

## Name and full correspondence address

## Dr. Pankaj Kumar

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Research Gate

Google Scholar

## Research specialization

Climate Variability and Change; Climate modeling; Extremes and Climate change projection; Uncertainties associated with climate models; Himalayan Glacier modeling for mass-balance and area change studies; AIML in Climate studies.

## Publications

S.N.	Article	Impact Factor
<b>Corresponding Author *</b>		
1.	Javed, A., Anshuman, K., <b>Kumar P*</b> et al. (2023) “The decline in western disturbance activity over Northern India in recent decades”, Climatic Change, 176, 97.	IF: 4.8
2.	<b>Kumar P*</b> , Javed A, Kolli RK, Sachan D, Dinesh AS, Midhun M, Sharma J, Giri RK, Pattanaik DR, Jha SK, Balasubramanian R, Mishra GD (2023), “National Colloquium for Advances in Weather and Climate Prediction and Climate Change Projection over South Asia: Applications in Water and Agriculture Sectors”, The Bulletin of the American Meteorological Society.	IF: 9.116
3.	Tiwari, G., & <b>Kumar P*</b> (2023) “Pertaining the application of the 4DVar and 4DEnVar WRFDA techniques to simulate tropical cyclones in the Bay of Bengal”, Advances in Space Research, 72(2), 389-408	IF: 2.611
4.	Bar, S., Parida, B. R., Pandey, A. C., Shankar, B. U., <b>Kumar P</b> , Panda, S. K., & Behera, M. D. (2023) “Modeling and prediction of fire occurrences along an elevational gradient in Western Himalayas”, Applied Geography, 151, 102867	IF: 4.9
5.	Kumari, A., & <b>Kumar P*</b> (2023), “Evaluation and future projection of the extreme precipitation over India and its homogeneous regions: A regional earth system model perspective”, International Journal of Climatology, 43(8), 3679-3697.	IF:3.651
6.	Khandare, A.M., Dubey, A.K., <b>Kumar, P.</b> et al. (2022), “Projection of the Indian Summer Monsoon onset using a regionally coupled atmosphere–ocean model”, Theor Appl Climatol, 150, 1187–1199.	IF: 3.4
7.	Tiwari, G., <b>Kumar P*</b> , & Tiwari, P. (2022), “The appraisal of tropical cyclones in the North Indian Ocean: An overview of different approaches and the involvement of Earth’s components”, Frontiers in Earth Science, 10, 823090.	IF: 2.9
8.	Sachan, D., <b>Kumar P*</b> & Saharwardi, M.S. (2022) “Contemporary climate change velocity for near-surface temperatures over India”, Climatic Change, 173, 24.	IF: 4.8
9.	Mishra, A. K., <b>Kumar P*</b> , Dubey, A. K., Jha, S. K., Sein, D. V., & Cabos, W. (2022) “Demonstrating the asymmetry of the Indian Ocean Dipole response in regional earth system model of CORDEX-SA.”, Atmospheric Research, 273, 106182.	IF: 5.5
10.	Preet Lal, Aditya Kumar Dubey, Amit Kumar, <b>Kumar P*</b> & C. S. Dwivedi (2022) “Measuring the control of landscape modifications on surface temperature in India”, Geocarto International, 37:27, 15736-15753.	IF: 3.45
11.	Saharwardi, M. S., <b>Kumar P*</b> , Dubey, A. K., & Kumari, A. (2022) “Understanding spatiotemporal variability of drought in recent decades and its drivers over identified homogeneous regions of India”, Quarterly Journal of the Royal Meteorological Society, 148(747), 2955-2972.	IF: 7.237
12.	<b>Kumar P*</b> , Mallick, S., Mishra, A. K., Dubey, A. K., Tiwari, G., Sein, D. V., Cabos, W., & Jacob, D. (2022) “Regional earth system model for CORDEX-South Asia: A comparative assessment of RESM and ESM over the tropical Indian Ocean”, International Journal of Climatology, 42(16), 9131-9149.	IF: 3.651

