



Technical Sessions

**National Conference on
'Big Geospatial Data: Analytics, Modelling & Applications'
25-26 September 2019
(Venue; Punjab Remote Sensing Centre, Ludhiana)
(Oral Presentations)**

Oral Session (Weather, Climate Change and Modelling) -25th September, 2019 (2.00 PM-3.30 PM) (Venue : PRSC Auditorium, 1st Floor, West Wing) Chair: Anoop Nagar, Regional Director, CGWB Co-Chair : Rabindra Nayak, Head-OEM, NRSC, Hyderabad				
S. No	Abstract ID	Title of Paper	Authors	Affiliation of first author
1	001	Regional Perspective on the Carbon Cycle and Ecosystem Model	Rabindra Kumar Nayak	National Remote Sensing Centre, Hyderabad
2	124	Analysis of aerosol optical depth with increasing urban sprawl in Kanpur District, Uttar Pradesh (India)	Harshita Singh, Pragati Singh and Dr. R.K. Upadhyay	Remote Sensing Applications Centre-Uttar Pradesh, Lucknow
3	169	Simulating the effect of climate change on wheat using WOFOST and DSSAT under different emission pathways in Punjab	Jatinderpal Singh, Barun Biswas and LK Dhaliwal	Department of Climate Change and Agricultural Meteorology, PAU, Ludhiana
4	171	Spatial and temporal drought analysis based on chirps rainfall data derived standardized precipitation index (spi) over Gujarat(India)	Manish Malik and Shashikant Patel	Haryana Space Application Centre, Hisar
5	174	Spatial Variability of Normalized Difference Snow Index and Normalized Difference Glacier Index with Land Surface Temperature	Priyanka Rao and Abhishek Singh	Indian Institute of Remote Sensing, Indian Space Research Organisation, Dehradun
6	193	Study of trends and change in the frequency of meteorological drought (1968–2018) over Indian region	Shalini Saxena, Preeti Tahlani, Rajat Saxena, Amit Rabha and S.S. Ray	Mahalanobis National Crop Forecast Centre, DAC&FW, New Delhi
7	203	Study of spectral indices and their impact on land surface temperature in Bathinda district of Punjab, India using geospatial technology	Rajveer Kaur and Puneeta Pandey	Department of Environmental Sciences and Technology, Central University of Punjab, Bathinda
8	220	Rainfall variability analysis in lower Shivalik region of Punjab, India	Navneet Kaur, Abrar Yousuf and Manmohanjit Singh	Regional Research Station, PAU, Ballawal Saunkhri

**Oral Session (Big Data Analytics, UAV Data Processing and Applications) -25th September, 2019
(2.00 PM-3.30 PM) (Venue : Training Room, 1st Floor, West Wing)**

Chair: U N Mishra, Deputy Surveyor General , Northern Zone SOI, Chandigarh

Co-Chair : Himanshu Govil, NIT, Raipur

1.	123	Machine learning based growth stage classification of sugarcane crop through Hyperspectral signatures	B B Gaikwad, Y. Singh, N. Varghese and N. More	National Institute of Abiotic Stress Management- ICAR, Malegaon-Karhavagaj Road, Khurd, Baramati, Maharashtra
2.	137	Comparison of Sentinel 2A fused AVIRIS airborne data and EO-1 Hyperion satellite data for mineral mapping using different techniques	Prateek Tripathi and Rahul Dev Garg	Indian Institute of Technology, Roorkee
3.	149	Semantic segmentation of roads from satellite image using convolution neural network	Minakshi Kumar and Manik Tulani	Indian Institute of Remote Sensing, Dehradun.
4.	176	Geospatial Bigdata Cataloguing, Analytics and Map Services; Odisha Spatial Data Infrastructure (OSDI) an initiative towards making a Geospatial Bigdata for the State of Odisha and providing demand-based services to the User Departments of Government of Odisha	S. Tripathi , P. K. Parida and P. K. Mallick	Odisha State Forest Department, Odisha
5.	163	Big data and climate change research: opportunities and challenges	Som Pal Singh, PK Kingra and R Setia	Department of Climate Change & Agriculture-Meteorology, PAU Ludhiana
6.	167	Assessing long-term Surface Water change in Uttarakhand using Google Earth Engine and GIS	Charanjeet Singh Nijjar, Sachchidanand Singh, Tanisha Jaiswal, Pritipadmaja, Vishal Sharma, and Vaibhav Shrivastava	Indian Institute of Remote Sensing, IIRS-ISRO, Dehradun, Uttarakhand, India
7.	114	Object-based approach for shadow region enhancements in ultra-high resolution UAV datasets	Abhishek Adhikari, Minakshi Kumar and Shefali Agrawal	Indian Institute of Remote Sensing , Dehradun
8.	147	Google Earth Engine – A Planetary Scale Geospatial Data Analysis Tool	Harpinder Singh, P.K. Litoria and B. Pateriya	Punjab Remote Sensing Centre, PAU Campus, Ludhiana

