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Regional nitrate deposition inferred from ground- and space-based measurements

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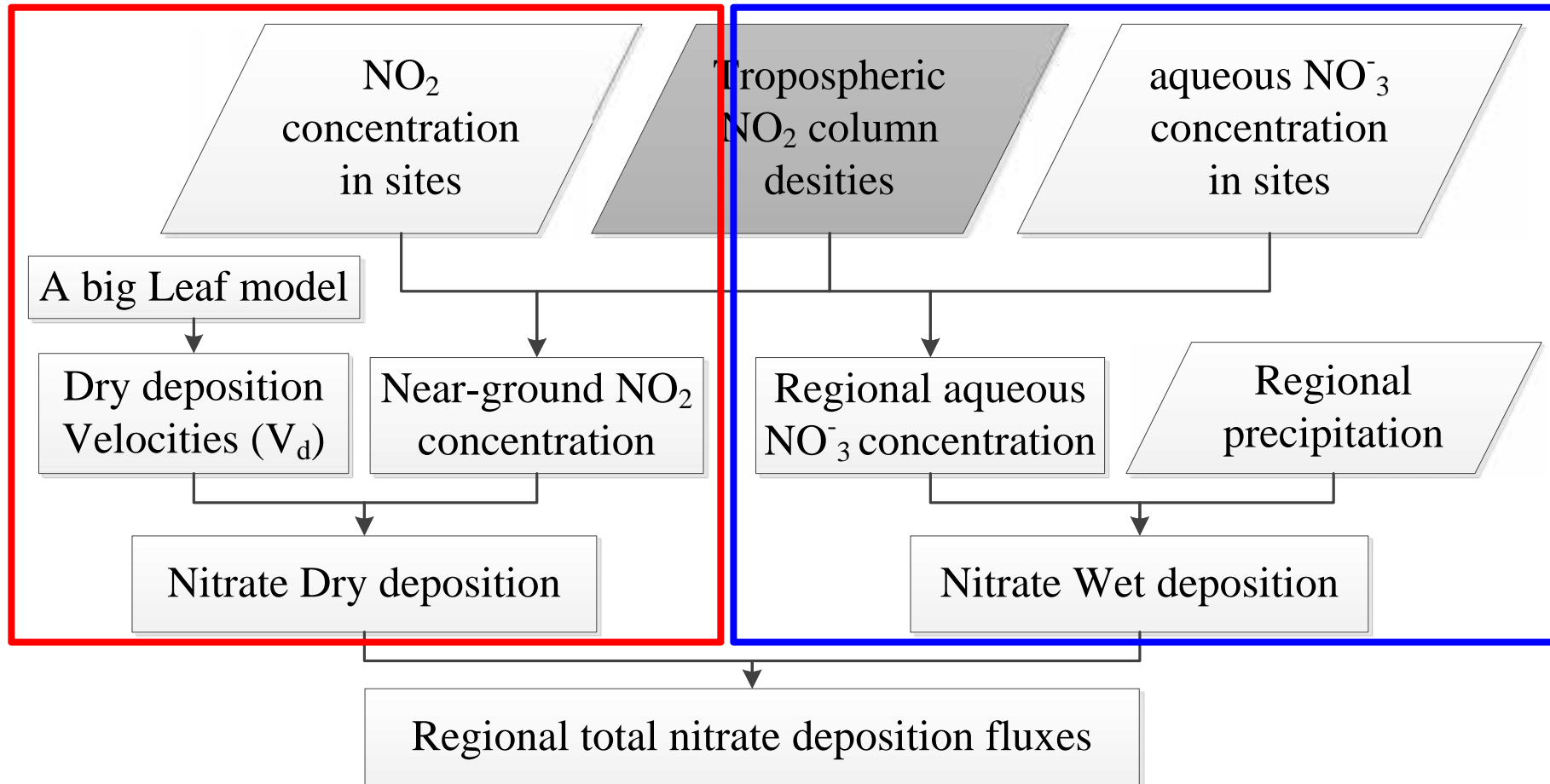


Why we use satellite data to estimate nitrate deposition

- A great amount of nitrogen deposition has been observed in China by monitoring observations and models.
- There are still large gaps in knowledge of the magnitude, temporal trend and spatial pattern of atmospheric N deposition on different ecosystems across China.
- The models can provide long-term wide-range N deposition patterns, but there are often large discrepancies because of the uncertain NO_x emission inventory.
- Tropospheric NO₂ columns retrieved from satellite data have been used to provide top-down estimates of surface NO_x emissions via inverse modelling, to examine specific sources, to infer NO_x lifetimes, and to estimate surface NO₂ concentrations.



How to estimate nitrate deposition using satellite data



Thank you for your attention.