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The tidal oscillations under the sea level rise effects in central Vietnam

Nguyen Quoc Trinh¹, Nguyen Minh Huan², Pham Van Tien³ and Nguyen Quang Vinh⁴

¹National Centre for Hydro-Meteorological Forecasting, Vietnam

²VNU University of Science, Vietnam

³Vietnam Institute of Meteorology, Hydrology and Climate Change, Vietnam

⁴Aero-Meteorological Observatory, Vietnam

Tide is one of the most important phenomena in the oceans. In all over the world as well as in Vietnam, the tide has been studied very early and such great achievements have been recorded. However, under the impact of climate changes and sea level rise, the local-to-regional-scale will cause significant changes in the coastal system. This paper gives some results of research on the tidal changes in the central region of Vietnam by using the hydrodynamic model and data analyzing model. The simulation results of the tide in the central coast of Vietnam show that the tide can change both in the amplitude and phase distribution of the tidal constituents as M2, S2, K1 and O1. Specifically, the results of the average values of M2 are 0.1 m and 10.20; for S2 are 0.12 m and 12.50; for K1 are 0.2 m and 17.20; for O1 are 0.21 m and 20.20. Some results of this study showed that the most important contribution to the change of the tide in the region is the change of topography and the submerged areas.

maitrinhvinh@gmail.com