Pascal Yiou

List of Publications by Year
in descending order

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136	12,655	57719	30058
papers	citations	44 h-index	103 g-index

181	181	181	13484
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	EURO-CORDEX: new high-resolution climate change projections for European impact research. Regional Environmental Change, 2014, 14, 563-578.	1.4	1,758
2	Singular-spectrum analysis: A toolkit for short, noisy chaotic signals. Physica D: Nonlinear Phenomena, 1992, 58, 95-126.	1.3	1,189
3	Changes in Climate Extremes and their Impacts on the Natural Physical Environment. , 2012, , 109-230.		1,080
4	Northern Hemisphere atmospheric stilling partly attributed to an increase in surface roughness. Nature Geoscience, 2010, 3, 756-761.	5.4	581
5	Extending the Vostok ice-core record of palaeoclimate to the penultimate glacial period. Nature, 1993, 364, 407-412.	13.7	556
6	Attribution of extreme weather and climateâ€related events. Wiley Interdisciplinary Reviews: Climate Change, 2016, 7, 23-41.	3.6	437
7	Winter 2010 in Europe: A cold extreme in a warming climate. Geophysical Research Letters, 2010, 37, .	1.5	379
8	Grape ripening as a past climate indicator. Nature, 2004, 432, 289-290.	13.7	369
9	The simulation of European heat waves from an ensemble of regional climate models within the EURO-CORDEX project. Climate Dynamics, 2013, 41, 2555-2575.	1.7	290
10	Summertime European heat and drought waves induced by wintertime Mediterranean rainfall deficit. Geophysical Research Letters, 2007, 34, .	1.5	289
11	A model-tested North Atlantic Oscillation reconstruction for the past millennium. Nature, 2015, 523, 71-74.	13.7	255
12	Beryllium 10 in the Greenland Ice Core Project ice core at Summit, Greenland. Journal of Geophysical Research, 1997, 102, 26783-26794.	3.3	240
13	Human influence on climate in the 2014 southern England winter floods and their impacts. Nature Climate Change, 2016, 6, 627-634.	8.1	237
14	Asymmetric European summer heat predictability from wet and dry southern winters and springs. Nature Climate Change, 2012, 2, 736-741.	8.1	213
15	Extreme events: dynamics, statistics and prediction. Nonlinear Processes in Geophysics, 2011, 18, 295-350.	0.6	197
16	Using palaeo-climate comparisons to constrain future projections in CMIP5. Climate of the Past, 2014, 10, 221-250.	1.3	193
17	Hot European Summers and the Role of Soil Moisture in the Propagation of Mediterranean Drought. Journal of Climate, 2009, 22, 4747-4758.	1.2	180
18	Decline of fog, mist and haze in Europe over the past 30â€‰years. Nature Geoscience, 2009, 2, 115-119.	5.4	179

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19	Assessing climate change impacts on European wind energy from ENSEMBLES high-resolution climate projections. Climatic Change, 2015, 128, 99-112.	1.7	171
20	Extreme climatic events and weather regimes over the North Atlantic: When and where?. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	149
21	Decadal variability of sea surface temperatures off North Iceland over the last 2000Âyears. Earth and Planetary Science Letters, 2008, 268, 137-142.	1.8	148
22	Data-adaptive wavelets and multi-scale singular-spectrum analysis. Physica D: Nonlinear Phenomena, 2000, 142, 254-290.	1.3	131
23	Large-scale temperature response to external forcing in simulations and reconstructions of the last millennium. Climate of the Past, 2013, 9, 393-421.	1.3	131
24	Spectral analysis of climate data. Surveys in Geophysics, 1996, 17, 619-663.	2.1	119
25	Dynamical proxies of North Atlantic predictability and extremes. Scientific Reports, 2017, 7, 41278.	1.6	116
26	Changes in European precipitation seasonality and in drought frequencies revealed by a four-century-long tree-ring isotopic record from Brittany, western France. Climate Dynamics, 2005, 24, 57-69.	1.7	88
27	Statistical methods for the analysis of climate extremes. Comptes Rendus - Geoscience, 2005, 337, 1013-1022.	0.4	87
28	The European 2016/17 Drought. Journal of Climate, 2019, 32, 3169-3187.	1.2	86
29	Does the NAO index represent zonal flow? The influence of the NAO on North Atlantic surface temperature. Climate Dynamics, 2002, 19, 17-30.	1.7	73
30	Amplitude and frequency of temperature extremes over the North Atlantic region. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	71
31	Inconsistency between atmospheric dynamics and temperatures during the exceptional 2006/2007 fall/winter and recent warming in Europe. Geophysical Research Letters, 2007, 34, .	1.5	71
32	Attribution of human-induced dynamical and thermodynamical contributions in extreme weather events. Environmental Research Letters, 2016, 11, 114009.	2.2	71
33	Interhemispheric spaceâ€“time attributes of the Dansgaardâ€“Oeschger oscillations between 100 and 0ka. Quaternary Science Reviews, 2002, 21, 1213-1228.	1.4	70
34	Control of recent European surface climate change by atmospheric flow. Geophysical Research Letters, 2009, 36, .	1.5	65
35	A 4500-year reconstruction of sea surface temperature variability at decadal time-scales off North Iceland. Quaternary Science Reviews, 2008, 27, 2041-2047.	1.4	62
36	Atmospheric and oceanic evidences of El NiÃ±o-Southern Oscillation events in the south central Pacific Ocean from coral stable isotopic records over the last 137 years. Paleoceanography, 1998, 13, 671-685.	3.0	60

