

Curriculum Vitae

Yuh-Lang Lin, PhD

Professor

302H Gibbs Hall

Department of Physics

Appl. Sci. & Tech. (AST) PhD Program

North Carolina A&T State University (NCAT)

1601 E. Market St., Greensboro, NC 27411

336-285-2127 (O); ylin@ncat.edu; <http://mesolab.org>

Educational Background

- Ph.D.: Yale University, Meteorology and Geophysical Fluid Dynamics, 1984
- M.S.: South Dakota School of Mines and Technology, Meteorology, 1979
- M.A.: Fordham University, New York, Mathematics, 1978
- B.S.: Fu Jen Catholic University, Taiwan, Mathematics, 1976

Areas of Specialization

- Mesoscale Dynamics and Modeling
 - Mountain Meteorology
 - Forest Fire Dynamics
 - Urban Heat Island Effects
 - Gravity Waves and Turbulence
 - Storm Dynamics and Moist Convection
 - Cloud Microphysics Parameterization
- Tropical Cyclones and Tropical Wave Dynamics

Professional Experience

- 2008–: Senior Scientist & Professor, Department of Physics; Applied Sci & Tech PhD Program
- 2017 (su): Chair Professor, Ministry of Science & Technology (MOST), Taiwan
- 2017–: Adjunct Professor, Department of Atmospheric Sciences, National Central University, Taiwan
- 2008–12: Distinguished Scientist for the NOAA ISET Center
- 2011–16: Graduate Faculty, Department of Civil and Environmental Engineering, Duke University (Term membership: 11/1/11 – 11/30/16)
- 1998–07: Professor, Department of Marine, Earth, and Atmos. Sci. (MEAS), North Carolina State University (NCSU)
- 1993–98: Associate Professor, MEAS, NCSU
- 1987–93: Assistant Professor, MEAS, NCSU
- 1984–87: Drexel Fellow, Department of Physics and Atmospheric Science, Drexel University
- 1983–84: Postdoctoral Associate, Department of Geology and Geophysics, Yale University
- 1982 (su): Predoctoral Fellow, NATO Advanced Study Program on Mesoscale Meteorology
- 1980–83: Research/Teaching Assistant, Department of Geology & Geophysics, Yale University
- 1978–79: Research Assistant, Department of Meteorology, S. D. School of Mines & Technology
- 1976–78: Teaching Assistant, Department of Mathematics, Fordham University

List membership(s) in professional organizations

- | | |
|---|-------|
| American Meteorology Society | 1979- |
| Sigma Xi | 1982- |
| North America Taiwanese Professors' Association | 1993- |
| American Geophysical Union | 2007- |

List of Grants and/or Grant Proposals Submitted

Conducted a relatively large number of research projects for various funding agencies (Listed below are for 2019-2024. For funded grants before 2019 can be found in 2013-2019 PTR review document, which will be provided upon request)

1. Lin, Y.-L. (PI), 2024: Collaborative Research: Improving Understanding and Prediction of Extreme Rainfall Associated with Typhoons and Mei-Yu Fronts Passing over the Central Mountain Range in Taiwan. NSF, \$346,140, 2/1/25-3/31/28. Submitted to NSF on 10/11/24.
2. Lin, Y.-L. (PI) and J. Zhang, 2023: Urban Heat Island modeling (as part of the CROCUS Integrated Field Laboratory, DOE). \$1,000,000/5 years, 9/1/23-8/31/28. Funded
3. Liu, L. (PI), Y.-L. Lin (Co-PI), and H. Li, (NCAT), Luettich and Sabastian UNC-CH), 2022: Improving Prediction of Flooding Associated with Tropical Cyclones in Eastern NC. NC A&T SU and UNC CH Looking Forward Pilot Program, \$200,000, 9/1/22-8/31/25. Funded.
4. Lin, Y.-L. (PI), M. L. Kaplan (DRI, Co-PI), A. Mekonnen, and J. Zhang: HBCU-RISE, 2021: Center for Improving Understanding and Forecasting of Orographic Effects on Extreme Weather (EWC). NSF, \$999,583, 4/15/21-3/31/25. Funded.
5. Zhang, J. (PI), S. Bililign, Y.-L. Lin, and A. Mekonnen, 2021: GP-UP: Enhancing Recruitment and Retention of Underrepresented Minorities in Atmospheric Sciences at NCAT. NSF, \$349,422, 9/1/21-8/31/25. Funded
6. Lin, Y.-L. (PI), L. Liu, M. Kaplan, and C. James, 2019: HBCU-EiR: Dynamics of Orographic Effects on Major Wildfires that Occurred in the Southwest U.S. under Diverse Mesoscale Environments. NSF, \$620,253 [including 2 supplements: \$38,216 (6/1/20), \$83,664 (6/1/21)], 6/1/19-5/31/23. Funded.
7. Lin, Y.-L. (PI) and M. Bell (CSU), 2022: PRECIP2020 field experiment in Taiwan. NSF/CSU, \$6500 foreign travel fund for 1 student (Nick Gordon) to participate in the field experiment in summer 2022
8. Lin, Y.-L. (Co-PI), 2018: Testing and Training the Cloud WRF Model for the Atmospheric Research Community Developed by NCAR, NSF/NCAR (PI: Jordan Powers), \$12,975.
9. Bililign, S. (PI), A. S. Denning, M. K. Jha, Y.-L. Lin (Co-PI), J. Zhang, A. Mekonnen, 2016: GeoPath-Extra: Improving and enhancing the pathways to atmospheric sciences at NCA&T. NSF, \$456,589, 9/1/16-12/31/20.

List of Honors and Awards

- Consulted as an expert on Extreme Weather by ABC News and a French Newspaper for their news articles regarding precipitation produced by Hurricane Helene (2024)
- Named a Top Scholar by ScholarGPS (Aug. 2024)
- Listed as a World's top 2% scientist by Stanford University (Dec. 2020)
- High number of citations (Google Scholar Citation: 9791 by 10.15.2024)
- Developed a cloud microphysics parameterization scheme with R. D. Farley and H. D. Orville (Lin, Farley and Orville, 1983, J. Appl. Meteor. & Climate), which is a pioneer scheme installed in many atmospheric numerical models and well quoted.
- Published an advanced graduate textbook – “*Mesoscale Dynamics*” (Cambridge University Press, 2007, 630pp)

