

Atmos. Chem. Phys. Discuss., editor comment EC1
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Comment on acp-2022-598

Hinrich Grothe (Editor)

Editor comment on "The importance of acid-processed meteoric smoke relative to meteoric fragments for crystal nucleation in polar stratospheric clouds" by Alexander D. James et al., Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2022-598-EC1>, 2022

Please comment on the polymorphism of NAT. Did you observe the nucleation of alpha-NAT or beta-NAT? This is an important question since the nucleation barriers for both phases and between them are rather different, see Weiss et al. 2016 and literature as quoted within.

Fabian Weiss, Frank Kubel, Óscar Gulvez, Markus Hoelzel, Stewart F. Parker, Philipp Baloh, Riccardo Iannarelli, Michel J. Rossi, and Hinrich Grothe, Metastable Nitric Acid Trihydrate in Ice Clouds, *Angew. Chem. Int. Ed.* 2016, 55, 3276 –3280, DOI: 10.1002/anie.20151084.