

Interactive comment on “Strong linkages between surface and deep water dissolved organic matter in the East/Japan Sea” by Tae-Hoon Kim et al.

Anonymous Referee #2

Received and published: 8 March 2017

The manuscript by Kim et al. describes concentrations of dissolved organic nitrogen, dissolved organic carbon and amino acids in the East Japan Sea. A reasonable amount of new data is presented and the presentation is generally acceptable.

The manuscript is well-written, and the organization is easy and clear to follow. It is a short paper that fits within the scope of the journal. The topic is relevant given the possible effects of changes in oceanic carbon chemistry on bacterioplankton communities and subsequent biogeochemical nutrient cycles. The article suggest an interesting link between microbial metabolism and oceanographic processes, it contributes to improve our understanding on the carbon cycle of one of the most understudied variables, so I consider that this manuscript would be suitable for publication after minor revisions.

Major comments:

C1

There are no definition of THAA, DOC or DON in a explicit way. DOC and DON are maybe more obvious, but a short sentence with the main meaning of THAA would be appreciated.

Material and Methods should include info about error of the measurements. Same for the Tables 1 and 2. Certified Reference Materials are widely used nowadays for measurement validation, if they were not used should be said.

Along the manuscript, decreasing concentrations are always related with utilization. What about the lateral advection? Don't should be discussed?

Specific comments:

- Fig.1 - why is not Tsushima Current (TC) in the figure? Additionally, some color differentiation would be appreciated for the map A).
- Page 5 - Line 32 “ a significant, but weak, correlation” more info is needed
- Page 6 Line 24 - Is the slight decrease significant?

Interactive comment on Biogeosciences Discuss., doi:10.5194/bg-2017-8, 2017.

C2