African Set Maps Project

Library of Congress

March 30, 2010

Project Scope

Library of Congress, Library Services, Geography & Map Division awarded $240,240 grant from Council on Library and Information Resources (CLIR)

Catalog approximately 1,800 African multi-sheet map sets and inventory 125,000 map sheets. Provide access through a web portal using Google Earth.

The collection includes 19th century to present large scale mapping of Africa by various colonial powers. The largest volume and most expansive collection of African set maps.

Project team of professionals in various disciplines: Cataloging, Collections Management, Digital, Reference, Information Technology & Policy, Technicians, and Interns.

Project span: 2009 – 2011

January 14, 2009 kick-off.

Cataloging Overview

- Historically, to view a sheet by sheet index of any given set of maps, a patron would most likely be required to be physically present in the Reading Room in the Geography and Map Division.
- The CLIR Project in the Geography and Map Division is endeavoring to furnish a sheet by sheet visual index of each African map set, online, in the public domain, for free, through Google Earth.
- To this end, Cataloging was charged with accounting for map sets of Africa in the more traditional manner of Machine Readable Cataloging.
- Accounting for these sets of maps with a MARC record is important because, in the event a patron gains interested in material they initially become aware of online -- through the visual index -- this material can easily be identified in the Voyager database, the physical location of the material can be pinpointed in the G&M collection, and the material can be served, as directly as possible, upon request of the patron, by the G&M Reading Room.
- Cataloging works its magic inside well-defined constructs, that is, we did not invent Machine Readable Cataloging or the Anglo American Cataloging Rules just for the CLIR Project.
- However, it is worth noting that all other aspects of the CLIR Project in the Geography and Map Division are either pieced together from various technologies in a unique way or entirely built from scratch.

