

## **TUTORIAL 4**

*aviolo.grd*

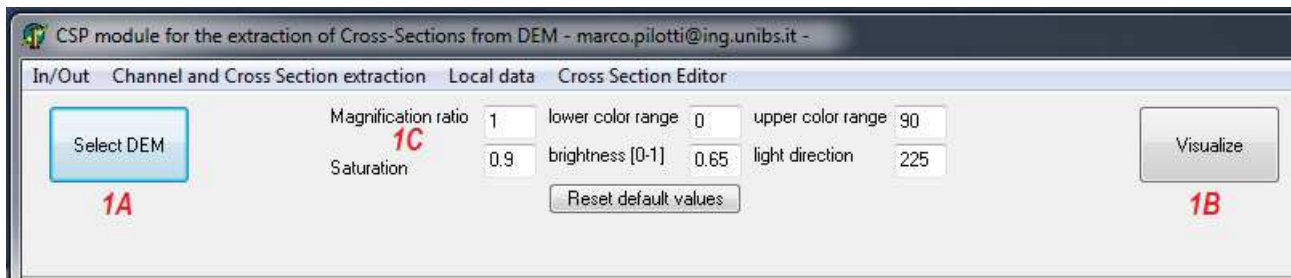
**WRITING A FILE WITH CSS LOCATION ALONG THE CN**

Most of the instructions presented in this tutorial have already been explained in Tutorial 1. These instructions are needed to give completeness to the Tutorial. Accordingly, new instructions will be written in blue within the text.

Run the CSP program by clicking on the *CSP.exe* icon.

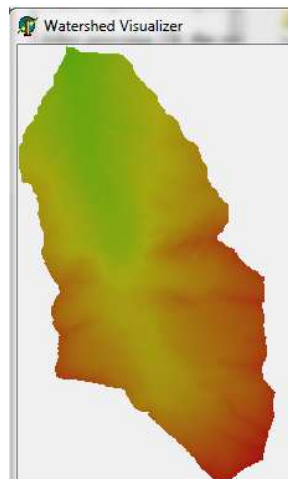
Let us consider the case of *Aviolo.grd*. In this case we will show the use of command 4 to select the location of CSs along the CN.

Select command 1;

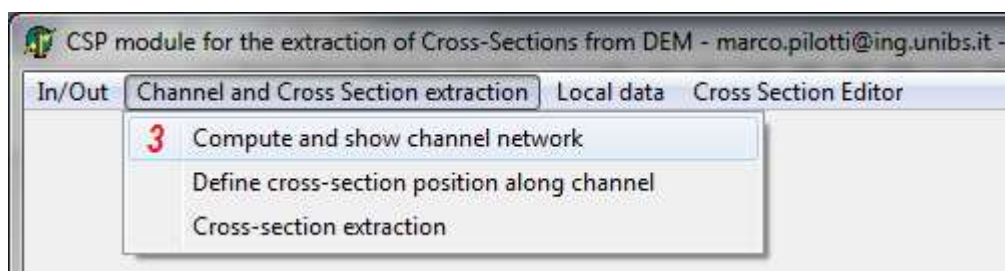


Using 1A, select the file *aviolo.grd*;

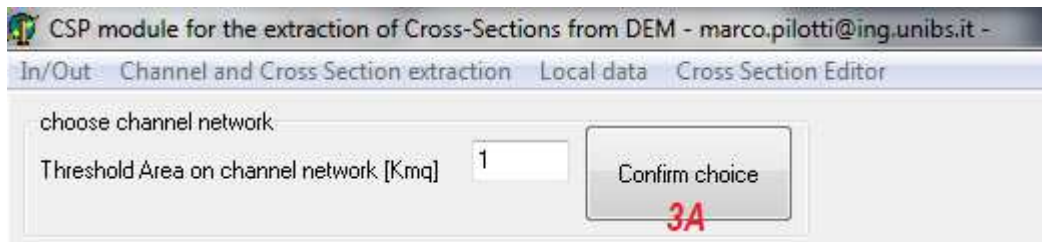
By pressing 1B, the basin is shown on the screen, according to the magnification ratio 1C;



As already explained in Tutorial 1, the basin is shown without the basin relief, because in the /in/ directory there is not yet the file that is needed to obtain this effect. Since this file is computed and written on disk while extracting the basin SFDN, let's go on by selecting command 3;

