# Chris Derksen

## List of Publications by Citations

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167
papers

6,328
citations

45
h-index

73
g-index

7,472
ext. papers

6.9
avg, IF

L-index

#	Paper	IF	Citations
167	Estimating northern hemisphere snow water equivalent for climate research through assimilation of space-borne radiometer data and ground-based measurements. <i>Remote Sensing of Environment</i> , <b>2011</b> , 115, 3517-3529	13.2	371
166	Spring snow cover extent reductions in the 2008\( \textbf{Q} 012 \) period exceeding climate model projections. Geophysical Research Letters, 2012, 39, n/a-n/a	4.9	264
165	Estimating Snow Water Equivalent Using Snow Depth Data and Climate Classes. <i>Journal of Hydrometeorology</i> , <b>2010</b> , 11, 1380-1394	3.7	262
164	A multi-data set analysis of variability and change in Arctic spring snow cover extent, 1967\( \textbf{Q}\) 008. Journal of Geophysical Research, <b>2010</b> , 115,		175
163	Large near-term projected snowpack loss over the western United States. <i>Nature Communications</i> , <b>2017</b> , 8, 14996	17.4	138
162	State of the Climate in 2013. Bulletin of the American Meteorological Society, 2014, 95, S1-S279	6.1	128
161	State of the Climate in 2017. Bulletin of the American Meteorological Society, 2018, 99, Si-S310	6.1	127
160	Evaluation of passive microwave snow water equivalent retrievals across the boreal forest/tundra transition of western Canada. <i>Remote Sensing of Environment</i> , <b>2005</b> , 96, 315-327	13.2	125
159	Characterization of Northern Hemisphere Snow Water Equivalent Datasets, 1981 2010. <i>Journal of Climate</i> , <b>2015</b> , 28, 8037-8051	4.4	115
158	State of the Climate in 2010. Bulletin of the American Meteorological Society, 2011, 92, S1-S236	6.1	114
157	State of the Climate in 2015. Bulletin of the American Meteorological Society, 2016, 97, Si-S275	6.1	114
156	State of the Climate in 2016. Bulletin of the American Meteorological Society, 2017, 98, Si-S280	6.1	112
155	State of the Climate in 2018. Bulletin of the American Meteorological Society, 2019, 100, Si-S306	6.1	111
154	State of the Climate in 2012. Bulletin of the American Meteorological Society, 2013, 94, S1-S258	6.1	109
153	A comparison of 18 winter seasons of in situ and passive microwave-derived snow water equivalent estimates in Western Canada. <i>Remote Sensing of Environment</i> , <b>2003</b> , 88, 271-282	13.2	106
152	LS3MIP (v1.0) contribution to CMIP6: the Land Surface, Snow and Soil moisture Model Intercomparison Project Laims, setup and expected outcome. <i>Geoscientific Model Development</i> , <b>2016</b> , 9, 2809-2832	6.3	98
151	Patterns and trends of Northern Hemisphere snow mass from 1980 to 2018. <i>Nature</i> , <b>2020</b> , 581, 294-298	B 50.4	91

