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Present Title and Address: Research Scientist
Center for Coastal Physical Oceanography
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Degrees: B.A. w/ High-Distinction (Astronomy-Physics), University of Virginia, 1987
M.S. (Meteorology), University of Maryland, 1996

Research Interests: *Numerical modeling of ocean and ice physical processes in oceanic and coastal regions, modeling of coupling between physical and biological processes in marine environments*

Professional Experience:

June 1987 - June 1988 Research Assistant, Department of Astronomy, University of Arizona
Aug. 1988 - Mar. 1993 Systems Analyst, Hughes Training Incorporated
Mar. 1993 - Aug. 1994 Systems Analyst, Cambridge Research Associates
Sep. 1994 - Aug. 1996 Research Assistant, Department of Meteorology, University of Maryland
Sept. 1996 - Oct. 1998 Senior Scientist, Raytheon STX
Nov. 1998 - present Research Scientist, Department of Ocean, Earth and Atmospheric Sciences, Old Dominion University

Professional and Honorary Societies: American Geophysical Union
American Meteorological Society

Reviewed Publications:

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. *Journal of Marine Systems*, 166, 108-119, doi:10.1016/j.jmarsys.2016.07.002.

Mack, S.L., M.S. Dinniman, D.J. McGillicuddy, Jr., P.N. Sedwick and J.M. Klinck, 2017. Dissolved iron transport pathways in the Ross Sea: Influence of tides and mesoscale eddies in a regional ocean model. *Journal of Marine Systems*, 166, 73-86, doi:10.1016/j.jmarsys.2016.10.008.

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. *Journal of Marine Systems*, 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.

- 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. *Annals of Glaciology*, 57(73), 131-144, doi:10.1017/aog.2016.31.
- 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. *Journal of Geophysical Research*, 121, 7880-7897, doi:10.1002/2016JC011875.
- Piñones, A., E.E. Hofmann, M.S. Dinniman and L.B. Davis, 2016. Transport and fate of Euphausiids in the Ross Sea, *Polar Biology*, 39, 177-187, doi:10.1007/s00300-015-1798-5.
- 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 Modelling*, 95, 38-52, doi:10.1016/j.ocemod.2015.09.004.
- St-Laurent, P., J.M. Klinck and M.S. Dinniman, 2015. Impact of local winter cooling on the melt of Pine Island Glacier, Antarctica, *Journal of Geophysical Research*, 120, 6718-6732, doi:10.1002/2015JC010709.
- McGillicuddy, D.J., P.N. Sedwick, M.S. Dinniman, K.R. Arrigo, T.S. Bibby, B.J.W. Greenan, E.E. Hofmann, J.M. Klinck, W.O. Smith, Jr., S.L. Mack, C.M. Marsay, B.M. Sohst and G.L. van Dijken, 2015. Iron supply and demand in an Antarctic shelf ecosystem, *Geophysical Research Letters*, 42, 8088-8097, doi:10.1002/2015GL065727.
- Kustka, A., J.T. Kohut, A.E. White, P.J. Lam, A.J. Milligan, M.S. Dinniman, S. Mack, E. Hunter, M.R. Hiscock, W.O. Smith, Jr. and C.I. Measures, 2015. The roles of MCDW and deep water iron supply in sustaining a recurrent phytoplankton bloom on central Pennell Bank (Ross Sea), *Deep-Sea Research Part I*, 105, 171-185, doi:10.1016/j.dsr.2015.08.012.
- 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, *Journal of Climate*, 28, 6076-6085, doi:10.1175/JCLI-D-14-00374.1
- Queste, B.Y., K.J. Heywood, W.O. Smith, Jr., D.E. Kaufman, T.D. Jickells and M.S. Dinniman, 2015. Dissolved oxygen dynamics during a phytoplankton bloom in the Ross Sea polynya, *Antarctic Science*, 27, 362-372, doi:10.1017/S0954102014000881.
- Marsay, C.M., P.N. Sedwick, M.S. Dinniman, P.M. Barrett, S.L. Mack and D.J. McGillicuddy, 2014. Estimating the benthic efflux of dissolved iron on the Ross Sea continental shelf, *Geophysical Research Letters*, 41, 7576-7583, doi:10.1002/2014GL061684.
- Smith, Jr., W.O., K.T. Goetz, D.E. Kaufman, B.Y. Queste, V. Asper, D.P. Costa, M.S. Dinniman, M.A.M. Friedrichs, E.E. Hofmann, K.J. Heywood, J.T. Kohut and C.M. Lee, 2014. Multi-platform, multi-disciplinary investigations of the Ross Sea, Antarctica, *Oceanography*, 27(2), 180-185, doi:10.5670/oceanog.2014.36.
- 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, *Geophysical Research Letters*, 41, 1624-1631, doi:10.1002/2014gl059311.
- Smith, Jr., W.O., D.G. Ainley, K.R. Arrigo and M.S. Dinniman, 2014. The oceanography and ecology of the Ross Sea, *Annual Review of Marine Science*, 6, 469-487, doi:10.1146/annurev-marine-010213-135114.
- Stern, A.A., M.S. Dinniman, V. Zagorodnov, S.W. Tyler and D.M. Holland, 2013. Intrusion of warm surface water beneath the McMurdo Ice Shelf, Antarctica, *Journal of Geophysical Research*, 118, 7036-7048, doi:10.1002/2013JC008842.
- Piñones, A., E.E. Hofmann, K.L. Daly, M.S. Dinniman and J.M. Klinck, 2013. Modeling environmental controls on the transport and fate of early life stages of Antarctic krill

