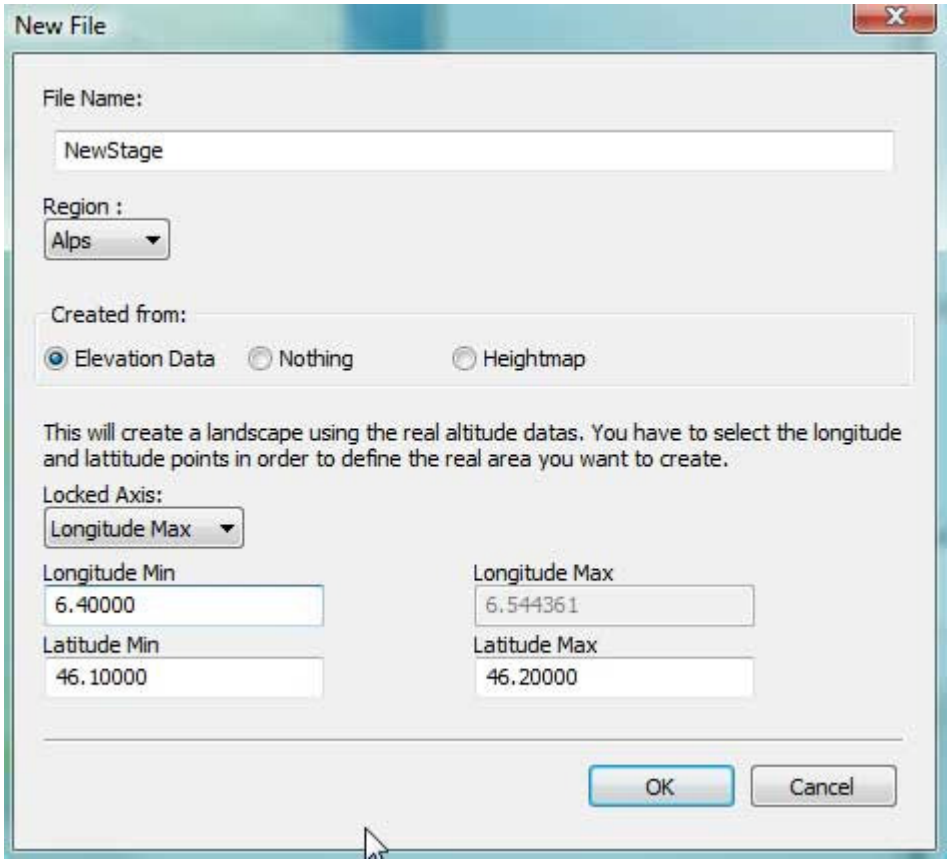
Tutorial : CM3D Basics

I) Create a map

- Select “File” on the top menu then the “New” function
- Keep the default choice : Created from: “Elevation Data”
- Put in the boxes the Longitude/Latitude coordinates.
- The map must be a square so the last coordinate is not editable.

