

# Visualizing DSpace

Google Summer of Code 2007

Brian Eoff

Presented by Scott Phillips for  
DSpace User Group Meeting 2007

# People

- Brian Eoff
  - Graduate student
  - Center for the Study of Digital Libraries
  - Research interests:
    - Information retrieval
    - Human computer interaction
- Scott Phillips (mentor)
  - Texas A&M University Libraries



# Problem

- Quickly understand relationships
  - Related in time
  - Related in location
- Possible questions:
  - “When was this collection most active?”
  - “How distributed are the items?”

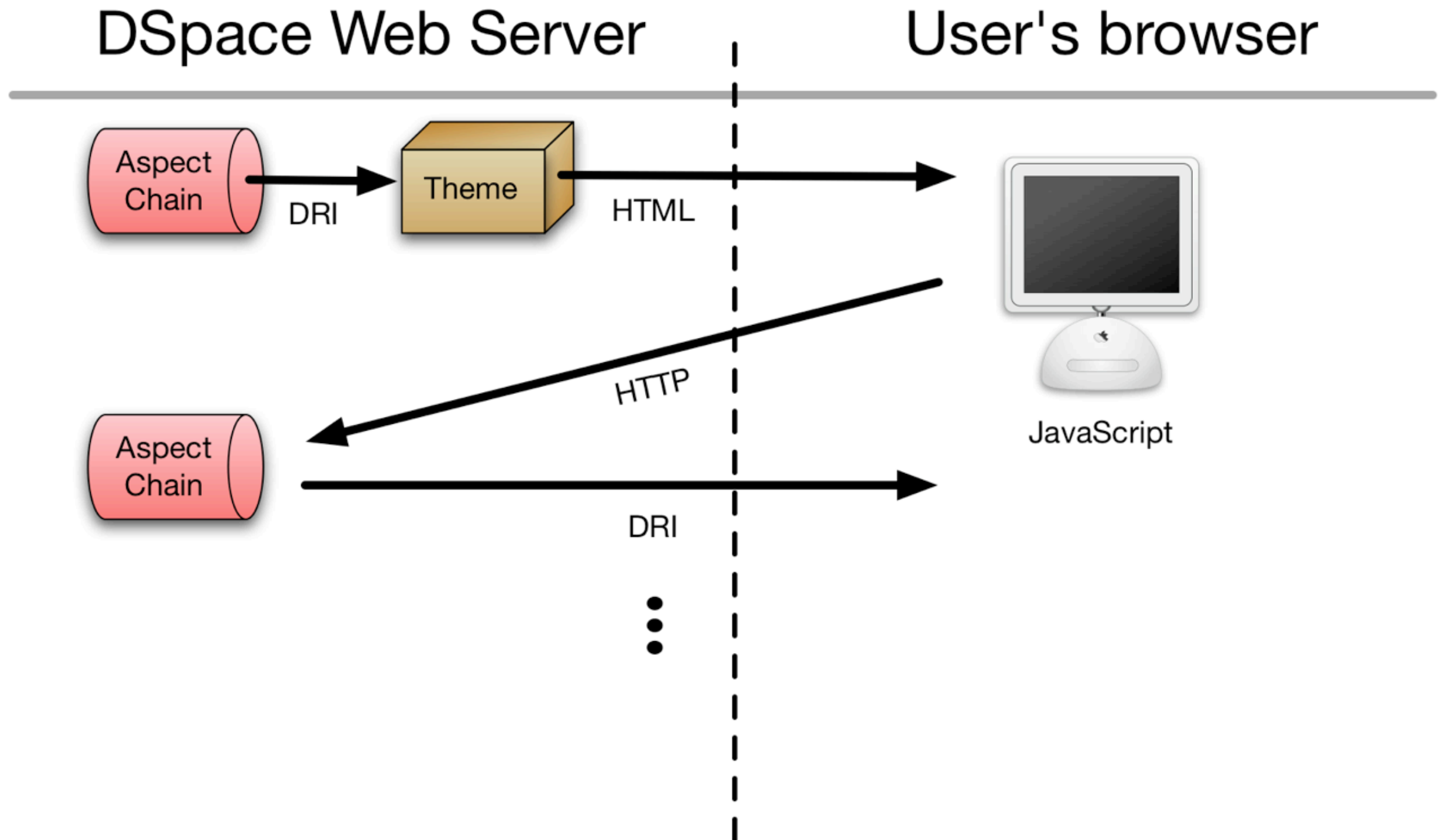
# Approach

- Interactive timeline viewer
  - Plot important dates of items
  - Easily understand the progression of the collection
- Interactive map browser
  - Plot the location of items spatial
  - Quickly understand the collections location

