

# **Distribution of POC and carbohydrate species in the East China Sea**

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## **Abstract**

Carbohydrates (including polysaccharides, TCHO, and uronic acids, URA), are important organic compound classes in seawater and play an important role in the biogeochemical cycling of organic carbon and trace elements in the ocean. However, the distribution of carbohydrate species and their production and cycling pathways are still poorly understood, mainly due to the lack of accurate analytical techniques. Concentrations of particulate organic carbon (POC), TCHO, URA were measured in the East China Sea in order to gain a better understanding of the biogeochemical cycles or organic matter in the ocean. Concentrations of POC, TCHO and URA had a positive correlation with chlorophyll *a* in surface water suggesting that phytoplankton are mainly responsible for the production POC and carbohydrates. Production of TCHO and URA in the upper water column seems to be highly related to the micro-phytoplankton and heterotrophic bacteria. The detailed data will be reported at the meeting.