Ayumi Fujisaki-Manome

Climate & Space Sciences and Engineering
2517D Space Research Building,
2455 Hayward St, Ann Arbor, MI 48109
Phone: 734-936-0502
Emails: ayumif@umich.edu

Cooperative Institute for Great Lakes Research
4840 S. State Rd, Ann Arbor, MI 48108
Phone: 734-741-2289
Email: ayumi.fujisaki@noaa.gov

Education

Ph.D., Ocean Engineering, the University of Tokyo in 2009
- Thesis title: "Ice-ocean coupled system in the Sea of Okhotsk based on a high-resolution numerical model." (Advisor: Hajime Yamaguchi)

M.S., Ocean Engineering, the University of Tokyo in 2006
- Thesis title: "Improvement of Short-Term Sea Ice Forecast in the Southern Okhotsk Sea." (Advisor: Hajime Yamaguchi)

B.S., Electronics and Electrical Engineering, Keio University in 2004
- Thesis title: "Influence of A/D Conversion Error on Wireless Communications using OFDM Modulation." (Advisor: Yukitoshi Sanada)

Academic Positions

- *2016-present*: Assistant Research Scientist, Cooperative Institute for Great Lakes Research (CIGLR). Affiliated with Climate & Space Sciences and Engineering, University of Michigan.
- *2011 – 2016*: Postdoctoral Research Fellow, Cooperative Institute for Limnology and Ecosystems Research (CILER), School of Natural Resources and Environment.
- *2010*: Postdoctoral Research Fellow, Institute of Low Temperature Science, Hokkaido University (short stay while waiting for the visa process at U-M)
- *2009-2010*: Visiting Postdoctoral Research Fellow, Atmospheric and Oceanic Science Program, Princeton University. Funded by JSPS fellowship.
- *2008-2009*: Graduate Research Fellow, University of Tokyo, supported by the Japan Society for the Promotion of Science (JSPS).

Honors and Awards

- The NOAA Team Member of the Month Award, April 2019. Selected out of ~7000 NOAA affiliates.
- Estuarine and Coastal Modeling Best Paper Award, 2018, with other co-authors.
- Outstanding Young Scientist Award, International Workshop on Modeling the Ocean, Norfolk, VA, May 24-26, 2010. A. Fujisaki (Manome) and L. Oey, "Formation of ice bands by wind", 3rd place.
- The Japan Society for the Promotion of Science, Research Fellowship, 2008-2009.
- Outstanding Young Scientist Award, International Workshop on Modeling the Ocean, Taipei, Feb. 26, 2009. A. Fujisaki (Manome), H. Yamaguchi, H. Mitsudera, "Investigation of ice-ocean coupled system in the Sea of Okhotsk using a numerical

model", 2nd place.
- Scientific Award, The Cold Region Technology Conference, Sapporo, Nov. 29, 2006. A. Fujisaki (Manome), H. Yamaguchi, F. Duan, K. Takemori, "Improvement of Short-term Numerical Sea Ice Forecasting in the Southern Okhotsk Sea (in Japanese)"

