

MapFish

Ein WebGIS 2.0 Framework



Elisabeth Leu, Camptocamp SA

Übersicht

- Camptocamp
- MapFish ist...
- Architektur
- Funktionalitäten
- One Step Further: aktuelle Beispiele
- Ausblick



- **Open Source solutions provider as editor and integrator since 2001**
- **Staff of 43**
- **Camptocamp helps you move forward with the latest Open Source technologies**



Wien

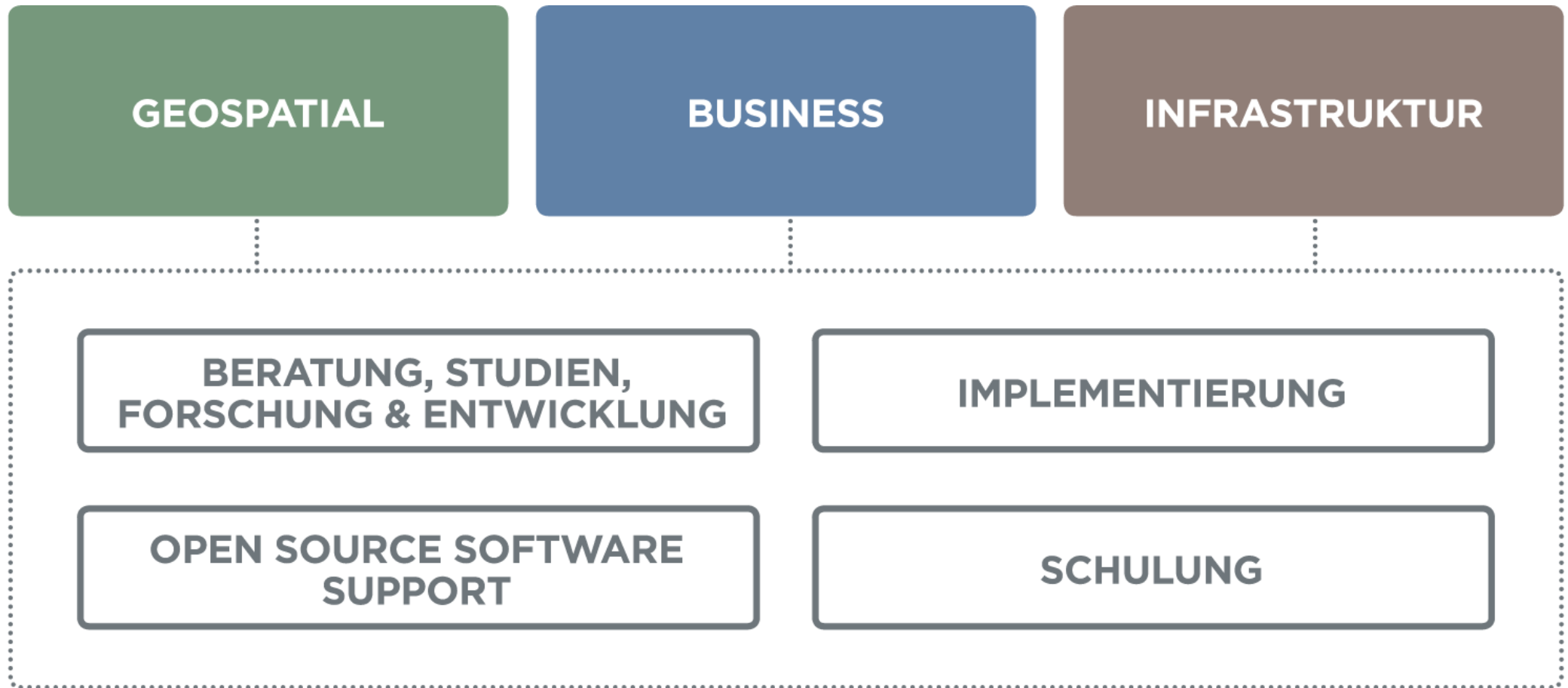


Lausanne



Chambéry

Camptocamp: 3 Abteilungen



MapFish ist...

- WebGIS Framework
- Komponenten-basiert
 - Server-seitige Komponenten in folgenden Programmiersprachen:
 - Pylons / Pyramid Python
 - Ruby on Rails Ruby
 - Symfony PHP
 - Java
 - Andere Programmbibliotheken (GeoAlchemy, Shapely, iText, repoze.who ...)
 - GeoExt
 - OpenLayers JavaScript library
 - ExtJS JavaScript library



MapFish ist...

Open Source (BSD)



