Dr. Vermeesch:

Attached please find a revision of egusphere-2025-149, 'Technical Note: ^{21}Ne in the CoQtz-N standard material'. This revision includes the following changes to address the reviewers' and your comments. Note that line numbers noted below pertain to the revised manuscript, not the latexdiff comparison.

- Added the ratio of the excess ^{21}Ne concentration in CoQtz-N to that in CRONUS-A to the abstract (lines 10-11)
- Briefly expanded the discussion of reasons for measurement offsets among noble gas labs (lines 29-30)
- Discussed the grain size distribution of the samples and clarified that they were analyzed as supplied (lines 57-61)
- Indicated the magnitude of interference corrections on masses 20 and 22 (lines 76, 108).
- Indicated the amount of atmospheric composition Ne released from Ta packets (lines 82-83)
- Clarified that low-temperature heating steps on all samples in the vacuum chamber were completed before continuing to high-temperature heating steps (lines 92-93)
- Clarified the discussion of the difference in estimated uncertainties for CRONUS-A between BGC and LLNL systems to make clear that the purpose of this section is to explain why the uncertainties are different for the same sample (CRONUS-A) between different analytical systems, not why the relative uncertainties differ between CRONUS-A and CoQtz-N (lines 135-145). Note that the relevant review comment suggested including a longer and more general error analysis emphasizing the importance of the relative abundances of atmospheric and excess ^{21}Ne in the eventual uncertainty on the excess ^{21}Ne concentration. While this is alluded to in the revised MS (line 165), in order to keep the paper concise and narrowly focused on the use of CoQtz-N for interlaboratory comparison, a more general error analysis has not been included. For interested readers, the reviewer's points should easily follow from the equation in line 129. Really the reason this section of the discussion exists is just that the significant difference in uncertainties between the BGC and LLNL systems is likely to be immediately apparent to readers, but is not obviously explained by any previous material in the methods section. This section is intended to concisely account for the obvious difference without distracting too much from the main point of the paper.
- Added additional summary statistics describing the CoQtz-N measurements (lines 155-157). Note that all calculations leading to these results are included in the Excel spreadsheet provided as Table S1 in the supplement.
- Added a brief clarification of why it is not possible to estimate the nucleogenic ^{21}Ne concentration from isotope ratio measurements alone (lines 170-171). As we discussed by email, this issue is not relevant to the main purpose of interlaboratory comparison of excess ^{21}Ne measurements.
- Reproduced information from the Binnie paper relating to distribution of the CoQtz-N material (lines 190-191)

Thanks very much for your attention to this paper,

Greg Balco
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