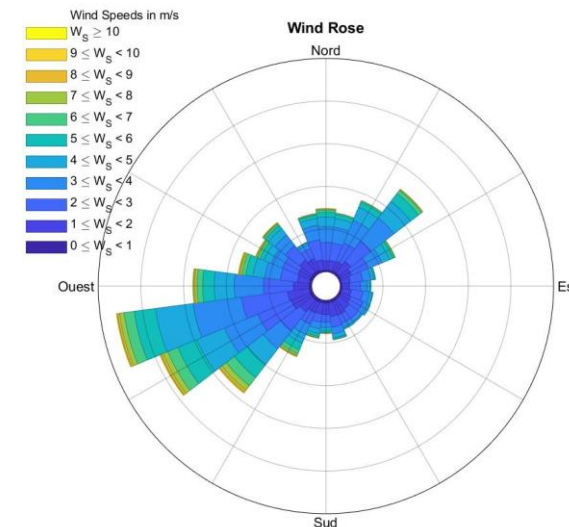




- Station SIRTa : Peri-urban site, south-west from Paris
- Paris region : ~ 20% of French population
- Several potential local sources (trafic, residential, building work...)
- continental/Paris (North-east) air masses or oceanic (West, South-West) air masses / dominant





## Measured since 2020:

mass	compound(s)	mass	compound(s)	mass	compound(s)	mass	compound(s)
31	Formaldehyde	58	Allylamine	75	Methylacetate	99	<b>Furandione</b>
33	<b>Methanol</b>	59	<b>Acetone</b>	79	<b>Benzene</b>	107	<b>C8-Aromatics</b>
42	<b>Acetonitrile</b>	60	Trimethylamine	81	MTs' fragments	111	<b>Benzenediol</b>
45	<b>Acetaldehyde</b>	61	Acetic acid	83	<b>Methylfuran</b>	121	<b>Trimethylbenzene</b>
46	Ethylamine/NO <sub>2</sub> <sup>+</sup>	63	DMS	85	<b>Methylbutanone</b>	137	<b>Monoterpenes</b>
47	Ethanol/Formic acid	69	<b>Isoprene/Furan</b>	87	<b>Butandione</b>	139	Nopinone
57	<b>Propenal</b>	71	<b>MVK/butenal</b>	93	<b>Toluene</b>	147	<b>Dichlorobenzene</b>
		73	<b>MEK/butanone</b>	97	<b>Furfural</b>	151	

