

Adaptation storategy of climate change on coastal protection system

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Climate change due to global warming is expected to have major impacts on coastal regions due to sea level rise, TCs and seasonal storms. Understanding how ocean waves and storm surges will change in the future is important for assessing and adapting to the impacts of climate change on coastal, marine and ocean environments, as well as on engineering-related problems. If extreme coastal hazards due to storm surges and storm waves become more frequent or severe in the future, it will be necessary to consider their effects when designing infrastructures (e.g., coastal dikes) with long-term uses of 50 years or more from the present. Since TC activity is a major factor behind climate change impacts in East Asia, it is valuable to assess climate change impacts on natural coastal hazards using climate projections.

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