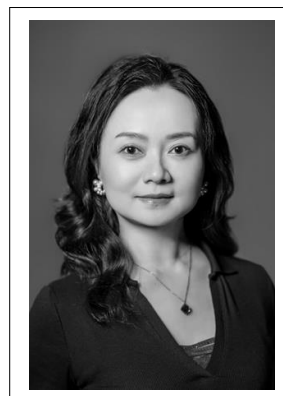


Curriculum Vitae for Yali Luo

State Key Laboratory of Severe Weather
Chinese Academy of Meteorological Sciences
46 Zhong-Guan-Cun South Avenue
Beijing 100081, China
Telephone: (10) 6840-8418
Fax: (10) 6217-5931
Email: ylluo@cma.gov.cn; yali.luo@qq.com



Education

- Ph.D. University of Utah (U.S.), Meteorology, 2003
- M.S. Chinese Academy of Meteorological Sciences, Meteorology, 1996
- B.S. Nanjing Institute of Meteorology (China), Meteorology, 1993

Professional Experience

- 07/2007-Date Senior Scientist/Professor, State Key Laboratory of Severe Weather, Chinese Academy of Meteorological Sciences
- 11/2010-05/2011 Visiting Scientist, Wyoming University, USA
- 11/2006-06/2007 Research Scientist II, U.S. NASA Langley Research Center
- 02/2004-10/2006 Research Scientist I, U.S. NASA Langley Research Center
- 07/2003-01/2004 Post-doctoral Research Associate, University of Utah, USA
- 06/1996-07/1999 Engineer, National Meteorological Center, China Meteorology Administration

Areas of Specialization and Research Interests

- Understand the science and prediction of weather/climate extremes such as heavy rainfall and extreme hot events, using high-resolution, integrated observational datasets combined with numerical modeling.
- Understand the distribution and vertical structure of clouds and precipitation, using integrated observations from field programs and new observational capabilities from satellites such as Fengyun, Himawari-8, *CloudSat*, Tropical Rainfall Measuring Mission, and Global Precipitation Mission.
- Evaluate and improve physics parameterization schemes, i.e., cloud microphysics and convection schemes, in atmospheric models such as the NCEP GFS, UCLA CRM, and the WRF model.

Honors

- Zou-Jing-Meng Award to Talents in Meteorological Science & Technology, Chinese Meteorological Society, 2016

- Award to Leading Talents in Meteorological Science & Technology, China Meteorological Administration, 2013-16/2017-19/2020-Date
- Group Achievement Award to CRYSTAL-FACE Science Team, NASA, 2003

Selected Memberships and Professional Services

2021-Date	Assistant Editor, Geoscience Letters, Asia Oceania Geosciences Society
2013-2021	Chief Scientist, The Southern China Monsoon Rainfall Experiment (SCMREX) Research & Development Project (RDP), World Meteorological Organization/World Weather Research Programme (WMO/WWRP)
10/2015-12/2019	Co-Chair, Expert Team on Severe Monsoon Weather, World Meteorological Organization (WMO)
11/2014-10/2015	Member, Expert Team on Severe Monsoon Weather, World Meteorological Organization (WMO)
2009-Date	Member, Chinese Meteorological Society (CMS)
2010-2012	Lead author, IPCC Special Report on <i>Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation</i>
2013-2015	Coordinating lead author, China National Assessment Report on <i>Risk Management and Adaptation of Climate Extremes and Disasters</i>
2003-Date	Referee of scientific journals (such as <i>the Journal of the Atmospheric Sciences, Journal of Climate, Journal of Applied Meteorology and Climatology, Monthly Weather Review, Journal of Geophysical Research, Geophysical Research Letter, Journal of Advances in Modeling Earth Systems, Climate Dynamics, International Journal of Remote Sensing, Remote Sensing of Environment, International Journal of Climatology, Science in China, Advances in Atmospheric Sciences, Journal of Meteorological Research, Acta Meteorologica Sinica, Theoretical and Applied Climatology, Atmospheric Science Letters, Meteorology and Atmospheric Physics, Journal of Meteorological Society of Japan</i>)
2008-Date	Convener and chair/member of IOC/LOC of international conferences/workshops (such as many <i>Annual Meetings of Asia Oceania Geosciences Society, the 6th and 7th WMO International Workshop on Monsoons, the 3rd and 4th WMO Workshop on Monsoon Heavy Rainfall, the 12th and 14th Conference on Mesoscale Convective System and High Impact Weather in East Asia, the 16th Chinese-American Kavli Frontiers of Science symposium</i>)

