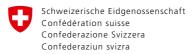
geo.admin.ch Info

Geoinformation for everyone – geo.admin.ch

Spatial knowledge with multiple purposes of use





Coordinating Agency for Federal Geographical Information GCG www.geo.admin.ch

Geoinformation for everyone

Table of contents

Why do we need geoinformation?	3
Direct access to geodata via the Swiss Federal Map Viewer	
Geoinformation for everyday life	7–11
Geoinformation for the economy and society	12-15
Geoinformation for politics, administration and the public	16-19
Geoinformation for "time-travellers" and history buffs	20-22
Geoinformation for teachers and students	23
New perspectives thanks to new technologies	24-26
Topic overview	27
Contacts	28

Photo credits

p. 23: Béatrice Devènes

p. 25: swisstopo

All other photos used under licence from Shutterstock.com

All graphs and screenshots: swisstopo

Why do we need geoinformation?

Did you know that around 80 % of all the decisions people make have a spatial context? Knowledge of locations or the spatial extension of objects, events, measured values, risks and potential forms the basis for planning and decisions of all kinds. This applies to the private sector as well as to administration, politics, society and the economy.

What did the place where I live look like 100 years ago? How high is the noise exposure at a certain location – and where is the nearest available electric filling station? Geoinformation provides answers to these and many other location or geo-related questions. They are available to individuals via data and services and can be accessed, for example, via the Swiss Federal map viewer map.geo.admin.ch. This platform makes the Confederation's geodata and services available to the public free-of-charge over the entire territory of Switzerland

Obtain, view, print geodata & more
The map viewer offers various options for visualising and using geodata: you can look at and analyse the data against the background of current or historical national maps and aerial photographs and also have the option to download them.
You can print out any map section, label it, add your own data, share it and use it offline. Around 1000 different topics can be accessed, combined, compared, or viewed over time in the map viewer.

This brochure gives you an overview of the variety of data and maps available. It shows how we can all benefit from geoinformation as individuals, as a society, in politics, business, research and education.

Direct access to geodata via the Swiss Federal Map Viewer

The simplest way to access Swiss Federal geodata is via the map viewer map.geo.admin.ch. With this viewer, you can look at and combine geodata on a desktop computer as well as on mobile devices.

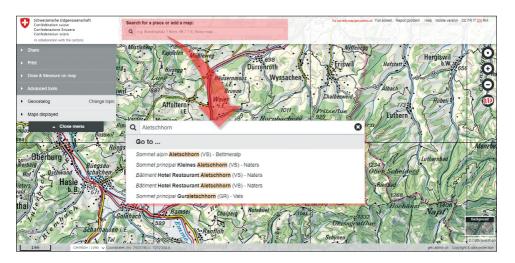


Figure 1: Look for a location or dataset. More information about the search function can be found at https://help.geo.admin.ch/?id=25

The most important function of the map viewer is the search field: you can display a specific map section by entering coordinates, addresses or place names in this field. You may also enter a themerelated keyword such as "noise", "cycle route" or "hydro-electric power" and thus search for one of the approximately 1000 datasets on map.geo.admin.ch. Catalogues are also available for thematic searches (see p. 27).



Figure 2: "Print". Instructions are available at https://help.geo.admin.ch/?id=41

The map viewer allows you to print specific map sections, share them on social media or embed them in websites. The maps can be combined with datasets as desired and supplemented with your own drawings.

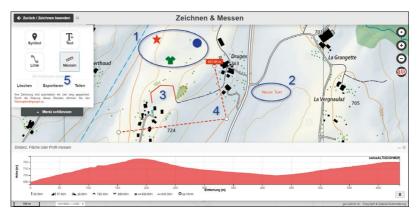


Figure 3: The "draw/measure" function is explained at https://help.geo.admin.ch/?id=66

On a mobile device, you can display your current position in the map viewer. You can also make simple comparisons, annotations and measurements on the map and calculate distances.

Using the menu function "Advanced Tools", you may import and visualise your own data records such as WM(T)S¹ data from third-party sources or self-generated KML files² into a map – for example, locations and addresses of members of a group.

The presentation of data in 3D and "time travel" via historical and current national maps and aerial photographs are further popular functions of the map viewer map.geo.admin.ch. You will find more information on these features in this brochure.

The source code for map.geo.admin.ch is open and therefore freely available at https://github.com/geoadmin. The application has many configuration options, which are all documented in help.geo.admin.ch.

