



**WTCX CONVERTER**

**GPS  
FILES  
CONVERTER**

# TCX Converter v2.0.9

QUICK USER MANUAL

# MAIN WINDOW

**TCX Converter** Build Date: 2009

File Import | Garmin Conn | GpsBabel Conn

**1** **2** **3**

File Information

Export | Waypoint | Preview | Track Modify | Settings

Save TCX File... Save TRK File... Save GPX File... Save CSV File... Save KML File... Save HRM File... Save PLT File...

Don't save Waypoint Remove SubTik before Export

SubTrack: SubTrack **8**

**4** **5** **6** **7**

Average Speed No average speed calculated


Course Data:

TIME	LAT	LONG	ALT	DIST	HR B...	CAD	AVG
SubTrack 0							13,42...
2006-05-28T06:00:37Z	45.013229	9.129599	88.398022	0	92	35	
2006-05-28T06:00:38Z	45.013229	9.129599	88.398022	0	94	0	
2006-05-28T06:00:39Z	45.013229	9.129600	88.398022	0	94	0	
2006-05-28T06:00:40Z	45.013233	9.129599	88.398022	0	0	0	
2006-05-28T06:00:43Z	45.013237	9.129599	88.398022	0	0	0	
2006-05-28T06:00:44Z	45.013241	9.129598	88.578735	0.001	91	0	
2006-05-28T06:00:46Z	45.013283	9.129587	87.517188	0.006	90	30	

Course Waypoint:

NAME	DISTANCE	TIME	LAT	LONG	TYPE
2006-05-28	0	2006-05-28T0...	45.013229	9.129599	Generic
2006-05-28	0	2006-05-28T0...	45.013229	9.129599	Water
2006-05-28	0	2006-05-28T0...	45.013229	9.129599	Valley

**10**

Informations: Max Altitude: 0m Altitude: +0m / -0m Progress: 

**11**

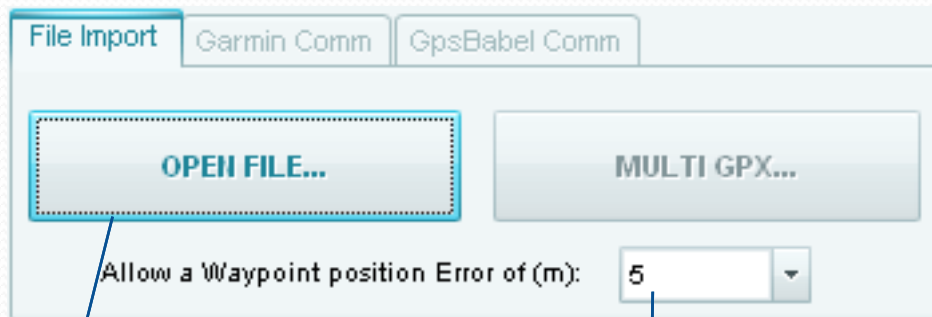
**TCX CONVERTER**

GPS FILES CONVERTER

# 1 TOP MENUBAR

- File
  - Exit Button
- Help
  - What's New
    - All the features added and bugs corrected
  - About
    - Information about the software
  - Revision data and info

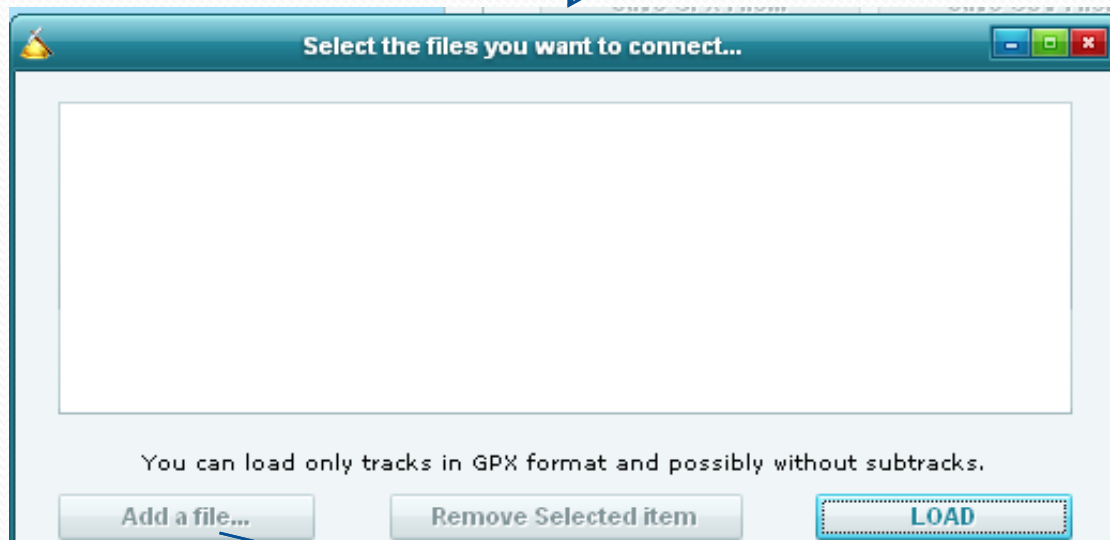
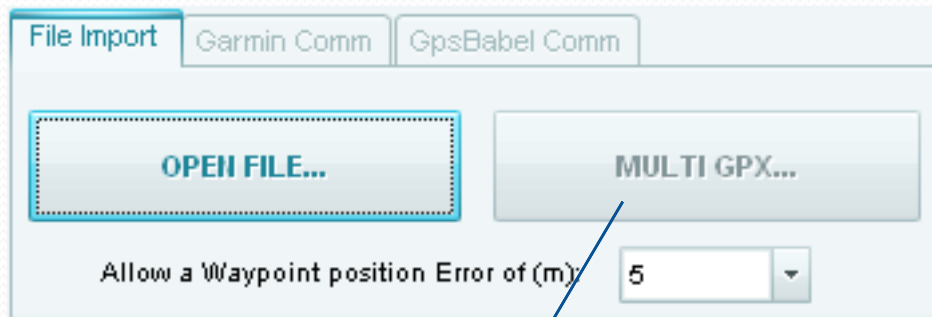
## 2 FILE IMPORT MENU



Open a file for analyze.  
The format allowed are  
TCX, GPX, KML, FITLOG,  
PLT and TRK

If a file include waypoints, with this parameter you decide what waypoint error is allowed. For a correct TCX file for Garmin GPS, the waypoint lat/lon have to be over a trackpoint, so TCX Converter will try to correct invalid waypoint in a radius of x meters from the waypoint passed.

# FILE IMPORT MENU (2)



With this function you can import multiple GPX files to create a big track.  
Use Add file to add files in correct sequence, than press LOAD to import them.