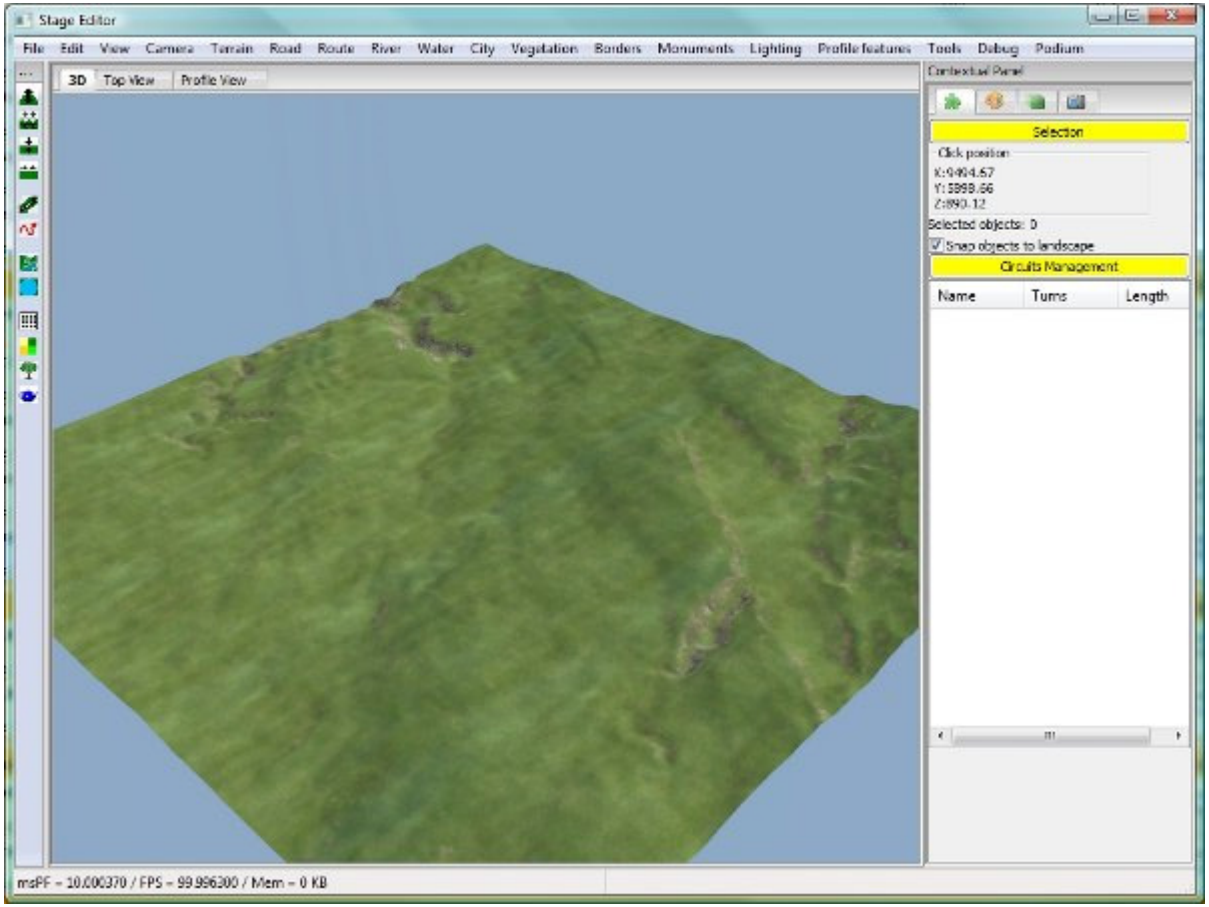


Try to center your future race on this map. If later your race goes near a border, the effect will be terrible in the game and you'll have to restart all the stage from 0 ! Note : http://www.openstreetmap.org/export/ [http://www.openstreetmap.org/export/] allow you to draw a rectangular area on a

map in order to see his 4 coordinates. Seems to be the perfect tool for us.

II) Camera

After a “New File” and few seconds of loading you'll discover the whole landscape from a far view :



- To zoom in/zoom out on the map, you can either use the mouse roll or the keys 1 and 2.
- To make a rotation, you must click and maintain the mouse roll then move your mouse to the left or right (or use keys 3 and 4).
- To modify the camera's view angle, you must click and maintain the mouse roll then move your mouse up or down (or use keys 5 and 6).
- To move the camera :

- Front/Rear/Left/Right : Z/S/Q/D
- Up/Down : E/X

- Modify the camera's speed : Select the “camera” icon in the right panel (Contextual Panel) then change the “Camera Speed” value. The “Reset Camera” button allow you to reset the camera's view.

III) Saves and file formats

- File Formats
  - .CTS : the stage source file, your stage creation save. Is Editable.
  - .CES : the first exported stage file, which will be read by the game. Non Editable !
  - .CDS : the second exported stage file which contains some sprint datas and other stage informations (generated automatically when you export the stage). Non Editable !
  - .XML : a specific save of the stage : roads, race route and water areas. It's recommanded to make regularly a save of this file when you're designing roads and race route. When we modify some specific parts in the code, the .CTS files are not compatible anymore while XML files are always compatible.
- Open

The **File>Open** (CTRL+O) function allow to open **.cts** file formats

- Save

The **File>Save** (CTRL+S) function allow to save your file (format : **.cts**)

- Export

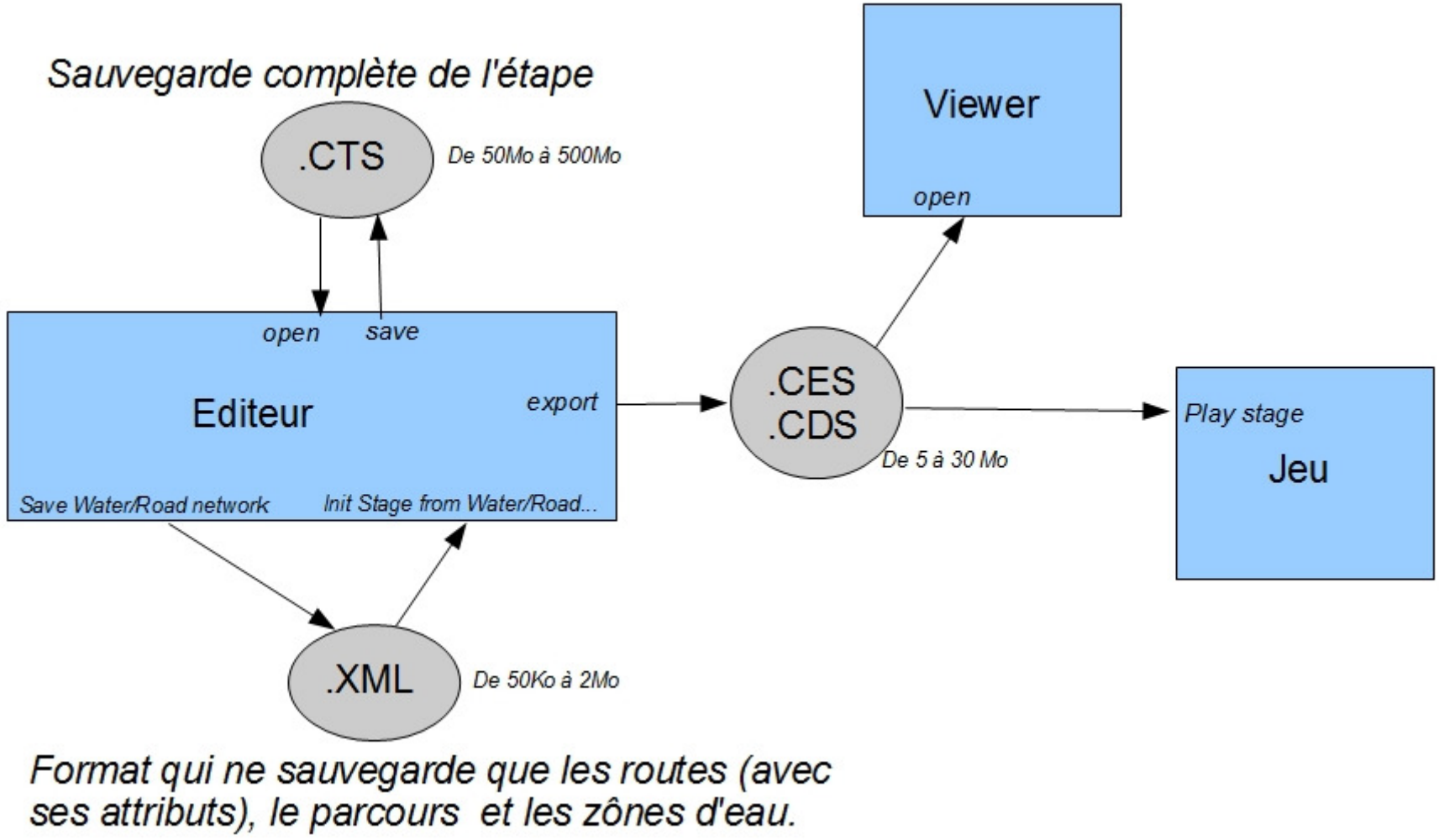
The **File>Export** (CTRL+E) function allow to export the stage in two separates files **.ces** and **.cds**

