Title
GIS Historical Map Project and Metadata

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https://escholarship.org/uc/item/6250q453

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Publication Date
2018-03-21

Peer reviewed
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Introduction

In the changing landscape of digital research and open access, the roles of technical services librarians are not limited to traditional cataloging. One of the new roles we envision is supporting digital humanities research by organizing, managing, and providing access to data sets via metadata creation and management.

We created a mock digital map project that compares Japanese historical maps by using digital humanities tools and explored a way that technical services librarians can play an important role in digital humanities research.

Historical Maps

Historical maps are unique in that they may not necessarily fit into regular geospatial metadata standards well and this is where technical services librarians can utilize their knowledge and experience.

Ground Control Points

To rectify the maps, ground control points are needed. This is one of the processes where a technical librarian’s skills are useful since finding ground control points in historical maps may require consulting gazetteers and other reference tools. In this particular case, mountains, lakes and capes are selected.

In this project, we compared Aou Tokei’s Kokagu Zenzu (1837) with Nagakubo Sekisui’s Kaisei Nihon Yochi Rotei Zenzu (1779). In the preface of Kokagu Zenzu, the author says his maps in this atlas were created based on Nagakubo Sekisui’s Kaisei Nihon Yochi Rotei Zenzu. However, it is not easy to see how they are related since one is an atlas and the other is a single sheet map. So, to compare, we decided to layer a northern part of the maps by using digital tools.

Metadata

When we create metadata for such a GIS project, information about ground control points should be included. We believe that such information is integral to reusability of data, which is a key to successful digital humanities. One of the challenges is to find a file format and schema appropriate to our purpose. KML is used here to display geographic data. Technical services librarians can help researchers by figuring out consistent vocabularies and metadata standards. We hope to demonstrate the role of controlled vocabulary as a means to improving the access to and reusability of data.