Publishing old maps as dynamic map services
Department of Mapping and Cartography
Faculty of Civil Engineering
CTU in Prague

Jakub Havlicek, Arnost Muller, Tomas Janata
Content

1. Old map
2. Publishing old maps on the Internet
3. List of old map published on the Internet
4. Web map application
1. Old map

- old map x historical map
- first map 24 000 years old
- many maps from the 16th century
- map original
  - museum, maps collections
  - hard to obtain or access them
  - grant project transforming paper maps to raster or vector
First map – on mammoth tusk
2. Published maps on the Internet

- the biggest providers of old map on the Internet
  - universities
  - state authorities
  - research institutions
- Zoomify (only image) - MapTiler (to WMS)
- WMS (raster map in original quality)
- WFS (vector data in original quality)
3. List of providers of old maps on the Internet

  - (in Czech)
  - Name of map (mapa)
  - Year of publication (rok vydání)
  - Map Scale (měřítková sada)
  - Author (autor)
  - Web site (zdroj)
3. The oldest maps of Bohemia

- Klaudyan’s map of Bohemia from 1518
- Criginger’s map of Bohemia from 1568
- Aretin’s map of Bohemia from 1619
- Muller’s map of Bohemia from 1722
4. Application - the oldest maps of Bohemia on the Internet

- 4 maps
  - Klaudyan’s map of Bohemia from 1518
  - Criginger’s maps of Bohemia from 1568
  - Aretin’s map of Bohemia from 1619
  - Muller’s map of Bohemia from 1722

- Raster maps
  - WMS, WMTS, KML

- Vector maps (without Aretin’s map)
  - WMS, WFS, WMTS, KML

- Web map application - ArcGIS Viewer for Flex
4. Klaudyan’s map of Bohemia, 1518

- the oldest map of the whole area of Bohemia
- author - Master Nicholas Klaudyan
- 1 260 mm long x 640 mm wide
- map part - 450 × 550 mm
- map scale - 1 : 637 000
- southern orientation
- images part
  - social statuses of the early 16th century
  - allegory of Justice
  - heraldic decoration
- 280 municipalities, symbol of vegetation, water flows (Vltava, Labe, Ohre and Jizera rivers).
4. Klaudyan’s map of Bohemia
4. Criginger’s map of Bohemia

- 1568
- author - Johann Criginger
- 510 × 340 mm
- map scale - 1 : 683 500
- images part
  - several male figures
  - emblems of Bohemia, Moravia, Silesia, Upper and Lower Lusatia
- 292 municipalities, symbol of vegetation, water flows and mountains
4. Criginger’s map of Bohemia
5. Aretin’s map of Bohemia

- 1619
- author – Paul Aretin
- 766 × 574 mm
- map scale - 1 : 504 000
- images part – left and right margines
  - 12 characters in contemporary costumes
- 1 157 municipalities, administrative boundaries, water flows and mountains
5. Aretin’s map of Bohemia
5. Muller’s map of Bohemia

- 1722 – the biggest map from one author
- author – Johann Christoph Müller
- 2,822 × 2,403 mm
- map scale - 1 : 132,000
- images part – illustrations (parergo) in all corners
  - symbol of Bohemia – Prague, rivers, forest, wine,
- 15,215 municipalities, administrative boundaries, water flows, water area, routes
5. Muller’s map of Bohemia
5. Publishing map on the Internet

- GISServer
  - publishing
    - grant project
    - bachelor's, master's and doctoral theses
    - semestr student’s work
  - ArcGIS Server
    - WMS, WFS, KML, WMTS
  - GEO Server
  - UMN Mapserver

http://gisserver.fsv.cvut.cz/arcgis/rest/services/old_map/
5. Web Map Application

- ArcGIS Viewer for FLEX
- old maps overlaid on base maps
- legend
- available on the Internet for everyone

http://gisserver.fsv.cvut.cz/old_maps/
Conclusion

- list of published old maps on the Internet
- 5 old maps published on the Internet
  - WMS, WFS, WMTS, KML
- maps – on internet for everyone for free
- web map application of old maps for Bohemia
Future plans

- add additional old maps to web application
- new web application for old maps of Moravia
Thank you for your attention!

Contacts

**Ing. Arnost Muller**
arnost.muller@fsv.cvut.cz
Dep. of Mapping and Cartography
FCE CTU in Prague

**Ing. Jakub Havlicek**
jakub.havlicek@fsv.cvut.cz
Dep. of Mapping and Cartography
FCE CTU in Prague

**Ing. Tomas Janata**
tomas.janata@fsv.cvut.cz
Dep. of Mapping and Cartography
FCE CTU in Prague