

Chris Derksen

List of Publications by Year in descending order

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189
papers

8,516
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7929
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Estimating northern hemisphere snow water equivalent for climate research through assimilation of space-borne radiometer data and ground-based measurements. Remote Sensing of Environment, 2011, 115, 3517-3529. | 11.0 | 481 |
| 2 | Estimating Snow Water Equivalent Using Snow Depth Data and Climate Classes. Journal of Hydrometeorology, 2010, 11, 1380-1394. | 1.9 | 336 |
| 3 | Spring snow cover extent reductions in the 2008â€“2012 period exceeding climate model projections. Geophysical Research Letters, 2012, 39, . | 4.0 | 316 |
| 4 | Estimating snow-cover trends from space. Nature Climate Change, 2018, 8, 924-928. | 18.8 | 218 |
| 5 | A multi-â€data set analysis of variability and change in Arctic spring snow cover extent, 1967â€“2008. Journal of Geophysical Research, 2010, 115, . | 3.3 | 207 |
| 6 | Large near-term projected snowpack loss over the western United States. Nature Communications, 2017, 8, 14996. | 12.8 | 203 |
| 7 | Patterns and trends of Northern Hemisphere snow mass from 1980 to 2018. Nature, 2020, 581, 294-298. | 27.8 | 203 |
| 8 | State of the Climate in 2018. Bulletin of the American Meteorological Society, 2019, 100, Si-S306. | 3.3 | 168 |
| 9 | State of the Climate in 2017. Bulletin of the American Meteorological Society, 2018, 99, Si-S310. | 3.3 | 160 |
| 10 | LS3MIP (v1.0) contribution to CMIP6: the Land Surface, Snow and Soil moisture Model Intercomparison Project â€ aims, setup and expected outcome. Geoscientific Model Development, 2016, 9, 2809-2832. | 3.6 | 152 |
| 11 | Characterization of Northern Hemisphere Snow Water Equivalent Datasets, 1981â€“2010. Journal of Climate, 2015, 28, 8037-8051. | 3.2 | 151 |
| 12 | Evaluation of passive microwave snow water equivalent retrievals across the boreal forest/tundra transition of western Canada. Remote Sensing of Environment, 2005, 96, 315-327. | 11.0 | 149 |
| 13 | State of the Climate in 2015. Bulletin of the American Meteorological Society, 2016, 97, Si-S275. | 3.3 | 142 |
| 14 | State of the Climate in 2013. Bulletin of the American Meteorological Society, 2014, 95, S1-S279. | 3.3 | 138 |
| 15 | State of the Climate in 2010. Bulletin of the American Meteorological Society, 2011, 92, S1-S236. | 3.3 | 135 |
| 16 | State of the Climate in 2016. Bulletin of the American Meteorological Society, 2017, 98, Si-S280. | 3.3 | 132 |
| 17 | State of the Climate in 2012. Bulletin of the American Meteorological Society, 2013, 94, S1-S258. | 3.3 | 129 |
| 18 | Changing sea ice conditions and marine transportation activity in Canadian Arctic waters between 1990 and 2012. Climatic Change, 2014, 123, 161-173. | 3.6 | 123 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | ESM-SnowMIP: assessing snow models and quantifying snow-related climate feedbacks. Geoscientific Model Development, 2018, 11, 5027-5049. | 3.6 | 119 |
| 20 | A comparison of 18 winter seasons of in situ and passive microwave-derived snow water equivalent estimates in Western Canada. Remote Sensing of Environment, 2003, 88, 271-282. | 11.0 | 115 |
| 21 | Historical Northern Hemisphere snow cover trends and projected changes in the CMIP6 multi-model ensemble. Cryosphere, 2020, 14, 2495-2514. | 3.9 | 115 |
| 22 | Retrieving landscape freeze/thaw state from Soil Moisture Active Passive (SMAP) radar and radiometer measurements. Remote Sensing of Environment, 2017, 194, 48-62. | 11.0 | 113 |
| 23 | SMOS prototype algorithm for detecting autumn soil freezing. Remote Sensing of Environment, 2016, 180, 346-360. | 11.0 | 109 |
| 24 | The contribution of AMSR-E 18.7 and 10.7 GHz measurements to improved boreal forest snow water equivalent retrievals. Remote Sensing of Environment, 2008, 112, 2701-2710. | 11.0 | 104 |
