



Plio-Quaternary transgressive/regressive deposits in the southeastern continental shelf, Korea (Korea Strait)

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A detailed analysis of high-resolution seismic profiles collected from the southeastern continental shelf of Korea reveals that the shelf deposits above the acoustic basement consist of seven, Plio-Quaternary depositional sequences separated by erosional unconformities. Individual sequence is well defined by stratified and complex sigmoid-oblique prograding reflection configurations, reflecting a history of upbuilding and outbuilding in response to repetitive transgressive and regressive events. During the regressive to lowstand of sea level, lowstand prograding wedges prograded seaward along the present shelf margin, while during the highstand of sea level, as in the case of the present condition, the inner shelf deposits were formed in the inner shelf along the coast. As the following regression began, however, the inner shelf highstand deposits were severely eroded out and/or formed condensed section. Consequently, the Plio-Quaternary depositional sequences in the Korea Strait comprise a succession of stacked progradational lowstand wedges, mainly formed during the regression and lowstand of sea level.