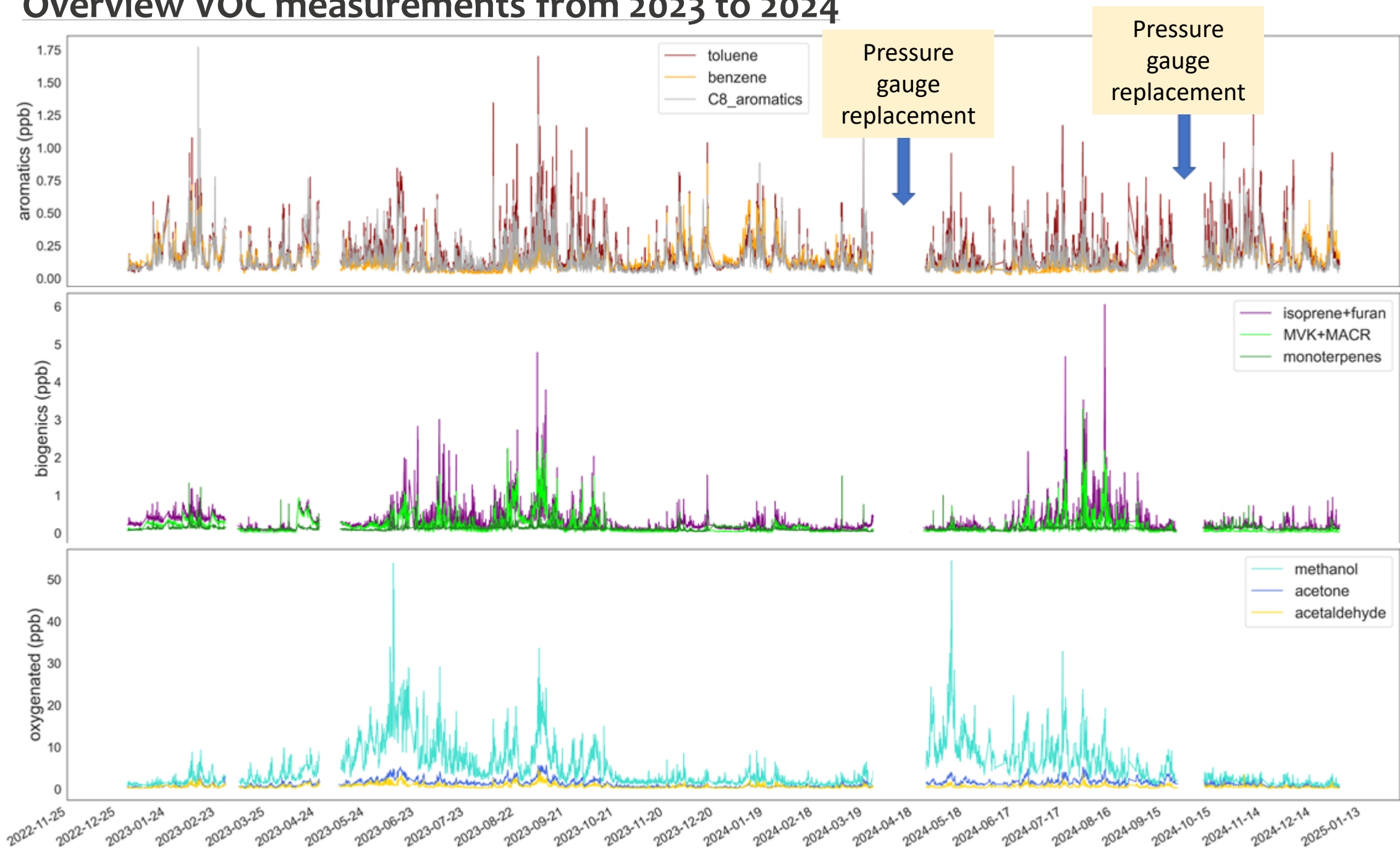
## 2024 technical news :

- Challenges with PTR-quad aging : the supplier might not be able to prevent maintenance in the future (problem with PKR gauge that cut some data)
- Calibration automation with the development of a MFC software linked to the valve program (by C. Boitel) for NRT (CAMS 2.1)

