User Manual

SIIG

Global Integrated Information System Destination

Versione 1.0

SUMMARY

Introduction

The statistics and studies carried out on the various aspects of **accident risk** in fixed plants and in toxic or dangerous substance transport have highlighted the significant incidence of this latter type of accident with effects which can be devastating for the environment and the safety of the resident population. Transport accidents have specific characteristics which make managing them more complicated:

- the **site** of the accident and the scenario itself which are diverse and difficult to forecast;
- **vulnerability centres** which can be very close to the site of the accident;
- specialised **emergency** services which may not be available on site;
- risk analysis and **prevention** and mitigation strategies and techniques which are less advanced than those in fixed plants.

In the context of a lack of legislation on both the Italian and European levels on TDG in which ongoing vehicle control and monitoring systems are not mandatory, action aimed at diminishing accidents rates is needed in order to implement prevention and control measures and reduce the effects of such accidents by managing them effectively.

The **DESTINATION project - Getting to know dangerous goods transport as an instrument in territorial protection** was set up with the objective of monitoring both substances in transit in the border area of Italy and Switzerland (by means of fixed points) and goods originating in and/or destined for the territory covered by the project (by installing devices on vehicles with the partnership of sector operators and the companies which are subject to the Seveso directive) and responding to local government needs to share environmental, territorial and technical TDG data which is intrinsically inter-regional and cross-border in character.

The user categories it is aimed at are heterogeneous: regions, provinces, town councils, motorway managers, transport operators and citizens. The system must be capable of supplying the necessary information, monitoring and forecast tools needed by each type of user and for each functional purpose. Each different category of user will have a specific profile which will determine the functions it can access.

To this purpose, the DESTINATION project proposes to:

- create a shared network of TDG data acquisition and analysis between local governments with specific reference to border areas and environmental vulnerability in order to provide for the immediate distribution of information from and for the road infrastructure relating to accidents (leakages, fires, damage to people and things, etc.), road work and so on to the bodies responsible for action in emergency situations and to facilitate the mitigation of the effects of such accidents;
- increase knowledge and awareness of intrinsic and relative risk linked to TDG by defining public policies and the training and direct participation of private individuals working in the project area such as manufacturing and logistics companies, associations and transport companies;
- support regional level planning and prevention aimed, on one hand, at drawing up shared protocols in emergency management of dangerous goods accidents and, on the other hand, improving infrastructure and service management in the area and making the allocation of resources linked to TDG more effective.

Introduction SIIG

The appplication SIIG – Global Integrated Information System, is the reference tool for:

- displaying the risk of the road network (risk calculated using the formula RIF doc FORMULA)
- viewing and consultation of information associated with human and environmental targets in the area
- perform processing of risk and / or portions of the formula setting some parameters such as substance involved, type of accident, gravity, etc..
- eseguire elaborazioni personalizzate sul calcolo del rischio e/o porzioni di formula
- perform custom processing on the calculation of risk and / or portions of formula
- Damage evaluation

The system use authentication mechanism and user profiling

The application involves user-function profiling which attributes different access levels to different categories of users. Associated roles and functions are set out in the following tables:

Ruoli	**Funzionalità**
SuperUser	Standard processing Customised processing Simulations Damage evaluation
MajorUser	Standard processing Customised processing
BaseUser	Standard processing

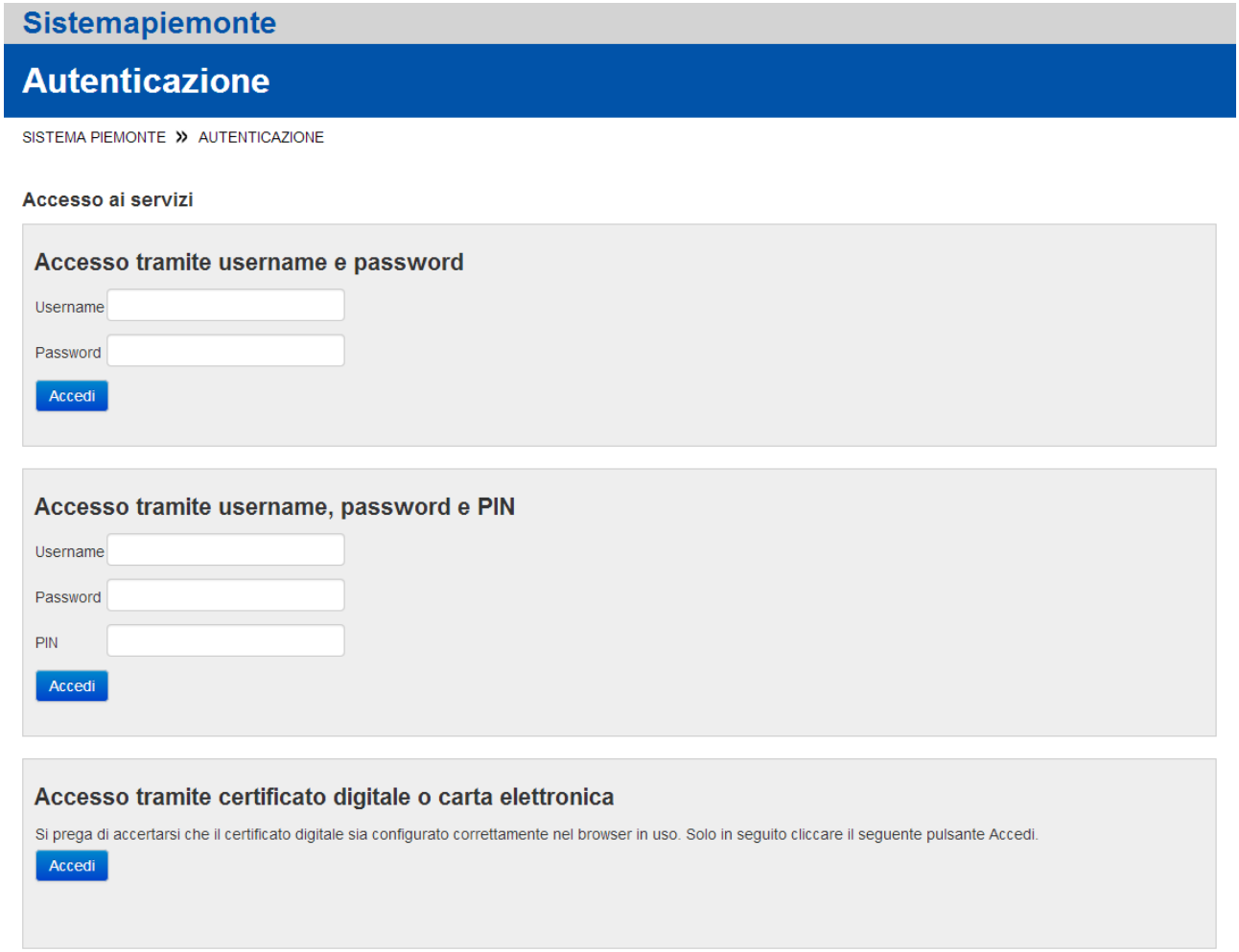
Accesso all'applicativo

The SIIG can be accessed using the appropriate link

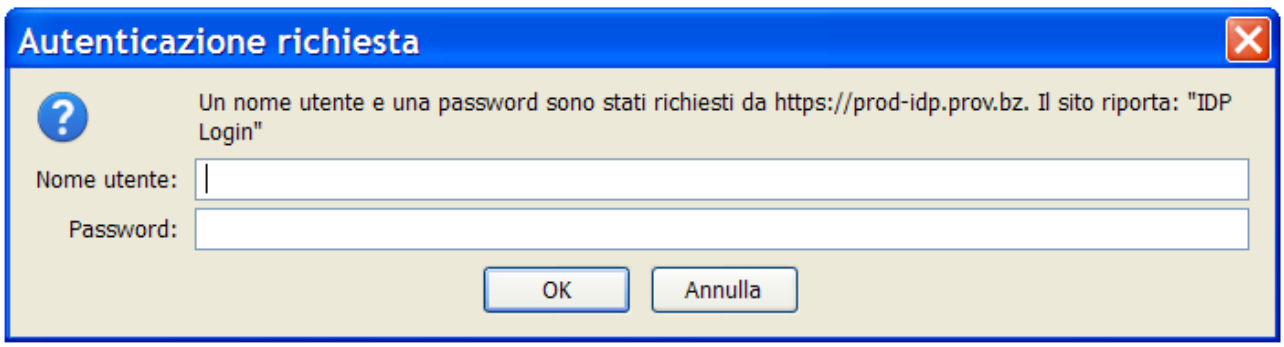
Partner	**URL**
Regione Piemonte e Regione Lombardia	http://destinationpa.csi.it/siig/
Provincia di Bolzano	http://destinationpa.csi.it/territorioliv1wrup/Shibboleth.sso/Login?target=http://destinationpa.csi.it/siig/&entityID=https://prod-idp.prov.bz/idp/shibboleth
Canton Ticino	http://destinationpa.csi.it/territorioliv1wrup/Shibboleth.sso/Login?target=http://destinationpa.csi.it/siig/&entityID=https://idp.suisseid-idp.signdemo.com/suisseid_v15
Valle D'Aosta	

and indicating their credentials. Below are some examples of required credentials:

Example authentication Regione Piemonte e Regione Lombardia



Example authentication Provincia di Bolzano



Application interface

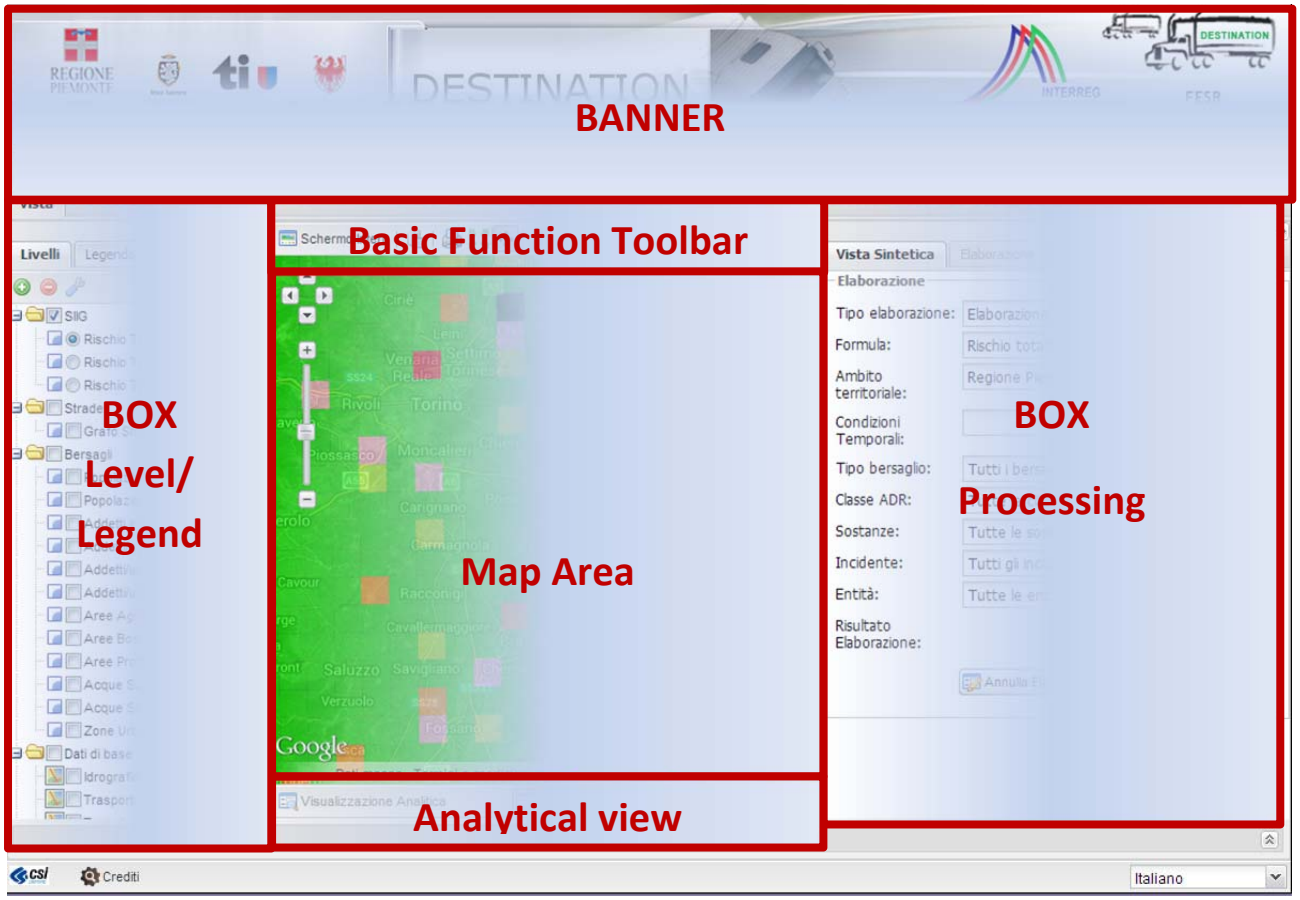
The following areas can be distinguished in the application interface:

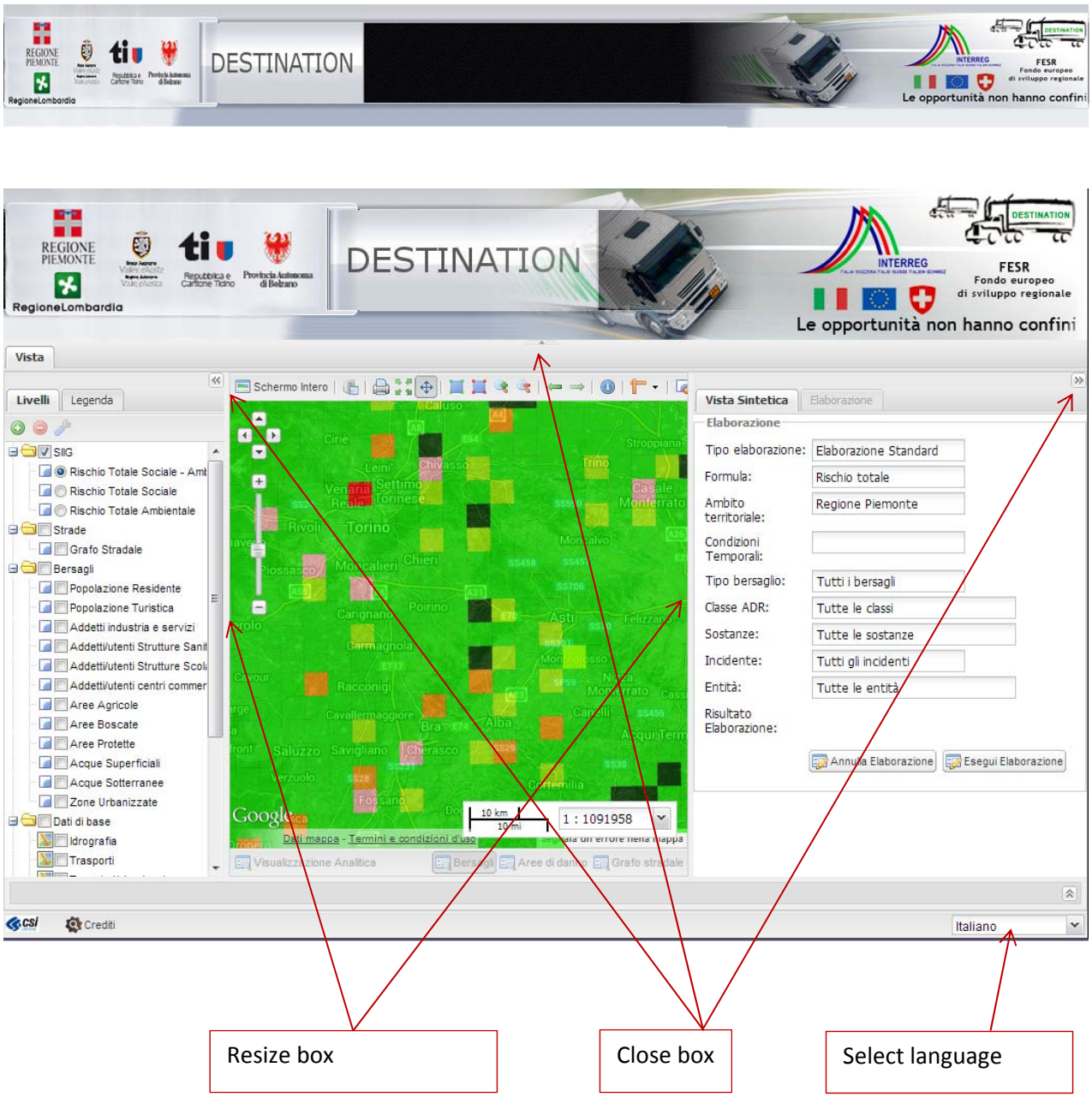
- Map area
- Basic functions toolbar
- Legend and level box
- GIIS processing box
- Analytical view box

The legend/level box, processing box, analytical view box and banner can be resized by the user using the arrows placed around the objects. In particular all these areas can be closed using the appropriate arrows thus increasing the size of the map and geographical information areas viewed.

Users can select the language of the whole interface using the bottom right menu. Four languages are currently available: Italian, French, English and German.


REGIONE PIEMONTE
RegioneLombardia
DESTINATION
INTERREG
FESR
Fondo europeo di sviluppo regionale
Le opportunità non hanno confini


BANNER
Basic Function Toolbar
BOX
Level/
Legend
Map Area
BOX
Processing
Analytical view
Livelli
Vista Sintetica
Elaborazione
Tipo elaborazione:
Formula:
Ambito territoriale:
Condizioni Temporali:
Tipo bersaglio:
Classe ADR:
Sostanze:
Incidente:
Entità:
Risultato Elaborazione:
Crediti
Italiano



Map Area

The map allows the cartographic data to be viewed

- Total Environmental Risk →Extrapolated from risk calculations after setting all possible combinations of substance, accident type, etc.
- Total Social Risk →Extrapolated from risk calculations after setting all possible combinations of substance, accident type, etc.
- Total Social-Environmental Risk →Simplified view of all the possible combinations which are extrapolated from the two previous levels jointly
- Road graph
- All the targets considered by the SIIG.
- Basic data: which enables the WMS created in the context of the PTA project to be viewed
- Background → Where the desired background can be chosen. Alternatives include Google Hybrid, OpenStreetMap, no background, Bing, etc.

The zoom slider is present in the map area. It is a sliding toolbar which enables map size to be modified by moving the indicator. Arrows are also available to move the map (pan).

An 'engineer's scale' is present bottom left and from a drop down menu a zoom scale can be chosen from those which are preset.

Box Levels/Legend

In the left hand part of the map, hereafter referred to as TOC (Table of Contents), two boxes are present:

- Levels Box
- Legend Box

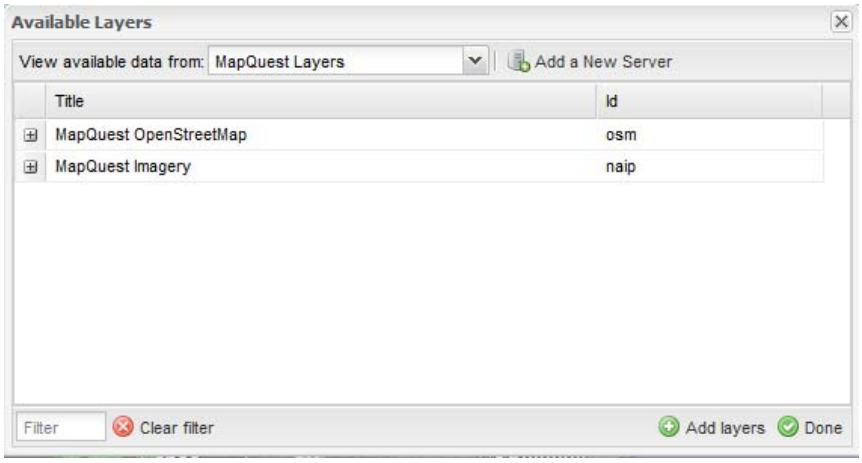
The loaded and viewable data is in the Levels Box. Levels can be activated and disactivated from view by using the flag on the left of each single layer.

The Legend Box supplies the legends for all data which is active and thus viewable on the map. Each legend shows the graphic/themed representation of the geographical objects of the data at the loaded levels.

The following functions are available in the 'Level Management' toolbar at the top of the level boxes

Add level

Clicking on this opens the 'available levels' menu and from here any WMS geoservice with a known URL can be loaded.



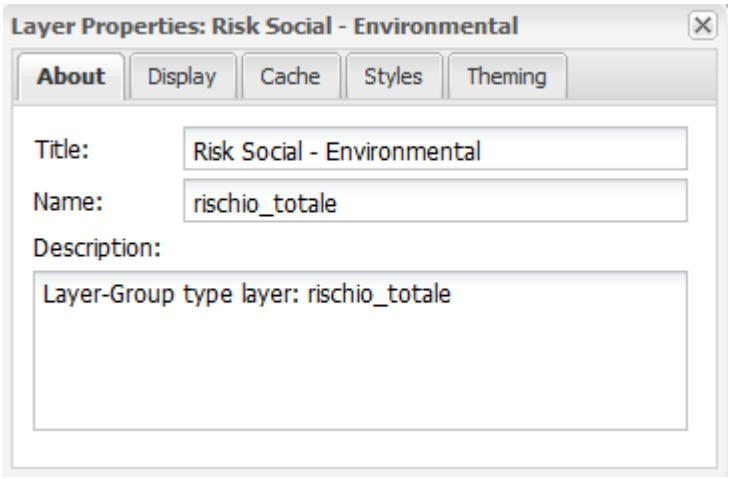
Remove level

Clicking on this eliminates the data from the 'levels box' which were selected by clicking as above.

Property level

Allows you to change the properties of the levels Clicking on this opens a window with the following tabs:

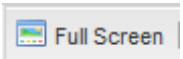
- Information → the information relating to the selected level can be accessed
- Display → level opacity and transparency can be set. The horizontal cursor allows opacity to be modified
- Cache → allows the use of cache information to be set
- Style → style can be modified starting with the styles potentially loaded in the WMS
- Theming → available only for the levels linked to the risk or to its partial formulas. The horizontal cursors enable the theming range on the maps to be modified



Once again from the level box, right clicking the mouse on a selected level accesses the 'zoom to level', 'remove level' and 'property of level' functions.

Basic Functions Toolbar

The basic functions toolbar contains the buttons used to navigate/interact with the map and search/view metadata.



Full screen

Clicking on this button, the map area is viewed full screen and thus without banners and the various boxes which surround it. Clicking on the banner and the various boxes once again returns them to the screen.

Metadata Explorer

Enables metadata to be searched within the Metadata Catalogues, data which have been made available within the Metadata Catalogues (C (cSW standard OCG). Once the Metadata Explorer window has been opened, you select the metadata catalogue in which you want to search for metadata and you can then insert a text or key word into 'search' to look for the metadata of interest. In 'resources found' the

metadata which correspond to the search will be listed, clicking on i twill show detailed information for each metadata.

Clicking on 'view metadata' accesses the metadata sheet which will be loaded between the tabs at the top. Moreover, clicking on 'view map' will load the WMS Geo-Service whose metadata are being viewed into the TOC

 **Maximum extension zoom (Max)**

Clicking on this button automatically views the map to its maximum extent

 **Drag map (Pan)**

Clicking on this button moves the map viewed.

 **Zoom box forward**

Magnifies the map representation scale. Click on a point inside the map or drag the map into a magnification box.

 **Zoom box backwards**

Reduces the map representation scale. Click on a point inside the map to reduce it.

 **Zoom rectangle (zoom in)**

Magnifies the map representation scale. Click and trace a magnification box on the map.

 **Zoom out**

Reduces the map representation scale. Click and trace a zoom out box on the map.

 **Zoom to the previous/next extension**

Return to the previous extension viewed on the map

 **Query an element (identify)**

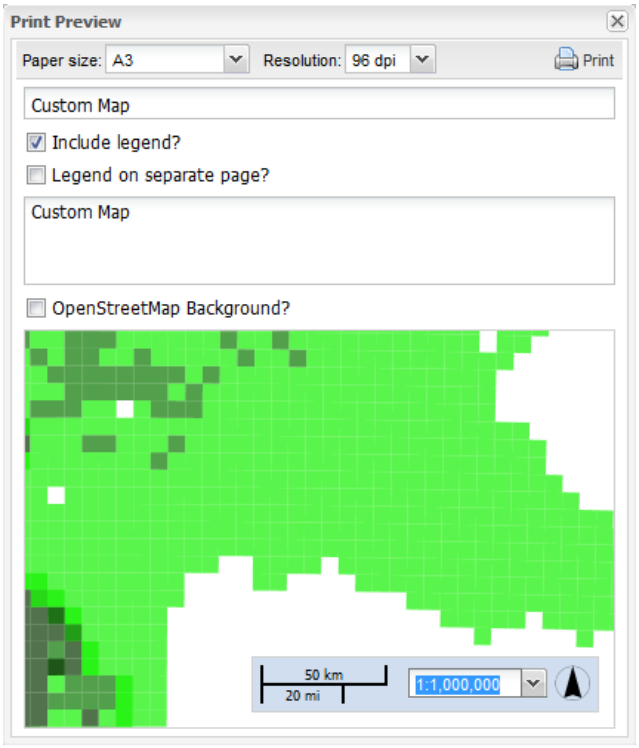
Rapid query on an object on the active layer. To perform a query on the objects in a layer, the layer needs to be made active by clicking on the appropriate layer – which goes grey - in the TOC. Then clicking on a point within the map queries the geographical object at that point. The query result appears in the 'feature info' window. The box shows all the information in all the layers in the TOC as well as in the layer selected.

