

On the field: Gaia GPS

Summer School on Digital Humanities

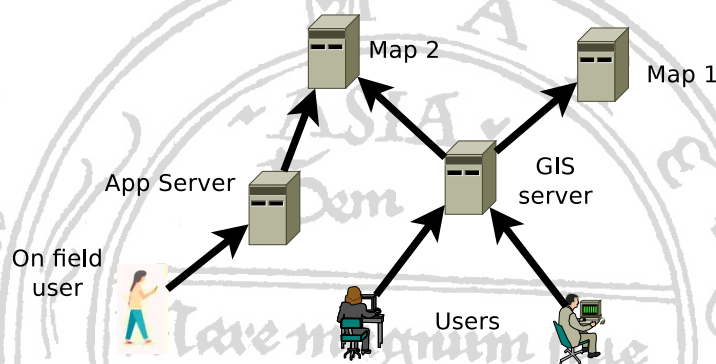
Course material available at

https://github.com/AugustoCiuffoletti/DHSS_2025

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On the field: Gaia GPS



- The system now includes also an user on field
 - as well as autonomous devices like drones
- Gaia GPS is one of the many apps that are useful for on field GIS
 - ...and one of the few that runs on both Android and iPhone

Using the Gaia GPS App

- You need to register to the service (use a free account for practicing)
- The activities of interest:
 - record a live track of an itinerary (as a **line** feature)
 - record waypoints (as **point** features)
 - associate written annotations (as point **attributes**)
 - associate pictures to points (as point **attributes**)
- Gaia GPS allows to perform all such activities
- Features can be exported as GPX, KMZ or CSV files in a cloud storage
- A companion Web service helps processing features

Gaia GPS: the *main* screen



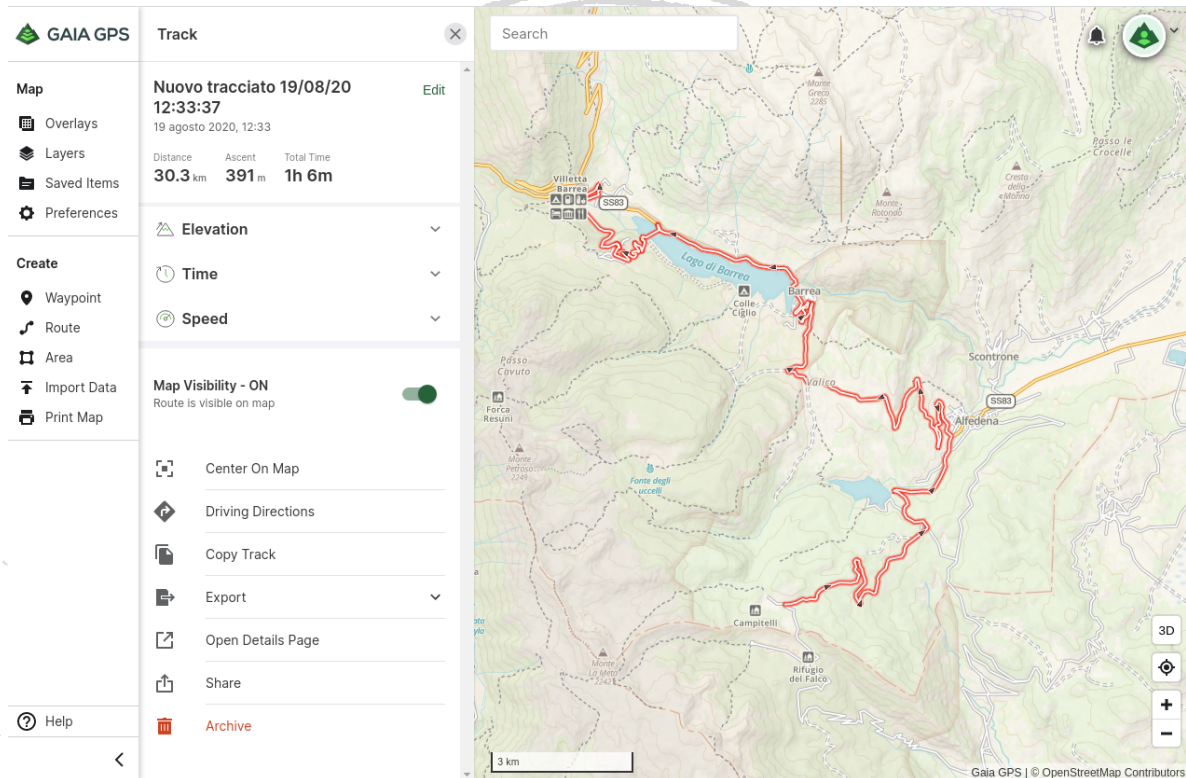
Recording a track with Gaia GPS

- Start recording a track with the **Record** button
 - running time is displayed
- As you walk, record waypoints and take pictures using the **+** button
 - right screen in figure
 - add a note to waypoints
 - a waypoint may be associated with pictures
- You can pause using the button showing time
- Use the same button to terminate and save the track
- Access recorded tracks using the **Saved** button
 - left screen in figure
- Tapping on a feature you can export in various formats (GPX, KML, CSV)
- Share using social/cloud services or the **GaiaGPS cloud storage**

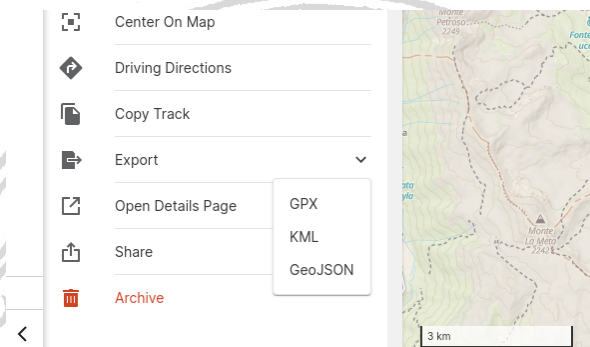
Processing the track on the Web service

- If you share your GPX using the **GaiaGPS cloud storage** you can easily view your track on a computer
- Enter the service at <https://www.gaiagps.com/> using your Gaia GPS credentials
- Select your track browsing your profile
- Click on a track to view the map and update details

Gaia GPS Web Service



Downloading the data in the PC




- In the left toolbar select *Saved Items*
- Click on the feature you want to export
- Browse to the bottom of the *Track* details frame and find the *Export* item
- Select the export format from the list
- Browse your hard disk to find a place to save the feature description

Import a Gaia GPS track in QGIS

- When you have successfully downloaded your feature on your PC:
 - Open QGIS and create a new project (or use an old one)
 - Layer -> Add layer -> Add vector
 - Browse to find your GPX file
 - Add, select all, OK and close the form
 - Your track is now on QGIS

Import a Gaia GPS track in uMap

- When you have successfully downloaded your feature on your PC:
- Enter the uMap Web service
- Create a new map (or use an old one)
- Enable editing (if disabled)
- Press the import button on the right 
- Browse to find your GPX file
- ... and import (in a new layer or in an old one)
- Your track is now on uMap

Time for a Gaia GPS 'challenge'

Track your walk:

- consider a nearby point of interest (e.g. a bridge, a pub, or a tower)
- reach it while tracking your walk with Gaia GPS
- take a picture of your point of interest
- record some waypoint for shops, turns at your taste
- when back, export the track and your waypoints in Gaia GPS cloud as a GPX file and copy the URL
- use that URL to import the data of your walk in uMap on your computer
 - use the shared map at https://umap.openstreetmap.fr/it/map/dhss_2021_616270
- display the picture(s) you took in the waypoint description.