
VASCO NAVIGATOR

Le 1^{er} Intégral de Road-Book



Version COMPÉTITION
IMPORTATION de POINTS
version 2.11 et ultérieures



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WAY POINTS & DISTANCE IMPORT

This new extended function will allow you to simplify the creation of your Road-Books. The idea came from files originating directly from the ERTF - M1, M2, M3 and now Reco² recognition systems - all of which have the same ability to be handled by Vasco Navigator.

So we looked at this problem and decided to add a function to import points directly from Excel. This feature automatically creates the lines of the area with cumulative distance and GPS points. Thus, after importing the points of a sector, all the lines are automatically created and all that remains is to enrich your Road Book with your most significant illustrations.

Format Exclusive but Tolerant :

Warning: the data presented through an import file are not qualifiable, so Vasco Compétition will integrate them as they are presented, without any verification.

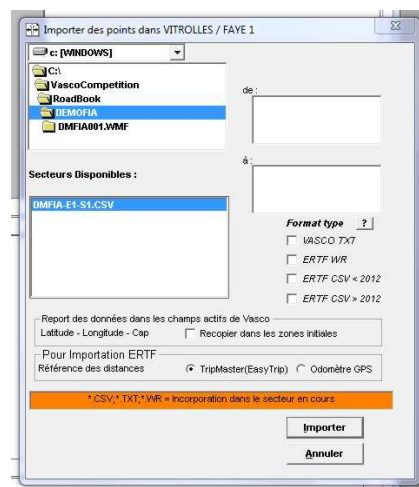
We urge you to carefully check the result of automatically generated lines in the sector after importing.

How to do :

Having a file in the correct format (see the following pages) and with Vasco Navigator Version Competition V 2.10.001 and following.

Create your Road-Book as you usually do, and then define steps and sectors.

Open an area, as you usually do. From the Sector menu, choose « **Importer des Points** ».



In the import window, select the TXT box, choose the corresponding file.

Format d'importation spécifique VASCO Compétition

If you do not select the " Recopier les données dans les champs actifs " box, only the new fields will be filled in. If you want the Cap - Latitude and Longitude values to be transferred to the active fields of the Road - Book, simply check this box.

Click on « Importer ».

Vasco gives you a new table with the list of data to integrate.



Click the desired line (usually always the first one) and click OK.

The sector will be created automatically... That's all.

All you have to do is finish the work with some drawings of your own art...

Organisation Advice :

If you have taken the wise precaution of creating in the folder Vasco / RoadBook, a specific folder to contain the files of your Road Book, you can also save your import files there.

Thus, they will be presented to you as soon as you request the import function.

FORMAT

PRESENTATION OF DATA

Beyond Excel, the data must be presented according to the following description:

File Format :

- Plain Text in ASCII,
- Separating fields with tabs
- filename ending with .TXT (see methodology in Excel)

Information format (data):

- Field 1 – **Line number** in the sector
 - From 1 to 9999, croissant from 1 à n
 - Note :** Lines containing letters in this field will not be integrated.
- Field 2 – **Cumulative Distance** in mètres from the start of the sector
 - 1 à 999999 – Whole number 10Km220 = 10220
 - Note :** Attention to rounding if your sector is defined in decameter or hectometer. Vasco will do this but the results may surprise you
- Field 3 – **Latitude** indeterminate format (as you want)
 - From 1 to 15 characters
- Field 4 – **Longitude** indeterminate format (as you want)
 - From 1 to 15 characters
- Field 5 – **WayPoint name**
 - From 1 to 25 characters
- Field 6 – **Description**
 - From 1 to 100 characters
- Field 7 – **Altitude**
 - From 1 to 50 characters
- Field 8 – **Course GPS**
 - From 1 to 20 characters
- Field 9 – **Date and Time from GPS**
 - From 1 to 20 characters

EXAMPLE

IDEALLY YOUR COMPLETED IMPORT FILE MUST BE PRESENTED AS FOLLOWS

File Name : xxxxxxxxxx.**TXT**
or **.CSV** (Specify Format Vasco)

