



International Virtual Conference

on

Earth's Changing Climate: Past, Present & Future

15-17 October 2020

PROGRAM

Organized by

The Society of Earth Scientists

Co-organized by

**Birbal Sahni Institute of Palaeosciences, Lucknow
Indian Institute of Tropical Meteorology, Pune
National Centre for Polar and Ocean Research, Goa
National Institute of Disaster Management, Delhi
National Institute of Advanced Studies, Bengaluru**

Date: 15.10.2020

Session: I Time: 09:45 AM-12:50 PM

Theme: *Palaeoclimate events/variations in Earth's geological history and associated disasters; Quaternary climatic changes and climate cycles (land and ocean records); Anthropogenic interferences*

Coordinator: Dr. Anju Saxena, BSIP, Lucknow

10:00-10:10	1	Floristic changes during the Permian Period and its palaeoclimatic implications	Deepa Agnihotri
10:10-10:20	2	Cenogram techniques: Historical review of cenogram methodology as a tool for environmental reconstructions sustained by several mammalian communities across the globe during the Cenozoic time-slice	Vivesh V Kapur and Blanca A García Yelo
10:20-10:30	3	Regional paleoclimate and environment database: where paleo data meets socio-economic-political decision making	Kushank Bajaj, Amir Bazaz, Supriyo Chakraborty and Atreyee Bhattacharya
10:30-10:40	4	Time assessment of tectonic and climatic forcing on the formation of Khari bedrock gorge, Kachchh, western India: A mathematical approach	M G Thakkar, Girish Ch Kothyari and Gaurav Chauhan
10:40-10:50	5	Extreme Flood Events and Erosional Hotspot of Tsangpo-Siang Tsangpo-Siang-Brahmaputra River valley	Sandeep Panda , Anil Kumar, Satyabrata Das, Rahul Devrani and Pradeep Srivastava
10:50-11:00	6	Palynological and carbon isotopic signatures of early Eocene hyperthermal event from Kutch Basin, Western India	Poonam Verma , Shailesh Agrawal and Abha Singh
11:00-11:10	7	Palynofloral diversity and palaeoclimatic significance of striate disaccate pollen in Yellandu coalfield of Kothagudem sub-basin, Godavari graben	D. S. Seetharam and H. Ramakrishna
11:10-11:20	8	Paleoclimate reconstruction of the Aravalli Craton (Central Rajasthan, NW India) during Paleoproterozoic using geochemical proxies of metasedimentary rocks	Ejaj Ahmad Khan , M E A Mondal and Iftikhar Ahmad
11:20-11:30	9	Oceanic Anoxic Events (OAEs): Causes, Consequences, and Records from India	Nazim Deori and Abha Singh

11:30-11:40	10	Post-LGM extreme flood record and provenance of Upper Indus River, Ladakh	Choudhurimayum Pankaj Sharma , Poonam Chahal, Anil Kumar, Saurabh Singhal, YP Sundriyal, Alan D Ziegler, Rajesh Agnihotri, Robert J Wasson, Uma Kant Shukla and Pradeep Srivastava
11:40-11:50	11	A Transformative Perspective on early Eocene Climate change of northern western India based on megaremain evidences	Kajal Chandra , Anumeha Shukla and R C Mehrotra
11:50-12:00	12	Signatures of Mid-Miocene Climate Optimum from Kerala Basin, India: based on palynological records	Yogesh Pal Singh , Poonam Verma and Abha Singh
12:00-12:10	13	Plant fossils from the Bhadasar Formation of Jaisalmer Basin, Rajasthan, Western India: paleoclimatic interpretation	Raj Kumar , Neelam Das and Bindhyachal Pandey
12:10-12:20	14	Late Oligocene–Miocene climate and vegetation of northeast India: megafossil evidences	Harshita Bhatia , Gaurav Srivastava and R C Mehrotra
12:20-12:30	15	Modern pollen analogue from the Majuli Island (ramsar site) of Assam: implications to decipher the palaeoecology and palaeoflood episodes in northeast India	Swati Tripathi and Sadhan Kumar Basumatary
12:30-12:40	16	The Kashmir Loess record and its significance for reconstruction of Middle to Late Pleistocene climate change in north-Western Himalaya, India	Ishtiaq Ahmad
12:40-12:50	17	Centennial scale teleconnection between the Indian Summer Monsoon and the North Atlantic Region during the last two millennia	Aashima Sodhi , Nisarg Makwana, S P Prizomwala, and Archana Das
<p>Date: 15.10.2020 Session-II; Time: 02:15 PM-05:10 PM Theme: Quaternary climatic changes and climate cycles (land and ocean records); Anthropogenic interferences Coordinator: Dr. Binita Phartiyal, BSIP, Lucknow</p>			
02:30-02:40	18	Evolution of glacial landforms in ISM dominated eastern Himalaya: Review study from Sikkim, India, emphasising climate change	Soumyadip Banerjee , Subhajit Sinha and Yogesh Ray
02:40-02:50	19	Reconstructing Crop economy and based on archaeobotanical evidence and radiocarbon dates from Rithi Rajana: an Early Iron Age site in semi-arid Vidarbha, Maharashtra, India	Himani Patel , Anil K Pokharia, N Nihildas, Niraj Rai and Rajeshwar P Sinha
02:50-03:00	20	Late Quaternary variations in Indian Summer Monsoon inferred from the morphotypes of <i>Globigerinoides ruber</i> (white) from the NE Indian Ocean	Ammoose K Jayana , A V Sijinkumar and B Nagender Nath