**Oral Session (Agriculture & Soil-I) -25th September, 2019
(2.00 PM-3.30 PM) (Venue : PRSC Committee Room, 1st Floor, East Wing)**

Chair: S. S. Ray, Director MNCFC, New Delhi

Co-Chair: P K Parida, ORSAC, Bhubaneswar

1.	138	Comparative analysis of supervised classifiers in crop type discrimination using AVIRIS-NG	Prachi Singh, Ramandeep Kaur M. Malhi, Manish K. Pandey and Prashant K. Srivastava	Institute of environment and sustainable development, Banaras Hindu University
2.	275	Spatio-temporal fire trends and burning pattern of Punjab using MODIS active fire data	Sumit Kumar, Sanjay Kumar Ghosh and Brijendra Pateriya	Department of Civil Engineering, Indian Institute of Technology, Roorkee
3.	161	Comparison of spectral indices for detecting the potato late	Juanid Ansari, R Setia, Sandeep Jain and B	Punjab Remote Sensing Centre, Ludhiana

		blight disease	Pateriya	
4.	107	Determining and Mapping of Soil Erodibility Index for Nongpoh Watershed	Susanta Das, PK Bora and Prafull Katre	Department of Soil and Water Engineering, SVCAET & RS, IGKV, Raipur
5.	113	Assessment of land suitability and land capability for agriculture in Barmer, Rajasthan	Diya Chatterjee and Rajesh S. Paul	Department of Geoinformatics, Applied Science, Sangam University
6.	120	Impact assessment of canal irrigation on crop acreage in Bhognipur branch command of lower ganga canal system using Remote Sensing and GIS techniques	R.K. Upadhyay, Pragati Singh, Ashutosh Singh, Narendra Kumar and S.P.S. Jadaun	Remote Sensing Applications Centre -Uttar Pradesh, Lucknow
7.	164	Long - term variability in evapotranspiration and water productivity of maize in central and sub-mountainous Punjab	Harleen Kaur, P K Kingra and Sompal Singh	Department of Climate change and Agricultural Meteorology, Punjab Agricultural University, Ludhiana
8.	129	Spatial prediction of soil properties in a Himalayan watershed using Random Forest model- A case study	Juan Mandy and Justin George	Indian Institute of Remote Sensing, Dehradun
9.	130	Recent trend analysis of terrestrial primary productivity in India using MODIS datasets	Roma Varghese and MD Behera	Centre for Oceans, Rivers, Atmosphere and Land Sciences (CORAL), Indian Institute of Technology, Kharagpur
10.	126	Spatio-temporal vegetation phenology dynamics over years 2000-2018 and their relation to climatic variables in alpine Himalayan ecosystem in Uttarakhand	Kanchan Pathania, Nitesh Takarker and Arvind Pandey	Centre of Excellence for NRDMS in Uttarakhand, Kumaun University
Oral Session (Agriculture & Soil-II) -26th September, 2019 (11.30 AM-1.00 PM) (Venue : PRSC Auditorium, 1st Floor, West Wing) Chair: S S Kukal, Dean, Punjab Agricultural University, Ludhiana Co-Chair : Rajesh Vashisht, Joint Director, Department of Agriculture and Family Welfare, Govt of Punjab				
1	221	Horticultural crop estimation and developmental planning in India using satellite remote sensing under the CHAMAN project	S. Mamatha, Pradeep Kumar, Shreya Roy, Niti Singh, Bijan Debnath, M. M. Kimothi, Seema Sehgal and S. S. Ray	Mahalanobis National Crop Forecast Centre, DAC&FW, New Delhi
2	142	Geospatial approach on crop cutting experiment (CCE) optimization	Rajagopal N, Yogesh Kumar Singh and Shravan Singh Bhati	Amnex Infotechnologies Pvt Ltd, India
3	157	Determination of heavy metal contents in agricultural soils of South Punjab, India.	Sandip Singh Bhatti, Jaskaran Kaur, Anil Sood, Minakshi, Jatinder Kaur and Avinash Kaur Nagpal	Department of Botanical and Environmental Sciences, Guru Nanak Dev University, Amritsar
4	172	Mapping spatial variability of soil properties at village level	Kusum Lata, Anil Sood and Kawaldeep Kaur	Punjab Remote Sensing Centre, Ludhiana
5	286	Identification of Soil Erosion Prone Zones Using Revised Universal Soil Loss Equation (RUSLE) Model and Geo-Spatial Technology. A Case Study of Upper Tuirial Watershed, Mizoram.	Binoy Kumar Barman, K. Srinivasa Rao, Shabnam Ara and Maisnam Sandhyarani Devi	Department of Geology, Mizoram University, Aizawl

