# **CURRICULUM VITAE**

# Chia-Jeng (CJ) Chen, Ph.D.

Deputy Chair & Associate Professor Civil Engineering, National Chung Hsing University

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### I. EXPERTISE AND RESEARCH INTERESTS

Hydro-Climatic Modeling and Forecasting Regional Catastrophe Modeling and Risk Assessments Integrated & Interdisciplinary Climate Risk Assessments GIS and Remote Sensing Applications Sustainability and Environmental Management Statistical Modeling and Machine Learning Applications Optimization Algorithms and Applications

### **II. PROFESSIONAL APPOINTMENTS**

Deputy Chair	August 2022–present	
Civil Engineering		
National Chung Hsing University		
Associate Professor	February 2020–present	
Civil Engineering		
National Chung Hsing University		
Assistant Professor	August 2015–January 2020	
Civil Engineering		
National Chung Hsing University		
Sr. Scientist	July 2013–July 2015	
Catastrophe Risk Engineering		
AIR Worldwide		
Postdoctoral Fellow	August 2012–June 2013	
Georgia Water Resources Institute		
School of Civil and Environmental Engineering		
Georgia Institute of Technology, Atlanta, Georgia		

Graduate Research Assistant	January 2007–July 2012
School of Civil and Environmental Engineering	
Georgia Institute of Technology, Atlanta, Georgia	

### **Research Assistant**

Research and Development Center Central Weather Bureau, Taipei, Taiwan August 2004–August 2006

# **III. EDUCATION**

Ph.D.,	Civil and Environmental Engineering, August 2012	
	Georgia Institute of Technology, Atlanta, Georgia	
Major:	Environmental Fluid Mechanics and Water Resources	
Minor:	Earth and Atmospheric Sciences; Statistics	
Thesis Title:	Hydro-Climatic Forecasting Using Sea Surface Temperatures	
M.S.,	Civil and Environmental Engineering, May 2008	
	Georgia Institute of Technology, Atlanta, Georgia	
M.S.,	Bioenvironmental Systems Engineering, May 2004	
	National Taiwan University, Taipei, Taiwan	
Major:	Soil and Water Resources Engineering	
Thesis Title:	Inverse Analysis of Identifying Groundwater Contaminant Source and its	
	Release History along with Optimizing Dispersivity Spatial Patterns	
B.S.,	Bioenvironmental Systems Engineering, May 2002	
	National Taiwan University	

# IV. PROJECT EXPERIENCE, SPONSORED RESEARCH, AND COLLABORATION

- Regional flood hazard assessment adaptable to global environmental change: A hybrid mechanistic-empirical modeling framework, \$2,571,000 NTD funded by the Ministry of Science and Technology (MOST 109-2221-E-005-001-MY3; PI) (August 2020–July 2023).
- Climate-smart adaptation algorithm on establishing interdisciplinary risk assessment and dynamic adaptation pathways, \$2,912,000 NTD funded by MOST 108-2621-M-005-008-MY3; PI (August 2019–July 2022).
- 3. Taiwan typhoon catastrophe model: Typhoon characteristic analysis, loss prediction, and risk assessment, \$720,000 NTD funded by **MOST 107-2625-M-005-001-; PI** (August 2018–July 2019).