MapFish und OSGeo

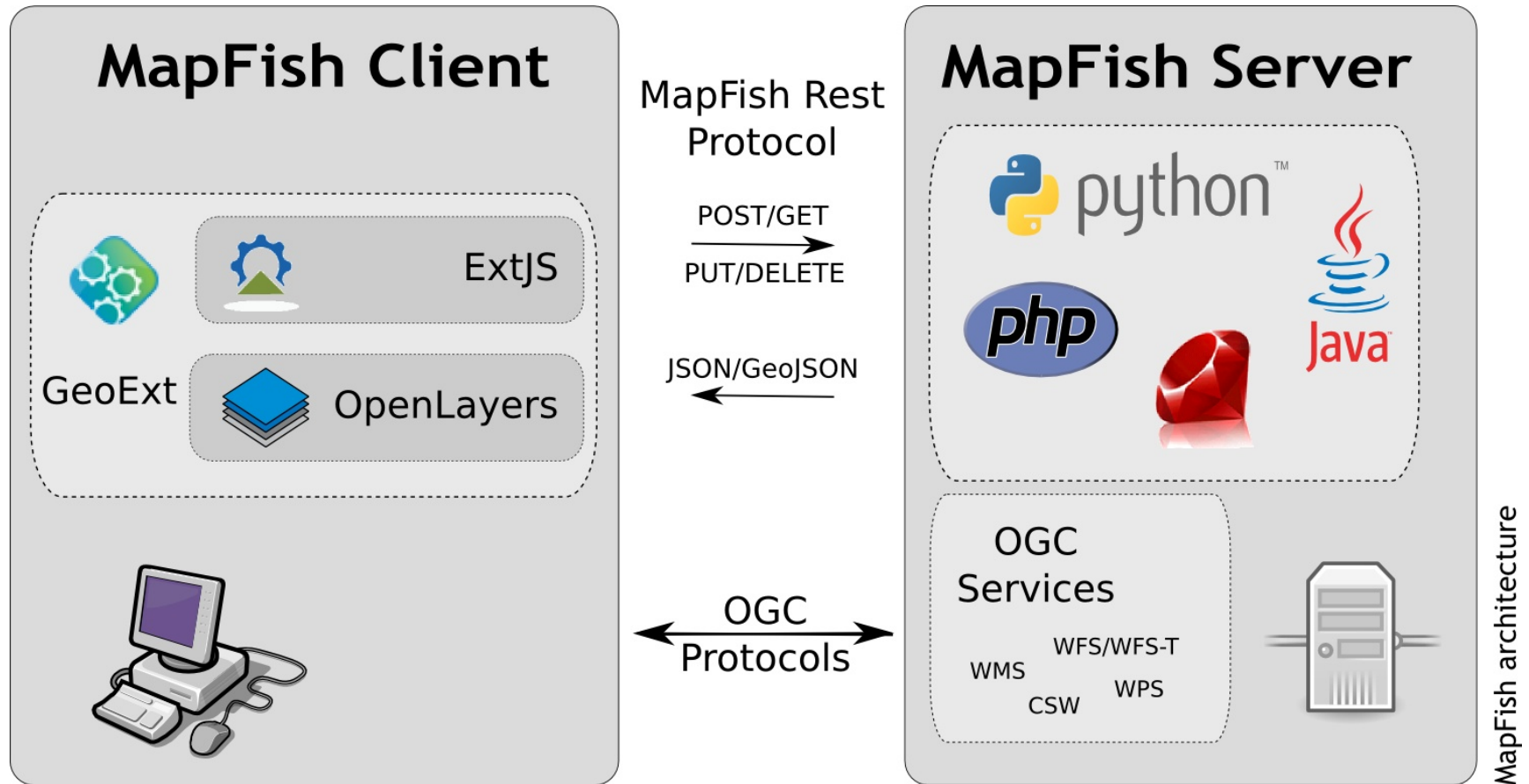
MapFish ist ein OSGeo-Projekt



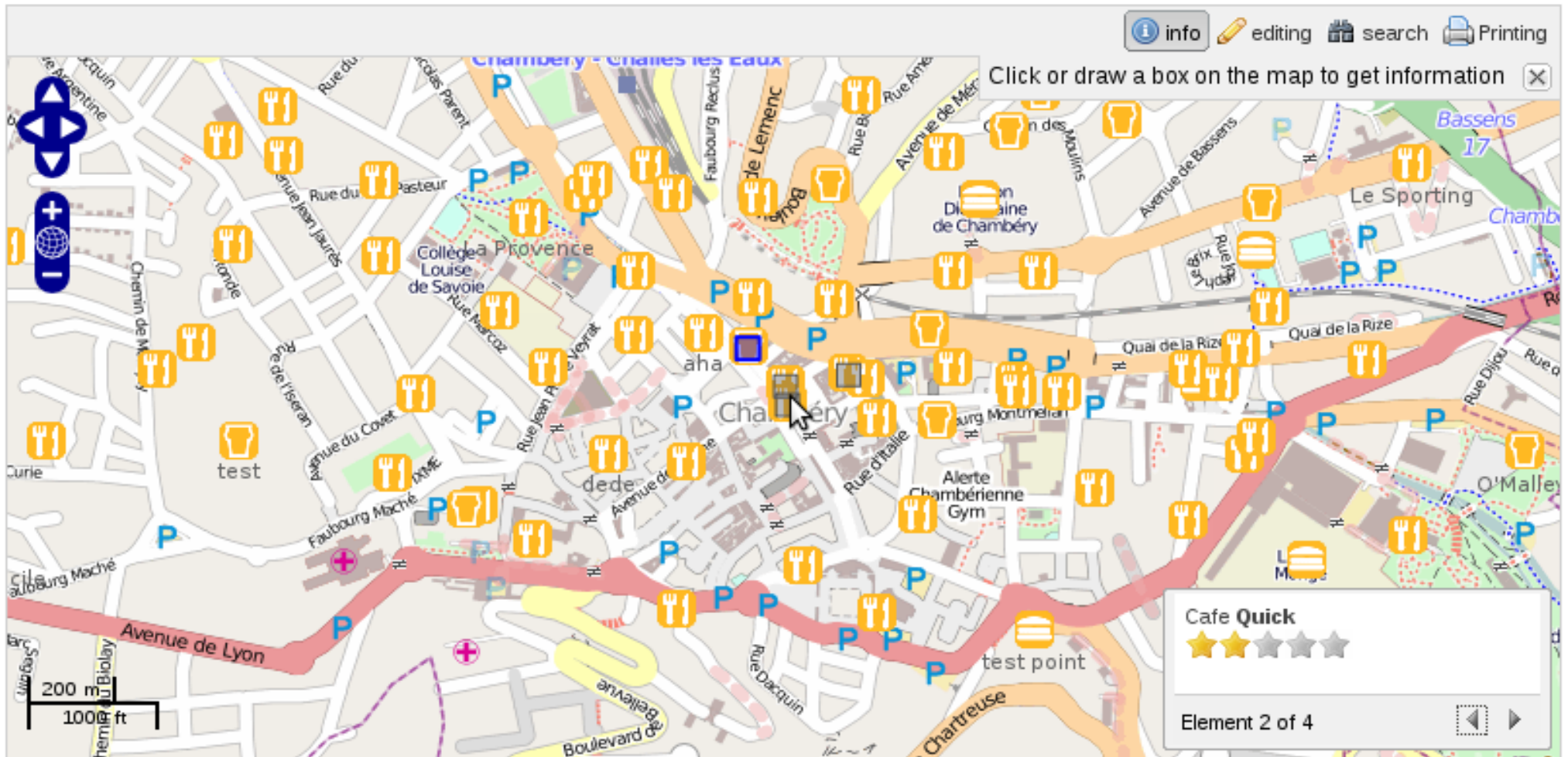
Mentor: Gary Sherman (QGIS)