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37	Sedimentary record of rapid climatic variability in the North Atlantic Ocean during the Last Glacial Cycle. Paleoceanography, 1995, 10, 911-926.	3.0	59
38	Role of circulation in European heatwaves using flow analogues. Climate Dynamics, 2018, 50, 1145-1159.	1.7	57
39	Nonlinear variability of the climatic system from singular and power spectra of Late Quaternary records. Climate Dynamics, 1994, 9, 371-389.	1.7	55
40	Weather regime dependence of extreme value statistics for summer temperature and precipitation. Nonlinear Processes in Geophysics, 2008, 15, 365-378.	0.6	55
41	Influence of solar variability, CO₂ and orbital forcing between 1000 and 1850 AD in the IPSLCM4 model. Climate of the Past, 2010, 6, 445-460.	1.3	53
42	Simulation of regional climate change under the IPCC A2 scenario in southeast China. Climate Dynamics, 2011, 36, 491-507.	1.7	53
43	An open-access database of grape harvest dates for climate research: data description and quality assessment. Climate of the Past, 2012, 8, 1403-1418.	1.3	51
44	AnaWEGE: a weather generator based on analogues of atmospheric circulation. Geoscientific Model Development, 2014, 7, 531-543.	1.3	48
45	The CLIMIX model: A tool to create and evaluate spatially-resolved scenarios of photovoltaic and wind power development. Renewable and Sustainable Energy Reviews, 2015, 42, 1-15.	8.2	47
46	The hammam effect or how a warm ocean enhances large scale atmospheric predictability. Nature Communications, 2019, 10, 1316.	5.8	47
47	On the roles of circulation and aerosols in the decline of mist and dense fog in Europe over the last 30 years. Atmospheric Chemistry and Physics, 2010, 10, 4597-4609.	1.9	46
48	Human influence on European winter wind storms such as those of January 2018. Earth System Dynamics, 2019, 10, 271-286.	2.7	45
49	Analyses of the Northern European Summer Heatwave of 2018. Bulletin of the American Meteorological Society, 2020, 101, S35-S40.	1.7	44
50	Dynamics of future seasonal temperature trends and extremes in Europe: a multi-model analysis from CMIP3. Climate Dynamics, 2012, 38, 1949-1964.	1.7	43
51	Summer temperatures in Europe and land heat fluxes in observation-based data and regional climate model simulations. Climate Dynamics, 2013, 41, 455-477.	1.7	43
52	Variability of the northeast Atlantic sea surface Î”14C and marine reservoir age and the North Atlantic Oscillation (NAO). Quaternary Science Reviews, 2010, 29, 2633-2646.	1.4	41
53	Grapevine harvest dates in BesanÃ§on (France) between 1525 and 1847: Social outcomes or climatic evidence?. Climatic Change, 2011, 104, 703-727.	1.7	41
54	Dynamical properties and extremes of Northern Hemisphere climate fields over the past 60 years. Nonlinear Processes in Geophysics, 2017, 24, 713-725.	0.6	40

