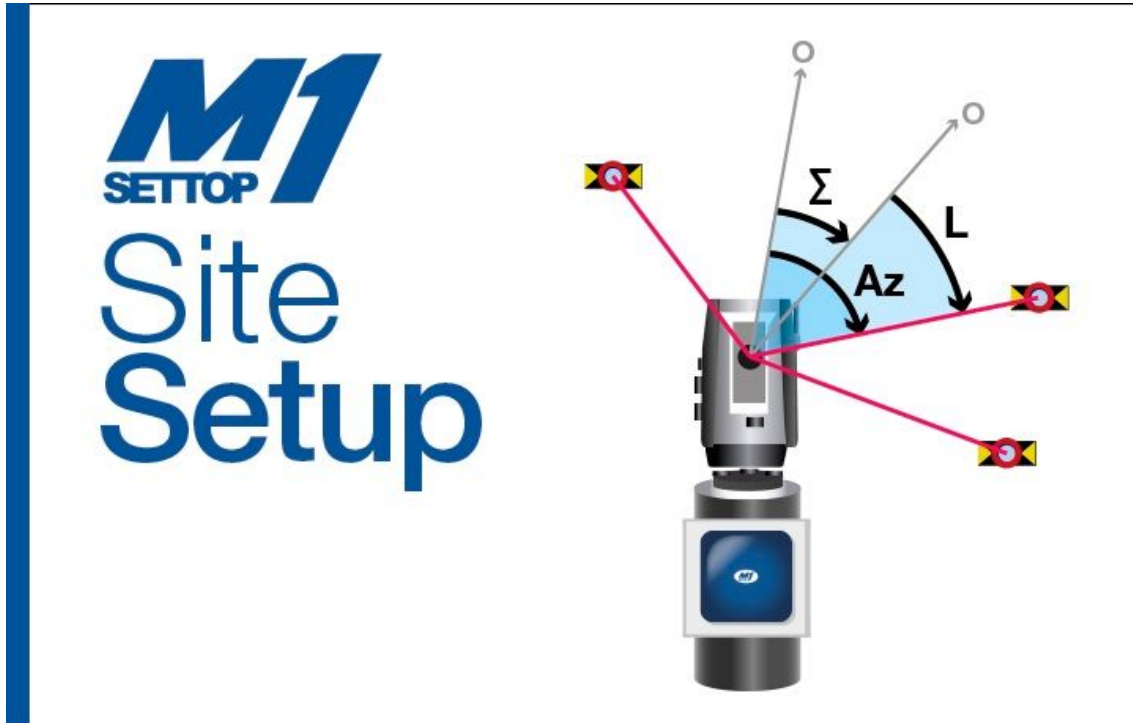


Settop SiteSetup - Quick Starter Guide

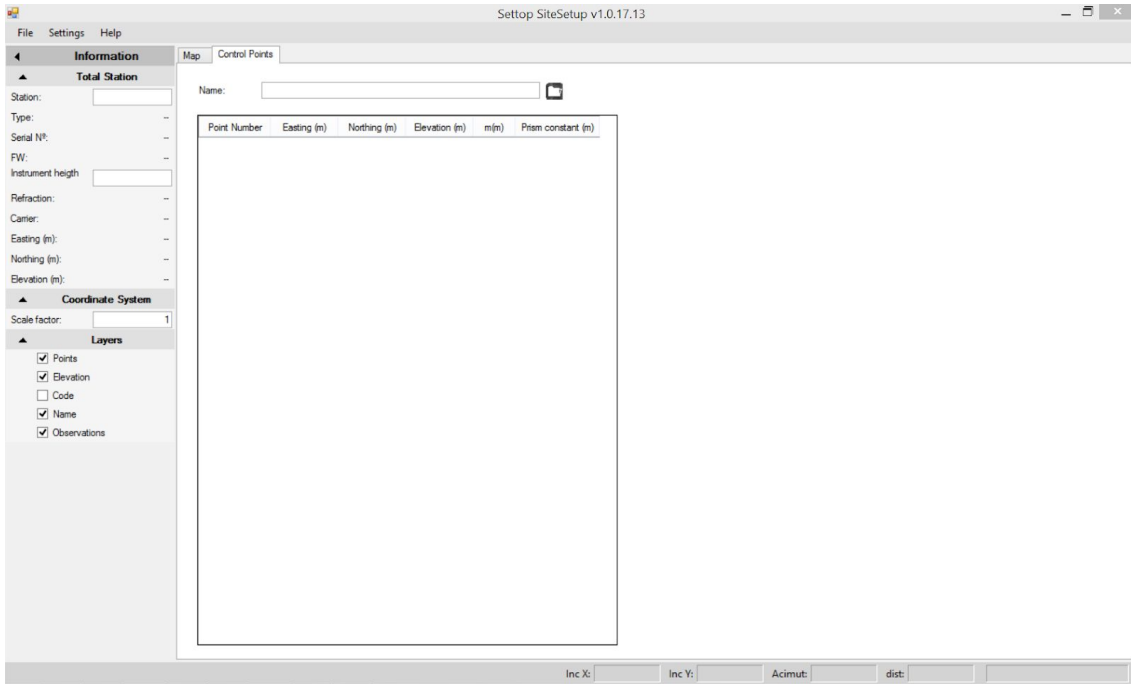


Objective

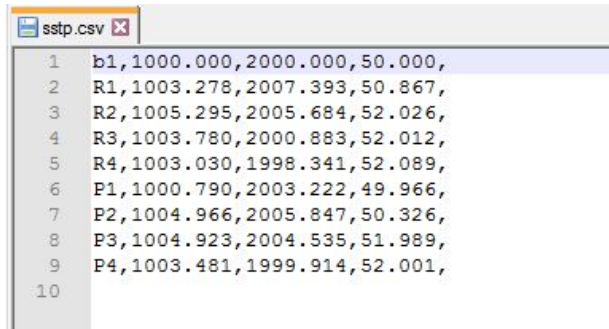
Generate a monitoring project file (*.ts), to load