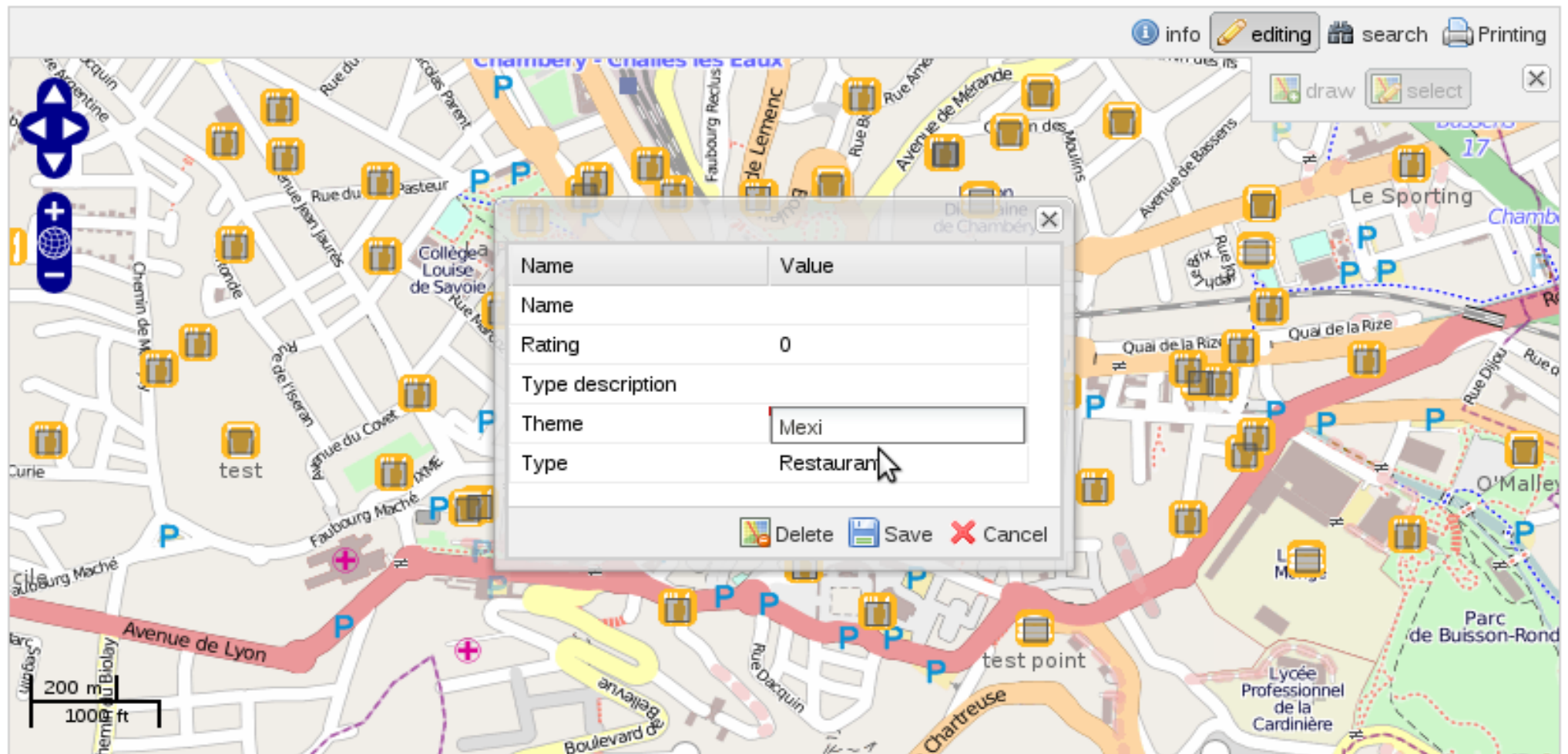
Architektur



MapFish Framework: Release 2



MapFish Framework: Release 2



One step further...



One step further...

map.geo.admin.ch

map.schweizmobil.ch

MapFish WebGIS
(aka c2cgeoportal)

Weitere...

