First Results

David Tschan

21.07.2026

Fe-Cit CWFTR Experiments

CWFTR so far...

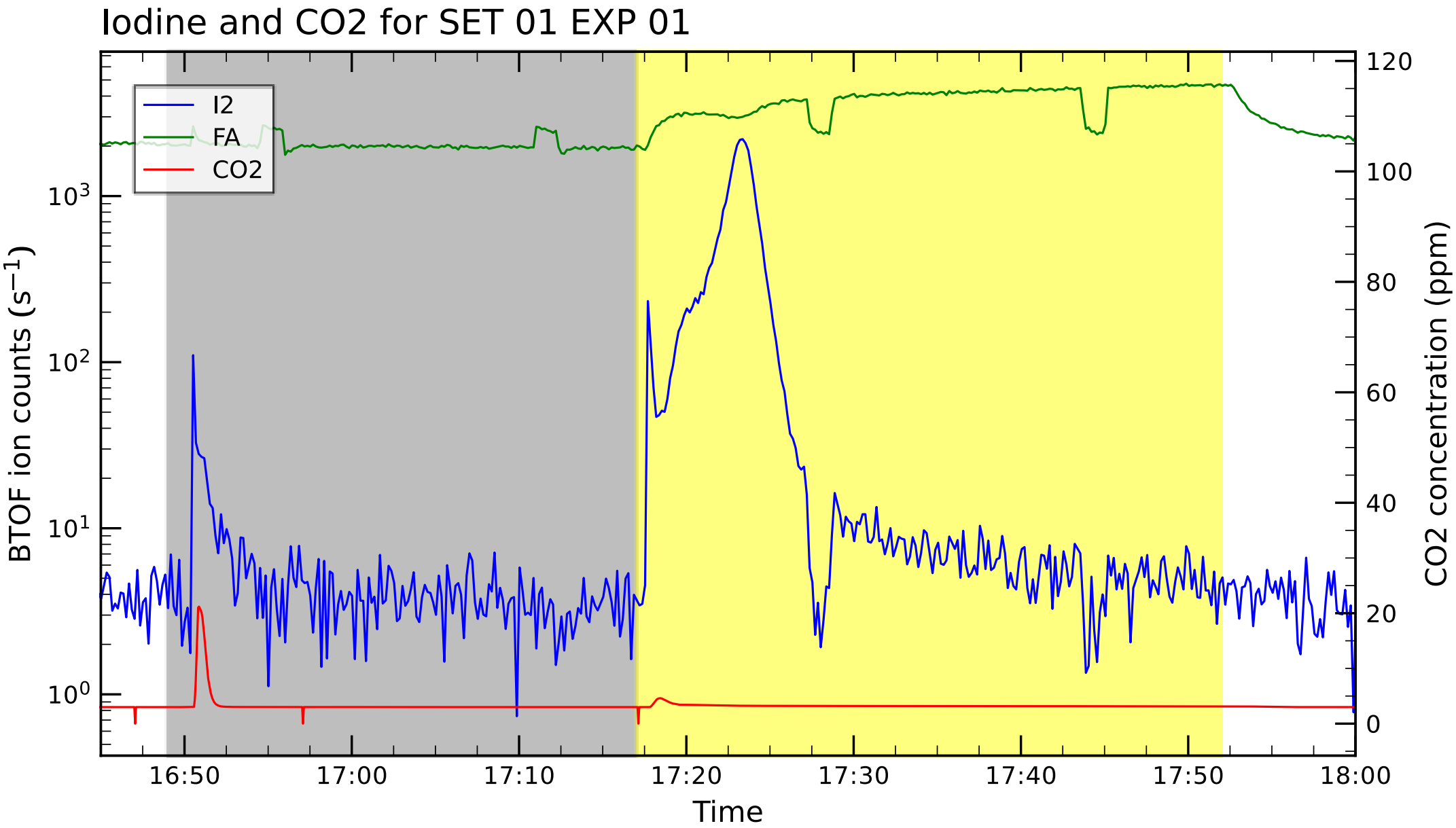
Date	Exp.	System	Molar Ratios	N2/O2	Parameter
20.05.2026	SET01EXP01	FeCit/CA/$NaIO_3$	8/761/1	1300/300	Fe/Iod Ratio
22.05.2026	SET01EXP02	FeCit/CA/$NaIO_3$	8/761/1	1300/300	Fe/Iod Ratio
27.05.2026	SET01EXP03	FeCit/CA/$NaIO_3$	11/1100/1	1300/346	Fe/Iod Ratio
29.05.2026	SET01EXP04	FeCit/CA/$NaIO_3$	11/1100/1	1300/346	Fe/Iod Ratio
29.05.2026	SET01EXP05	FeCit/CA/$NaIO_3$	11/1100/1	1646/0	O2
05.06.2026	SET01EXP06	$Fe_2(SO_4)_3$/CA/$NaIO_3$	4/900/1	1300/346	Fe Species
08.06.2026	SET01EXP07	$Fe_2(SO_4)_3$/Ca/$NaIO_3$	4/824/1	1300/346	Fe Species
08.06.2026	SET01EXP08	$Fe_2(SO_4)_3$/CA/$NaIO_3$	4/824/1	1646/0	O2
16.07.2026	SET01EXP09	$FeSO_4$/CA/$NaIO_3$	7/761/1	1300/346	Fe Species

