

Delta deposits at the Tsengwen River mouth, western Taiwan

*Kazuaki Hori¹, Eito Takahashi¹, Susumu Tanabe², Wanchung Lu³, Chichao Huang³

1.Department of Geography, Graduate School of Environmental Studies, Nagoya University, 2.AIST,
3.Central Geological Survey, MOEA

Taiwan is located in the fold and thrust belts due to the island arc collision action, and the coastal plains along the western coast has been subsiding. Subsidence rate along the western coast is estimated to be approximate 5 mm/yr based on topographical survey and ages of coastal deposits (Ching et al., 2011). Sedimentary facies analysis and measurement of grain size and loss on ignition (LOI) were performed for two borehole core sediment with 250 m long obtained from the Tsengwen River delta, western Taiwan to investigate evolution of the depositional systems located at tectonically subsiding coasts. Additionally, a new borehole core sediments, 300 m long, was taken near the river mouth in 2015. In the present study, we report the characteristics of the depositional systems especially the deltaic system on the basis of these cores. The thickness of deltaic deposits showing upward-coarsening succession is about 100 m. Maximum median grain size is 0.3-0.4 mm and LOI is usually less than 6 %. Depositional age of the deposits may have been during the last 8-9 ka.

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