 **Print map**

Enables the map to be printed in PDF and/or the data presented on screen to be exported.

If you wish to proceed with PDF printing, it is possible to define:

1. The size of the printing paper
2. Graphics resolution
3. The name you want to give the map
4. Decide if you want to include the legend as well
5. Decide whether the legend should be on a separate page
6. Include the background image (the only background image available for printing is the OpenStreetMap)
7. Define the viewing scale



Measurement

This function gives you the chance to measure:

1) the length of a tract/segment by selecting two points on the map
2) A polygon area by marking it directly on the map. The polygon can be closed by double clicking the last point/angle of the shape
3) The route by indicating an on-screen segment

Location Finder

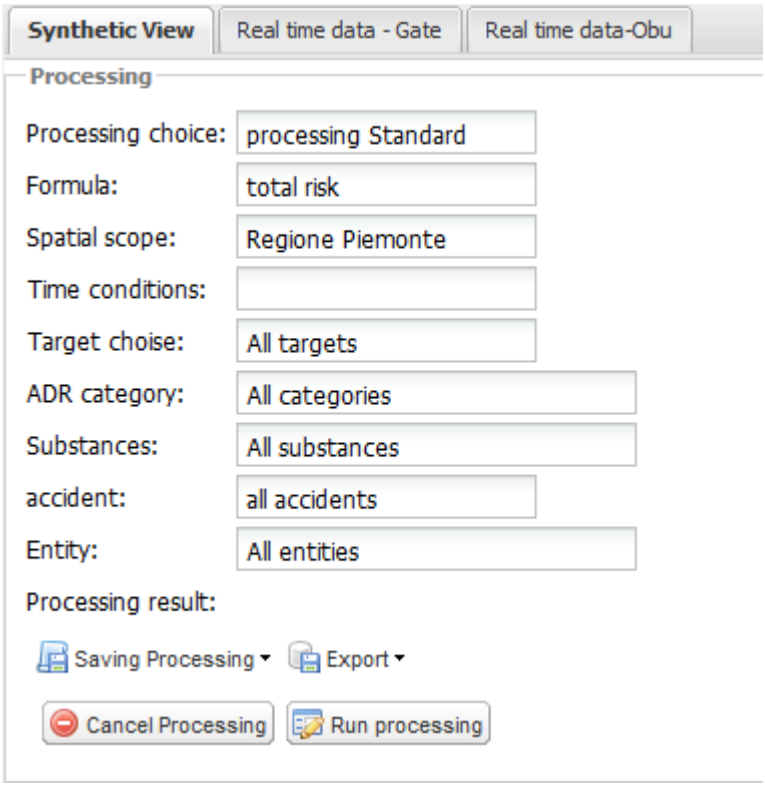
This function allows you to move around the map and position the cursor:

1) On a location (town, address, etc.) inserted by users in the 'geocoder' field
2) On a preset zone selected from the 'select an area' drop down menu

SIIG processing box

The GIIS processing boxes are used in the context of the specific functions of the GIIS (see chapter Functions of the Application) and enable users to:

- Set the parameters of the single processes ('Processing' folder)
- View the parameters set for the processes viewed ('Synthetic view' folder)



"Systhetic view" Folder

Enables users to:

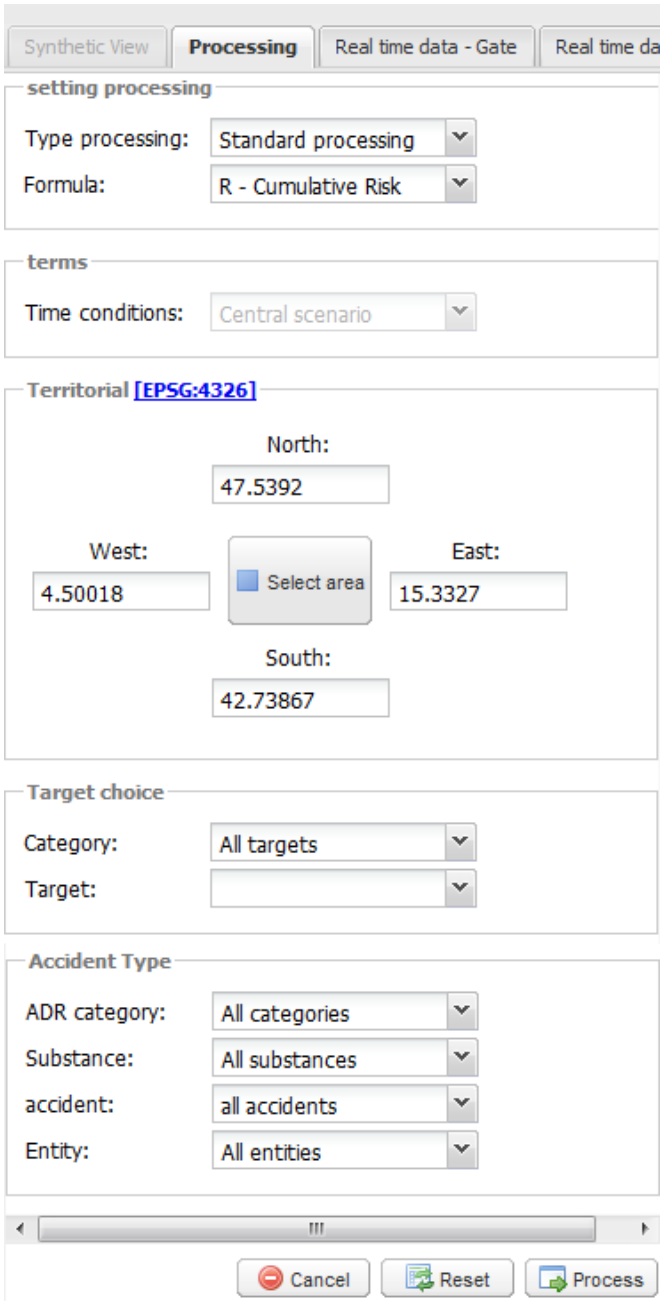
- View the parameters set for the processes viewed on the map
- Cancel processing in progress: in this case all the parameters set will be cancelled and only the road graph will remain on the map

- Set new processing criteria by clicking on the 'Perform processing' button. This is the only way to activate the 'Processing' folder

'Processing' folder

Enables users to set the parameters for new processing:

- Type of processing (see the 'Functions of the Application' chapter)
- The formula (see the 'Functions of the Application - Risk' chapter)
- The time frame (linked to customised processing and simulations)
- Territorial environment
- Type of target
- Type of accident



Users can also:

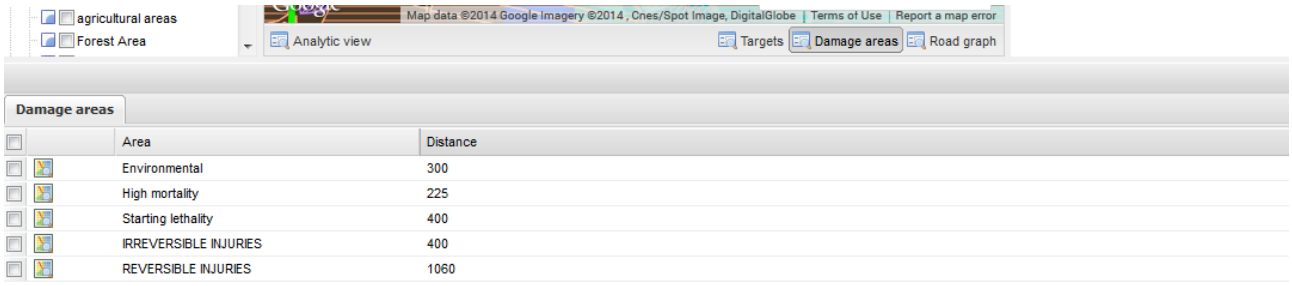
- **Cancel** the operation in progress and return to the 'Synthetic view' folder
- **Reset** all parameters and cancel all settings in the folder to date
- **Activate processing** according to the parameters set

Analytical view box

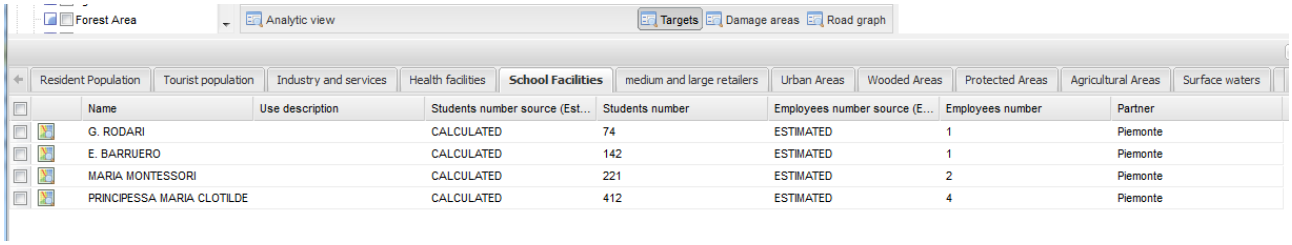
The analytical view box can only be activated following data processing and can only be consulted when the detail of the map view scale has been increased.

It enables users to highlight:

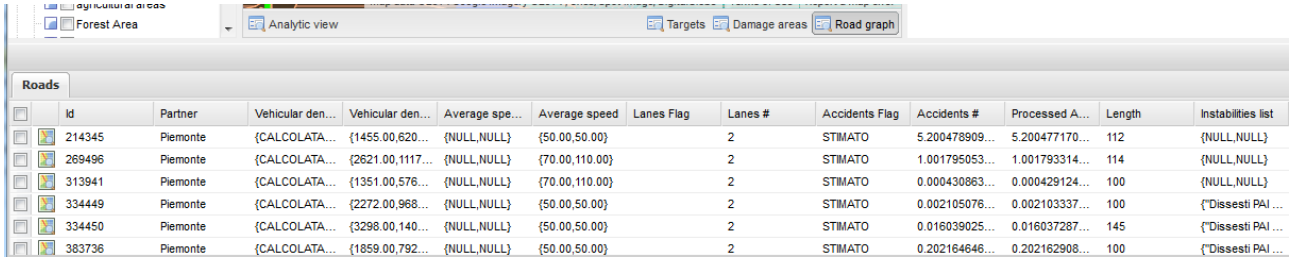
- the radius of the Damage Areas used for processing



- all targets falling within the Damage Areas calculated by the system



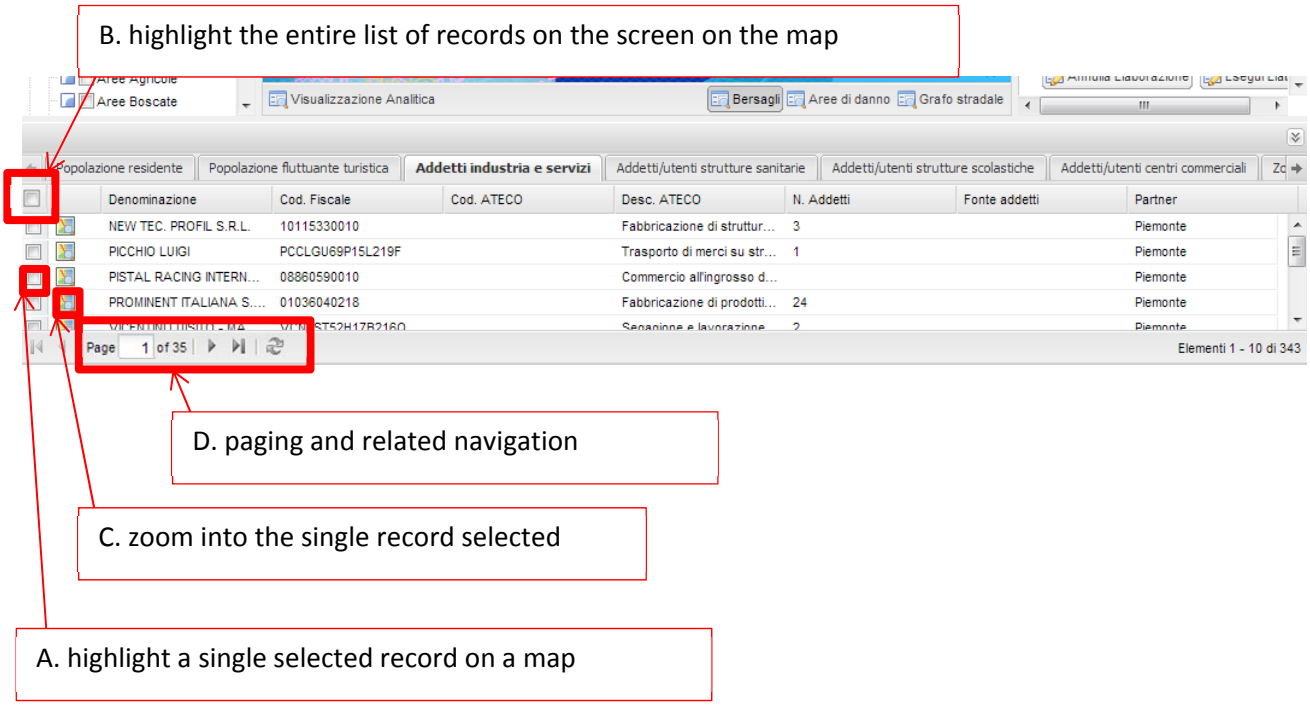
- information relating to the road graph segments selected