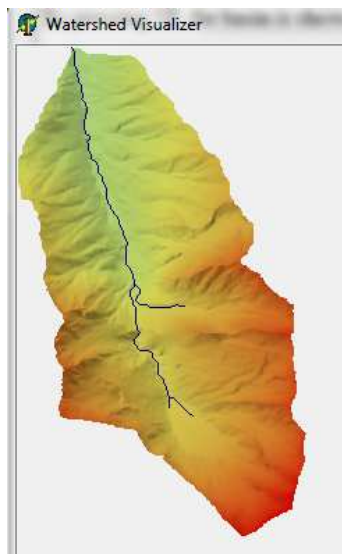


the following panel is shown

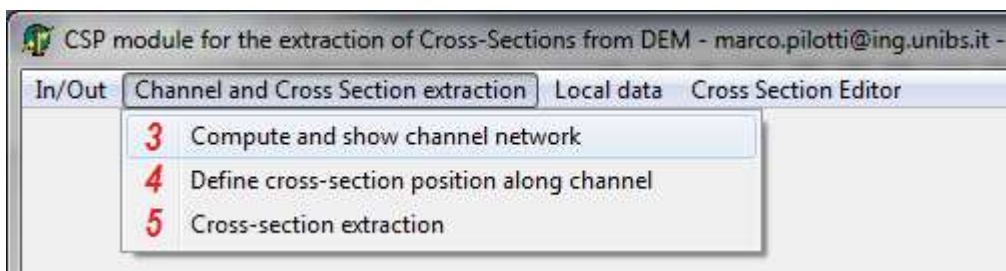


Let us choose a constant area threshold =1 km<sup>2</sup> and let us press 3A;

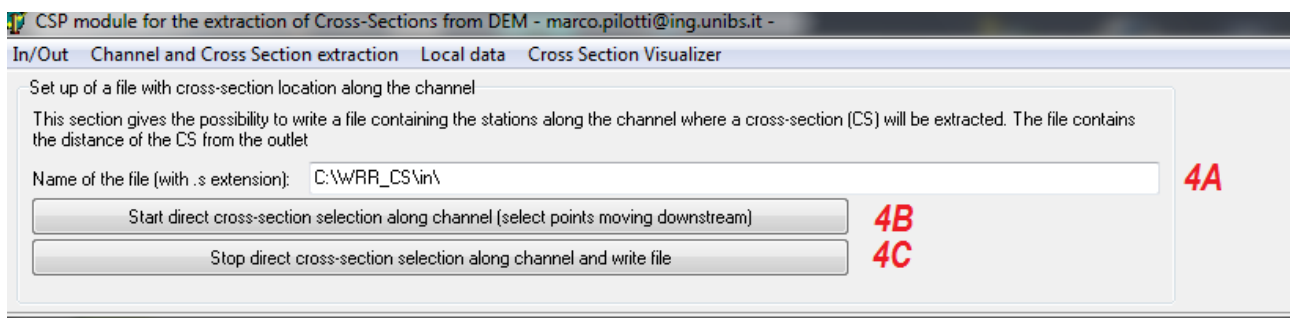
If we now quit the program, run it again and repeat the same set of commands (1A, 1B, 3, 3A), the basin shown on the screen will look like in the following panel



Select command 4



The following panel will be shown on the screen



In 4A, we add to the written path the name of the file where the location of the stations will be written. The extension of this file must be .s: e.g., *aviolo.s*

Name of the file (with .s extension):

By pressing 4B, we activate the selection of the position of the CS along the CN.

Set up of a file with cross-section location along the channel

This section gives the possibility to write a file containing the stations along the channel where a cross-section (CS) will be extracted. The file contains the distance of the CS from the outlet

Name of the file (with .s extension):

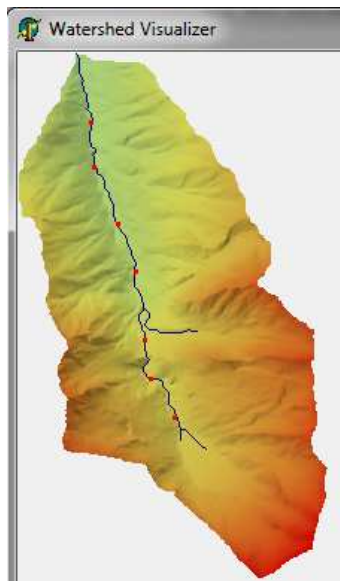
Done

Now we can start with the left key of the mouse to select the stations. The program will operate a snap-to-point along the CN. It may happen that the selected point is too far from the CN. In such a case a warning will appear on the Task List panel

*'WARNING ! Point not found: repeat selection';*

Do not terminate the selection process without a valid point, otherwise the program will not be able to locate the end-point of the CN

When the point selection is succesful, a red point will appear on the screen in correspondence of the selected station on the CN.



