R T Sutton

List of Publications by Year in Descending Order

134 papers	11,870 citations	49 h-index	108 g-index
165 ext. papers	13,179 ext. citations	7.3 avg, IF	6.86 L-index

#	Paper	IF	Citations
134	Recent decadal weakening of the summer Eurasian westerly jet attributable to anthropogenic aerosol emissions.. *Nature Communications*, **2022**, 13, 1148	17.4	2
133	Interactions between the stratospheric polar vortex and Atlantic circulation on seasonal to multi-decadal timescales. *Atmospheric Chemistry and Physics*, **2022**, 22, 4867-4893	6.8	0
132	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	4.8	5
131	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	4.4	0
130	Historical Simulations With HadGEM3-GC3.1 for CMIP6. *Journal of Advances in Modeling Earth Systems*, **2020**, 12, e2019MS001995	7.1	30
129	Observed Emergence of the Climate Change Signal: From the Familiar to the Unknown. *Geophysical Research Letters*, **2020**, 47, e2019GL086259	4.9	30
128	Aerosol-Forced AMOC Changes in CMIP6 Historical Simulations. *Geophysical Research Letters*, **2020**, 47, e2020GL088166	4.9	38
127	Attribution of 2012 extreme climate events: does air-sea interaction matter?. *Climate Dynamics*, **2020**, 55, 1225-1245	4.2	1
126	Processes shaping the spatial pattern and seasonality of the surface air temperature response to anthropogenic forcing. *Climate Dynamics*, **2020**, 54, 3959-3975	4.2	4
125	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	4.4	5
124	ESD Ideas: Global climate response scenarios for IPCC assessments. *Earth System Dynamics*, **2020**, 11, 751-754	4.8	2
123	Sensitivity of Historical Climate Simulations to Uncertain Aerosol Forcing. *Geophysical Research Letters*, **2020**, 47, e2019GL085806	4.9	15
122	The Evaluation of the North Atlantic Climate System in UKESM1 Historical Simulations for CMIP6. *Journal of Advances in Modeling Earth Systems*, **2020**, 12, e2020MS002126	7.1	4
121	U.K. Community Earth System Modeling for CMIP6. *Journal of Advances in Modeling Earth Systems*, **2020**, 12, e2019MS002004	7.1	6
120	Projected near term changes in the East Asian summer monsoon and its uncertainty. *Environmental Research Letters*, **2019**, 14, 084038	6.2	6
119	Climate Science Needs to Take Risk Assessment Much More Seriously. *Bulletin of the American Meteorological Society*, **2019**, 100, 1637-1642	6.1	39
118	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	23.1	152

117	Impacts of recent decadal changes in Asian aerosols on the East Asian summer monsoon: roles of aerosol–radiation and aerosol–cloud interactions. *Climate Dynamics*, **2019**, 53, 3235-3256	4.2	29
116	Impact of air–sea coupling on Northern Hemisphere summer climate and the monsoon–desert teleconnection. *Climate Dynamics*, **2019**, 53, 5063-5078	4.2	2
115	Challenges and opportunities for improved understanding of regional climate dynamics. *Nature Climate Change*, **2018**, 8, 101-108	21.4	47
114	Multiple perspectives on the attribution of the extreme European summer of 2012 to climate change. *Climate Dynamics*, **2018**, 50, 3537-3555	4.2	14
113	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	11.5	33
112	Atlantic Multidecadal Variability and the U.K. ACSIS Program. *Bulletin of the American Meteorological Society*, **2018**, 99, 415-425	6.1	60
111	An Intercomparison of Skill and Overconfidence/Underconfidence of the Wintertime North Atlantic Oscillation in Multimodel Seasonal Forecasts. *Geophysical Research Letters*, **2018**, 45, 7808-7817	4.9	55
110	Forced decadal changes in the East Asian summer monsoon: the roles of greenhouse gases and anthropogenic aerosols. *Climate Dynamics*, **2018**, 51, 3699-3715	4.2	29
109	Attributing extreme weather to climate change is not a done deal. *Nature*, **2018**, 561, 177	50.4	2
108	Recent multivariate changes in the North Atlantic climate system, with a focus on 2005–2016. *International Journal of Climatology*, **2018**, 38, 5050-5076	3.5	20
107	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	4.8	19
106	Decadal predictions with the HiGEM high resolution global coupled climate model: description and basic evaluation. *Climate Dynamics*, **2017**, 48, 297-311	4.2	12
105	Understanding the rapid summer warming and changes in temperature extremes since the mid-1990s over Western Europe. *Climate Dynamics*, **2017**, 48, 1537-1554	4.2	53
104	Attribution of Forced Decadal Climate Change in Coupled and Uncoupled Ocean–Atmosphere Model Experiments. *Journal of Climate*, **2017**, 30, 6203-6223	4.4	33
103	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	4.2	28
102	The 2015 European Heat Wave. *Bulletin of the American Meteorological Society*, **2016**, 97, S57-S62	6.1	35
101	A reversal of climatic trends in the North Atlantic since 2005. *Nature Geoscience*, **2016**, 9, 513-517	18.3	126
100	Preferred response of the East Asian summer monsoon to local and non-local anthropogenic sulphur dioxide emissions. *Climate Dynamics*, **2016**, 46, 1733-1751	4.2	37