it into the Settop M1 from an ASCII file of control point coordinates

Procedure

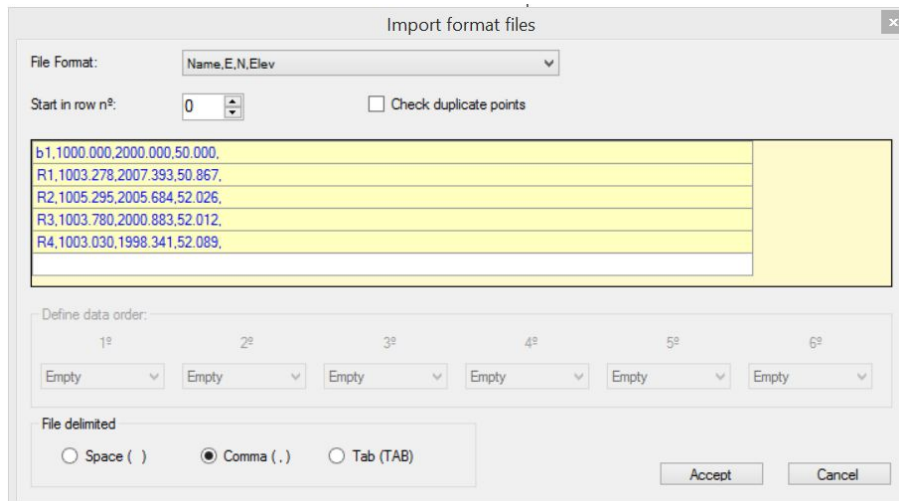
Open the Settop SiteSetup program and press on the button the folder in the tab "**Control Points**"