- Save Road/Water network

The **File>Save Water/Road network** function allow to save the landscape coordinates, the roads, the race route and the water areas in a XML file.

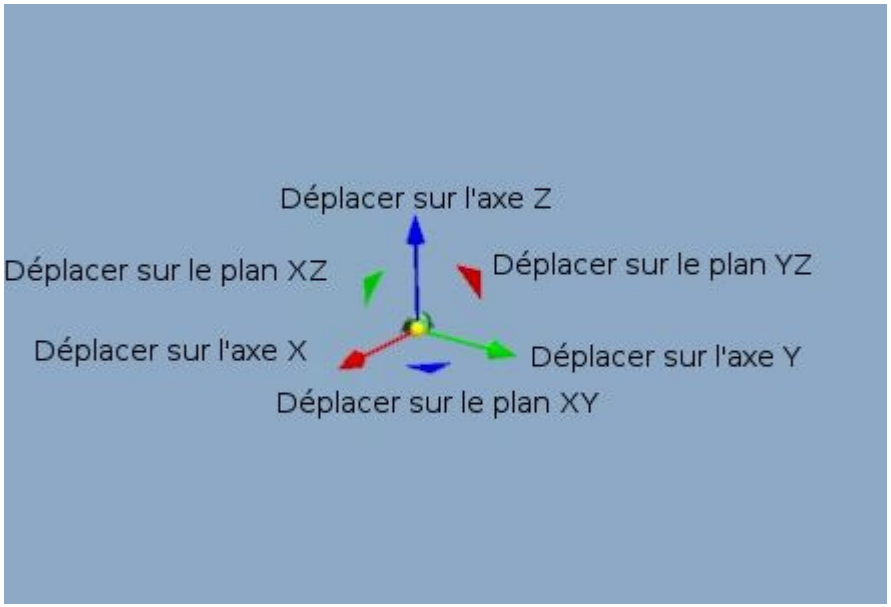
- Init Stage from Water/Road network

The **File>Init Stage from Water/Road network** function allow to create a stage from a XML file : landscape, roads, race route and water areas.



IV) The Gizmo

This tool allow to move an object (a house, a waymark…) or any object point (a point around a forest area)

