

Curriculum Vitae - I-I Lin (林依依)

Updated: April 2024

Dept. of Atmospheric Sciences, National Taiwan University, Taipei, Taiwan; E-mail: iilin@ntu.edu.tw

Google scholar: <http://scholar.google.com/citations?user=mQ06OBEAAAAAJ&hl=en&oi=ao>

ORCID: <https://orcid.org/0000-0002-8364-8106>

ResearcherID: <http://www.researcherid.com/rid/J-4695-2013>

Education:

- B.Sc. in Atmospheric Science, National Taiwan University, Taiwan (1989)
- Ph.D. in Remote Sensing, University of Cambridge, UK (1995)

Current position and relevant experience:

- 2023-Present: University Chair Professor, National Taiwan University, Taipei, Taiwan.
- 2013-Present: Distinguished Professor, Dept. of Atmospheric Sciences, National Taiwan University (NTUAS), Taipei, Taiwan.
- 2014-2017: Chair, Dept. of Atmospheric Sciences, National Taiwan University, Taipei, Taiwan.
- 2010-Present: Professor; 2006-2010: Associate Prof.; 2004-2006: Assistant Prof., NTUAS.
- 2011: Director of International Affairs Center (INTERACT), College of Science, NTU.
- 2000-2004: Assistant Research Scientist, National Center for Ocean Research, Taiwan.
- 1995-1999: Research Scientist, Centre for Remote Imaging, Sensing & Processing (CRISP), National University of Singapore, Singapore.

Fields of academic specialty:

- Tropical Cyclone-Ocean Interaction: Weather, Climate, and Global Warming Scale
- Synergy of Multi-Advanced Remote Sensing for Air-Sea Physical/Biogeochemical Interaction Research

Major awards and honors:

- Mar. 2024: Featured, 'Women's History Month', American Meteorological Society Social Media [\[Facebook\]](#) [\[X \(Twitter\)\]](#)
- 2024: Fellow of American Meteorological Society (AMS)
- 2023: US National Academies of Sciences, Engineering, and Medicine Panel, 101st Meeting of the Ocean Studies Board (美國國家科學院 Marine Heat Wave 專家小組)
- 2023: Featured in "Female Power of Taiwan" on the International Women's Day (8 March 2023), Ministry of Foreign Affairs, Taiwan (受邀拍攝外交部「國際婦女節形象影片」) [\[Link\]](#) [\[Link_EN\]](#) [\[YouTube\]](#)
- 2023: Editor's Award, American Meteorological Society (AMS)- Bulletin of the American Meteorological Society. The award citation reads "For insightful and detailed comments that have been instrumental in reaching publication decisions on challenging manuscripts"
- 2022- Present: UN/GOOS (United Nations/Global Ocean Observing System)-Tropical Cyclones Ocean Observations and Forecasts Exemplar Steering Committee (聯合國全球海洋觀測系統-熱帶氣旋海洋觀測與預報示範指導委員會)

