

氣象海嘯於北部海岸及河川之 衝擊影響

Li-Ching Lin, Wen-Cheng Liu, and Chin H. Wu

Lin et al., 2024, Front. Mar. Sci.

Lin et al., 2024, Estuar., coast. shelf sci.

Li Ching Lin

plihkimo@gmail.com

 Li-Ching-Lin-2



College of Engineering
UNIVERSITY OF WISCONSIN-MADISON



經濟部水利署
Water Resources Agency, MOEA

Conference on Weather Analysis and Forecasting, 5 September 2024



Tsunami



International Tsunami
Information Center

www.TsunamiWave.org

A UNESCO/IOC - NOAA Partnership

Rogue wave

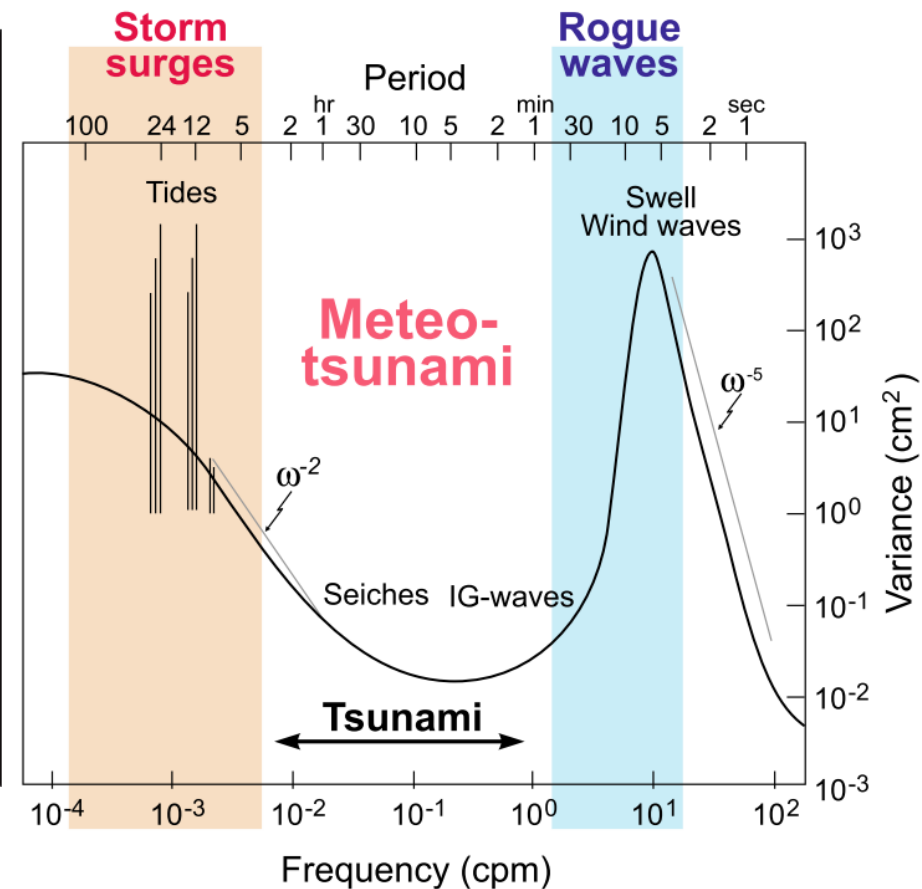
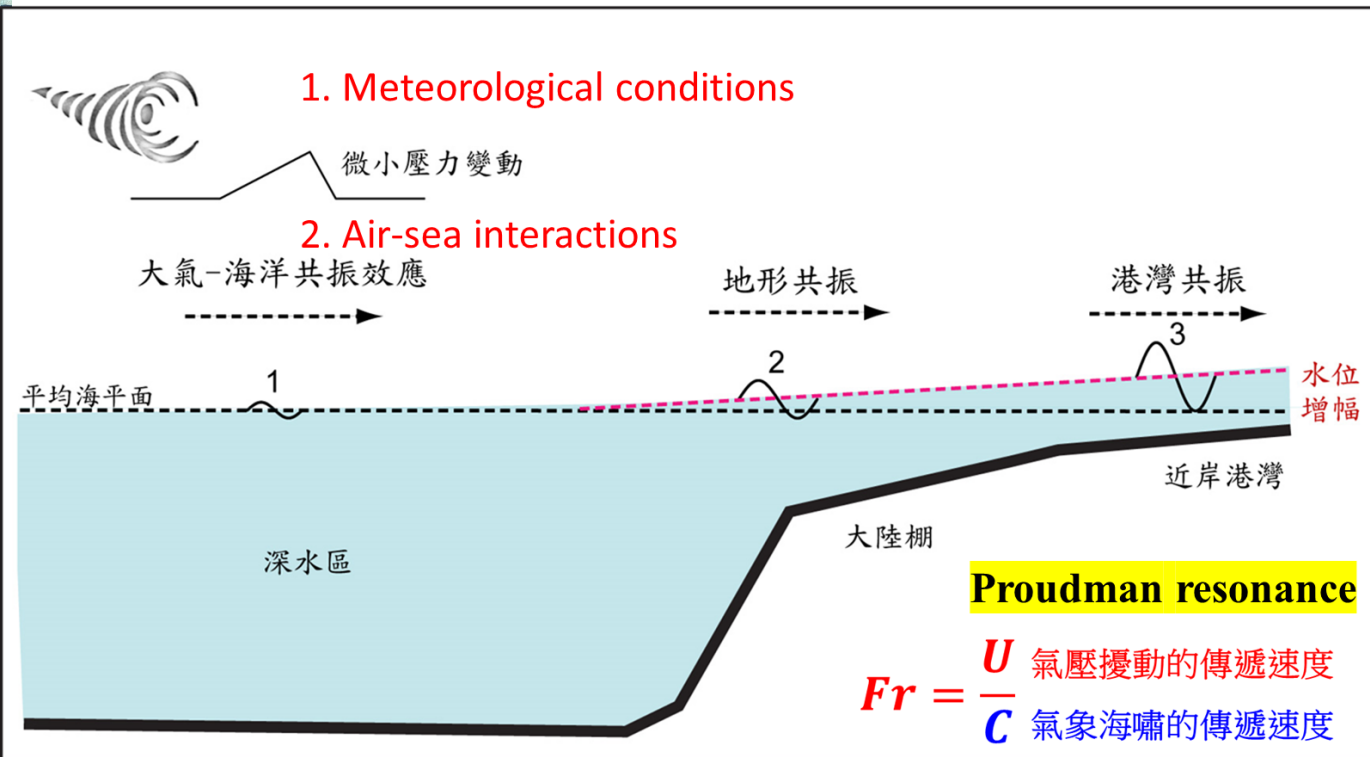