NoWpt	Odomètre	Latitude	Longitude	Wpt Name	Description	Altitude	Course	Date-Time
1	0	S19°07.627	E23°39.574	WP001	Magotho Camp	120	192	03/07/2014-12 :01
2	59	S19°07.600	E23°39.556	WP002	Sortie Camp	92	210	03/07/2014-12 :02
3	243	S19°07.580	E23°39.634	WP003	Reprise PP AD	77	230	03/07/2014-12 :09
4	7115	S19°08.949	E23°42.193	WP004	TD	56	290	03/07/2014-12 :15
Line not inserted into The Vasco's Sector (*)								
5	8639	S19°08.851	E23°42.964	WP005	TD	49	230	03/07/2014-12 :18
6	8864	S19°08.896	E23°43.075	WP006	Gué et !! ORN	17	190	03/07/2014-12 :19
7	11464	S19°09.693	E23°44.127	WP007	TD	33	150	03/07/2014-12 :23
8	12664	S19°09.913	E23°44.769	WP008	AD C 120° Moyen	45	125	03/07/2014-12 :25
9	13131	S19°09.967	E23°45.016	WP009	Khwaï Village	119	272	03/07/2014-12 :27

(*) Namely: any line with no number in the first column is ignored by Vasco.

The title line is therefore not considered, as is the line between lines 4 and 5 (in this example).

EXCEL MÉTHODOLOGIE

Basic principles :

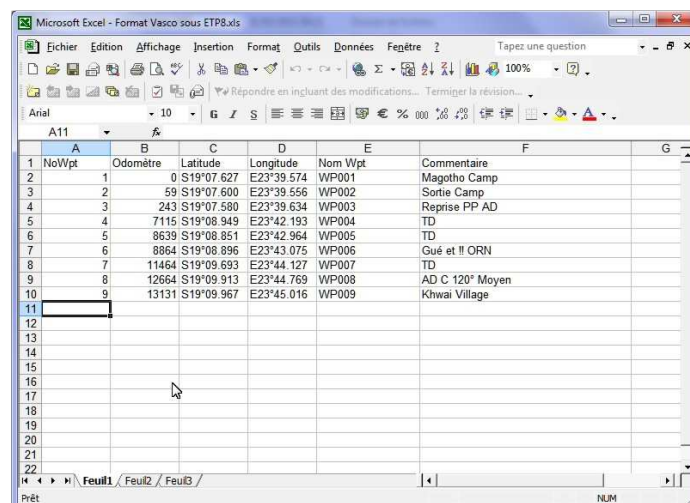
Under Excel, there are not ONE, but dozens of methods to achieve your goals, so we will present a few, without ever wanting to replace your know-how.

File Creation :

It will be easier to create and work (edit) your file in native Excel (xls) format and transform it into a text file at the time of integration into Vasco.

Recording the file under text format :

Your native Excel file open, save it in native Excel format and follow these steps with the menus:



NoWpt	Odomètre	Latitude	Longitude	Nom Wpt	Commentaire
1	0	S19°07.627	E23°39.574	WP001	Magotho Camp
2	59	S19°07.600	E23°39.556	WP002	Sortie Camp
3	243	S19°07.580	E23°39.634	WP003	Reprise PP AD
4	7115	S19°08.949	E23°42.193	WP004	TD
5	8639	S19°08.851	E23°42.964	WP005	TD
6	8864	S19°08.896	E23°43.075	WP006	Gué et II ORN
7	11464	S19°09.693	E23°44.127	WP007	TD
8	12664	S19°09.913	E23°44.769	WP008	AD C 120° Moyen
9	13131	S19°09.967	E23°45.016	WP009	Khwai Village

- **File/Write under :**
Choose format: Text tab separator (*.txt) and specify the desired folder for recording.
- **Click on Write :**
Then, to the question: The selected file type does not support workbooks containing multiple sheets - click OK.

To the second question: "file" may contain information not compatible with text separator tabulation ... - click on YES

- **Quit Excel :**
Which will propose you to save the file ... - click on NO because it is already done.

Manipulation of the information :

In Excel, it is possible to directly open files of different natures and horizons. A GPX file (the most standard of the GPS formats) can be useful to you by providing numerical values of Latitude and Longitude, Altitude, Timing, etc.

These data are of course to be interpreted and conditioned, but they have the advantage of being reliable.

Thus Latitude and Longitude are provided in fully digital form. For example, the following values (Lat / Lon): -16,393336 / -71,532849 correspond to the 16th degree of south latitude and 71th degree of west longitude (city of Arequipa in Peru). If you want to integrate them in a more usual and understandable form to the common browsers, it will be necessary to transform the decimals into minutes and decimals or minutes and seconds. Also, without wishing to call into question your computer skills, I remind you of some essential Excel commands with the following example.

