

## ***Publications by Michael Tjernström***

### Ph.D. Thesis:

M. Tjernström (MT), 1988: Numerical modeling of stratiform boundary-layer clouds on the meso- $\gamma$ -scale. *Acta Universitatis Upsaliensis*, Comprehensive Summaries of Uppsala Dissertations from the Faculty of Science, ISBN 91-554-2147-4, Uppsala, Sweden

Thesis advisors: Prof. Ulf Högström and Associate Prof. Leif Enger, Uppsala University, Sweden.

### Original papers in peer-reviewed journals:

#### 1987 - 1988

1. MT, 1987: A study of flow over complex terrain using a three dimensional model. A preliminary model evaluation focusing on stratus and fog. *Annales Geophysicae*, **5B**, (5), 469-486.
2. MT, 1988: Numerical simulations of stratiform boundary layer clouds on the meso- $\gamma$ -scale. Part 1: The influence of terrain height differences. *Boundary-Layer Meteorology*, **44**, 33-72.
3. MT, 1988: Numerical simulations of stratiform boundary layer clouds on the meso- $\gamma$ -scale. Part 2: The influence of a step change in surface roughness and surface temperature. *Boundary-Layer Meteorology*, **44**, 207 - 230.
4. MT, L. Enger and A. Andrén, 1988: A three-dimensional numerical model for studies of atmospheric flows on the meso- $\gamma$ -scale. *Journal of Theoretical and Applied Mechanics*, **7**, 167-194.

#### 1989-1991

5. MT, 1989: Some tests with a surface energy balance scheme, including a bulk parameterization for vegetation, in a mesoscale model. *Boundary-Layer Meteorology*, **48**, 33 - 68.
6. Enger, L., and MT, 1991: Estimating the effect on the regional precipitation climate in a semi-arid region caused by an artificial lake using a mesoscale model. *Journal of Applied Meteorology*, **30**, 227-250.
7. MT, and C. A. Friehe, 1991: Analysis of a radome air-motion system on a twin-jet aircraft for boundary layer research. *Journal of Atmospheric and Oceanic Technology*, **8**, 19-40.
8. MT, 1991: Airborne observations of thermal mesoscale circulations in the coastal marine boundary layer. *Journal of Geophysical Research*, **96**, C11, 20499-20520.

#### 1992-1993

9. MT, 1993: Simulated liquid water and visibility in stratiform boundary layer clouds over sloping terrain. *Journal of Applied Meteorology*, **32**, 656-665.
10. MT, 1993: Turbulence length scales in stably stratified free-shear flow analyzed from slant aircraft profiles. *Journal of Applied Meteorology*, **32**, 948-963.
11. MT and A.-S. Smedman, 1993: The vertical turbulence structure of the coastal marine atmospheric boundary layer. *Journal of Geophysical Research*, **98**, 4809-4826.
12. Smedman, A.-S., MT and U. Högström, 1993: Analysis of the turbulence structure of a marine low level jet. *Boundary-Layer Meteorology*, **66**, 105-126.

#### 1994-1995

13. MT and D. Koračin, 1995: Modeling the impact of stratocumulus on boundary layer structure. *Journal of the Atmospheric Sciences*, **52**, 863-878.
14. MT and P. Samuelsson, 1995: The effect of inertial navigation system time response on airborne turbulence measurements. *Journal of Atmospheric and Oceanic Technology*, **12**, 1196-1213.
15. Smedman, A.-S., MT and U. Högström, 1995: The near-neutral marine atmospheric boundary layer with no surface shearing stress - a case study. *Journal of the Atmospheric Sciences*, **51**, 3399-3411.

#### 1996-1997

16. MT and D. P. Rogers, 1996: Turbulence structure in decoupled marine stratocumulus: A case study from the Astex field experiment. *Journal of the Atmospheric Sciences*, **53**, 598-619.
17. MT and B. Grisogono, 1996: Thermal mesoscale circulations on the Baltic coast. Part I: A numerical case study. *Journal of Geophysical Research*, **101(D14)**, 18979-18997.
18. Grisogono, B., and MT, 1996: Thermal mesoscale circulations on the Baltic coast: Part II: Perturbation of surface parameters. *Journal of Geophysical Research*, **101**, 18999-19012.