Do you have questions about using the map viewer? At help.geo.admin.ch you will find a lot of information and tutorials on the various functions. If you have any further questions, the geoportal hotline will be happy to help you:

Phone: +41 58 469 03 15 / Email: info@geo.admin.ch

a list of addresses into a KML file and upload it to the map viewer.

Web Map Services (WMS) and Web Map Tiling Services (WMTS) are display services. You can find further information about these services at https://www.geo.admin.ch/en/geo-services/portrayal-services-web-mapping.html

A KML file is a so-called Keyhole Markup Language file and belongs to the GIS file formats. Using a simple service (see http://cms.geo.admin.ch/www.geo.admin.ch/kml/geocoder.xlsx), you can convert

Geoinformation for everyday life

As part of its sovereign tasks, the Confederation coordinates the collection of geodata, makes it available as a service and publishes it in the Confederation's map viewer. Most of the geodata can be used directly in your everyday life – for example, for your leisure planning and mobility, for information on your current or planned place of residence, for the current weather at a particular location and much more. For some datasets, you can even query real-time information, for example public transport departure times or meteorological information. We will present some of these datasets on the following pages. The QR code or link will take you directly to the corresponding dataset.

Construction, housing, health





https://s.geo.admin.ch/88b3e260f2

Property information

Are you interested in the location, expanse or plot number of a particular plot of land? You can look at the plots of land on map.geo.admin.ch via the service www.cadastre.ch/info or in the map viewer using CadastralWebMap (zoom in for large scale). By clicking on the desired parcel, a link to the corresponding cantonal portal will be displayed. Here you can obtain further information and order plans. The service shows reduced content compared to the complete cadastral survey data.





https://s.geo.admin.ch/888fccc2bb

Cadastre of public-law restrictions on ownership
Would you like to know whether a property is affected by public
law restrictions on land ownership (PLR)? The PLR-cadastre provides
you with this official information. On map.geo.admin.ch, you can
find out whether the PLR-cadastre is available for a municipality.
By clicking on the municipality, you can obtain detailed information
with a link to the cantonal PLR portal where you can access the
land information directly.





https://s.geo.admin.ch/888fde4f35

Solar energy potential of roofs and facades

How much electricity or heat can my roof produce? This information is provided by a dataset developed by the Swiss Federal Office of Energy together with MeteoSwiss and swisstopo. It shows how suited a roof is to collect solar energy and what its potential yield would be. To do this, the annual path of the sun is simulated and the solar radiation which reaches each roof is calculated. A corresponding dataset is also available to identify the solar energy suitability of house facades.





https://s.geo.admin.ch/888fe239dc

Which channels can I receive at my home? On which frequencies can I find the channels I am looking for? OFCOM's overview map:

Mobile phone antennas and radio transmitters

can I find the channels I am looking for? OFCOM's overview maps of transmitter sites in Switzerland answer these questions. They show the locations of radio stations (radio and television) and the base stations for mobile telephony, divided into 2.3, 4 and 5G antennas.

By clicking on a station, additional information is displayed:

- Name of the radio service
- Transmission power of the system
- In the case of broadcasting stations, information on the programmes and frequencies broadcast is also featured





https://s.geo.admin.ch/888fe55a57

Noise pollution by road and rail traffic

Various maps published by the Federal Office for the Environment FOEN show noise pollution by road or rail traffic during the day or at night. Corresponding calculations show that during the day one-fifth of the population and at night one-sixth is affected by harmful or disruptive road traffic noise.





https://s.geo.admin.ch/8a0bd88070

Risk of a tick bite by area

The "Tick bite model" dataset of the Federal Office of Public Health FOPH represents the tick-bite risk by area in mild and humid weather in early summer. It is based on the tick hazard potential map in the "Tick" prevention app. "Citizen science" data recorded by the app helps to review the model.

