

黃怡陵 助理教授 地震學研究室

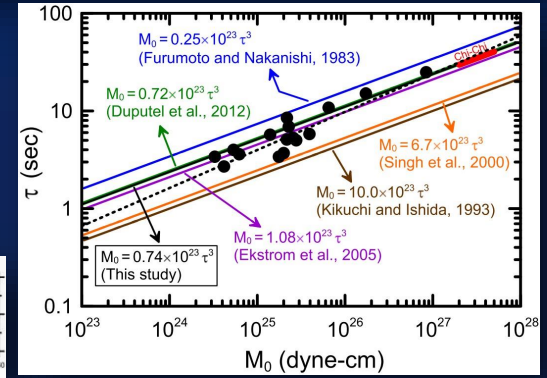
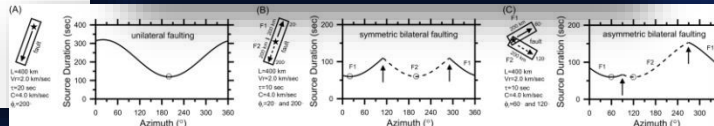
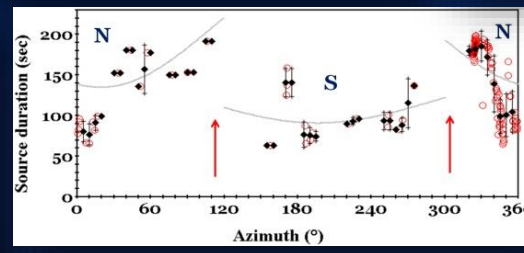
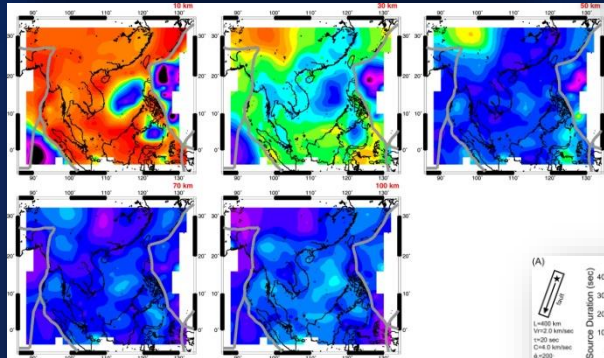
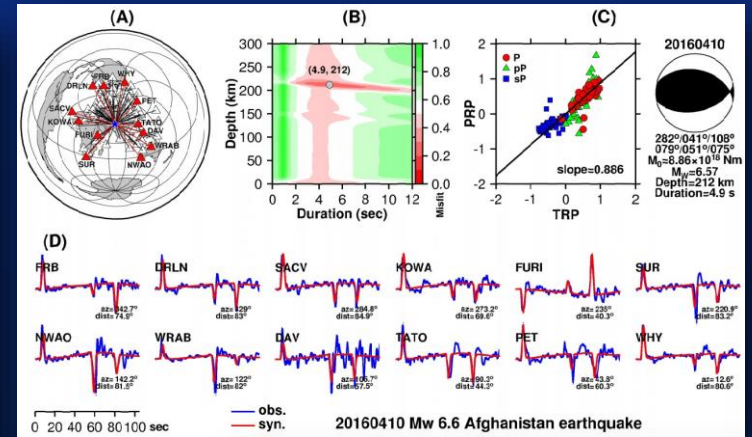
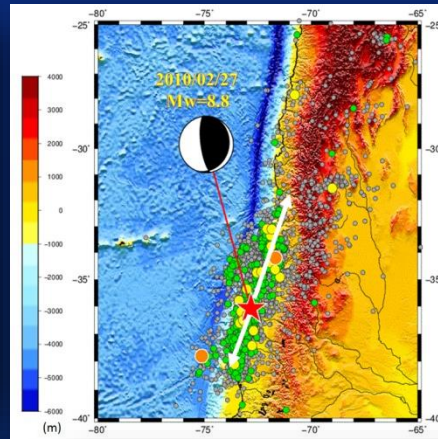
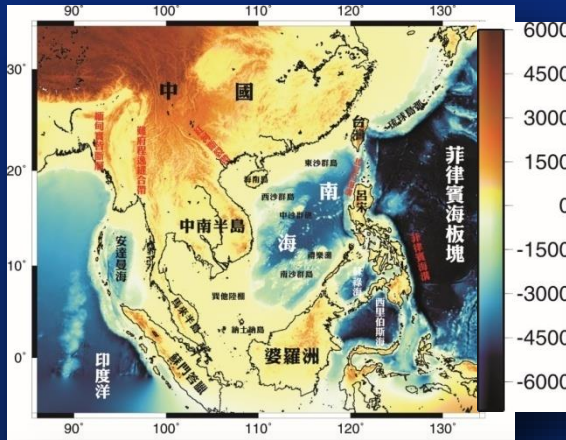