13. Vishwakarma BD, Ramsankaran R, Azam MF, Bolch T, Mandal A, Srivastava S, **Kumar P**, et. al (2022) "Challenges in Understanding the Variability of the Cryosphere in the Himalaya and Its Impact on Regional Water Resources", *Front. Water*, 4:909246. IF:2.59
14. Tiwari G and **Kumar P\***, (2022) "Predictive skill comparative assessment of WRF 4Dvar and 3Dvar data assimilation: an Indian Ocean tropical cyclone case study", *Atmospheric Research* IF: 4.70
15. Javed A, **Kumar P\***, Hodges K I, Sein D V, Dubey A K, Tiwari G (2022), "Does the recent revival of Western Disturbances govern the Karakoram Anomaly?", *Journal of Climate*. <https://doi.org/10.1175/JCLI-D-21-0129.1> IF: 5.15
16. Dubey A K and **Kumar P\*** (2022), "Future projections of heatwave characteristics and dynamics over India using a high-resolution regional earth system model", *Climate Dynamics*. <https://link.springer.com/article/10.1007/s00382-022-06309-x> IF: 4.38
17. Tiwari G, **Kumar P\***, Javed A, Mishra A K, Routray A (2022), "Assessing tropical cyclones characteristics over the Arabian Sea and Bay of Bengal in the recent decades", *Meteorology and Atmospheric Physics*. <https://link.springer.com/article/10.1007/s00703-022-00883-9> IF: 2.10
18. Mishra A K, **Kumar P\***, Dubey A K, Tiwari G, Sein D V (2022), "Impact of air-sea coupling on the simulation of Indian summer monsoon using a high- resolution Regional Earth System Model over CORDEX-SA", *Climate Dynamics*. <https://link.springer.com/article/10.1007/s00382-022-06249-6> IF: 4.38
19. **Kumar P\***, Mishra A K, Dubey A K, Javed A, Saharwardi M S, Kumari A, Sachan D, Cabos W, Jacob D, Sein D V (2022), "Regional earth system modelling framework for CORDEX-SA: an integrated model assessment for Indian summer monsoon rainfall", *Climate Dynamics*. <https://link.springer.com/article/10.1007/s00382-022-06217-0> IF: 4.38
20. Sein D V, Dvornikov A Y, Martyanov S D, Cabos W, Ryabchenko V A, Gröger M, Jacob D, Mishra A K, **Kumar P** (2022), "Indian ocean marine biogeochemical variability and its feedback on simulated South Asia climate", *Earth System Dynamics*. <https://doi.org/10.5194/esd-13-809-2022> IF: 5.54
21. Kumari A and **Kumar P\*** (2022), "Contrasting changes in Precipitation Events during Active and Break Spells of Indian Summer Monsoon in Recent Decades", *Climate Dynamics*. <https://link.springer.com/article/10.1007/s00382-022-06162-y> IF: 4.38
22. Kumari A, **Kumar P\***, Dubey A K, Mishra A K, Saharwardi M S (2021), "Dynamical and Thermodynamical Aspect of Precipitation Events over India", *International Journal of Climatology* <https://doi.org/10.1002/joc.7409> IF: 4.06
23. Tiwari G, R Arathi, **Kumar P\***, Javed A, Mishra A K (2021), "Understanding the post monsoon tropical cyclone variability and trend over the Bay of Bengal during the satellite era", *Quarterly Journal of the Royal Meteorological Society*. <https://doi.org/10.1002/qj.4189> IF: 3.70
24. Saharwardi M S, **Kumar P\***, Sachan D, (2021) "Evaluating drought representation and projection over India using high-resolution regional earth system model ROM", *Climate Dynamics* <https://doi.org/10.1007/s00382-021-05919-1> IF: 4.38
25. Dubey A K, Lal P, **Kumar P\***, Kumar A, Dvornikov A Y (2021), "Present and Future Projections of Heatwave Hazard-Risk over India: A Regional Earth System Model Assessment", *Environmental Research* <https://doi.org/10.1016/j.envres.2021.111573> IF: 8.43
26. Saharwardi M S, **Kumar P\*** (2021), "Future drought changes and associated uncertainty over the homogenous regions of India: a multimodel approach", *International Journal of Climatology* <https://doi.org/10.1002/joc.7265> IF:4.06
27. Mishra A K, **Kumar P\***, Dubey A K, Javed A, Saharwardi M S, Sein D V, Martyanov S D, Jacob D (2021), "Impact of horizontal resolution on monsoon precipitation for CORDEX-South Asia: A regional earth system model assessment", *Atmospheric Research* <https://doi.org/10.1016/j.atmosres.2021.105681> IF: 4.70
28. Dubey A K, **Kumar P\*** (2021), "Predictive relationships between winter climate and hot season temperatures over India", *International Journal of Climatology* <https://doi.org/10.1002/joc.7174> IF: 4.06
29. Dubey A K, **Kumar P\***, Saharwardi M S, Javed A (2021), "Understanding the hot season dynamics and variability across India", *Weather and Climate Extremes*", <https://doi.org/10.1016/j.wace.2021.100317> IF: 4.70

