

# **African Regional anthropogenic Emissions Inventory for NO<sub>x</sub> and NH<sub>3</sub> for 2010-2020 period**

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## **Abstract**

Ammonia (NH<sub>3</sub>) and NO<sub>x</sub> are constituents of the atmosphere, which act as key precursors in the formation of secondary inorganic aerosols that are associated with increased particulate concentrations in ambient air. The few regional inventories (DACCIWA version 1 and version 2) in Africa, an emerging giant in the near future in terms of anthropogenic emissions if no regulations are put in place, do not take into account anthropogenic emissions of NH<sub>3</sub>. Thus, for nitrogen emissions, a detailed data set on NO<sub>x</sub> and NH<sub>3</sub> emissions map at 0.1° x 0.1° spatial resolution and annual temporal resolution for Africa has been developed for the period 2010-2020 based on the DACCIWA inventory. This work focuses on combustion sources, but does not deal here with biomass combustion. We will discuss the development of this new regional inventory for Africa, as well as comparisons with other global inventories in order to highlight differences between the datasets and the relative contribution of the different activities.

## **Early Career Scientist**

NO, I am not an early career scientist.

## **IGAC Activities**

GEIA: Global Emissions Initiative