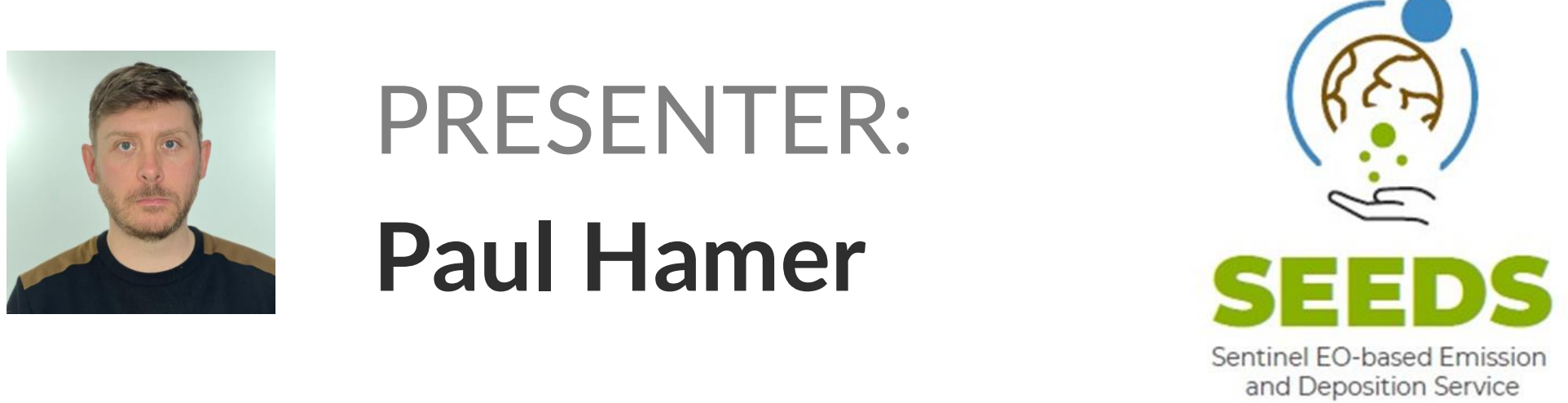


The Impact of Recent European Droughts and Heatwaves on Trace Gas Surface Fluxes: Insights from Land Surface Data Assimilation