Leisure and mobility





https://s.geo.admin.ch/8893fb98b2

Hiking trails, slow traffic

The hiking trails are one of the most popular datasets on map.geo.admin. The network of footpaths and hiking trails which exceed 60,000 kilometres is an important part of our leisure-time infrastructure. The dataset is published by swisstopo in collaboration with the Federal Roads Office FEDRO, SwitzerlandMobility, the Swiss Hiking Federation and the cantons. The cycling, mountain biking and skating routes of SwitzerlandMobility are also available on the map viewer.





https://s.geo.admin.ch/8893fe0c18

Snow sports

Winter sports enthusiasts can find a range of useful information in the Swiss Federal map viewer, above all the snow sports maps from swisstopo. They can also view datasets such as designated wildlife areas (closed to snow sports) or regions with slope gradients of over 30°.





https://s.geo.admin.ch/889400ae7b

Water temperature and quality

In summer when it is tempting to jump into the cool water, data records from the Federal Office for the Environment provide information on the current water temperature of the rivers (maximum over the last 24 hours) and on the quality of the water for swimming.





https://s.geo.admin.ch/889402a269

Public transport stops – with departure times

The Federal Office of Transport geodataset for "Public transport stops" comprises the stops for public transport in Switzerland as well as other selected public transport locations, which have an operational or structural significance (operating points). By clicking on a stop, you can display the next public transport departure times.





https://s.geo.admin.ch/8894076e74

Bike and car sharing stations

Bike-sharing and bicycle rental systems offer a wide range of vehicles which are well suited for tourist purposes and in everyday life for short distances, for example for the trip to work in combination with public transport. A corresponding map issued by the Swiss Federal Office of Energy SFOE contains the stations of various providers such as PubliBike and "Schweiz rollt". For each location, the map provides information on opening hours, the rental system and rental conditions

Moreover, you can look at the locations of Mobility car sharing vehicles in the map viewer.





https://s.geo.admin.ch/88940972f8

Charging stations for electric cars

Electric mobility is a key technology for greater sustainable mobility and contributes to the achievement of ambitious energy and climate policy goals. The corresponding data set of the Swiss Federal Office of Energy shows the locations of the charging stations and the availability of the charging points in real time.

Weather





https://s.geo.admin.ch/88940be9f7

Current weather information: Meteorological measurements
The SwissMetNet automatic ground monitoring network from
MeteoSwiss comprises 160 fully equipped automatic weather stations. Every ten minutes, these measuring stations provide a wide range of up-to-date data on weather and climate in Switzerland – for example the current air temperature, maximum or minimum temperature over the last 24 hours, current precipitation totals over various time intervals, current snow depth, air pressure, wind speed and much more. You can obtain all the meteorological information you need by clicking on a specific measuring station.

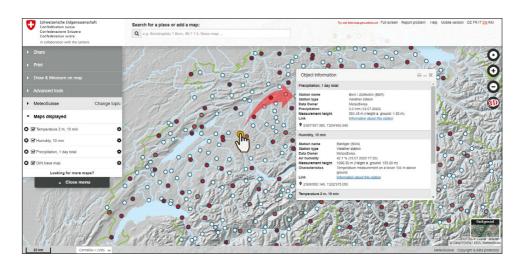


Figure 4: Meteorological measurements. By clicking on a point or a measuring station you can display detailed information on various weather parameters (precipitation, humidity, temperature, snow depth).

Geoinformation for the economy and society

Knowledge of a situation or location of resources and infrastructures as well as knowledge or overviews of potential and risks or dangers presented by a place or a region are of great importance for the economy and society. This knowledge is an important prerequisite for the quality assessment of a site but also for the efficient, low-risk and successful management of our limited resources.

Knowledge of the subsoil





https://s.geo.admin.ch/8894fe1e1f

Earthquakes: Map of current earthquakes (last 90 days) and seismic soil classes

The map of earthquakes over the last 90 days shows the current seismic activity in Switzerland and nearby countries recorded by the Swiss Seismological Service of ETH Zurich (SED). It is updated continuously.

On the map, you can also see to which soil class a particular soil belongs. A subsoil class is a vital piece of information to determine the effects of an earthquake on a building, according to construction standard SIA 261. The construction standard defines six subsoil classes which are shown on this map. Geological maps, bore holes and geotechnical reports are evaluated to attribute a subsoil to one of these six classes.





https://s.geo.admin.ch/8a0be0683a

Geological formations: What we build on

Detailed knowledge of the subsoil is necessary for safe construction. Rail and road tunnels, caverns for waste storage or building foundations must be adapted to the prevailing geological conditions. In order to shed light on the darkness beneath the earth's surface, the swisstopo Geological Survey documents the subsoil and produces geological maps and 3D models. With the "Geocover" geological datasets, standardised and harmonised vector data are available to the public on the Swiss Federal map viewer.





https://s.geo.admin.ch/8895017465

Geothermal energy potential: A temperature model of the underground of the Central Swiss Plateau

Geothermal energy refers to the use of heat in the earth's interior and is gaining importance with the Energy Strategy 2050. This energy can be used for heating and electricity generation. Today, Switzerland does not yet produce electricity from geothermal sources. However, the potential is excellent; corresponding research and pilot projects are therefore being promoted and implemented. swisstopo, SwissEnergy and the Swiss Federal Office of Energy SFOE have established a central geothermal energy database. Interactive maps provide information on deep geothermal projects, on boreholes deeper than 500 metres and on regional geothermal potential studies.

