



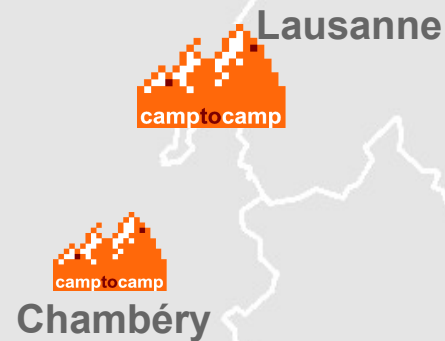
Printing in a web mapping application

MapFish print module

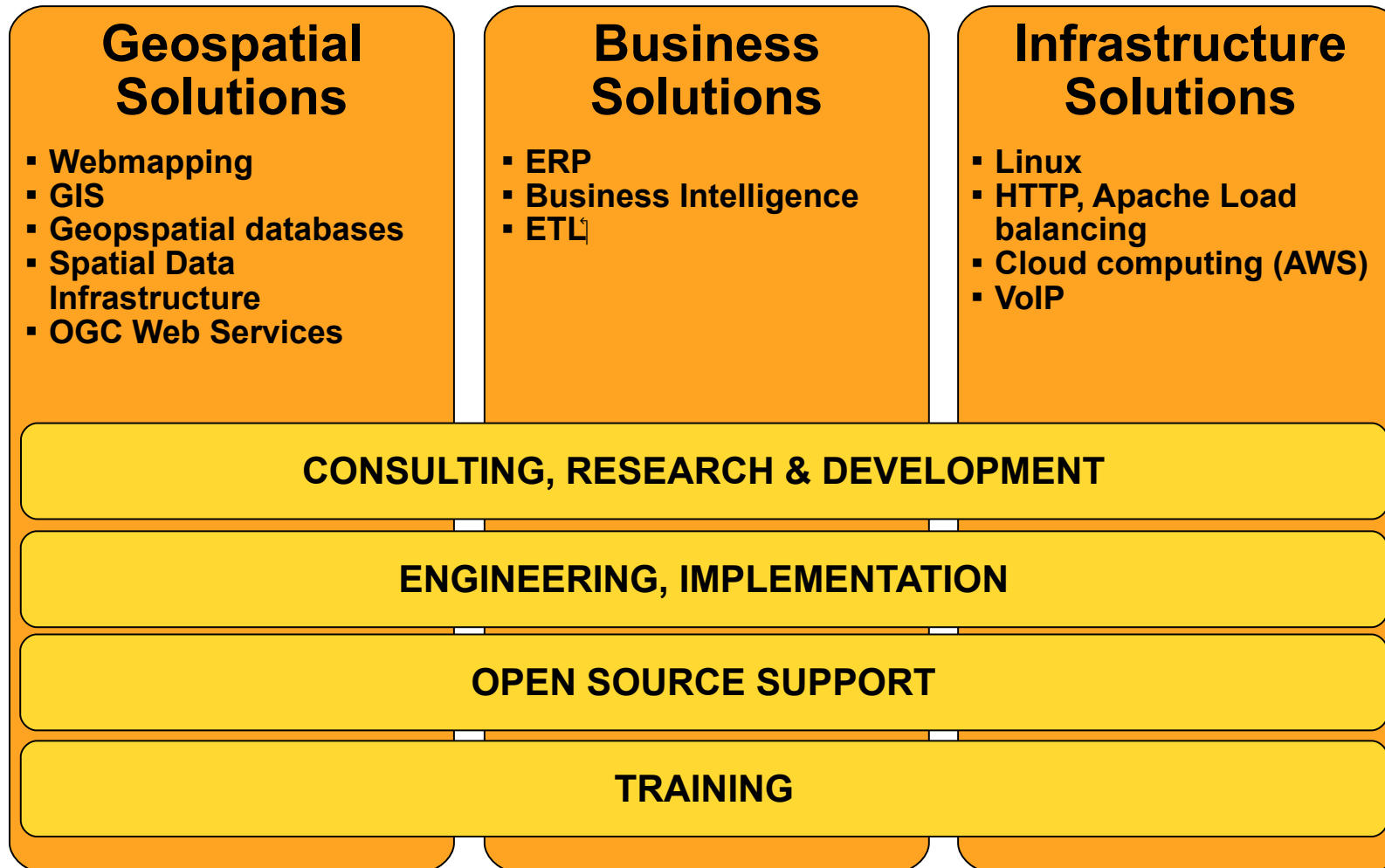
Outline

- Camptocamp
- Examples
- Architecture
- Supported Readers
- Components
- Typical Configuration
- Future Work
- Wrap up
- Resources