30. Saharwardi M S, Mahadeo S A, **Kumar P\*** (2021), "Understanding drought dynamics and variability over Bundelkhand region", *Journal of Earth System Science* IF: 1.70  
<https://doi.org/10.1007/s12040-021-01616-z>
31. Sharma S, Kumari A, Navajyoth M, **Kumar P\***, Saharwardi M M (2020), "Impact of air-sea interaction during two contrasting monsoon seasons", *Theoretical and Applied Climatology* doi: IF: 3.10  
<https://doi.org/10.1007/s00704-020-03300-6>.
32. F Tangang, ..., **Kumar P** (2020), "Projected Future Changes in Rainfall in Southeast Asia based on CORDEX – SEA Multi-model Simulations", *Climate Dynamics*. Doi: IF: 4.80  
<https://doi.org/10.1007/s00382-020-05322-2>
33. Everard M, Ahmed S, Gagnon A, **Kumar P\***, Thomas T, Sinha S, Dixon H and Sarkar S (2020), "Can nature-based solutions contribute to water security in Bhopal?", *Science of the Total Environment*. Doi: <https://doi.org/10.1016/j.scitotenv.2020.138061> IF: 5.60
34. **Kumar P\***, Md. Saquib Saharwardi, et al. (2019), "Snowfall Variability Dictates Glacier Mass Balance Variability in Himalaya-Karakoram", *Scientific Report*. Doi: <https://doi.org/10.1038/s41598-019-54553-9> IF: 4.50
35. Lal P, Dubey A K, Kumar A, **Kumar P\***, and Dwivedi C S (2019), "SAR – Optical Remote Sensing Based Forest Cover and Greenness Estimation Over INDIA", *ISPRS*. Doi: <https://doi.org/10.5194/isprs-annals-IV-5-W2-49-2019> Open access -
36. Engelhardt M, Leclercq P, Eidhammer T, **Kumar P**, Landgren O, and Rasmussen R (2017), "Meltwater runoff in a changing climate (1951-2099) at Chhota Shigri Glacier, Western Himalaya, Northern India", *Annals of Glaciology*, 1-12. <https://doi.org/10.1017/aog.2017.13> IF: 3.10
37. Engelhardt M, Ramanathan A, Eidhammer T, **Kumar P**, Landgren O, Mandal A and Rasmussen R (2017), "Modelling 60 years of glacier mass balance and runoff for Chhota Shigri Glacier, Western Himalaya, Northern India", *Journal of Glaciology*. <https://doi.org/10.1017/jog.2017.29> IF: 3.20
38. Koldunov N, **Kumar P**, Rasmussen R, Ramanathan AL, Nesje A, Engelhardt M, Tiwari M, Haensler A, Jacob D (2015), "Identifying climate change information needs for the Himalaya region – Results from the GLACINDIA Stakeholder Workshop and Training Program", *Bulletin of the American Meteorological Society*. <http://dx.doi.org/10.1175/BAMS-D-15-00160.1> IF: 8.77
39. **Kumar P\***, S. Kotlarski, C. Moseley, K. Sieck, H. Frey, M. Stoffel, and D. Jacob (2015), "Response of Karakoram-Himalayan glaciers to climate variability and climatic change: A regional climate model assessment". *Geophysical Research Letters*, 42, 1818–1825. <http://dx.doi.org/10.1002/2015GL063392> IF: 4.60
40. **Kumar P\***, Podzun R, Hagemann S and Jacob D (2014) "Impact of modified soil thermal characteristic on the simulated monsoon climate over South Asia", *Journal of Earth System Science*, Vol. 123, No 1. <http://dx.doi.org/10.1007/s12040-013-0381-0> IF: 1.70
41. Neha M, Mishra A, Singh R, **Kumar P** (2014) "Assessing future changes in seasonal climatic extremes in the Ganges river basin using an ensemble of regional climate models", *Climate Change*, Volume 123, pp273-286. <https://doi.org/10.1007/s10584-014-1056-9> IF: 4.80
42. Teichmann C, Eggert B, Elizalde A, Haensler A, Jacob D, **Kumar P** et al. (2013) "How does a regional climate model modify the projected climate change signal of the driving GCM: A study over different CORDEX regions using REMO", *Atmosphere*, 4(2), 214-236. <http://dx.doi.org/10.3390/atmos4020214> IF: 2.70
43. Biemans, H., Speelman L, Ludwig F, Moors E, Wiltshire A, **Kumar P**, Gerten D, Kabat P (2013) "Future water resources for food production in five South Asian river basins and potential for adaptation – a modelling study", *Science of Total Environment*, Volumes 468–469, pp117–131. <http://dx.doi.org/10.1016/j.scitotenv.2013.05.092> IF: 7.96
44. Siderius C, Biemans H, Wiltshire A, Rao S, Franssen W, **Kumar P**, Gosain A, Vliet M, Collins D (2013) "Snowmelt contributions to discharge of the Ganges", *Science of Total Environment*, Volumes 468–469, pp93–101. <http://dx.doi.org/10.1016/j.scitotenv.2013.05.084> IF: 7.96
45. **Kumar P\***, Wiltshire A, et al. (2013) "Downscaled climate change projections with uncertainty assessment over India using a high resolution multi-model approach", *Science of Total Environment*, Volumes 468–469, pp18–30. <http://dx.doi.org/10.1016/j.scitotenv.2013.01.051> IF: 7.96
46. Dimri A P, T. Yasunari T, Wiltshire A, **Kumar P**, Mathison C, Ridley J and Jacob D (2013) "Application of regional climate models to the Indian winter monsoon over the western