- Served on the Committee for the 2022 PRECIP field experiment committee for typhoons and Mei-Yu fronts in Taiwan
- Guest Editor, *Atmosphere* (2019)
- Associate Editor, *Frontiers in Earth Science*
- Editor, *Open Physics*
- Senior Researcher of the Year, 2018, College of Science and Technology, NC A&T State University
- Chair Professor, appointed by the Ministry of Science & Technology (MOST) and National Central University (NCU), Taiwan in summer 2017 to teach Dynamics of Mountain Meteorology at NCU and National Taiwan University.
- Coordinating research among 31 PIs in 7 partner universities as the chief scientist for NOAA ISET Center (2008-12)
- Formed an Atmospheric Modeling Group for the NOAA ISET Center and established a real-time forecasting system (NCAST)
- Graduate faculty of Duke University (2011-16)
- Outstanding College Senior Researcher Award, 2014, College of Arts & Sciences, NC A&T State University
- Foreign Advisor, Central Weather Bureau, Taipei, Taiwan
- Served as a leader in the UNC Tomorrow Global Warming Task Force, 2008
- Review Panel, National Environmental Research Council, UK, 2006-07
- Board member, PhD program development committee, Addis Ababa University, Ethiopia
- External examiner for a PhD student's dissertation defense, Addis Ababa University, Ethiopia
- Conducted a large amount of funded research for funding agencies (see Appendix A for details)
- Published 145 peer-reviewed journal papers (see Appendix B for details)
- Presented more than 400 conference presentations and invited talks nationally and internationally
- Editor, *East Asian Journal of the Atmospheric Sciences* (2007-11)
- Chaired a large number of sessions for national and international conferences
- Member, Steering Committee of the Terrain-induced Monsoon Rain Experiment (TiMREX, 2007)
- NASA award for "Turning Goals into Reality" for outstanding contribution to Aircraft Vortex Spacing System (AVOSS) Team and exceptional progress toward revolutionizing aviation by increasing capacity while maintaining a high degree safety, 2003.
- Award for Collaboration with Raleigh Office, National Weather Service, 2002
- AMS Mesoscale Conference Committee, 2001-04
- Scientific Committee, East Asian Mesoscale Conferences (Korea (99); Taiwan (01); Japan (02))
- President, North America Taiwanese Professors' Association, 1996-97
- Co-Chair (with Dr. P. Arya) of the Seventh Southeast Conference on Geophysical Fluid Dynamics, 1990
- Participated in field programs: TiMREX, T-REX, MAP, AMMA, TAMEX, and GALE
- Reviewed a relatively number of papers for national and international journals

- Reviewed a relatively number of grant proposals for national and international funding agencies
- Chaired sessions for national and international conferences

Teaching Experience

Courses Taught:

(a) Undergraduate:

NCAT: College Phys II, Atmospheric Thermodynamics; Atmospheric Dynamics I & II, Weather Systems, Atmospheric Modeling

NCSU: Air Processes & Motion I & II, Atmospheric Thermodynamics I & II, Atmospheric Dynamics I, Atmospheric Dynamics II

Drexel U.: General Physics I, FORTRAN Programming

(b) Graduate:

NCAT: Dynamic Meteorology, Numerical Weather Prediction, Orographic Precipitating Systems, Tropical Meteorology, Mountain Meteorology, Storm Dynamics, Graduate Seminar, AST Doctoral Seminar

NCSU: Dynamic Meteorology, Mesoscale Modeling; Mesoscale Dynamics, Mesoscale Wave Dynamics, Numerical Weather Prediction, Advanced Physical Meteorology

Students advised and postdoctoral scholars sponsored

Postdocs and Graduate Students:

[NCAT]

Postdocs: Yong Jung, Shak Karim

Ph.D. Graduates: Justin Riley (AST, Su23), Shak Karim (AST, F21), William Agyakwa (AST, F20), Stephany Taylor (EES, S17), Gian Villamil Otero (EES, F16), Gökhan Sever (EES, Su16), Van Ngyuen (CSE, S16), José M. García-Rivera (EES, F15), Riem Rostom (EES, S15), Galen M. Smith (EES, F14), James Spinks (EES, S14), Yi-Chih Huang (EES, S12)

M.S. Graduates: Lela Shumpert (Phys, S24), Jackson Wiles (Phys, S23), Aniya Tyson (Phys, F22), Jan Ising (Phys, S21), Julian Gordon (Phys, F19), William Agyakwa (Phys, F16), Percy Williams (Phys, Su16), Guy Oldaker IV (Math, S16, Chair: Dr. L. Liu), Brittney Hamilton (Phys, S16), Justin Riley (Phys, Su15), Aaron Bailey (Phys, S15), Raymond Ruiz (Phys, F14), Nimrod Micael (Phys, F13), Adrian Santiago (Phys, Su13), Stephany Taylor (Phys, S13), Patrick Pete (Phys, S13), José M. García-Rivera (Phys, F12), Cristina Carrasco (Phys, Su12), Ian Colon-Pagan (Physics, Su10), Van Ngyuen (CSE, Su09), Wilson Jones (Math, Su09, Chair: Dr. G. Tang), James Spinks (Math, Su09, Chair: Dr. G. Tang)

B.S. Graduates: Joshua McCalla (ASME, S24), Hailey Poole (ASME, S24), Richarde Graham (ASME, S24), Lela Shumpert (ASME, S22), Jada Cox (ASME, F21), Ari Brown (ASME, F21), Jackson Wiles (Phys, S21), Zainab Ali (ASME, S17), Julian Gordon (ASME, S17), Chanelle Stigger (ASME, F16), Shekia Brower (ASME, S15), Cameron Anderson (ASME, S14), Percy Williams (ASME, S14), Justin Riley (ASME, S13)

[Current Students]

Ph.D. Students: [AST] D. Lee Armstrong, Jackson Wiles, Nicholas Golden, Md Shamimul Hasan, Lela Shumpert, Hailey Poole,

Undergraduates: [ASME] Nicholas Branch, Takayla Harrell, Charles Cook, Jalen McGee, Jonathan Williams

[NCSU]

Postdocs: Dave Schowalter, Ronald P. Weglarz, S. Shen, C.-T. Kao, Jongil Han, Joseph J. Charney, Bo-Wen Shen, Xuejin Zhang

Ph.D. Graduates: H.-Y. Chun, N.-H. Lin, R. P. Weglarz, J. Wang, T.-A. Wang,
R. A. Rozumalski, J. Egentowich, J. Han, C.-M. Chu,
F. Ding, B.-W. Shen, D. A. DeCroix, J. Egentowich, K. D. Pfeiffer, S. Chiao,
J. Cetola, J. A. Thurman, H. D. Reeves

M.S. Graduates: J. Grovestein, B. Burns, J. Anderson, T.-A. Wang, I.-C. Jao, M. S. Kulie,
R. L. Deal, D. W. Hamilton, D. Felton, J. D. Shaltanis, L. Joyce, K. Contre, S. Baker
(Co-Chair), K. M. Lux, S.-Y. Chen, C. M. Hill, S. Slussers, N. C. Witcraft, K. E.
Robertson, M. T. Kiefer, A. M. Hoggarth, P. Suffern, C. Huang, Z. Brown, M.
Silverman

B.S. Graduates (as research advisor): Robbie Berg, Jeff Lin, Carl Schreck, Leigh Jones,
Barrett Smith, Crosby Savage, Christian Cassell, Carrie Larsen, Tyner Bryce, Chu-Che
Liu, Ting-Yen Huang

List Service Activities

- Served as members in the varied committees, such as Graduate Committee,
- Serve as BS-ASME coordinator from 1/2008-7/2024
- Recruiting speakers for the Physics Colloquium and Atmospheric Student seminars.
- Recruiting prospective students for BS-ASME program, MS-Physics-Atmospheric Science Concentrations.
- Coordinated the NCAT Atmospheric Science programs to join the UCAR (University Corporation for Atmospheric Research).
- Coordinated a National Weather Service at Raleigh (NWS-RAH) – NCAT voluntary weather forecasting internship program in summer.
- Initiated and recruited an instructor for the Broadcasting Meteorology course (ASME 280).
- AST PhD Advisory Committee
- Recruited a relatively large number of AST-Atmospheric Science Concentrations
- Took lead in forming research teams to compete for center-level external funding.
- Served as invited speakers to other universities and national laboratories, such as Appalachian State University, UNC-CH, ECU, NOAA GFDL, NCAR, etc.
- Continue to participate in the national and N.C. Taiwanese society, such as the North America Taiwanese Professors' Association (NATPA) and the Taiwanese Association of America (TAA), NC Chapter.