Findings from the SEEDS Project

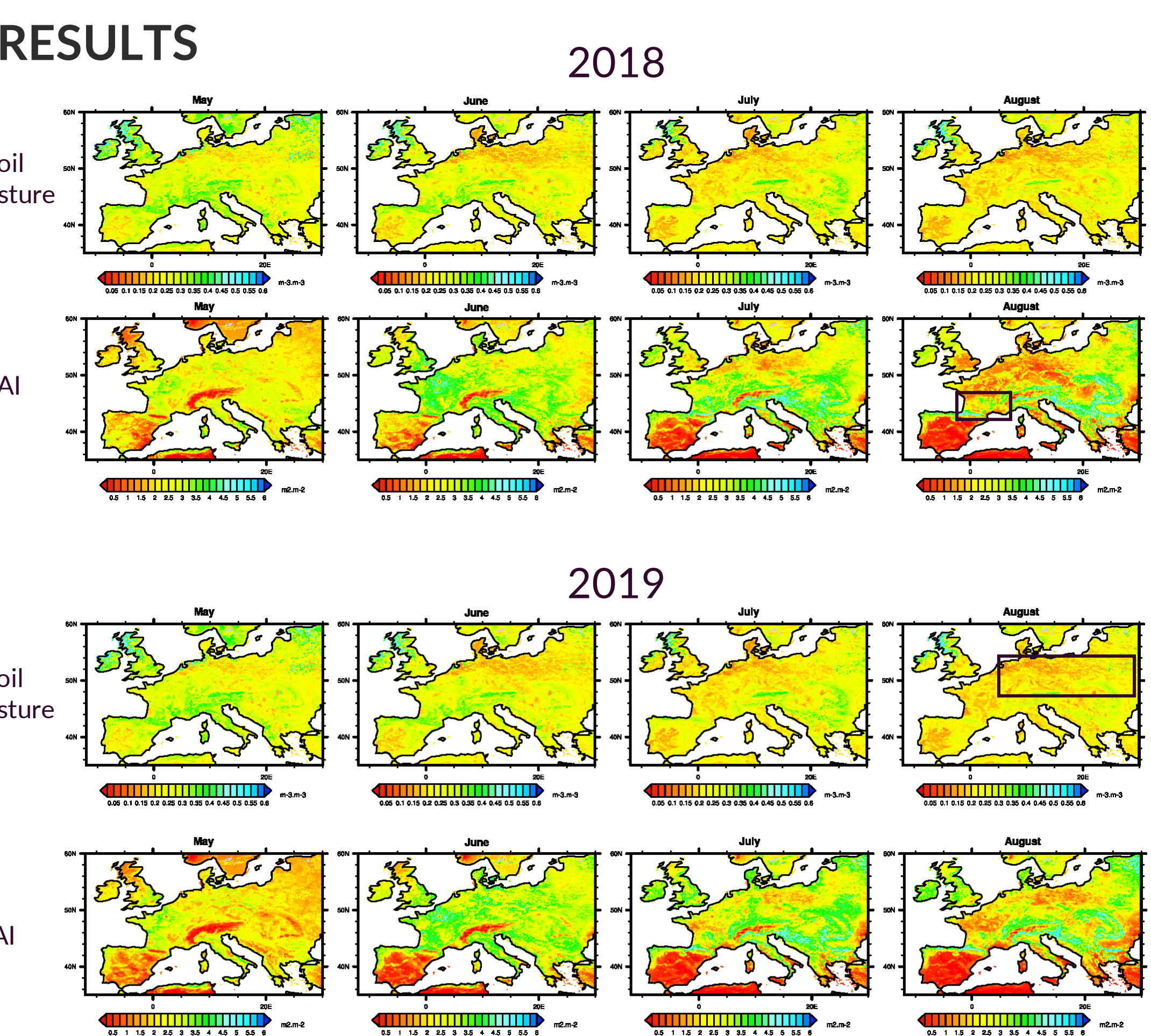
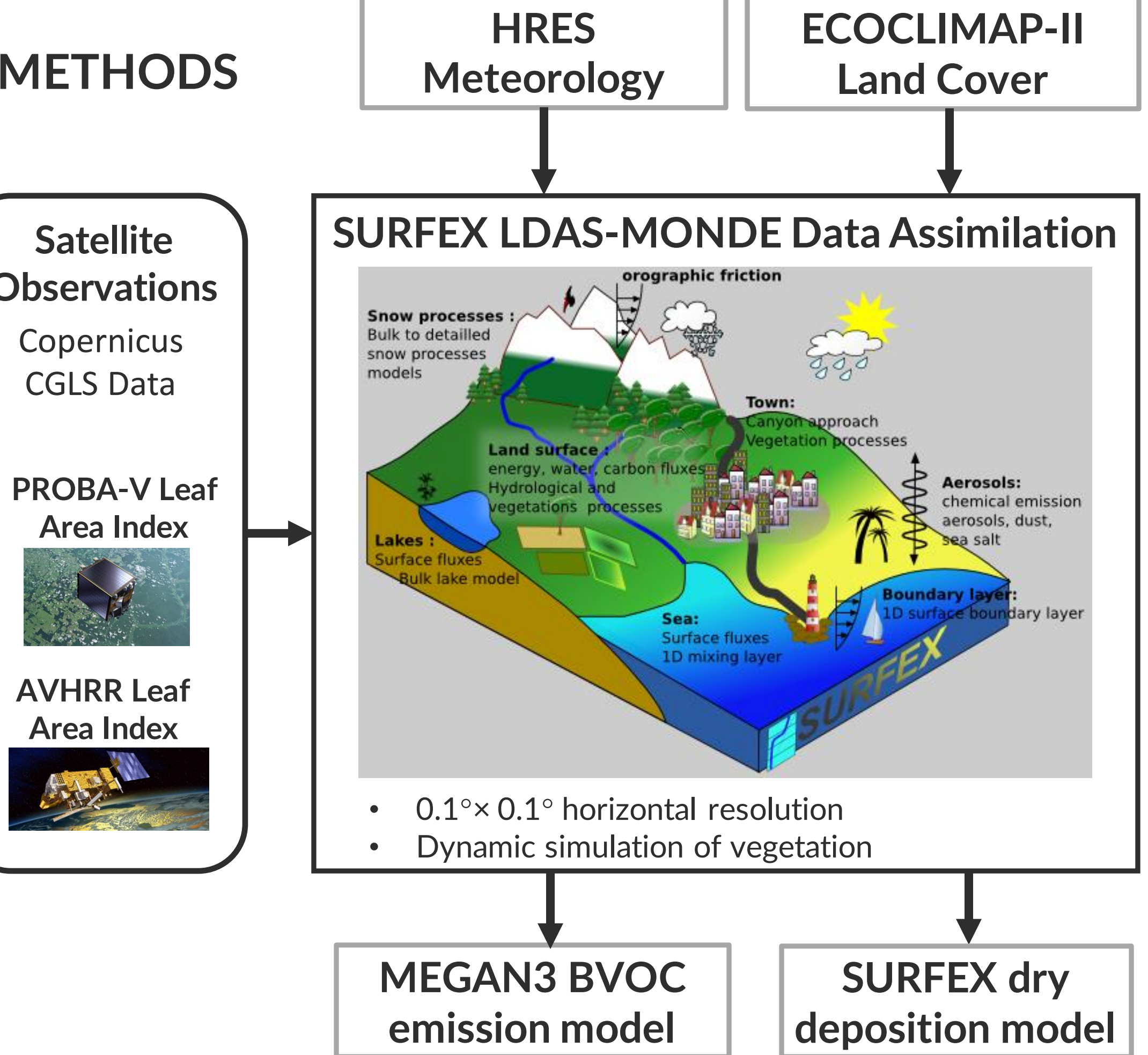


BACKGROUND: Land-atmosphere interactions have