

Interactive comment on “Iodine observed in new particle formation events in the Arctic atmosphere during ACCACIA” by J. D. Allan et al.

R. Saunders

rws_brancaaster@hotmail.com

Received and published: 4 December 2014

The reported detection of iodine in Arctic nanoparticles is an exciting one. As the authors suggest, a number of possible sources could be responsible - the ice-algal one is a strong candidate as in Antarctic ice. I would like to bring to the authors' attention a couple of recent reports (see below) of algal release from melting Arctic ice in the previous year's summer (2012). In particular, the Assmy paper shows images of brown-coloured 'algal-aggregates' observed in/collected from ice/ice-water (Fig. 2) and reports elevated iodide concentrations from these features (2-3 times that in surface water) (Figure S1). Were no observations made of discolouration in melting ice on the author's own cruise?

C9791

Assmy, P., et al. (2013): Floating ice-algal aggregates below melting Arctic sea ice. PLOS, 8(10), e76599, 1-13.

Boetius, A., et al. (2013): Export of algal biomass from the melting Arctic sea ice. Science, 339(6126), 1430-1432.

Interactive comment on Atmos. Chem. Phys. Discuss., 14, 28949, 2014.

C9792