- 2023, 2022, 2021: World's top 2% Scientists (Stanford Univ.)
- March 2022: The Ministry of Education's 25th Annual National Chair Professorship Award, Taiwan (教育部第 25 屆國家講座主持人獎)
- June 2021: Invited Formal Seminar, Geophysical Fluid Dynamics Laboratory/National Oceanic and Atmospheric Administration (GFDL/NOAA), Princeton USA
- March 2021: The 14th Taiwan Outstanding Women in Science Award (第十四屆台灣傑出女科學家獎)
- 2018: Fellow, Meteorological Society of Taiwan
- 2017: Cover, Journal of Geophysical Research: Oceans
- 2017: Academic Award, Ministry of Education, Taiwan (教育部第 61 屆學術獎)
- 2015, 2011: Outstanding Research Award, Ministry of Science and Technology, Taiwan (科技部傑出研究獎, 兩次)
- 2014: Advisor, Gold Medal (Chen Yu-Hsin), the 2014 Intel ISEF Award in the Earth and Planetary Science discipline, LA, USA
- 2014: Spotlight author, State of Climate Report 2013, NOAA, USA
- 2014: Featured and interviewed in the special documentary 'Mega Disaster' of Japan's NHK
- 2013: Research on Super typhoon Haiyan highlighted by Science
- 2013: Image of the Month, AVISO Satellite Altimetry, French Space Agency, CNES
- 2013: One of the Three Major Research Achievements of the Division of Mathematics and Physical Sciences, Academia Sinica, Taiwan (中央研究院數理組三項重要研究成果之一)
- 2009: Twice (February and March) featured by NASA with official press release for research on Indian Ocean Killer Cyclone Nargis (2008), also reported by the USA Today and other press
- 2009: Outstanding Teaching Award, National Taiwan University (國立台灣大學教學傑出獎)
- 2008: Featured by the International Scientific Committee on Ocean Research (SCOR)'s Surface Ocean Lower Atmosphere Study (SOLAS)
- 2007: Ten outstanding Young Women Award, Taiwan (中華民國第十九屆十大傑出女青年)
- 2005: Ta-You Wu Memorial Award for Young Scientists, National Science Council, Taiwan. (行政院國家科學委員會吳大猷先生紀念獎)
- 2005: Taiwan Academia Sinica's Research Award for Young Scientists (中研院年輕學者研究著作獎)
- 2004: American Geophysical Union (AGU) START Young Scientist Award
- 2004: Reported in NASA's 10-years Anniversary of Earth Observation
- 2003: Research highlighted in Nature: News and Views in Brief, 7 August, 2003, vol. 425, no. 6949, pp. 630, 'Oceanography: Bloom in Cyclone'
- 2003: Research highlighted in Nature: News and Views in Brief, 13 March, 2003, vol. 422, no. 6928, pp. 132, 'Atmospheric Science: Quick, quick, slow'
- 2002: Press Conference with NASA 'Latest Ocean Winds Research Creates a Stir - Typhoons a boon for Ocean life', Fall Meeting, American Geophysical Union, USA
- 1992: Award for best presentation of non-native English speaker at the IGS (International Glaciological Society) Symposium on Remote Sensing of Ice and Snow, Boulder, Colorado, USA

Selected Publications

2024

- Jin, Fei-Fei*, Shoude Guan, Jiwei Tian*, **I-I Lin*** et al., Ocean Internal Tides Suppress Tropical Cyclones in the South China Sea, *Nat Commun*, 2024. **ACCEPTED**. (IF: 16.6)
- Kang, Sok Kuh*, Sung-Hun Kim, **I-I Lin** et al., The North Equatorial Current and Rapid Intensification of Super Typhoons, *Nat Commun*, Vol. 15, 1742, doi: 10.1038/s41467-024-45685-2, Feb. 2024(Accepted), Mar. 2024(Published). (IF: 16.6).
- Danso, Derrick Kwadwo*, Christina M Patricola, Jaison Kurian, Ping Chang, Philip Klotzbach, **I-I Lin**, Air-sea Coupling Influence on Projected Changes in Tropical Cyclone Events, *Weather and Climate Extremes*, Vol. 43, doi: 10.1016/j.wace.2024.100649, Jan. 2024 (Published Online), Feb. 2024 (Version of Record). (IF: 8).