- 4. Interactions between Taiwan's land-use/cover change and regional atmospheric and hydro-meteorological modeling and large-scale climate variability, \$2,483,000 NTD funded by **MOST 105-2621-M-005-004-MY3; PI** (August 2016–July 2019).
- 5. Rainfall analysis in the context of climate change for Jen-I-T'an reservoir, Southwest Taiwan, \$300,000 NTD funded by **Liming Engineering Consultants; PI** (May 2019–September 2019).
- 6. Hydro-climatic forecasting for East and Southeast Asia—methodology and integrated modeling, \$901,000 NTD funded by **MOST 106-2625-M-005-004-; PI** (August 2017–October 2018).
- Hydro-climatic forecasting for East and Southeast Asia—teleconnection patterns, methodology, and integrated modeling, \$1,687,000 NTD funded by MOST 104-2625-M-005-007-MY2; PI (November 2015–July 2017).
- 8. Applying integrated numerical modeling of surface water and subsurface water to study groundwater resources management, \$3,400,000 NTD funded by the Water Resources Agency under **MOEAWRA1050043; Co-PI** (November 2015–July 2017).
- 9. Development of inland flood modeling for Southeast Asian countries (Indonesia, the Philippines, and Vietnam), sponsored by **AIR Worldwide** (November 2013–July 2015).
- 10. Enable climate change responses in Asia and the Pacific—developing a disaster risk financing (DRF) capability—Phase 2: study of potential DRF options, in partnership with the Asian Disaster Preparedness Center (Thailand) and Swiss Re (Switzerland), sponsored by the Asian Development Bank (November 2013–July 2015).
- 11. Philippines catastrophe risk assessment and modeling—Component 3: country catastrophe risk profiles, in partnership with the **Asian Disaster Preparedness Center**, sponsored by the **World Bank** (July 2013–December 2013).
- Development of inland flood modeling for Southeast European countries (Albania, Macedonia, and Serbia), in support of the Europa Re operations, sponsored by the World Bank (July 2013–September 2013).
- 13. Apalachicola Chattahoochee Flint (ACF) sustainable water management plan—Phase I: ACF unimpaired flow review and assessment; Phase II: instream flow and lake levels assessment, sponsored by Black and Veatch Corporation and the ACF Stakeholders (May 2012–June 2013).
- 14. FY 2011 state water resources program, sponsored by **U.S. Dept. of Interior and Geological Survey** (January 2012–June 2013).

- 15. Establishing strategies for natural disaster research based on hydrometeorology and hydroclimatology, recipient of Taiwan Merit Scholarships, sponsored by the **National Science Council in Taiwan** (~\$70,000USD, January 2007–December 2008).
- 16. Developing an atmospheric-pattern-based flood hazard module, sponsored by the **National Science Council in Taiwan** (August 2004–July 2006).
- 17. Developing a climate change and extreme weather monitoring and forecasting system, sponsored by the **Central Weather Bureau in Taiwan** (August 2004–July 2006).

### V. TEACHING EXPERIENCE

#### Instructor

Fall 2015-2022

CE 2315 Engineering Statistics (I) Department of Civil Engineering National Chung Hsing University, Taichung, Taiwan

#### Instructor

Spring 2020–2022

CE 3406 Hydraulic Engineering Department of Civil Engineering National Chung Hsing University, Taichung, Taiwan

#### Instructor

Spring 2016, 2018, and 2019

CE 2371 Fluid Mechanics Department of Civil Engineering National Chung Hsing University, Taichung, Taiwan

#### Instructor

Spring 2017-2021

CE 4158 Topic Study in Civil Engineering (Capstone) Department of Civil Engineering National Chung Hsing University, Taichung, Taiwan

#### Instructor

Spring 2016, 2017, 2020–2022

CE 3329(7775) Climate Change and Environmental Impact (Disaster Risk Assessment) Department of Civil Engineering National Chung Hsing University, Taichung, Taiwan

#### Instructor

Fall 2015-2021

CE 6765 Applied Statistics Department of Civil Engineering National Chung Hsing University, Taichung, Taiwan

#### Instructor

CE 6765 Random Data Analysis Department of Civil Engineering National Chung Hsing University, Taichung, Taiwan

#### Instructor

### Spring 2017–2022

CE 6765 Analysis of Water Resources System (I) Department of Civil Engineering National Chung Hsing University, Taichung, Taiwan

### Instructor

Summer 2010 and 2011; Fall 2011

CEE 4210 Hydrology School of Civil and Environmental Engineering Georgia Institute of Technology, Atlanta, Georgia

### **Teaching Assistant**

Fall 2009, 2010, and 2012

CEE 6231 Probability and Statistics (Statistical Hydrology) School of Civil and Environmental Engineering Georgia Institute of Technology, Atlanta, Georgia

#### Laboratory Assistant

Spring 2003

BSE 2016 Fluid Mechanics Laboratory Department of Bioenvironmental Systems Engineering National Taiwan University, Taipei, Taiwan

Teaching AssistantFall 2002BSE 5071 Climate Change and Environmental EcologyDepartment of Bioenvironmental Systems EngineeringNational Taiwan University, Taipei, Taiwan

# VI. PUBLICATIONS AND PRESENTATIONS

# **Refereed Journal Articles:**

- 1. Lee T-Y, Chiu C-C, **Chen C-J**\*, Lin C-Y, Shiah F-K (2022). Assessing future availability of water resources in Taiwan based on the Budyko framework. *Ecological Indicators* (in revision).
- 2. Huang S-H, Mahmud K, **Chen C-J**\* (2022). Meaningful trend in climate time series: a discussion based on linear and smoothing techniques for drought analysis in Taiwan. *Atmosphere*, **13(3)**:444.