# Architecture

- Manakin & DSpace
- AJAX and JQuery javascript libraries
- Client side processing of DRI documents
- Restful interface to repository metadata (VOSS)
- MIT Simile timeline (<http://simile.mit.edu/timeline/>)
- Google Map API (<http://www.google.com/apis/maps/>)

# Architecture

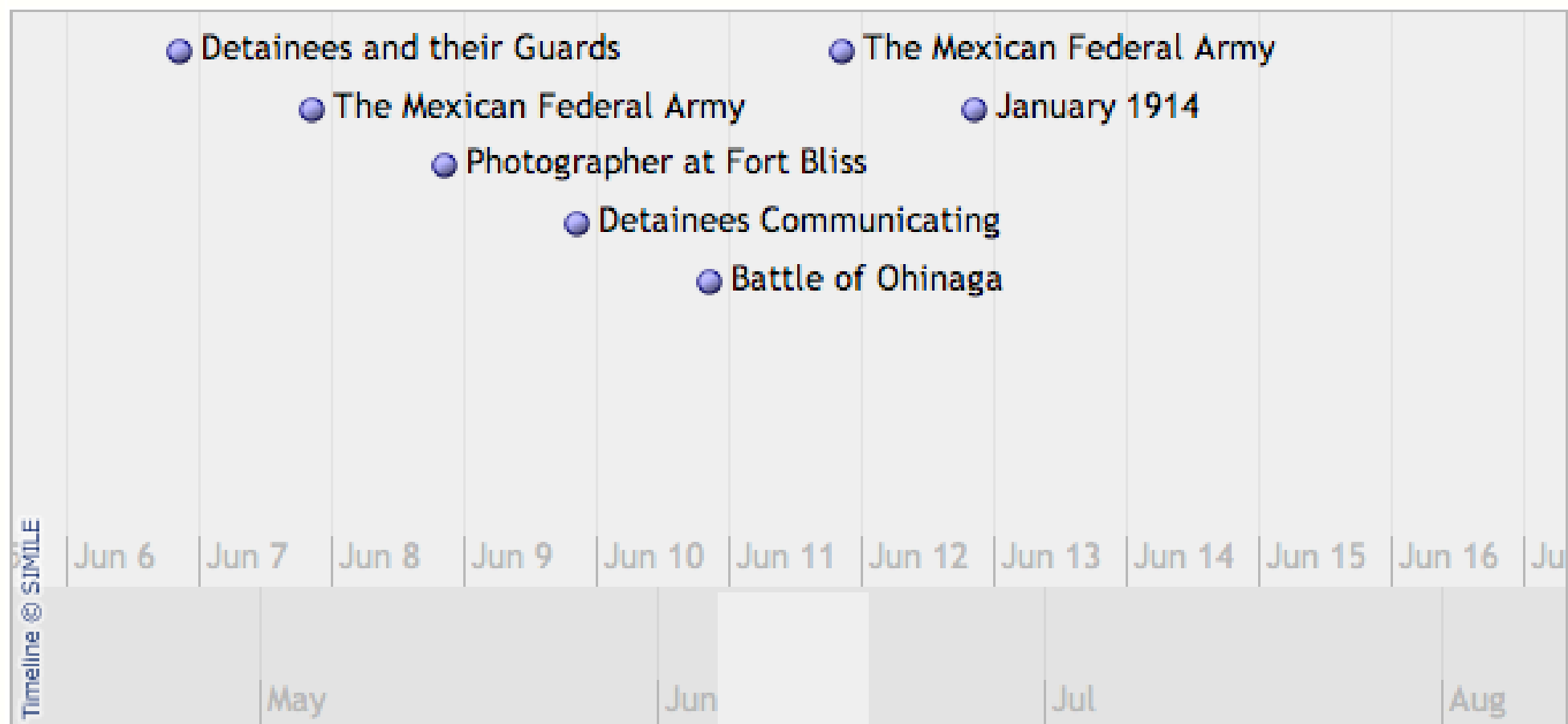


# Solution

## Browse By Dates

Jump to a point in the index: (Choose month) (Choose year)