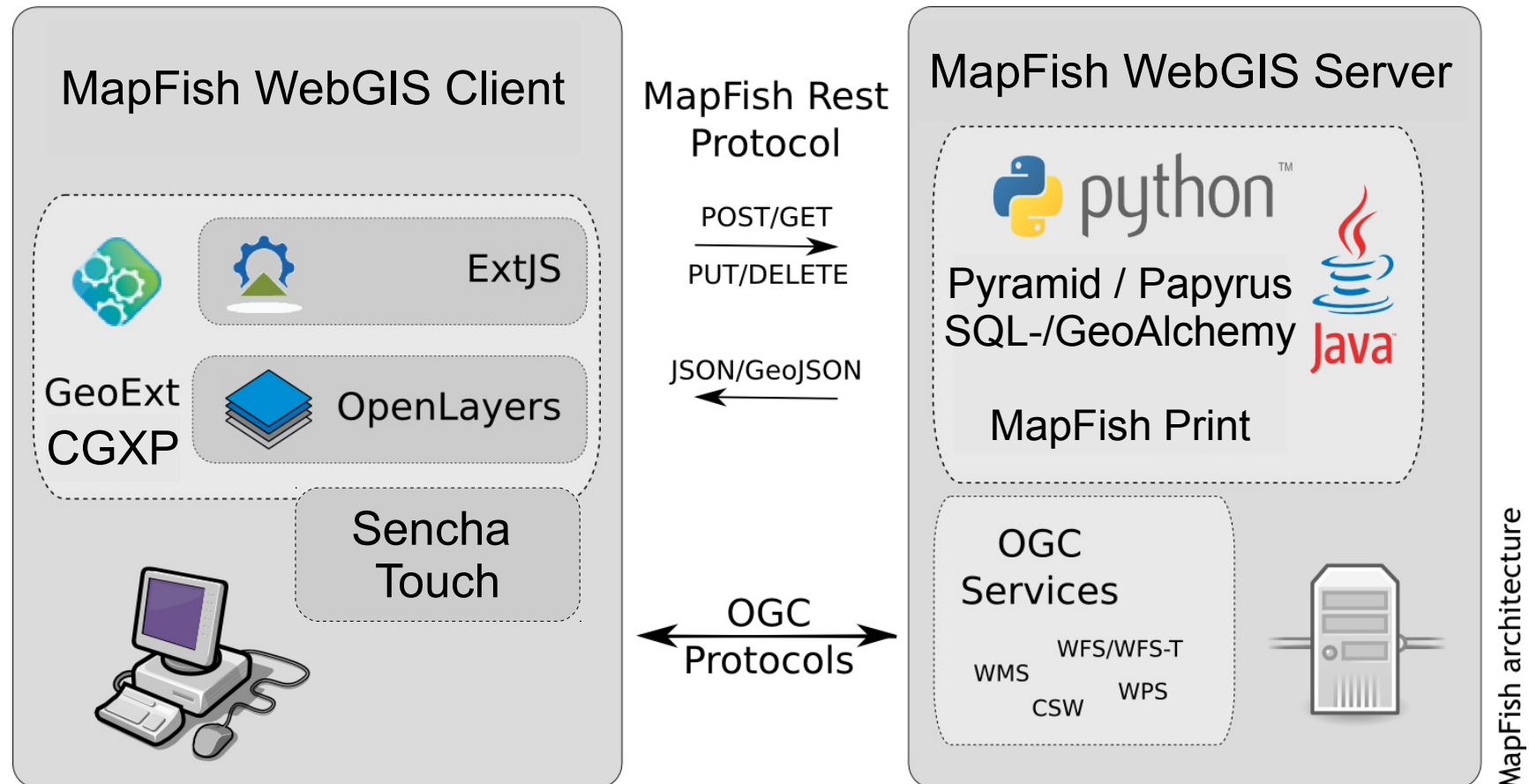


One step further: MapFish WebGIS

- Generisches WebGIS
- Plugin-Basiert
- Anpassbar und Erweiterbar
- Zahlreiche Funktionalitäten
- User group