Fall 2018–2022

- 3. Li P-L, Lin L-F, **Chen C-J**\* (2021). Hydrometeorological assessment of satellite and model precipitation products over Taiwan. *Journal of Hydrometeorology*, **22**, 2897–2915.
- 4. Chen Y-C, **Chen C-J**\* (2021) Flood potential assessment in the Gaoping region under climate change using an hourly rainfall generator. *Journal of the Chinese Institute of Civil and Hydraulic Engineering*, **33(6)**, 461–472 (in Chinese).
- 5. Mahmud K, **Chen C-J\*** (2021). Space- and time-varying associations between Bangladesh's seasonal rainfall and large-scale climate oscillations. *Theoretical and Applied Climatology*, **145**, 1347–1367.
- 6. Chen P-Y, Tung C-P, Tsao J-H, **Chen C-J** (2021) Assessing future rainfall intensityduration-frequency characteristics across Taiwan using the k-nearest neighbor method. *Water*, **13(11)**, 1521.
- Tseng S-C, Chen C-J\*, Senarath SUS (2020) Evaluation of multi-site precipitation generators across scales. *International Journal of Climatology*, 40(10), 4622–4637, DOI: 10.1002/joc.6480.
- 8. **Chen C-J\***, Chen C-C, Lo M-H, Juang J-Y, Chang C-M (2020) Central Taiwan's hydroclimate in response to land use/cover change. *Environmental Research Letters*, **15(3)**, 034015.
- 9. Shih D-S, **Chen C-J**\*, Lee M-H, Jang C-S, Chang C-M, Liao Y-Y (2019) Statistical and numerical assessments of groundwater resource subject to excessive pumping: case study in Southwest Taiwan. *Water*, **11(2)**, 360.
- 10. Chan C-M\*, **Chen C-J** (2019) Application of neural networks to typhoon loss prediction. *Journal of Disaster Management*, **8(1)**, 55–88 (in Chinese).
- 11. **Chen C-J\***, Lee T-Y, Chang C-M, Lee J-Y (2018) Assessing typhoon damages to Taiwan in the recent decade: return period analysis and loss prediction. *Natural Hazards*, **91(2)**, 759–783.
- 12. **Chen C-J**, Lee T-Y\* (2017) Variations in the correlation between teleconnections and Taiwan's streamflow. *Hydrology and Earth System Sciences*, **21**, 3463–3481.
- 13. **Chen C-J\***, Senarath SUS, Dima West IM, Marcella MP (2017) Evaluation and restructuring of gridded precipitation data over the Greater Mekong Subregion. *International Journal of Climatology*, **37**, 180–196.
- 14. **Chen C-J**, Georgakakos AP\* (2015) Seasonal prediction of East African Rainfall. *International Journal of Climatology*, **35**, 2698–2723.

- Chen C-J, Georgakakos AP\* (2014) Hydro-climatic forecasting using sea surface temperatures—methodology and application for the Southeast U.S. *Climate Dynamics*, 42, 2955–2982. DOI: 10.1007/s00382-013-1908-4.
- 16. **Chen C-J**, Lu MM (2007) Detection of the climatic extreme rainfall events in Taiwan. *Atmospheric Sciences*, **35**(2), 105–118 (in Chinese).
- 17. Lu MM, **Chen C-J**, Lin YC (2007) Long-term variations of the occurrence frequency of extreme rainfall events during the period of 1951–2005. *Atmospheric Sciences*, **35**(2), 87–104 (in Chinese).
- 18. Lu MM, **Chen C-J** (2005) Statistical analysis of heavy rainfall frequency. *Meteorological Bulletin*, **46**(1), 45–49 (in Chinese).
- Tung CP, Chen C-J (2002) Study of optimizing reservoir operation rules using Genetic Algorithms—case study of Liyu-Tan Reservoir. *Journal of Taiwan Water Conservancy*, 50(3), 61–69 (in Chinese).