- **Open Source solutions provider as editor and integrator**
- **Staff of 35 in Switzerland and France**
- **Camptocamp helps you move forward with the latest Open Source technologies**



Camptocamp activity domains



Sightings

- EPFL Plan
 - <http://plan.epfl.ch/>
- Swisstopo Geoadmin
 - <http://map.geo.admin.ch/>
- Mapfish demo site
 - <http://demo.mapfish.org/mapfishsample/1.2/examples/print/>
- GeoOrchestra (Not yet released)
- Geoserver integration (No photos)
 - <http://docs.geoserver.org/stable/en/user/community/printing/>

EPFL (Ecole Polytechnique Fédérale de Lausanne)


The screenshot displays the EPFL 3D map interface. At the top left is the EPFL logo and the text "ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE". A search bar with a "Find" button is located next to it. Below the search bar are navigation buttons: "Points of Interest", "Routing", "Print", "Measure", "Links", and "?". A "URL" field is on the far right. On the left side, there are controls for "Title" (set to "Foss4g Example"), "Overview map" (checked), "Layout" (set to "Landscape (A4)"), and "Scale" (set to "1:1,000"). There are "Reset Pos." and "Print" buttons below these controls. The main map area shows a 3D view of the EPFL campus with buildings labeled "CH", "STI", "BCH/Batochime", and "LE GENOPODE". A "Floors" control on the left allows viewing from "Sky" down to "-4". A "Zoom" control on the right allows zooming from "Room" to "City". A "Powered by Google" logo and copyright information are at the bottom left. A "Map" and "Satellite" toggle is at the bottom center. An inset map at the bottom right shows the location within the region of Chavannes-près-Rérens, Ecublens (VD), and Saint-Sulpice (VD). The "camp to camp" logo is in the bottom right corner.

webmaster.map@epfl.ch

EPFL Output



Swisstopo Geoadmin

 Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

The Federal Authorities of the Swiss Confederation

map.geo.admin.ch

Homepage | Help | Contact

Deutsch | Français | Italiano | Rumantsch | English

Enlarged map

Aerial imagery

Color map

Search location, zip, coordinate ...

