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Version 4.12



OkMap

Mobile



www.okmap.org

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Introduction

References

OkMap web site	http://www.okmap.org
OkMap Forum	http://www.okmap.org/forum
OkMap Mobile for Android	https://play.google.com/store/apps/details?id=com.OkMap.Mobile
OkMap Mobile for iOS	https://apps.apple.com/us/app/okmap-mobile/id949554920
This manual	http://www.okmap.org/download/okmapMobileXam_en.pdf
OkMap Desktop	http://www.okmap.org/en_okmapdesktop.asp

General consideration

Purpose of the software

The software should never be used as a single source of information for navigation.

You should always use your experience and make use of charts, compasses and any other tools before making any kind of orientation or navigation decision.

Warranty

The software is as it is and we will not be responsible in any way for its proper or improper use and for any direct or indirect damage caused by the use of the same software.

The use of the software is at the sole risk of the user.



Reports

We are willing to do our best to remove errors or inaccuracies in the software, so your every report will be precious to us.

Reports can be sent through the OkMap [forum](#) or by sending an email to this [address](#).

Before submitting negative reviews, please let us know your considerations so that we will be able to better meet your needs and, consequently, improve the app.

Manual conventions

The presence, at the beginning of a paragraph, of the icons  and  indicates a specificity of the Android and iOS systems.

Sample images were produced with an Android mobile phone. In the iOS version the images are completely similar except for differences which will be highlighted on a case-by-case basis.

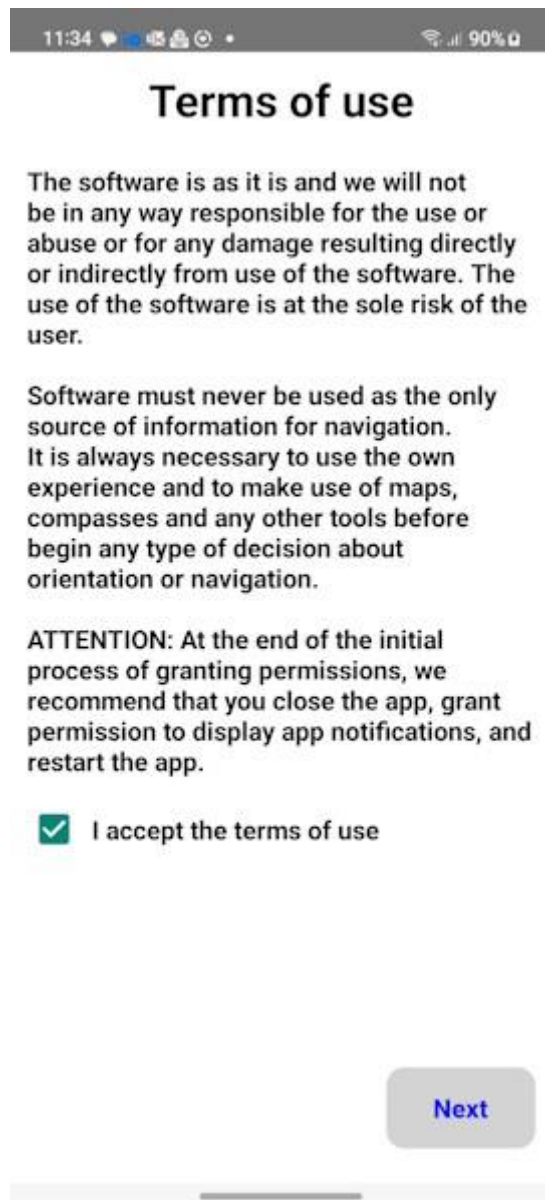
First start

Thank you for purchasing OkMap Mobile.

The OkMap Mobile app was designed to be installed on both mobile phones and tablets with the Android or iOS operating system.

The first time you use OkMap Mobile a sequence of pages is displayed to accept the terms of use and provide some permissions.

Terms of use



To use the app, you must accept the terms of use shown in the figure on the side.

Read the information carefully and check the **I accept the terms of use** checkbox.

It is not possible to proceed further, if the terms of use are not accepted.

Press the **Next** button.



Permissions



Permissions

This app collects location data to enable to log your tracks during outdoor activities and for other important navigation functions even when the app is closed or not in use.

To allow this, you need to set the Location permission to "While use the app" and then, when prompted, to "Allow all the time".

Please tap on the "Set permission" button and then on the "Next" button.

[Set permissions](#)

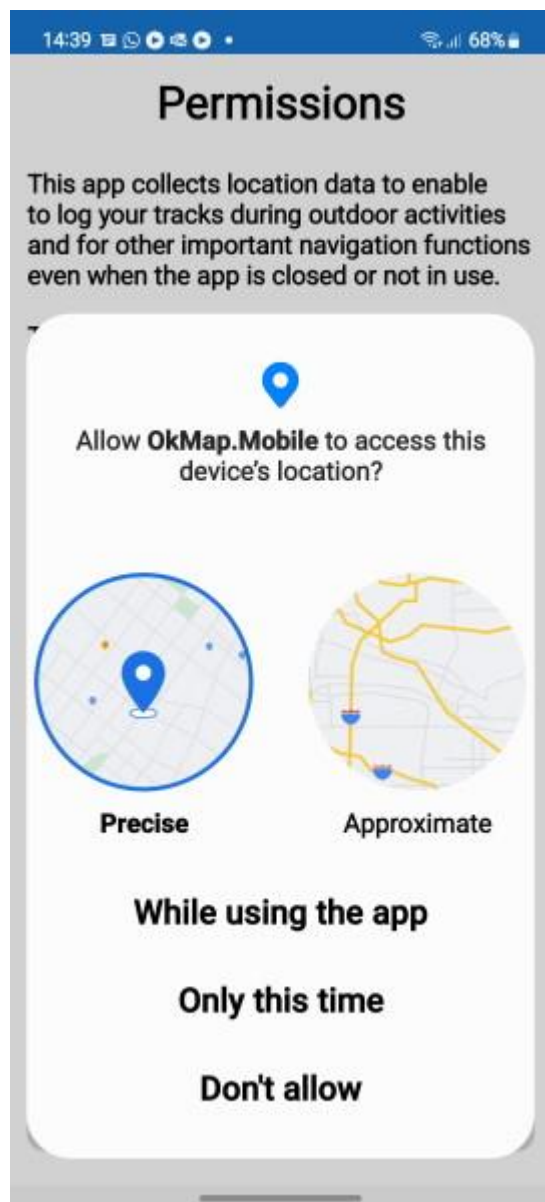
[Previous](#)

[Next](#)

The first permission required concerns the use of the user's location (GPS).

Carefully read the note on the page and press the **Set permissions** button.

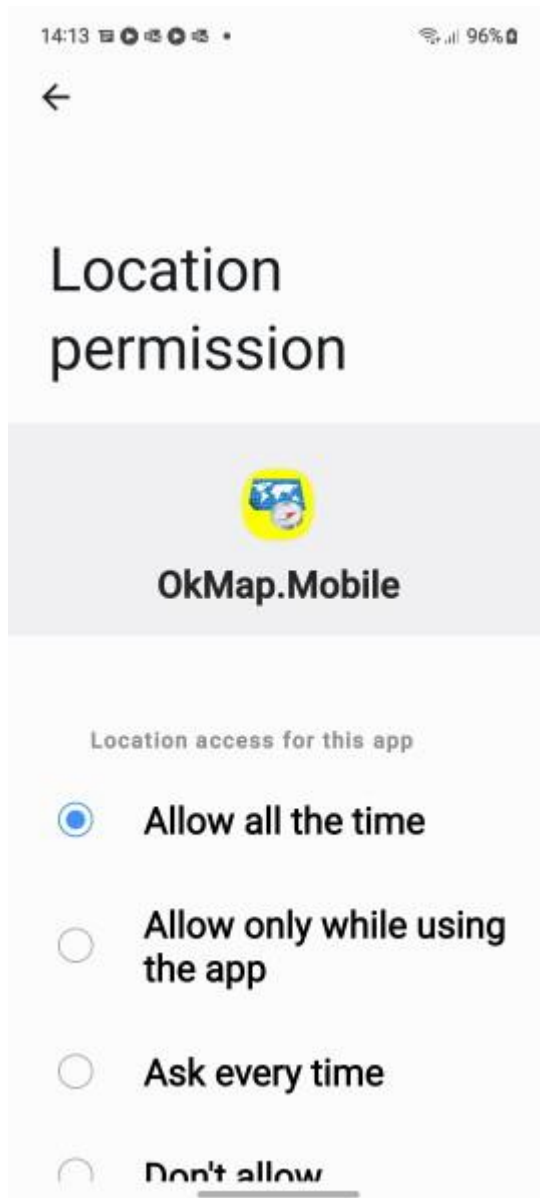
This permission is required to make full use of the app's features, and in particular track recording and navigation functions even when the app is closed or not in use.



Select the item **While using the app** to allow the app to access the location of the device.

This permission can also be granted later in the system settings.

The path to follow in the Settings is indicated on the next page.



Subsequently, the opposite page is displayed.

This authorization once again concerns the user's location (GPS) and in particular the use of this even when the app is not in use.

Select **Allow all the time** to ensure track recording and navigation functions even when the screen is off or the app is closed (background).

In addition, it is necessary to turn on (if not already) the **Use precise location** switch in order to obtain the most accurate positions possible from the GPS.

Once these choices have been made, to return to the app you need to press the button at the top left depicting a small arrow.

This permission can also be granted later in the system settings using the following path (in Android 13): Settings -> Privacy -> Permissions manager -> Location -> OkMap.Mobile -> **Allow all the time**.

Alternatively: Settings -> Apps -> OkMap.Mobile -> Permissions -> Location -> **Allow all the time**.

Press the **Next** button.



Permissions

This app can take photos and associate them with waypoints of a GPX file.

To allow this, you need to set the Camera permission to "While use the app".

Please tap on the "Set permission" button and then on the "Next" button.

[Set permissions](#)

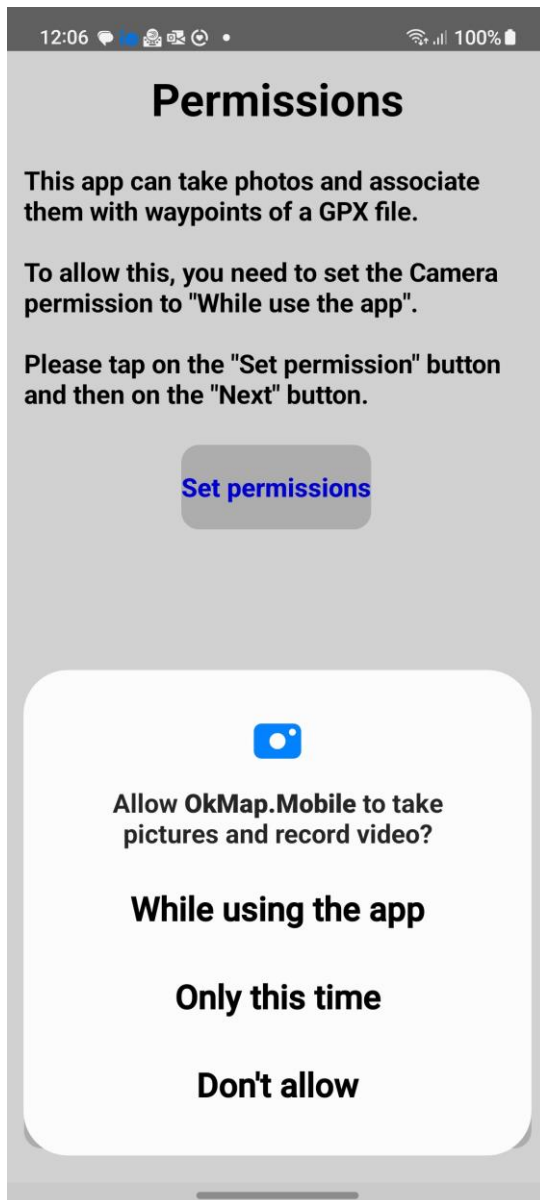
[Previous](#)

[Next](#)

The third authorization concerns access to camera.

The app can take photos and associate them with waypoints in a GPX file. Photos will be stored in the Pictures public folder.

Press the **Set Permissions** button.

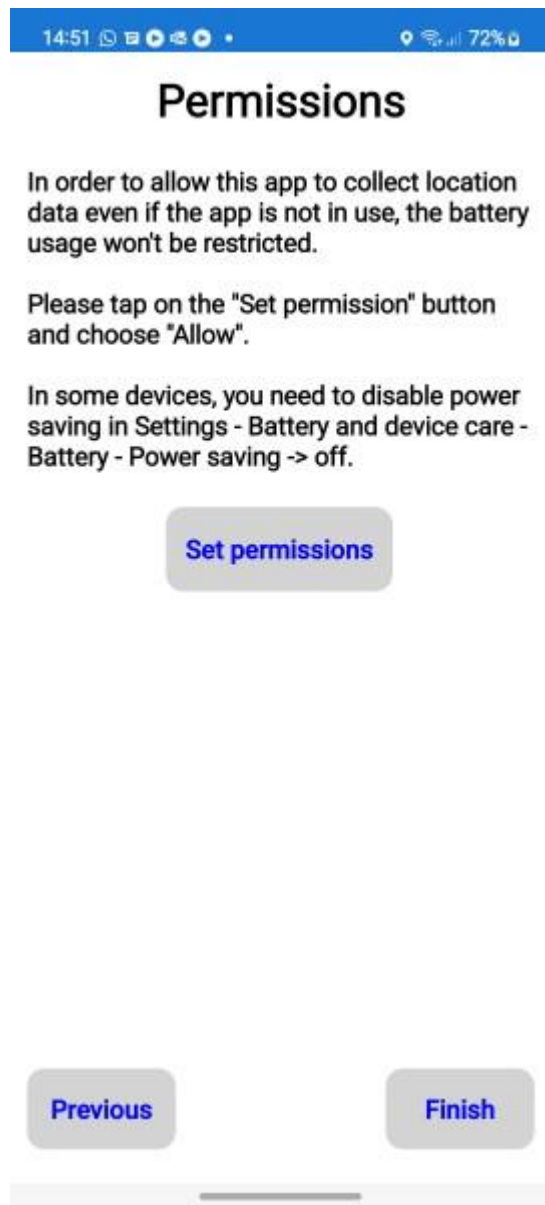


The consent is required to access camera. Press the **Set permissions** button and choose **While using the app**.

This permission can also be granted later in the system settings.

The path to use in Android 13 is as follows: Settings -> Apps -> OkMap.Mobile -> Permissions -> Camera -> **Allow only while using the app**.

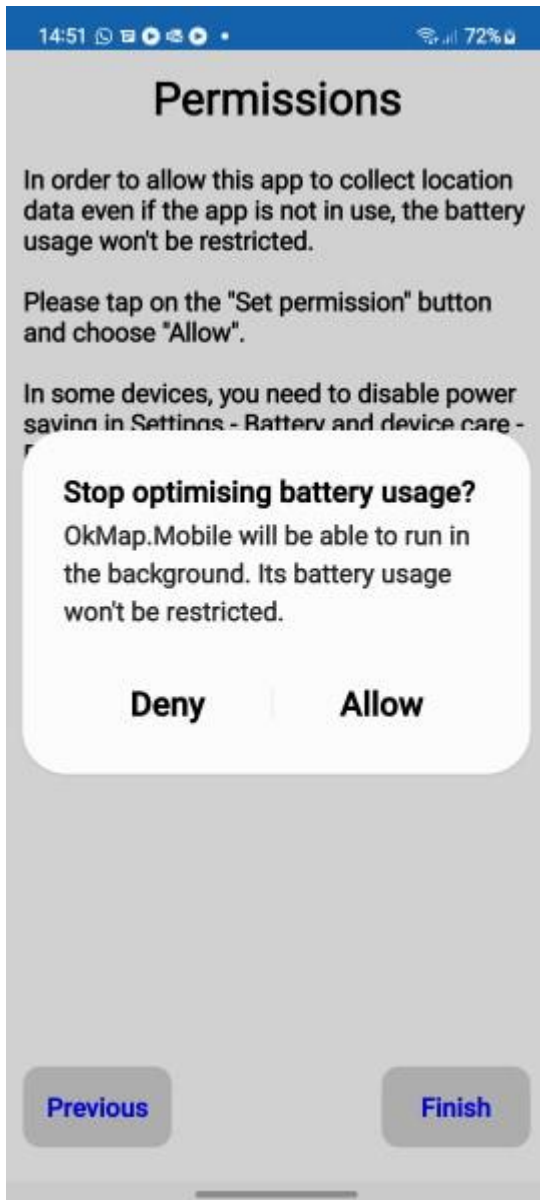
Press the **Next** button.



