

## iMap finds its feet

Recently we implemented GPS localization, as an additional feature in **iMap**.

You can use **iMap** now on mobile devices like tablets or smart-phones, if you have internet connection available.

You can load in the background one of our map products. Here it is the latest SAR Water Index (SWI) from an area in northern Italy.

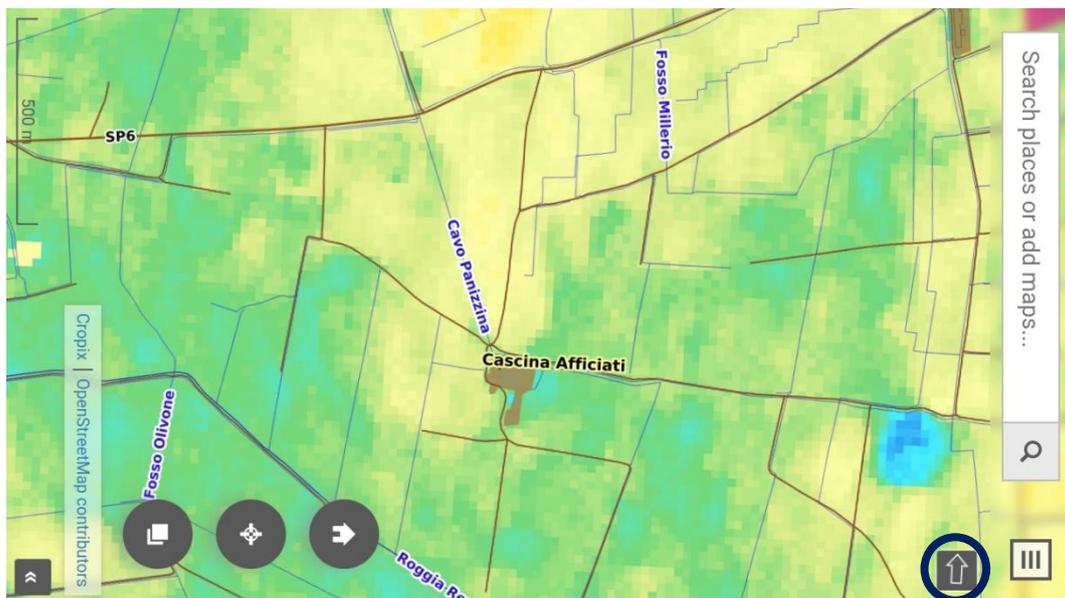
In order to have a good orientation open-street-map is implemented as labelled vector overlay.

There is a **button** on the right side, which allows you to switch-on GPS functionality within the map application.

With two fingers you can zoom in and out.

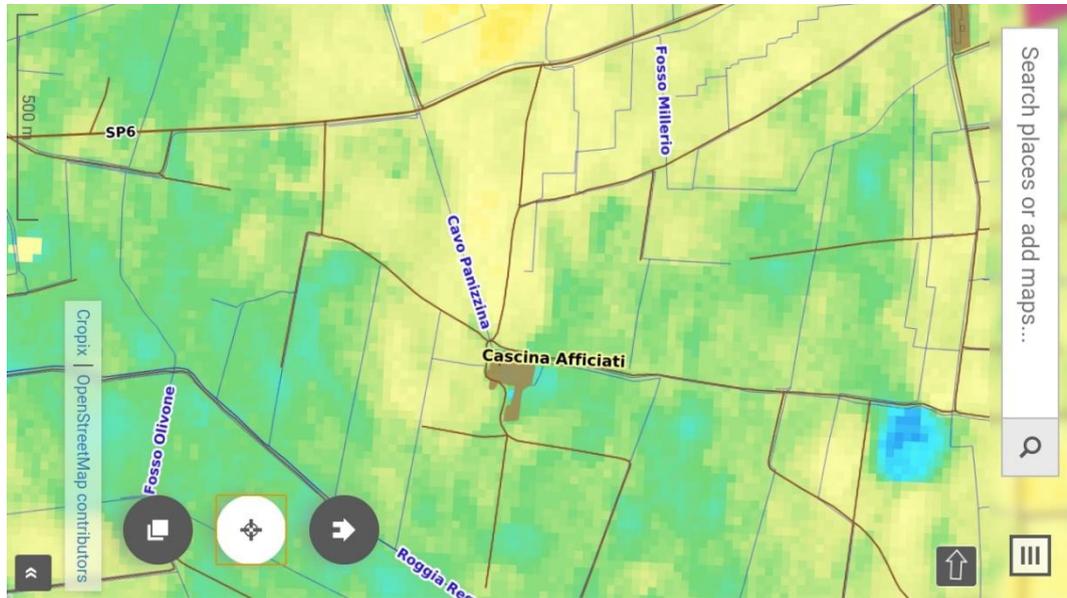
As well with two fingers you can rotate the map content in any direction.