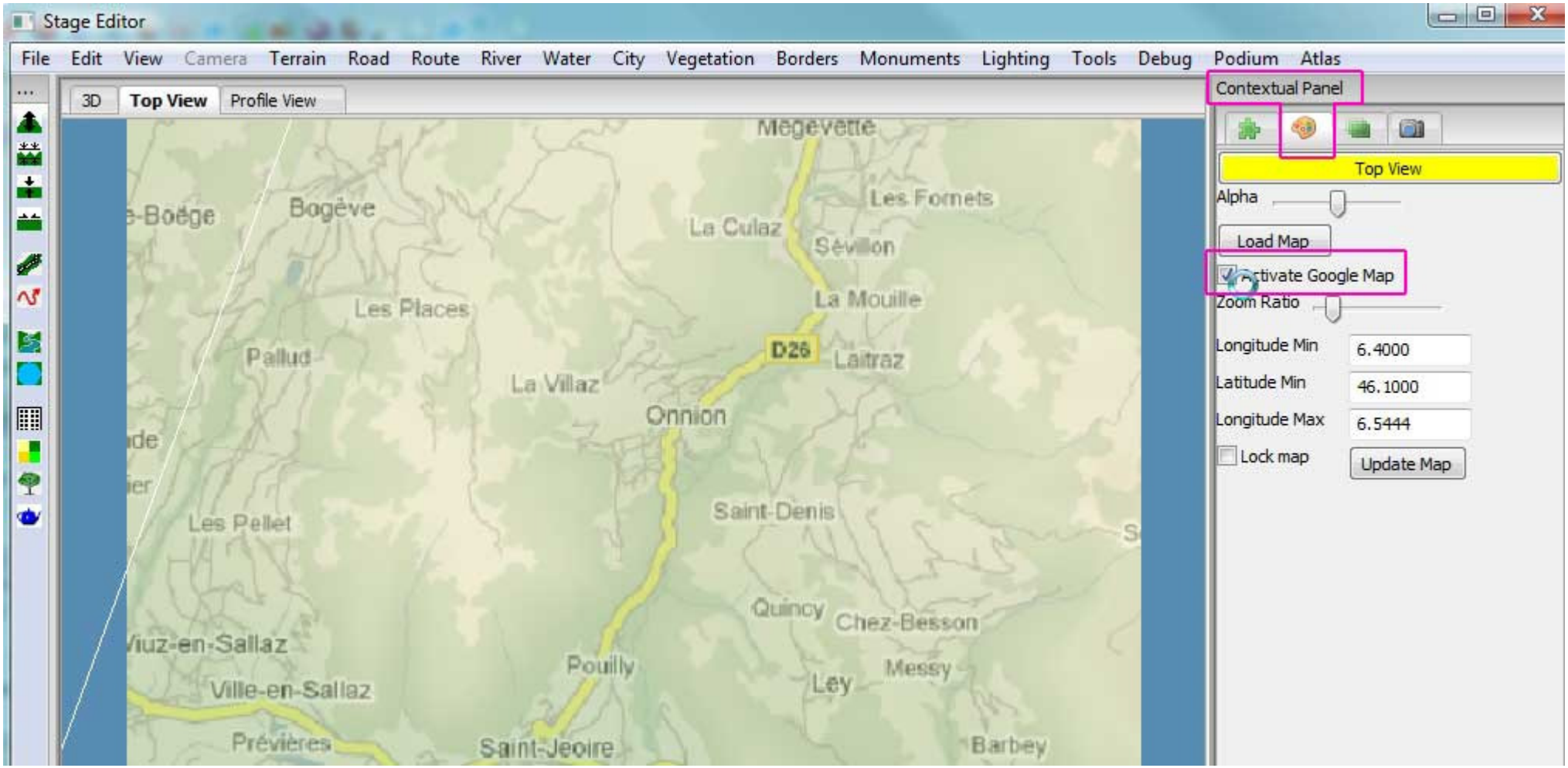


You have to select the object in order to see the Gizmo. Then you just need to click and maintain the axe where you want to move your object and move your mouse.

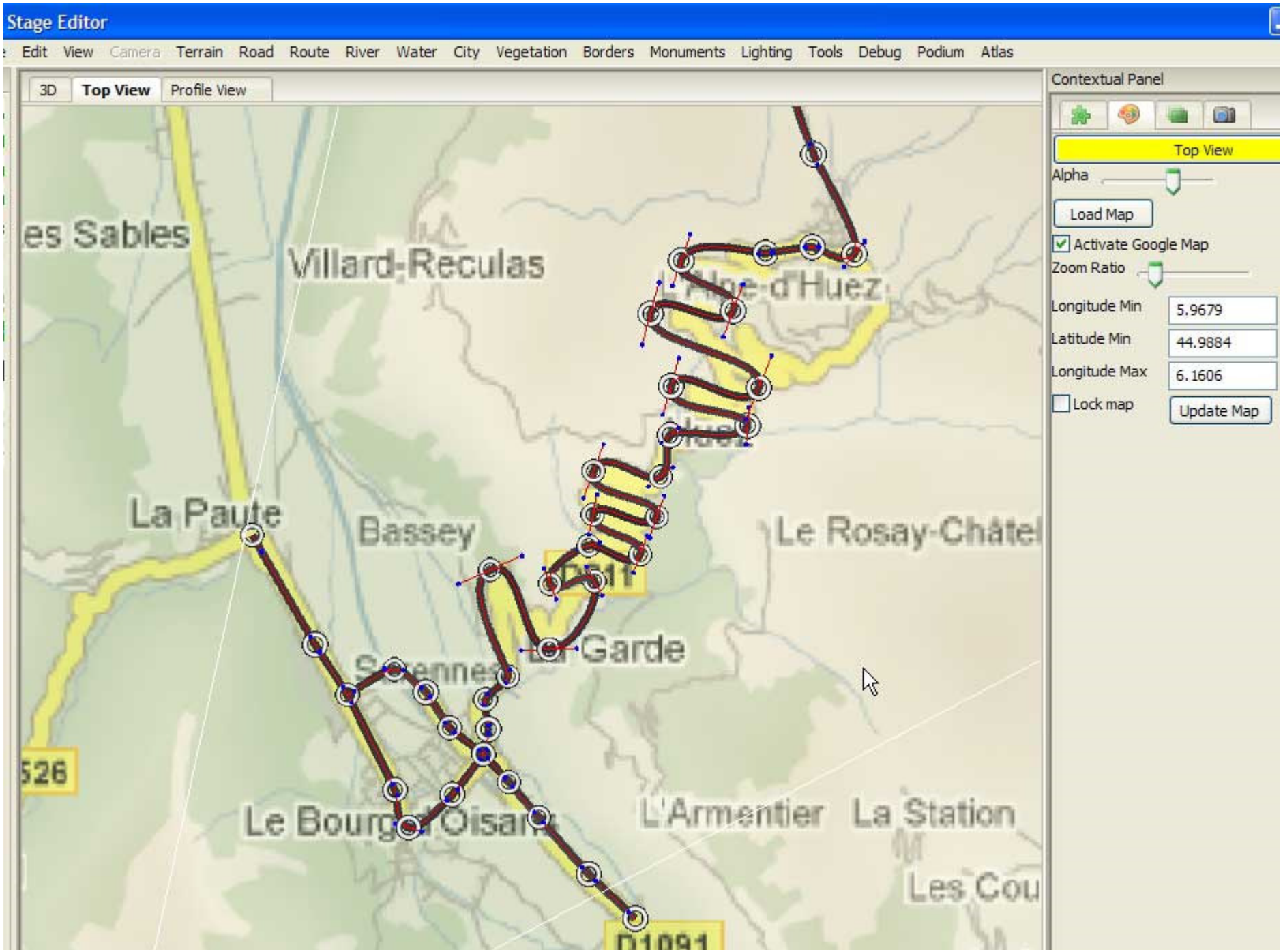
You'll use mostly the little blue triangle to move an object.

V) Create the road network

- Go into the “Top View” tab then in the right contextual panel.
- Open the second tab and check the “activate google map” function



- With the "Road" tool we'll create a first road network
- Go into the top menu "Road" then use the "Add Road" function (or the keyboard shortcut ALT+R).