#### 1998-1999

19. Cui, Z., MT and B. Grisogono, 1998: Idealized simulations of coastal flow along the central coast of California. *Journal of Applied Meteorology*, **37**, 1332-1363.
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22. Frech, M., P. Samuelsson, MT and A. M. Jochum, 1999: Boundary layer budgets over the NOPEX area. *Journal of Hydrology*, **213**, 155-171.
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26. Samuelsson, P., and MT, 2000: Introduction to the in-situ airborne meteorological measurements in NOPEX. *Journal of Agricultural and Forest Meteorology*, **98-99**, 181-204.
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34. Brooks, I., S. Söderberg and MT, 2003: The turbulence structure of the stable atmospheric boundary layer around a coastal headland: Aircraft observations and modeling results. *Boundary-Layer Meteorology*, **107**, 531-559.
35. MT and A. Rune, 2003: The turbulence structure of stratocumulus during the ASTEX first Lagrangian experiment. *Quarterly Journal of the Royal Meteorological Society*, **129**, 1071 - 1100. 2004
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**2006**

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3. MT, 1988: A numerical study of mesoscale perturbations in stratiform boundary layer cloud fields. 10<sup>th</sup> International Cloud Physics Conference, August 15-20, 1988, Bad-Homburg, Germany.
4. MT, 1989: On the use of pressure fluctuations on the radome of a Sabreliner aircraft for air motion sensing in boundary layer research - or - what to do when you can't afford your own research aircraft. International Workshop on the Airborne Measurements of Wind, Turbulence and Position, August 26-28, 1989, Oberpfaffenhofen, Germany.
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8. MT, 1991: Airborne observations of the inhomogeneous marine boundary layer in a coastal area. 4<sup>th</sup> Inter-agency Airborne Geoscience Workshop, January 29- February 1, 1991, La Jolla, USA.
9. MT, 1992.: Mesoskaliga cirkulationer i det kustnära marina gränsskiktet (Mesoscale Circulations in the Marine Boundary Layer, in Swedish)., NMM XVIII (18<sup>th</sup> Meeting of the Nordic Meteorological Societies), June 15-19, 1992, in Hirtshals, Denmark.
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16. MT and D. Koračin, 1992: The impact of marine stratocumulus on boundary layer structure. 3<sup>rd</sup> International Workshop on Cloud Modeling, August 10-14, 1992, Toronto, Canada.
17. MT, 1993: In-cloud turbulence analyzed from ASTEX field data. American Geophysical Union annual Fall Meeting, San Francisco, December 5-9, 1993.
18. MT, 1994: Coastal Modeling in Sweden. 2<sup>nd</sup> Office of Naval Research Coastal Meteorology Workshop La Jolla, February 23-24, 1994.
19. MT, 1994: Turbulence structure of a cloud-capped marine atmospheric boundary layer analyzed from ASTEX field data, 2<sup>nd</sup> International Conference on Air Sea Interaction and Meteorology and Oceanography of the Coastal Zone, September 21-28, 1994, Lisbon, Portugal.
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105. MT, 2007: Small-scale Dynamic Processes. (Invited) Polar Dynamics, August 2007, Bergen.
106. MT, 2007: What (little?) do we know about the Arctic atmosphere (Invited). *Global environmental change: The role of the Arctic*, ESF-VR-Formas conference, 13-17 October, Nynäshamn Sweden.
107. MT, 2008: The Vertical Structure of the Arctic Atmosphere, and some words on one Swedish contributions to IPY (Invited). AMAP workshop on “The use of Unmanned Aerial Vehicles (UAV) for Arctic Research”, 27-28 April, Stockholm.