List of Publications

(A) Books

Lin, Y.-L., 2007: Mesoscale Dynamics, Cambridge University Press, 630pp.

(B) Journal Papers

1. Wiles, J. T., Y.-L. Lin, and L. Liu, 2026: Numerical Weather Prediction of Hurricane Florence (2018) and Potential Climate Impacts Through Thermodynamic and Moisture Modification. *Atmosphere* 2026, 17, 438.
2. Ogu, H., L. Liu, and Y.-L. Lin, 2026: Comparative Evaluation of Machine Learning and Deep Learning Models for Tropical Cyclone Track and Intensity Forecast in the North Atlantic Basin. *Atmosphere* 2026, 17, 418.
3. Wiles, J. T., M. L. Kaplan, and Y.-L. Lin, 2026: Multiscale Dynamics Organizing Heavy Precipitation During Tropical Cyclone Hilary's (2023) Remnant Passage over the Southwestern U.S. *Atmosphere* 2026, 17, 82.
4. Kaplan, M. L., S. M. Karim, and Y.-L. Lin, 2025: Urban Impacts on Convective Squall Lines over Chicago Season—Part I: Observations of Multi-Scale Convective Evolution. *Atmosphere* 2025, 16, 306.

5. Karim, S. M., M. L. Kaplan, and Y.-L. Lin, 2025: Urban Impacts on Convective Squall Lines over Chicago in the Warm Season—Part II: A Numerical Study of Urban Infrastructure Effects on the Evolution of City-Scale Convection. Atmosphere 2025, 16, 652.
6. Agyakwah, W., Y.-L. Lin, and M. L. Kaplan, 2025: Essential Organizing and Evolving Atmospheric Mechanisms Affecting the East Bay Hills Fire in Oakland, California (1991). Fire 2025, 8, 72.
7. Sever, G., and Y.-L. Lin, 2025: Dynamic and Physical Processes Associated with Orographic Precipitation in a Conditionally Unstable, Low-CAPE and High-Speed Wind. Ch. 7, Geography, Earth Science and Environment: Research Highlights, Vol. 4, 114-139.
8. Armstrong, D. L., and Y.-L. Lin, 2025: Some Common Ingredients for Tornadogenesis Associated with Landfalling Tropical Cyclones Impinging on Frontal Boundaries. Earth Science Research, 14, 1.
9. Liu, L., A. Tyson, Y.-L. Lin, R. A. Luetlich. Jr., 2024: Improvement in Track and Intensity Prediction of Hurricane Florence 2018 Using WRF and HWRF Models with Regression Analysis. Math. Found. Compu., doi:10.3934/mfc.2024038.
10. Afolayan, S., A. Mekonnen, B. Gamelin, and Y.-L. Lin, 2024: Climate & Orographic Impacts on California Wildfires. Fire preprints202405.2126.v1.
11. Wiles, J. T., Y.-L. Lin, and M. L. Kaplan, 2024: Multi-scale Numerical Simulations of the Synoptic Environment, Diablo Windstorm, and Wildfire Formation Mechanisms for the Tubbs Fire (2017). Meteor. and Atmos. Phys. (MAAP), 136, 10.1007/s00703-023-01001-z
12. Riley, J. G., and Y.-L. Lin, 2024: Evolution of 2007-08 Madden-Julian Oscillation (MJO07-08) passing over the New Guinea Highlands (Part II): Effects of mechanical and thermal forcing on the modification of heavy orographic rain. Ch. 5, Current Research Progress in Physical Science, Vol. 2, 142-174. DOI: <https://doi.org/10.9734/bpi/crpps/v2/296>.
13. Riley, J. G., and Y.-L. Lin, 2024: Evolution of 2007-08 Madden-Julian Oscillation (MJO07-08) passing over the New Guinea Highlands (Part III): Effects of orographic blocking and diurnal heating on MJO07-08 during the splitting stage. Ch. 6, Current Research Progress in Physical Science, Vol. 8, 117-148. DOI: <https://doi.org/10.9734/bpi/strufp/v8/1071>.
14. Kaplan, M. L., S. M. S. Karim, J. T. Wiles, C. N. James, Y.-L. Lin, and J. G. Riley, 2023: Convective Density Current Circulations That Modulated Meso- γ Surface Winds near the Yarnell Hill Fire. Fire 2023, 6, 130. <https://doi.org/10.3390/fire6040130>
15. Karim, M.S. S., Y.-L. Lin, and M. L. Kaplan, 2022: Formation Mechanisms of the Mesoscale Environment Conducive to a Downslope Windstorm over the Cuyamaca Mountains Associated with Santa Ana Wind during the Cedar Fire (2003). J. Appl. Meteor. & Clim., DOI: 10.1175/JAMC-D-22-0025.1
16. Riley, J. G., and Y.-L. Lin, 2022: Effects of mechanical and thermal forcing on the enhancement and ingredients of orographic rain associated with the 2007-08 Madden-Julian Oscillation passing the New Guinea Highlands, Earth Sci. Res., 11, 1, 2022, ISSN 1927-0542 E-ISSN 1927-0550.
17. Ising, J., M. L. Kaplan, and Y.-L. Lin, 2022: Effects of density current, diurnal heating, and local terrain on the mesoscale environment conducive to the Yarnell Hill Fire: Atmosphere, 2022, 13(2), 215. <http://doi.org/10.3390/atmos13020215>.
18. Lin, Y.-L., W. Agyakwah, J. Riely, H.-H. Huang, and L.-C. Jiang, 2021: Orographic effects on the propagation and rainfall modification associated with the 2007-08 Madden-Julian Oscillation (MJO) past the New Guinea Highlands. Meteor. and Atmos. Phys., 133, 359-378, <https://doi.org/10.1007/s00703-020-00753-2>.
19. Kaplan, M.L., C. N. James, J. Ising, M. R. Sinclair, Y.-L. Lin, A. Taylort, J. Riley, S. M.S. Karim, and J. Wiles, 2021: The Multi-Scale Dynamics Organizing a Favorable Environment for Convective Density Currents That Redirected the Yarnell Hill Fire. Climate, <https://doi.org/10.3390/cli9120170>

