CURRICULUM VITAE

Kim Chu-Fang Yang 楊筑方

- Affiliation: Institute of Earth Sciences, Academia Sinica
  128, Sec. 2, Academia Road, Nangang, Taipei 11529, Taiwan
- Phone: +886-2-2783-9910, ext. 1508
- E-Mail: kcfyang@gate.sinica.edu.tw / kcfyang@earth.sinica.edu.tw

RESEARCH INTERESTS

- Seismically detected environmental processes: Analyze dynamic processes of air-land-water interactions using seismic data and methods.
- Arrayed waveform analysis and inversions.
- Tropical cyclone modeling: Dynamic processes of tropical cyclone, interactions of tropical cyclone and topography, and interactions of typhoon and monsoon systems.

EDUCATION

09/2015-06/2021	• **Ph.D.**, Taiwan International Graduate Program (TIGP)-Earth System Science, Academia Sinica and National Central University, Taipei, Taiwan
09/2008-01/2011	• **M.S.**, Earth Sciences (specialty in Atmospheric Sciences), National Taiwan Normal University (NTNU), Taipei, Taiwan
09/2004-06/2008	• **B.S.**, Earth Sciences, National Taiwan Normal University, Taipei, Taiwan

EXPERIENCES

08/2021-present	• **Postdoctoral fellow**, Institute of Earth Sciences, Academia Sinica, Taiwan
03/2020-02/2021	• **Visiting PhD student**, Department of Ocean Systems, Royal Netherlands Institute for Sea Research (NIOZ), the Netherlands
11/2012-08/2015	• **Research assistant**, Institute of Earth Sciences, Academia Sinica, Taiwan
02/2011-02/2012	• **Research assistant**, Mesoscale Meteorology Laboratory, Department of Earth Sciences, NTNU, Taiwan
02/2007-08/2008	• **Part-time research and teaching assistant**, Mesoscale Meteorology Laboratory, Department of Earth Sciences, NTNU, Taiwan

HONORS

2019	• Graduate Students Study Abroad Scholarship (博士生千里馬計畫), Ministry of Science and Technology (MOST), Taiwan
2018	• Outstanding Student Paper Award of Earth Science Research Promotion Center, MOST, Taiwan
2007	• College Student Research Award, National Science Council (former MOST), Taiwan

PUBLICATIONS

Refereed publications

Yang, C.-F., Chi, W.-C., van Haren, H., Lin, C.-R., & Kuo, B.-Y. (2021). Tracking deep-sea internal wave propagation with a differential pressure gauge array. *Scientific Reports*, 11, 23311 (9 pp.) https://doi.org/10.1038/s41598-021-02721-1

Chen, J.-C. F., Chi, W.-C., & **Yang, C.-F.** (2021). Seismically derived ground tilts related to the 2010 Chilean tsunami. *Seismological Research Letters*, 92 (4), 2172–2181. https://doi.org/10.1785/0220200288

Yang, C.-F.[*], Chi, W.-C.[*], & van Haren, H. (2021). Deep-sea turbulence evolution observed by multiple closely spaced instruments. *Scientific Reports*, 11, 3919 (12pp.) https://doi.org/10.1038/s41598-021-83419-2

van Haren, H., Chi, W.-C., **Yang, C.-F.**, Yang, Y.-J., & Jan, S. (2020). Deep sea floor observations of typhoon driven enhanced ocean turbulence. *Progress in Oceanography*, 184, 102315 (12 pp.) https://doi.org/10.1016/j.pocean.2020.102315

Yang, C.-F., Chi, W.-C.[*], & Lai, Y.-J. (2018). Seismically detected ground tilts induced by precipitation and fluvial processes: An example from Taiwan. *Journal of Geophysical Research: Solid Earth*, 123, 4814–4828. https://doi.org/10.1029/2017JB014768

Yang, C.-F., & Chien, F.-C.[*] (2011). Numerical study of the heavy rainfall in Taiwan associated with Typhoon Kalmaegi (2008). *Atmospheric Sciences*, 39, 311–342. (in Chinese with English abstract)

Chien, F.-C., & **Yang, C.-F.** (2009). A study of southwesterly flow associated with northward-moving typhoons. *Atmospheric Sciences*, 37, 27–48. (in Chinese with English abstract)

Theses

Yang, C.-F. (2021). Broadband Seismic and Differential Pressure Gauge Waveform Analysis of Environmental Processes: Implication of Hydrodynamics. National Central University, PhD dissertation, advised by Dr. W.-C. Chi, Prof. J.-Y. Lin, and Dr. H. van Haren.