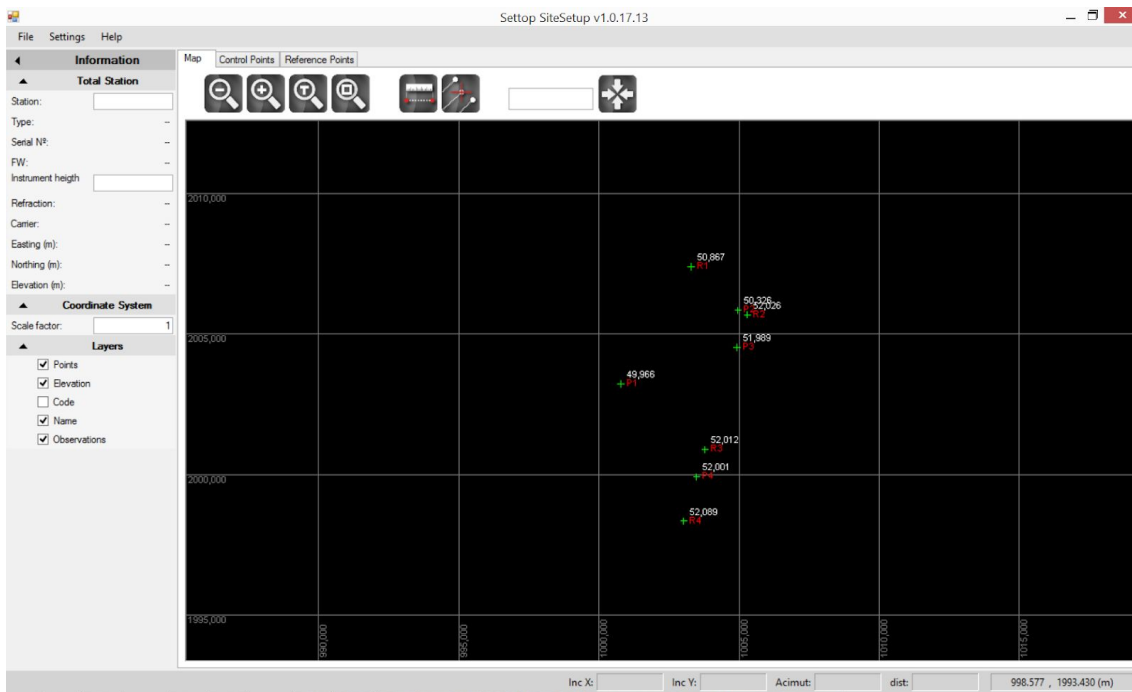
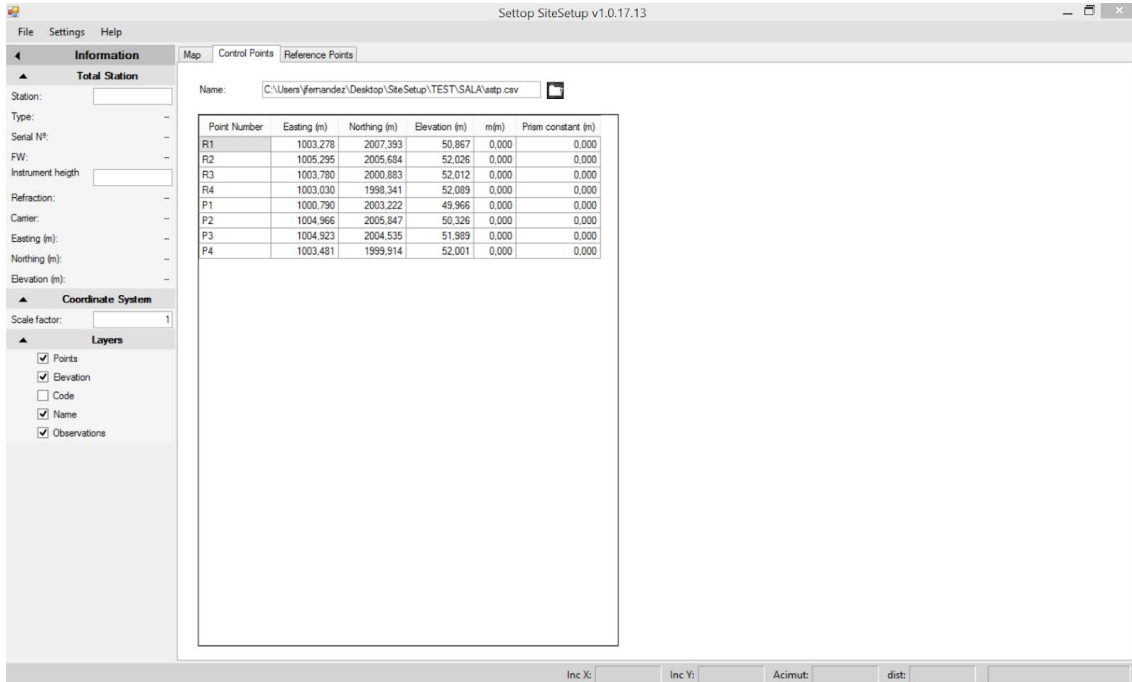
Select the coordinates file of the control points (* .csv, * .asc, * .txt) separated by spaces, commas or tabs