### Journal Articles Under Review or in Preparation:

- 1. **Chen C-J\*** Yeh J-R, Chi M-H, Huang S-H (2022) Assessing hydroclimate response to land use/cover change using WRF and WRF-Hydro. *Geoscience Letters* (in preparation).
- 2. Mahumd K, **Chen C-J\*** (2022) Seasonal hydrological forecasting using empirical and data-preprocessing techniques. *Journal of Hydrology* (in preparation).
- 3. Chi M-H, **Chen C-J**\* (2022) Coupling numerical weather prediction and highperformance hydrologic-hydraulic models for operational flood forecasting. *Natural Hazards and Earth System Sciences* (in preparation).
- 4. Kao Y-C, **Chen C-J\*** (2022) Correction and merging of satellite and model rainfall data using convolutional long-short term memory networks. *Journal of Hydrology* (in preparation).

### Presentations to International Conferences, Symposia, and Seminars:

- 1. **Chen C-J**, Yeh J-R, Chi M-H (2022) Modeling assessment of hydroclimate variations in response to land use/cover change: Case study in central Taiwan. AOGS 2022, Virtual, August 1–5.
- 2. **Chen C-J** (2022) Flood forecasting by coupling numerical weather prediction (NWP) and high-performance hydrologic-hydraulic models. Korean Water Resources Association Conference, Virtual, May 19 (invited keynote speaker).

- 3. **Chen C-J**, Li P-L (2019) Evaluation of GPM- and model-based precipitation over Taiwan. AGU Fall Meeting, San Francisco, December 9–13.
- 4. Li P-L, **Chen C-J** (2019) Assessment of WRF and IMERG precipitation over Taiwan. 16<sup>th</sup> Annual Meeting Asia Oceania Geosciences, AOGS 2019, Singapore, July.
- 5. Chen Y-C, **Chen C-J** (2019) Assessment of weather generators at fine spatiotemporal scales. 16<sup>th</sup> Annual Meeting Asia Oceania Geosciences, AOGS 2019, Singapore, July.
- 6. Yu C-Y, **Chen C-J** (2019) Flood simulation and loss estimate subject to land use/cover changes based on coupled 1D-2D analysis and neural networks. EGU General Assembly 2019, Vienna, Austria.
- 7. Chuang P-P, **Chen C-J** (2019) Application of data-preprocessing and –driven methods for irrigation water prediction. EGU General Assembly 2019, Vienna, Austria.
- 8. **Chen C-J**, Lee T-Y, Yu C-Y, Chang C-M (2018) Predicting typhoon losses in Taiwan: From data-driven to detailed modeling. AGU Fall Meeting, Washington, D.C., December 10–14 (oral).
- 9. **Chen C-J** (2018) Seasonal streamflow forecasting in Taiwan using derived climate variables. 2018 International Conference on Environmental and Water Resources Engineering, Jeju Island, Korea, October 12–14 (oral).
- 10. **Chen C-J**, Chen C-C, Chang C-M, Juang J-Y, Lo M-H (2018) Modelling the impact of land use/cover changes on Taiwan's climate. Global Land Project Asia Conference 2018, Taipei, September 3–5 (oral).
- 11. **Chen C-J**, Chen C-C, Chang C-M, Juang J-Y, Lo M-H (2017) Understanding the impact of land use/cover changes on regional climate modeling for Taiwan. 14<sup>th</sup> Annual Meeting Asia Oceania Geosciences, AOGS 2017, Singapore, August 6–11 (oral).
- 12. Tseng S-C, **Chen C-J** (2017) Intercomparison of stochastic weather generators using rainfall data in Taiwan. 14<sup>th</sup> Annual Meeting Asia Oceania Geosciences, AOGS 2017, Singapore, August 6–11.
- 13. **Chen C-J** (2017) Seasonal prediction of Taiwan's streamflow using teleconnection patterns. 19th EGU General Assembly, EGU 2017, Vienna, Austria, April 23–28.
- 14. **Chen C-J** (2016) Temporal disaggregation of seasonal forecasting for streamflow simulation. World Environmental and Water Resources Congress 2016, West Palm Beach, Florida, USA, May 22–26 (oral).
- 15. Jayasekera DL, Chen C-J, Senarath SUS, Marcella MP (2015). Generation of stochastic

rainfall estimates for the Mekong River basin. Watershed Management Symposium 2015, Reston, Virginia, August 5–7.

