

Diffusion du prototype aux partenaires

FORTH
01dB-METRAVIB

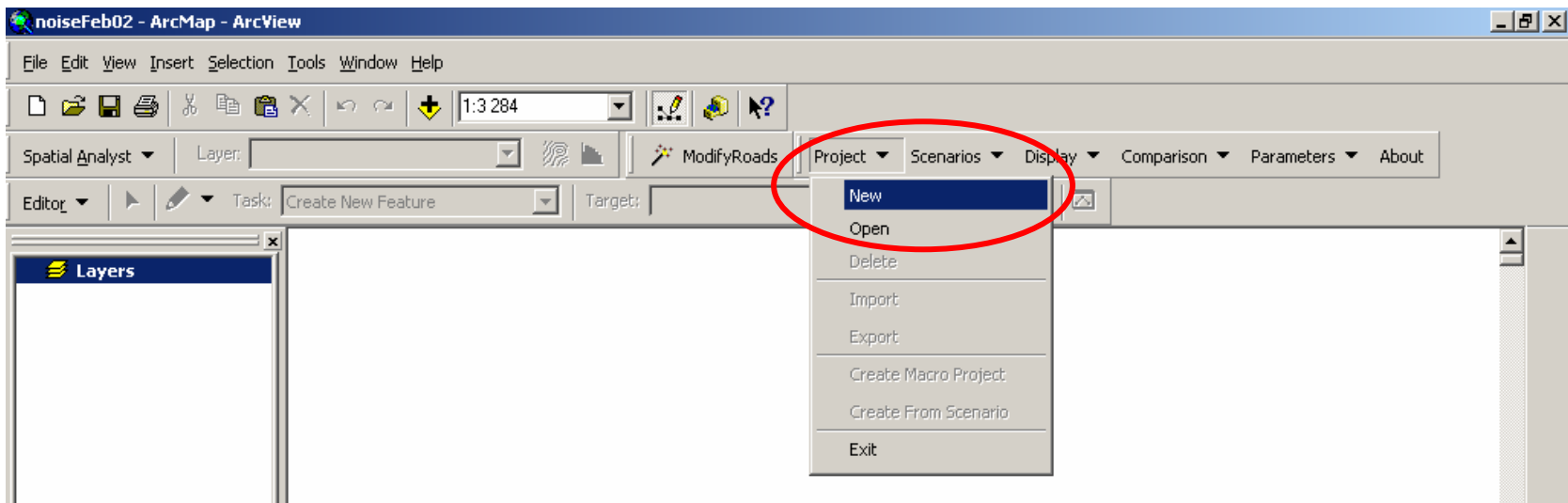


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Creation of a new project

- First, start GIpSynoise software tool
- Then, create a project with the command “New”



Creation of a new project

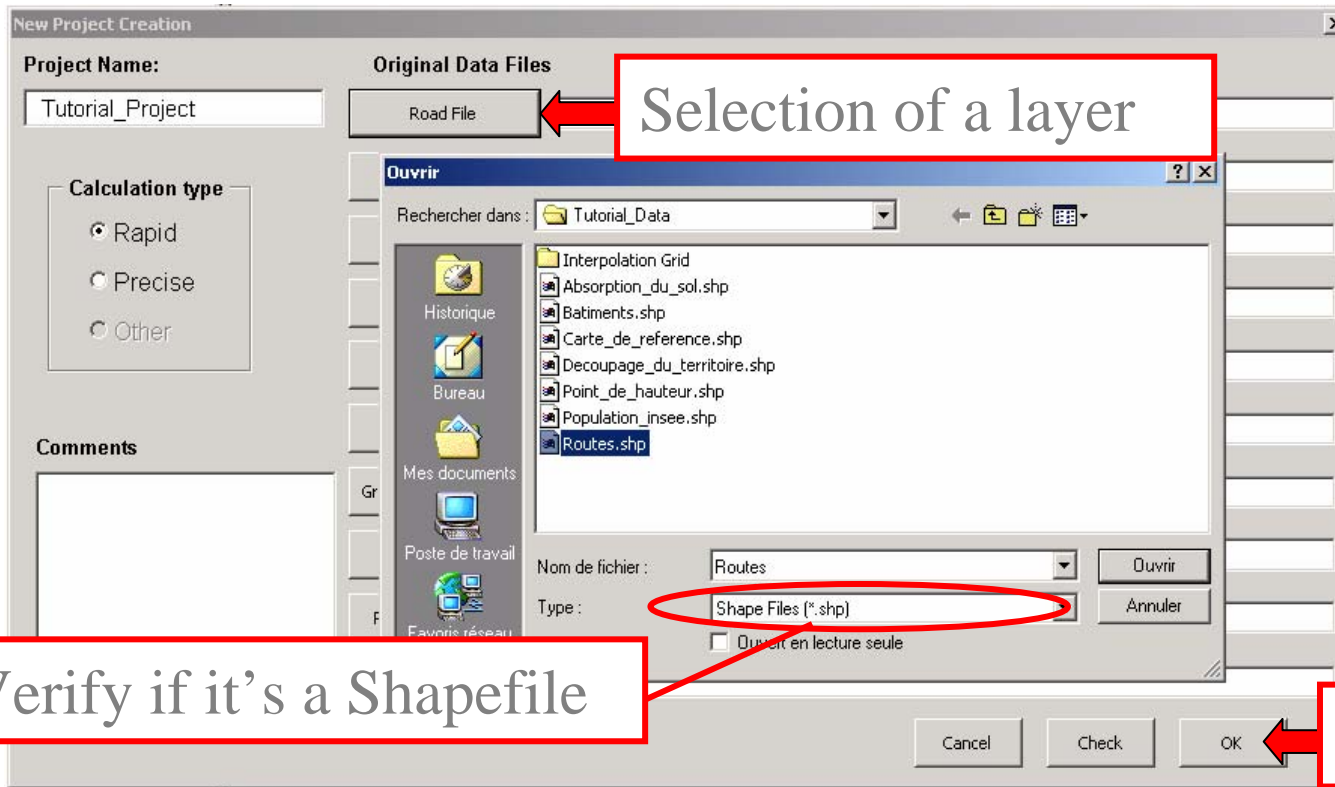
- Input data dialog box appears with four steps:

The screenshot shows a 'New Project Creation' dialog box with the following elements:

- Step 1:** Points to the 'Project Name:' text input field.
- Step 2:** Points to the 'Calculation type' section, which includes radio buttons for 'Rapid', 'Precise', and 'Other'.
- Step 3:** Points to the 'Comments' text area.
- Step 4:** Points to the 'Original Data Files' section, which lists various file types with corresponding input fields: Road File, RailRoad File, Height Point File, Height Line File, Building File, Barrier File, Ground Absorption File, Population File, Reference Map File, and Calculation Zone File.
- Validation:** A red box labeled 'Validation' points to the 'OK' button at the bottom right of the dialog.

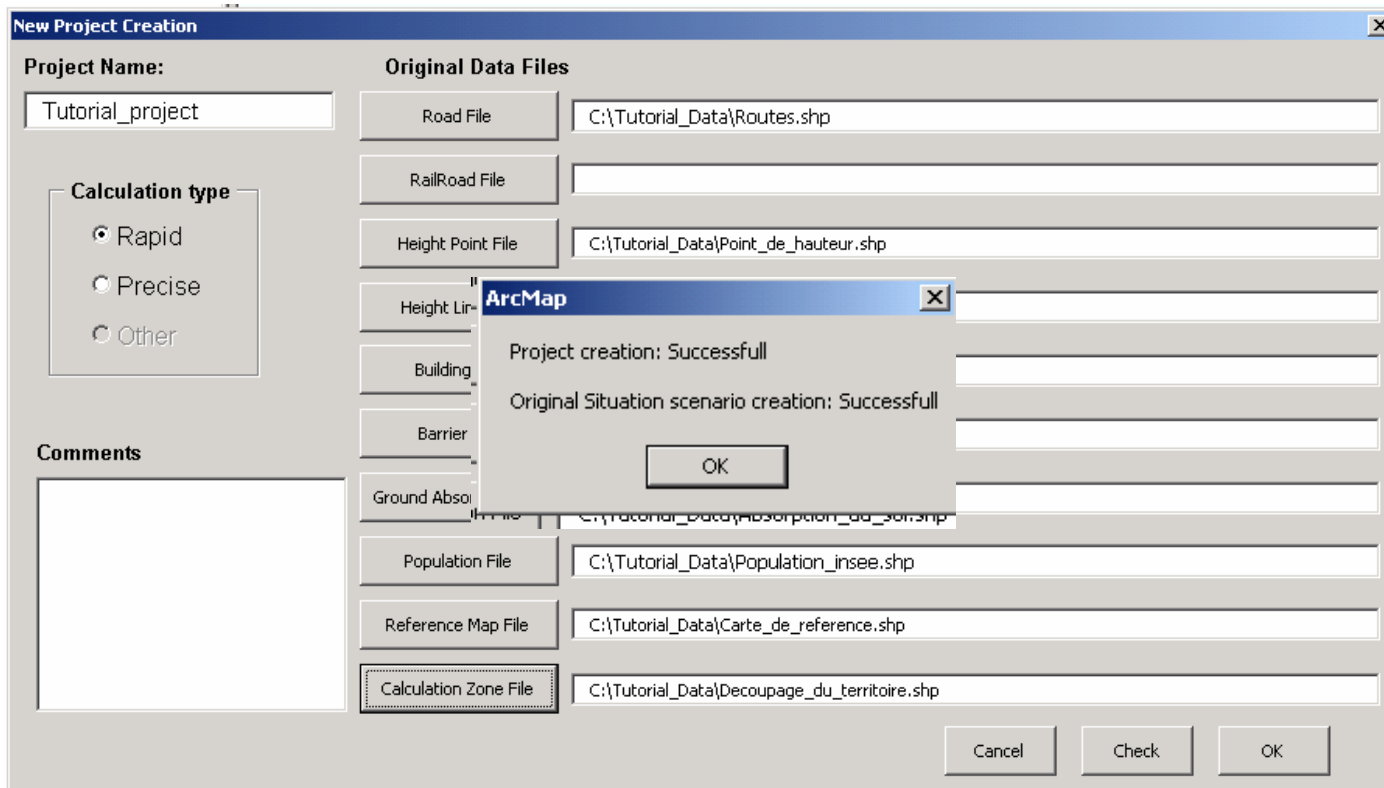
Creation of a new project

- Load layer information:



