

Curriculum Vitae: Sheldon Drobot

Professional Preparation:

University of Manitoba	Geography	BA (Hons.), 1995
University of Manitoba	Geography	MA, 1997
University of Nebraska	Geosciences	PhD, 1997-2000

Appointments:

Research Associate, Colorado Center for Astrodynamics Research, Department of Aerospace Engineering, University of Colorado, 2004-
Study Director, Polar Research Board and Board on Atmospheric Sciences and Climate, National Academy of Sciences, Washington, DC, 2002-2004
Postdoc, Colorado Center for Astrodynamics Research, Department of Aerospace Engineering, University of Colorado, 2000-2002
Visiting Scientist, National Ice Center, Suitland, Maryland, 2002
Research Assistant, Department of Geosciences, University of Nebraska, 1998-2000
Contract Researcher - Centre for Earth Observation Science, University of Manitoba, 1998
Contract Researcher - TRW Weather TAC Division, 1998

Selected Publications:

1. **Drobot, S.D.**, 2005: A Seasonal Outlook for the Opening Date of Navigation to Prudhoe Bay, 1979-2000. *Proceedings of the 18th International Conference on Port and Ocean Engineering Under Arctic Conditions (POAC)*. June 26–30, 2005. Potsdam, NY.
2. Assel, R., **S.D. Drobot**, and T.E. Croley, 2004: Improving 30-Day Great Lakes Ice Cover Outlooks. *Journal of Hydrometeorology*, 5:713-717.
3. **Drobot, S.D.**, J.A. Maslanik, and C.F. Fowler, 2003: Atmospheric and sea ice conditions during the SHEBA year: Historical and spatial assessment. *Polar Geography*, 27:15-37.
4. **Drobot, S.D.**, 2003: Long-range statistical forecasting of ice severity in the Beaufort/Chukchi Sea, *Weather and Forecasting*, 18, 1161 - 1176.
5. **Drobot, S.D.**, and J.A. Maslanik, 2003: Interannual variability in summer Beaufort sea ice conditions: Relationship to spring and summer surface and atmospheric variability. *Journal of Geophysical Research*, 108(C7), 3233, doi:10.1029/2002JC001537.
6. M. C. Serreze, J. A. Maslanik, T. A. Scambos, F. Fetterer, J. Stroeve, K. Knowles, C. Fowler, **S. Drobot**, R. G. Barry, and T. M. Haran, 2003: A record minimum arctic sea ice extent and area in 2002. *Geophysical Research Letters.*, 30, 1110, doi:10.1029/2002GL016406.
7. Anderson, M.R., and **S.D. Drobot**, 2002: Arctic ocean snow melt onset dates derived from passive microwave, A new data set. In *Glaciological Data: Twenty-fifth anniversary: Monitoring an evolving cryosphere*. National Snow and Ice Data Center, pp. 13-18.
8. **Drobot, S.D.**, and J.A. Maslanik, 2001: A practical method for long-range forecasting of ice severity in the Beaufort Sea. *Geophysical Research Letters*, 29, 1213, 10.1029/2001GL014173.
9. **Drobot, S.D.**, and M.R. Anderson, 2001: An improved method for determining snowmelt onset dates over Arctic sea ice using scanning multichannel microwave radiometer and Special Sensor Microwave/Imager data. *Journal of Geophysical Research*, 106:24,033-24,050.
10. **Drobot, S.D.**, and M.R. Anderson, 2001: Influence of the Arctic Oscillation on snow melt onset over Arctic sea ice. *Annals of Glaciology*. 33:79-84.

11. Anderson, M.R., and S.D. Drobot, 2001: Spatial variability in snow melt onset over Arctic sea ice. *Annals of Glaciology*. 33:74-78.
12. Forster, R.R., D.G. Long, K.C. Jezek, S.D. Drobot, and M.R. Anderson, 2001: The onset of Arctic sea-ice melt as detected with passive and active microwave remote sensing. *Annals of Glaciology*. 33:85-93.
13. Drobot, S.D., and M.R. Anderson, 2000: Spaceborne microwave radiometric observations of Arctic sea ice during spring. *Professional Geographer*. 52:315-321.
14. Drobot, S.D., and M.R. Anderson, 1999: Interannual variations in snowmelt onset and links to 500 hPa atmospheric anomalies over the Arctic. *Interactions Between the Cryosphere, Climate and Greenhouse Gases*. IAHS Publication 256, pp. 55-61.
15. Drobot, S.D., and D.G. Barber, 1998: Towards development of a snow water equivalence (SWE) algorithm using microwave radiometry over snow covered first-year sea ice. *Photogrammetric Engineering and Remote Sensing*. 64:415-423.

National Research Council Projects

1. NRC, 2005: *Final Comments on the Science Plan for the North Pacific Research Board*. National Academies Press. Washington, DC. 44 pp.
2. NRC, 2004: *A Vision for the International Polar Year*. National Academies Press. Washington, DC. 112 pp.
3. NRC, 2004: *Planning for the International Polar Year 2007-2008: Report of the Implementation Workshop*. National Academies Press. Washington, DC. 65 pp.
4. NRC, 2004: *Climate Data Records from Environmental Satellites*. National Academies Press. Washington, DC. 150 pp.
5. NRC, 2004: *Elements of a Science Plan for the North Pacific Research Board*. National Academies Press. Washington, DC. 140 pp.

Conference/Technical Publications

1. Drobot, S., D. Porinchu, K. Azayus, V. Barber, L. Delissio, Z. Eshetu, A. Ridgewell, A. Schnetzer, M. Smith, J. Warren. 2003. The Ideal Climate Change Ph.D. Program. Working Group Report from the The DISsertations initiative for the advancement of Climate Change ReSearch (DISCCRS). Available at: <http://aslo.org/phd/discrcsclimatechange.pdf>
2. Drobot, S.D., J.A. Maslanik, and C. Fowler, 2001: Spatial and temporal variations in monthly averaged cloud cover based on AVHRR Polar Pathfinder Data. *Proceedings of the Sixth Conference on Polar Meteorology and Oceanography*. San Diego, CA, USA. May 14-18, 2001, pp. 49-52.
3. Drobot, S.D., and M.R. Anderson, 2001: Towards prediction of snowmelt onset over Arctic sea ice. *Proceedings of the Sixth Conference on Polar Meteorology and Oceanography*. San Diego, CA, USA. May 14-18, 2001, pp. 93-96.
4. Drobot, S.D., and M.R. Anderson, 2000: Variations in the snow melt onset date derived from passive microwave data. *Proceedings of the 11th Symposium on Global Change Studies*. Long Beach, CA, USA. January 11-15, 2000, pp. 58-61.
5. Drobot, S.D., and M.R. Anderson, 1999: Spatial variation in 500 hPa atmospheric height anomalies and links to snow melt onset over the Arctic. *Proceedings of the 5th Conference on Polar Meteorology and Oceanography*. Dallas, Texas, USA. January 10-15, 1999, pp. 35-38.
6. Anderson, M.R. and S.D. Drobot, 1999: Spatio-temporal variability in snow melt onset over the Arctic as determined by microwave radiometry. *Proceedings of the 5th Conference on Polar Meteorology and Oceanography*. Dallas, Texas, USA. January 10-15, 1999, pp. 31-34.