

整合臺灣海岸及港灣海氣地象 模擬技術之研究(4/4)

A study on the integration of Taiwan coastal and harbor's oceanographic modeling systems(4/4)

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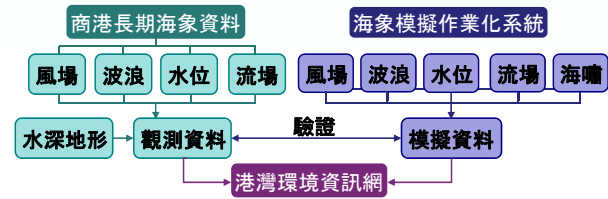
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計畫主持人：李兆芳、劉正琪、陳冠宇

整體目標 Overall objective

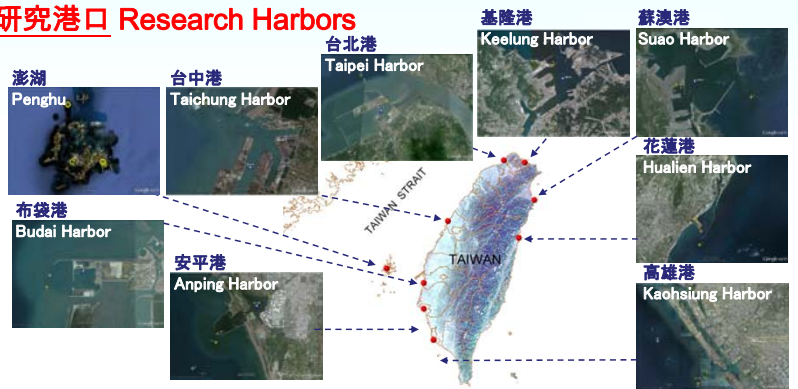
本計畫目的為整合海岸及港灣海域波浪模擬技術之研究，提昇海岸及港灣海嘯模擬技術。藉由國內航運及國內各主要港口海域之風浪、暴潮、流場及海嘯等預警資訊，提供港務及工程單位參酌，以達到港灣正常營運與海岸永續發展利用的目標。

The objective of this project is to integrate the "Enhancement of marine meteorology simulation technology on coastal and harbor areas". Supplying waves, tides, currents and tsunamis' information to major harbors in Taiwan and making effective prevention strategies and giving suggestions is what we want to do. Last, we provide references for port authorities and engineering units to maintain normal operation of harbors and to maintain sustainable development of the coastal areas.

Taicoms模式架構 Taicoms mode architecture

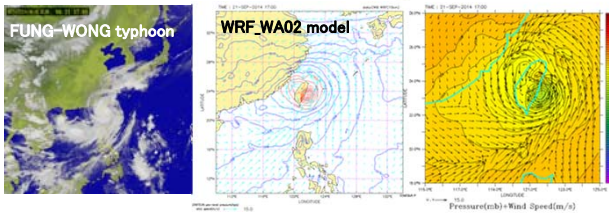


研究港口 Research Harbors



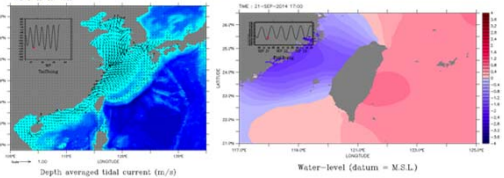
作業流程 Process assignment

中央氣象局 - 風場及氣壓場模式
CWB - Wind field and pressure field model

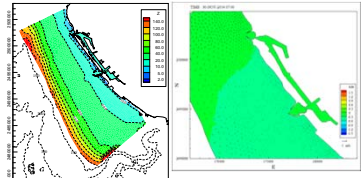


水動力模式 Hydrodynamic model

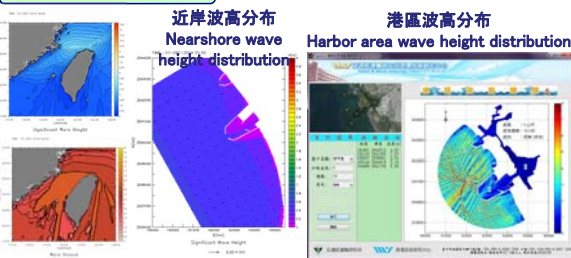
遠域潮流模擬 COHERENS模式 Far field - Current & Tide
(COupled Hydrodynamical Ecological model for REgional Shelf seas)



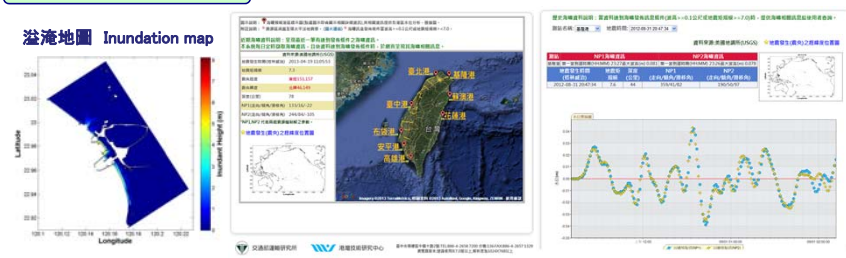
近岸潮流模擬 二維有限元素水動力模式
Nearshore - Current & Tide (fehdm model)



波浪模式 Wave model



海嘯模式 Tsunami model

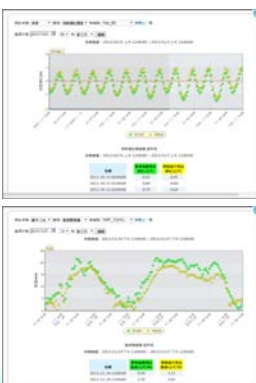


模擬成果展示 - 港灣環境資訊網

Display of simulation results - Harbor Environment Information Website

海氣象模擬綜合表
Sea meteorological integrated table

日期時間	風速	風向	浪高	浪向	水位	潮流	海嘯
2015-01-01 00:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 01:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 02:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 03:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 04:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 05:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 06:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 07:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 08:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 09:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 10:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 11:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 12:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 13:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 14:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 15:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 16:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 17:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 18:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 19:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 20:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 21:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 22:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
2015-01-01 23:00	1.00	0.00	0.00	0.00	0.00	0.00	0.00



藍色公路航線 (風波預測)
Bluehighway (wind & wave forecast)

