Continental-Oceanic Mutual Interaction: Global-scale Material Circulation through River Runoff

Convener:*Yosuke Yamashiki(Global Water Resources Assessment Laboratory - Yamashiki Lab. Graduate School of Advanced Integrated Studies in Human Survivability Kyoto University), Swadhin Behera(Climate Variation Predictability and Applicability Research Program Research Institute for Global Change/JAMSTEC, 3173-25 Showa-machi, Yokohama 236-0001), Yukio Masumoto(Japan Agency for Marine-Earth Science and Technology), Yasumasa Miyazawa(Japan Agency for Marine-Earth Science and Technology), Toshio Yamagata(Japan Agency for Marine-Earth Science and Technology), Kaoru Takara(Disaster Prevention Research Institute, Kyoto University), Chair:Yukio Masumoto(Japan Agency for Marine-Earth Science and Technology), Swadhin Behera(Climate Variation Predictability and Applicability Research Program Research Institute for Global Change/JAMSTEC, 3173-25 Showa-machi, Yokohama 236-0001), Toshio Yamagata(Japan Agency for Marine-Earth Science and Technology)
Wed. Apr 30, 2014 9:00 AM - 10:45 AM  211 (2F)

The main purpose of this session is to promote discussion on mutual interaction between Continental zone and Oceanic zone. The global-scale material circulation induced by River runoff through oceanic general circulation as major topic on Continental-Oceanic Interaction, where the ENSO / IOD influence into continental climate as major topics on Oceanic-Continental Interaction. Numerical simulation and field observation of radionuclide transport from continental zone into ocean and its potential impact is also important topics of this session.

10:35 AM - 10:45 AM

A Study of Contribution of "Nanohana Project" and Agricultural restoration in Sukagawa, Fukushima, Japan

*Naoko KIMURA (1.GSGES, Kyoto University)

Keywords:Nanohana, decontamination, restoration, agricultural production corporation, Sukagawa

This paper explores for what and to what extent "Nanohana Project" contributes to restoration in Sukagawa, Fukushima Prefecture, Japan. Since the huge earthquake and tsunami occurred in March 2011, agricultural fields in these cities have been suffering damages caused by radionuclides classified as nuclear-fission products from the Fukushima No.1 Nuclear Power Plant (Tokyo Electricity Power Company (TEPCO)) due to the accident. Agricultural field restoration, especially decontamination of radionuclides from the soil, is one of the most important issues to be tackled for local farmers. This research reviews literatures regarding and conducted an interview to an agricultural production corporation in Sukagawa in order to grasp what initiatives has been taken to reduce radionuclides in their products as well as to fight to bad rumors among general public. "Nanohana Project" has been implemented with local stakeholders in Sukagawa since 2007. They grow Nanohana (rapeseed flower or colza, Brassica Napus) and produce Biodiesel fuel (BDF) from seeds as well as biogas (BG) out of the pomace (leaves and stems after producing BDF), and they use the BDF and BG in the local area. The Nanohana absorbs some radionuclides in the soil in its growing process, and there was attention to it after disaster, however some scientific researches found that the absorption amount is limited and may not be a remedy itself for decontamination of radionuclides. Nevertheless, "Nanohana Project" has been
ongoing and the network is expanding in Sukagawa. This paper discusses contribution of "Nanohana Project" and initiatives by an agricultural production corporation for restoration through qualitative analysis of interview and some key figures in order to speculate the Project's possible roles for future reconstruction in the region.