

EMPLOYMENTS

Ulsan National Institute of Science and Technology

March 2014 – present, *Associate Professor*

February 2010 – Feb 2014, *Assistant Professor*

NASA Goddard Space Flight Center & University of Maryland Baltimore County

March 2003 – January 2010

Research Associate (2003-2006), Assistant Research Scientist (2006-2010)

Climate Environment System Research Center, Seoul National University

March 2001 – March 2003

Post-doctoral Research Scientist

RESEARCH PROJECTS

- Study of Atmospheric Environment Variation Mechanism in East Asia using 3D VAR Data Assimilation system, NRF, 2018~present
- Development of Coupled Initialization of Climate Forecast System for Supporting Long-term Prediction, KMI, 2018~present,
- Research on the Long-Term Source Technology in the Heat Wave (Heat Wave Research Center), KMI, 2017~present
- Development of the GAIA Simulator Earth System Model with Atmospheric Carbon Cycle, NRF Korea, 2012-present
- Land surface initialization for KMA GloSea5 dynamical ensemble prediction system, KMA, 2013-present
- Evaluation of the GloSea4 Experimental Hindcasts, KMA, 2012-present
- Development of Urban Climate and Environmental Prediction System Using WRF/UCM, NRF, 2011-2014
- Development of Tropical Cyclone Prediction System, APEC Climate Center, 2011-2013.
- Improvement of Diurnal Cycle of Warm-Season Precipitation in Global Climate Models, KMA, 2010-2012
- Development of a High-Resolution Global Climate Model for the Tropical Typhoon Simulation, KMA, 2010-2011.
- Use of cloud-resolving models to improve the simulation of convective precipitation and diurnal cycle in the NASA GEOS-5, Lee, M.-I., Principal Investigator with 5 other Co-Is, 2009 – 2012.
- Simulating and predicting sub-seasonal and longer-term changes in tropical storm characteristics using high-resolution climate models, PI: Schubert (NASA/GSFC), Co-I, 2009 – 2010.
- Improved representation of diurnal precipitation patterns in the NASA GEOS5 general circulation models, PI: Posselt (U. Michigan), Co-I, 2009 – 2010.
- Pathways to predictability on subseasonal time scales: assessing the role of tropical forcing and land surface conditions, PI: Schubert (NASA/GSFC), Co-I, 2005 – 2010.
- An assessment and analysis of the warm season diurnal cycle over the continental United States and northern Mexico in global atmospheric general circulation model, PI: Schubert (NASA/GSFC), Co-I, NOAA/OGP, 2003-2005

TEACHING EXPERIENCES

- *Climate Dynamics* (graduate), SNU, 2002
- An Introduction to the *Climate System Modeling* (graduate), SNU, 2002

- *Introduction to the Environmental Engineering* (undergraduate, co-teaching), UNIST, 2010-
- *Introduction to Climate Change* (undergraduate), UNIST, 2010
- *Global Environment* (undergraduate), UNIST, 2010-
- *Climate and Environmental Modeling* (graduate), UNIST, 2010-
- *Atmospheric Dynamics* (undergraduate), UNIST, 2011-
- *Advanced Statistics* (graduate), UNIST, 2013-
- *Statistics in Earth and Environmental Sciences* (undergraduate), UNIST, 2014-
- *Tropical Meteorology* (graduate), UNIST, 2014-
- *Remote Sensing* (undergraduate), UNIST, 2018

PROFESSIONAL SERVICES

- Professional Committee of Energy and Environment, National Scientific and Technological Advisory Conference, 2019-2020
- Ulsan Health City Committee, Ulsan, 2017-2019
- Professional Committee of Atmospheric Science in the Earth Science Field, National Research Foundation of Korea, 2016-2019
- Advisor Professor, APEC Climate Center, 2011-2016
- Advisory member, Korea Institute of Atmospheric Prediction System (KIAPS), 2011-2015
- Advisory Board, Korean Meteorological Administration, 2012-present
- Executive Member & Int'l Cooperation, Korean Meteorological Society, 2012-2013, 2015-
- Director of International Cooperation Committee, Korean Meteorological Society, 2015-present
- Member, Working Group for the APEC Climate Center (APCC), 2007-2010
- Editor, Korean Atmospheric Scientists in America (KASA), publish on-line newsletter, 2006
- Member, Korean Meteorological Society, since 2001
- Member, American Meteorological Society, since 2008
- Member, American Geophysical Union, since 2008
- Journal Peer Reviewer: Tellus A, Atmos. Environ., J. Climate, J. Atmos. Sci., J. Geophys. Res, Geophys. Res. Lett., Climate Dynamics, Dynamics of Atmospheres and Oceans, Advances in Atmospheric Sciences, Scientific Online Letters on the Atmosphere, Asia-Pacific Journal of Atmospheric Sciences, since 2003
- Proposal/Award Reviewer: NASA Earth System Science (ESS) Fellowship (2006-2008), NOAA Oceanic and Atmospheric Research (OAR) Outstanding Paper Award (2008)