- 16. **Chen C-J**, Jayasekera DL, Senarath SUS (2015) Assessing uncertainty in precipitation and hydrological modeling in the Mekong. World Environmental and Water Resources Congress 2015, Austin, Texas, USA, May 17–21 (oral).
- 17. Shen Yi, **Chen C-J**, Senarath SUS (2014) Sensitivity of a hydraulic model to land use uncertainty under extreme flooding. Floodplain Management Annual Conference, Santa Clara, California, USA, September 2–5.
- 18. **Chen C-J**, Senarath SUS (2014) Implications of SRTM- and ASTER-based DEMs on hydrologic responses at various catchment scales. EWRI World Water and Environmental Resources Congress, Portland, Oregon, USA, June 1–5 (oral).
- 19. Marcella PM, **Chen C-J**, Senarath SUS (2013) Analysis of non-tropical cyclone-induced flood events over Southeast Asia: investigating flood frequency and extremes in the Philippines. AGU Fall Meeting, San Francisco, California, USA, December 9–13.
- 20. **Chen C-J** (2013) Understanding the benefits of hydro-climatic forecasting to water resources planning and management. Southern Illinois University Edwardsville, April 24 (invited).
- 21. **Chen C-J**, Georgakakos AP (2012) Seasonal rainfall forecasting using SST dipoles with application to the Southeast US. AGU Fall Meeting, San Francisco, California, USA, December 3–7.
- 22. **Chen C-J**, Georgakakos AP (2011) Seasonal rainfall prediction using sea surface temperature with an application in the southeast US. AGU Fall Meeting, San Francisco, California, USA, December 5–9 (oral).
- 23. **Chen C-J**, Georgakakos AP (2011) Seasonal rainfall prediction using sea surface temperature information. Proceedings of the 2011 Georgia Water Resources Conference, University of Georgia, Athen, Georgia, USA, April 11–13 (oral).
- 24. **Chen C-J** (2008) Improving hydro-climatic assessment and forecasting by utilizing ocean-atmosphere information. Central Weather Bureau, Taipei, Taiwan, December 15 (invited).
- 25. Liu TM, Tung CP, **Chen C-J**, Chen SW (2004) Establishing a drought warning system based on long-lead climate forecasting. EWRI World Water and Environmental Resources Congress, Salt Lake City, Utah, USA, June 28–July 1.
- 26. Hsu SY, Tung CP, Chen C-J, Wang CF (2004) Application to reservoir operation rule-

curves. EWRI World Water and Environmental Resources Congress, Salt Lake City, Utah, USA, June 28–July 1.

## VII. PROFESSIONAL SERVICE, ACTIVITIES, AND MEMBERSHIP

### **Associate Editor:**

Weather and Forecasting (American Meteorological Society, AMS), 2014-present

### **Guest Editor/Topics Board:**

*Atmosphere* (MDPI), Special Issue: Hydro-Climatic Trends, Variability, and Regime Shifts *Land* (MDPI), Special Issue: Hydrological Processes in Urban Environments *Environments* (MDPI), Special Issue: Understanding Land-Atmosphere Interactions: Knowledge from Monitoring to Modelling, 2018–2019

### **Journal Reviewer:**

Bulletin of the American Meteorological Society (AMS) Environmental Monitoring and Assessment (Springer) Environmental Modelling & Software (Elsevier) Environmental Research Letters (IOP) Journal of Applied Meteorology and Climatology (AMS) Journal of Atmospheric and Oceanic Technology (AMS) Journal of Climate (AMS) *Journal of Hydrology* (Elsevier) Journal of Hydrologic Engineering (ASCE) *Journal of Hydrometeorology* (AMS) Journal of the American Water Resources Association (AWRA) Journal of Water Resources Planning and Management (ASCE) Monthly Weather Review (AMS) Paddy and Water Environment (Springer) PLOS One (PLOS) Sustainability (MDPI) Water (MDPI) Water Resource Management (Springer) Water Resources Research (AGU) Weather, Climate and Society (AMS) *Weather and Forecasting* (AMS) Terrestrial, Atmospheric and Oceanic Sciences (CGU) Taiwan Water Conservancy (in Chinese) *Journal of the Chinese Institute of Civil and Hydraulic Engineering (in Chinese)* 

### **Proposal Reviewer:**

MOST 2018-2022

### **Conference Organization:**

Convener, Global Land Project Asia Conference 2018, Taipei, September 3–5.

