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Measurement Campaign RACLET – Exploring the Composition and Reactivity of Organic Matter in Cloud Conditions

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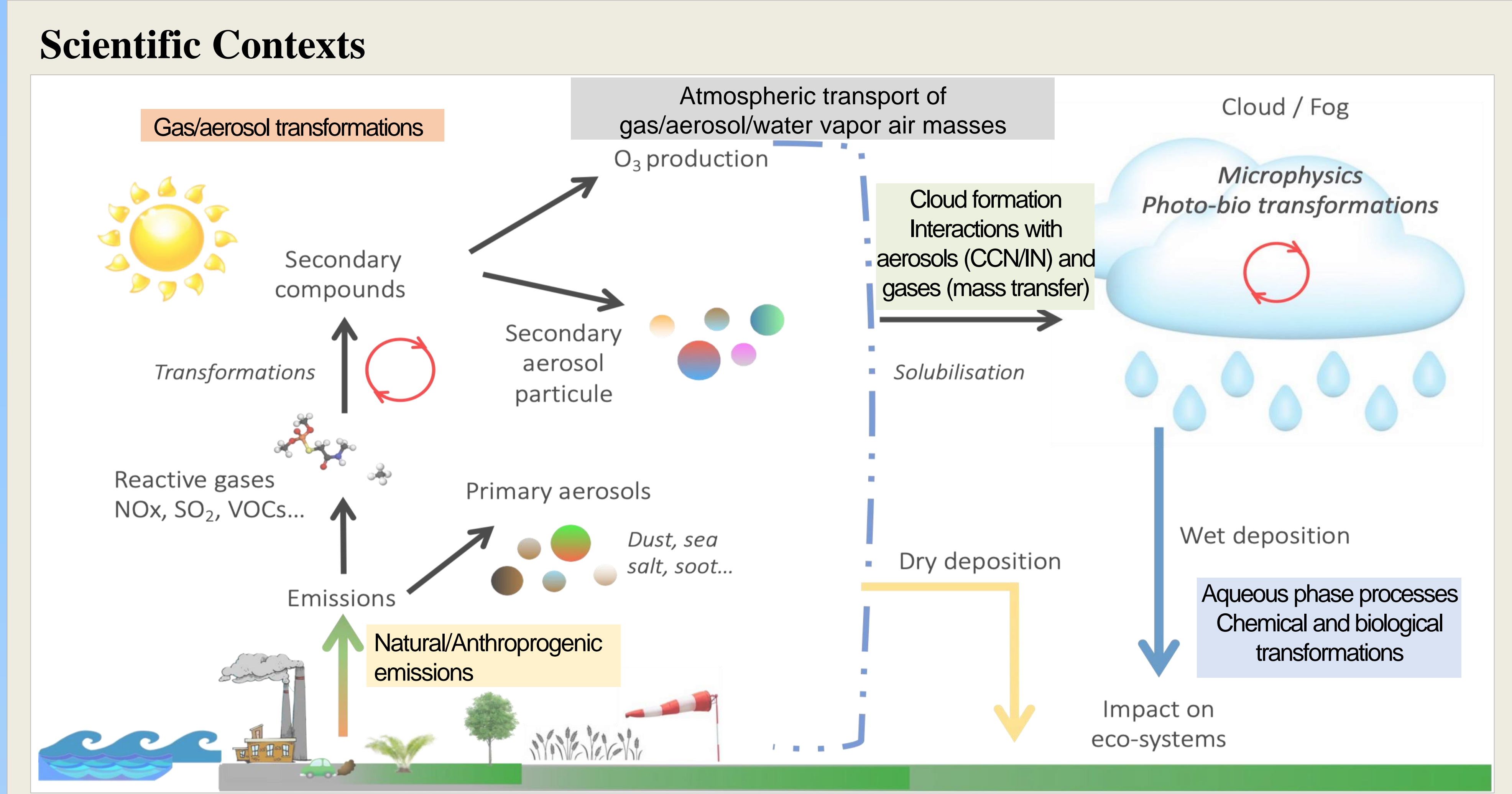


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Objectives of the project

RACLET: Reactive gases, Aerosols and Clouds: Exploring organic matter Transformations
 From 1st April to 30th April 2024

- follow atmospheric organic matter in all its forms and to analyze its environmental variability over the duration of the measurement campaign
- better understand how organic matter is distributed between the different phases during a cloud event (gas, aerosol, aqueous phase) and how these compounds are modified in this multiphase environment



Implementations

The Cézéaux-Opme Puy De Dôme instrumented site

Aerosols Granulometries Chemistry Radiative In-situ, remote sensing	Clouds Microphysics Chemistry Microbiology
Gases Reactive gas Greenhouse gas	Meteorology Precipitations Dynamic Radiation
Wind tunnel Natural condition test center PDD train set	Radioactivity Aerosols/gases Clouds/rains