20. Powers, J. G., K. K. Werner, D. O. Gill, Y.-L. Lin, and R. S. Schmachter, 2021: Cloud Computing Effects for the Weather Research and Forecasting Model. BAMS, DOI 10.1175/BAMS-D-20-0219.1
21. Karim, S. M. S., and Y.-L. Lin, 2021: A Study on Track Deflection Associated with the Landfall of Tropical Cyclone Sidr (2007) on Bangladesh. Dyn. Atmos. Ocean. <https://doi.org/10.1016/j.dynatmoce.2021.101207>
22. Rostom, R., and Y.-L. Lin, 2021: Common Ingredients and Orographic Rain Index (ORI) for Heavy Precipitation Associated with Tropical Cyclones Passing over the Appalachian Mountains. Earth Sci. Research, Vol. 10, No. 1. doi:10.5539/esr.v10n1p32, <https://ccsenet.org/journal/index.php/esr/article/view/0/44792>
23. Agyakwah, W., and Y.-L. Lin, 2020: Generation and enhancement mechanisms for extreme orographic rainfall associated with Typhoon Morakot (2009) over the Central Mountain Range of Taiwan. Atmospheric Research, 247 (2021) 105160. <https://doi.org/10.1016/j.atmosres.2020.105160>
24. Lin, Y.-L., W. Agyakwah, J. G. Riley, H.-H. Hsu, and L.-C. Jiang, 2020: Orographic effects on the propagation and rainfall of the Madden-Julian Oscillation (MJO) 2007-08 over New Guinea Highland. Meteor. and Atmos. Physics (MAAP) - Online First (doi 10.1007/s00703-020-00753-2)
25. Garcia-Rivera, J. M., and Y.-L. Lin, 2019: On the coupling of convective updrafts prior to secondary eyewall formation in Hurricane Katrina (2005). Meteor. Atmos. Phys. (MAAP), 131 (1), pp. 29-53 (doi: 10.1007/s.00703-017-0557-2).
26. Oldaker, G. IV, L. Liu and Y.-L., Lin, 2019: Influence of Appalachian orography on heavy rainfall and rainfall variability associated with the passage of Hurricane Isabel by ensemble simulations. Meteor. Atmos. Phys. (MAAP), 131 (3), 329-350. (doi: 10.1007/s00703-017-0562-5).
27. Huang, Y.-C., and Y.-L. Lin, 2018: Looping tracks associated with tropical cyclones approaching an isolated mountain. Part I; Essential parameters. Meteor. Atmos. Phys. (MAAP), 130 (3), 333-348. (doi: 10.1007/s00703-017-0533-x).
28. Lin, Y.-L., J. Spinks, and B.-W. Shen, 2017: Formation and maintenance of an African easterly wave-mesoscale convective system in 2004 over East Africa and the Arabian Peninsula. Ch. 1 (pp.1-34) of the "North Africa Social, Environmental and Political Issues" (Ed. S. Fuller), Nova Scientific Publishers, Inc., New York, 102pp. (ISBN: 978-1-53612-984-7).
29. Taylor, S. M., M. L. Kaplan, and Y.-L. Lin, 2017: Multi-Scale Dynamics of the 11-12 February 2010 Deep South U.S. Snowstorm Event. Adv. in Meteor., vol. 2017, Article ID 6301026 (<https://doi.org/10.1155/2017/6301026>).
30. Yang, Q., L. R. Leung, J. Lu, Y.-L. Lin, S. Hagos, K. Sakaguchi, and Y. Gao, 2017: Exploring the effect of nonhydrostatic dynamics in high-resolution aquaplanet simulations. J. Geophys. Res., D. (Atmospheres), 122(6):3245-3265. doi:10.1002/2016JD025287.
31. Sever, G. and Y.-L. Lin, 2017: Dynamical and Physical Processes Associated with Orographic Precipitation in a Conditionally Unstable Uniform Flow: Variation in Basic Wind Speed. J. Atmos. Sci., 74, 449-466.
32. Lin, Y.-L., S.-H. Chen, and L. Liu, 2016: Orographic Effects on Track Deflection and Structure Change of an Idealized Tropical Cyclone Passing over a Mesoscale Mountain Range. J. Atmos. Sci., 73, 3951-3974.
33. Lin, Y.-L., 2016: Instabilities conducive to aviation turbulence. Ch. 3 (pp. 59-82) of the "Aviation Turbulence" (Eds: R. D. Sharman and T. P. Lane), Springer, DOI:10.1007/978-3-319-23630-8_3).
34. Arivelo, T. A., and Y.-L. Lin, 2016: Climatology of heavy orographic rainfall induced by tropical cyclones over Madagascar: From synoptic to mesoscale perspectives. Earth Science Research, 5(2), 146-161. doi:10.5539/esr.v5n2p146.
35. Smith, G. M., Y.-L. Lin, and Y. Rastigejev, 2016: Orographic effects on supercell: Development and structure, intensity and tracking. Environ. Nat. Resources Res., 6(2), 76-91. doi:10.5539/enrr.v6n2p76-91.

