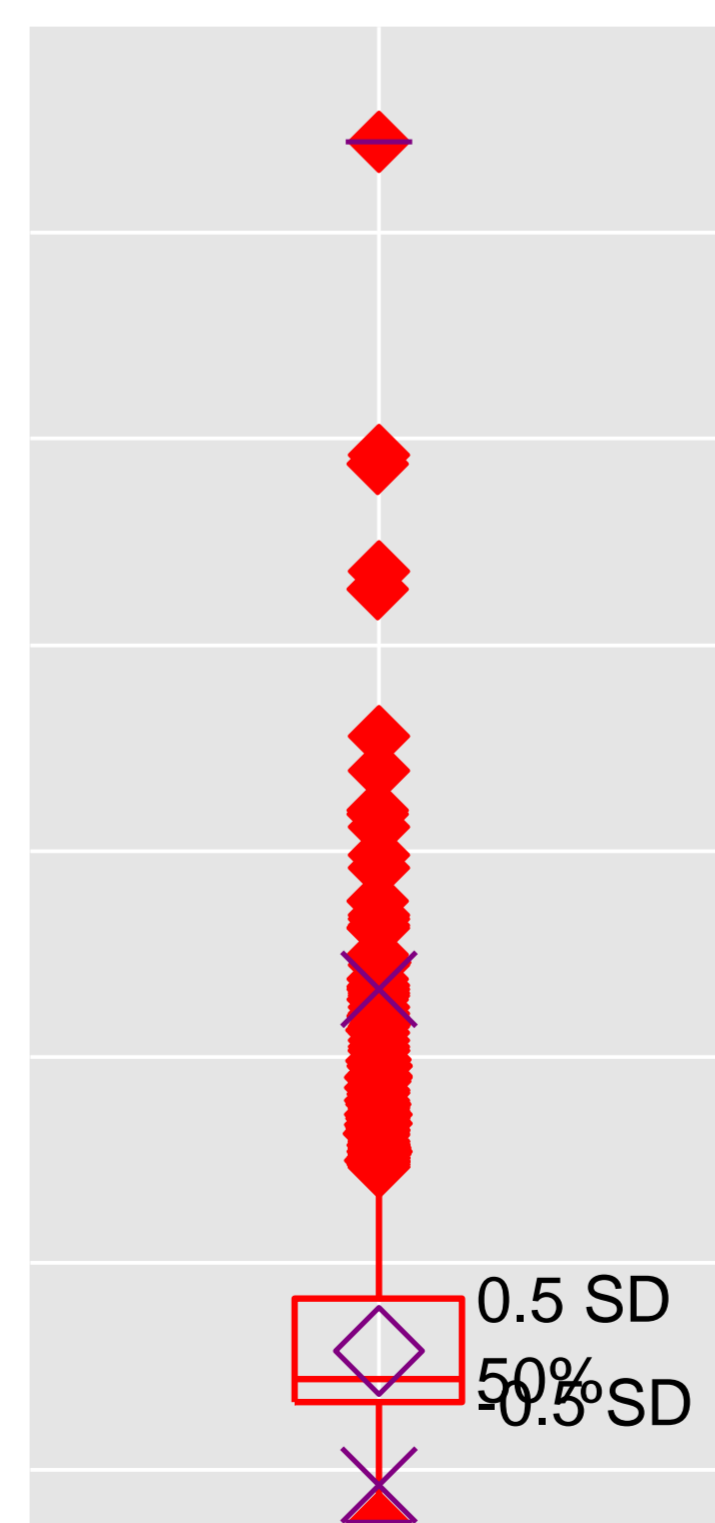
For the JFJ site LoD= 0.14 μg-C/m³ with two hours time resolution.

Jungfrauoch, Sphinx Observatory



Unique: Long-lived metallic filter

- Exchange interval: more than one year (instead of few days).
- No leaks, no filter damage, no filter displacements.



GAW-CH Science Projects 2018-2021

The fast thermal carbon totalizer (FATCAT)



New Instrument!
Developed @ FHNW

Tested at diverse sites:

- 1) Urban roadside (Zurich)
- 2) Urban background (Windisch)
- 3) Regional background (Payerne)
- 4) Above the planetary boundary layer (Jungfrauoch; 3500 m.a.s.l.)