### Member:

American Geophysical Union (AGU) American Meteorological Society (AMS) American Society of Civil Engineers (ASCE) Environmental and Water Resources Institute (EWRI)

### VIII. HONORS AND AWARDS

2019–2021 Best Reviewer of Terrestrial, Atmospheric and Oceanic Sciences (TAO) NCHU Distinguished Professor, 2020–2022 2019 Journal of Disaster Management Best Paper Award PROM – International Scholarship Exchange of Academic Staff, SGGW, Poland, 2019 2016 ASCE Outstanding Reviewer of *J. Water Res. Pl.* MOST Subsidies for Schools of Higher Education to Hire Distinguished Talents, 2015–2018 Georgia Tech's Nominee for the 2012 Lorenz G. Straub Award Taiwan Merit Scholarships Program, National Science Council (NSC), Taiwan, 2006–2008 Thesis Award for the Memorial to Prof. Takasaka, National Taiwan University, 2002 Grant-In-Aid of the Undergraduate Monographic Study, NSC, Taiwan, 2001 Scholarship of Prof. Xu, National Taiwan University, 2001

# **IX. GRADUATE ADVISEES**

### **Present Advisees:**

M.S.: Wei-Feng Wu, Yi-Yun Lu, Wen-Yi Lu, Hsiang-En Tsou, and Yu-Ru Chiou

### Former Advisees:

Ph.D.: Khalid Mahmud

M.S.: Meng-Kai Yu, Shao-Chun Tseng, Pei-Pei Chuang, Chih-Yun Yu, Pin-Lun Li, Yang-Cheng Chen, Shih-Han Huang, Jing-Ru Yeh, Yung-Cheng Kao, and Min-Hung Chi.

## X. PROFICIENCY IN RESEARCH SKILLS

### **Programming, Database, and Statistical Packages**

C++, FORTRAN, GrADS, MATLAB, NCL, OpenMP, Python, R, SPSS, SAS, Visual Basic, VBA

### Hydrologic, Hydraulic, and Water Resources Modeling Essentials

ArcGIS, AutoCAD, CASC2D, GWLF, HEC-DSSVue, HEC-GeoHMS, HEC-HMS, HEC-RAS, HEC-ResSim, IHA, MODFLOW, PDM, TRITON

#### **Climate Modeling Essentials**

WRF, Noah LSM, WRF-Hydro

### **Operating Systems and Others**

Cygwin, LaTeX, Linux, Mac OS, MS Office, Windows

### XI. PROFESSIONAL REGISTRATION

Engineer-In-Training, MD Board for Professional Engineers, License 43656

### XII. COLLABORATORS & PROFESSIONAL REFERENCES

Dr. Liaofan Lin Research Scientist Cooperative Institute for Research in the Atmosphere (CIRA) 325 Broadway Boulder, CO 80305-3328 Email: <u>liaofan.lin@noaa.gov</u>

Dr. Sharika U.S. Senarath Director of Flood Peril Berkshire Hathaway Specialty Insurance 2633 Camino Ramon, Suite 325 San Ramon, CA 94583 Email: <u>ssenarath@live.com</u>

Dr. Marc Marcella Director of Climate Science Travelers Chicago, IL Email: <u>marc.p.marcella@gmail.com</u> Dr. Aris P. Georgakakos Professor School of Civil and Environmental Engineering Georgia Institute of Technology Mason 2201D, 790 Atlantic Drive Atlanta, Georgia 30332, USA Email: <u>ageorgak@ce.gatech.edu</u>

Dr. Min-Hui Lo Professor Department of Atmospheric Sciences National Taiwan University 1, Section 4, Roosevelt Road Taipei 10673, Taiwan Email: <u>minhuilo@ntu.edu.tw</u>

Dr. Tsung Yu Lee Associate Professor Department of Geography National Taiwan Normal University, Taipei, Taiwan 162, Section 1, HePing East Road Taipei 10610, Taiwan Email: <u>tylee@ntnu.edu.tw</u>

Dr. Dong-Sin Shih Professor Department of Civil Engineering National Yang Ming Chiao Tung University 1001 University Road Hsinchu 300, Taiwan Email: <u>dsshih@nctu.edu.tw</u>

Dr. Mong-Ming Lu Project Professor Department of Atmospheric Sciences National Taiwan University 1, Section 4, Roosevelt Road Taipei 10673, Taiwan Email: <u>mongminglu@gmail.com</u>