

# KIM MORRIS

Researcher | Communicator | Problem Solver

[kim.morris.2000@gmail.com](mailto:kim.morris.2000@gmail.com)

<https://www.linkedin.com/in/morriskim>

## Publication List

### PAPERS AND BOOK CHAPTERS

- Sparrow, E.B., Gordon, L.S., Kopplin, M.R., Boger, R., Yule, S., Morris, K., Jaroensutasinee, K., Jaroensutasinee, M. and Yoshikawa K. (2014). Integrating Geoscience Research in Primary and Secondary Education In *Tong, V. (ed) Geoscience: Research--enhanced School and Public Outreach*, Innovations in Science and Technology 21, DOI 10.1007/978-94-007-6943-4, pp 227-250. Springer, London.
- Jeffries, M. O., K. Morris and C. R. Duguay. 2012. Floating Ice: Lake Ice and River Ice. In, *State of the Earth's Cryosphere at the Beginning of the 21st Century: Glaciers, Global Snow Cover, Floating Ice, and Permafrost and Periglacial Environments*. Satellite Image Atlas of Glaciers of the World, Professional Paper 1386-A, R. S. Williams and J. G. Ferrigno (editors), U.S. Geological Survey, A381-A414.
- Jeffries, M. O., K. Morris and C. R. Duguay. 2012. Lake Ice and River Ice. In, *The Earth's Dynamic Cryosphere and the Earth System: Supplemental Cryosphere Note 5*. Satellite Image Atlas of Glaciers of the World, Professional Paper 1386-A, R. S. Williams and J. G. Ferrigno (editors), U.S. Geological Survey.
- Williams, R. S., Ferrigno, J. G., Foley, K. M., Hall, D. K., Robinson, D. A., Parkinson, C. L., Cavalieri, D. J., Jeffries, M. O., Morris, K., Duguay, C. R., Brown, J., Heginbottom, J. A., Humlum, O., Svensson, H., Dyurgerov, M., Meier, M. F., Huntington, T. G., Thompson, L. G., Raup, B. H. and Kargel, J. S. 2012. *The Earth's Dynamic Cryosphere – Plate 1*. Satellite Image Atlas of Glaciers of the World, Professional Paper 1386-A, R. S. Williams and J. G. Ferrigno (editors), U.S. Geological Survey.
- Dickens, D., G. Hearon, K. Morris, K. Ambrosius and W. Horowitz. 2011. Mapping Sea Ice Overflood Using Remote Sensing: Alaskan Beaufort Sea. *Cold Regions Science and Technology*. DOI information: 10.1016/j.coldregions.2010.10.015.
- Zhou, X., S. Li, K. Morris and M. Jeffries. 2007. Albedo of summer snow on sea ice, Ross Sea, Antarctica. *Journal of Geophysical Research*, **112**, D16105, doi:10.1029/2006JD007907.
- Jeffries, M.O. and K. Morris. 2007. Some aspects of ice phenology on ponds in central Alaska. *Annals of Glaciology*, **46**, 397-403. (Also presented at the International Glaciological Society Symposium on Cryospheric Indicators of Global Climate Change, Cambridge, UK, August 2006.)
- Sparrow, E. B., J. H. Robin, L. S. Gordon, K. Morris, M. O. Jeffries, E. R. Levine, M. R. Kopplin, R. Boger, and D. L. Verbyla. 2007. Climate Change Research by Pre-College Students in the International Polar Year. In *Proceedings of the International Symposium on Asian Collaboration in the International Polar Year 2007-2008*. Japan Polar Year National Committee, Tokyo, Japan, 89-92.
- Jeffries, M. O. and K. Morris. 2006. Instantaneous daytime conductive heat flow through snow on lake ice in Alaska. *Hydrological Processes*, **20**, 803-815.
- Morris, K., M. O. Jeffries and C. R. Duguay. 2005. Model simulation of the effects of climate variability and change on lake ice in central Alaska. *Annals of Glaciology*, **40**, 113-118.
- Jeffries, M.O., K. Morris and C.R. Duguay. 2005. Lake ice growth and decay in central Alaska: observations and computer simulations compared. *Annals of Glaciology*, **40**, 195-199.