Knowledge about the earth's surface: infrastructures, soil and water





https://s.geo.admin.ch/8895089c5f

Rail network

The Federal Office of Transport FOT "rail network" basic dataset maps the network of rail-bound transport in Switzerland under federal supervision. It includes the standard and narrow-gauge lines of railways, trams and rack railways on which passengers are regularly and commercially transported or on which access to the network is possible. The dataset also serves as a basis for the FOT's regular monitoring of the condition and load of the installations.





https://s.geo.admin.ch/88951156ba

Agriculture: Soil suitability, irrigation needs and erosion risk Which soil is most suitable for arable farming, which for fodder and which for pasture? How deep is the soil at a given location and how much water and how many nutrients can it store? Information on these and many other questions relating to soil is provided by data records of the Federal Office for Agriculture FOAG. They also provide information on the need for irrigation of agricultural land and on the risk of erosion of arable land. The relevant map shows the potential erosion risk areas based on local factors such as gradient, precipitation and soil characteristics. Thanks to appropriate management, the risk of soil erosion in these endangered areas can be kept to a minimum.





https://s.geo.admin.ch/889513410f

Hydropower in Switzerland

The "Statistics on hydropower plants (WASTA)" of the Swiss Federal Office of Energy SFOE contain data on Swiss hydroelectric power plants with a capacity of at least 300 kW. Among others, they contain technical data such as output and production expectations. A further dataset of "Small-scale hydroelectric potential of Swiss watercourses" shows the theoretical hydroelectric potential of all natural watercourses in Switzerland, calculated as part of a research project.

Above the ground: wind potential and aviation





https://s.geo.admin.ch/8a0be39867

Swiss Wind Atlas and the use of wind energy

The Swiss wind atlas describes the average wind speed and distribution at five heights above the ground (50, 75, 100, 125 and 150 metres). Wind distribution describes the frequency of wind directions and the frequency of wind speeds.

Wind turbines use the kinetic energy of the incoming air to generate electrical energy. There are currently 38 wind turbines in Switzerland with their location on map.geo.admin.





https://s.geo.admin.ch/8895182b33

Obstacles to aviation

Buildings and installations, as well as vegetation, can hinder aviation and affect the safety of aircraft. When preparing their flights, pilots use the map viewer to obtain information on published obstacles. Updated weekly by the Federal Office of Civil Aviation FOCA, the obstacle situation makes an important contribution to aviation safety in Switzerland





https://s.geo.admin.ch/889519e395

Flight restrictions for drones

The Federal Office of Civil Aviation FOCA also provides the map on restrictions for model aircrafts and drones. Pilots of civil unmanned aircrafts can discover in which areas the operation of their aircraft is prohibited or only permitted with restrictions for reasons of safety and security, protection of privacy or the environment.

Geoinformation for politics, administration and the public

Cartographic representation and spatial evaluations allow correlations to be identified and developments to be estimated relatively simply and accurately. Geodata therefore plays an important role in the planning of infrastructure and the use of space. Wherever the Confederation coordinates land-use activities, geodata enables conflicts to be identified at an early stage and solutions to be developed.

When it comes to the environment and natural hazards, geodata is an important tool for communicating hazardous situations, identifying conflicts of use and initiating appropriate measures.

Models as a basis for planning





https://s.geo.admin.ch/8898e76daa

Landscape models as planning aids

The Swiss Federal Office of Topography swisstopo's precise landscape models help with analysis, planning, design and simulation. These include swissTLM^{3D}, the most precise and complete 3D-vector dataset in Switzerland, swissBUILDINGS^{3D} with all Swiss buildings and their roof shapes and swissNAMES^{3D}, the official collection of name data in Switzerland with over 400,000 geographical names.