By pressing 4C,

Set up of a file with cross-section location along the channel

This section gives the possibility to write a file containing the stations along the channel where a cross-section (CS) will be extracted. The file contains the distance of the CS from the outlet

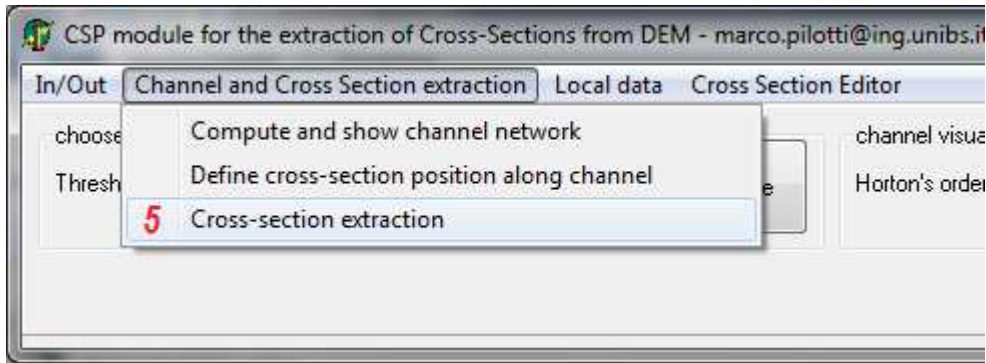
Name of the file (with .s extension):

Done

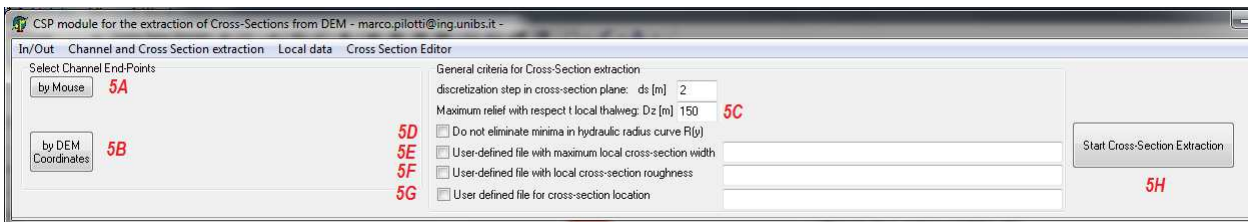
Done

the selection comes to an end and the file *aviolo.s* is created.

Now we can select command 5

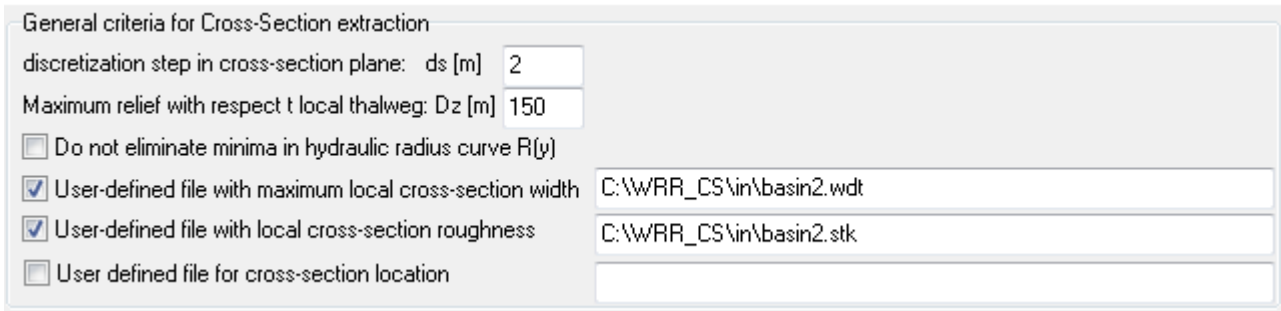


The following panel will be shown on the screen



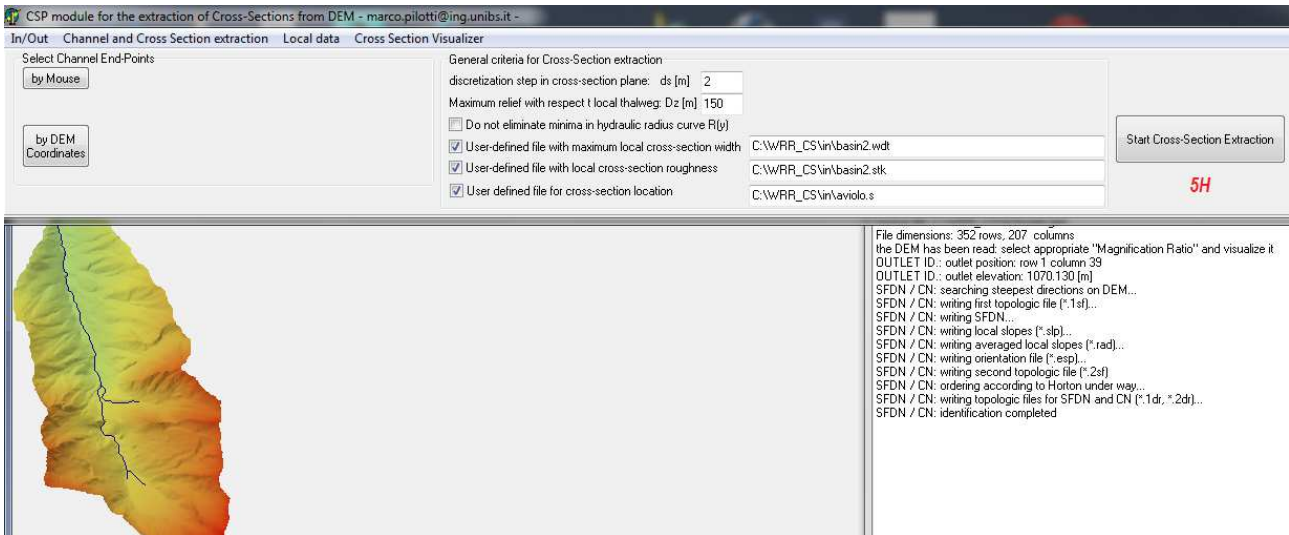
From this point on we can proceed as already done in Tutorial 1 and 2. Otherwise, if we want to use the file *Aviolo.s* that we have just created, we can proceed as in Tutorial 3.