36. Liu, L., Y.-L. Lin, and S.-H. Chen, 2016: Effects of Landfall Location and Approach Angle of an Idealized Tropical Cyclone over a Long Mountain Range. *Front. Earth Sci.* 4:14. doi: 10.3389/feart.2016.00014
37. Jung, Y., and Y.-L. Lin, 2016: Assessment of a regional-scale weather model for hydrological applications in South Korea. *Environ. Nat. Resources Res.*, 6 (2), 28-41. doi:10.5539/enrr.v6n2p28-41.
38. Garcia-Rivera, J., Y.-L. Lin, and Y. Rastigejev, 2016: Cold-air Damming – Tropical Cyclone Interaction: A Numerical Case Study of Tropical Storm Kyle (2002) and its Influence on Heavy Rain in the North Carolinas. *Meteor. and Atmos. Phys. (MAAP)*, vol. 128, 347-372. doi:10.1007/s00703-015-0421-1.
39. Rostom, R., and Y.-L. Lin, 2015: Control Parameters for Track Continuity of Cyclones Passing over the Southern-Central Appalachian Mountains. *Wea. Forecasting*, 30, 1429-1449.
40. Spinks, J., and Y.-L. Lin, 2015: Variability of the subtropical highs, African easterly jet and easterly wave intensities over North Africa. *Int'l J. Climato.*, 35, 3540-3555. doi/10.1002/joc.4226/pdf.
41. Spinks, J., Y.-L. Lin, and A. Mekonnen, 2015: Effects of the subtropical anticyclones over North Africa and Arabian Peninsula on the African easterly jet. *Int'l J. Climato.*, 35, 733-745. doi/10.1002/joc.4017/pdf.
42. Carrasco, C. A., C. W. Landsea, and Y.-L. Lin, 2014: The Influence of Tropical Cyclone Size on its Intensification. *Weather and Forecasting*, 29, 582-590.
43. Huang, Y.-C., and Y.-L. Lin, 2014: A study on the structure and precipitation of Morakot (2009) induced by the Central Mountain Range of Taiwan. *Meteor. Atmos. Phys.*, 123, 115-141. (DOI 10.1007/s00703-013-0290-4)
44. Lin, Y.-L., L. Liu, G. Tang, J. Spinks, and W. Jones, 2013: Origin of pre-Debby (2006) African easterly wave and mesoscale convective system. *Meteor. Atmos. Phys.*, 120, 123-144. (DOI 10.1007/s00703-013-0248-6)
45. Chen, C.-S., Y.-L. Lin, H.-T. Zeng, C.-Y. Chen, and C.-L. Liu, 2013: Orographic effects on heavy rainfall events over northeastern Taiwan during northeasterly monsoon. *Atmos. Research*, 122, 310-335.
46. Shen, B.-W., B. Nelson, W.-K. Tao, and Y.-L. Lin, 2013: Advanced Visualizations of Scale Interactions of Tropical Cyclone Formation and Tropical Waves. *IEEE, CiSE*, vol. 15, no. 2, 47-59, March-April 2013, doi:10.1109/MCSE.2012.64.
47. Schimmel et al., 2012: Middle and High School Teacher Professional Development Through University Research Experiences and Curriculum Development. *ASEE*.
48. Lacewell, C. W., A. Homaifar, and Y.-L. Lin, 2012: Tracing the origins and propagation of pre-Tropical Storm Debby (2006) mesoscale convective systems using pattern recognition and image fusion. *Meteor. Atmos. Phys.*, 119, 59-70. (DOI 10.1007/s00703-012-0214-8)
49. Shen, B.-W., W.-K. Tao, and Y.-L. Lin, A. Laing, 2012: Genesis of twin tropical cyclones as revealed by a global mesoscale model: The role of mixed Rossby gravity waves. *J. Geophys. Res.*, Vol. 117, D13114, doi:10.1029/2012JD017450 (also in: Vol. 117, D16199, doi:10.1029/2012JD018598).
50. Bililign, B., Y.-L. Lin, R. Davis, S. Ilias, L. Kurkalova, Y. Kyei, Y. Rastigeyev, G. Uzochukwu, and S. Bae, 2012: Effects of global warming on North Carolina. *Int'l J. Climate Change: Impacts and Responses*, Vol. 3, Issue 2, 51-70.
51. Lin, Y.-L., and L. C. Savage III, 2011: Effects of Landfall Location and the Approach Angle of a Cyclone Vortex Encountering a Mesoscale Mountain Range. *J. Atmos. Sci.*, 68, 2095-2106.
52. Rastigejev, Y., S. Suslov, and Y.-L. Lin, 2011: Effect of ocean spray on vertical momentum transport under high-wind conditions. *Boundary Layer Meteor.*, DOI 10.1007/s10546-011-9625-1.
53. Chen, C.-S., Y.-L. Lin, W.-C. Peng, and C.-L. Liu, 2009: Investigation of a heavy rainfall event over southwestern Taiwan associated with a mesocyclone during the 2003 Mei-Yu season. *Atmos. Research*, 95, 235-254.
54. Bililign, S., Y.-L. Lin, L. Kurkalova, Y. Rastigejev, K. Schimmel, S. Bae, R. Davis, S. Ilia, Y. Kyei,

- and G. Uzochukwu, 2009: Climate and Water Resources: A challenge to integrated science/social policy formulation, *Convergence Review*, Issue 2, N. C. A&T State Univ., 11pp.
55. Bililign, S., K. Schimmel, and Y.-L. Lin, 2009: The NOAA Interdisciplinary Scientific Environmental Technology Cooperative Science Center (ISETCSC). *International Newsletter*, p.7-9, Dec. 31. American Physical Society.
 56. Huang, C., Y.-L. Lin, M. L. Kaplan, and J. Charney, 2009: Synoptic-scale and mesoscale environments conducive to forest fires during the October 2003 extreme fire event in Southern California. *J. Appl. Meteor. and Climate*, 48, 553–579.
 57. Huang, C.-Y., and Y.-L. Lin, 2008: The influence of mesoscale mountains on cyclone tracks. Part I: A shallow-water modeling study. *Meteor. Atmos. Phys.*, 101, 1-20.
 58. Lin, Y.-L., 2008: Formation of African easterly waves and mesoscale convective systems in eastern North Africa and its impacts on the tropical cyclogenesis over eastern Atlantic Ocean. *NSBP Proc.*, 1140, 104-113.
 59. Kaplan, M. L., C. Huang, Y.-L. Lin, and J. J. Charney, 2008: The development of extremely dry surface air due to vertical exchanges under the exit region of a jet streak. *Meteor. Atmos. Phys.*, 102, 63-85.
 60. Chen, S.-H., Y.-L. Lin, and Z. Zhao, 2008: Effects of unsaturated moist Froude number and orographic aspect ratio on a conditionally unstable flow over a mesoscale mountain. *J. Meteor. Soc. Japan*, 86, 353-367.
 61. Horvath, K., Y.-L. Lin and B. Ivančan-Picek, 2008: Classification of cyclone tracks over Apennines and Adriatic Sea. *Mon. Wea. Rev.*, 136, 2210-2227.
 62. Reeves, H. D., Y.-L. Lin, and R. Rotunno, 2008: Dynamic forcing and mesoscale variability of heavy precipitation events over the Sierra Nevada mountains. *Mon. Wea. Rev.*, 136, 62-77.
 63. Kiefer, M. T., Y.-L. Lin, and J. J. Charney, 2008: A study of two-dimensional dry convective plume modes with variable critical level height. *J. Atmos. Sci.*, 65, 448-469.
 64. Chad J. Ringley; Yuh-Lang Lin; Zachary G. Brown; Michael L. Kaplan, 2007: The development of a boundary layer turbulence database for wake vortex applications. 45th AIAA Aerospace Sciences Meeting, 5, 3519-3547.
 65. Reeves, H. D., and Y.-L. Lin, 2007: The effects of a mountain on the propagation of a pre-existing convective system for blocked and unblocked flow regimes. *J. Atmos. Sci.*, 64, 2401-2421.
 66. Kaplan, M. L., Y.-L. Lin, C. J. Ringley, Z. G. Brown, M. T. Kiefer; P. S. Suffern, 2006: Wake vortex environment simulations from a terminal Area PBL Prediction System (TAPPS). 44th AIAA Aerospace Sciences Meeting, 17, 12917-12932.
 67. Lin, Y.-L., N. C. Witcraft, and Y.-H. Kuo, 2006: Dynamics of track deflection associated with the passage of tropical cyclones over a mesoscale mountain. *Mon. Wea. Rev.*, 134, 3509-3538.
 68. Hoggarth, A. M., H. D. Reeves, and Lin, Y.-L., 2006: Formation and maintenance mechanisms of the stable layer over the Po Valley during MAP IOP-8. *Mon. Wea. Rev.*, 134, 3334-3352.
 69. Reeves, H. D., and Y.-L. Lin, 2006: Effect of stable layer formation over the Po Valley on the development of convection during MAP IOP-8. *J. Atmos. Sci.*, 63, 2567-2584.
 70. Kaplan, M. L., J. J. Charney, K. T. Waight III, K. M. Lux, J. D. Cetola, A. W. Huffman, A. J. Riordan, S. D. Slusser, and Y.-L. Lin, 2006: Characterizing the Severe Turbulence Environments Associated with Commercial Aviation Accidents: A Real-Time Turbulence Model (RTTM) Designed for the Operational Prediction of Hazardous Aviation Turbulence Environments. *Meteor. Atmos. Phys.*, 94, 235-270.
 71. Witcraft, N. C., Y.-L. Lin, and Y.-H. Kuo, 2005: Dynamics of orographic rain associated with the passage of a tropical cyclone over a mesoscale mountain. *Terr. Atmos. Ocean*, 16, 1133-1161.
 72. Lin, Y.-L., K. E. Robertson, and C. M. Hill, 2005: Origin and propagation of a disturbance associated with an African easterly wave as a precursor of Hurricane Alberto (2000). *Mon. Wea. Rev.*, 133, 3276–3298.
 73. Lin, Y.-L., H. D. Reeves, S.-Y. Chen, and S. Chiao, 2005: Formation mechanisms for convection over the Ligurian Sea during MAP IOP-8. *Mon. Wea. Rev.*, 133, 2227-2245.