03:00-03:10	21	Stable C and N isotopes of carbonized seeds/ soil-sediments to gauge hydrological status and manuring practices during Indus urbanism	Shalini Sharma , Rajesh Agnihotri and Anil K Pokharia
03:10-03:20	22	Using geochemical tracers for paleoenvironmental reconstruction from tropical montane peat, Nilgiris, India	PrabhakaranRamyaBala , Francois De Vleeschouwer, Gael Le Roux, Raman Sukumar and Sajeev Krishnan
03:20-03:30	23	A high-resolution record of past environmental variations during the mid-holocene from an east antarctic lake	Joju George Sebastian , Anish Kumar Warriar, Mahesh B S and Rahul Mohan
03:30-03:40	24	Quaternary climate: A case study on Alluvium Geochemistry from Tawa Basin, Hoshangabad district Madhya Pradesh	Shradha Shukla , JayshreeMeshram, ChhayaMinz, HemrajSuryavanshi and Shubrasuchi Sarkar
03:40-03:50	25	Stable- and radio-isotopic measurements of faunal remains from archaeological sites: Implications to achieve absolute chronology and retrieve palaeo-environmental information	Nikhil Patel , Rajesh Agnihotri and Alok Kumar
03:50-04:00	26	Shell size variation of pteropod <i>Limacinainflata</i> as a proxy for Paleoceanography	E. Sreevidya , A. V. Sijinkumar, A. Ameena and B N Nath
04:00-04:10	27	Holocene climate anomaly of the Kashmir valley, Northwestern Himalayas	Rayees Ahmad Shah , AbdurRehman, M G Yadava and Sanjeev Kumar
04:10-04:20	28	Holocene hydroclimate variability in the Bengal Basin: a lake archive record	KorobiSaikia , Oindrila Biswas, Shailesh Agrawal, Mohd. Arif, BinitaPhartiyal, Anupam Sharma, Neha Singh, Dipak Kumar Paruya, Ruby Ghosh and SubirBera
04:20-04:30	29	Enamel Isotope Data from the Domesticated Animals at KotadaBhadli, Gujarat, Reveals Specialized Animal Husbandry During the Indus Age	KalyanSekhar Chakraborty , Supriyo Chakraborty, Petrus Le Roux, Heather M-L Miller, PrabodhShirvalkar and YadubirsinghRawat
04:30-04:40	30	Quaternary sea level fluctuation along with sedimentation pattern of different sectors of north-eastern coast, India	Dola Chackraborty
04:40-04:50	31	Control of Sea Surface temperature on the isotopic composition of coastal precipitation	Md. Arzoo Ansari , Jacob NobleI, ArchanaDeodhar, S Chakraborty and G N Mendhekar
04:50-05:00	32	Understanding of the Himalayan monsoon system: Past to present	Aasif Mohmad Lone , Rayees Ahmad Shah and HemaAchyuthan
05:00-05:10	33	Role of tectonic-climate interaction in formation of the terraces in the Chamba region, NW Himalaya	Mayank Joshi and V C Thakur

Date:16.10.2020

SESSION: I; Time: 09:45 AM- 11:40 AM

Theme: Extreme weather events, El Nino and La Nino episodes; Natural Viability in the climate system

