

Curriculum Vitae (abbreviated): CHRISTOPHER M. LITTLE

PROFESSIONAL PREPARATION

<u>College/University</u>	<u>Location</u>	<u>Major</u>	<u>Degree&Year</u>
Williams College	Williamstown, MA	Chemistry	B.A., 1998
Princeton University	Princeton, NJ	Geosciences	Ph.D., 2010
Princeton University	Princeton, NJ	(Postdoc)	2010-2013

ACADEMIC/PROFESSIONAL APPOINTMENTS

2019-present, Manager/Oceanography Group, Atmospheric and Environmental Research, Inc.
2014-2019, Staff Scientist I, Staff Scientist II, and Senior Staff Scientist I, Atmospheric and Environmental Research, Inc.
2013-2014 Associate Research Scholar, Princeton University

Publications since 2018 related to ice sheets

Edwards, T. L., and Coauthors, 2021: Projected land ice contributions to twenty-first-century sea level rise. *Nature*, **593**, 74–82, <https://doi.org/10.1038/s41586-021-03302-y>.

Payne, A. J., and Coauthors, 2021: Future Sea Level Change Under Coupled Model Intercomparison Project Phase 5 and Phase 6 Scenarios From the Greenland and Antarctic Ice Sheets. *Geophys Res Lett*, **48**, <https://doi.org/10.1029/2020GL091741>.

Barthel, A., Agosta, C., Little, C. M., Hattermann, T., Jourdain, N. C., Goelzer, H., et al. (2020). CMIP5 model selection for ISMIP6 ice sheet model forcing: Greenland and Antarctica. *The Cryosphere*, **14**(3), 855–879. <https://doi.org/10.5194/tc-14-855-2020>

Jourdain, N. C., Asay-Davis, X., Hattermann, T., Straneo, F., Seroussi, H., Little, C. M., & Nowicki, S. (2020). A protocol for calculating basal melt rates in the ISMIP6 Antarctic ice sheet projections. *The Cryosphere*, **14**(9), 3111–3134. <https://doi.org/10.5194/tc-14-3111-2020>

Slater, D. A., Felikson, D., Straneo, F., Goelzer, H., Little, C. M., Morlighem, M., et al. (2020). Twenty-first century ocean forcing of the Greenland ice sheet for modelling of sea level contribution. *The Cryosphere*, **14**(3), 985–1008. <https://doi.org/10.5194/tc-14-985-2020>

Goelzer, H., Nowicki, S., Payne, A., Larour, E., Seroussi, H., Lipscomb, W. H., et al. (2020). The future sea-level contribution of the Greenland ice sheet: a multi-model ensemble study of ISMIP6. *The Cryosphere*, **14**(9), 3071–3096. <https://doi.org/10.5194/tc-14-3071-2020>

Nowicki, S., Goelzer, H., Seroussi, H., Payne, A. J., Lipscomb, W. H., Abe-Ouchi, A., et al. (2020). Experimental protocol for sea level projections from ISMIP6 stand-alone ice sheet models. *The Cryosphere*, **14**(7), 2331–2368. <https://doi.org/10.5194/tc-14-2331-2020>

Seroussi, H., Nowicki, S., Payne, A. J., Goelzer, H., Lipscomb, W. H., Abe-Ouchi, A., et al. (2020). ISMIP6 Antarctica: a multi-model ensemble of the Antarctic ice sheet evolution over the 21st century. *The Cryosphere*, **14**(9), 3033–3070. <https://doi.org/10.5194/tc-14-3033-2020>

Publications since 2018 unrelated to ice sheets

Little, C. M., C. G. Piecuch, and R. M. Ponte, 2021: North American east coast sea level exhibits high power and spatiotemporal complexity on decadal timescales. *Geophysical Research Letters*, **48**, e2021GL093675, <https://doi.org/10.1029/2021GL093675>.

Little, C. M., M. Zhao, and M. W. Buckley, 2020: Do Surface Temperature Indices Reflect Centennial-Timescale Trends in Atlantic Meridional Overturning Circulation Strength? *Geophysical Research Letters*, **47**, e2020GL090888, <https://doi.org/10.1029/2020GL090888>.