HONORS/AWARDS

- Songcheon Academic Award, Korea Meteorological Society, 2019
- Presidential Commendation, Ministry of the Interior and Safety, 2018
- Associate Member, Korean Academy of Science and Engineering, 2015
- Hallim Leading Scientist, Korean Academy of Science and Engineering, 2014
- Outstanding Performance Award, UNIST, 2014
- President Award for Best Teaching, UNIST, 2010
- Outstanding Performance Award, NASA/Goddard Space Flight Center/Global Modeling and Assimilation Office, 2004
- Best PhD Dissertation Award, Korean Meteorological Society, 2001

INVITED SEMINAR/PRESENTATIONS

- The Climate Prediction Program for the Americas (CPPA) 2008
- APEC Climate Symposium, Lima, Peru 2008
- APEC Climate Symposium, Busan, Korea 2007
- Climate Diagnostics & Prediction Workshop, Boulder, USA 2006
- A Workshop on the Seasonal-to-Interannual Prediction, Taipei, Taiwan 2003

PUBLICATIONS

H-index: 21 (SCI)

Total Times Cited: 1,706 (SCI)

- [70] Lee, S., **M.-I. Lee****, C.-K. Song, K.-M. Kim, and A. M. da Silva, 2019: Interannual Variation of the East Asia Jet Stream and Its Impact on the Horizontal Distribution of Aerosol in Boreal Spring, Atmospheric Environment, Submitted
- [69] Kim, H., **M. I. Lee****, S. Kim, Y.-K. Lim, S. D. Schubert, and A. M. Molod, 2019: Representation of Tropical Storms by the Modern-Era Retrospective Analysis for Research and Applications version 2, Asia-Pacific Journal of Atmospheric Sciences, Submitted
- [68] Lee, S. and **Lee, M.-I.***, 2019: Effects of Surface Vegetation on the Intensity of East Asian Summer Monsoon as Revealed by Observation and Model Experiments, Int. J. Climatology
– TC 0 / 2Y IF(L3) 3.601 / 2Y Rank 20.93%
- [67] Choi, N., **M.-I. Lee****, D. H. Cha, Y. K. Lim, and K. M. Kim, 2019: Decadal Changes in the Interannual Variability of Heatwaves in East Asia Caused by Atmospheric Teleconnection Changes. Journal of Climate
– TC 0 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [66] Choi, N., K.-M. Kim, Y.-K. Lim, and **M.-I. Lee****, 2019: Decadal changes in the leading patterns of sea level pressure in the Arctic and their impacts on the sea ice variability in boreal summer. The Cryosphere, 13(11), 3007-3021
– TC 0 / 2Y IF(L1) 4.790 / 2Y Rank 6.12% (geosciences, multidisciplinary) or 8.00% (geography, physical)
- [65] Kim, H., **M.-I. Lee****, D.-H. Cha, Y.-K. Lim, and W. M. Putman, 2019: Improved representation of the diurnal variation of warm season precipitation by an atmospheric general circulation model at a 10 km horizontal resolution. Climate Dynamics, 53(11), 6523-6542
– TC 0 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%
- [64] Seo, E., **M.-I. Lee****, D. Kim, Y.-K. Lim, S. D. Schubert, and K.-M. Kim, 2019: Interannual variation of tropical cyclones simulated by GEOS-5 AGCM with modified convection scheme. Int. J. Climatology, 39, 4041– 4057.
– TC 0 / 2Y IF(L3) 3.601 / 2Y Rank 20.93%
- [63] Kim, M., M.-S. Park, J. Im, S. Park, and **M.-I. Lee****, 2019: Machine Learning Approaches for Detecting Tropical Cyclone Formation Using Satellite Data. Rem. Sens. 11, 1195
– TC 0 / 2Y IF(L3) 4.118 / 2Y Rank 23.33%
- [62] Kim, D., **M.-I. Lee****, and E. Seo, 2019: Improvement of Soil Respiration Parameterization in a Dynamic Global Vegetation Model and Its Impact on the Simulation of Terrestrial Carbon Fluxes. Journal of Climate, 32, 127-143.
– TC 0 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%