profound impacts on atmospheric composition, air quality and climate.

- Vegetation can control the dry deposition of reactive nitrogen and nutrients leading to eutrophication
- Vegetation emits biogenic volatile organic compounds
- Ozone deposition damages crops

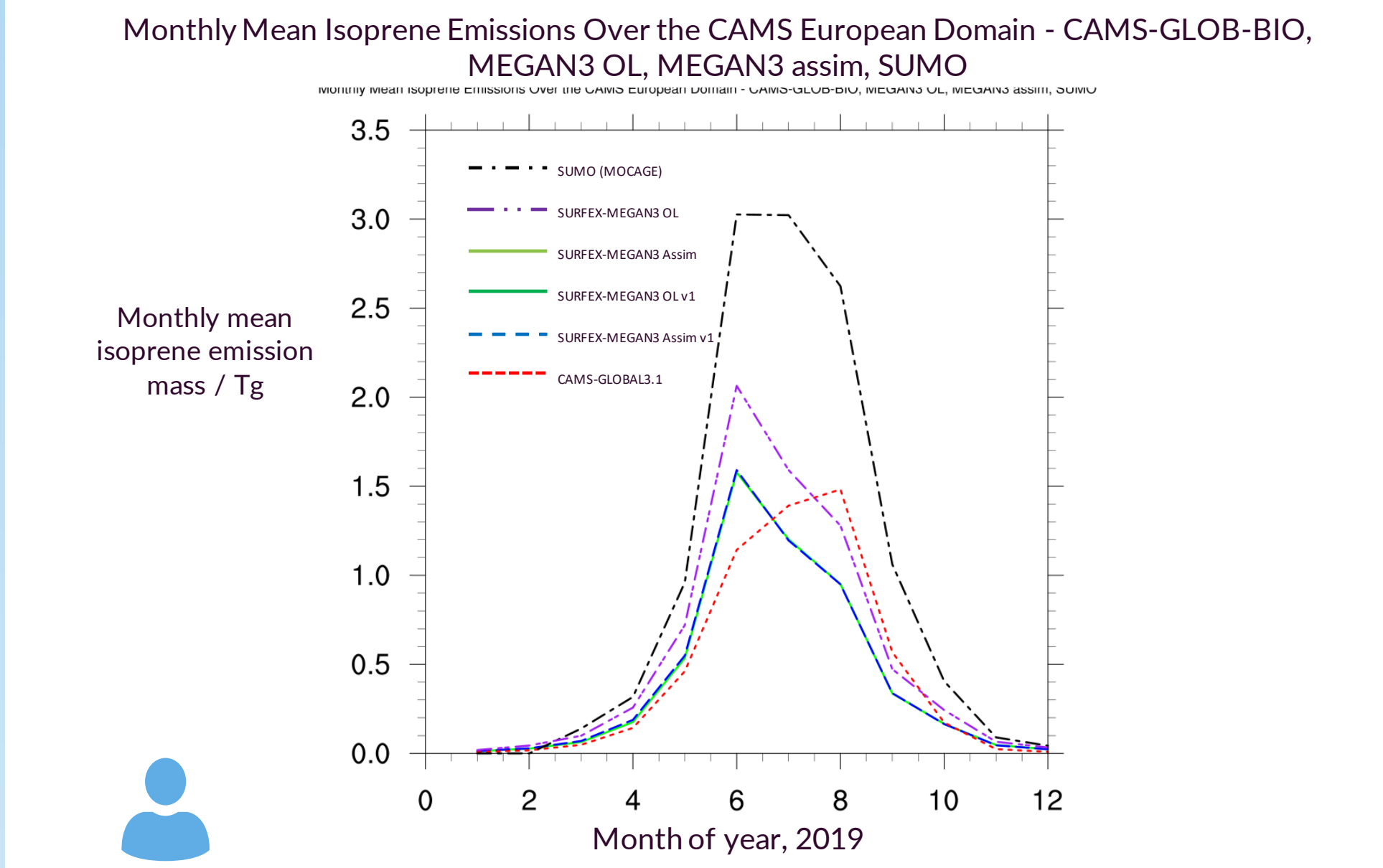
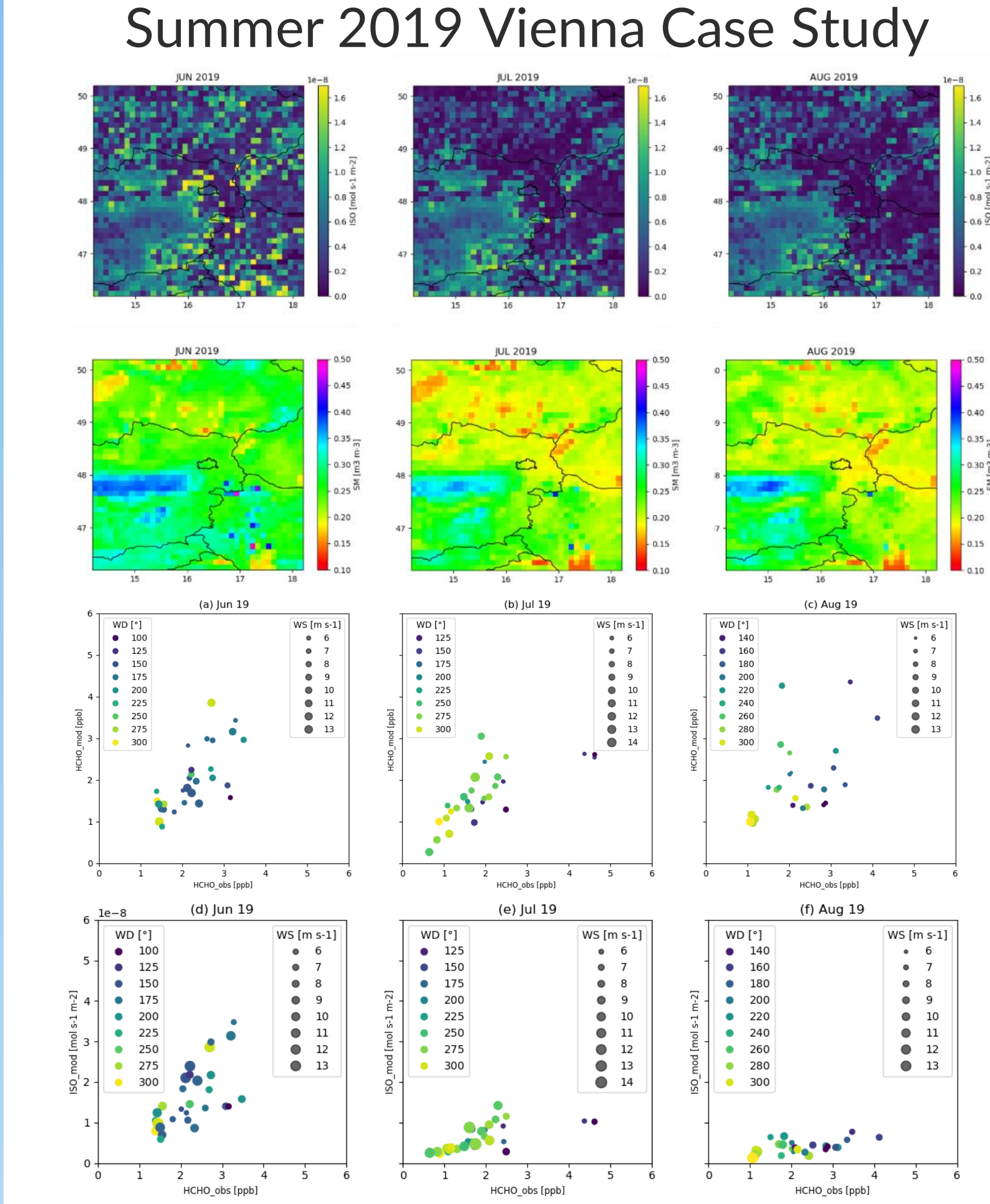