- Himalayas*”, Science of Total Environment, Volumes 468–469, pp36–47. <http://dx.doi.org/10.1016/j.scitotenv.2013.01.040>
47. Mathison C, Wiltshire A, **Kumar P**, Dimri A P, Jeff Ridley J, Jacob D, Pete Falloon, T. Yasunari, Siderius C (2013) “*Regional Projections of South Asian Climate for Adaptation studies*”, Science of Total Environment, Volumes 468–469, <http://dx.doi.org/10.1016/j.scitotenv.2012.04.066> IF: 7.96
  48. Jacob D, Elizalde A; Haensler A, Hagemann S, **Kumar P**, Podzun R, Rechid D, Remedio A, Saeed F, Sieck K, Teichmann C, Wilhelm C (2012) “*Assessing the Transferability of the Regional Climate Model REMO to Different Coordinated Regional Climate Downscaling Experiment (CORDEX) Regions*”, Atmosphere 3, pp181–199. <http://dx.doi.org/10.3390/atmos3010181> IF: 2.70
  49. Lucas-Picher P, Christensen J H, Saeed F, **Kumar P**, Asharaf S, Ahrens B, Wiltshire A, Jacob D, Hagemann S (2011), “*Can regional climate models represent the Indian monsoon?*”, Journal of Hydrometeorology, 12, <http://dx.doi.org/10.1175/2011JHM1327.1> IF:4.20
  50. Eddy M, Hester B, Groot A, Terwissch van Scheltinga C, Siderius C, Stoffel M, Huggelb C, Wiltshire A, Mathison C, Ridley J, Jacob D, **Kumar P**, Bhadwal S, Gosain A, Collins D N (2011) “*Adaptation to changing water resources of the Ganges basin in northern India*”, Environmental Science & Policy, Volume 14, Issue7, pp758–769. <http://dx.doi.org/10.1016/j.envsci.2011.03.005> IF: 4.80
  51. **Kumar P\***, K. Kumar R, Rajeevan M and Sahai A K (2007) “*On the recent strengthening of the relationship between ENSO and Northeast monsoon rainfall over south Asia*”, Climate Dynamics, Vol-28, pp 649-660. <http://dx.doi.org/10.1007/s00382-006-0210-0> IF: 4.80
  52. Kripalani R H and **Kumar P** (2004) “*Northeast Monsoon Rainfall Variability over South Peninsular India vis-à-vis Indian Ocean Dipole Mode*”, International Journal of Climatology, Vol-24, pp 1267-1282. <http://dx.doi.org/10.1002/joc.1071> IF: 3.90