MapFish WebGIS

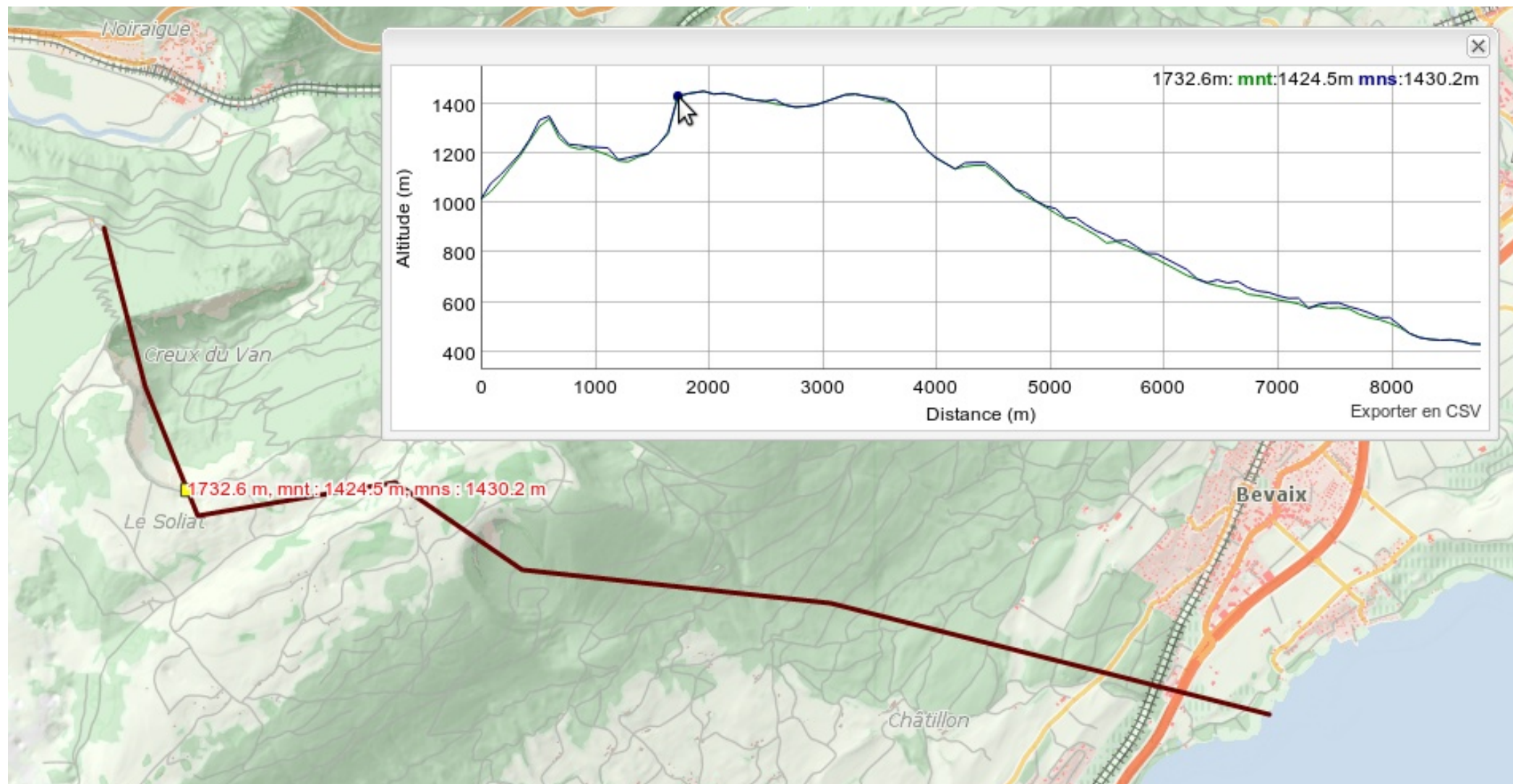


MapFish WebGIS

The screenshot displays the MapFish WebGIS interface. On the left, a sidebar titled 'Themen' (Themes) lists various map layers categorized by type: Gewässer (Water), Landschaft (Landscape), Kulturerbe (Cultural Heritage), Bildung (Education), and Ausrüstung (Equipment). Each category has sub-options with checkboxes. The main map area shows a street map of Rapperswil, Switzerland, with a large, semi-transparent word cloud overlay. The word cloud contains terms such as 'WMS', 'Mobile', 'Suche' (Search), 'Profil', 'WFS', 'API', 'Editieren' (Edit), 'Redlining', 'WMTS', 'Kombinierte Abfrage' (Combined Query), 'Transparenz' (Transparency), 'Abfrage' (Query), 'Autovervollständigung' (Autocomplete), 'Sicherheit' (Security), 'Google Earth Plugin', 'Legende' (Legend), 'Print', 'Themen', 'Messstools' (Measurement Tools), 'Navigation', 'Export', 'Pentamark', 'Übersichtskarte' (Overview Map), 'externe WMS hinzufügen' (Add external WMS), and 'Permalink'. The interface includes a search bar at the top with the placeholder 'Suche Ort, Objekte...', a toolbar with icons for navigation and map manipulation, and a status bar at the bottom showing the scale (1:25000), map type (OSM-Karte), and coordinates (980312, 5978977). The bottom right corner credits 'Contact - Développé par Camplocamp.'



Profil



Editieren

1

Cliquer sur la carte pour éditer des objets, ou
Créer un nouvel objet in NPA ▾

Choisir une couche

- NPA

2

Cliquer sur la carte pour éditer des objets, ou
Créer un nouvel objet in NPA ▾

3

Cliquer sur la carte pour éditer des objets, ou
Créer un nouvel objet in NPA ▾

Object #

localite	Mon Lieux
npa	1234
npa_comp	12

Delete Cancel Save

Save changes

4

Cliquer sur la carte pour éditer des objets, ou
Créer un nouvel objet in NPA ▾

Object #

localite	
npa	
npa_comp	

Delete Cancel Save

Object #

nom_point	Test
lien	http://www.
validation	false
date_validation	
lien_email	
lien_telephone	
saisie_utilisateur	
saisie_date	
type_id	

May 2012

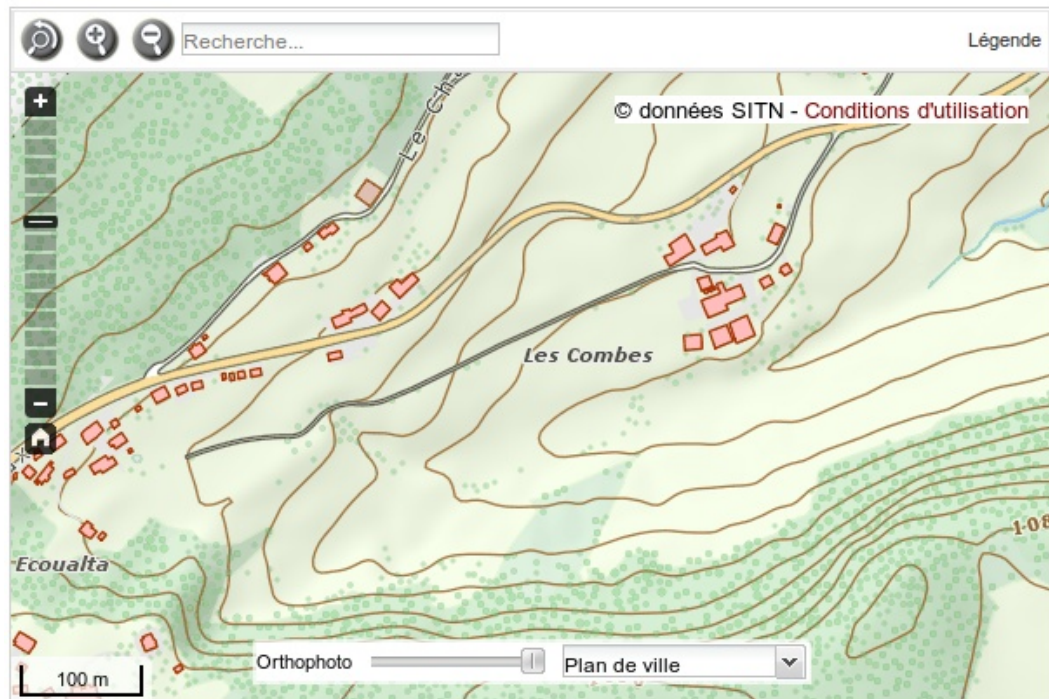
L	M	M	J	V	S	D
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

Aujourd'hui

Delete Cancel Save



API



```
var map = new sitn.Map({  
  div: 'map1', // id de l'élément qui va contenir la carte  
  zoom: 8, // niveau de zoom  
  center: [544500, 210100] // coordonnées sur lesquelles la carte doit être centrée  
});
```



Mobile



... im Einsatz ...

Zum Beispiel:

- <http://geoview.bl.ch>
- <http://sitn.ne.ch>
- <http://map.regiogis-beo.ch>
- <http://cartoriviera.ch>



Weitere Entwicklungen...





Enlarged map

Selection

Aerial imagery

Color map

Search location, zip, coordinate ...