An additional authorization grants the app to be able to run in the background, i.e. with the screen off or the application closed.

Consequently, the use of the battery will not be limited.

Press the **Set Permissions** button.



You are asked to stop optimizing battery use. Press the Allow button.

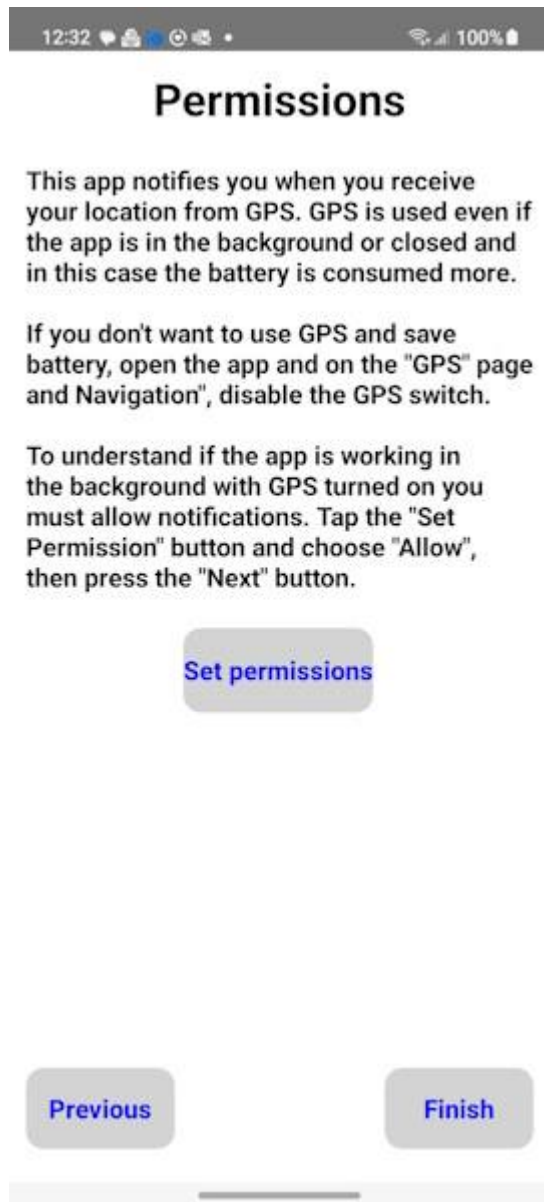
This permission can also be granted later in the system settings.

The path to use in Android 13 is as follows:

Settings -> Apps -> OkMap.Mobile -> Battery -> **Unrestricted**.

Finally, a warning reminds you that in some devices it is necessary to disable energy saving to allow the recording of the track with the screen off or with the app closed.

The path to use in Android 13 is as follows: Settings -> Device and battery assistance -> Battery -> Power saving (**off**).



If your Android version is 13 or higher, an additional permission allows the app to send notifications.

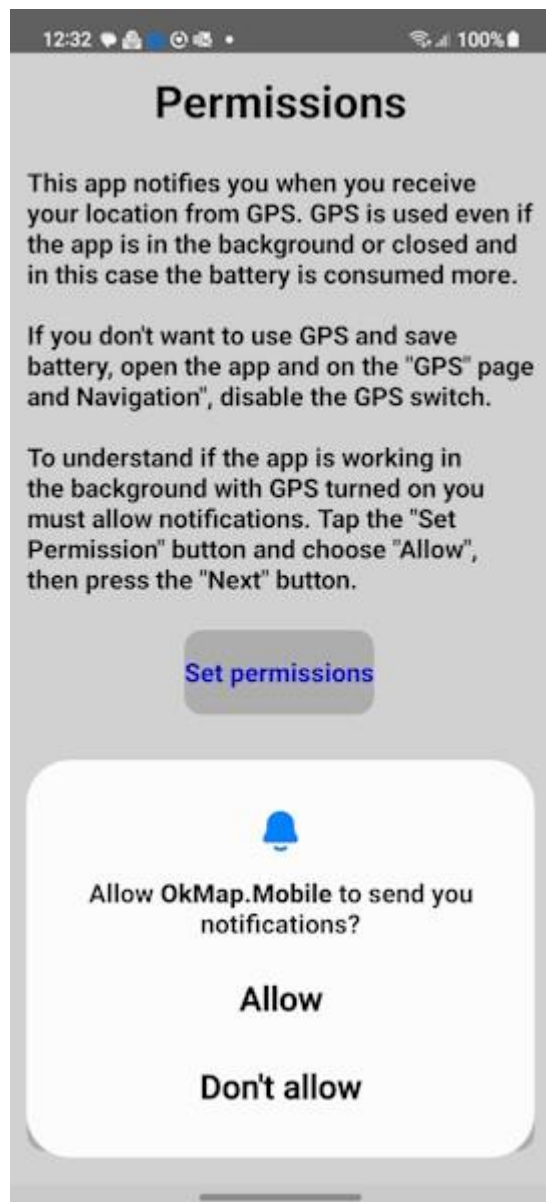
It is important to receive notifications to understand when the app is using GPS.

It should be remembered that the app is able to receive data from the GPS even when it is inactive (background) or closed and in these circumstances battery use is greater.

Press the **Set Permissions** button.

This permission can also be granted later in the system settings.

The path to use in Android 13 is as follows: Settings -> Applications -> OkMap.Mobile -> Notifications -> **Allow notifications**.



You are asked to allow the app to send notifications. Press the **Allow** button.



14:13



Permissions

This app collects location data to enable to log your tracks during outdoor activities and for other important navigation functions even when the app is in background.

To allow this, you need to set the Location permission to "Allow while use the app".

Please tap on the "Set permission" button and then on the "Next" button.

Set permissions

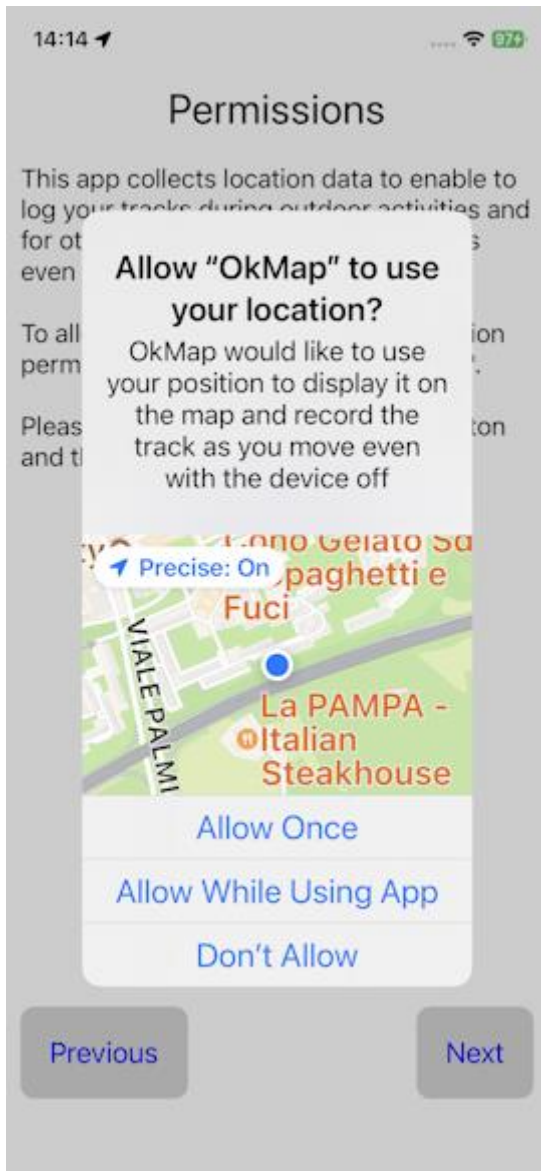
Previous

Next

The first permission required concerns the use of the user's location (GPS).

Carefully read the note on the page and press the **Set permissions** button.

This permission is required to make full use of the app's features, and in particular track recording and navigation functions even when the app is not in use.



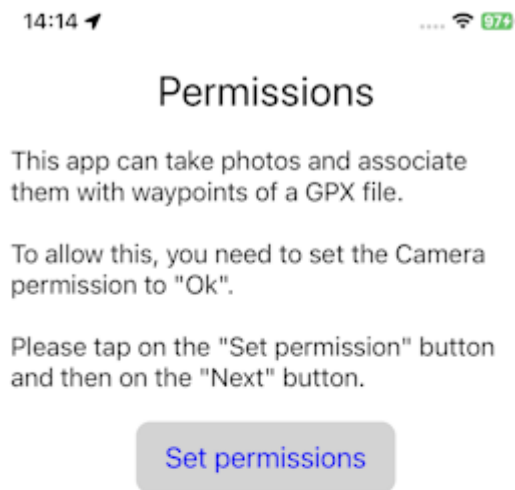
Select the item **While using the app** to allow the app to access the location of the device.

This permission can also be granted later in the system settings.

Location permission can also be granted later in the system settings.

In iOS 16 the path is the following: Settings - Privacy & Security - Location Services - OkMap - **Always**.

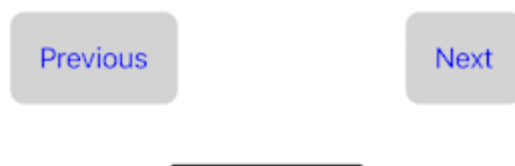
Press the **Next** button.

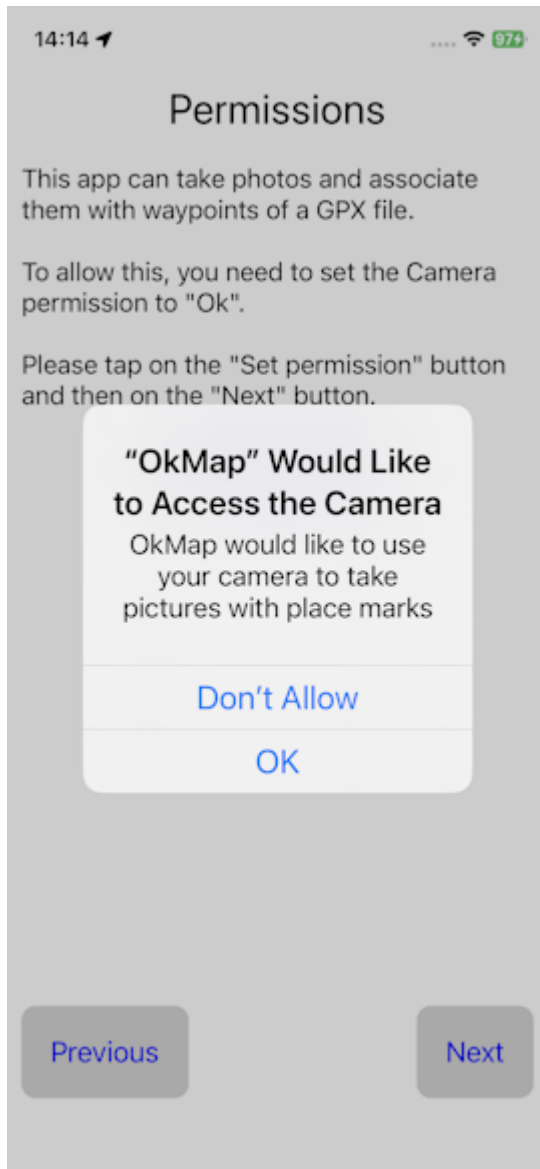


The second authorization concerns access to camera.

The app can take photos and associate them with waypoints in a GPX file. Photos will be stored in the pictures public folder if request in [Preferences - Photos](#). In any case they are saved in the app sandbox in the subfolder Pictures.

Press the **Set Permissions** button.





Consent is required to access the camera. Press the **OK** button.

This permission can also be granted later in the system settings.

In iOS 16 the path to use is the following: Settings -> Privacy and security -> Camera -> OkMap.Mobile -> **ON**.

Press the **Next** button.

14:14



Permissions

To allow this app to collect location data even when not in use, you may need to disable power saving.

Read the notice and, if necessary, disable Energy Saver.

Once the authorization process has been completed, press the **Finish** button.

The [Map](#) is displayed.


Attention! After the first start the map is positioned at the coordinates 0,0.
Just restart the app.

This behavior will no longer occur the following times as the user's last position is stored.

[Previous](#)[Finish](#)

Folders and files



At the first start OkMap Mobile creates some folders in the app *sandbox*. Each app has its own storage space (*sandbox*) whose files are not visible to other apps.

 In the case of OkMap Mobile, the sandbox address is as follows:
Android/data/com.OkMap.Mobile/files/.

It in turn contains the following folders:

- **ActiveLog:** this folder stores the GPX file named ACTIVELOG.gpx containing the track being recorded and all the GPX objects (waypoints, tracks and routes) that have been created with the app. This file is temporary and the user has the ability to store it in the GPX folder with a proper name (see [GPX Files](#) page).
- **DEM:** all DEM files (elevation data) downloaded from the app are stored here (see [Menu - Viewfinder - Download DEM data](#)). These files can also be downloaded manually from the [OkMap](#) site and copied from the PC to the device, in the DEM folder.
- **GPX:** contains all the GPX files that the app or the user has loaded or stored (see [GPX Files](#) page).
- **Logs:** contains log files that the app creates in the event of an error (bug) and that must be sent together with the report in order to make the necessary changes to the software.
- **CustomMaps:** contains all MbTiles files that the app or user has loaded (see [Custom maps files](#)).
- **Pins:** contains placeholder images to be used in graphical representation of waypoints. To ensure compatibility between the [OkMap Desktop](#) software and OkMap Mobile, use the same images of the OkMap Desktop software that can be downloaded [here](#). Once the images have been downloaded, copy them to the device's Pins folder.
- **Export:** contains the files produced by export functions (tracks or routes) in csv (comma separated value) format. These file types can be opened with Microsoft® Excel.



If you were to inadvertently delete some of these folders, they will be automatically recreated the next time the OkMap Mobile app is restarted. Of course, the original content will be lost.

Both user maps (*custom maps*) and GPX files can actually reside in any folder accessible from the app (internal memory, removable memory, or  Google Drive,  or iCloud) and can be loaded directly into the app.

However, in the case of loading GPX files (since these are editable), they will first be copied to the GPX folder described above, thus responding to the concept that *only files in the sandbox can be modified*.

The same rule applies to custom maps.

Therefore, if you load a GPX file (or a custom map) from an external archive, you will still find it (with any changes made) in the GPX (CustomMaps) folder.

The **GPX**, **DEM** and **Pins** folders can be populated with files by connecting the device with a USB cable to a PC and using  file transfer or  iTunes.

If you use the Save Waypoint with Photo function, the following folder will be created:

- **Pictures:** The image files in .jpg format containing the photos taken are stored in this folder. A copy of the files can be stored in the **Pictures** public folder if the **Save to Album** option on the [Preferences - Photos](#) page is activated.