Oxford University

Meteorological Tsunami

Forces: a rapid movement of atmospheric disturbances

Response : long waves with periods between 2 min to 2 h



Meteotsunami Hazards



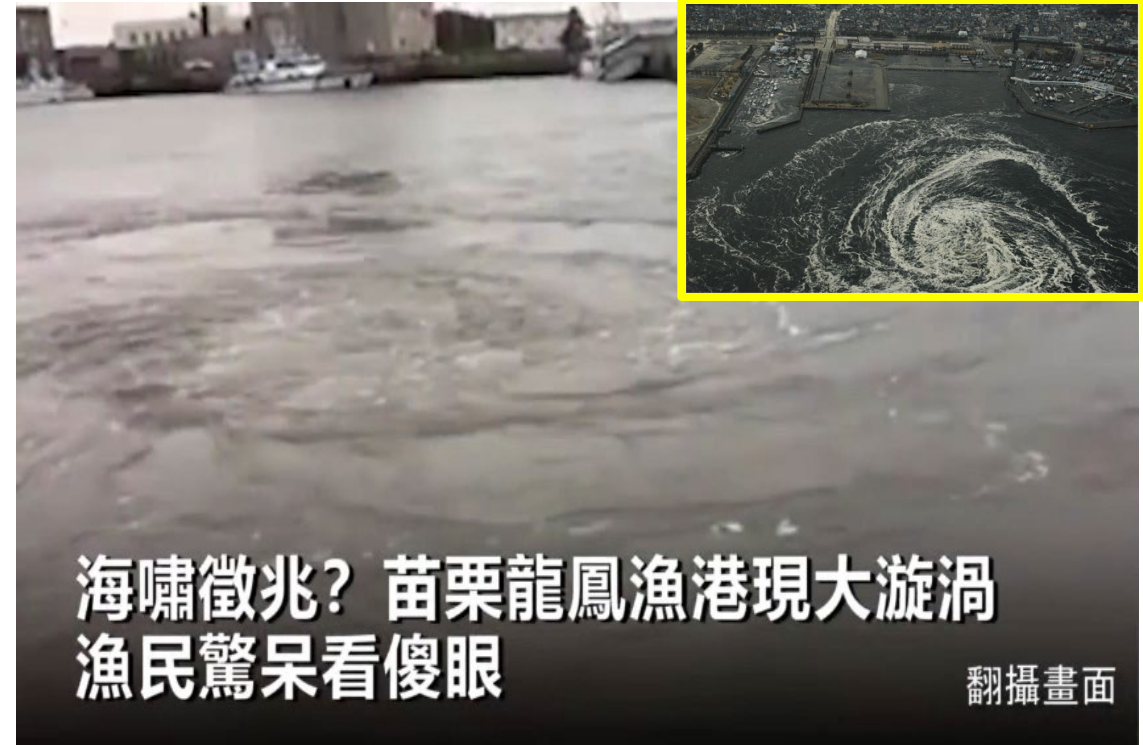
[2008/01/30 聯合報]

昨天中午12時30分許，龍鳳漁港湧起「怪浪」，岸邊遠遠看得到海水急速漲起，灌進港區內，強大的水流撞上南堤後轉彎，**在航道擴散並形成巨大漩渦**，驚濤拍岸，浮水碼頭也搖晃撞擊，聲勢驚人，漁民目測潮水一個漲退，**岸邊水痕顯示落差最高達2.5公尺**。