# FILE IMPORT MENU (3)



Use this function to open the Garmin Communicator download page (internet connection required).  
Whit this function you can download datas directly from you Garmin gps via the Garmin Communicator Plugin.

Use this function to open the Garmin Communicator upload page (internet connection required).  
Whit this function you can upload datas directly to you Garmin gps via the Garmin Communicator Plugin.



Use this function to import datas via GpsBabel engine. Please, refer to GpsBabel site for Garmin Gps compatible with this function.

## 3 FILE DATA

- This window contain information about the name of the file.

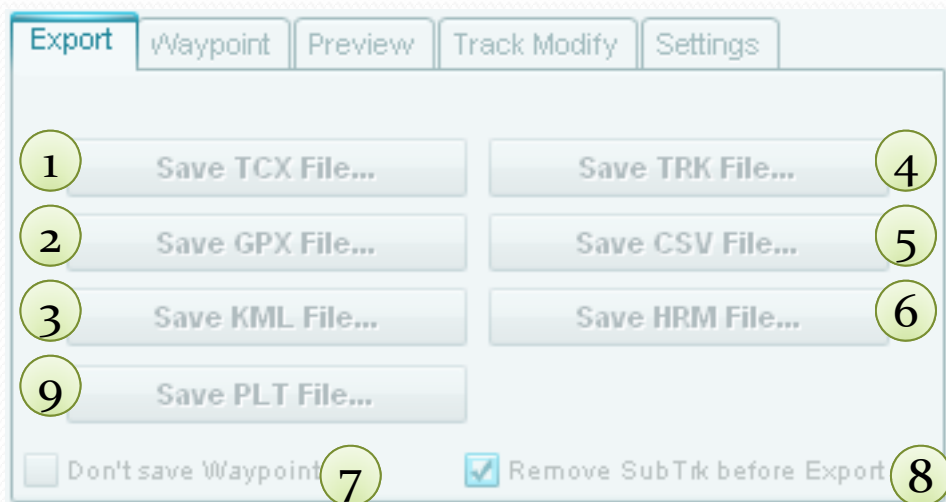
# 4 COURSES LIST

Nr.	Course Name	Distance	Time Sec.

- In this list-box you can see the list of courses contained into the file loaded.
  - If you load a file with only one track (GPX, TCX, TRK, KML, FITLOG) this list is only for information, with the total distance and time of the ride.
  - For TCX files, once you have loaded the file you have to select from this list what track you want to load. This is because in TCX file can be stored more than one track.

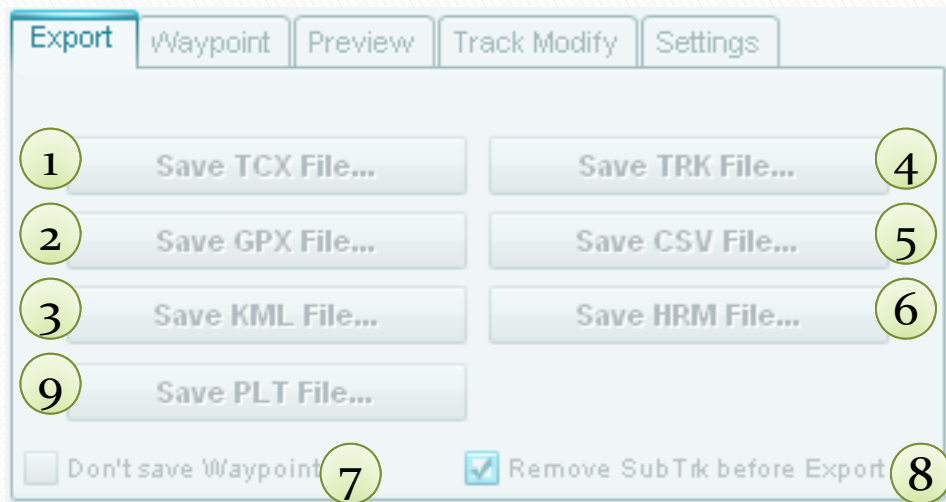


# 5 WORKING MENU



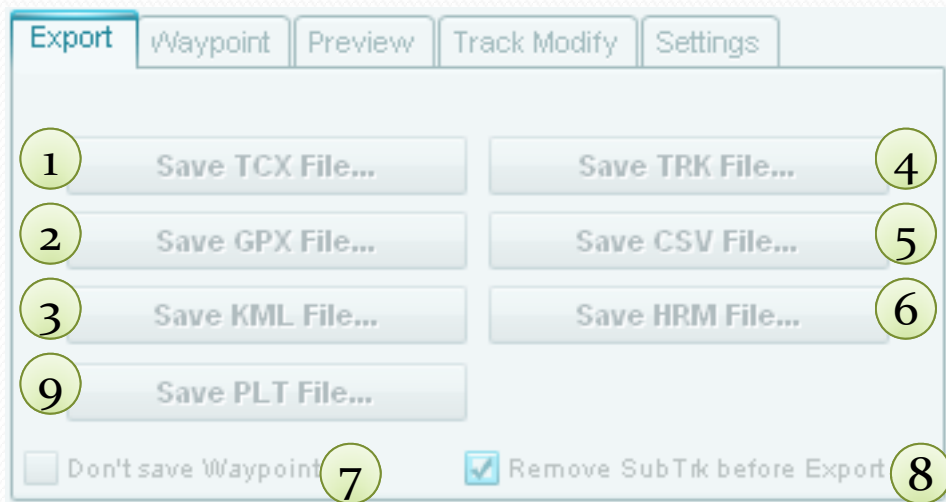
- 1 – Save the track as TCX file
  - After the selection of the export name, you can select if you want to export a course (track to use to navigate) or history (track that can be imported in Training Center as history). For this case, you can also select the activity type (Bicicletta, Corsa, Ciclyng etc etc etc).
  - You have also the possibility to select if you want to save the TCX file with your personal gps informations (retrived by the function in setting menu) or to use dummy gps informations.
  - For a problem with Garmin Connect, you can select to don't save DistanceMeters Tags.