CWFTR so far...

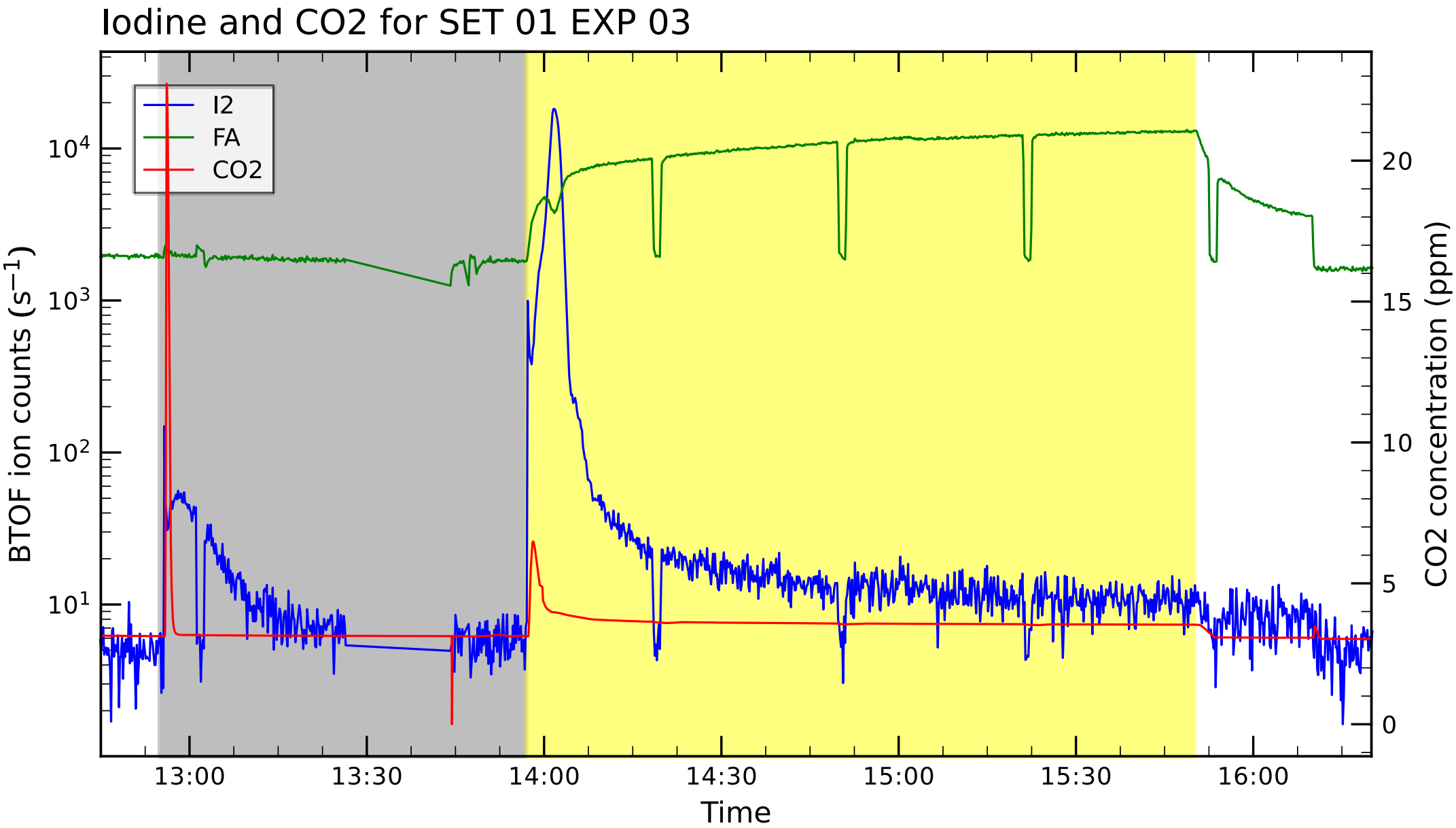
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16.07.2026	SET01EXP09	$FeSO_4$/CA/$NaIO_3$	7/761/1	1300/346	Fe Species