Link

Catalog [INSPIRE]

Search

Base data

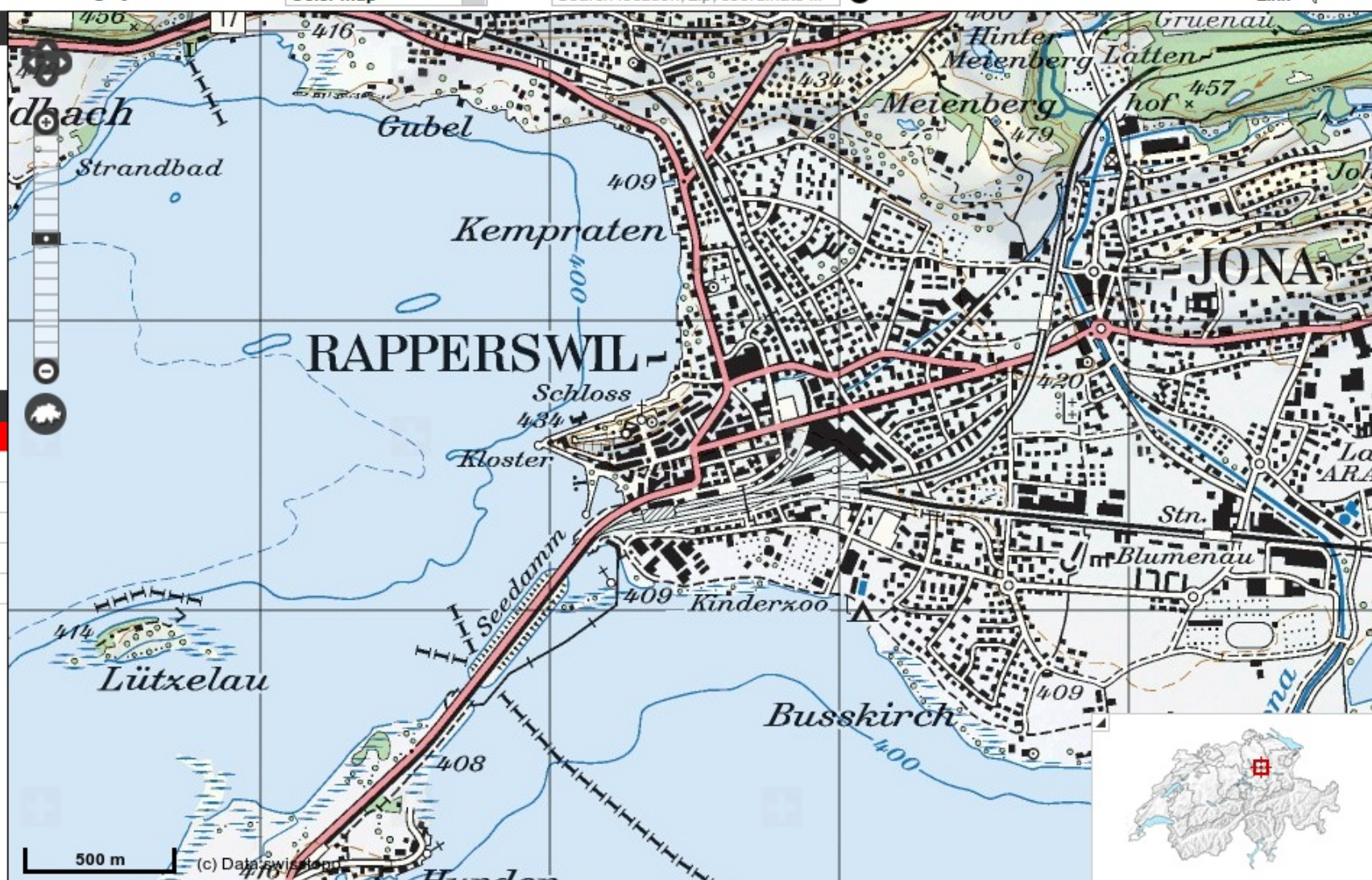
Surface representation

Area and population

Infrastructure and communication

Environment, biology and geology

Energy and economy



CH1903 / LV03

Coordinates (m): 703256, 232004

map.geo.admin.ch v3

The screenshot displays the map.geo.admin.ch v3 web application interface. The main map area shows a topographic map of the Köniz region, including locations like Liebefeld, Spiegel, Bünzere, Herxroil, Bindehus, Bütschi, Bachtele, Schlieren, and Schlierberg. The map features contour lines, roads, and water bodies. A yellow line highlights a specific route or boundary.

Top Left: Swiss Federal Cross logo and text: Schweizerische Eidgenossenschaft, Confédération suisse, Confederazione Svizzera, Confederaziun svizra.

Top Center: Search bar with the text "map.geo.admin.ch" and a search icon. Below it, a placeholder text "z.B. Ort, PLZ, Koordinate oder Daten".

Top Right: Navigation links: "Problem melden", "Hilfe", "Mobile", and a language dropdown menu currently set to "DE".

Left Sidebar: A menu with the following items: "Link versenden", "Drucken", "Kartenfunktionen", "Geokatalog" (with a "Thema wählen" dropdown), and "Ihre Auswahl (0)". A "Menü schliessen" button is located below the menu.

Right Sidebar: A dropdown menu for map styles, currently showing "Karte farbig". Other options include "Karte SW", "CadastralWebMap", "swissTLM-Map", and "Kein Hintergrund". Below this is a "Kartenausschnitt" section with a small map of Switzerland showing the current view area.

Bottom: A scale bar indicating "200 m". On the right, the text "geo.admin.ch | Copyright & Datenschutzerklärung" is visible.



