Schweizerische Eidgenossenschaft
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Federal Office of Civil Aviation FOCA
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Aviation - *map.aviation.admin.ch* -
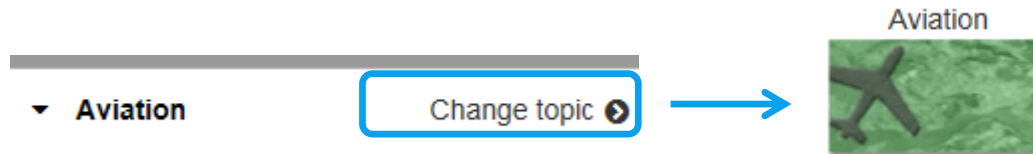# Instructions for using the Web-GIS Obstacle Map (WeGOM)

25.11.2015

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General

- Web-GIS Obstacle Map *(WeGOM)* is a web-based interactive map application for querying and displaying information for air navigation.

- As an official aeronautical publication of Switzerland, WeGOM should be routinely consulted by pilots as part of flight preparation.

- To launch WeGOM, open the topic «Aviation» within the official map viewer facility.

General

WeGOM homepage (topic: *«aviation»*)

Aviation • Instructions for using WeGOM
Federal Office of Civil Aviation FOCA

General

The *air navigation obstacles* layer

Important: note the date of the last update (validity)

General

The **air navigation obstacles** layer provides current obstacle information for the entire country. The information is updated twice weekly (every Monday and Thursday). It includes structures and facilities (including antennas, buildings, cables, cranes, cable lifts, power lines, wind power plants etc.) that could potentially render the operation of aircraft or air navigation facilities difficult, dangerous or impossible. This includes obstacles with a height of at least 25 metres above terrain outside populated areas or at least 60 m within populated areas.

This layer does not cover obstacles in the vicinity of airports. That information is published in the AIP or VFRM CH of Skyguide.

General

Legend and metadata on air navigation obstacles

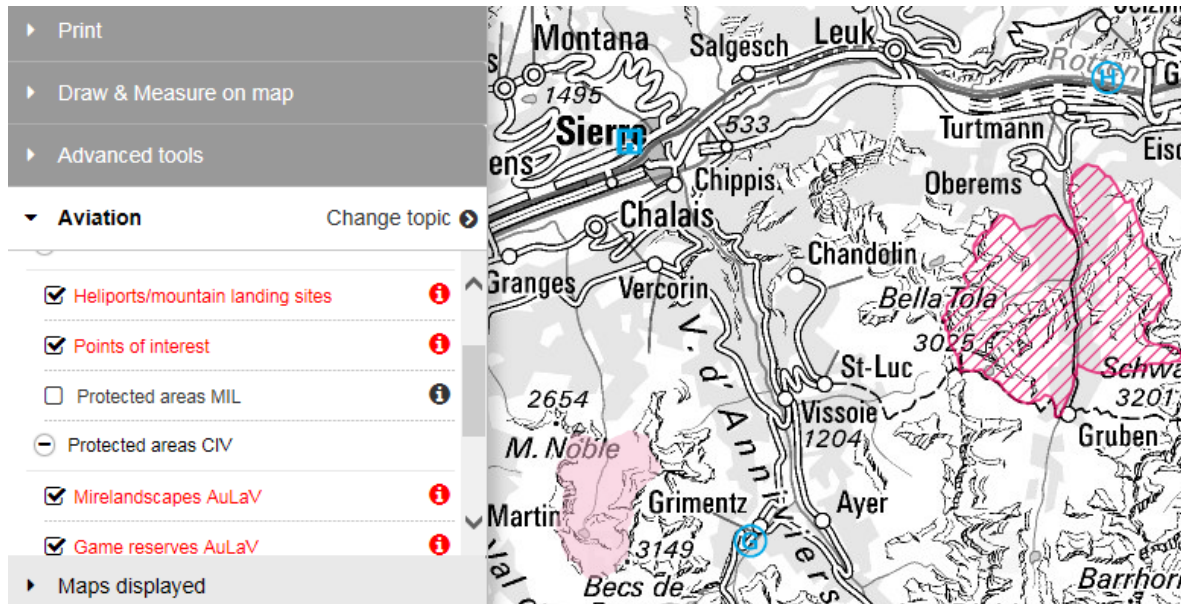Click on the Infobox icons for descriptions of the different layers available in WeGOM.