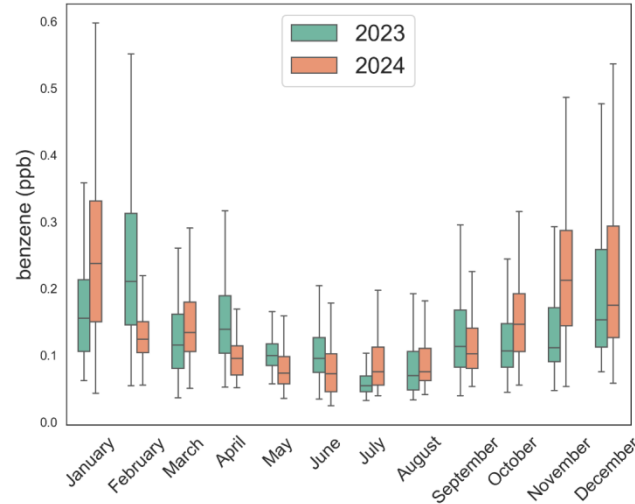
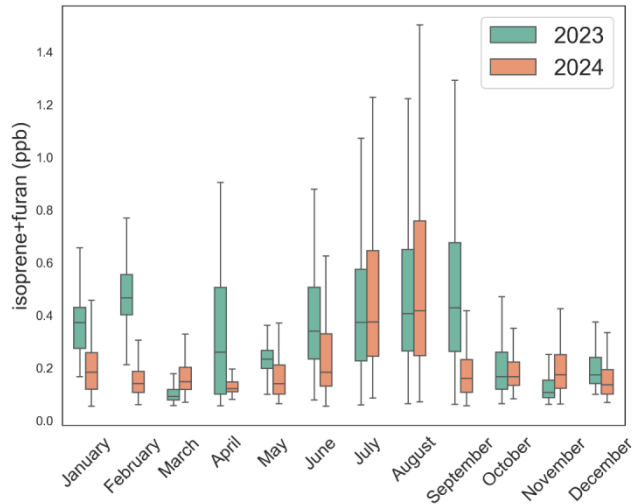
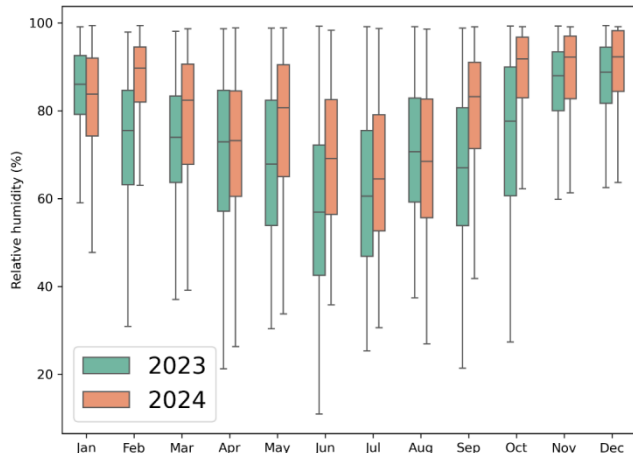
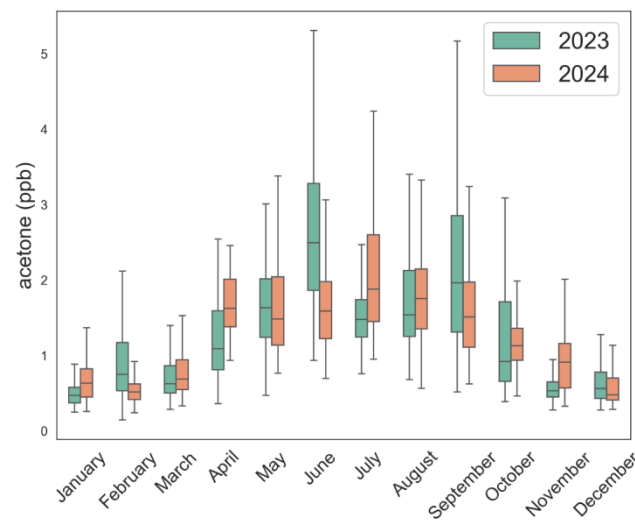
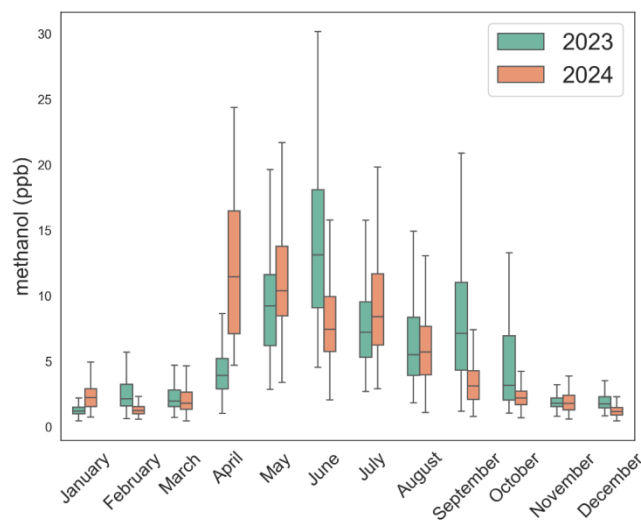
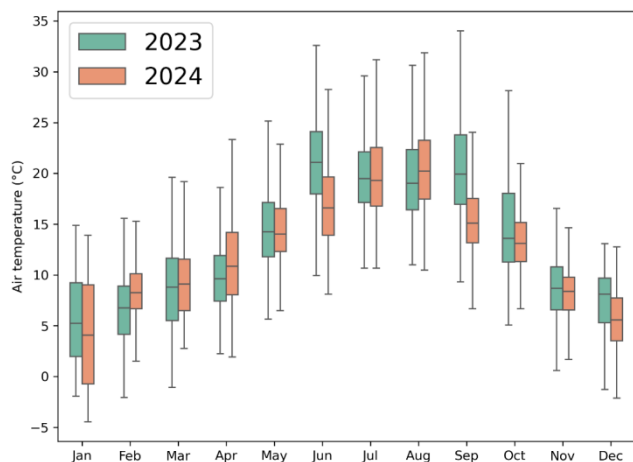