# WORKING MENU (2)



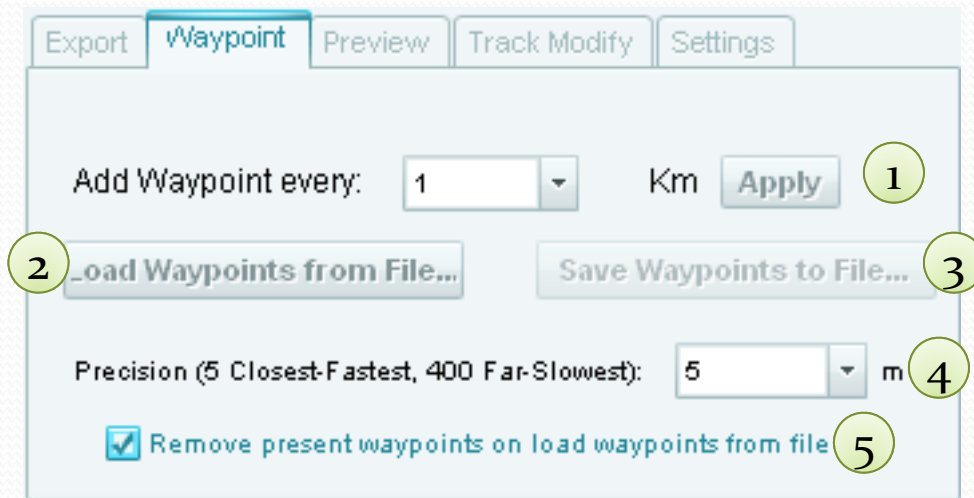
- 2 – Save the track as GPX file
  - After the selection of the export name, you can select if you want to export a standard GPX file (you have to press NO at the question) or a SportTracks GPX file with all the training datas, heart rate and cadence (you have to press YES at the question).
  - If you want a GPX to import in MapSource, you have to save a standard GPX file.

# WORKING MENU (3)



- 3 – Save the track as KML file
- 4 – Save the track as TRK file
- 5 – Save the track as an Excel CSV file
- 6 – Save the track as Polar HRM file
  - For this function, you have to specify some personal parameters to try to calculate as much data as possible.
- 7 – Check this checkbox if you want to remove subtrack data and save a file with a single subtrack
- 8 – Check this checkbox if you don't want to save waypoints data
- 9 – Save the track as a PLT OziExplorer file

# WORKING MENU (4)



Export Waypoint Preview Track Modify Settings

Add Waypoint every: 1 Km Apply 1

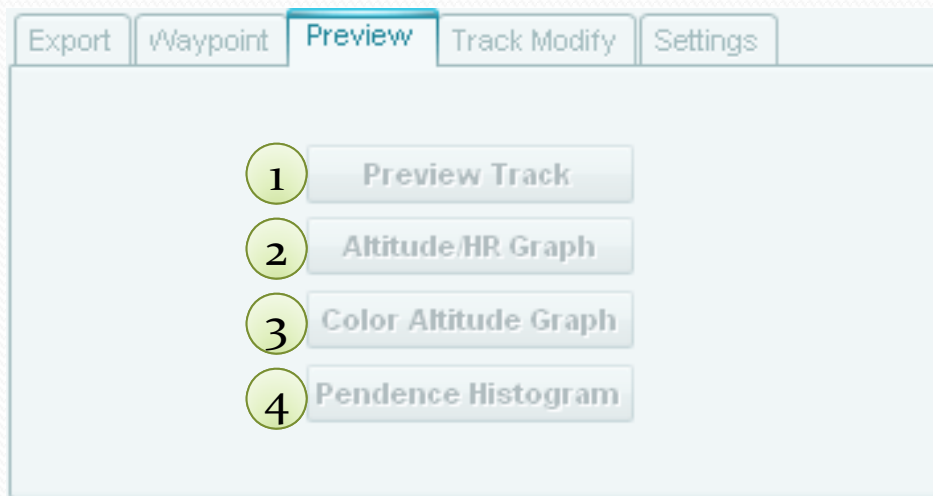
2 Load Waypoints from File... Save Waypoints to File... 3

Precision (5 Closest-Fastest, 400 Far-Slowest): 5 m 4

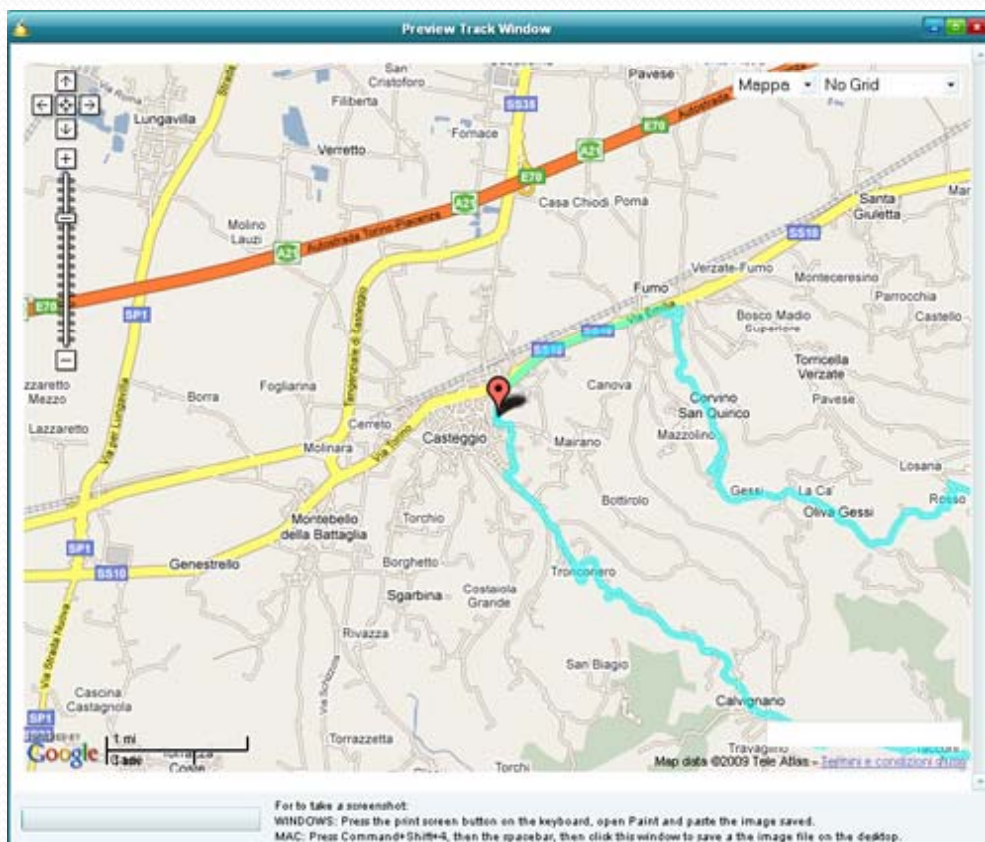
☒ Remove present waypoints on load waypoints from file 5

