

HING ONG (A.K.A. HENG WANG)

Curriculum Vitae

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He/him

EDUCATION

PhD	University at Albany, State University of NY, Atmospheric Sciences	2020
MS	National Taiwan University, Atmospheric Sciences	2016
BS	National Taiwan University, Atmospheric Sciences	2014

PROFESSIONAL EMPLOYMENT

Postdoctoral Scholar , University of California, Davis	2020 to present
Research Assistant , National Taiwan University	2016 to 2017

HONORS AND AWARDS

2020	Climate and Global Change Postdoctoral Fellowship , NOAA (declined)
2019	Government Scholarship to Study Abroad , Ministry of Education, Taiwan
2019	Student Presenter Award—Poster 1st Place , Annual Meeting, AMS
2014	Dean's Award , College of Science, National Taiwan University

PUBLICATIONS

Journal Publications

2022	Ong, H. , & Yang, D., The compressional beta effect and convective system propagation. <i>J. Atmos. Sci.</i> , 79(8), 2031–2040.
2021	Skamarock, W. C., Ong, H. , & Klemp, J. B., A fully compressible nonhydrostatic deep-atmosphere equations solver for MPAS. <i>Mon. Weather Rev.</i> , 149(2), 571–583.
2020	Ong, H. , Comments on “On the structure and formation of UTLS PV dipole/jetlets in tropical cyclones by convective momentum surges”. <i>Mon. Weather Rev.</i> , 148(11), 4693–4695.

- 2020 **Ong, H.**, & Roundy, P. E., The compressional beta effect: Analytical solution, numerical benchmark, and data analysis. *J. Atmos. Sci.*, 77(11), 3721–3732.
- 2020 **Ong, H.**, & Roundy, P. E., Nontraditional hypsometric equation. *Q. J. R. Meteorol. Soc.*, 146(727), 700–706.
- 2019 **Ong, H.**, & Roundy, P. E., Linear effects of nontraditional Coriolis terms on intertropical convergence zone forced large-scale flow. *Q. J. R. Meteorol. Soc.*, 145(723), 2445–2453.
- 2017 **Ong, H.**, Wu, C. M., & Kuo, H. C., Effects of artificial local compensation of convective mass flux in the cumulus parameterization. *J. Adv. Model. Earth Syst.*, 9(4), 1811–1827.

INVITED PRESENTATIONS

- 2021 “Atmospheric rivers: Integrated vapor kinetic energy and preliminary budget analyses,” National Taiwan University, Taipei, Taiwan, Dec 16. Delivered in Taiwanese Hokkien.
- 2021 “The nontraditional Coriolis terms and convective system propagation,” Geophysical Fluid Dynamics Laboratory, Princeton, NJ, Sep 23.
- 2021 “Radiative-convective equilibrium with the nontraditional Coriolis terms,” Department of Atmospheric Science, Colorado State University, Fort Collins, CO, Feb 17.
- 2020 “Is vorticity tilting the primary source of potential vorticity in the eye of a hurricane?” Department of Atmospheric Sciences, National Taiwan University, Taipei, Taiwan, Dec 22.
- 2020 “The significance of the nontraditional Coriolis terms in tropical large-scale dynamics,” Department of Land, Air and Water Resources, University of California, Davis, CA, Feb 24.
- 2020 “The significance of the nontraditional Coriolis terms in tropical large-scale dynamics,” Research Center for Environmental Changes, Academia Sinica, Taipei, Taiwan, Jan 10.
- 2020 “The significance of the nontraditional Coriolis terms in tropical large-scale dynamics,” Department of Atmospheric Sciences, National Taiwan University, Taipei, Taiwan, Jan 9.
- 2019 “The significance of the nontraditional Coriolis terms in tropical large-scale dynamics,” Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, Cambridge, MA, Oct 30.

- 2019 “The significance of the nontraditional Coriolis terms in tropical large-scale dynamics,” Mesoscale and Microscale Meteorology Laboratory, National Center for Atmospheric Research, Boulder, CO, Jul 25.
- 2019 “The significance of the nontraditional Coriolis terms in tropical large-scale dynamics,” Central Weather Bureau, Taipei, Taiwan, Jun 20.
- 2018 “Ertel potential vorticity charging and scaling for the nontraditional Coriolis term,” Department of Atmospheric Sciences, National Taiwan University, Taipei, Taiwan, Jun 26.

TEACHING EXPERIENCE

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|---|---------------------|
| <p>Teaching Assistant, University at Albany, State University of NY
 Applications of Subseasonal to Seasonal Dynamics
 Ocean Science
 Water and Climate Change
 Atmospheric Dynamics</p> | <p>2018 to 2020</p> |
| <p>Teaching Assistant, National Taiwan University
 Lab. of Synoptic Meteorology (Lecturer)
 Fluid Mechanics
 Program and Scientific Computing</p> | <p>2014 to 2016</p> |

PROFESSIONAL SERVICE

- Journal Reviewer**
 Geophysical Research Letters
 Monthly Weather Review
 Journal of Geophysical Research: Atmospheres
 Journal of Atmospheric Sciences

LANGUAGES

- English:** Professionally proficient
- Chinese Mandarin:** Native (my official name until Dec 2021, Heng Wang)
- Taiwanese Hokkien:** Native (my official name since Dec 2021, Hing Ong)