Little, C. M., Hu, A., Hughes, C. W., McCarthy, G. D., Piecuch, C. G., Ponte, R. M., & Thomas, M. D., 2019: The Relationship between United States East Coast Sea Level and the Atlantic Meridional Overturning Circulation: A review. *J. Geophys. Res. Oceans*, **124**, 6435– 6458.

Kopp, R. E., Gilmore, E. A., Little, C. M., Lorenzo-Trueba, J., Ramenzoni, V. C., & Sweet, W. V. (2019). Usable science for managing the risks of sea-level rise. *Earth's Future*, **7**, 1235-1269.

van de Wal, R. S. W., Zhang, X., Minobe, S., Jevrejeva, S., Riva, R. E. M., Little, C., et al. (2019). Uncertainties in Long-Term Twenty- First Century Process-Based Coastal Sea-Level Projections. *Surveys in Geophysics*, **40**(6), 1655–1671.

Zhang, R., Sutton, R., Danabasoglu, G., Kwon, Y.O., Marsh, R., Yeager, S.G., Amrhein, D.E. and Little, C.M., 2019. A review of the role of the Atlantic Meridional Overturning Circulation in Atlantic multidecadal variability and associated climate impacts. *Reviews of Geophysics*, **57**(2), 316-375.

Ponte, R. M., Carson, M., Cirano, M., Domingues, C. M., Jevrejeva, S., Marcos, M., et al. (2019). Towards Comprehensive Observing and Modeling Systems for Monitoring and Predicting Regional to Coastal Sea Level. *Frontiers in Marine Science*, **6**, 437.

Piecuch, C. G., Dangendorf, S., Gawarkiewicz, G. G., Little, C. M., Ponte, R. M., & Yang, J. (2019). How is New England Coastal Sea Level Related to the Atlantic Meridional Overturning Circulation at 26° N? *Geophysical Research Letters*, **46**(10), 5351–5360.

Piecuch, C. G., Bittermann, K., Kemp, A. C., Ponte, R. M., Little, C. M., Engelhart, S. E., & Lentz, S. J., 2018. River-discharge effects on United States Atlantic and Gulf coast sea-level changes. *Proceedings of the National Academy of Sciences*, **115**(30), 7729–7734.

Piecuch, C. G., Huybers, P., Hay, C. C., Kemp, A. C., Little, C. M., Mitrovica, J. X., Ponte, R.M., Tingley, M.P., 2018: Origin of spatial variation in US East Coast sea-level trends during 1900–2017. *Nature*, **564**(7736), 400–404.

Five Other Significant Publications

Little, C.M. and N. M. Urban, 2016: CMIP5 temperature biases and 21st century warming around the Antarctic Coast. *Annals of Glaciology*, **7**, 1-10.

Kopp, R. E., R. M. Horton, C. M. Little, J. X. Mitrovica, M. Oppenheimer, D. J. Rasmussen, B. H. Strauss, and C. Tebaldi, 2014: Probabilistic 21st and 22nd century sea-level projections at a global network of tide gauge sites. *Earth's Future* **2**, 383–406.

Little, C.M., M. Oppenheimer, and N. M. Urban, 2013: Upper bounds on 21st century Antarctic ice loss assessed using a probabilistic framework, *Nature Climate Change*, **3**, 654-659.

Goldberg, D.N., C. M. Little, O. V. Sergienko, A. Gnanadesikan, R. Hallberg, and M. Oppenheimer. 2012. Investigation of land ice-ocean interaction with a fully coupled ice-ocean model, Part 2: Sensitivity to external forcings. *Journal of Geophysical Research, Earth Surface*, **117**, F02038

Little, C. M., A. Gnanadesikan, and M. Oppenheimer, 2009: How ice shelf morphology controls basal melting. *Journal of Geophysical Research*, **114**, <https://doi.org/10.1029/2008JC005197>.

SELECTED SYNERGISTIC ACTIVITIES

Member of NJDEP Science and Technical Advisory Panel (STAP) 2018-2019; co-author of report “New Jersey’s Rising Seas and Changing Coastal Storms”.

Ice Sheet Model Intercomparison Project for CMIP6 (ISMIP6) ocean working group, 2017-2019

Chair, US CLIVAR AMOC Science Task Team 4

Co-author: Verisk Analytics/AIR Worldwide/AER climate change white paper, 2018