Thomas L Mote

List of Publications by Year
in descending order

119 papers	5,120 citations	87723 38 h-index	106150 65 g-index
128 all docs	128 docs citations	128 times ranked	4992 citing authors

#	Article	IF	Citations
1	The extreme melt across the Greenland ice sheet in 2012. Geophysical Research Letters, 2012, 39, .	1.5	397
2	Patterns and Causes of Atlanta's Urban Heat Islandâ€"Initiated Precipitation. Journal of Applied Meteorology and Climatology, 2003, 42, 1273-1284.	1.7	264
3	Evidence and analysis of 2012 Greenland records from spaceborne observations, a regional climate model and reanalysis data. Cryosphere, 2013, 7, 615-630.	1.5	242
4	Atmospheric and oceanic climate forcing of the exceptional Greenland ice sheet surface melt in summer 2012. International Journal of Climatology, 2014, 34, 1022-1037.	1.5	182
5	Greenland surface melt trends 1973â€"2007: Evidence of a large increase in 2007. Geophysical Research Letters, 2007, 34, .	1.5	177
6	Spatial variability and trends in observed snow depth over North America. Geophysical Research Letters, 2006, 33, .	1.5	156
7	Radar signatures of the urban effect on precipitation distribution: A case study for Atlanta, Georgia. Geophysical Research Letters, 2007, 34, .	1.5	139
8	Variations in snowpack melt on the Greenland ice sheet based on passive-microwave measurements. Journal of Glaciology, 1995, 41, 51-60.	1.1	116
9	Quantifying the contribution of tropical cyclones to extreme rainfall along the coastal southeastern United States. Geophysical Research Letters, 2007, 34, .	1.5	105
10	Atmospheric River Impacts on Greenland Ice Sheet Surface Mass Balance. Journal of Geophysical Research D: Atmospheres, 2018, 123, 8538-8560.	1.2	98
11	Distribution of Mesoscale Convective Complex Rainfall in the United States. Monthly Weather Review, 2003, 131, 3003-3017.	0.5	91
12	GCIP water and energy budget synthesis (WEBS). Journal of Geophysical Research, 2003, 108, .	3.3	86
13	Oceanic transport of surface meltwater from the southern Greenland ice sheet. Nature Geoscience, 2016, 9, 528-532.	5.4	85
14	Melting glaciers stimulate large summer phytoplankton blooms in southwest Greenland waters. Geophysical Research Letters, 2017, 44, 6278-6285.	1.5	82
15	A Climatology of Derecho-Producing Mesoscale Convective Systemsin the Central and Eastern United States, 1986â€"95. Part I: Temporal and Spatial Distribution. Bulletin of the American Meteorological Society, 1998, 79, 2527-2540.	1.7	78
16	The Contribution of Mesoscale Convective Complexes to Rainfall across Subtropical South America. Journal of Climate, 2009, 22, 4590-4605.	1.2	78
17	Downscaled estimates of late 21st century severe weather from CCSM3. Climatic Change, 2015, 129, 307-321.	1.7	78
18	Derecho Hazards in the United States. Bulletin of the American Meteorological Society, 2005, 86, 1577-1592.	1.7	74