2023

- Wu, Chau-Ron*, Yong-Fu Lin, **I-I Lin**, Jin-Yi Yu*, Unleashing the Power of the Sun: The Increasing Impact of the Solar Cycle on Off-Season Super Typhoons since the 1990s, *npj Climate and Atmospheric Science*, Vol. 6, 166, doi: 10.1038/s41612-023-00495-z, Oct. 2023. (IF: 9).
- Camargo, Suzana J.*, Hiroyuki Murakami*, Nadia Bloemendaal, Savin Chand, Medha S. Deshpande, Christian Dominguez-Sarmiento, Juan Jesús González-Alemán, Thomas R. Knutson, **I-I Lin** et al., An Update on the Influence of Natural Climate Variability and Anthropogenic Climate Change on Tropical Cyclones, *Tropical Cyclone Research and Review*, Vol. 12, Issue 3, p. 216-239, doi: 10.1016/j.tcr.2023.10.001, Sep. 2023. (IF: 2.9).
- Liu, Yuhao, Shoude Guan*, **I-I Lin** et al., Effect of storm size on sea surface cooling and tropical cyclone intensification in the western north Pacific, *Journal of Climate*, Vol. 36, p. 7277-7296, doi: 10.1175/JCLI-D-22-0949.1., Sep. 2023 (Online Publication), Oct. 2023 (Print Publication). (IF: 4.9).
- Bringas, F., G. J. Goni, **I-I Lin**, and J. A. Knaff, Tropical Cyclone Heat Potential [in "State of the Climate in 2022"], *Bulletin of the American Meteorological Society*, Vol. 104, No. 9, S256-S259, doi: 10.1175/BAMS-D-23-0078.1, Sep. 2023. (IF: 8).
- Pun, Iam-Fei*, Huang-Hsiung Hsu, Il-Ju Moon, **I-I Lin**, and Jin-Yong Jeong, Marine Heatwave as a Supercharger for the Strongest Typhoon in the East China Sea, *npj Climate and Atmospheric Science*, 2023. Vol. 6, 128, doi: 10.1038/s41612-023-00449-5, Aug. 2023. (IF: 9).
- **Lin, I-I*** et al., Poleward Migration as Global Warming's Possible Self-Regulator to Restrain Future Western North Pacific Tropical Cyclone's Intensification, *npj Climate and Atm. Sci.*, Vol. 6, 34, doi: 10.1038/s41612-023-00329-y, Jan. 2023(Accepted), Apr. 2023(Published). (IF: 9).

2022

- Camargo, S. J., Hiroyuki Murakami, Nadia Bloemendaal, Savin Chand, Medha S. Deshpande, Christian Dominguez-Sarmiento, Juan Jesús González-Alemán, Thomas R. Knutson, **I-I Lin** et al., Report for the 10th World Meteorological Organization (WMO)'s International Workshop on Tropical Cyclones: Tropical Cyclones and Climate Change, *IWTC-10 report*, 2022. (**Invited**)
- Gao, Cong, Lei Zhou*, Chunzai Wang, **I-I Lin**, and Raghu Murtugudde, Unexpected limitation of tropical cyclone genesis by subsurface tropical central-north Pacific during El Niño, *Nature Communications*, Vol. 13, 7746, doi: 10.1038/s41467-022-35530-9, Dec. 2022. (IF: 16.6).
- Bringas, F., G. J. Goni, **I-I Lin**, and J. A. Knaff, Tropical Cyclone Heat Potential [in "State of the Climate in 2021"], *Bulletin of the American Meteorological Society*, Vol. 103, No. 8, S246-S248, doi:

10.1175/BAMS-D-22-0069.1., Aug. 2022. (IF: 8).

2021

- **Lin, I-I***, et al., ENSO and Tropical Cyclones. In *El Niño Southern Oscillation in a Changing Climate* (eds M. J. McPhaden, A. Santoso, W. Cai). American Geophysical Union., Chap. 17, pp. 377-408, doi: 10.1002/9781119548164.ch17, Oct. 2020 (First Published), 2021(Copyright Year). (**Invited Chapter, AGU Centennial Celebration Monograph, one of the 4 Books from AGU as special COP26 Showcase**)
- Domingues, R., G. J. Goni, J. A. Knaff, **I-I Lin**, and F. Bringas, Tropical Cyclone Heat Potential [in "State of the Climate in 2020"], *Bulletin of the American Meteorological Society*, Vol. 102, No. 8, S252-S255, doi: 10.1175/BAMS-D-21-0080.1., Aug. 2021. (IF: 8).
- **Lin, I-I*** et al., A Tale of Two Rapidly-Intensifying Supertyphoons: Hagibis (2019) and Haiyan (2013), *Bulletin of the American Meteorological Society*, Vol. 102, No. 9, E1645–E1664, doi: 10.1175/BAMS-D-20-0223.1, Sep. 2021. (IF: 8).

2020

- Domingues, R., G. J. Goni, J. A. Knaff, **I-I Lin**, and F. Bringas, Tropical Cyclone Heat Potential [in "State of the Climate in 2019"], *Bulletin of the American Meteorological Society*, Vol. 101, No. 8, S227-S229, doi: 10.1175/BAMS-D-20-0077.1, Aug. 2020. (IF: 8).
- Chang, Ya-Ting, **I-I Lin*** et al., The Association of Typhoon Intensity Increase with Translation Speed Increase in the South China Sea, *Sustainability*, Vol. 12, Issue 3, doi:10.3390/su12030939, Jan. 2020. (IF: 3.9).