Refereed Publications

(* indicates corresponding author)

1. Liu, L., B. Yang, X. Jiang, and Y. Luo*, 2022: Changes in Tropical Cyclone–Induced Extreme Hourly Precipitation over China during 1975–2018. *J. Climate*, DOI: 10.1175/JCLI-D-21-0736.1, in press.
2. Zhang, Q., Y. Luo*, Y. Tang, X. Xu, S. Yu., C. Wu, 2022: Cause–Effect Relationship between Meso- γ -Scale Rotation and Extreme Short-Term Precipitation: Observational Analyses at Minute and Sub-Kilometer Scales. *J. Meteorological Research*, **36**, 539-552.
3. Luo, Y.*, J. Zhang, M. Yu, X. Liang, R. Xia, Y. Gao, X. Gao, and J. Yin, 2022: On the influences of urbanization on the extreme rainfall over Zhengzhou on 20 July 2021: a Convection-permitting ensemble modeling study. *Adv. Atmos. Sci.*, <https://doi.org/10.1007/s00376-022-2048-8>.
4. Pu, Y.; Hu, S.*; Luo, Y.; Liu, X.; Hu, L.; Ye, L.; Li, H.; Xia, F.; Gao, L, 2022: Multiscale Perspectives on an Extreme Warm-Sector Rainfall Event over Coastal South China. *Remote Sensing*, **14**, 3110. <https://doi.org/10.3390/rs14133110>
5. Yu, S., Y. Luo*, C. Wu*, D. Zheng, W. Xu, 2022: Convective and microphysical characteristics of extreme precipitation revealed by multisource observations over the Pearl River Delta at monsoon coast. *Geophysical Research Letters*, **49**, e2021GL097043. <https://doi.org/10.1029/2021GL097043>.
6. Xu, W.*, H. Chen, H. Wei, Y. Luo, T. Zhao, 2022: Extreme precipitation produced by relatively weak convective systems in the tropics and subtropics. *Geophysical Research Letters*, **49**, 2022GL098048
7. Gao, X., Y. Luo*, Y. Lin, X. Bao, 2022: A Source of WRF Simulation Error for the Early-summer Heavy Rainfall over South China Coast: Land-sea Thermal Contrast. *J. Geophys. Res. Atmos.*, **127**, e2021JD035179.
8. Huang, L., Luo, Y.*, & Bai, L.*, 2022: An evaluation of convection-permitting ensemble simulations of coastal nocturnal rainfall over South China during the early-summer rainy season. *J. Geophys. Res. Atmos.*, **127**, e2021JD035656. <https://doi.org/10.1029/2021JD035656>
9. Fu, S.M.*, J.P. Zhang, Y.L. Luo*, W.T. Yang and J.H. Sun, 2022. Energy paths that sustain the warm-sector torrential rainfall over South China and their contrasts to the frontal rainfall: A cae study. *Adv. Atmos. Sci.*, DOI: 10.1007/s00376-021-1336-z. (online Dec. 2021)
10. Li, M., Y. Luo*, M. Min, 2022: Characteristics of Pre-summer Daytime Cloud Regimes over Coastal South China from the Himawari-8 Satellite. *Adv. Atmos. Sci.*, doi: 10.1007/s00376-021-1148-1. (accepted 30 August 2021)
11. Bao., X., and Y. Luo*, X. Gao, 2021: The Synoptic Impacts on the Convection Initiation of a Warm-sector Heavy Rainfall Event over Coastal South China Prior to the Monsoon Onset: A Numerical Modeling Study. *J. Geophys. Res. Atmos.*, **126**, e2020JD034335. <https://doi.org/10.1029/2020JD034335>.
12. Chen, Y., Y. Luo*, B. Liu*, 2021: General features and synoptic-scale environments of mesoscale convective systems over South China during the 2013–2017 pre-summer rainy seasons. *Atmos. Res.*, **266** (2022) 105954.