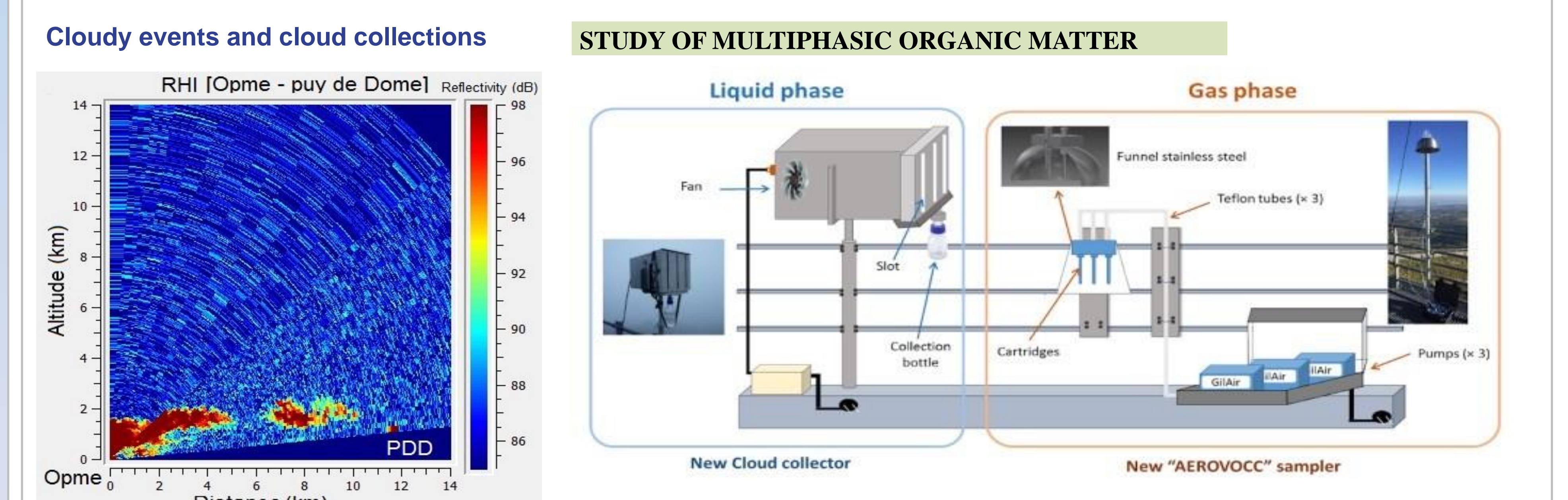
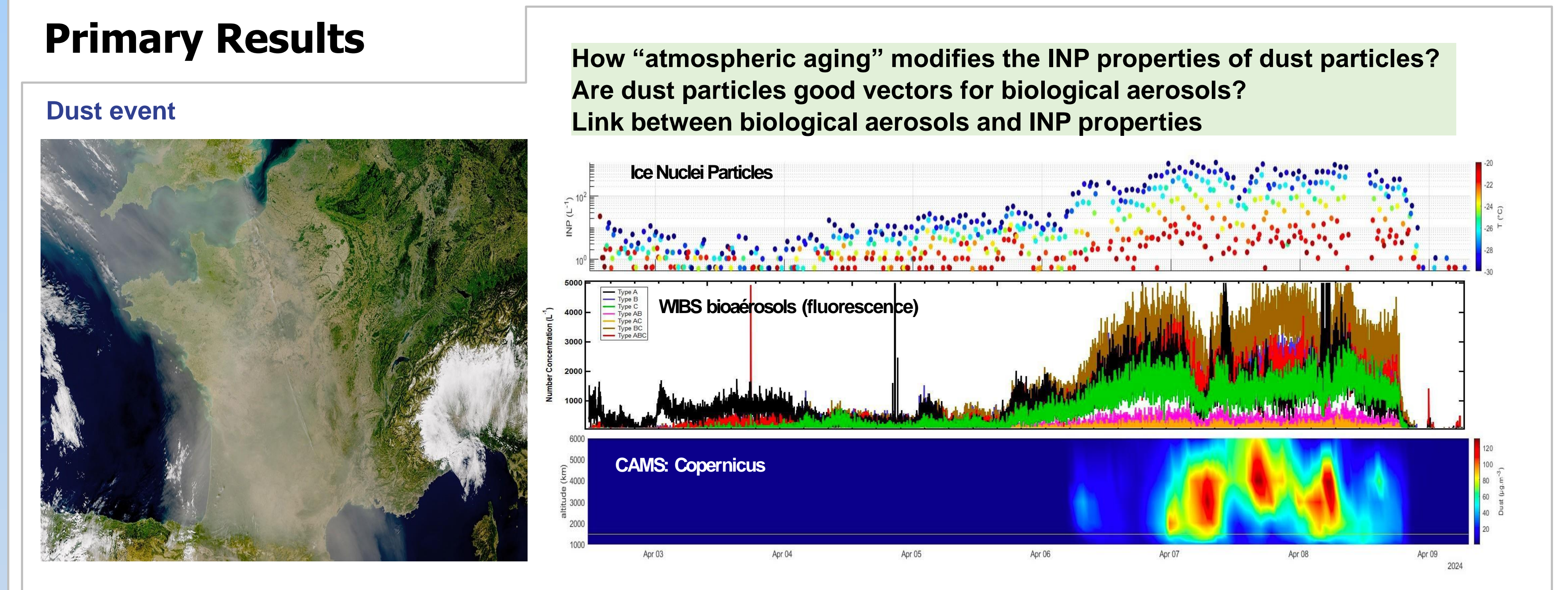
PDD (1465 m)
Station météo
Particules d'aérosols
Gaz réactifs et à effet de serre
Nuages
Radionucléides
Hygroscopicité
GPS

Cézéaux(410 m)
Radar X pluie et pluvio.
GPS
station météo
photomètre
Lidar

Opme (680 m)
Radar Vent, MRR
Radar Nuage,
Pluviomètre,
disdromètre,
Radionucléides
station météo, GPS

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References

[1] Baray, J.-L. *et al.* Cézéaux-Aulnat-Opme-Puy De Dôme: a multi-site for the long-term survey of the tropospheric composition and climate change. *Atmospheric Meas. Tech.* 13, 3413–3445 (2020).

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