



# Initial findings from comparison of SPARTAN data with GEOS-Chem

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# Initial findings from comparison of SPARTAN data with GEOS-Chem



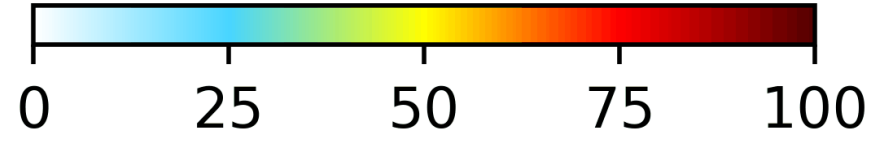
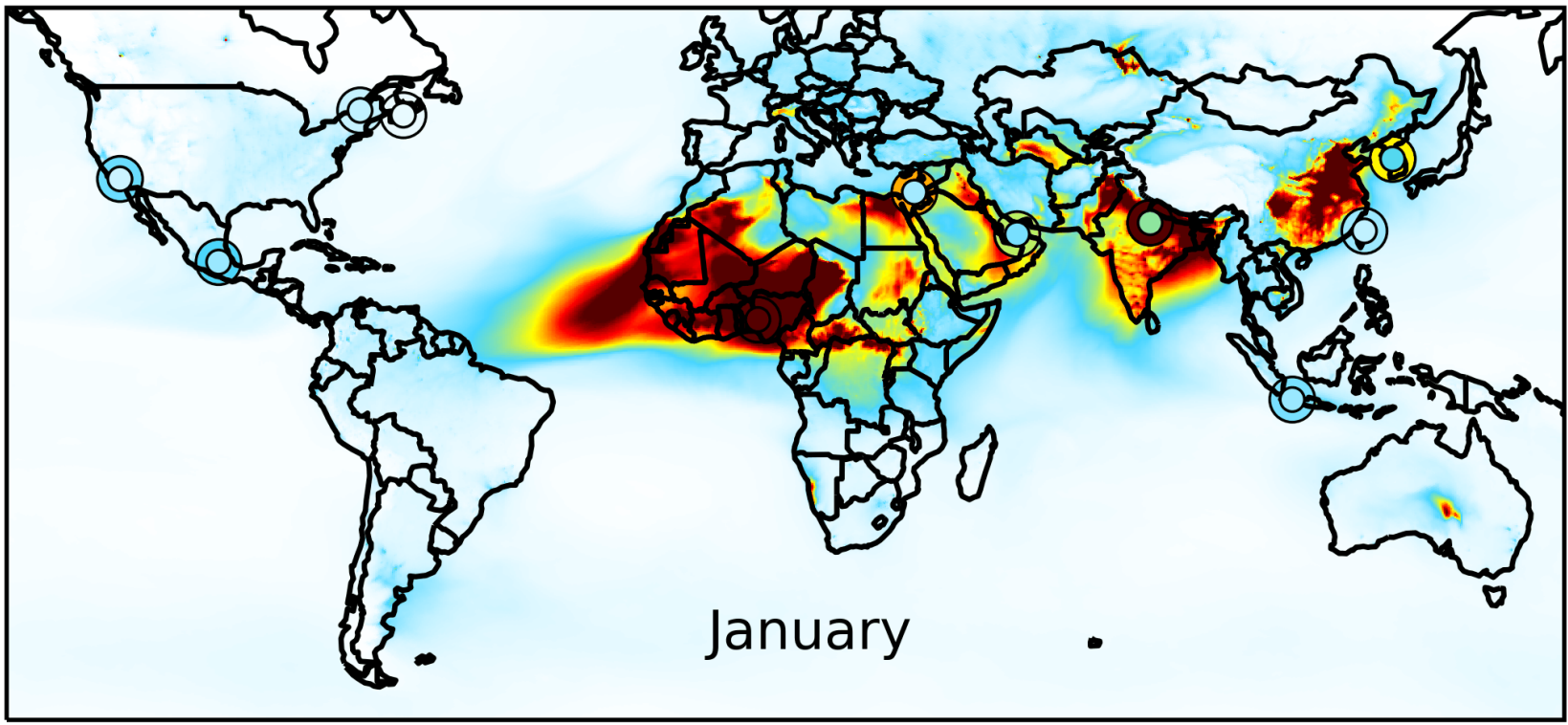
Atmospheric  
Composition  
Analysis  
Group

## Datasets:

- 1. GEOS-Chem High Performance (GCHP) v13.4.1 c360 in 2018 (monthly)
  - 2. SPARTAN in 2020-2022 (monthly)
- PM<sub>2.5</sub> monthly data are considered valid only when measurements cover more than 10 days (≥ 2 samples)

Outer ring: Simulation

Inner circle: SPARTAN



PM<sub>2.5</sub> concentrations (µg/m<sup>3</sup>)

