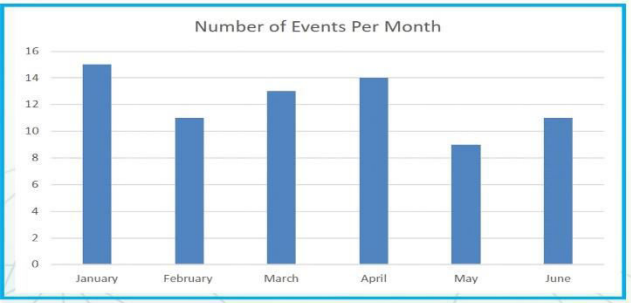
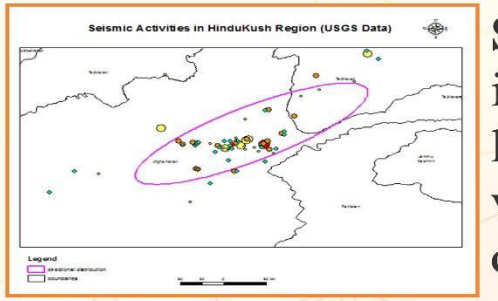
Disaster Prediction through Pattern Informatics Applied on Global Seismological Data

Pattern Informatics can be used to predict seismic events using Three forms of patterns

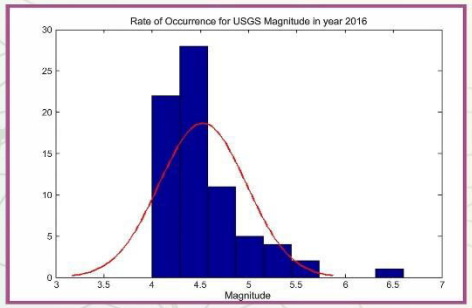


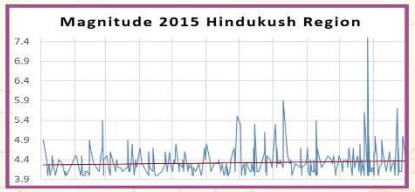
Temporal patterns indicating temporal relationship between different events depict their sequence in the form of a pattern

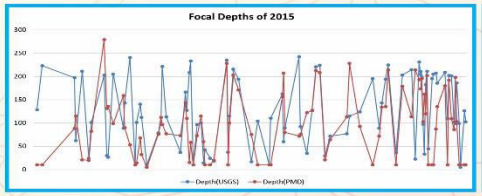


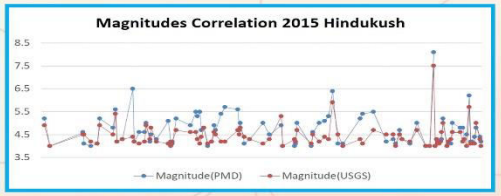
Spatial patterns indicate geographic locations of events with order of occurrence.

Spectral patterns indicating the frequency characteristics of the events establish forms of interpretable correlations.









Three dimensional matrix comprising all patterns is likely to yield valuable results. Validity of conclusions strongly depend upon the completeness of acquired data from around the globe used in unison.

Variations in sensors and estimation techniques can always be catered for using normalization. Simulations of available data yielded relevant and usable outcomes indicating possible future events with related scale and depth parameters.

CTBTO SnT2017

Author: **Engr. Syed Muhammad Ayub Shah (Pakistan)**