Advice for optimal use

Here are some tips for optimal use of the app.

App performance

We must always keep in mind that the Android device on which we have installed OkMap Mobile, although of the latest generation, will never be as powerful as a desktop PC of the same age.

Consider that the heaviest operations are those of drawing data on the map, therefore the advice to keep in mind are:

- Do not upload user maps that are not strictly necessary for the excursion you are about to undertake.
- Do not create MbTiles maps with a large number of tiles and which cover areas not relevant to the excursion.
- Do not load GPX data with many waypoints or tracks or in any case with data that is not useful for the excursion. Better to create multiple GPX files with little data than a few GPX files with a lot of data (some of which are useless for the excursion).
- Before uploading your GPX files to the device, clean the tracks of GPS errors and the redundant points that inevitably arise during breaks.
- Simplify your tracks that have hundreds of points with fewer significant points, using for example the Windows software [OkMap Desktop](#).

Data quality

To obtain a good quality track recording, keep in mind the following considerations:

- When you activate the app and you are about to record a new track, immediately turn on the GPS and wait a few minutes before activating the recording, especially if you have moved several kilometers from the last detected position or it has been a long time. In the meantime, you can always check your bike or put your boots on.
- Do not keep the GPS inside your backpack or pocket, it is preferable to put it, for example, in a container tied to the shoulder strap of the backpack.
- Consider that in places with little sky in sight, the accuracy of the GPS can decrease significantly (for example in canyons or in narrow streets in the midst of tall buildings).
- When you return home, use a PC app capable of post-processing and cleaning the recorded data. This operation will guarantee much more precise statistics on the recorded track. You can always use the [OkMap Desktop](#) Windows software for this.

General features of the app

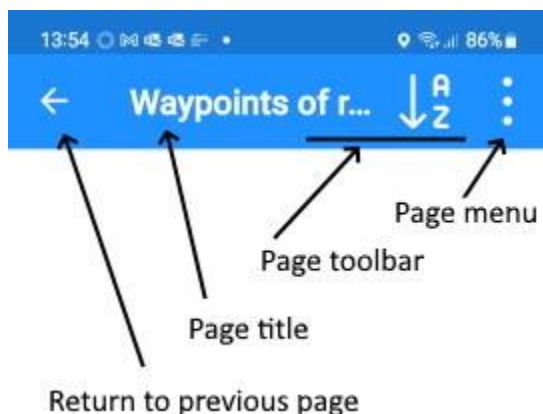
Screen organization



All the main pages of the app display a bar at the top as shown in the figure on the side.

The bar is organized like this:

- On the left is the **main menu** of the app. Pressing this button opens the list of main functions. Each chapter of this manual describes each of these items.
- Below is a short **title** of the current page which in some cases can be displayed abbreviated.
- The **toolbar** follows. The buttons displayed depend on the current page. It may not be present on some pages. The meaning of the buttons is explained in each specific paragraph of the page.
- Finally, the **page menu** which, if pressed, opens a secondary list of the functions of the current page. The meaning of the buttons is explained in each specific paragraph of the page.



In some cases, the main pages may display secondary pages in cascade.

The secondary pages are organized as shown in the figure on the side.

The only difference with the main pages is that instead of the main menu an arrow is displayed which allows you to **return to the previous page**.

Many sub-pages have two buttons that allow you to cancel (**Cancel**) or confirm (**OK**) the changes made to the page.

In any case, you will then return to the calling page.



Warning: using the return to the previous page (arrow at the top left) is equivalent to the **Cancel** button.

Background mode

The app also works in *background* mode to give the possibility to record the track that the user is following even with the screen off.



Furthermore, even if the app is closed, the registration is not interrupted. For more information see the paragraph [GPS and navigation](#).

Orientation of the device

The app can work both in *portrait* mode (device in vertical) and in *landscape* mode (device in horizontal).

The choice of horizontal or vertical orientation of the device is essentially personal and depends on your habits and the type of information you are viewing.

The positions of the page elements are automatically adapted, based on the orientation of the device, to facilitate reading.

However, most of the pages have been designed to have a better use in *portrait* mode.

The [Compass](#) page can only work in *portrait* mode as it displays the north direction and consequently cannot be readjusted.

Scrollable pages

Most of the pages and menu items can be scrolled up or down as the size of the screen does not allow full viewing.

To scroll through a page or menu, use a finger swipe on the screen.

List functions



Some pages show data in the form of lists.

In these pages there are often some functions (usually one or two) that act on the single line.

To activate these features, simply drag your finger on the row from right to left.

This reveals the buttons that activate the functions (*swipe menu*).

These functions typically refer to changing or deleting row data.

To return to the row view and hide the buttons, drag your finger from left to right.

It should be noted that in some particular lines these functions can be blocked and consequently the buttons cannot be displayed.

For example, it is not possible to delete the definitions of the system web maps while those defined by the user can be deleted (see [Web maps](#)).

Sorting functions

In almost all the list functions there is the possibility to sort the rows according to some criteria.



The sorting functions are activated with the toolbar button shown at the side (see [Screen organization](#)).

A list opens where you can choose the sort order.

If you choose the same criterion twice in succession, the ordering takes place in reverse.

At the bottom of the list of sorting criteria there is always the **CANCEL** button which cancels the function in progress and leaves the previous sorting criteria active.

Filter functions

In almost all the list functions there is the possibility to filter the data in order to reduce the number of rows displayed in order to find what you are looking for more easily.

To set the filters, use the *Set filters* item in the page menu (see [Screen organization](#)). A page is displayed where you can enter some values that act as a filter on the data. The required conditions must all be verified (logical *and* operator).

To cancel all filters and return to the complete list, use the *Cancel Filters* menu item.

Entering the coordinates

In some circumstances it is necessary to enter the geographical coordinates and in this case the app provides a special page (see figure on the side).

This page shows the reference datum of the coordinates at the top (default *WGS 84* but can be modified in the [Preferences - Coordinates](#) page).

Below is the coordinate representation format that can be changed by tapping on it. The possible values are:

- Degrees
- Degrees -Minutes
- Degrees -Minutes-Seconds
- Radians
- UTM – Universal Transverse Mercator
- ECEF – Earth-centered, Earth-fixed
- OCL – Open Location Code
- GeoRef – World Geographic Reference System
- USNG – United States National Grid
- MGRS – Military Grid Reference System
- BNG – British National Grid
- IG – Irish Grid
- Metric

If you select some formats such as BNG or IG, the datum, displayed at the top, is adapted to the requested grid.

In case of BNG, IG or Metric format, the projection is also displayed.

The projection can be changed on the [Preferences - Coordinates](#) page.

Naturally the chosen coordinate format affects the fields to be entered which are adjusted accordingly.

All conversions are automatic and managed by the system.

At the top right there is a menu with the following items:

- **Copy and paste**
 - **Copy Coordinates:** Copies coordinates into memory for future use.
 - **Copy Coordinates (text format):** Copies coordinates into the clipboard in text format.
 - **Paste coordinates:** pastes previously stored coordinates (if available) into the page.
 - **Clean coordinates:** clears the page for entering new coordinates.
 - **Paste home coordinates:** pastes the home coordinates defined in the [Preferences - Coordinates](#) page into the page.
 - **Paste GPS coordinates:** paste the coordinates of the user's position into the page, if available.
- **Waypoints**
 - **Select waypoint:** opens a page to select a waypoint present in the GPX files loaded in the app. Once selected, the waypoint coordinates will be pasted on the page.
 - **Save Waypoint:** opens a box for acquiring the name of the new waypoint. A new waypoint will be created with the coordinates on the page.
- **Others**
 - **Info coordinates:** displays a message with the address corresponding to the coordinates on the page (*Reverse geocoding*).
 - **Open Google Maps:** opens the [Google Maps](#) website in the position indicated by the coordinates on the page.
 - **Open Geocaching.com:** opens the [Geocaching.com](#) website and displays the caches near the coordinates on the page (authentication required).
 - **Open Peakfinder.org:** Opens the [Peakfinder.org](#) website and displays a view of the surrounding mountains at the coordinates on the page.

File types managed by the app

GPX files

Waypoints, routes and tracks are data typically processed by **GPS**. They are usually stored in a standard format called **GPX**.

The acronym GPX stands for *GP's eXchange format*. It is an **XML**-type data format specially designed for the interchange of GPS data between applications and web services on the Internet. GPX files have a .gpx extension.

XML stands for *eXtensible Markup Language*. It is a markup metalanguage, that is an extensible (eXtensible) marker language as it allows you to create custom tags.

More information on the GPX format can be found at http://www.topografix.com/GPX_for_developers.asp.

More information on XML can be found at <http://www.w3.org/XML>.

OkMap Mobile can open one or more GPX files at the same time.

MbTiles files

MbTiles files have .mbtiles extension and contain the user maps (custom maps) displayed on top of the base map (see [Map - Objects drawn on the map](#)).

These maps are stored in an *SQLite* database and are divided into tiles to ensure good performance in the visualization phase.

User maps differ from online maps, made available by servers from various manufacturers (Apple, Google, Microsoft, Nokia, etc. ...), in that:

- They are offline, therefore always available even in the absence of a connection.
- They are raster and therefore can represent the morphology of the territory in a much more captivating way than any other vector map.
- They are thematic and therefore meet the specific needs of many categories of users who use the app while carrying out their outdoor activities (search and rescue, trekking, mountain biking, off-road, sailing, flying, hunting and fishing, look for mushroom, geocaching, soft air and many others).
- They can be easily produced, even starting from a paper map, using the [OkMap Desktop](#) software.

DEM files

The acronym **DEM** stands for *Digital Elevation Model* and refers to a model capable of returning the altitude above sea level of any geographical point of the globe.

OkMap uses in particular **STRM** type altimetric data (returned by the *Shuttle Topographic Radar Mission*). These data cover all longitudes and latitudes between 56 ° South and 60 ° North.

The resolution in the USA is one second of arc (about 30m at the equator) while in the rest of the world it is three seconds of arc (about 90m at the equator).

The data is organized in files, each relating to a degree of latitude and one of longitude and can be downloaded from the internet at this [address](#).

OkMap Mobile is however able to download these files upon request, thus creating a local archive of the elevation data of the favorite places (see [Map - Menu - Download DEM data](#)). The files are stored in the DEM folder (see [Folders and files](#)).

Having these files available, OkMap is able to show the altitudes of the various points on the map (see [Trip computer](#)) and use this information in the creation of waypoints and tracks, thus being able to create the altitude profile of a track even during design.

Furthermore, knowing the altitudes, OkMap can make a more correct estimate of the travel times of the designed tracks.

The elevation data can be interpolated to obtain more precise values (see [Preferences - DEM](#)).

Map

Organization of the map



The map page is organized as shown in the figure on the side.

- At the top is the map **scale** in meters. The scale is adjusted according to the zoom factor.
- On the right there are 4 small buttons that allow you to **zoom** the map, **center the map** on the user's position (highlighted by a blue dot), and **orient** the map to the north. This last button is rotated together with the map and is therefore useful for understanding the orientation of the map respect to the north.
- A **viewfinder** is displayed in the exact center of the map which is useful in some functions of the [Menu - Viewfinder](#).
- At the bottom a black line allows the visualization of 6 statistical **indicators** of the [trip computer](#). These indicators can be customized by tapping on their respective labels.
- The **attribution** of the map displayed is described at the bottom of the page. The current map can be changed (see [Menu - Map](#)).








Moving the map is done with a simple gesture of sliding your finger on the map itself.

Zoom + is achieved with a gesture of two fingers moving apart while **zoom -** with a gesture of two fingers moving together.

The **rotation** of the map is achieved with a gesture of two fingers that rotate left or right.

Objects drawn on the map

The following objects are drawn in the map container:

- Background containing the selected **web map** (see [Menu - Map](#)).
- Drawing in overlapping of the **user maps** (see [MbTiles files](#), [Custom maps files](#)).
- **User position** represented by a blue dot.
- Drawing the map grids:
 - **Geographic grid**: (see [Show geographic grid](#)) it is adapted to the zoom of the map and covers an extension a little larger than the extent of the map displayed. It is not adapted to the zoom variation for performance reasons. However, it can be automatically readjusted by turning off and on the switch that allows it to be displayed. The grid shows the coordinates in degrees, minutes, seconds.
 - **Metric grid**: (see [Show metric grid](#)) the same considerations apply as for the geographic grid. Reports the coordinates in meters (or in the unit of measurement of the projection selected in the [Preferences - Coordinates](#)). If the selected projection uses UTM, the area and the relative hemisphere will also be displayed.
 - **DEM grid**: (see [Show DEM grid](#)) is a grid that highlights the limits of each existing elevation file (1 x 1 degree). If the DEM file is available locally, it is drawn with a solid green line, otherwise with a line of red dots.
- GPX data overlay drawing (see [GPX files](#), [GPX files](#)):
 - **Waypoint**: Waypoints: they are punctual data and represent points of interest; are drawn with the default placeholder . The placeholder can be edited in the tab of each waypoint (see [Modify a waypoint](#)). If the waypoint was saved with the **Waypoint with photo** function, a thumbnail of the photo taken can be displayed instead of the placeholder (if the **Show photo preview** switch on the [Preferences - Photos](#) page is activated).
 - **Tracks**: they are drawn with lines of a predefined blue color; the beginning and the end of the track are drawn respectively with placeholders  and . The track you are recording (active track) is drawn with a red default color. The thicknesses, colors and styles of the lines can be customized in the tab of each track (see [Modify a track](#)). Tracks are divided into their component segments.
 - **Routes**: they are mainly used in boating and are drawn with default red lines; route waypoints are drawn with the placeholder . Line thicknesses, colors and styles can be customized in the tab of each route (see [Modify a route](#)).
 - **Autoring Points**: These are points used to automatically calculate a track/route. The points are displayed with the following placeholders:  start of route,  end of the route and  intermediate points.

Tapping on these placeholders (*pins*) opens a balloon that displays the description. To close the callout, simply tap the placeholder again.

On the other hand, tapping on the description of the placeholder opens a list of possible functions.

Waypoint functions (see [Modify a waypoint](#)):

- Modify waypoint
- Hide waypoint
- Copy to ACTIVELOG.gpx file
- Set altitude DEM
- Set description (geocoding)
- Open link (if specified)
- Send waypoint to OkMap server (see [Preferences – Send data](#))
- Send waypoint to Web server ([see Preferences – Web Server](#))
- Delete waypoint

Track functions (see [Modify a track](#)):

- Modify track
- Hide track
- List track points
- Track statistics
- Track graphs
- Copy to ACTIVELOG.gpx file
- Set altitude DEM
- Set travel times
- Adjust altitude
- Adjust time
- Smoothing
- Smoothing altitudes
- Duplicate
- Create an inverted track
- Add to JOIN
- Merge segments
- Export data
- Open link (if specified)
- Show start / end
- Delete track

Route functions (see [Modify a route](#)):

- Modify route
- Hide route
- Modify waypoint of route
- List waypoints
- Copy to ACTIVELOG.gpx file
- Duplicate
- Create an inverted route
- Add to JOIN
- Export data
- Open link (if specified)
- Show start
- Show end
- Delete waypoint
- Delete route

Autorouting point functions:

- Delete Point

- **Navigation line to a waypoint:** This is a line that connects the user's position and the position of the destination waypoint in real time (see [GPS and navigation](#)).
- **Anchor position:** it is a placeholder that identifies the position in which the anchor is dropped. This function is used to generate an alarm in the event that the vessel moves too far from the anchor (see [GPS and navigation](#)).

- **Copied coordinates:** it is a placeholder that identifies the position of the copied coordinates (see [Menu - Copy coordinates](#)).