In both cases we have not a user defined file with the maximum local width, (5E) and a user defined file with the local roughness coefficient, (5F). For the sake of this example, we can use the files *basin2.wdt* and *basin2.stk* (by using a text editor, we could also create in the /in/ directory our own files *aviolo.wdt* and *aviolo.stk*)

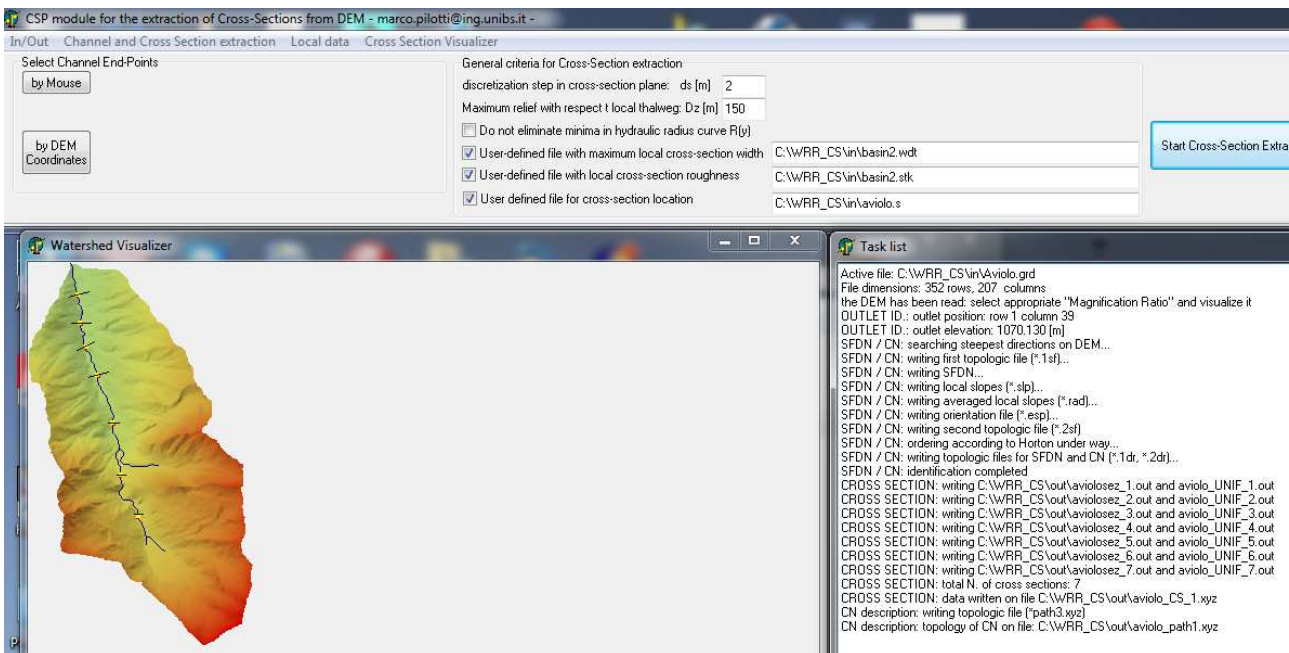


we select (in 5G) the file *aviolo.s*, with the stations in correspondence of which the CSs will be extracted,

## Cross Section Processor – Tutorial # 4 –



and we select 5H to start the extraction process. The planimetric outline of the CSs is then plotted on the screen as shown in the panel below.



and each CS can be explored as already done in previous Tutorials

Cross Section Processor – Tutorial # 4 –