Stage Editor
Edit View Camera Terrain Road Route River Water City Vegetation Borders Monuments Lighting Tools Debug Podium Atlas
3D Top View Profile View
Contextual Panel
Top View
Alpha
Load Map
Activate Google Map
Zoom Ratio
Longitude Min 5.9679
Latitude Min 44.9884
Longitude Max 6.1606
Lock map
Update Map
es Sables
Villard-Reculas
La Paute
Bassey
Le Rosay-Châtel
La Garde
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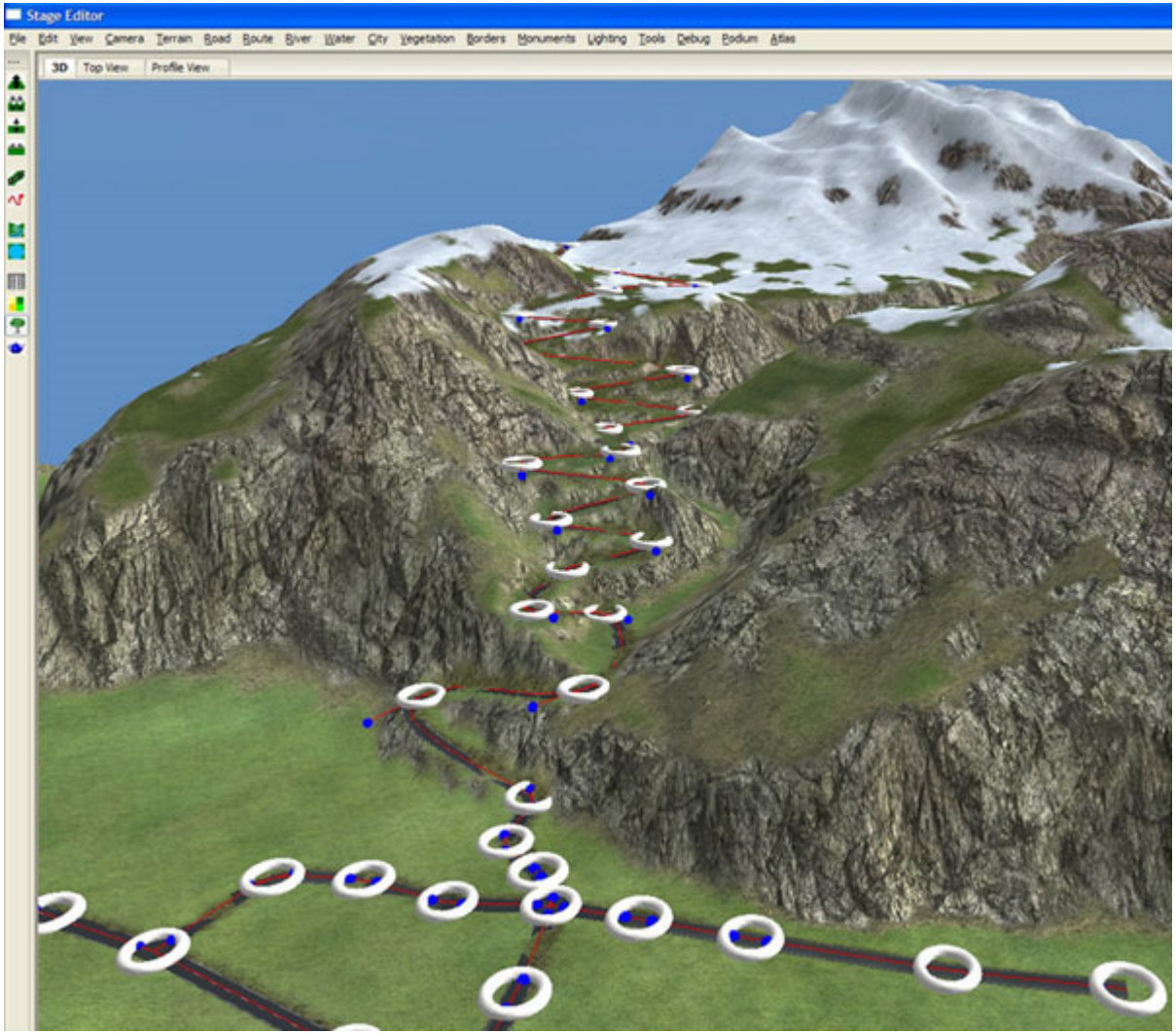
Le Bourg-d'Oisans
L'Armentier
La Station
Les Cou