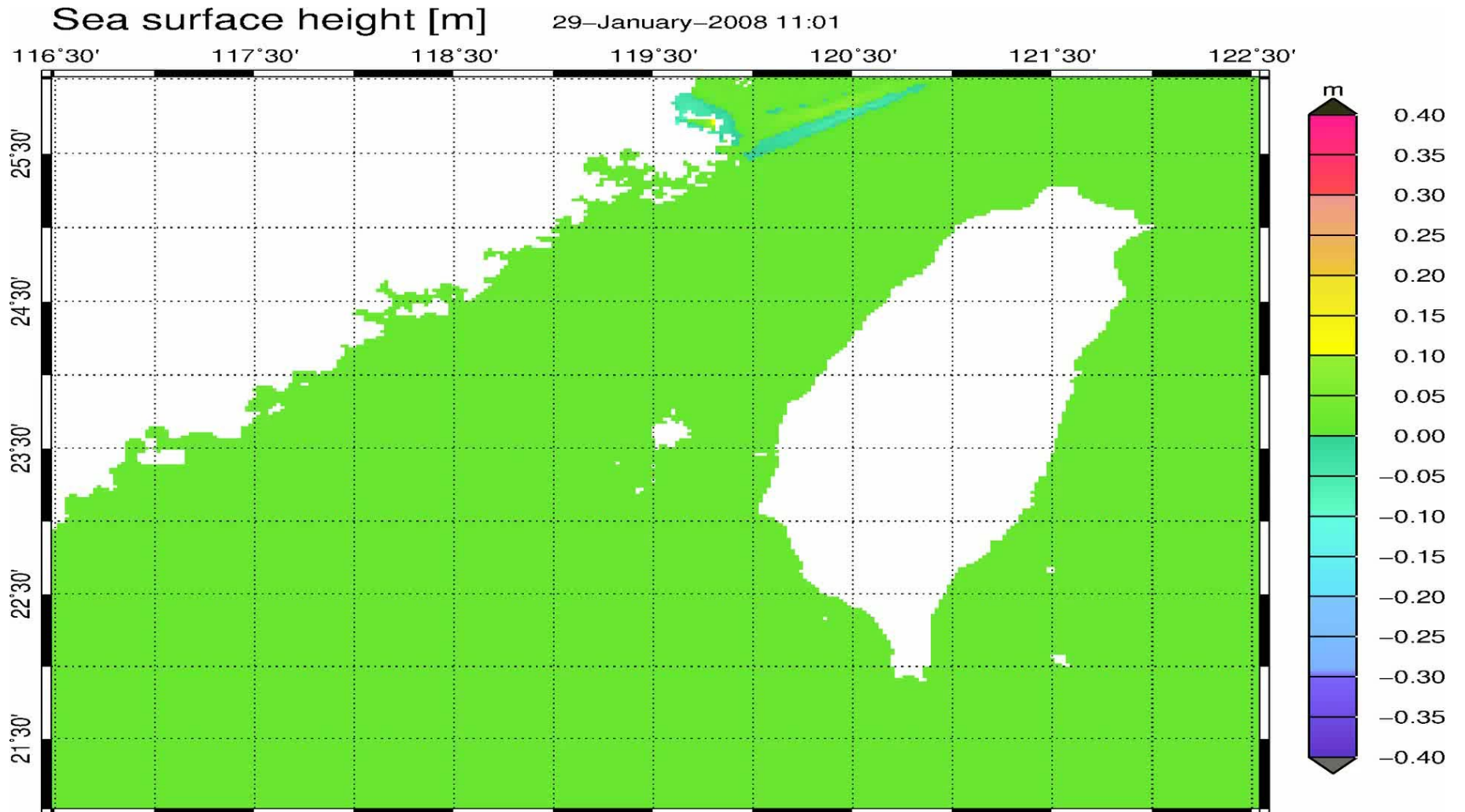
[2018/11/29三立新聞網]

有民眾在11月28日下午2時48分，用手機拍到苗栗龍鳳漁港內，水面上竟然出現「**漩渦**」，當時一分鐘內**水位上升1.5公尺**，就連船也升高到差點「上岸」，

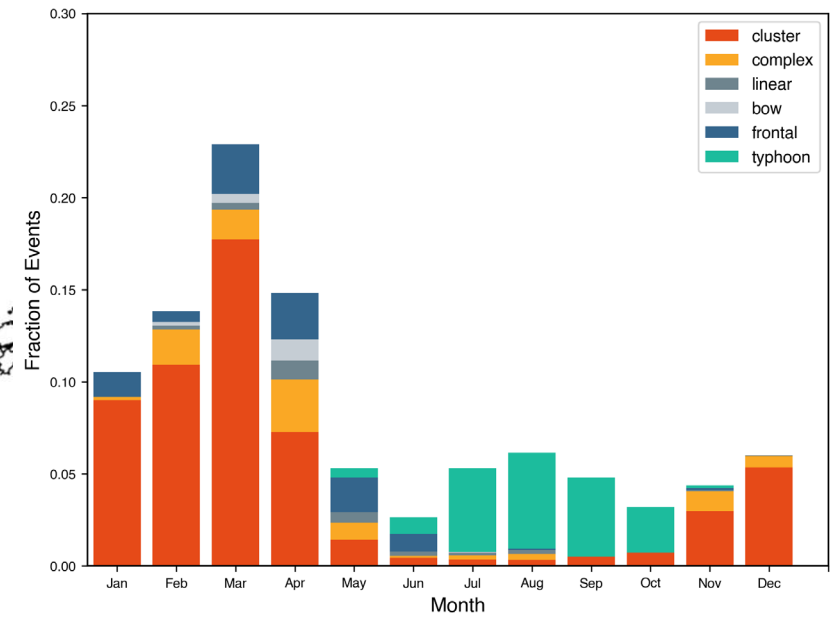
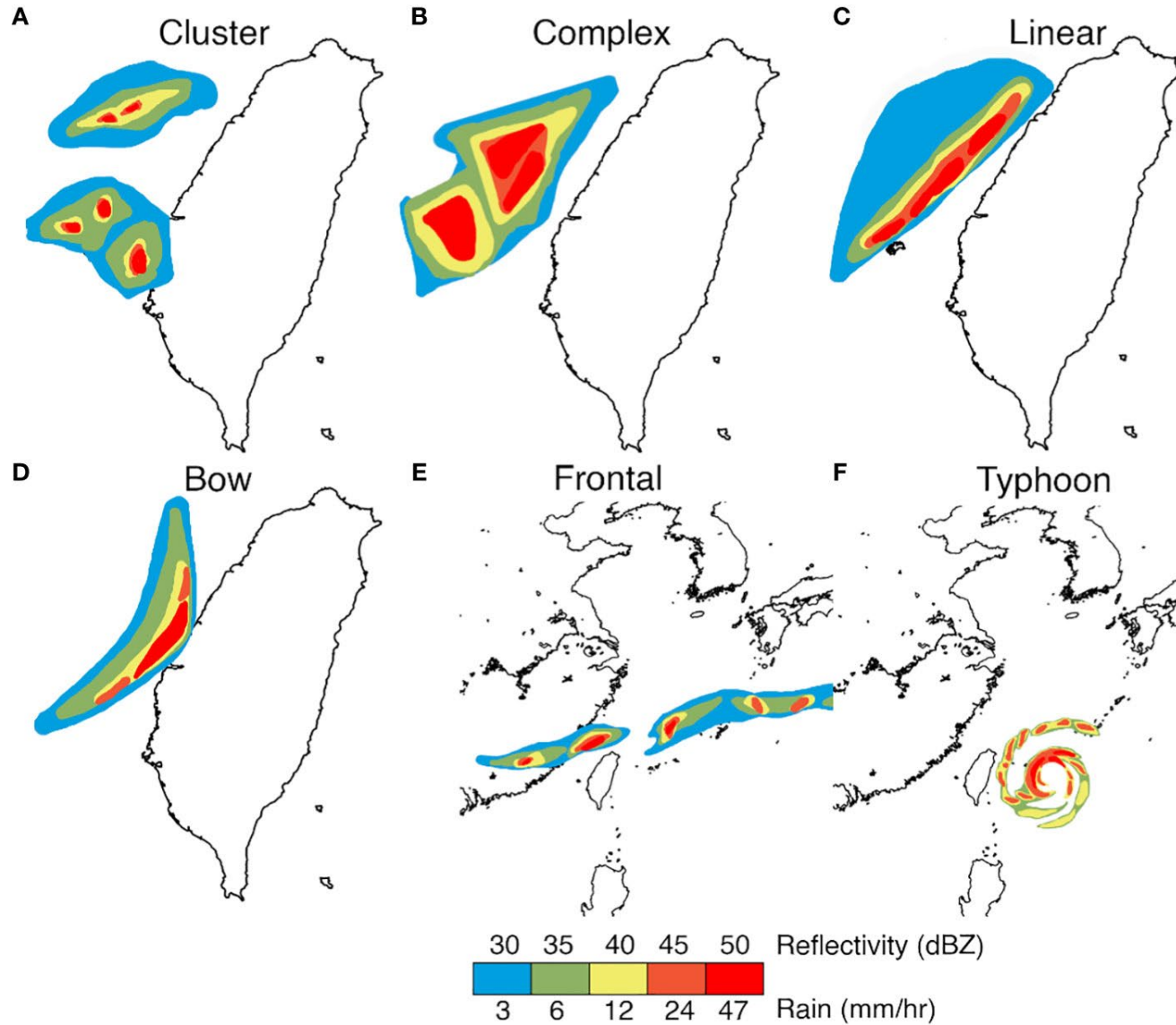
2018 Meteotsunami, Taiwan