Research Grants

- NOAA/OAR, Office of Weather and Air Quality, "*Improving Lake-Effect Snow Forecasting Capabilities via Advanced Coupling Techniques in NOAA's Unified Forecast System (UFS)*", $750,000 (total, UM amount $615,000), Co-PI, 07/01/2019 - 06/30/2022.
- NOAA, Climate Program Office, "Scaling-up Stakeholder Engagement Workshops to Inform Better Communication & Uptake of NOAA Great Lakes Ice Forecast Information", Co-PI, $200,000, 10/01/2019 - 09/30/2020.
- University of Michigan Graham Sustainability Institute, "Knowledge co-production in effective communication of Great Lakes ice forecasts", $10,000, Jan.2019-Aug.2019. PI.
- National Oceanic and Atmospheric Administration, "Building Coupled Storm Surge and Wave Operational Forecasting Capacity for Western Alaska", Oct.2018-Sep.2021. Collaborator with U. Notre Dame and NOAA GLERL, U-M received $330,206.
- National Oceanic and Atmospheric Administration, "Implementation of the FVCOM-Ice model for the Great Lakes Operational Forecasting System (GLOFS)", $314,074, Sep.2017-Aug.2020. Co-PI.
- National Oceanic and Atmospheric Administration, "Improving Lake-Effect Snow and Cloud Forecast Capability for the Great Lakes Region", $243,702, Aug.2017-Jul.2019. Co-PI.
- National Oceanic and Atmospheric Administration, "Evaluation of the evaporation and heat flux algorithms for the Great Lakes based on the eddy covariance measurements", $110,000, Sept.2016-Aug. 2017. Co-PI.
- Climate Program Office, National Oceanic and Atmospheric Administration, "Modeling sea ice-ocean-ecosystem responses to climate changes in the Arctic Ocean and East Siberian Sea using CIOM/PhEcoM with data assimilation from RUSALCA measurements", $75,000. Jul. 2016 – Jun. 2019. Co-PI.
- National Oceanic and Atmospheric Administration, "A high-resolution atmospheric, wave and circulation model guidance system for the Great Lakes Region,". Jul. 2014 – Aug. 2017. Collaborator, U-M received $343,770.
- Climate Program Office, National Oceanic and Atmospheric Administration, "Modeling sea ice-ocean-ecosystem responses to climate changes in the Arctic Ocean and East Siberian Sea using CIOM/PhEcoM with data assimilation from RUSALCA measurements", $75,000. Jul. 2016 – Jun. 2019. Co-PI.
- The Japan Society for the Promotion of Science (JSPS). Grant-in-Aid for Scientific Research for fellows: "Investigation of the ice-ocean coupled system in the Sea of Okhotsk based on a high-resolution numerical model," 2-year stipend 4,800,000 JPY (~$43,000) + research grant 1200,000 JPY (~$11,000). Apr. 2008 – Mar. 2009. PI.
- Sasagawa Grant for Scientific Research, Japan Science Society, "Development of a

high-resolution ice forecast system in the coastal region off Hokkaido", PI, 600,000 JPY (~$5,500). Apr. 2006 – Mar. 2007. PI.

Publications

ORCID: 0000-0001-5466-6332. 13 publications, 9 as first author, 10 as corresponding author.
h-index = 8; citation = 155 (Google Scholar), *h*-index = 6; citation = 123 (Scopus)

Submitted

1. Saiki, R., Mitsudera, H., Fujisaki-Manome, A., Kimura, N., Ukita, J., Toyota, T., and Nakamura, T., A Mechanism of Ice-Band Pattern Formation Caused by Resonant Interaction between Sea Ice and Internal Waves in a Continuously Stratified Ocean, submitted to Progress in Oceanography.
2. **Fujisaki-Manome, A**., D.G. Gill, T. Guo, E.J. Anderson, and M.C. Lemos, Knowledge Co-production in a Research-to-Operation (R2O) Process for Development of a Great Lakes Ice Forecast: Reflection from a Stakeholder Engagement Workshop, submitted to *Journal of Operational Oceanogerphy*.
3. **Fujisaki-Manome, A.,** E.J. Anderson, J.A. Kessler, P.Y. Chu, J. Wang, and A.D. Gronewold, Simulating impacts of precipitation on ice cover and surface water temperature across large lakes, submitted to *Journal of Geophysical Research Oceans*.

Published

1. Anderson, E.J., **Fujisaki-Manome, A.**, Kessler, J., Chu, Y.P., Kelley, J., Lang, G., Chen, Y., and Wang, J. (2018), Ice Forecasting in the Next-Generation Great Lakes Operational Forecast System (GLOFS), *J. Mar. Sci. Eng.*, 6(123), doi:10.3390/jmse6040123.
2. Charusombat, U., **Fujisaki-Manome, A**., A.D. Gronewold, B.M. Lofgren, E.J. Anderson, P.D. Blanken, C. Spence, J.D. Lenters, C. Xiao, L.E. Fitzpatrick, and G. Cutrell (2018), Validating modeled turbulent heat fluxes across large freshwater surfaces, *Hydrol. Earth Syst. Sci.*, 22, 5559-5578, https://doi.org/10.5194/hess-22-5559-2018 (corresponding author).
3. **Fujisaki-Manome, A**. L. Fitzpatrick, A.D. Gronewold, E.J. Anderson, C. Spence, J. Chen, C. Shao, D. Wright, C. Xiao, and B.M. Lofgren (2017), Turbulent Heat Fluxes during an Extreme Lake Effect Snow Event, *J. Hydrometeorology*, *18*(12), pp. 3145–3163.
4. **Fujisaki (Manome)**, A., Mitsudera, H., Wang, J., and Wakatsuchi, M. (2014), How does the Amur River discharge flow over the northwestern continental shelf in the Sea of Okhotsk?, Progress in Oceanography., 126, pp. 8-20, doi: 10.1016/j.pocean.2014.04.028.
5. **Fujisaki (Manome), A**., Wang, J., Lofgren, B., Bai, X, and Leshkevich, G. (2013), Interannual variability of ice cover, circulation, and thermal structure in Lake Erie from 2003 to 2012, Journal of Geophysical Research-Oceans., 118(9), pp. 4286-4304, doi: 10.1002/jgrc.20312.