## (2012-2014)

150	Changing sea ice conditions and marine transportation activity in Canadian Arctic waters between 1990 and 2012. <i>Climatic Change</i> , <b>2014</b> , 123, 161-173	4.5	91	
149	Assessment of spring snow cover duration variability over northern Canada from satellite datasets. <i>Remote Sensing of Environment</i> , <b>2007</b> , 111, 367-381	13.2	90	
148	The contribution of AMSR-E 18.7 and 10.7 GHz measurements to improved boreal forest snow water equivalent retrievals. <i>Remote Sensing of Environment</i> , <b>2008</b> , 112, 2701-2710	13.2	86	
147	Development of a tundra-specific snow water equivalent retrieval algorithm for satellite passive microwave data. <i>Remote Sensing of Environment</i> , <b>2010</b> , 114, 1699-1709	13.2	80	
146	SMOS prototype algorithm for detecting autumn soil freezing. <i>Remote Sensing of Environment</i> , <b>2016</b> , 180, 346-360	13.2	80	
145	Multiple-Layer Adaptation of HUT Snow Emission Model: Comparison With Experimental Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2010</b> , 48, 2781-2794	8.1	79	
144	Retrieving landscape freeze/thaw state from Soil Moisture Active Passive (SMAP) radar and radiometer measurements. <i>Remote Sensing of Environment</i> , <b>2017</b> , 194, 48-62	13.2	75	
143	Observed and modelled effects of ice lens formation on passive microwave brightness temperatures over snow covered tundra. <i>Remote Sensing of Environment</i> , <b>2010</b> , 114, 116-126	13.2	70	
142	Northwest Territories and Nunavut Snow Characteristics from a Subarctic Traverse: Implications for Passive Microwave Remote Sensing. <i>Journal of Hydrometeorology</i> , <b>2009</b> , 10, 448-463	3.7	65	
141	Variability and change in the Canadian cryosphere. Climatic Change, 2012, 115, 59-88	4.5	63	
140	Evaluation of spring snow covered area depletion in the Canadian Arctic from NOAA snow charts. <i>Remote Sensing of Environment</i> , <b>2005</b> , 95, 453-463	13.2	62	
139	ESM-SnowMIP: assessing snow models and quantifying snow-related climate feedbacks. <i>Geoscientific Model Development</i> , <b>2018</b> , 11, 5027-5049	6.3	62	
138	State of the Climate in 2014. Bulletin of the American Meteorological Society, 2015, 96, ES1-ES32	6.1	61	
137	Early snowmelt significantly enhances boreal springtime carbon uptake. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 11081-11086	11.5	59	
136	Is Eurasian October snow cover extent increasing?. Environmental Research Letters, 2013, 8, 024006	6.2	59	
135	Canadian snow and sea ice: historical trends and projections. <i>Cryosphere</i> , <b>2018</b> , 12, 1157-1176	5.5	59	
134	Snow cover response to temperature in observational and climate model ensembles. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 919-926	4.9	58	
133	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> , <b>2012</b> , 48,	5.4	58	

132	Recent changes in the exchange of sea ice between the Arctic Ocean and the Canadian Arctic Archipelago. <i>Journal of Geophysical Research: Oceans</i> , <b>2013</b> , 118, 3595-3607	3.3	55
131	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> , <b>2013</b> , 51, 4692-	4 <sup>8</sup> d4	52
130	Snow density and ground permittivity retrieved from L-band radiometry: Application to experimental data. <i>Remote Sensing of Environment</i> , <b>2016</b> , 180, 377-391	13.2	49
129	Detection of pan-Arctic terrestrial snowmelt from QuikSCAT, 2000\(\mathbb{Z}\)005. Remote Sensing of Environment, 2008, 112, 3794-3805	13.2	49
128	. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, <b>2015</b> , 8, 4442-4459	4.7	48
127	Evaluation of passive microwave brightness temperature simulations and snow water equivalent retrievals through a winter season. <i>Remote Sensing of Environment</i> , <b>2012</b> , 117, 236-248	13.2	48
126	Population vulnerability to climate change linked to timing of breeding in boreal ducks. <i>Global Change Biology</i> , <b>2012</b> , 18, 480-492	11.4	47
125	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> , <b>2013</b> , 51, 4705-4717	8.1	47
124	Characterization and Summary of the 1999\(\textit{0}005\) Canadian Prairie Drought. <i>Atmosphere - Ocean</i> , <b>2011</b> , 49, 421-452	1.5	46
123	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> , <b>2015</b> , 8, 3833-3845	4.7	45
122	Extending the QuikSCAT record of seasonal melt <b>f</b> reeze transitions over Arctic sea ice using ASCAT. <i>Remote Sensing of Environment</i> , <b>2014</b> , 141, 214-230	13.2	44
121	Recent changes in pan-Arctic melt onset from satellite passive microwave measurements. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 522-528	4.9	43
120	Combining SMMR and SSM/I Data for Time Series Analysis of Central North American Snow Water Equivalent. <i>Journal of Hydrometeorology</i> , <b>2003</b> , 4, 304-316	3.7	40
119	Quantifying the skill of CMIP5 models in simulating seasonal albedo and snow cover evolution. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5831-5849	4.4	38
118	Polar amplification and elevation-dependence in trends of Northern Hemisphere snow cover extent, 1971 2014. <i>Environmental Research Letters</i> , <b>2015</b> , 10, 044010	6.2	37
117	A spatial statistical operator applied to multidate satellite imagery for identification of coral reef stress. <i>Remote Sensing of Environment</i> , <b>2004</b> , 91, 271-279	13.2	37
116	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> , <b>2017</b> , 191, 67-80	13.2	35
115	Interpreting observed northern hemisphere snow trends with large ensembles of climate simulations. <i>Climate Dynamics</i> , <b>2014</b> , 43, 345-359	4.2	35