- Columns B to K give the results of an interpretation to convert these raw values into more common values in Degrees-Minutes and 3 decimals (column J) or Degrees-Minutes-Seconds (column K).

	A	B	C	D	E	F	G	H	I	J	K
	<i>Position</i>	<i>Hémisphère</i>	<i>Pos Inter +</i>	<i>Degrés</i>	<i>Décimales Inter</i>	<i>Minutes Inter 1</i>	<i>Minutes</i>	<i>Décimales Minutes</i>	<i>Seconde s</i>	<i>Résultat en minutes,xxx</i>	<i>Résultat en minutes secondes</i>
1	<i>GPX initiale</i>										
2	-16,393336	S	16,393336	16	393336	23,60016	23	600	36	S 16°23.600'	S 16°23'36"
3	-71,532849	W	71,532849	71	532849	31,97094	31	971	58	W 71°31.971'	W 71°31'58"

- **Column A :**
The positions of Arequipa in degrees and decimals. For clarity of this example, the Latitude (Line 2) and Longitude (Line 3) positions are processed on two lines. In a practical operation, they must be used on the same line to process both values simultaneously.
- **Column B - Deduction of hemisphere**
If negative latitude = S, positive = N, and if negative longitude = W, positive = E.
Formula : Latitude =IF(A2<0;"S";"N")
or Longitude =IF(A3<0;"W";"E")
- **Column C – Intermediate position value always positive**
Multiplication of the negative value by -1 to obtain a positive one
Formula : =IF(A2<0;A2-1;A2)*
- **Column D – Extraction of the Degrees**
Formula : =INT(C2)

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- **Column E** – Extraction of millionths of degrees
*Formula : $= (C2 - INT(C2)) * 1000000$*
- **Column F** – Intermediate Calculation of Minutes
*Formula : $= (E2 / 1000000) * 60$*
- **Column G** – Extraction of minutes integers
Formula : $= INT(F2)$
- **Column H** – Calculation and Extraction of décimals of minutes
*Formula : $= INT(ROUND(F2 - INT(F2); 3) * 1000)$*
- **Column I** – Calculation and Extraction of seconds
*Formula : $= ROUNDED((H2 / 1000) * 60; 0)$*
- **Column J** – Calculation and Extraction of décimales of minutes
*Formula : $= INT(ROUNDED(F2 - INT(F2); 3) * 1000)$*
- **Column J** – Obtaining the position in the format H DD ° MM.MMM '
Formula : $= CONCAT(B2; " "; D2; "°"; G2; " "; H2; "''')$
Note : Fixed values must be enclosed in quotation marks. But in order for Excel to correctly interpret the formula, the quote for 'minute' must also be enclosed in quotation marks (""')
- **Column K** – Obtaining the position in the format H DD°MM'SS"
Formula : $= CONCAT(B2; " "; D2; "°"; G2; "''"; I2; "''''')$
Note : For Excel to interpret the formula correctly, the second sign " must be enclosed in quotation marks and doubled (" ""')

Note : Obviously, the cell references will be different in your own Excel table.

Add-ons for novices:

Some will say

"It's all very well, but after I have a lot of columns and what do I do to get the famous Vasco format? "

Then: Follow the guide ...

- Right-click the sheet name (at the bottom of the table)
- In the window that opens then click "Move or Copy"
- A new window, click on the correct sheet and check "Create a copy"
- You have an extra sheet ... Type of backup of your work
- Click the empty box at the top of the Excel frame (above the line number and to the left of the column letter) or press CTRL + A
This selects the entire contents of the worksheet
- Be sure to keep the entire worksheet selected
Right click in the sheet and "Copy"
Re-Right Click and "Paste Special" - in the window that opens check values and OK
- All the formulas have disappeared and you will be able to delete the unnecessary columns and keep only the columns to integrate.

The Little Tip :

Do you have a GPS file (GPX or other)?

Open it with your usual software (eg Garmin MapSource).

- Select and display a route or trace,
 - Click in the resulting list to position the pointer,
 - Press CTRL + A (select all) then Right click in the list and "Copy"
 - Open Excel and in an empty sheet, Paste it all and do the cleaning ...
- You will surely find the distances and courses in addition to the positions