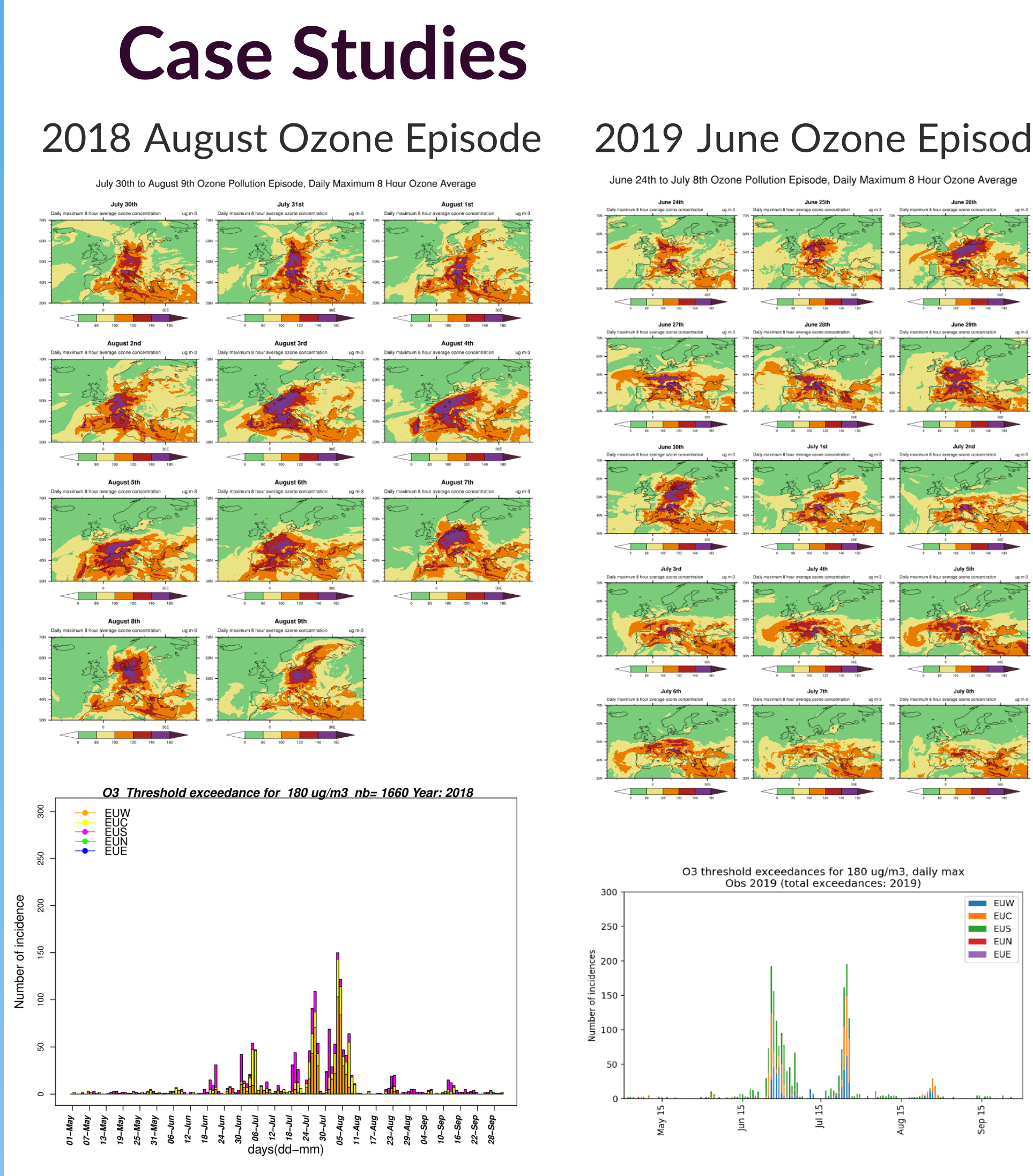
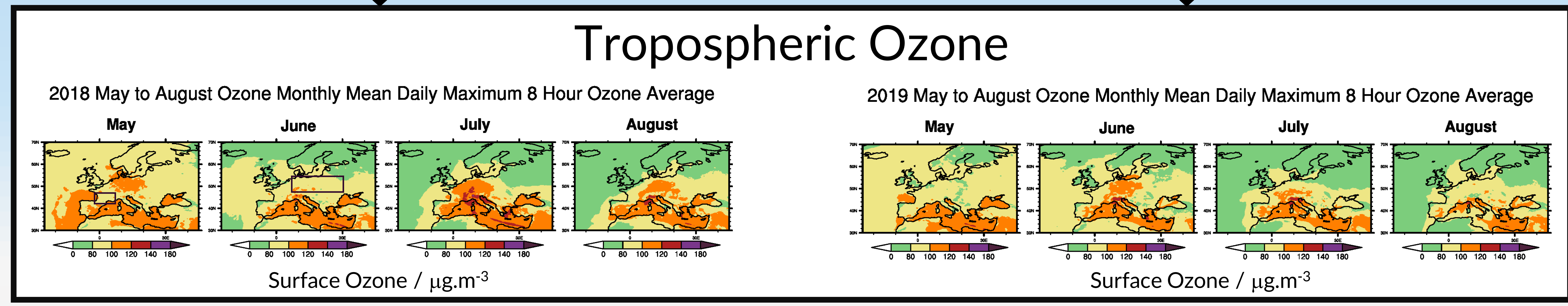
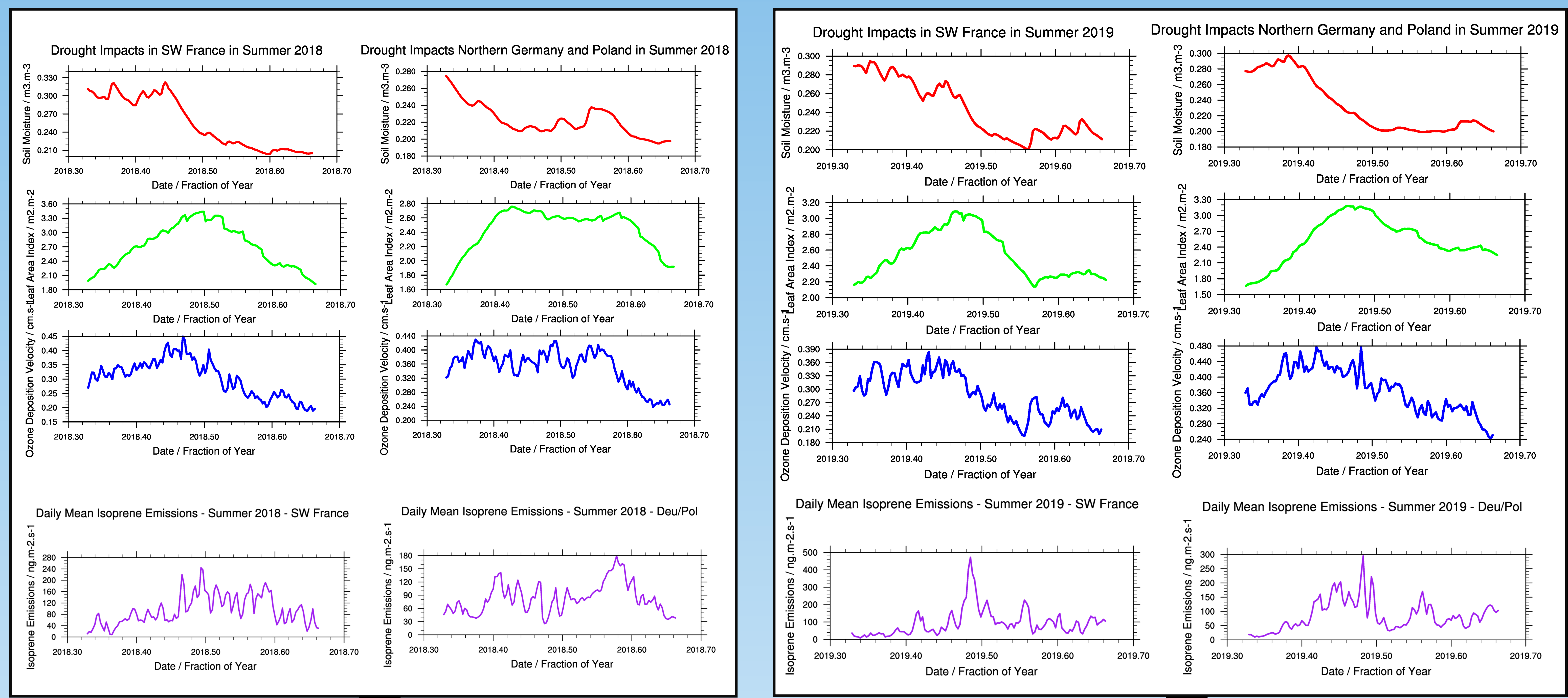
What role have recent