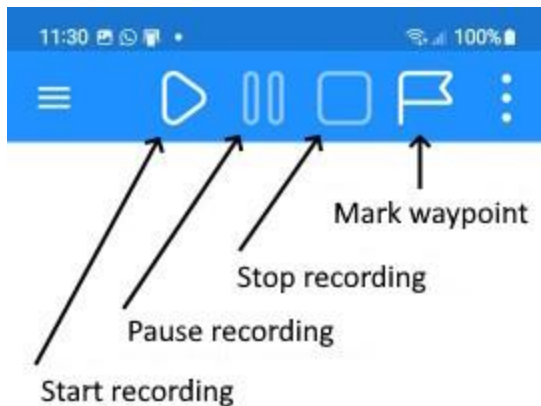
Indicators

In the lower part of the map, it is possible to view 6 indicators of the [Trip computer](#) by tapping on the thick black line at the bottom of the page. A further tap on the black line closes the display of the indicators.

The 6 indicators can be customized by tapping on their labels; a list is displayed from which you can select the desired item.

To know all the possible indicators, see the [Trip computer](#).

Toolbar



The Map page menu is presented as shown in the figure to the side.

- The first button **starts recording the track** or restarts it after a pause. The track is drawn on the map in real time as the user moves. The track is stored in the ACTIVELOG.gpx file (if this file does not exist, it is created).
- The second button **pauses track recording** and can only be activated if track recording has previously been activated. This function is useful in the case of prolonged stops that could *dirty* the track being recorded due to GPS inaccuracy. This is especially the case if the distance filter (see [Preferences - Navigation](#)) is less than the accuracy of the GPS.
- The third **button stops track recording** and can only be activated if track recording has previously been activated. If at least a track point has been recorded, you are prompted for the name to be assigned to the new track.
- The fourth button **saves a new waypoint** in the user's position. A page is displayed to acquire the name, description and comment of the waypoint to be saved. The waypoint is stored in the ACTIVELOG.gpx file (if this file does not exist, it is created).

To use these functions, you must first activate the GPS on the [GPS and navigation](#) page and wait a few seconds to give time to the GPS to make the *fixing* or to calculate the precise position based on the position of the satellites in sight.

If the user has moved several kilometers from the last position received or a long time has passed, it is possible that the *fixing* may take longer than expected.

Of course, if the device is indoors or there are not enough satellites in sight, it is possible that these functions cannot be used due to the absence of the signal or due insufficient accuracy.

Menu

The menu items on the Map page are organized into groups according to their purpose.

Navigation

GPS on/off

Activates or deactivates the background service that handles receiving positions from the location device (GPS).

A notification warns that the GPS is active and therefore the app is monitoring your location. The notification can arrive a few seconds late.

When you start the app, the GPS is turned on automatically.

When you do not intend to use the app, it is not enough to close it but you must first deactivate the GPS which otherwise would continue to run in the background.

Turning off GPS is also a significant advantage in increasing battery life.

Some navigation functions can only be activated if the GPS is turned on.

Mark waypoint

It saves a new waypoint in the user's position. A page is displayed to acquire the name, description and comment of the waypoint to be saved. The waypoint is stored in the ACTIVELOG.gpx file (if this file does not exist, it is created).

Mark waypoint with photo

It saves a waypoint with a photo in the user's position. The camera to take the photo is displayed. Once the image is confirmed, it follows the same procedure as the previous button.

Go to waypoint

The Go to waypoint switch allows you to set a waypoint as the navigation destination and consequently obtain the values for the selected destination in the [Trip computer](#).

When the switch is turned on, a page is opened to select the destination waypoint (see [List waypoints](#)).

A line is drawn on the map that connects the user's position to the destination waypoint.

The characteristics of this line (thickness, color and style) can be changed in the [Preferences - Navigation](#) page.

The activation of this function is subject to the activation of the GPS. Sometimes it takes a few seconds before you can activate this function.

Follow a track

The Follow a track switch allows you to set the end of a track as the navigation destination and consequently obtain the values for the selected destination in the [Trip computer](#).

When the switch is turned on, a page opens for selecting the track to be used.

The activation of this function is subject to the activation of the GPS. Sometimes it takes a few seconds before you can activate this function.

When this function is active, the Off-course is calculated in the [Trip computer](#), that is the distance between the user's current position and the line of the track being followed.

If the value of this distance exceeds a maximum value, a warning is issued.

The off-course distance can be configured on the [Preferences - Navigation](#) page. The use of the speech synthesizer, the acoustic signal or the mute can be configured in the [Preferences - Notifications](#) page.

Follow a route

The Follow a route switch works in a similar way to the Follow a track switch.

The three navigation functions seen so far are exclusive, i.e., only one can be activated at a time.

Proximity waypoint

The Proximity waypoint switch allows you to select a waypoint to use for the proximity alert. In practice, the app warns us when we get too close to the selected waypoint with a synthesized voice or with a short sound.

It can be used to keep away from dangerous areas such as sinkholes or other during the journey. Of course, it can be used for other purposes.

This function can be used in conjunction with the other navigation functions.

The distance to the proximity waypoint can be configured in the [Preferences - Navigation](#) page. The use of the speech synthesizer, the acoustic signal or the mute can be configured in the [Preferences - Notifications](#) page.

Anchor alarm

The Anchor alarm switch fixes the anchor position in the current position of the boat and allows you to receive a warning if the boat moves too far from the anchored position.

The maximum distance of the anchor, from which you can move away without the alarm being triggered, can be configured in the [Preferences - Navigation](#) page. The use of the speech synthesizer, the acoustic signal or the mute can be configured in the [Preferences - Notifications](#) page.

Send position by email

The Send position by email button prepares an email that has as an attachment a GPX file containing the user's current position.

The app to use (among those installed) is required for sending the file (email, WhatsApp, etc.).

Send current GPX by email

The Send current GPX by email button prepares an email that has the GPX ACTIVELOG.gpx file as an attachment, containing the track recorded so far and other data created with the app.

If the current GPX file does not contain any data, a warning is issued.

The app to use (among those installed) is required for sending the file (email, WhatsApp, etc.).

Send track to OkMap server

The Send track to OkMap server switch is used to enable/disable the real-time transmission of your position as track points to the OkMap Desktop application configured as a remote data reception server (see [OkMap Desktop](#) documentation).

Before activating these last two functions, it is necessary to configure the data for transmission on the [Preferences - Send data](#) page.

The OkMap Desktop server is able to receive data (waypoints and tracks) from multiple remote devices and is able to represent them on a previously loaded map.

Send track to Web server

The Send track to Web server switch is used to enable/disable the real-time transmission of your location as track points to the OkMap Desktop application via a separately purchased web server (for information contact info@okmap.org).

Before activating this function, it is necessary to configure the data for transmission on the [Preferences – Web Server](#) page.

This feature is capable of sending data to multiple recipients.

Receive data from Web server

This switch starts receiving data (waypoints and tracks) from a separately purchased web server (for information contact info@okmap.org).

Before activating this function, it is necessary to configure the data for transmission on the [Preferences – Web Server](#) page.

This feature is capable of receiving data from multiple senders.

Map

Change map

This button allows you to select one or more maps other than the default one.

When you press the button, a page containing a list of web maps is displayed.

In this list it is possible to select the maps to be displayed (see [Web maps](#)).

Only active maps are listed (*Active* indicator selected).

You can select from 1 to 3 different maps.

To select a map, use the swipe menu on the right and select the + button.

To deselect a map, use the swipe menu on the right and select the - button.

Selected maps are displayed in green.

In the toolbar of this page there is a button which allows you to cancel all the selections made.

With the menu it is also possible to filter or not the listed data.

Set zoom level

Set the zoom level to the desired value.

Zoom on GPX data

It positions the map and set the zoom in order to view all the GPX data present in the device.

If the GPX data has not been loaded, this function has no effect.

Zoom to copied coordinates

It positions the map and zoom in on the point corresponding to the copied coordinates (see [Copy coordinates](#) menu).

If the coordinates have never been copied, a message is issued.

Close all popups

Closes all popups on the map opened by the user.

Reset indicators

This function resets the indicators displayed at the bottom of the page to the factory settings.

Confirmation is requested.

Mode

Follow the user

When this switch is activated, the map is automatically moved to the point where the user is and is constantly centered on its position.

When this function is active it is not possible to move the map manually but only to act on the zoom and orientation.

To reactivate manual movement, turn off the switch.

Rotation

Set the map rotation as follows:

- Normal rotation
- Rotation based on terrain
- Rotation locked

Distance mode

Calculates the distance from the initial point to the central red viewfinder.

Two placeholders are drawn at the beginning and at the end of the measurement and a line that joins the two points.

Distance, direction, and reverse direction are shown in the description of the destination placeholder.

The thickness, color and style of the line can be changed on the [Preferences - Distances](#) page.

To exit distance mode, turn off the switch.

Compute distance

Calculates the distance by drawing a broken line on the map.

A keypad opens on the top left, very similar to that of the [Create track](#) function. The functions for inserting, deleting and moving points are similar to those of the [Create track](#) function.

The distance is shown in the automatically opened popup at the end point.

The line can take on different colors depending on whether or not there is visibility in a straight line, i.e. in the absence of terrestrial obstacles. Colors can be customized on the Preferences – [Distance, Area](#) page.

Compute Area

The function is completely analogous to the [Compute distance](#) function.

Clear distance, area

Delete the drawings created with the [Compute distance](#) and [Compute area](#) function.

Show

Show custom maps

This switch shows or hides the user maps (*custom maps*) loaded in the app.

Show geographic grid

This switch shows or hides the geographical grid of the map (see [Objects drawn on the map](#)).

Show metric grid

This switch shows or hides the metric grid of the map (see [Objects drawn on the map](#)).

Show DEM grid

This switch shows or hides the DEM data grid (see [Objects drawn on the map](#)).

Show the compass

This toggle shows or hides a protractor in the center of the map. The color of the protractor can be customized in the [Preferences – Maps](#) page.

Show waypoints

This switch shows or hides the waypoints contained in the GPX files loaded into the app.

Show tracks

This switch shows or hides the tracks contained in the GPX files loaded into the app.

Show tracks points (zoom >= 17)

This switch shows or hides track points. The points of the tracks are highlighted with arrows oriented in the direction of the track. Every 5 points a label containing the segment-point of the track is shown.

The colors and font used can be changed in the [Preferences – Tracks](#) page.

Show routes

This switch shows or hides the routes contained in the GPX files loaded into the app.

Show viewfinder

This switch shows or hides the red viewfinder drawn in the center of the map. The viewfinder is useful in the functions of the [Viewfinder](#) group.

Show AR limits

This switch shows on the map the area containing the waypoints visible in the [Waypoint augmented reality](#) function.

Search

Search for a waypoint

This function is used to search for a waypoint on the map.
A page is displayed with the list of waypoints present in the GPX files loaded into the app.

To select the waypoint to search, tap on the corresponding line.
Two blue bars are displayed on the sides to indicate the selected item.

You can use the [sort](#) and [filter](#) functions.

Press the **OK** button to confirm or the **Cancel** button to cancel the operation in progress.

The map will be moved so that the selected waypoint is displayed in the center of the map (position of the viewfinder).

Search for the start of a track

This function is very similar to the [Search for a waypoint](#) function.

Search for the end of a track

This function is very similar to the [Search for a waypoint](#) function.

Search for the start of a route

This function is very similar to the [Search for a waypoint](#) function.

Search for the end of a route

This function is very similar to the [Search for a waypoint](#) function.

Search for an address

This function is used to search for an address or any point of interest on the map.
A dialog box is opened to enter the subject of the search.

Here are some examples of possible searches:

"Piazza Venezia, 56 Rome"

"Colosseum"

"Santo Spirito Hospital, Rome"

"00186"

The address found will be displayed in the center of the map with a pin.

To delete the pin, use the Clear found coordinates function.

Search for coordinates

This function is used to position the map at certain coordinates.
The page for [entering the coordinates](#) opens.

The map will be centered on the coordinates and a pin will be displayed.

To delete the pin, use the Clear found coordinates function.

Clear found coordinates

The found coordinates are cleared and the corresponding pin is hidden on the map.

Viewfinder

Info coordinates

A message is displayed with the address corresponding to the center of the map (in the position of the viewfinder). This function is called *Reverse geocoding*.

Copy coordinates

The coordinates corresponding to the center of the map (at the location of the viewfinder) are copied to memory for future use.

The copied coordinates are displayed on the map with a pin.

To delete the pin, use the *Clear copied coordinates* function.

Copy coordinates (text format)

The coordinates corresponding to the center of the map (at the location of the viewfinder) are copied into the clipboard in text format.

The copied coordinates are displayed on the map with a pin.

To delete the pin, use the *Clear copied coordinates* function.

Clear copied coordinates

The copied coordinates are canceled and the corresponding pin on the map is hidden.

Generate waypoint

This function is used to create a waypoint starting from the coordinates of the center of the map (viewfinder), knowing the distance and the direction (or reverse direction).

The following information are required:

- Waypoint name (required)
- Description (optional)
- Comment (optional)
- Distance (mandatory)
- Direction (or reverse direction depending on the appropriate switch) (mandatory)

Press the **OK** button to confirm the creation of the waypoint or the **Cancel** button to cancel the operation in progress.

The new waypoint created will be stored in the ACTIVELOG.gpx file.

Download DEM data

Download the DEM elevation data of the STRM type relating to the area indicated by the red viewfinder in the center of the map. Each file covers an area of 1 x 1 degrees. For more information read the paragraph [DEM file](#).

During the download, a scroll bar is displayed showing the progress.
If the DEM file is already present in the DEM folder, it will be notified.

Download waypoints from OSM

This feature allows you to download information from OpenStreetMap.

In particular, it is possible to create new waypoints with the information contained in the *nodes* stored in the OpenStreetMap database.

Information is defined by:

- Key
- Subkey
- Value

More information can be found on this web page:

https://wiki.openstreetmap.org/wiki/Map_features.

A page appears to select the type of waypoint to download:



The information is grouped by *Key*, while the details contain the *Subkey* - *Value* information.

The lines have a *swipe* menu that allows you to view the description of the information represented in the current row.

With the menu it is also possible to filter the listed data or not.

Press the **OK** button to confirm the selection of the waypoint type or the **Cancel** button to cancel the operation in progress.

Once downloaded the new waypoints will appear on the current map.

External services

Opens a list of web services that you can access.

The services report information of various kinds related to the position indicated by the red crosshair in the center of the map.

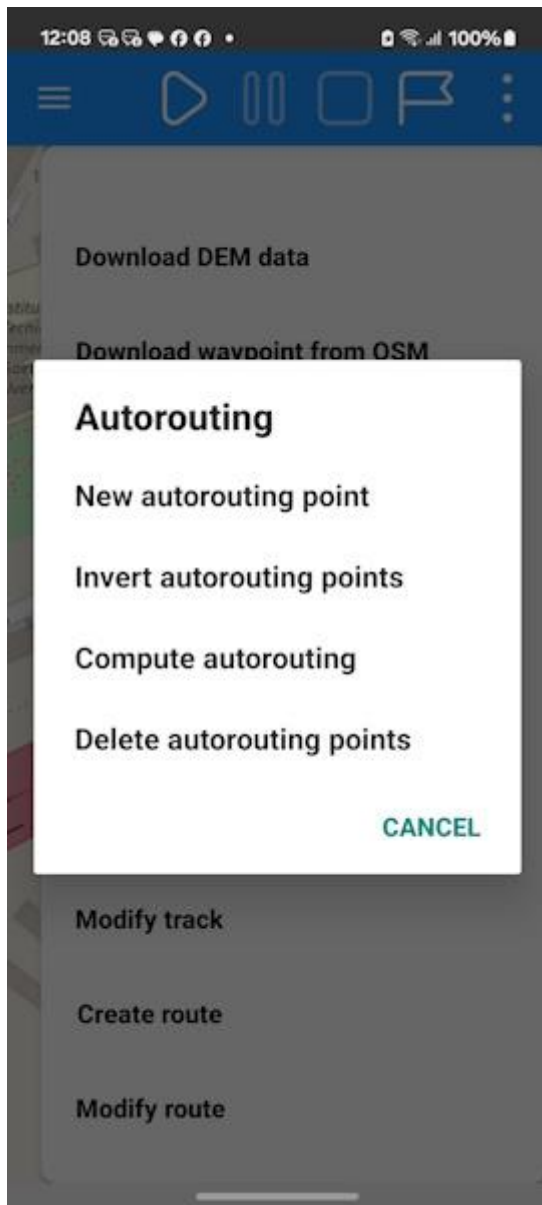
The services available are:

- Google Maps Place
- Google Street View
- OpenStreetMap
- Wikiloc
- Geocaching.com
- Peakfinder.org
- Meteogram
- Zoom.Earth
- Earth.NullSchool
- NOAA Declination
- NOAA Magnetic field
- Sky chart

Data

Autorouting

It is a function that can determine the route between two or more locations and save it as a track or route in the current file.



