Historic Catalog 1434-93-G-2323 A.I. Qamar, P.I.

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We are compiling an improved catalog of historic felt and damaging earthquakes in Washington and Oregon based on existing earthquake catalogs, contemporaneous newspaper clippings, diary entries, articles in scientific journals, and other available information. Our new catalog takes advantage of powerful relational-data base features to store extensive information on each event and to allow the user to view the information in various ways; from a single-line summary of earthquake time, location, and magnitude to a complete report including numerous sources of information.

During this contract period, we completed entering and tabulating our collection of existing catalogs and newspaper articles. We are now compiling entries by earthquake, reviewing our compilation of materials for each earthquake, selecting preferred values of time, location etc., and flagging earthquakes for which additional information might be available. The data-base will be available via Internet **ftp** in several data-base formats. We plan to publish a companion report through the Washington State Dept. of Natural Resources which will include a catalog of events and a source list for each event, as well as a full description of the data-base fields, and instructions on the ACCESS implementation.

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Investigations

We are compiling an improved catalog of historic felt and damaging earthquakes in Washington and Oregon based on existing earthquake catalogs (published or unpublished), supplemented by contemporaneous newspaper clippings, diary entries, references to articles in scientific journals, and other available information. Our new catalog takes advantage of powerful relational data-base features to store extensive information on each event and to allow the user to view the information in various ways; from a single-line summary to a complete report including all available sources of information for an earthquake.

Progress

During this contract period, we completed entering and tabulating our collection of existing catalogs and newspaper articles. We are now compiling tabulated entries by earthquake, reviewing our compilation of materials for each earthquake, selecting preferred values of time, location etc., and flagging earthquakes for which additional information might be available.

The catalog is being constructed using Microsoft ACCESS, a PC data-base product. The design of the data-base includes 3 main tables; a "Scrapbook" of original source materials, a "Tabulation" of selected information about earthquakes mentioned in the source materials, and a "Cardfile" of earthquakes which gives an interpretation of the various sources of original information (which are sometimes conflicting), and includes the preferred time, location, etc. for each earthquake.

We have developed data-base tools that allow us to view the data in ways which facilitate each step of the development of the three tables. We have used ACCESS "Forms" to allow us to view information from one, two, or all three of our tables. We have a "Scrapbook entry" form which uses the the Scrapbook table only; "Tabulate" and Compile" forms which use both the Scrapbook and Tabulation tables; and a "Prefer" form which uses the Cardfile and Tabulation tables to display the current preferred date/time, location etc. and all available choices for an individual event. The "Prefer" form also draws on the Scrapbook table to display all of the underlying information available for that event.

We are now considering distribution and publication options. The data-base will be available via Internet ftp as an ACCESS data-base and also in a more universal data-base format so that it can be imported into other data-bases. We plan to publish a companion report through the Washington State Dept. of Natural Resources which will include a catalog of events and a source list for each event, as well as a full description of the data-base fields, and instructions on the ACCESS implementation.