

Atul Kumar Sahai

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3792469/publications.pdf>

Version: 2024-02-01

93
papers

2,424
citations

270111

25
h-index

263392

45
g-index

99
all docs

99
docs citations

99
times ranked

2339
citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-physics schema for sub-seasonal prediction of Indian summer monsoon. <i>Climate Dynamics</i> , 2022, 58, 669-690.	1.7	3
2	Recent changes in the spatio-temporal characteristics of monsoon intraseasonal oscillations. <i>Theoretical and Applied Climatology</i> , 2022, 147, 251-264.	1.3	3
3	Increasing incidence of Arabian Sea cyclones during the monsoon onset phase: Its impact on the robustness and advancement of Indian summer monsoon. <i>Atmospheric Research</i> , 2022, 267, 105915.	1.8	7
4	The intraseasonal fluctuation of Indian summer monsoon rainfall and its relation with monsoon intraseasonal oscillation (MISO) and Madden Julian oscillation (MJO). <i>Theoretical and Applied Climatology</i> , 2022, 148, 819-831.	1.3	11
5	Northward propagation of convection over Arabian Sea and Bay of Bengal: a perspective from vorticity equation. <i>Climate Dynamics</i> , 2022, 59, 2751-2767.	1.7	2
6	Climatological patterns of subseasonal eddy flux transfer based on the co-spectral analysis over the Indian region and the derivation of an index of eddy transfer for operational tracking. <i>International Journal of Climatology</i> , 2021, 41, E1906.	1.5	1
7	Value addition to forecasting: towards Kharif rice crop predictability through local climate variations associated with Indo-Pacific climate drivers. <i>Theoretical and Applied Climatology</i> , 2021, 144, 917-929.	1.3	3
8	Prediction of dominant daily modes of the Indian summer monsoon in the NCEP GFS model. <i>Meteorology and Atmospheric Physics</i> , 2021, 133, 1009-1027.	0.9	1
9	Bay of Bengal Intraseasonal Oscillations and the 2018 Monsoon Onset. <i>Bulletin of the American Meteorological Society</i> , 2021, 102, E1936-E1951.	1.7	15
10	Long-Term Trend Analysis of Precipitation and Extreme Events over Kosi River Basin in India. <i>Water (Switzerland)</i> , 2021, 13, 1695.	1.2	12
11	Kharif rice yield prediction over Gangetic West Bengal using IITM-IMD extended range forecast products. <i>Theoretical and Applied Climatology</i> , 2021, 145, 1089-1100.	1.3	3
12	Large-scale features associated with excess monsoon rainfall over india during 2019 and the real-time extended range forecast. <i>Meteorology and Atmospheric Physics</i> , 2021, 133, 1275-1297.	0.9	5
13	Was the earliest documented account of tornado dynamics published by an Indian scientist in an Indian journal?. <i>Weather</i> , 2020, 75, 120-123.	0.6	0
14	The relationship between the daily dominant monsoon modes of South Asia and SST. <i>Theoretical and Applied Climatology</i> , 2020, 142, 59-70.	1.3	4
15	Development of a probabilistic early health warning system based on meteorological parameters. <i>Scientific Reports</i> , 2020, 10, 14741.	1.6	8
16	Revamping extended range forecast of Indian summer monsoon. <i>Climate Dynamics</i> , 2020, 55, 3397-3411.	1.7	4
17	An Improved Cyclogenesis Potential and Storm Evolution Parameter for North Indian Ocean. <i>Earth and Space Science</i> , 2020, 7, e2020EA001209.	1.1	5
18	On the Epochal Variability in the Frequency of Cyclones during the Pre-Onset and Onset Phases of the Monsoon over the North Indian Ocean. <i>Advances in Atmospheric Sciences</i> , 2020, 37, 634-651.	1.9	9