- 1 – With this function you can add waypoints every x kilometers to the track. Select the ammount and press apply to see them added.
- 2 – With this function you can import waypoints previously saved from another similar track. TCX Converter will try to place them over the current track.
- 3 – Save the waypoints of this track in a file.
- 4 – With this parameter you decide what waypoint error is allowed. For a correct TCX file for Garmin GPS, the waypoint lat/lon have to be over a trackpoint, so TCX Converter will try to correct invalid waypoint in a radius of x meters from the waypoint passed.
- 5 – If checked, the present waypoints are deleted before new waypoints are imported

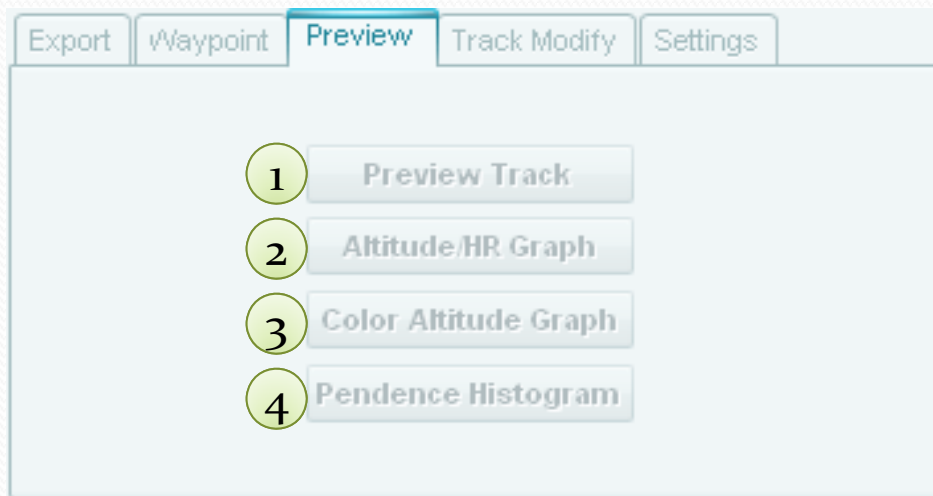
# WORKING MENU (5)



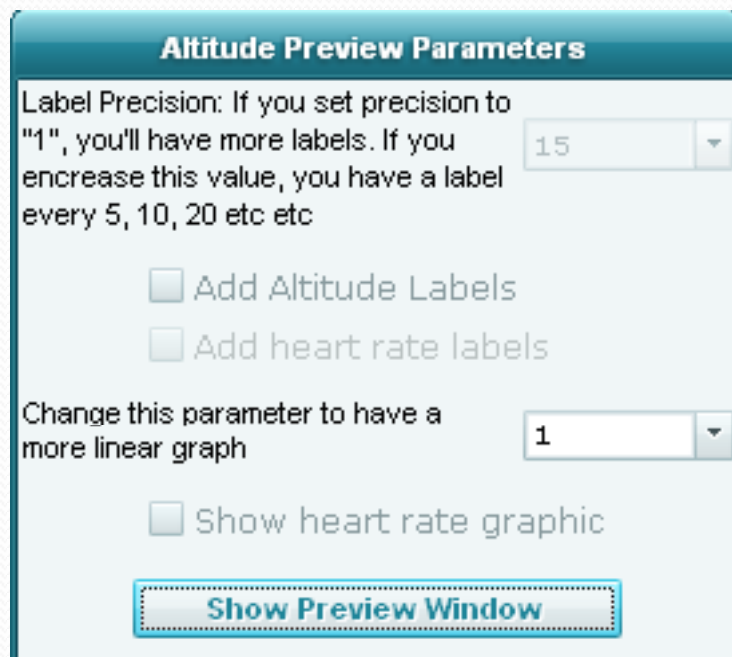
- 1 – Open the track preview map. For this function you have to be connected to internet and your track have to be perfect (correct date, average speed etc etc etc)



