2013

SAMARA V2

USER MANUAL

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INTERFACE

The Main Interface

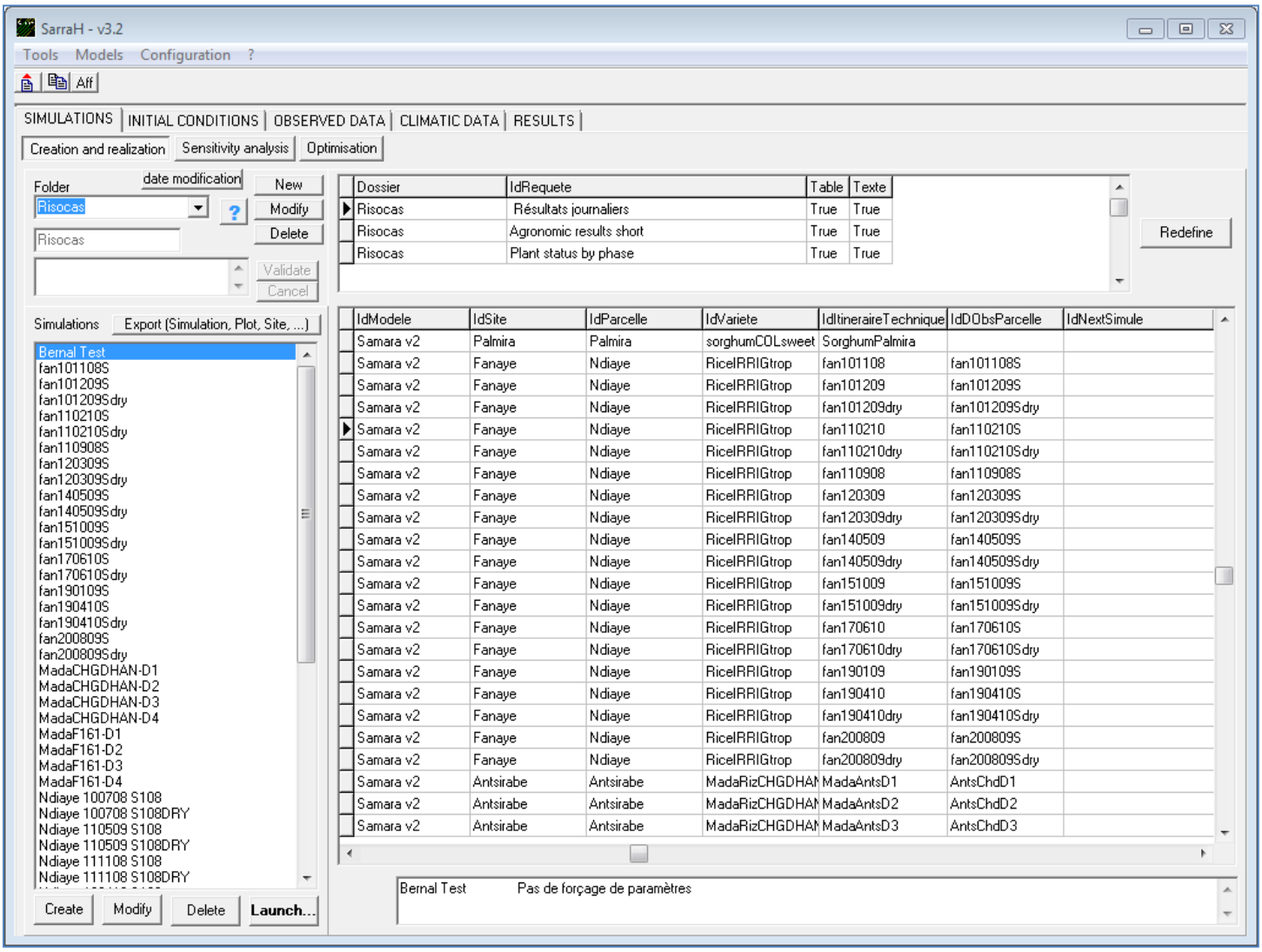


Figure 1 The Main Interface

The Simulation Creation / Modification Interface

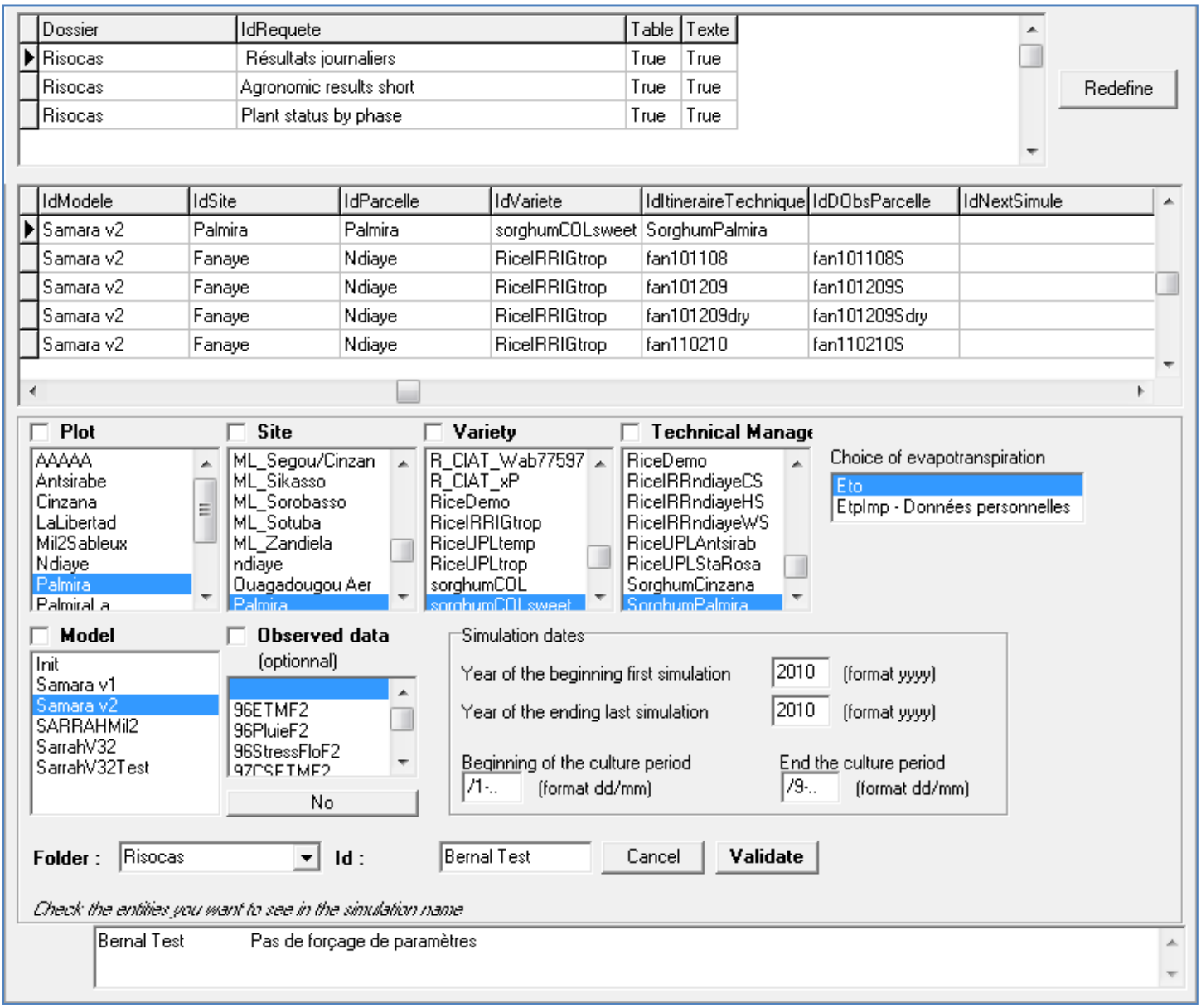
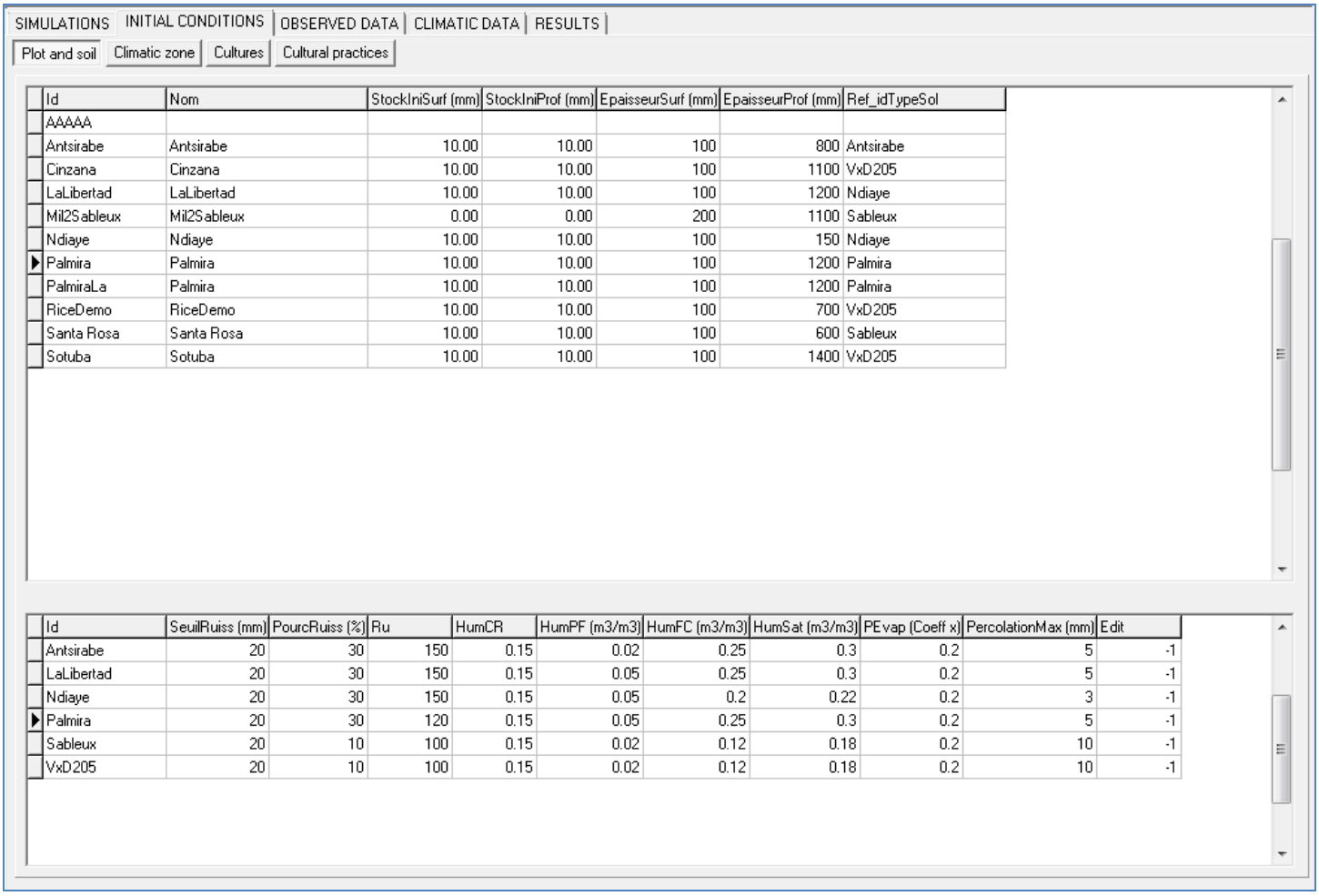