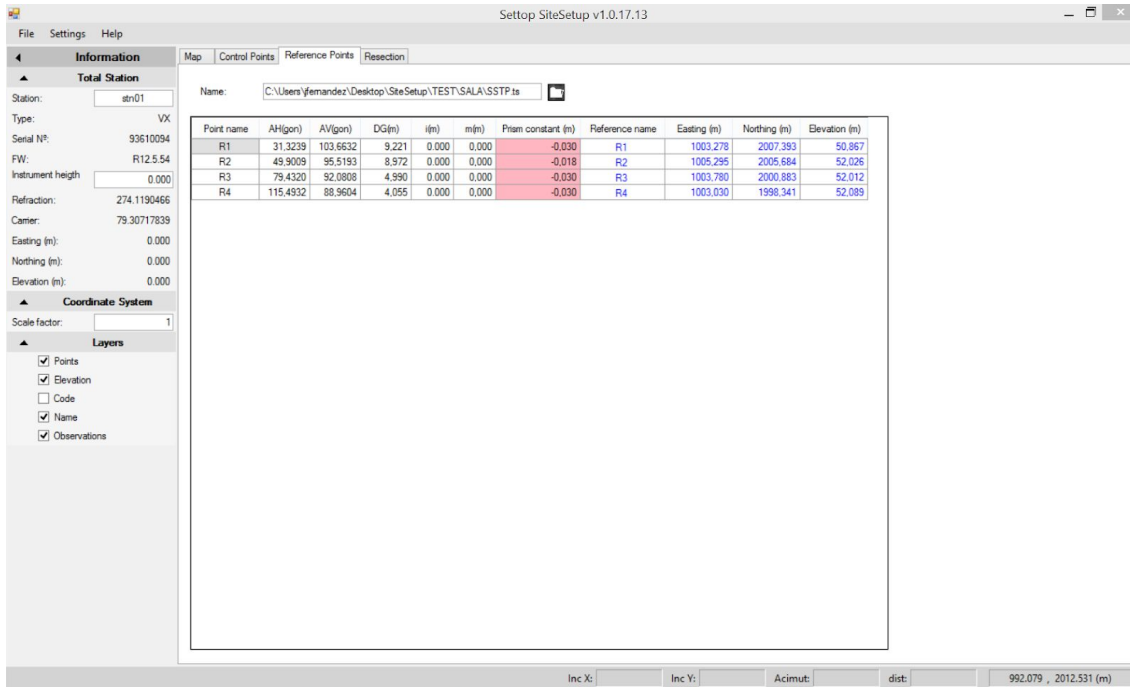
Choose the appropriate format to perform the correct import of the file



The coordinates of the loaded points will be listed and can be displayed graphically in the tab **"Map"**



Once the file is imported, a new tab called **"Reference points"** is created where the file of the measured references will be loaded with the Settop M1 device. It is necessary a minimum of 2 observations to be able to perform the calculation of the resection and that the observed points coincide at least with the name of the control points. You must press the button of the folder to select the *.ts file downloaded directly from the Settop M1 device.