# WORKING MENU (6)



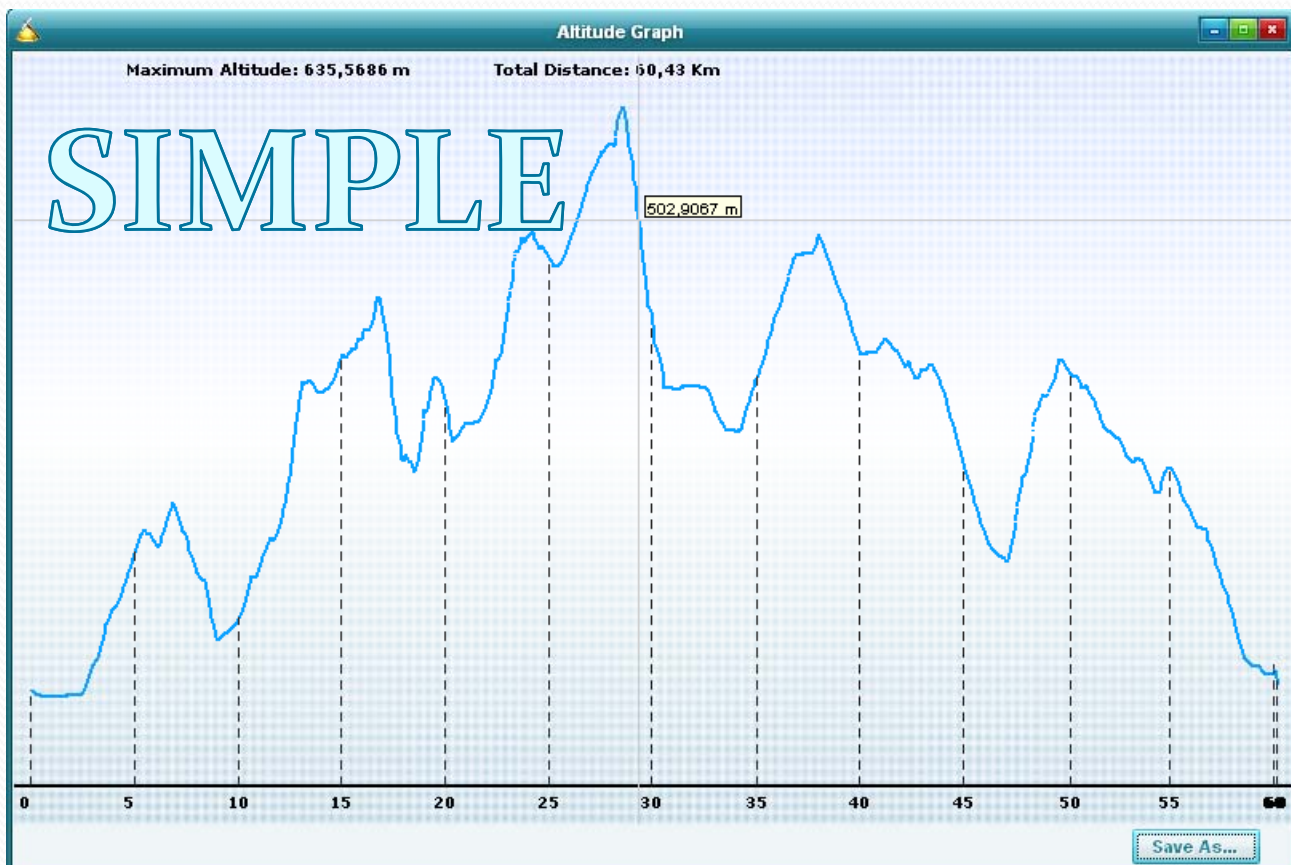
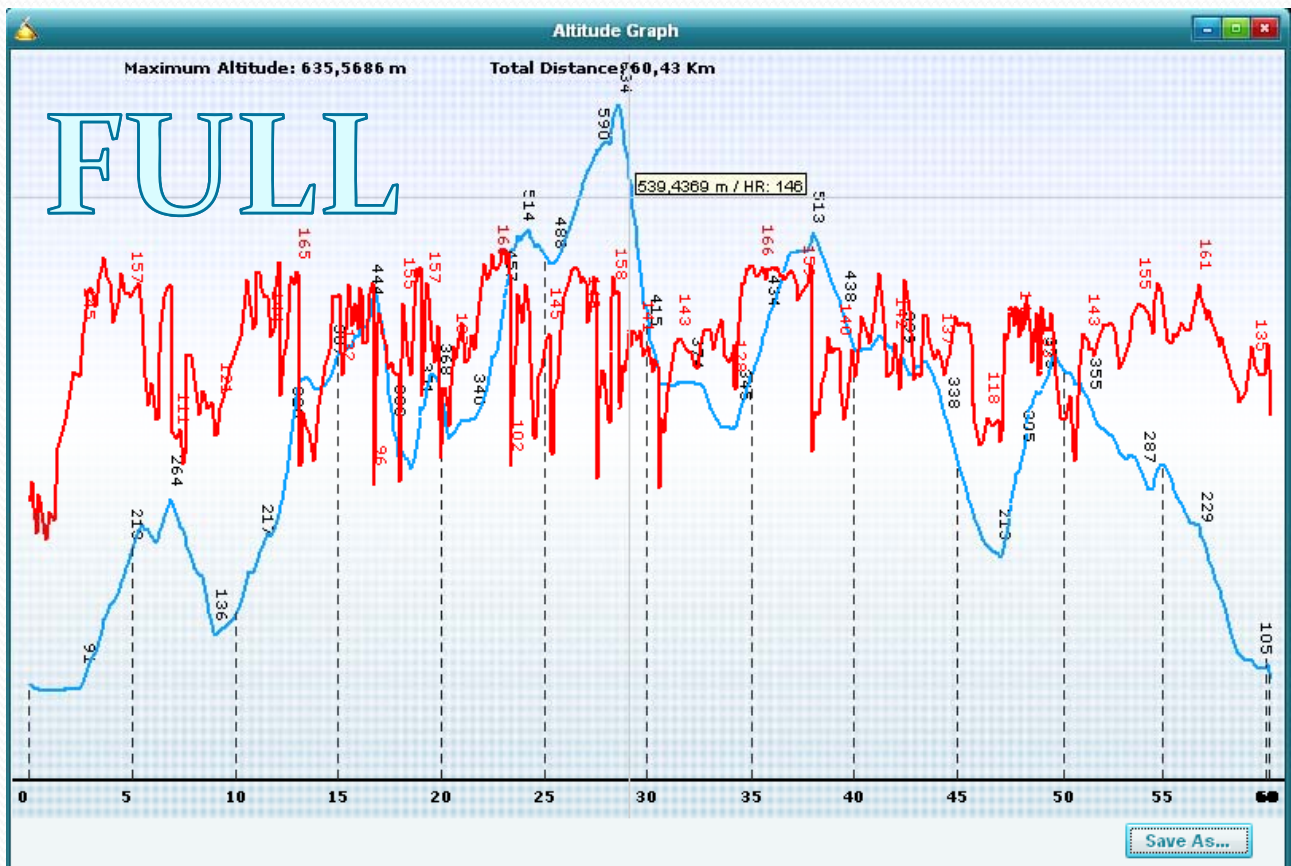
- 2 – Open the track altitude graph parameter window. From here you can activate some parameters that will change the graph preview.
- From the graph preview, with a right click over the blue altitude line, you can also add waypoints (with a precision of 95%).



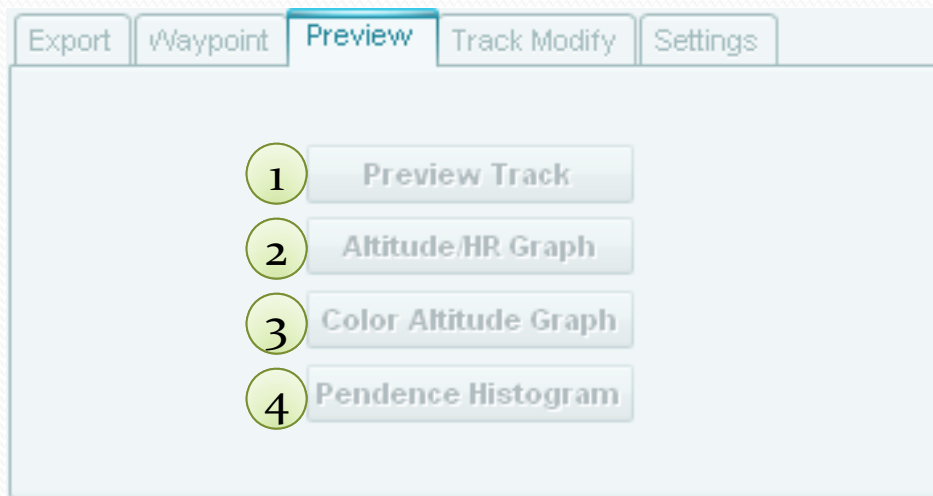


WORKING MENU (7)