General

Other layers (*aeronautical information)*

Also under «Aviation» you can find other layers of data, including landing sites, protected areas (Art. 19 of the Swiss Off-Aerodrome Landing Ordinance, *AuLaV*), the ICAO aeronautical chart and glider chart, and the cantonal and municipal boundaries.

General

Protected areas under Art. 19 of the AuLaV
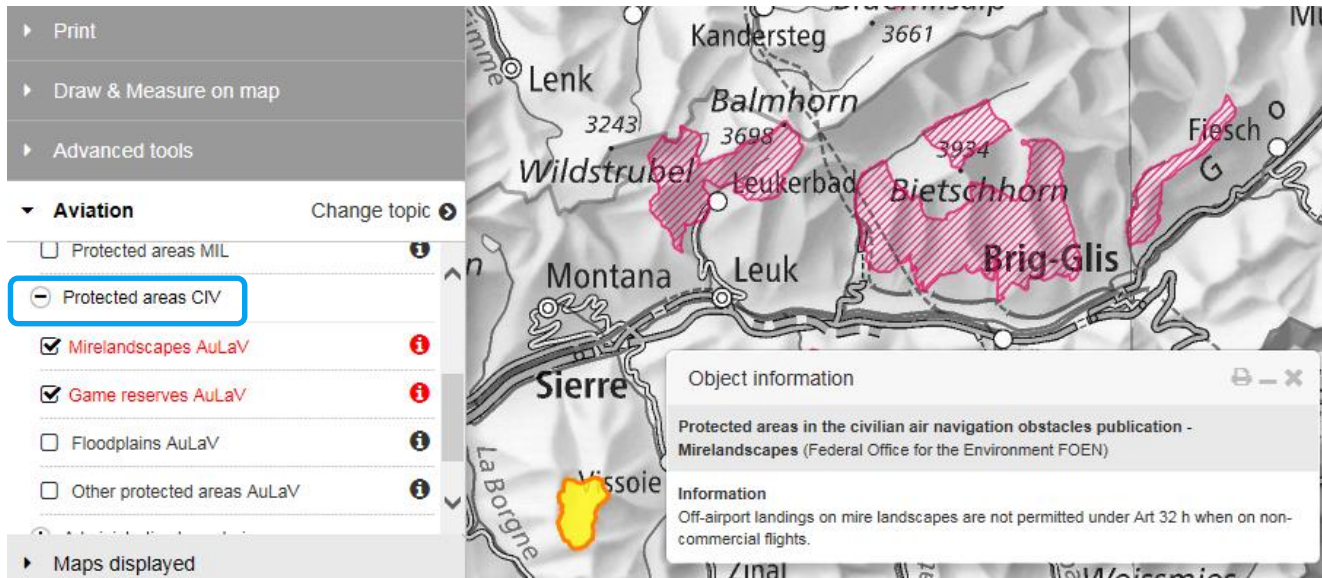
Under the heading *«Protected areas CIV»* you can view the officially published protected areas under the Off-Aerodrome Landing Ordinance, AuLaV, along with information about applicable restrictions.

General

Aeronautical charts *(Aeronautical Chart ICAO and Glider chart)*

Compare tool (under «Advanced tools»)

In *Aeronautical charts* you can view the ICAO 1:500'000 aeronautical chart for Switzerland and the 1:300'000 glider chart. The charts include airports and airfields, classified air space, restricted and hazardous areas and air navigation obstacles.

General

Downloading aeronautical data:

Transfer to FOCA's WeGOM page

The file can be downloaded by clicking on the infobox icon for the desired layer and then on «Link for download».

Data formats available:
- Air navigation obstacles → Google Earth (KMZ)
- AuLaV protected areas → ESRI Shape Files (SHP)

Obstacle information

Information under *Air navigation obstacles*

Click on individual obstacles to display their properties.

Obstacle information

When selecting *Air navigation obstacles:*

- If there are several obstacles at the place where you click, all objects will be listed in the information window. The chart shows only active obstacles (A). Inactive (I) or suspended (S) objects may be displayed inadvertently when selecting an object manually.