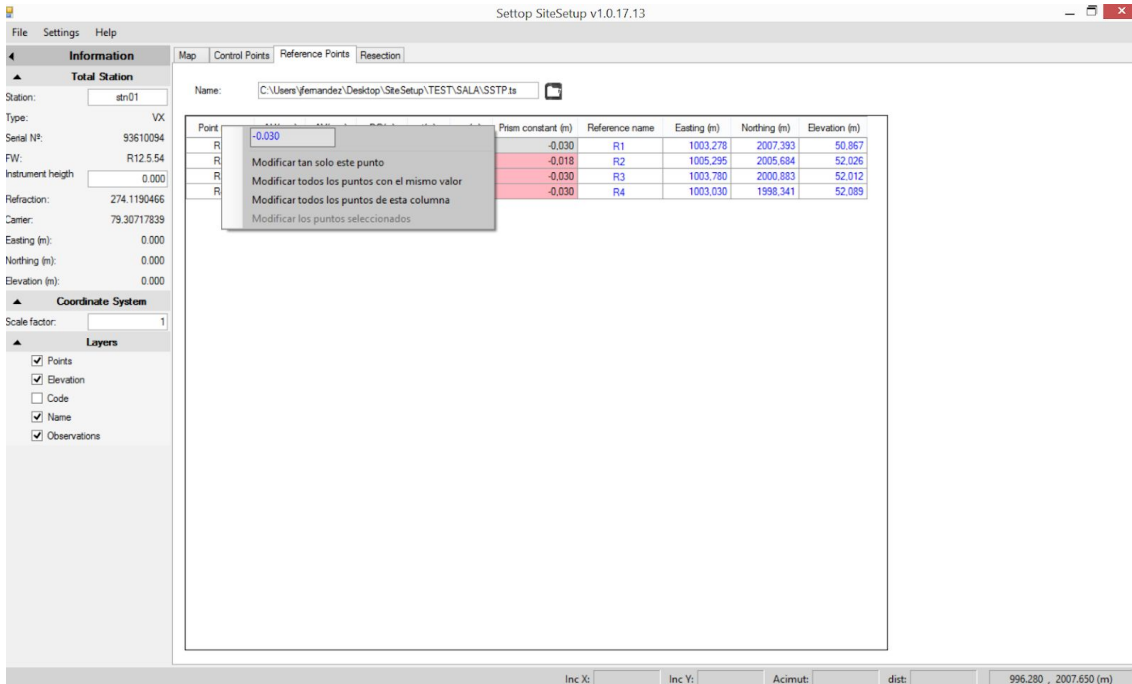
Automatically in the sidebar appears the information related to the total station, such as the model, serial number, firmware version, instrument height, refraction, and carrier indexes and the coordinates of the station. Likewise, you can define a scale factor to work on the project and the layers that can be displayed in the tab **"Map"**.

In the list of points of the tab **"Reference Points"**, an automatic association is made (provided that the names coincide) between the observed point and the coordinates of the loaded control point. In case the names do not coincide, the name can be associated manually.