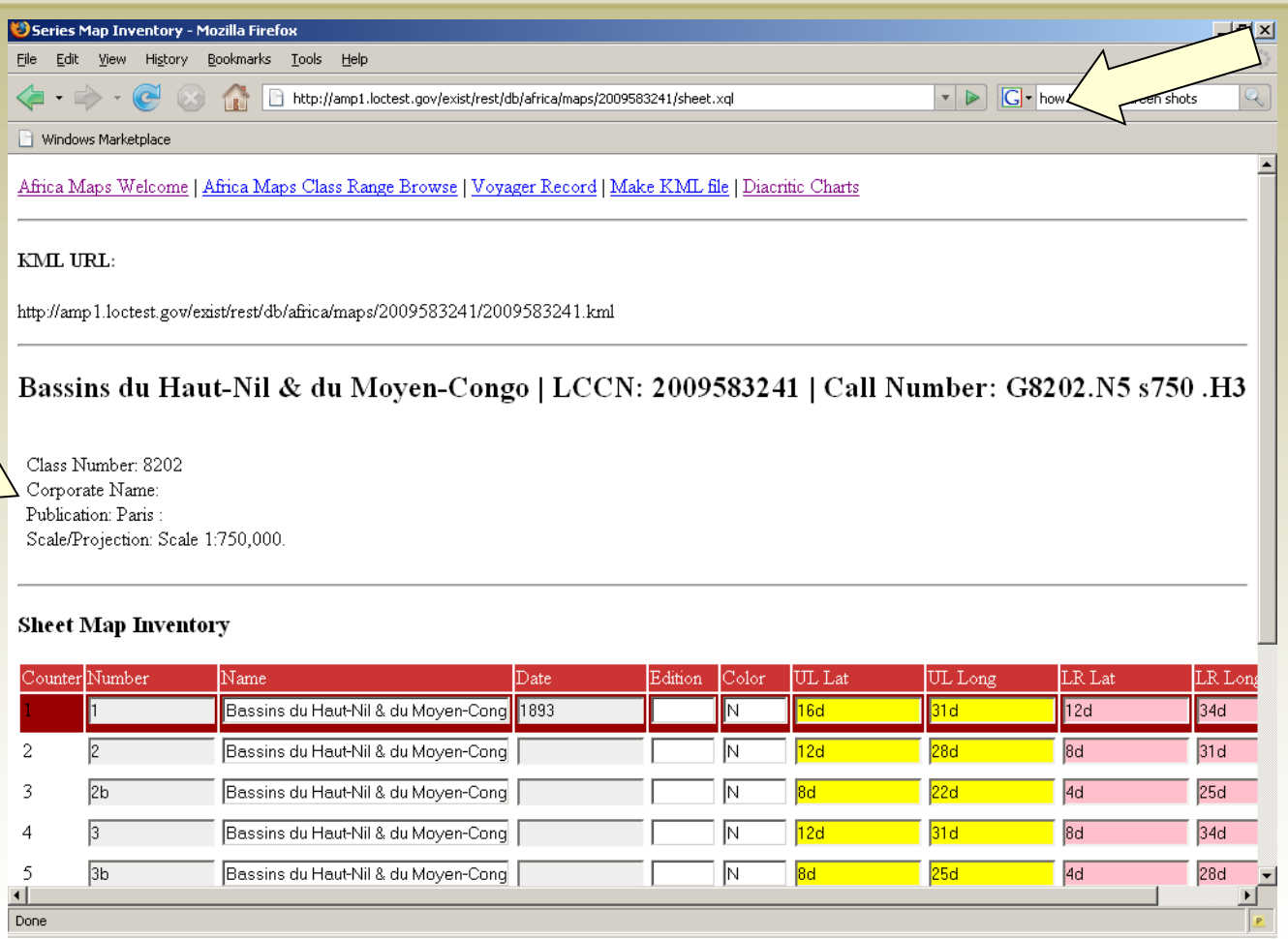
Innovations

- 20% of maps required research to determine what type of coordinate system was employed.
- In some cases simple research did not resolve the issue; as result, staff adopted innovative approaches to resolve conversion problems.
- These included: mathematical equations; a method of reverse triangulation using Google Earth; employing geo-referencing tools to help convert local grid systems.
- Tools and resources used in this process included: academic journals; Google Earth; geo-referencing resources; online mathematical tools; etc.