74. Lin, Y.-L., 2005: Dynamics of Orographic Precipitation, 2005 Yearbook of Science & Technology, McGraw Hill Companies, 248-250.
75. Lin, Y.-L., S.-Y. Chen, C. M. Hill, and C.-Y. Huang, 2005: Control parameters for tropical cyclones passing over mesoscale mountains, *J. Atmos. Sci.*, 62, 1849-1866.
76. Kaplan, M. L., A. W. Huffman, K. M. Lux, J. J. Charney, A. J. Riordan, and Y.-L. Lin, 2005: Characterizing the Severe Turbulence Environments Associated with Commercial Aviation Accidents. A 44 Case Study Synoptic Observational Analyses. *Meteor. Atmos. Phys.*, 88, 129-152.
77. Kaplan, M. L., A. W. Huffman, K. M. Lux, J. D. Cetola, J. J. Charney, A. J. Riordan, Y.-L. Lin, and K. T. Waight III, 2005: Characterizing the severe turbulent environments associated with commercial aviation accidents. Hydrostatic mesobeta scale numerical simulations of supergradient wind flow and streamwise ageostrophic frontogenesis. *Meteor. Atmos. Phys.*, 88, 153-174.
78. Chen, S.-H., and Y.-L. Lin, 2005: Orographic effects on a conditionally unstable flow over an idealized three-dimensional mesoscale mountain. *Meteor. Atmos. Phys.*, 88, 1-21.
79. Chen, S.-H., and Y.-L. Lin, 2005: Effects of moist Froude number and CAPE on a conditionally unstable flow over a mesoscale mountain ridge. *J. Atmos. Sci.*, 62, 331-350.
80. Hoggarth, A. M., Y.-L. Lin, and H. D. Reeves, 2005: Formation and maintenance mechanisms of the stable layer over the Po Valley during MAP IOP-8. *Hrvatski Meteoroloski Casopis*, 40, 246-249.
81. Lin, Y.-L., A. M. Hoggarth; H. D. Reeves, and B. L. Smith II, 2005: Influence of the Apennines on track deflection of Genoa cyclones. *Hrvatski Meteoroloski Casopis*, 40, 250-253.
82. Chen, S.-H., Y.-L. Lin, Z. Zhao, and H. D. Reeves, 2005: Effects of moist Froude number and orographic aspect ratio on a conditionally unstable flow over a mesoscale mountain *Hrvatski Meteoroloski Casopis*, 40, 456-459.
83. Reeves H. D., and Y.-L. Lin, 2005: The effects of a mountain on the propagation of pre-existing convection for different Froude number flow regimes. *Hrvatski Meteoroloski Casopis*, 40, 168-171.
84. Richard, E., E., A. Buzzi, G. Zängl, N. Asencio, R. Benoit, S. Chiao, R. Ferretti, C. Hohenegger, C. Keil, Y.-L. Lin, C. Marsigli, S. Medina, and C. Schar, 2005: Quantitative precipitation forecasting in mountainous regions. *Hrvatski Meteoroloski Casopis*, 40, 65-69.
85. Kaplan, M. L., K. M. Lux, J. D. Cetola, A. W. Huffman, A. J. Riordan, S. W. Slusser, Y.-L. Lin, J. J. Charney, and K. T. Waight, 2004: Characterizing the severe turbulence environments associated with commercial aviation accidents. A real-time turbulence model (RTTM) designed for the operational prediction of hazardous aviation turbulence environments. NASA/CR-2004-213025, August 2004, 49pp.
86. Chiao, S., Y.-L. Lin, and M. L. Kaplan, 2004: Numerical study of the orographic forcing of heavy precipitation during MAP IOP-2B. *Mon. Wea. Rev.*, 132, 2184-2203.
87. Hill, C. M., and Y.-L. Lin, 2003: Initiation of a mesoscale convective complex over the Eithiopian Highlands preceding the genesis of Hurricane Alberto (2000): A precursor to tropical cyclogenesis. *Geophys. Res. Lett.*, 30, 1232, doi:10.1029/2002GL016655.
88. Chiao, S., and Y.-L. Lin, 2003: Numerical modeling of an orographically induced precipitation event associated with tropical storm Rachel over Taiwan. *Wea. Forecasting*, 18, 325-344.
89. Lin, Y.-L., D. B. Ensley, S. Chiao, C. M. Hill, and C.-Y. Huang, 2002: Orographic influence on rainfall and track deflection associated with the passage of a tropical cyclone. *Mon. Wea. Rev.*, 130, 2929-2950.
90. Koch, S. E., F. Zhang, M. L. Kaplan, Y.-L. Lin, R. P. Weglarz, and C. M. Trexler, 2001: Numerical simulations of a gravity wave event over CCOPE. Part III: The role of mountain-plains solenoid in the generation of the second wave episode. *Mon. Wea. Rev.*, 129, 909-933.
91. Lin, Y.-L., S. Chiao, T.-A. Wang, and M. L. Kaplan, 2001: Some common ingredients for heavy orographic rainfall. *Weather and Forecasting*, 16, 633-660.
92. Lin, Y.-L., and L. E. Joyce, 2001: A further study of the mechanisms of cell regeneration, propagation, and development within two-dimensional multicell storms. *J. Atmos. Sci.*, 58, 2957-2988.

