

***Interactive comment on “Brief communication:
ikaite ($\text{CaCO}_3 \cdot 6\text{H}_2\text{O}$) discovered in Arctic sea ice”
by G. S. Dieckmann et al.***

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Thank you for the valuable comments on the brief communication. We would like to respond to the reviewers comments as follows: We do not see the significance of supplying additional data such as temperature and salinity of the cores in which we found the crystals, since the data do not reflect the conditions under which precipitation occurred. They are momentary data taken at the time of sampling and do give any idea of the conditions at the onset of freezing nor the developmental history of the sea ice since freezing. We will conform with the reviewers request and add the XANES results and XRD patterns in the revised manuscript. We will briefly comment on future plans and more specific analyses of sea ice if this is requested More background information on ikaite findings and conditions under which they are formed would also exceed the

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limits of a brief communication and can be found in a previous paper by the authors We will comply with the requested technical corrections.

Interactive comment on The Cryosphere Discuss., 4, 153, 2010.