



## **Optically stimulated luminescence dating cronology of relict foredunes in Seyhan delta, South Turkey**

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Foredunes are depositional landforms developed along coastal deltas. Their geomorphic development closely related to aeolian processes acting along the coastal zones. Therefore they may provide insights about paleo-geographical conditions. The Seyhan delta is located at the easternmost part of the Turkish Mediterranean Coast. Foredunes which run successively with current coastline are observed in the Seyhan delta. However there is no chronological evidence established yet based on numerical dating on these foredunes. Numerical dating study on foredunes in Seyhan delta were applied first time by us. Our study focuses upon establishing the cronology and progradation rate of foredunes in Seyhan delta. In this study, Optically Stimulated Luminescence (OSL) dating technique were applied on five samples collected from a 3,5 km transect across relict foredunes. In addition, aerial photos and satellite images were also analysed in detail to determine the number of ridges formed over time. Our age results range between  $110\pm 9$  yr to  $960\pm 110$  year. Accordingly, we propose 4,1 m/yr of mean foredune progradation rate for the last  $960\pm 110$  year. Also It was found that from  $960\pm 110$  BP to the present day one foredune ridge has been formed for every 50 years period.