Inventory Database

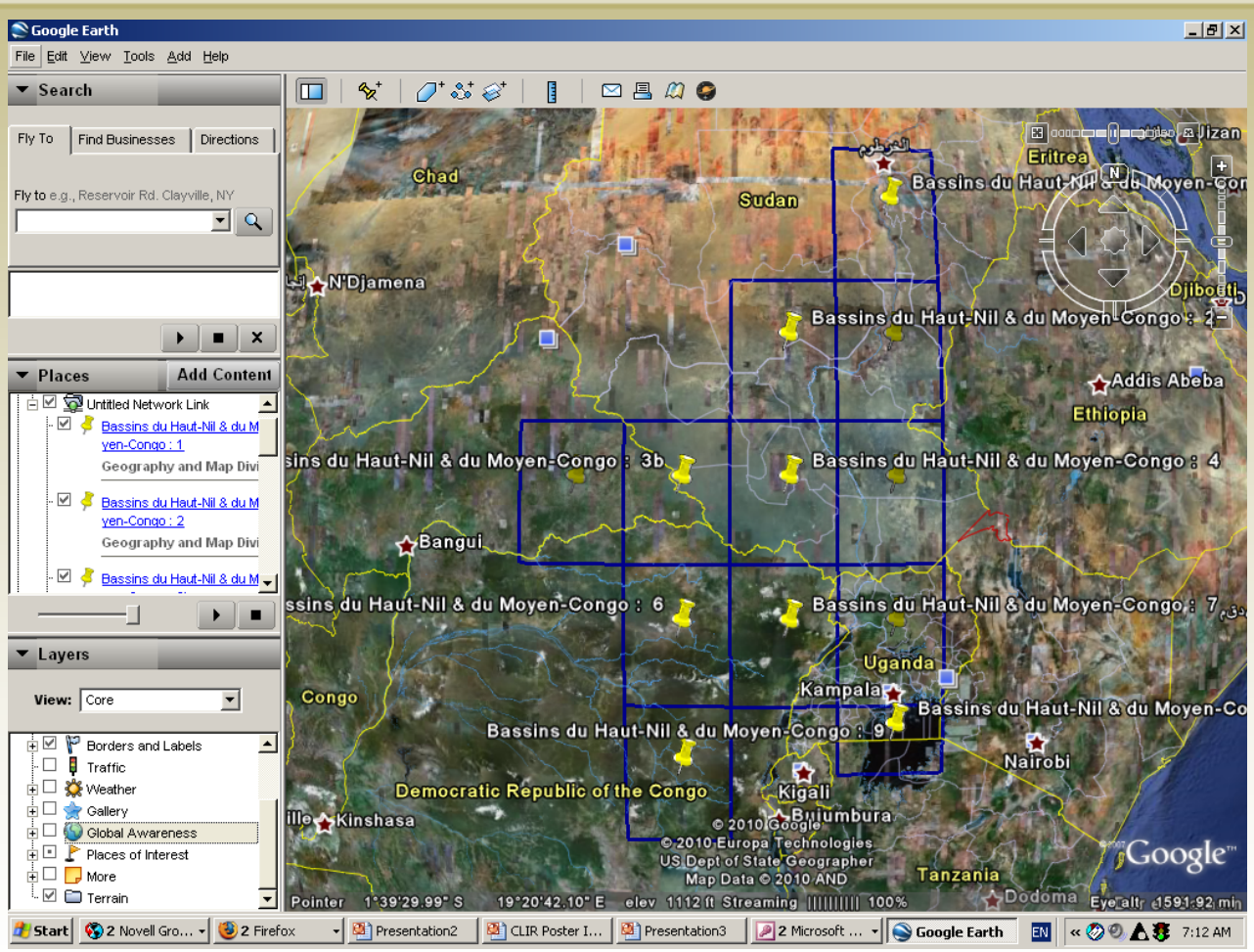
Step 3: Make KML

Step 1: Bibliographic Information



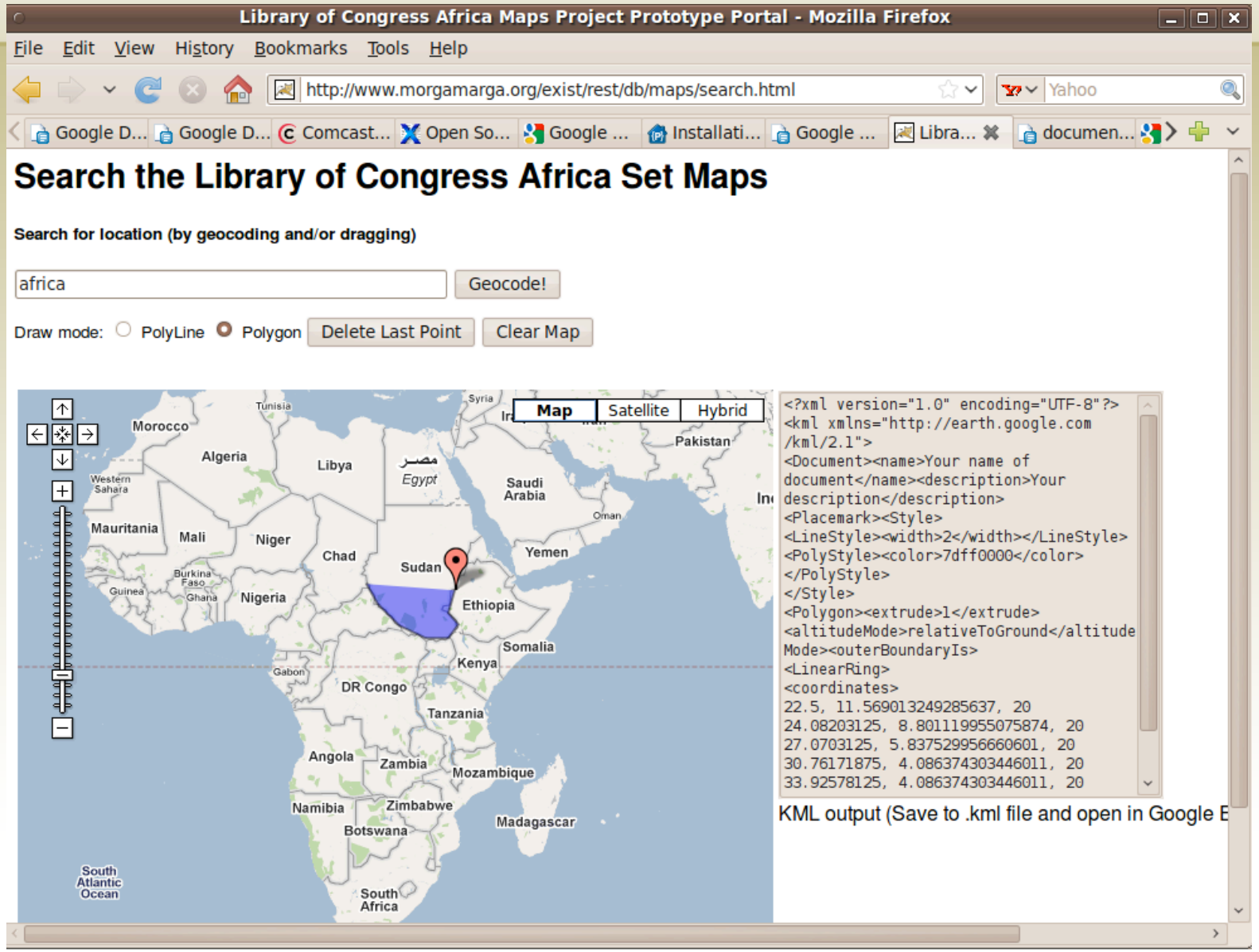
Step 2: Sheet level information entered, including: sheet number, name, date, edition, where or not there is color and coordinates.