#	ARTICLE	IF	CITATIONS
19	Severe-Thunderstorm Reanalysis Environments and Collocated Radiosonde Observations. Journal of Applied Meteorology and Climatology, 2014, 53, 742-751.	0.6	71
20	Arctic cut-off high drives the poleward shift of a new Greenland melting record. Nature Communications, 2016, 7, 11723.	5.8	67
21	Passive microwave-derived spatial and temporal variations of summer melt on the Greenland ice sheet. Annals of Glaciology, 1993, 17, 233-238.	2.8	66
22	Greenland ice sheet surface melt extent and trends: 1960â€"2010. Journal of Glaciology, 2011, 57, 621-628.	1.1	66
23	Greenland surface air temperature changes from 1981 to 2019 and implications for iceâ€sheet melt and massâ€balance change. International Journal of Climatology, 2021, 41, E1336.	1.5	65
24	Effects of winter precipitation on automobile collisions, injuries, and fatalities in the United States. Journal of Transport Geography, 2015, 48, 165-175.	2.3	59
25	Linking interannual variability in extreme Greenland blocking episodes to the recent increase in summer melting across the Greenland ice sheet. International Journal of Climatology, 2016, 36, 1484-1499.	1.5	56
26	Estimations of Hazardous Convective Weather in the United States Using Dynamical Downscaling. Journal of Climate, 2014, 27, 6581-6589.	1.2	55
27	Greenland blocking index daily series 1851â€"2015: Analysis of changes in extremes and links with North Atlantic and UK climate variability and change. International Journal of Climatology, 2018, 38, 3546-3564.	1.5	54
28	Thunderstorm associated asthma in Atlanta, Georgia. Thorax, 2008, 63, 659-660.	2.7	53
29	Future convective environments using <scp>NARCCAP</scp>. International Journal of Climatology, 2014, 34, 1699-1705.	1.5	53
30	Interepochal Changes in Summer Precipitation in the Southeastern United States: Evidence of Possible Urban Effects near Atlanta, Georgia. Journal of Applied Meteorology and Climatology, 2005, 44, 717-730.	1.7	52
31	A climatology of warmâ€season mesoscale convective complexes in subtropical South America. International Journal of Climatology, 2010, 30, 418-431.	1.5	52
32	Effects of the North Atlantic Oscillation on precipitation-type frequency and distribution in the eastern United States. Theoretical and Applied Climatology, 2008, 94, 51-65.	1.3	47
33	Understanding Greenland ice sheet hydrology using an integrated multi-scale approach. Environmental Research Letters, 2013, 8, 015017.	2.2	46
34	A comparison of modeled, remotely sensed, and measured snow water equivalent in the northern Great Plains. Water Resources Research, 2003, 39, .	1.7	45
35	Characteristics of Winter-Precipitation-Related Transportation Fatalities in the United States. Weather, Climate, and Society, 2015, 7, 133-145.	0.5	45
36	An Overview of Synoptic and Mesoscale Factors Contributing to the Disastrous Atlanta Flood of 2009. Bulletin of the American Meteorological Society, 2011, 92, 861-870.	1.7	44

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37	Convection Initiation along Soil Moisture Boundaries in the Southern Great Plains. Monthly Weather Review, 2010, 138, 1140-1151.	0.5	43
38	Increasing water vapor transport to the Greenland Ice Sheet revealed using selfâ€organizing maps. Geophysical Research Letters, 2016, 43, 9250-9258.	1.5	43
39	On the Role of Snow Cover in Depressing Air Temperature. Journal of Applied Meteorology and Climatology, 2008, 47, 2008-2022.	0.6	41
40	Persistent Hydrological Consequences of Hurricane Maria in Puerto Rico. Geophysical Research Letters, 2019, 46, 1413-1422.	1.5	39
41	Has Arctic Sea Ice Loss Contributed to Increased Surface Melting of the Greenland Ice Sheet?. Journal of Climate, 2016, 29, 3373-3386.	1.2	38
42	Exploring the Potential Impact of Greenland Meltwater on Stratification, Photosynthetically Active Radiation, and Primary Production in the Labrador Sea. Journal of Geophysical Research: Oceans, 2018, 123, 2570-2591.	1.0	37
43	Atmospheric drivers of Greenland surface melt revealed by selfâ€organizing maps. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5095-5114.	1.2	36
44	Aerosols and associated precipitation patterns in Atlanta. Atmospheric Environment, 2009, 43, 4359-4373.	1.9	35
45	Effects of Rainfall on Vehicle Crashes in Six U.S. States. Weather, Climate, and Society, 2017, 9, 53-70.	0.5	35
46	Strong Summer Atmospheric Rivers Trigger Greenland Ice Sheet Melt through Spatially Varying Surface Energy Balance and Cloud Regimes. Journal of Climate, 2020, 33, 6809-6832.	1.2	35
47	Synoptic-Scale Features Common to Heavy Snowstorms in the Southeast United States. Weather and Forecasting, 1997, 12, 5-23.	0.5	34
48	Estimation of runoff rates, mass balance, and elevation changes on the Greenland ice sheet from passive microwave observations. Journal of Geophysical Research, 2003, 108, .	3.3	34
49	Snowpack control over the thermal offset of air and soil temperatures in eastern North Dakota. Geophysical Research Letters, 2005, 32, .	1.5	33
50	A climatology of atmospheric river interactions with the southeastern United States coastline. International Journal of Climatology, 2017, 37, 4077-4091.	1.5	33
51	Polar Jet Associated Circulation Triggered a Saharan Cyclone and Derived the Poleward Transport of the African Dust Generated by the Cyclone. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,899.	1.2	33
52	Surface mass balance of the Greenland ice sheet from climate-analysis data and accumulation/runoff models. Annals of Glaciology, 2002, 35, 67-72.	2.8	32
53	Temporal characteristics of USA snowfall 1945â€"1946 through to 1984â€"1985. International Journal of Climatology, 1993, 13, 65-76.	1.5	31
54	Trends in snow ablation over North America. International Journal of Climatology, 2007, 27, 739-748.	1.5	31