As well as presenting the alphanumeric data the analytical view box allows for ongoing interaction between these and the map and enables users to:

A. highlight a single selected record on a map. The selected shape is highlighted in fuchsia
B. highlight the entire list of records shown on the screen on the map. Selected shapes are highlighted in fuchsia
C. zoom into the single record selected

D. paging and related navigation in the event that the number of records corresponding to the parameters set is in excess of 10



Functionality of the application

The GIIS makes the following functions available:

- performing standard risk and/or portions of formula processing by setting certain parameters such as substance involved, type of accident, severity, etc.
- performing customised processing on risk calculations and/or portions of formula
- performing risk calculation and/or portions of formula simulations by adding or eliminating targets
- evaluating damage

Before going into greater depth on the functions of the GIIS, it is important to establish what we mean by risk on the road network (risk calculated using the formula) and portions of formula

Risk Analysis

The various processes involve on screen graphic/alphanumeric rendering and viewing of risk processing using the complete formula or portions of the formula. The risk processed and viewed is made up of the following types of risk:

- environmental risk
- Social/Human Risk
- a combination of environmental and social risks

Graph representation allows the following levels of environmental and social risk to be distinguished.

For the environmental and social risk combination the following graph representation is used.

Users can choose whether to view the complete risk or the following portions of the Risk formula:

Titolo	**Formula**	**Finalità**	**Unità di misura**	**Dipendenze**	**Parametri input obbligatori**	**Visualizzazione Output**
R- Risk	∑ (Pis x ∑ (Padr x ∑(Psc x ∑ (Fp x (ExS) x (1- Cff)))))	Overall anthropic and/or environmental risk evaluation on a detailed scale	[deaths/km/year] or [m_{2eq} with damage/km/year]	i – j – k –m	NA	* On the map * Analytical view
R- Accumulated Risk	∑ (Pis x ∑ (Padr x ∑(Psc x ∑ (Fp x (ExS) x (1- Cff)))))	Overall anthropic and/or environmental risk evaluation on a regional or project scale	[deaths/km_2/year] or [m_{2eq} with damage/km_2/year]	i – j – k –m	NA	* On the map Formula usable only with less detail
Individual anthropic risk	Pis x∑ (Padr x ∑(Psc x S x (1- Cff))))	Evaluation of risk acceptability for a target *m* (extremely useful for territorial planning or in the VAS and VIA procedure contexts)	[deaths/PE exposed/year]	i – j – k	NA	* On the map * Analytical view
Individual environmental risk	Pis x∑ (Padr x ∑(Psc x S x (1- Cff))))	Evaluation of risk acceptability for a target *m* (extremely useful for territorial planning or in the VAS and VIA procedure contexts)	[m_2 with damage/m_2 exposed/year]	i – j – k	NA	* On the map * Analytical view
Anthropic damage associated with certain accident	∑(Psc x ∑ (Fp x (ExS) x (1- Cff)))	ADR traffic planning and emergency planning	[deaths/ADR accident vehicles]	k- m	Substance Entity	* On the map * Analytical view
Environmental damage associated with certain accident	∑(Psc x ∑ (Fp x (ExS) x (1- Cff)))	ADR traffic planning and emergency planning	[m_{2eq} with damage/ADR vehicles in accidents]	k- m	Substance Entity	* On the map * Analytical view
Accident probability	Pis x ∑(Padr x(∑ Psc))	Analysis of ADR hazard on a road arc in detailed scale	[events/km/year]	i – j – k	NA	* On the map * Analytical view
Accumulated accident probability	Pis x ∑(Padr x(∑ Psc))	Analysis of ADR hazard on a road arc in regional or project scale	[events/km_2/year]	i – j – k	NA	* On the map Formula usable only with less detail
Magnitude of the anthropic consequences	∑ (Fp x (ExS) x (1- Cff))	Estimate of the anthropic damage associated with the evolution of a specific *k* scenario	[deaths/km/accident scenario]	m	Substance Accident Entity	* On the map * Analytical view
Magnitude of the environmental consequences	∑ (Fp x (ExS) x (1- Cff))	Estimate of the environmental damage associated with the evolution of a specific *k* scenario	[m_{2eq} with damage/km/accident scenario]	m	Substance Accident Entity	* On the map * Analytical view
Probability of occurrence of an accident	Psc	Overall probability of the sequence of events starting with the road accident (initiating event) determining the leaking out of the	[accident scenario/ADR accident	j - k	Substance Entity	* In synthetic view

scenario		dangerous substance carried as a result of the transport system's failure to contain it and the consequent occurrence of a critical accident event to which a specific damage threshold is linked and, by means of a consequence assessment process and a specific damage area (the so-called damage buffer zone).	vehicles]			
Intrinsic road hazard	Pis	Characterise the accident propension of each element of the road route on a detailed scale (accident prevention)	[circulating vehicles in accidents/km/year]	i	NA	* On the map * Analytical view
Intrinsic accumulated hazard of the road network	Pis	Characterise the accident propension of each element of the road route on a regional or project scale (accident prevention)	[circulating vehicles in accidents/km_2/ year]	i	NA	* On the map Formula usable only with less detail
ADR flows	Padr	Circulating ADR vehicle quantification	[ADR accident vehicles/circulating vehicles in accidents]	i - j	Substance	* On the map * Analytical view
Potentially exposed anthropic targets	E	Representation of exposed humans	[PE exposed/accident scenario]	m	NA	* On the map * Analytical view
Potentially exposed environmental targets	E	Representation of environments exposed	[m_2 exposed/accident scenario]	m	NA	* On the map * Analytical view
Anthropic vulnerability	S	Vulnerability of the potentially exposed anthropic targets to the various accident scenario hypotheses on the basis of the fact that not all the potentially exposed targets effectively suffer damage	[deaths/PE exposed]	k- m	NA	* In synthetic view
Environmental vulnerability	S	Vulnerability of the potentially exposed environmental targets to the various accident scenario hypotheses on the basis of the fact that not all the potentially exposed targets effectively suffer damage	[m_2 with damage/m_2 exposed	k- m	NA	* In synthetic view
Ability to address	Cff		[-]	i - k - m	NA	* On the map * Analytical view

Standard processing

Standard processing requires the following criteria to be set:

- formula (complete or portion of formula)
- territorial context
- type of target
- type of accident (entity, ADR class, substance involved, etc.)

It is not mandatory to select target and accident types. If these are not selected the system performs the envelope of the various cases.

Territorial context is also non-mandatory and if it is not selected the system processes the data on the basis of what is presented in the map area at the moment that processing is performed.

Customised processing

Customised processing is a function which enables users to re-elaborate the Risk (or portions of it) according to their needs. The system enables users to request processing with variations on standard processing. In addition to the parameters which can be set in standard processing corrective factors can be used (amplifying or mitigating) in the risk calculation algorithm linked, for example, to specific (weekdays/public holidays, night time...) and/or meteorological (e.g. fog, ice, rain...) conditions which impact on specific factors (e.g. Pis , Padr) of the formula.

Simulations

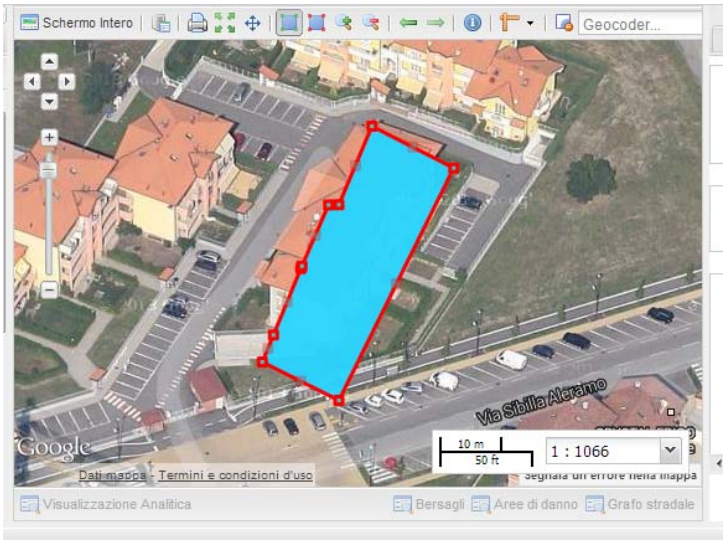
Simulations are an extension of customised processing in which users can add or cancel targets, modify target parameters and modify certain parameters of the formula linked to road arcs (intrinsic road hazard - PIS, capacity to address - CFF, probability that an accident will involve Dangerous Goods Transport - PADR).

The purpose of the simulation function is the evaluation of potential risk in that it simulates territorial context variables (e.g. presence of a new target...).

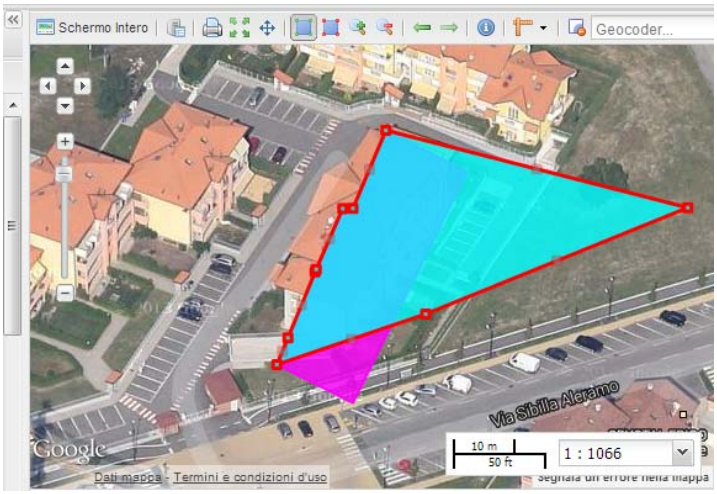
On an operational level, when processing type 'simulation' is selected, the analytical view box is opened (at the bottom of the screen) and populated with the data of the targets which fall into the portion of the map shown on the screen (to avoid slowing down the operation too much users are thus advised to use this function at an increased level of detail).

In the analytical view box, as well as the functions described in section **Errore. L'origine riferimento non è stata trovata.** ('Application Interface – Analytical View Box'), the following functions are also present:

A.  Begin shape editing. This function enables users to begin editing a shape. As soon as this key is pressed the system highlights the element on the screen.



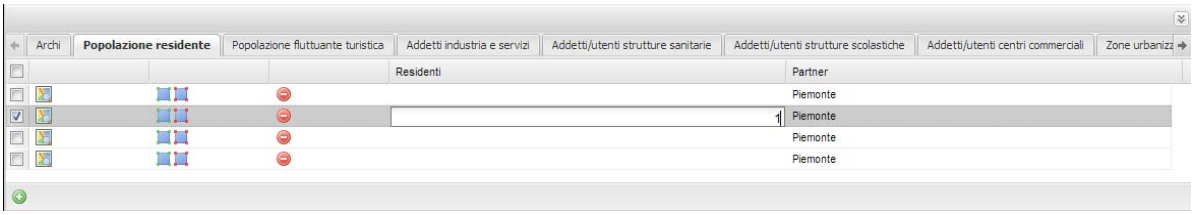
It is this possible to begin modifying by moving the angles highlighted on the screen



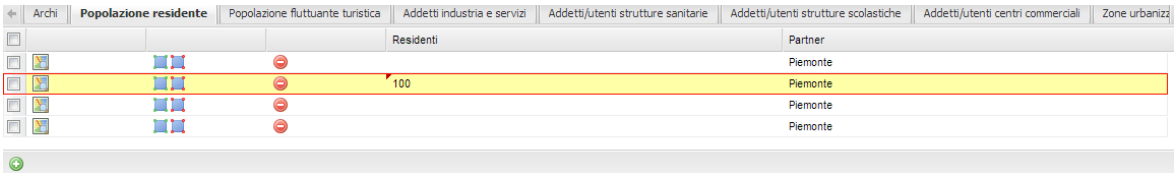
The system highlights the initial shape in fuchsia and the new modified shape in blue

B.  End shape editing. This function enables users to complete editing the selected shape. At this point only the modified shape will be shown on the screen and not the original shape.

