Diurnal evolution of atmospheric ammonia over the Paris megacity from the ground-based and satellite remote sensing
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Why do we care about ammonia (NH$_3$)?

Ammonia as fertilizer is used for food security

Eutrophication

Fish dying; algae bloom

Fine particle precursor (ammonium sulfate and nitrate)

Leaching

Volatil.

Measurement methods of ammonia

In-situ: Passive samplers, filter packs and denuders

Drawback: sampling, local representation

Remote Sensing:

- Ground-based: Diurnal evolution
- Satellite sounder: Global coverage
Agreement of OASIS and IASI diurnal evolution

PM$_{2.5}$ pollution outbreak (30-100 µg/m$^3$ for 24-hour mean)

Kutzner et al. in preparation.

Next steps

• Incorporating other satellite data
• Comparison with meteorological variables

Thank you for your attention!

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