- The object information window has a print icon in the top right corner, which can be used to print the object information.
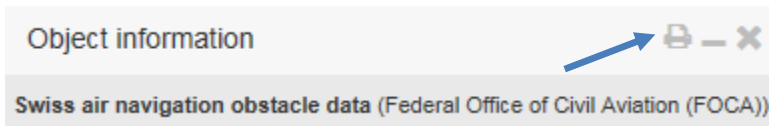
Obstacle information

More info

Object information

Swiss air navigation obstacle data (Federal Office of Civil Aviation (FOCA))

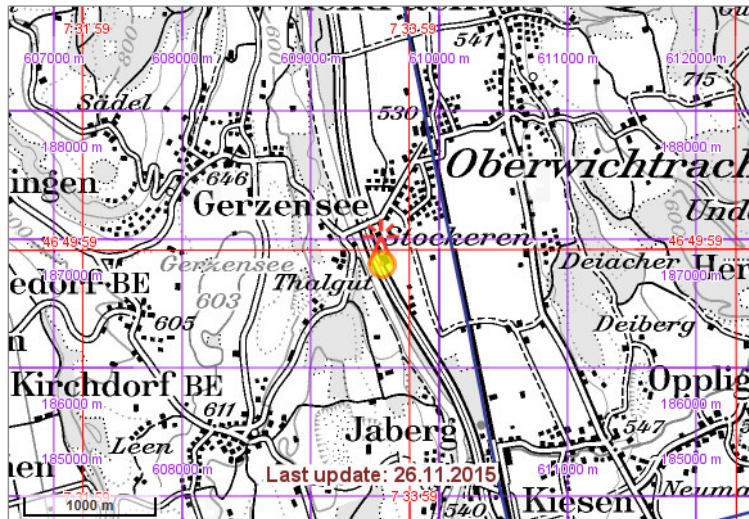| Information	
Registration number	243-BE-20055-LSZB
Map number [NM100]	36
Obstacle type	Antenna
Status	A
Maximum height AGL [m]	27
Maximum top elevation AMSL [m]	559
Total length [m]	0
Start of construction	2004-05-01
Duration of installation	PERM
Marking / navigation lights	Lighted

More info ⇨

Click on «More info» to generate a printable chart with the information for the selected obstacle.

Swiss air navigation obstacle data (Federal Office of Civil Aviation (FOCA))

Registration number: 243-BE-20055-LSZB — Obstacle type: Antenna

Status: A

Start of construction: 1.5.2004
Duration of installation: PERM
Removal accomplished: -

Geometry data:

Maximum height AGL [m]: 27
Maximum top elevation AMSL [m]: 559
Total length [m]: 0

Coordinates [CH1903]:

East=609546.0 North=186815.0

Marking / navigation lights:

Lighted

Map number [NM100]: 36

The aviation obstacle data may include deviations regarding it's completeness, up-to-date map maintenance as well as regarding the bearing- and hight positions of obstalces.
Date: 26.11.2015

Copyright & data protection   Print

Obstacle information

Other information available:

Further object information available includes:

- In the case of an object of *inactive status* (I), the date when it was made inactive. This attribute remains empty if the status is active.
- The *Swiss grid coordinates* of the object (coordinate pair in the case of a point, or a rectangle in the case of a line or surface).
- *Chart excerpt* with the obstacle highlighted, overlaid with the WGS84 and CH1903 coordinate grid and the date as of which the data was valid.

Obstacle queries

To submit a query for several air navigation obstacles in WeGOM, you have three possibilities:

- *Select multiple obstacles* by clicking and drawing a rectangle (see [How to select objects](#)).

- *Predefined queries:* There are two predefined queries that will give you all obstacles that have been made active in the previous two weeks, or all those that have been deleted in that time.

- *Custom queries:* You can also create a customized query, for example by specifying date ranges, numerical attributes or domain values (see [How to select objects](#)).