108. Murray, M.S., and MT, 2008: The international study of Arctic change (ISAC). 2008 Arctic Forum, Washington DC, 13 – 15 May 2007.
109. Paatero, J., Leck, C., MT, Hatakka J. and Viisanen, Y., 2008: External radiation dose rate over the arctic ocean. Nordic Radiation Protection Society, Ålesund 26 – 30 May 2008.
110. MT, B. B. Balsley, G. Svensson, and C. J. Nappo, 2008: Observations of turbulence in the residual layer. AMS 18<sup>th</sup> Symposium on Boundary Layers and Turbulence, Stockholm, 9-13 June 2008.
111. MT and R. G. Graversen, 2008: Arctic boundary-layer inversions from SHEBA observations and ERA-40 reanalysis data. AMS 18<sup>th</sup> Symposium on Boundary Layers and Turbulence, Stockholm, 9-13 June 2008.
112. Balsley, B. B., MT and G. Svensson, 2008: Turbulence in the nocturnal boundary layer: highly-structured, strongly-variable, but ubiquitous. AMS 18<sup>th</sup> Symposium on Boundary Layers and Turbulence, Stockholm, 9-13 June 2008.
113. Sedlar, J., and MT, 2008: Cloud and inversion characteristics over the Arctic pack ice. AMS 18<sup>th</sup> Symposium on Boundary Layers and Turbulence, Stockholm, 9-13 June 2008.
114. Bocquet, F., B. B. Balsley, MT, and G. Svensson, 2008: Using the TLS system to improve understanding of atmospheric turbulent processes. AMS 18<sup>th</sup> Symposium on Boundary Layers and Turbulence, Stockholm, 9-13 June 2008.
115. Birch, C. E., I. M. Brooks, MT and S. F. Milton, 2008: The performance of the Met Office Unified Model over the central Arctic Ocean. AMS 18<sup>th</sup> Symposium on Boundary Layers and Turbulence, Stockholm, 9-13 June 2008.
116. MT, T. Mauritsen and J. Sedlar, 2008: The Arctic Summer Cloud-Ocean Study – Some preliminary results. DAMOCLES General Assembly, 25 – 28 November, Sopot, Poland.
117. MT and C. Leck, 2008: ASCOS – The Arctic Summer Cloud-Ocean Study (Invited). AGU Fall Meeting, San Francisco, 15 – 19 December 2008.
118. MT, 2009: Is every 50 years enough? What - and how - have we learned about the Arctic from the IPY? (Invited). American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
119. MT, J. Paatero, M. Szczodrak, and C. Wheeler, 2009: The summer 2008 central Arctic weather conditions as observed during ASCOS. American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
120. Sedlar, J., MT and T. Mauritsen, 2009: The influence of cloud cover on the surface energy budget during ASCOS. American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
121. Shupe, M., O. Persson, P. Johnston, C. Wheeler, and MT, 2009: Surface-based remote-sensing of clouds during ASCOS. American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
122. Brooks, I.M., C. E. Birch, M. K. Hill, T. Mauritsen, J. Sedlar and MT, 2009: and Tethered balloon measurements of Arctic boundary layer mean and turbulent structure during ASCOS. American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
123. Persson, P.O.G., V. Leuski, M. Shupe, I. M. Brooks and MT, 2009: High-temporal resolution observations of the thermal and kinematic vertical structure in the Arctic boundary-layer during ASCOS. American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
124. Birch, C.E., I. M. Brooks, S. F. Milton, P. Earnshaw and MT, 2009: An evaluation of the U.K. Met Office Unified Model over the central Arctic Ocean during ASCOS. American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
125. Gasiewski, A., A. Chaturvedi, E. McIntyre, D. M. Kraft, O. Persson, MT, M. Beaubien, and W. Jeffries, 2009: Use of a new generation of dropsondes during the 2008 Arctic Mechanisms of Interaction Between the Surface and Atmosphere (AMISA) Campaign. American Meteorological Society American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
126. Gasiewski, A., E. McIntyre, D. M. Kraft, O. Persson, V. Leusky, MT, M. Tian, and A. Chaturvedi, 2009: Radiometric Observations of the Arctic Environment during the 2008 Arctic Mechanisms of Interaction Between the Surface and Atmosphere (AMISA) Campaign. American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
127. Persson, P.O.G., E. Sukovich, A. Gasiewski, B. J. Brooks, A. Chaturvedi, M. Shupe, and MT, 2009: Aircraft observations during the 2008 ASCOS/AMISA field program: Overview of the synoptic/mesoscale

