NITROGEN BUDGET IN SOUTH AMERICA: OBSERVATION AND MODELING

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Conceptual framework of nitrogen emissions drivers in Latin America
Nitrogen... it goes way beyond the natural environment

Results indicate nitrogen mining in pasture regions of the Brazilian Cerrado

\[ \Delta^{15}N_{\text{plant-soil}} \] isoscape interpolation, for the Latin America, showed important regional fluctuation N dynamic in the region

Agriculture and livestock dominate the \( \text{N}_2\text{O} \) emissions, followed by biomass burning from deforestation. Increasing importance of waste and industrial emissions are notable

EURAD-IM coarse grid (75 km) simulations of monthly average Ammonia concentrations in ppbv for January, March, July and September (2016) over South America.
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- Integrated communication strategy on the best practices.
  - Participatory approach – collect local knowledge;
- Lack of a clear communication strategy bringing a close interaction among social, political and environmental scientists
- Low participation of social scientists in publications related to benefits/threats of nitrogen in Latin America.
- The literature indicates that science and nitrogen management approaches are still in the diagnostic phase of the problem, assessing and measuring the effects of human-induced changes in the nitrogen cycle.