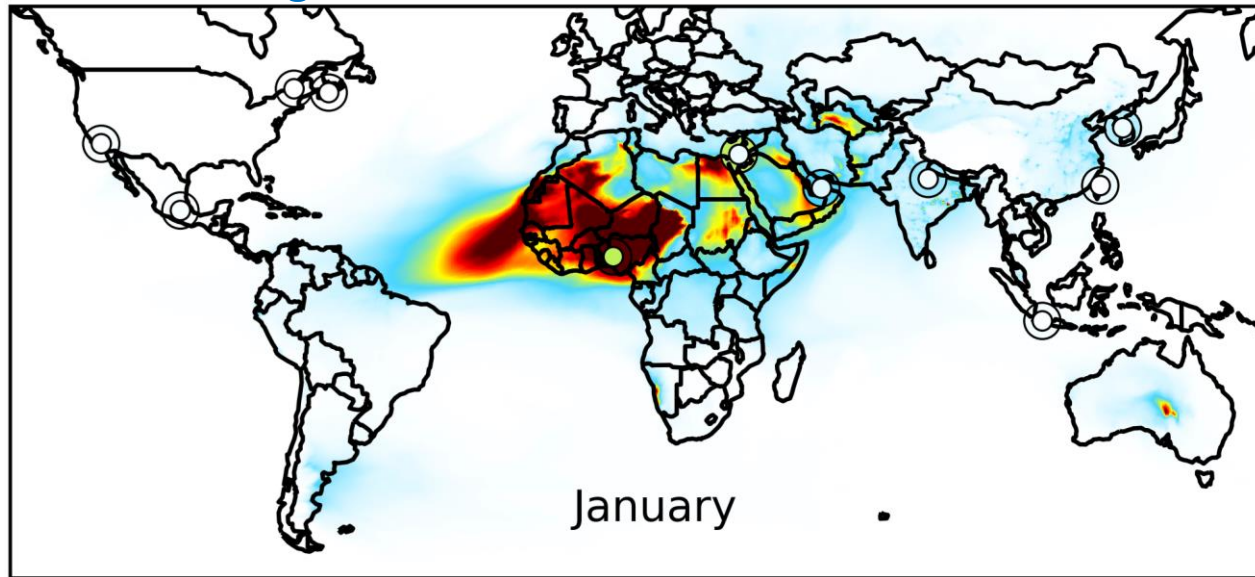
# Dust, Sulfate and Organics in PM<sub>2.5</sub>



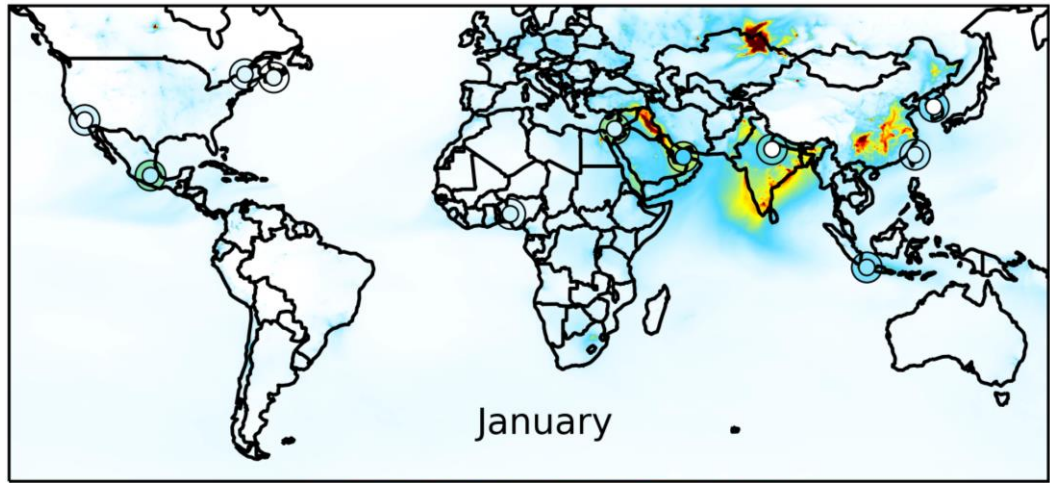
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Outer ring: Simulation

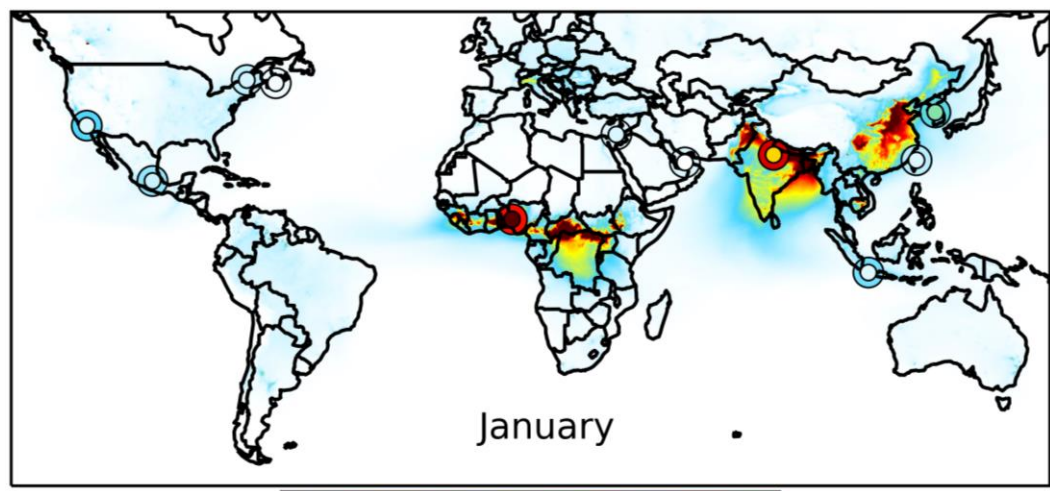
Inner circle: SPARTAN



0 25 50 75 100  
Dust concentrations ( $\mu\text{g}/\text{m}^3$ )



0 10 20  
Sulfate concentrations ( $\mu\text{g}/\text{m}^3$ )



0 20 40  
OA concentrations ( $\mu\text{g}/\text{m}^3$ )



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Thanks!