Internannual Variability of Summer Phytoplankton Community in the East China Sea

*Joji Ishizaka¹, Qian Xu², Chiho Sukigara¹, Takeshi Matsuno³, Sinjae Yoo⁴

1.Institute for Space-Earth Environmental Research, Nagoya University, 2.Graduate School of Environmental Studies, Nagoya University, 3.Research Institute for Applied Mechanics, Kyushu University, 4.Korea Institute of Ocean Science and Technology

Interannual variability of summer phytoplankton community was examined with HPLC pigments in 2009, 2010, 2011 and 2013. On 2009 and 2013, diatom was dominated in high chlorophyll-a water, while on 2010 and 2011 smaller phytoplankton was dominated. It is expected that influence of high nitrate Changjiang river water was stronger on 2010 and 2011, while phosphate amount was higher in 2009 and 2013 and coastal upelling may stronger. The source of nutrients may be the cause of the dominance of different phytoplankton groups.

Keywords: phytoplankton, river water, nutrients