# (2015-2010)

114	Testing snow water equivalent retrieval algorithms for passive microwave remote sensing in an alpine watershed of western Canada. <i>Canadian Journal of Remote Sensing</i> , <b>2010</b> , 36, S74-S86	1.8	35	
113	Evaluation of long-term Northern Hemisphere snow water equivalent products. <i>Cryosphere</i> , <b>2020</b> , 14, 1579-1594	5.5	35	
112	The influence of canopy snow parameterizations on snow albedo feedback in boreal forest regions. Journal of Geophysical Research D: Atmospheres, <b>2014</b> , 119, 9810-9821	4.4	34	
111	Snow and Climate: Feedbacks, Drivers, and Indices of Change. <i>Current Climate Change Reports</i> , <b>2019</b> , 5, 322-333	9	33	
110	New satellite climate data records indicate strong coupling between recent frozen season changes and snow cover over high northern latitudes. <i>Environmental Research Letters</i> , <b>2015</b> , 10, 084004	6.2	33	
109	Physical properties of Arctic versus subarctic snow: Implications for high latitude passive microwave snow water equivalent retrievals. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 7254-7270	4.4	33	
108	A Comparison of Airborne Microwave Brightness Temperatures and Snowpack Properties Across the Boreal Forests of Finland and Western Canada. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2009</b> , 47, 965-978	8.1	33	
107	Characterizing local scale snow cover using point measurements during the winter season. <i>Atmosphere - Ocean</i> , <b>2006</b> , 44, 257-269	1.5	33	
106	Simulation of Snow Water Equivalent (SWE) Using Thermodynamic Snow Models in QuBec, Canada. <i>Journal of Hydrometeorology</i> , <b>2009</b> , 10, 1447-1463	3.7	32	
105	Simulating seasonally and spatially varying snow cover brightness temperature using HUT snow emission model and retrieval of a microwave effective grain size. <i>Remote Sensing of Environment</i> , <b>2015</b> , 156, 71-95	13.2	30	
104	. IEEE Transactions on Geoscience and Remote Sensing, <b>2003</b> , 41, 910-915	8.1	30	
103	Historical Northern Hemisphere snow cover trends and projected changes in the CMIP6 multi-model ensemble. <i>Cryosphere</i> , <b>2020</b> , 14, 2495-2514	5.5	30	
102	Landfast ice thickness in the Canadian Arctic Archipelago from observations and models. <i>Cryosphere</i> , <b>2016</b> , 10, 1463-1475	5.5	30	
101	Quantifying the Uncertainty in Historical and Future Simulations of Northern Hemisphere Spring Snow Cover. <i>Journal of Climate</i> , <b>2016</b> , 29, 8647-8663	4.4	29	
100	Investigating the spread in surface albedo for snow-covered forests in CMIP5 models. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 1104-1119	4.4	29	
99	Spatio-temporal influence of tundra snow properties on Ku-band (17.2 GHz) backscatter. <i>Journal of Glaciology</i> , <b>2015</b> , 61, 267-279	3.4	29	
98	Capturing agricultural soil freeze/thaw state through remote sensing and ground observations: A soil freeze/thaw validation campaign. <i>Remote Sensing of Environment</i> , <b>2018</b> , 211, 59-70	13.2	28	
97	Evaluation of Operation IceBridge quick-look snow depth estimates on sea ice. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 9302-9310	4.9	28	