EPFL > Map

YOU ARE ▾

BY SCHOOL ▾

ABOUT EPFL ▾

Person **Place** EPFL Web

Find a place



English Français

Search

Points of Interest

Routing

Print

Measure

Reset

Link

Help

A Arrêts M1 EPFL

B Musée Bolo

☐ Disabled

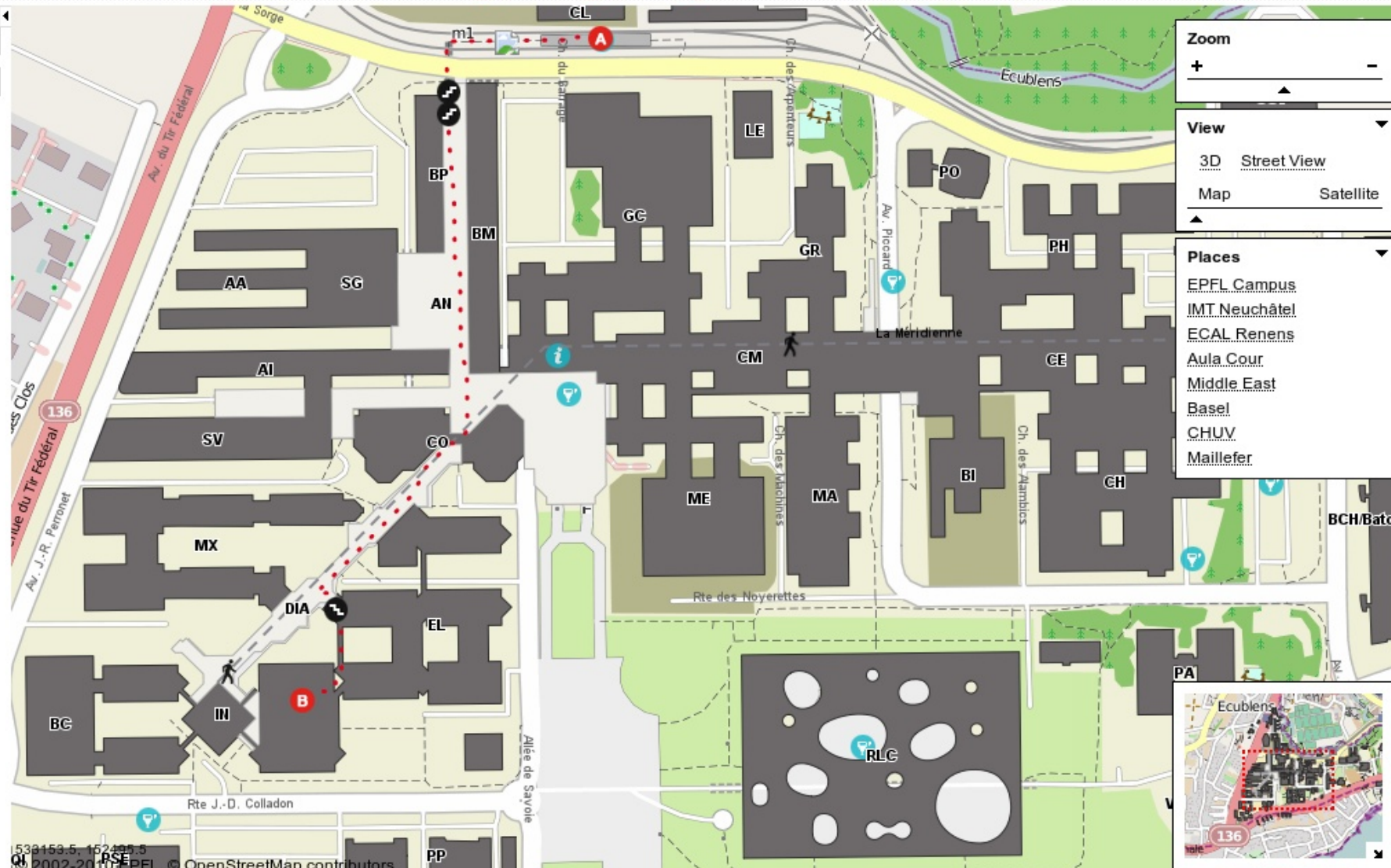
Let's go!

Reset

A Departure from level 0

- | | | |
|---|----------------------------|-------|
| 1 | Down the ramp to level -1 | 57 m |
| 2 | Up the stairs to level 0 | 123 m |
| 3 | Up the stairs to level 1 | 137 m |
| 4 | Down the stairs to level 0 | 492 m |

