## High Resolution Seismic Study on Sedimentary Structure in the Southern Shelf of Jeju Island

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High-resolution seismic profiles, chirp and sparker system, were acquired from the continental shelf in the southeastern Yellow Sea. The sedimentary sequence is classified into three units that can be defined as erosional and disconformable strata. Unit A displays acoustically transparent units and composes the uppermost layer. Unit B forms transgression sequence of sea level rise. The lowermost Unit C, as parallel to underlain acoustic basement, composes estuarine strata. The layer, thinning toward north and disappears adjacent to Jeju Island, is defined as suspended sediments originated from adjacent continents. On the sea bottom at the track lines close to Jeju Island, the seismic facies changes from Unit A to Unit B and finally to Unit C. Three major echo types are classified as flat (transgressive sediment sheets, relict sands, and Holocene muds), mounded (tidal ridges), and irregular echoes (channels). Flat echo type dominates in the south that implies the fine sediments. Mounded echoes indicate a tidal sand ridge. Irregular echo types are presumed to be related to incised channels or acoustic basements.