93. Ding, F., S. P. Arya, and Y.-L. Lin, 2001: Large-eddy simulations of the atmospheric boundary layer using a new subgrid-scale model. Part I: Slightly unstable and neutral cases. *Environ. Fluid Mech.*, 1, 29-47.
94. Ding, F., S. P. Arya, and Y.-L. Lin, 2001: Large-eddy simulations of the atmospheric boundary layer using a new subgrid-scale model. Part II: Weakly and moderately stable cases. *Environ. Fluid Mech.*, 1, 49-69.
95. Koch, S. E., F. Zhang, M. L. Kaplan, Y.-L. Lin, R. P. Weglarz, and C. M. Trexler, 2001: Numerical simulations of a gravity wave event over CCOPE. Part III: The role of mountain-plains solenoid in the generation of the second wave episode. *Mon. Wea. Rev.*, 129, 909-932.
96. Chu, C.-M., and Y.-L. Lin, 2000: Effects of orography on the generation and propagation of mesoscale convective systems in a two-dimensional conditionally unstable flow. *J. Atmos. Sci.*, 57, 3817-3837.
97. Wang, T.-A., and Y.-L. Lin, 2000: Effects of shear and sharp gradients in static stability on two-dimensional flow over an isolated mountain ridge. *Meteor. Atmos. Phys.*, 75, 69-99.
98. Kaplan, M. L., Y.-L. Lin, J. Charney, K. D. Pfeiffer, D. S. DeCroix, and R. P. Weglarz, 2000: A terminal area PBL Prediction System at DFW and its application in simulating diurnal PBL jets. *Bull. Amer. Meteor. Soc.*, 81, 2179-2204.
99. Egentowich, J. M., M. L. Kaplan, Y.-L. Lin, and A. J. Riordan, 2000: Mesoscale simulations of dynamical factors discriminating between a tornado outbreak and non-event over the southeast US. Part I: 84-48 hour precursors. *Meteor. Atmos. Phys.*, 74, 129-157.
100. Egentowich, J. M., M. L. Kaplan, Y.-L. Lin, and A. J. Riordan, 2000: Mesoscale simulations of dynamical factors discriminating between a tornado outbreak and non-event over the southeast US. Part II: 48-6 hour precursors. *Meteor. Atmos. Phys.*, 74, 159-187.
101. Egentowich, J. M., M. L. Kaplan, Y.-L. Lin, and A. J. Riordan, 2000: Mesoscale simulations of dynamical factors discriminating between a tornado outbreak and non-event over the southeast US. Part III: 6 hour precursors. *Meteor. Atmos. Phys.*, 74, 189-215.
102. Han, J., Y.-L. Lin, S. P. Arya, and F. H. Proctor, 2000: Large eddy simulation of aircraft wake vortices in a homogeneous atmospheric turbulence: Vortex decay and descent. *AIAA Journal*, 38, 292-300.
103. Han, J., Y.-L. Lin, D. G. Schowalter, S. P. Arya, and F. H. Proctor, 2000: Large eddy simulation of aircraft wake vortices in a homogeneous atmospheric turbulence: the crow instability. *AIAA Journal*, 38, 643-656.
104. Doyle, J. D., D. R. Durran, C. Chen, B. A. Colle, M. Georgelin, V. Grubisic, W.-R. Hsu, C.-Y. Huang, D. Landau, Y.-L. Lin, G. S. Poulos, W.-Y. Sun, D. B. Weber, M. G. Wurtele, and M. Xue, 2000: An intercomparison of model predicted wave breaking for the 11 January 1972 Boulder windstorm. *Mon. Wea. Rev.*, 128, 901-914.
105. Han, J., Y.-L. Lin; S. Pal Arya; F. H. Proctor, 2000: Numerical study of wake vortex decay and descent in homogeneous atmospheric turbulence. *AIAA J.*, 38, 643-656.
106. Han, J., Y.-L. Lin, D. G. Schowalter, S. Pal Arya, F. H. Proctor, 2000: An Operational Computational Terminal Area Large eddy simulation of aircraft wake vortices within homogeneous turbulence: crow instability. *AIAA J.*, 2000, 38, 292-300.
107. Shen, B.-W., and Y.-L. Lin, 1999: Effects of critical levels on two-dimensional background flow over an isolated mountain ridge on an f plane. *J. Atmos. Sci.*, 56, 3286-3302.
108. Lin, Y.-L., J. Han, D. W. Hamilton, and C.-Y. Huang, 1999: Orographic influence on a drifting cyclone. *J. Atmos. Sci.*, 56, 534-562.
109. Weglarz, R. P., and Y.-L. Lin, 1998: Nonlinear adjustment of a rotating homogeneous atmosphere to zonal momentum forcing. *Tellus*, 50A, 616-636.
110. Wang, T.-A., and Y.-L. Lin, 1999: Wave ducting in a stratified shear flow over a two-dimensional mountain. Part II: Implications for the development of high-drag states for severe downslope windstorms. *J. Atmos. Sci.*, 56, 437-452.
111. Wang, T.-A., and Y.-L. Lin, 1999: Wave ducting in a stratified shear flow over a two-dimensional