In order to use this function, you need to specify the API key of the [OpenRouteService](#) service in the [Preferences - Routing](#) page.

On this page you can find the link to do this.

On the same page you also need to set the *Mode* to *Track*, *Track and waypoint* or *Route*.

If you choose *Track and waypoint*, the respective waypoints will also be created at each change of direction.

Before activating the calculation, you need to set the start, end and any intermediate points of the route.

The route points can be set to the current point on the map by leaving the address blank.

The route positions are displayed on the map with balloon icons (green is the start of the route, red is the end and blue are any intermediate points).

To reverse the order of the autorouting points, use the Reverse Autorouting Points function.

Once this is done, you can perform the calculation.

A submenu opens in which you can specify the calculation mode (means of transport).

You can also get trail paths using the *Hiking* mode.

The track points will be accompanied by altitudes and walking times so that you can determine all the corresponding statistics.

To reset the positions and consequently hide their icons, use the *Delete autorouting points* function.

Create/modify waypoint

Set the map page in waypoint creation / modification mode.



A keypad opens at the top left to allow waypoints to be created and edited.

The + key creates a waypoint at the position of the center of the map (viewfinder).

The waypoint name is requested.

The - key deletes a waypoint near the map viewfinder.

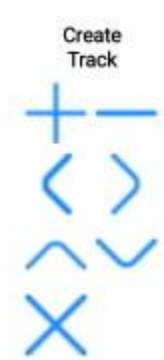
The <> ^ v keys move the waypoint near the center of the map (viewfinder) in the 4 directions and by a certain number of pixels.

The lower the zoom factor of the map, the greater the distance of the move and vice versa.

The **X** key closes the waypoint creation / modification mode.

Create track

First, the name of the track to be created is requested.



A keypad opens at the top left to allow track creation operations.

The **+** key creates a new point at the location of the center of the map (viewfinder).

The points are highlighted with a circle.

The **-** key deletes a point near the map viewfinder.

The **<>** **^** **v** keys move the point near the center of the map (viewfinder) in the 4 directions and by a certain number of pixels.

The lower the zoom factor of the map, the greater the distance of the move and vice versa.

The **X** key closes the track creation mode.

Modify track

A keypad opens at the top left to allow track editing operations. The keypad is completely the same as the one already seen in the creation of the tracks.

The **+** key creates a new point at the location of the center of the map (crosshair).

The new point will occupy the position next to the point closest to the center of the map (viewfinder) in the sequence.

In this mode the points are highlighted with a circle.

The **-** key deletes a point near the center of the map (viewfinder).

The **<>** **^** **v** keys move the point near the center of the map (viewfinder) in the 4 directions and by a certain number of pixels.

The lower the zoom factor of the map, the greater the distance of the move and vice versa.

The **X** key closes the track edit mode.

Create route

The function is completely analogous to the [Create track](#) function.

Modify route

The function is completely analogous to the [Modify track](#) function.

Trip computer

The screenshot shows the 'Trip computer' app interface. At the top, there's a status bar with the time 14:40 and battery level 80%. The app title 'Trip computer' is in the center, with a menu icon on the left and a toolbar on the right containing a sort icon (downward arrow with 'A' and 'Z') and a trash icon. The interface is divided into four main sections: 'Coordinates', 'Map', 'Navigation', and 'Directions'. Each section contains specific data points related to the trip.

Coordinates

Current coordinates (format 1)	Lat: 41.9098281° Lon: 12.5769101°
Current coordinates (format 2)	UTM 33N E: 299035.8 m N: 4642604.0 m

Map

Map center coordinates (format 1)	Lat: 41.909828° Lon: 12.5769102°
Map center coordinates (format 2)	UTM 33N E: 299035.8 m N: 4642604.0 m
Map zoom	19
Map resolution	1

Navigation

Name of target navigation	20220831-135424
Description of target navigation	
Coordinates of end target	Lat: 41.9085270048° Lon: 12.5767769282°

Directions

Direction of course	?
Direction of magnetic north	113.1 deg

This page collects all the Trip computer values updated in real time by the app.

In the toolbar there is a first button that allows you to **sort** the list by *Measure* or *Type*.

Sorting by *Measure* is shown in detail below.

Sorting by *Type* provides for the same items but grouped according to a different scheme that prefers the type of values:

- Status
- Map
- Current values
- Initial values
- Total values
- Average values
- Minimum values
- Maximum values
- Final destination
- Server

A second button on the toolbar allows the **reset of the cumulative values**. Basically, it allows you to start the counts from zero (useful at the beginning of the path).

The values are updated in real time without the need to drag the list down to *refresh* the list.

On the [Map](#) and [Compass](#) page you can select 6 of these indicators to have them handy.

Below all the possible items organized by *Measure*:

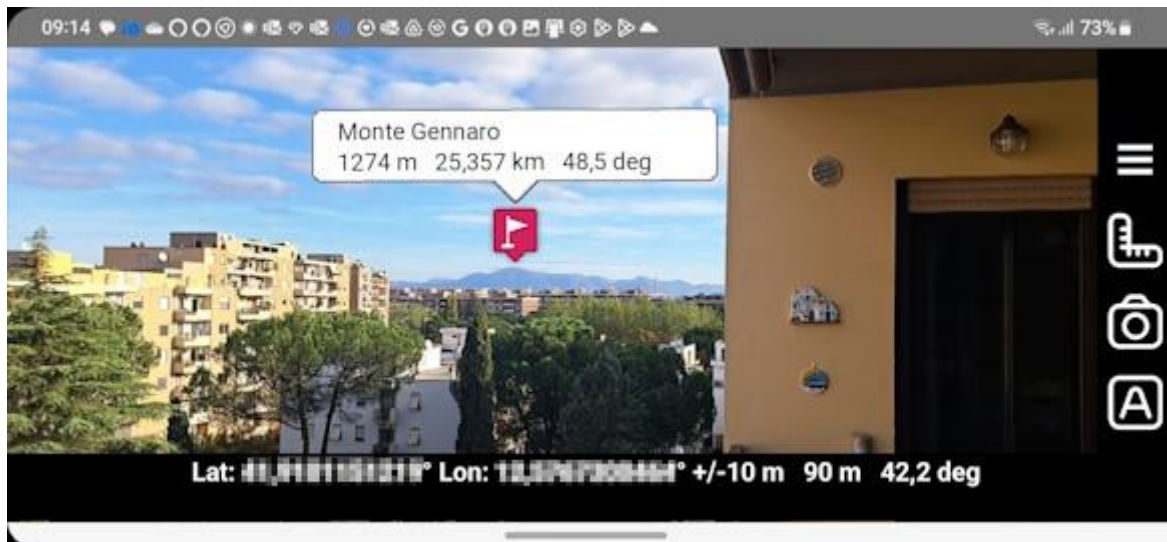
Label	Value
Status	
Battery status	Charging - Discharging - Complete - Not charging - Not present - Unknown
Battery level	Value between 0 and 100 (fully charged)
Navigation status	Not enabled - Not supported - No permission - Poor signal - Started - Stopped or no signal - Unable to get data
Compass status	Not supported - Started - Stopped - Unable to get data
Barometer status	Not supported - Started - Stopped - Unable to get data
Magnetometer status	Not supported - Started - Stopped - Unable to get data
Status of the sending service to OkMap server	Started - Stopped - Unable to send data to remote OkMap server
Navigation accuracy	In the short distance unit of measure (see Preferences -

	Unit of measure)
Navigation vertical accuracy	“
Coordinates	
Current coordinates (format 1)	In format 1 coordinates (see Preferences - Coordinates)
Current coordinates (format 2)	In format 2 coordinates (see Preferences - Coordinates)
Map	
Map center coordinates (format 1)	In format 1 coordinates (see Preferences - Coordinates)
Map center coordinates (format 2)	In format 2 coordinates (see Preferences - Coordinates)
Map zoom	Value between 2 and 20
Map resolution	In m/pixel
Navigation	
Name of target navigation	Name of waypoint, track or route being navigated
Description of target navigation	Description of waypoint, track or route being navigated
Coordinates of end target	Coordinates of the waypoint, the last point of the track or the last waypoint of the route being navigated
Directions	
Direction of course	In the unit of measure of direction (see Preferences - Unit of measure)
Direction of magnetic north	“
Direction of end target	“
Distances	
Distance traveled	In the unit of measure of distance (see Preferences - Unit of measure)
Distance traveled on the flat	“
Distance traveled uphill	“
Distance traveled downhill	“
Distance to end target	“
Off course	In the unit of measure of short distance (see Preferences - Unit of measure)
Times	
Total travel time	In the format hours: minutes: seconds
Time in stop	“
Time in motion	“
Time traveled on the flat	“
Time traveled uphill	“
Time traveled downhill	“
E.T.E. end target	“
Altitudes and differences	
Pressure	If the barometer is available, in the unit of measure of pressure (see Preferences - Unit of measure)

Altitude	In the unit of measure of altitude (see Preferences - Unit of measure)
Map center altitude	"
DEM altitude	"
Departure altitude	"
Minimum altitude	"
Maximum altitude	"
Total ascent	"
Total descent	"
Times en route	
Departure time	In date-time format
Time of last GPS point	"
Time of sunrise	In the format hours: minutes: seconds
Time of sunset	"
E.T.A end target	In date-time format
Speeds	
Current speed	In the unit of measure of speed (see Preferences - Unit of measure)
Minimum speed	"
Maximum speed	"
Average speed	"
Average speed in motion	"
Average speed on the flat	"
Average speed uphill	"
Average speed downhill	"
Rates	
Rate of uphill	In the unit of measure of rate (see Preferences - Unit of measure)
Rate of downhill	"
Slopes	
Average slope uphill %	Slope in percent
Average slope downhill %	"
Average slope uphill °	Slope in degrees
Average slope downhill °	"
Server	
Track points sent to the OkMap server	Number of track points sent to the OkMap server when the <i>Send track to OkMap server</i> function is active on the Map page
Waypoints sent to OkMap server	Number of waypoints sent to the OkMap server with the function that can be activated from the waypoint balloon
Errors while sending to the OkMap server	Total errors that occurred while sending data to the OkMap server (track points and waypoints)
Track points sent to the Web server	Number of track points sent to the Web server when the <i>Send track to Web server</i> function is active on the Map

	page
Waypoints sent to Web server	Number of waypoints sent to the Web server with the function that can be activated from the waypoint balloon
Errors while sending to the Web server	Total errors that occurred while sending data to the Web server (track points and waypoints)
Track points received from the Web server	Number of track points received from the Web server when the <i>Receive data from Web server</i> function is active on the Map page
Waypoints received from OkMap server	Number of waypoints received from the Web server when the <i>Receive data from Web server</i> function is active
Errors while receiving from the Web server	Total errors that occurred while receiving data from the Web server (track points and waypoints)

Waypoints augmented reality



With this function you can view in the camera the waypoints loaded in your device.

The position of the waypoints respects the position, altitude and distance of the waypoint itself so as to be displayed in the position where the human eye would see it.

By tapping on the icons, you can view/hide a balloon containing the following information:

- Waypoint description
- Waypoint altitude
- Distance of the waypoint from the user position
- Direction of the waypoint from the user position

By moving your finger on the camera view you can more precisely align waypoints by taking a known waypoint as a reference.

The original position can be restored with the Auto button (see below).

Only waypoints with the following characteristics are displayed:

- Visible waypoints
- Waypoints with altitudes
- Waypoints whose distances from the user's position fall within the range of the selected distances and exceed the selected minimum altitude (see below)

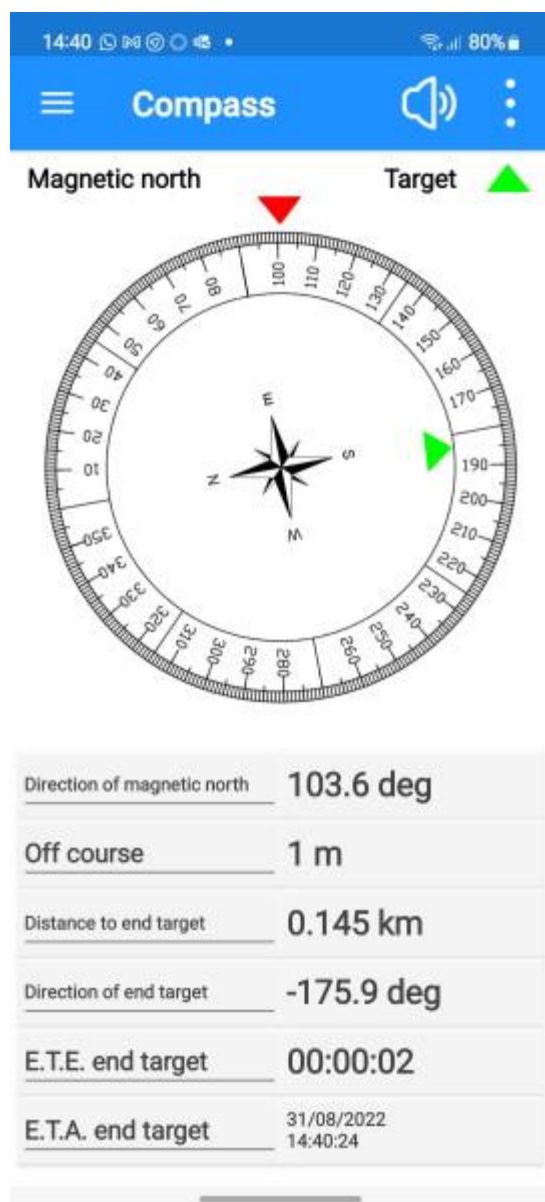
Functionality (right side buttons):

- Main menu
- Ruler: Opens/closes the left sidebar for defining the distance range and minimum altitude
- Camera: Take the photo
- Auto: Automatic position reset

Clicking on the balloons relating to the waypoints, opens a menu containing the following functions:

- Edit waypoints
- Hide waypoints
- Open link (if available)
- Delete waypoints
- Show (waypoints on map)

Compass



The page displays a rotating compass that looks in the direction the device is pointing (indicated by the red triangle).

This page remains locked in *portrait* position and cannot be rotated in order not to create confusion about the orientation of the device itself.

In the lower part of the map, 6 [Trip computer](#) indicators are visible.

The 6 indicators can be customized by tapping on their labels; a list is displayed from which you can select the desired item.

To know all the possible indicators, see the [Trip computer](#).

In the toolbar there is a button that activates the **speech synthesizer** which reproduces the direction in degrees.

This feature can be very useful if you are pointing the device at a target and cannot read the screen content.

If you were using the Go to waypoint, Follow a track or Follow a route functions (see [GPS and navigation](#)), the direction of your destination is indicated by a second green triangle that rotates around the compass crown.