| 25 | Assessment of spring snow cover duration variability over northern Canada from satellite datasets. Remote Sensing of Environment, 2007, 111, 367-381. | 11.0 | 100 |
| 26 | Multiple-Layer Adaptation of HUT Snow Emission Model: Comparison With Experimental Data. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2781-2794. | 6.3 | 97 |
| 27 | Canadian snow and sea ice: historical trends and projections. Cryosphere, 2018, 12, 1157-1176. | 3.9 | 95 |
| 28 | Snow cover response to temperature in observational and climate model ensembles. Geophysical Research Letters, 2017, 44, 919-926. | 4.0 | 90 |
| 29 | Development of a tundra-specific snow water equivalent retrieval algorithm for satellite passive microwave data. Remote Sensing of Environment, 2010, 114, 1699-1709. | 11.0 | 89 |
| 30 | Evaluation of long-term Northern Hemisphere snow water equivalent products. Cryosphere, 2020, 14, 1579-1594. | 3.9 | 85 |
| 31 | Early snowmelt significantly enhances boreal springtime carbon uptake. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11081-11086. | 7.1 | 84 |
| 32 | Variability and change in the Canadian cryosphere. Climatic Change, 2012, 115, 59-88. | 3.6 | 79 |
| 33 | Northwest Territories and Nunavut Snow Characteristics from a Subarctic Traverse: Implications for Passive Microwave Remote Sensing. Journal of Hydrometeorology, 2009, 10, 448-463. | 1.9 | 78 |
| 34 | State of the Climate in 2014. Bulletin of the American Meteorological Society, 2015, 96, ES1-ES32. | 3.3 | 78 |
| 35 | Is Eurasian October snow cover extent increasing?. Environmental Research Letters, 2013, 8, 024006. | 5.2 | 75 |
| 36 | Observed and modelled effects of ice lens formation on passive microwave brightness temperatures over snow covered tundra. Remote Sensing of Environment, 2010, 114, 116-126. | 11.0 | 74 |

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|----|---|------|-----------|
| 37 | Recent changes in the exchange of sea ice between the Arctic Ocean and the Canadian Arctic Archipelago. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 3595-3607. | 2.6 | 69 |
| 38 | Evaluation of Spaceborne L-Band Radiometer Measurements for Terrestrial Freeze/Thaw Retrievals in Canada. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015, 8, 4442-4459. | 4.9 | 67 |
| 39 | Evaluation of spring snow covered area depletion in the Canadian Arctic from NOAA snow charts. <i>Remote Sensing of Environment</i> , 2005, 95, 453-463. | 11.0 | 66 |
| 40 | Evaluation of passive microwave brightness temperature simulations and snow water equivalent retrievals through a winter season. <i>Remote Sensing of Environment</i> , 2012, 117, 236-248. | 11.0 | 65 |
| 41 | Coupling the snow thermodynamic model SNOWPACK with the microwave emission model of layered snowpacks for subarctic and arctic snow water equivalent retrievals. <i>Water Resources Research</i> , 2012, 48, . | 4.2 | 65 |
| 42 | Snow and Climate: Feedbacks, Drivers, and Indices of Change. <i>Current Climate Change Reports</i> , 2019, 5, 322-333. | 8.6 | 64 |
| 43 | Impact of 1, 2 and 4°C of global warming on ship navigation in the Canadian Arctic. <i>Nature Climate Change</i> , 2021, 11, 673-679. | 18.8 | 61 |
| 44 | Snow density and ground permittivity retrieved from L-band radiometry: Application to experimental data. <i>Remote Sensing of Environment</i> , 2016, 180, 377-391. | 11.0 | 60 |
| 45 | Characterization and Summary of the 1999–2005 Canadian Prairie Drought. <i>Atmosphere - Ocean</i> , 2011, 49, 421-452. | 1.6 | 59 |
| 46 | Snow Density and Ground Permittivity Retrieved from L-Band Radiometry: A Synthetic Analysis. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015, 8, 3833-3845. | 4.9 | 59 |
| 47 | Detection of pan-Arctic terrestrial snowmelt from QuikSCAT, 2000–2005. <i>Remote Sensing of Environment</i> , 2008, 112, 3794-3805. | 11.0 | 58 |
| 48 | GlobSnow v3.0 Northern Hemisphere snow water equivalent dataset. <i>Scientific Data</i> , 2021, 8, 163. | 5.3 | 58 |
| 49 | Brightness Temperature Simulations of the Canadian Seasonal Snowpack Driven by Measurements of the Snow Specific Surface Area. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2013, 51, 4692-4704. | 6.3 | 55 |