99	Comment on "The Atlantic Multidecadal Oscillation without a role for ocean circulation". *Science*, **2016**, 352, 1527	33.3	116
98	Connecting Climate Model Projections of Global Temperature Change with the Real World. *Bulletin of the American Meteorological Society*, **2016**, 97, 963-980	6.1	48
97	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	2.9	42
96	Atmospheric Impact of Arctic Sea Ice Loss in a Coupled Ocean–Atmosphere Simulation*. *Journal of Climate*, **2015**, 28, 9606-9622	4.4	28
95	A Mechanism of Internal Decadal Atlantic Ocean Variability in a High-Resolution Coupled Climate Model. *Journal of Climate*, **2015**, 28, 7764-7785	4.4	26
94	Atmospheric response in summer linked to recent Arctic sea ice loss. *Quarterly Journal of the Royal Meteorological Society*, **2015**, 141, 2070-2076	6.4	34
93	What does global mean temperature tell us about local climate?. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2015**, 373,	3	38
92	Exploring the impact of CMIP5 model biases on the simulation of North Atlantic decadal variability. *Geophysical Research Letters*, **2015**, 42, 5926-5934	4.9	58
91	The 2014 Hot, Dry Summer in Northeast Asia. *Bulletin of the American Meteorological Society*, **2015**, 96, S105-S110	6.1	15
90	Dominant role of greenhouse-gas forcing in the recovery of Sahel rainfall. *Nature Climate Change*, **2015**, 5, 757-760	21.4	158
89	Atlantic overturning in decline?. *Nature Geoscience*, **2014**, 7, 2-3	18.3	100
88	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	4.2	42
87	Uncertainties in the timing of unprecedented climates. *Nature*, **2014**, 511, E3-5	50.4	54
86	A novel transport assimilation method for the Atlantic meridional overturning circulation at 26°N. *Quarterly Journal of the Royal Meteorological Society*, **2014**, 140, 2563-2572	6.4	6
85	The impact of salinity perturbations on the future uptake of heat by the Atlantic Ocean. *Geophysical Research Letters*, **2014**, 41, 9072-9079	4.9	6
84	An Anatomy of the Cooling of the North Atlantic Ocean in the 1960s and 1970s. *Journal of Climate*, **2014**, 27, 8229-8243	4.4	39
83	The Impacts of European and Asian Anthropogenic Sulfur Dioxide Emissions on Sahel Rainfall. *Journal of Climate*, **2014**, 27, 7000-7017	4.4	34
82	The Importance of Wind and Buoyancy Forcing for the Boundary Density Variations and the Geostrophic Component of the AMOC at 26°N. *Journal of Physical Oceanography*, **2014**, 44, 2387-2408	2.4	36