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55	The North Atlantic Oscillation and its relationship with near surface temperature. Geophysical Research Letters, 2001, 28, 807-810.	1.5	39
56	Projected increase in diurnal and interdiurnal variations of European summer temperatures. Geophysical Research Letters, 2015, 42, 899-907.	1.5	39
57	Rapid oscillations in Vostok and GRIP Ice Cores. Geophysical Research Letters, 1995, 22, 2179-2182.	1.5	36
58	Statistical analysis of floods in Bohemia (Czech Republic) since 1825. Hydrological Sciences Journal, 2006, 51, 930-945.	1.2	36
59	Grape harvest dates for checking NAO paleoreconstructions. Geophysical Research Letters, 2001, 28, 3895-3898.	1.5	35
60	Evaluation of the HadGEM3-A simulations in view of detection and attribution of human influence on extreme events in Europe. Climate Dynamics, 2019, 52, 1187-1210.	1.7	34
61	Ensemble reconstruction of the atmospheric column from surface pressure using analogues. Climate Dynamics, 2013, 41, 1333-1344.	1.7	33
62	Extreme Fall 2014 Precipitation in the CÃ©vennes Mountains. Bulletin of the American Meteorological Society, 2015, 96, S56-S60.	1.7	33
63	A statistical framework for conditional extreme event attribution. Advances in Statistical Climatology, Meteorology and Oceanography, 2017, 3, 17-31.	0.6	32
64	Simulated changes in the relationship between tropical ocean temperatures and the western African monsoon during the mid-Holocene. Climate Dynamics, 2007, 28, 533-551.	1.7	31
65	European heatwave in July 2006: Observations and modeling showing how local processes amplify conducive largeâ€scale conditions. Geophysical Research Letters, 2014, 41, 5644-5652.	1.5	31
66	The switching between zonal and blocked mid-latitude atmospheric circulation: a dynamical system perspective. Climate Dynamics, 2016, 47, 1587-1599.	1.7	31
67	Behind the veil of extreme event attribution. Climatic Change, 2018, 149, 367-383.	1.7	30
68	Characterizing atmospheric circulation signals in Greenland ice cores: insights from a weather regime approach. Climate Dynamics, 2014, 43, 2585-2605.	1.7	29
69	Multivariate stochastic bias corrections with optimal transport. Hydrology and Earth System Sciences, 2019, 23, 773-786.	1.9	29
70	Dynamical Properties of the North Atlantic Atmospheric Circulation in the Past 150 Years in CMIP5 Models and the 20CRv2c Reanalysis. Journal of Climate, 2018, 31, 6097-6111.	1.2	28
71	Impact of precipitation intermittency on NAO-temperature signals in proxy records. Climate of the Past, 2013, 9, 871-886.	1.3	26
72	Atmospheric Dynamics Leading to West European Summer Hot Temperatures Since 1851. Complexity, 2018, 2018, 1-10.	0.9	26

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73	Quantifying CMIP6 model uncertainties in extreme precipitation projections. Weather and Climate Extremes, 2022, 36, 100435.	1.6	26
74	Detecting changes in forced climate attractors with Wasserstein distance. Nonlinear Processes in Geophysics, 2017, 24, 393-405.	0.6	24
75	Origins of the extremely warm European fall of 2006. Geophysical Research Letters, 2009, 36, .	1.5	23
76	North-Atlantic SST amplified recent wintertime European land temperature extremes and trends. Climate Dynamics, 2011, 36, 2113-2128.	1.7	23
77	Changes in Future Synoptic Circulation Patterns: Consequences for Extreme Event Attribution. Geophysical Research Letters, 2020, 47, e2020GL088002.	1.5	23
78	Diagnosing concurrent drivers of weather extremes: application to warm and cold days in North America. Climate Dynamics, 2020, 54, 2187-2201.	1.7	23
79	Weather regimes designed for local precipitation modeling: Application to the Mediterranean basin. Journal of Geophysical Research, 2010, 115, .	3.3	21
80	North-Atlantic dynamics and European temperature extremes in the IPSL model: sensitivity to atmospheric resolution. Climate Dynamics, 2013, 40, 2293-2310.	1.7	21
81	Trends and variability of seasonal weather regimes. International Journal of Climatology, 2014, 34, 472-480.	1.5	21
82	Trends of atmospheric circulation during singular hot days in Europe. Environmental Research Letters, 2018, 13, 054007.	2.2	21
83	Revisiting the dynamic and thermodynamic processes driving the record-breaking January 2014 precipitation in the southern UK. Scientific Reports, 2019, 9, 2859.	1.6	21
84	Ensemble meteorological reconstruction using circulation analogues of 1781â€“1785. Climate of the Past, 2014, 10, 797-809.	1.3	21
85	Attribution of Extreme Rainfall Events in the South of France Using EUROâ€CORDEX Simulations. Geophysical Research Letters, 2018, 45, 6242-6250.	1.5	20
86	Generalized dimensions, large deviations and the distribution of rare events. Physica D: Nonlinear Phenomena, 2019, 400, 132143.	1.3	20
87	Statistical representation of temperature mean and variability in Europe. Geophysical Research Letters, 2009, 36, .	1.5	19
88	Drivers of the 2013/14 winter floods in the UK. Nature Climate Change, 2015, 5, 490-491.	8.1	19
89	Attribution of Wintertime Anticyclonic Stagnation Contributing to Air Pollution in Western Europe. Bulletin of the American Meteorological Society, 2018, 99, S70-S75.	1.7	19
90	Compound Climate Events and Extremes in the Midlatitudes: Dynamics, Simulation, and Statistical Characterization. Bulletin of the American Meteorological Society, 2021, 102, E774-E781.	1.7	18