96	Sea-Ice Melt-Pond Fraction as Determined from Low Level Aerial Photographs. <i>Arctic and Alpine Research</i> , <b>1997</b> , 29, 345		28
95	Integrating in situ and multiscale passive microwave data for estimation of subgrid scale snow water equivalent distribution and variability. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2005</b> , 43, 960-972	8.1	28
94	Influence of Sensor Overpass Time on Passive Microwave-Derived Snow Cover Parameters. <i>Remote Sensing of Environment</i> , <b>2000</b> , 71, 297-308	13.2	28
93	Temporal and spatial variability of North American prairie snow cover (1988¶995) inferred from passive microwave- derived snow water equivalent imagery. <i>Water Resources Research</i> , <b>2000</b> , 36, 255-2	6ē <sup>.4</sup>	28
92	Time-series analysis of passive-microwave-derived central North American snow water equivalent imagery. <i>Annals of Glaciology</i> , <b>2002</b> , 34, 1-7	2.5	27
91	Integrated pan-Arctic melt onset detection from satellite active and passive microwave measurements, 2000\( \textbf{Q} 009. \) Journal of Geophysical Research, 2011, 116, n/a-n/a		26
90	Sensitivity of AMSR-E Brightness Temperatures to the Seasonal Evolution of Lake Ice Thickness. <i>IEEE Geoscience and Remote Sensing Letters</i> , <b>2010</b> , 7, 751-755	4.1	26
89	Retrieval of Effective Correlation Length and Snow Water Equivalent from Radar and Passive Microwave Measurements. <i>Remote Sensing</i> , <b>2018</b> , 10, 170	5	25
88	Associations between spatially autocorrelated patterns of SSM/I-derived prairie snow cover and atmospheric circulation. <i>Hydrological Processes</i> , <b>1998</b> , 12, 2307-2316	3.3	25
87	Snow cover variability across central Canada (1978\( \pi\)002) derived from satellite passive microwave data. <i>Climatic Change</i> , <b>2007</b> , 82, 113-130	4.5	25
86	. IEEE Transactions on Geoscience and Remote Sensing, <b>2016</b> , 54, 2001-2019	8.1	24
85	. IEEE Transactions on Geoscience and Remote Sensing, <b>2014</b> , 52, 235-248	8.1	24
84	Validation of the SMAP freeze/thaw product using categorical triple collocation. <i>Remote Sensing of Environment</i> , <b>2018</b> , 205, 329-337	13.2	22
83	Triple collocation for binary and categorical variables: Application to validating landscape freeze/thaw retrievals. <i>Remote Sensing of Environment</i> , <b>2016</b> , 176, 31-42	13.2	22
82	Variability and change in terrestrial snow cover: data acquisition and links to the atmosphere. <i>Progress in Physical Geography</i> , <b>2000</b> , 24, 469-498	3.5	22
81	The influence of snow microstructure on dual-frequency radar measurements in a tundra environment. <i>Remote Sensing of Environment</i> , <b>2018</b> , 215, 242-254	13.2	22
80	Uncertainty in snow mass retrievals from satellite passive microwave data in lake-rich high-latitude environments. <i>Hydrological Processes</i> , <b>2006</b> , 20, 1019-1022	3.3	21
79	Merging Conventional (1915¶2) and Passive Microwave (1978¶002) Estimates of Snow Extent and Water Equivalent over Central North America. <i>Journal of Hydrometeorology</i> , <b>2004</b> , 5, 850-861	3.7	21