| 50 | Snow Microwave Emission Modeling of Ice Lenses Within a Snowpack Using the Microwave Emission Model for Layered Snowpacks. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2013, 51, 4705-4717. | 6.3 | 54 |
| 51 | Polar amplification and elevation-dependence in trends of Northern Hemisphere snow cover extent, 1971–2014. <i>Environmental Research Letters</i> , 2015, 10, 044010. | 5.2 | 53 |
| 52 | Population vulnerability to climate change linked to timing of breeding in boreal ducks. <i>Global Change Biology</i> , 2012, 18, 480-492. | 9.5 | 52 |
| 53 | Extending the QuikSCAT record of seasonal melt–freeze transitions over Arctic sea ice using ASCAT. <i>Remote Sensing of Environment</i> , 2014, 141, 214-230. | 11.0 | 50 |
| 54 | Response of L-Band brightness temperatures to freeze/thaw and snow dynamics in a prairie environment from ground-based radiometer measurements. <i>Remote Sensing of Environment</i> , 2017, 191, 67-80. | 11.0 | 50 |

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| 55 | Quantifying the skill of CMIP5 models in simulating seasonal albedo and snow cover evolution. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5831-5849. | 3.3 | 48 |
| 56 | Recent changes in pan-Arctic melt onset from satellite passive microwave measurements. Geophysical Research Letters, 2013, 40, 522-528. | 4.0 | 47 |
| 57 | Combining SMMR and SSM/I Data for Time Series Analysis of Central North American Snow Water Equivalent. Journal of Hydrometeorology, 2003, 4, 304-316. | 1.9 | 46 |
| 58 | A spatial statistical operator applied to multidecadate satellite imagery for identification of coral reef stress. Remote Sensing of Environment, 2004, 91, 271-279. | 11.0 | 46 |
| 59 | Investigating the spread in surface albedo for snow-covered forests in CMIP5 models. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1104-1119. | 3.3 | 43 |
| 60 | Retrieval of Effective Correlation Length and Snow Water Equivalent from Radar and Passive Microwave Measurements. Remote Sensing, 2018, 10, 170. | 4.0 | 42 |
| 61 | The influence of canopy snow parameterizations on snow albedo feedback in boreal forest regions. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9810-9821. | 3.3 | 41 |
| 62 | Characterizing local scale snow cover using point measurements during the winter season. Atmosphere - Ocean, 2006, 44, 257-269. | 1.6 | 40 |
| 63 | Testing snow water equivalent retrieval algorithms for passive microwave remote sensing in an alpine watershed of western Canada. Canadian Journal of Remote Sensing, 2010, 36, S74-S86. | 2.4 | 39 |
| 64 | Physical properties of Arctic versus subarctic snow: Implications for high latitude passive microwave snow water equivalent retrievals. Journal of Geophysical Research D: Atmospheres, 2014, 119, 7254-7270. | 3.3 | 39 |
| 65 | Interpreting observed northern hemisphere snow trends with large ensembles of climate simulations. Climate Dynamics, 2014, 43, 345-359. | 3.8 | 39 |
| 66 | Identification of systematic bias in the cross-platform (SMMR and SSM/I) EASE-grid brightness temperature time series. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 910-915. | 6.3 | 38 |
| 67 | A Comparison of Airborne Microwave Brightness Temperatures and Snowpack Properties Across the Boreal Forests of Finland and Western Canada. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 965-978. | 6.3 | 38 |
| 68 | Landfast ice thickness in the Canadian Arctic Archipelago from observations and models. Cryosphere, 2016, 10, 1463-1475. | 3.9 | 38 |
| 69 | Quantifying the Uncertainty in Historical and Future Simulations of Northern Hemisphere Spring Snow Cover. Journal of Climate, 2016, 29, 8647-8663. | 3.2 | 38 |
| 70 | Spatio-temporal influence of tundra snow properties on Ku-band (17.2 GHz) backscatter. Journal of Glaciology, 2015, 61, 267-279. | 2.2 | 37 |