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91	Stability of weather regimes during the last millennium from climate simulations. Geophysical Research Letters, 2012, 39, .	1.5	17
92	Was the Cold European Winter of 2009/10 Modified by Anthropogenic Climate Change? An Attribution Study. Journal of Climate, 2018, 31, 3387-3410.	1.2	16
93	Multiple perspectives on the attribution of the extreme European summer of 2012 to climate change. Climate Dynamics, 2018, 50, 3537-3555.	1.7	15
94	Continental atmospheric circulation over Europe during the Little Ice Age inferred from grape harvest dates. Climate of the Past, 2012, 8, 577-588.	1.3	14
95	Revising Return Periods for Record Events in a Climate Event Attribution Context. Journal of Climate, 2018, 31, 3411-3422.	1.2	13
96	Minimal dynamical systems model of the Northern Hemisphere jet stream via embedding of climate data. Earth System Dynamics, 2019, 10, 555-567.	2.7	13
97	Ocean and land forcing of the record-breaking Dust Bowl heatwaves across central United States. Nature Communications, 2020, 11, 2870.	5.8	13
98	Interannual-to-decadal variability of North Atlantic air-sea CO₂ fluxes. Ocean Science, 2006, 2, 43-60.	1.3	12
99	Statistical issues about solarâ€“climate relations. Climate of the Past, 2010, 6, 565-573.	1.3	12
100	Stochastic ensemble climate forecast with an analogue model. Geoscientific Model Development, 2019, 12, 723-734.	1.3	12
101	Simulation of extreme heat waves with empirical importance sampling. Geoscientific Model Development, 2020, 13, 763-781.	1.3	12
102	Evaluation of convection-permitting extreme precipitation simulations for the south of France. Earth System Dynamics, 2022, 13, 687-702.	2.7	12
103	Relation between Large-Scale Circulation and European Winter Temperature: Does It Hold under Warmer Climate?. Journal of Climate, 2010, 23, 3752-3760.	1.2	11
104	Web processing service for climate impact and extreme weather event analyses. Flyingpigeon (Version) Tj ETQq0 0 0 rgBT /Overlock 10	2.0	11
105	An Interdisciplinary Approach to the Study of Extreme Weather Events: Large-Scale Atmospheric Controls and Insights from Dynamical Systems Theory and Statistical Mechanics. Bulletin of the American Meteorological Society, 2018, 99, ES81-ES85.	1.7	11
106	Conditional and residual trends of singular hot days in Europe. Environmental Research Letters, 2020, 15, 064018.	2.2	11
107	Singular Extreme Events and Their Attribution to Climate Change: A Climate Serviceâ€“Centered Analysis. Weather, Climate, and Society, 2020, 12, 89-101.	0.5	10
108	A critical look at solar-climate relationships from long temperature series. Climate of the Past, 2010, 6, 745-758.	1.3	9

