

Editor's comment

September 4, 2025

The authors present a valuable data set in a concise and clear way. Previous revisions have made improvements, but I do have some minor suggestions and comments to consider before publication.

1 General comments

Line 15: The number concentration should be typeset italic, i.e. N_c should be N_c (see Copernicus style guide under Mathematical symbols and formulae). This should also be fixed in other occurrences.

Line 20: In-situ should not be hyphenated (see Copernicus style guide under Hyphens).

Line 22: There is a space missing in the reference to Doulgeris et al., 2025 and the sentence should also end with a full stop.

Line 33: In-situ should not be hyphenated (see Copernicus style guide under Hyphens).

Lines 27 & 38: You refer to it in line 27 as “Arctic amplification”, while you refer to it as “polar amplification” in line 38. Chose one of those.

Line 78: You refer to it at line 15 as “liquid water content”, while you capitalize it in line 78. In lines 115-116, 132-133, 142-143, Table 1, 235, 262, 297, 300, 305, 311, you also type out LWC and MVD, even though it has been defined as an abbreviation before. Sometimes it can be beneficial to get the full name again, but I think it is often not necessary, especially for well-known abbreviations such as the liquid water content.

Line 104: There is a full stop in the unit, which should be Lmin^{-1} .

Line 106: There should be a space between number and unit (see Copernicus style guide under Figure content guidelines).

Line 115: You refer to it in line 27 as “Arctic amplification”, while you refer to it as “polar amplification” in line 38. Chose one of those.

Line 134: There should be a space between number and unit (see Copernicus style guide under Figure content guidelines). The same is true for other occurrences (e.g. line 198, lines 266-267).

Line 336: There is a space missing after “Doulgeris et al.,”.

Line 338: There is a closing parentheses missing after “21 March 2025”.