- You can see your result in real-time in the “3D” tab

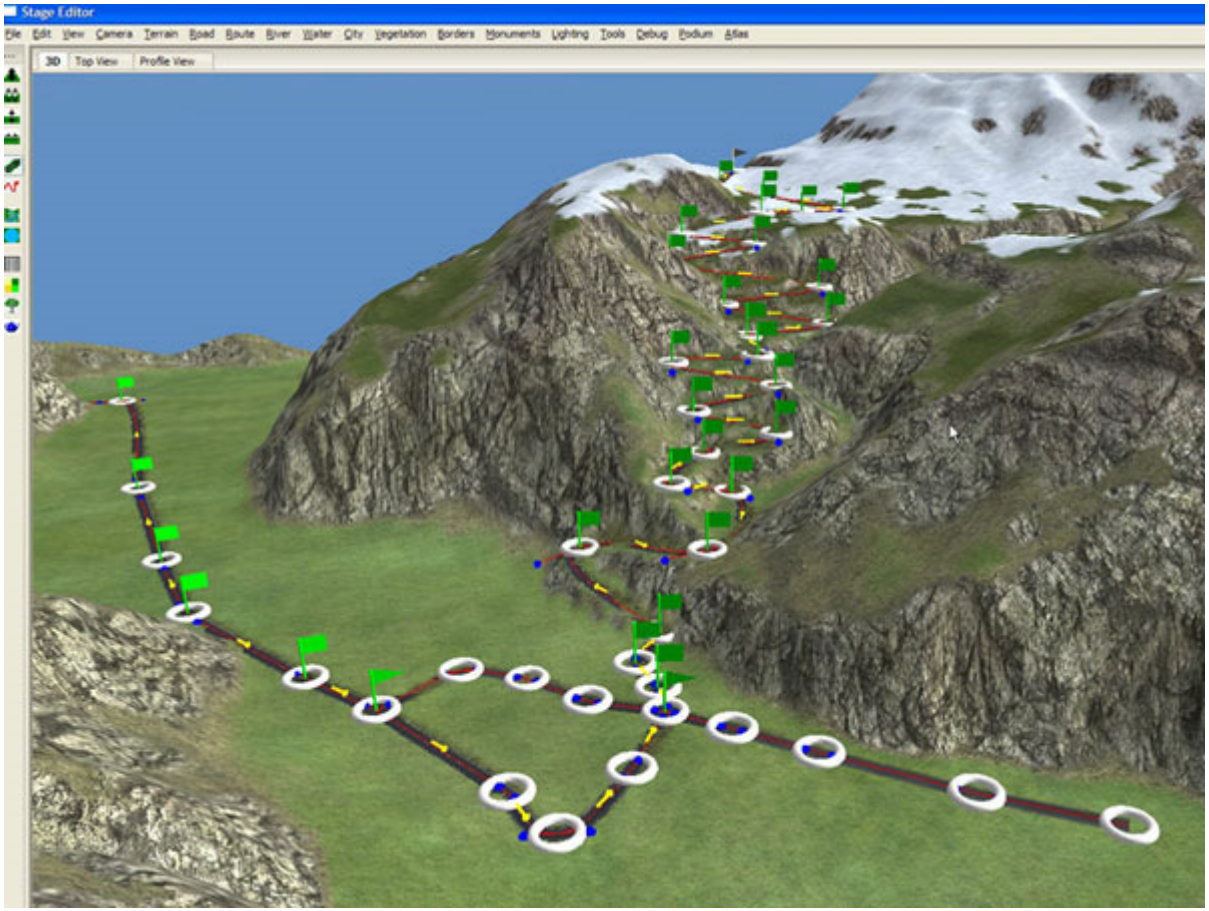


Note : the Road tool allow you to make the road network, not the race route (“Route” menu). Creating the road network is only a first step which doesn't allow you to see the race profile or calculate the race distance.

VI) Create the race route

- We'll create the race route with the “Route” tool
- Go into the top menu “Route” then use the “Add Route Checkpoint” function (or the keyboard shortcut ALT+C).

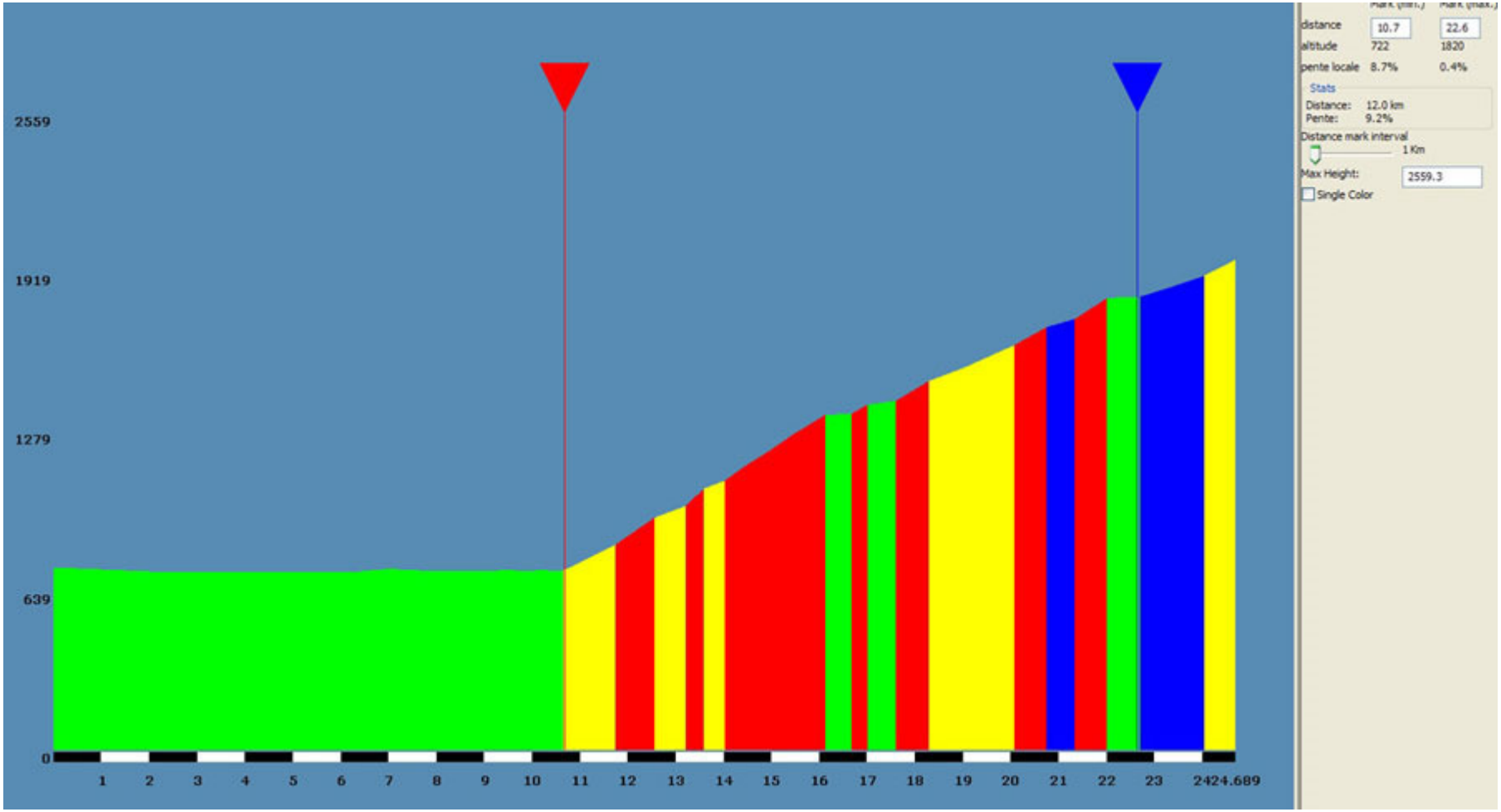
Note : You can do this step either in 3D either in 2D TopView