C. Double clicking directly on an alphanumeric information field shown on the screen users can also vary some of its parameters such as number of residents, number of employees, etc.

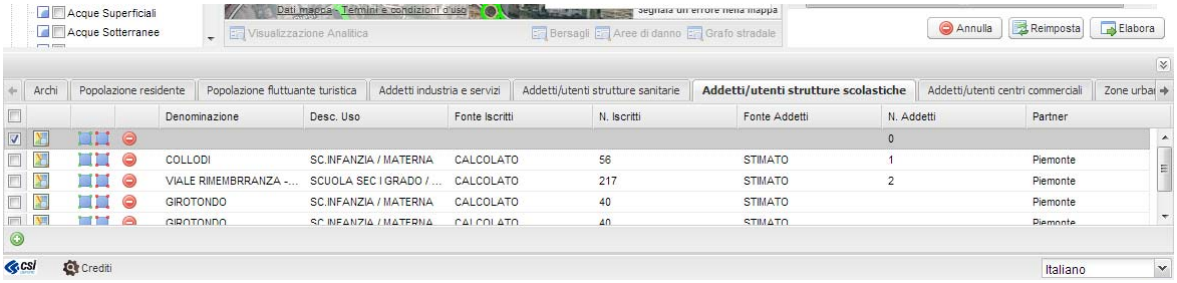


Records on which alphanumeric modifications have been made are highlighted in yellow and the modified field is marked with a small red triangle.

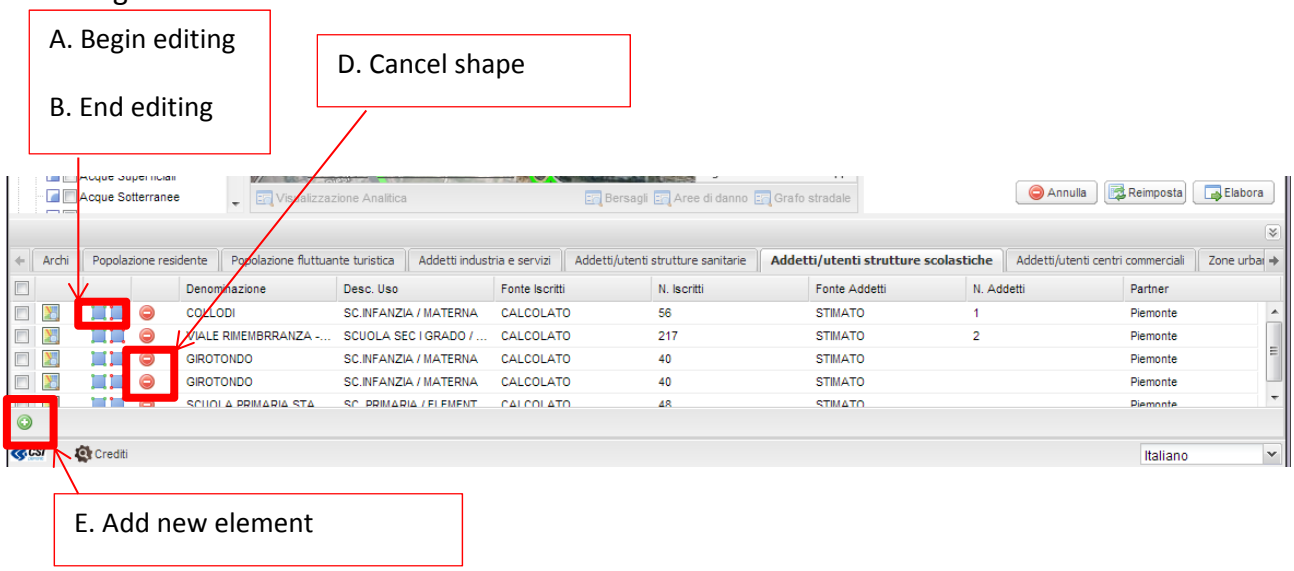


D. Cancel shape. This function enables users to cancel a shape. A message requesting confirmation appears on the screen. If the operation is confirmed the shape will always appear on the screen but it will be in a reddish colour.

E. Adding a new target. This function allows users to add a new element to the target folder in the foreground (a new row) on which users can proceed using the functions described in points A, B, C and D



In the figure below the locations of the functions described thus far are shown

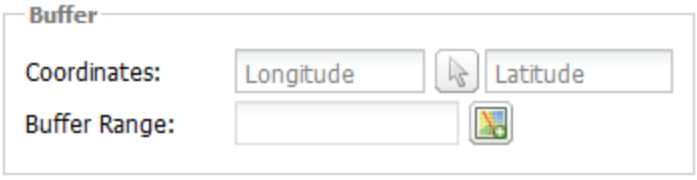


Damage assessment

With the selection of the "Assessment of damage" in the combo formula the only item available is "Calculation of damage."

To be able to start processing the user must select the area of damage. There are 3 modes

1) Draw a polygon on the map. Attention, closing the polygon is made with a double-click the last corner / angle of the polygon
2) Drawing a circle. First you identify the center of the circle and hold it away from the center, indicating graphically the radius.
3) Applying a buffer to a point. The parameters for the application of the buffer are: latitude and longitude of the point; buffer size expressed in meters

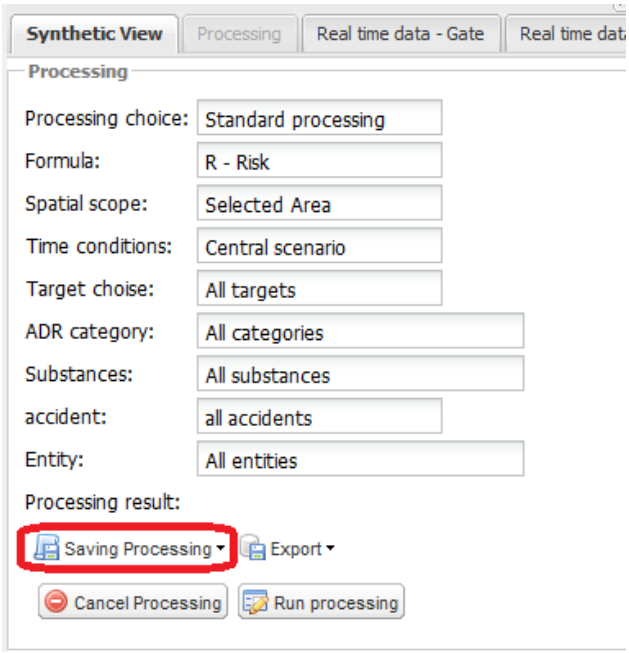


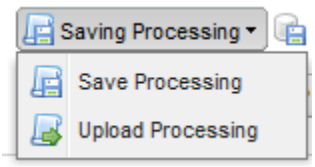
Before you start processing it is also necessary to specify the type of accident. The development will color the arcs of the road that intersect the area of damage previously represented by the formula of assessing damage.

Through the "analytical view", you can view on the map the area of damage used for processing and the targets that intersect the latter

Saving and searching processes

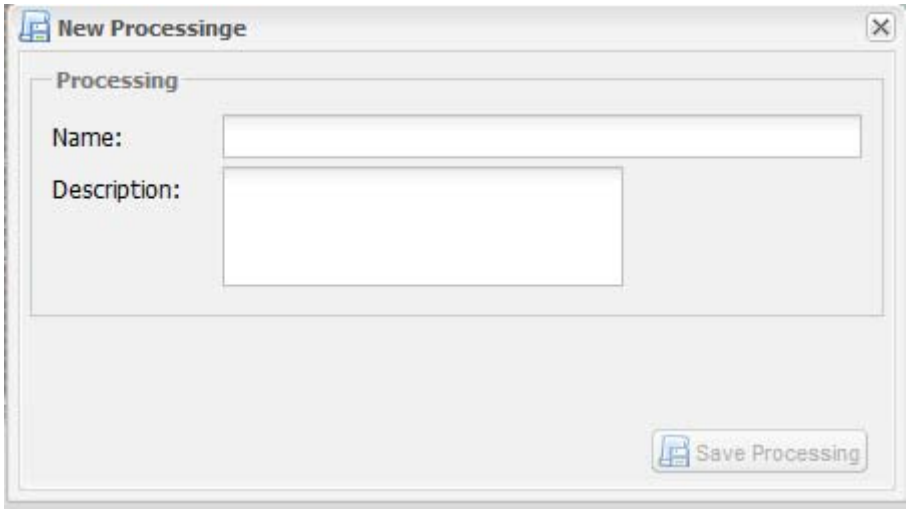
On users' requests, any processes carried out (standard, customised, simulations, etc.) can be saved in the system and retrieved when needed.





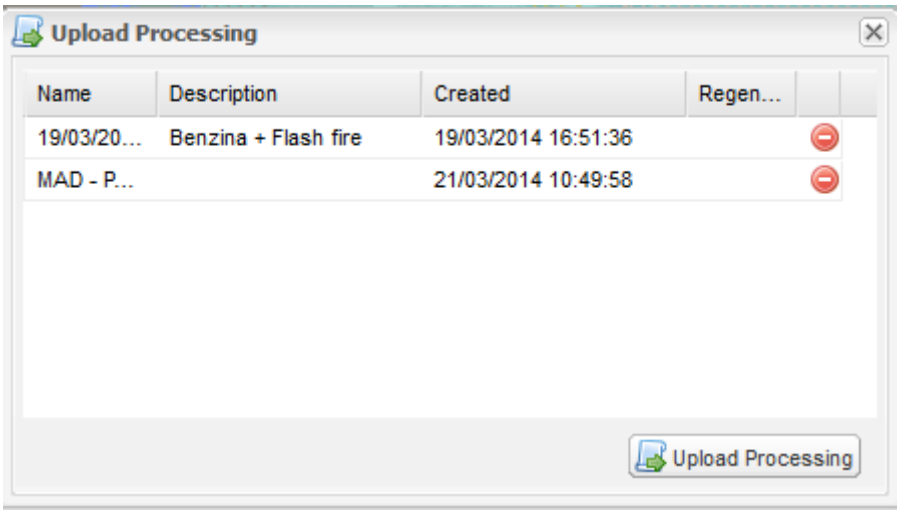
Individual processes saved have the following characteristics:

1) Proprietary user. Individual users can view and manage only their own processes.
2) Updating data.
3) Process denomination. A brief description of the process



All processes can be retrieved by proprietary users with the 'load processes' function and can be regenerated at any time. For simulations only, regeneration is possible only until the next time that the ingestion phase of updated data is launched by partners (it is estimated that this ingestion process will take place once or at most twice a year). This process can involve changes in the starting data (graphs and targets) and thus regeneration operations are no longer possible

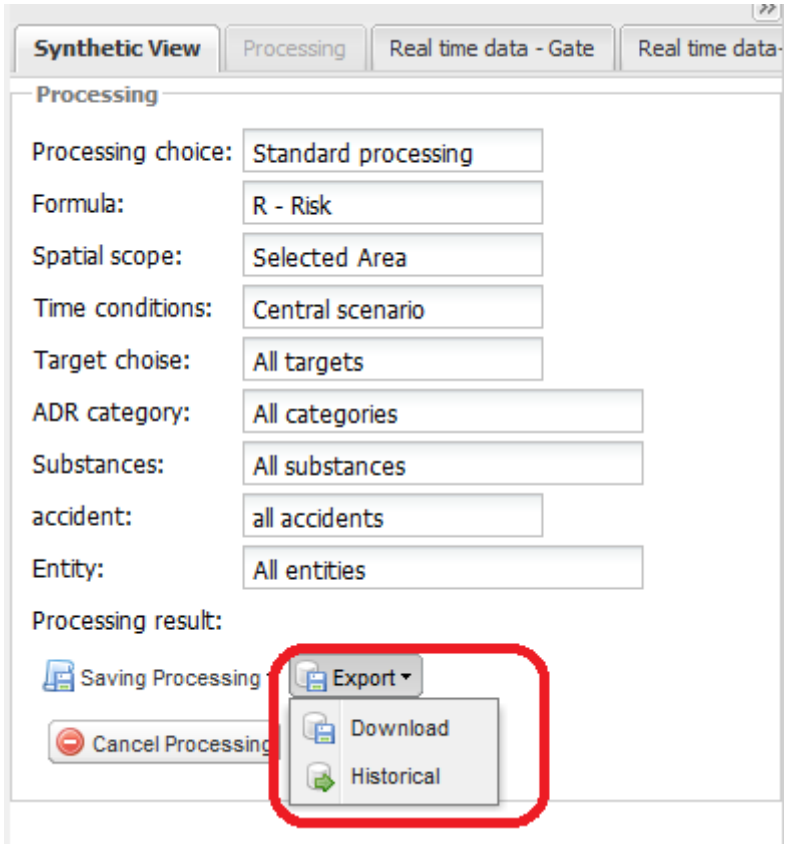
.



