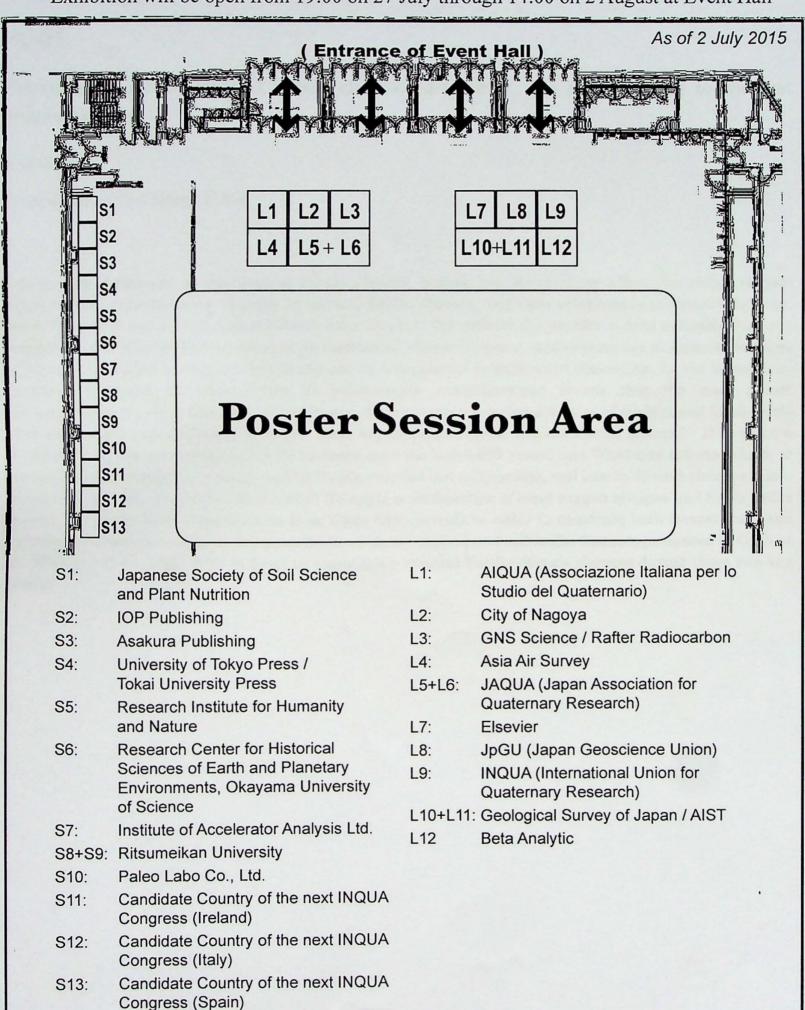
Exhibition

Exhibition will be open from 19:00 on 27 July through 14:00 on 2 August at Event Hall







C02: Coastal wetlands

Oral Presentation / 28 July (Tue) 2015 / Room 431

C02-08 #Presenting author *Corresponding author

Coastal wetland dynamics on the Delta of the Doce River during the middle to late Holocene, Southeastern Brazil

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Sedimentological, geochemical and pollen analysis of the sediment core from the Delta of the Doce River, southeastern Brazil, reveals changes in depositional system and vegetation dynamics resulting by oscillations on relative sea level and climate change during the middle to late Holocene. Four main phases are discerned using sedimentary features, stable isotopes C and N, palynological data and shells, synchronized with the five 14C dating. Around 8050 cal yr BP this region was influenced by marine organic matter probably result of a relative sea level rise, with sand sediments, colonized mainly by herbs and mangroves close to the region. Between 8050 and 7115 cal yr BP began the lagoon system, with low flow energy, silt and sand sediments, tidal flooding presence and marine and brackish water influence, colonized mainly by herbs, followed mangrove, trees and shrubs. During the middle to late Holocene that environment showed decreased flow energy and the mangroves were replaced by herbaceous vegetation, trees and shrubs, palms and aquatics vegetation following the decline in marine influence, starting the lake formation with sandy silt sediments and freshwater organic matter influence. After the lake began the siltation resulting on herbaceous flat with sandy silt sediments influence by terrigenous matter with C3 terrestrial plants. This record captures oscillation on relative sea level and climate changes supported by sedimentary features, organic geochemical and pollen analyses likely caused by the post glacial sea level rise and climate change during the Holocene.