2019

- Domingues, R. G. J. Goni, J. A. Knaff, **I-I Lin**, and F. Bringas, Tropical Cyclone Heat Potential [in "State of the Climate in 2018"], *Bulletin of the American Meteorological Society*, Vol. 100, No. 9, S133-S135, doi:10.1175/2019BAMSSStateoftheClimate.1, Sep. 2019. (IF: 8). [**Invited contribution**]
- Domingues, Ricardo*, Akira Kuwano-Yoshida, Patricia Chardon-Maldonado, Robert E. Todd, George R. Halliwell, Hyun-Sook Kim, **I-I Lin** et al., Ocean Observations in Support of Studies and Forecasts of Tropical and Extratropical Cyclones, *Frontiers in Marine Science*, Vol. 6, 446, doi:10.3389/fmars.2019.00446, Jul. 2019. (IF: 3.7). [**Invited**]
- Pun, Iam-Fei*, Johnny C. L. Chan, **I-I Lin** et al., Rapid Intensification of Typhoon Hato (2017) over Shallow Water, *Sustainability*, Vol. 11, Issue 13, doi:10.3390/su11133709, Jul. 2019. (**Editor's Choice**) (IF: 3.9).

2018

- Braun, Scott A., Heather Archambault, **I-I Lin** et al., Ninth WMO International Workshop on Tropical Cyclones: Intensity Change: External Influences, *IWTC-9 report*, 2018. (**Invited**)
- Goni, G.J., J. A. Knaff, **I-I Lin**, and R. Domingues, Tropical Cyclone Heat Potential [in "State of the Climate in 2017"], *Bulletin of the American Meteorological Society*, Vol. 99, No. 8, S129-S132, doi:10.1175/2018BAMSSStateoftheClimate.1, Aug. 2018. (IF: 8).
- Pun, Iam-Fei*, **I-I Lin** et al., Influence of the Size of Supertyphoon Megi (2010) on SST Cooling, *Monthly Weather Review.*, Vol. 146, No. 3, p. 661-677, doi:10.1175/MWR-D-17-0044.1, Mar. 2018. (IF: 3.2).

2017

- **Lin, I-I***, M.-M. Lu and M.-D. Cheng, Taiwan in the bullseye of several major Typhoons [in "State of the Climate in 2016"], *Special Supplement to BAMS*, Vol. 98, No. 8, S124-S125, Aug. 2017. [Invited]
- Huang, H.-C., J. Boucharel, **I-I Lin***, F.-F. Jin et al., Air-sea fluxes for Hurricane Patricia (2015):..., *J. Geophys. Res. Oceans*, **122**, 6076-6089, doi:10.1002/2017JC012741, Aug., 2017. [**JGR:Ocean 122(8) Cover**]

2016

- Boucharel, J., F.-F. Jin, M. H. England, and **I-I Lin**, Modes of hurricane activity variability in the eastern Pacific..., *Geophys. Res. Lett.*, 43, 11,358-11,366, doi: 10.1002/2016GL070847, Nov. 2016.
- Wu, C.-C.*, W.-T. Tu, I.-F. Pun, **I-I Lin** and M. S. Peng, Tropical Cyclone-Ocean Interaction in Typhoon Megi (2010)..., *J. Geophys. Res. Atmos.*, **121**, 153-167, doi:10.1002/2015JD024198, Jan., 2016.