- [61] Kim, S.-J., H.-O. Kwon, **M.-I. Lee**, Y. Seo, and S.-D. Choi*, 2019: Spatial and temporal variations of volatile organic compounds using passive air samplers in the multi-industrial city of Ulsan, Korea, *Environmental Science and Pollution Research*, 26, 5831-5841.
 – TC 1 / 2Y IF(L3) 2.914 / 2Y Rank 36.40%
- [60] Choi, N. and **M.-I. Lee****, 2019: Spatial Variability and Long-Term Trend in the Occurrence Frequency of Heatwave and Tropical Night in Korea, *Asia-Pacific Journal of Atmospheric Sciences*, 55, 101-114
 – TC 0 / 2Y IF(L4) 1.772 / 2Y Rank 65.12%
- [59] Seo, E., **M.-I. Lee****, J.-H. Jeong, R. D. Koster, S. D. Schubert, H.-M. Kim, D. Kim, H.-S. Kang, H.-K. Kim, C. MacLachlan, and A. A. Scaife, 2019: Impact of soil moisture initialization on boreal summer subseasonal forecasts: mid-latitude surface air temperature and heat wave events. *Climate Dynamics*, 52, 1695-1709
 – TC 0 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%
- [58] Kim, D., **M.-I. Lee****, S.-J. Jeong, J. Im, D.-H. Cha, and S. Lee, 2018: Intercomparison of Terrestrial Carbon Fluxes and Carbon Use Efficiency Simulated by CMIP5 Earth System Models. *Asia-Pacific Journal of Atmospheric Science*, 54, 145-163.
 – TC 0 / 2Y IF(L4) 1.772 / 2Y Rank 65.12%
- [57] Kim, H., **M.-I. Lee****, D. Kim, H. Kang, and Y. Hyun, 2018: Representation of Boreal Winter MJO and Its Teleconnection in a Dynamical Ensemble Seasonal Prediction System. *J. Climate*, 31, 8803–8818
 – TC 0 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [56] Park, S., E. Seo, D. Kang, J. Im*, and **M.-I. Lee**, 2018: Prediction of Drought on Pentad Scale Using Remote Sensing Data and MJO Index through Random Forest over East Asia. *Remote Sensing*, 10, 1811.
 – TC 2 / 2Y IF(L3) 4.118 / 2Y Rank 23.33%
- [55] Yoon, D., D.-H. Cha*, G. Lee, C. Park, **M.-I. Lee**, and K.-H. Min, 2018: Impacts of synoptic and local factors on heat wave events over southeastern region of Korea in 2015. *Journal of Geophysical Research: Atmospheres*, 123, 12,081-12,096
 – TC 1 / 2Y IF(L2) 3.633 / 2Y Rank 19.77%
- [54] Kim, M., J. Im*, H. Park, S. Park, **M.-I. Lee**, and M.-H. Ahn, 2017: Detection of Tropical Overshooting Cloud Tops Using Himawari-8 Imagery, *Remote Sensing*, 9, 685.
 – TC 5 / 2Y IF(L3) 4.118 / 2Y Rank 23.33%
- [53] Kim, D., H. Kim, and **M.-I. Lee***, 2017: Why does the MJO detour the Maritime Continent during Austral summer? *Geophys. Res. Lett.*, 44 2579-2587.
 – TC 14 / 2Y IF(L1) 4.578 / 2Y Rank 7.14%
- [52] Lee, S., H., Han, J. Im*, E. Jang, and **M.-I. Lee**, 2017: Detection of deterministic and probabilistic convective initiation using Himawari-8 Advanced Himawari Imager data. *Atmos. Mea. Tech.*, 10, 1859-1874.
 – TC 16 / 2Y IF(L3) 3.400 / 2Y Rank 22.58%
- [51] Lee, S., J. Im*, **M.-I. Lee***, D. Kim, and Y.-G. Park, 2017: CO₂ concentration and its spatiotemporal variation in the troposphere using multi-sensor satellite data, carbon tracker, and aircraft observations. *Remote Sensing*, 54, 592-613
 – TC 0 / 2Y IF(L3) 4.118 / 2Y Rank 23.33%
- [50] Choi, Y., D.-H. Cha*, **M.-I. Lee**, J. Kim, C.-S. Jin, S.-H. Park, and M.-S. Joh, 2017: Satellite Radiance Data Assimilation for Binary Tropical Cyclone Cases over the Western North Pacific, *Journal of Advances in Modeling Earth Systems*, 9, 832-853
 – TC 2 / 2Y IF(L3) 3.457 / 2Y Rank 24.42%