When you rotate the screen a **north arrow** appears to show you the northern direction.



When GPS is active you have two modes.

Either the color of the button appears in white color which means, that the map canvas is static. If you want to look at another place, which is out of the actual map canvas, you can move to this place and the map view will stay there and not always move back to your position.



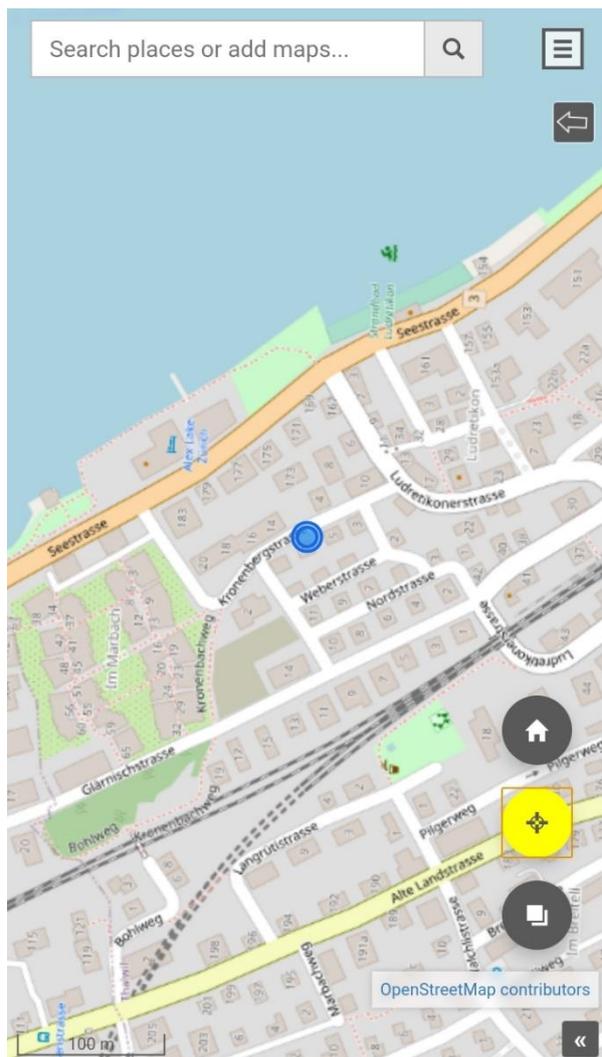
If the button appears in **yellow color**, the map canvas will always be centered over your location and moves dynamically with you.

In this mode you could walk or drive through an area and inspect places, where you see a deviation in the map values.

It is an ideal tool for field inspections, or loss assessment and you will have it always ready to use. For farmers it can be a daily information panel, when they are out in the fields.

You can upload as well additional layers like shape-files or kml from your plots and you can mark points on the screen, which will be saved temporary.

We will try to find a solution that such files can be exported again in kml or shp format.



Here you find the direct link to [imap](#) in an Internet Browser. In the main menu Maps&tools /share link you can generate a QR-Code. If you scan it with your smart-phone you can directly execute it on your device.

When you open the **button** in the upper right corner you find the themes menu.