Figure 2 The Creation / Modification interface, the only difference between the two is that the first does not have a defined ID yet but every field is set to default values

The Various Data Input / Modification Interfaces:

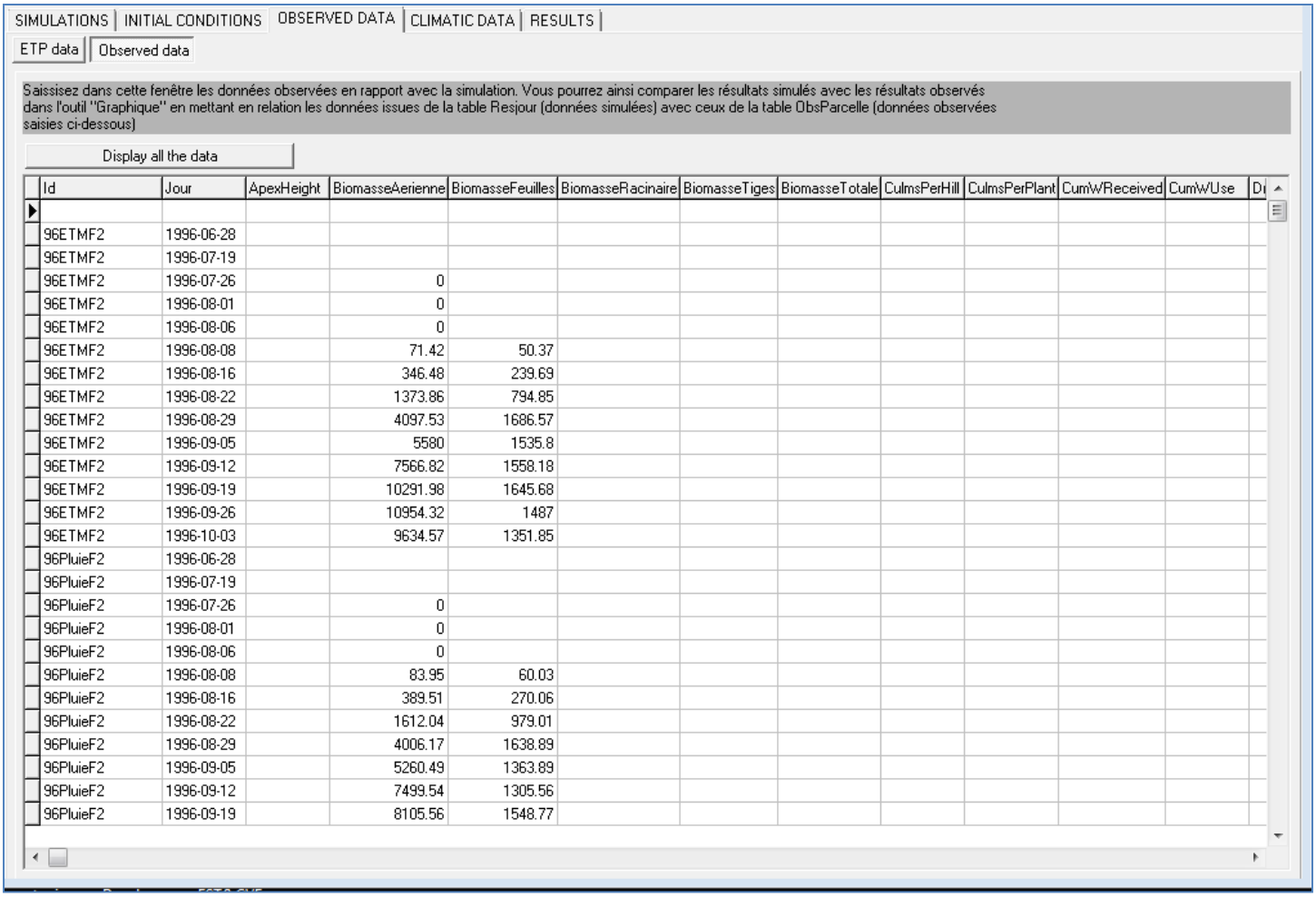
The data Input interfaces compose the bulk of SAMARA, these are mainly divided into 3 tabs indicating which data classification the fields belong to: **Initial Conditions**, **Observed Data**, and **Climatic Data.** These tabs have their own tabs too which present further sub-grouping.