Results are from non-processed data!!

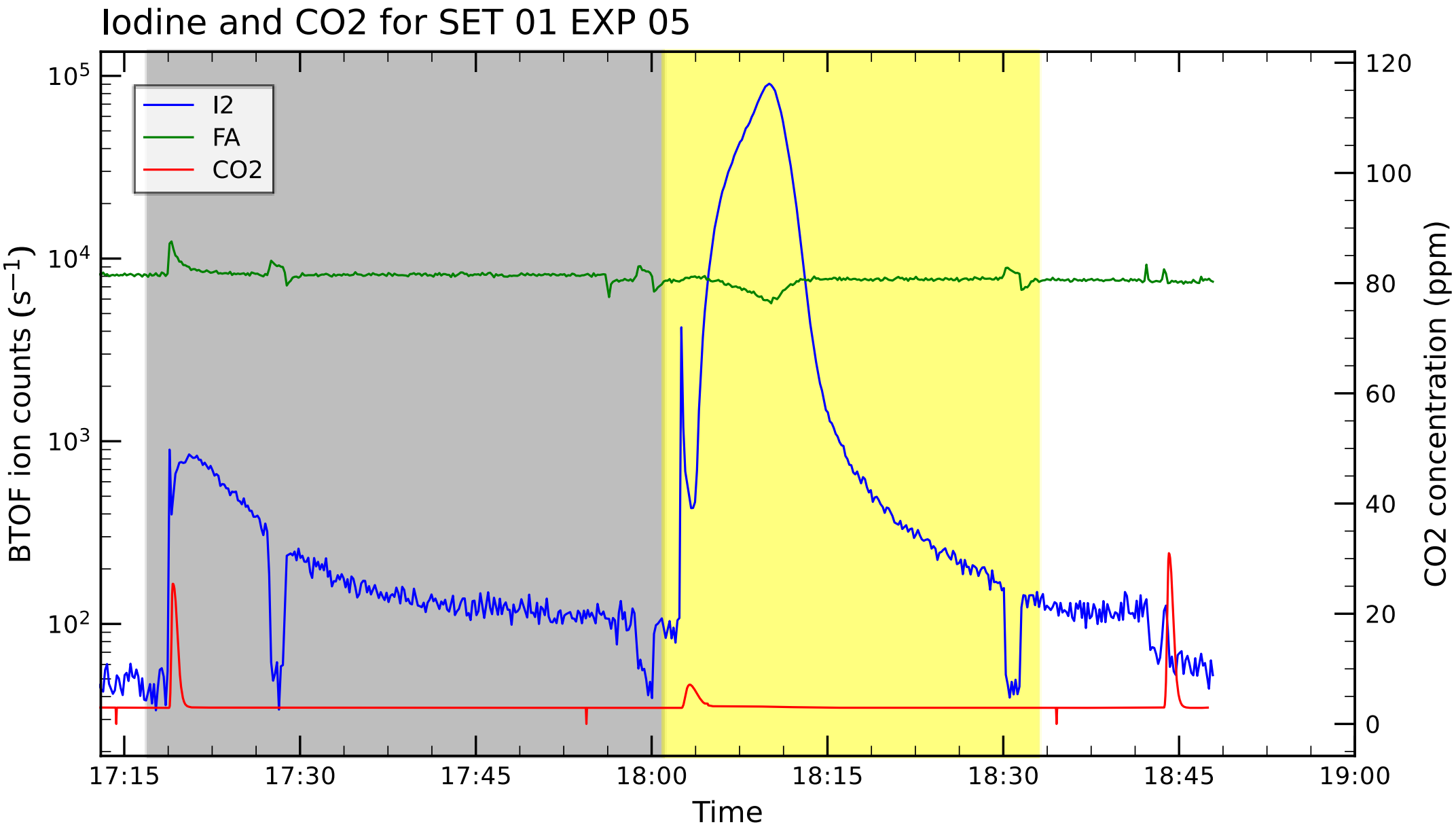
FeCit/CA/NaIO3 @ 8/761/1 @ N2/O2 1.3/0.3 lpm