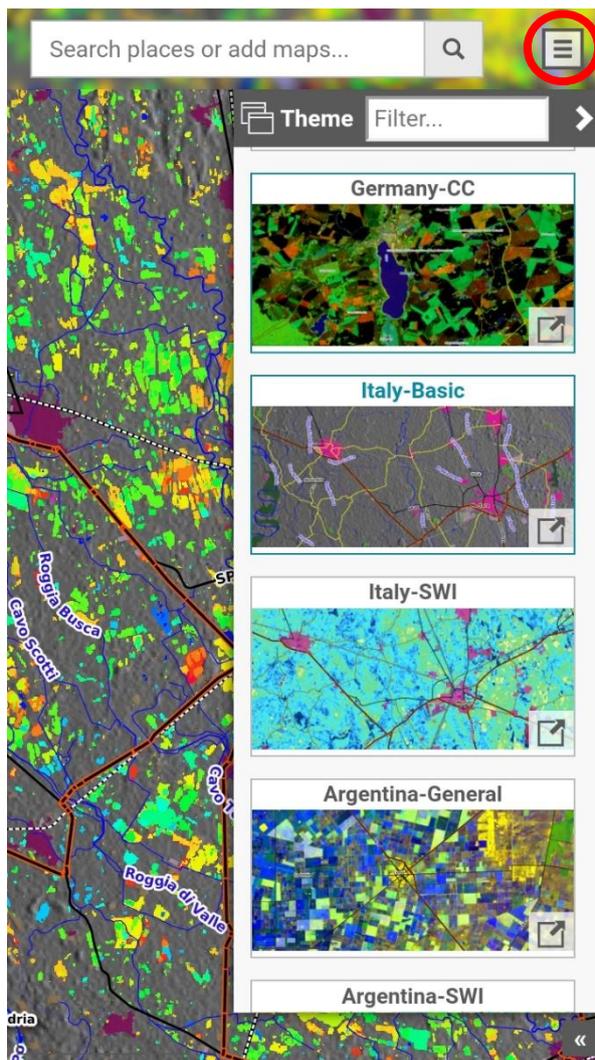
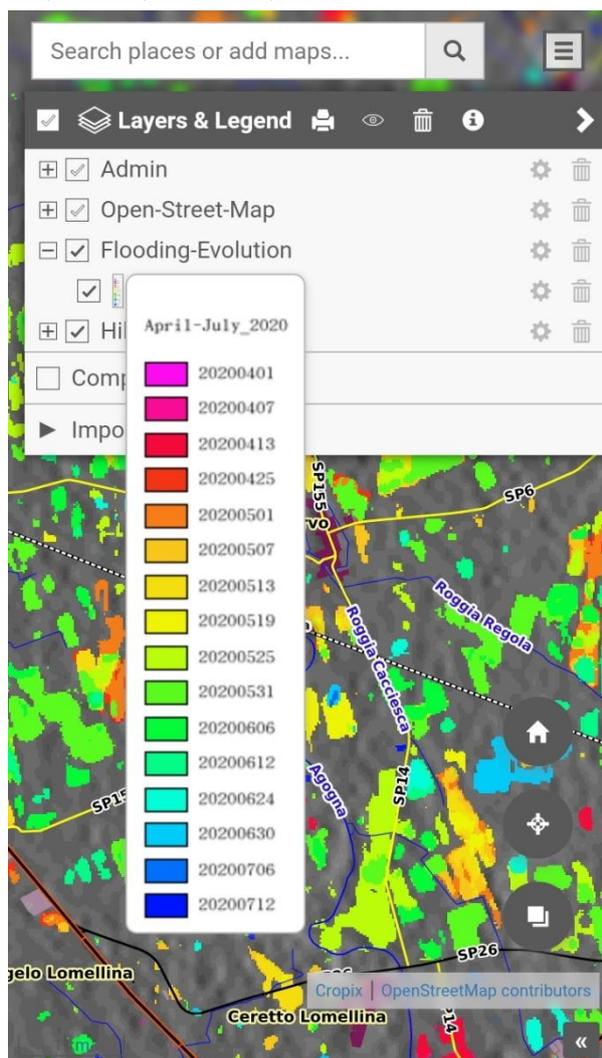
There are various thematic maps from different regions available.

Beside a basic map, there is a pseudo-true-color image available, the SAR Water Index and the enhanced SAR Vegetation Index.

For public use from each region one of those map products beside the basic map is visible.

If you want to see the other two map products you have to register for **free** at

<https://cropix.ch/imap-en/>



For the basic map we have different kind of additional information like a hillshade, or a map product, which is derived from a temporal statistical analysis.

In northern Italy we have derived the flooding dates of the rice paddies.

In this example it is the temporal evolution of the period from April – July in 2020.

If you open the Layers & Legends menu you can switch on and off different layers.

When you tip on the legend beside the layer, the legend window will open and indicate the color coding and its meaning.

