

General comments:

I've reviewed the authors' revisions and response to both reviewers' comments. I find the revised manuscript much improved and nearly ready for publication.

Regarding value of the work to the field, I agree that the evaluation of the subcloud BL and microphysics is important for our understanding cloud-topped boundary layers. What remains in my view, is whether this study shows that rain isotope observations constrain the rain evaporation estimates independent of other estimation methods. If the authors have quantitative support of that question, adding it would increase the impact on the field. It is a very nice contribution to make this model available to the community.

The new model results improve agreement with the observations on the Ron Brown ship. I agree that d-excess is most sensitive to evaporation and should be the metric of analysis. The previous presentation made it hard to see the full picture of the isotopic evolution through the BL. The isotopic presentation is improved. Figure 10: It is my understanding that the authors consider the modeled rain at 85% RH_{surf} (magenta line) is in good agreement with the observations from the Brown (red line). I don't see any of the model results in Fig 10 that get above 10 permil, but Fig 11 model results extend to 11.5 permil. Perhaps it is my ability to read the figure line colors, but if there is an inconsistency, please fix.

The linear relation between REF and dp features prominently in the key findings of this paper, yet the figure is in Supplemental with no statistical metrics given. Please give statistical analysis and uncertainty at minimum. There are some values that could use some discussion in the figure caption or the main text if warranted. Values of REF=1.0 indicate the rain evaporates completely therefore d_{p,sf} is NA. Likewise rain isotope observations where d-excess increases instead of decreases are curious given the conventional assumption that d-excess decreases with evaporation influence.

Specific comments:

Page 7, line 205: Can you be more specific about what an appropriate integration time would be?
Section 3.2: When discussing correlations in Figure, provide quantitative correlation and statistical significance. The correlation described in Fig 5d may not be significant.

Page 12, line 362: "Most of the P3 cases with higher D_g and σ also have higher N_0 ." Is this expected or unusual? It seems important for the generality of the findings.

Page 14, line 402: "These ranges correspond well to the value show across other platforms..." What other values? The 3 ship platforms are the only rain measurements mentioned so far.

Page 14, line 406: "...with a high RH_{sf} of 86% is around 10 permil that matches the brown..." awkward wording.

Conclusions: Conceptual question: To what extent does the thermodynamic state of the BL control rain evaporation versus rain evaporation control the thermodynamic state of the BL?

Page 16, line 480: The linear relation between REF and dp features prominently in the key findings of this paper, yet the figure is in Supplemental with no statistical metrics given. Please give statistical analysis and uncertainty at minimum.

Fig 1: Does 'rain flux' is the same a 'rain rate' right? It's not clear to me what the profile in the BL represents. It seems labeled as the instantaneous rain rate, but that would have to highest at cloud base in both small droplet and large droplet cases right? Does blue indicate larger rain rates and red smaller? Does the x-axis also indicate the rain rate? If so, the partial evap case should end at different relative location than the complete evaporation rain rate, which would end at zero. Do the rain evaporation arrows indicate moisture recycling within those altitudes? Maybe the profile is the rain evaporation rate? It might be helpful to label this figure with the top/bottom heavy classification used later in the manuscript.

Fig 2: Label color bar as altitude (m).

Fig 4: Give units of color bar. Are they really plotted as contour lines? Or rather shaded?

Fig 5: Give statistical metrics of relationships/no relationships.

Fig A1: Give correlation statistics.

Fig 7: The cases where dDp decreases with altitude are curious. I think d is used throughout the manuscript instead of dxs. Please be consistent with the label in this figure.

Fig 9: Breakpoints suggest this figure may have been generated using model with 50 m altitude steps (previous version).

Figs 10-11: See previous comment.