學歷：國立中央大學 地球物理研究所 博士

經歷：國立臺灣海洋大學 地球科學研究所 助理教授
中央研究院 地球科學研究所 博士後研究
國家災害防救科技中心 博士後研究

研究領域：地震學、強震地動學、地體構造學

研究內容：臺灣南部至南中國海周邊地區之地震與地體構造
大規模之中、深源地震震源參數與斷層破裂特性



Yi-Ling Huang, Assistant Professor

Laboratory of Seismology



Education: Institute of Geophysics, National Central University (PhD)

Experience: Institute of Earth Sciences, National Taiwan Ocean University (Assistant Professor)

Institute of Earth Sciences, Academia Sinica (Postdoctoral Fellow)

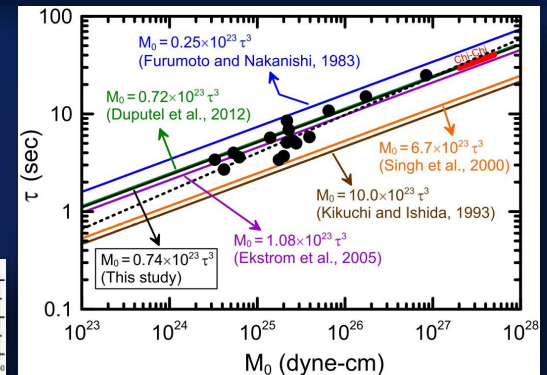
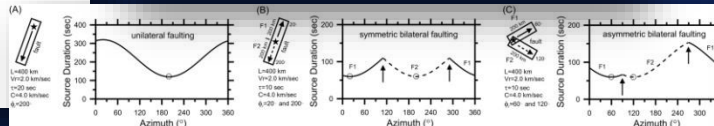
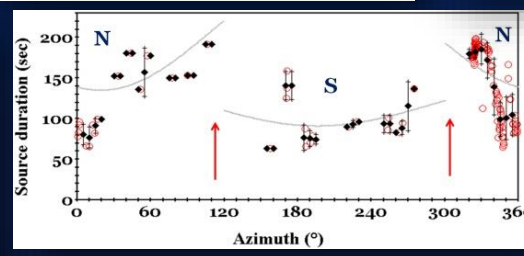
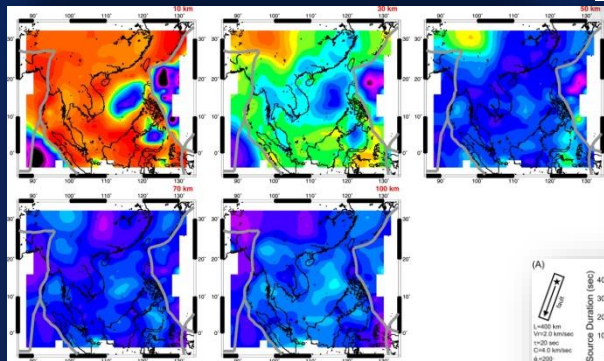
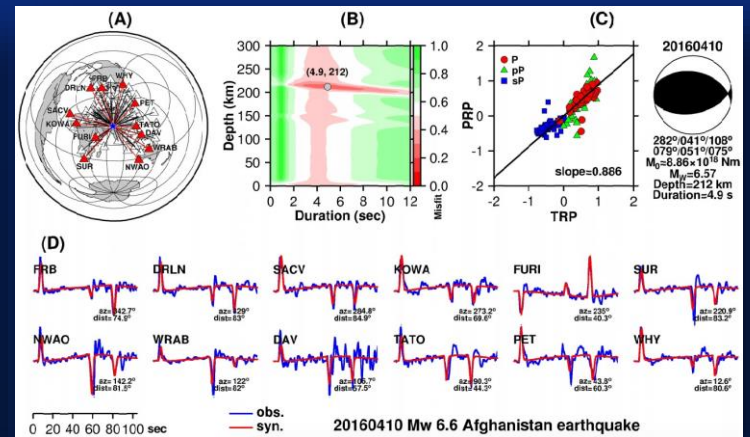
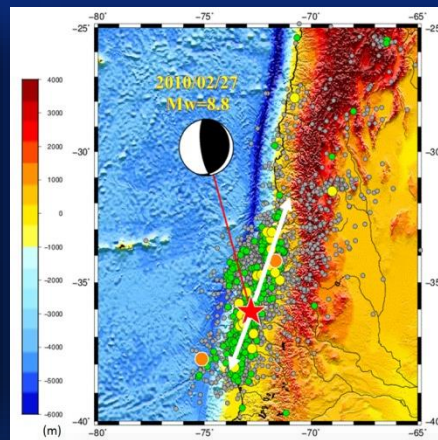
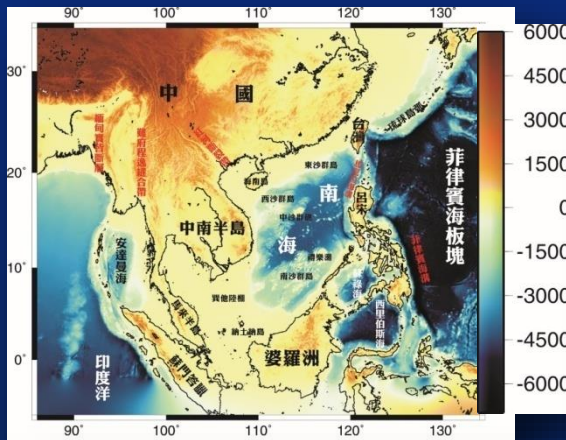
National Science and Technology Center for Disaster Reduction (Postdoctoral Fellow)