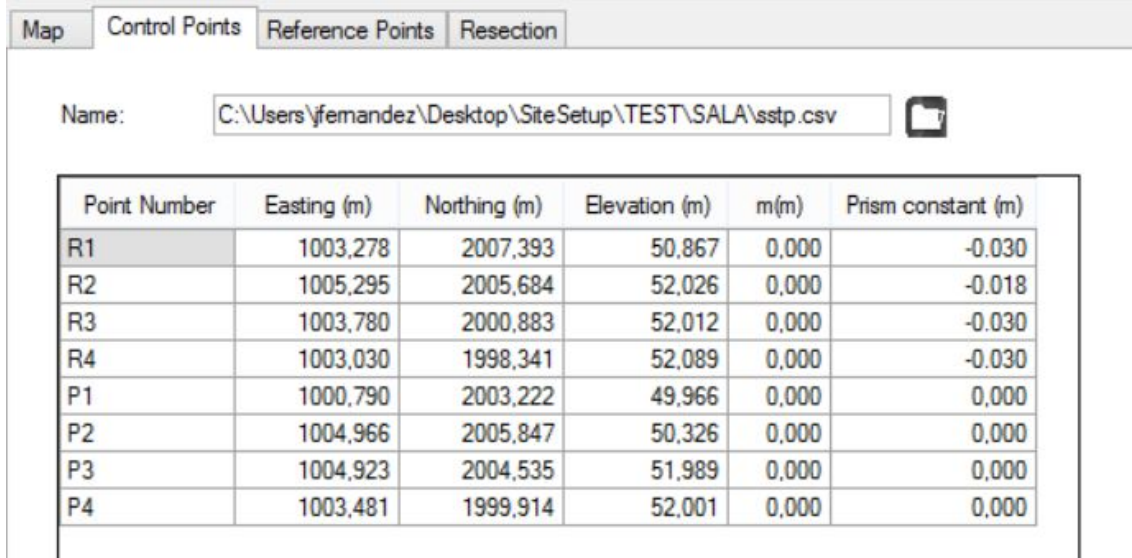
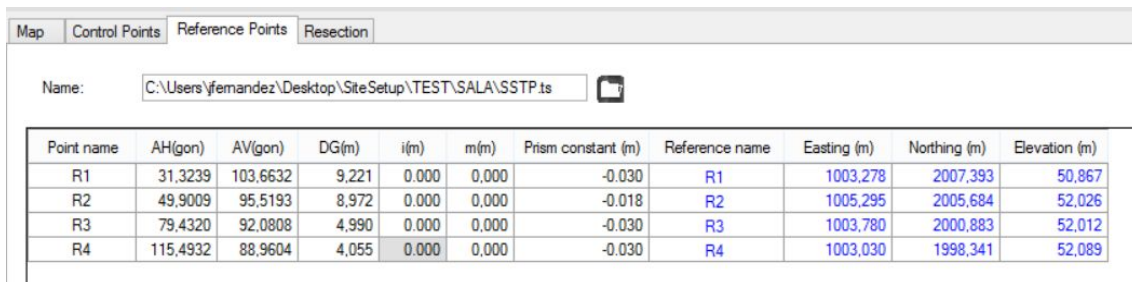
An association is also made between the height of the prism and the prism constant of the observed point. If there is a difference, it is marked in red and must be corrected before proceeding with the calculation.

To correct the differences, the corresponding box must be selected and with the right button select the desired option among the existing ones:

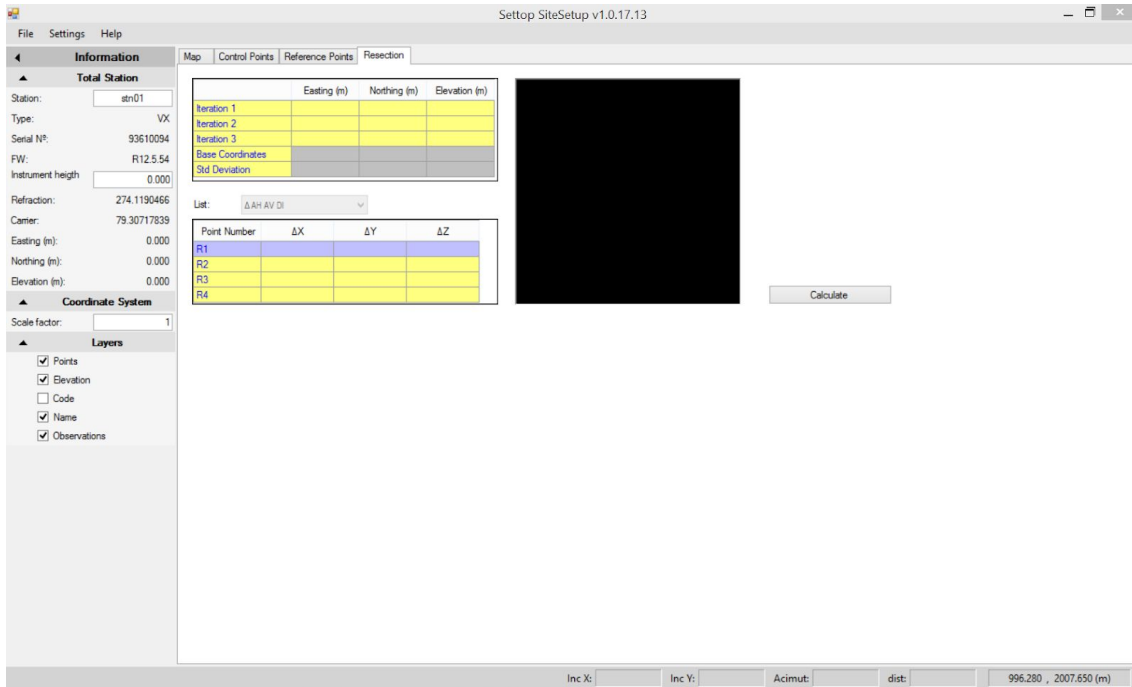
- *Modify only this point*
- *Modify all the points with the same value*
- *Modify all the points in this column*
- *Modify the selected*



