

## Sang-Ki Lee

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### Education

PhD, Old Dominion University, Norfolk, Va (Oceanography)	1995
MSc, Old Dominion University, Norfolk, Va (Oceanography)	1993
BSc, Inha University, Incheon, South Korea (Oceanography)	1991

### Professional Service

Oceanographer, AOML, NOAA	2016 - Present
Scientist, CIMAS, University of Miami	2011 - 2016
Associate Scientist, CIMAS, University of Miami	2007 - 2011
Assistant Scientist, CIMAS, University of Miami	2005 - 2007
Postdoctoral Research Associate, CIMAS, University of Miami	2002 - 2004
Senior Research Engineer: Maritime Research Institute, Samsung Heavy Industries	1996 - 2001

### Publications in FY24-25: H-index = 38; Total publications = 99

Chung, E.-S., S.-J. Kim, **S.-K. Lee**, K.-J. Ha, S.-W. Yeh, Y. Kim, S.-Y. Jun, J.-H. Kim and D. Kim, 2024. Tropical eastern Pacific cooling trend reinforced by human activity. *npj Climate and Atmospheric Science*, 7, 170. <https://doi.org/10.1038/s41612-024-00713-2>

Kim, D., **S.-K. Lee**, H. Lopez, J.-H. Jeong, J.-S. Hong, 2024. An unusually prolonged Pacific-North American pattern promoted the 2021 winter Quad-State Tornado Outbreaks. *npj Climate and Atmospheric Science*, 7, 133. <https://doi.org/10.1038/s41612-024-00688-0>

Gomez, F.A., R. Wanninkhof, L. Barbero, and **S.-K. Lee**, 2024: Mississippi River chemistry impacts on the interannual variability of aragonite saturation state in the northern Gulf of Mexico. *Journal of Geophysical Research-Oceans*, 129(2):e2023JC020436, <https://doi.org/10.1029/2023JC020436> 2024

**Lee, S.-K.**, D. Kim, F. Gomez, H. Lopez, D. Volkov, S. Dong, R. Lumpkin, and S. Yeager, 2024. A pause in the weakening of the Atlantic meridional overturning circulation since the early 2010s. *Nature Communications*, 15, 10624. <https://doi.org/10.1038/s41467-024-54903-w>

Lopez, H., **S.-K. Lee**, R. West, D. Kim, G. Foltz, G. Alaka, and H. Murakami, 2024. Projected increase in the frequency of extremely active Atlantic hurricane seasons. *Science Advances*, 10(46): eadq7856, <https://doi.org/10.1126/sciadv.adq7856>

Tuchen, F.P., R.C. Perez, G.R. Foltz, P. Brandt, A. Subramaniam, **S.-K. Lee**, R. Lumpkin, and R. Hummels, 2024: Modulation of equatorial currents and tropical instability waves during the 2021 Atlantic Niño. *Journal of Geophysical Research-Oceans*, 129(1):e2023JC020431, <https://doi.org/10.1029/2023JC020431>

### Under Review

Kim, D., **S.-K. Lee**, H. Lopez, R. West, G.R. Foltz, J.-S. Hong, and S.-W. Yeh, 2025, Atlantic Niño increases tropical cyclone landfall risk in Korea and Japan. *Science Advances*, Submitted.

West, R., H. Lopez, **S.-K. Lee**, D. Kim, A. E. Mercer, G. R. Foltz, and H. Wang, 2024. Skilled sub-basin forecasts of seasonal Atlantic hurricane activity. *Weather and Forecasting*, In-review.

### Current Research Projects

NOAA/OAP (PI): High-resolution ocean-biogeochemistry modeling for the East & Gulf coasts of U.S.

NOAA/OAR (PI): Climate Ecosystem Fishery Initiative (CEFI) Research

NOAA/OAR (PI): Climate-Fishery Research

NOAA/OAR (Collaborator): Nested Global Modeling

NOAA/NGI (Collaborator): Toward building a subseasonal-to-seasonal red tide and hypoxia warning system for the West Florida Shelf fisheries: Part I. hindcast simulations and validation.

NOAA/NGI (Collaborator): Asymmetric influences of the Pacific and Atlantic Oceans on the decadal drought frequency in the southeast U.S.