RelationshipVolcanoesEarthquakes

Project Name Relationship between volcanoes and earthquakes

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1. Administrative Data

Title of the project

Relationship between volcanoes and earthquakes

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2. Data Collection

What type and amount of data will you generate?

The results of the experiment will be automatically outputed as a simple plain text document (.txt) with an avereage size of 50KB. Other optional outputs are screenshots in PNG format (.png) which can be generated through our data analysis tool in a manual way. The size of PNG files does not exceed 500KB each.

How will the data be collected or created?

The source data (i.e. input of our experiment) will be downloaded in an automated way through our (.sh) script. For reasons related to data preservation, the script inside runs "*curl*" programm to check if the source servers are online. If the servers are online, then the actual source files will be downloaded automatically with "*wget*" programm (volcanoes.txt and earthquakes.txt). If the server is down, the provided backup sources will be taken. The analysis tools parses the files and calculates the correlation of volcanoes to the earthquakes. The results will be stored in a plain text file. Moreover, on optional output from our data analysis tool are the screenshots in PNG format which can be made manually from the tool.

3. Documentation

What documentation will accompany the data?

The output data from the experiment as are the source data are pretty much selfexplanatory since they are simple text files. The tools and scripts needed to conduct the experiment are described in data collection section in of this plan, as well as in the project raport accompanied with this document.

4. Metadata

What metadata will accompany the data?

The source data which will feed the experiment, as well as the result, are Plain Text Files (MIME: text/plain, PUID: x-fmt/111). The optional screenshots are in PNG format (image/png, PUID: fmt/11). Our data analyis tool is in Java Archive Format file format (MIME: application/java-archive)

5. Ethics and Legal Compliance

How will you manage any ethical issues?

The source data is content made available by the Smithsonian Institute with "no known copyright restrictions" for personal, educational and other non-commercial purposes as long as the sources (e.g. website or documents provided through their website) are cited.

The tools used in our scripts "curl" and "wget", are open source projects offered under "GNU Free License".

All other scripts and tools are authored by us, the owners of this document. They also are open-source, free to use and change. Therefore, any change in future, resons of changed circumstances can be easily done.

How will you manage copyright and Intellectual Property Rights (IPR) issues?

Used sources for this experiment (i.e. volcanous.txt and earthquakes.txt) are cited and linked correctly to their source, together with a timestamp when the data was collected. All other sources are publicaly available, free for personal use (ink. our data analysis tool).

6. Storage and Backup

How will the data be stored and backed up during the research?

During the research the source data as well as the results of the experiment will be stored locally on hard-drive. After every research phase, a backup of data is stored on a shared cloud storage with access rights ony to the owners of this document.

How will you manage access and security?

Since the source data, as well as the tools which we use for the experimentis already freely available for everyone, there is no concern regarding the manage access and security issues, since they also cant be missused.

7. Selection and Preservation

Which data should be retained, shared and/or preserved?

Our experiment uses two plain text files as its source. Plain text files are well preserved since they contain only text. The output of our experiment is as well a plain text file. However, with our data analysis tool, screenshots in PNG from the visualized map

What is the long-term preservation plan for the dataset?

We use only plain text files which are very easy and have a well preservation affinity.

8. Data Sharing

How will you share the data?

All the data, tools and documentation involved in this experiment is publically shared and free to use on zenodo portal under this link http://dx.doi.org/10.5281/zenodo.55844

How will the data be used after completion of the project?

All the data, tools and documentation will stay forever publically available on zenodo free to use.

9. Responsibilities and Resources

Who will be responsible for data management?

The co-authors of this plan

What resources will you require to implement your data management plan?

We use open-source, freely available, cross-platform tools. Hence no money or specific infrastructure setup is required to implement this data management plan. Through provided automating script, no personel with special know-how or time resources are needed for the plan implementation.