Obstacle queries

Predefined *standard queries* for air navigation obstacles

Predefined queries with automatic adjustment of date (to cover the previous 14 days)

Obstacle queries

Custom queries for air navigation obstacles

Obstacle queries

Here's how to specify the *conditions* for a *simple* customized query and submit the query:

Select your layer («Air navigation obstacles»)

Define your query conditions
- Attribute
- Operator (=, !=, >, <, >=, <=)
- Value

Submit your query

Obstacle queries

Here's how to specify *multiple conditions* in a customized query
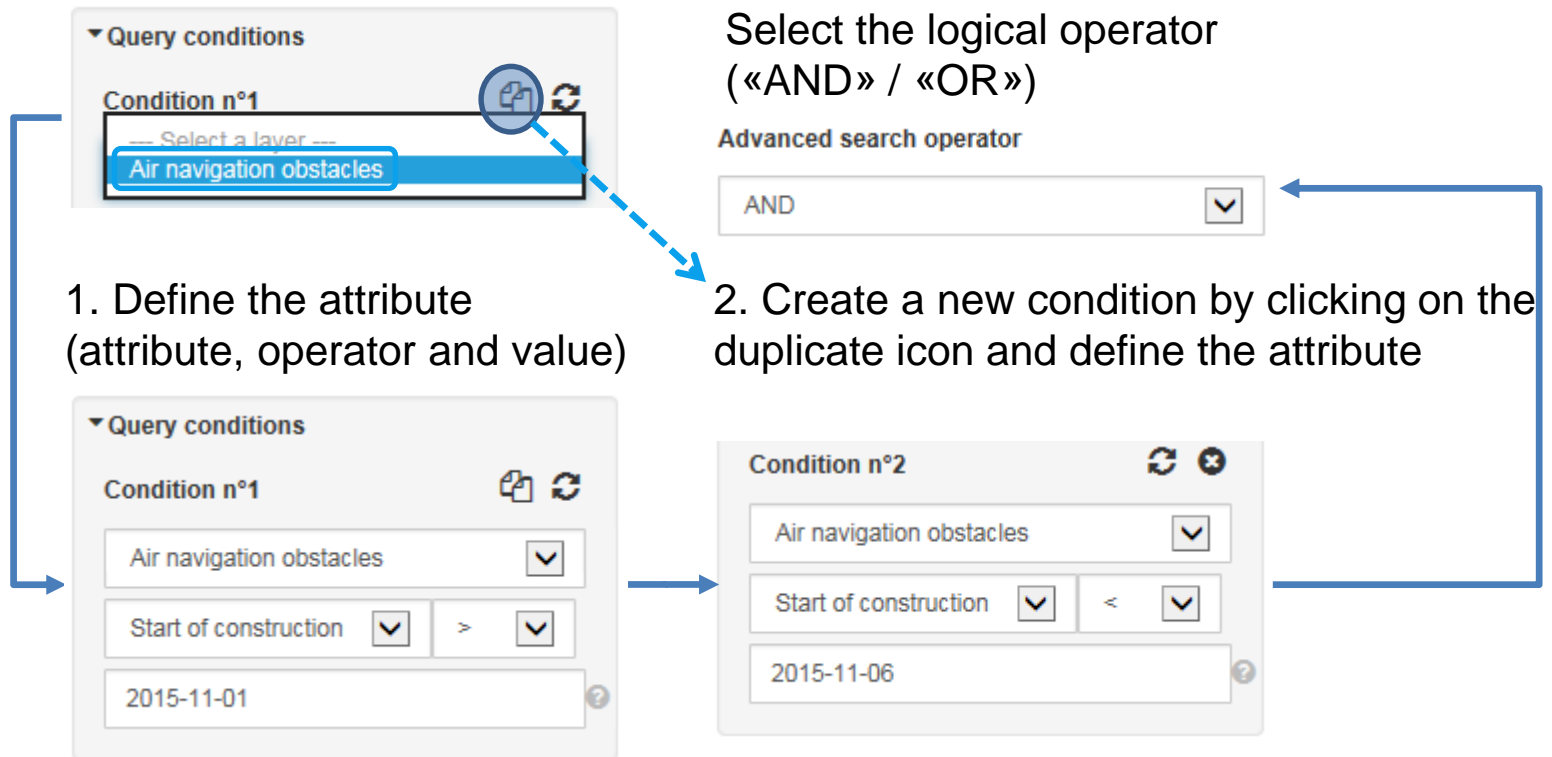