- [49] Kang, D., and **M.-I. Lee****, 2017: ENSO Influence on the Dynamical Seasonal Prediction of the East Asian Winter Monsoon. *Clim. Dyn.*, 1-17.
 – TC 0 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%
- [48] Shin, S.-H., O.-Y. Kim, D. Kim, and **M.-I. Lee***, 2017: Cloud Radiative Effects and Changes Simulated by the Coupled Model Intercomparison Project Phase 5 Models. *Advances in Atmospheric Science*, 34, 859-876.
 – TC 0 / 2Y IF(L4) 1.819 / 2Y Rank 59.30%
- [47] Park, M.-S., **M.-I. Lee***, D. Kim, D.-H. Cha, M. M. Bell, and R. L. Elsberry, 2017: Land-based convection effects on Formation of Tropical Cyclone Mekkhala (2008). *Mon. Wea. Rev.*, 145, 1315-1337.
 – TC 0 / 2Y IF(L3) 3.146 / 2Y Rank 31.40%
- [46] Kang, D., and **M.-I. Lee****, 2017: Increase in the Potential Predictability of the Arctic Oscillation via Intensified Teleconnection with ENSO after the Mid-1990s. *Clim. Dyn.*, 49, 2147-2160
 – TC 2 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%
- [45] Kim, O.-Y.*, H.-M. Kim, **M.-I. Lee**, Y.-M. Min, and S.-H. Shin, 2017: Dynamical-statistical seasonal prediction for western North Pacific typhoons based on APCC multi-models. *Clim. Dyn.*, 48, 71-88
 – TC 7 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%
- [44] Lee, W.-S., and **M.-I. Lee***, 2016: Interannual variability of heat waves in South Korea and their connection with large-scale atmospheric circulation patterns. *Int. J. Climatology*, 36, 4815-4830
 – TC 19 / 2Y IF(L3) 3.601 / 2Y Rank 20.93%
- [43] Truong, S. C. H., **M.-I. Lee****, G. Kim, D. Kim, J.-H. Park, S.-D. Choi, and G. Cho, 2016: Accidental benzene release risk assessment in an urban area using an atmospheric dispersion model. *Atmos. Environ.*, 144, 146-159.
 – TC 5 / 2Y IF(L2) 4.012 / 2Y Rank 17.44%
- [42] Park, M.-S., M. Kim, **M.-I. Lee***, J. Im*, S. Park, 2016: Detection of Tropical Cyclone Genesis via Quantitative Satellite Ocean Surface Wind Pattern and Intensity Analyses using Decision Trees. *Remote Sens. Env.*, 183, 205-214.
 – TC 8 / 2Y IF(L1) 8.218 / 2Y Rank 2.80% (Environmental Sciences) or 6.67% (Remote Sensing), or 7.14% (Imaging Science & Photographic Technology)
- [41] Park, M.-S., **M.-I. Lee***, H. Kim, and J.-M. Yoo, 2016: Spatial and diurnal variations of storm height in East Asia summer monsoon: Regimes of storm height and large-scale diurnal modulation, *Clim. Dyn.*, 46, 3-4, 745-763.
 – TC 4 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%
- [40] Yoo, J.-M., Jeong, M.-J.*, Kim, D., Stockwell, W. R., Yang, J.-H., Shin, H.-W., **Lee, M.-I.**, Song, C.-K., and Lee, S.-D., 2015: Spatiotemporal variations of air pollutants (O₃, NO₂, SO₂, CO, PM₁₀, and VOCs) with land-use types, *Atmos. Chem. Phys.*, 15, 10857-10885.
 – TC 24 / 2Y IF (L2) 5.668 / 2Y Rank 9.30% (Meteorology & Atmospheric Sciences) or 10.40% (Environmental Sciences)
- [39] Pradhan, P. K.*, P. Venkatraman, D.-Y. Lee, and **M.-I. Lee**, 2016: El Niño and Indian Summer Monsoon Rainfall Relationship in retrospective seasonal prediction runs: Experiments with Coupled Global Climate Models and MMEs. *Meteorology and Atmospheric Physics*, 128, 1, 97-115.
 – TC 1 / 2Y IF(L4) 1.656 / 2Y Rank 72.09%