6. Wang, J., Cao, C., Mizobata, K., Hu, H., Bai, X., Yu, Y., Eicken, H., Ikeda, M., Johnson, W., Perie, W. **Fujisaki (Manome), A.** (2013), Modeling landfast ice and coastal circulation in the nearshore Beaufort and Chukchi Seas using CIOM, Journal of Geophysical Research-Oceans, 119(6), pp. 3285-3312, doi: 10.1002/2013JC009258.
7. **Fujisaki (Manome), A.**, Wang, J., Hu, H., Schwab, D.J., Hawley, N., and Yerubamdi, R. (2012), A modeling study of ice-water process for Lake Erie using coupled ice-circulation models, Journal of Great Lakes Research, 38(4), pp. 585-599, doi: 10.1016/j.jglr.2012.09.021.
8. **Fujisaki (Manome), A.**, and Oey, L. (2011), Formation of ice bands by winds, Journal of Geophysical Research-Oceans, 116, C10015, 14 pages, doi:10.1029/2010JC006655.
9. Chang, Y-L, Oey, L, Lu, X, and Fujisaki (Manome) A, (2011), 2010 Oil Spill – trajectory projections based on ensemble drifter analyses, Ocean Dynamics, doi: 10.1007/s10236-011-0397-4.
10. **Fujisaki (Manome), A.**, Mitsudera, H., and Yamagushi, H. (2011), Dense Shelf Water formation process in the Sea of Okhotsk: Sensitivity study with a high-resolution ice-ocean coupled model, Journal of Geophysical Research, 116, C03005, 15 pages, doi:10.1029/2009JC006007.
11. **Fujisaki (Manome), A.**, Yamaguchi, H., and Mitsudera, H. (2010), Numerical Experiment of air-ice drag coefficient and its impact on ice-ocean coupled system in the Sea of Okhotsk, Ocean Dynamics, 60 (2), pp. 377-394, DOI: 10.1007/s10236-010-0265-7.
12. **Fujisaki (Manome), A.**, Yamaguchi, H., Toyota, T., Futatsudera, A., Miyanaga, M. (2009), Measurements of Air-Sea Drag Coefficient over the Ice-Covered Sea of Okhotsk, Journal of Oceanography, 65(4), pp.487-498, DOI: 10.1007/s10872-009-0042-8.
13. **Fujisaki (Manome), A.**, Yamaguchi, H., Duan, F., and Sagawa, G. (2007), Improvement of Short-Term Sea Ice Forecast in the Southern Okhotsk Sea, Journal of Oceanography, 63(5), pp.775-790, DOI: 10.1007/s10872-007-0066-x.

Other non-refereed publications

1. **Fujisaki-Manome, A.,** D.G. Gill, E.J. Anderson, T. Guo, and M.C. Lemos, 2019: Report on The Great Lakes Ice Forecast Workshop, Available from the University of Michigan Graham Sustainability Institute web site: http://graham.umich.edu/activity/43899
2. **Fujisaki-Manome, A**., Mitsudera, H., Wang, J., and Wakatsuchi, M., 2016. "How does the Amur River discharge flow over the northwestern continental shelf in the Sea of Okhotsk?", Contributions from ILTS, Hokkaido University. In Japanese.

Other research products

Model development

- Contributor to the Princeton Ocean Model (maintained by L. Oey at Princeton University). Developed ICEPOM by fully parallelizing Princeton Ocean Model with the message-passing-interface library, re-writing into Fortran 90, and coupling it to sea/lake ice processes.

- Contributor to the Finite Volume Community Ocean Model (maintained by C. Chen at University of Massachusetts-Dartmouth). Updating its ice module for freshwater applications.