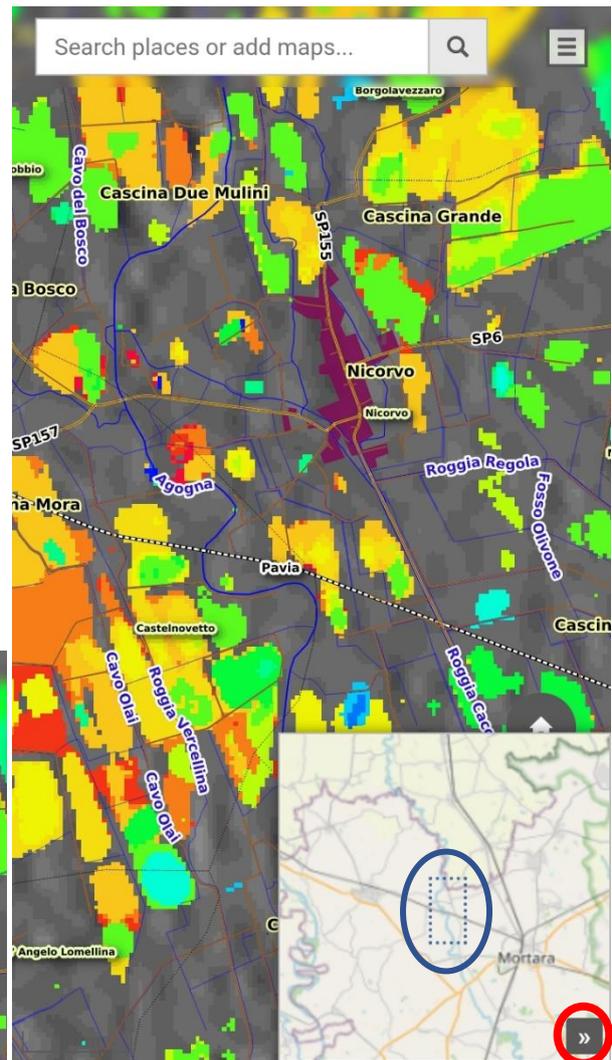
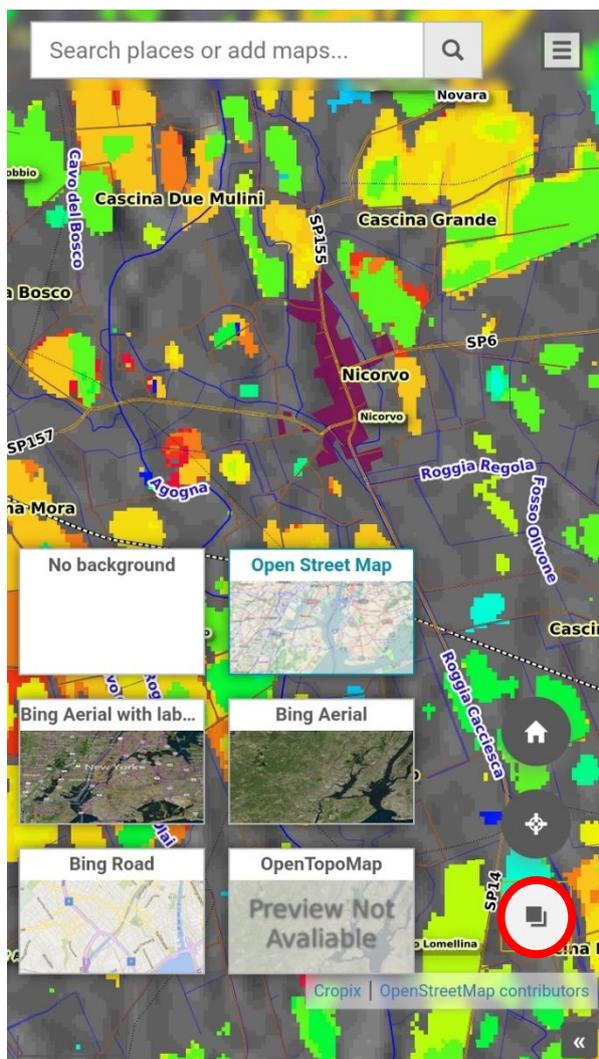
Here you see the start date of the flooding in a rainbow color scheme.

On the top of the screen is a search bar, where you can insert the place of a location.

The search is based on the data from Open-street-map.

If your search is successful you get one or more hits and can select one of them. The screen will shift directly over this place by tipping on the result.

Over all maps Open street map vector overlays appears helps you to find certain landmarks in the area and gives you orientation. The features appear depending on their relevance and the zoom level



The **double arrow** in the lower right corner opens an overview map, which shows the extent of the actual screen on OSM background map.

You can shift as well the **rectangle** manually in the overview map to reach another location, which you might want to inspect.