Click here to add a new one

AND→Both conditions have to be true
OR →Just one needs to be true

Obstacle queries

Example of a customized *multiple-condition* query: display all air navigation obstacles that were made active during a particular period of time.
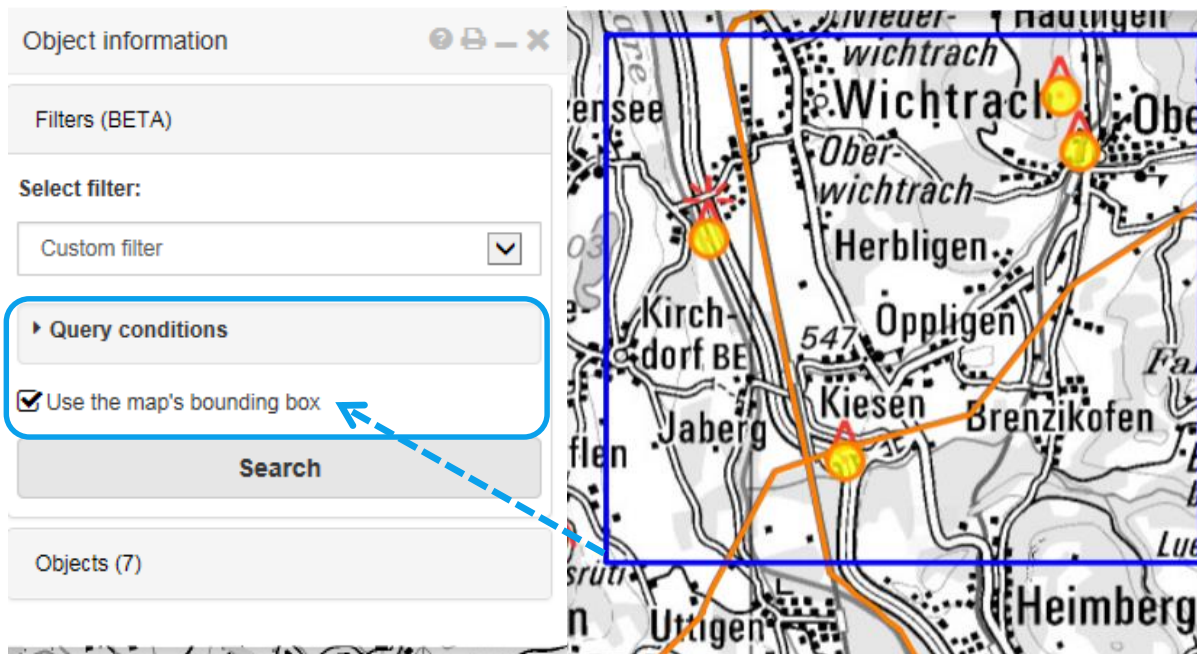

Select the logical operator («AND» / «OR»)

1. Define the attribute (attribute, operator and value)

2. Create a new condition by clicking on the duplicate icon and define the attribute

Obstacle queries
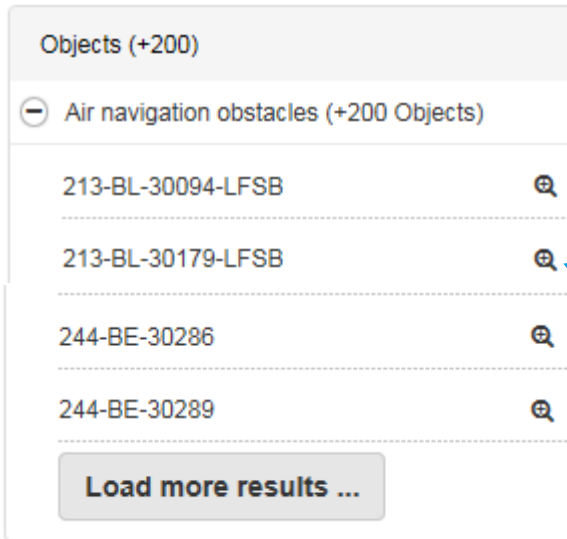
Define *the space*:

A customized query can be spatially restricted to a predefined rectangle (CTRL + left mouse key).

Obstacle queries

Viewing the results of your query

The initial list of results is limited to 200 objects. If there are more, you will see «+200 objects».

Click on the zoom icon to zoom in on the obstacle on the map.

Scroll through the other objects as necessary.

Selected obstacles will be highlighted on the chart viewer (yellow with orange outline). A query of air navigation obstacles will always include not just active but also *inactive* obstacles (highlighted on the map, but without the symbol).

