R T Sutton

List of Publications by Year
in descending order

135 papers	14,612 citations	26630 56 h-index	19190 118 g-index
165 all docs	165 docs citations	165 times ranked	11049 citing authors

#	Article	IF	Citations
1	Recent decadal weakening of the summer Eurasian westerly jet attributable to anthropogenic aerosol emissions. Nature Communications, 2022, 13, 1148.	12.8	22
2	Interactions between the stratospheric polar vortex and Atlantic circulation on seasonal to multi-decadal timescales. Atmospheric Chemistry and Physics, 2022, 22, 4867-4893.	4.9	1
3	The Role of Anthropogenic Aerosol Forcing in the 1850â€“1985 Strengthening of the AMOC in CMIP6 Historical Simulations. Journal of Climate, 2022, 35, 3243-3263.	3.2	11
4	Labrador Sea subsurface density as a precursor of multidecadal variability in the North Atlantic: a multi-model study. Earth System Dynamics, 2021, 12, 419-438.	7.1	13
5	Recent trends in summer atmospheric circulation in the North Atlantic/European region: is there a role for anthropogenic aerosols?. Journal of Climate, 2021, , 1-49.	3.2	5
6	The Evaluation of the North Atlantic Climate System in UKESM1 Historical Simulations for CMIP6. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002126.	3.8	8
7	U.K. Community Earth System Modeling for CMIP6. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002004.	3.8	18
8	Historical Simulations With HadGEM3â€GC3.1 for CMIP6. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001995.	3.8	84
9	Observed Emergence of the Climate Change Signal: From the Familiar to the Unknown. Geophysical Research Letters, 2020, 47, e2019GL086259.	4.0	76
10	Aerosolâ€Forced AMOC Changes in CMIP6 Historical Simulations. Geophysical Research Letters, 2020, 47, e2020GL088166.	4.0	85
11	Attribution of 2012 extreme climate events: does air-sea interaction matter?. Climate Dynamics, 2020, 55, 1225-1245.	3.8	2
12	Processes shaping the spatial pattern and seasonality of the surface air temperature response to anthropogenic forcing. Climate Dynamics, 2020, 54, 3959-3975.	3.8	7
13	Sensitivity of Historical Climate Simulations to Uncertain Aerosol Forcing. Geophysical Research Letters, 2020, 47, e2019GL085806.	4.0	28
14	Development, Amplification, and Decay of Atlantic/European Summer Weather Patterns Linked to Spring North Atlantic Sea Surface Temperatures. Journal of Climate, 2020, 33, 5939-5951.	3.2	16
15	ESD Ideas: Global climate response scenarios for IPCCÂassessments. Earth System Dynamics, 2020, 11, 751-754.	7.1	6
16	Impacts of recent decadal changes in Asian aerosols on the East Asian summer monsoon: roles of aerosolâ€“radiation and aerosolâ€“cloud interactions. Climate Dynamics, 2019, 53, 3235-3256.	3.8	62
17	Impact of airâ€“sea coupling on Northern Hemisphere summer climate and the monsoonâ€–desert teleconnection. Climate Dynamics, 2019, 53, 5063-5078.	3.8	3
18	Projected near term changes in the East Asian summer monsoon and its uncertainty. Environmental Research Letters, 2019, 14, 084038.	5.2	9