- [38] Min, S.-K., S.-W. Son, K.-H. Seo, J.-S. Kug*, S.-I. An, Y.-S. Choi, J.-H. Jeong, B.-M. Kim, J.-W. Kim, Y.-H. Kim, J.-Y. Lee, **M.-I. Lee**, 2015: Changes in weather and climate extremes over Korea and possible causes: A review, *Asia-Pacific J. Atmos. Sci.*, 51, 103-121.
 – TC 38 / 2Y IF(L4) 1.772 / 2Y Rank 65.12%
- [37] Lim, Y.-K.*, S. D. Schubert, O. Reale, **M.-I. Lee**, A.M. Mold, and M. J. Suarez, 2015: Sensitivity of Tropical Cyclones to Parameterized Convection in the NASA GEOS5 Model. *J. Climate*, 28, 2, 551-573.
 – TC 23 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [36] Park, M.-S., H.-S. Kim*, C.-H. Ho, R.L. Elsberry, and **M.-I. Lee**, 2015: Tropical cyclone Mekkhala(2008)'s formation over South China Sea: Mesoscale, synoptic-scale, and large-scale contributions. *Mon. Wea. Rev.*, 143, 88–110.
 – TC 4 / 2Y IF(L3) 3.146 / 2Y Rank 31.40%
- [35] Han, H., S. Lee, J. Im*, M. Kim, **M.-I. Lee**, M. H. Ahn, and S.-R. Chung, 2015: Detection of convective initiation using meteorological imager onboard Communication, Ocean, and Meteorological Satellite based on machine learning approaches. *Remote Sens.* 7, 9184-9204.
 – TC 16 / 2Y IF(L3) 4.118 / 2Y Rank 23.33%
- [34] Shin, S.H., **M.-I. Lee***, and O.-K. Kim, 2014: Examinations of cloud variability and future change in the coupled model intercomparison project phase 3 simulations. *Asia-Paific J. Atmos. Sci.*, 50, 481-495.
 – TC 1 / 2Y IF(L4) 1.772 / 2Y Rank 65.12%
- [33] Kang, D., **M.-I. Lee****, J. Im, D. Kim, H.-M. Kim, H.-S. Kang, S. D. Schubert, A. Arribas, C. MacLachlan, 2014: Prediction of the Arctic Oscillation in Boreal Winter by Dynamical Seasonal Forecasting Systems, *Geophys. Res. Lett.*, 41, 3577-3585.
 – TC 38 / 2Y IF(L1) 4.578 / 2Y Rank 7.14%
- [32] Kim, D., **M.-I. Lee****, H.-M. Kim, and S. D. Schubert, 2014: The Modulation of Tropical Storm Activity in the Western North Pacific by the Madden-Julian Oscillation in the GEOS-5 AGCM Experiments. *Atmos. Sci. Lett.*, 15(4), 335-341
 – TC 6 / 2Y IF(L4) 1.796 / 2Y Rank 60.47%
- [31] Kang, D., J. Im*, **M.-I. Lee**, and L. J. Quackenbush, 2014: The MODIS Ice Surface Temperature Product as an Indicator of Sea Ice Minimum over the Arctic Ocean, *Remote Sens. Environ.*, 152, 99-108.
 – TC 8 / 2Y IF(L1) 8.218 / 2Y Rank 2.80% (Environmental Sciences) or 6.67% (Remote Sensing), or 7.14% (Imaging Science & Photographic Technology)
- [30] **Lee, M.-I.***, H.-S. Kang, D. Kim, D. Kim, H. Kim, and D. Kang, 2014: Validation of the Experimental Hindcasts Produced by the GloSea4 Seasonal Prediction System. *Asia-Pacific J. Atmos. Sci.*, 50, 307-326.
 – TC 2 / 2Y IF(L4) 1.772 / 2Y Rank 65.12%
- [29] Kim, D., **M.-I. Lee***, D. Kim, S. D. Schubert, D.E. Waliser, B. Tian, 2014: Representation of tropical subseasonal variability of precipitation in global reanalysis. *Clim. Dyn.*, 43, 517-534.
 – TC 13 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%
- (이상 부교수 재직기간) -----
- [28] Kim, H.-M*, **M.-I. Lee**, P.J. Webster, D. Kim, and J.-H. Yoo, 2013: A physical Basis for the Probabilistic Prediction of the Accumulated Tropical Cyclone Kinetic Energy in the Western North Pacific. *J. Clim.*, 26, 7981-7991.
 – TC 10 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [27] Blackburn, M.*, D. L. Williamson, K. Nakajima, W. Ohfuchi, Y. O. Takahashi, Y.-Y. Hayashi, H. Nakamura, M. Ishiwatari, J. McGregor, H. Borth, V. Wirth, H. Frank, P. Bechtold,

