



Information System for the Early Warning of Coastal Flooding

Li-Chung Wu (1), Dong-Jiing Doong (2), Yang-Ming Fan (1), and Chia Chuen Kao (1)

(1) National Cheng Kung University, Tainan, Taiwan, Republic of China, (2) National Taiwan Ocean University, Keelung, Taiwan, Republic of China

This report presents a web-based integration information system for the purpose of coastal flooding warning. The components of this system includes in-situ field data and forecast results on sea states, live video images and the historical records of coastal flooding events. The in-situ data and field images are linked to the nationwide coastal monitoring network of Taiwan. Nested models including NWW III, SWAN and POM are used to forecast the wave and storm surge conditions. The key technology of this study is to integrate all these components to form an operational system. The system was daily run and attracted a lot of interests during typhoon period. The system has been operated for more than three years by governmental institutions in Taiwan and did play an important role on the decision making for the mitigation of coastal flooding.