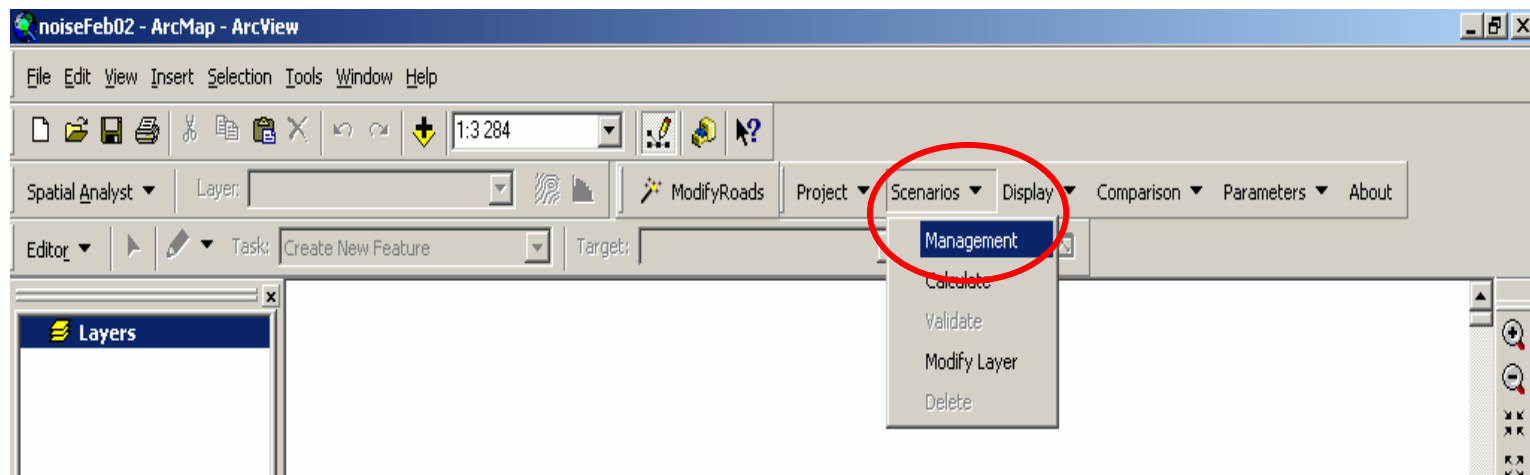
Creation of a new project

- When the loading is OK:



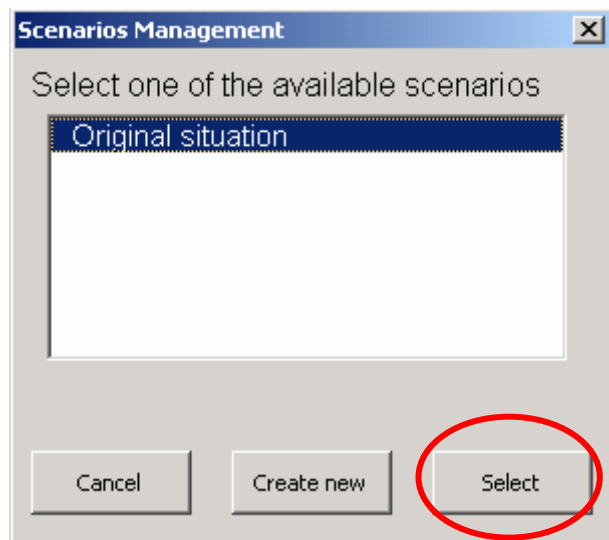
Creation of a new project

- Scenario creation



Creation of a new project

- You can select the original situation which is automatically created

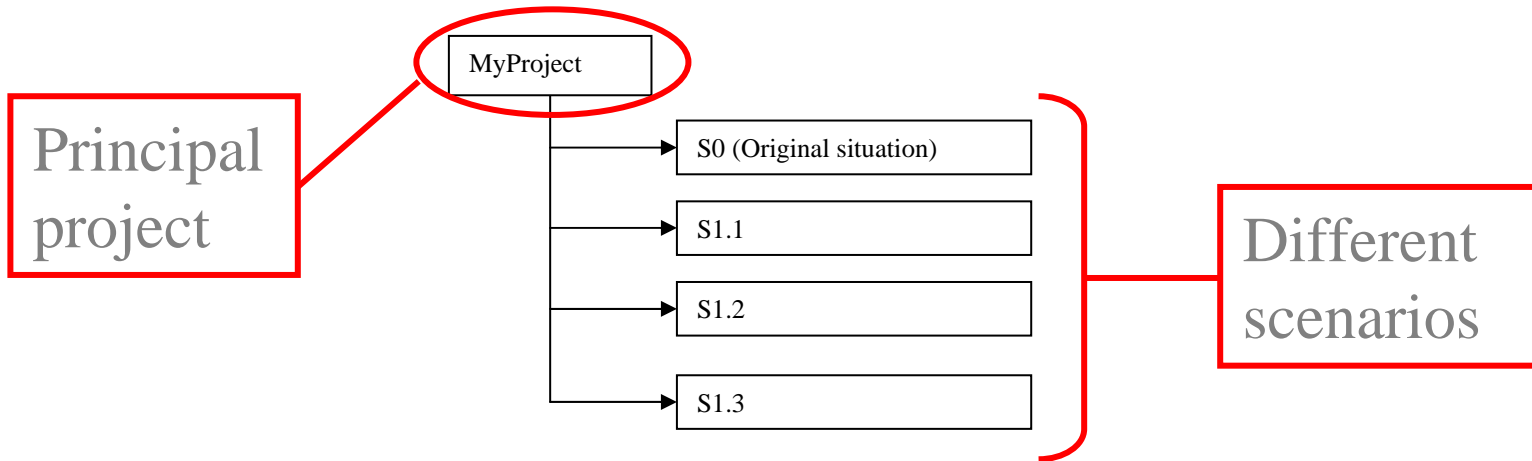


In this dialog box you can choose the original situation scenario (or you'll be able to create another situation when your original situation will be calculated)

Creation of a new project

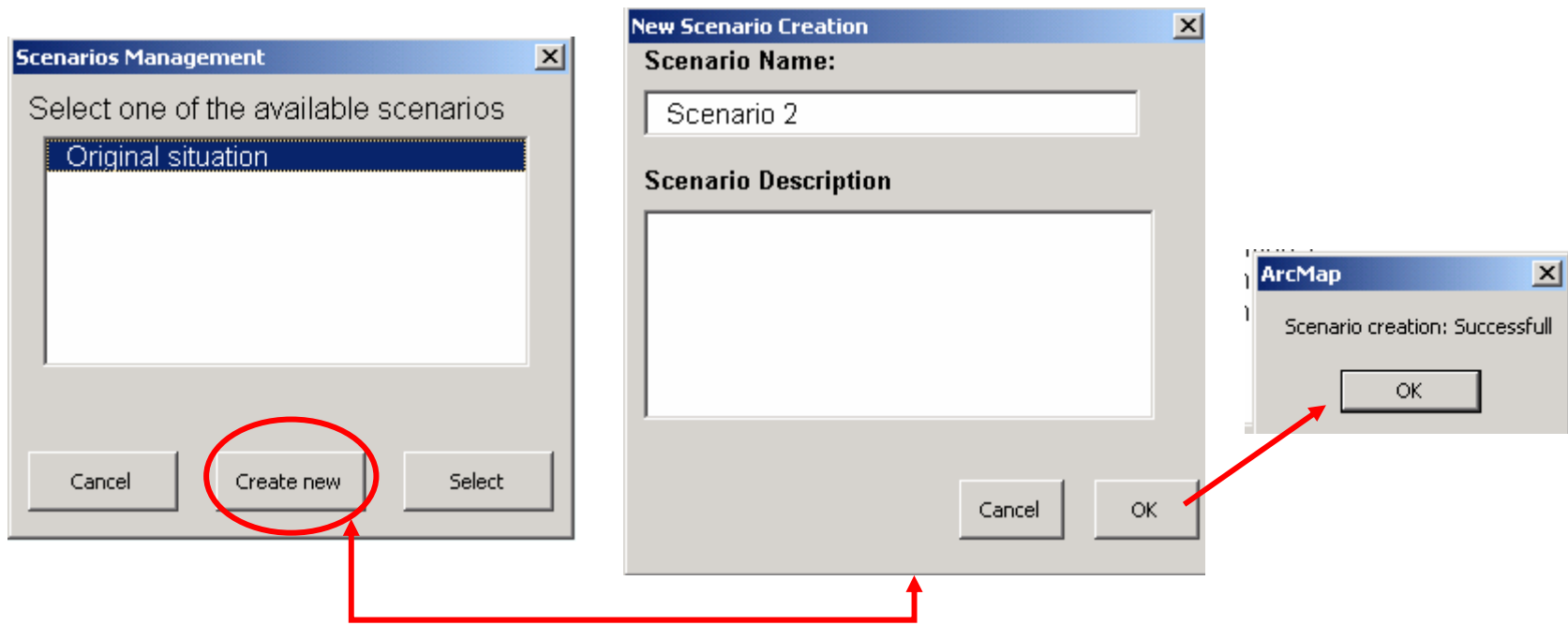
Organisation of the scenarios:

- When you create a new scenario, a subfolder is created in the main folder of the project.
- This chart presents the architecture of the scenarios creation:



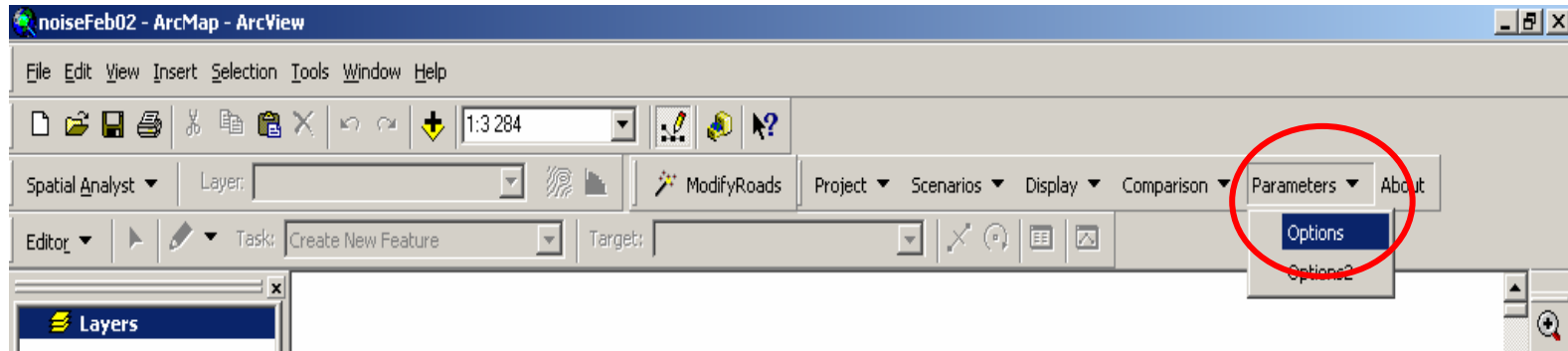
Creation of a new project

- Creation of a new scenario: if you want you can create a different scenario from the original one.



Launching of a calculation

- Define and verify the different parameters:



Launching of a calculation

- Dialog box of the parameters:

CadnaA Executable File: C:\CADNAA_W\cna32.exe

Waiting Time for CadnaA (secs): 20

Buffer Zone: 20

Area/Indicator	Day	Evening	Night	GDay	Den
Residential	65	65	60	65	65
Mixed	65	65	60	65	65
Industrial	-1	-1	-1	-1	-1
Sensitive	60	60	55	60	60
Other	62	60	55	62	62

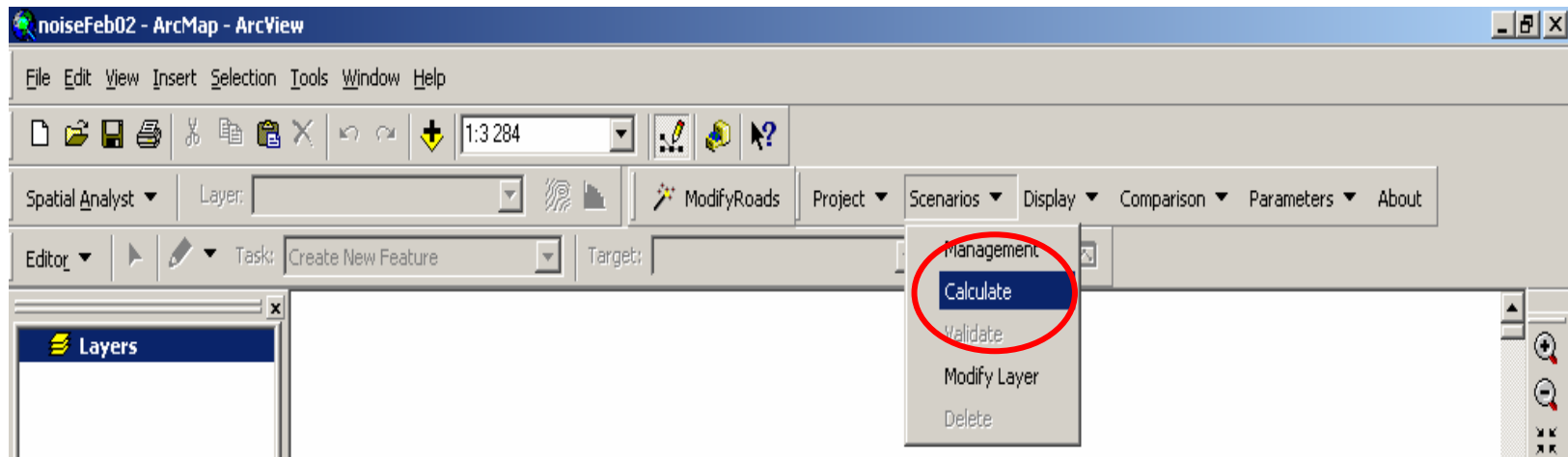
Buttons: Save parameters, Cancel, OK

Validation

The parameters are saved only when you click on this button

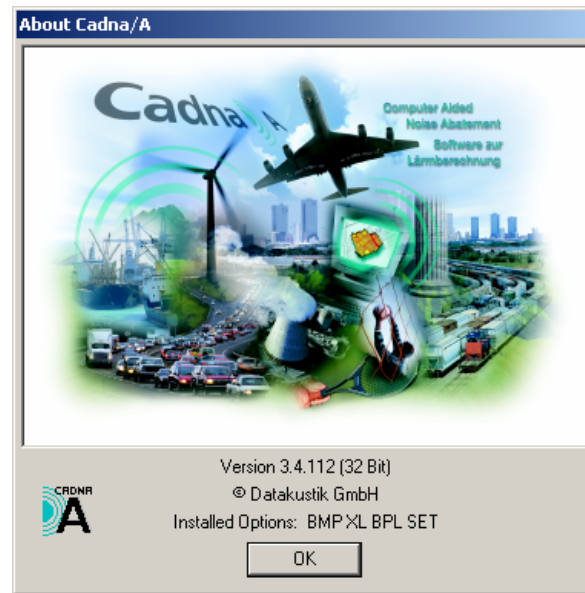
Launching of a calculation

- Initialisation of the calculation:



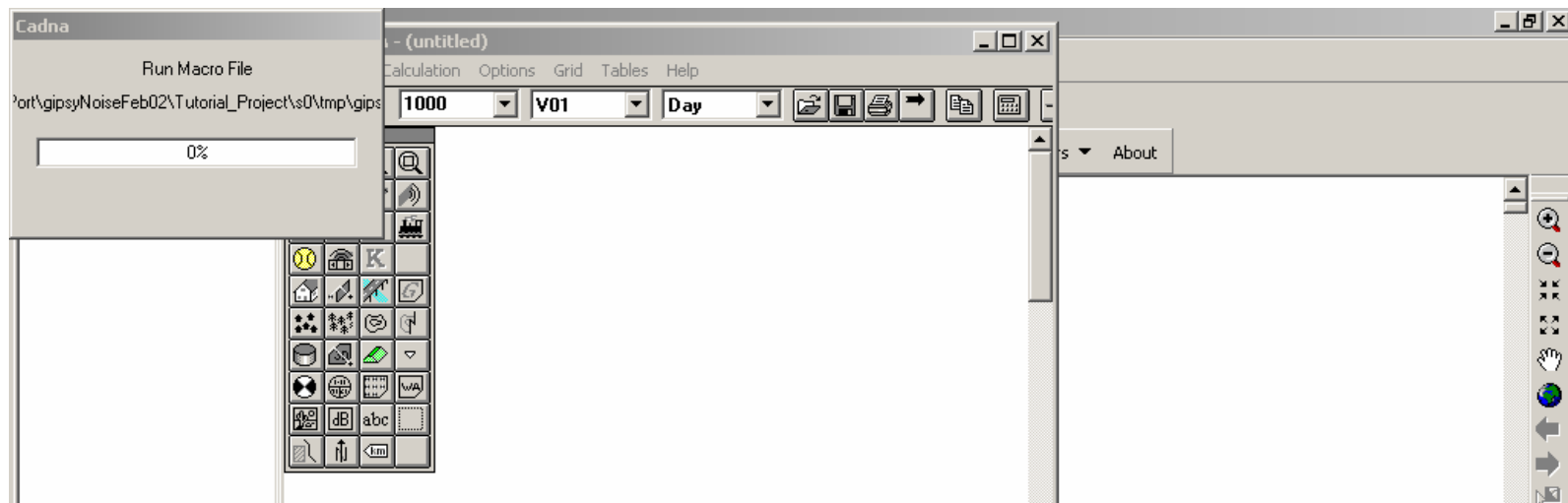
Calculation steps

- First, you can see the window which represents the initialisation of CadnaA runtime:



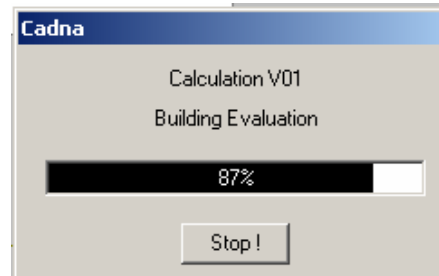
Calculation steps

- Then, you can see a little box which appears in order to show evolution of the calculation, and a new empty project which is relative to CadnaA runtime.



