

NAME, First Name: NORGREN, Matthew

Affiliation: Laboratory for Atmospheric and Space Physics - University of Colorado, Boulder

Role in the project: Early Career Scientist

Expertise in measuring stratospheric aerosols from balloon platforms. Knowledge in both size resolved aerosol measurements and measuring total aerosol concentrations using condensation nuclei (CN) counters. My dissertation focused on radiative transfer and remote sensing of clouds and aerosols.

Current position: Postdoctoral Researcher (2022-)

Former Position(s): Graduate Research Assistant, Laboratory for Atmospheric and Space Physics (2016-2022)

Education:

2021 PhD Atmospheric Science -- University of Colorado, Boulder

2014 MS Civil and Environmental Engineering -- University of California, Berkeley

2012 BS Physics -- University of California, Santa Cruz

Selected Publications:

Chen, H., Schmidt, K. S., Massie, S. T., Nataraja, V., Norgren, M. S., Gristey, J. J., Feingold, G., Holz, R. E., and Iwabuchi, H.: The Education and Research 3D Radiative Transfer Toolbox (EaR3T) – towards the mitigation of 3D bias in airborne and spaceborne passive imagery cloud retrievals, *Atmos. Meas. Tech.*, 16, 1971–2000, <https://doi.org/10.5194/amt-16-1971-2023>, 2023.

Reid, J. S. et al.: The coupling between tropical meteorology, aerosol lifecycle, con-vection, and radiation, during the Cloud, Aerosol and Monsoon Processes Philippines Experiment (CAMP2Ex), *B. Am. Meteorol. Soc.*, 1, <https://doi.org/10.1175/BAMS-D-21-0285.1>, 2023.

Norgren, M. S., Wood, J., Schmidt, K. S., van Dierenhoven, B., Stamnes, S. A., Ziemba, L. D., Crosbie, E. C., Shook, M. A., Kittelman, A. S., LeBlanc, S. E., Broc-cardo, S., Freitag, S., and Reid, J. S.: Above-aircraft cirrus cloud and aerosol optical depth from hyperspectral irradiances measured by a total-diffuse radiometer, *Atmos. Meas. Tech.*, 15, 1373–1394, <https://doi.org/10.5194/amt-15-1373-2022>, 2022.

Norgren, M. S., de Boer, G., and Shupe, M. D.: Observed aerosol suppression of cloud ice in low-level Arctic mixed-phase clouds, *Atmos. Chem. Phys.*, 18, 13345–13361, <https://doi.org/10.5194/acp-18-13345-2018>, 2018.

Norgren, M. S., Small, J. D., Jonsson, H. H., and Chuang, P. Y.: Observational esti-mates of detrainment and entrainment in non-precipitating shallow cumulus, *Atmos. Chem. Phys.*, 16, 21–33, <https://doi.org/10.5194/acp-16-21-2016>, 2016.

Diez S., Clark T., Grillo A. A., Kononenko W., Martinez - McKinney F., Newcomer F. M., Norgren M., Rescia S., Spencer E., Spieler H., Ull'an M., Wilder M., Radiation Hardness Evaluation of a 130 nm SiGe BiCMOS technology for High Energy Physics Applications. 2013 JINST 8 P10009, 2013.