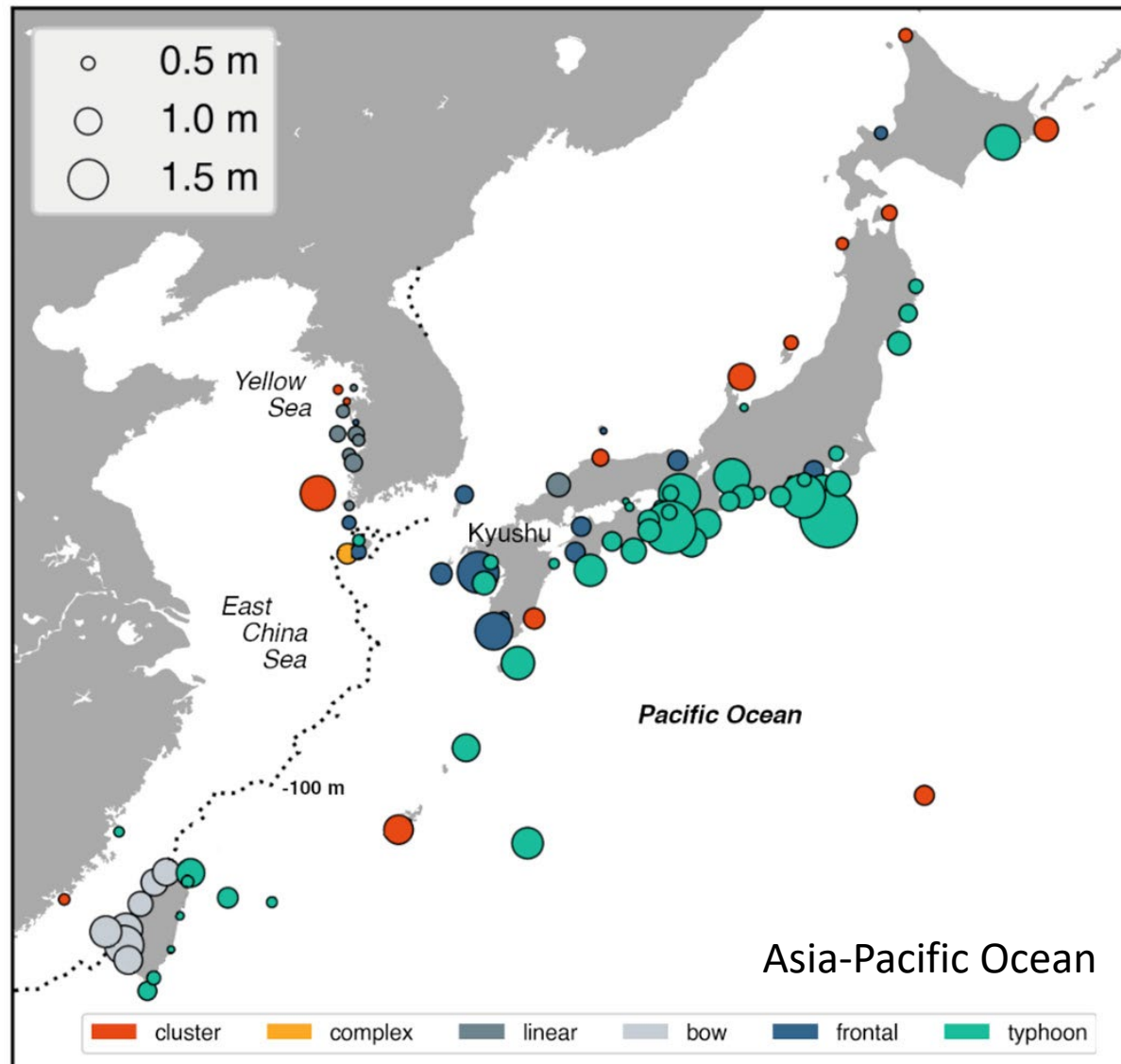
Meteotsunami Hazards



Storm Patterns vs Meteotsunamis