Use and organisation of space





https://s.geo.admin.ch/8898e9f3a7

Sectoral plans: spatial planning action across authorities
For an adequate land-use planning, coordination is indispensable.
Sectoral plans allow the Confederation to coordinate its activities, which impact on spatial planning. They also enable to harmonize them in collaboration with the cantons. The Swiss Federal geoportal shows the sectoral plans relating to transport (road, rail, aviation, and navigation), transmission lines, geological repositories and military.





https://s.geo.admin.ch/8898ecbc36

Land use statistics: state and change of land use
Based on swisstopo aerial photographs, the area statistics of the
Swiss Federal Statistical Office FSO regularly collect information on
land use and land cover in Switzerland (see also chapter on Time
travelling, page 20). This geoinformation is an indispensable basis
for spatial planning policies, for the planning and monitoring of
the success of administrative measures as well as for numerous research projects.





https://s.geo.admin.ch/88d3017aad

Building zones

In Switzerland, construction is generally only permitted within building zones. The dataset of the Federal Office for Spatial Development ARE on "Building zones in Switzerland (harmonised)" is based on the geodata on building zones available from the cantonal offices for spatial planning on 1 January 2017. A distinction is made in partcular between residential zones (around 46 % of building zones in Switzerland), zones-with economic activity (14 %), mixed zones, central zones and zones for public use (approx.11% each).





https://s.geo.admin.ch/88950f60df

Accessibility: The quality of connection by public transport
The quality of connection by public transport of the Swiss Federal
Office for Spatial Development show how well a location is connected to public transport. They enable the identification of places which have major potential as development focal points thanks to good public transport links.

Environmental protection





https://s.geo.admin.ch/8898fb7e37

Biodiversity and landscapes: from amphibian spawning grounds to migratory bird reserves

Various maps of the Federal Office for the Environment identify regions which are under special protection to protect animal and plant species and landscapes. The aim is to conserve, promote and sustainably use biodiversity and landscapes, ecosystem and landscape services based on the relevant legal regulations.





https://s.geo.admin.ch/8898fe3109

Invasive alien plants

These thematic maps from the Federal Office for the Environment contain information on the potential spread of 56 invasive alien plants found in Switzerland as well as those from neighbouring countries including their potential spread in Switzerland. They are the result of a modelling study by the University of Lausanne to predict the spread of invasive plants included in the blacklist or on the observation list

Assessment of hazards and risks





https://s.geo.admin.ch/889901b5da

Hazard and warning maps, for example flood hazard levels 24 h

Hazard maps show where residential zones in Switzerland are threatened by floods, avalanches, landslides or fall processes. Concerning avalanches, 98 percent of the areas to be mapped in Switzerland are currently covered, 97 percent for floods and 92 percent for rockfalls and landslides. The Confederation supports the cantons in the preparation and updating of hazard maps.

The visualisation of real-time data via warning maps shows whether the discharge of rivers is normal for the time of year or is lower or higher than average. The map shows for each measuring station the maximum discharge over the last 24 hours compared to the danger levels for floods. In the event of potential flooding, the authorities and population are warned in time.





https://s.geo.admin.ch/889903fd66

Road accidents

The accident maps from the Federal Roads Office FEDRO present anonymised and localised road traffic accidents with personal injuries since 2011. The data available for a road traffic accident are the time data, the type of road, the type of accident and the accident severity category. A distinction can be made between accidents involving pedestrians, bicycles or motorcycles, accidents with speed as the main cause, accidents with alcohol as the main cause and accidents per inhabitant by canton. The authorities can use this data to take appropriate action.

Geoinformation for "time-travellers" and history buffs

In the Swiss Federal map viewer, you can look at historical (themed) maps and visualise datasets for several time periods. This gives you the opportunity to take a look into the past and "travel in time". Regarding maps and landscapes, you can look at historical maps (from 1844), aerial photographs (from 1929) or area-wide photographs (e.g. for the American flights in 1946) and get an idea of what a place, a residential zone or a landscape looked like in the past.

In addition, there are also historical maps on specific topics. For example, a dataset informs you about the extent of glaciers in Switzerland during the peak of the last Ice Age about 24,000 years ago.

A map by the Swiss Seismological Service provides an overview of the historical earthquakes in Switzerland and neighbouring countries. For each location, you can find out the time and estimated magnitude of the earthquake².