- Let at least 2 km of margin before the start and 2 km after the finish in order to let some space for the cyclists.
- It's not necessary to put a race checkpoint over each road point. You just need to put one at the beginning, then one on each crossroad of the race and one at the end. The Editor will automatically add them between your checkpoints.

VII) Retouch roads

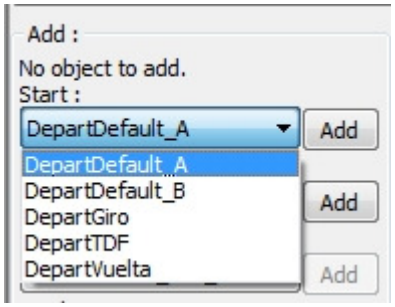
- Once the race route has been created, you can notice that a race profile has been generated (tab : "Profile View").



- First, we can modify the roads parameters : number of lanes, textures…
- Then it could be interesting to retouch some roads for too steep slopes or strange curves or too tight turns.

VIII) Startlines, Finishlines, Sprints

- Go into the top menu "Route" then use the "Sprint" function
- Choose in the right menu a Starting object and click on the "Add" button. The go into the 3D view and set up the line where you want



- Slide the line until you reach the place you want on the race route. Then right-click on it to validate. It's not possible to put a startline during the 2 first kilometers of the race route (idem for the finish ⇒ you cannot place the finishline in the last 2 kms of the race route), so it's important to anticipate those margins.

- To move a start/finish/sprint object, you have to select the sphere which is just near the object's top then move it with the “Gizmo” tool.

- To delete a start/finish/sprint object, you have to select the sphere which is just near the object's top then press “Delete” on your keyboard.

IX) Cities

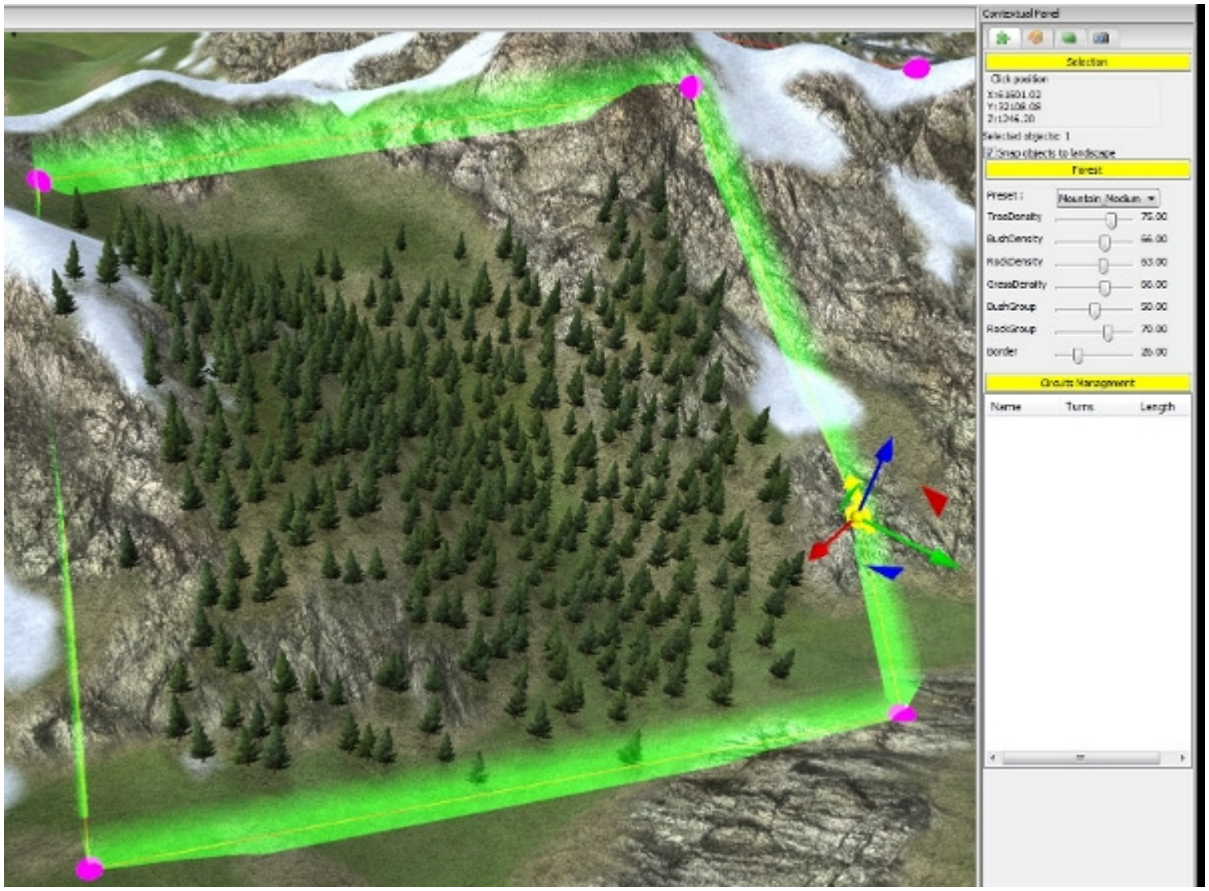
You don't have to use this function for the moment, it's not yet fully finished.