Google Earth Display



KML link is then added to Google Earth as a network link. The geographic area is then highlighted. Thus, the area is displayed as it presently exist.

Geospatial Search Portal



ILS
(Library Catalog)

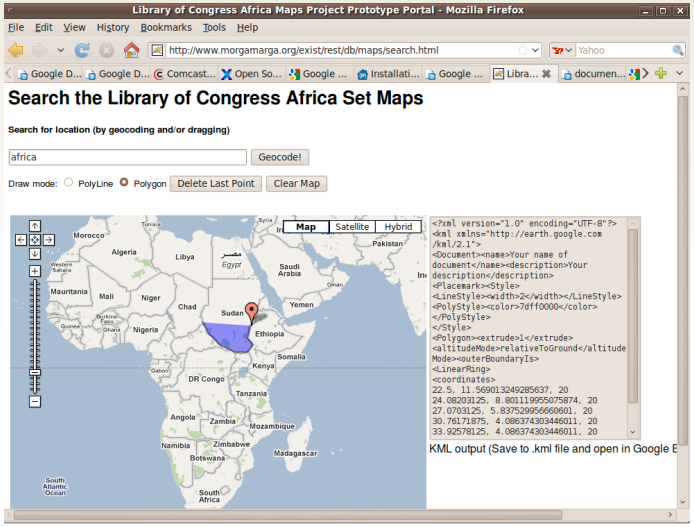
MARC Bibliographic Records,
Holdings Records, etc

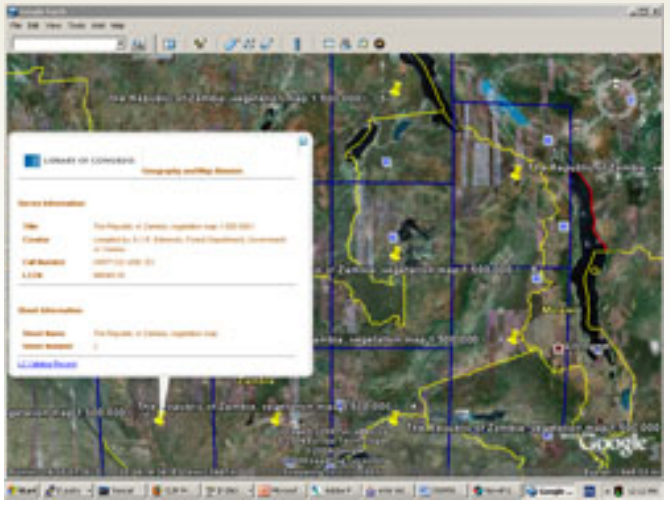
Data Entry Form

XML Datastore
(XQuery)

MARCXML
Sheets XML
Holdings*
METS/MODS*
KML*

Public LC Web Portal



*Automatically generated
from
MARCXML and Sheets
XML

Google Earth Display