heatwaves and droughts had in impacting these processes?

Have these processes impact ozone pollution episodes?



The 2018 and 2019 European droughts and heatwaves had profound impacts on atmospheric composition and air quality

2018 2019

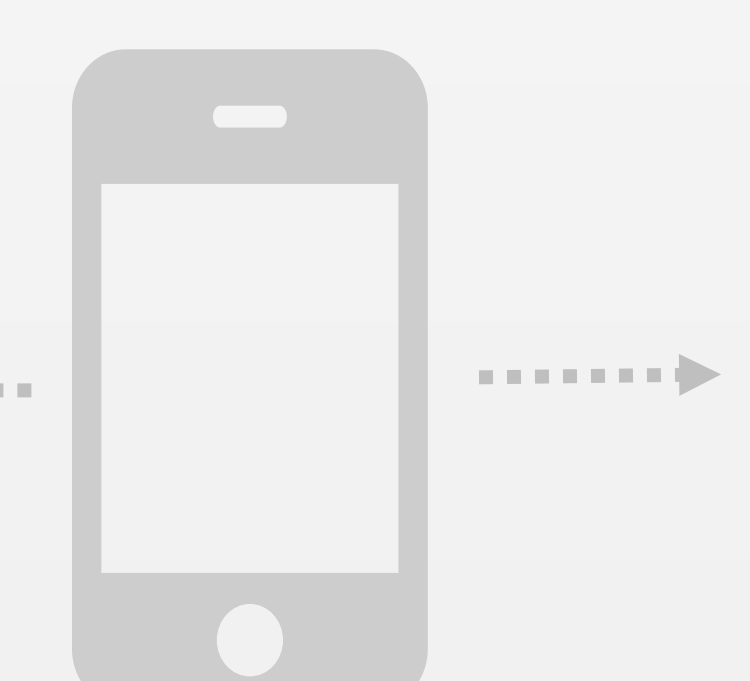


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