In the menu there is the only item **Reset indicators** which restores the indicators displayed at the bottom of the page according to the factory settings (default). Confirmation is requested.

Active track statistics

Track	
Name	ACTIVE LOG
Description	
Comment	
Segments	1
Points	6

Distances	
Distance traveled	0.002 km
Distance traveled flat	0.002 km
Distance traveled uphill	?
Distance traveled downhill	?

Times	
Total travel time	00:00:55
Time in stop	00:00:55
Time in motion	?
Time traveled flat	00:00:58
Time traveled uphill	?
Time traveled downhill	?

Altitudes and differences	
Departure altitude	34 m

This page shows the statistical values of the trace being recorded (ACTIVE LOG).

It can only be activated if this trace exists.

In the toolbar there is a single button that allows you to **sort** the list by *Measure* or *Type*.

Sorting by *Measure* is shown in detail below.

Sorting by *Type* provides for the same items but grouped according to a different scheme that prefers the type of values:

- Track
- Initial values
- Final values
- Total values
- Average values
- Minimum values
- Maximum values
- Calories

The values are updated in real time without the need to drag the list down to *refresh* the list.

Below all the items organized by *Measure*:

Label	Value
Track	
Name	Alphanumeric value
Description	"
Comment	"
Segments	Number
Points	"
Distances	
Distance traveled	In the unit of measure of distance (see Preferences - Unit of measure)
Distance traveled on the flat	"
Distance traveled uphill	"
Distance traveled downhill	"

Times	
Total travel time	In the format hours: minutes: seconds
Time in stop	"
Time in motion	"
Time traveled on the flat	"
Time traveled uphill	"
Time traveled downhill	"
Altitudes and differences	
Altitudes at start	In the unit of measure of short distance (see Preferences - Unit of measure)
Altitudes at end	"
Minimum altitude	"
Maximum altitude	"
Total ascent	"
Total descent	"
Times en routes	
Departure time (local)	In date-time format
Arrival time (local)	"
Speeds	
Minimum speed	In the unit of measure of speed (see Preferences - Unit of measure)
Maximum speed	"
Average speed	"
Average speed in motion	"
Average speed on the flat	"
Average speed uphill	"
Average speed downhill	"
Rates	
Rate of uphill	In the unit of measure of rate (see Preferences - Unit of measure)
Rate of downhill	"
Slopes	
Average slope uphill %	Slope in percent
Average slope downhill %	"
Average slope uphill °	Slope in degrees
Average slope downhill °	"
Calories	
Calories for trekking	In the unit of measure of calories (see Preferences - Unit of measure)
Lost body weight	In the unit of measure of lost body weight (see Preferences - Unit of measure)

Active track graphs



It represents the graphs of the track being recorded (ACTIVE LOG).

It can only be activated if this trace exists.

The name of the track and the units of measure of the x and y axes appear in the header.

The graphs can be of various **types**:

- Distance / Altitude
- Time / Altitude
- Distance / Speed
- Time / Speed
- Time / Distance
- Distance / Slope
- Time / Slope

The type of the graph can be selected with the first menu item which shows the type of active graph.

The switches in the menu act on the drawing of the graph:

- **Show segments:** displays, between the header and the graph, the interruptions in the different segments of the track.
- **Show waypoints:** displays, between the header and the graph, the waypoints close to the track (the distance between waypoint and track point can be configured in the [Preferences - Graphs](#) page).
- **Show DEM data:** displays the elevation line (yellow) determined not based on track altitudes but based on DEM data (if any).

- **Show Grid:** Displays a grid below the graph lines to make them easier to read.
- **Apply smoothing:** the smoothing algorithm is applied to soften the edges of the graph.

The graph can be zoomed using the classic pinch gesture.

Once zoomed in, the graph can be moved by dragging your finger on the page.

A double tap switches from the normal view to the zoomed view at maximum and vice versa.

List waypoints

ACTIVELOG.gpx	
TESTWPT	
Test waypoint	
30 m	0.180 km
wptLazioAbruzzo.gpx	
ACQUAVIVAV	Summit
Vetta del monte Acquaviva (Maiella)	
2737 m	130.261 km
BLOCKHAUSP	Parking Area
Parcheggio Blockhaus (Maiella)	
2073 m	129.867 km
FUSCORIF	Residence
Rifugio Fusco (Maiella)	
2440 m	129.774 km
CAVALLOV	Summit
Vetta del monte Cavallo (Maiella)	
2171 m	129.220 km
FOCALONEV	Summit
Vetta monte Focalone (Maiella)	
2676 m	129.098 km
PONTEPIETR	Bridge
Ponte di Pietra (Orfento)	
974 m	126.936 km

Lists all waypoints present in the ACVIVELOG.gpx file and loaded GPX files.

The list of waypoints is grouped by file (lines in gray).

Each row shows the following waypoint information:

- Name
- Symbol
- Description
- Altitude
- Distance from the user's position (if known)

The list can be sorted by:

- Name
- Description
- Comment
- Symbol
- Altitude
- Distance

The menu contains the following functions:

- **Add new waypoint** (similar to [Modify a waypoint](#) function)
- **Make everyone visible** (makes all waypoints visible on the map)
- **Set filters**
- **Reset filters**

The rows have a *swipe* menu that allows the following functions:

- **Delete** (waypoint)
- Other
 - Modify waypoint
 - Set altitude DEM
 - Open link (if specified)
 - Show

Modify a waypoint

14:48 79%

← Waypoint

Name 2CORNISELL

Description

Comment

Sella dei due corni (Gran Sasso)

Symbol Drinking Water

Coordinates Lat: 42.4742683304°
Lon: 13.5619216076°

Pin image

Visible

Distance 102.703 km

Direction 52.0 deg

Source

Link

Type

Cancel Ok

This page allows you to change the attributes of a waypoint.

You can edit:

- Name
- Description
- Comment
- Symbol (selectable from a predefined symbol list)
- Coordinates (see the page for [entering the coordinates](#))
- Time (in local date-time format)
- Altitude (in the short distance unit of measure (see [Preferences - Unit of measure](#)))
- Pin image (the first button allows you to select the placeholder image from a list of files contained in the Pins folder, the second button restores the default image)
- Visible (switch to make the waypoint visible on the map or not)
- Source
- Link (if a photo is taken, it contains the link to the image file; alternatively, a link to a web resource can be specified)
- Type

The menu contains the following functions:

- **Open the link** (available only if the Link field is specified)

To confirm the changes, press the **OK** button otherwise the **Cancel** button.

Set altitude DEM

Attributes altitude to a waypoint using locally available [DEM](#) data.
A message signals the possible unavailability of altimetric data.

Open the link (if specified)

Opens the associated application (e.g. browser) for the URI (Uniform Resource Identifier) string specified in the waypoint link field.

Show

Return to the [Map](#) page and center the displayed map at the coordinates of this waypoint.

List tracks



Lists all tracks present in the ACVIVELOG.gpx file and loaded GPX files.

The list of tracks is grouped by file (lines in gray).

Each line shows the following track information:

- Name
- Description
- Date-hour

The list can be sorted by:

- Name
- Description
- Comment
- Date-hour

The menu contains the following functions:

- **Add new track** (similar to [Modify a track](#) function)
- **Make everyone visible** (makes all tracks visible on the map)
- **Set filters**
- **Reset filters**

The rows have a *swipe* menu that allows the following functions:

- **Delete** (track) if it is not the track being recorded
- Other
 - Modify track
 - List track points
 - Track statistics
 - Track graphs
 - Set altitude DEM
 - Set travel times
 - Adjust altitude
 - Adjust time
 - Smoothing
 - Smoothing altitudes
 - Duplicate
 - Create an inverted track
 - Add to JOIN
 - Merge segments
 - Export data
 - Open link (if specified)
 - Show start
 - Show end

Modify a track

14:48 79%

← Track

Name AL_CASTRO-ANV

Description

Comment

Line color (FFFFFF = use preference color) FFFFFF

Line thickness (0 = use preference thickness) 0

Line pattern Default

Visible ☒

Source

Link

Type

Number of segments 11

Number of points 305

Cancel Ok

This page allows you to change the attributes of a track.

You can edit:

- Name
- Description
- Comment
- Line color (in hexadecimal. The color FFFFFFFF (white) uses the default color in the [Preferences - Tracks](#) page); tapping on the box on the side opens a page to select the color in RGB format using three sliders)
- Line thickness (if set = 0, use default thickness in [Preferences - Tracks](#) page)
- Line pattern (from a list of predefined styles)
- Visible
- Source
- Link (if a photo is taken, it contains the link to the image file; alternatively, a link to a web resource can be specified)
- Type

It also shows:

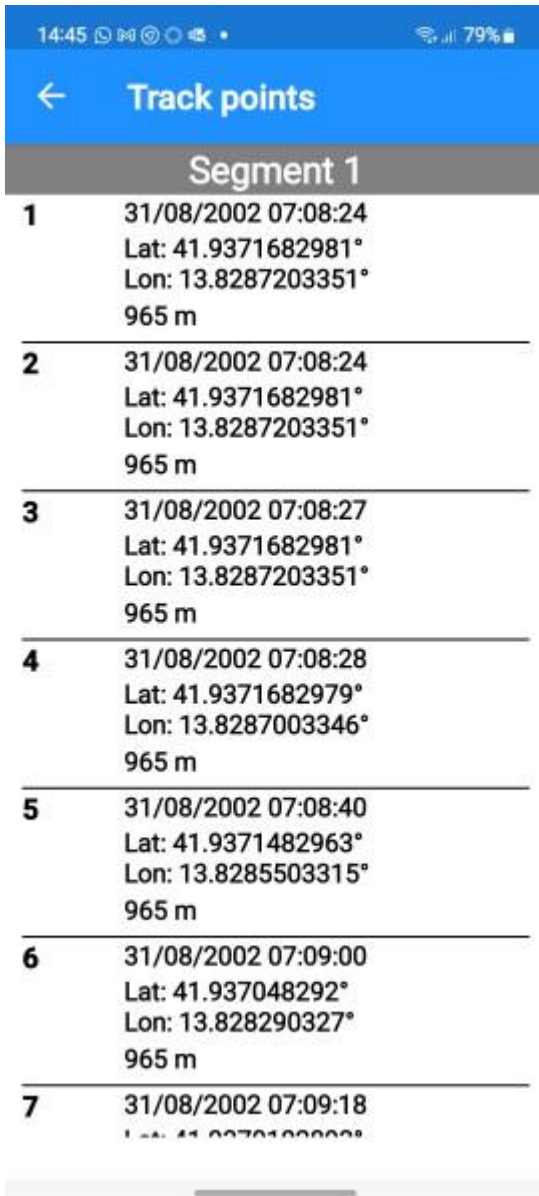
- Number of segments
- Number of points (total for all segments)

The menu contains the following functions:

- **List track points:** Opens the [List track points](#) page
- **Track statistics:** Opens the Track Statistics page (similar to [Active track statistics](#))
- **Track graphs:** opens the Track graphs page (similar to [Active track graphs](#))
- **Open the link** (available only if the Link field is specified)

To confirm the changes, press the **OK** button otherwise the **Cancel** button.

List track points



Segment 1	
1	31/08/2002 07:08:24 Lat: 41.9371682981° Lon: 13.8287203351° 965 m
2	31/08/2002 07:08:24 Lat: 41.9371682981° Lon: 13.8287203351° 965 m
3	31/08/2002 07:08:27 Lat: 41.9371682981° Lon: 13.8287203351° 965 m
4	31/08/2002 07:08:28 Lat: 41.9371682979° Lon: 13.8287003346° 965 m
5	31/08/2002 07:08:40 Lat: 41.9371482963° Lon: 13.8285503315° 965 m
6	31/08/2002 07:09:00 Lat: 41.937048292° Lon: 13.828290327° 965 m
7	31/08/2002 07:09:18 Lat: 41.9370100000° Lon: 13.828290327° 965 m

Lists all points of a track.

The list of tracks is grouped by segment of belonging (lines in gray).

Each line shows the following track point information:

- Point number within the segment
- Local date-time
- Coordinates
- Altitude

The list cannot be sorted.

There isn't a menu.

The lines have a *swipe* menu that allows the following functions:

- **Delete** (track point)
- Other
 - New segment
 - Divide track
 - Show

New segment

A new track segment is created starting from this point.

The section that goes from the last point of the previous segment to the first point of the new segment is not drawn on the map (the track stops) and is considered a section in which the GPS did not have a signal good enough to determine the coordinates.

Divide track

Track points, between this point and the end of the track, are moved to a new track with the name preceded by "N.".

Show

Return to the [Map](#) page and center the displayed map at the coordinates of the track point in question.

Track statistics

Opens the statistics page of the track in question.
The page is exactly the same as the [Active track statistics](#) page.

Track graphs

Opens the page relating to the graphs of the track in question.
The page is exactly the same as the [Active track graphs](#) page.

Set altitude DEM

Attributes altitudes to track points using locally available [DEM](#) data.
A message signals the possible unavailability (even partial) of the altimetric data.

Set travel times

Attributes the times to the points of the track using an algorithm that considers the slopes (suitable for trekking).
The walking speed on the flat specified in [Preferences – Tracks](#), is used as a basis.
The speed is automatically adjusted according to the slopes of the track.

Adjust altitude

All the altitudes of the track points are corrected with a user requested relative value in meters.

Adjust time

All the times of the track points are corrected with a user requested relative value in seconds.

Smoothing

All track point coordinates are processed by a smoothing algorithm.
The number of points used by the algorithm is defined in the [Preferences - Tracks](#) function.
A new track is created with the name preceded by "H."

Smoothing altitudes

All the altitudes of the track points are processed by a smoothing algorithm.
The number of points used by the algorithm is defined in the [Preferences - Tracks](#) function.
A new track is created with the name preceded by "A."

Duplicate

The track is duplicated into a new track with the name preceded by "C."

Create an inverted track

A new track is created with the name preceded by "I." having the order of segments and points reversed.

Add to JOIN

If no track named "JOIN" exists in the loaded GPX files, the current track is duplicated into a new track named "JOIN" in the same GPX file.

If instead a track named "JOIN" exists, the segments and points of the current track are added to that track, starting from a new segment.

Merge segments

A new track is created with the name preceded by "U." having a single segment containing all the points of the track in question.

Export data

A file with the csv extension (comma separated values) containing all the information (some calculated) of the track in question is created in the "Export" folder.

At the end of processing, the user is asked whether to open the file.

The most suitable app to view the contents of this file is Microsoft® Excel.

In the Excel app it will be possible to save the file in another folder of the user's choice.

Open link (if specified)

Opens the associated application (e.g., browser) for the URI (Uniform Resource Identifier) string specified in the link field of the track.

Show start

Return to the [Map](#) page and center the displayed map at the coordinates of the track start point.

Show end

Return to the [Map](#) page and center the displayed map at the coordinates of the track end point.

List routes



Lists all routes present in the ACVIVELOG.gpx file and loaded GPX files.

The list of routes is grouped by file (lines in gray).

Each line shows the following route information:

- Name
- Description
- Date-hour

The list can be sorted by:

- Name
- Description
- Comment
- Date-hour

The menu contains the following functions:

- **Add new route** (similar to [Modify a route](#) function)
- **Make everyone visible** (makes all routes visible on the map)
- **Set filters**
- **Reset filters**

The rows have a *swipe* menu that allows the following functions:

- **Delete** (route)
- Other
 - Modify route
 - List waypoints
 - Duplicate
 - Create an inverted route
 - Add to JOIN
 - Export data
 - Open link (if specified)
 - Show start
 - Show end

Modify a route

14:47 79%

← Route

Name 20220831-135424

Description

Test route

Comment

Line color (FFFFFF = use preference color) FFFFFF

Line thickness (0 = use preference thickness) 0

Line pattern Default

Visible ☒

Source

Link

Type

Number of waypoints 7

Cancel Ok

This page allows you to change the attributes of a route.