#### Ph.D. students graduated so far, and those currently being mentored

S.No.	Name of the Student	Date of Joining	Remarks
1.	<b>Dr. Aditya Kumar Dubey</b>	01-01-2016	Thesis defended 14 <sup>th</sup> Dec 2021 with <b>Excellent</b> grade. Presently, <b>Postdoc</b> at <b>University of Maryland, US</b>
2.	<b>Dr. Md. Saquib Saharwardi</b>	01-08-2016	Thesis defended 22 <sup>nd</sup> Dec 2021 with <b>Excellent</b> grade. Presently, <b>Postdoc</b> at King Abdullah Uni. of Science and Technology ( <b>KUSAT</b> ), <b>Saudi Arabia</b> .
3.	<b>Mr. Gaurav Tiwari</b>	01-08-2016	Thesis defended 14 <sup>th</sup> Nov 2022 with <b>Excellent</b> grade. Offered, <b>Postdoc</b> at <b>Japan</b> .
4.	<b>Ms. Amita Kumari</b>	01-08-2017	Thesis defended 23 <sup>rd</sup> Nov 2022 with <b>Excellent</b> grade. Presently, <b>Postdoc</b> at <b>Israel</b>
5.	Mr. Aaqib Javed	01-08-2017	Thesis submission due in April, 2023
6.	Ms. Disha Sachan	28-07-2018	Awarded <b>IPCC Research Fellowship</b> grant for one and half years of amount 24K Euro (= ~20 Lakh)
7.	Mr. Midhun M.	07-08-2020	Awarded <b>Prime Minister Research Fellowship</b>
8.	Ms Jyoti Sharma	01-08- 2022	Awarded <b>Prime Minister Research Fellowship</b>
9.	Ms. Sadhana Chaurasia	26-07-2023	GATE
10.	Raj Pritam Gupta	03-08-2023	Institute Fellowship

#### BS-MS students mentored so far

S. No.	Name of the Student	Session	Present Status
<b>IISER Bhopal BSMS Students</b>			
1.	Navajyoth M.P.	2018-2019	PhD Washington State Uni, USA
2.	Roja Ashraf	2019-2020	JRF at <b>IISc, Bangalore</b>
3.	Shweta M Alam	2019-2020	Preparing for Competitive Exams
4.	Ajinkya Khandare	2019-2020	PhD from <b>IIT, Bombay</b>
5.	Arathi R	2010-2021	PhD in <b>Germany</b>
6.	Rohan Deewar	2020-2021	MBA <b>IIM Amritsar</b>
7.	Vishal Bobde	2021-2022	PhD Uni. of Illinois Chicago. USA
8.	K. Anshuman	2021-2022	MBA <b>IIM Indore</b>

9.	Sreevathsa Golla	2022-2023	PhD University of <b>Southampton, UK</b>
10.	Raj Pritam Gupta	2022-2023	PhD <b>IISER</b> Bhopal (selected)
11.	Rishabh Singh	2022-2023	Project Work at <b>IIT Bombay</b>
12.	Harsh Kumar Kori	2022-2023	Geology Major
13.	Ashish Verma	2022-2023	Geology Major
14.	Rahul Singh	2022-2023	Geology Major
15.	Bela Lodh	2023-2024	Present Student
16.	Nagesh Mishra	2018-2019	JRF at CGWB, Bhopal
17.	Priyanka Mallick	2018-2019	PhD NIT Raurkela
18.	Preet Lal	2019-2020	PhD, Michigan State Uni, <b>USA</b>
19.	Sam P Raj	2019-2020	PhD from <b>ISRO</b> , IIST, Kerala
20.	Shreeshma K.	2020-2021	PhD CUSAT Cochin Kerala