- (*Euphausia superba*) on the western Antarctic Peninsula continental shelf, *Deep-Sea Research I*, 82, 17-31, doi:10.1016/j.dsr.2013.08.001.
- Piñones, A., E.E. Hofmann, K.L. Daly, M.S. Dinniman and J.M. Klinck, 2013. Modeling the remote and local connectivity of Antarctic krill populations along the western Antarctic Peninsula, *Marine Ecology Progress Series*, 481, 69-92, doi:10.3354/meps10256.
- 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, *Journal of Physical Oceanography*, 43, 51-64, doi:10.1175/JPO-D-11-0237.1.
- Ashford, J., M. Dinniman, C. Brooks, A.H. Andrews, E. Hofmann, G. Cailliet, C. Jones and N. Ramanna, 2012. Does large-scale circulation structure life history connectivity in Antarctic toothfish (*Dissostichus mawsoni*)? *Canadian Journal of Fisheries and Aquatic Sciences*, 69(12), 1903-1919, doi:10.1139/f2012-111.
- 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, *Journal of 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, *Journal of Geophysical Research*, 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, *Journal of Geophysical Research*, 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 Research II*, 58, 1508-1523, doi:10.1016/j.dsr2.2010.11.013.
- Piñones, M.A., E.E. Hofmann, M.S. Dinniman and J.M. Klinck, 2011. Lagrangian simulation of transport pathways and residence times along the western Antarctic Peninsula, *Deep-Sea Research II*, 58, 1524-1539, doi:10.1016/j.dsr2.2010.07.001.
- Smith, Jr., W.O., M.S. Dinniman, S. Tozzi, G.R. DiTullio, O. Mangoni, M. Modigh and V. Saggiomo, 2010. Phytoplankton photosynthetic pigments in the Ross Sea: Patterns and relationships among functional groups, *Journal of Marine Systems*, 82, 177-185, doi:10.1016/j.jmarsys.2010.04.014.
- Klinck, J.M. and M.S. Dinniman, 2010. Exchange across the shelf break at high southern latitudes, *Ocean Science*, 6, 513-524, doi:10.5194/os-6-513-2010.
- Costa, D.P., J.M. Klinck, E.E. Hofmann, M.S. Dinniman and J.M. Burns, 2008. Upper ocean variability in west Antarctic Peninsula continental shelf waters as measured using instrumented seals, *Deep-Sea Res. II*, 55, 323-337, doi:10.1016/j.dsr2.2007.11.003.
- Crouch, J.R., Y. Shen, J.A. Austin and M.S. Dinniman, 2008. An educational interactive numerical model of the Chesapeake Bay, *Computers and Geosciences*, 34, doi:10.1016/j.cageo.2007.03.017.
- Dinniman, M.S., J.M. Klinck and W.O. Smith, Jr., 2007. Influence of Sea Ice Cover and Icebergs on Circulation and Water Mass Formation in a Numerical Circulation Model of the Ross Sea, Antarctica, *Journal of Geophysical Research*, 112, C11013, doi:10.1029/2006JC004036.