Users can eliminate processes which are no longer of use to them at any time using the following key

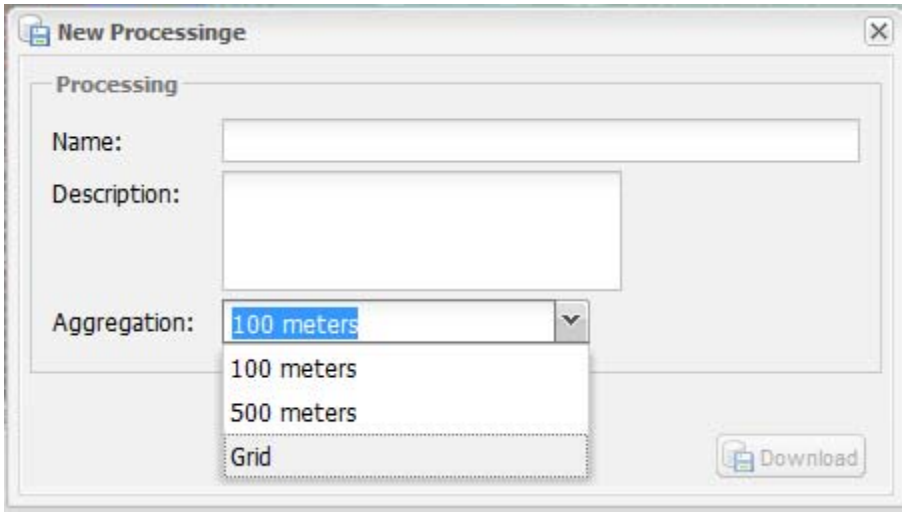
Exporting processed data

On users' requests, any processes carried out (standard, customised, simulations, etc.) can be exported.



Individual processes exported have the following characteristics:

1) Proprietary user. Individual users can view and manage only their own processes.
2) Updating data.
3) Process denomination. A brief description of the process

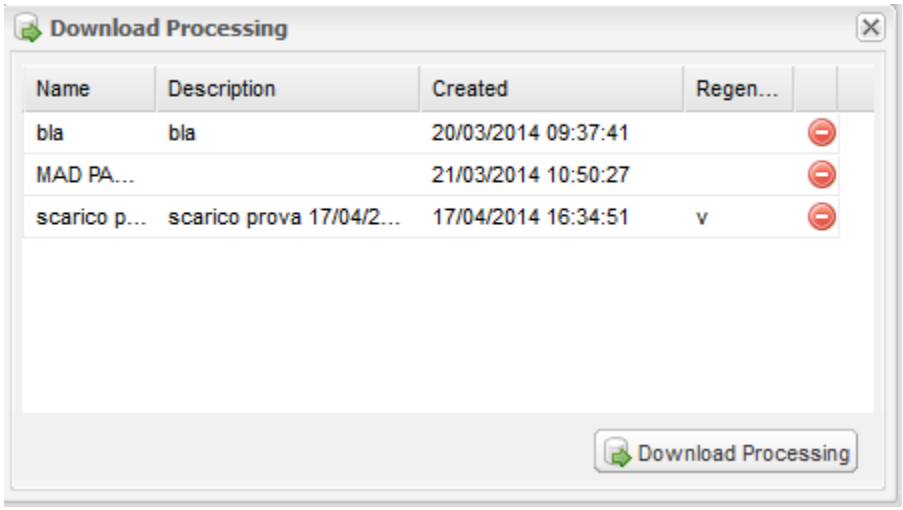


Warning: export operations can require slightly longer processing times. As soon as it has been completed the following message appears on the screen

which allows users to download a zip extension file onto local files containing the shapes relating to:

- Results of processes performed
- Buffer areas
- Targets falling within the buffer area

With the 'statistical data' function users can re-perform process downloads or cancel them permanently with the following key:

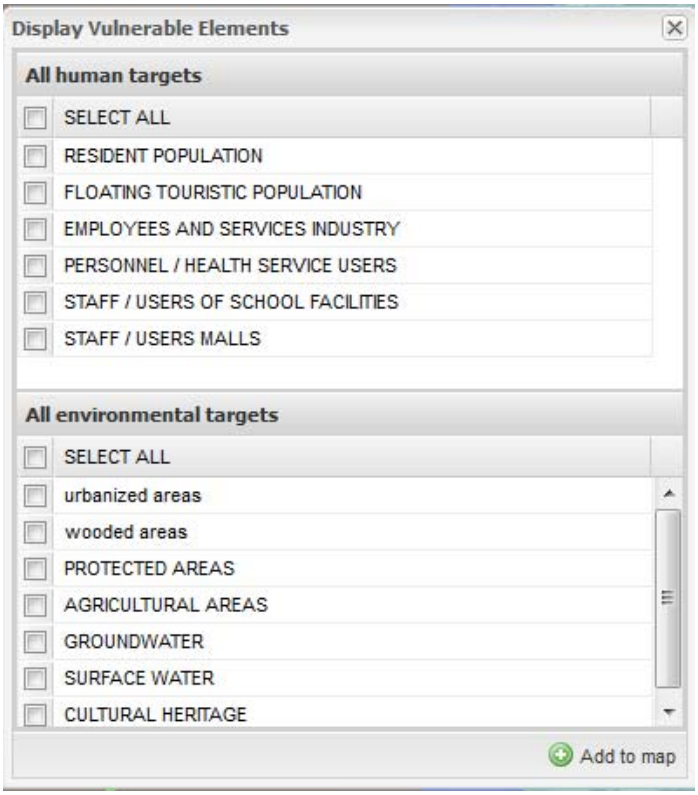


Viewing vulnerable elements

Vulnerable elements can be shown using theming. The result is a coloured vulnerability map.

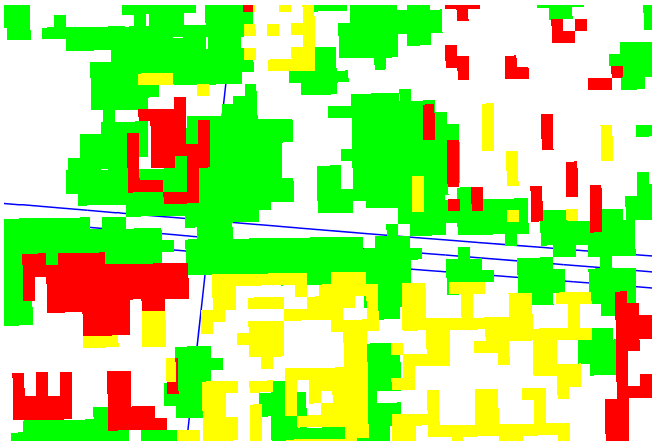
To launch this function users need to indicate the elements contributing to theming:

1) All human or environmental targets
2) One or more items listed



Then clicking on 'add map' generates a new level on the 'vulnerability' map of the following type:

Having a representation of a regular grid of 10 m to the side. Here is a detailed example



If necessary users can modify the theming of the elements on the map by selecting the 'Property of level' key and modifying the thresholds .

Functions which support active security

As far as active security is concerned, the following functions can be performed:

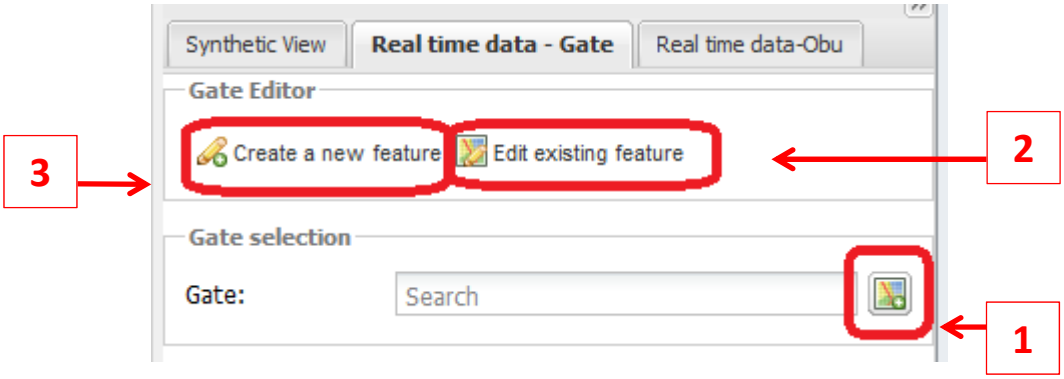
1) viewing the information acquired by GATEs in real time;
2) viewing the information acquired by OBUs in real time;
3) viewing and downloading the statistical information (aggregations on a daily, weekly, monthly, seasonal and yearly basis) on relevant transit via GATEs and OBUs..

Viewing GATE data in real time

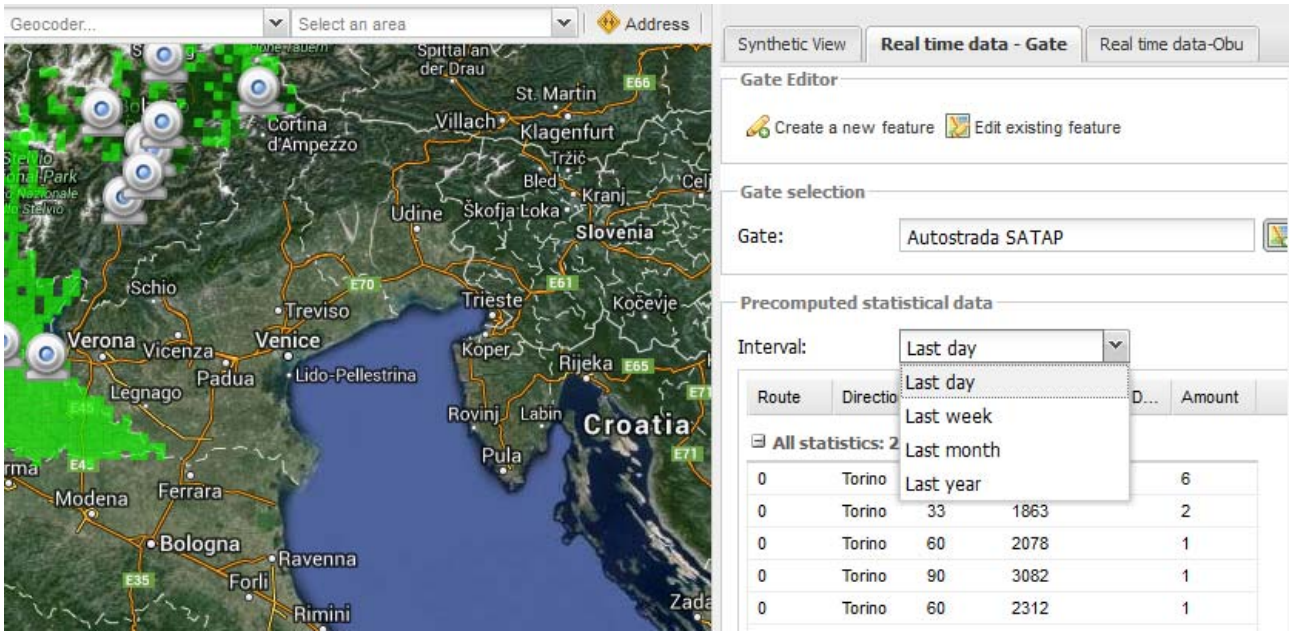
This function enables the data from GATEs to be viewed in real time on maps via access to the appropriate layer in the Levels Box.

On the map then displays the following icons

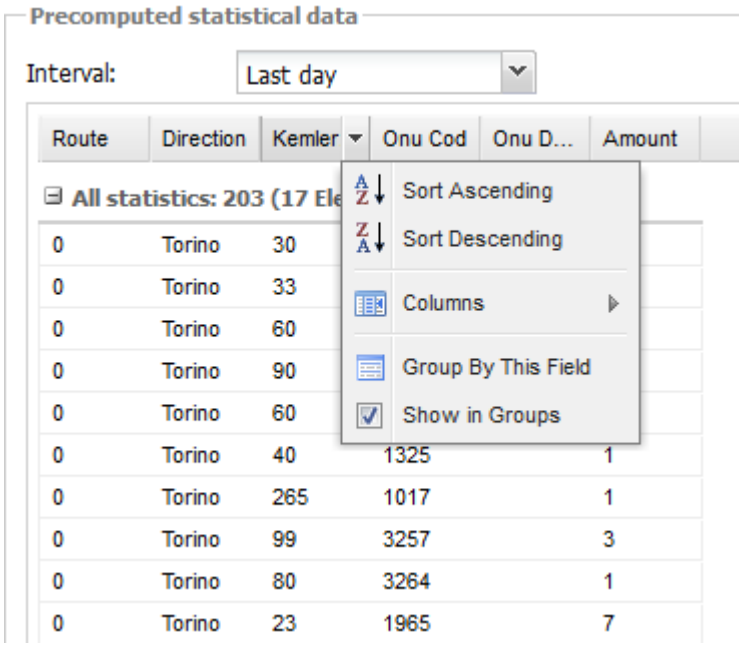
Can also access the information by positioning in the "BOX Processing" on the folder "Real time data - GATE".



