

Dear Editor,

We would like to thank you for your careful reading of our manuscript and for the constructive comments. We have addressed all the points you raised:

- The notation of number concentration (N_c) has been corrected according to the Copernicus style guide.
- “In situ” is now written without hyphen throughout the text.
- The reference to *Doulgeris et al., 2025* has been corrected (spacing and punctuation).
- Terminology has been unified to consistently use “Arctic amplification.”
- The use of abbreviations (LWC, MVD) has been harmonized: the full term is defined once and abbreviations are used consistently, with only a few reintroductions where beneficial for clarity.
- Units have been corrected (e.g., spacing, removal of extra full stop in $l\ min^{-1}$).
- Other minor typographical issues (spacing, missing parenthesis) have been fixed.

We believe these changes improve the clarity and consistency of the manuscript and thank you again for your valuable feedback.

Sincerely,

Konstantinos Doulgeris on behalf of all co-authors