- Smith, Jr., W.O., A.R. Shields, G. Catalano, J.A. Peloquin, S. Tozzi, M.S. Dinniman and V.A. Asper, 2006. Interannual Variations in Nutrients, Net Community Production, and Biogeochemical Cycles in the Ross Sea, *Deep-Sea Research II*, 53, 815-833.
- Dinniman, M.S. and J.M. Klinck, 2004. A model study of circulation and cross shelf exchange on the west Antarctic Peninsula continental shelf, *Deep-Sea Research II*, 51, 2003-2022.
- Dinniman, M.S., J.M. Klinck and W.O. Smith, Jr., 2003. Cross shelf exchange in a model of the Ross Sea circulation and biogeochemistry, *Deep-Sea Research II*, 50, 3103-3120.
- Smith, W.O., Jr., M.S. Dinniman, J.M. Klinck and E.E. Hofmann, 2003. Biogeochemical climatologies in the Ross Sea, Antarctica: Seasonal patterns of nutrients and biomass, *Deep-Sea Research II*, 50, 3083-3101.
- Allen, S.E., M.S. Dinniman, J.M. Klinck, D.D. Gorby, A.J. Hewett and B.M. Hickey, 2003. On Vertical Advection Truncation Errors in Terrain-Following Numerical Models: Comparison to a Laboratory Model for Upwelling over Submarine Canyons, *Journal of Geophysical Research*, 108, doi:10.1029/2001JC000978.
- Dinniman, M.S. and J.M. Klinck, 2002. The Influence of Open versus Periodic Alongshore Boundaries on Circulation near Submarine Canyons, *Journal of Atmospheric and Oceanic Technology*, 19, 1722-1737.
- Dinniman, M.S. and M.M. Rienecker, 1999. Frontogenesis in the North Pacific Oceanic Frontal Zones - A Numerical Simulation, *Journal of Physical Oceanography*, 29, 537-559.

Presentations Last Five Years (*denotes invited):

- Dinniman, M., J. Klinck and L. Padman. Transport pathways and consequences for Antarctic ice shelf basal meltwater. 2016 ROMS Asia-Pacific Workshop, October, 2016.
- Gwyther, D.E., K. Kushara, B.K. Galton-Fenzi and M.S. Dinniman. Modelling regional ice shelf/ocean interaction with ROMS. 2016 ROMS Asia-Pacific Workshop, October, 2016.
- Kumar, R., K. Hedstrom, M. Dinniman and D. Holland. Coupling ROMS-CICE for Polar COAWST model. 2016 ROMS Asia-Pacific Workshop, October, 2016.
- St-Laurent, P., M.S. Dinniman, R.M. Sherrell, S.E. Stammerjohn and P.L. Yager. Variability of physical parameters influencing the bloom of the most productive Antarctic coastal polynya (Amundsen Sea Polynya). West Antarctic Ice Sheet Initiative Workshop 2016, October, 2016.
- Yager, P., P. St-Laurent, R. Sherrell, H. Oliver, M. Dinniman and S. Stammerjohn. Melting ice enhances coastal biological production. West Antarctic Ice Sheet Initiative Workshop 2016, October, 2016.
- Dinniman, M., J. Klinck and L. Padman. Transport pathways and consequences for Antarctic ice-shelf basal meltwater. International Symposium on Interactions of Ice Sheets and Glaciers with the Ocean, July, 2016.
- St-Laurent, P., M. Dinniman, P. Yager, R. Sherrell and S. Stammerjohn. Simulating the upward transport of sediment-derived iron associated with the overturning circulation in ice-shelf cavities of the Amundsen Sea, Antarctica. International Symposium on Interactions of Ice Sheets and Glaciers with the Ocean, July, 2016.
- Dinniman, M. and J. Klinck. Antarctic polynyas: A coupled process requiring high model resolution in the ocean and atmosphere. International Workshop on Coupled Modeling of Polar Environments, June, 2016.