The points corrected are painted in white and we can check the coincidence of the values in the tabs **"Reference points"** and **"Control points"**

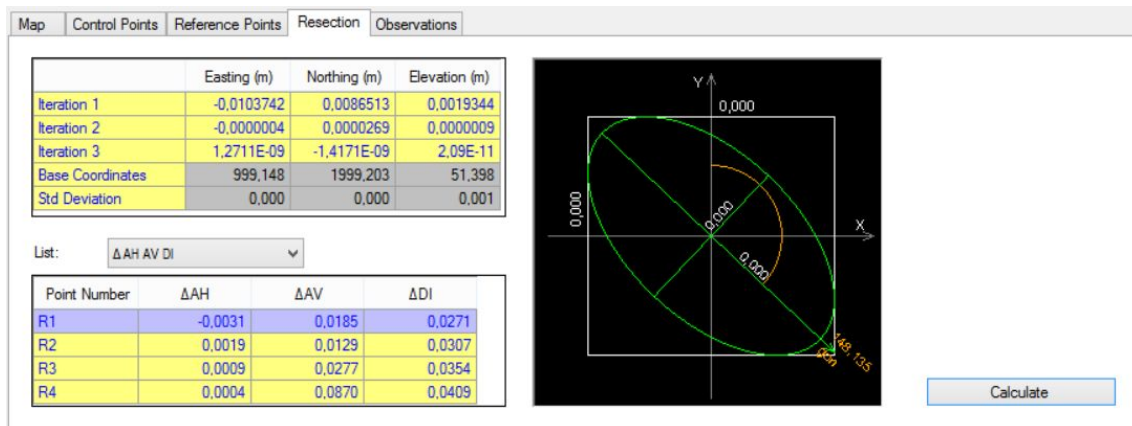


Now in the tab **"Resection"**, we can calculate the coordinate of the reference base by pressing the button **"Calculate"**