6	280	Factors controlling the difference between organic carbon measured by wet oxidation and dry combustion method in salt-affected soils	M Sharma, R Setia, R P Singh, B Pateriya, K Sreenivas, T Ravisankar and V K Dadhwal	Punjab Remote Sensing Centre, Ludhiana, India
7	202	Assessment and modelling of heavy metals in agricultural soils of Bathinda using IDW Interpolation technique	Naseer Ahmad and Puneeta Pandey	Department of Environmental Science and Technology, Central University of Punjab, Bathinda
8	140	Impact of irrigation in Lalitpur district, Uttar Pradesh, India using Remote Sensing &GIS technique	Sunil Yadav, Pragati Singh and Shiv Pal Singh Jadaun	Remote Sensing Applications Centre -Uttar Pradesh, Lucknow.
9	179	Comparison of multispectral and airborne hyperspectral imagery for predicting soil properties in Gujarat	Sagar Taneja, Raj Setia, Baban K Bansod, Rahul Nigam, Bimal K Bhattacharya and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
10	128	Evaluating automated endmember extraction for classifying hyperspectral data & deriving spectral parameters for monitoring vegetation health	Ronak Singh, Vinay Kumar and Ashish Ranjan	Indian Institute of Remote Sensing, Dehradun
Oral Session (Open Source, Mobile Apps and Crowd Sourcing Data Management) -26th September, 2019 (11.30 AM-1.00 PM) (Venue : Training Room, 1st Floor, West Wing) Chair : Sameer Saran, Head Geoinformatics, IIRS, Dehradun Co-Chair : Ashutosh Jha, Scientist SE, IIRS, Dehradun				
1	158	SPI Utility: An Open-source tool for calculation of Standardized Precipitation Index	Manaruchi Mohapatra, Gunjan Kour and Bhaskar R. Nikam	Indian Institute of Remote Sensing, Dehradun
2	188	Real-Time Data Acquisition and Visualization from an Open Government Data Platform through API	Koushikey Chhapariya, Ankita Vashishtha and Shubham Pawar	Photogrammetry and Remote Sensing, Indian Institute of Remote Sensing, Dehradun
3	110	Asset audits using mobile apps - case studies from Delhi and Telangana	Bendalam Aditya Babu and Nagaraja Kaushik Gampa	Kaiinos Geospatial Technologies Pvt Ltd, Hyderabad
4	106	Agriculture monitoring system using near-real time satellite data	Krishanu Acharya and Amit Kumar	Suhora Technologies Pvt. Ltd, Noida
5	103	Android based mobile app (surface water resources information system): A need of the hour	Sudhakar Shukla, Sushant Pathak, R.K. Upadhyay, Narendra Kumar, S.P.S.Jadaun and Shriddha Pathak and Rajneesh Kumar	Remote Sensing Applications Centre- Uttar Pradesh, Lucknow
6	270	An Android based automated solution for Urban Planning	Munish Sambyal, Amardeep Singh, Harpinder Singh, P.K Litoria and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
7	282	Essential geospatial python libraries	Taranjot Singh Bhatia, Harpinder Singh, PK Litoria and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
8	195	Citizen-centric geo-spatial web-service for industrial and infrastructure development initiatives in Odisha Satte, India	Debajit Mishra, Manoj Kumar Sanabada and P.K. Mallick	Odisha Space Applications Centre (ORSAC), Bhubaneswar
9	150	WEBLIN: An Open Source Web Based GIS Tool for Lineament Analysis	Chaure Shailesh	Govt. Holkar Science College, Indore

**Oral Session (EO Sensors & Data Processing)-26th September, 2019
(11.30 AM-1.00 PM) (Venue : PRSC Committee Room, 1st Floor, East Wing)
Chair: B K Singh, Professor, Govt. Engg. College, Ujjain
Co-Chair : Gaurav, IISER, Bhopal**