| 71 | New satellite climate data records indicate strong coupling between recent frozen season changes and snow cover over high northern latitudes. Environmental Research Letters, 2015, 10, 084004. | 5.2 | 37 |
| 72 | Simulating seasonally and spatially varying snow cover brightness temperature using HUT snow emission model and retrieval of a microwave effective grain size. Remote Sensing of Environment, 2015, 156, 71-95. | 11.0 | 37 |

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|----|---|------|-----------|
| 73 | The influence of snow microstructure on dual-frequency radar measurements in a tundra environment. Remote Sensing of Environment, 2018, 215, 242-254. | 11.0 | 37 |
| 74 | Simulation of Snow Water Equivalent (SWE) Using Thermodynamic Snow Models in QuÃ©bec, Canada. Journal of Hydrometeorology, 2009, 10, 1447-1463. | 1.9 | 36 |
| 75 | Capturing agricultural soil freeze/thaw state through remote sensing and ground observations: A soil freeze/thaw validation campaign. Remote Sensing of Environment, 2018, 211, 59-70. | 11.0 | 36 |
| 76 | Sea-Ice Melt-Pond Fraction as Determined from Low Level Aerial Photographs. Arctic and Alpine Research, 1997, 29, 345. | 1.3 | 34 |
| 77 | Time-series analysis of passive-microwave-derived central North American snow water equivalent imagery. Annals of Glaciology, 2002, 34, 1-7. | 1.4 | 34 |
| 78 | Sensitivity of AMSR-E Brightness Temperatures to the Seasonal Evolution of Lake Ice Thickness. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 751-755. | 3.1 | 34 |
| 79 | Triple collocation for binary and categorical variables: Application to validating landscape freeze/thaw retrievals. Remote Sensing of Environment, 2016, 176, 31-42. | 11.0 | 34 |
| 80 | Integrating in situ and multiscale passive microwave data for estimation of subgrid scale snow water equivalent distribution and variability. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 960-972. | 6.3 | 33 |
| 81 | Influence of Sensor Overpass Time on Passive Microwave-Derived Snow Cover Parameters. Remote Sensing of Environment, 2000, 71, 297-308. | 11.0 | 32 |
| 82 | Temporal and spatial variability of North American prairie snow cover (1988-1995) inferred from passive microwave- derived snow water equivalent imagery. Water Resources Research, 2000, 36, 255-266. | 4.2 | 32 |
| 83 | Snow cover variability across central Canada (1978â€“2002) derived from satellite passive microwave data. Climatic Change, 2007, 82, 113-130. | 3.6 | 32 |
| 84 | Integrated pan-Arctic melt onset detection from satellite active and passive microwave measurements, 2000-2009. Journal of Geophysical Research, 2011, 116, n/a-n/a. | 3.3 | 31 |
| 85 | Evaluation of Operation IceBridge quick-look snow depth estimates on sea ice. Geophysical Research Letters, 2015, 42, 9302-9310. | 4.0 | 30 |
| 86 | Forward and Inverse Radar Modeling of Terrestrial Snow Using SnowSAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 7122-7132. | 6.3 | 30 |
| 87 | The Arctic. Bulletin of the American Meteorological Society, 2020, 101, S239-S286. | 3.3 | 29 |
| 88 | Differences Between the HUT Snow Emission Model and MEMLS and Their Effects on Brightness Temperature Simulation. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 2001-2019. | 6.3 | 28 |
| 89 | Local-scale variability of snow density on Arctic sea ice. Cryosphere, 2020, 14, 4323-4339. | 3.9 | 28 |
| 90 | Estimating Passive Microwave Brightness Temperature Over Snow-Covered Land in North America Using a Land Surface Model and an Artificial Neural Network. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 235-248. | 6.3 | 27 |

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|-----|---|------|-----------|
| 91 | Validation of the SMAP freeze/thaw product using categorical triple collocation. Remote Sensing of Environment, 2018, 205, 329-337. | 11.0 | 27 |
| 92 | Canadian snow and sea ice: assessment of snow, sea ice, and related climate processes in Canada's Earth system model and climate-prediction system. Cryosphere, 2018, 12, 1137-1156. | 3.9 | 27 |