Coordinator: Dr. S. Chakraborty, IITM, Pune

10:00-10:10	34	The role of the orbital parameters in the Indian monsoon during the Mid-Holocene, as deciphered from atmospheric model experiments	Charan Teja Tejavath , Karumuri Ashok and Supriyo Chakraborty
10:10-10:20	35	Role of solar insolation and high latitude climate in Indian summer monsoon variability since MIS3	Sonu Jaglan , Anil K Gupta, Steven C Clemens, Som Dutt, Hai Cheng, and Raj K Singh
10:20-10:30	36	Heatwave driven atmospheric Carbon dioxide variability over India perceived by satellite and surface measurements	Smrati Gupta , Yogesh K Tiwari, J V Revadekar, Pramit Kumar Deb Burman, Supriyo Chakraborty and Palingamoorthy Gnanamoorthy
10:30-10:40	37	Role of Atmospheric Wind Pattern in Extreme Weather Condition	Vinay Kumar Pandey
10:40-10:50	38	Assessment of agricultural drought using rainfall deviation at district level for Tamil Nadu, India	Venkadesh Samykannu , S.Pazhanivelan, and S.Panneer Selvam
10:50-11:00	39	Characteristics of Aerosol Optical depth (AOD) using satellite approach over Surat	Ranjitkumar Solanki and K N Pathak
11:00-11:10	40	Grid-wise Correlation of Long Term Monthly Average Temperature of Meghalaya, India	Raju Kalita and Atul Saxena
11:10-11:20	41	Temperature Forecasting over North-East Region of India using Artificial Neural Network: A comparison-based study	S O Shaw, S Das and A K Maurya
11:20-11:30	42	Extreme rainfall trends and their statistical significance	Sanjay Kumar, L N Thakural , Sunil Gurrapu and J P Patra
11:30-01:40	43	Geographical dependence of cloud process over India: A comparative study between coastal and inland region	Rohit Srivastava and Ruchita Shah

Date:16.10.2020

SESSION: II; Time: 12:15 PM- 01:20 PM

Theme: Impact of climate change on water resources

Coordinator: Dr. Venkatesh Dutta, BBAU, Lucknow

12:30-12:40	44	Impact of the climate change on the water resources of the Brahmani Basin of Odisha	Damodar Panda
12:40-12:50	45	Groundwater responses to climate variability in Punjab, India	Gopal Krishan , Nitesh Patidar, N Sudarsan, Rajesh Vasisth, and B S Sidhu
12:50-01:00	46	Snow Cover Estimation and Their Impact on Hydrological Flow Regime: A Study of Tons River Basin	Aradhana Thakur , Anupma Sharma and L N Thakural
01:00-01:10	47	Geographical study of wetland area in north Bihar plain using remote sensing and GIS tools	Baidyanath Kumar
01:10-01:20	48	Groundwater management strategies in a rural catchment area: A case study of Chattisgarh	Priyam Saxena , Apoorva Bamal, Niharika Singh, Pammi N Sinha and Jyoti Patil

Date:16.10.2020

SESSION: III; Time: 02:15 PM- 05:00 PM

Theme: Teleconnection between Poles and Tropics; Indian Ocean warming, coastal ecosystem and sea-level rise

Coordinator: Dr. Rahul Mohan, NCPOR, Goa

02:30-02:40	49	Glacier loss in response to climate change in selected basins of Western Himalaya	Riyaz Ahmad Mir , Sanjay K Jain, and Zahid Majeed
02:40-02:50	50	Glacier Response to Changing Climate in the past half a century in the Lidder Basin, Western Himalayas	F A Bhat and Anayat Ahmad Quarshi
02:50-03:00	51	Reconstructing the glacier dynamics since Little Ice age (LIA) using multi-proxies or data integrate approach in the Chandra-Bhaga basin, northwestern Himalaya	Pritam Chand , Mayank Shekhar, Amalava Bhattacharyya and Milap Chand Sharma
03:00-03:10	52	Accelerated decline of the Arctic sea-ice associated to the global climate change	Avinash Kumar , Juhi Yadav and Rahul Mohan
03:10-03:20	53	Impact of changing climate over Polar ice sheet located south of Larsemann Hills, East Antarctica	Pradeep Kumar and Amit Dharwadkar

