

**Seminar on Physics and Chemistry
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Global ammonia emissions monitored with remote sensing

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Abstract

Atmospheric ammonia (NH_3) at high concentration levels is known to be a (in)direct hazard to our own and the environments health. The atmospheric budget however, is still quite uncertain. The uncertainty in the budget mostly stems from the short lifetime of ammonia in combination with an overall lack of in-situ measurement networks observing emission fluxes and concentrations. In the recent past, it has become possible to observe ammonia concentrations by satellite which has opened new ways to evaluate the atmospheric ammonia budget. Over the years that followed, studies have demonstrated the ability of using observations of such sensors to resolve emissions from point like sources, biomass burning, and emissions at a regional level using various setups, from simple approximations to complete inversion systems. Join us on a trip through the short history and latest developments of this exciting field of research!