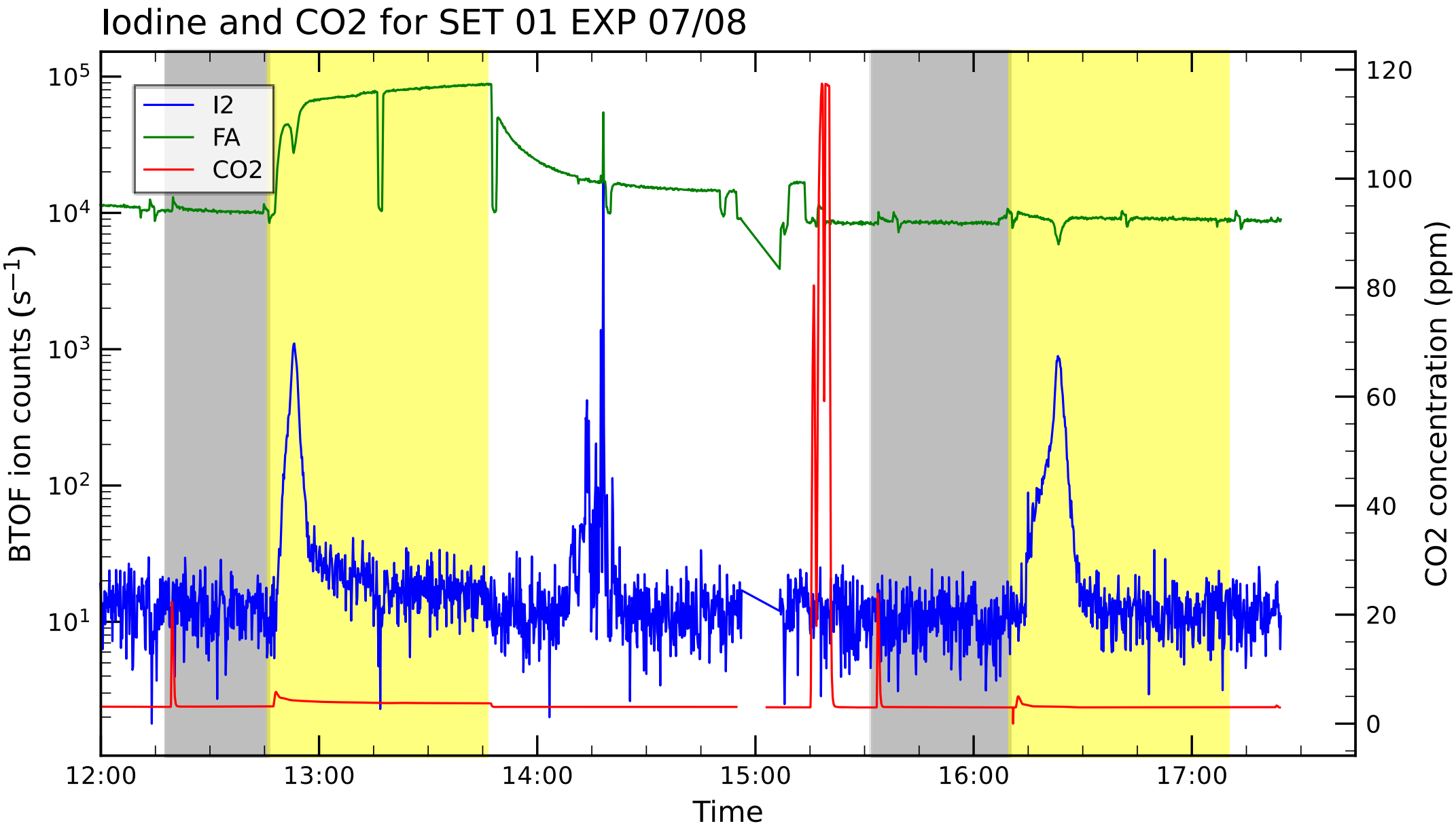
FeCit/CA/NaIO3 @ **11/1100/1** @ N2/O2 **1.3/0.346** lpm