- N. P. Wedi, H. Tomita, M. Satoh, M. Zhao, I. M. Held, M. J. Suarez, **M.-I. Lee**, M. Watanabe, M. Kimoto, Y. Liu, Z. Wang, A. Molod, K. Rajendran, A. Kitoh, and R. Stratton, 2013: The Aqua Planet Experiment(APE): Control SST simulation. *J. Meteor. Soc. Japan*, 91A, 17-56.
 – TC 28 / 2Y IF(L3) 3.318 / 2Y Rank 26.74%
- [26] Williamson, D. L., M. Blackburn*, K. Nakajima, W. Ohfuchi, Y. O. Takahashi, Y.-Y. Hayashi, H. Nakamura, M. Ishiwatari, J. McGregor, H. Borth, V. Wirth, H. Frank, P. Bechtold, N. P. Wedi, H. Tomita, M. Satoh, M. Zhao, I. M. Held, M. J. Suarez, **M.-I. Lee**, M. Watanabe, M. Kimoto, Y. Liu, Z. Wang, A. Molod, K. Rajendran, A. Kitoh, and R. Stratton, 2013: The Aqua Planet Experiment(APE): Response to changed meridional SST fields. *J. Meteor. Soc. Japan*, 91A, 57-89.
 – TC 23 / 2Y IF(L3) 3.318 / 2Y Rank 26.74%
- [25] Yamada, T. J.*, **M.-I. Lee**, M. Kanamitsu, H. Kanamaru, 2012: Diurnal Characteristics of Rainfall over the Contiguous United States and Northern Mexico in the Dynamically Downscaled Reanalysis Dataset (US10). *J. Hydrometeor*, 13, 1142–1148.
 – TC 9 / 2Y IF(L2) 4.158 / 2Y Rank 13.95%
- [24] Jiang, X.*, D.E. Waliser, D. Kim, M. Zhao, K.R. Sperber, W. F. Stern, S.D. Schubert, G.J. Zhang, W. Wang, M. Khairoutdinov, R. B. Neale, and **M.-I. Lee**, 2012: Simulation of the intraseasonal variability over the Eastern Pacific ITCZ in climate models. *Clim. Dyn.*, 39, 3, 617-636.
 – TC 19 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%
- [23] **Lee, M. -I.***, S. D. Schubert. and D. Kim, 2011: Representation of Tropical Storms in the Northwestern Pacific by the Modern-Era Retrospective Analysis for Research and Applications. *Asia-Paific J. Atmos. Sci.*, 47, 245-253.
 – TC 3 / 2Y IF(L4) 1.772 / 2Y Rank 65.12%
- [22] Frierson, D. M. W.*, D. Kim, I.-S. Kang, **M.-I. Lee**, J. Lin, 2011: Structure of AGCM-Simulated Convectively Coupled Kelvin Waves and Sensitivity to Convective Parameterization. *J. Atmos. Sci.*, 68, 26–45.
 – TC 32 / 2Y IF(L4) 1.772 / 2Y Rank 65.12%
- [21] Matsui, T.*, D. Mocko, **M.-I. Lee**, W.-K. Tao, M. J. Suarez, and R. A. Pielke Sr., 2010: Ten-year climatology of summertime diurnal rainfall rate over the conterminous U.S. *Geophys. Res. Lett.*, 37, L13807.
 – TC 15 / 2Y IF(L1) 4.578 / 2Y Rank 7.14%
- [20] **Lee, M.-I.***, I. Choi, W.-K. Tao, S. D. Schubert, I.-S. Kang, 2010: Mechanisms of diurnal precipitation over the US Great Plains: A cloud resolving model perspective. *Clim. Dyn.*, 34, 419-437.
 – TC 15 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%
- [19] Kim, D.*, K. Sperber, W. Stern, D. Waliser, I.-S. Kang, E. Maloney, W. Wang, K. Weickmann, J. Benedict, M. Khairoutdinov, **M.-I. Lee**, R. Neale, M. Suarez, K. Thayer-Calder, and G. Zhang, 2009: Application of MJO Simulation Diagnostics to Climate Models, *J. Climate*, 22, 6413-6436.
 – TC 228 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [18] Bell, T. L.*, J.-M. Yoo, and **M.-I. Lee**, 2009: Note on the weekly cycle of storm heights over the southeast United States, *Journal of Geophysical Research*, 114, D15201.
 – TC 10 / 2Y IF(L2) 3.633 / 2Y Rank 19.77%
- [17] Gutzler, D.*, L. N. Long, J. Schemm, M. Bosilovich, J. Chern, J. C. Collier, M. Kanamitsu, P. Kelly, D. Lawrence, **M.-I. Lee**, R. Lobato S., B. Mapes, K. Mo, A. Nunes, E. Ritchie, J. Roads, S. B. Roy, S. Schubert, H. Wei and G. Zhang, 2009: Simulations of the 2004 North American Monsoon: NAMAP2. *J. Climate*, 22, 6716-6740.