Invited Talks

1. "Turbulent Heat Fluxes during an Extreme Lake Effect Snow Event: Direct Measurements and Model Ensemble", *Invited presentation at session "High performance computing for next generation weather, climate, and environmental sciences using K", Japan Geophysical Union-American Geophysical Union joint meeting 2017*, Makuhari, Chiba, Japan, May 20th-25th, 2017.
2. **"**Simulating hydrodynamics and ice cover in Lake Erie using an unstructured grid model", *Keynote Speech at the 23rd International Association for Hydro-Environment Engineering and Research (IAHR) International Symposium on Ice*, Ann Arbor MI, May 31-June 3, 2016.
3. "Numerical Modeling of Coastal Ice-covered Waters: Toward better understanding of nearshore processes and forecast for hazard prediction", *Special Seminar at Stevens Institute of Technology*, November 21st, 2014

Other Talks

1. Seminar series at Japan Agency for Marine-Earth Science and Technology (JAMSTEC), "Ice-lake model development for climate research and operational coastal forecasts: Application to the Laurentian Great Lakes" April 19th, 2016
2. CLasP weekly seminar "Ice-ocean/lake model development for climate research and operational ice forecasts: Application to the Laurentian Great Lakes." Climate and Space Sciences and Engineering Department, University of Michigan November 19th, 2015
3. GLERL-CILER seminar series, "Impacts of ice cover on Lake Erie hydrodynamics, from a 3D ice-hydrodynamic coupled model", NOAA Great Lakes Environmental Research Laboratory, June 12th, 2013.
4. Conservation Ecology Seminar, "Changing Great Lakes ice cover under climate variability, its impacts on the coastal physics and its ecological implications", School of Natural Resources and Environment, University of Michigan, March 1, 2013.
5. GLERL-CILER seminar series, "Ice-lake models for Lake Erie: Sensitivity study for ice-water processes", NOAA Great Lakes Environmental Research Laboratory, April 19th, 2011.

Conference presentations

1. **Fujisaki-Manome, A.**, G.E. Mann, E.J. Anderson, P.Y. Chu, L.E. Fitzpatrick, G.A. Lang, E.P. James, S.G. Benjamin, C. Alexander, J.G.W. Kelley, Y. Chen, and M. Rostaminia, Advancement of integrated winter weather forecasts in the Great Lakes region: Linking operational weather, lake, ice models, and user engagement, 2020 Americal Meteorological Society Annual Meeting, 10th Conference on Transition of Research to Operations, Boston, MA, January 12-16, 2020.
2. **Fujisaki-Manome, A.**, E.J. Anderson, J.A. Kessler, G.A. Lang, P.Y. Chu, J. Wang, J. Kelley, Y. Chen, and A. Zhang, Great Lakes Ice Forecast Model Development, the International Icebreaking Conference, U.S. Coast Guard, Cleveland OH, October 29-

30, 2019.

3. **Fujisaki-Manome, A.**, E.J. Anderson, J.A. Kessler, G.A. Lang, J. Wang, and P. Chu,"Impacts of Precipitation on Ice Cover and Water Temperature in the Great Lakes", 62nd Annual Conference on Great Lakes Research, International Association for Great Lakes Research, Brockport NY, June 10-14, 2019.
4. **Fujisaki-Manome, A.**, E.J. Anderson, J.A. Kessler, G.A. Lang, J. Wang, and P. Chu, Impacts of Sensible Heat from Precipitation on Ice Cover in Large Lakes, AGU Fall meeting, Washington D.C., December 10th-14th, 2018.
5. **Fujisaki-Manome, A.**, A.D. Gronewold, B.M. Lofgren, E.J. Anderson, L. Fitzpatrick, P. Blanken, C. Spence, J.D. Lenters, C. Xiao, U. Charusombat, Validating modeled turbulent heat fluxes across large freshwater surfaces, AGU Fall meeting 2017, New Orleans, LA, December 11th-15th, 2017 (poster).
6. **Fujisaki-Manome, A**., J. Wang, and E.J. Anderson, Modeled ice thickness in Lake Erie with different parameterizations of the ice strength, JpGU-AGU joint meeting 2017, Makuhari, Chiba, Japan, May 20th-25th, 2017 (poster).
7. **Fujisaki-Manome, A.**, J. Wang, and E.J. Anderson, Modeled ice thickness in Lake Erie with different parameterizations of the ice strength, Conference of International Association for Great Lakes Research, Detroit, MI, May 15-19, 2017.
8. **Fujisaki-Manome**, **A.**, Reconstructing turbulent heat fluxes over Lake Erie using an unstructured grid model – extreme lake effect snow, FVCOM Users Workshop 2016, Bedford Institute of Oceanography, October 18-20, 2016
9. **Fujisaki-Manome, A.** and J. Wang, Simulating sea ice in the Arctic Ocean and Eastern Siberian Sea The 23rd International Association for Hydro-Environment Engineering and Research (IAHR) International Symposium on Ice, Ann Arbor MI, May 31-June 3, 2016.
10. **Fujisaki-Manome, A.**, and J. Wang, Simulating hydrodynamics and ice cover in Lake Erie using an unstructured grid model, 8th International Workshop on Modeling Ocean, Bologna, Italy, June 6-10, 2016.
11. **Fujisaki-Manome, A.** and J. Wang, Simulating hydrodynamics and ice cover in Lake Erie using an unstructured grid model, American Geophysical Union, Ocean Sciences Meeting, New Orleans, LA, February 21-26, 2016. (poster)
12. **Fujisaki-Manome, A.**, J. Wang, and D. Hall, Ice-hydrodynamic simulation with data assimilation of satellite-derived ice surface temperature, Conference of International Association for Great Lakes Research, Burlington, VT, May 25-29, 2015.
13. **Fujisaki (Manome), A.,** J. Wang, and X. Bai, Ice-hydrodynamic coupled simulation in Lake Erie with FVCOM, Conference of International Association for Great Lakes Research, Hamilton, ON, May 26-30, 2014.
14. **Fujisaki (Manome), A.**, J. Wang, X. Bai, G. Leshkevich, and B. Lofgren, Model-simulated interannual variability of Lake Erie ice cover, circulation, and thermal structure in response to atmospheric forcing, 2003-2012, Conference of International Association for Great Lakes Research, West Lafayette, IN, June 2-6, 2013.
15. **Fujisaki (Manome), A.**, J. Wang, and D. Schwab, Interannual variability of ice cover, circulation, and thermal structure in Lake Erie from 2003 to 2012, Workshop on Methods of Projecting Hydrologic Impacts of Climate Change, NOAA/GLERL Lake Michigan Field Station, Muskegon, MI, August 27-29, 2012 (poster).
16. **Fujisaki (Manome), A.**, J. Wang, D. Schwab, Interannual variability of ice-