81	The Interpretation and Use of Biases in Decadal Climate Predictions. *Journal of Climate*, **2014**, 27, 2931-2947	4.4	21
80	Decadal Climate Prediction: An Update from the Trenches. *Bulletin of the American Meteorological Society*, **2014**, 95, 243-267	6.1	364
79	Changes in tropical Atlantic interannual variability from a substantial weakening of the meridional overturning circulation. *Climate Dynamics*, **2013**, 41, 2765-2784	4.2	20
78	A verification framework for interannual-to-decadal predictions experiments. *Climate Dynamics*, **2013**, 40, 245-272	4.2	207
77	Predictable Climate Impacts of the Decadal Changes in the Ocean in the 1990s. *Journal of Climate*, **2013**, 26, 6329-6339	4.4	34
76	Have Aerosols Caused the Observed Atlantic Multidecadal Variability?. *Journals of the Atmospheric Sciences*, **2013**, 70, 1135-1144	2.1	240
75	Variability of the North Atlantic summer storm track: mechanisms and impacts on European climate. *Environmental Research Letters*, **2013**, 8, 034037	6.2	73
74	A lagged response to the 11 year solar cycle in observed winter Atlantic/European weather patterns. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 13,405-13,420	4.4	125
73	Past, Present, and Future Changes in the Atlantic Meridional Overturning Circulation. *Bulletin of the American Meteorological Society*, **2012**, 93, 1663-1676	6.1	130
72	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	4.2	38
71	Atlantic Ocean influence on a shift in European climate in the 1990s. *Nature Geoscience*, **2012**, 5, 788-792	18.3	300
70	Time of emergence of climate signals. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	280
69	Aerosol contribution to the rapid warming of near-term climate under RCP 2.6. *Geophysical Research Letters*, **2012**, 39,	4.9	35
68	Importance of density-compensated temperature change for deep North Atlantic Ocean heat uptake. *Nature Geoscience*, **2012**, 5, 905-910	18.3	33
67	Initialized decadal predictions of the rapid warming of the North Atlantic Ocean in the mid 1990s. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	82
66	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	6.4	49
65	Mechanisms Linking Volcanic Aerosols to the Atlantic Meridional Overturning Circulation. *Journal of Climate*, **2012**, 25, 3039-3051	4.4	21
64	Causes of the Rapid Warming of the North Atlantic Ocean in the Mid-1990s. *Journal of Climate*, **2012**, 25, 4116-4134	4.4	195

63	Projections of when temperature change will exceed 2 ℃ above pre-industrial levels. *Nature Climate Change*, **2011**, 1, 407-412	21.4	129
62	The potential to narrow uncertainty in projections of regional precipitation change. *Climate Dynamics*, **2011**, 37, 407-418	4.2	644
61	Changes of interannual NAO variability in response to greenhouse gases forcing. *Climate Dynamics*, **2011**, 37, 1621-1641	4.2	39
60	Evaluating the potential for statistical decadal predictions of sea surface temperatures with a perfect model approach. *Climate Dynamics*, **2011**, 37, 2495-2509	4.2	46
59	Processes governing the predictability of the Atlantic meridional overturning circulation in a coupled GCM. *Climate Dynamics*, **2011**, 37, 1771-1782	4.2	18
58	Estimating Climatically Relevant Singular Vectors for Decadal Predictions of the Atlantic Ocean. *Journal of Climate*, **2011**, 24, 109-123	4.4	9
57	Climate impacts of recent multidecadal changes in Atlantic Ocean Sea Surface Temperature: a multimodel comparison. *Climate Dynamics*, **2010**, 34, 1041-1058	4.2	84
56	Case studies in interannual to decadal climate predictability. *Climate Dynamics*, **2010**, 35, 1169-1189	4.2	21
55	The Potential to Narrow Uncertainty in Regional Climate Predictions. *Bulletin of the American Meteorological Society*, **2009**, 90, 1095-1108	6.1	1509
54	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	4.4	59
53	A review of climate risk information for adaptation and development planning. *International Journal of Climatology*, **2009**, 29, 1193-1215	3.5	188
52	Understanding Land–Sea Warming Contrast in Response to Increasing Greenhouse Gases. Part I: Transient Adjustment. *Journal of Climate*, **2009**, 22, 3079-3097	4.4	128
51	Does the North Atlantic Oscillation show unusual persistence on intraseasonal timescales?. *Geophysical Research Letters*, **2009**, 36,	4.9	53
50	Climate predictability in the second year. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2009**, 367, 913-6	3	6
49	Decadal climate prediction (project GCEP). *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2009**, 367, 925-37	3	9
48	Detection and attribution of Atlantic salinity changes. *Geophysical Research Letters*, **2008**, 35,	4.9	48
47	Potential predictability of rapid changes in the Atlantic meridional overturning circulation. *Geophysical Research Letters*, **2008**, 35,	4.9	31
46	Exploring multi-model atmospheric GCM ensembles with ANOVA. *Climate Dynamics*, **2008**, 31, 973-986	4.2	10