Different time intervals can be queried for different datasets. For example, you can access the land use statistics of the Federal Statistical Office regarding land cover and land use for the periods 2004/09, 1992/97 and 1979/85 and analyse changes in settlement and transport areas, agricultural use, vegetation, wetlands and glaciers. The development of traffic accidents over the last few years³ or the condition of the water quality⁴ can also be followed over several time periods.

¹ Switzerland during the last glacial maximum (LGM): https://s.geo.admin.ch/87ef17f7c5

² Historical earthquakes: https://s.geo.admin.ch/8885a6ea3d

Accidents involving injuries: https://s.geo.admin.ch/7a18dd0276

⁴ Assessment of the chemical status of water: https://s.geo.admin.ch/8885acbfaf

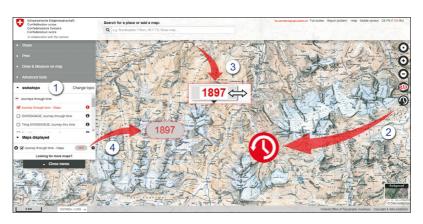


Figure 5: Timer controller instructions http://help.geo.admin.ch/?id=42

Setting and interactive comparison of time intervals or datasets

If the map level has several time intervals, you can activate them via the clock symbol on the right side of the screen (2), set them with the controller (3) or play them as a "film". You can also enter or adjust the desired year in the menu on the left under "Maps displayed" (4).



Figure 6: Comparison Guide: http://help.geo.admin.ch/?id=65

You can also compare two different data levels and two different time periods with each other in the map viewer.

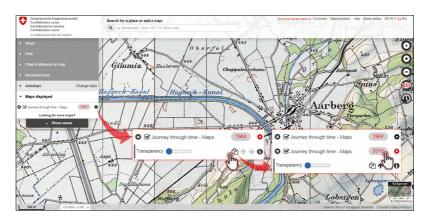


Figure 7: Time comparison guide http://help.geo.admin.ch/?id=43

If you want to compare different time periods from the same dataset, you can "copy" this dataset. To do this, click on the "Copy" icon in the menu next to the displayed map as described in Figure 7. The duplicated data record is now displayed (twice) in the selection window. Now you can select the desired year for both datasets.

Geoinformation for teachers and students

The Swiss Federal map viewer provides information on a wide range of topics in a simple way. It is therefore highly suitable for school lessons. Students learn how to work with Swiss maps and geoinformation and acquire interdisciplinary knowledge on geographical, historical and social topics.



At the same time, the use of the map viewer also promotes methodological competence and the use of electronic media – for example, by practising applications such as "drawing and calculating a school or travel route on the map", "creating and integrating your own dataset" or "comparing different time periods".



In 2016, the project and the platform "sCHoolmaps.ch" were launched for the three major language regions of Switzerland. Within the framework of sCHoolmaps.ch, teachers, geo-specialists, didacticians and media educators are jointly developing teaching units for primary and lower secondary schools based on the Swiss Federal map viewer. They are making them available at www.schoolmaps.ch (in the corresponding language version).

New perspectives thanks to new technologies

The latest web and hardware technologies not only enable the presentation of geodata on two-dimensional maps. They also open up new possibilities – for example, spatial or 3D visualisation, immersion in a constructed "virtual reality" scene or the superimposition of virtual elements on reality to create an "augmented reality" view. The "classic cartographic map approach" is also being further developed: thanks to new, vector-based approaches on the web, users can adapt the appearance and easily create or combine their own map.



Figure 8: A click on the 3D button of the map viewer allows you to navigate in a 3D environment

3D representation

Our living habitat is represented on traditional maps in two dimensions. In reality, the landscape has another dimension: the spatial dimension. This can be described in the form of a digital elevation model or a topographic landscape model. The Federal Geoportal offers you the possibility of displaying three-dimensional data based

on the Topographic Landscape Model TLM. This digital model of Switzerland consists of approx. 70 million 3D objects.

To activate the three-dimensional display, a button has been added to the Swiss Federal map viewer map.geo.admin.ch (see Figure 8). In this mode you can move freely in the 3D environment. A "flight mode" allows you to explore digital Switzerland by air. Various 2D datasets can be laid over the 3D terrain. Additional functions such as the integration of your own data are also available in the 3D viewer.





Figure 9: Virtual reality application as a model with swisstopo geodata (left) and photo (right)

Future technologies: Augmented and Virtual RealityAugmented (AR) and Virtual Reality (VR) technologies are types of 3D visualisations. They are being used more and more widely and, after the initial hype, are establishing themselves increasingly in everyday life.