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19	Climate Science Needs to Take Risk Assessment Much More Seriously. Bulletin of the American Meteorological Society, 2019, 100, 1637-1642.	3.3	72
20	A Review of the Role of the Atlantic Meridional Overturning Circulation in Atlantic Multidecadal Variability and Associated Climate Impacts. Reviews of Geophysics, 2019, 57, 316-375.	23.0	298
21	Challenges and opportunities for improved understanding of regional climate dynamics. Nature Climate Change, 2018, 8, 101-108.	18.8	56
22	Multiple perspectives on the attribution of the extreme European summer of 2012 to climate change. Climate Dynamics, 2018, 50, 3537-3555.	3.8	15
23	Observational evidence of European summer weather patterns predictable from spring. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 59-63.	7.1	42
24	Atlantic Multidecadal Variability and the U.K. ACSIS Program. Bulletin of the American Meteorological Society, 2018, 99, 415-425.	3.3	80
25	Recent multivariate changes in the North Atlantic climate system, with a focus on 2005â€“2016. International Journal of Climatology, 2018, 38, 5050-5076.	3.5	34
26	ESD Ideas: a simple proposal to improve the contribution of IPCC WGI to the assessment and communication of climate change risks. Earth System Dynamics, 2018, 9, 1155-1158.	7.1	26
27	An Intercomparison of Skill and Overconfidence/Underconfidence of the Wintertime North Atlantic Oscillation in Multimodel Seasonal Forecasts. Geophysical Research Letters, 2018, 45, 7808-7817.	4.0	83
28	Forced decadal changes in the East Asian summer monsoon: the roles of greenhouse gases and anthropogenic aerosols. Climate Dynamics, 2018, 51, 3699-3715.	3.8	49
29	Attributing extreme weather to climate change is not a done deal. Nature, 2018, 561, 177-177.	27.8	8
30	Decadal predictions with the HiGEM high resolution global coupled climate model: description and basic evaluation. Climate Dynamics, 2017, 48, 297-311.	3.8	16
31	Understanding the rapid summer warming and changes in temperature extremes since the mid-1990s over Western Europe. Climate Dynamics, 2017, 48, 1537-1554.	3.8	86
32	Attribution of Forced Decadal Climate Change in Coupled and Uncoupled Oceanâ€“Atmosphere Model Experiments. Journal of Climate, 2017, 30, 6203-6223.	3.2	40
33	Mechanisms of decadal variability in the Labrador Sea and the wider North Atlantic in a high-resolution climate model. Climate Dynamics, 2017, 49, 2625-2647.	3.8	37
34	Connecting Climate Model Projections of Global Temperature Change with the Real World. Bulletin of the American Meteorological Society, 2016, 97, 963-980.	3.3	61
35	Abrupt summer warming and changes in temperature extremes over Northeast Asia since the mid-1990s: Drivers and physical processes. Advances in Atmospheric Sciences, 2016, 33, 1005-1023.	4.3	64
36	The 2015 European Heat Wave. Bulletin of the American Meteorological Society, 2016, 97, S57-S62.	3.3	47

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37	A reversal of climatic trends in the North Atlantic since 2005. Nature Geoscience, 2016, 9, 513-517.	12.9	174
38	Preferred response of the East Asian summer monsoon to local and non-local anthropogenic sulphur dioxide emissions. Climate Dynamics, 2016, 46, 1733-1751.	3.8	49
39	Comment on â€œThe Atlantic Multidecadal Oscillation without a role for ocean circulationâ€. Science, 2016, 352, 1527-1527.	12.6	136
40	Atmospheric response in summer linked to recent Arctic sea ice loss. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2070-2076.	2.7	48
41	What does global mean temperature tell us about local climate?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140426.	3.4	53
42	Exploring the impact of CMIP5 model biases on the simulation of North Atlantic decadal variability. Geophysical Research Letters, 2015, 42, 5926-5934.	4.0	80
43	The 2014 Hot, Dry Summer in Northeast Asia. Bulletin of the American Meteorological Society, 2015, 96, S105-S110.	3.3	19
44	Dominant role of greenhouse-gas forcing in the recovery of Sahel rainfall. Nature Climate Change, 2015, 5, 757-760.	18.8	183
45	Atmospheric Impact of Arctic Sea Ice Loss in a Coupled Oceanâ€“Atmosphere Simulation*. Journal of Climate, 2015, 28, 9606-9622.	3.2	32
46	A Mechanism of Internal Decadal Atlantic Ocean Variability in a High-Resolution Coupled Climate Model. Journal of Climate, 2015, 28, 7764-7785.	3.2	32
47	The impact of salinity perturbations on the future uptake of heat by the Atlantic Ocean. Geophysical Research Letters, 2014, 41, 9072-9079.	4.0	7
48	An Anatomy of the Cooling of the North Atlantic Ocean in the 1960s and 1970s. Journal of Climate, 2014, 27, 8229-8243.	3.2	43
49	The Impacts of European and Asian Anthropogenic Sulfur Dioxide Emissions on Sahel Rainfall. Journal of Climate, 2014, 27, 7000-7017.	3.2	44
50	The Importance of Wind and Buoyancy Forcing for the Boundary Density Variations and the Geostrophic Component of the AMOC at 26Â°N. Journal of Physical Oceanography, 2014, 44, 2387-2408.	1.7	56
51	The Interpretation and Use of Biases in Decadal Climate Predictions. Journal of Climate, 2014, 27, 2931-2947.	3.2	23
52	Decadal Climate Prediction: An Update from the Trenches. Bulletin of the American Meteorological Society, 2014, 95, 243-267.	3.3	454
53	Atlantic overturning in decline?. Nature Geoscience, 2014, 7, 2-3.	12.9	124
54	Decadal predictions of the cooling and freshening of the North Atlantic in the 1960s and the role of ocean circulation. Climate Dynamics, 2014, 42, 2353-2365.	3.8	53