2015

- Jin, F.-F.*, J. Boucharel, and **I-I Lin**, El Nino and intense tropical cyclones Reply, *Nature*, **526**, doi: 10.1038/nature15547, Oct., 2015.
- Mei, W.*, C.-C. Lien, **I-I Lin**, and S.-P. Xie, Tropical cyclone-induced ocean response: A comparative study..., *J. Climate*, **28**, p 5952-5968, Aug., 2015.
- Zheng, Z.-W., **I-I Lin*** et al., A Long Neglected Damper in the El Niño – Typhoon Relationship: a ‘Gaia-Like’ Process, *Sci Rep*, **5**, 11103, doi:10.1038/srep11103, Jul., 2015. [**NTU highlight and Press release**]
- Huang, P., **I-I Lin*** et al., Change in Ocean Subsurface Environment to Suppress Tropical Cyclone Intensification under Global Warming, *Nat Commun*, Vol. 6, 7188, doi:10.1038/ncomms8188, May 2015. [**Reviewed by Knutson et al. BAMS 2020, NTU highlight and Press release**]
- **Lin, I-I*** and J.C.L. Chan, Recent Decrease in Typhoon Destructive Potential and Global Warming Implications, *Nat Commun*, Vol. 6, 7182, doi:10.1038/ncomms8182, May 2015. [**NTU highlight and Press release**]

2014

- **Lin, I-I***, I.-F. Pun and C.-C. Lien, ‘Category-6’ Supertyphoon Haiyan in Global Warming Hiatus: Contribution from Subsurface Ocean Warming, *Geophys. Res. Lett.*, doi:10.1002/2014GL061281, Dec. 2014. [**Science highlight, EOS highlight, Japan NHK Special Documentary**]
- Jin, F.-F.*, J. Boucharel, **I-I Lin**, Eastern Pacific Tropical Cyclones Intensified by El Niño Delivery of Subsurface Ocean Heat, *Nature*, Vol. 516, p 82-85, doi:10.1038/nature13958, Dec. 2014. [**Nature paper with Press Release in different media**]
- Walker, N. D.*, R. R. Leben, C. T. Pilley, M. Shannon, D. C. Herndon, I.-F. Pun, **I-I Lin** and C. L. Gentemann, Slow translation speed causes rapid collapse of northeast Pacific Hurricane Kenneth over cold core eddy, *Geophys. Res. Lett.*, doi:10.1002/2014GL061584, Vol. 41, Issue 21, p 7595-7601, Nov., 2014.
- D'Asaro, E.A.*, P.G. Black, L.R. ..., **I-I Lin** et al., Impact of Typhoons on the Ocean in the Pacific: ITOP, *BAMS*, **95**, p.1405-1418, doi:10.1175/BAMS-D-12-00104.1, Sep, 2014.
- Pun, I.-F., **I-I Lin***, and Dong S. Ko, New Generation of Satellite-Derived Ocean Thermal Structure for the Western North Pacific Typhoon Intensity Forecasting, *Progress in Oceanography*, Vol. 121, p 109-124, doi: 10.1016/j.pocean.2013.10.004, Feb., 2014.

2013

- Pun, I.-F., **I-I Lin***, and M.-H. Lo, Recent Increase in High Tropical Cyclone Heat Potential Area in the Western North Pacific Ocean, *Geophys. Res. Lett.*, 40, p 4680-4684, doi:10.1002/grl.50548, Sep., 2013. **[Science highlight, French AVISO Altimetry highlight]**
- **Lin, I-I***, P. Black et al, An ocean coupling potential intensity index for tropical cyclones, *Geophys. Res. Lett.*, Vol. 40, Issue 9, p. 1878-1882, doi:10.1002/grl.50091, May, 2013. **[Reviewed by Sobel et al. Science 2016]**
- **Lin, I-I***, G. J. Goni, et al., Ocean Heat Content for Tropical Cyclone Intensity Forecasting and Its Impact on Storm Surge, *Nat Hazards*, Vol. 66, Issue 3, p 1481-1500, doi:10.1007/s11069-012-0214-5, Apr., 2013.

2012

- **Lin, I-I***, Typhoon-induced Phytoplankton Blooms and Primary Productivity Increase in the Western North Pacific Subtropical Ocean, *J. Geophys. Res. Oceans*, 117, C03039, doi:10.1029/2011JC007626, Mar. 2012.

