Interactive comment on “Quantification of calcium carbonate (ikaite) in first- and multi-year sea ice” by Heather Kyle et al.

Anonymous Referee #2

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Ikaite is a peculiar mineral intrinsically intriguing to many people with diverse background. So I understand the interest in studying this mineral in sea ice and I enjoyed some of the early ikaite papers about sea ice. After reading through a series of papers by the senior author cited in the introduction (In55-65), I’m still not convinced at all that ikaite abundance in sea ice has the impact anywhere close to what they are claiming it to be. Overhyped implications of ikaite on carbon cycle do not seem to be a wise choice of motivation for this type of study. This is almost like arguing that it is critical to study ikaite in frozen shrimp due to its global health effect. The data may have some value in them, but I feel the senior author should seriously brainstorm for the real novelty of such investigations. I won’t further comment on the technical details of the paper, because I don’t want the graduate student to feel overly disheartened.