You can edit:

- Name
- Description
- Comment
- Line color (in hexadecimal. The color FFFFFFFF (white) uses the default color in the [Preferences - Routes](#) page); tapping on the box on the side opens a page to select the color in RGB format using three sliders)
- Line thickness (if set = 0, use default thickness in [Preferences - Routes](#) page)
- Line pattern (from a list of predefined styles)
- Visible
- Source
- Link (if a photo is taken, it contains the link to the image file; alternatively, a link to a web resource can be specified)
- Type

It also shows:

- Number of waypoints

The menu contains the following functions:

- **List route waypoints:** Opens the [List route waypoints](#) page
- **Open the link** (available only if the Link field is specified)

To confirm the changes, press the **OK** button otherwise the **Cancel** button.

List route waypoints



Lists all waypoints of a route.

Each line, in addition to the waypoint information, shows the distance from the user's last position (if known):

Each row shows the following route waypoint information:

- Position
- Name
- Symbol
- Description
- Altitude
- Distance from the user's last position (if known)

The list can be sorted by:

- Position
- Name
- Description
- Comment
- Symbol
- Altitude
- Distance

The menu contains the following functions:

- **Add new route waypoint** (similar to [Modify a waypoint](#) function)
- **Make everyone visible** (makes all waypoints visible on the map)

The rows have a *swipe* menu that allows the following functions:

- [Edit](#) (waypoint)
- [Delete](#) (waypoint)

Duplicate

The route is duplicated into a new route with the name prefixed with "C.".

Create an inverted route

A new route is created with the name preceded by "I." having the waypoint order reversed.

Add to JOIN

If no route named "JOIN" exists in the loaded GPX files, the current route is duplicated into a new route named "JOIN" in the same GPX file.

If instead a route named "JOIN" exists, the waypoints of the current route are added to this route.

Export data

A file with the csv extension (comma separated values) containing all the information (some calculated) of the route in question is created in the "Export" folder.

At the end of processing, the user is asked whether to open the file.

The most suitable app to view the contents of this file is Microsoft® Excel.

In the Excel app it will be possible to save the file in another folder of the user's choice.

Open link (if specified)

Opens the associated application (e.g., browser) for the URI (Uniform Resource Identifier) string specified in the link field of the route.

Show start

Return to the [Map](#) page and center the displayed map at the coordinates of the initial route waypoint.

Show end

Return to the [Map](#) page and center the displayed map at the coordinates of the final waypoint of the route.

GPX files



With this function it is possible to load and close GPX files (see [File types managed by the app - GPX](#)).



The list shows all the GPX files that have been loaded into the app, and in particular for each line:

- File name and extension
- Number of waypoints
- Number of tracks
- Number of routes

When you start the app, all the files loaded in the previous session are automatically loaded (if requested in the [Preferences – Maps](#) page).

The first button on the toolbar **archives** (renames) the ACTIVELOG.gpx file with a name provided by the user and creates a new ACTIVELOG.gpx file.

This function can only be activated when track recording is stopped and the GPX file contains at least one element (waypoint, track or route).

The second button **loads** one or more GPX files into the app from the device memory, from the removable memory or  from Google Drive or  from iCloud.

The selected files are copied to the GPX app folder (see [Folders and files](#)). If any file is already present, the user is warned and asked whether to load the file present in the app folder.

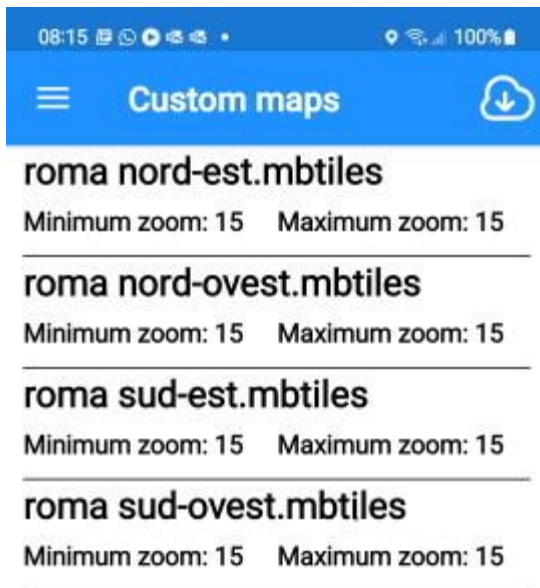
The third button **loads** the GPX files that are already available in the GPX app folder into the app.

It is not possible to load the same file more than once.

The rows have a *swipe* menu that allows the following functions:

- **Close**: closes the file indicated in the row and its content is no longer displayed on the map.
- **Other**: open the follow submenu:
 - **Show**: displays the map and centers it on the GPX data contained in the file indicated in the line.
 - **Send**: send the GPX file indicated in the line by email.
 - **Rename**: Rename the selected file.
 - **Delete**: Permanently delete the selected file.

Custom maps files





With this function you can **load** and **close** files containing user maps (MbTiles) (see [File types managed by the app - MbTiles](#)).

The list shows all the MbTiles files that have been loaded into the app, and in particular for each line:

- File name and its extension
- Minimum zoom
- Maximum zoom

When you start the app, all the files loaded in the previous session are automatically loaded (if requested in the [Preferences – Maps](#) page).

The toolbar button **loads** one or more MbTiles files from the device memory, from the removable memory or  from Google Drive or  from iCloud into the app.

The selected files are copied to the CustomMaps app folder (see [Folders and files](#)). If any file is already present, the user is warned and asked whether to load the file present in the app folder.

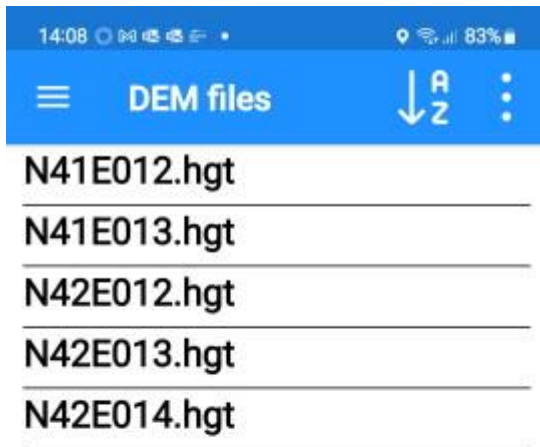
The third button **loads** the custom maps, that are already available in the CustomMaps app folder, into the app.

It is not possible to load the same file more than once.

The lines have a *swipe* menu that allows the following functions:

- **Close**: closes the file indicated in the row and the user map is no longer displayed overlapping the base map.
- **Other**: open the follow submenu:
 - **Show**: displays the map and centers it to show the custom map indicated in the line.
 - **Rename**: Rename the selected file.
 - **Delete**: Permanently delete the selected file.

DEM files



With this function it is possible to list the DEM files downloaded in the app memory (see [File types managed by the app - DEM](#)).

The list shows for each row:

- File name and its extension (.hgt)

With the first button of the toolbar, it is possible to **sort** the list by:

- Latitude
- Longitude

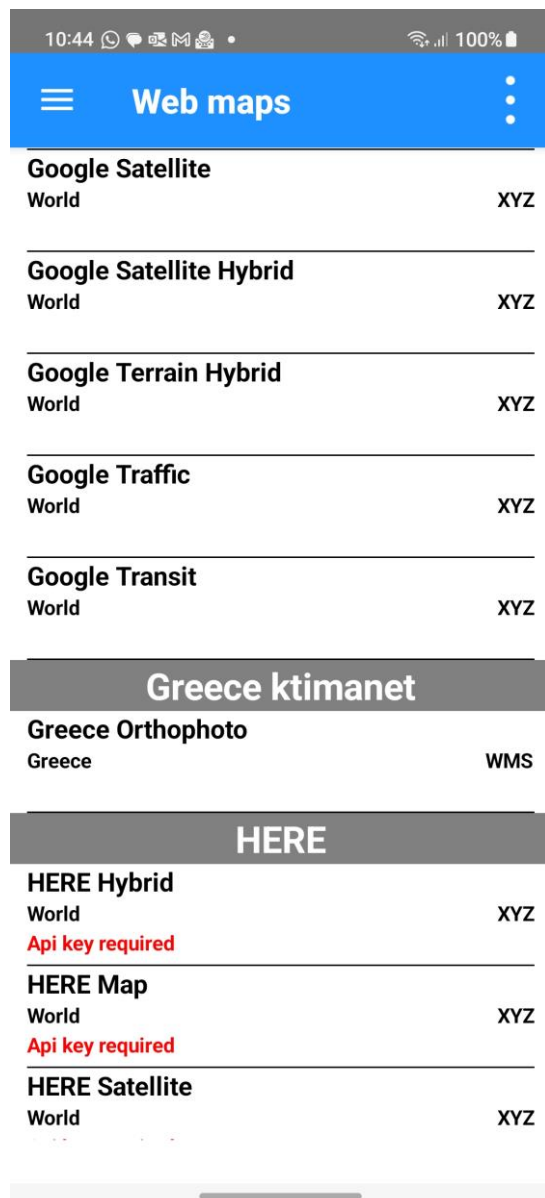
The menu shows the following functions:

- **Delete all files:** used to delete all DEM files and free up space in the device memory
- **Set filters**
- **Reset filters**

The rows have a *swipe* menu that allows the following functions:

- **Delete:** delete the file indicated in the row

Web maps



Lists all available web maps (both predefined by the app and defined by the user).

Selected maps are numbered in red in stacking order.

User-defined maps are highlighted with a red warning.

Similarly, maps that require an API key (see [Web API Keys](#)) are highlighted with a red warning.

The menu shows the following functions:

- **Add new web map:** used to create a [custom web map](#) (not available in map selection mode)
- **Deselect All:** Cancel all selections made (only available in map selection mode)
- **Set filters**
- **Reset filters**

Rows have a swipe menu on the right which allows the following functions:

- **+** Adds the map to the list of maps to view (only available in map selection mode)
- **-** Removes the map from the list of maps to view (only available in map selection mode)
- **Other** (not available in map selection mode):
 - [Edit](#) a web map
 - **Duplicate** a web map
 - **Delete** a custom web map (only available for custom maps)

There is also a swipe menu on the left which allows the following functions:

- **Test:** to preview the map at the specified coordinates
- **Capabilities:** to view the capabilities of the web service in XML format (only available for WMS maps)

Custom web map

11:26 100% battery

Maps server

Maps server name
Apple Street

Group
Apple

Type
XYZ

URL
http://gsp2.apple.com/tile?api=1&style=slideshow&layers=default&z={z}&x={x}&y={y}&v=10

Server nodes

Attributions
Map data by ©Apple

WMS Version

Layers

HTTP Referer

Coordinates
Lat: 41.89285°
Lon: 12.48931°

Covered
World

Min zoom
4

Max zoom
14

Active ☒

Can saved ☐

Cancel Ok

Allows you to create a custom web map.

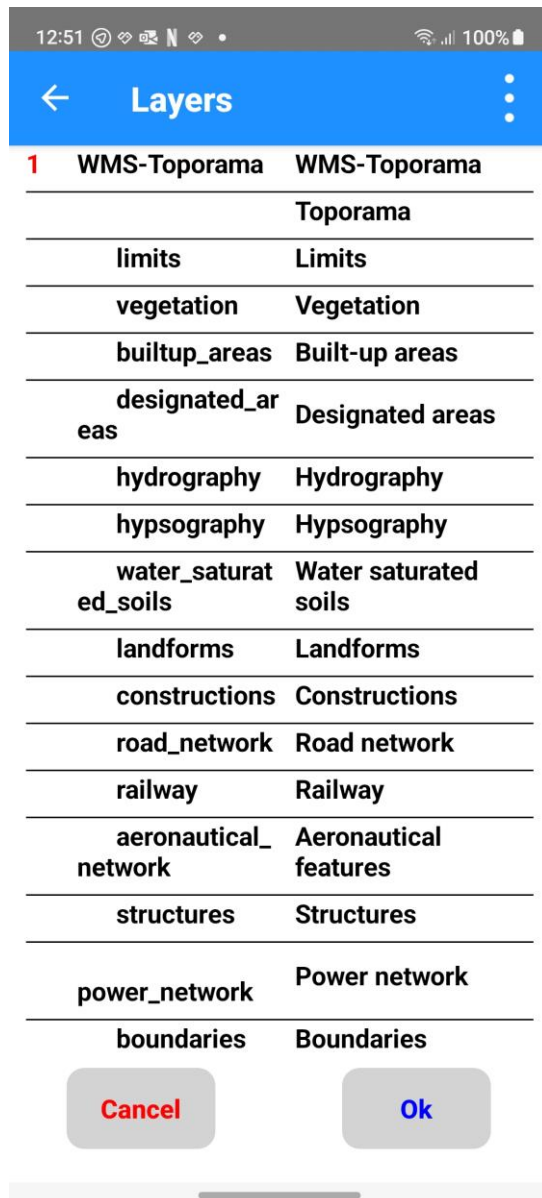
This function is reserved for more experienced users who are familiar with the operation of Tiled (XYZ) and WMS maps.

The information requested are:

- Map Server Name: Identification name by which the map is recognized
- Group: it is used to group all the maps provided by the same web service
- Type: type of service (XYZ, WMS)
- URL: web address of the server
- Server Nodes (optional): Can be used when the server has multiple access nodes
- Map Attributions (optional): These are the credits displayed at the bottom of the map
- WMS version
- [Layers](#): WMS layer names. A page for choosing the WMS layers (one or more than one) is displayed
- HTTP Referer header value
- Coordinates: Coordinates for the map test
- Coverage: coverage area of the map
- Minimum zoom
- Maximum zoom
- Active: to list or not the web service in the function of choosing the maps to display
- Can be saved: prepared for future use

To confirm the changes, press the **OK** button otherwise the **Cancel** button.

Layers



Allows you to choose one or more layers related to a WMS map.

The menu displays the following functions:

- **Deselect All:** Cancels all selections made

Rows have a swipe menu on the right which allows the following functions:

- **+** Adds the layer to the list of those to be displayed
- **-** Removes the layer from the list of those to be displayed

There is also a swipe menu on the left which allows the following functions:

- **Test:** to preview the layer in the specified coordinates

List datum



With this function it is possible to **list** all the Datums present in the OkMap database.

Deprecated datums are displayed in red.

The list shows for each row:

- EPSG code
- Name of the datum
- Area of competence of the datum
- Ellipsoid

With the first button of the toolbar, it is possible to **sort** the list by:

- EPSG datum
- Name
- Zone
- Ellipsoid

The menu shows the following functions:

- **Set filters**
- **Reset filters**

List projections



With this function it is possible to **list** all the Projections present in the OkMap database.

Deprecated projections are displayed in red.

The list shows for each row:

- EPSG CRS projection code
- Name of the projection
- Area of competence of the projection
- EPSG datum code
- Name of the datum
- Name of the projection algorithm

With the first button of the toolbar, it is possible to **sort** the list by:

- EPSG projection
- Name
- Zone
- EPSG datum
- Datum name
- Projection name (algorithm)

The menu shows the following functions:

- **Set filters**
- **Reset filters**

Preferences

After selecting the Preferences menu, a list of items appears that group preferences by theme.

Each page has a button in the toolbar that allows the factory settings to be restored limited to the values described on the page itself.
Confirmation is requested.

The changes to the data must in any case be confirmed with the **OK** button.
To discard the changes, press the **Cancel** button.

Units of measure

This page allows you to define the units of measure for the system.
These are pairs of values that define the unit of measurement (selectable from a list) and the number of decimals with which to represent the relative values (selectable with a dot that slides on a bar).