- Jeffries, M.O., K. Morris and N. Kozlenko. 2005. Ice characteristics & processes, and remote sensing of frozen rivers and lakes. In *Remote Sensing in Northern Hydrology*, edited by C. R. Duguay and A. Pietroniero, AGU Monograph **163**, 63-90.
- Duguay, C. R., G. M. Flato, M. O. Jeffries, P. Ménard, K. Morris and W. R. Rouse. 2003. Ice cover variability on shallow lakes at high latitudes: Model simulations and observations. *Hydrological Processes*, **17**, 3465-3483.
- Morris, K. and M. O. Jeffries. 2001. Seasonal contrasts in snow cover characteristics on Ross Sea ice floes. *Annals of Glaciology*, **33**, 61-68.
- Zhou, X., S. Li and K. Morris. 2001. Measurement of all-wave and spectral albedo of snow surface on the summer sea ice in the Ross Sea. *Annals of Glaciology*, **33**, 267-274.
- Massom, R. A., H. Eicken, C. Haas, M. O. Jeffries and 10 others. 2001. Snow on Antarctic sea ice. *Reviews of Geophysics*, **39**(3), 413-445.
- Jeffries, M. O., K. Morris, T. Maksym, N. Kozlenko and T. Tin. 2001. Autumn sea ice thickness, ridging and heat flux variability in and adjacent to Terra Nova Bay, Ross Sea, Antarctica. *Journal of Geophysical Research*, 106(C3), 4437-4448.
- Morris, K., S. Li and M. Jeffries. 1999. Meso- and micro sea ice motion in the East Siberian Sea as determined from ERS-1 SAR data. *Journal of Glaciology*, 45(150), 370-383.
- Morris, K., M. O. Jeffries and S. Li. 1998. Sea ice characteristics and seasonal variability of ERS-1 SAR backscatter in the Bellingshausen Sea. In, M. O. Jeffries (ed.), *Antarctic Sea Ice: Physical Processes, Interactions and Variability*, Antarctic Research Series, AGU, Washington, 74, 213-242.
- Sturm, M., K. Morris and R. Massom. 1998. The character and distribution of the winter snow cover on the sea ice in the Bellingshausen, Amundsen and Ross seas, Antarctica, 1994-1995. In, M. O. Jeffries (ed.), *Antarctic Sea Ice: Physical Processes, Interactions and Variability*, Antarctic Research Series, AGU, Washington, 74, 1-18.
- Sturm, M., J. Holgrem, M. Koenig and K. Morris. 1997. The thermal conductivity of seasonal snow. *Journal of Glaciology*, 43(143), 26-41.
- Jeffries, M. O., A. P. Worby, K. Morris and W. F. Weeks. 1997. Seasonal variations in the properties and structural composition of sea ice and snow cover in the Bellingshausen and Amundsen seas, Antarctica. *Journal of Glaciology*, 43(143), 138-151.
- Jeffries, M. O., K. Morris and G. E. Liston. 1996. A method to determine lake depth and water availability on the North Slope of Alaska with spaceborne imaging radar and numerical ice growth modelling. *Arctic*, 49(4), 367-374.
- Worby, A. P., M. O. Jeffries, W. F. Weeks, K. Morris and R. Jana. 1996. The thickness distribution of sea ice and snow cover during late winter in the Bellingshausen and Amundsen Seas. *Journal of Geophysical Research*, 101(C12), 28441-28455.
- Jeffries, M. O., K. Morris and G. E. Liston. 1996. Using spaceborne imaging radar to identify lake water resources on the Alaskan North Slope. In, R. F. Carlson (ed.), *Cold Regions Engineering—The Cold Regions Infrastructure: An International Imperative for the 21st Century*, American Society of Civil Engineers, New York, 855-865.
- Jeffries, M. O., K. Schwartz, K. Morris, A. D. Veazey, H. R. Krouse and S. Cushing. 1995. Evidence for platelet ice accretion in Arctic sea ice development. *Journal of Geophysical Research*, 100(C6), 10905-10914.
- Morris, K., M. O. Jeffries and W. F. Weeks. 1995. Ice growth processes and history on arctic and sub-arctic lakes using ERS-1 SAR data. *Polar Record* 31 (177), 115-128.
- Jeffries, M. O., K. Morris, A. L. Veazey and H. R. Krouse. 1994. Depositional environment of the snowcover on West Antarctic pack ice floes. *Annals of Glaciology*, 20, 33-38.

- Veazey, A. L., M. O. Jeffries and K. Morris. 1994. Small scale variability of physical properties and structural characteristics of Antarctic landfast sea ice. *Annals of Glaciology*, 20, 61-66.
- Jeffries, M. O., K. Morris, W. F Weeks and H. Wakabayashi. 1994. Structural-stratigraphic features and ERS-1 SAR backscatter characteristics of ice growing on lakes in N.W. Alaska, Winter 1991-92. *Journal of Geophysical Research*, 99(C11), 22459-22471.
- Jeffries, M. O., R. A. Shaw, K. Morris, A. L. Veazey and H. R. Krouse. 1994. Crystal structure, stable isotopes ( $\delta^{18}O$ ) and development of sea ice in the Ross, Amundsen and Bellingshausen Seas, Antarctica. *Journal of Geophysical Research*, 99(C1), 985-995.