Obstacle queries

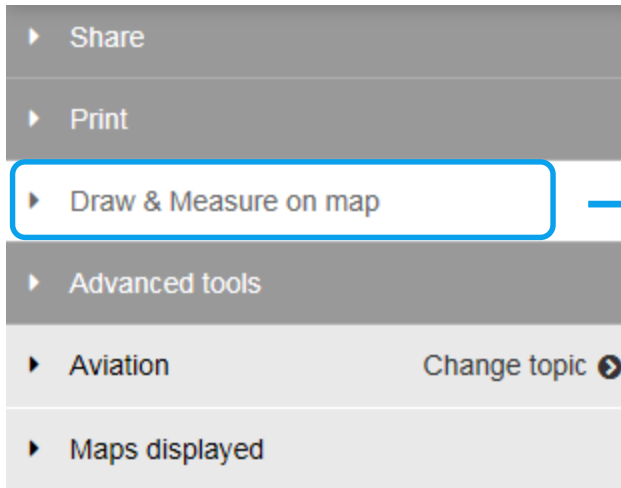Printing the *query results*
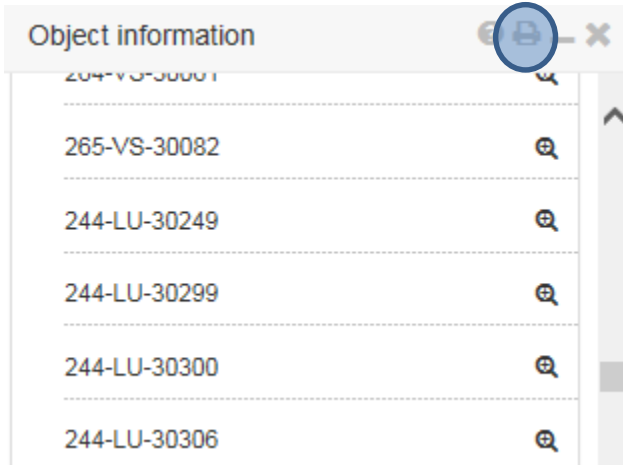
Click on the print icon (top right) of the object information window to generate a report on all obstacles found. Each object will be printed on a separate A4 page with detailed information (as per «More info» on slide 14 above). The report can be used to create a PDF file or printed out directly.

Extras

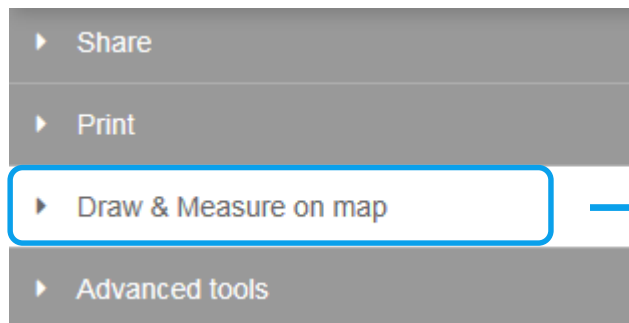Create your own drawing

Put drawing objects in the chart.

Drawings can be shared with other users by means of a URL, and they can be edited (see «Share drawing / KML»). Drawings are automatically stored and retained for at least one year.

Extras

Import your own drawings as external files (1/3):