The list of couples is described below:

- Distance: used for example to represent the values of the distances traveled
- Short distance: used for example to represent off course or other short distances
- Altitude
- Rates: of ascent and descent
- Area: currently not used
- Speed
- Direction
- Pressure: used if the barometer is present
- Body weight
- Weight of the backpack
- Loss of body weight

Coordinates

Allows you to define:

- Coordinates datum: used to represent coordinates
- Coordinates projection: used for the calculation of metric coordinates
- Format 1 coordinates: used in the trip computer and other pages; it can be:
 - Deg: Degrees
 - DMM: Degrees -Minutes
 - DMS: Degrees -Minutes-Seconds
 - Rad: Radians
 - UTM: Universal Transverse Mercator
 - ECEF: Earth-centered, Earth-fixed
 - OCL: Open Location Code
 - GeoRef: World Geographic Reference System
 - USNG: United States National Grid
 - MGRS: Military Grid Reference System
 - BNG: British National Grid
 - IG: Irish Grid
 - Metric: metric coordinates
- Format 2 coordinates: used in the trip computer (similar to format 1)
- Decimals with which to represent the coordinates:
 - Degrees
 - Minutes

- Seconds
 - Radians
 - Metric coordinates
- Home coordinates: coordinates stored and recalled in the [coordinates page](#)
 - Default box coordinates: specifies the default coordinate type in the [coordinates page](#)

Maps

Allows you to define:

- Indicator whether to automatically load custom maps (on restart)
- Indicator whether to automatically load GPX files (on restart)
- Alpha user maps: value from 0 to 1 where 0 is total transparency and 1 is opacity
- Compass color: blue, green, red
- Zoom web map preview: used in the web map list to produce previews

Web API Keys

Allows you to define the API keys used in some map delivery web services.
It involves multiple pairs of values consisting of:

- Web server group (see [Web Maps](#) function)
- Web API key

Any custom maps can include the API key encoded with the string @apikey@ in the url.

Geographic grid

Allows you to define:

- Grid line width: establishes the thickness of the grid line in pixels
- Grid line color: establishes the color of the grid line through a window where it is possible to indicate the RGB value using three sliders (0-255)
- Grid line pattern: establishes the style of the lattice line; the possible values are:
 - Default
 - Solid: solid line
 - Dash: dashed line
 - Dot: line of points
 - DashDot: dash-dot line
 - DashDotDot: dash-point-point line
- Label background color: establishes the background color of the labels through a window where it is possible to indicate the RGB value using three sliders (0-255)
- Label font size: determines the font size of the labels
- Label color: establishes the color of the labels through a window where it is possible to indicate the RGB value using three sliders (0-255)

Metric grid

It allows you to define the parameters for drawing the metric grid in a way that is completely similar to the [Geographical grid](#).

DEM grid

It allows you to define the parameters for drawing the metric grid in a way that is completely similar to the [Geographical grid](#).

There is the possibility of differentiating the color and pattern of the grid lines according to the local availability of the DEM file.

Waypoints

Allows you to define:

- Maximum name length: establishes the maximum length of waypoint names for compatibility with some GPS models

Tracks

Allows you to define:

- Maximum name length: establishes the maximum length of track names for compatibility with some GPS models
- Tracks line width: establishes the thickness in pixels of the track lines
- Tracks line color: establishes the color of the track's lines through a window where it is possible to indicate the RGB value using three sliders (0-255)
- Tracks line pattern: establishes the style of the track's lines; the possible values are:
 - Default
 - Solid: solid line
 - Dash: dotted line
 - Dot: line of points
 - DashDot: dash-dot line
 - DashDotDot: dash-point-point line
- Active track line width: as above but applies to the track being recorded
- Active track line color: as above but applies to the track being recorded
- Active track line pattern: as above but applies to the track being recorded
- Background color of the point label
- Point label font size
- Point label color
- Average speed on the flat: it is used to estimate travel times
- Point smoothing: Number of points to use in the smoothing of track points or altitudes
- Body weight: used for estimating calories burned while trekking
- Backpack weight: as above

Routes

Allows you to define:

- Maximum name length: establishes the maximum length of route names for compatibility with some GPS models
- Route line width: establishes the thickness in pixels of the route lines
- Route line color: establishes the color of the route lines through a window where it is possible to indicate the RGB value using three cursors (0-255)
- Route line pattern: establishes the style of the route lines; the possible values are:
 - Default
 - Solid: solid line
 - Dash: dotted line
 - Dot: line of points
 - DashDot: dash-dot line
 - DashDotDot: dash-point-point line

Distance, area

Allows you to define:

- Distance line width: establishes the thickness of the distance line in pixels
- Distance line color: establishes the color of the distance line through a window where it is possible to indicate the RGB value using three cursors (0-255)
- Distance line pattern: establishes the style of the distance line; the possible values are:
 - Default
 - Solid: solid line
 - Dash: dotted line
 - Dot: line of points
 - DashDot: dash-dot line
 - DashDotDot: dash-point-point line
- Width of the visible distance line: characteristic of the visible distance line
- Color of the visible distance line: characteristic of the visible distance line
- Pattern of the visible distance line: characteristic of the visible distance line
- Width of the not visible distance line: characteristic of the distance line not visible
- Color of the not visible distance line: characteristic of the distance line not visible
- Pattern of the not visible distance line: characteristic of distance line not visible
- Area line width: establishes the thickness in pixels of the line that delimits the area
- Area line color: establishes the color of the line that delimits the area through a window where it is possible to indicate the RGB value using three cursors (0-255)
- Area line pattern: establishes the style of the line that delimits the area; the possible values are the same as for the distance line
- Area fill style: establishes how the area should be filled; the possible values are:
 - Default: the area is not filled
 - Hollow: the area is not filled
 - Solid: the area is filled with a solid color
 - Dotted: the area is filled with colored dots
 - Horizontal: the area is filled with horizontal lines
 - Vertical: the area is filled with vertical lines
 - Cross: the area is filled with small crosses
 - DiagonalCross: the area is filled with a diagonal grid
 - ForwardDiagonal: the area is filled with diagonal lines from left to right
 - BackwardDiagonal: the area is filled with diagonal lines from right to left

DEM

Allows you to define:

- DEM data interpolation: allows you to interpolate DEM data to obtain altitudes in a continuous rather than discrete way; the possible values are:
 - Plane: discrete values without any interpolation
 - Bilinear: the bilinear algorithm is applied to make the values continuous


Routing

Allows you to define:

- API key: this is a key to use the routing service provided by the [OpenRouteService](#) service. Once registered on the site you can obtain a token (API key) on [this page](#).
- Mode: Defines the result of the path calculation:
 - Track: a track is produced that joins the starting point to the final point of the path.
 - Track and waypoints: in addition to the track, waypoints are also produced for each change of direction.
 - Route: A route is produced that joins the starting point to the ending point of the route. The route contains all waypoints that represent changes in direction.

Navigation

Allows you to define:

-  GPS timeout: it is the maximum time allowed to the GPS to return the geographical position
- GPS accuracy: is the accuracy of the geographical position
- Time interval between GPS requests: it is the time that elapses between one request for the geographical position and the next
- Minimum distance between GPS points: the point returned by the GPS must be at least this value away from the previous one to be considered. The higher this value is, the more the points of the track will be spaced. It can be calibrated according to whether the march is on foot, by bicycle or by car
- Increase accuracy in curves: if turned on and a change of direction greater than the next value occurs, the distance filter is ignored
- Minimum course change for track recording: represents the minimum course change value so that the distance filter is ignored (only if the previous switch is turned on)
- Maximum off course distance: Used when navigating along a track or route. Establishes the distance of the off course beyond which the off-course warning is issued
- Proximity waypoint distance: Used when selecting a proximity waypoint. Represents the distance between the user and the proximity waypoint below which the proximity warning is issued
- Alarm anchor distance: used when the anchor alarm is activated. Establishes the distance between the vessel and the anchor beyond which the anchor alarm is issued.
- To waypoint line width: if navigation to a waypoint is activated, it establishes the thickness in pixels of the line that connects the user's position and that of the waypoint
- To waypoint line color: establishes the color of the above line; the color is selected through a window where it is possible to indicate the RGB value using three sliders (0-255)
- To waypoint line pattern: establishes the style of the above line; the possible values are:
 - Default
 - Solid: solid line
 - Dash: dotted line
 - Dot: line of points
 - DashDot: dash-dot line
 - DashDotDot: dash-point-point line

Graphs

Allows you to define:

- Number of comment lines in the graphs: it is the number of lines used to describe the proximity waypoints in the display of the graph of a track
- Proximity waypoint distance for graphs: establishes the maximum distance between the waypoints encountered along a track and the points on the track itself; if this value is too low there is the risk of not displaying waypoints along a track, vice versa if it is too high waypoints may be displayed that have nothing to do with the track itself
- Distance for slope calculation purposes: it is the distance between two points used to calculate the slopes of the track

Photos

Allows you to define:

- Folder organization: photos can be organized into sub-folders to improve their organization. The possible values are:
 - None: No sub-folder is created
 - YYYY: photos are organized into sub-folders by Year
 - YYYYMM: photos are organized into sub-folders by YearMonth
 - YYYYMMDD: photos are organized into sub-folders by YearMonthDay
- Save to album: if activated, a copy of the photo is saved in the Pictures public folder; in any case, the photos are saved in the Pictures app folder
- Allow cropping: allows you to crop the image
- Compression quality: defines the quality of image compression (values 0-100, but it is advisable not to go below 70 in order not to degrade the image too much)
- Custom photo size: resizing percentage of photos saved in the app folder (values 10-100 where 100 represents the photo in its original size)
- Show photo preview: if activated, it allows you to display a thumbnail of the photo on the map instead of the waypoint pin
- Photo thumbnail width: defines the width in pixels of the photo thumbnail (values 50-150) displayed on the map

AR waypoints

Allows you to define:

- AR circle width: establishes the thickness in pixels of the circle that delimits the mountains display area
- AR circle color: establishes the color of the circle through a window where it is possible to indicate the RGB value using three cursors (0-255)
- AR circle pattern: establishes the style of the circle; the possible values are the same as for the distance line
- AR circle fill style: establishes how the circle should be filled; the possible values are:
 - Default: the area is not filled
 - Hollow: the area is not filled
 - Solid: the area is filled with a solid color
 - Dotted: the area is filled with colored dots
 - Horizontal: the area is filled with horizontal lines
 - Vertical: the area is filled with vertical lines
 - Cross: the area is filled with small crosses
 - DiagonalCross: the area is filled with a diagonal grid
 - ForwardDiagonal: the area is filled with diagonal lines from left to right
 - BackwardDiagonal: the area is filled with diagonal lines from right to left

Send data

Allows you to define:

- My identification: is a string used to identify the user when sending data to the remote [OkMap Desktop](#) server
- Host: is the public IP address of the OkMap Desktop server
- Port: it is the port on which the data is sent (by default OkMap Desktop uses port 5150)
- Encoding: it is the encoding of the text transmission (ASCII, UTF7, UTF8, UTF32, Unicode, BigEndianUnicode)
- Image quality: Represents the image quality of the waypoint photos expressed as a percentage (it serves to further compress the images to be sent)
- Track line width: establishes the thickness in pixels of the trace line represented on the server
- Track line color: establishes the color of the above line; the color is selected through a window where it is possible to indicate the RGB value using three sliders (0-255)
- Request to center the maps on sent track points: Forces the movement of the maps loaded in the server in order to center the received track points

- Request to center the maps on sent waypoints: Forces the movement of the maps loaded in the server in order to center the received waypoints
- Request to alert the operator on sent waypoints: Notifies the operator with an acoustic signal when the waypoints are received from the server
- Time interval between points sending: it is the time that elapses between sending own positions

Web Server

Allows you to define:

- Web URL: it is the address of the Web server that can be purchased separately (for information contact info@okmap.org)
- Web user: this is the user used to authenticate to the Web server
- Web password: it is the password used for authentication with the Web server
- Recipient identification (Rx): identifies the name of the recipient who receives the data from the web server
- Time interval between sent points (seconds): this is the time between sending your positions
- My identification (Tx): it is a string used to identify the user who sends the data to the remote Web server
- Recipient identification (Tx): identifies the recipient to whom the data is sent
- Image quality: Represents the image quality of the waypoint photos expressed as a percentage (it serves to further compress the images to be sent)
- Track line width: establishes the thickness in pixels of the track line represented in the recipient
- Trace line color: establishes the color of the above line; the color is selected via a window where it is possible to indicate the RGB value via three sliders (0-255)
- Request to center maps on sent track points: Forces the uploaded maps to be moved to the recipient so as to center the received track points
- Request to center maps on sent waypoints: Forces the recipient to move maps to center received waypoints
- Request to alert the operator on sent waypoints: Notifies the operator with an acoustic signal when the waypoints are received by the recipient
- Time interval between received points: This is the time between activities receiving data from the web server

Notifications

Defines whether notifications are to be issued for certain events.

The events are:

- Low battery level: it is triggered when the battery charge level is below 10%
- Poor or no GPS signal
- Off course
- Proximity waypoint reached
- Anchor alarm

In addition, the type of report can be specified:

- Speech synthesizer or acoustic signal

Screen

Defines under which circumstances the screen should remain on:

- While recording the track
- While navigating to a destination

- When the device is powered on
- All time

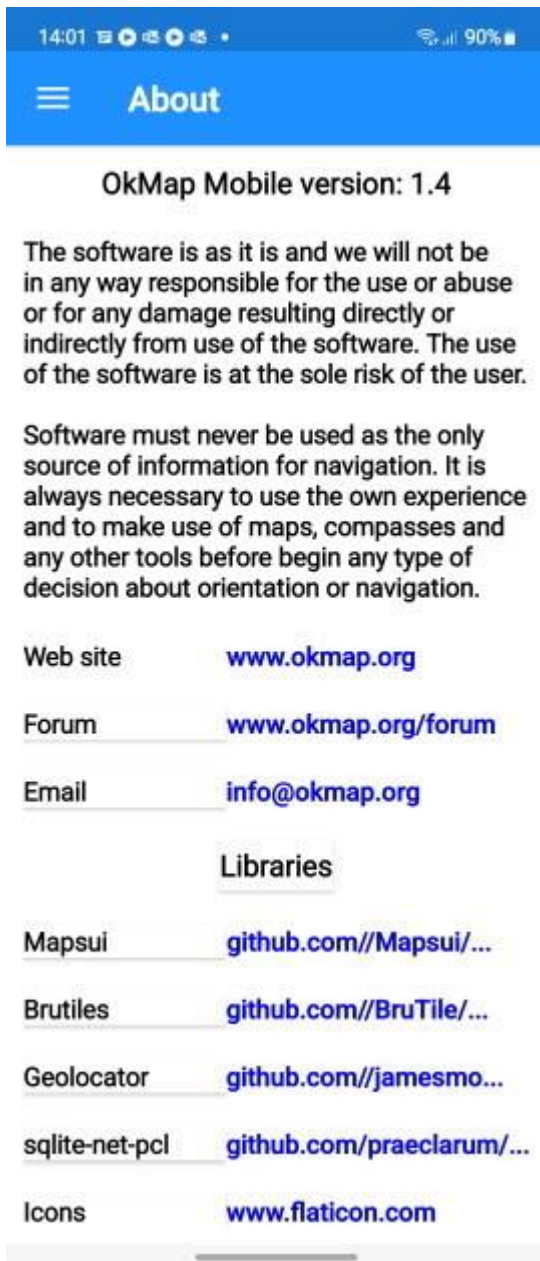
Permissions

This function repeats the authorization process displayed when the application is first launched.

It can be useful if the user has forgotten to provide some authorization necessary for correct use of the application.

The sequence of pages is the same as already seen in the [First start](#) chapter.

About



This page provides all the information and references of the app.

It also contains links to the official website and the websites of the libraries used.

Important: read the disclaimer at the top of the page.

Help

View this manual directly from the app.