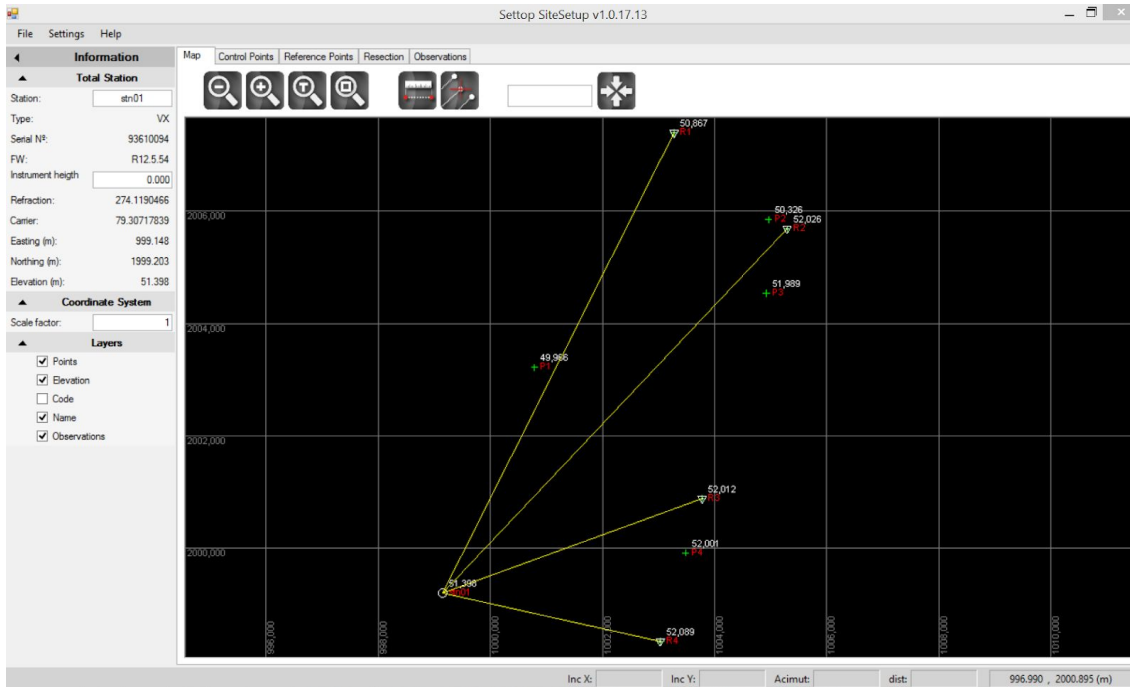


The fields are filled with the different iterations made in the calculations and the coordinates of the base are shown as well as the standard deviation of the calculation. In the right part of the picture, we can see a picture with the ellipse of error of the point. The box at the bottom gives us the possibility to show a list with the differentials of:

- The increment of angles (AH, AV DI)
- Increments of Azimuth, horizontal distance, vertical distance (Ac, DH, DV)
- Increments of distance, distance horizontal and elevation (Dist, H.Offset, Elev)
- Grid increment (Grid)

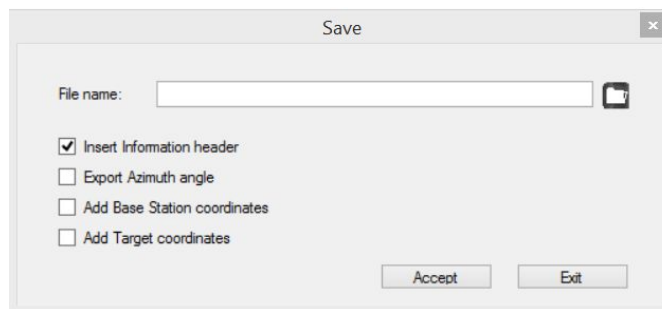


In the tab **Map**, we can see the base drawn with the different visuals to the reference points.



After the completion of the calculation of the resection, in the tab “**Observations**”, all the raw data of the observation (AH, AV, DG) are displayed not only for the reference points but also for the control points to be observed.

It is at this point that you can now export the observations file to be loaded directly into the Settop M1, by pressing the button. **Save**



The first step is to select the location and the name of the file (or project) that will be loaded in the Settop M1 with the extension * .TS

The other possible options for the generation of the file are:

- Insert the header of the file, by default marked and essential for it to work in the Settop M1. In the header, there is information about the station: model, serial number, firmware, instrument height, refraction, carrier, and coordinates.
- Export the azimuth of the points, north reference (it is recommended unmarked since the Settop M1 uses the internal horizontal angles)
- Add the coordinates of the base (you can enter the calculated coordinates in the file) if it is unchecked, the fields remain in 0,0,0
- Add the coordinates of the points (you can enter the imported coordinates) if it is unchecked, the fields remain at 0,0,0