Link Print

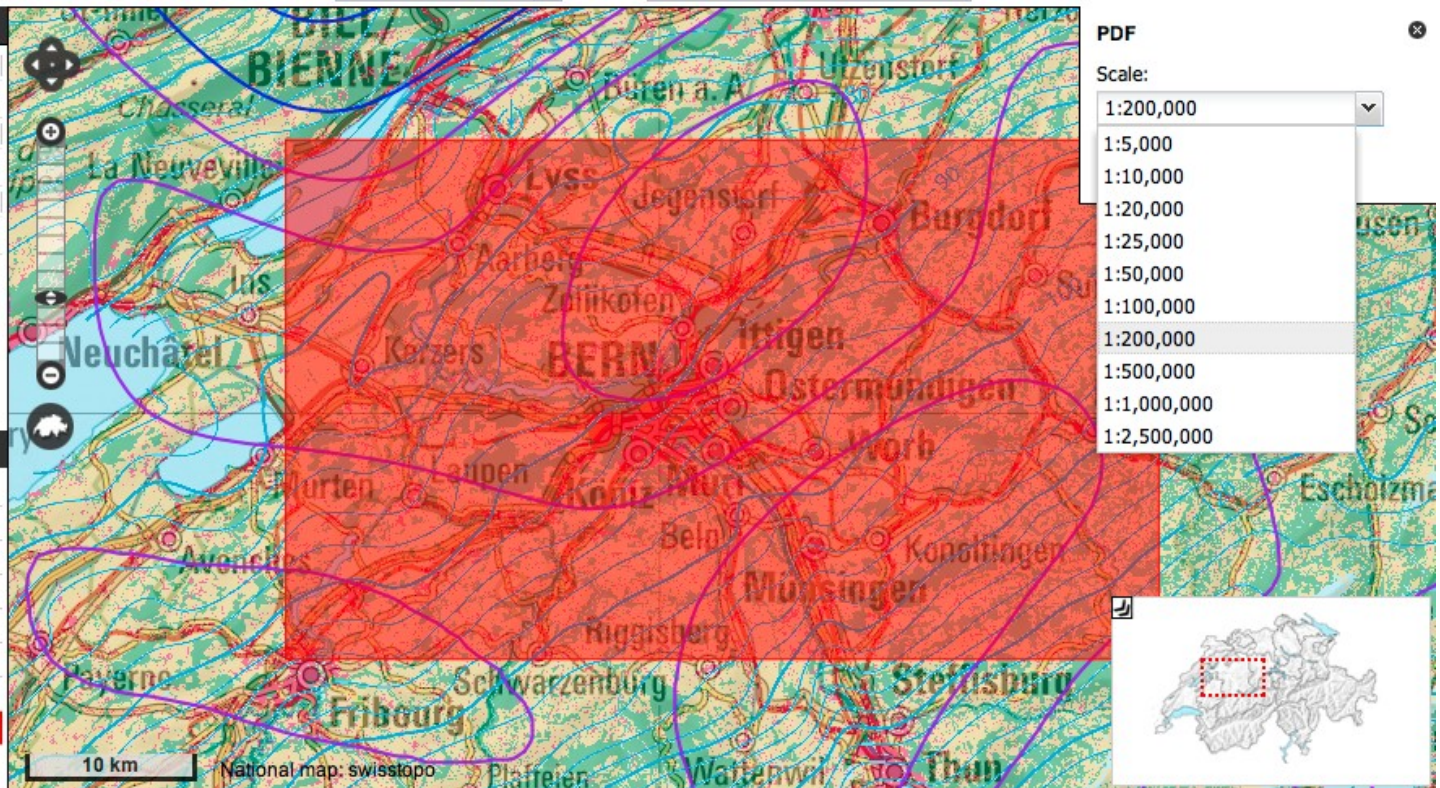
Selection

- Geothermie CH
Opacity: 94%
- Bouguer-Anomalien CH
Opacity: 100%
- Arealstatistik 1992/1997
Opacity: 156%

Catalog [INSPIRE]

Search

- Base data
- Surface representation
- Infrastructure and communication
- Environment, Biology and Geology
- Energy and economy
- Land use
- Energy resources
- Geothermie CH



PDF

Scale:

1:200,000

1:5,000

1:10,000

1:20,000

1:25,000

1:50,000

1:100,000

1:200,000

1:500,000

1:1,000,000

1:2,500,000

10 km

National map: swisstopo

1:200'000

Coordinates (m): 572525, 206400

geo.admin.ch | Copyright & Data protection | Contact

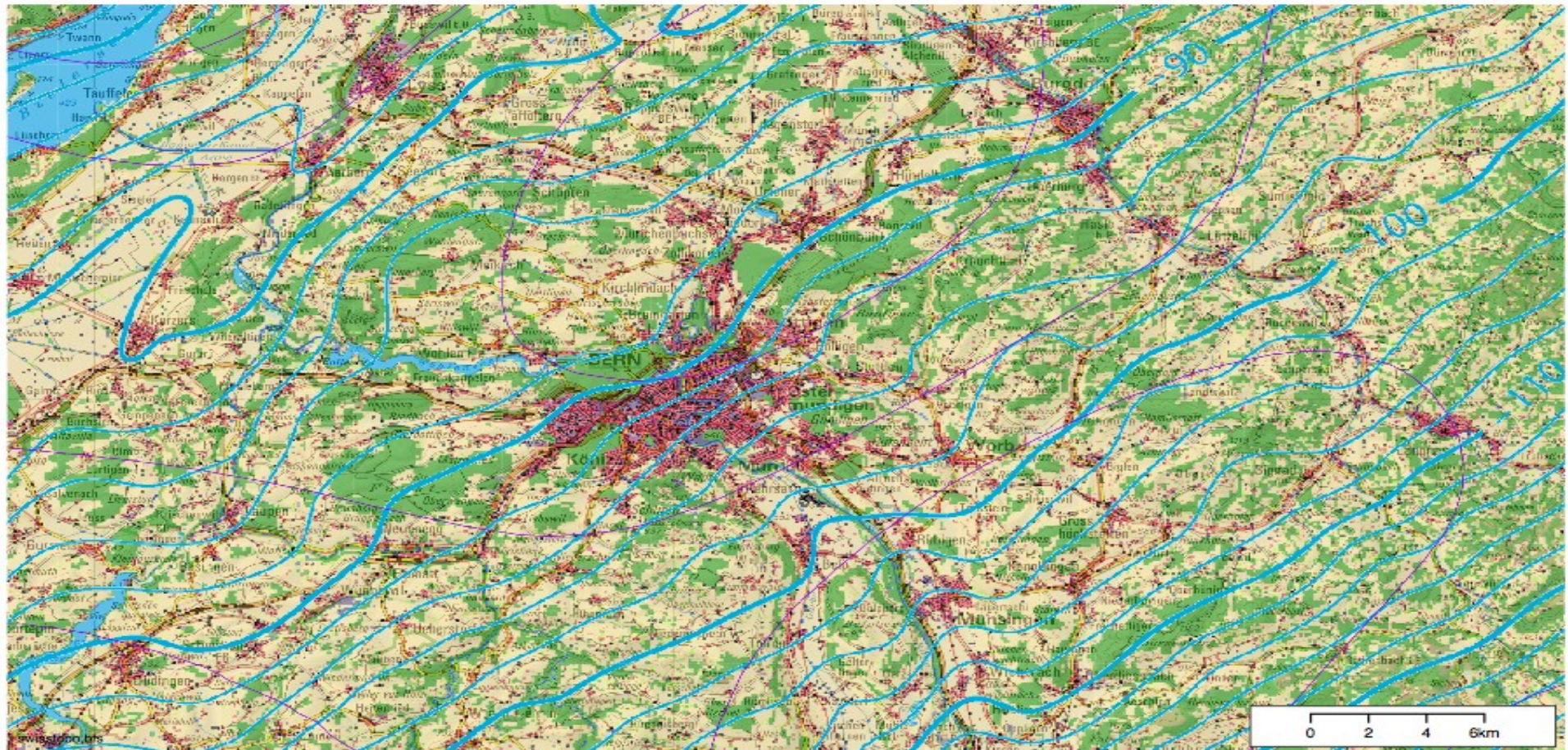


Swisstopo Geoadmin Output



www.geo.admin.ch
geo.admin.ch, the swiss geoportal

Scale 1: 200,000



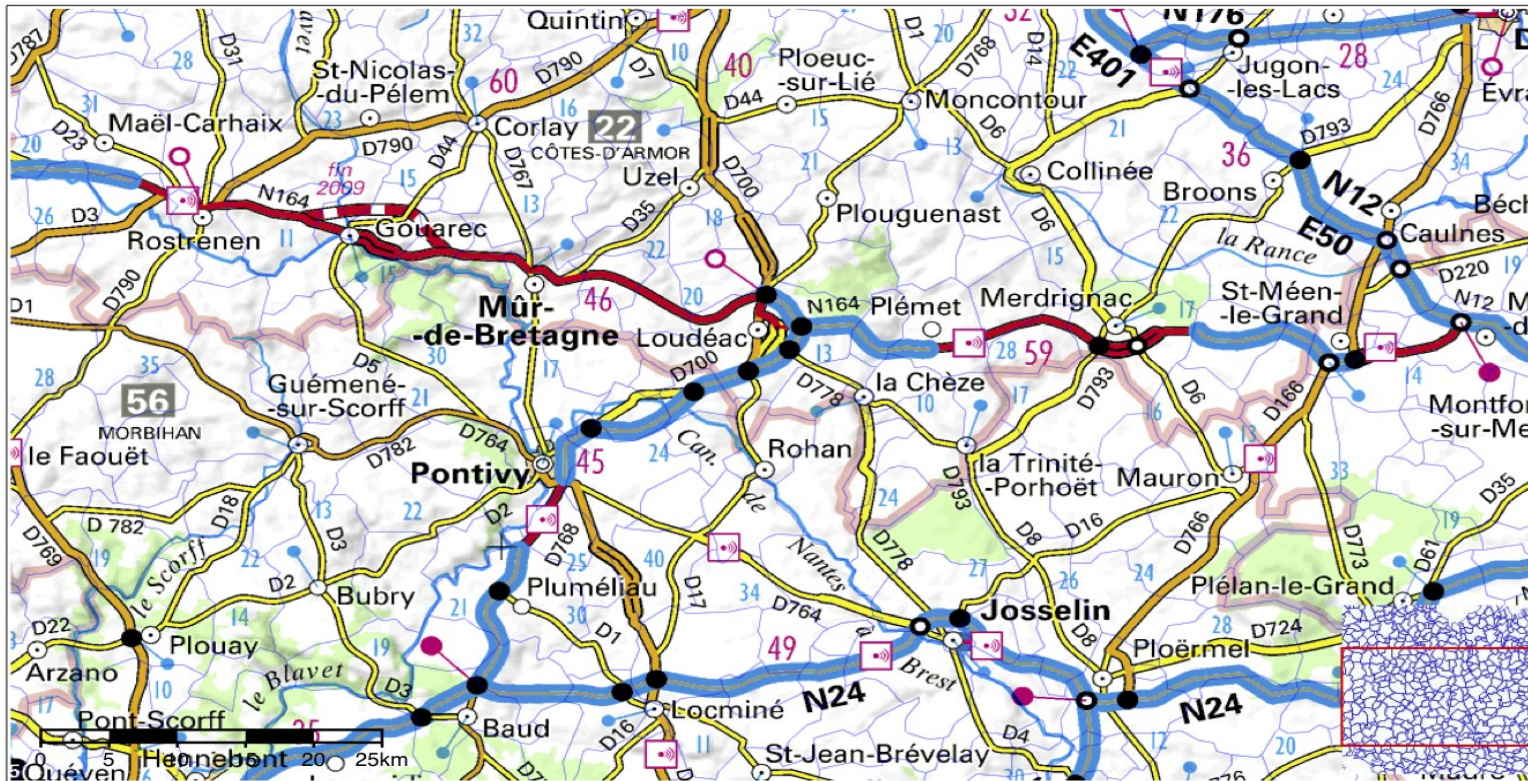
www.geo.admin.ch is a portal provided by the Federal Authorities of the Swiss Confederation to gain insight on publicly accessible geographical information, data and services