13. Gao, H., Yali Luo*, Da-Lin Zhang, Yang Chen, Yongqing Wang, Xinyong Shen, 2021: A Statistical Analysis of Extreme Hot Characteristics and their Relationships with Urbanization in Southern China during 1971-2020. *J. Appl. Meteor. Climat.*, 60, 1301-1317, DOI: 10.1175/JAMC-D-21-0012.1.
14. Guo, J., Y. Luo*, J. Yang*, K. Furtado, H. Lei, 2021: Effect of Anthropogenic and Sea Salt Aerosols on a Southern China Heavy Rainfall Event. *Atmos. Res.*, 265 (2022) 105923.
15. Li W, Bi X*, Sheng L, Luo Y and Sun J (2021) Modulations of Synoptic Weather Patterns on Warm-Sector Heavy Rainfall in South China: Insights From High-Density Observations With Principal Component Analysis. *Front. Earth Sci.* 9:678230. doi: 10.3389/feart.2021.678230
16. Li, M., Yali Luo*, D.-L. Zhang, M. Chen, C. Wu, J. Yin and R. Ma, 2021: Analysis of a Record-breaking Rainfall Event Associated with a Monsoon Coastal Megacity of South China using Multi-source Data. *IEEE Trans. Geosci. Remote Sens.*, 59, 6404-6414, DOI: 10.1109/TGRS.2020.3029831
17. Sun, X., Yali Luo*, Xiaoyu Gao, Mengwen Wu, Mingxin Li, Ling Huang, Da-Lin Zhang, Haiming Xu, 2021: On the Localized Extreme Rainfall over the Great Bay Area in South China with Complex Topography and Strong UHI Effects. *Mon. Wea. Rev.*, 149, 2777-2801, DOI:10.1175.MWR-D-21-0004.1.
18. Chen, Y.* , X. Wang, L. Huang, and Y. Luo, 2021: Spatial and Temporal Characteristics of Abrupt Heavy Rainfall Events over Southwest China during 1981-2017. *Int. J. Climatology*, **41**, 3286-3299.
19. Xia, R., Y. Luo*, D.-L. Zhang, M. Li, X. Bao, J. Sun, 2021: On the Diurnal Cycle of Heavy Rainfall over the Sichuan Basin during 10–18 August 2020. *Adv. Atmos. Sci.*, 38, 2183-2200.
20. Yun, Y.* , C. Liu, Y. Luo, W. Gao, 2021: Warm-season Mesoscale Convective Systems over Eastern China: Convection-permitting Climate Model Simulation and Observation. *Climate Dynamics*, 57, 3599-3617.
21. Zhao, X., Y. Lin*, Y. Luo, and Coauthors, 2021: A Double-Moment SBU-YLIN Cloud Microphysics Scheme and Its Impact on a Squall Line Simulation. *Journal of Advances in Modeling Earth Systems*, 13, e2021MS002545. <https://doi.org/10.1029/2021MS002545>
22. Zhao, Z., X. Bi*, J. Dudhia, Y. Luo, J. Song, Q. Song, and N. Wu, 2021: Responses of the atmospheric boundary layer to a low-latitude mesoscale SST front. *Q. J. Royal Meteor. Soc.*, DPO:10.1002/qj.4197.
23. Luo, Y.*, J. Sun, Y. Li, and Coauthors, 2020: Science and Prediction of Heavy Rainfall over China: Research Progress since the Reform and Opening-Up of New China. *J. Meteor. Res.*, 34(3): 427-459. Doi:10.1007/s13351-020-0006-x
24. Jiang, X., Y. Luo*, D.-L. Zhang, M. Wu, 2020: Urbanization Enhanced Summertime Extreme Hourly Precipitation over the Yangtze River Delta. *J. Climate*, 33, 5809-5826.
25. Furtado, K., P. Field, Y. Luo*, T. Zhou, A. Hill, 2020: The Effects of Cloud-Aerosol Interaction Complexity on Simulations of Presummer Rainfall over Southern China. *Atmos. Chem. Phys.*, **20**, 5093–5110. <https://doi.org/10.5194/acp-20-5093-2020>.
26. Luo, Y.*, R. Xia, J. C. L. Chan, 2020: Characteristics, Physical Mechanisms, and Prediction of Pre-summer Rainfall over South China: Research Progress during 2008-2019. *J. Meteor. Soc. Japan*, **98**(1), 19-42, doi:10.2151/jmsj.2020-002.
27. Luo, Y.* , X. Bao , H. Wang, R. Xia, and coauthors, 2020: The Southern China Monsoon Rainfall Experiment (SCMREX). Invited review chapter in *The Global Monsoon System, IV*,

