Tracks

The track or course over ground is the actual path followed from A to B point. Both, the track recorded by the GPS during a trip, or the one drown directly on the computer with CompeGPS Land, are files that contain, in an orderly manner over time, a number of points representing graphically the planned (or traveled) trip. Skipping the importance of waypoints, explained in **previous chapters**, the track is without doubt the main data recorded on our GPS receiver and is also one of the most used tools in CompeGPS Land.

It is because a track, downloaded from the GPS or drawn, allows us to represent the route on the map, share it or save it for future use, guiding us to the desired destination. CompeGPS Land allows us a further edition and modification over the desired track, adding or removing items, splitting it into subtracks, unifying, animating, or sharing it.

Download and view a recorded track from GPS:

If you want to view (graphically on a map) the itinerary of a trip that you have carried out and saved in your GPS receiver, you will need, first of all, download it to your computer. You must also take into account that available GPS memory is limited and need to download and save the tracks on your computer, so when erasing for increase the space, the data are not lost. CompeGPS Land allows you to download the track from any GPS device. To do so, once plugged the GPS to the computer, choose from the menu **'Communications'** the option **'Download the GPS track'**.
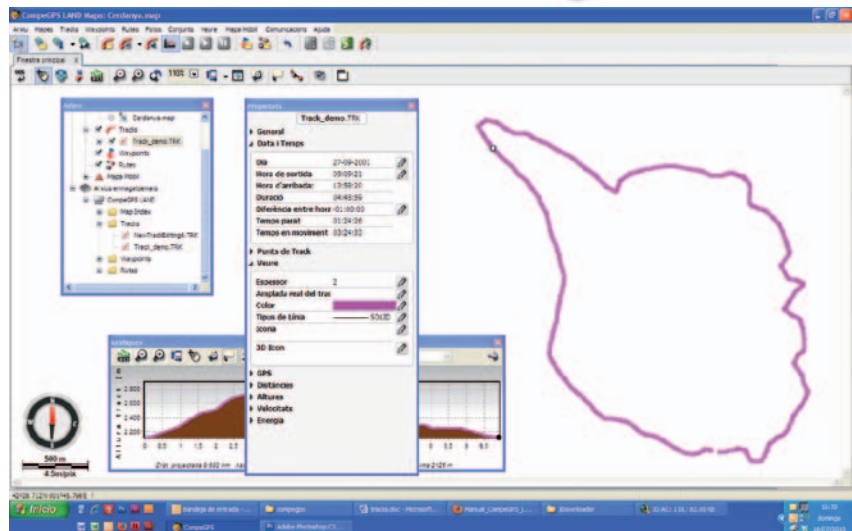
If our receiver is TwoNav Aventura/Sportiva or Evadeo, we simply do double click on the name of the track file from the GPS folder, in the 'Data Tree'. In both options, the track appears centered in the screen (Figure 1).

Using the menu **'Maps'** can load a map that will allow us to identify the trip and work more comfortably on the track. To save the map on our computer we can right-click on the track and choose **'Save Track as ...'**, which will allow us to choose the file name and desired folder.
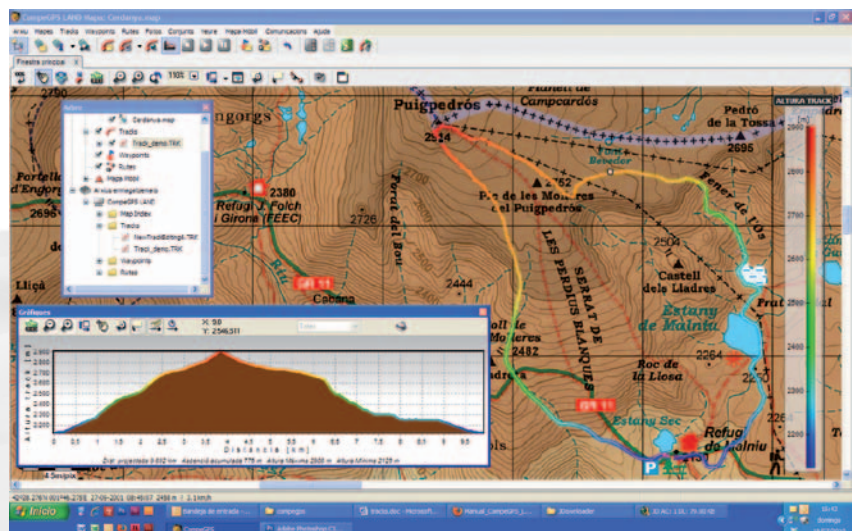
CompeGPS Land allows us to visualize the track gradient in a color scale