1	135	Chlorophyll retrieval using AVIRIS-NG derived hyperspectral indices	Ramandeep Kaur M. Malhi, Prachi Singh, Manish K. Pandey, Prashant K. Srivastava and G.Sandhya Kiran	Institute of Environment and Sustainable Development, Banaras Hindu University, Varanasi-221005
2	182	Utilisation of C-band dual POLSAR backscatter for analysis of soil moisture variation	AksharTripathi and Reet Kamal Tiwari	Department of Civil Engineering, Indian Institute of Technology Ropar, Rupnagar
3	112	An Integration of object and rule-based classification of very high resolution dataset	Anjali Patel and Minakshi Kumar	Indian Institute of Remote Sensing, Dehradun
4	194	Utilization of ISRO's SCATSAT-1 ku band scatterometer data for agriculture	Preeti Tahlani, Pushkar Gaur, Rojalin Tripathy, B. K. Bhattacharya and S. S. Ray	Mahalanobis National Crop Forecast Centre, DAC & FW, New Delhi
5	186	Evaluate the LST-NDVI relationship in Raipur City, India	Himanshu Govil, Subhanil Guha and Pralay Bhaumik	Department of Applied Geology, National Institute of Technology Raipur, Raipur, India
6	115	Downsampling MODIS Land Surface Temperature	Akula Surya Vasantha and Gowtham Gollapalli	Kaiinos Geospatial Technologies Pvt Ltd, Hyderabad
7	178	Extraction and comparison of lineaments from satellite SAR imagery acquired in two different bands in general area Jahajpur, Bhilwara District, Rajasthan	Pralay Bhaumik, Himanshu Govil, Mahesh Kumar Tripathi, Monika Besoya and Shubhanil Guha	Department of Applied Geology, National Institute of Technology, Raipur
8	153	Soil moisture estimation and validation using Sentinel 1 data over Bhopal region	Abhilash Singh	Indian Institute of Science Education and Research, Bhopal
9	168	Polarimetric parameter assessment for agricultural applications	Arunav Nanda and Dipanwita Halder	Indian institute of Remote Sensing, Dehradun

**Oral Session (Water Resources Management and Geological Studies)- 26th September, 2019
(1.45 PM-3.15 PM) (Venue : Training Room, 1st Floor, West Wing)
Chair: K G Singh, Head, Soil & Water Engineering, PAU, Ludhiana
Co-Chair: Mahesh Thakur, Assistant Prof, Panjab University, Chandigarh**

1	133	Assessment of sedimentation rate and revised capacity of Bargi Reservoir using Remote Sensing	Atul Kaushik, Bhaskar R. Nikam and Vaibhav Garg	Indian Institute of Remote Sensing, Dehradun
2	134	GIS mapping of dry wells in Karnal, Haryana	Kapil Rohilla, Nidhi Kundu, V. S. Arya, Deepti Agrawal, Chander Shekhar and Sandeep Kumar	Haryana Space Applications centre, Hisar
3	155	Assessment of reservoir sedimentation using temporal SAR data	Abhishek Kumar Yadav and Bhaskar R. Nikam	Indian Institute of Remote Sensing, Dehradun
4	162	Tectonic displacement after Kermanshah earthquake in Iran measured using DInSAR technique	Junaid Ansari, Tapas Ranjan Martha and Priyom Roy	Punjab Remote Sensing Centre, Ludhiana
5	206	Large scale mapping and	Mahesh Thakur and Raj Kiran	Centre of Advanced Study in