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GeoOrchestra(Not yet in production)



Geobretagne Example



Echelle: 1:500,000

Sources : GeoBretagne, c2cpc83.camptocamp.com,
geolittoral.application.equipement.gouv.fr, geobretagne.fr,
kartenn.region-bretagne.fr

31/08/2010

GéoBretagne[®]

camp to camp

Mapfish Demo Site

MapFish example: advanced print

West <<

Help +

Print single page -

Title:

Comments:

Layout: ▾


DPI: ▾

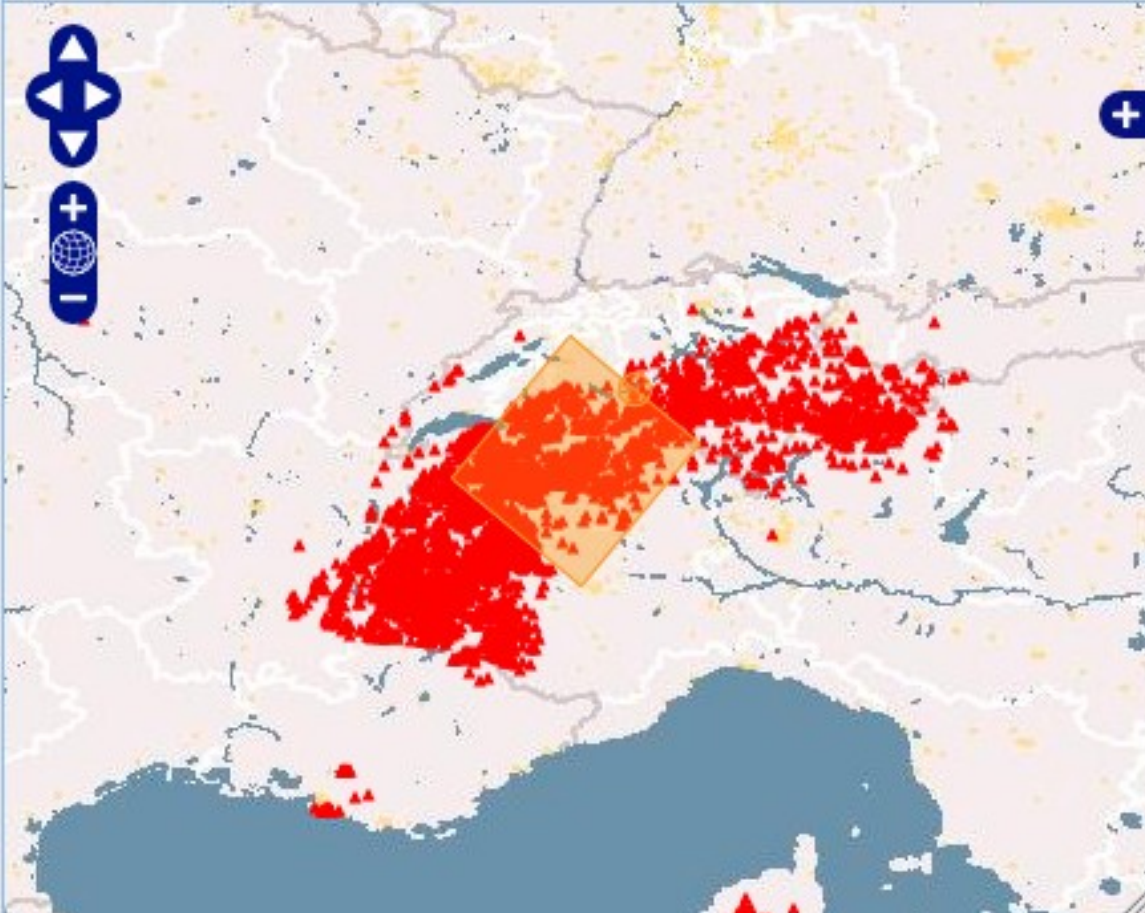
Scale: ▾

Rotation:

Print multi page +

Map

 Print



Mapfish Demo Site

MapFish example: advanced print

West <<

Help +

Print single page +

Print multi page -

Scale	Rotation	Title	Comments
1:1,000,...	-48		
1:4,000,...	22		
1:1,000,...	49		

Add page Remove page Clear all

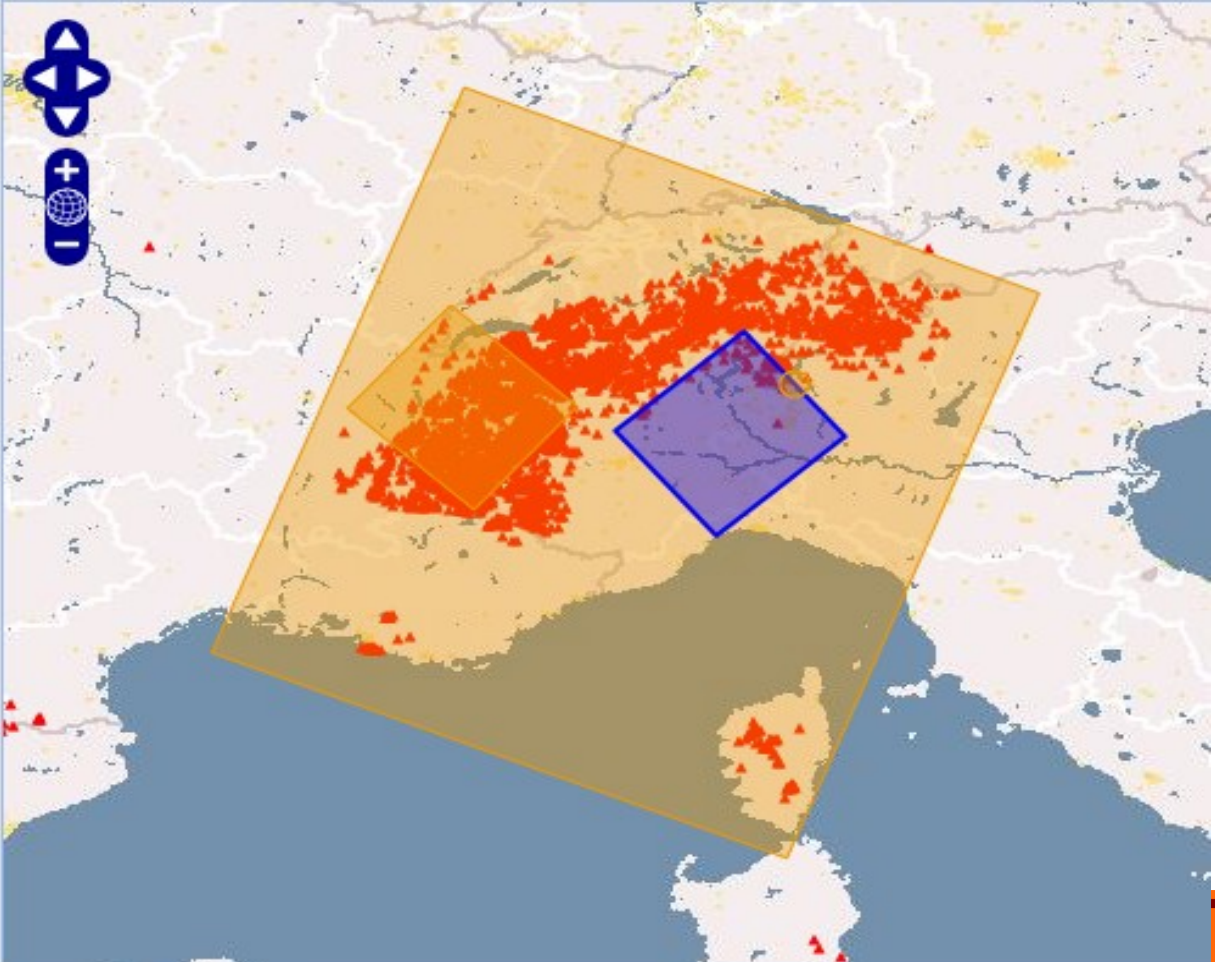
Layout: A4 portrait

DPI: 56

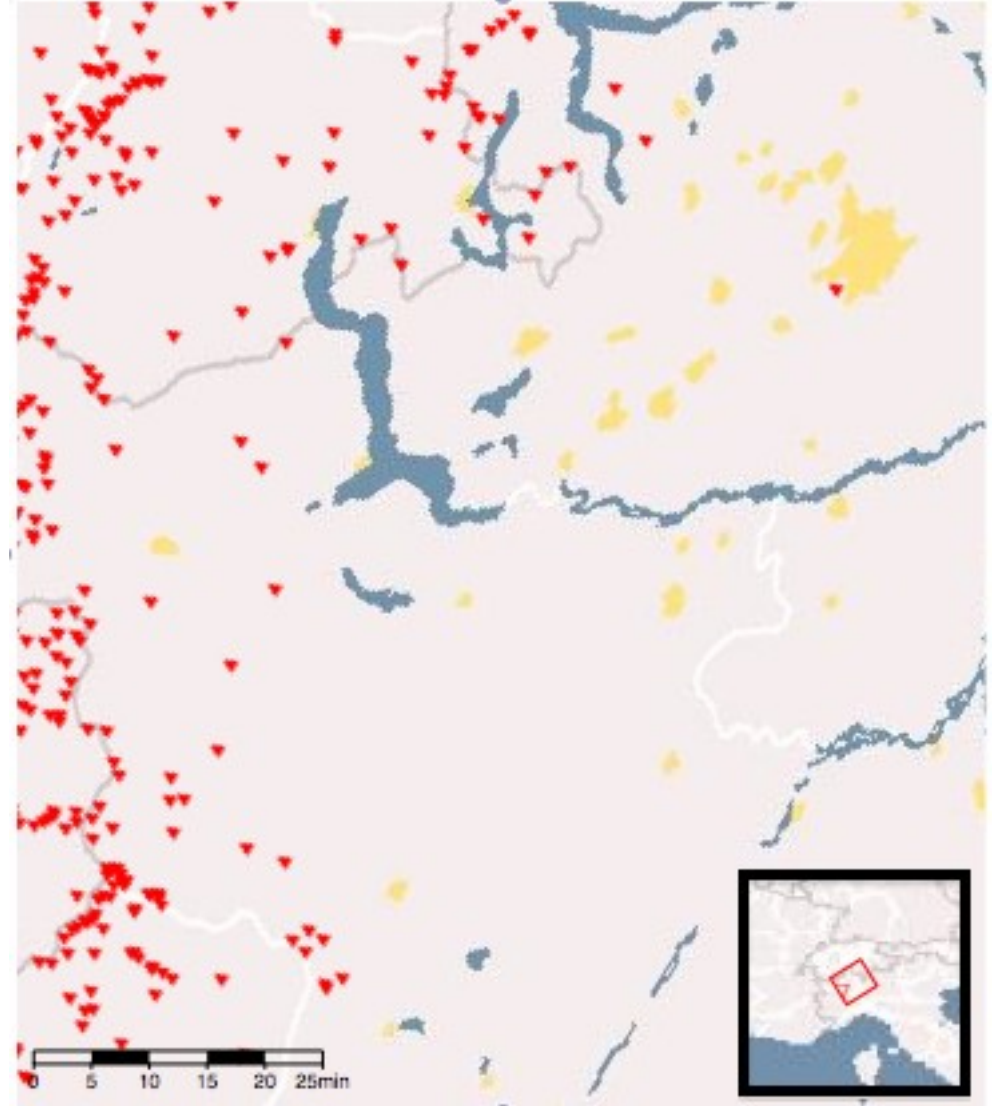
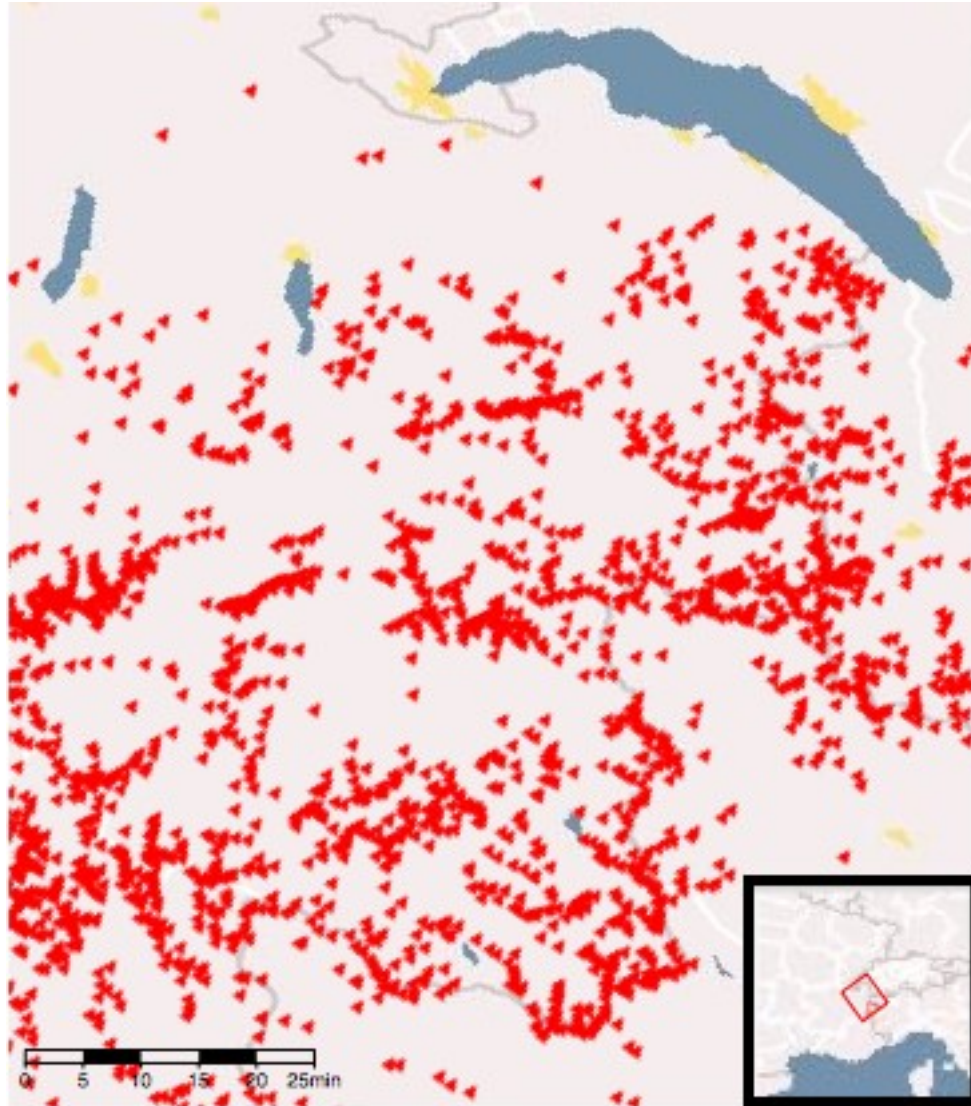
Print