# Overview VOC measurements from 2023 to 2024



# Seasonal variability between 2023 & 2024



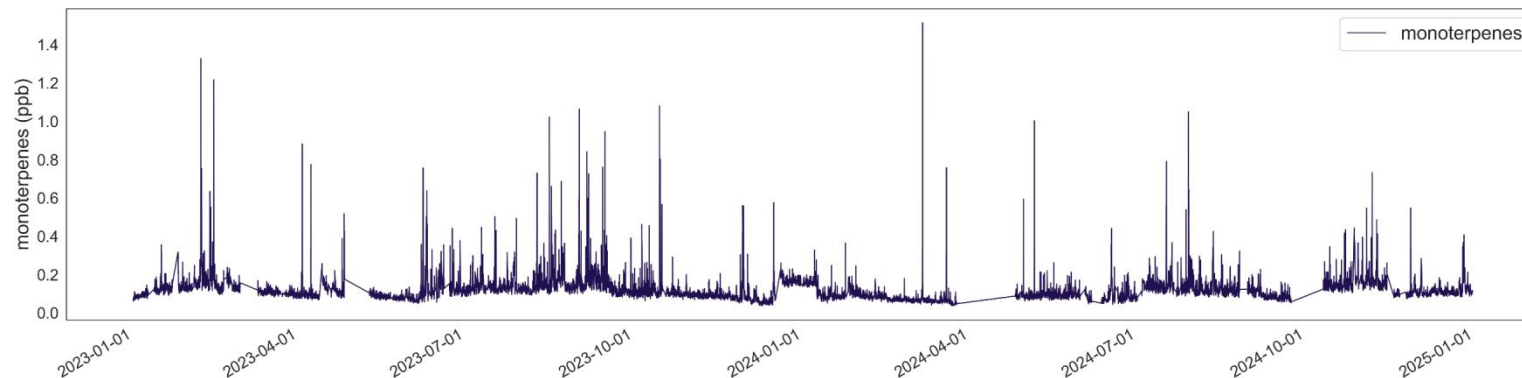
Seasonal cycle quite similar from one year to the other

Oxygenated compounds maximum in spring-summer (methanol is peaking earlier than acetone)

Aromatics compounds like benzene max in winter

Impact of Rainfall difference between June 2023/2024 to be studied

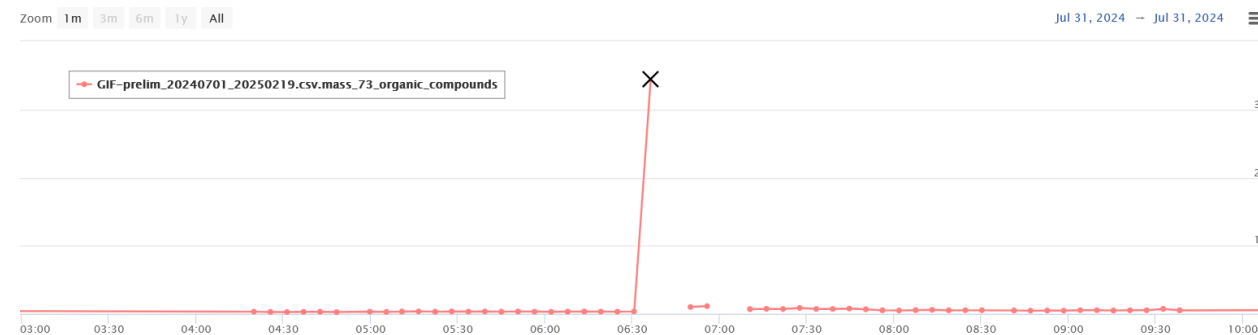
# Flags



Tendency on  
monoterpenes to show  
sharp spikes along the  
year => currently kept in  
the dataset



Defined peak with gaussian shape  
and sufficient duration =>  
atmospheric variability



Short and high amplitude spikes => certainly  
coming from hyper local /specific sources or  
unidentified mechanical problem, we think  
these data are not representative of our station  
and we have flagged them as invalid.

*More about flagging in Mantis issue 0005880*

# Perspectives for 2025

- Continuation of CAMS 21-a project
- Upgrade plan for ACTRIS labelling:
  - Measurement line height to be increased (2m above the roof), so we consider changing the current PFA line by Silconert one.
  - Secondary standard (target) to be measured weekly
  - Requalification of NPL standard (IMT)
- Focus on PTR-TOF 1000 data treatment – deployment on Integreen campaign in Paris (June-July 2025) and then maybe for long-term measurement at Sirta station

## Acknowledgements

We thank Aurélien Chauvigné (AERIS) for helping with data submission