		investigation of correlation between RMRb and CSMR: Case study from NW Himalaya, India	Dhiman	Geology, Panjab University, Chandigarh
6	213	Application of WEPP Model For Runoff And Sediment Yield Simulation From Ungauged Watershed In Shivalik Foothills	Abrar Yousuf and Anil Bhardwaj	Department of Soil and Water Engineering, PAU, Ludhiana
7	218	Impact assessment of landuse change on runoff and sediment yield of a watershed using RS, GIS and WEPP model	Kallem Sushanth, Anil Bhardwaj, Abrar Yousuf and Brijendra Pateriya	Department of Soil & Water Engineering, Punjab Agricultural University, Ludhiana
8	105	Appraisal of human health risk by ingestion of groundwater using GIS in Ludhiana (Punjab)	Dapinder Deep Singh, Mukta Sharma, Sashikanta Sahoo and Siby John	Shaheed Bhagat Singh State Technical Campus, Firozpur
9	274	Landslide Hazard Zonation Using Satellite remote sensing and GIS Technology	Ankit Tyagi, Reet Kamal Tiwari and Naveen James	Department of Civil Engineering, Indian institute of Technology Ropar
10	285	Water Quality of Upper Patiala-Ki-Rao Stream Located on Shivalik Hills	Dikesh Chandra Loshali, SushmaWalia Sarbjit Singh, and Richa Babbar	Punjab Remote Sensing Centre, Ludhiana
Oral Session (SMART Urbanization and Rural Development Planning)- 26th September, 2019 (1.45 PM-3.15 PM) (Venue : PRSC Auditorium, 1st Floor, West Wing) Chair: Pankaj Mishra, Survey of India, Dehradun Co-Chair : Sudhakar Shukla, Head-School of Geoinformatics, UPRSAC, Lucknow				
1	102	A geospatial assessment on creeks of Mumbai, India: an impact of urbanization	Jaydip dey, Saurabh Sakhre and Ritesh Vijay	CSIR-National Environmental Engineering Research Institute, Nagpur
2	104	Road connectivity analysis and travel parameters raster generation using remote sensing and GIS	Ashritha and Paresah Cahndra Deka	National Institute of Technology, Karnataka
3	109	Kriti for Asset Management - Case study of Optical fiber mapping in India	Raghavendra Kopalle, DVS Sarma, Mahendra Pullata and Nagaraja Kaushik Gampa	Wundapix LLP, Hyderabad
4	121	Identification of urban heat island due to rapid growth of urbanization using time series remotely sensed data	Priyanka Rao, Abhishek Singh, Sachchidanand Singh and Kamal Pandey	Indian Institute of Remote Sensing, Dehradun
5	132	Evaluation of ecosystem services at cadastral level using Geoinformatics and remote sensing techniques	Dharmendra Singh, Saswati Mondal and V.S. Arya	Haryana Space Applications Centre, Hisar
6	148	Extension of corporation boundary- A Remote Sensing and GIS approach	Simerjit Kaur, Reenu Sharma, Ajay Mathur and Brijendra Pateriya	Punjab Remote sensing centre, Ludhiana
7	199	SMART mega public event management through GIS	D.S.Yadav, B.K.Singh and U.K.Singh	National Informatics Centre, Government of India, Ujjain
8	204	e-CLU: An e-governance initiative for Land use Change Management	Amardeep Singh, Harpinder Singh, Sonam Verma, Taranpreet Singh Gulati, P K Litoria, Reenu Sharma, Ajay Mathur and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
9	219	Application of Geographical	Rajesh Jolly and Ripudaman	Lovely Professional University,

		Information System to study the socio-economic infrastructural facilities in the Kandi region of Punjab	Singh	Phagwara
10	276	Sustainable Livelihood Security Index – A Tool to Identify Future Needs	Supratim Guha	Indian Institute of Technology Ropar, Rupnagar
Oral Session (Natural Resources and Environment Management)- 26th September, 2019 (1.45 PM-3.15 PM) (Venue : PRSC Committee Room, 1st Floor, East Wing) Chair: T. Ravisankar, Group Director, NRSC, Hyderabad Co-Chair : Anup Kumar, HARSAC, Hisar				
1	118	Canopy height retrieval using polinsar coherence optimization technique	Sadhana Yadav	Indian Institute of Remote Sensing , Dehradun
2	272	Fisheries profile and its spatial distribution in the River Ganga from Haridwar to Patna, India	Syed Shabih Hassan and R. K. Sinha	College of Fisheries, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana
3	119	Study of floral biodiversity and its ecological parameters in Musa Bagh forest area, Lucknow applying Remote Sensing and GIS techniques	Ankit Kumar, V. Rajamani and Ganesh Chandra Kisku	Environmental Toxicology Group, CSIR – Indian Institute of Toxicology Research, Lucknow
4	125	Change detection of land use land cover- A case study on Kadakola sub watershed	H Hemanth Kumar and Binny Gopal	Karnataka State Council for Science and Technology, Bengaluru
5	146	Impact Assessment of Extreme events on Changing Land Use / Land Cover: A case study of Mandakini Catchment	Sanjay Kumar and Minakshi Kumar	Department of Geography, SSV College, Hapur
6	197	Estimating sand mining impacts on LULC:A Remote Sensing Approach	Rajan Dabral, Rajdeep Singh, HAS Sandhu and Rohan Kumar	Punjab Engineering College, Chandigarh, Punjab, India
7	108	Smart education using earth data (seed) for natural resource conservation	Guntuboyina Surya Tanusha and Ajay Kumar Mulakala	Kaiinos Geospatial Technologies, Hyderabad
8	247	Temporal Analysis of land use/land cover changes in Jalandhar District of Punjab using Remote Sensing and GIS Techniques	Indrajit Pal, D.C. Loshali and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
9	214	Spatio temporal change analysis of Harike wetland in Punjab using Remote Sensing & GIS	Rahul Sharma, Shashikant Patel, P.K. Litoria and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana

(Poster Presentations)

Poster Session (Agriculture & Soil) -25th September, 2019 (5.30 PM-6.30 PM) (Venue : Hall, Ground Floor, East Wing)				
S. No	Abstract ID	Title of Paper	Authors	Affiliation of first author
1.	101	Response of zero tillage sown wheat (<i>Triticum aestivum</i> L.) to different dates of sowing in Amritsar	Mandeep Singh and Kanwaljit Singh	Department of Agriculture, Khalsa College Amritsar, Punjab
2.	116	Estimation of daily reference evapotranspiration using AQUACROP and CROPWAT models for Raipur region of Chhattisgarh, india	Vishnu Prasad	Indira Gandhi Krishi Viswavidyalaya, Raipur, Chhattisgarh
3.	131	Development and evaluation of a weighing type micro Lysimeter for soilless cultivation under naturally ventilated greenhouse conditions	Pooja Goyal, Rakesh Sharda, Mukesh Siag, K. G. Singh and Nilesh Biwalkar	Department of Soil and Water Engineering, Punjab Agricultural University (PAU), India
4.	156	A GIS based study for the spatial distribution of micronutrients in soils of Amritsar District, Punjab.	Anil Sood, Minakshi, B.Khan and Arvind Kumar	Punjab Remote Sensing Centre, Ludhiana
5.	160	Multicriteria land suitability evaluation for crop diversification in South-west Punjab	Tapan Ghosh, R Setia, V K Verma and B Pateriya	Punjab Remote Sensing Centre, Ludhiana
6.	170	Quantitative assessment of bioconcentration of Cr in wheat grains collected from Ropar Wetland, Punjab and its Surrounding Areas	Sakshi Sharma, Avinash Kaur Nagpal and InderpreetKaur	Department of Botanical and Environmental Sciences, Guru Nanak Dev University
7.	187	Site suitability evaluation for mulberry based sericulture development - A case study of northern district (Gurdaspur) of Punjab	Sunil Nehra, Sarabjit Singh, Birinder Kaur, V.K Verma and B. Pateriya	Punjab Remote Sensing Centre, Ludhiana
8.	201	Analysis of Soil Quality at Cadastral level using Geospatial techniques: A case study of Khushalipur village, Saharanpur district, Uttar Pradesh	A.L. Haldar, Swati Pandey and P.P.S Yadav	Remote Sensing Applications Centre -Uttar Pradesh, Lucknow
9.	205	Crop harvesting and sensor based yield monitoring using combine harvester	Manvendra Bhardwaj and Mahesh Chand Singh	Department of Farm Machinery and Power Engineering, PAU Ludhiana
10.	207	Effect of weather variables on development of Ascochyta blight (<i>Ascochyta rabiei</i> (Pass.) Labr.) of chickpea	Upasana Rani, Wazir Ahmad Dost Mohammdy, Asmita Sirari and Shayla Bindra	Department of Plant Breeding and Genetics, Punjab Agricultural University, Ludhiana
11	208	Impact and adaptation of climate change on sugarcane production	Sudhir Kumar Mishra, Kuldeep Singh, K K Gill and	Punjab Agricultural University, Regional Research Station,

