((• LIVE •))
Webinar Series

ASIA PACIFIC REGIONAL WEBINAR

"Space Technology for Flood Forecast Modelling"

Jointly Organised by
National Remote Sensing Centre (NRSC)
Indian Space Research Organisation (ISRO),
International Water Management Institute (IWMI)
under Sentinel Asia
27 – 28 October, 2021

Government of India
National Remote Sensing Centre
Indian Space Research Organisation
ISO 9001:2015

IWMI
International Water
Management Institute

SENTINEL ASIA — Sentinel Asia

Flooding constitutes the most prevalent and costly natural disaster in the world. A variety of mitigation measures can be implemented to minimize the impact of flooding. Flood forecasting is one of the best non-structural methods of flood damage mitigation methods being adopted globally. Flood forecasting in large catchments has been a challenging task for the hydrologists due to its spatial and temporal variability. Flood forecasting using hydrological modelling techniques can replace the conventional methods of forecast with the improved forecast lead-time and more accurate flood discharge estimation. Due to availability of very high resolution digital terrain models, advanced hardware and softwares, spatial flood early warning and alarming is gaining momentum in recent years. Satellite technology can provide very vital information on the hydrology and topography of the catchment that plays a major role in spatial flood early warning.

The 2-day training programme will focus on the overview of the role of Earth Observation (EO) technologies in flood forecasting and spatial flood inundation modelling using hydrological and hydrodynamic modelling techniques. The objective of the programme is to appraise the participants from Sentinel Asia member countries about the potential and current status of utilization of EO technologies for operational spatial flood early warning.

The programme consists of Expert lectures, interactive sessions and panel discussion to make it more impactful. Scope for augmenting technology applications, research gaps, data limitations, knowledge sharing opportunities will be discussed for future course of action towards promoting the technology for flood disaster risk reduction.

Schedule

Day- 1 (27 October, 2021 from 10:00 hours IST)

Inaugural Session

	Organization	Duration
Welcome by Dr. V V Rao, Deputy Director, RSAA	NRSC/ISRO	3 minutes
Introduction by participants		7 minutes
Remarks by Sri Shantanu Bhatawdekar, Director	EDPO/ISRO	5 minutes
Remarks by Dr. Mark Smith, Director General	IWMI	5 minutes
Remarks by Dr. Raj Kumar, Director	NRSC/ISRO	5 minutes
Vote of thanks by Dr. K H V Durga Rao	NRSC/ISRO	2 minutes

Technical Session - 1

Hydrological Modelling, Dr K H V Durga Rao	NRSC/ISRO	45 minutes
Flood Forecast Modelling (Demo using HEC HMS), Sri Amanpreet Singh	NRSC/ISRO	45 minutes
Flood Inundation Simulation, Mr. Amanpreet Singh	NRSC/ISRO	45 minutes
Flood Inundation Simulation (Demo using HEC RAS), Sri Abhinav Shukla	NRSC/ISRO	45 minutes

Day-2 (28 October, 2021 from 10:00 hours IST)

Technical Session - 2

Recap of day 1, Dr. K H V Durga Rao	NRSC/ISRO	5 minutes
Cyclogenesis, Forecasting Systems, and Extreme Rainfall Events, Dr. Sunitha Devi	IMD	45 minutes
Operational Flood Early Warning System – Case Studies, Dr. KHV Durga Rao	NRSC/ISRO	45 minutes
Urban Flood Modelling, Dr Subhankar Karmakar	IIT-B	45 minutes
Flood Forecasting and Early Warning System in Cloud Framework, Sri Giriraj Amarnath	IWMI	45 minutes
Country Profile and Existing Flood Forecast Systems (3 brief presentations by participants)		30 minutes
Open Discussions and Way Forward		15 minutes
Vote of Thanks by Dr. S V S P Sharma	NRSC/ISRO	2 minutes

Registration link: https://forms.gle/u4mSbhxn2Drt83cF6