# (2011-2006)

On the simulation of regional scale sublimation over boreal and agricultural landscapes in a climate model. <i>Atmosphere - Ocean</i> , <b>2006</b> , 44, 289-304	1.5	20
The Arctic. Bulletin of the American Meteorological Society, <b>2020</b> , 101, S239-S286	6.1	20
Snow stratigraphic heterogeneity within ground-based passive microwave radiometer footprints: Implications for emission modeling. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2014</b> , 119, 550-565	<sub>5</sub> 3.8	19
Identification of snow cover regimes through spatial and temporal clustering of satellite microwave brightness temperatures. <i>Remote Sensing of Environment</i> , <b>2010</b> , 114, 199-210	13.2	19
Canadian snow and sea ice: assessment of snow, sea ice, and related climate processes in Canada's Earth system model and climate-prediction system. <i>Cryosphere</i> , <b>2018</b> , 12, 1137-1156	5.5	18
Recent changes in sea ice area flux through the Beaufort Sea during the summer. <i>Journal of Geophysical Research: Oceans</i> , <b>2016</b> , 121, 2659-2672	3.3	16
. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, <b>2016</b> , 9, 1370-1381	4.7	16
The accuracy of snow melt-off day derived from optical and microwave radiometer data IA study for Europe. <i>Remote Sensing of Environment</i> , <b>2018</b> , 211, 1-12	13.2	16
Observations of late winter Canadian tundra snow cover properties. <i>Hydrological Processes</i> , <b>2014</b> , 28, 3962-3977	3.3	16
SSM/I derived snow water equivalent data: The potential for investigating linkages between snow cover and atmospheric circulation. <i>Atmosphere - Ocean</i> , <b>1998</b> , 36, 95-117	1.5	16
Forward and Inverse Radar Modeling of Terrestrial Snow Using SnowSAR Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2018</b> , 56, 7122-7132	8.1	15
Global Assessment of the SMAP Freeze/Thaw Data Record and Regional Applications for Detecting Spring Onset and Frost Events. <i>Remote Sensing</i> , <b>2019</b> , 11, 1317	5	14
C-band backscatter from a complexly-layered snow cover on first-year sea ice. <i>Hydrological Processes</i> , <b>2014</b> , 28, 4614-4625	3.3	14
Representation of Snow in the Canadian Seasonal to Interannual Prediction System. Part I: Initialization. <i>Journal of Hydrometeorology</i> , <b>2016</b> , 17, 1467-1488	3.7	14
Evaluation of snow water equivalent datasets over the Saint-Maurice river basin region of southern QuBec. <i>Hydrological Processes</i> , <b>2018</b> , 32, 2748-2764	3.3	13
Multiyear ice replenishment in the Canadian Arctic Archipelago: 1997\(\mathbb{Q}\)013. <i>Journal of Geophysical Research: Oceans</i> , <b>2015</b> , 120, 1623-1637	3.3	13
Extreme low sea ice years in the Canadian Arctic Archipelago: 1998 versus 2007. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		13
Evaluation of the HUT modified snow emission model over lake ice using airborne passive microwave measurements. <i>Remote Sensing of Environment</i> , <b>2011</b> , 115, 233-244	13.2	13
	The Arctic. Bulletin of the American Meteorological Society, 2020, 101, 5239-5286  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. Identification of snow cover regimes through spatial and temporal clustering of satellite microwave brightness temperatures. Remote Sensing of Environment, 2010, 114, 199-210  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  Recent changes in sea ice area flux through the Beaufort Sea during the summer. Journal of Geophysical Research: Oceans, 2016, 121, 2659-2672  IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 1370-1381  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  Observations of late winter Canadian tundra snow cover properties. Hydrological Processes, 2014, 28, 3962-3977  SSM/I derived snow water equivalent data: The potential for investigating linkages between snow cover and atmospheric circulation. Atmosphere - Ocean, 1998, 36, 95-117  Forward and Inverse Radar Modeling of Terrestrial Snow Using SnowSAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 7122-7132  Clobal Assessment of the SMAP Freeze/Thaw Data Record and Regional Applications for Detecting Spring Onset and Frost Events. Remote Sensing, 2019, 11, 1317  C-band backscatter from a complexty-layered snow cover on first-year sea ice. Hydrological Processes, 2014, 28, 4614-4625  Representation of Snow in the Canadian Seasonal to Interannual Prediction System. Part I: Initialization. Journal of Hydrometeorology, 2016, 17, 1467-1488  Evaluation of snow win the Canadian Arctic Archipelago: 19978013. Journal of Geophysical Research: Oceans, 2015, 120, 1623-1637  Extreme low s	The Arctic. Bulletin of the American Meteorological Society, 2020, 101, 5239-5286 6.1  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 3.8  Identification of snow cover regimes through spatial and temporal clustering of satellite microwave brightness temperatures. Remote Sensing of Environment, 2010, 114, 199-210 13-2  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 55  Recent changes in sea ice area flux through the Beaufort Sea during the summer. Journal of Geophysical Research: Oceans, 2016, 121, 2659-2672  .IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 1370-1381 47  The accuracy of snow melt-off day derived from optical and microwave radiometer data IA study for Europe. Remote Sensing of Environment, 2018, 211, 1-12  Observations of late winter Canadian tundra snow cover properties. Hydrological Processes, 2014, 28, 3962-3977  SSM/I derived snow water equivalent data: The potential for investigating linkages between snow cover and atmospheric circulation. Atmosphere - Ocean, 1998, 36, 95-117  Forward and Inverse Radar Modeling of Terrestrial Snow Using SnowSAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 7122-7132  Global Assessment of the SMAP Freeze/Thaw Data Record and Regional Applications for Detecting Spring Onset and Frost Events. Remote Sensing, 2019, 11, 1317  C-band backscatter from a complexly-layered snow cover on first-year sea ice. Hydrological Processes, 2014, 28, 4614-4625  Representation of Snow in the Canadian Seasonal to Interannual Prediction System. Part I: Initialization. Journal of Hydrometeorology, 2016, 17, 1467-1488  Evaluation of snow water equivalent datasets over the Saint-Maurice river basin region of southern Qubec. Hydrological Pro

