

Interactive comment on “Intense photooxidative degradation of planktonic and bacterial lipids in sinking particles collected with sediment traps across the Canadian Beaufort Shelf (Arctic Ocean)” by J.-F. Rontani et al.

J.-F. Rontani

jean-francois.rontani@univ-amu.fr

Received and published: 3 October 2012

Reply to the comments of Dr. G.J.M. Versteegh Dear Dr. Versteegh, responding to your comments, the text has been revised. Please find below our detailed responses to your comments and suggestions.

- Comment: The absence of dinosterol doesn't imply the absence of dinoflagellates since there are several dinos that don't produce dinosterol. See e.g. Leblond, J. D. and Chapman, P. J., 2002. A survey of the sterol composition of the marine dinoflagel-

C4462

lates *Karenia brevis*, *Karenia mikimotoi* and *Karlodinium micrum*: distribution of sterols within other members of the class dinophyceae. *Journal of Phycology* 38, 670-682.

- Answer:

We agree with this comment, thus the text (page 7753 lines 22-25) 'If the lack of dinosterol, which is widely accepted as a specific marker of dinoflagellates (Mansour et al., 1999), allowed excluding the presence of such organisms, a significant contribution of haptophytes to the samples cannot be totally excluded.' was replaced by 'If the lack of dinosterol, which is present in some dinoflagellates (Mansour et al., 1999), does not support the presence of such organisms, a significant contribution of dinoflagellates to the samples cannot be totally excluded since they do not produce systematically dinosterol (Leblond and Chapman, 2002). In contrast, a contribution of haptophytes to the samples is very likely.'

The reference Leblond and Chapman (2002) was added in the reference list.

- Other minor comments: All the changes required have been carried out.

Interactive comment on Biogeosciences Discuss., 9, 7743, 2012.

C4463