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Usability of Global Seismological Data for Disaster Prediction, Detection, Analysis and Management

This study suggests shared use of seismic data collectively acquired by different national & global apparatus for disaster prediction research. Techniques like, but not limited to, Pattern informatics have likelihood of success provided global dataset is studied in unison. Three main objectives suggested. Firstly, Event Prediction or Forecasting Secondly, Precise Event Detection and Thirdly, Post Occurrence Analysis of global dataset for concept validation and finding new techniques. Multi stage data processing, at source initial processing and report triggering, intermediate processing and final processing for refined results. It suggests increasing the deployment density of sensor arrays along known fault lines and vulnerable cores, introduction of autonomous sensor arrays, power-self-sufficient, network-self-configuring and processing-capable. Global collaboration, sharing of technology, knowledge, data and expertise are the bottom lines of proposed initiative. A unified open-source-multi-access-collaborative architecture, distributed storage, availability, update, data warehousing, data resolution enhancement, accuracy, cross validation and new customizable data presentation formats for early interpretation with ease, incorporation of GIS, open availability of knowledge ware and replications to prevent loss. Public availability of data will encourage new collaborative initiatives towards development of improved algorithms, techniques,interpretations and development of new business models for furtherance of the concept towards attainment of maturity and intended aim.

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