45	Land/sea warming ratio in response to climate change: IPCC AR4 model results and comparison with observations. *Geophysical Research Letters*, **2007**, 34,	4.9	279
44	A new feedback on climate change from the hydrological cycle. *Geophysical Research Letters*, **2007**, 34,	4.9	20
43	The Influence of a Weakening of the Atlantic Meridional Overturning Circulation on ENSO. *Journal of Climate*, **2007**, 20, 4899-4919	4.4	251
42	Sea-ice decline due to more than warming alone. *Nature*, **2007**, 450, 27	50.4	6
41	Quasi-periodic fluctuations in the Greenland□Iceland□Norwegian Seas region in a coupled climate model. *Ocean Dynamics*, **2007**, 57, 541-557	2.3	9
40	Variability of the Atlantic thermohaline circulation described by three-dimensional empirical orthogonal functions. *Climate Dynamics*, **2007**, 29, 745-762	4.2	46
39	Climate Response to Basin-Scale Warming and Cooling of the North Atlantic Ocean. *Journal of Climate*, **2007**, 20, 891-907	4.4	228
38	El Ni□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	4.4	27
37	Enhancement of ENSO Variability by a Weakened Atlantic Thermohaline Circulation in a Coupled GCM. *Journal of Climate*, **2007**, 20, 4920-4939	4.4	95
36	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	1.1	12
35	Interannual to Decadal Climate Predictability in the North Atlantic: A Multimodel-Ensemble Study. *Journal of Climate*, **2006**, 19, 1195-1203	4.4	150
34	Bjerknes Compensation and the Decadal Variability of the Energy Transports in a Coupled Climate Model. *Journal of Climate*, **2006**, 19, 1167-1181	4.4	79
33	Multidecadal modulation of El Ni□□Southern Oscillation (ENSO) variance by Atlantic Ocean sea surface temperatures. *Geophysical Research Letters*, **2006**, 33,	4.9	195
32	Recent trends in sea level pressure in the Indian Ocean region. *Geophysical Research Letters*, **2006**, 33,	4.9	58
31	Atlantic Climate Variability and Predictability: A CLIVAR Perspective. *Journal of Climate*, **2006**, 19, 5100-5121	4.4	82
30	Coupled Ocean□Atmosphere Processes and European Climate (COAPEC): Improved Understanding of the Coupled Climate System. *Journal of Climate*, **2006**, 19, 1065-1065	4.4	
29	CLIVAR Workshop on Atlantic Climate Predictability. *Journal of Climate*, **2006**, 19, 5947-5947	4.4	
28	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	6.4	8