03:20-03:30	54	Glacial to proglacial and paraglacial landscape transformations in Arctic, Ny-Alesund area, Svalbard: sedimentary archives	Sharat Dutta , Mohd Sadiq, Amit Dharwadkar
03:30-03:40	55	Prevalent Climate variables during summer season around Gangotri Glacier	Manohar Arora and Jatin Malhotra
03:40-03:50	56	Influence of the Arctic sea-ice melt on the Summer Pacific Tropical Cyclone is modulated by Pacific Ocean decadal variability	Varunesh Chandra and S. Sandeep
03:50-04:00	57	Impact of ENSO on tropical cyclone season over north Indian Ocean	Debanjana Das, Fatema Khan, Chayan Roychoudhury , Swagata Paul and Sutapa Chaudhuri
04:00-04:10	58	Spatial modifications of Gulf of Mannar Islands due to rising sea level, Tamil Nadu	Sasi Mary Priya Rajan and Radhakrishnan Vengadasalam
04:10-04:20	59	Modeling Sea Surface Temperature over Indian Ocean and its influence on Indian Monsoon rainfall	Prabha Kushwaha, Vivek Kumar Pandey and Anshu Prakash Mishra
04:20-04:30	60	Increased cyclone destructive potential in the Southern Indian Ocean	Vidya P J , Ravichandran M, R Murtugudde, Subeesh M P, Sourav Chatterjee, Neetu S and Nuncio M
04:30-04:40	61	Recent changes in Different modes of Indian Ocean in warming climate	Jayanti Pal
04:40-04:50	62	Response of ocean water chemistry on impact of increasing atmospheric Carbon di Oxide	Somenath Ganguly , Uday Bhan, Santosh K Rai and Prashant Dhote
04:50-05:00	63	Did the Meghalayan sea stand fluctuations play a role in deurbanization of the coastal Harappan settlers, Lothal (Gujarat, India)?	Archana Das , Chintan D. Vedpathak, Aashima Sodhi, Rajesh Agnihotri, Binita Phartiyal, Nisarg Makwana, Nikhil Patel, Jaquilin Joseph and S P Prizomwala

Date:17.10.2020

SESSION: I; Time: 09:45 AM- 11:20 AM

Theme: Climate change and Indian monsoon

Coordinator: Dr. S. Chakraborty, IITM, Pune

10:00-10:10	64	Isotope fingerprinting of precipitation over Indian region	Nidhi Kalyani , M S Rao and Sudhir Kumar
10:10-10:20	65	Climatological interlink study of rapid urbanization and extreme rainfall events over megacities in India	G N Mohapatra, Smrati Purwar and V Rakesh
10:20-10:30	66	Isotopic composition of daily precipitation from Kashmir Valley, NW Himalaya: Insights on the role of meteorological parameters and dual moisture transport pathways	Aasif Mohmad Lone , Supriyo Chakraborty, Hema Achyuthan, Abirlal Metya, Amey Datye, R H Kripalani and Fousiya A A
10:30-10:40	67	Rainfall Trends (1901-2019) and last 100Year's Drought Intensity Assessment (DIA) in Varanasi district, Uttar Pradesh	Antara Gupta and Ajai Mishra
10:40-10:50	68	Changing patterns of historical rainfall and temperature in a river basin of the desert state of India	Archana Sarkar , Ushendra Kumar, Sanjay Agarwal and Govind Pandey
10:50-11:00	69	An Appraisal of Seasonal Precipitation distribution pattern over the newly formed union-territory of Ladakh in North West Himalayan Region	Debangshu Banerjee and Charu Singh
11:00-11:10	70	Spatio-temporal rainfall analysis of Goa State	Venkatesh B , Ashwini Pai Panandiker and Abhilash R
11:10-11:20	71	Investigating the effect of environmental variables on the isotopic composition of transpiration	Amey Datye and S Chakraborty

Date:17.10.2020

SESSION: II; Time: 12:15 PM- 01:50 PM

Theme: Climate change and Environmental degradation

Coordinator: Dr. Venkatesh Dutta, BBAU, Lucknow

12:30-12:40	72	Quality assessment of water-bodies around an oil refinery, Bina, district Sagar, Central India	Jemini Khatik and P. K. Kathal
12:40-12:50	72	Temporal Trends in Water Discharge of the Large Peninsular Rivers: Assessing the Role of Climatic and Anthropogenic Factors	Harish Gupta , Kiran Kumar Reddy S and Vamshi Krishna Gandla