- a WMO Quadrennial Review*. Editors: C.P. Chang, K.-J. Ha, R. H. Johnson, D. Kim, G. N. C. Lau, B. Wang. Vol. 11, World Scientific Series on Asia-Pacific Weather and Climate, 389-398
28. Tsuboki, K.*, Y. Luo, 2020: High-resolution simulations of heavy rainfalls in association with monsoon systems and typhoons using cloud-resolving models. Invited review chapter in *The Global Monsoon System, IV, a WMO Quadrennial Review*. Editors: C.P. Chang, K.-J. Ha, R. H. Johnson, D. Kim, G. N. C. Lau, B. Wang. Vol. 11, World Scientific Series on Asia-Pacific Weather and Climate, 113-132.
 29. Liu, X., Y. Luo*, L. Huang, D.-L. Zhang, & Z. Guan, 2020: Roles of double low-level jets in the generation of coexisting inland and coastal heavy rainfall over South China during the presummer rainy season. *Journal of Geophysical Research: Atmospheres*, 125, e2020JD032890. <https://doi.org/10.1029/2020JD032890>
 30. Li, Z., Y. Luo*, Y. Du, J. C. L. Chan, 2020: Statistical Characteristics of Pre-summer Rainfall over South China and Associated Synoptic Conditions. *J. Meteor. Soc. Japan*, **98**, 213-233.
 31. Yin, J., D.-L. Zhang*, Y. Luo, and R. Ma, 2020: On the Extreme Rainfall Event of 7 May 2017 over the Coastal City of Guangzhou. Part I: Impacts of Urbanization and Orography. *Mon. Wea. Rev.*, **148**, 955-979.
 32. Yun, Y.*, C. Liu, Y. Luo*, X. Liang, L. Huang, F. Chen, R. Rasmussen, 2020: Convection-permitting regional climate simulation of warm-season precipitation over Eastern China. *Climate Dynamics*, **54**, 1469–1489.
 33. Luo, Y.*, L. Li, R.H. Johnson, C.-P. Chang, L.S. Chen, W.-K. Wong, J. Chen, K. Furtado, J.L. McBride, A. Tyagi, N. Lomarda, T. Lefort, E.O. Cayan, 2019: Science and Prediction of Monsoon Heavy Rainfall. *Science Bulletin*, **64**, 1557-1561, doi: 10.1016/j.scib.2019.09.005.
 34. Wu, M., Y. Luo*, F. Chen, and W.-K. Wong, 2019: Observed Link of Extreme Hourly Precipitation Changes to Urbanization over Coastal South China. *J. Appl. Meteor. Climat.*, **58**, 1799-1819.
 35. Huang, L., Y. Luo*, and D.-L. Zhang, 2018: The Relationship between Anomalous Presummer Extreme Rainfall over the South China and Synoptic Disturbances. *J. Geophys. Res. Atmos.*, **123**, 3395-3413.
 36. Qian, Q., Y. Lin*, Y. Luo, X. Zhao, Z.-C. Zhao, Y. Luo, and X. Liu, 2018: Sensitivity of a Simulated Squall Line during SCMREX to Parameterization of Microphysics. *J. Geophys. Res. Atmos.*, **123**, 4197–4220.
 37. Liu, X., Y. Luo*, Z. Guan, and D.-L. Zhang, 2018: An Extreme Rainfall Event in Coastal South China during SCMREX-2014: Formation and Roles of Rainband and Echo Trainings. *J. Geophys. Res. Atmos.*, **123**, 9256-9278.
 38. Chen, Y. and Y. Luo*, 2018: Analysis of Paths and Sources of Moisture for the South China Rainfall during the Presummer Rainy Season of 1979-2014. *J. Meteor. Res.*, **32**, 744-757.
 39. Ma, R. Y., Y. Luo*, and H. Wang, 2018: Classification and Diurnal Variations of Precipitation Echoes Observed by a C-band Vertically-pointing Radar in Central Tibetan Plateau during TIPEX-III 2014-IOP. *J. Meteor. Res.*, **32**, 985–1001, doi: 10.1007/s13351-018-8084-8.
 40. Chang, C.-P., R. H. Johnson, K.-J. Ha, D. Kim, G. N.-C. Lau, B. Wang, M. M. Bell, and Y. Luo, 2018: The Multiscale Global Monsoon System: Research and Prediction Challenges in Weather and Climate. *Bull. Amer. Meteor. Soc.*, **99**, 149-153.