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109	Detecting spatial patterns with the cumulant function â€“ Part 2: An application to El NiÃ±o. Nonlinear Processes in Geophysics, 2008, 15, 169-177.	0.6	8
110	Three variables are better than one: detection of european winter windstorms causing important damages. Natural Hazards and Earth System Sciences, 2014, 14, 981-993.	1.5	8
111	Return times of hot and cold days via recurrences and extreme value theory. Climate Dynamics, 2016, 47, 3803-3815.	1.7	8
112	Recent Trends in the Recurrence of North Atlantic Atmospheric Circulation Patterns. Complexity, 2018, 2018, 1-8.	0.9	8
113	Comparing scientists and delegates perspectives on the use of extreme event attribution for loss and damage. Weather and Climate Extremes, 2019, 26, 100231.	1.6	8
114	On the Computation of the Extremal Index for Time Series. Journal of Statistical Physics, 2020, 179, 1666-1697.	0.5	8
115	AMOC and summer sea ice as key drivers of the spread in mid-holocene winter temperature patterns over Europe in PMIP3 models. Global and Planetary Change, 2020, 184, 103055.	1.6	8
116	Should Multivariate Bias Corrections of Climate Simulations Account for Changes of Rank Correlation Over Time?. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	8
117	Trends in sub-annual climate variability since the Little Ice Age in western Europe. Comptes Rendus - Geoscience, 2005, 337, 1001-1012.	0.4	7
118	Using MSSA to determine explicitly the oscillatory dynamics of weakly nonlinear climate systems. Nonlinear Processes in Geophysics, 2005, 12, 807-815.	0.6	6
119	Analysis of the Exceptionally Warm December 2015 in France Using Flow Analogues. Bulletin of the American Meteorological Society, 2018, 99, S76-S79.	1.7	6
120	Probability Distributions for Analog-To-Target Distances. Journals of the Atmospheric Sciences, 2021, 78, 3317-3335.	0.6	5
121	Robustness of warming attribution. Nature Climate Change, 2012, 2, 26-27.	8.1	4
122	Mortality induced by PM2.5 exposure following the 1783 Laki eruption using reconstructed meteorological fields. Scientific Reports, 2018, 8, 15896.	1.6	4
123	On the low-frequency variability of wintertime Euro-Atlantic planetary wave-breaking. Climate Dynamics, 2019, 52, 2431-2450.	1.7	4
124	Statistical downscaling of water vapour satellite measurements from profiles of tropical ice clouds. Earth System Science Data, 2020, 12, 1-20.	3.7	4
125	Seasonal circulation regimes in the North Atlantic: Towards a new seasonality. International Journal of Climatology, 2022, 42, 5848-5870.	1.5	4
126	Preface "Extreme Events: Nonlinear Dynamics and Time Series Analysis". Nonlinear Processes in Geophysics, 2011, 18, 895-897.	0.6	3

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127	Recurrence Spectra of European Temperature in Historical Climate Simulations. Atmosphere, 2019, 10, 166.	1.0	3
128	Simulating compound weather extremes responsible for critical crop failure with stochastic weather generators. Earth System Dynamics, 2021, 12, 103-120.	2.7	3
129	Present and future synoptic circulation patterns associated with cold and snowy spells over Italy. Earth System Dynamics, 2022, 13, 961-992.	2.7	3
130	Assessment of stochastic weather forecast of precipitation near European cities, based on analogs of circulation. Geoscientific Model Development, 2022, 15, 4941-4958.	1.3	3
131	Testing asynchronous coupling on simple "ocean-atmosphere" dynamic systems. Climate Dynamics, 1999, 15, 1-7.	1.7	2
132	Wave group focusing in the ocean: estimations using crest velocities and a Gaussian linear model. Natural Hazards, 2020, 104, 2431-2449.	1.6	2
133	Enhancing geophysical flow machine learning performance via scale separation. Nonlinear Processes in Geophysics, 2021, 28, 423-443.	0.6	2
134	Modelling forest ruin due to climate hazards. Earth System Dynamics, 2021, 12, 997-1013.	2.7	1
135	Extreme Fall 2014 Precipitation in the CÃ©vennes Mountains. Bulletin of the American Meteorological Society, 2015, 96, S56-S60.	1.7	1
136	Projected Changes in the Atmospheric Dynamics of Climate Extremes in France. Atmosphere, 2021, 12, 1440.	1.0	0