#	ARTICLE	IF	CITATIONS
19	Active-Break Transitions of Monsoons Over India as Predicted by Coupled Model Ensembles. Pure and Applied Geophysics, 2020, 177, 4391-4422.	0.8	12
20	MJO Prediction Skill Using IITM Extended Range Prediction System and Comparison with ECMWF S2S. Pure and Applied Geophysics, 2020, 177, 5067-5079.	0.8	2
21	Simulation of monsoon intra-seasonal oscillations in Geophysical Fluid Dynamics Laboratory models from Atmospheric Model Intercomparison Project integrations of Coupled Model Intercomparison Project phase 5. International Journal of Climatology, 2020, 40, 5574-5589.	1.5	3
22	Dynamical downscaling of a multimodel ensemble prediction system: Application to tropical cyclones. Atmospheric Science Letters, 2020, 21, e971.	0.8	11
23	On unravelling mechanism of interplay between cloud and large scale circulation: a grey area in climate science. Climate Dynamics, 2019, 52, 1547-1568.	1.7	6
24	Monsoon Mission: A Targeted Activity to Improve Monsoon Prediction across Scales. Bulletin of the American Meteorological Society, 2019, 100, 2509-2532.	1.7	64
25	Skill Evaluation of Extended-Range Forecasts of Rainfall and Temperature over the Meteorological Subdivisions of India. Weather and Forecasting, 2019, 34, 81-101.	0.5	10
26	Real time extended range prediction of heat waves over India. Scientific Reports, 2019, 9, 9008.	1.6	38
27	Subseasonal Forecasts of the 2018 Indian Summer Monsoon Over Bihar. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13861-13875.	1.2	16
28	Changing Characteristics of Droughts over Kerala, India: Inter-Annual Variability and Trend. Asia-Pacific Journal of Atmospheric Sciences, 2019, 55, 1-17.	1.3	26
29	Genesis and track prediction of pre-monsoon cyclonic storms over North Indian Ocean in a multi-model ensemble framework. Natural Hazards, 2019, 95, 823-843.	1.6	7
30	Seamless Prediction of Monsoon Onset and Active/Break Phases. , 2019, , 421-438.		9
31	An Operational Tracking Method for the MJO Using Extended Empirical Orthogonal Functions. Pure and Applied Geophysics, 2019, 176, 2697-2717.	0.8	6
32	A study on the capability of the NCEP-CFS model in simulating the frequency and intensity of high-intensity rainfall events over Indian region in the high and low resolutions. Modeling Earth Systems and Environment, 2019, 5, 85-100.	1.9	6
33	Aspect of ECMWF downscaled Regional Climate Modeling in simulating Indian summer monsoon rainfall and dependencies on lateral boundary conditions. Theoretical and Applied Climatology, 2019, 135, 1559-1581.	1.3	31
34	Impact of Observed Climate Change on the Classification of Agroclimatic Zones in India. Current Science, 2019, 117, 480.	0.4	6
35	Identification of Drought Occurrences Using Ensemble Predictions up to 20-Days in Advance. Water Resources Management, 2018, 32, 2113-2130.	1.9	11
36	A New Approach to Improve the Track Prediction of Tropical Cyclones Over North Indian Ocean. Geophysical Research Letters, 2018, 45, 7781-7789.	1.5	9

#	ARTICLE	IF	CITATIONS
37	Role of enhanced synoptic activity and its interaction with intra-seasonal oscillations on the lower extended range prediction skill during 2015 monsoon season. <i>Climate Dynamics</i> , 2018, 51, 3435-3446.	1.7	11
38	Intra-seasonal variability of the South Asian monsoon and its relationship with the Indo-Pacific sea-surface temperature in the NCEP CFSv2. <i>International Journal of Climatology</i> , 2018, 38, e28.	1.5	12
39	Hydrologic impacts of climate change: Comparisons between hydrological parameter uncertainty and climate model uncertainty. <i>Journal of Hydrology</i> , 2018, 566, 1-22.	2.3	75
40	A bias-correction and downscaling technique for operational extended range forecasts based on self organizing map. <i>Climate Dynamics</i> , 2017, 48, 2437-2451.	1.7	9
41	Potential predictability of wet/dry spells transitions during extreme monsoon years: optimism for dynamical extended range prediction. <i>Natural Hazards</i> , 2017, 88, 853-865.	1.6	3
42	Nonlinearities in the Evolutional Distinctions Between El Niño and La Niña Types. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 9649-9662.	1.0	16
43	Short to sub-seasonal hydrologic forecast to manage water and agricultural resources in India. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 707-720.	1.9	34
44	Extremes in June rainfall during the Indian summer monsoons of 2013 and 2014: observational analysis and extended range prediction. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 1276-1289.	1.0	10
45	Why are the Indian monsoon transients short-lived and less intensified during droughts vis-à-vis good monsoon years? An inspection through scale interactive energy exchanges in frequency domain. <i>International Journal of Climatology</i> , 2016, 36, 2958-2978.	1.5	3
46	Improved performance of multi-model ensemble through the bias correction based on ANN technique. , 2016, , .		1
47	Twin tropical cyclones in the Indian Ocean: the role of equatorial waves. <i>Natural Hazards</i> , 2016, 84, 2211-2224.	1.6	3
48	Moisture dynamics of the northward and eastward propagating boreal summer intraseasonal oscillations: possible role of tropical Indo-west Pacific SST and circulation. <i>Climate Dynamics</i> , 2016, 47, 1335-1350.	1.7	17
49	Prediction and error growth in the daily forecast of precipitation from the NCEP CFSv2 over the subdivisions of Indian subcontinent. <i>Journal of Earth System Science</i> , 2016, 125, 29-45.	0.6	1
50	An assessment of real-time extended range forecast of 2013 Indian summer monsoon. <i>International Journal of Climatology</i> , 2015, 35, 2860-2876.	1.5	21
51	Development and Evaluation of an Objective Criterion for the Real-Time Prediction of Indian Summer Monsoon Onset in a Coupled Model Framework. <i>Journal of Climate</i> , 2015, 28, 6234-6248.	1.2	18
52	Asymmetry in space-time characteristics of Indian summer monsoon intraseasonal oscillations during extreme years: Role of seasonal mean state. <i>International Journal of Climatology</i> , 2015, 35, 1948-1963.	1.5	22
53	Improved Spread-Error Relationship and Probabilistic Prediction from the CFS-Based Grand Ensemble Prediction System. <i>Journal of Applied Meteorology and Climatology</i> , 2015, 54, 1569-1578.	0.6	34
54	Future projection of Indian summer monsoon variability under climate change scenario: An assessment from CMIP5 climate models. <i>Global and Planetary Change</i> , 2015, 124, 62-78.	1.6	226