- environment, boundary-layer structure, and cloud microphysics. American Meteorological Society's 10<sup>th</sup> Conference on Polar Meteorology and Oceanography, 18-21 May 2009 in Madison, Wyoming.
128. R. Y. Chang, S. J. Sjostedt, J. Abbatt, K. L. Hayden, S. Li, R. Leaitch, M. Martin, B. Sierau, Q. Gao, C. Leck, M. K. Tjernström, 2009: Aerosol Chemical Composition Measured in the Arctic during ASCOS and Arctic-SOLAS. American Geophysical Union Fall Meeting, San Francisco.
129. MT, 2009: Small-scale atmospheric processes: Confronting models with observations (Invited). DAMOCLES General Assembly, 10-12 November, 2009, Brussels
130. Sedlar, J., MT, T. Mauritsen, I. Brooks, C. Birch, O. Persson, M. Shupe, and A. Sirevaag, 2009: The summer-fall transition - a surface energy budget perspective. DAMOCLES General Assembly, 10-12 November, 2009, Brussels
131. MT and C. Leck, 2009: Arctic Summer Cloud Ocean Study - ASCOS. DAMOCLES General Assembly, 10-12 November, 2009, Brussels
132. MT and C. Leck, 2010: Arctic Summer Cloud Ocean Study - ASCOS. State of the Arctic conference, 16-19 March, 2010, Miami, Florida.
133. Sedlar, J., MT, T. Mauritsen, I. Brooks, and M. Shupe, 2010: The impact of albedo, solar zenith angle and clouds on the transition from melt to freeze in the high latitude Arctic. State of the Arctic conference, 16-19 March, 2010, Miami, Florida.
134. MT, 2010: International Arctic science – a vision for the future (Invited). State of the Arctic conference, 16-19 March, 2010, Miami, Florida.
135. Ranjha, R., MT, Gunilla Svensson, 2010: Scale Dependence of Model Simulated Coastal Low-Level Wind Jets. American Meteorological Society's 9th Conference on Coastal Atmospheric and Oceanic Prediction and Processes, 17 September – 1 October, Annapolis, MD, USA.
136. MT, T. Mauritsen and J. Sedlar, 2010: Boundary layer - cloud interaction in the summer Arctic. 19th Symposium on Boundary Layers and Turbulence, August 2–6, 2010, Keystone, Colorado.
137. MT, R.G. Graversen and T. Mauritsen, 2010: Can Arctic sea-ice melt be explained by atmospheric meridional transports? (Invited). American Geophysical Union Fall Meeting, 13-17 December, 2010, San Francisco, California.
138. MT, T. Mauritsen, J. Sedlar and M.D. Shupe: Boundary-layer and aerosol/cloud interaction in central Arctic summer observed during ASCOS (Invited), 2010. American Geophysical Union Fall Meeting, 13-17 December, 2010, San Francisco, California.
139. Mauritsen, T., J. Sedlar, MT, C. Leck, M. Martin, M. Shupe, S. Sjogren, B. Sierau, P. O. G. Persson, I. M. Brooks, E. Swietlicki, 2011: Arctic aerosol indirect effects. *EGU General Assembly, 3-8 April, Vienna, Austria*.
140. Pleavin, T.D., I.M. Brooks, S. Dobbie, M. Shupe, P. O. G. Persson, MT, and B. J. Brooks, 2011: Large Eddy Simulations of Arctic stratus: ASCOS case studies. American Meteorological Society's 11<sup>th</sup> Conference on Polar Meteorology and Oceanography, 5-10 May 2011 in Boston, Massachusetts.
141. G. Canut, I.M. Brooks, P.O.G. Persson, M. Shupe, MT, J. Sedlar, and C.E. Birch, 2011: Boundary layer structure during ASCOS – Multi-sensor retrievals and diagnostics. American Meteorological Society's 11<sup>th</sup> Conference on Polar Meteorology and Oceanography, 5-10 May 2011 in Boston, Massachusetts.
142. C.E. Birch, I.M. Brooks, P. Earnshaw, C. Leck, A. Lock, T. Mauritsen, S.F. Milton, P.O.G. Persson, J. Sedlar, M. Shupe, and MT, 2011: Modelling the vertical structure of the central Arctic boundary layer : ASCOS case studies. American Meteorological Society's 11<sup>th</sup> Conference on Polar Meteorology and Oceanography, 5-10 May 2011 in Boston, Massachusetts.
143. M. Shupe, P.O.G. Persson, A. Solomon, I.M. Brooks, T. Mauritsen, J. Sedlar, and MT, 2011: Dynamical and microphysical characteristics and interactions in Arctic mixed-phase clouds. American Meteorological Society's 11<sup>th</sup> Conference on Polar Meteorology and Oceanography, 5-10 May 2011 in Boston, Massachusetts.
144. I.M. Brooks, A. Held, C. Leck, MT, S.J. Norris, G. de Leeuw, A. Sirevaag, C.E. Birch, and B.J. Brooks, 2011: Linking the Arctic Ocean and clouds - bubble and aerosol flux measurements from ASCOS. American Meteorological Society's 11<sup>th</sup> Conference on Polar Meteorology and Oceanography, 5-10 May 2011 in Boston, Massachusetts.
145. MT, T. Mauritsen, M. Shupe, J. Sedlar, and I.M. Brooks , 2011: Boundary-layer and aerosol/cloud interaction in central Arctic summer observed during ASCOS. American Meteorological Society's 11<sup>th</sup> Conference on Polar Meteorology and Oceanography, 5-10 May 2011 in Boston, Massachusetts.
146. Birch, C. E., I. M. Brooks, P. Earnshaw, C. Leck, A. Lock, T. Mauritsen, S. F. Milton, P. O. G. Persson, J. Sedlar, M. Shupe, and MT, 2011: Modelling the vertical structure of the central Arctic boundary layer: ASCOS case studies, IUGG Conference, 28 June – 7 July, Melbourne, Australia