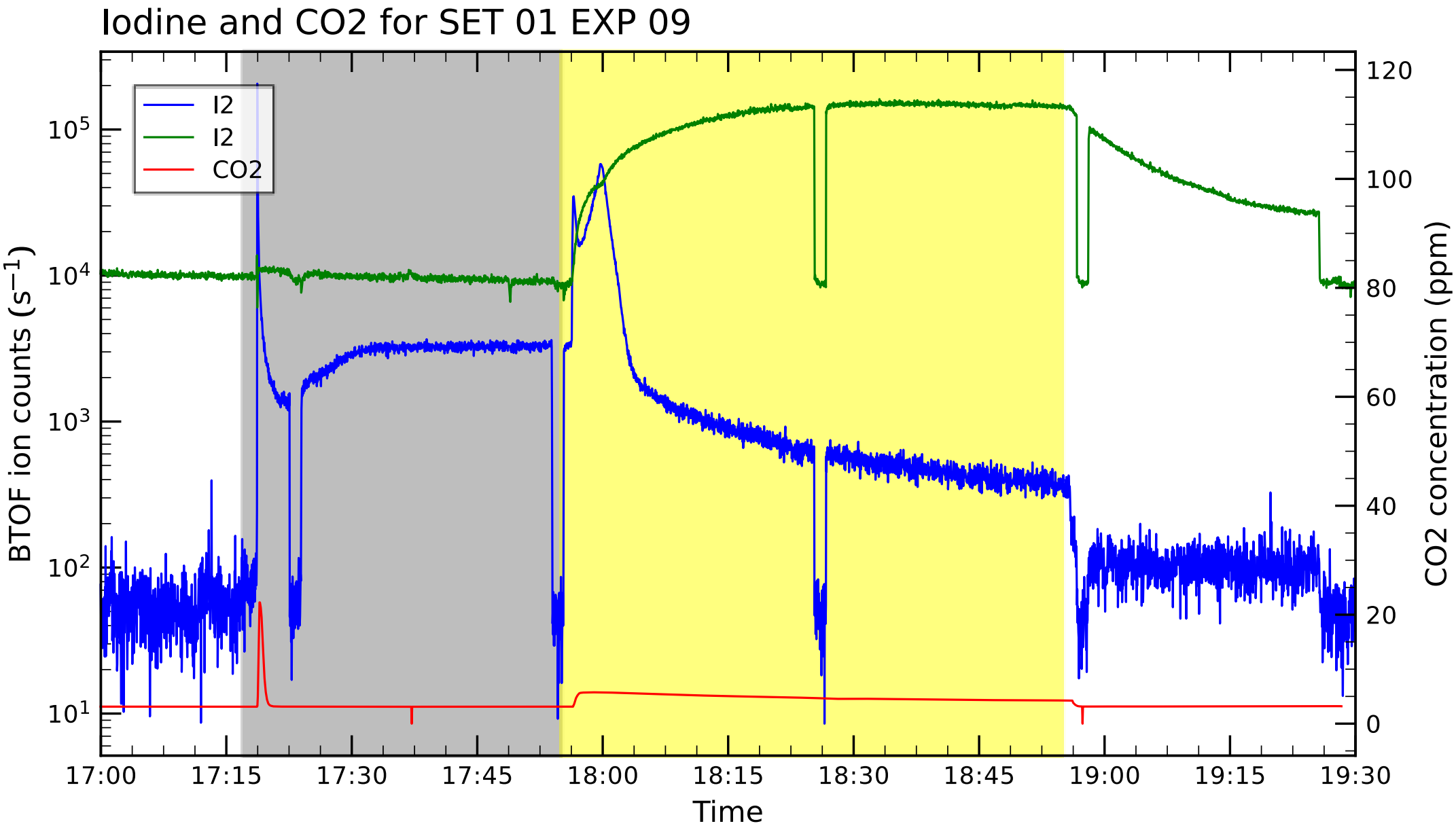
FeCit/CA/NaIO3 @ 11/1100/1 @ N2/O2 **1.646/0.0** lpm