- TC 27 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [16] Lee, M.-I.*, M. J. Suarez, I.-S. Kang, I. M. Held, and D. Kim, 2008: A moist benchmark calculations for atmospheric general circulation models. *J. Climate*, 21, 4934-4954.
- TC 20 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [15] Lee, M.-I.*, S. D. Schubert, M. J. Suarez, J.-K. E. Schemm, H.-L. Pan, J. Han, and S.-H. Yoo, 2008: Role of convection triggers in the simulation of the diurnal cycle of precipitation over the United States Great Plains in a general circulation model. *J. Geophys. Res.*, 113, D02111.
- TC 43 / 2Y IF(L2) 3.633 / 2Y Rank 19.77%
- [14] Lin, J.-L.*, M.-I. Lee, D. Kim, I.-S. Kang, and D. M. W. Frierson, 2008: Impacts of convective parameterization and moisture convective triggering on AGCM-simulated convectively coupled equatorial waves. *J. Climate*, 21, 883-909.
- TC 86 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [13] Bell, T. L.*, D. Rosenfeld, K.-M. Kim, J.-M. Yoo, M.-I. Lee, and M. Hahnenberger, 2008: Midweek increase in U.S. summer rain suggests air pollution invigorates rainstorms. *J. Geophys. Res.*, 113, D02209.
- TC 140 / 2Y IF(L2) 3.633 / 2Y Rank 19.77%
- [12] Jiang, X.*, D. E. Waliser, M. C. Wheeler, C. Jones, M.-I. Lee, and S. D. Schubert, 2008: Assessing the Skill of an All-season Statistical Forecast Model for the Madden-Julian Oscillation. *Mon. Weather Rev.*, 136, 1940-1956.
- TC 63 / 2Y IF(L3) 3.146 / 2Y Rank 31.40%
- [11] Lin, J.-L.*, B. E. Mapes, K. M. Weickmann, G. N. Kiladis, S. D., Schubert, M. J. Suarez, J. T. Bacmeister, and M.-I. Lee, 2008: North American monsoon and convectively coupled equatorial waves simulated by IPCC AR4 coupled GCMs. *J. Climate*, 21, 2919-2937.
- TC 29 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [10] Lin, J.-L.*, K. M. Weickmann, G. N. Kiladis, B. E. Mapes, S. D., Schubert, M. J. Suarez, J. T. Bacmeister, and M.-I. Lee, 2008: Subseasonal variability associated with Asian summer monsoon simulated by 14 IPCC AR4 coupled GCMs. *J. Climate*, 21, 4541-4567.
- TC 82 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [9] Lee, M.-I.*, S.D. Schubert, M. J. Suarez, I. M. Held, A. Kumar, T. L. Bell, J.-K. E. Schemm, N.-C. Lau, J.-J. Ploshay, H.-K. Kim, J. J. Ploshay, S.-H. Yoo, 2007: Sensitivity to horizontal resolution in the AGCM simulations of warm season diurnal cycle of precipitation over the United States and northern Mexico. *J. Clim.*, 20, 1862–1881.
- TC 70 / 2Y IF(L2) 4.805 / 2Y Rank 10.47%
- [8] Lee, M.-I.*, S.D. Schubert, M. J. Suarez, I. M. Held, N.-C. Lau, J. J. Ploshay, A. Kumar, H.-K. Kim, and J.-K. E. Schemm, 2007: An analysis of the warm season diurnal cycle over the continental United States and northern Mexico in general circulation models. *J. Hydromet.*, 8, 344-366.
- TC 63 / 2Y IF(L2) 4.158 / 2Y Rank 13.95%
- [7] Lee, M.-I.*, S.D. Schubert, M. J. Suarez, T. L. Bell, and K.-M. Kim, 2007: Diurnal cycle of precipitation in the NASA Seasonal to Interannual Prediction Project atmospheric general circulation model. *J. Geophys. Res.*, 112, D16111.
- TC 19 / 2Y IF(L2) 3.633 / 2Y Rank 19.77%
- [6] Lau, W. K. M.*, K.-M. Kim, and M.-I. Lee, 2007: Characteristics of diurnal and seasonal cycles in global monsoon systems. *J. Meteorol. Soc. Japan*, 85A, 403-416.
- TC 8 / 2Y IF(L3) 3.318 / 2Y Rank 26.74%
- [5] Lin, J.-L.*, D. Kim, M.-I. Lee, and I.-S. Kang, 2007: Effects of cloud-radiative heating on atmospheric general circulation model (AGCM) simulations of convectively coupled equatorial waves, *J. Geophys. Res.*, 112, D24107.