circulation coupled system in Lake Erie, Conference of International Association for Great Lakes Research, Cornwall, Ontario, Canada, May 13-17, 2012.

17. **Fujisaki (Manome), A.**, H. Mitsudera, and M. Wakatsuchi, Ice-Ocean coupled model with 1 km grids to study the dense shelf water transport in the Sea of Okhotsk, Ocean Sciences Meeting, American Geophysical Union, Salt Lake City, Utah, US, February 20-24, 2012 (poster).
18. **Fujisaki (Manome), A.**, J. Wang, H. Hu, and D. Schwab, Comparison of ice-ocean models for Lake Erie, Conference of International Association for Great Lakes Research, Duluth, Minnesota, USA, May 30 – June 3, 2011.
19. **Fujisaki (Manome), A.**, and L. Oey, Generation mechanism of ice bands and their grid size dependence, Western Pacific Geophysical Meeting, American Geophysical Union, Taipei, Taiwan, June 22-25, 2010.
20. **Fujisaki (Manome), A.**, and L. Oey, Coupled response to wind on small-scale ice and ocean features; How are ice-bands formed?, Ocean Sciences Meeting, American Geophysical Union, Portland, Oregon, US, February 22-26, 2010. (poster).
21. **Fujisaki (Manome), A.**, H. Yamaguchi, H. Mitsudera, Investigation of ice-ocean coupled system in the Sea of Okhotsk using a numerical model, Proc. International Workshop on Modeling the Ocean: Dynamics, Systheses and Prediction, Taipei, Taiwan, Feb. 23-26, 2009, pp. 37.
22. **Fujisaki (Manome), A.**, H. Yamaguchi, and H. Mitsudera, Investigation of ice-ocean coupled system in the Sea of Okhotsk using a numerical model, Proc.24rd International Symposium on Okhotsk Sea & Sea Ice, Mombetsu, Hokkaido, Feb. 15-18, 2009, pp. 97-100.
23. **Fujisaki (Manome), A.**, H. Yamaguchi, and G. Sagawa, Numerical study of the Sea of Okhotsk with a high-resolution ice-ocean model, Proc.23rd International Symposium on Okhotsk Sea & Sea Ice, Mombetsu, Hokkaido, Feb. 16-22, 2008, pp.46-49.
24. **Fujisaki (Manome), A.**, H. Yamaguchi, T. Toyota, A. Futatsudera, and M. Miyanaga, Measurements of Turbulent Fluxes over Sea Ice Region in the Sea of Okhotsk, Proc.CD American Geophysical Union Fall Meeting, San Francisco, Dec. 10-14, 2007, Paper No. C21A-0064, 1p..(poster)
25. **Fujisaki (Manome), A.**, H. Yamaguchi, F. Duan, and G. Sagawa, Improvement of Short-term Numerical Sea Ice Forecasting in the Southern Okhotsk Sea, The 16th International Offshore and Polar Engineering Conference, San Francisco, CA, 2006, pp. 591-598.