B Arrival to level 571 m



Zoom

+

-

View

3D

Street View

Map

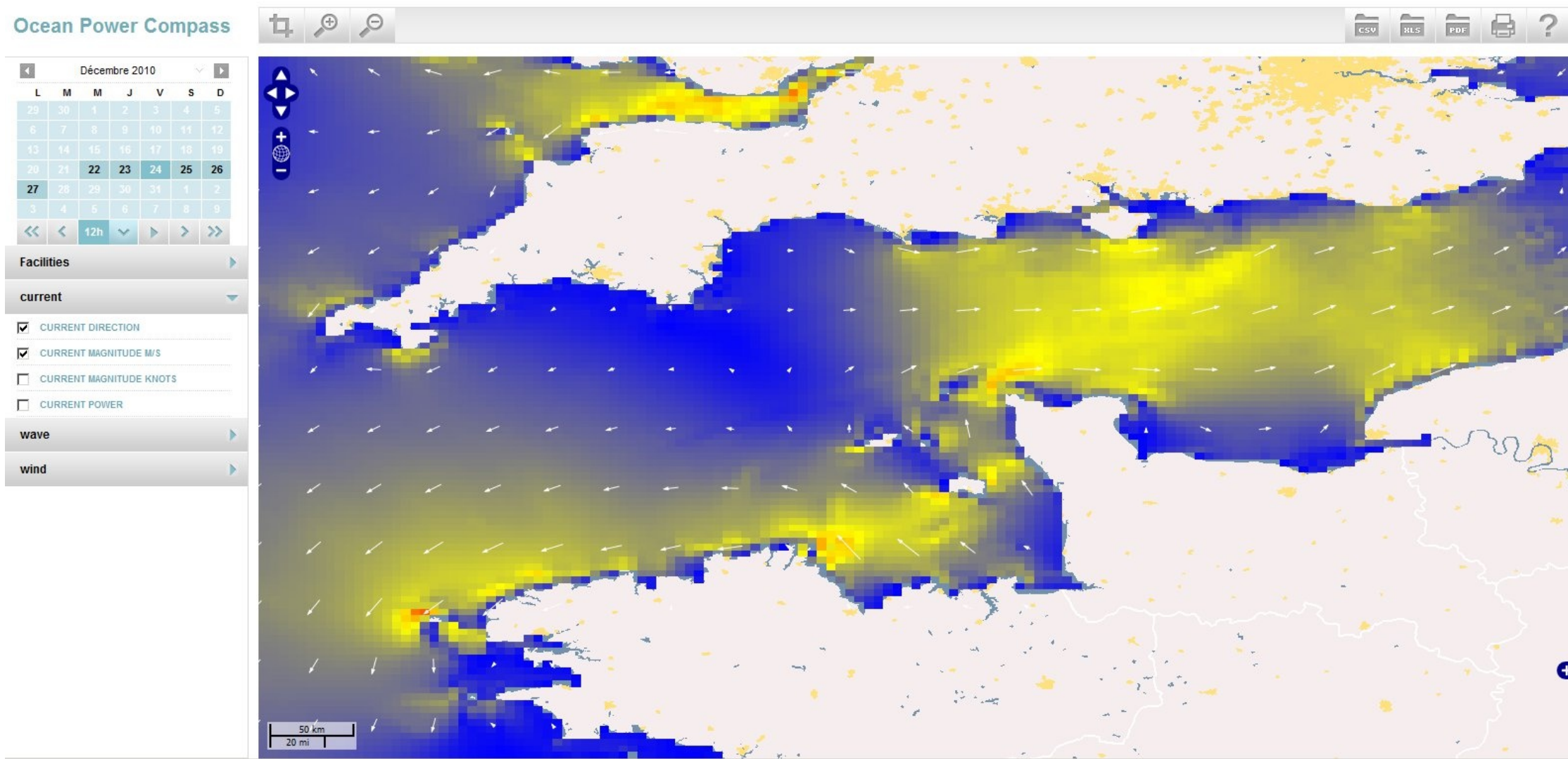
Satellite

Places

EPFL Campus
IMT Neuchâtel
ECAL Renens
Aula Cour
Middle East
Basel
CHUV
Maillefer

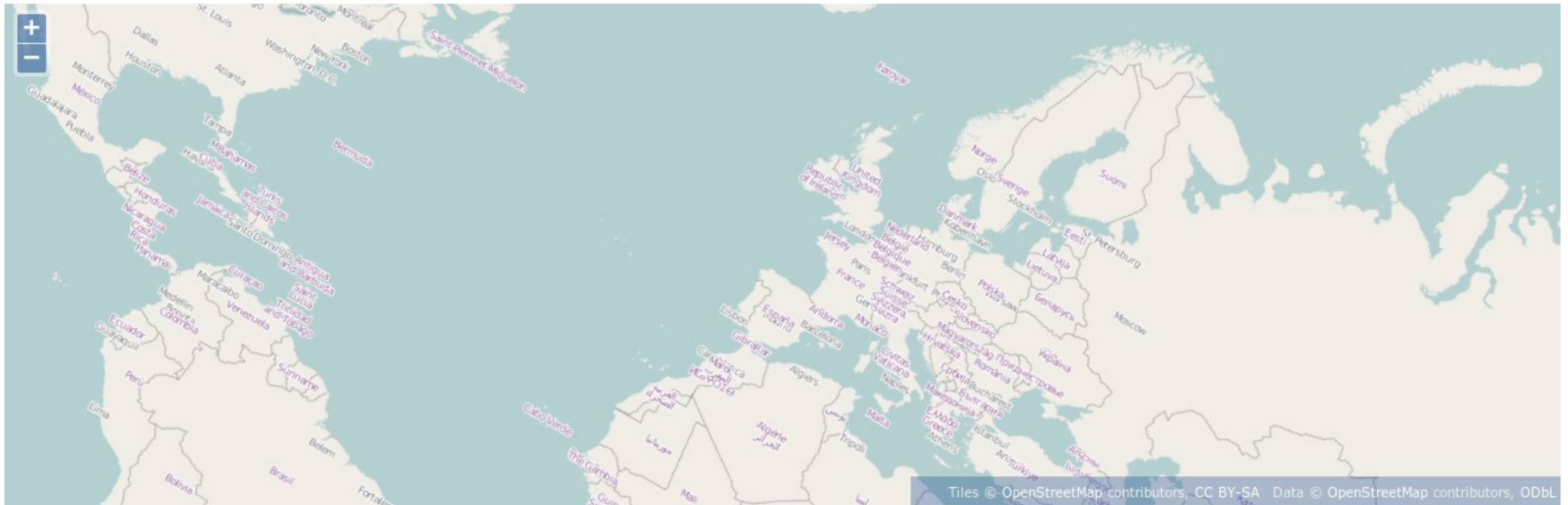
BCH/Bato

Ocean Power Compass – Animation



Ausblick

- OpenLayers 3... etc!



- Weiterentwicklung des MapFish WebGIS
- Cross device



Community

<http://www.mapfish.org>

<http://github.com/mapfish/>

<http://twitter.com/mapfish>

#mapfish

MapFish WebGIS

<http://github.com/camptocamp/c2cgeoportal/>



Danke für die Aufmerksamkeit!

Kontakt:

MSc ETH Elisabeth Leu

Camptocamp SA

EPFL – PSE A

CH - 1005 Lausanne

+41 21 619 10 21

elisabeth.leu@camptocamp.com

... oder am Stand



to camp 

camp **to** camp

INNOVATIVE SOLUTIONS
BY OPEN SOURCE EXPERTS