Map

Print



Mapfish Demo Site Output



Architecture

GeoExt print components

Java Print Server

Rest API

Data
Readers

Page
Layouts

Page
Components

Outline of Rest API

- GeoExt uses Rest API

- info.json (GET) – get print parameters
 - Scales
 - DPIs
 - Layouts
- print.pdf (GET) – create and obtain pdf
- create.json (POST) – create pdf and obtain URL for later download of PDF

Layouts

- YAML file describes layouts
- Several layouts
- info.json lists layouts
- Layout components and maps
- No restriction on number of components or page

Layout Areas

- Title Page
 - Optional
- Main Page
 - Required
- Last Page
 - Optional
- Header
 - Optional
- Footer
 - Optional

Components

- Map
 - Restrict DPI, Scale, servers
 - Overview option
- Scalebar
 - Text
 - Graphic
- Legend
- Text
- Image
- Dynamic Copyright
- Attributes
 - Display table of attributes read from GeoJSON features
- Columns
 - Table with arbitrary data



Supported Readers

- Web Map Server (WMS)
- Google Maps
- Tile Map Server (TMS)
- Image
- KaMap
- KaMapCache
- Open Street Map (OSM)
- Tile Cache
- GeoJSON

Configuration Snippet

layouts:

A4 landscape:

mainPage:

rotation: false

pageSize: A4

landscape: true

#-----

header

#-----

header:

height: 75

items:

- !columns

widths: [70, 30]

items:

- !text

fontSize: 24

fontColor: #333333



Future Direction

- Plugin architecture
 - Components (Exists somewhat)
 - Readers
- Embedded jetty solution for those who want scalability but not Java web-server configuration
- Print to image
- Unlimited scales

Wrap up

- Nice, simple printing
- Flexible
- Standalone or Mapfish integration

Resources

- Camptocamp
 - <http://www.camptocamp.com/>
- Mapfish
 - <http://www.mapfish.org>
- Print subproject
 - <http://www.mapfish.org/doc/print/>
- Mapfish Print Examples
 - <http://demo.mapfish.org/mapfishsample/1.2/examples/print/>
- Geoserver printing Module:
 - <http://docs.geoserver.org/stable/en/user/community/printing/>



Thank you for your attention

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