You can keep permanent copies of your drawings and share them with other users, by generating a permalink. This will also save all the important parameters such as the selection of layers, the displayed domain, zoom level and so on.
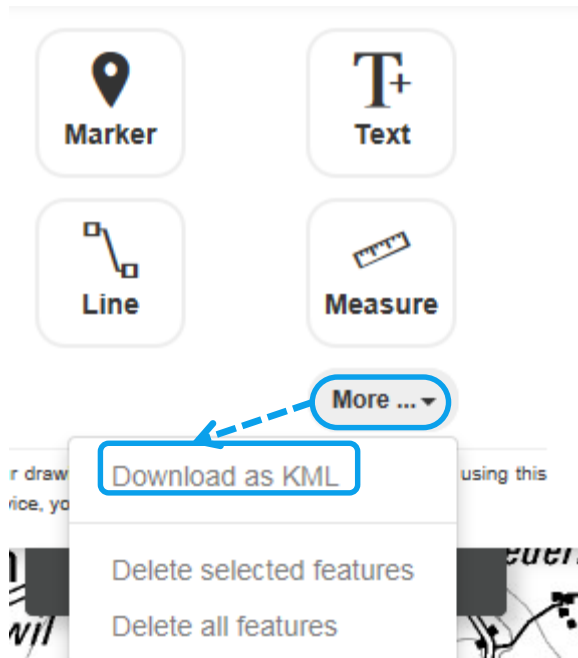
Step 1 and 2: Create your drawing objects in the chart and select the layers, domain and zoom level.
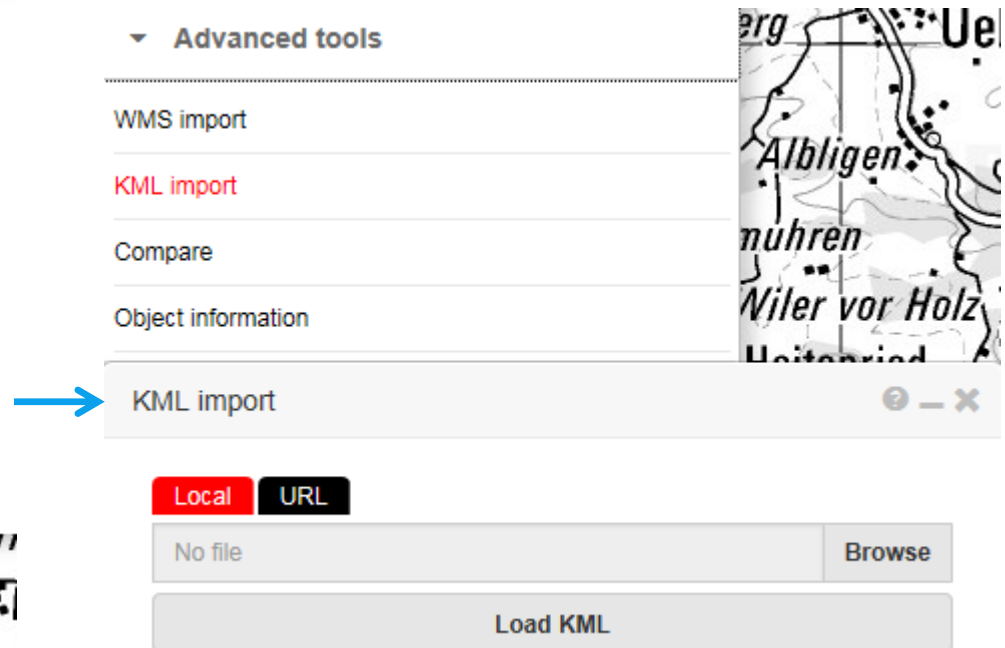
Extras

Import your own drawings (2/3):

Step 3: Save the drawing as a KML file. Rename the file if desired.

Step 4: Use the KML file to import the drawing (either from a local drive or via the URL).
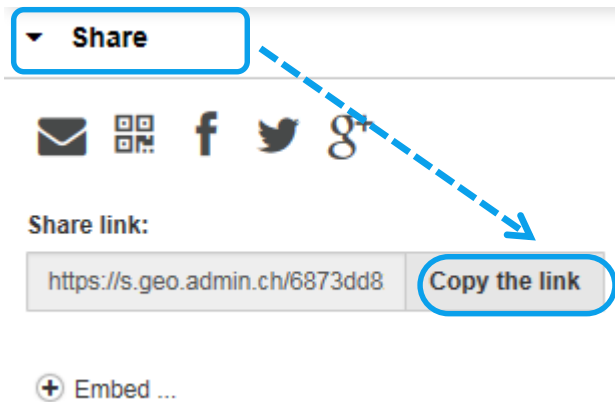
Extras

Import your own drawings (3/3):

Step 5: Select «Share» and
click on «Copy the link».

See also «Use parameters to call
up a map».

Step 6: When the link is opened, the external drawing (i.e. the KML
file) will be directly imported and displayed on the chart.

Extras

Use the cursor to capture coordinates:

Just right-click any position
on the chart.

Position

CH1903 / LV03	592'340.0, 188'810.0
CH1903+ / LV95	2'592'340.00, 1'188'810.00 *
WGS 84 (long/lat)	7.33820, 46.85038
UTM	373'310, 5'189'878 (zone 32T)
MGRS	32TLS 73310 89878
Elevation	603.1 m

Link with bowl crosshair