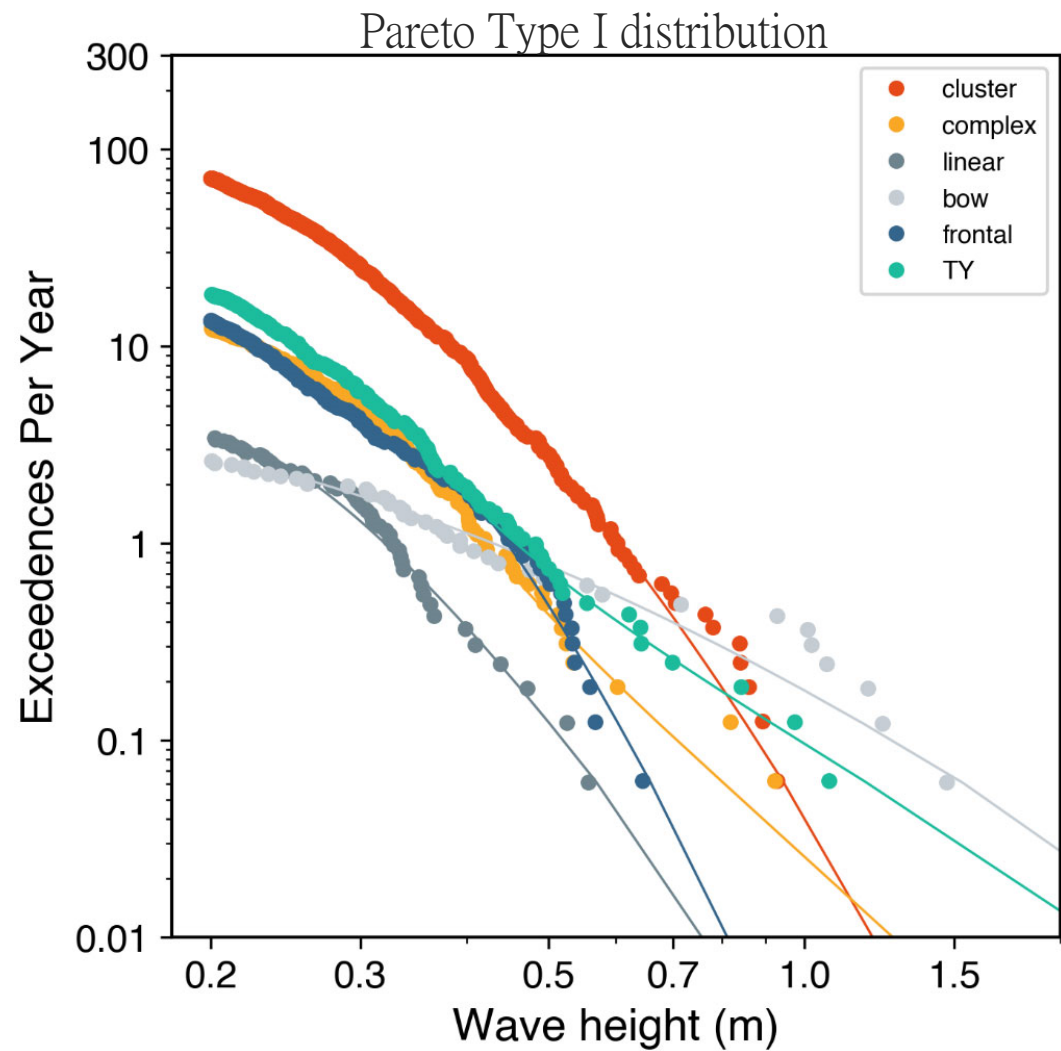
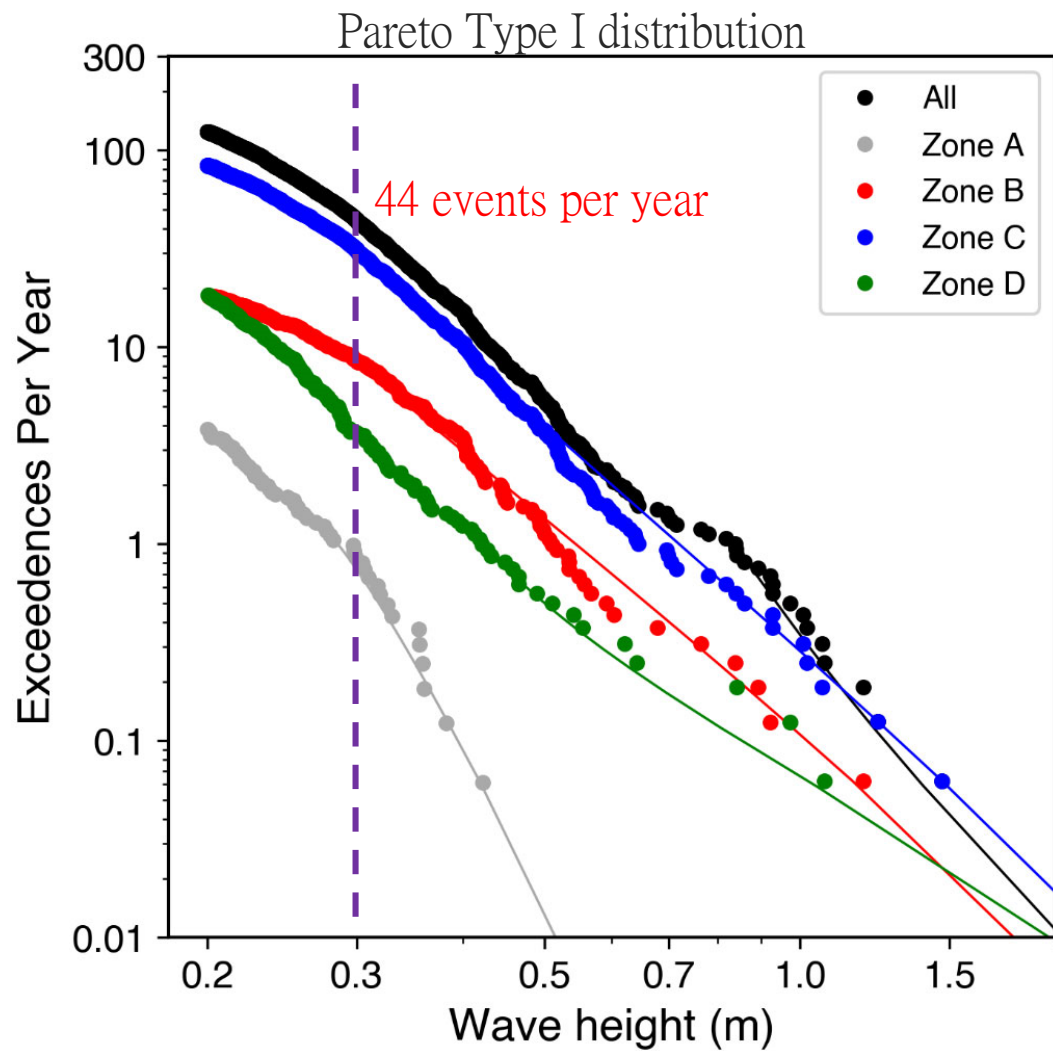