– TC 10 / 2Y IF(L2) 3.633 / 2Y Rank 19.77%

[4] Higgins, W.*, D. Ahijevych, J. Amador, A. Barros, E. H. Berbery, E. Caetano, P. Ciesielski, R. Cifelli, M. Cortez-Vazquez, A. Douglas, M. Douglas, G. Emmanuel, C. Fairall, D. Gochis, D. Gutzler, R. Johnson, C. King, T. Lang, **M.-I. Lee**, D. Lettenmaier, R. Lobato, V. Magaña, J. Meitin, K. Mo, S. Nesbitt, E. Pytlak, P. Rogers, S. Rutledge, J. Schemm, S. Schubert, F. Torres, A. White, C. Williams, A. Wood, R. Zamora, C. Zhang, 2006: The NAME 2004 Field Campaign and Modeling Strategy. Bull. Amer. Meteorol. Soc., 87, 79–94.

– TC 62 / 2Y IF(L1) 8.166 / 2Y Rank 3.49%

[3] Waliser, D. E.*, K. Jin, I.-S. Kang, W. F. Stern, S. D. Schubert, K.-M. Lau, **M.-I. Lee**, V. Krishnamurthy, A. Kitoh, G. A. Meehl, V. Y. Galin, V. Satyan, S. K. Mandke, G. Wu, Y. Liu, and C.-K. Park, 2003: AGCM Simulations of Intraseasonal Variability Associated with the Asian Summer Monsoon, Clim. Dyn., 21, 423-446.

– TC 175 / 2Y IF(L2) 4.048 / 2Y Rank 16.28%

[2] Lee, M.-I., I.-S. Kang*, and B. E. Mapes, 2003: Impacts of cumulus convection parameterization on the aqua-planet AGCM simulations of tropical intraseasonal oscillation, J. Meteorol. Soc. Japan, 81, No.5, 963-992.

– TC 78 / 2Y IF(L3) 3.318 / 2Y Rank 26.74%

[1] Lee, M.-I., I.-S. Kang*, J.-K. Kim, and B. E. Mapes, 2001: Influences of cloud-radiation interaction on simulating tropical intraseasonal oscillation with an atmospheric general circulation model. J. Geophys. Res., 106, D13, 14,219-14,233.

– TC 79 / 2Y IF(L2) 3.633 / 2Y Rank 19.77%