| 93 | Associations between spatially autocorrelated patterns of SSM/I-derived prairie snow cover and atmospheric circulation. Hydrological Processes, 1998, 12, 2307-2316. | 2.6 | 26 |
| 94 | Merging Conventional (1915-92) and Passive Microwave (1978-2002) Estimates of Snow Extent and Water Equivalent over Central North America. Journal of Hydrometeorology, 2004, 5, 850-861. | 1.9 | 26 |
| 95 | Global Assessment of the SMAP Freeze/Thaw Data Record and Regional Applications for Detecting Spring Onset and Frost Events. Remote Sensing, 2019, 11, 1317. | 4.0 | 26 |
| 96 | Variability and change in terrestrial snow cover: data acquisition and links to the atmosphere. Progress in Physical Geography, 2000, 24, 469-498. | 3.2 | 24 |
| 97 | Snow stratigraphic heterogeneity within ground-based passive microwave radiometer footprints: Implications for emission modeling. Journal of Geophysical Research F: Earth Surface, 2014, 119, 550-565. | 2.8 | 24 |
| 98 | Uncertainty in snow mass retrievals from satellite passive microwave data in lake-rich high-latitude environments. Hydrological Processes, 2006, 20, 1019-1022. | 2.6 | 23 |
| 99 | Effect of snow microstructure variability on Ku-band radar snow water equivalent retrievals. Cryosphere, 2019, 13, 3045-3059. | 3.9 | 23 |
| 100 | The Arctic. Bulletin of the American Meteorological Society, 2021, 102, S263-S316. | 3.3 | 23 |
| 101 | Observations of late winter Canadian tundra snow cover properties. Hydrological Processes, 2014, 28, 3962-3977. | 2.6 | 22 |
| 102 | Recent changes in sea ice area flux through the Beaufort Sea during the summer. Journal of Geophysical Research: Oceans, 2016, 121, 2659-2672. | 2.6 | 22 |
| 103 | The accuracy of snow melt-off day derived from optical and microwave radiometer data - A study for Europe. Remote Sensing of Environment, 2018, 211, 1-12. | 11.0 | 22 |
| 104 | Identification of snow cover regimes through spatial and temporal clustering of satellite microwave brightness temperatures. Remote Sensing of Environment, 2010, 114, 199-210. | 11.0 | 21 |
| 105 | On the simulation of regional scale sublimation over boreal and agricultural landscapes in a climate model. Atmosphere - Ocean, 2006, 44, 289-304. | 1.6 | 20 |
| 106 | Freeze/Thaw Detection and Validation Using Aquarius™ L-Band Backscattering Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 1370-1381. | 4.9 | 20 |
| 107 | Evaluation of the HUT modified snow emission model over lake ice using airborne passive microwave measurements. Remote Sensing of Environment, 2011, 115, 233-244. | 11.0 | 19 |
| 108 | SSM/I derived snow water equivalent data: The potential for investigating linkages between snow cover and atmospheric circulation. Atmosphere - Ocean, 1998, 36, 95-117. | 1.6 | 17 |

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|-----|--|------|-----------|
| 109 | Câ€band backscatter from a complexlyâ€layered snow cover on firstâ€year sea ice. Hydrological Processes, 2014, 28, 4614-4625. | 2.6 | 17 |
| 110 | The Canadian boreal snow water equivalent band. Atmosphere - Ocean, 2006, 44, 305-320. | 1.6 | 16 |
| 111 | Diagnosing the Impacts of Northern Hemisphere Surface Albedo Biases on Simulated Climate. Journal of Climate, 2019, 32, 1777-1795. | 3.2 | 16 |
| 112 | L-Band response to freeze/thaw in a boreal forest stand from ground- and tower-based radiometer observations. Remote Sensing of Environment, 2020, 237, 111542. | 11.0 | 16 |
| 113 | Extreme low sea ice years in the Canadian Arctic Archipelago: 1998 versus 2007. Journal of Geophysical Research, 2010, 115, . | 3.3 | 15 |
| 114 | Multiyear ice replenishment in the <scp>C</scp>anadian <scp>A</scp>rtic <scp>A</scp>rchipelago: 1997â€2013. Journal of Geophysical Research: Oceans, 2015, 120, 1623-1637. | 2.6 | 15 |
| 115 | Evaluation of snow water equivalent datasets over the Saintâ€Maurice river basin region of southern QuÃ©bec. Hydrological Processes, 2018, 32, 2748-2764. | 2.6 | 15 |
| 116 | Recent extreme light sea ice years in the Canadian Arctic Archipelago: 2011 and 2012 eclipse 1998 and 2007. Cryosphere, 2013, 7, 1753-1768. | 3.9 | 14 |