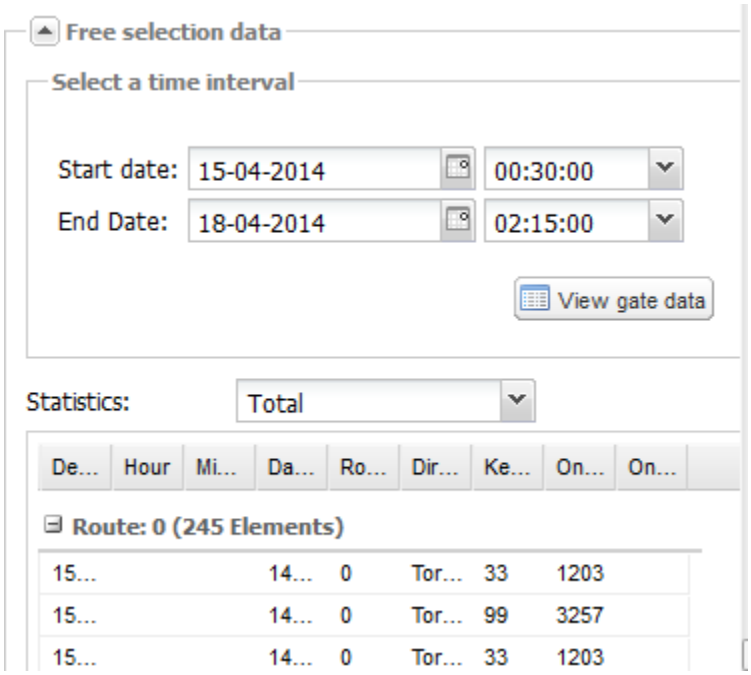
1) If the user select the GATE on the map , is possible view some statistics related to the precalculated GATE..
   The user can view the statistics relating to:
   - Last day
   - Last week
   - Last month
   - Last year



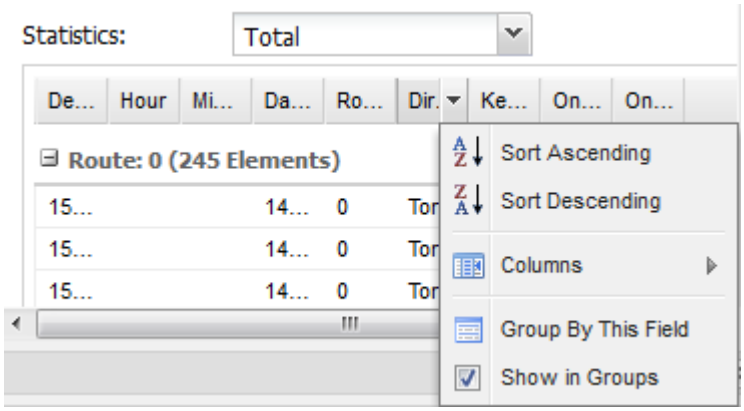
For each information (lane, direction, Kemler code, etc..) is possible apply the following features:
- sort in ascending order
- Sort in descending order
- Select the information to display
- Group statistics according to the selected field
- show / hide groupings



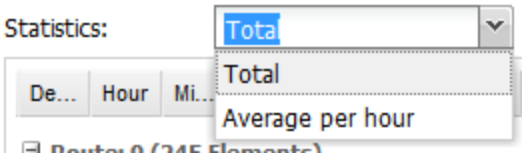
Can also specify a time interval different from those pre-calculated by setting the start date and the end date in the "Free selection data"



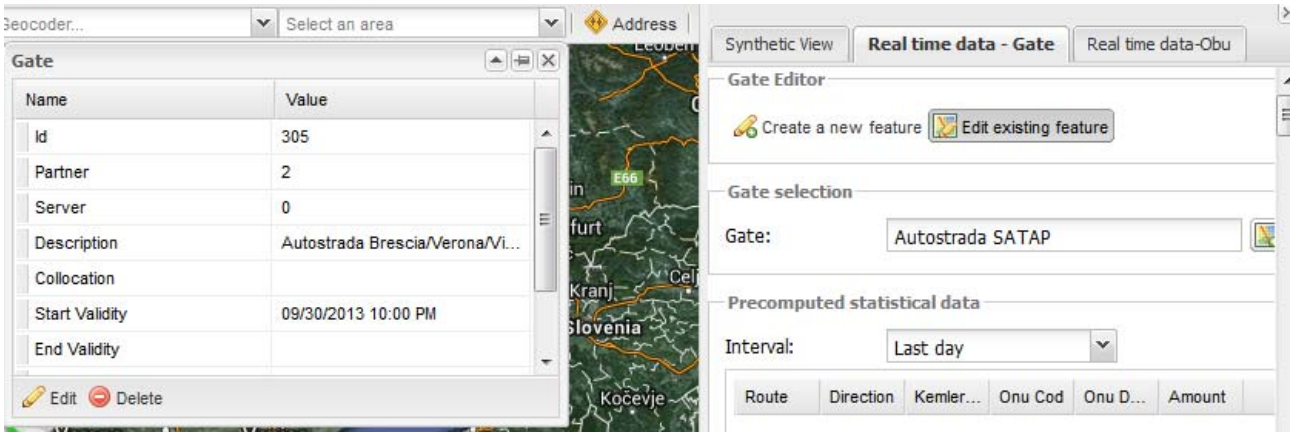
For each information (lane, direction, Kemler code, etc..) is possible apply the following features:
- sort in ascending order
- Sort in descending order
- Select the information to display
- Group statistics according to the selected field
- show / hide groupings



The user can select the following statistics:
- Total: Represents the total number of vehicles recorded during the period
- Average per hour: represents how many vehicles detected on average per hour
These values can vary if the user sets different groupings

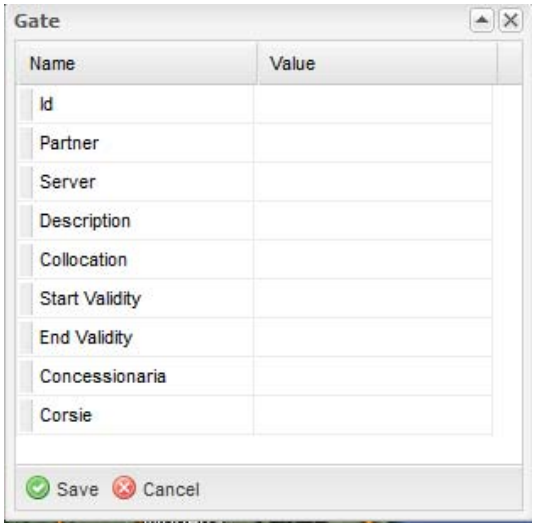


2) Only SUPERUSER profiles can modify some data related to GATE. Clicking the "Edit existing GATE" and selecting the gate on the map opens a window that shows the information of the gate. The user can then update the data displayed



From this window, you can also delete a gate. This operation involves a cancellation logic gate that will no longer be visible on the map.

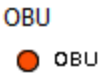
3) Only SUPERUSER profiles can add a new GATE. Selecting the button "Add new GATE" and clicking on the map at the location where to place the GATE opens a window that shows the information of the gate. The user can then proceed with the loading of the information necessary for its identification.
Attention! The field IDGATE will be used for the allocation / binding information in real time



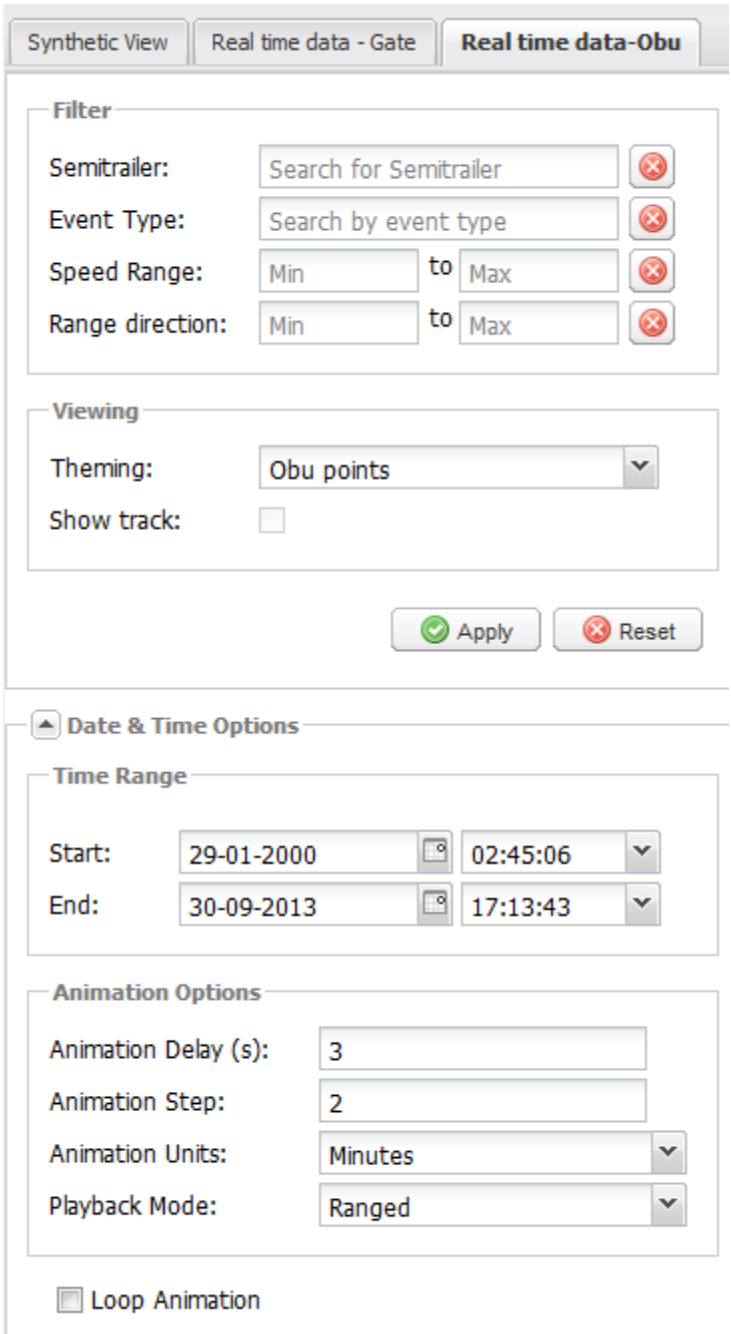
Viewing OBU data in real time

This function allows you to view real-time data from the OBU and are shown on the map by turning on the appropriate layer on the Layers Box.

On the map then displays the following icons

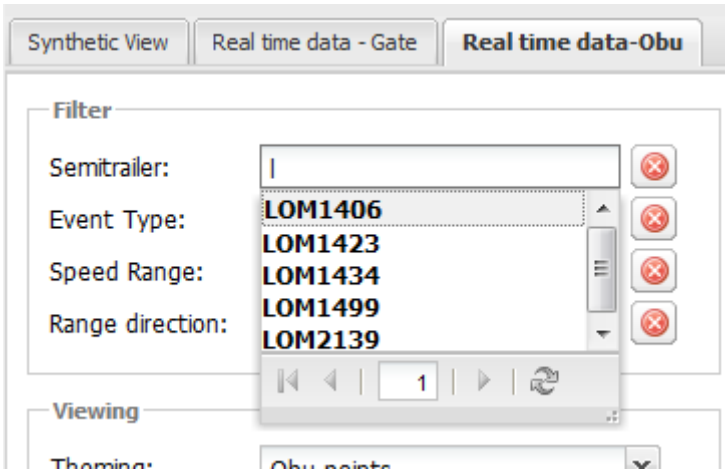


Can also access the information by positioning in the "BOX Processing" on the folder "Real time data - OBU".