		in Punjab	Harpinder Singh	Faridkot
12	210	The Smart Farming System using Augmented Reality	Kawaldeep Kaur, Anil Sood, Amardeep Singh and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
13	263	Advanced remote sensing techniques for detecting pathogens of infectious diseases in Potato	Harmanpreet Singh and Amanpreet Singh	Khalsa College Amritsar and Punjab Agricultural University, Ludhiana
14	265	Effect of Pressmud Based Biocompost on soil properties and Micronutrient Uptake by Sunflower in a Vertiso	T. Jyolsna and S. K. Gali	Punjab Agricultural University, Ludhiana
15	266	Response of Potato (<i>Solanum Tuberosum</i> L.) to Gibberellic acid and Integrated potassium management	Amanpreet Singh and Gurbax Singh	Department of Agriculture, Khalsa College Amritsar, Punjab
16	287	Irrigation and residue mulch effects on productivity and water and nitrogen economy of Bt cotton in north-west India	Ritika Joshi and C B Singh	Department of Soil Science, Punjab Agricultural University, Ludhiana
17	288	Impact of deep tillage and irrigation regimes on land and water productivity of maize-wheat system	Jeevanjot Dhailwal, M S Kahlon and S S Kukal	Department of Soil Science, Punjab Agricultural University, Ludhiana
18	289	Estimation and evaluation of curve number from small watersheds of lower Himalayas of North-West India	Sumita Chandel, M S Hadda and Amrit Kaur Mahal	Department of Soil Science, College of Agriculture, Punjab Agricultural University, Ludhiana
19	292	Wheat yield forecasting of Ludhiana district using statistical models	Lovepreet Kaur, Amrit Kaur Mahal, Pritpal Singh and Prabhjyot Kaur	Punjab Agricultural University, Ludhiana
Poster Session (Big Data Analytics, UAV Data Processing and Applications) -25th September, 2019 (5.30 PM-6.30 PM) (Venue : Hall, Ground Floor, East Wing)				
1	175	ANN-GIS based statistical approach for landslide hazard zonation in Morni, Nahan Salient, North-Western Himalaya, India	Mahesh Thakur, Abhinav Galohda and Raj Kiran Dhiman	Centre of Advanced Study in Geology, Panjab University Chandigarh, India
2	209	UAV Data Processing and Applications: Decoding the role of UAVs in Forestry	Rishabh Sodhi and Harmeet Singh Saralch	Department of Forestry and Natural Resouces, Punjab Agricultural University, Ludhiana
3	268	Artificial intelligence potential in resolving the issues and challenges pertaining in the urbanization	Taranpreet Singh Gulati, Amardeep Singh, PK Litoria and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
Poster Session (EO Sensors & Data Processing)-25th September, 2019 (5.30 PM-6.30 PM) (Venue : Hall, Ground Floor, East Wing)				
1	139	Bidirectional Reflectance Distribution Function (BRDF) properties of snow in indian himalayan conditions, obtained	Chander Shekhar, Ashish Mishra, Vimanyu Sharma and Snehmani	Snow and Avalanche Study Establishment, DRDO, Chandigarh

		using field spectral radiometer (350 -2500 NM)indices		
Poster Session (Natural Resources and Environment Management)- 25th September, 2019 (5.30 PM-6.30 PM) (Venue : Hall, Ground Floor, East Wing)				
1	122	Natural Resources Management : Need of Hour	Ankita, Riddhi Salotra and R. I.S Gill	Department of Forestry and Natural resources, PAU, Ludhiana
2	278	Identifying the hot spots of dengue fever incidence in Punjab using spatial statistics	Bhupinder Singh, R Setia, Nitin Dhir and B Pateriya	Punjab Remote Sensing Centre, Ludhiana
3	145	Mapping the biomass of Orchha wildlife sanctuary from remotely sensed data.	Shreya Tripathi	Department of Botany, University of Delhi, New Delhi
4	154	Inventorization of <i>Azadirachta indica</i> A. Juss and <i>Cassia fistula</i> L. in Guru Nanak Dev University, Amritsar, Punjab	Akanksha Bakshi, Minakshi and Avinash Kaur Nagpal	Department of Botanical and Environmental Sciences Guru Nanak Dev University, Amritsar
5	198	Analysis and change detection of hydrological, ecological and human activities in a watershed using Geoinformatic Techniques	Sarabjit Singh, Sunil Nehra, V. K Verma and B Pateriya	Punjab Remote Sensing Centre, Ludhiana
Poster Session (Open Source, Mobile Apps and Crowd Sourcing Data Management)- 26th September, 2019 (12.00 PM-1.00 PM) (Venue : Hall, Ground Floor, East Wing)				
1	111	Smartout web cartography API	Gulshan Savanth Dommu and Mahendra Pullata	KALINOS Geospatial Technologies Private Limited, Hyderabad
2	184	India's Policy on Banning Cryptocurrency- its Impact and Potential on Indian Economy	Robin Singh, Amardeep Singh, PK Litoria and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
3	185	Boon of using GIS for real-time Disaster Management	Sonam Verma, Amardeep Singh, PK Litoria and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
4	212	A comparative Study of Free and Enterprise Framework for Web Application Development	Samandeep Kaur, Amardeep Singh, PK Litoria, Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
5	258	Developing WebGIS for monitoring of epilepsy	Nitin Dhir, Randhir Singh, Suman Sharma, R Setia, Gagandeep Singh, Sarit Sharma, Anurag Chowdhury, R K Bansal and B Pateriya	Punjab Remote Sensing Centre, Ludhiana
6	269	Impact of Data Localisation requirement on Digital Economy	Niketa Singla, Sonam Verma, Amardeep Singh, PK Litoria and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
7	271	Implementation of Different Maps API along with Android	Munish Sambyal, Amardeep Singh, Harpinder Singh, P.K Litoria and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
Poster Session (Water Resources Management and Geological Studies)- 26th September, 2019 (12.00 PM-1.00 PM) (Venue : Hall, Ground Floor, East Wing)				
1	117	Utilization of groundwater assessment and modelling of	Kusum Pandey and Shiv Kumar	Department of Soil and Water Engineering, Punjab