60	Recent extreme light sea ice years in the Canadian Arctic Archipelago: 2011 and 2012 eclipse 1998 and 2007. <i>Cryosphere</i> , <b>2013</b> , 7, 1753-1768	5.5	12
59	The Canadian boreal snow water equivalent band. <i>Atmosphere - Ocean</i> , <b>2006</b> , 44, 305-320	1.5	12
58	Frequency and distribution of winter melt events from passive microwave satellite data in the pan-Arctic, 1988\( \begin{align*} 013. \) Cryosphere, \( \begin{align*} 2016, 10, 2589-2602 \end{align*}	5.5	12
57	Effect of snow microstructure variability on Ku-band radar snow water equivalent retrievals. <i>Cryosphere</i> , <b>2019</b> , 13, 3045-3059	5.5	12
56	L-band radiometry freeze/ thaw validation using air temperature and ground measurements. <i>Remote Sensing Letters</i> , <b>2018</b> , 9, 403-410	2.3	11
55	Remote sensing of snow depth and snow water equivalent <b>2014</b> , 73-98		11
54	Changes in snow, ice, and permafrost across Canada <b>2019</b> ,		11
53	GlobSnow v3.0 Northern Hemisphere snow water equivalent dataset. <i>Scientific Data</i> , <b>2021</b> , 8, 163	8.2	11
52	Evaluation of the Interactive Multisensor Snow and Ice Mapping System (IMS) for monitoring sea ice phenology. <i>Remote Sensing of Environment</i> , <b>2014</b> , 147, 65-78	13.2	10
51	Spatial Variability of L-Band Brightness Temperature during Freeze/Thaw Events over a Prairie Environment. <i>Remote Sensing</i> , <b>2017</b> , 9, 894	5	10
50	Diagnosing the Impacts of Northern Hemisphere Surface Albedo Biases on Simulated Climate. Journal of Climate, <b>2019</b> , 32, 1777-1795	4.4	9
49	Modeling the Observed Microwave Emission from Shallow Multi-Layer Tundra Snow Using DMRT-ML. <i>Remote Sensing</i> , <b>2017</b> , 9, 1327	5	9
48	Winter season variability in North American Prairie SWE distribution and atmospheric circulation. <i>Hydrological Processes</i> , <b>2000</b> , 14, 3273-3290	3.3	9
47	Impact of 1, 2 and 4 °C of global warming on ship navigation in the Canadian Arctic. <i>Nature Climate Change</i> , <b>2021</b> , 11, 673-679	21.4	9
46	Quantifying Snow Mass Mission Concept Trade-Offs Using an Observing System Simulation Experiment. <i>Journal of Hydrometeorology</i> , <b>2019</b> , 20, 155-173	3.7	8
45	Development of a water clear of sea ice detection algorithm from enhanced SeaWinds/QuikSCAT and AMSR-E measurements. <i>Remote Sensing of Environment</i> , <b>2010</b> , 114, 2594-2609	13.2	8
44	Snow distribution from SSM/I and its relationships to the hydroclimatology of the Mackenzie River Basin, Canada. <i>Advances in Water Resources</i> , <b>2010</b> , 33, 667-677	4.7	8
43	Mackenzie Basin Snow Cover: Variability and Trends from Conventional Data, Satellite Remote Sensing, and Canadian Regional Climate Model Simulations <b>2008</b> , 213-239		8