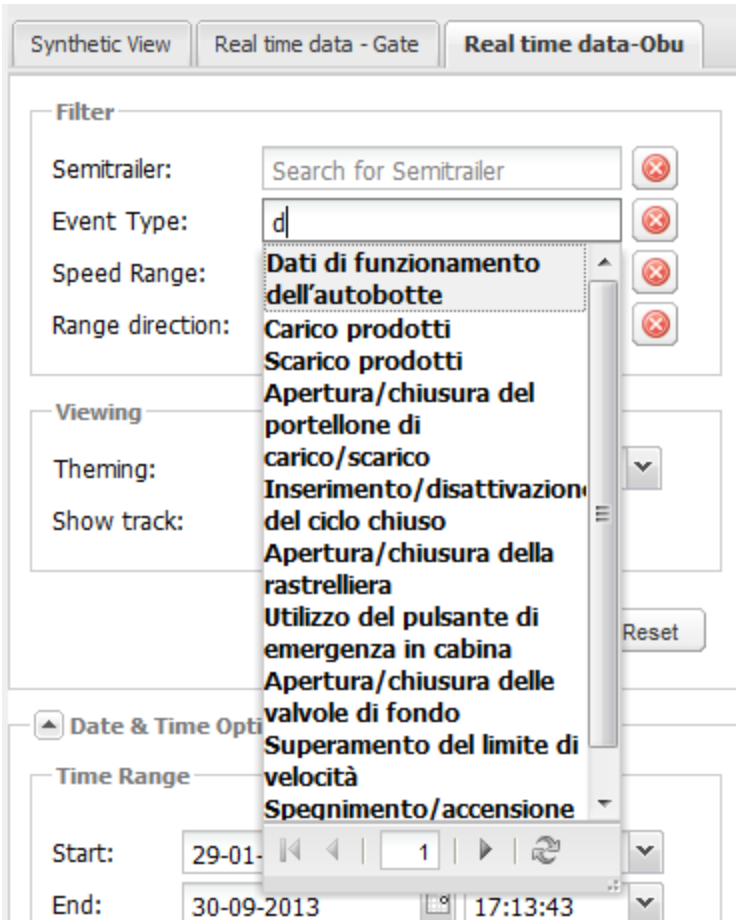


Inside the "BOX Processing" on the folder "Real time data - OBU" you can filter the data that you are viewing. Below the filter criteria available:

- Semitrailer : the data in a specific tanker. As soon as you start to type the value to be set is pre-filled in a menu 'pull-down with all the possible values that meet the criteria defined so far



- Event Type: allows you to display only the events of the specified type. . As soon as you start to type the value to be set is pre-filled in a menu 'pull-down with all the possible values that meet the criteria defined so far



- Speed range : allows you to set a range for the related data (note that these figures are 01 types of events, namely, the "Operating data of tank")

- range direction . Represents the instantaneous direction detected by the GPS and is a value between 0 and 360

In the same screen you can also choose the type of theming for the OBU:

- A simple point

  OBU

- One based on the speed of semitrailer

  Fermo

  Bassa

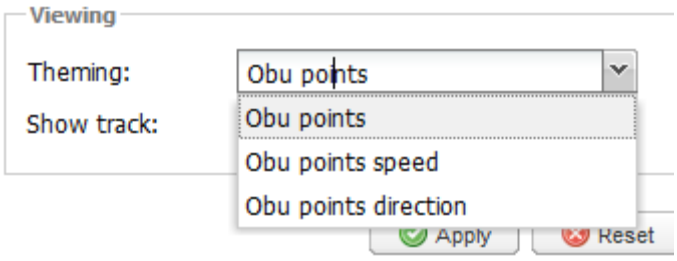
  Media

  Alta

- One based on direction of semitrailer

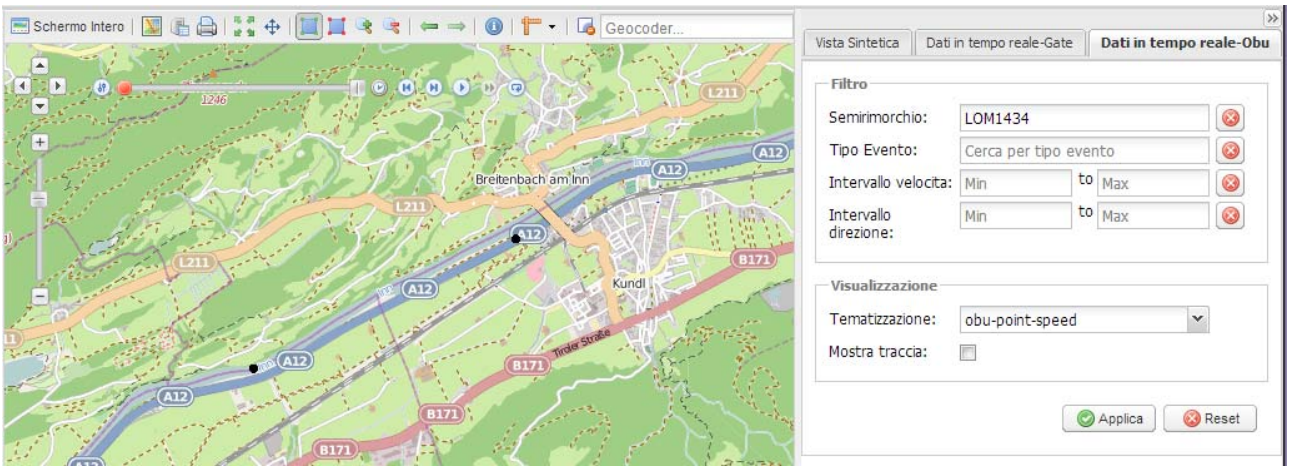
  No Direction

  Obu Direction

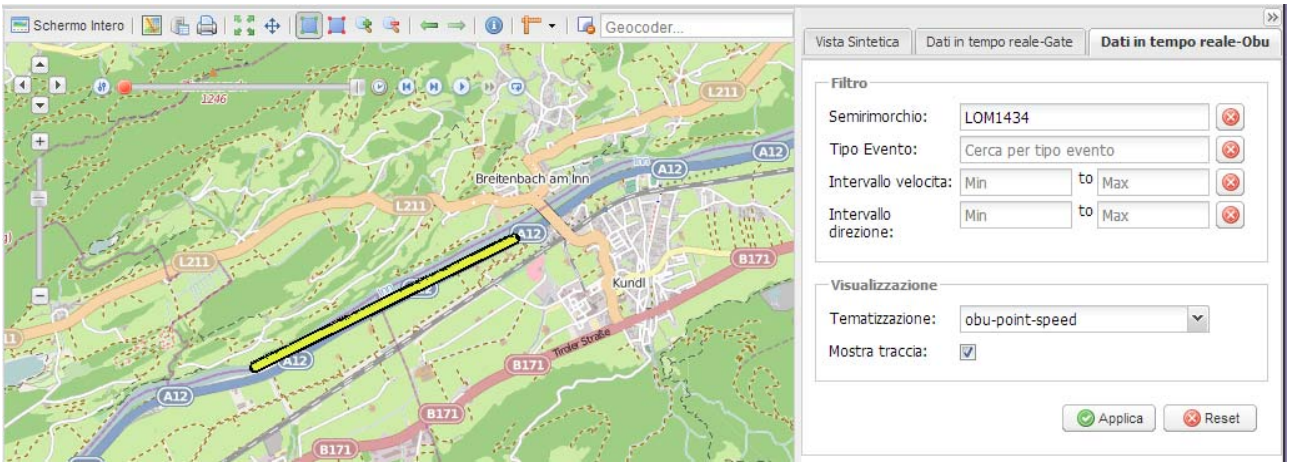


Is possible enable the feature that allows you to draw a track between the points identified event, temporally ordered. To use it requires two preconditions: choosing a particular trailer and that the same has at least two points (eg. LOM1423).

Example . display without "Show Track"



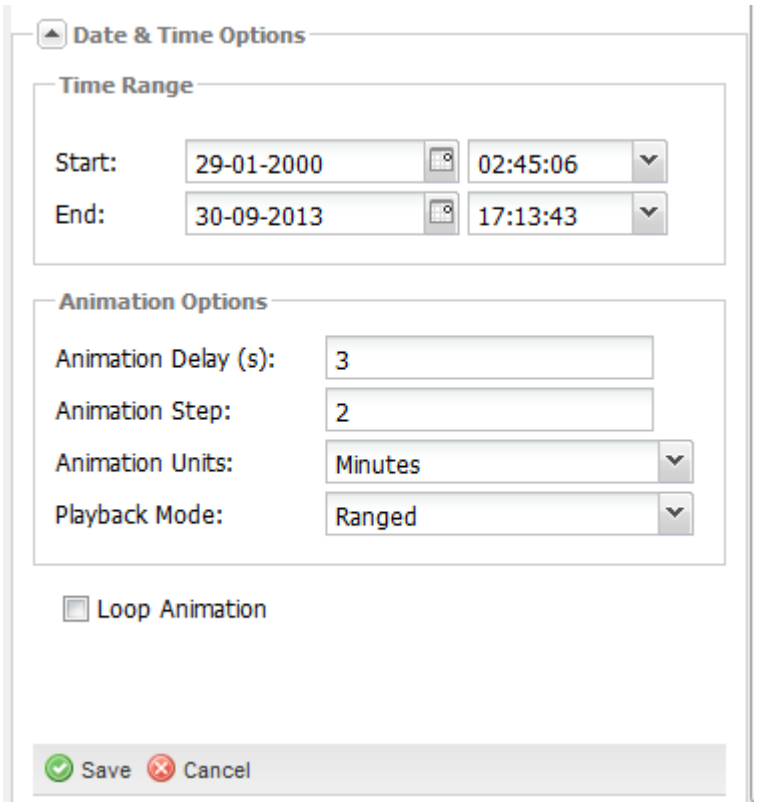
Example . display with "Show Track"



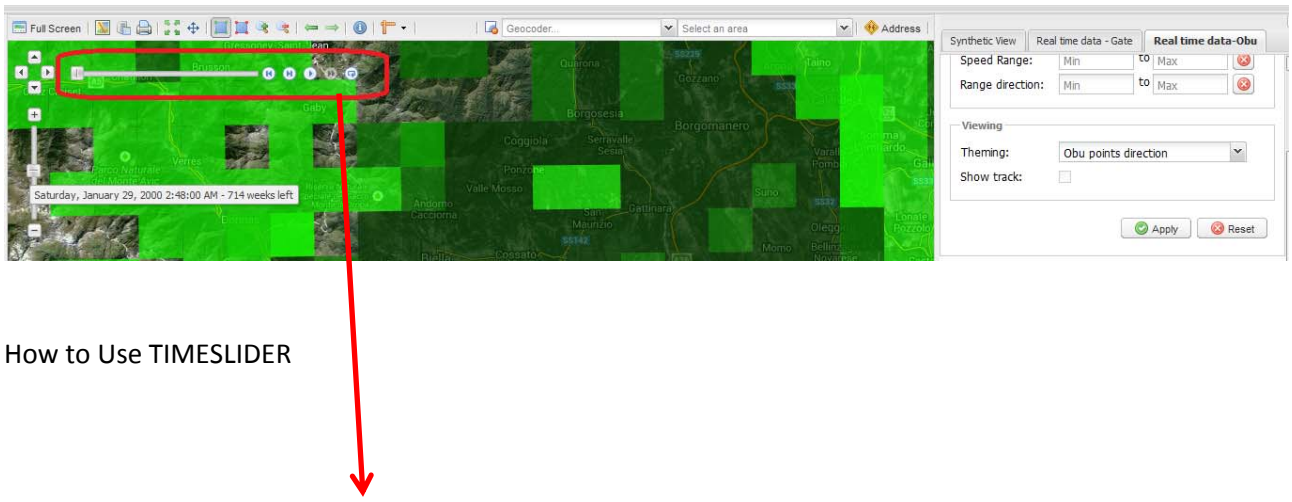
Also in the "BOX Processing" on the folder "Real time data - OBU" you can define the "Date and Time Options" on which you can set some basic information on the slider displayed on map::

- The temporal range (date / time and start date / time end) of OBUs information you want to display on the map. These dates represent the time (instant start and end) maximum of the slider
- Some settings on the animation that you want. the slider allows you to animate your data by automatically moving the instant display of data:
  * Animation delay. This is the time to update the map and is expressed in seconds
  * Animation Step (increase of time for each frame). Represents the actual scan time on the territory of the middle
  *Animation Unit Unit of measure for the animation step
  * Enable the animation indefinitely

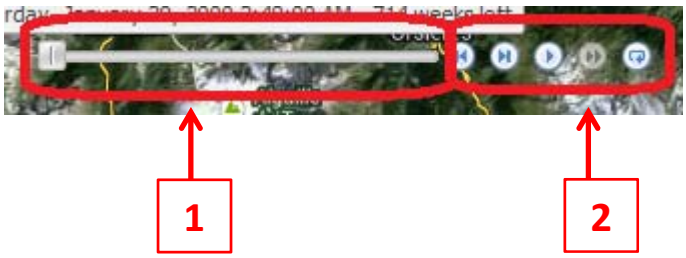
The information set will be active only for the current session



On the map also shows a timeslider that allows you to set a time interval of information visualization; is initially set in such a manner as not to show any data.



How to Use TIMESLIDER



1 Moving the cursor on the gray slider is possible to extend the time interval of interest, and view it on the map of the OBU data available. The red slider shows the precise moment of the OBU given that you are viewing; You can also move the red slider to move the initial instant of interest. Move the cursor to the right of the slider Grey, you can start displaying the data OBU

2 The buttons to the right of the slider allow you to manage the animation, by starting, stopping or moving the cursor one frame forward or backward.