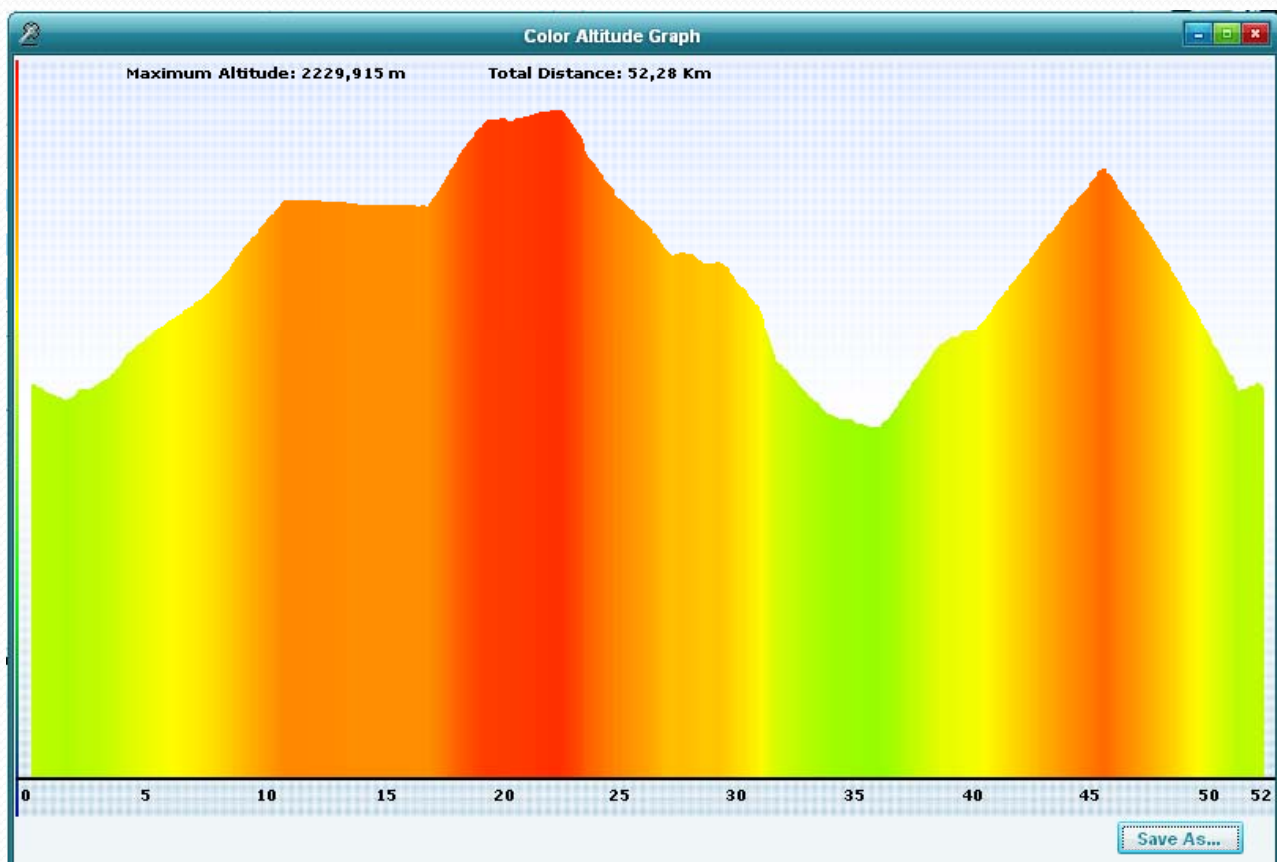
Altitude Graph



# WORKING MENU (8)

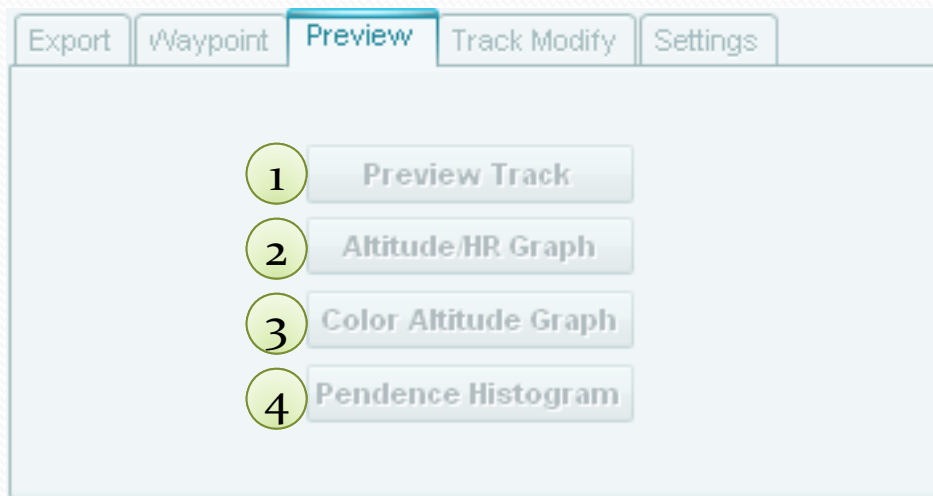


- 3 – Open the styled track preview map with colors linked to the altitude of the track.