## (2006-2020)

42	L-Band response to freeze/thaw in a boreal forest stand from ground- and tower-based radiometer observations. <i>Remote Sensing of Environment</i> , <b>2020</b> , 237, 111542	13.2	8
41	Snowmelt variability in Polar Bear Pass, Nunavut, Canada, from QuikSCAT: 2000\(\bar{\mathbb{Q}}\)009. <i>Hydrological Processes</i> , <b>2012</b> , 26, 3477-3488	3.3	7
40	Local-scale variability of snow density on Arctic sea ice. <i>Cryosphere</i> , <b>2020</b> , 14, 4323-4339	5.5	7
39	Plot-scale assessment of soil freeze/thaw detection and variability with impedance probes: implications for remote sensing validation networks <b>2018</b> , 49, 1-16		6
38	Relationship between snow cover and atmospheric circulation, central North America, winter 1988. <i>Annals of Glaciology</i> , <b>1997</b> , 25, 347-352	2.5	6
37	Brief communication: Improved measurement of ice layer density in seasonal snowpacks. <i>Cryosphere</i> , <b>2016</b> , 10, 2069-2074	5.5	6
36	Modelling the L-Band Snow-Covered Surface Emission in a Winter Canadian Prairie Environment. <i>Remote Sensing</i> , <b>2018</b> , 10, 1451	5	6
35	Radio-frequency interference mitigating hyperspectral L-band radiometer. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , <b>2017</b> , 6, 39-51	1.5	5
34	Investigating hemispherical trends in snow accumulation using GlobSnow snow water equivalent data <b>2011</b> ,		4
33	Relationship between snow cover and atmospheric circulation, central North America, winter 1988. <i>Annals of Glaciology</i> , <b>1997</b> , 25, 347-352	2.5	4
32	Spatial and temporal variation of bulk snow properties in northern boreal and tundra environments based on extensive field measurements. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , <b>2016</b> , 5, 347-363	1.5	4
31	A Dual-Frequency Ku-Band Radar Mission Concept for Seasonal Snow <b>2019</b> ,		4
30	The Arctic. Bulletin of the American Meteorological Society, 2021, 102, S263-S316	6.1	4
29	Exploiting the ANN Potential in Estimating Snow Depth and Snow Water Equivalent From the Airborne SnowSAR Data at X- and Ku-Bands. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2021</b> , 1-16	8.1	4
28	2016,		3
27	Landscape freeze/thaw standerd and enhanced products from soil moisture active/passive (SMAP) radiometer data 2017,		3
26	Spatial-temporal patterns of snow cover in western Canada. <i>Canadian Geographer / Geographie Canadien</i> , <b>2009</b> , 53, 473-487	1.1	3
25	A Comparison of Finnish SCAmod Snow Maps and MODIS Snow Maps in Boreal Forests in Finland and in Manitoba, Canada <b>2006</b> ,		3