### Awards & Distinctions from IISER Bhopal

- **Invited** by **Principal Scientific Adviser** to the Government of India to deliver an invited talk at National Conference on "Akash for Life", held at Dehradun during November 5-6, 2022.
- **Invited as a Jury Member** YAC at the **India International Science Festival (IISF-2022)**, which was organized by the Ministry of Science & Technology, Ministry of Earth Sciences, Department of Biotechnology, Government of Madhya Pradesh in association with Vijnana Bharati (VIBHA) during 21st - 24th January 2023 at MANIT Bhopal.
- **Invited** by IMS Delhi to organize national conference **TROPMET 2022** at IISER Bhopal from 29th Nov to 2nd Dec 2022.
- **Co-Convenor** of a session entitled "*C02 Glacier Changes in High Mountain Asia and the Karakoram Anomaly: Latest Insights From the Atmosphere and Cryosphere*" at The 28th **IUGG General Assembly (IUGG2023)**, which will be held from 11 to 20 July 2023 at the CityCube in Berlin, **Germany**.
- **Invited as a Jury Member** at Youth Conclave under Mission LiFE at IFM Campus, Bhopal, on 1st and 2nd June 2023, organized by **IIFM Bhopal**.
- **Thesis reviewer** of Pune University and Banaras Hindu University.
- **H-index**: 19; **I-index**: 23; and **Total Citations**: 2234
- Selected as National Council Member of IMS for the period 2022-2024.
- Selected as a member of the international "CLIVAR/GEWEX" Monsoons Panel, until December 2023.
- IPCC AR6 report reviewer for GoI.
- Dr. Pankaj Kumar has been nominated as an **Editorial board member** of **Climate Services Journal**, publisher Elsevier.
- Award Indo-Russia project, "Impact of Climate Change on South Asia Extremes: A high-resolution regional Earth System Model assessment".
- Unanimously selected as **Chairperson of Executive Committee** of **India Meteorological Society** Bhopal Chapter.
- Nominated as International Expert on Open Panel of CCI Experts (OPACE) by United Nations (**World Meteorological Organization**) on the recommendations of its permanent representative (i.e. DG, IMD, Govt. of India), June 2016.
- SERB, Government of India "Ramanujan Fellowship" for the period 2015-2020.

### Collaboration's

- German Climate Service Center (GERICS) Germany: Prof. Dr Danila Jacob
- P. P. Shirshov Institute of Oceanology, RAS, Russia: Dr Dimitry Sein
- Reading University of Reading, UK: Dr Keving Hodges
- IIT Bombay: Dr Raaj Ramsankaran
- Central University of Jharkhand: Dr Amit Kumar
- IISER Pune: Dr Argha Banerjee
- IIT Indore: Dr Farooq Azam

### Conference and Workshop Organized from IISER Bhopal

- Organized (convenor) TROPMET 2022 at IISER Bhopal from 29<sup>th</sup> Nov to 2<sup>nd</sup> Dec 2022.
- Organized (convenor) India –UK workshop on "Grassroots Field Exposure Session", at IISER Bhopal from 25-27 Feb, 2019.

- (iii) Organized India –UK workshop on “Water Resource Management and Supply in Central India” at IISER Bhopal from 28th Feb to 2nd March 2019.
- (iv) Organized a one-week “coupled climate modeling workshop” for Ph.D. students conducted by Dr. Dmitry Sein, from AWI, Germany, from 14-21 Dec. 2017.
- (v) Organized DST-FIST Expert Committee meeting - Earth and Atmospheric Sciences Area on 13th, 14th October 2017 at IISER, Bhopal.
- (vi) Organized a one-week course on “Hydrology and climate change”, lectures delivered by Prof. Eddy Moors from Wageningen University, The Netherlands, from 13-17 Feb 2017.