Extreme Meteotsunamis

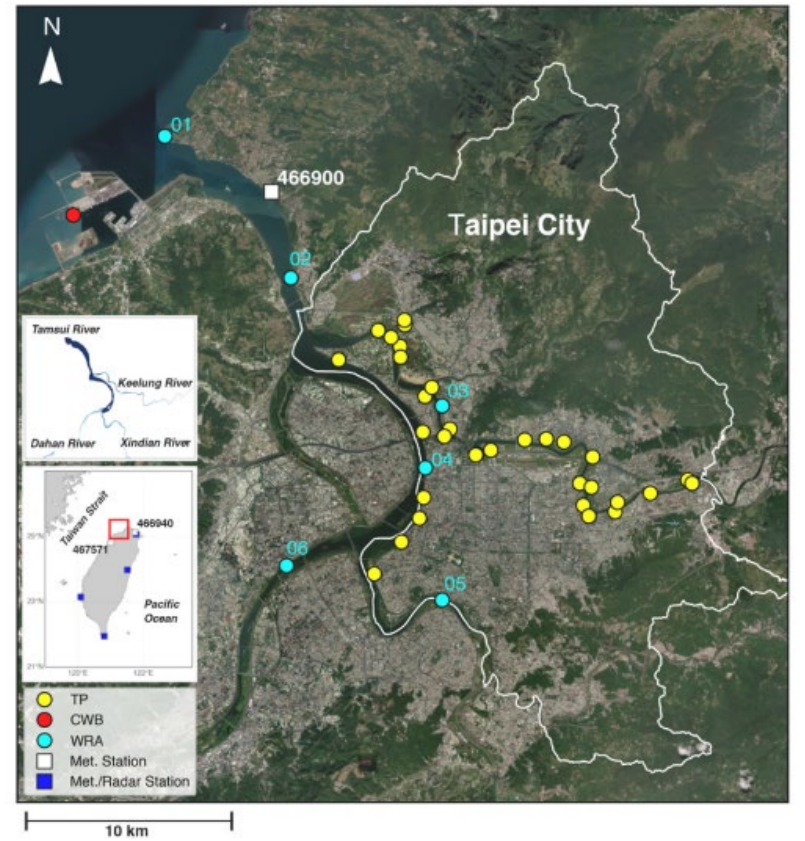
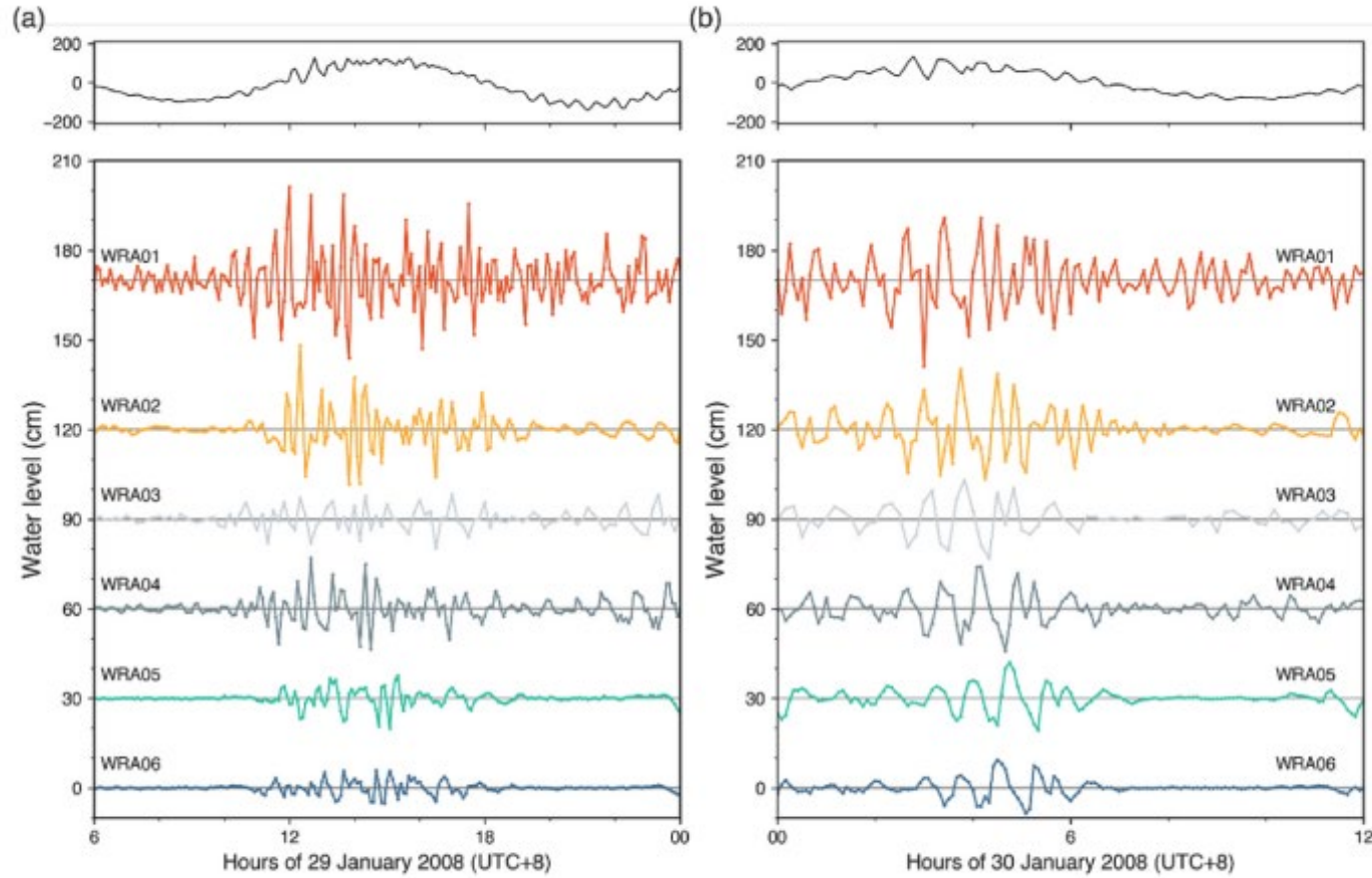