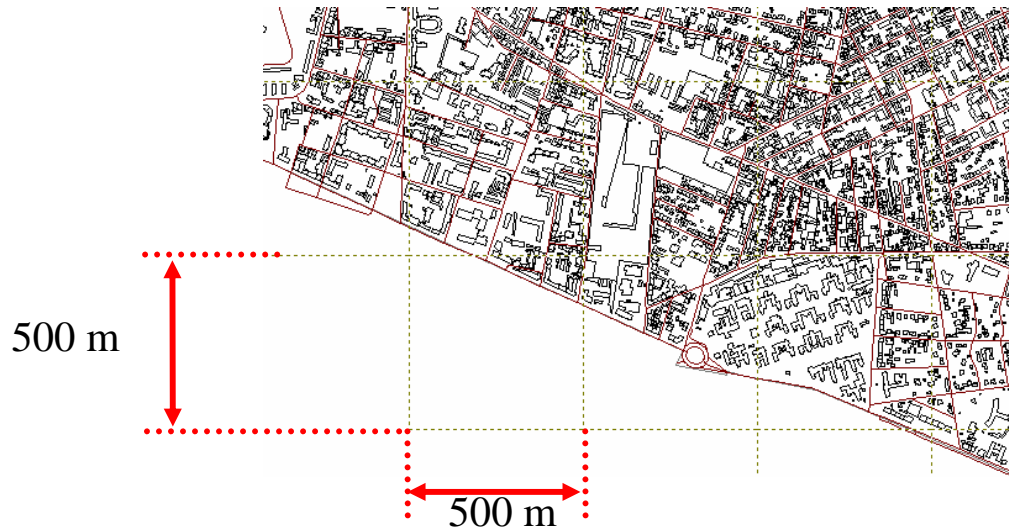
Calculation steps

- Here is a message from CadnaA that shows the evolution of the Building evaluation calculation.
- If the calculation zone is large, you may view a lot of boxes similar to that one since CadnaA runtime cuts the calculation zone into several small calculation zones.



Calculation steps

- CadnaA runtime cuts the calculation zone into several small zones when it's necessary. A “unity zone” is about 500 m * 500 m.
- You can see an example below:

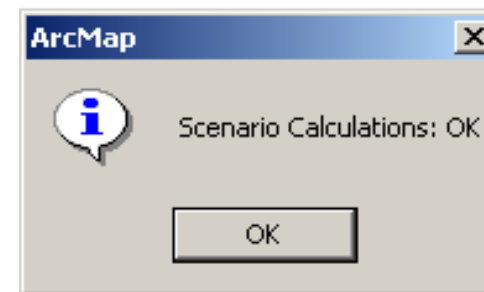


Calculation steps

- The last step of the calculation is about the reading of the records calculated by CadnaA runtime.

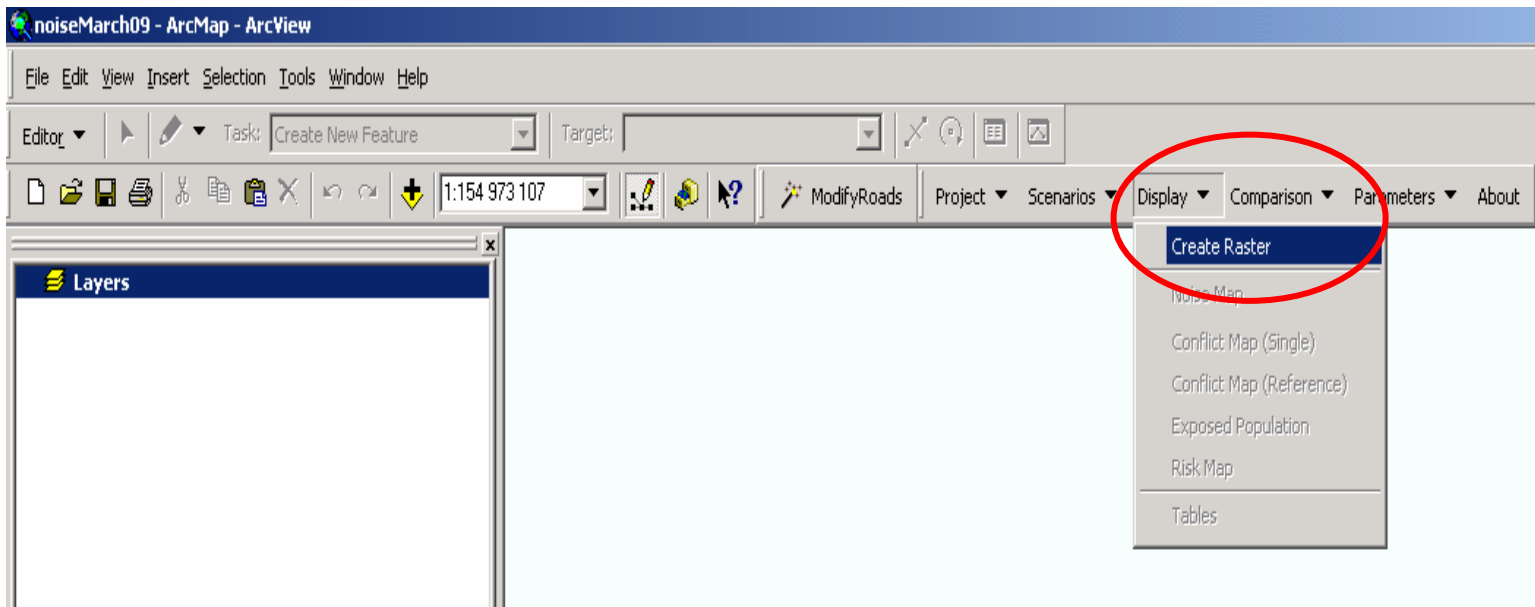


- When calculation is finished, you can see this information box:



Maps creation

- You have to use the “Display” menu, in order to create the raster file



Maps creation

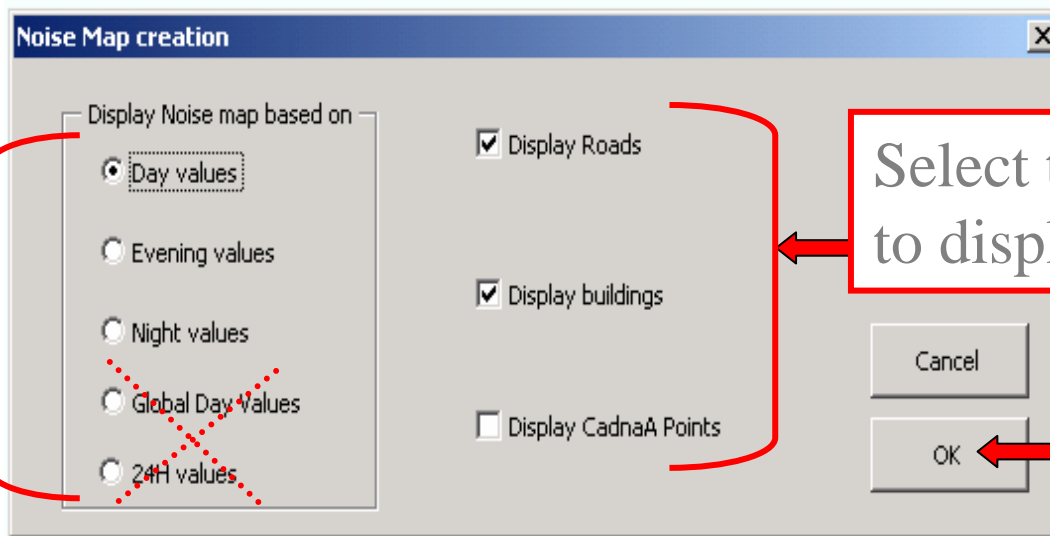
- Once the raster file is created, you have a small message that informs you like that:



Maps creation

- In the same menu “Display”, you can create the noise map, by choosing between different values you want to visualize:

Different available values



Select the element to display

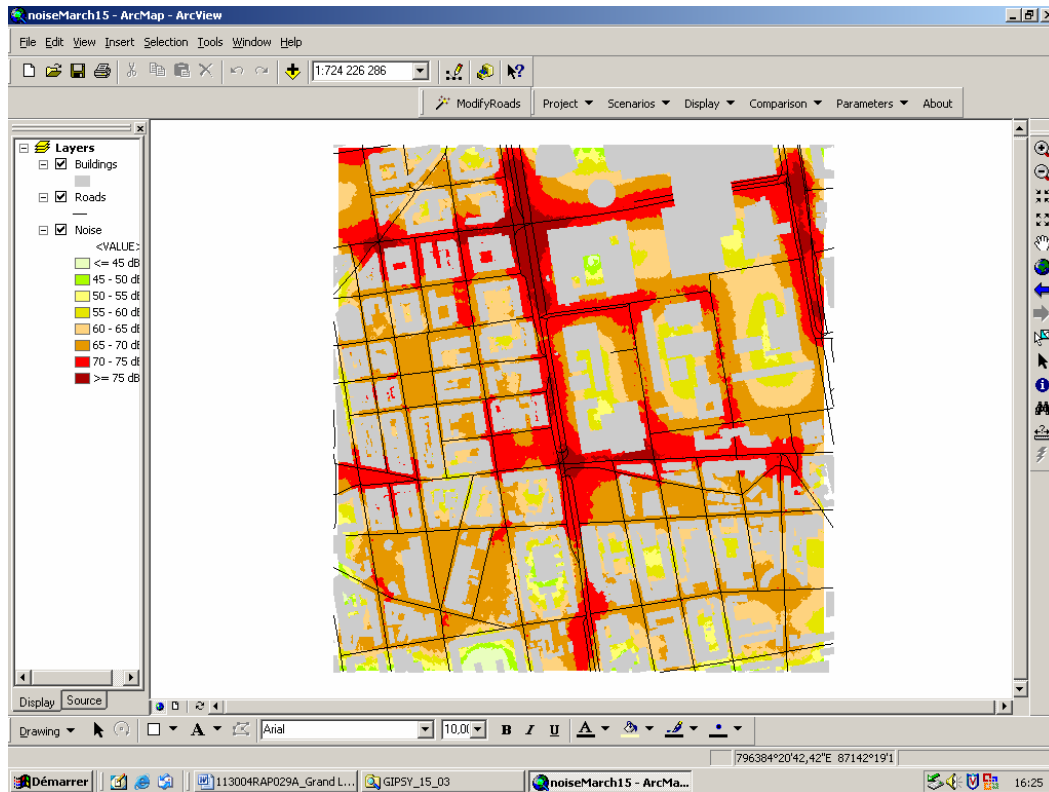
Validation

..... Not available in BETA1 version

Maps creation

- Here is an example of a result for a noise map creation:

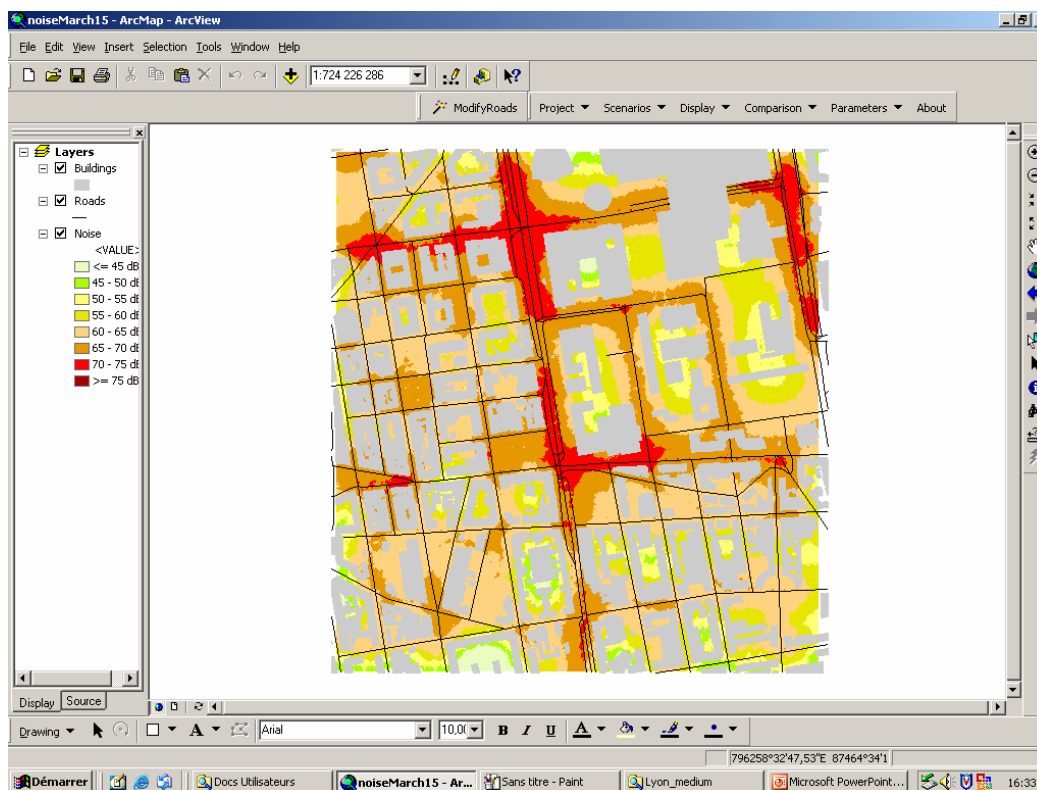
Day Map:



Maps creation

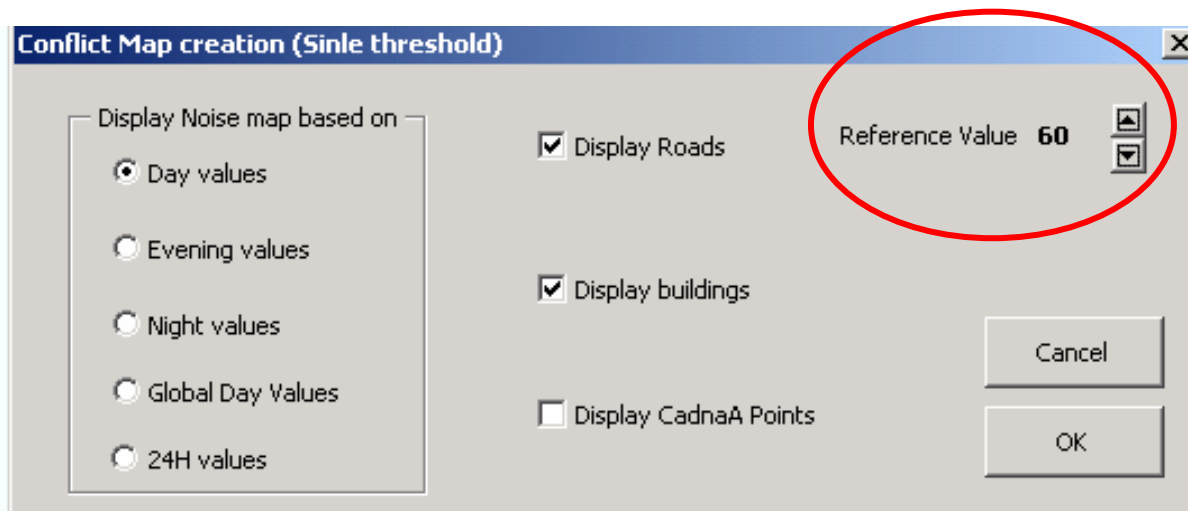
- Here is an example of a result for a noise map creation:

Evening
Map:



Maps creation

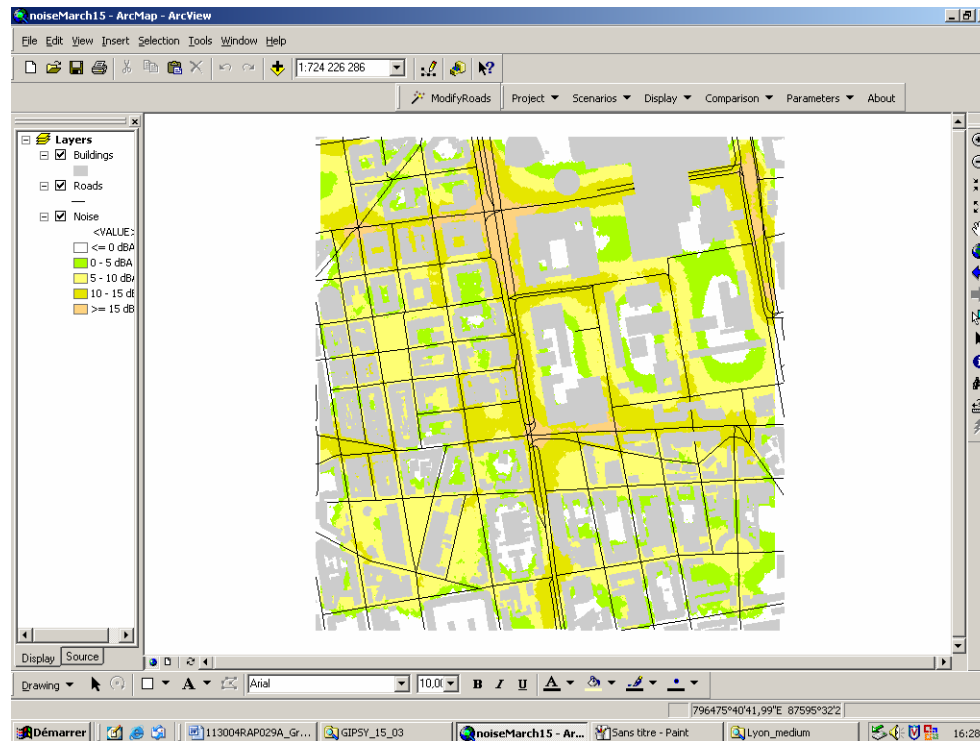
- You can also create a single conflict map, with the command situated inside the menu “Display”:
- Note that you can change the Reference Value:



Maps creation

- You can see below the result of an example of a single conflict map created with GIPSynoise:

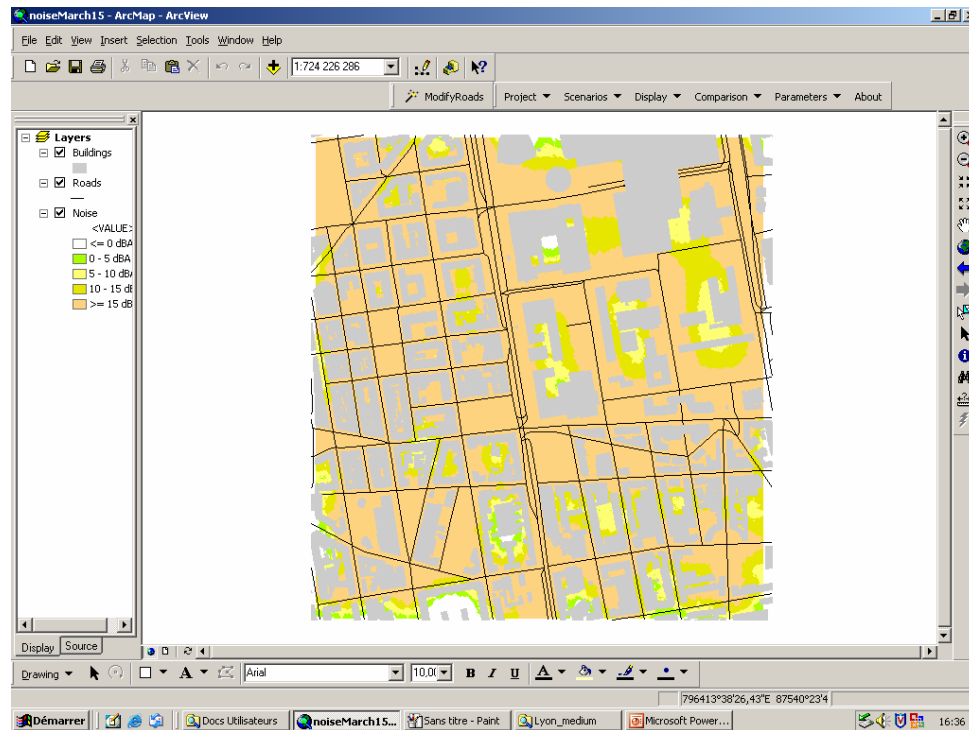
Reference value: 60 dB



Maps creation

- You can see below the result of an example of a single conflict map created with GlpSynoise:

Reference
value: 48 dB



Maps creation

- If you want to use the threshold conflict map creator, you must define your threshold values in the dialog box of the parameters:

Parameters

CadnaA Executable File: C:\CADNAA_W\cna32.exe

Waiting Time for CadnaA (secs): 20

Buffer Zone: 20

Area/Indicator	Day	Evening	Night	GDay	Den
Residential	65	65	60	65	65
Mixed	65	65	60	65	65
Industrial	-1	-1	-1	-1	-1
Sensitive	60	60	55	60	60
Other	62	60	55	62	62

Save parameters Cancel OK

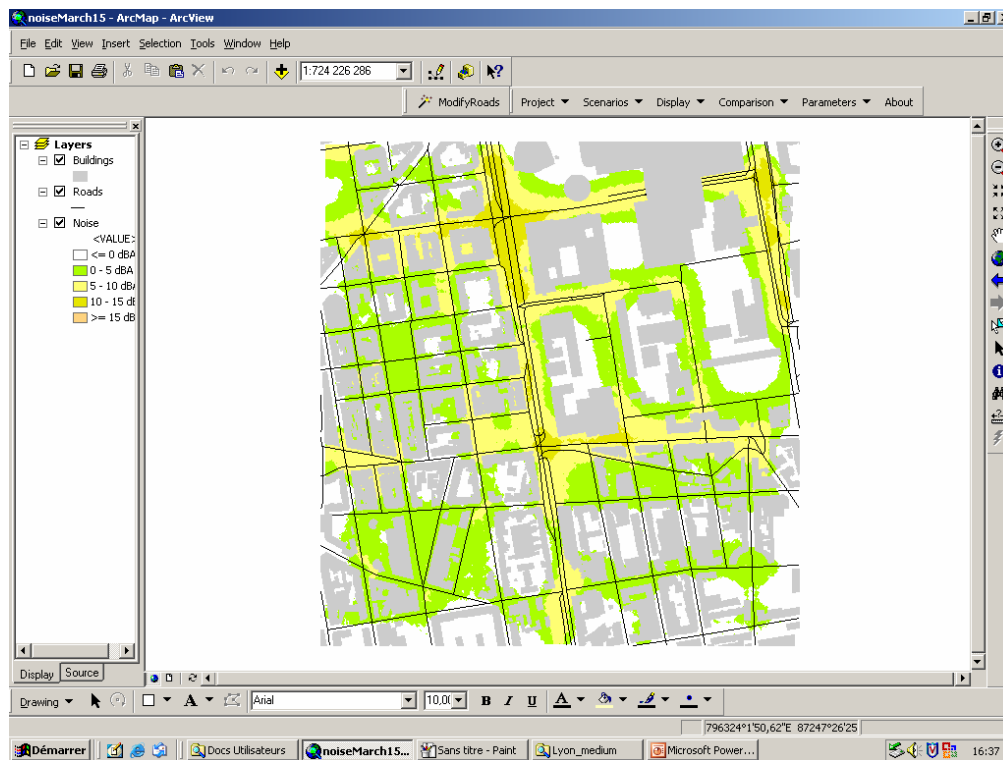
References
Thresholds

Validation

Maps creation

- You can see below the result of the creation of a Threshold conflict map:

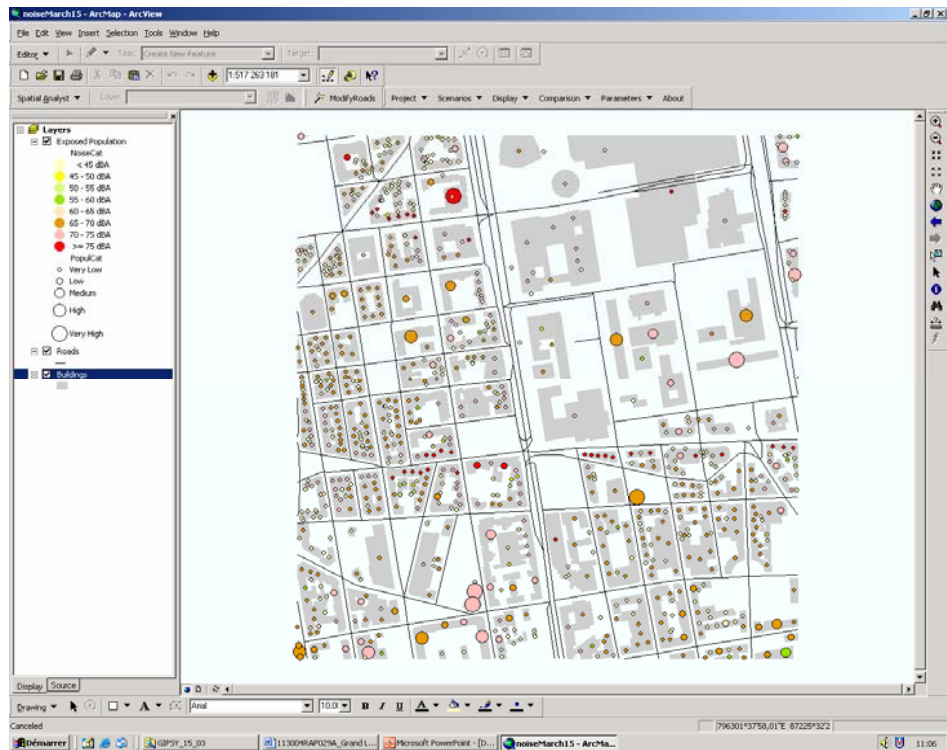
Used parameters are the default ones



Maps creation

- You can see below the result of the creation of a “Exposed Population Map”:

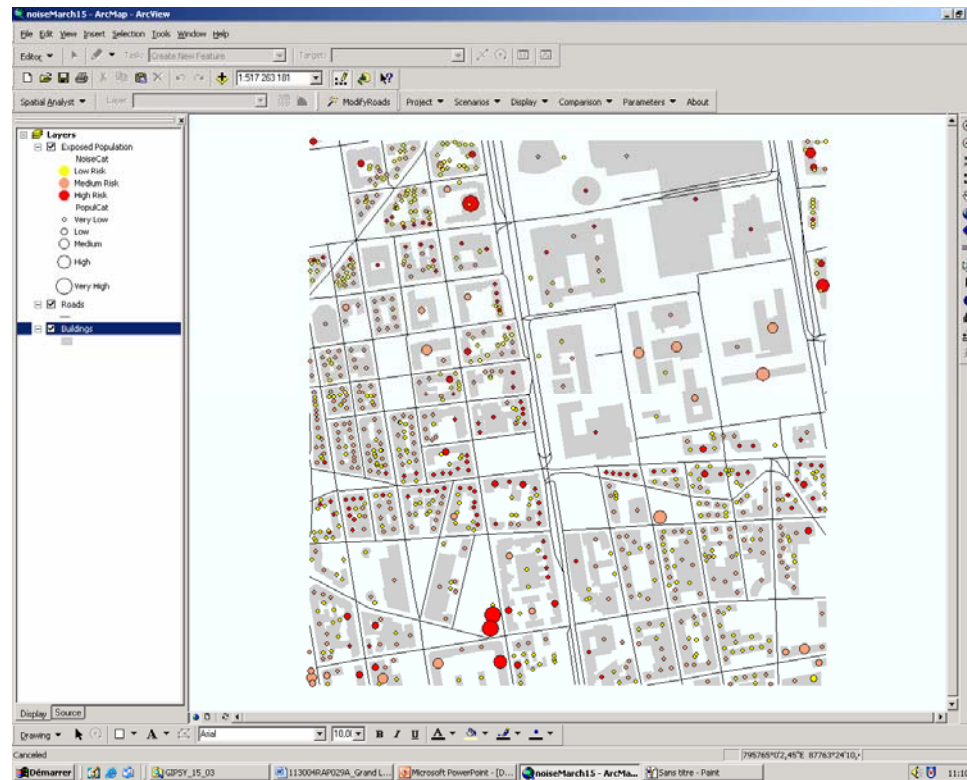
This map shows the zone where population are exposed to different noise levels.



Maps creation

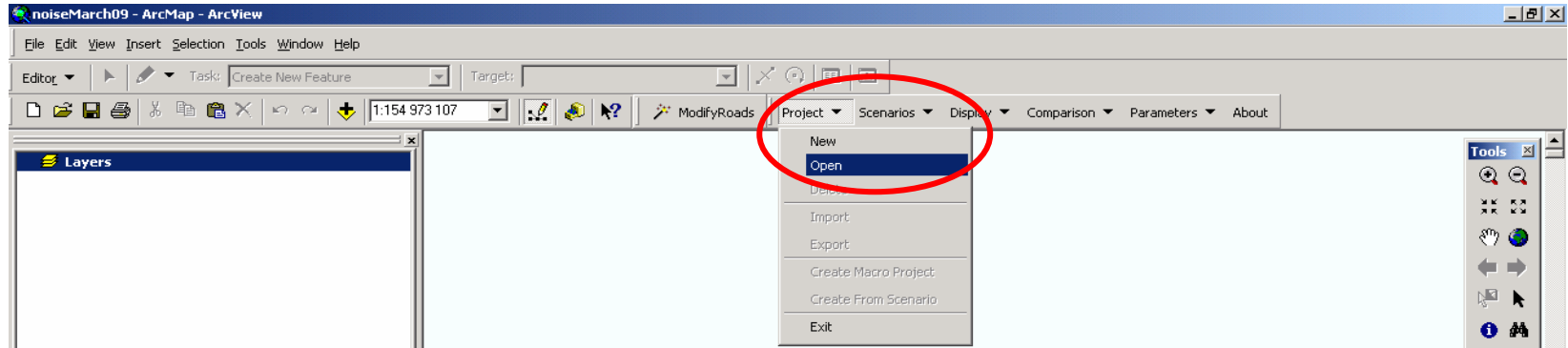
- You can see below the result of the creation of a “Risk Map”:

This map shows the zone where risk is existing (Den annoyance / Night sleep disturbance)