Or type in a year:  Go



# Solution

## Browse By Dates

Jump to a point in the

Or type in a year





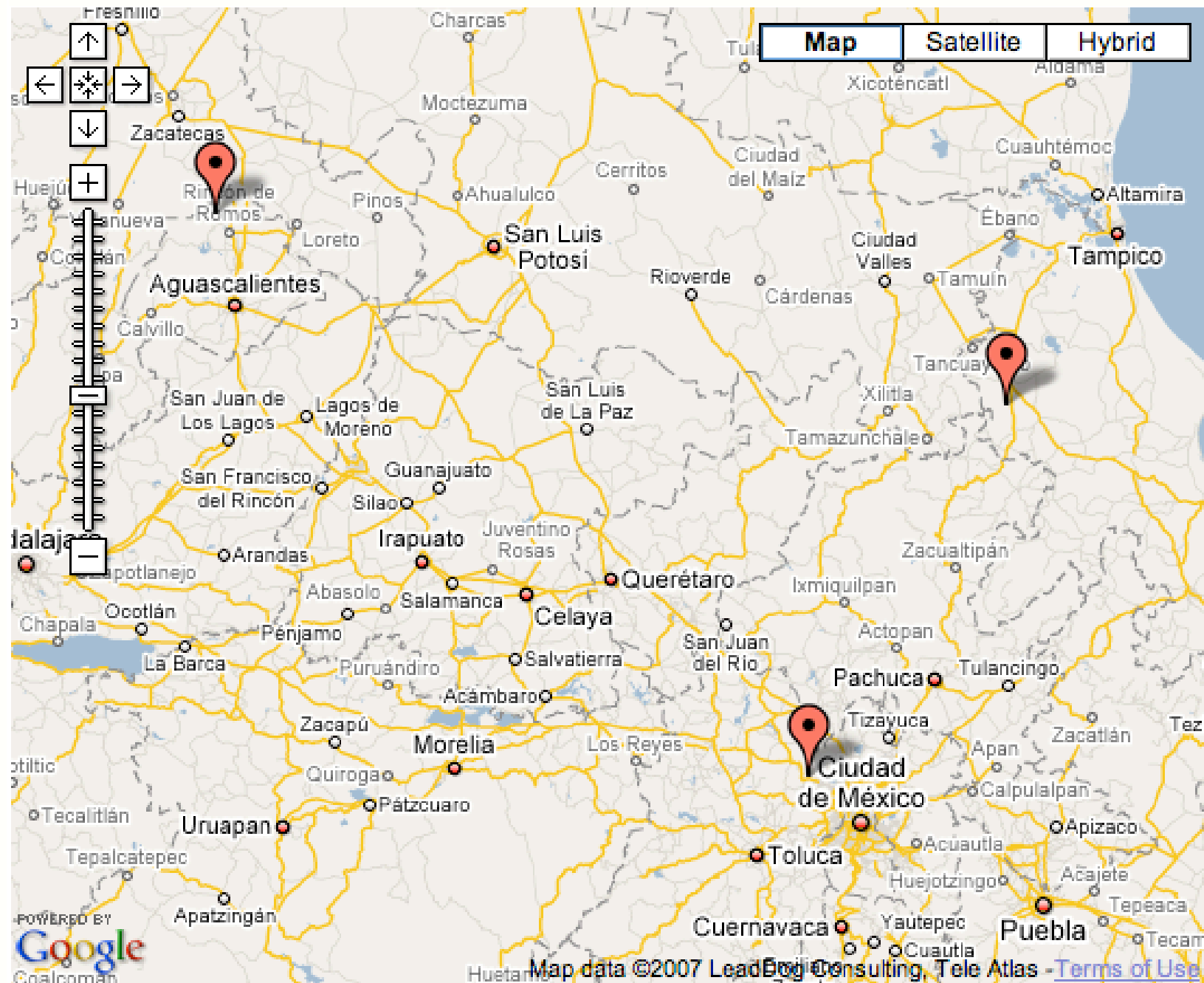
## Photographs of the Mexican Revolution

Full Text Search:

Go

[Submit a new item to this collection](#)

