[JJ] Evening Poster | H (Human Geosciences) | H-CG Complex & General

[H-CG28]Coastal wetlands: geomorphologic, biologic and

anthropogenic processes

convener:Kiyoshi Fujimoto(Nanzan University)

Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe) Coastal wetlands are very fragile environment against external environmental changes such as sea-level rise and anthropogenic impacts. On the other hand, coastal wetlands have a significant role as a place for carbon sequestration in the belowground as well as the aboveground. This session will discuss the geomorphologic, biologic and anthropogenic processes on the coastal wetlands in the various climate zones during the Holocene. For example, coastal wetlands in the tropics have evolved with the development of wetland forests such as mangrove forest, peat swamp forest and fresh water swamp forest. The most significant process for habitat formation and maintenance of the former two forests are peat production and decomposition, which are also significant processes on the coastal lowlands in the temperate and subarctic zones, though the mechanism of the processes might be different. Geomorphological processes such as sedimentation and erosion by fluvial and marine processes are also important for all of coastal wetlands. However, the environment of coastal wetlands has been destroyed by various human activities such as deforestation, agriculture land development, peat mining, and shrimp firming in and around mangrove forests in recent years. We would like to invite the wide discipline of research papers on not only the natural processes but also the anthropogenic processes in order to offer the scientific basis for creating sustainable management systems on the coastal wetlands in the future.

[HCG28-P02]Land cover change in mangrove forests using analysis of high-resolution images

*Kodai Hasada¹, Shin Watanabe², Kiyoshi Fujimoto³, Saimon Lihpai⁴ (1.Faculty of Letters, Hosei University, 2.Tropical Biosphere Research Center, University of the Ryukyus, 3.Faculty of Policy Studies, Nanzan University, 4.Pohnpei State Government, FSM)

Keywords:Mangrove, Canopy gap, Unmanned Aerial Vehicle (UAV), GIS, Pohnpei Island

We report on canopy gap area change estimated by analyzing satellite and UAV images in Mangrove forests of Pohnpei Island, FSM.