41. Furtado, K., P. Field, Y. Luo, X. Liu, Z. Guo, T. Zhou, B. Shipway, A. Hill, and J. Wilkinson, 2018: Cloud-microphysical Factors Affecting Simulations of Deep Convection during the Presummer Rainy-season in Southern China. *J. Geophys. Res. Atmos.*, **123**, 10477-10505, <https://doi.org/10.1029/2017JD028192>.
42. Deng, M., G. G. Mace, Z. Wang, J.-L. F. Li, Y. Luo, 2018: Partitioning Ice Water Content from Retrievals and Its Application in Model Comparison. *J. Atmos. Sci.*, **75**, 1105-1120, <https://doi.org/10.1175/JAS-D-17-0017.1>.
43. Luo, Y.*, R. Zhang, Q. Wan, and coauthors, 2017: The Southern China Monsoon Rainfall Experiment (SCMREX). *Bull. Amer. Meteor. Soc.*, **98**, 999-1013, DOI: <http://dx.doi.org/10.1175/BAMS-D-15-00235.1>.
44. Bao, X., Y. Luo*, J. Sun, and Z. Meng, 2017: Assimilating Doppler Radar Observations with an Ensemble Kalman Filter for Convection-permitting Prediction of Convective Development in a Heavy Rainfall Event during the Pre-summer Rainy Season of South China. *Sci. China Earth Sciences*, **60**, 1866-1885, doi: 10.1007/s11430-017-9076-9.
45. Luo, Y.*, 2017: Advances in Understanding the Early-Summer Heavy Rainfall over South China. Invited review chapter in *The Global Monsoon System, III, a WMO Quadrennial Review*. Editors: C.P. Chang, N. G. Lau, R. H. Johnson, B. Wang and M. Wheeler. Vol. 9, World Scientific Series on Asia-Pacific Weather and Climate, 215-226.
46. Huang, L., and Y. Luo*, 2017: Evaluation of Quantitative Precipitation Forecasts by TIGGE Ensembles for South China during the Presummer Rainy Season. *J. Geophys. Res. Atmos.*, **122**, 8494-8516, doi:10.1002/2017JD026512.
47. Wu, M., C.C. Wu, T.H. Yen, Y. Luo*, 2017: Synoptic Analysis of Extreme Hourly Precipitation in Taiwan during 2003-12. *Mon. Wea. Rev.*, **145**, 5123-5140.
48. Luo, Y.*, M. Wu, F. Ren, and coauthors, 2016: Synoptic Situations of Extreme Hourly Precipitation over China. *J. Climate*, **29**, 8703-8719.
49. Luo, Y.*, W. Qian, Y. Gong, H. Wang, and D.L. Zhang, 2016: Ground-based Radar Reflectivity Mosaic of Mei-yu Precipitation Systems over the Yangtze River-Huaihe River Basins. *Adv. Atmos. Res.*, **33**, 1285-1296, doi:10.1007/s00376-016-6022-1.
50. Wu, M., and Y. Luo*, 2016: Mesoscale Observational Analysis of Lifting Mechanism of a Warm-sector Convective System Producing the Maximal Daily Precipitation in China Mainland during Presummer Rainy Season of 2015. *J. Meteor. Res.*, **30**, 719-736, doi: 10.1007/s13351-016-6089-8.
51. Zhang, X., Y. Luo, Q. Wan, and coauthors, 2016: Impact of Assimilating Wind Profiling Radar Observations on Convection-permitting Quantitative Precipitation Forecasts during SCMREX. *Wea. Forecast.*, **31**, 1271-1292.
52. Ding Zhi-ying, Zhao Xiang-jun, Gao Song, Luo Ya-li. 2016: A Novel Method for Calculating Vertical Velocity: A Relationship Between Horizontal Vorticity and Vertical Movement. *J. Trop. Meteor.*, **22**(2), 208-219.
53. Luo, Y.*, and Y. Chen, 2015: Investigation of the Predictability and Physical Mechanisms of an Extreme-rainfall Producing Mesoscale Convective System along the Meiyu Front in East China: An Ensemble Approach. *J. Geophys. Res. Atmos.*, **120**, 10593-10618, doi:10.1002/2015JD023584.