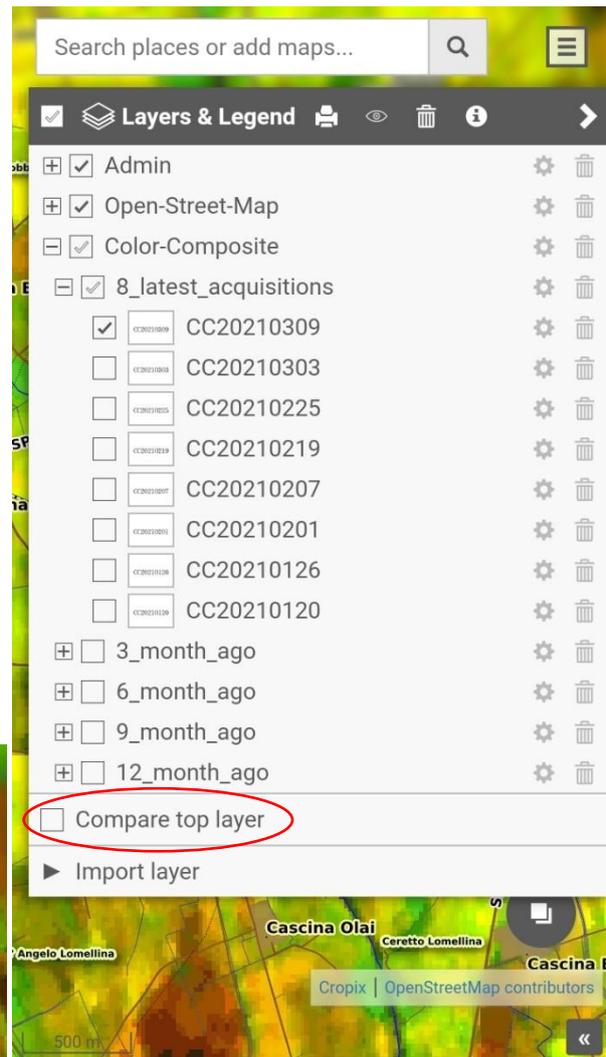
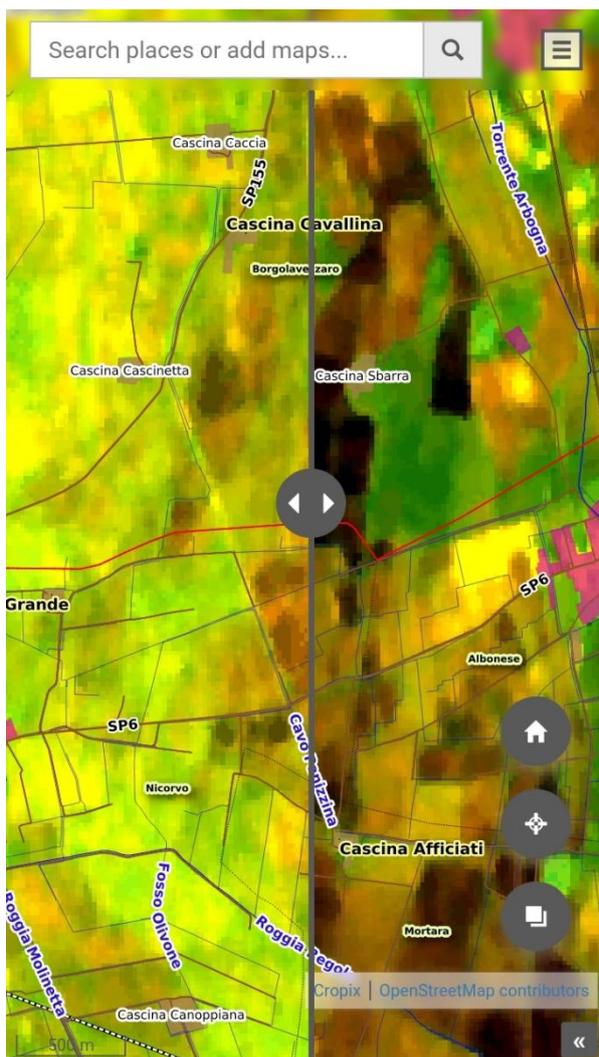
Different background maps are available like an aerial from Bing-Maps. Be aware that dark layers might be not visible very well, if you are outside under daylight conditions.

You can change between other thematic maps.

For our map products **CC** (Color Composite), which is a pseudo-true-color map, **SWI** (SAR Water Index) and **ESVI** (SAR Vegetation Index) we have the latest acquisitions and some previous layers always available.

SAR is independent from cloud coverage and hence of constant quality and availability. This enable us to rely on our time-series.

The data is very useful for temporal analysis and describes the spatial and temporal evolution of cropland.



If you use the **compare top layer** tool the screen is divided in two zones and you can directly compare the actual and a previous condition on your screen by shifting the barrow from left to right.

Make sure, that the two raster layers are active which you want to compare.

We hope you find our tool useful and in case your area of interest is not yet listed in the themes don't hesitate to contact us.

Email: [info@cropix.ch](mailto:info@cropix.ch)

Many thanks to Francesco Collivingnarelli from sarmap who spent a lot of effort to bring the **iMap** project to life.