Expertise: Seismology, Strong Ground motion, Tectonics

Research interest: Earthquakes and tectonic structures from southern Taiwan to the

South China Sea and the nearby region

Source parameters and rupture characteristics of large earthquakes occur in moderate and deep depth





Relationship Between Seismic Moment and Source Duration for Seismogenic Earthquakes in Taiwan: Implications for the Product of Static Stress Drop and the Cube of Rupture Velocity

RUEY-DER HWANG^{1,*}, CHENG-YING HO², TZU-WEI LIN³, WEN-YEN CHANG⁴, YI-LING HUANG⁵, CAI-YI LIN¹ and CHIUNG-YAO LIN¹

¹Department of Geology, Chinese Culture University, Taipei, Taiwan, ROC.
E-mail: hrd@faculty.pccu.edu.tw

²ZhongHan Technology Co., Ltd., Taipei, Taiwan, ROC.

³Seismological Center, Central Weather Bureau, Taipei, Taiwan, ROC.

⁴Department of Natural Resources and Environmental Studies, National Dong Hwa University, Hualien, Taiwan, ROC.

⁵Institute of Earth Sciences, National Taiwan Ocean University, Chilung, Taiwan, ROC.

Received: April 15, 2019; Revised January 17, 2020; Accepted: January 20, 2020; Published: 27 January, 2020

臺灣孕震帶地震之地震矩與震源持續時間關係研究：由靜應力降與破裂速度三次方關係之探討

黃瑞德^{1,*}、何丞穎²、林祖慰³、張文彥⁴、黃怡陵⁵、林采儀¹、林瓊瑤¹

¹文化大學地質學系；²駿翰科技有限公司

³中央氣象局地震測報中心；⁴東華大學自然資源及環境學系

⁵臺灣海洋大學地球科學研究所

重要研究成果

- 本研究使用遠震P波逆推法，系統性地分析臺灣區孕震帶震矩規模5.5~7.1之地震，其震源持續時間 τ 與地震矩 M_0 之間的關係。
- 忽略震源自相關，並假設圓形破裂模型中之靜應力降乘以破裂速度三次方為定值，分析結果顯示震源持續時間和地震矩之間的關係成三次方的冪次關係($M_0 \propto \tau^3$)。
- 分析結果得出的關係式不只可提供估算大地震震源持續時間的資訊，亦可幫助探討孕震帶地震的破裂特性。