		groundwater behaviour in the area between Ganga and Hindon Rivers in Uttar Pradesh		Agricultural University, Ludhiana
2	151	Utilization of geo-spatial technologies for assessment of the status of traditional water harvesting systems in Karnataka	Vijay U T, Sachin D A, Rajashekara G and Sanjeev Kumar P	KSCST, IISc campus, Bangalore
3	152	Autoregressive time series model for the assessment of runoff in upper Sewani watershed of Damodar catchment	Nikhil Gladwin Cutting	Department of Soil and Water Engineering, Punjab Agricultural University, Ludhiana
4	159	Dynamics of waterlogging and drainage congestion in Kosi fan	Digvijay Singh and Kumar Gaurav	IISER, Bhauri, Bhopal Bypass road, Bhopal
5	173	GIS aided spatial groundwater quality assessment for drinking purpose in Kurukshetra District, Haryana	Anup Kumar, Balwinder, Om Prakash and V.S.Arya	Front Office- HARSAC, Panchkula, Haryana
6	177	Geospatial technologies in water resource management	Upasna Manhas	Punjab Agriculture University, Ludhiana, Punjab
7	180	Spatial distribution and risk assessment of heavy metals in surface water from Satluj river in Indian Punjab	Randhir Singh, R Setia, S S Dhaliwal, Akhil Goyal, S S Kukal and B Pateriya	Punjab Remote Sensing Centre, Ludhiana
8	196	Time Series analysis of Impact of watershed development using Remote Sensing and GIS.	Birinder Kaur, Sunil Nehra, V.K. Verma and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
9	215	Morphometric analysis of a Choharkhad micro-watershed using GIS	Abrar Yousuf, Shabnam Ara, ShaikIftikhar Ahmad, Ramashray Prasad and BR Thakur	Department of Soil and Water Engineering, PAU, Ludhiana
10	222	Groundwater depletion in Punjab: A Spatial Analysis	Ripudaman Singh and Vardan Gupta	Lovely Professional University, Jalandhar
11	259	Estimation of water quality parameters of Satluj river in Punjab using Sentinel 2 satellite data	Shaveta Lamba, Raj Setia, Shard Chander, Ashwin Gujrati, R P Singh and Brijendra Pateriya	Punjab Remote Sensing Centre, Ludhiana
12	277	Trends in Surface Ice Velocity of Zemu Glacier- Annual and Decadal Perspective	Supratim Guha and Reet Kamal Tiwari	Indian Institute of Technology Ropar,
13	291	Spatial and temporal variation of groundwater salinity for Fazilka and Muktsar district of Punjab state	Gokul Prasad, Gopal Krishan, N. Sudershan, CP Kumar, R. Vasisth, and B.S. Sidhu	National Institute of Hydrology, Roorkee
Poster Session (Weather, Climate Change and Modelling) -26th September, 2019 (12.00 PM-1.00 PM) (Venue : Hall, Ground Floor, East Wing)				
1	143	Estimation of particulate matter 2.5 using satellite based AOD measurements	Dimple Kaushik and Dharmendra Singh	J C Bose University of Science and Technology, YMCA Faridabad, Haryana, India
2	183	Climate data mining using machine learning techniques	P K Kingra, Sony Bora, R Setia and Som Pal Singh	Punjab Agricultural University, Ludhiana
3	211	Long Term Temperature Data Analysis of Patiala District, Punjab	Ritesh Kumar, Arun Kaushal	Punjab Agricultural University, Ludhiana