54. Wang, H., Y. Luo*, R. Zhang, 2015: Synoptic Pattern and Severe Weather Associated with the Wide Convection over Southeast China during the Summer Monsoon Period. *J. Meteor. Res.*, **29**(1), 041-058, doi:10.1007/s13351-014-4069-4.
55. Ding, Y.-H., Y.-J. Ding, Y.-D. Fan, Q.-X. Gao, T. Jiang, J.-P. Li, E.-D. Lin, Y.-L. Luo, Y. Luo, Y. Qi, D.-H. Qin, C.-C. Shan, P.-J. Shi, L.-C. Song, Y. Wang, S.-H. Wu, J.-Y. Zhang, and Y. Zheng, 2015: *China National Assessment Report on Risk Management and Adaptation of Climate Extremes and Disasters* [Qin, D.-H., J.-Y. Zhang, C.-C. Shan, and L.-C. Song (eds.)]. Science Press, Beijing, 124pp.
56. Wang, H., Y. Luo*, B. J.-D. Jou, 2014: Initiation, Maintenance, and Properties of Convection in an Extreme Rainfall Event during SCMREX: Observational Analysis. *J. Geophys. Res. Atmos.*, **119**, 13206-13232, doi:10.1002/2014JD022339.
57. Luo, Y.*, Y. Gong, D.-L. Zhang, 2014: Initiation and Organizational Modes of an Extreme-Rain-Producing Mesoscale Convective System along a Mei-Yu Front in East China. *Mon. Wea. Rev.*, **142**, 203-221.
58. Li, X., Y. Luo*, Z. Guan, 2014: The Persistent Heavy Rainfall over Southern China in June 2010: Evolution of Synoptic Systems and the Effects of the Tibetan Plateau Heating. *J. Meteor. Res.*, **28**, 540-560.
59. Lu, E., Y. Zeng, Y. Luo, Y. Ding, W. Zhao, et al., 2014: Changes of Summer Precipitation in China: The Dominance of Frequency and Intensity and Linkage with Changes in Moisture and Air Temperature. *J. Geophys. Res. Atmos.*, **119**, doi:10.1002/2014JD022456.
60. Lu, E., S. Liu, Y. Luo, W. Zhao, H. Li, et al., 2014: The Atmospheric Anomalies Associated with the Drought over the Yangtze River Basin during Spring 2011. *J. Geophys. Res. Atmos.*, **119**, 5881-5894, doi:10.1002/2014JD021558.
61. Luo, Y.*, H. Wang, R. Zhang, W. Qian, and Z. Luo, 2013: Comparison of Rainfall Characteristics and Convective Properties of Monsoon Precipitation Systems over South China and the Yangtze and Huai River Basin. *J. Climate*, **26**, 110-132.
62. Luo, Y.*, W. Qian, R. Zhang, D.L. Zhang, 2013: Gridded Hourly Precipitation Analysis from High-density Rain Gauge Network over the Yangtze-Huai Rivers Basin during the 2007 Meiyu Season and Comparison with CMORPH. *J. Hydrometeorology*, **14**, 1243-1258.
63. Seneviratne, S.I., N. Nicholls, D. Easterling, C.M. Goodess, S. Kanae, J. Kossin, Y. Luo, J. Marengo, K. McInnes, M. Rahimi, M. Reichstein, A. Sorteberg, C. Vera, and X. Zhang, 2012: Changes in climate extremes and their impacts on the natural physical environment. In: *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* [Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. *A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC)*. Cambridge University Press, Cambridge, UK, and New York, NY, USA, pp. 109-230.
64. Luo, Y.*, R. Zhang, W. Qian, Z. Luo, X. Hu, 2011: Intercomparison of Deep Convection over the Tibetan Plateau-Asian Monsoon Region and Subtropical North America in Boreal Summer using CloudSat/CALIPSO data. *J. Climate*, **24**, 2164-2177.
65. Morrison, H., P. Zuidema, A. Ackerman, A. Avramov, G. de Boer, J. Fan, A. Fridlind, T. Hashino, J. Harrington, Y. Luo, M. Ovchinnikov, B. Shipway, 2011: Intercomparison of Cloud Model Simulations of Arctic Mixed-phase Boundary Layer Clouds observed during SHEBA. *J. Adv. Modeling Earth Systems*, **3**, M06003, doi:10.1029/2011MS000066.