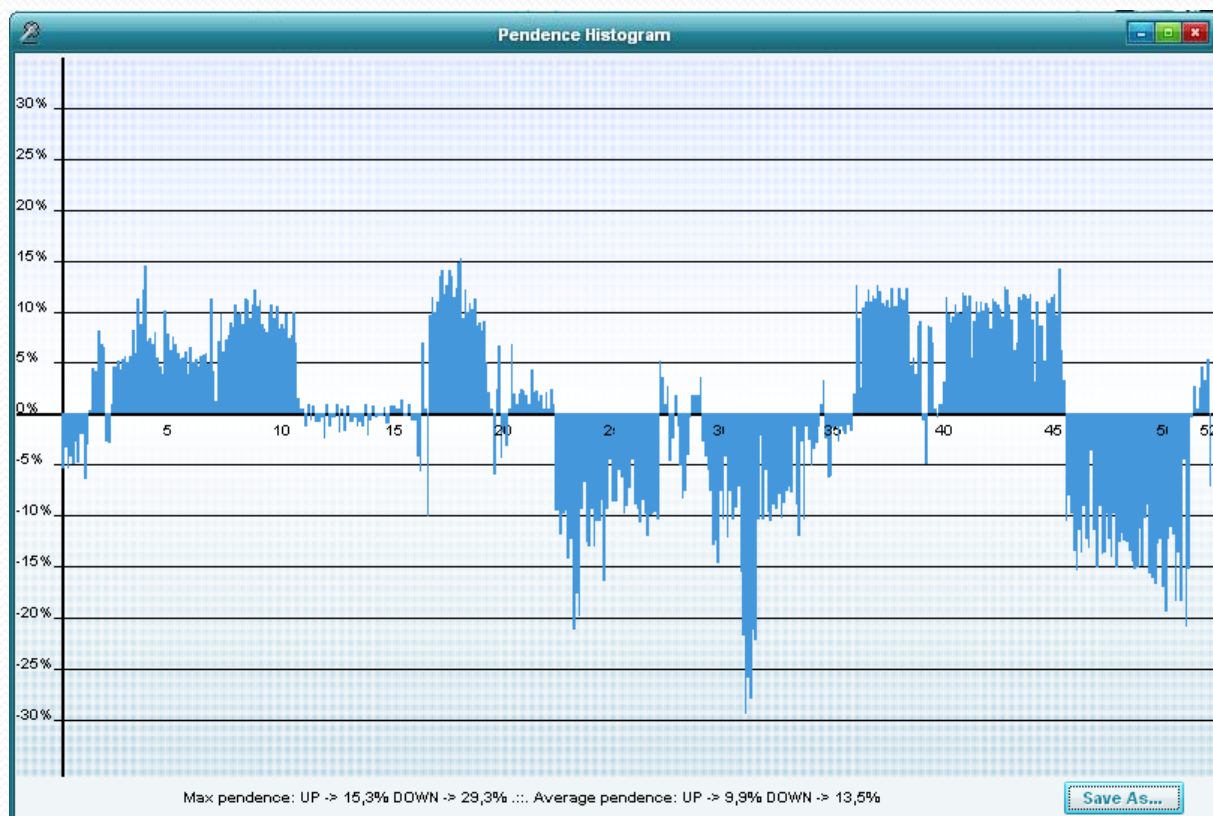




# WORKING MENU (9)



- 4 – Open the pendence histogram of the track. Here you can see if the track is hard or not 😊



# WORKING MENU (10)

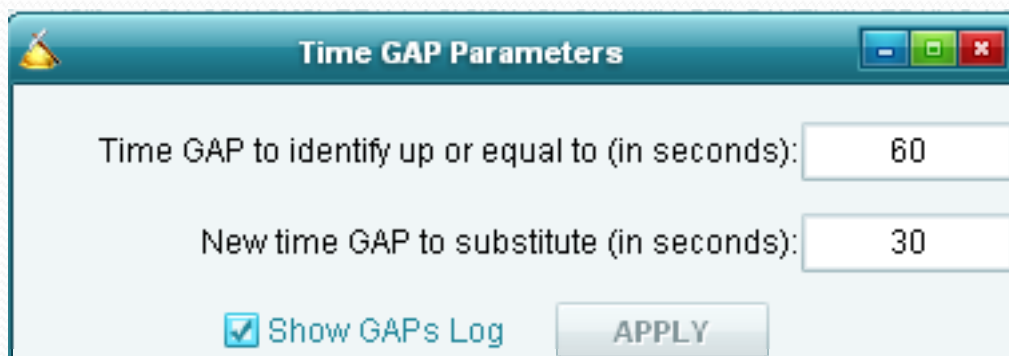


- 1 – Update the altitude of all the trackpoint. (Internet connection needed)
- 2 – Fix corrupted TCX files. When Garmin GPS like EDGE 705 power off during recording, the TCX file can be corrupted and no readable with no software. With this function you can try to fix the problem.
- 3 – Limit the trackpoints passing a fixed maximum number (i.e. your track have 2000 points and you want to limit them to 1000; TCX Converter smartly remove 1000 point from the track)
- 4 – Remove unneeded adjacent clone points (point with same lat/lon)

# WORKING MENU (11)



- 5 – Invert the direction of the track start <> end
- 6 – Change the track name
- 7 – Open the mod time gap parameters window. A time gap is, for example, when you stop your ride and after some time restart. Your track so present a time gap of seconds, minutes or hours, that are not needed. With this function you can remove them from the track.



# WORKING MENU (12)



- 8 – Change the track average speed
- 9 – Increment or decrement the actual average speed by %

# SETTING MENU (1)

Export Waypoint Preview Track Modify Settings

User GPS Track Update Proxy

Vo2Max: 50

Weight: 78

Personal Resting HR: 60

Personal Max HR: 195

Time Zone: 0

CSV Dec: ,

SAVE params

- Personal Parameters for HRM and CSV save

Export Waypoint Preview Track Modify Settings

User GPS Track Update Proxy

Unit Name: EDGE305

Unit ID: 1111111111

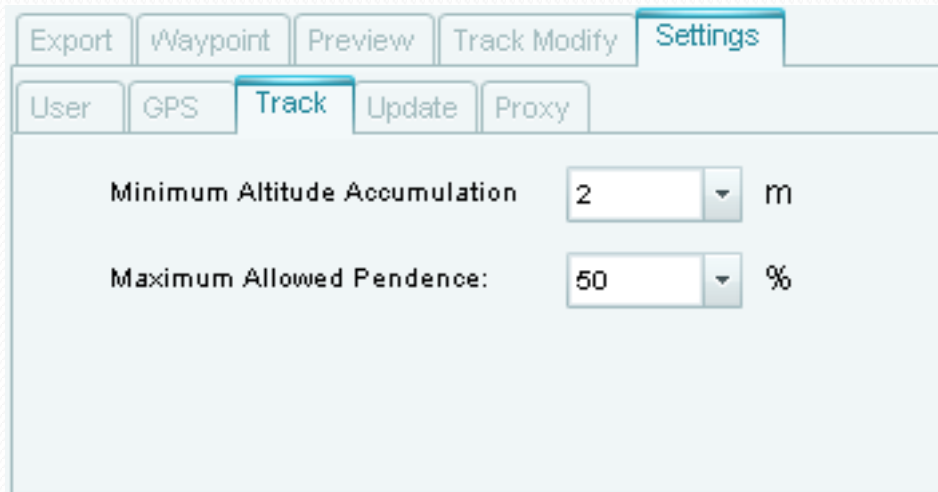
Product ID: 450

Version: 2.90.0.0

UPDATE

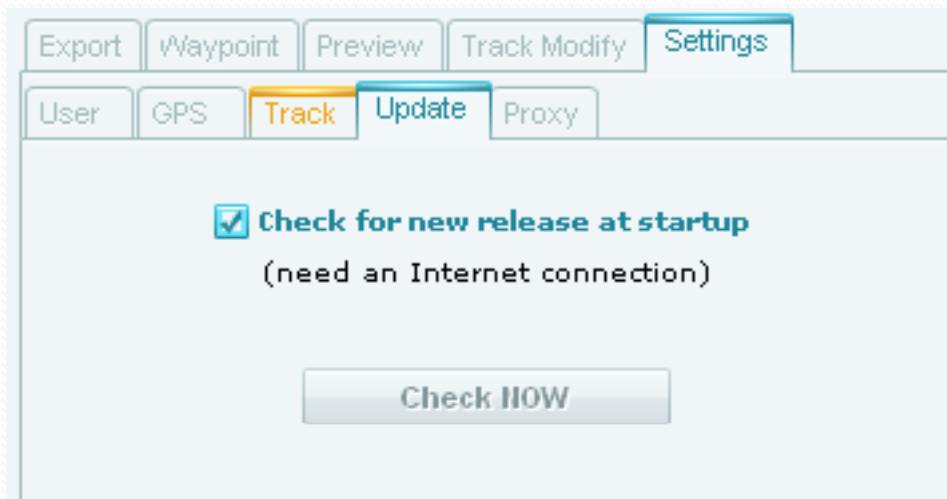
- Garmin GPS unit data. Press update to get your personal Garmin gps datas from a TCX file generated from your GPS.