## ABSTRACTS

- Hik, D. S., K. Morris and M. Bieber .2013. How does ArcticNet research connect with decision-makers? Weak evidence for strong connections. *ArcticNet Annual Scientific Meeting*, 9-13 December 2013, Halifax, NS, Canada, page 152
- Haines-Stiles, G., E. Akuginow and K. Morris. 2013. Scientists as Producers, Presenters, Videographers, Distributors and "Stars": The Revolution In Science Filmmaking, from COSMOS to iPhones on Kilimanjaro. American Geophysical Union 2013 Fall Meeting, PA41A-02.
- Sparrow E. B., M.R. Kopplin, R. Boger, K. Morris, K. Yoshikawa, D. Verbyla, K. Jaroensutasinee, M. Jaroensutasinee, L.S. Gordon, and S. Yule. 2012. Engaging Young Scientists in Research Investigations. *International Polar Year (IPY) 2012 Conference, From Knowledge to Action*, 22-27 April, 2012, Montreal, Canada (online conference proceedings).
- Sparrow, E. B., M. R. Kopplin, L. S. Gordon, S. Yule, R. Boger and K. Morris. 2011. Integrating Research in Earth System Science Education. *Geophysical Research Abstracts*, Vol. 13, EGU2011-9505, (European Geosciences Union General Assembly, Vienna, Austria.)
- Morris, K. and M. Jeffries. 2010. Alaska Lake Ice and Snow Observatory Network (ALISON). In, Kaiser, B., B. Allen and S. Zicus (editors), *Polar Science and Global Climate: An International Resource for Education and Outreach*, Harlow, Essex, UK: Pearson Education Limited, 149-150.
- Morris, K. and M. Jeffries. 2010. A year in the life of a northern river: A geoscience education pilot project on the Nenana River, Alaska. In, Kaiser, B., B. Allen and S. Zicus (editors), *Polar Science and Global Climate: An International Resource for Education and Outreach*, Harlow, Essex, UK: Pearson Education Limited, 150.
- Boger, R., K. Morris, S. Yule and E. Sparrow. 2010. Connecting health and earth system science in Africa. *Geoscience Education - Developing the World. Proceedings of the 6th Quadrennial Conference of the International Geoscience Educators Organisation (IGEO)*, Johannesburg, South Africa.
- Sparrow, E. B., K. Morris, M. Jaroensutasinee, K. Jaroensutasinee, S. Yule, R. Boger, L. S. Gordon, K. Yoshikawa, M. R. Kopplin, and D. L. Verbyla. 2009. Use of the Seasons and Biomes Project in Climate Change Education. *Geophysical Research Abstracts*, Vol. 11, (2009), EGU2009-8190-2.
- Sparrow, E. B., R. Boger, S. Yule, K. Morris, M. R. Kopplin, M. Jaroensutasinee, K. Jaroensutasinee, L. S. Gordon, D. Verbyla, and S. Zicus. 2009. Ecosystem Measurements in Primary and Secondary Student Biome Studies. *Impact of the Environment on Human Health: Interdisciplinary Science and Education*. Proceedings of the 2009 Arctic Science Conference, Juneau, Alaska (Sept. 14-16, 2009), pp. 28.
- Morris, K., and M. Jeffries. 2008. The Alaska Lake Ice and Snow Observatory Network (ALISON): Hands-on Experiential K- 12 Learning in the North. *American Geophysical Union*, Fall Meeting 2008, abstract #ED32A-03.

Morris, K., M. O. Jeffries, and E. B. Sparrow. 2007. GLOBE Freshwater ice phenology protocols. *Proceedings of the GLOBE Annual Conference* held July 29-Aug.3, 2007 in San Antonio Texas, Program Addendum pp 4-5

Sparrow, E. B., J.H. Robin, L.S. Gordon, K. Morris, E.R. Levine, M.R. Kopplin, M.O. Jeffries, R. Boger and D.L. Verbyla. 2007. Engaging Pre-College Students in the International Polar Year through Earth System Science Research and Education. *Proceedings of the Seventh International Conference on Global Change: Connection to the Arctic (GCCA-7)*. 19-20. Committee of the University Consortium for GCCA. International Arctic Research Center, University of Alaska Fairbanks, pp19-20.

## Unpublished Research

### **M. S. THESIS**

Morris, K. 1992. Annually recurring sea ice patterns in the nearshore region of the eastern Beaufort Sea as determined from satellite data (1974-1986). Interdisciplinary Program, University of Alaska Fairbanks. *Unpublished*.

### **GRADUATE DIPLOMA RESEARCH PROJECT**

Morris, K. 2013. Was the Polar-Palooza “Stories from a Changing Planet” Campaign a Transformative Learning Experience for the Participating Scientists? Graduate Diploma in Science Communication, Laurentian University. *Unpublished*.