66. Zhang, R., Y. Ni, L. Liu, Y. Luo, and Y. Wang, 2011: South China Heavy Rainfall Experiments (SCHeREX). *J. Meteor. Soc. Japan*, **89A**, 153-166.
67. Lu, E., Y. Luo, R. Zhang, Q. Wu, and L. Liu, 2011: Regional Atmospheric Anomalies Responsible for the 2009–2010 Severe Drought in China. *J. Geophys. Res.*, **116**, D21114, doi:10.1029/2011JD015706.
68. Luo, Y.*, Y. Wang, H. Wang, Y. Zheng, and H. Morrison, 2010: Modeling Convective-stratiform Precipitation Processes on a Mei-Yu Front with the WRF Model: Comparison with Observations and Sensitivity to Cloud Microphysics Parameterizations. *J. Geophys. Res.*, **115**, D18117, doi:10.1029/2010JD013873.
69. S. J. Woolnough, P. Bechtold, P. Bolssey, J.-P. Chaboureau, T. Hosomi, S. Iacobellis, Y. Luo, J. C. Petch, R. Wong, and S. Xie, 2010: Convective Processes during the Suppressed Phase of the Madden-Julian Oscillation. *Quart. J. Royal Meteor. Soc.*, **136**, 333-353.
70. Luo, Y.*, R. Zhang, and H. Wang, 2009: Comparing Occurrences and Vertical Structures of Hydrometeors between the Eastern China and the Indian Monsoon Region using CloudSat/CALIPSO Data. *J. Climate*, **22**, 1052-1064.
71. Morrison, H., R. McCoy, S. Klein, S. Xie, Y. Luo, Alexander Avramov, Mingxuan Chen, Jason N. S. Cole, Michael Falk, Michael J. Foster, Anthony D. Del Genio, Jerry Y. Harrington, Corinna Hoose, Marat F. Khairoutdinov, Vincent E. Larson, Xiaohong Liu, Greg M. McFarquhar, Michael R. Poellot, Knut von Salzen, Ben J. Shipway, Matthew D. Shupe, Yogesh C. Sud, David D. Turner, Dana E. Veron, Gregory K. Walker, Zhien Wang, Audrey B. Wolf, Kuan-Man Xu, Fanglin Yang, Gong Zhang, 2009: Intercomparison of Model Simulations of Mixed-phase Clouds Observed during the ARM Mixed-Phase Arctic Cloud Experiment, Part II: Multi-layered Cloud. *Quart. J. Royal Meteor. Soc.*, **135**, 1003-1019.
72. Klein, S. A., R. B. McCoy, H. Morrison, A. S. Ackerman, A. Avramov, G. de Boer, M. Chen, J. N. S. Cole, A. D. Del Genio, M. Falk, M. J. Foster, A. Fridlind, J.-C. Golaz, T. Hashino, J. Y. Harrington, C. Hoose, M. F. Khairoutdinov, V. E. Larson, X. Liu, Y. Luo, G. M. McFarquhar, S. Menon, R. A. J. Neggers, S. Park, M. R. Poellot, J. M. Schmidt, I. Sednev, B. J. Shipway, M. D. Shupe, D. A. Spangenberg, Y. C. Sud, D. D. Turner, D. E. Veron, K. von Salzen, G. K. Walker, Z. Wang, A. B. Wolf, S. Xie, K.-M. Xu, F. Yang, G. Zhang, 2009: Intercomparison of Model Simulations of Mixed-phase Clouds Observed during the ARM Mixed-Phase Arctic Cloud Experiment. Part I: Single-layer Cloud. *Quart. J. Royal Meteor. Soc.*, **135**, 979-1002.
73. Luo, Y.*, K.-M. Xu, H. Morrison, G. McFarquhar, Z. Wang, G. Zhang, 2008: Multi-layer Arctic Mixed-phase Clouds Simulated by a Cloud-resolving Model: Comparison with ARM Observations and Sensitivity Experiments. *J. Geophys. Res.*, **113**, doi:10.1029/2007JD009563.
74. Luo, Y.*, K.-M. Xu, H. Morrison, G. McFarquhar, 2008: Arctic Mixed-phase Clouds Simulated by a Cloud-resolving Model: Comparison with ARM Observations and Sensitivity to Microphysics Parameterizations. *J. Atmos. Sci.*, **65**, 1285-1303.
75. Luo, Y.*, K.-M. Xu, B. A. Wielicki, T. Wong, and Z. A. Eitzen, 2007: Statistical Analyses of Satellite Cloud Object Data from CERES. Part III: Comparison with Cloud-resolving Model Simulations of Tropical Convective Clouds. *J. Atmos. Sci.*, **64**, 762-785.
76. Luo, Y.*, S. K. Krueger, and K.-M. Xu, 2006: Cloud Properties Simulated by a Single-column Model. Part II: Evaluation of Cumulus Detrainment and Ice-phase Microphysics Parameterizations. *J. Atmos. Sci.*, **63**, 2831-2847.