| 117 | Evaluation of the Interactive Multisensor Snow and Ice Mapping System (IMS) for monitoring sea ice phenology. Remote Sensing of Environment, 2014, 147, 65-78. | 11.0 | 14 |
| 118 | Representation of Snow in the Canadian Seasonal to Interannual Prediction System. Part I: Initialization. Journal of Hydrometeorology, 2016, 17, 1467-1488. | 1.9 | 14 |
| 119 | Spatial Variability of L-Band Brightness Temperature during Freeze/Thaw Events over a Prairie Environment. Remote Sensing, 2017, 9, 894. | 4.0 | 13 |
| 120 | L-band radiometry freeze/ thaw validation using air temperature and ground measurements. Remote Sensing Letters, 2018, 9, 403-410. | 1.4 | 13 |
| 121 | Quantifying Snow Mass Mission Concept Trade-Offs Using an Observing System Simulation Experiment. Journal of Hydrometeorology, 2019, 20, 155-173. | 1.9 | 13 |
| 122 | Exploiting the ANN Potential in Estimating Snow Depth and Snow Water Equivalent From the Airborne SnowSAR Data at X- and Ku-Bands. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16. | 6.3 | 13 |
| 123 | Benchmarking algorithm changes to the Snow CCI+ snow water equivalent product. Remote Sensing of Environment, 2022, 274, 112988. | 11.0 | 13 |
| 124 | Winter season variability in North American Prairie SWE distribution and atmospheric circulation. Hydrological Processes, 2000, 14, 3273-3290. | 2.6 | 12 |
| 125 | Frequency and distribution of winter melt events from passive microwave satellite data in the pan-Arctic, 1988â€2013. Cryosphere, 2016, 10, 2589-2602. | 3.9 | 12 |
| 126 | Mackenzie Basin Snow Cover: Variability and Trends from Conventional Data, Satellite Remote Sensing, and Canadian Regional Climate Model Simulations. , 2008, , 213-239. | | 10 |

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|-----|---|------|-----------|
| 127 | Modeling the Observed Microwave Emission from Shallow Multi-Layer Tundra Snow Using DMRT-ML. Remote Sensing, 2017, 9, 1327. | 4.0 | 10 |
| 128 | Snow distribution from SSM/I and its relationships to the hydroclimatology of the Mackenzie River Basin, Canada. Advances in Water Resources, 2010, 33, 667-677. | 3.8 | 9 |
| 129 | Spatial and temporal variation of bulk snow properties in northern boreal and tundra environments based on extensive field measurements. Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 347-363. | 1.6 | 9 |
| 130 | Canadian In Situ Snow Cover Trends for 1955–2017 Including an Assessment of the Impact of Automation. Atmosphere - Ocean, 2021, 59, 77-92. | 1.6 | 9 |
| 131 | Development of a water clear of sea ice detection algorithm from enhanced SeaWinds/QuikSCAT and AMSR-E measurements. Remote Sensing of Environment, 2010, 114, 2594-2609. | 11.0 | 8 |
| 132 | Modelling the L-Band Snow-Covered Surface Emission in a Winter Canadian Prairie Environment. Remote Sensing, 2018, 10, 1451. | 4.0 | 8 |
| 133 | HydroCube Mission concept: P-Band signals of opportunity for remote sensing of snow and root zone soil moisture. , 2017, , . | | 8 |
| 134 | Investigating hemispherical trends in snow accumulation using GlobSnow snow water equivalent data. , 2011, , . | | 7 |
| 135 | Snowmelt variability in Polar Bear Pass, Nunavut, Canada, from QuikSCAT: 2000–2009. Hydrological Processes, 2012, 26, 3477-3488. | 2.6 | 7 |
| 136 | Brief communication: Improved measurement of ice layer density in seasonal snowpacks. Cryosphere, 2016, 10, 2069-2074. | 3.9 | 7 |
| 137 | Plot-scale assessment of soil freeze/thaw detection and variability with impedance probes: implications for remote sensing validation networks. Hydrology Research, 2018, 49, 1-16. | 2.7 | 7 |
| 138 | A Dual-Frequency Ku-Band Radar Mission Concept for Seasonal Snow. , 2019, , . | | 7 |
| 139 | Radio-frequency interference mitigating hyperspectral L-band radiometer. Geoscientific Instrumentation, Methods and Data Systems, 2017, 6, 39-51. | 1.6 | 6 |
| 140 | Relationship between snow cover and atmospheric circulation, central North America, winter 1988. Annals of Glaciology, 1997, 25, 347-352. | 1.4 | 6 |