#### Invited Talks Since joining IISER Bhopal

1. **Kumar P**, (2022) TROPMET-2022, "**Regional Earth System Modelling Framework for South Asian climate studies**", 29 November to 2 December 2022 at IISER Bhopal (Invited)
2. **Kumar P**, (2022) Youth Conclave under Mission LiFE 2023, "**Science of Climate Change**", organized by Ministry of Forest and Climate Change, GoI at IIFM Bhopal, 2 June 2023 (Invited)
3. **Kumar P**, (2022) AKASH for LIFE, "**Regional Earth System Modelling framework unraveling the Akash interactions: A boon for South Asian climate studies**", organized by PSA and the Department of Space, GoI at Dehradun during November 5-6, 2022. (Invited)
4. **Kumar P**, (2022) UGC-HRDC Talk for Faculties, "**Science of Climate change & Extreme Meteorological Events in India under Changing Climate**", Allahabad University, 3 Nov 2022 (Invited)
5. **Kumar P**, (2022) National Conference on Polar Sciences (NCPS-2023), "**Snowfall from Western Disturbances sustained the “Karakoram Anomaly”**", at NCPOR Goa from 18-19 May 2023 (Talk)
6. **Kumar P**, (2022) AGU 2022, "**A Regional Earth System Modelling Framework over CORDEX-SA: Indian summer monsoon study**", 12-16 December 2022, (Talk - online)
7. **Kumar P**, (2022) Future Projections of Heatwave over India, National Institute of Disaster Management, Ministry of Home Affairs, Delhi Webinar on “Heat Wave Preparedness and Response” 30th March 2022.
8. **Kumar P**, (2022) International Conference on Extreme Weather Events under Changing Climate in Indian Himalayan Region (ICEWECC-2022), March 10 – 11, 2022
9. **पंकज कुमार** (2021) काराकोरम-हिमालय ग्लेशियरों पर जलवायु परिवर्तन का प्रभाव और क्षेत्रीय मॉस-बैलेंस अनुमानों को नियंत्रित करने में पश्चिमी विक्षोभों की भूमिका: एक ग्लेशियर-जलवायु मॉडल मूल्यांकन, हिंदी वैज्ञानिक संगोष्ठी, राष्ट्रीय मध्यम अवधि मौसम पूर्वानुमान केंद्र, नोएडा, 22 मार्च 2021
10. **Kumar P**, (2021) Impact of Climate Change on KH glaciers and the role of WDs in modulating regional mass balance estimations: a glacier-climate model assessment, CLEAR AND PRESENT DANGER: Climate Change Hazards in the Himalayas, Feb 25, 2021
11. **Kumar P**, (2020) Addressing Climate Change Extremes using Dynamical Models and Big Data (An Integrated Approach), The Fourth Paradigm: From Data to Discovery, at IISER Bhopal, Madhya Pradesh, 27-30 January 2020.
12. **Kumar P**, (2019) Energy and climate and broader topics on technology assessment: Seminar Series - IDP in Climate Studies, at Indian Institute of Technology Bombay, India, 12 September 2019.
13. **Kumar P**, (2019) "Onset of Indian Summer Monsoon: Theory and Prediction", at Indian Institute of Science Bengaluru, India, 25-26 July 2019.
14. **Kumar P**, (2019) Regional Earth System Modeling Over South Asia & Lessons learned from Water-Food-Energy nexus Workshop, International Workshop on "Water-Energy-Food Nexus Perspective: Path Making for Sustainable Development Goals (SDGs) to Country Actions in Asia" Central University of Rajasthan, 25-26 June 2019.
15. **Kumar P**, (2019) The response of Himalayan glaciers to climate variability and climatic change, International workshop on Climate Change and Extreme Events, IIT Mandi, India, 18-20 April 2019.
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**Peer Reviewer**

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**Membership**

- AGU : Life membership of American Geophysical Union
- EGU : Life membership of European Geosciences Union
- IMSB : Life membership of India Meteorological Society, Bhopal Chapter
- SAMA : Life membership of South Asian Meteorological Association

**Declaration**

I declare that the foregoing information is correct and complete to the best of my knowledge and belief, and nothing has been concealed/distorted.

Place: Bhopal

Date: 23-08-2023

**Pankaj Kumar**