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55	Uncertainties in the timing of unprecedented climates. Nature, 2014, 511, E3-E5.	27.8	63
56	A novel transport assimilation method for the Atlantic meridional overturning circulation at 26Â°N. Quarterly Journal of the Royal Meteorological Society, 2014, 140, 2563-2572.	2.7	8
57	Changes in tropical Atlantic interannual variability from a substantial weakening of the meridional overturning circulation. Climate Dynamics, 2013, 41, 2765-2784.	3.8	23
58	A verification framework for interannual-to-decadal predictions experiments. Climate Dynamics, 2013, 40, 245-272.	3.8	254
59	Predictable Climate Impacts of the Decadal Changes in the Ocean in the 1990s. Journal of Climate, 2013, 26, 6329-6339.	3.2	37
60	Have Aerosols Caused the Observed Atlantic Multidecadal Variability?. Journals of the Atmospheric Sciences, 2013, 70, 1135-1144.	1.7	282
61	Variability of the North Atlantic summer storm track: mechanisms and impacts on European climate. Environmental Research Letters, 2013, 8, 034037.	5.2	89
62	A lagged response to the 11 year solar cycle in observed winter Atlantic/European weather patterns. Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,405.	3.3	154
63	Mechanisms Linking Volcanic Aerosols to the Atlantic Meridional Overturning Circulation. Journal of Climate, 2012, 25, 3039-3051.	3.2	32
64	Causes of the Rapid Warming of the North Atlantic Ocean in the Mid-1990s. Journal of Climate, 2012, 25, 4116-4134.	3.2	226
65	Past, Present, and Future Changes in the Atlantic Meridional Overturning Circulation. Bulletin of the American Meteorological Society, 2012, 93, 1663-1676.	3.3	153
66	The impact of resolution on the adjustment and decadal variability of the Atlantic meridional overturning circulation in a coupled climate model. Climate Dynamics, 2012, 39, 3057-3073.	3.8	38
67	Atlantic Ocean influence on a shift in European climate in the 1990s. Nature Geoscience, 2012, 5, 788-792.	12.9	370
68	Time of emergence of climate signals. Geophysical Research Letters, 2012, 39, .	4.0	375
69	Aerosol contribution to the rapid warming of nearâ€term climate under RCP 2.6. Geophysical Research Letters, 2012, 39, .	4.0	40
70	Importance of density-compensated temperature change for deep North Atlantic Ocean heat uptake. Nature Geoscience, 2012, 5, 905-910.	12.9	35
71	Initialized decadal predictions of the rapid warming of the North Atlantic Ocean in the mid 1990s. Geophysical Research Letters, 2012, 39, .	4.0	91
72	The impact of North Atlantic sea surface temperature errors on the simulation of North Atlantic European region climate. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 1774-1783.	2.7	61