Korea 2010-2019
Japan 2009-2020
Taiwan 2005-2020

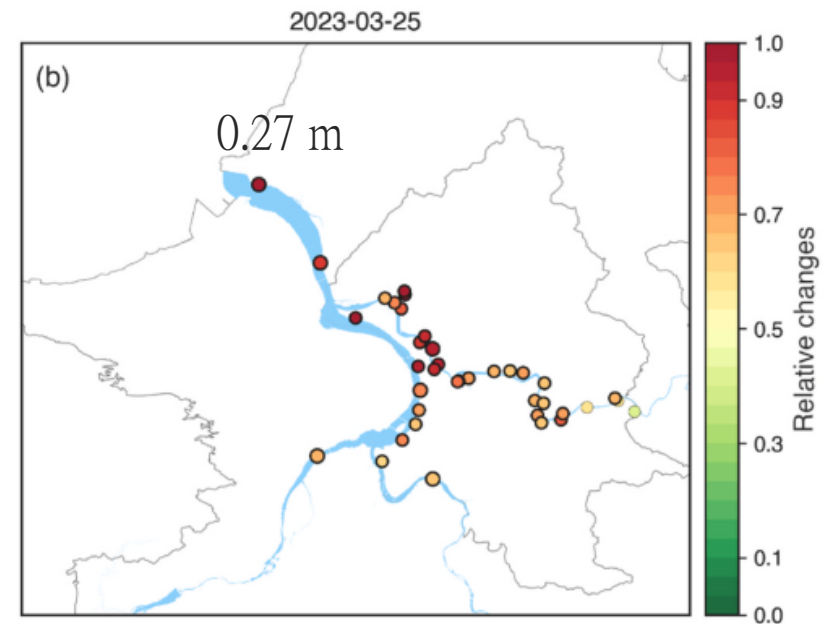
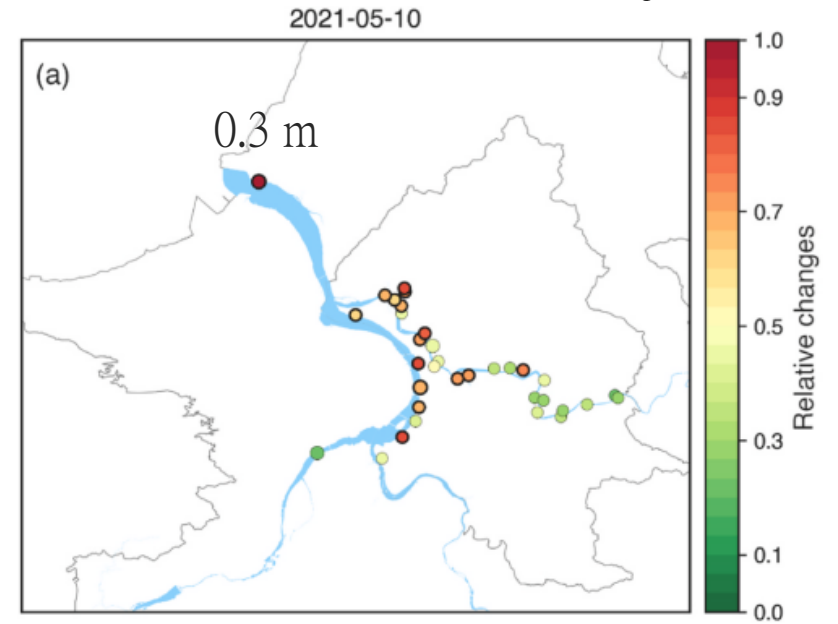
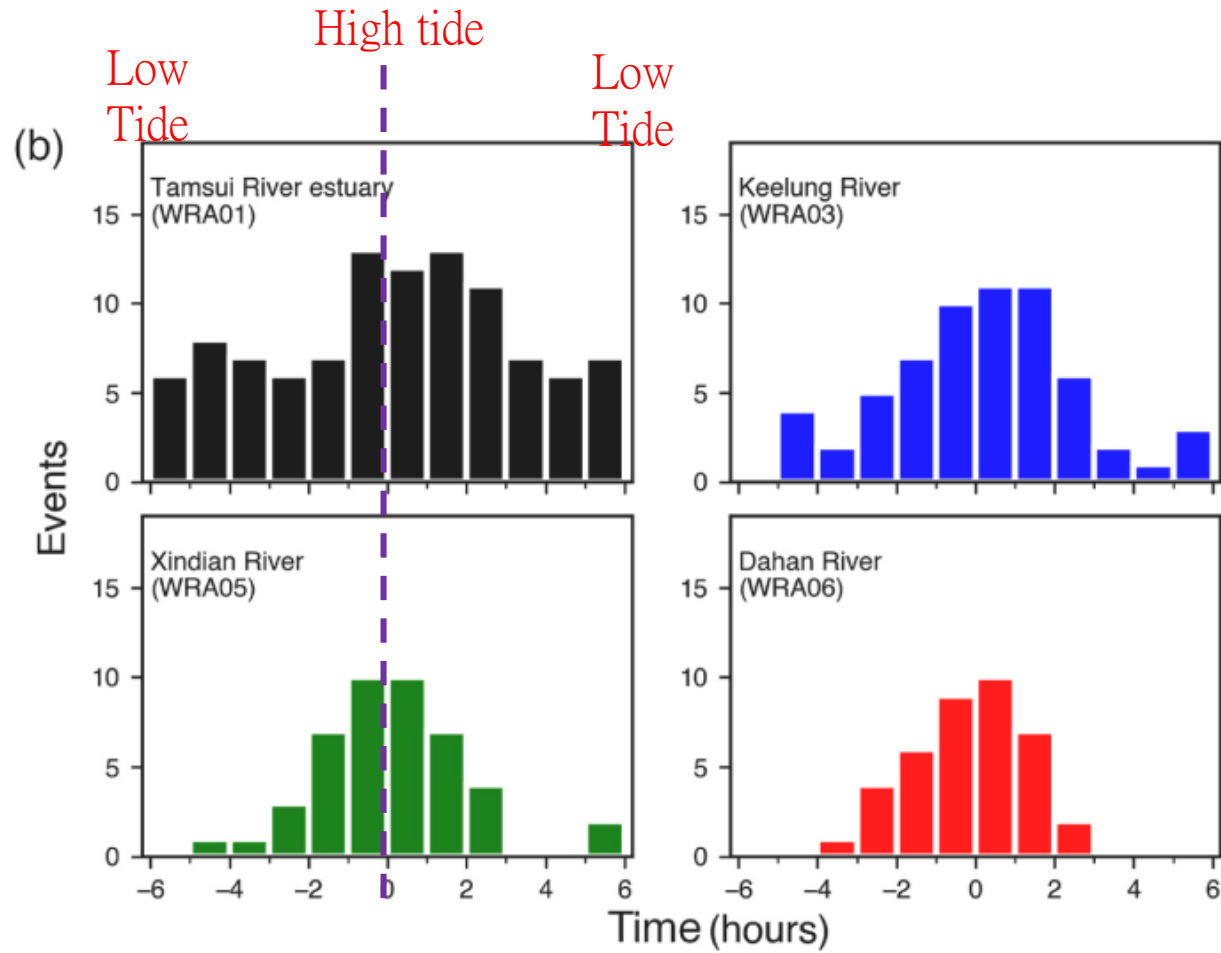
Annual meteotsunami exceedances