77. Luo, Y.*, S. K. Krueger, and S. Moorthi, 2005: Cloud Properties Simulated by a Single-column Model. Part I: Comparison to Cloud Radar Observations of Cirrus Clouds. *J. Atmos. Sci.*, **62**, 1428-1445.
78. Luo, Y.*, S. K. Krueger, G. G. Mace, and K.-M. Xu, 2003: Cirrus Cloud Properties from a Cloud-resolving Model Simulation Compared to Cloud Radar Observations. *J. Atmos. Sci.*, **60**, 510-525.
- (Refereed publications below are in Chinese)
79. Sun Hulin, Luo Yali*, Zhang Renhe, et al. 2011: Analysis on the mature-stage features of the severe squall line occurring over the Yellow river and Huaihe river basins during 3-4 June 2009. *Chinese Journal of Atmospheric Sciences* (in Chinese), 35(1), 105-120.
80. Qian Weimiao, Luo Yali*, Zhang Renhe, Gong Yu, 2011: The heavy rainfall event leading to the large debris flow at Zhouqu. *Chinese Journal of Applied Meteorological Sciences* (in Chinese). **22**(4), 385-397.
81. Wang Hui, Luo Yali*, Zhang Renhe, 2011: Analyzing seasonal variation of clouds over the Asian monsoon regions and the Tibetan Plateau region using CloudSat/CALIPSO data. *Chinese Journal of Atmospheric Sciences* (in Chinese). **35**(6): 1117-1131.
82. Zhang Yin, Luo Yali*, Guan Zhaoyong, 2012: Temperature, relative humidity, and cloud fraction predicted by the NCEP Global Forecast System at the ARM SGP Site during 2001-2008: Comparison with ARM observations. *Chinese Journal of Atmospheric Sciences* (in Chinese). **36**(1): 170-184.
83. Dong Hao, Xu Haiming, and Luo Yali*, 2012: Effects of cloud condensation nuclei concentration on precipitation in convection permitting simulations of a squall line using WRF model: Sensitivity to cloud microphysical schemes. *Chinese Journal of Atmospheric Sciences* (in Chinese). **36**(1): 145-169.
84. Luo Yali, 2012: Changes in weather and climate extremes. *Advances in Climate Change Research* (in Chinese). **8**(2): 90-98.
85. Li, Xuesong, Luo Yali*, Guan Zhaoyong, 2014: The persistent severe rainfall over southern China in June 2010: The evolution of synoptic systems and the Tibetan Plateau's heating effect. *Acta Meteorologica Sinica* (in Chinese), **72**(3): 428-446.
86. Gong Yu, and Luo Ya-li, 2014: An analysis of vertical air velocity in a linear mesoscale convective system to the south of a meiyu front. *Journal of Tropical Meteorology* (in Chinese), **30**(4): 687-699.
87. 秦大河, 丁一汇, 丁永建, 王毅, 史培军, 闪淳昌, 齐晔, 李建平, 吴绍洪, 宋连春, 张建云, 范一大, 林而达, 罗亚丽, 罗勇, 郑艳, 姜彤, 高庆先, 2015: *中国极端天气气候事件和灾害风险管理与适应国家评估报告*. 北京: 科学出版社, 163000字.
88. Zhou Sheng-nan, Luo Yali*, Wang Hui, 2015: Analysis of occurrence frequency of precipitation feature over Tibetan Plateau, East China, and subtropical North America in boreal summer using TRMM data. *Meteorological Monthly*, **41**(1): 1-16.
89. Zhou Xuan, Luo Ya-li*, and Guo Xue-liang, 2015: Application of a CMORPH-AWS merged hourly gridded precipitation product in analyzing characteristics of short-duration heavy rainfall over Southern China. *Journal of Tropical Meteorology* (in Chinese), **31**(3): 333-344.
90. ChenYang Rui-xue, and Luo Ya-li*, 2016: Analysis of the influence of different parameterization schemes representing the planetary boundary layer and land surface

processes on convection-permitting simulations of a heavy rainfall event along meiyu front. *Journal of Tropical Meteorology* (in Chinese), **32**(5): 656-667.

91. WU Mengwen, LUO Yali*. 2019. Extreme hourly precipitation over China: Research progress from 2010 to 2019 [J], *Torrential Rain and Disasters* (in Chinese), 38(5):502-514
92. YU Shuting, LUO Yali*, LI Jian. 2020. Climatology and changes of hourly precipitation with various intensities in Yunnan Province from 1982 to 2016 [J]. *Torrential Rain and Disasters* (in Chinese), 39(4):363-371
93. LI Zhenghui, Luo Yali*. 2021. Statistical characteristics of pre-summer rainfall over South China before and after South China Sea monsoon onset from 1980 to 2017 [J]. *Torrential Rain and Disasters* (in Chinese), 40(2):101-110
94. Yang Baochen, Luo Yali*, Jiang Xiaoling, 2022: On the impacts of tropical cyclone on extreme precipitation in China during the 1975-2018 warm seasons: Climatology, trend and relationship with temperature. *Journal of Tropical Meteorology* (in Chinese), 38(3): 397-409.
- 95.