Diving into a built-up 3D environment with VR glasses gives a real impression of it. This technology is suitable for depicting complex conditions or experiencing or training future scenarios. In concrete terms, for example, a traffic simulation can be viewed from any angle, the view from the balcony of the planned home can be checked or rescue operations on the alpine terrain can be trained for.

Augmented Reality technology is not so developed yet but its potential is rated much higher than that of Virtual Reality. AR uses reality as background and overlays it with virtual elements. This makes the invisible visible to the user, for example on a smartphone with

a camera, AR glasses or the windshield of a car. What is needed is the exact positioning and orientation of the mobile device as well as spatial information for the superimposition. In concrete terms, the technology can be used for road traffic navigation, as a visualisation of a planned new building or for the display of conduit information underground. With 3D geodata, various federal agencies offer basic data and location-independent services.

Web maps from vector data

So-called "vector tiles" offer new possibilities for the online visualisation of geodata. Thanks to this technology, maps are less data-intensive and load faster. As one of many possibilities, this technology allows you to create individual maps based on official data. With just a few clicks you can, for example, colour the buildings differently, display streets wider or enlarge place names. The customised map can be shared and reused.

Web maps from vector data based on a wide variety of sources are standard worldwide – and they can be combined with the official maps of Switzerland. The map viewer can thus also be used to display data far beyond national borders. This extension will be introduced in map.geo.admin.ch in the next few years.

Vector Tiles are packages of geodata which are packed into predefined square-shaped "tiles" and transmitted over the web. They can be used to provide stylised web maps.

The theme collections on map.geo.admin.ch



Broadband map https://map.geo.admin.ch/?topic=nga



https://map.energie.admin.ch



Radio transmitter https://map.funksender.admin.ch



Geodesy
https://map.geo.admin.ch/?topic=geodesy



Geology https://map.geo.admin.ch/?topic=geol



Geoth. energy https://map.geo.admin.ch/?topic=geothermie



Land and property https://map.geo.admin.ch/?topic=cadastre



https://map.geo.admin.ch/?topic=ivs



KGS Inventory 2009 https://map.geo.admin.ch/?topic=kgs



Rural development https://map.geo.admin.ch/?topic=emapis



Aerial images https://map.geo.admin.ch/?topic=luftbilde



Aviation https://map.aviation.admin.ch



Emergency call https://map.geo.admin.ch/?topic=notruf



Sectoral pl./concepts https://map.geo.admin.ch/?topic=sachplan



https://map.geo.admin.ch/?topic=schneesport



Road accidents https://map.geo.admin.ch/?topic=vu



Defense https://map.geo.admin.ch/?topic=verteidigung



Water
https://map.geo.admin.ch/?topic=gewiss



Des. Wildlife areas https://map.geo.admin.ch/?topic=wildruhezonen

geo.admin.ch – the geoportal of the Swiss Confederation

The coordination of geoinformation within the Federal Administration falls under the strategic management and control of the Coordinating Agency for Federal Geographic Information (GCG). This body also manages and develops the structure and development of the geo.admin.ch portal.

The following offices are involved in the federal map viewer through their representation in the GCG and/or through the publication of geodata and services by their office:

Federal Office for Spatial Development ARE

Federal Roads Office FEDRO

Federal Office for Civil Protection FOCP

Federal Office of Public Health FOPH

Federal Office for the Environment FOEN

Federal Office of Culture SEOC

Federal Office of Communications OFCOM

Swiss Federal Archives SFA

Federal Office of Transport FOT

Federal Office of Civil Aviation FOCA

Swiss Federal Office of Energy SFOE

Federal Statistical Office FSO

Federal Office for Agriculture FOAG

Federal Department of Foreign Affairs FDFA

Federal Nuclear Safety Inspectorate ENSI

Federal Office of Meteorology and Climatology, MeteoSwiss

Federal Office of Topography swisstopo

Federal Department of Defence, Civil Protection and Sport DDPS

In cooperation with the cantons

geo.admin.ch
c/o Federal Office of Topography swisstopo
COGIS (Coordination, Geoinformation and Services)
Seftigenstrasse 264
CH-3084 Wabern

Phone: +41 58 469 03 15 | e-mail: info@geo.admin.ch | twitter: @swiss_geoportal

The brochure can be found online at www.geo.admin.ch/leaflet