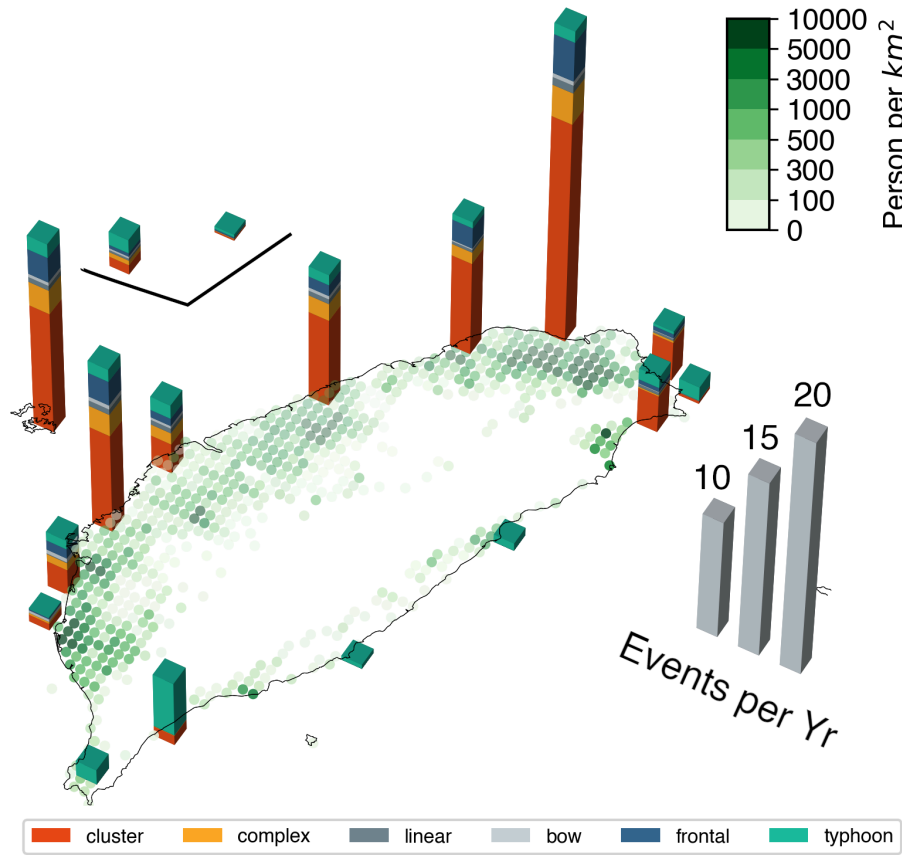
Meteotsunami in the Tamsui River estuary



Meteotsunami in the Tamsui River estuary



Future works



Meteotsunami occurred on 31 March 2024