Media Contributions

1. *CIGLR Winter 2018 News Letter*, Featured Research, "Forecasting the Future of Lake Effect Snow", February 28, 2018. https://mailchi.mp/9bd0701ee886/ciglr-enews-winter-2018?e=a4bd7b8868
2. *Great Lakes Echo*, "Imagine a Great Lakes weather forecaster who's always right", November 20, 2017. http://greatlakesecho.org/2017/11/20/imagine-a-great-lakes-weatherman-whos-always-right/
3. *The Buffalo News*, "Better lake-effect forecasts are coming", November 24, 2017. http://buffalonews.com/2017/11/24/don-paul-better-lake-effect-forecasts-are-coming/

4. *The Ship & Ocean Newsletter, Ocean Policy Research Foundation*, No. 277., Fujisaki (Manome), A., 2012. "Research to Restore the Environment of the U.S. Great Lakes", In Japanese. (Brief introduction of the Great Lakes environmental background and relation to my research.)

Professional Service

Students supervised

- Yin Min Goh (U. of Michigan), Assessing precipitation impacts on Great Lake ice cover, Undergraduate Research Opportunity Program (URIP), September 2018-May 2019.
- Kyle Klein (CLaSP, U. of Michigan), Meteorological data analysis for lake effect snow forecasts, CLIMATE/SPACE 701 (Special Problems in Meteorology and Oceanography) and summer project, co-mentored by Frank Marsik (CLaSP), September 2017-August 2018.
- Peiyun Zhu (CLaSP, U. of Michigan), Hydrodynamic data analysis, May-July 2017
- Logan Lee (U. of North Dakota), Analysis of vessel based meteorological data, Great Lakes summer fellowship, May-August 2016
- Trent Frey (U. of Michigan), Meteorological data analysis, Great Lakes summer fellowship, May-August 2015
- James Kessler (U. of Michigan), Radiative transfer modeling of Great Lakes ice cover, Great Lakes summer fellowship, May-August 2015

Journal reviewer

Geophysical Research Letters, Journal of Geophysical Research, Progress in Oceanography, PLOS ONE, Water Resources Research, Journal of Atmospheric and Oceanic Technology, Journal of Oceanography, Ocean Dynamics, Polar Research, Hydrology Research, Canadian Journal of Civil Engineering, Journal of Great Lakes Research,

Proposal reviewer

National Science Foundation

Invited participants in the NSF-funded Coastlines and People (CoPe) Scoping Session in Chicago Sept. 26-28, 2018.

Conference organization

- IAHR International Symposium on Ice 2016 (Ann Arbor, MI, May 31st-June 3rd) Local committee member (Secretariat)
- Session convener, 2010 Western Pacific Geophysics Meeting, "Multiscale Interactions in Ocean: Small-scale Processes, Air-ice-ocean Interactions, Impacts on Large-scale prediction." (co-convener: Humio Mitsudera)

Informal modeling consultant for students and postdocs

Routinely being consulted with by students, postdocs, and professional scientists in Hokkaido University, the University of Tokyo, University of Toronto, and University of

São Paulo, Japan Agency for Marine-Earth Science and Technology (JAMSTEC) who apply FVCOM and ICEPOM (the ice-ocean modeling codes that I have contributed to) to regional oceans and process studies. Providing technical and scientific advices upon request.

Membership

American Geophysical Union, The Oceanographic Society of Japan, International Association for Great Lakes Research

Experience of Studying outside U.S. and Japan

Received funding from the University of Tokyo to visit Institute for Atmosphere and Climate, ETH Zurich, Switzwerland (Advisor, Prof. Atsumu Ohmura), Oct.-Nov. in 2006 and Jan. in 2007. Conducted literature review on ice-ocean interaction processes and formulated a review write-up.

Field experience

The measurement of the air-ice drag coefficient in the Sea of Okhotsk with the eddy covariance method (Peer-reviewed paper #12) in a cruise of the Patrol Vessel Soya, Japan Coast Guard, in February 2005.

Language

Japanese (native), English