- Dinniman*, M., J. Klinck and L. Padman. Modeling transport of ice shelf basal meltwater around Antarctica. Climate and Cryosphere's Rising Seas on a Warming Earth II Workshop, May, 2016.
- Mu, L., P. Yager, P. St-Laurent, M. Dinniman, H. Oliver, S. Stammerjohn, R. Sherrell and E. Hofmann. Investigating the Role of Mesoscale Processes and Ice Dynamics in Carbon and Iron Fluxes in a Changing Amundsen Sea (INSPIRE). 2016 Ocean Sciences Meeting, February, 2016.
- Davis, L., E. Hofmann, J. Klinck, M. Dinniman, and M. Pinones. Comparison of *Euphausia superba*, *Euphausia crystallorophias*, *Pleuragramma antarcticum* and Environmental Distributions in the Western Ross Sea. 2016 Ocean Sciences Meeting, February, 2016.
- St-Laurent, P., M. Dinniman, E. Hofmann, R. Sherrell, S. Stammerjohn, P. Yager and E. Randall-Goodwin. Transport pathways of nutrients in the Amundsen Sea, Antarctica. 2016 Ocean Sciences Meeting, February, 2016.
- Mack, S., M. Dinniman, J. Klinck, P. Sedwick and D. McGillicuddy. Iron transport pathways in the Ross Sea: Physical processes affecting the supply of dFe in a regional ocean model. 2016 Ocean Sciences Meeting, February, 2016.
- McGillicuddy, D., P. Sedwick, M. Dinniman, K. Arrigo, T. Bibby, B. Greenan, E. Hofmann, J. Klinck, W. Smith, S. Mack, C. Marsay, B. Sohst and G. vanDijken. Iron Supply and Demand in an Antarctic Shelf Ecosystem. 2016 Ocean Sciences Meeting, February, 2016.
- Li, Y., D.J. McGillicuddy, Jr., M. Dinniman and J.M. Klinck, Processes regulating formation of low-salinity, high-biomass lenses along the edge of the Ross Ice Shelf. 2016 Ocean Sciences Meeting, February, 2016.
- Dinniman, M.S., J. Klinck and L. Padman. Transport of ice shelf basal meltwater around Antarctica. 2016 Ocean Sciences Meeting, February, 2016.
- Springer, S., L. Padman and M. Dinniman. Satellite studies of interactions between Antarctic Circumpolar Current eddies and sea ice. 2015 Fall AGU Meeting, December, 2015.
- Cuoto, N., O. Schofield, M. Dinniman and J. Graham. Modeling the intrusion pathways of Upper Circumpolar Deep Water to a biologically productive canyon. 2015 LTER ASM, September, 2015.
- Graham, J., J. Klinck and M. Dinniman. Modelling on-shelf ocean heat transport along the West Antarctic Peninsula. International Glaciological Society 2015 Meeting, August, 2015.
- Gwyther, D., E. Cougnon, B. Galton-Fenzi, M. Dinniman, J. Roberts and J. Hunter. Using idealised models to explore uncertainties in ice shelf-ocean interaction. International Glaciological Society 2015 Meeting, August, 2015.
- Mack, S., M. Dinniman and J. Klinck. Effect of tides and eddies on Ross Ice Shelf basal melt from a regional ocean model. 26th IUGG General Assembly, June, 2015.
- Dinniman*, M. Ocean melting of Antarctic ice shelves: Why do we care and the tricky business of modeling how it might change. Invited Seminar, University of Arizona Department of Geosciences, May, 2015.
- Dinniman*, M. The Length Scale of Physical Processes on the Antarctic Continental Shelves and Implications of this for Modeling Biogeochemical Cycles. Southern Ocean Dynamics and Biogeochemistry Workshop, February, 2015.
- Klinck, J., M. Dinniman, D. Bromwich, D. Holland. Effect of Atmospheric Forcing Resolution on Delivery of Ocean Heat to the Antarctic Floating Ice Shelves. 2014 Fall AGU Meeting, December, 2014.