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73	Projections of when temperature change will exceed 2 Â°C above pre-industrial levels. Nature Climate Change, 2011, 1, 407-412.	18.8	151
74	The potential to narrow uncertainty in projections of regional precipitation change. Climate Dynamics, 2011, 37, 407-418.	3.8	784
75	Changes of interannual NAO variability in response to greenhouse gases forcing. Climate Dynamics, 2011, 37, 1621-1641.	3.8	42
76	Evaluating the potential for statistical decadal predictions of sea surface temperatures with a perfect model approach. Climate Dynamics, 2011, 37, 2495-2509.	3.8	51
77	Processes governing the predictability of the Atlantic meridional overturning circulation in a coupled GCM. Climate Dynamics, 2011, 37, 1771-1782.	3.8	18
78	Estimating Climatically Relevant Singular Vectors for Decadal Predictions of the Atlantic Ocean. Journal of Climate, 2011, 24, 109-123.	3.2	9
79	Climate impacts of recent multidecadal changes in Atlantic Ocean Sea Surface Temperature: a multimodel comparison. Climate Dynamics, 2010, 34, 1041-1058.	3.8	90
80	Case studies in interannual to decadal climate predictability. Climate Dynamics, 2010, 35, 1169-1189.	3.8	22
81	The Potential to Narrow Uncertainty in Regional Climate Predictions. Bulletin of the American Meteorological Society, 2009, 90, 1095-1108.	3.3	1,936
82	Decadal Predictability of the Atlantic Ocean in a Coupled GCM: Forecast Skill and Optimal Perturbations Using Linear Inverse Modeling. Journal of Climate, 2009, 22, 3960-3978.	3.2	62
83	A review of climate risk information for adaptation and development planning. International Journal of Climatology, 2009, 29, 1193-1215.	3.5	231
84	Understanding Landâ€“Sea Warming Contrast in Response to Increasing Greenhouse Gases. Part I: Transient Adjustment. Journal of Climate, 2009, 22, 3079-3097.	3.2	132
85	Does the North Atlantic Oscillation show unusual persistence on intraseasonal timescales?. Geophysical Research Letters, 2009, 36, .	4.0	55
86	Climate predictability in the second year. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 913-916.	3.4	6
87	Decadal climate prediction (project GCEP). Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 925-937.	3.4	10
88	Exploring multi-model atmospheric GCM ensembles with ANOVA. Climate Dynamics, 2008, 31, 973-986.	3.8	12
89	Detection and attribution of Atlantic salinity changes. Geophysical Research Letters, 2008, 35, .	4.0	59
90	Potential predictability of rapid changes in the Atlantic meridional overturning circulation. Geophysical Research Letters, 2008, 35, .	4.0	35

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91	Climate Response to Basin-Scale Warming and Cooling of the North Atlantic Ocean. Journal of Climate, 2007, 20, 891-907.	3.2	254
92	El NiÃ±o in a Coupled Climate Model: Sensitivity to Changes in Mean State Induced by Heat Flux and Wind Stress Corrections. Journal of Climate, 2007, 20, 2273-2298.	3.2	29
93	Enhancement of ENSO Variability by a Weakened Atlantic Thermohaline Circulation in a Coupled GCM. Journal of Climate, 2007, 20, 4920-4939.	3.2	103
94	Land/sea warming ratio in response to climate change: IPCC AR4 model results and comparison with observations. Geophysical Research Letters, 2007, 34, .	4.0	339
95	A new feedback on climate change from the hydrological cycle. Geophysical Research Letters, 2007, 34, .	4.0	32
96	The Influence of a Weakening of the Atlantic Meridional Overturning Circulation on ENSO. Journal of Climate, 2007, 20, 4899-4919.	3.2	282
97	Sea-ice decline due to more than warming alone. Nature, 2007, 450, 27-27.	27.8	7
98	Quasi-periodic fluctuations in the Greenlandâ€“Icelandâ€“Norwegian Seas region in a coupled climate model. Ocean Dynamics, 2007, 57, 541-557.	2.2	10
99	Variability of the Atlantic thermohaline circulation described by three-dimensional empirical orthogonal functions. Climate Dynamics, 2007, 29, 745-762.	3.8	53
100	Bjerknes Compensation and the Decadal Variability of the Energy Transports in a Coupled Climate Model. Journal of Climate, 2006, 19, 1167-1181.	3.2	84
101	Multidecadal modulation of El NiÃ±oâ€“Southern Oscillation (ENSO) variance by Atlantic Ocean sea surface temperatures. Geophysical Research Letters, 2006, 33, .	4.0	236
102	Recent trends in sea level pressure in the Indian Ocean region. Geophysical Research Letters, 2006, 33, .	4.0	62
103	Atlantic Climate Variability and Predictability: A CLIVAR Perspective. Journal of Climate, 2006, 19, 5100-5121.	3.2	99
104	Coupled Oceanâ€“Atmosphere Processes and European Climate (COAPEC): Improved Understanding of the Coupled Climate System. Journal of Climate, 2006, 19, 1065-1065.	3.2	0
105	CLIVAR Workshop on Atlantic Climate Predictability. Journal of Climate, 2006, 19, 5947-5947.	3.2	0
106	Predictability and skill of boreal winter forecasts made with the ECMWF Seasonal Forecasting System II. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 2031-2053.	2.7	10
107	Influence of May Atlantic Ocean initial conditions on the subsequent North Atlantic winter climate. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 2977-2999.	2.7	8
108	On the climate response of the low-latitude Pacific Ocean to changes in the global freshwater cycle. Climate Dynamics, 2006, 27, 593-611.	3.8	14