27	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	6.4	7
26	On the climate response of the low-latitude Pacific Ocean to changes in the global freshwater cycle. *Climate Dynamics*, **2006**, 27, 593-611	4.2	10
25	The influence of oceanic conditions on the hot European summer of 2003. *Climate Dynamics*, **2006**, 28, 53-66	4.2	48
24	Mechanism of Interdecadal Thermohaline Circulation Variability in a Coupled Ocean–Atmosphere GCM. *Journal of Climate*, **2005**, 18, 1117-1135	4.4	152
23	Indian Ocean Climate and Dipole Variability in Hadley Centre Coupled GCMs. *Journal of Climate*, **2005**, 18, 2286-2307	4.4	30
22	Informing adaptation: New challenges for the climate modelling community. *Weather*, **2005**, 60, 186-189	0.9	4
21	Atlantic Ocean forcing of North American and European summer climate. *Science*, **2005**, 309, 115-8	33.3	998
20	North Atlantic forcing of climate and its uncertainty from a multi-model experiment. *Quarterly Journal of the Royal Meteorological Society*, **2004**, 130, 2013-2032	6.4	22
19	An intercomparison between the surface heat flux feedback in five coupled models, COADS and the NCEP reanalysis. *Climate Dynamics*, **2004**, 22, 373-388	4.2	40
18	The Interannual Variability of Energy Transports within and over the Atlantic Ocean in a Coupled Climate Model. *Journal of Climate*, **2004**, 17, 1433-1448	4.4	24
17	Predictability of Winter Climate over the North Atlantic European Region during ENSO Events. *Journal of Climate*, **2004**, 17, 1953-1974	4.4	77
16	Influence of the Ocean on North Atlantic Climate Variability 1871–1999. *Journal of Climate*, **2003**, 16, 3296-3313	4.4	142
15	Variability in North Atlantic heat content and heat transport in a coupled ocean–atmosphere GCM. *Climate Dynamics*, **2002**, 19, 485-497	4.2	25
14	Response of the atmosphere–ocean mixed-layer system to anomalous ocean heat-flux convergence. *Quarterly Journal of the Royal Meteorological Society*, **2002**, 128, 1259-1275	6.4	57
13	The effect of El Niño on intraseasonal Kelvin waves. *Quarterly Journal of the Royal Meteorological Society*, **2002**, 128, 1277-1291	6.4	21
12	Atmospheric GCM Response to Extratropical SST Anomalies: Synthesis and Evaluation*. *Journal of Climate*, **2002**, 15, 2233-2256	4.4	514
11	Adjustment of the coupled ocean–atmosphere system to a sudden change in the Thermohaline Circulation. *Geophysical Research Letters*, **2002**, 29, 18-1-18-4	4.9	135
10	The dominant mechanisms of variability in Atlantic Ocean Heat Transport in a Coupled Ocean-Atmosphere GCM. *Geophysical Research Letters*, **2001**, 28, 2445-2448	4.9	39

9	The influence of subseasonal wind variability on tropical instability waves in the Pacific. *Geophysical Research Letters*, **2001**, 28, 2041-2044	4.9	7
8	The Elements of Climate Variability in the Tropical Atlantic Region. *Journal of Climate*, **2000**, 13, 3261-3284	4.4	151
7	Report of RMS Discussion Meeting 21 June 2000: Some aspects of the general circulation of the atmosphere Presidential Address. *Atmospheric Science Letters*, **2000**, 1, 89-100	2.4	73
6	Predictable winter climate in the North Atlantic sector during the 1997 1999 ENSO cycle. *Geophysical Research Letters*, **2000**, 27, 985-988	4.9	48
5	The Atmospheric Response over the North Atlantic to Decadal Changes in Sea Surface Temperature. *Journal of Climate*, **1999**, 12, 2562-2584	4.4	137
4	Decadal predictability of North Atlantic sea surface temperature and climate. *Nature*, **1997**, 388, 563-567	50.4	315
3	Lagrangian flow in the middle atmosphere. *Quarterly Journal of the Royal Meteorological Society*, **1994**, 120, 1299-1321	6.4	24
2	Rapid descent of mesospheric air into the stratospheric polar vortex. *Geophysical Research Letters*, **1993**, 20, 1267-1270	4.9	88
1	Challenges and opportunities for improved understanding of regional climate dynamics		1