12:50-01:00	73	A comparative study of ecohydrology of a tropical mangrove and a broadleaf deciduous forest in India	Pramit Kumar Deb Burman and Supriyo Chakraborty
01:00-01:10	74	Study of carbon transfer processes in a semi-evergreen forest of Northeast India	Dipankar Sarma , S Chakraborty, Nirmali Gogoi, Abhijit Bora, Pramit K Deb Burman, Abirlal Metya, Amey Datye, Charuta Murkute and Anand Karipot
01:10-01:20	75	Interannual variability of the physico-chemical parameters around the coral reef ecosystem of Lakshadweep Sea	Saravanan Kumaresan and Supriyo Chakraborty
01:20-01:30	76	Assessment and conservation approaches of degradation hotspots in three leading Indian rivers	Apoorva Bamal , Niharika Singh, Priyam Saxena and Akash Sondhi
01:30-01:40	77	Examination of historical trends and future projections for climate and land-use variables and its impact on Kalna River flow in Goa, India	Ashwini Pai Panandiker , B Venkatesh, Shubham Gude, K Mahender and A G Chachadi
01:40-01:50	78	Assessment of Physicochemical parameters of the Ganga River water between Prayagraj and Varanasi	Kumar Ankit , Kuldeep Prakesh, Anis and Narendra Kumar
<p>Date:17.10.2020 SESSION: III; Time: 02:15 PM- 05:20 PM <i>Theme: Disaster Management and policy framework: Climate Action: stock take in India; Covid-19 impact on environment and future strategies</i> Coordinator: Prof. Anil Gupta, NIDM, Delhi</p>			
02:30-02:40	79	Probability of flooding and vulnerability assessment in the Damodar River, Eastern India: implications for mitigation	Surajit Kundu
02:40-02:50	80	Identification of climate change impacts by glacial lake changing aspects in Arunachal Pradesh over the last four decades	Shubhesh Sharma , Ajanta Goswami, Anis, and Narendra Kumar
02:50-03:00	81	Multi- hazard risk mapping and assessment of housing adaptability: a geo-statistical analysis from Indian Sundarban	Rituparna Hajra and Sanjib Kumar Gupta
03:00-03:10	82	Innovation in Rain water Harvesting to mitigate risks due to Climate Change	Sunil Shrivastava
03:10-03:20	83	Waste Management and Its Effect on Global Warming	R. Dhana Raju
03:20-03:30	84	Seeing the Unseen: Changing Climate affecting microbes and their ecological services	Kavita Verma , Pooja Gokhale Sinha and Vartika Mathur
03:30-03:40	85	Engendered climate risk analysis: a precursor to gender equality and empowerment	Vandana Sharma, Smita Chakravarty, Savita Aggarwal and Jagriti Kher

03:40-03:50	86	Understanding the lockdown impact on Air Quality in Delhi due to COVID-19	Harshita Saxena and Vivek Kumar Pandey
03:50-04:00	87	COVID-19 Lockdowns Improve Air Quality in the South-East Asian Regions, as Seen by the Remote Sensing Satellites	Abirlal Metya , Panini Dagupta, Santanu Halder, S Chakraborty and Yogesh K Tiwari
04:00-04:10	88	Black carbon in Arctic: Impact of COVID-19	Rohit Srivastava
04:10-04:20	89	COVID19 and Pollution and Meteorology: A Convoluted Relationship	Pankaj Mehta, Anjali Bala and Bhawna Sharma
04:20-04:30	90	Impact of COVID-19 induced lockdown and Unlock periods on the Air quality of Guwahati city, India	Ritwik Nigam and Kanvi Pandya
04:30-04:40	91	COVID-19 and weather parameters: A case study of Maharashtra, India	Amit Awasthi , Uday Bhan and Nirankar Singh
04:40-04:50	92	An overview of the impacts of Covid-19 on marine sector in India and their implications for achieving sustainable development of marine resources	Sudip Kumar Kundu and Harini Santhanam
04:50-05:00	93	Impact of lockdown on air quality in megacities of India during COVID-19 pandemic	Pallavi Pradeep Khobragade and Ajay Vikram Ahirwar
05:00-05:10	94	Review of Lockdown Consequences on the Aerosol Heterogeneity over Indian Subcontinent	Nishi Srivastava
05:10-05:20	95	Rethinking Waste Management during Covid-19 – Assessment and Strategies to Manage Household Biohazard Personal Protection Equipment	Het Jani, Vanita Prasad, Akash Sondhi , Priya Sondhi