Fe2(SO4)3/Ca/NaIO3 @ 4/824/1 @ N2/O2 (**1.3** / **1.6**) / (**0.3** / **0**) lpm



FeSO4/CA/NaIO3 @ 7/761/1 @ N2/O2 1.3 / 0.346 lpm

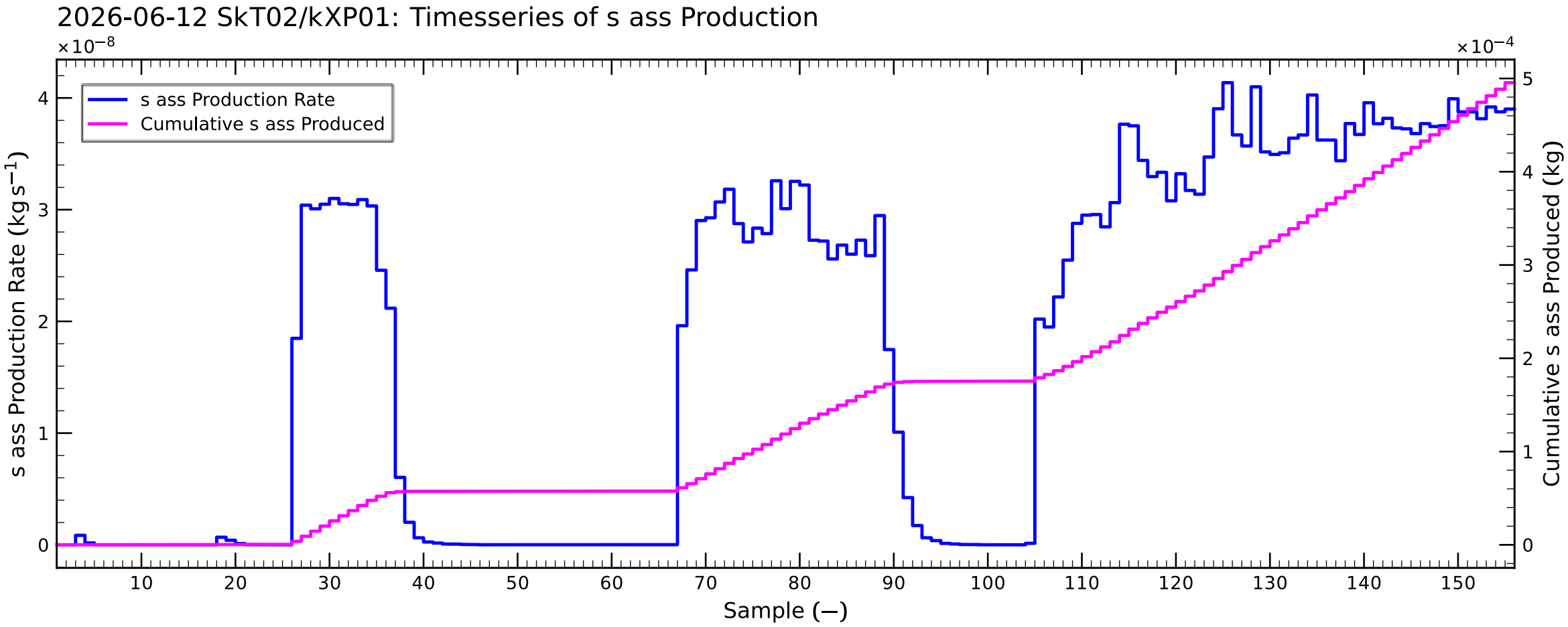


OFR SOA Production

OFR Samples

Date	Filter	Substance	Runtime	TOC (ppm)
10.06.2026	20260610_aPinene	a-Pinene		
11.06.2026	20260611_aPinene	a-Pinene		
12.06.2026	20260612_aPinene	a_Pinene		
02.07.2026	20260712_aPinene	a-Pinene		
03.07.2026	20260703_aPinene	a-Pinene		
09.07.2026	20260709_aPinene	a-Pinene	~ 30 h	
13.07.2026	20260713_aPinene	a-Pinene		

Documentation to be completed…


2026-06-12 SkT02/kXP01: Timesseries of s ass Production
×10⁻⁸
×10⁻⁴
s ass Production Rate
Cumulative s ass Produced
s ass Production Rate (kg s⁻¹)
Cumulative s ass Produced (kg)
Sample (—)
0
1
2
3
4
5
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150

Other things done so far

Things done / struggles

- Documentation & Project Management
  - Time consuming
- Finding my way in the lab
- Setting up my workflows

… I’m getting there!

Next steps

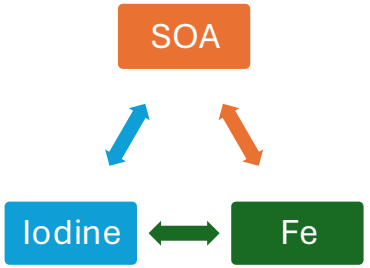
… vacation (13.08 – 30.08). Until then: 3 w

CWFTR

- FeCit – Iodine experiments:
  - 3 Compositions / 3 Repeats
  - Properly analysed and documented

OFR / SOA tests

- SOA trials:
  - TOC measurements
  - b-Pinene and
  - Triangle tests



Wrap Up Documentation of First Part!

After vacation

- Systematic SOA CWFTR Experiments
- Until mid-October
- Then: writing & finishing up
- Goals:
  - Characterise triangle
  - Calibrate BTOF with I2 source
  - (Vary 1…2 parameters. Let's see, 1 parameter variation at 3 reps amounts to 9…12 Experiments = 1.5 weeks of lab… if there is enough time)

