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Latest News

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NRSC bags ESRI SAG Award 2023

Environmental Systems Research Institute, Inc. (ESRI), California, is the global market leader in geographic information system (GIS) software, location intelligence, and mapping.

ESRI organizes annual User Conference every year and gives Special Achievement in GIS (SAG) award to recognize outstanding work with GIS technology. This year during the plenary session on 10 July 2023, Jack Dangermond, president and founder of ESRI, selected and announced the SAG awards during ESRI user conference (July 10-14, 2023). National Remote Sensing Centre (NRSC) bagged the SAG award from India for the year 2023.

Thus NRSC sets a new precedent throughout the GIS community, in application of GIS technology for landslide inventory in India.



NRSC has created a geospatial database of ~80,000 landslides in India during the 1998-2022 using satellite data. The landslide inventory data were used in conjunction with lithology, geological structure, soil, slope, land use etc. to prepare landslide susceptibility maps employing machine learning methods for important tourists corridors in Himachal Pradesh and pilgrimage road corridors in Uttarakhand in the Indian Himalayan region.

In case of severe Landslides, having a life cycle of 3-4 years, their kinetic behavior needs to be monitored especially in tertiary stage, to predict the time of failure. Geospatial landslide inventory database of India covering the Himalaya and Western Ghats region formed a baseline data for landslide mitigation studies. This database provided an insight to major landslide controlling factors in India. Landslide susceptibility maps were helpful to decision makers for planning developmental activities in hilly regions. Landslide kinematics estimated using PS-InSAR was helpful in predicting the time of failure of a vulnerable slope in hilly terrains.



The landslide datasets can be viewed on :

https://bhuvan-app1.nrsc.gov.in/disaster/disaster.php?id=landslide_monitor

https://ndem.nrsc.gov.in/geological_lsinventory.php

Link for the award is given below.

<https://events.esri.com/conference/saqList/?fa=Detail&SID=76444>