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55	Creation and Validation of a Comprehensive 1Â° by 1Â° Daily Gridded North American Dataset for 1900â€“2009: Snowfall. Journal of Atmospheric and Oceanic Technology, 2016, 33, 857-871.	0.5	31
56	The Saharan Air Layer as an Early Rainfall Season Suppressant in the Eastern Caribbean: The 2015 Puerto Rico Drought. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10,966.	1.2	31
57	Using Landsat to Identify Thunderstorm Damage in Agricultural Regions. Bulletin of the American Meteorological Society, 2002, 83, 363-376.	1.7	30
58	Monitoring Surface and Subsurface Water Storage Using Confined Aquifer Water Levels at the Savannah River Site, USA. Vadose Zone Journal, 2007, 6, 327-335.	1.3	30
59	The Arctic. Bulletin of the American Meteorological Society, 2020, 101, S239-S286.	1.7	29
60	Mid-tropospheric circulation and surface melt on the Greenland ice sheet. Part II: synoptic climatology. International Journal of Climatology, 1998, 18, 131-145.	1.5	28
61	Mid-tropospheric circulation and surface melt on theGreenland ice sheet. Part I: atmospheric teleconnections. International Journal of Climatology, 1998, 18, 111-129.	1.5	26
62	Variations in snowpack melt on the Greenland ice sheet based on passive-microwave measurements. Journal of Glaciology, 1995, 41, 51-60.	1.1	25
63	Local and Remote Atmospheric Circulation Drivers of Arctic Change: A Review. Frontiers in Earth Science, 2021, 9, .	0.8	24
64	Southeast Greenland Winter Precipitation Strongly Linked to the Icelandic Low Position. Journal of Climate, 2018, 31, 4483-4500.	1.2	23
65	The Arctic. Bulletin of the American Meteorological Society, 2021, 102, S263-S316.	1.7	23
66	Characterizing severe weather potential in synoptically weakly forced thunderstorm environments. Natural Hazards and Earth System Sciences, 2018, 18, 1261-1277.	1.5	22
67	Passive microwave-derived spatial and temporal variations of summer melt on the Greenland ice sheet. Annals of Glaciology, 1993, 17, 233-238.	2.8	21
68	A synoptic climatology of derecho producing mesoscale convective systems in the North-Central Plains. International Journal of Climatology, 2000, 20, 1329-1349.	1.5	21
69	Winter Lightning and Heavy Frozen Precipitation in the Southeast United States. Weather and Forecasting, 2001, 16, 478-490.	0.5	21
70	Associations between continental-scale snow cover anomalies and air mass frequencies across eastern North America. International Journal of Climatology, 2002, 22, 1473-1494.	1.5	21
71	A climatological assessment of Greenland blocking conditions associated with the track of Hurricane Sandy and historical North Atlantic hurricanes. International Journal of Climatology, 2015, 35, 746-760.	1.5	21
72	A Climatology of Weakly Forced and Pulse Thunderstorms in the Southeast United States. Journal of Applied Meteorology and Climatology, 2017, 56, 3017-3033.	0.6	21