Figure1

Figure2

that graphically represents some characteristics of the track, such as speed, height, etc. We can see all the options on the menu gradient **'Tracks'** in the option **'Downgrade color of track'** (Figure 2).

Track properties:

If you right-click on the track, a menu will appear where you can choose the 'Track Properties'. In the window **'Properties'** that appears you will see a series of tabs that allow to customize the track. All editable fields are those marked with a pencil icon.

From all the tabs, we want to highlight **'View'**, **'Distance'** and **'Heights'** (Figure 3). **'View'** allows us to vary the type, thickness and color of the line representing the track. **'Distances'** informs us of various distances: the projected distance shows the distance in horizontal projection, that is, regardless of the heights. In contrast, distance with heights takes into account the different levels and consider the actual distance covered. .

In the tab **'Heights'** is specified all data related to the heights and slopes of the track: the maximum and minimum heights, the heights of departure and arrival points, the gain (difference between highest point of track and start point), the maximum slope (difference between the highest and lowest), and the cumulative rise (sum of all the uphill sections).
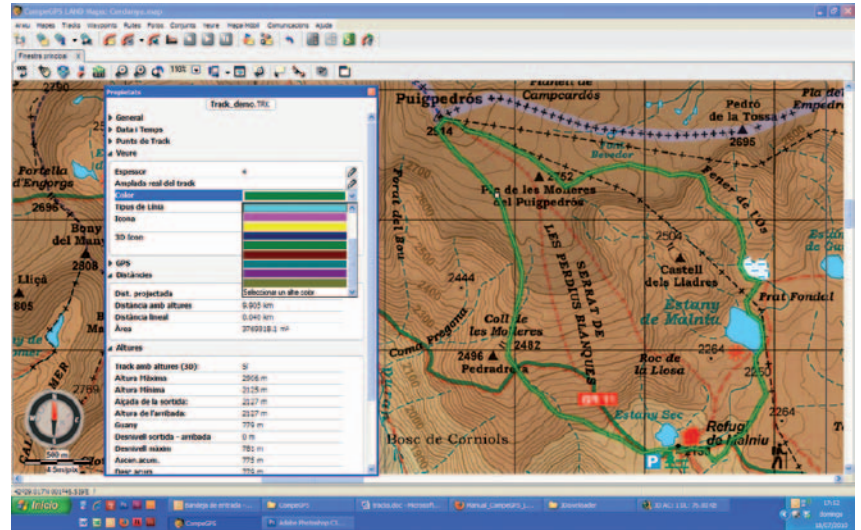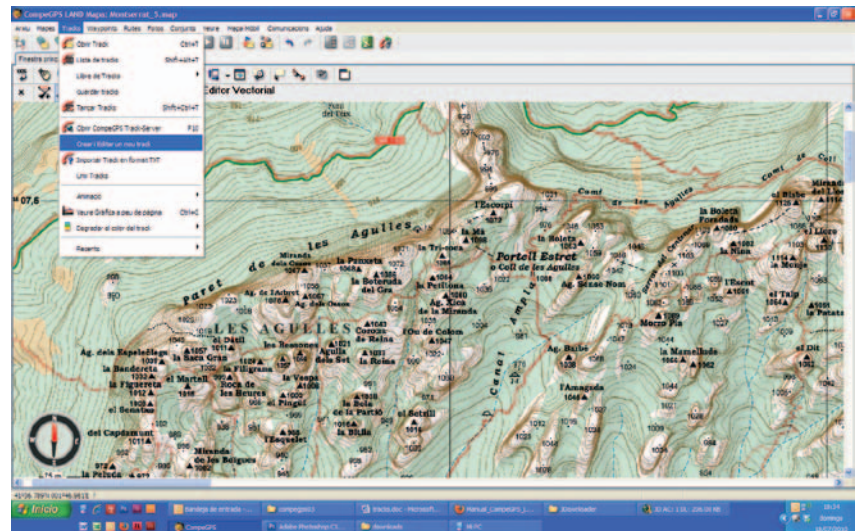
Creating a new track manually:

This is one of the most popular utility among GPS enthusiasts; since it gives us the ability to plan from home and draw directly on the digital map. Then you can copy it to the GPS and during the trip, have a good reference that tells you, in case of doubt, where to go through.

To create a new track is needed to pre-load the digital map of the area. **In chapter 3: "Working with maps"**, we explained how to do and how to get digital maps. Once loaded the map you will choose the option **'Create and Edit a new track'** from menu **'Tracks'**. A message reminds you that for add items to the track is needed to hold control key and right-click on the desired point of the map. One after another you
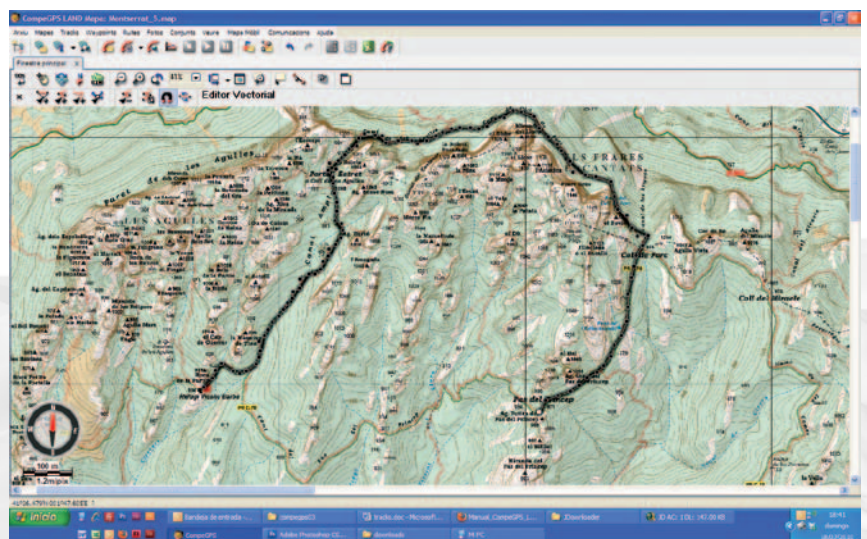

Figure 3

Figure 4

Figure 5

continue adding points along the places whe-re you want to pass (Figure 5).

CompeGPS Land links with a line the points that you mark (you may change the characte-ristics of this line in **'Track Properties')**. If you look at the top menu of the editor window you will see that there are a series of icons. These icons allow you, among other functions, close the editor, insert intermediate points, add new or delete items from a track (Fig. 6.)

You must not forget to save the track once completed its edition..

Add heights to a created track:

Perhaps we are interested in defining the heights of different points of the track in order to know the gradient of the trip we just plan-ned. CompeGPS Land has a utility that will allow us to calculate the height of each point of the track. To do this we need to load the relief map of the area. We will do this by choosing from the menu 'Maps', the option **'Download from Internet a relief for this area'.** Click **'Download'** and save in the folder you wish (figure 7).
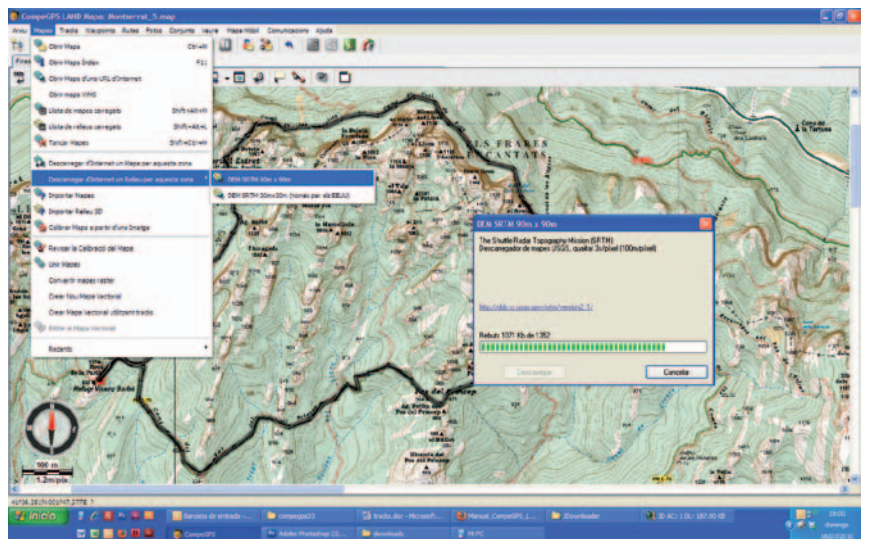
Once downloaded the relief, we can open it at any time as a normal map. To add the heights of the points, click on them with the right mouse button and choose **'Tools'>Calculate height for each point'**. If in **'Track'** menu we click on **'View Graphics',** a bottom window will appear with the altimetric profile of our track (Fig. 8).

Send track to GPS:

Si nuestro receptor es TwoNav Aventura, Sportiva o Evadeo, si no tenemos el track abierto, lo abriremos (menú **'Track'**, opción **'Abrir Track'** o la combinación de teclas de acceso rápido 'Ctrl+T') y, en la ventana **'Ár-bol'**, arrastraremos el archivo a la carpeta **'Tracks'** del dispositivo.

If your GPS is a TwoNav Aventura/Sportiva or Evadeo, open the track (menu **'Track'**, option **'Open Track'** or a combination of shortcut keys 'Ctrl + T') and in the window **'Tree'**, drag the file to the folder **'Tracks'** of the device. If you have another type of GPS, choose the option **'Send Track to GPS'** from **'Communi-cations'** menu or, in the data tree, right-click on the track and choose **'Send'>'Send Track to GPS'.**
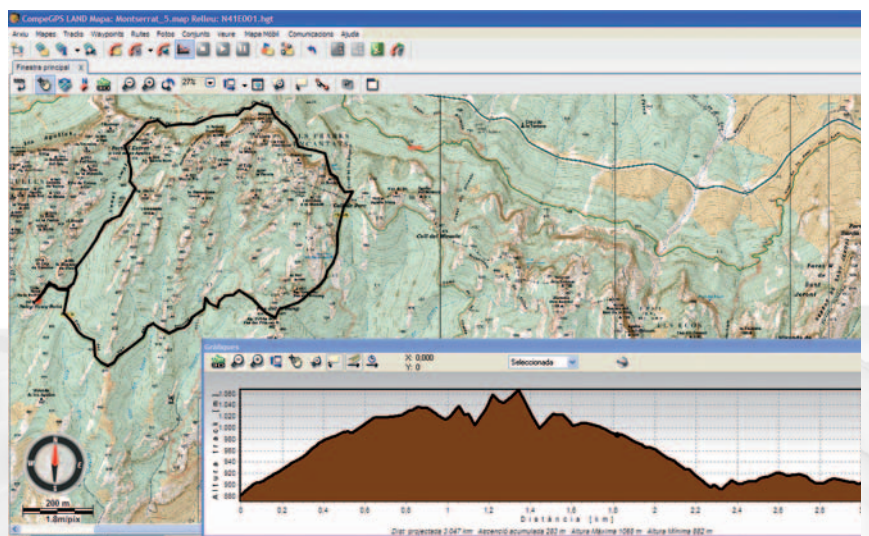

Figure 6

Figure 7

Figure 8