147. A. Devasthale and MT, 2011: The vertical structure of the Essential Climate Variables (ECVs) over the Arctic observed by A-Train. International Arctic Science Committee's Atmospheric Working Group Workshop, 26-27 September, 2011, Potsdam, Germany.
148. Brooks, I.M., P.O.G Persson, M. Shupe, MT, C. Birch, T. Mauritsen, J. Sedlar, G. Canut, B.J. Brooks, C. Leck, 2011: Arctic (ASCOS) boundary layer measurements and model representation. International Arctic Science Committee's Atmospheric Working Group Workshop, 26-27 September, 2011, Potsdam, Germany.
149. MT, I. M. Brooks, P.O.G. Persson, M. Shupe, C. Birch, T. Mauritsen, J. Sedlar, 2011: Arctic cloud and boundary layer processes in observations (and modelling). International Arctic Science Committee's Atmospheric Working Group Workshop, 26-27 September, 2011, Potsdam, Germany.
150. Brooks, I. M., A. Held, C. Leck, MT, S. J. Norris, G. de Leeuw, A. Sirevaag, C. E. Birch, B. J. Brooks, 2011: Bubble and aerosol fluxes in and over leads in Arctic sea ice: results from ASCOS. *UK Arctic Science Conference, 14-16 Sept. Leeds, UK*.
151. Pleavin, T. D., I. M. Brooks, J. S. Dobbie, M. Shupe, P. O. G. Persson, MT, B. J. Brooks, 2011: Large Eddy Simulations of Arctic Stratus: ASCOS case studies. *UK Arctic Science Conference, 14-16 Sept. Leeds, UK*.
152. Birch, C. E., I. M. Brooks, P. Earnshaw, C. Leck, A. Lock, T. Mauritsen, S. F. Milton, P. O. G. Persson, J. Sedlar, M. Shupe, and MT, 2011: Modelling the vertical structure of the central Arctic boundary layer: ASCOS case studies. *UK Arctic Science Conference, 14-16 Sept. Leeds, UK*.
153. Canut, G., I. M. Brooks, P. O. G. Persson, M. Shupe, MT, T. Mauritsen, J. Sedlar, and C. E. Birch, 2011: Boundary layer structure during ASCOS – Multi-sensor retrievals and diagnostics. *UK Arctic Science Conference, 14-16 Sept. Leeds, UK*.
154. MT, 2011: The Arctic boundary layer - Interactions with the surface, and clouds, as learned from observations (and some modeling), (Invited). European Centre for Medium Range Weather Forecast (ECMWF) and Gewex Atmospheric Boundary Layer Study (GABLS) Joint workshop on stable boundary layers and surface interaction, 7-12 November, 2011, Reading, UK.
155. Stramler, K., J. Sedlar and MT, 2011: CMIP5 models in the Arctic: Evaluating near-term processes and distribution shifts in a changing climate. American Geophysical Union Fall Meeting, 12-16 December, 2011, San Francisco, California.
156. Syed, F. S., H. Körnich, MT, 2012: On the fog variability over South Asia, European Geophysical Union, 22-27 April, 2012, Vienna, Austria.
157. Pleavin, T. D., I. M. Brooks, J. S. Dobbie, M. D. Shupe, MT, P. O. G. Persson, B. J. Brooks, 2012: A large eddy simulation study of Arctic boundary-layer cloud during ASCOS, AMS 20th Conference on Boundary Layers and Turbulence, 8-13 July, Boston, USA.
158. Canut, G., I. M. Brooks, M. D. Shupe, P. O. G. Persson, MT, J. Sedlar, T. Mauritsen, C. E. Birch, B. J. Brooks, 2012: Turbulence structure of the central Arctic boundary layer, AMS 20th Conference on Boundary Layers and Turbulence, 8-13 July, Boston, USA.
159. MT, 2012: The Arctic Ocean Atmospheric boundary layer (keynote), WCRP & WWRP Joint Workshop on Physics in Weather and Climate Models, 20-23 March, 2012, California Institute of Technology, Pasadena, California, USA.
160. MT, M. Kapsch, T. Mauritsen, R. G. Graversen, J. Sedlar and M. Shupe, 2012: The Role of Longwave Radiation for Arctic Sea Ice. American Geophysical Union Fall Meeting, 10-14 December, 2012, San Francisco, California.
161. Wesslén, C., MT, D. H. Bromwich, S. H. Wang, L. S. Bai, G. de Boer, 2013: Evaluating central Arctic summer conditions in the Arctic System Reanalysis (ASR) and ERA-Interim using Arctic-Summer Cloud-Ocean-Study (ASCOS) data. European Geoscience Union, 8-12 April, 2013, Vienna, Austria.
162. Salih, A.S.M., Zhang, Q. and MT, 2013: Lagrangian tracing of Sahelian Sudan moisture sources. European Geoscience Union, 8-12 April, 2013, Vienna, Austria.
163. Dethloff, K., MT, M. Shupe, P. O. G. Persson, 2013: Multidisciplinary drifting Observatory for the Study of Arctic Climate – MOSAiC. Arctic Science Summit Week, 16-19 April, 2013, Krakow, Poland.
164. Vihma, T., C. Lüpkes, T. Nygård, I. Renfrew, J. Sedlar, MT, 2013: Recent advances in understanding and parameterization of small-scale physical processes in the Arctic atmosphere. Arctic Science Summit Week, 16-19 April, 2013, Krakow, Poland.
165. Wesslén, C., MT, D. H. Bromwich, S. H. Wang, L. S. Bai, G. de Boer, 2013: Evaluating central Arctic summer conditions in the Arctic System Reanalysis (ASR) and ERA-Interim using Arctic-Summer Cloud-Ocean-Study (ASCOS) data. Arctic Science Summit Week, 16-19 April, 2013, Krakow, Poland.
166. MT, 2013: Why modelers should care about field projects (invited), ECMWF & WWRP Joint Workshop on Polar Prediction, 24-27 June at ECMWF, Reading, UK.