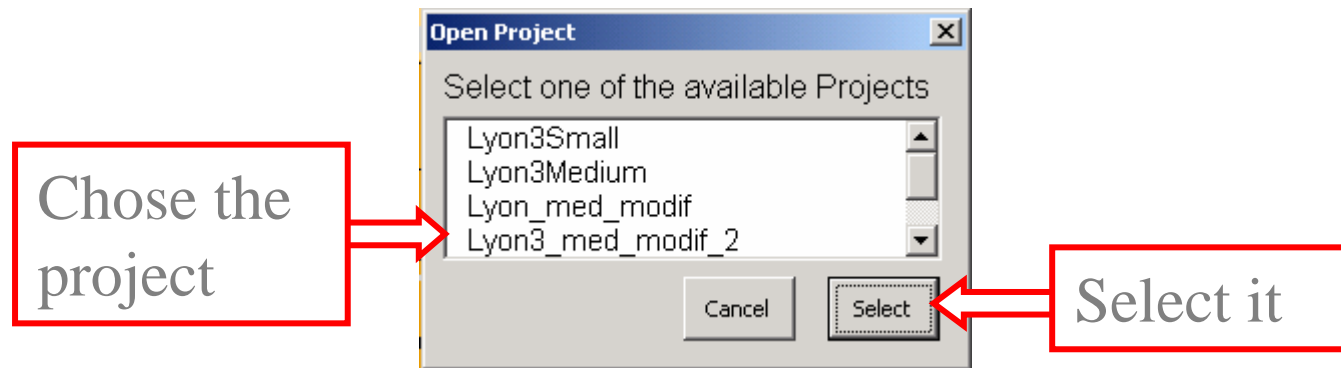
Project manipulation

- Open an existing project:



Project manipulation

- Then select the right project you want to open in this dialog box:

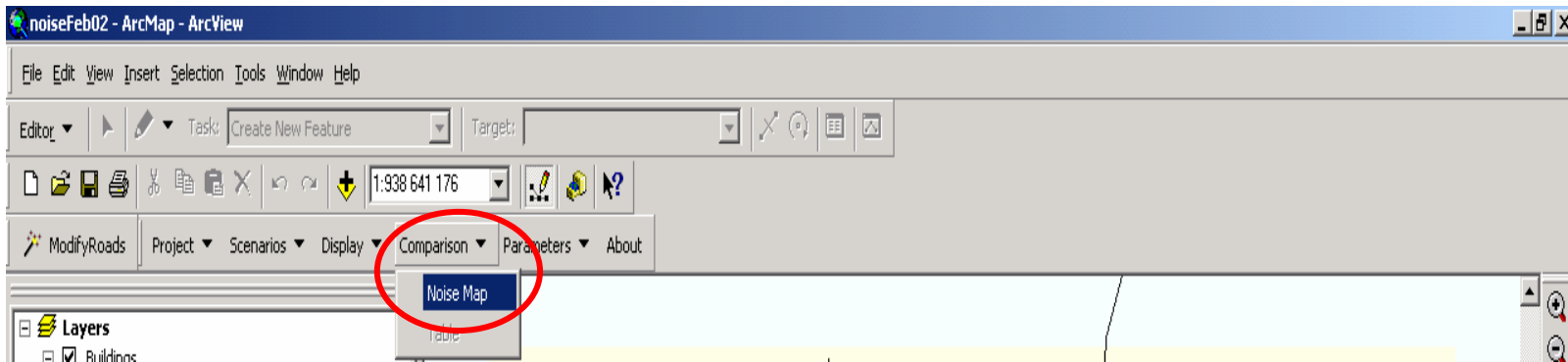


Project manipulation

- The project is supposed to be calculated.
- Once the project is open, you must select the scenario you want to test, and only after that you are able to visualize the different possible maps.
- Refer to previous slides to know how to create such maps.

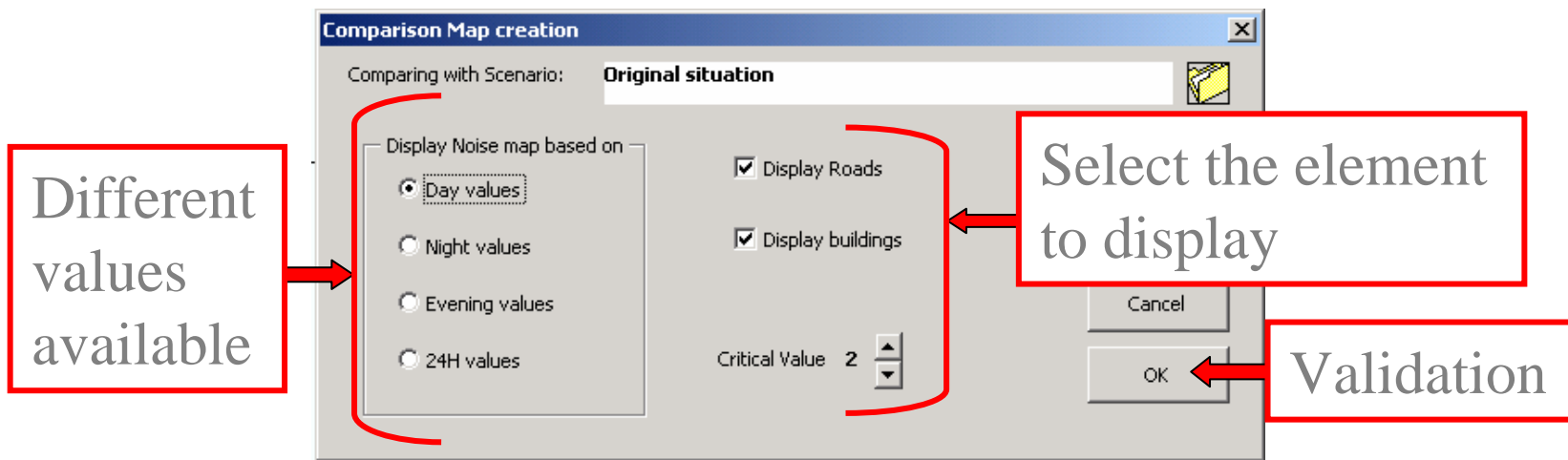
Map comparison

- First, create another scenario than the original one.
- Then, calculate this second scenario.
- After these two operations, you can use the comparison Map creation.



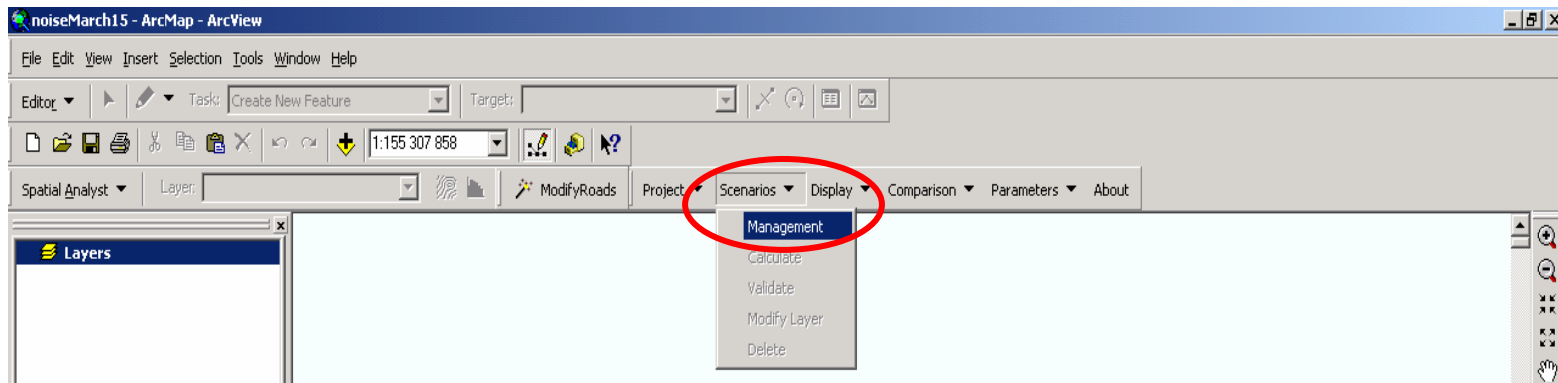
Map comparison

- You can see the Comparison Map dialog box:



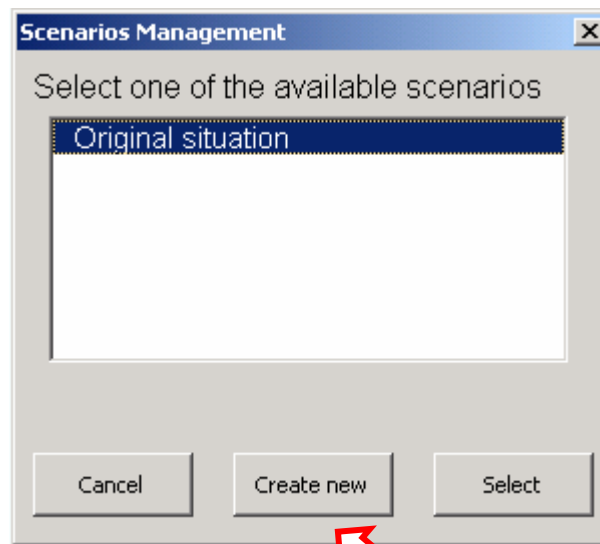
Map comparison

- The map comparison is possible by using the management of the scenarios:



Map comparison

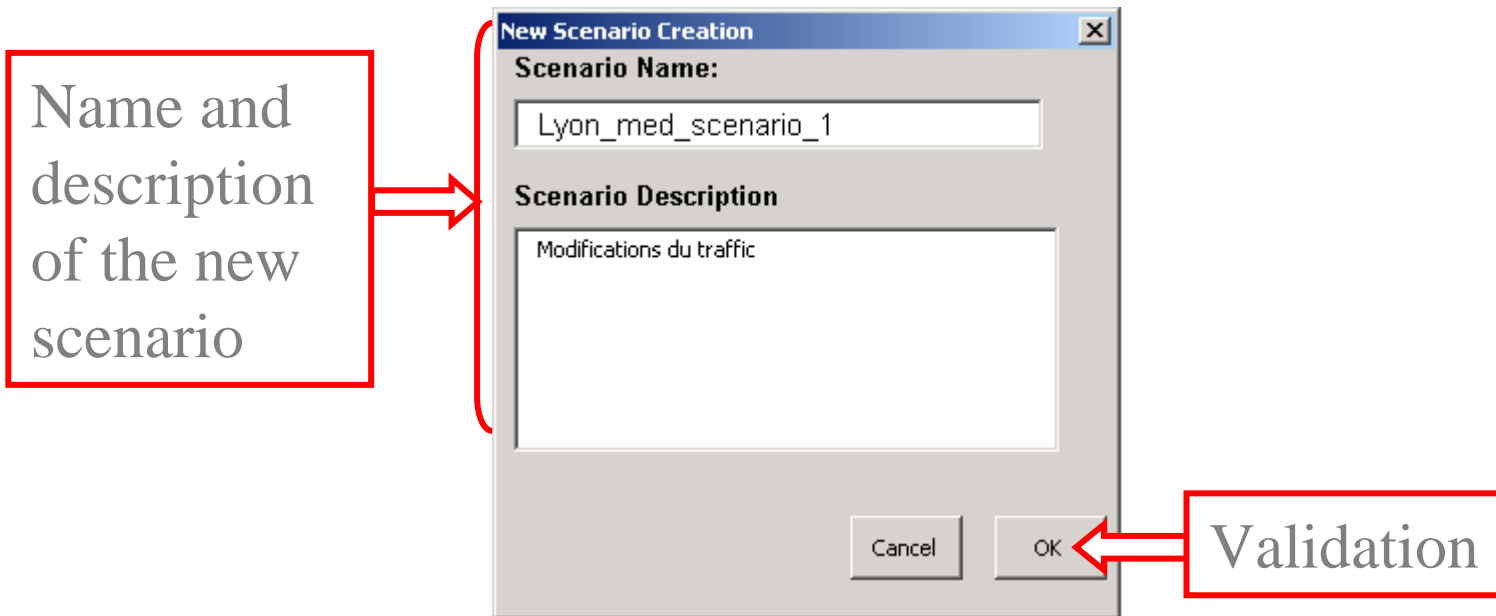
- After clicking on the Management Button, you can see this dialog box:



Select this option

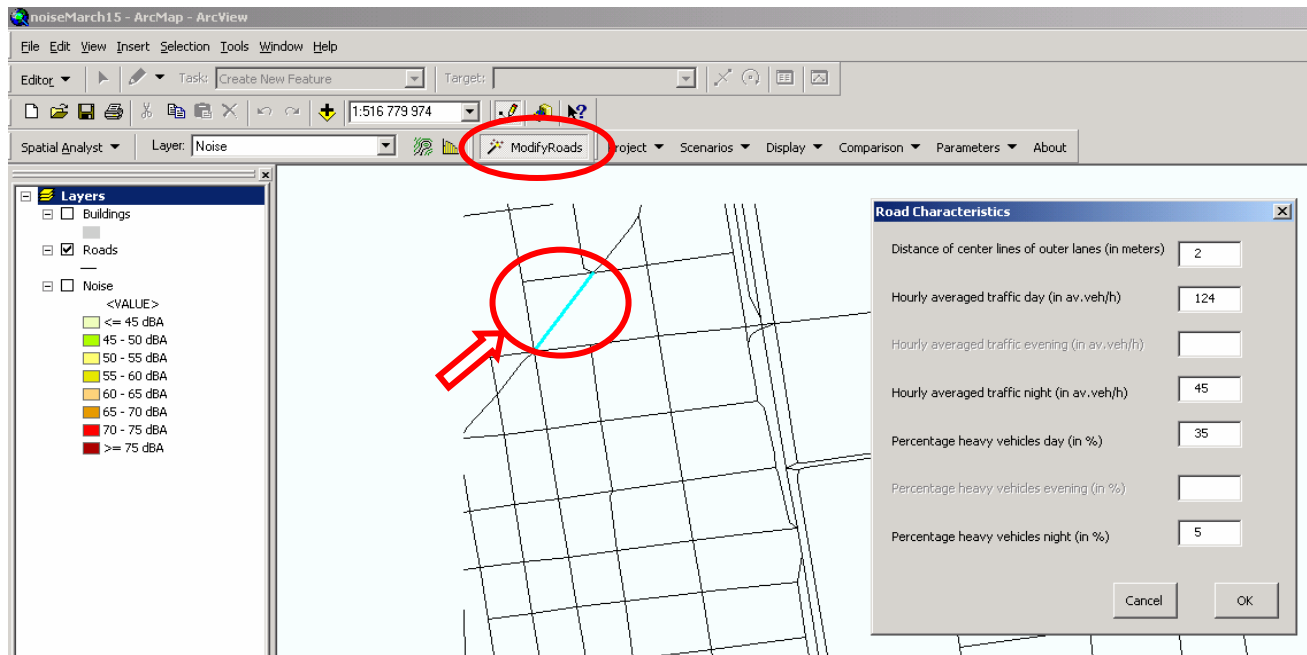
Map comparison

- The creation of a new scenario:



Map comparison

- Then you have to modify the road you want to change, with the “Modify Roads” Button.



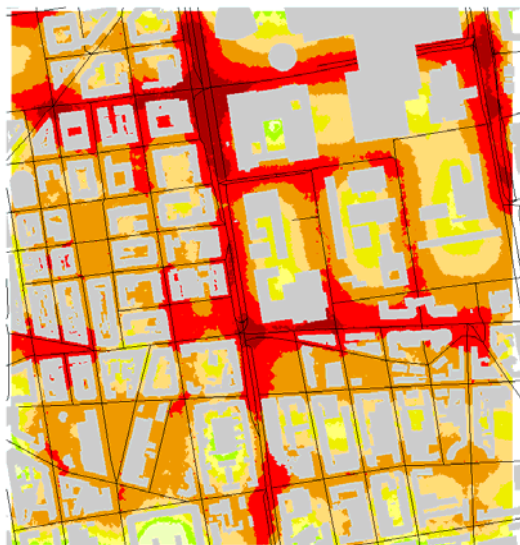
Map comparison

- Then you have to calculate the new scenario in order to compare it from the original situation.
- After that, you'll create raster and then you'll display the new noise map.
- Let's see different scenarios.

Map comparison

- Scenario 1, we have reduced the traffic of Garibaldi road and increased both the traffic of Servient road and Duguesclin road.

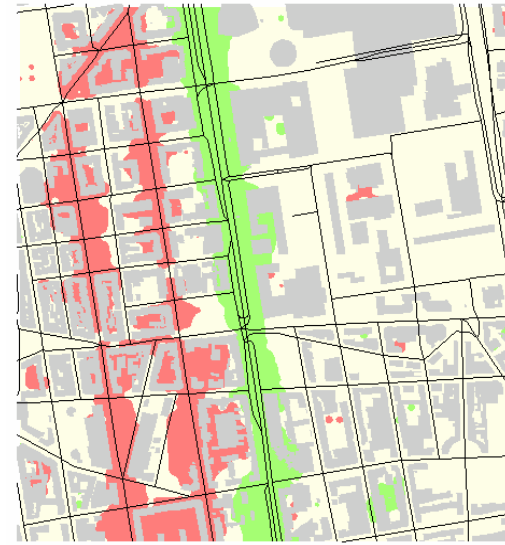
Original situation



Scenario 1



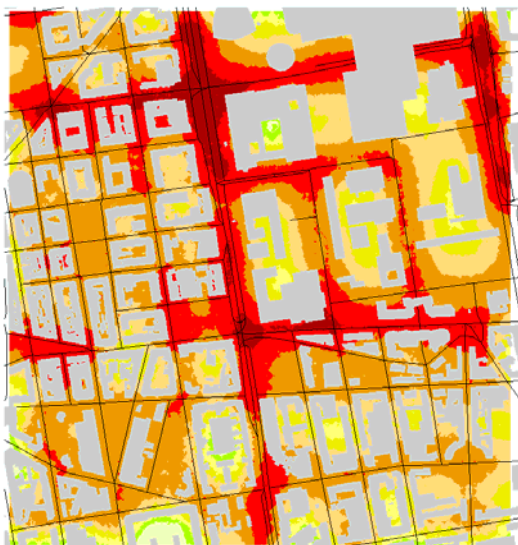
Comparison



Map comparison

- Scenario 2, we have changed the asphalt of Garibaldi road for a street with acoustic properties.

Original situation



Scenario 2



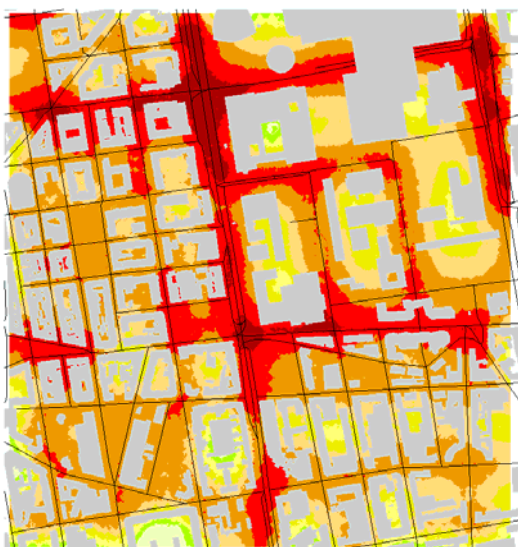
Comparison



Map comparison

- Scenario 3, we have reduced the speed of the traffic on Garibaldi road.

Original situation



Scenario 3



Comparison



Thank you for your attention



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