- Dinniman*, M., J. Klinck, L.-S. Bai, D. Bromwich, K. Hines and D. Holland. Sensitivity of modeled ice shelf basal melt around the Antarctic to the resolution of the atmospheric forcing and the ocean model. Climate and Cryosphere's West Antarctica Glacier-Ocean Modeling (CliC-WAGOM) Workshop, October, 2014.
- Salmon, E., M. Dinniman and E. Hofmann. NPZD-Iron lower trophic level model of the Ross Sea: Processes controlling the seasonal cycle of biological production. Advances in Marine Ecosystem Research IV Symposium, July, 2014.
- Huckstadt, L.A., D.M. Palacios, M.A. Pinones, B.I. McDonald, M. Dinniman, E.E. Hofmann, J.M. Burns, M.E. Goebel, M.A. Fedak, D.E. Crocker and D.P. Costa. Habitat preference of crabeater seals in the rapidly changing western Antarctic Peninsula. IMBER Open Science Conference, June, 2014.
- Hofmann, E.E., W.O. Smith, Jr., M.S. Dinniman and J.M. Klinck. The Effects of Changing Winds and Temperatures on the Oceanography of the Ross Sea in the 21st Century. IMBER Open Science Conference, June, 2014.
- McGillicuddy, D., M. Dinniman, P. Sedwick, W.O. Smith, Jr. and B. Greenan. Processes Regulating Iron Supply at the Mesoscale (PRISM) Project. IMBER Open Science Conference, June, 2014.
- Piñones, A., E.E. Hofmann, M.S. Dinniman and L.B. Davis. Transport and fate of Euphausiid larvae in the Ross Sea. IMBER Open Science Conference, June, 2014.
- Salmon, E., M.S. Dinniman, E.E. Hofmann. NPZD-iron lower trophic level model of the Ross Sea: Processes controlling the seasonal cycle of biological production. IMBER Open Science Conference, June, 2014.
- Dinniman*, M. Outstanding Issues in Modeling Aspects of the Open Continental Shelf Circulation that Affect Antarctic Ice Shelves. Invited Overview, ESF Exploratory Workshop on Oceanic Heat Transport to Floating Glaciers in Antarctica, May, 2014.
- Dinniman, M., J. Klinck and W. Smith, Jr. Sensitivity of sea ice, water masses and ice shelf basal melt in the Ross Sea to changes in the winds and atmospheric temperatures. IGS 2014 Sea-Ice Symposium, March 2014.
- Sedwick P., D. McGillicuddy, M. Dinniman, T. Bibby, B. Greenan, E. Hofmann, J. Klinck, S. Mack, C. Marsay, W. Smith and B. Sohst. Importance of sea-ice derived iron for primary production in the Ross Sea polynya: results from the PRISM project. IGS 2014 Sea-Ice Symposium, March 2014.
- Salmon, E., M. Dinniman and E. Hofmann. NPZD-Iron lower level ecosystem model. IGS 2014 Sea-Ice Symposium, March 2014.
- Salmon, E., M. Dinniman and E. Hofmann. NPZD-Iron lower level ecosystem model of the Ross Sea: A study of the processes controlling the seasonal cycle of biological production. 2014 Ocean Sciences Meeting, February 2014.
- McGillicuddy, D.J., P.N. Sedwick, M.S. Dinniman and K.R. Arrigo. Iron supply and demand in an Antarctic shelf ecosystem. 2014 Ocean Sciences Meeting, February 2014.
- Mack, S, M. Dinniman, B. Greenan, S. Springer and J. Klinck. Role of tidally induced mixing in the Ross Sea. 2014 Ocean Sciences Meeting, February 2014.
- Dinniman, M.S., L.S. Bai, D.H. Bromwich and J.M. Klinck. Sensitivity of modeled ice shelf basal melt around the Antarctic to the atmospheric forcing. 2014 Ocean Sciences Meeting, February 2014.

