

Classes 13, 14 – Wave modeling and breakwater placement

Reading: SWAN User's Manual

- a. Design project 2 presentations.
- b. SWAN introduction – wave action theory.
- c. Lab – SWAN example in class.
- d. Design project 3 – design a coastal levee for Haneda airport. Give required height and armor specifications. Use both CEM equations and SWAN, and discuss the difference. Redesign the coastal levee. As an alternative, design an unarmored levee using a cassion breakwater (or set of breakwaters) to protect the airport from waves.