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109	The influence of oceanic conditions on the hot European summer of 2003. Climate Dynamics, 2006, 28, 53-66.	3.8	55
110	The seasonal forecast of electricity demand: a hierarchical Bayesian model with climatological weather generator. Applied Stochastic Models in Business and Industry, 2006, 22, 113-125.	1.5	15
111	Interannual to Decadal Climate Predictability in the North Atlantic: A Multimodel-Ensemble Study. Journal of Climate, 2006, 19, 1195-1203.	3.2	161
112	Mechanism of Interdecadal Thermohaline Circulation Variability in a Coupled Oceanâ€“Atmosphere GCM. Journal of Climate, 2005, 18, 1117-1135.	3.2	164
113	Indian Ocean Climate and Dipole Variability in Hadley Centre Coupled GCMs. Journal of Climate, 2005, 18, 2286-2307.	3.2	35
114	Informing adaptation: New challenges for the climate modelling community. Weather, 2005, 60, 186-189.	0.7	4
115	Atlantic Ocean Forcing of North American and European Summer Climate. Science, 2005, 309, 115-118.	12.6	1,148
116	North Atlantic forcing of climate and its uncertainty from a multi-model experiment. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 2013-2032.	2.7	28
117	An intercomparison between the surface heat flux feedback in five coupled models, COADS and the NCEP reanalysis. Climate Dynamics, 2004, 22, 373-388.	3.8	42
118	The Interannual Variability of Energy Transports within and over the Atlantic Ocean in a Coupled Climate Model. Journal of Climate, 2004, 17, 1433-1448.	3.2	24
119	Predictability of Winter Climate over the North Atlantic European Region during ENSO Events. Journal of Climate, 2004, 17, 1953-1974.	3.2	88
120	Influence of the Ocean on North Atlantic Climate Variability 1871â€“1999. Journal of Climate, 2003, 16, 3296-3313.	3.2	153
121	Atmospheric GCM Response to Extratropical SST Anomalies: Synthesis and Evaluation*. Journal of Climate, 2002, 15, 2233-2256.	3.2	580
122	Adjustment of the coupled ocean-atmosphere system to a sudden change in the Thermohaline Circulation. Geophysical Research Letters, 2002, 29, 18-1-18-4.	4.0	149
123	Variability in North Atlantic heat content and heat transport in a coupled ocean-atmosphere GCM. Climate Dynamics, 2002, 19, 485-497.	3.8	29
124	Response of the atmosphereâ€“ocean mixed-layer system to anomalous ocean heat-flux convergence. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 1259-1275.	2.7	64
125	The effect of El NiÃ±o on intraseasonal Kelvin waves. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 1277-1291.	2.7	25
126	The dominant mechanisms of variability in Atlantic Ocean Heat Transport in a Coupled Ocean-Atmosphere GCM. Geophysical Research Letters, 2001, 28, 2445-2448.	4.0	43

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127	The influence of subseasonal wind variability on tropical instability waves in the Pacific. Geophysical Research Letters, 2001, 28, 2041-2044.	4.0	11
128	The Elements of Climate Variability in the Tropical Atlantic Region. Journal of Climate, 2000, 13, 3261-3284.	3.2	163
129	The North Atlantic Oscillationâ€"What Role for the Ocean?. Atmospheric Science Letters, 2000, 1, 89-100.	1.9	85
130	Predictable winter climate in the North Atlantic sector during the 1997-1999 ENSO cycle. Geophysical Research Letters, 2000, 27, 985-988.	4.0	55
131	The Atmospheric Response over the North Atlantic to Decadal Changes in Sea Surface Temperature. Journal of Climate, 1999, 12, 2562-2584.	3.2	160
132	Decadal predictability of North Atlantic sea surface temperature and climate. Nature, 1997, 388, 563-567.	27.8	355
133	Lagrangian flow in the middle atmosphere. Quarterly Journal of the Royal Meteorological Society, 1994, 120, 1299-1321.	2.7	27
134	Rapid descent of mesospheric air into the stratospheric polar vortex. Geophysical Research Letters, 1993, 20, 1267-1270.	4.0	100
135	Challenges and opportunities for improved understanding of regional climate dynamics. , 0, .		1