



Annual variation of topography and surface sedimentary facies of 2014~2015 years in the Gochang coast, southwestern Korea

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The Gochang coast is characterized by macro-tide, open-coast, linear shoreline, and sand substrates. It is located on the southwestern coast of Korea along the eastern part of the Yellow Sea, comprising the Donghori, Gwangseungri, and Myengsasipri areas from the north to south. This study has investigated annual variation of topography, accumulation rates, surface sediment texture, and sedimentary facies during 2014~2015. In the intertidal area, topographic elevation and surface sediments were measured and sampled at 63 sites during the 7 seasons from winter (Feb.) in 2014 to summer (Aug.) in 2015. Surface sediments of the subtidal area were sampled at 110 and 119 sites with 500 m interval for the two seasons of winter and summer in 2015, respectively. In the Gochang coast of 2014~2015 years, surface sedimentary facies represent a fining trend from shoreline to offshore. Area distribution of sedimentary facies also becomes finer from the north to south. Annual accumulation rates of the Gochang intertidal area represent av. -0.081m/yr from winter to winter, av. -0.018m/yr from spring to spring, av. -0.019m/yr from summer to summer during 2014~2015, respectively. It was indicative of an erosion-dominated environment.

Keywords: macro-tide, open-coast, surface sediment, accumulation rate, Gochang coast

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