

Training on Space based Disaster Management -Shifting focus from Reactive to Proactive Approaches; 29 Sep - 3 Oct 2025; Islamabad, Pakistan

The international training course on *“Space-Based Disaster Management – Shifting Focus from Reactive to Proactive Approaches”* was co-organised with SUPARCO from 29 September to 3 October 2025 in Islamabad, Pakistan. Jointly organized under ISNET’s capacity-building framework, the five-day advanced-level program brought together 17 professionals, including 4 international participants from Iraq, Libya, Senegal, and Tunisia, and 13 national experts from leading scientific, meteorological, and disaster management organizations. The course focused on equipping participants with advanced technical and analytical competencies to apply space-based technologies, hydrological models, and AI-supported tools for proactive disaster risk reduction and climate resilience. Participants gained hands-on experience in flood frequency analysis, hydrological data integration, floodplain modeling using HEC-RAS 2D, and drought hazard assessment through climate indices (SPI and SPEI). A dedicated workshop on Google Earth Engine (GEE) introduced cloud-based geospatial analysis and AI-assisted automation for environmental monitoring. Practical sessions on risk modeling tools such as the NatCAT Model Project, Risk Calculator, and Disaster Watch System demonstrated real-world applications of satellite data for early warning and decision support. The course received widespread appreciation for its practical orientation, technical depth, and relevance to real-world challenges, with extensive media coverage highlighting its role in advancing technology-driven disaster management capabilities in developing countries. ISNET-sponsored participants especially commended the training for its impact, quality of instruction, and contribution to their institutional capacity building.