- mountain. Part I: General linear criteria. *J. Atmos. Sci.*, 56, 412-436.
112. Lee, T.-Y., Y.-Y. Park, and Y.-L. Lin, 1998: A numerical study of cyclogenesis to the east of Korean Peninsula, *Mon. Wea. Rev.*, 126, 2090-2116.
 113. Lin, Y.-L., R. L. Deal, and M. S. Kulie, 1998: Mechanisms of cell regeneration, development, and propagation within a two-dimensional multicell thunderstorm. *J. Atmos. Sci.*, 55, 1867-1886.
 114. Kaplan, M. L., Y.-L. Lin, D. W. Hamilton, and R. A. Rozumalski, 1998: A numerical simulation of an unbalanced jetlet and its role in the Palm Sunday 1994 tornado outbreak in Alabama and Georgia. *Mon. Wea. Rev.*, 55, 1867-1886.
 115. Hamilton, D. W., Y.-L. Lin, R. P. Weglarz, and M. L. Kaplan, 1998: Atmospheric responses to diabatic forcing with applications to jetlet formation associated with the 1994 Palm Sunday tornado outbreak. *Mon. Wea. Rev.*, 126, 2133-2165.
 116. Kulie, M. S., and Y.-L. Lin, 1998: The structure and evolution of a numerically simulated high-precipitation supercell thunderstorm. *Mon. Wea. Rev.*, 126, 2061-2089.
 117. DeCroix, D., Y.-L. Lin, and D. G. Schowalter, 1997: Cellular convection embedded in the convective PBL surface layer. *J. Wind Engineering & Indus. Aerodynamics*, 67&68, 387-401.
 118. Huang, C.-Y., and Y.-L. Lin, 1997: The evolution of mesoscale vortex impinging on symmetric topography. *Taiwan Natl. Sci. Council*, 285-309.
 119. Kaplan, M. L., S. E. Koch, Y.-L. Lin, and R. P. Weglarz, 1997: Numerical simulations of a gravity wave event over CCOPE. Part I: The role of geostrophic adjustment in mesoscale jet streak formation and their role in the generation of the first wave episode. *Mon. Wea. Rev.*, 125, 1185-1211.
 120. Weglarz, R. P., and Y.-L. Lin, 1997: A linear theory for jet streak formation due to zonal momentum forcing in a stably stratified atmosphere. *J. Atmos. Sci.*, 54, 908-932.
 121. Jin, Y., S. E. Koch, Y.-L. Lin, F. M. Ralph, and C. Chen, 1996: Numerical simulations of an observed gravity current and gravity waves in an environment characterized by complex stratification and shear. *J. Atmos. Sci.*, 53, 3570-3588.
 122. Xie, L., and Y.-L. Lin, 1996: Responses of low-level flow to an elongated surface heat source with application to coastal frontogenesis. *Mon. Wea. Rev.*, 124, 2807-2827.
 123. Lin, Y.-L., 1996: Effects of thermal forcing in atmospheric shear flows with critical level. *Nonlinear Analysis*, Ed. V. Lakshmikantham, 3491-3513, Walter de Gruyter.
 124. Kaplan, M. L., R. A. Rozumalski, R. Gonski, R. P. Weglarz, Y.-L. Lin, and S. Businger, 1996: Numerical simulations studies of the mesoscale environment conducive to the Raleigh tornado. NOAA Tech. Memo, NWS ER-90, 101pp.
 125. Lin, Y.-L., 1996: Structure of dynamically unstable shear flow and their implications for shallow internal gravity waves. Part II: Nonlinear response. *Meteor. Atmos. Phys.*, 59, 153-172.
 126. Lin, Y.-L., and T.-A. Wang, 1996: Flow regimes and transient dynamics of two- dimensional stratified flow over an isolated mountain ridge. *J. Atmos. Sci.*, 53, 139-158.
 127. Wang, T.-A., Y.-L. Lin, F. H. Semazzi, and G. Janowitz, 1995: Response of a stably stratified flow to large scale diabatic heating. *J. Geophys. Res.*, 101, D3, 7049-7073.
 128. Lin, Y.-L., and I.-C. Jao, 1995: A numerical study of flow circulations in the Central Valley of California and formation mechanisms of the Fresno Eddy. *Mon. Wea. Rev.*, 123, 3227-3239.
 129. Chun, H.-Y., and Y.-L. Lin, 1995: Enhanced response of an atmospheric flow to a line type heat sink in the presence of a critical level. *Meteor. Atmos. Phys.*, 55, 33-45.
 130. Lin, Y.-L., 1994: Airflow over mesoscale heat source. Part I: Responses in uniform flow. *Taiwan Proc. Natl. Sci. Council. ROC-A*, 18, 1-32.
 131. Lin, Y.-L., 1994: Airflow over mesoscale heat source. Part II: Responses in a shear flow. *Taiwan Proc. Natl. Sci. Council. ROC-A*, 18, 119-150.
 132. Stout, J., Y.-L. Lin, and P. S. P. Arya, 1993: A theoretical investigation of the effects of sinusoidal topography on particle deposition. *J. Atmos. Sci.*, 50, 2533-2541.
 133. Lin, Y.-L., and H.-Y. Chun, 1993: Structures of dynamically unstable shear flows and their implications for shallow internal gravity waves. *Meteor. Atmos. Phys.*, 52, 59-68.

134. Lin, Y.-L., T.-A. Wang, and R. P. Weglarz, 1993: Interaction between gravity waves and cold air outflows in a stably stratified uniform flow. *J. Atmos. Sci.*, 50, 3790-3816.
135. Lin, Y.-L., 1993: Orographic effects on airflow and mesoscale weather systems over Taiwan. *Terres. Atmos. Ocean*, 4, 381-420.
136. Semazzi, F. H. M., N.-H. Lin, Y.-L. Lin, and F. Giorgi, 1993: A nested model study of the Sahelian climate response to sea-surface temperature anomalies. *Geophys. Res. Lett.*, 20, 2897-2900.
137. Lin, Y.-L., 1992: Dynamics of thermally forced mesoscale circulations. *Trends in Atmospheric Research*, 1, 73-152.
138. Riordan, A. J., and Y.-L. Lin, 1992: Mesoscale wind signatures along the Carolina coast. *Mon. Wea. Rev.*, 120, 2786-2797.
139. Lin, Y.-L., N.-H. Lin, and R. P. Weglarz, 1992: Numerical modeling studies of lee mesolows, mesovortices, and mesocyclones. *Meteor. Atmos. Phys.*, 49, 43-67.
140. Lin, Y.-L., and H.-Y. Chun, 1991: Effects of diabatic cooling in a shear flow with a critical level. *J. Atmos. Sci.*, 48, 2476-2491.
141. Lin, Y.-L., 1990: A theory of cyclogenesis forced by diabatic heating. Part II: A semigeostrophic Approach. *J. Atmos. Sci.*, 47, 1755-1777.
142. Lin, Y.-L., 1989: Inertial and frictional effects on stratified hydrostatic airflow past an isolated heat source. *J. Atmos. Sci.*, 46, 921-936.
143. Lin, Y.-L., 1989: A theory of cyclogenesis forced by diabatic heating. Part I: A quasi-geostrophic approach. *J. Atmos. Sci.*, 46, 3015-3036.
144. Lin, Y.-L., and D. J. Perkey, 1989: A numerical modeling studies of a process of lee cyclogenesis. *J. Atmos. Sci.*, 46, 3685-3697.
145. Lin, Y.-L., and R. C. Goff, 1988: A study of a mesoscale solitary wave in the atmosphere originating near a region of deep convection. *J. Atmos. Sci.*, 45, 194-205.
146. Lin, Y.-L., and S. Li, 1988: Three-dimensional response of a shear flow to elevated heating. *J. Atmos. Sci.*, 45, 2987- 3002.
147. Lin, Y.-L., 1987: Two-dimensional response of a stably stratified shear flow to diabatic heating. *J. Atmos. Sci.*, 44, 1375-1393.
148. Lin, Y.-L., and R. B. Smith, 1986: Transient dynamics of airflow near local heat source. *J. Atmos. Sci.*, 43, 40-49.
149. Lin, Y.-L., 1986: Calculation of airflow over an isolated heat source with application to the dynamics of V-shaped clouds. *J. Atmos. Sci.*, 43, 2736-2751.
150. Lin, Y.-L., 1986: A study of the transient dynamics of orographic rain. *Pap. Meteor. Res.*, 9, 20-45.
151. Lin, Y.-L., R. D. Farley, and H. D. Orville, 1983: Bulk parameterization of the snow field in a cloud model. *J. Climate and Applied Meteor.*, 22, 1065-1092.
152. Smith, R. B., and Y.-L. Lin, 1983: Orographic rain on Western Ghats. *Mountain Meteorology*, Ed. Reiter et al., Sci. Press and Amer. Meteor. Soc., 71-98.
153. Smith, R. B., and Y.-L. Lin, 1982: The addition of heat to a stratified airstream with application to the dynamics of orographic rain. *Quart. J. Royal Meteor. Soc.*, 108, 353-378.