167. Kapsch, M., R. G. Graversen and MT, 2013: The importance of spring atmospheric conditions for the prediction of summer sea ice extent. American Geophysical Union Fall Meeting, 9-13 December, 2013, San Francisco, California.
168. Johansson, E., A. Devasthale, T. L'Ecuyer, A. Ekman and MT, 2014: The cloud radiative heating in the upper troposphere lower stratosphere over the Indian Subcontinent. SPARC conference.
169. Sotiropoulou, G., J. Sedlar, MT, M. D. Shupe, I. M. Brooks and P. O. G. Persson, 2014: The thermodynamic structure of summer Arctic stratocumulus and the dynamic coupling to the surface, European Geophysical Union General Assembly, 27 April – 2 May, 2014, Vienna.
170. MT, J. Sedlar, I. Brooks, M. Shupe and O. Persson, 2014: Arctic mixed phase summer clouds: Lessons from ASCOS. European Geophysical Union General Assembly, 27 April – 2 May, April 2014, Vienna.
171. Jansen, R. A., I. M. Brooks, M. D. Shupe, J. Sedlar, MT, P. O. G. Persson, J. S. Dobbie, 2014: Radatively driven in-cloud turbulence and cloud-surface coupling in Arctic Stratocumulus, AMS 20th Conference on Boundary Layers and Turbulence, June 9-13, Leeds, UK.
172. Salisbury, D., I. M. Brooks, J. Prytherch, B. J. Brooks, J. Sedlar, G. Sotiropoulou, MT, P. O. G. Persson, M. D. Shupe, B. I. Moat, P. Achtert, 2015: Characterizing surface conditions during the Arctic Cloud in Summer Experiment (ACSE), AMS 19th Conference on Air-Sea Interaction, January 4-8, Phoenix, AZ, USA.
173. Brooks, I. M., J. Prytherch, D. J. Salisbury, B. J. Brooks, J. Sedlar, G. Sotiropoulou, MT, P. O. G. Persson, M. D. Shupe, P. M. Crill, B. F. Thornton, B. I. Moat, P. Achtert, 2015: Surface Turbulent Exchange over the Arctic Ocean – Measurements from the SWERUS-C3 / ACSE Project, AMS 19th Conference on Air-Sea Interaction, January 4-8, Phoenix, AZ, USA.
174. Achtert, P., D. J. Salisbury, J. Prytherch, J. Sedlar, G. Sotiropoulou, MT, B. J. Brooks, I. M. Brooks, M. D. Shupe, P. O. G. Persson, P. Johnston, D. Wolfe, 2015: Observations of the Arctic boundary layer during ACSE 2014, High-Latitude dynamics workshop, Rosendal, 23-27 March, 2015.
175. Brooks, I., M., J. Prytherch, D. J. Salisbury, B. J. Brooks, P. Achtert, J. Sedlar, MT, G. Sotiropoulou, P. O. G. Persson, M. D. Shupe, P. Johnston, D. Wolfe, B. I. Moat, 2015: In situ measurements of surface exchange over the Arctic Ocean, High-Latitude dynamics workshop, Rosendal, 23-27 March, 2015.
176. Brooks, B. J., P. Achtert, I. M. Brooks, J. Prytherch, D. J. Salisbury, J. Sedlar, MT, G. Sotiropoulou, P. O. G. Persson, M. D. Shupe, P. Johnston, D. Wolfe, 2015: Interactions between Arctic clouds, boundary-layer structure, and surface conditions over the Arctic Ocean, High-Latitude dynamics workshop, Rosendal, 23-27 March, 2015.