24	Variability and change in terrestrial snow cover: data acquisition and links to the atmosphere.  Progress in Physical Geography, <b>2000</b> , 24, 469-498	j	3
23	HydroCube Mission concept: P-Band signals of opportunity for remote sensing of snow and root zone soil moisture <b>2017</b> ,		3
22	Canadian In Situ Snow Cover Trends for 1955\(\mathbb{Q}\)017 Including an Assessment of the Impact of Automation. <i>Atmosphere - Ocean</i> ,1-16	;	3
21	ESM-SnowMIP: Assessing models and quantifying snow-related climate feedbacks 2018,		3
20	Validation of the SMAP freeze/thaw product using categorical triple collocation 2017,		2
19	Investigating the Influence of Variable Freshwater Ice Types on Passive and Active Microwave Observations. <i>Remote Sensing</i> , <b>2017</b> , 9, 1242		2
18	Plot Scale Passive Microwave Measurements and Modeling of Layered Snow Using the Multi-layered HUT Model. <i>Canadian Journal of Remote Sensing</i> , <b>2015</b> , 41, 219-231	;	2
17	Hemispheric snow water equivalent: The need for a synergistic approach. <i>Eos</i> , <b>2012</b> , 93, 305-305		2
16	2010,		2
15	Implementing hemispherical snow water equivalent product assimilating weather station observations and spaceborne microwave data <b>2011</b> ,		2
14	Passive Microwave Brightness Temperature Scaling Over Snow Covered Boreal Forest and Tundra <b>2006</b> ,		2
13	Historical Northern Hemisphere snow cover trends and projected changes in the CMIP-6 multi-model ensemble		2
12	Exploring the influence of snow microstructure on dual-frequency radar measurements 2017,		1
11	Determination of the dominant spatial modes of terrestrial snow cover over North America using passive microwave derived data		1
10	A Comparison of Airborne Passive Microwave Brightness Temperatures and Snowpack Properties across the Boreal Forests of Finland and Western Canada <b>2006</b> ,		1
9	The influence of sensor overpass time on passive microwave derived snow water equivalent measurement	S	1
8	Improved measurement of ice layer density in seasonal snowpacks		1
7	UAS-based P-band signals of opportunity for remote sensing of snow and root zone soil moisture <b>2018</b> ,		1

#### LIST OF PUBLICATIONS

6	Estimating Snow Water Equivalent in Northern Regions from Satellite Passive Microwave Data <b>2008</b> , 195-212		1
5	Recent extreme light sea ice years in the Canadian Arctic Archipelago: 2011 and 2012 eclipse 1998 and 2007		1
4	Assessing global satellite-based snow water equivalent datasets in ESA SnowPEx project 2016,		1
3	Assessment of Seasonal snow Cover Mass in Northern Hemisphere During the Satellite-ERA <b>2018</b> ,		1
2	Benchmarking algorithm changes to the Snow CCI+ snow water equivalent product. <i>Remote Sensing of Environment</i> , <b>2022</b> , 274, 112988	13.2	1
1	Correction to Multiple-Layer Adaptation of HUT Snow Emission Model: Comparison With Experimental Datal[Jul 10 2781-2794]. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2010</b> , 48, 3055-3055	8.1	0