D109-008 Room: Function Room B Time: May 19 15:45-16:00

Ground subsidence monitoring in Kujukuri Plains using C- and L-band SAR interferometry

# Tomonori Deguchi[1]; Shuichi Rokugawa[2]; Jun Matsushima[3]

[1] NMCC; [2] Dept. Geosystem Eng., Univ. Tokyo; [3] UOT

Huge natural gas and iodine resources are deposited in Kujukuri Plains located the southeast of Boso peninsula. The natural gas produced in this area attracts attention as the clean energy that do not drain most of sulfur oxide and nitrogen oxides to be based on methane. However, subsurface water pumping with the production of natural gas and iodine caused ground subsidence. In this study, the authors applied SAR interferometry technology in order to monitor the ground subsidence phenomena. We will present the result of temporal displacement measurement since 1992 using JERS-1/SAR, ERS-1/2, ENVISAT/ASAR and ALOS/PALSAR, and the validation using leveling data by Chiba prefecture and GEONET data by GSI.