### Recent Submissions



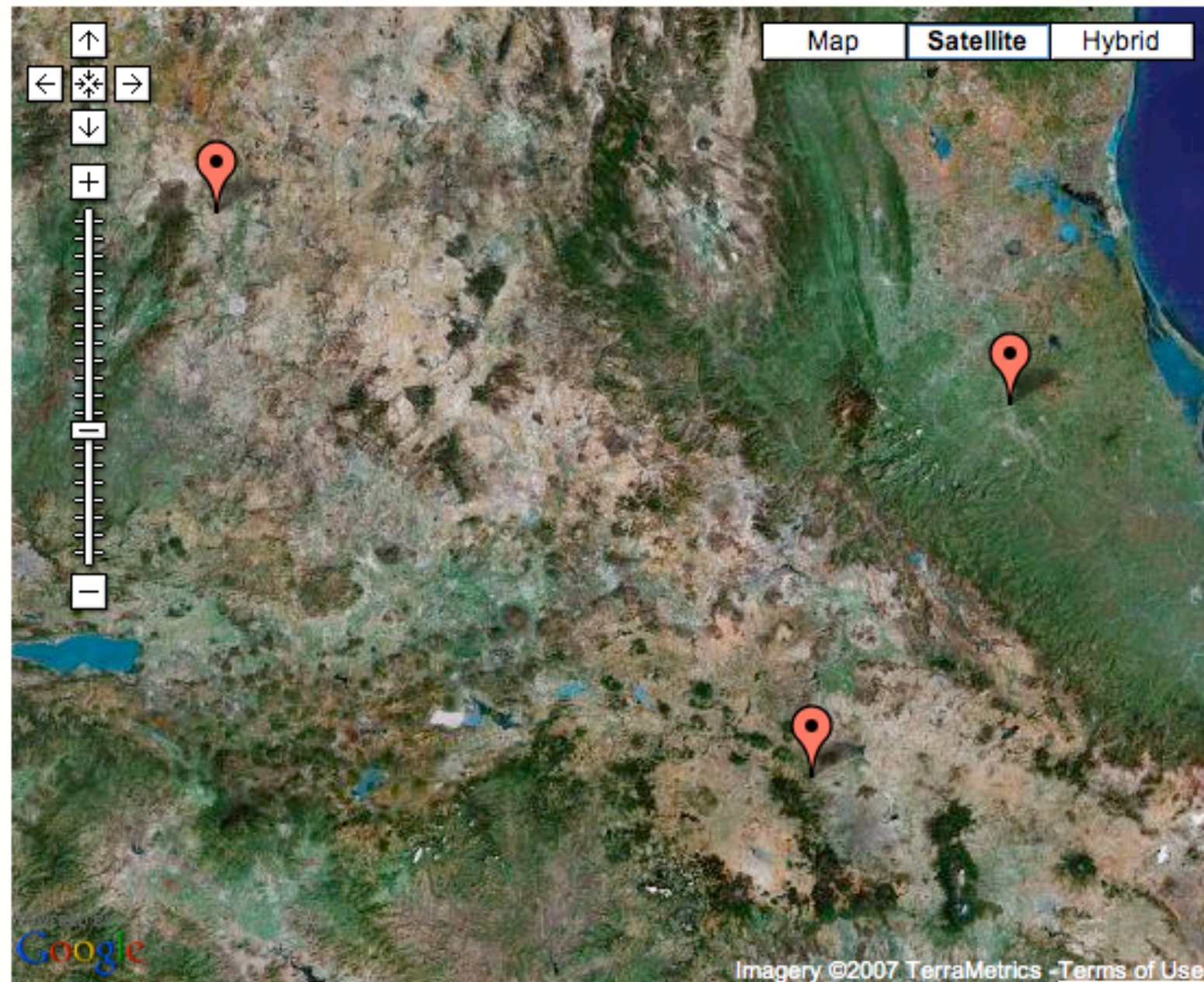
## Photographs of the Mexican Revolution

Full Text Search:

Go

[Submit a new item to this collection](#)

### Recent Submissions



# Results

- Experience gained by Brian:
  - DSpace, Manakin, Cocoon, XSL, Javascript
  - Open Source Development
- Proved the Virtual Object Store extensions to Manakin worked
- Simple visualizations improve the user experience

# Current Status

- Works with the Manakin-VOSS branch
  - DSpace 1.4.2
- Incompatible with Manakin / DSpace 1.5
  - Browsing sub-system overhaul
  - Brian would like to continue updating the project, time permitting.

# Questions?