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73	The Role of Airmass Types and Surface Energy Fluxes in Snow Cover Ablation in the Central Appalachians. Journal of Applied Meteorology and Climatology, 2004, 43, 1887-1899.	1.7	20
74	Regions of autumn Eurasian snow cover and associations with North American winter temperatures. International Journal of Climatology, 2012, 32, 1164-1177.	1.5	20
75	The impacts of the PNA and NAO on annual maximum snowpack over southern Canada during 1979â€“2009. International Journal of Climatology, 2013, 33, 388-395.	1.5	20
76	Assessing the role of precursor cyclones on the formation of extreme Greenland blocking episodes and their impact on summer melting across the Greenland ice sheet. Journal of Geophysical Research D: Atmospheres, 2015, 120, 12357-12377.	1.2	18
77	Future precipitation variability during the early rainfall season in the El Yunque National Forest. Science of the Total Environment, 2019, 661, 326-336.	3.9	18
78	The Synergistic Relationship between Soil Moisture and the Low-Level Jet and Its Role on the Prestorm Environment in the Southern Great Plains. Journal of Applied Meteorology and Climatology, 2010, 49, 775-791.	0.6	17
79	Atmospheric circulation patterns, cloud-to-ground lightning, and locally intense convective rainfall associated with debris flow initiation in the Dolomite Alps of northeastern Italy. Natural Hazards and Earth System Sciences, 2016, 16, 509-528.	1.5	16
80	Extreme Greenland blocking and highâ€latitude moisture transport. Atmospheric Science Letters, 2020, 21, e1002.	0.8	16
81	A meandering polar jet caused the development of a Saharan cyclone and the transport of dust toward Greenland. Advances in Science and Research, 0, 16, 49-56.	1.0	16
82	On the episodic nature of derecho-producing convective systems in the United States. International Journal of Climatology, 2005, 25, 1915-1932.	1.5	15
83	A seasonal-scale climatological analysis correlating spring tornadic activity with antecedent fallâ€“winter drought in the southeastern United States. Environmental Research Letters, 2009, 4, 024012.	2.2	15
84	Attribution of snowmelt onset in Northern Canada. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9638-9653.	1.2	15
85	An Empirical Study of the Relationship between Seasonal Precipitation and Thermodynamic Environment in Puerto Rico. Weather and Forecasting, 2019, 34, 277-288.	0.5	15
86	Trends in Average Snow Depth Across the Western United States. Physical Geography, 2010, 31, 172-185.	0.6	14
87	Climate change and associated fire potential for the south-eastern United States in the 21st century. International Journal of Wildland Fire, 2013, 22, 1034.	1.0	14
88	Atmospheric controls on Puerto Rico precipitation using artificial neural networks. Climate Dynamics, 2016, 47, 2515-2526.	1.7	14
89	Assessing the climatic and environmental impacts of midâ€tropospheric anticyclones over Alaska. International Journal of Climatology, 2018, 38, 351-364.	1.5	14
90	INFLUENCE OF ENSO ON MAXIMUM, MINIMUM, AND MEAN TEMPERATURES IN THE SOUTHEAST UNITED STATES. Physical Geography, 1996, 17, 497-512.	0.6	13

