The study of a beach safety assessment?an example of Fulong Beach
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This paper presents the beach safety assessment indicators to assess the safe area for beach recreation. The sea area safe for reaction is defined by the beach security assessment indicators, including wave height, beach type, tidal elevation, sea velocity and beach shifting sand. According to the results, wave height, beach type and tidal elevation are major important indicators affecting personal water height. Seawaters flow field is an important indicator of change in location during the recreation process, and beach shifting sand is an important indicator affecting the beach air quality in the recreation area. Based on the consideration of the above influencing factors, this paper proposes to delineate the recreation areas by beach rating method. In this paper, as seawaters affect the tidal wave and current, MIKE 21 HD hydrodynamic model and SW wave model are used to simulate the nearshore wave and current characteristics. With Fulong Beach in northern Taiwan as the site for analysis, this study compares the model computation results and the in-situ observation data proposed by Lin (2009). The simulation of in-situ observation data is consistent in terms of the split current generation position. In summary of the discussion on beach safe recreation area of Fulong Beach by applying the above assessment methods, it is found that the beach safe recreation area is 0-30m line during high tide and 0-90m line during low tide.

キーワード: wave height, beach type, wave model, tidal elevation, hydrodynamic model
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