Id	Nom	StockIniSurf (mm)	StockIniProf (mm)	EpaisseurSurf (mm)	EpaisseurProf (mm)	Ref_idTypeSol
AAAAA						
Antsirabe	Antsirabe	10.00	10.00	100	800	Antsirabe
Cinzana	Cinzana	10.00	10.00	100	1100	VxD205
LaLibertad	LaLibertad	10.00	10.00	100	1200	Ndiaye
Mil2Sableux	Mil2Sableux	0.00	0.00	200	1100	Sableux
Ndiaye	Ndiaye	10.00	10.00	100	150	Ndiaye
Palmira	Palmira	10.00	10.00	100	1200	Palmira
PalmiraLa	Palmira	10.00	10.00	100	1200	Palmira
RiceDemo	RiceDemo	10.00	10.00	100	700	VxD205
Santa Rosa	Santa Rosa	10.00	10.00	100	600	Sableux
Sotuba	Sotuba	10.00	10.00	100	1400	VxD205

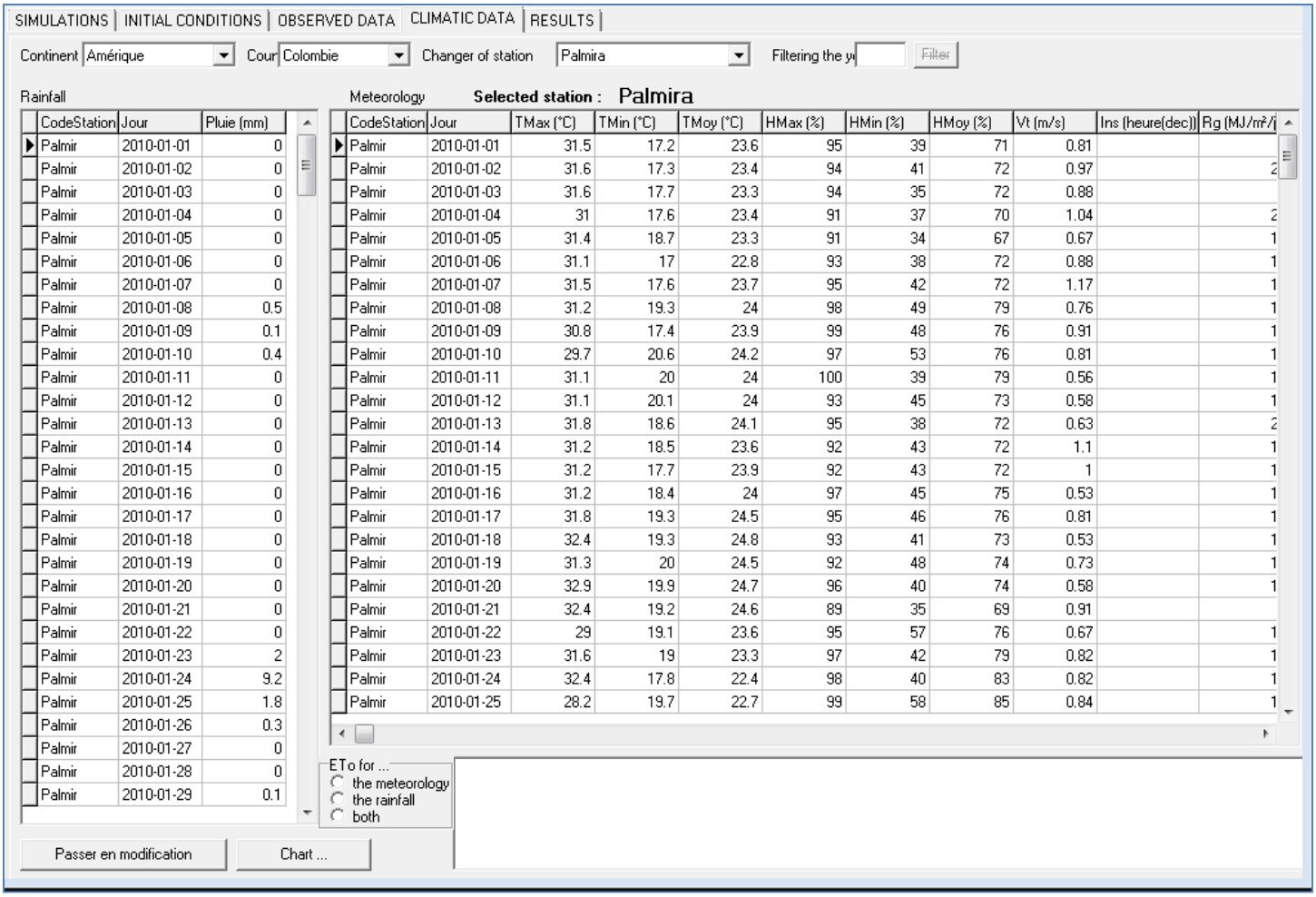
Id	SeuilRuiss (mm)	PourcRuiss (%)	Ru	HumCR	HumPF (m3/m3)	HumFC (m3/m3)	HumSat (m3/m3)	PEvap (Coeff x)	PercolationMax (mm)	Edit
Antsirabe	20	30	150	0.15	0.02	0.25	0.3	0.2	5	-1
LaLibertad	20	30	150	0.15	0.05	0.25	0.3	0.2	5	-1
Ndiaye	20	30	150	0.15	0.05	0.2	0.22	0.2	3	-1
Palmira	20	30	120	0.15	0.05	0.25	0.3	0.2	5	-1
Sableux	20	10	100	0.15	0.02	0.12	0.18	0.2	10	-1
VxD205	20	10	100	0.15	0.02	0.12	0.18	0.2	10	-1

