Abstract

An event called prediction in a time series is more important for geophysics and economy problems. The time series data mining is a combination field of time series and data mining techniques. The historical data are collected which has follow the time series methodology, combine the data mining for preprocessing and finally apply the fuzzy logic rules
to predict the impact of earthquake. Earthquake prediction has done by historical earthquake
time series to investigating the method at first step ago. Huge data sets are preprocessed using
data mining techniques. Based on this process data prediction is possible. This paper is
focused on statistics and soft computing techniques to analyze the earthquake data.

Reference

- A. Morales-Esteban, F. Martinez-Alvarez, A. Troncoso, J.L. Justo, C. Rubio-Escudero,
  Pattern recognition to forecast seismic time series, Elsevier (2010).
  - Feature recognition, ArcView GIS Version 3.1.
    1997.
  - I. Aydin, M. Karakose and E. Akin, The Prediction Algorithm Based on Fuzzy Logic Using
    Time Series Data Mining Method.
  - J. Han and M. Kamber, Data Mining: Concepts and Techniques, San Francisco:
  - R. J. Povinelli, “Time Series Data Mining: Identifying Temporal Patterns for
    Characterization and Prediction of Time Series Events”, Ph.D. Dissertation, Marquette
    University, 180 p., 1999.
  - Chris gray, A Review of Two Methods of Predicting Earthquakes.
  - A. Morales-Esteban, F. Martinez-Alvarez, A. Troncoso, J.L. Justo, C. Rubio-Escudero,
    Pattern recognition to forecast seismic time series, Elsevier, Experts System with Application
  - Muhammad Ardalani-Farsa, Saeed Zolfaghari, Chaotic time series prediction with
  - Scott J. Goetz, Gregory J. Fiske, Andrew G. Bunn, Using satellite time-series data sets to
    analyze fire disturbance and forest recovery across Canada, Remote Sensing of Environment
  - Hao-Tien Liu, Mao-Len Wei, An improved fuzzy forecasting method for seasonal time
  - G. Peter Zhang, Time series forecasting using a hybrid ARIMA and neural network
  - T. Takagi, M. Sugeno, “Fuzzy identification of systems and its applications to modeling
  - Arash Andalib, Mehdi Zare, Farid Atray, a fuzzy expert system for earthquake prediction,
    case study: the zagros range, ICMSAO 2009.
  - Neeti Bhargava, V. K. Katiyar, M. L. Sharma and P. Pradhan, Earthquake Prediction
    through Animal Behavior: A Review, Indian Journal of Biomechanics: Special Issue (NCBM 7-8
    March 2009).
  - J Sajjad Mohsin, Faisal Azam, Computational seismic algorithm comparison for
Computer Science

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