

Interactive comment on “Tracing atmospheric nitrate in groundwater using triple oxygen isotopes: evaluation based on bottled drinking water” by U. Tsunogai et al.

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This well written paper uses data based on specialized isotope measurements of nitrate in bottled water to infer the fraction attributed to atmospheric nitrate which has an Oxygen-17 excess due to the reaction $\text{NO} + \text{O}_3$ followed by further oxidation processes in the atmosphere and deposition. The analytical quality of the measurements described is high, the authors have published similar work on ground waters before. The use of bottled water proves to be very efficient and useful. The interpretation of the data is convincing and consistent. The conclusions "implications" are justified by the data. The most difficult issue is perhaps the zero point for the cap del 17O scale

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in this case, as values are close to zero. Given the fact that bottled water contains a subtle but unambiguous signal derived from atmospheric ozone may make bottled water a drink of choice for our colleagues in atmospheric sciences.

Minor remarks (please check for last few corrections, I may have overlooked a few). 16494/2. "types". Perhaps better "brands". 16497/14 "aquantances in abroad" leave "in" out. 16502/12 "negative..less than 0" 16499/1 "a method" Could you very briefly mention what it is, an enzymatic method, or heating, reducing or whatever?

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