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91	Standardizing the Definition of a â€œPulseâ€• Thunderstorm. Bulletin of the American Meteorological Society, 2017, 98, 905-913.	1.7	12
92	Analysing regional climate forcing on historical precipitation variability in Northeast Puerto Rico. International Journal of Climatology, 2018, 38, e224.	1.5	12
93	Controls on the Transport of Meltwater From the Southern Greenland Ice Sheet in the Labrador Sea. Journal of Geophysical Research: Oceans, 2019, 124, 3551-3560.	1.0	12
94	Antarctica and the Southern Ocean. Bulletin of the American Meteorological Society, 2021, 102, S317-S356.	1.7	12
95	Ablation Rate Estimates over the Greenland Ice Sheet from Microwave Radiometric Data. Professional Geographer, 2000, 52, 322-331.	1.0	11
96	Role Of Energy Budget Components On Snow Ablation From A Mid-Latitude Prairie Snowpack. Polar Geography, 2002, 26, 87-115.	0.8	11
97	A rain on snow climatology and temporal analysis for the eastern United States. Physical Geography, 2020, 41, 54-69.	0.6	10
98	Historical trends of seasonal Greenland blocking under different blocking metrics. International Journal of Climatology, 2021, 41, E3263.	1.5	10
99	Spatial and Scaleâ€Dependent Controls on North American Panâ€Arctic Minimum River Discharge. Geographical Analysis, 2012, 44, 202-218.	1.9	9
100	A SYNOPTIC CLIMATOLOGY OF COOL-SEASON DERECHO EVENTS. Physical Geography, 2000, 21, 21-37.	0.6	8
101	The extensive episode of derechoâ€producing convective systems in the United States during May and June 1998: A multiâ€scale analysis and review. Meteorological Applications, 2007, 14, 227-244.	0.9	8
102	Variability in warm-season atmospheric circulation and precipitation patterns over subtropical South America: relationships between the South Atlantic convergence zone and large-scale organized convection over the La Plata basin. Climate Dynamics, 2017, 48, 241-263.	1.7	8
103	Greenland Ice Sheet late-season melt: investigating multiscale drivers of K-transect events. Cryosphere, 2019, 13, 2241-2257.	1.5	8
104	<scp>Oceanâ€"atmosphere</scp> variability and drought in the insular Caribbean. International Journal of Climatology, 2022, 42, 5016-5037.	1.5	8
105	A storage model approach to the assessment of snow depth trends. Water Resources Research, 2009, 45, .	1.7	7
106	Modeled Atmospheric Optical and Thermodynamic Responses to an Exceptional Transâ€Atlantic Dust Outbreak. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD032909.	1.2	7
107	A comparison of microwave radiometric data and modeled snowpack conditions for Dye 2, Greenland. Meteorology and Atmospheric Physics, 1996, 59, 245-255.	0.9	6
108	A hybrid Climatology of Snow Water Equivalent Over the Northern Great Plains of the United States. Polar Geography, 2002, 26, 187-209.	0.8	6

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109	Validation of NARCCAP temperature data for some forest sites in the southeast United States. Atmospheric Science Letters, 2012, 13, 275-282.	0.8	6
110	Indications of melt in near-surface ice-core stratigraphy: comparisons with passive-microwave melt signals over the Greenland ice sheet. Annals of Glaciology, 1995, 21, 59-63.	2.8	4
111	Identifying and extracting a seasonal streamflow signal from remotely sensed snow cover in the Columbia River Basin. Remote Sensing Applications: Society and Environment, 2019, 14, 207-223.	0.8	4
112	Systematic precipitation redistribution following a strong hurricane landfall. Theoretical and Applied Climatology, 2020, 139, 861-872.	1.3	4
113	Summer Greenland Blocking Diversity and Its Impact on the Surface Mass Balance of the Greenland Ice Sheet. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	4
114	An analysis of seasonal biases in satellite and reanalysis rainfall products in the Savannah River basin. Physical Geography, 2014, 35, 181-194.	0.6	3
115	Indications of melt in near-surface ice-core stratigraphy: comparisons with passive-microwave melt signals over the Greenland ice sheet. Annals of Glaciology, 1995, 21, 59-63.	2.8	1
116	The Influence of Point Source Aerosol Emissions on Atmospheric Convective Activity in the Vicinity of Power Plants in Georgia, USA. Papers in Applied Geography, 2015, 1, 134-142.	0.8	1
117	The algorithmic detection of pulse thunderstorms within a large, mostly nonâ€severe sample. Meteorological Applications, 2018, 25, 629-641.	0.9	1
118	Declining North American snow cover ablation frequency. International Journal of Climatology, 2021, 41, 5213-5225.	1.5	1
119	Framing the Future in the Southern United States. , 2013, , 9-44.		0