Yang, C.-F. (2011). Numerical Study of Typhoon Kalmaegi (2008). National Taiwan Normal University, M.S. thesis, advised by Prof. F.-C. Chien. (in Chinese)

CONFERENCE PRESENTATIONS

Yang, C.-F., Chi, W.-C., Lin, C.-J., & Lai, Y.-J. (2019). Seismically Detected Ground Tilts Induced by Precipitation and Fluvial Processes: Examples from Taiwan. 5th International Working Group on Rotational Seismology, Sun Moon Lake, Taiwan, September 22-26.

Yang, C.-F., Chi, W.-C., Lin, C.-J., & Ke, C.-C. (2019). Seismically Detected Ground Deformation from A Dense Seismic Array during A One-day

Continuous Water Pumping Experiment. 27th IUGG General Assembly, Montreal, Canada, July 8-18.

Yang, C.-F., Chi, W.-C., & Lin, C.-J. (2018). Ground Tilts Derived from Seismometers: Examples from Taiwan. 2018 AGU Fall Meeting, Washington DC, USA, December 10-14.

Yang, C.-F., & Chi, W.-C. (2017). Ground Tilts Induced by Fluvial Processes Recorded by Broadband and Strong-motion Seismometers. 2017 AGU Fall Meeting, New Orleans, USA, December 11-15.

Yang, C.-F., Chi, W.-C., & Lai, Y.-J. (2017). Ground Tilts Induced by Precipitation and Fluvial Processes: An Example from Taiwan. EGU Galileo conference: From process to signal – advancing environmental seismology, Ohlstadt, Germany, June 6-9.

Yang, C.-F., Chi, W.-C., & Lai, Y.-J. (2016). Ground Motions Induced by Precipitation and Fluvial Processes: An Example from Taiwan. EGU General Assembly 2016, Vienna, Austria, April 17-22.

Yang, C.-F., Chi, W.-C. & Lai, Y.-J. (2015). Weather-related Ground Motions Recorded by Taiwan Broadband Seismic Network Stations. 2015 AGU Fall Meeting, San Francisco, USA, December 14-18.

Yang, C.-F., & Chi, W.-C. (2014). Weather-related Ground Motions Recorded by Taiwan Broadband Seismic Network Stations. 2014 AGU Fall Meeting, San Francisco, USA, December 15-19.

Yang, C.-F., & Chien, F.-C. (2010). Numerical study of Typhoon Kalmaegi (2008). Joint 2010 CWB Weather Analysis-Forecasting and COAA 5th International Ocean-Atmosphere Conference, Taipei, Taiwan, June 28-30.

Yang, C.-F., & Chien, F.-C. (2010). A study of the heavy rainfall event in Taiwan associated with Typhoon Kalmaegi (2008). International Workshop on Typhoon Morakot (2009), Taipei, Taiwan, March 25-26.

FIELD WORK AND OCEANOGRAPHIC EXPEDITIONS

Field work

2016-present	• Mud volcano seismic station network installation and data collection, southern Taiwan
2014-present	• Geothermal measurements, mountainous regions of Taiwan
2019 & 2021	• On-land multi-channel seismic (MCS) surveys, northeastern Taiwan
2018 & 2021	• Seismic array deployment, northeastern Taiwan
2017	• Seismic station site scouting, Taroko National Park (mountainous region of eastern Taiwan)

Research cruises

2022	• 5-day cruise, MCS reflection survey by R/V Legend, offshore of southwestern Taiwan

2021 • 5-day cruise, MCS reflection survey by R/V Legend, offshore of southwestern Taiwan

2019 • 3-week cruise, Old Pacific ORCA ocean-bottom seismometer (OBS) deployment by R/V Kilo Moana, south Pacific

2018 • 2-week cruise, mooring recovery by R/V Sonne, Mariana Trench

• 3-day cruise, OBS and mooring recovery by R/V Ocean Research 3, offshore of eastern Taiwan

2017 • 5-day cruise, OBS deployment by R/V Ocean Research 1, offshore of eastern Taiwan

LANGUAGES

- *Mandarin* Native language
- *English* CEFR: B2 to C1
- *Dutch* CEFR: A2 to B1

SKILLS

- *Programming* Python, MATLAB, FORTRAN, GMT, NCAR Command Language (NCL), shell scripting
- *Software* SAC, GrADS, Adobe Illustrator
- *Numerical model* Weather Research and Forecasting (WRF) Model

MEMBERSHIPS

- American Geophysical Union (AGU)
- European Geosciences Union (EGU)

MISCELLANEOUS EXPERIENCES

2019 • A selected docent for R/V Sally Ride tour, Field Trip of AGU Fall Meeting, San Francisco, USA

• Assist activities in the Open House of Academia Sinica, Taipei, Taiwan

• Assist in organizing the Taiwanese-German Joint Workshop on Marine Gas Hydrate, Taipei, Taiwan

• Assist in organizing the 5th International Working Group on Rotational Seismology, Sun Moon Lake, Taiwan