#	ARTICLE	IF	CITATIONS
55	North Indian heavy rainfall event during June 2013: diagnostics and extended range prediction. <i>Climate Dynamics</i> , 2015, 44, 2049-2065.	1.7	85
56	High-resolution operational monsoon forecasts: an objective assessment. <i>Climate Dynamics</i> , 2015, 44, 3129-3140.	1.7	40
57	Real-Time Performance of a Multi-Model Ensemble-Based Extended Range Forecast System in Predicting the 2014 Monsoon Season Based on NCEP-CFSv2. <i>Current Science</i> , 2015, 109, 1802.	0.4	20
58	Real-Time Performance of a Multi-Model Ensemble-Based Extended Range Forecast System in Predicting the 2014 Monsoon Season Based on NCEP-CFSv2. <i>Current Science</i> , 2015, 109, 1802.	0.4	11
59	Does bias correction in the forecasted <scp>SST</scp> improve the extended range prediction skill of activeâ€break spells of Indian summer monsoon rainfall?. <i>Atmospheric Science Letters</i> , 2014, 15, 114-119.	0.8	37
60	Prediction and monitoring of monsoon intraseasonal oscillations over Indian monsoon region in an ensemble prediction system using CFSv2. <i>Climate Dynamics</i> , 2014, 42, 2801-2815.	1.7	66
61	Extended range prediction of active-break spells of Indian summer monsoon rainfall using an ensemble prediction system in NCEP Climate Forecast System. <i>International Journal of Climatology</i> , 2014, 34, 98-113.	1.5	83
62	Moist dynamics of active/break cycle of Indian summer monsoon rainfall from NCEPR2 and MERRA reanalysis. <i>International Journal of Climatology</i> , 2014, 34, 1429-1444.	1.5	23
63	Predictability of Indian Monsoon Circulation with High Resolution ECMWF Model in the Perspective of Tropical Forecast During the Tropical Convection Year 2008. <i>Pure and Applied Geophysics</i> , 2013, 170, 2351-2368.	0.8	0
64	Influence of convective parameterization on the systematic errors of Climate Forecast System (CFS) model over the Indian monsoon region from an extended range forecast perspective. <i>Climate Dynamics</i> , 2013, 41, 341-365.	1.7	19
65	A self-organizing mapâ€based ensemble forecast system for extended range prediction of active/break cycles of Indian summer monsoon. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 9022-9034.	1.2	35
66	Role of oceanâ€atmosphere interaction on northward propagation of Indian summer monsoon intra-seasonal oscillations (MISO). <i>Climate Dynamics</i> , 2013, 41, 1651-1669.	1.7	106
67	Predictability during active break phases of Indian summer monsoon in an ensemble prediction system using climate forecast system. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2013, 100-101, 13-23.	0.6	17
68	Diabatic heating profiles over the continental convergence zone during the monsoon active spells. <i>Climate Dynamics</i> , 2013, 41, 205-226.	1.7	5
69	A new method to compute the principal components from self-organizing maps: an application to monsoon intraseasonal oscillations. <i>International Journal of Climatology</i> , 2013, 34, n/a-n/a.	1.5	8
70	The role of the intra-daily SST variability in the Indian monsoon variability and monsoon-ENSOâ€IOD relationships in a global coupled model. <i>Climate Dynamics</i> , 2012, 39, 729-754.	1.7	42
71	Profiling and scalability of the high resolution NCEP model for weather and climate simulations. , 2012, , .		0
72	Aerosol indirect effect during the aberrant Indian Summer Monsoon breaks of 2009. <i>Atmospheric Environment</i> , 2012, 60, 153-163.	1.9	50