| 141 | Spatial–temporal patterns of snow cover in western Canada. Canadian Geographer / Géographie Canadienne, 2009, 53, 473-487. | 1.5 | 5 |
| 142 | Investigating the Influence of Variable Freshwater Ice Types on Passive and Active Microwave Observations. Remote Sensing, 2017, 9, 1242. | 4.0 | 5 |
| 143 | UAS-based P-band signals of opportunity for remote sensing of snow and root zone soil moisture. , 2018, , . | | 5 |
| 144 | Relationship between snow cover and atmospheric circulation, central North America, winter 1988. Annals of Glaciology, 1997, 25, 347-352. | 1.4 | 4 |

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|-----|--|-----|-----------|
| 145 | Correction to "Multiple-Layer Adaptation of HUT Snow Emission Model: Comparison With Experimental Data" [Jul 10 2781-2794. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3055-3055. | 6.3 | 4 |
| 146 | Hemispheric snow water equivalent: The need for a synergistic approach. Eos, 2012, 93, 305-305. | 0.1 | 4 |
| 147 | Retrieval of snow parameters from L-band observations - application for SMOS and SMAP. , 2016, , . | | 4 |
| 148 | Development of the Terrestrial Snow Mass Mission. , 2021, , . | | 4 |
| 149 | Application of the Getis statistic to hemispheric and regional scale passive microwave derived snow water equivalent imagery. , 1998, , . | | 3 |
| 150 | A Comparison of Finnish SCAMod Snow Maps and MODIS Snow Maps in Boreal Forests in Finland and in Manitoba, Canada. , 2006, , . | | 3 |
| 151 | Plot Scale Passive Microwave Measurements and Modeling of Layered Snow Using the Multi-layered HUT Model. Canadian Journal of Remote Sensing, 2015, 41, 219-231. | 2.4 | 3 |
| 152 | Landscape freeze/thaw standard and enhanced products from soil moisture active/passive (SMAP) radiometer data. , 2017, , . | | 3 |
| 153 | Variability and change in terrestrial snow cover: data acquisition and links to the atmosphere. Progress in Physical Geography, 2000, 24, 469-498. | 3.2 | 3 |
| 154 | An examination of spatial autocorrelation as a means of monitoring coral reef ecosystems. , 0, , . | | 2 |
| 155 | Determination of the dominant spatial modes of terrestrial snow cover over North America using passive microwave derived data. , 0, , . | | 2 |
| 156 | SSM/I imagery of sea ice, Q-vectors and synoptic-scale linkages between the atmosphere and cryosphere: eighteen years of variability in the Beaufort Sea-the example of principal component one of sea ice. , 0, , . | | 2 |
| 157 | Passive Microwave Brightness Temperature Scaling Over Snow Covered Boreal Forest and Tundra. , 2006, , . | | 2 |
| 158 | Comparison of multiple layer snow emission models. , 2010, , . | | 2 |
| 159 | Implementing hemispherical snow water equivalent product assimilating weather station observations and spaceborne microwave data. , 2011, , . | | 2 |
| 160 | Assessing global satellite-based snow water equivalent datasets in ESA SnowPEX project. , 2016, , . | | 2 |
| 161 | Exploring the influence of snow microstructure on dual-frequency radar measurements. , 2017, , . | | 2 |
| 162 | Validation of the SMAP freeze/thaw product using categorical triple collocation. , 2017, , . | | 2 |

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|-----|---|-----|-----------|
| 163 | A Ku-Band Airborne InSAR for Snow Characterization at Trail Valley Creek. , 2021, , . | | 2 |
| 164 | The influence of sensor overpass time on passive microwave derived snow water equivalent measurements. , 0, , . | | 1 |
| 165 | Evaluation of a multi-algorithm approach to passive microwave monitoring of Central North American snow water equivalent. , 0, , . | | 1 |
| 166 | Evaluating spaceborne passive microwave snow water equivalent retrievals across the Canadian Northern Boreal - Tundra Ecotone. , 0, , . | | 1 |
| 167 | A Comparison of Airborne Passive Microwave Brightness Temperatures and Snowpack Properties across the Boreal Forests of Finland and Western Canada. , 2006, , . | | 1 |
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