177. Persson, P. O. G., Matthew D. Shupe, MT, J. Sedlar, I. M. Brooks, B. J. Brooks, G. Björk, J. Prytherch, D. J. Salisbury, P. Achtert, G. Sotiropoulou, P. Johnston, and D. Wolfe, 2015: Atmosphere-Ice-Ocean Interactions During Summer Melt and Early Autumn Freeze-up: Observations from the ACSE Field Program, High-Latitude dynamics workshop, Rosendal, 23-27 March, 2015.
178. Prytherch, J., D. J. Salisbury, P. Achtert, J. Sedlar, G. Sotiropoulou, MT, B. J. Brooks, I. M. Brooks, M. D. Shupe, P. O. G. Persson, P. Johnston, D. Wolfe, B. Moat, 2015: Wave state and surface turbulent exchange over low fractional ice cover, High-Latitude dynamics workshop, Rosendal, 23-27 March, 2015.
179. Salisbury, D., J. Prytherch, M. C. Tsamados, I. M. Brooks, B. J. Brooks, P. Achtert, J. Sedlar, MT, G. Sotiropoulou, P. O. G. Persson, M. D. Shupe, P. Johnston, D. Wolfe, B. Moat, 2015: Evaluating surface flux parameterizations over Arctic sea ice, High-Latitude dynamics workshop, Rosendal, 23-27 March, 2015.
180. Sotiropoulou, G., J. Sedlar, MT, M. D. Shupe, I. M. Brooks and P. O. G. Persson, 2015: The thermodynamic structure of summer Arctic stratocumulus and the dynamic coupling to the surface, High-Latitude dynamics workshop, Rosendal, 23-27 March, 2015.
181. MT and coauthors, 2015: The role of clouds in shaping Arctic climate, High-Latitude dynamics workshop, Rosendal, 23-27 March, 2015.
182. Vihma, T., J. Screen, MT, X. Zhang, V. Popova, B. Newton, C. Deser, M. Holland, J. Walsh, T. Prowse, 2015: Air moisture, clouds and net precipitation in the Arctic: processes, changes and research challenges, High-Latitude dynamics workshop, Rosendal, 23-27 March, 2015.
183. Johansson, E., A. Devasthale, A. Ekman, T. L'Ecuyer, and MT, 2015: The vertical distribution of cloud regimes and their radiative impact under active phases of the Arctic Oscillation, European Geophysical Union General Assembly, 12-17 April 2015, Vienna.
184. MT, Matthew Shupe, P. Achtert, B. J. Brooks, I. M. Brooks, P. Johnston, P. O. G. Persson, J. Prytherch, D. Salisbury, J. Sedlar, G. Sotiropoulou, D. Wolfe, 2015: The “blob of death”, or how warm air advection causes rapid ice melt, European Geophysical Union General Assembly, 12-17 April 2015, Vienna.
185. Persson, P. O. G., B. J. Brooks, MT, J. Sedlar, I. M. Brooks, M. Shupe, G. Björk, J. Prytherch, D. Salisbury, P. Achtert, G. Sotiropoulou, P. Johnston, D. Wolfe, 2015: Atmosphere-Ice-Ocean Interactions During