2011

- **Lin, I-I***, M.-D. Chou, and C.-C. Wu, The Impact of a Warm Ocean Eddy on Typhoon Morakot (2009) ..., *Terr. Atmospheric Ocean. Sci.*, Vol. 22, No. 6, p. 661-671, doi:10.3319/TAO.2011.08.19.01(TM), Dec. 2011.
- Pun, I.-F., Y.-T. Chang, **I-I Lin*** et al., Typhoon-Ocean Interaction in the Western North Pacific, Part 2, *Oceanography*, Vol. 24, No. 4, p. 32-41, doi:10.5670/oceanog.2011.92, Dec. 2011.
- **Lin, I-I***, C. Hu et al., Fertilisation Potential of Volcanic Dust in the Low Nutrient Low Chlorophyll Western North Pacific ..., *Global Biogeochemical Cycles*, Vol. 25, doi:10.1029/2009GB003758, Feb. 2011.

2010

- **Lin, I-I***, C.-C. Lien et al., Enhanced Primary Production in the Oligotrophic South China Sea by Eddy Injection, *Geophys. Res. Lett.*, Vol. 37, doi:10.1029/2010GL043872, Aug. 2010.

2009

- **Lin, I-I***, I.-F. Pun, and C.-C. Wu, Upper Ocean Thermal Structure and the Western North Pacific Category-5 Typhoons Part II: Dependence on Translation Speed, *Mon. Wea. Rev.*, Vol. 137, No. 11, p. 3744-3757, doi:10.1175/2009MWR2713.1, Nov. 2009.
- **Lin, I-I***, G. T. F. Wong et al., Aerosol Impact on the South China Sea Biogeochemistry: An Early Assessment ..., *Geophys. Res. Lett.*, 36, L17605, doi:10.1029/2009GL037484, Sep. 2009.
- **Lin, I-I*** et al., Warm Ocean Anomaly, Air Sea Fluxes, and the Rapid Intensification of Tropical Cyclone Nargis (2008), *Geophys. Res. Lett.*, Vol. 36, L03817, doi:10.1029/2008GL035815, Feb. 2009. **[Twice NASA highlight]**

2008

- **Lin, I-I***, C.-C. Wu et al., Upper-Ocean Thermal Structure and the Western North Pacific Category 5 Typhoons. Part I: ..., *Mon. Wea. Rev.*, Vol. 136, No. 9, p. 3288-3306, doi:10.1175/2008MWR2277.1, Sep. 2008.

2007

- Wu, C.-C.*, C.-Y. Lee, and **I-I Lin**, The Effect of the Ocean Eddy on Tropical Cyclone Intensity, *J. Atmos. Sci.*, Vol. 64, p. 3562-3578, doi:10.1175/JAS4051.1, Oct. 2007.
- **Lin, I-I***, J.-P. Chen, G. T. F. Wong, C.-W. Huang, and C.-C. Lien, Aerosol input to the South China Sea: Results from ..., *Deep Sea Res. Part II Top. Stud. Oceanogr.*, doi:10.1016/j.dsr2.2007.05.013, Sep. 2007.
- Pun, I.-F., **I-I Lin*** et al., Validation and Application of Altimetry-derived Upper Ocean Thermal ..., *IEEE Trans Geosci Remote Sens*, Vol. 45, No. 6, p. 1616-1630, doi:10.1109/TGRS.2007.895950, Jun. 2007.

2005

- **Lin, I-I**, C.-C. Wu*, K. Emanuel et al., The interaction of Supertyphoon Maemi (2003) with a warm ocean eddy, *Mon. Wea. Rev.*, Vol. 133, No. 9, p. 2635-2649, doi: 10.1175/MWR3005.1, Sep. 2005.

2003

- **Lin, I-I*** et al., New evidence for enhanced ocean primary production triggered by tropical cyclone, *Geophys. Res. Lett.*, Vol. 30, No. 13, 1718, doi:10.1029/2003GL017141, Jul. 2003. [**Nature, CNN, Associate Press highlight**]
- **Lin, I-I***, W. Alpers, and W. T. Liu, First evidence for the detection of natural surface films by the QuikSCAT scatterometer, *Geophys. Res. Lett.*, Vol. 30, No. 13, 1713, doi:10.1029/2003GL017415, Jul. 2003.
- **Lin, I-I*** et al., Satellite observations of modulation of surface winds by typhoon-induced upper ocean cooling, *Geophys. Res. Lett.*, Vol. 30, No. 3, 1131, doi:10.1029/2002GL015674, Feb. 2003. [**Nature highlight**]