#	ARTICLE	IF	CITATIONS
73	Assimilation of Doppler Weather Radar Radial Velocity and Reflectivity Observations in WRF-3DVAR System for Short-Range Forecasting of Convective Storms. Pure and Applied Geophysics, 2012, 169, 2047-2070.	0.8	19
74	Possible role of warm SST bias in the simulation of boreal summer monsoon in SINTEX-F2 coupled model. Climate Dynamics, 2012, 38, 1561-1576.	1.7	25
75	Can El Niño-Southern Oscillation (ENSO) events modulate intraseasonal oscillations of Indian summer monsoon?. Journal of Geophysical Research, 2011, 116, .	3.3	23
76	Modoki, Indian Ocean Dipole, and western North Pacific typhoons: Possible implications for extreme events. Journal of Geophysical Research, 2011, 116, .	3.3	57
77	Boreal summer intraseasonal oscillations and seasonal Indian monsoon prediction in DEMETER coupled models. Climate Dynamics, 2010, 35, 651-667.	1.7	22
78	Eastward propagating MJO during boreal summer and Indian monsoon droughts. Climate Dynamics, 2009, 32, 1139-1153.	1.7	97
79	Role of stratiform rainfall in modifying the northward propagation of monsoon intraseasonal oscillation. Journal of Geophysical Research, 2009, 114, .	3.3	54
80	Hydraulic response of a tidally forced coastal aquifer, Pontal do Parani, Brazil. Hydrogeology Journal, 2008, 16, 1427-1439.	0.9	4
81	A SST based large multi-model ensemble forecasting system for Indian summer monsoon rainfall. Geophysical Research Letters, 2008, 35, .	1.5	23
82	Objective Identification of Nonlinear Convectively Coupled Phases of Monsoon Intraseasonal Oscillation: Implications for Prediction. Journals of the Atmospheric Sciences, 2008, 65, 1549-1569.	0.6	63
83	Simulated changes in active/break spells during the Indian summer monsoon due to enhanced CO2 concentrations: assessment from selected coupled atmosphere-ocean global climate models. International Journal of Climatology, 2007, 27, 837-859.	1.5	49
84	On the recent strengthening of the relationship between ENSO and northeast monsoon rainfall over South Asia. Climate Dynamics, 2007, 28, 649-660.	1.7	112
85	Interdecadal Variations in AGCM Simulation Skills. Journal of Climate, 2006, 19, 3406-3419.	1.2	18
86	Roles of phosphatidylinositol 3-kinase and osteopontin in steatosis and aminotransferase release by hepatocytes treated with methionine-choline-deficient medium. American Journal of Physiology - Renal Physiology, 2006, 291, G55-G62.	1.6	27
87	Long-lead prediction of Indian summer monsoon rainfall from global SST evolution. Climate Dynamics, 2003, 20, 855-863.	1.7	95
88	Teleconnections in recent time and prediction of Indian summer monsoon rainfall. Meteorology and Atmospheric Physics, 2003, 84, 217-227.	0.9	41
89	All India summer monsoon rainfall prediction using an artificial neural network. Climate Dynamics, 2000, 16, 291-302.	1.7	148
90	Thermosolutal Convection in the Presence of Both Vertical and Horizontal Temperature Gradients. Journal of Applied Mechanics, Transactions ASME, 1999, 66, 181-196.	1.1	1

#	ARTICLE	IF	CITATIONS
91	Climate Change: A Case Study Over India. Theoretical and Applied Climatology, 1998, 61, 9-18.	1.3	5
92	Role of initial error growth in the extended range prediction skill of Madden-Julian Oscillation (MJO). Theoretical and Applied Climatology, 0, , 1.	1.3	4
93	Eddy transport, Waveâ€mean flow interaction, and Eddy forcing during the 2013 Uttarakhand Extreme Event in the Reanalysis and <sc>S2S</sc> Retrospective Forecast Data. International Journal of Climatology, 0, , .	1.5	2