- St-Laurent, P., J.M. Klinck and M.S. Dinniman. Vertical and horizontal transport by mesoscale eddies in the Amundsen Sea: Where, when and how much? 2014 Ocean Sciences Meeting, February 2014.
- Klinck, J., M. Dinniman, B. Greenan and D. McGillicuddy. Horizontal structure of ocean properties in the southern Ross Sea. 2014 Ocean Sciences Meeting, February 2014.
- Marsay, C.M., P.N. Sedwick, M.S. Dinniman, B.M. Sohst, B. M. and D.J. McGillicuddy. An assessment of benthic iron efflux on the Ross Sea continental shelf and its contribution to surface water dissolved iron supply. 2014 Ocean Sciences Meeting, February 2014.
- Yoo, C., L.-S. Bai, D.H. Bromwich, M.S. Dinniman, E.P. Gerber, K.M. Hines, D.M. Holland and J.M. Klinck. Impact of Stratospheric Ozone on Cross Shelf Exchange around the Antarctic. 2013 Fall AGU meeting, December 2013.
- Stern, A.A., M.S. Dinniman, V. Zagorodnov, S.W. Tyler and D.M. Holland. Intrusion of warm surface water beneath the McMurdo Ice Shelf, Antarctica. 2013 Fall AGU meeting, December 2013.
- Piñones, A., E.E. Hofmann and M.S. Dinniman. Transport and fate of Euphasiid larvae in the Ross Sea. XIth SCAR Biology Symposium, July 2013.
- Salmon, E., M. Dinniman and E. Hofmann. NPZD-iron lower level ecosystem model of the Ross Sea. 2013 Ocean Carbon and Biogeochemistry Summer Workshop, July 2013.
- McGillicuddy, D., P. Sedwick, M. Dinniman, T. Bibby, B. Greenan, E. Hofmann, J. Klinck, C. Marsay, W. Smith and B. Sohst. Iron Sources on the Ross Sea Continental Shelf: Initial Results from the PRISM Project. IAHS-IAPSO-IASPEI Joint Assembly, July 2013.
- St-Laurent, P., J. Klinck and M. Dinniman. What Determines the Differences in Basal Melt between Ice Shelves in the Amundsen Sea. 27th International Forum for Research into Ice Shelf Processes, June 2013.
- Dinniman, M., J. Klinck and W.O. Smith, Jr. Sensitivity of Water Masses and Ice Shelf Basal Melt in the Ross Sea to Changes in the Winds and Atmospheric Temperatures. 27th International Forum for Research into Ice Shelf Processes, June 2013.
- Bromwich, D., L.-S. Bai, M. Dinniman, E. Gerber, K. Hines, D. Holland, J. Klinck, J. Nicolas and C. Yoo. The ACCIMA Project - Coupled Modeling of the High Southern Latitudes. 27th International Forum for Research into Ice Shelf Processes, June 2013.
- Dinniman, M., J. Klinck and W. Smith, Jr. Sensitivity of Water Masses in the Ross Sea to Changes in the Winds and Atmospheric Temperatures. 12th AMS Conference on Polar Meteorology and Oceanography, April 2013.
- Mack, S., L. Padman, S. Springer, M. Dinniman and J. Klinck. Tidal contribution to sea ice variability in the Ross Sea from AMSR-E satellite data and modeling. 12th AMS Conference on Polar Meteorology and Oceanography, April 2013.
- Bromwich, D.H., K. Hines, L.-S. Bai, M.S. Dinniman, E.P. Gerber, K.M. Hines, D.M. Holland, J.M. Klinck, J.P. Nicolas and C. Yoo. The ACCIMA Project - Coupled Modeling of the High Southern Latitudes. 12th AMS Conference on Polar Meteorology and Oceanography, April 2013.
- Sedwick, P., D. McGillicuddy, M. Dinniman, T. Bibby, B. Greenan, E. Hofmann, J. Klinck, C. Marsay, W. Smith and B. Sohst. Iron sources on the Ross Sea continental shelf: Initial results from the PRISM project. ASLO 2013 Aquatic Sciences Meeting, February, 2013.
- Dinniman*, M. Sensitivity of Intrusions of Circumpolar Deep Water onto Antarctic Continental Shelves to Changes in the Atmosphere. Invited Seminar, Lamont-Doherty Earth Observatory Division of Ocean and Climate Physics Seminar Series, November, 2012.