- Early Autumn Freeze-up: Boundary-Layer and Surface Observations from the ACSE Field Program, European Geophysical Union General Assembly, 12-17 April 2015, Vienna.
186. MT, B. J. Brooks, I. M. Brooks, P. Johnston, P. O. G. Persson, J. Prytherch, D. Salisbury, J. Sedlar (1), M. Shupe, G. Sotiropoulou and D. Wolfe, 2015: Atmospheric observations during the Arctic Clouds in Summer Experiment (ACSE), European Geophysical Union General Assembly, 12-17 April 2015, Vienna.
187. MT, M. Shupe, P. Achtert, B. Brooks, I. Brooks, P. Johnston, O. Persson, J. Prytherch, D. Salisbury, J. Sedlar, G. Sotiropoulou, D. Wolfe, 2015: Rapid sea-ice melt due to warm air advection: Observations from the ACSE field program, Arctic Science Summit Week, 27 April – 1 May 2015, Toyama, Japan.
188. Brooks I. M., MT, M. D. Shupe, P. O. G. Persson, B. J. Brooks, D. J. Salisbury, P. Achtert, J. Prytherch, J. Sedlar, G. Sotiropoulou, P. E. Johnston, D. Wolfe. 2015: The Arctic Cloud Summer Experiment (ACSE), UK Arctic Science Conference, Sept 16-18, Sheffield, UK
189. Geibel, M. C., B. Thornton, J. Prytherch, I. M. Brooks, D. Salisbury, MT, I. Similetov, C.-M. Mört, C. Humborg, and P. Crill 2015: Characterization of sea-air methane fluxes around a seafloor gas seep in the central Laptev Sea. American Geophysical Union Fall Meeting, 14-18 December 2015, San Francisco, California, USA.
190. Salisbury, D. S, I. M Brooks, J. Prytherch, B. I Moat, O. P. G. Persson, J. Sedlar, G. Sotiropoulou, MT, P. Achtert, B. J. Brooks and M. Shupe 2015: In situ measurement of the drag coefficient over Arctic sea ice. American Geophysical Union Fall Meeting, 14-18 December 2015, San Francisco, California, USA.
191. Achtert, P., G. Sotiropoulou, I. M. Brooks, B. Brooks, P. Johnston, P. O. G. Persson, J. Prytherch, D. Salisbury, J. Sedlar, MT, D. Wolfe, 2015: Observations of the Arctic boundary layer clouds during ACSE 2014, American Geophysical Union Fall Meeting, 14-18 December 2015, San Francisco, California, USA.
192. Sotiropoulou, G., J. Sedlar, R. Forbes, and MT, 2015: Summer Arctic Clouds in the ECMWF Forecast Model: an Evaluation of Cloud Parameterization Schemes, American Geophysical Union Fall Meeting, 14-18 December 2015, San Francisco, California, USA.
193. Igel, A., A. Ekman, C. Leck, J. Savré, MT, and J. Sedlar, 2015: A24C-03 The Influence of Free Tropospheric Aerosol on the Boundary Layer Aerosol Budget in the Arctic, American Geophysical Union Fall Meeting, 14-18 December 2015, San Francisco, California, USA.
194. Johansson E. A Devasthale, MT, T. L'Ecuyer, and A. Ekman, 2016: The radiative response of the lower troposphere to moisture intrusions into the Arctic, European Geophysical Union General Assembly, 17-22 April 2016, Vienna, Austria.
195. Persson, O., B Blomquist, P. Guest, C. Fairall, S. Stammerjohn, I. Brooks, G. Björk, MT, and J. Inoue, 2016: Surface Energy Fluxes During Arctic Freeze-Up, European Geophysical Union General Assembly, 17-22 April 2016, Vienna, Austria.
196. MT, G. Sotiropoulou, J. Sedlar, P. Achtert, B. Brooks, I. Brooks, O. Persson, J. Prytherch, D. Salisbury, M. Shupe, P. Johnston, D. Wolfe, 2016: Contrasting sea-ice and open-water boundary layers during melt and freeze-up seasons: Some result from the Arctic Clouds in Summer Experiment, European Geophysical Union General Assembly, 17-22 April 2016, Vienna, Austria.
197. Sotiropoulou, G., J. Sedlar, R. Forbes and MT, 2016: Arctic clouds in the ECMWF forecast model: an evaluation of cloud parameterization schemes, European Geophysical Union General Assembly, 17-22 April 2016, Vienna, Austria.
198. Weixler, K., A. Ekman, C. Hoose, M. Paukert, J. Sedlar, MT, 2016: Analyzing the dissipation of an Arctic mixed-phase cloud during the ASCOS field campaign. 17th International Conference on Clouds & Precipitation, 25 - 29 July 2016, Manchester, UK.
199. Igel, A.L., A.M.L Ekman, C. Leck, J. Savre, MT and J. Sedlar, 2016: The Free Troposphere as a Source of Arctic Boundary Layer Aerosol. European Aerosol Conference 2016, 4-9 September 2016, Tours, France.
200. Thornton, B., M. C. Geibel, J. Prytherch, I. M. Brooks, D. Salisbury, MT, I. Similetov, C.-M. Mört, C. Humborg, and P. Crill 2015: Methane isotopologues and eddy covariance fluxes above the mid and outer Laptev and East Siberian Seas during SWERUS-C3. XI. International Conference on Permafrost, 20 - 24 June 2016, Potsdam, Germany.
201. Weixler, K., A. Ekman, C. Hoose, M. Paukert, J. Sedlar, MT, 2016: Analyzing the dissipation of an Arctic mixed-phase cloud during the ASCOS field campaign. XVII International Conference on Clouds and Precipitation, 25-29 July, 2016, in Machester, UK.
202. Prytherch, J., I. M. Brooks, P. M. Crill, B. F. Thornton, D. J. Salisbury, MT, L. G. Anderson, M. C. Geibel, Humborg, 2017: Direct measurement of air-sea CO<sub>2</sub> gas transfer velocity from an icebreaker in Arctic sea-ice regions. American Geophysical Union Fall Meeting, 12-16 December 2016, San Francisco, California, USA.

203. Persson, P. Ola G., B. W. Blomquist, P. S. Guest, I. M. Brooks, MT, A. A. Grachev, M. Shupe, and C. W. Fairall, 2017: Interactions between the atmospheric boundary layer and the advancing autumn sea ice. AMS 97<sup>th</sup> Annual Meeting, 23-26 February 2017, Seattle, Washington, USA.
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