# SETTING MENU (2)



A screenshot of a software settings window. The top row of tabs includes 'Export', 'Waypoint', 'Preview', 'Track Modify', and 'Settings'. The 'Settings' tab is active. Below this, a second row of tabs includes 'User', 'GPS', 'Track', 'Update', and 'Proxy'. The 'Track' tab is selected and highlighted in blue. The main content area shows two settings: 'Minimum Altitude Accumulation' with a value of '2' and a unit of 'm', and 'Maximum Allowed Pendence' with a value of '50' and a unit of '%'. Both values are in input fields with dropdown arrows.

- Parameters for set altitude accumulation filter



A screenshot of the same software settings window, but with the 'Update' tab selected and highlighted in blue. The 'Track' tab is now greyed out. The main content area displays a checkbox labeled 'Check for new release at startup' which is checked. Below the checkbox is the text '(need an Internet connection)'. At the bottom of the panel is a button labeled 'Check NOW'.

- Software update parameters

# SETTING MENU (3)

The screenshot shows a software interface with a top menu bar containing 'Export', 'Waypoint', 'Preview', 'Track Modify', and 'Settings'. The 'Settings' menu is open, showing sub-options: 'User', 'GPS', 'Track', 'Update', and 'Proxy'. The 'Proxy' sub-menu is selected, displaying the following settings:

- ☐ Use a proxy
- ☐ Proxy need authentication
- Proxy Address:
- Proxy Port:
- User:  Password:
- SAVE params**

- Proxy settings

# 6 DONATION BUTTON

- This is the more important function button of the software 😊
- If you want to help my work to go on and you are satisfied about my software, you can place an ammount-free donation with PayPal, using this button or using the links inside  
<http://www.teambikeolympo.it/TCXConverter>



## 7 AVERAGE SPEED INFO

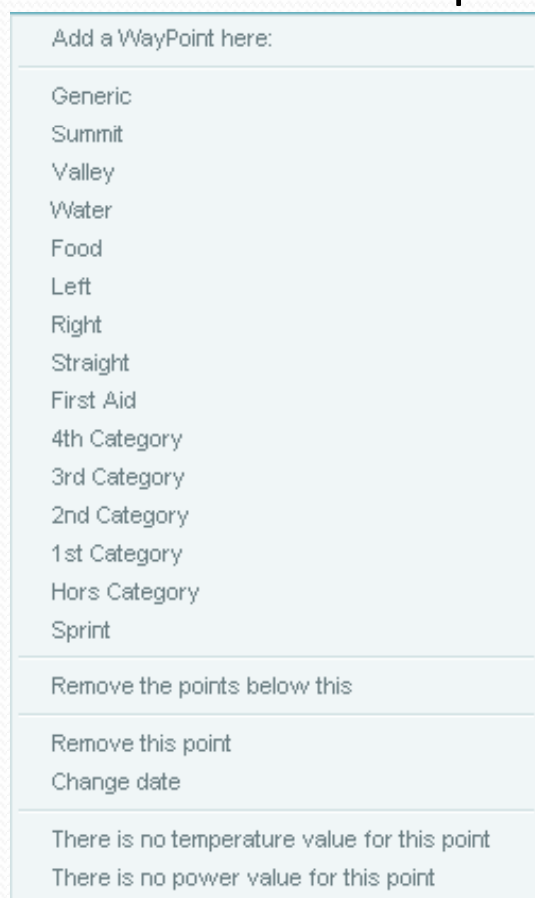
- This box contain informations about the average speed of the current track.

## 8 SUBTRACKS INFO

- This popup listbox contain informations about the subtracks present in the current track. You can move the cursor directly to the start of the subtrack selected.

# 9 TRACKPOINT INFO

- This listbox contain information on each trackpoint.
  - If you want to add a waypoint to a determinate trackpoint, you have only to click with the right button on the decided trackpoint.



- Then select the type of waypoint you want to add and you can see it appearing in the waypoint listbox.
- In this popup menu you can see also the temperature and power data (if presents) in that trackpoint.
- If the point you clicked is the first, you can decide to change the date of the track (a calendar appear to help you select the day)
- You can also remove all the trackpoints below the selected one or only the selected point.

# TRACKPOINT INFO (2)

- If you want to export a portion of the track, preview the map for a limited points series or view the altitude graph for the selected points, you can do this operation:

SubTrack 0							
2009-01-25T09:32:11Z	45.036563	10.545529	18.883056...	0	66	0	
2009-01-25T09:32:11Z	45.036556	10.545509	18.40234375	0,001	66	0	
2009-01-25T09:32:12Z	45.036540	10.545482	18.40234375	0,004	67	0	
2009-01-25T09:32:13Z	45.036525	10.545456	18.40234375	0,006	67	0	
2009-01-25T09:32:13Z	45.036514	10.545436	17.441162...	0,008	68	0	
2009-01-25T09:32:14Z	45.036495	10.545415	17.441162...	0,011	70	0	
2009-01-25T09:32:15Z	45.036476	10.545394	17.441162...	0,014	72	0	
Course Waypoint:							
NAME			LAT		LONG		T

Export this selection as GPX file  
 Preview selection altitude graph  
 Preview selection map  
 Remove these points

- Select the first wanted trackpoint with a left click of the mouse
- Holding the shift key on the keyboard, press with the left button over the last wanted point
- Without releasing the shift key and without moving, press the right click over this last point.
- The menu "Export this selection as GPX file" appear and you can select it.
- You can also decide to delete all the points selected (you cannot delete SubTrack rows)

# 10 WAYPOINTS INFO

- Here you have all the datas about waypoints. You can rename them or, with a right click change the waypoint type or delete it.



# 11 ALTITUDE INFO

- Here you have the info about the maximum altitude, the total ascending accumulate altitude and the total descending accumulate altitude. These two last value depending from the settings in the settings menu.

# GREETINGS

I want to say thank you to all the people who helped me via PayPal donation or via software feedbacks that helped me to correct a lot of bugs in the past.

I want also to say thank you to **Garmin Slipstream Pro Cycling Team** who decided to use my software for their tracks creation work.

