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Degrees: B.A. w/ High-Distinction (Astronomy-Physics), University of Virginia, 1987
M.S. (Meteorology), University of Maryland College Park, 1996

Professional Experience:

2020-present	Senior Research Scientist	Center for Coastal Physical Oceanography
1998-2020	Research Scientist	Center for Coastal Physical Oceanography
1996-1998	Senior Scientist	Raytheon STX
1994-1996	Graduate Research Asst.	University of Maryland
1993-1994	Systems Analyst	Cambridge Research Associates
1988-1993	Engineer	Hughes Training Incorporated

Relevant Publications (last 10 years, full list at https://scholar.google.com/citations?user=kyuXeF8AAAAJ&hl=en):

Dinniman, M.S., P. St-Laurent, K.R. Arrigo, E.E. Hofmann, and G.L. van Dijken, 2020. Analysis of iron sources in Antarctic continental shelf waters. *J. Geophys. Res.*, 125, e2019JC015736, doi:10.1029/2019JC015736.

Gwyther, D.G., K. Kusahara, X.S. Asay-Davis, M.S. Dinniman, and B.K. Galton-Fenzi, 2020. Vertical processes and resolution impact basal melting: a mutli-model study. *Ocean Model.*, 147, 101569, doi:10.1016/j.ocemod.2020.101569.

Brearley, J.A., C. Moffatt, H.J. Venables, M.P. Meredith, and M.S. Dinniman, 2019. The role of eddies and topography in the export of shelf waters from the West Antarctic Peninsula shelf. *J. Geophys. Res.*, 124, 7718-7742, doi:10.1029/2018JC014679.

Mack, S.L., M.S. Dinniman, J.M. Klinck, D.J. McGillicuddy, Jr., and L. Padman, 2019. Modeling ocean eddies on Antarctica's cold water continental shelves and their effects on ice shelf basal melting. *J. Geophys. Res.*, 124, 5067-5084, doi:10.1029/2018JC014688.

Dinniman, M.S., J.M. Klinck, E.E. Hofmann, and W.O. Smith Jr., 2018. Effects of projected changes in wind, atmospheric temperature, and freshwater inflow on the Ross Sea. *J. Climate*, 31, 1619-1635, doi:10.1175/JCLI-D-17-0351.1

Li, Y., D.J. McGillicuddy, M.S. Dinniman, and J.M. Klinck, 2017. Processes regarding formation of low-salinity high-biomass lenses near the edge of the Ross Ice Shelf. *J. Marine Syst.*, 166, 108-119, doi:10.1016/j.jmarsys.2016.07.002.

Casatagno, P., P. Falco, M.S. Dinniman, G. Spezie, and G. Budillon, 2017. Temporal variability of the Circumpolar Deep Water inflow onto the Ross Sea continental shelf. *J. Marine Syst.*, 166, 37-49, doi:10.1016/j.jmarsys.2016.05.006.

Dinniman, M.S., X.S. Asay-Davis, B.K. Galton-Fenzi, P.R. Holland, A. Jenkins, and R. Timmermann, 2016. Modeling ice shelf/ocean interaction in Antarctica: A review. *Oceanography*, 29(4), 144-153, doi:10.5670/oceanog.2016.106.

Graham, J.A., M.S. Dinniman, and J.M. Klinck, 2016. Impact of model resolution for on-shelf heat transport along the West Antarctic Peninsula. *J. Geophys. Res.*, 121, 7880-7897, doi:10.1002/2016JC011875.

Gwyther, D.E., E.A. Cougnon, B.K. Galton-Fenzi, J.L. Roberts, J.R. Hunter, and M.S. Dinniman, 2016. Modelling the response of ice shelf basal melting to different ocean cavity environmental regimes. *Ann. Glaciol.*, 57(73), 131-144, doi:10.1017/aog.2016.31.

St-Laurent, P., J.M. Klinck, M.S. Dinniman, 2015. Impact of local winter cooling on the melt of Pine Island Glacier, Antarctica. *J. Geophys. Res.*, 120, 6718-6732, doi:10.1002/2015JC010709

Gwyther, D.E., B.K. Galton-Fenzi, M.S. Dinniman, J.L. Roberts, and J.R. Hunter, 2015. An investigation of the impact of basal roughness on melting and freezing in ice shelf-ocean models. *Ocean Model.*, 95, 38-52, doi:10.1016/j.ocemod.2015.09.004.

Dinniman, M.S., J.M. Klinck, L-S Bai, D.H. Bromwich, K.M. Hines and D.M. Holland, 2015. The effect of atmospheric forcing resolution on delivery of ocean heat to the Antarctic floating ice shelves. *J. Climate*, 28, 6076-6085, doi:10.1175/JCLI-D-14-00374.1

Smith, Jr., W.O., M.S. Dinniman, E.E. Hoffman and J.M. Klinck, 2014. The effects of changing winds and temperatures on the oceanography of the Ross Sea in the 21st century. *Geophys. Res. Lett.*, 41, 1624-1631, doi:10.1002/2014gl059311.

Stern, A.A., Dinniman, M.S., Zagorodnov, V., Tyler, S.W. and D.M. Holland, 2013. Intrusion of warm surface water beneath the McMurdo Ice Shelf, Antarctica. *J. Geophys. Res.*, 118, 7036-7048, doi:10.1002/2013JC008842.

St-Laurent, P., J.M. Klinck and M.S. Dinniman, 2013. On the Role of Coastal Troughs in the Circulation of Warm Circumpolar Deep Water on Antarctic Shelves. *J. Phys. Oceanogr.*, 43, 51-64, doi:10.1175/JPO-D-11-0237.1.

Dinniman, M.S., J.M. Klinck and E.E. Hofmann, 2012. Sensitivity of Circumpolar Deep Water transport and ice shelf basal melt along the west Antarctic Peninsula to changes in the winds. *J. Climate*, 25, 4799-4816, doi:10.1175/JCLI-D-11-00307.1.

Mueller, R.D., L. Padman, M.S. Dinniman, S.Y. Erofeeva, H.A. Fricker, M.A. King, 2012. Impact of tide-topography interactions on basal melting of Larsen C Ice Shelf, Antarctica. *J. Geophys. Res.*, 117, C05005, doi:10.1029/2011JC007263.

Padman, L., D.P. Costa, M.S. Dinniman, H.A. Fricker, M.E. Goebel, L.A. Huckstadt, A. Humbert, I. Joughin, J.T.M. Lenaerts, S.R.M. Ligtenberg, T. Scambos and M.R. van den Broeke, 2012. Oceanic controls on the mass balance of Wilkins Ice Shelf, Antarctica. *J. Geophys. Res.*, 117, C01010, doi:10.1029/2011JC007301.

Dinniman, M.S., J.M. Klinck and W.O. Smith, Jr., 2011. A model study of Circumpolar Deep Water on the West Antarctic Peninsula and Ross Sea continental shelves. *Deep-Sea Res. II*, 58, 1508-1523, doi:10.1016/j.dsr2.2010.11.013.

Other Activities:

Member: WCRP Climate and Cryosphere Marine Ice Sheet-Ocean Model Intercomparison Project

Reviewer of manuscripts for ~30 different journals (~11 reviews/yr over last 5 years)

Ad hoc reviewer for 2 U.S. and 7 foreign funding agencies

Panel Reviewer for: U.S. National Oceanic and Atmospheric Administration
U.S. National Science Foundation (x4)