

## **B06-P08**

### **SPATIAL DISTRIBUTION AND CHARACTERISTICS OF DISSOLVED ORGANIC MATTER IN THE BEAUFORT AND CHUKCHI SEAS**

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Concentration and fluorescence characteristics of dissolved organic matter have been determined in the Beaufort and Chukchi Seas from 21 August to 24 September in 2013. In the upper 200 m, the changes in dissolved organic carbon concentration were well explained by salinity in the Beaufort Sea; *i.e.*, the concentration of dissolved organic carbon decreased with increasing salinity. However, weak relationship between dissolved organic carbon concentration and salinity was observed in the Chukchi Sea. These results indicate that the strong influence of river input was limited in the Beaufort Sea during this study periods. In the Chukchi Sea, the concentration of dissolved organic carbon was higher in the regions situated close to Beaufort Sea than those in the other regions of sampling station. On the other hand, low humification indices based on fluorescence synchronous spectrum area and relatively low salinity were recorded at the same regions. Our results suggest that the spatial differences should be existed in concentration and characteristics of dissolved organic matter in relation to hydrographic features in the Beaufort and Chukchi seas. Furthermore, fluorescence characteristics of dissolved organic matter can provide valuable information concerning the quality of dissolved organic matter in the each water mass.