X) Fill the landscape

- When you're ok with your race route, it's time to start with forests, fields, rivers, lakes, isolated objects…

A) Forests

- With the Vegetation tool, you can draw a vegetation area with trees, bushes, grass, rocks or a mix of all.
- Go into the top menu “Vegetation” then use the “Forest” function (or the keyboard shortcut ALT+O).
- Draw an area around your race route and finish the loop by linking the first and the last vegetation point :



- After having finished your area, choose the vegetation type of your choice between the 32 which are proposed to you in the listbox (into the “Contextual Panel”). By default, the vegetation type which will be set to a new area will be the same as your previous choice.
- You can tune the parameters for each area (more or less trees, bushes, rocks, etc…)

Be careful if you want to view the grass, you must drop it around a race route (and not around a simple road)

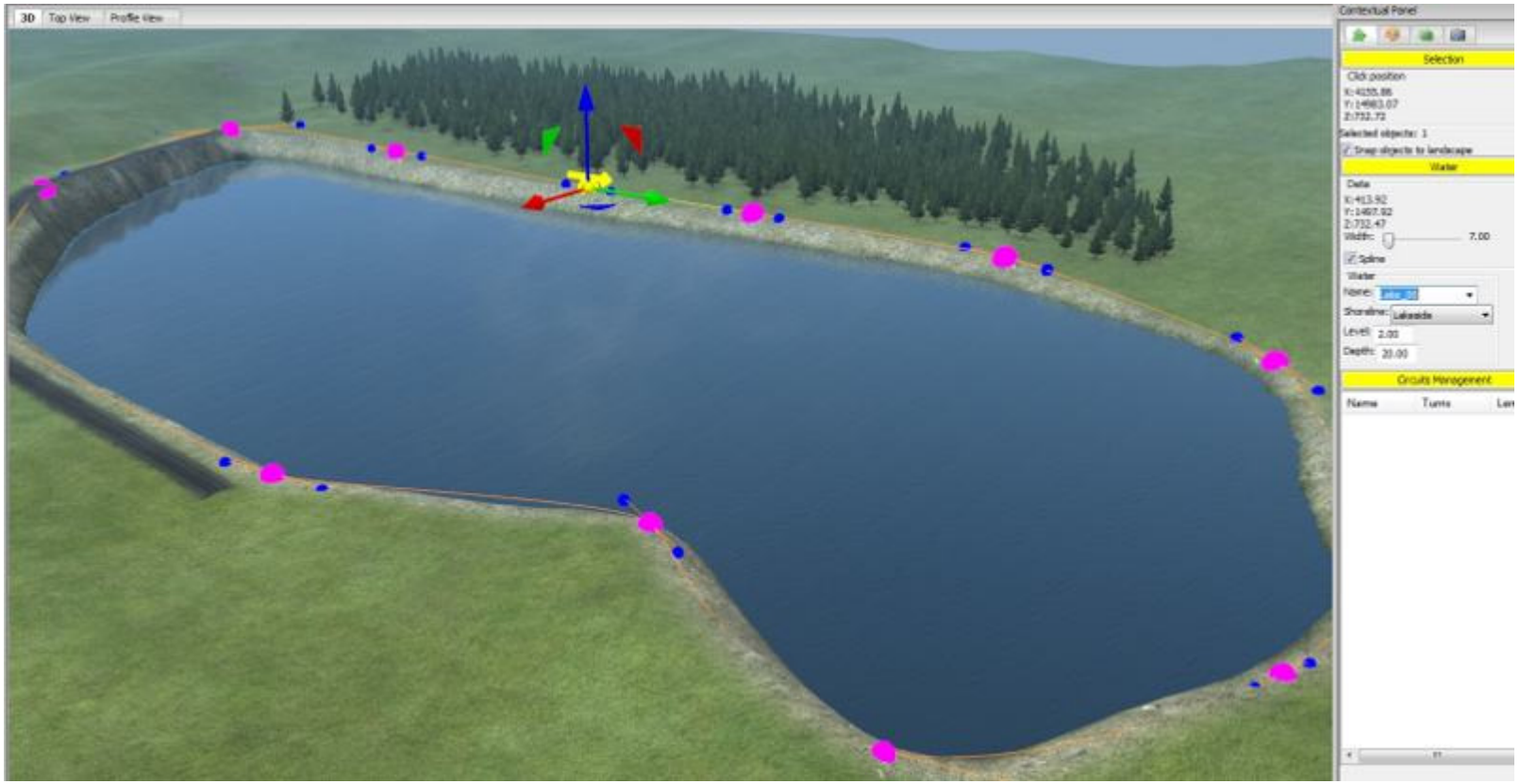
B) Fields

Drawing a field is more or less equal to a vegetation area :

- With the Fields tool, you can draw a specific field area with cultures, trees, etc…
- Go into the top menu “Vegetation” then use the “Field” function (or the keyboard shortcut ALT+F).
- Draw an area around your race route and finish the loop by linking the first and the last field point (idem Forest).
- After having finished your area, choose the field type of your choice between the dozens which are proposed to you in the listbox (into the “Contextual Panel”). By default, the field type which will be set to a new area will be the same as your previous choice.
- You can tune the parameters for each area (more or less trees, bushes into the lines which separates the cultures, more or less trees into the patures, etc…)

C) Lakes

- With the Water tool, you can draw a lake or a complete sea.
- Go into the top menu “Water” then use the “Add Water” function (or the keyboard shortcut ALT+W).
- Draw a lake and finish the loop by linking the first and the last water point (idem Forest).



XI) Remove Debug objects

- CTRL+D to hide/display the debug objects

CTRL+D