- Dinniman*, M. Circumpolar Deep Water Intrusions onto Antarctic Continental Shelves: Why We Care and How Might it Change. Invited Seminar, Virginia Institute of Marine Science Biological Sciences Noon Seminar Series, October 8, 2012.
- St-Laurent, P., J.M. Klinck, M.S. Dinniman. Influence of Ocean Circulation Patterns on Ocean Heat Transport to Ice Shelves. WAIS Workshop, September, 2012.
- Ashford, J., M. Dinniman, C. Brooks, A. Andrews, E. Hofmann, G. Cailliet, C. Jones and N. Ramanna. Does large-scale circulation structure life history connectivity in Antarctic toothfish (*Dissostichus mawsoni*)? SCAR Open Science Conference, July, 2012.
- Piñones, A., E. Hofmann, D. Costa, K. Goetz, J. Burns, M. Dinniman and J. Klinck. Characterization of temporal and spatial variability in hydrographic conditions in the Ross Sea from instrumented seals. SCAR Open Science Conference, July, 2012.
- Ferguson, J., J. Ashford, A. Pinones, M. Dinniman, J. Torres and C. Jones. Testing connectivity of a fully pelagic forage fish, Antarctic silverfish, along the West Antarctic Peninsula and South Orkney Shelf using otolith chemistry and particle-tracking simulations. SCAR Open Science Conference, July, 2012.
- Springer, S., L. Padman and M. Dinniman. Modeling mass loss through basal melting in the Ross Ice Shelf frontal zone. SCAR Open Science Conference, July, 2012.
- Mack, S., S. Springer, M. Dinniman, L. Padman and J. Klinck. Diurnal tidal effects on sea ice concentration in the Ross Sea from AMSR-E satellite data and a regional ocean model. SCAR Open Science Conference, July, 2012.
- Dinniman, M., J. Klinck and W. Smith, Jr. Sensitivity of Modified Circumpolar Deep Water in the Ross Sea to Changes in the Winds and Atmospheric Temperatures. SCAR Open Science Conference, July, 2012.
- Piñones, A., E. Hofmann and M. Dinniman. The fate of biological hot spots in a changing climate. SCAR Open Science Conference, July, 2012.
- Bromwich, D., K. Hines, L.-S. Bai, J. Nicolas, D. Holland, J. Klinck, M. Dinniman, C. Yoo and E. Gerber. The ACCIMA Project. SCAR Open Science Conference, July 2012.
- St-Laurent, P., J.M. Klinck and M.S. Dinniman. Comparing the Oceanic Heat Transport to Antarctic Ice Shelves for Two Generic Continental Shelves. 26th International Forum for Research into Ice Shelf Processes, June, 2012.
- Dinniman, M., J. Klinck and W. Smith, Jr. Sensitivity of Modified Circumpolar Deep Water in the Ross Sea to Changes in the Winds and Atmospheric Temperatures. 26th International Forum for Research into Ice Shelf Processes, June, 2012.
- Bromwich, D., L.-S. Bai, M. Dinniman, E. Gerber, K. Hines, D. Holland, J. Klinck, J. Nicolas and C. Yoo. The ACCIMA Project - Coupled Modeling of the High Southern Latitudes. 26th International Forum for Research into Ice Shelf Processes, June, 2012.
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Other Professional Service:

Reviewer for: National Science Foundation
U.K. Natural Environment Research Council
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Estuarine, Coastal and Shelf Science
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Geoscientific Model Development
Journal of Geophysical Research
Journal of Great Lakes Research
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