Figure 3 The Initial Conditions interface, this includes parameters concerning soil, climatic zones and cultural practices



Id	Jour	ApexHeight	BiomasseAerienne	BiomasseFeuilles	BiomasseRacinaire	BiomasseTiges	BiomasseTotale	CulmsPerHill	CulmsPerPlant	CumWReceived	CumWUse	Di
96ETMF2	1996-06-28											
96ETMF2	1996-07-19											
96ETMF2	1996-07-26		0									
96ETMF2	1996-08-01		0									
96ETMF2	1996-08-06		0									
96ETMF2	1996-08-08		71.42	50.37								
96ETMF2	1996-08-16		346.48	239.69								
96ETMF2	1996-08-22		1373.86	794.85								
96ETMF2	1996-08-29		4097.53	1686.57								
96ETMF2	1996-09-05		5580	1535.8								
96ETMF2	1996-09-12		7566.82	1558.18								
96ETMF2	1996-09-19		10291.98	1645.68								
96ETMF2	1996-09-26		10954.32	1487								
96ETMF2	1996-10-03		9634.57	1351.85								
96PluieF2	1996-06-28											
96PluieF2	1996-07-19											
96PluieF2	1996-07-26		0									
96PluieF2	1996-08-01		0									
96PluieF2	1996-08-06		0									
96PluieF2	1996-08-08		83.95	60.03								
96PluieF2	1996-08-16		389.51	270.06								
96PluieF2	1996-08-22		1612.04	979.01								
96PluieF2	1996-08-29		4006.17	1638.89								
96PluieF2	1996-09-05		5260.49	1363.89								
96PluieF2	1996-09-12		7499.54	1305.56								
96PluieF2	1996-09-19		8105.56	1548.77								

Figure 4 the Observed Data Interface



CodeStation	Jour	Pluie (mm)
Palmir	2010-01-01	0
Palmir	2010-01-02	0
Palmir	2010-01-03	0
Palmir	2010-01-04	0
Palmir	2010-01-05	0
Palmir	2010-01-06	0
Palmir	2010-01-07	0
Palmir	2010-01-08	0.5
Palmir	2010-01-09	0.1
Palmir	2010-01-10	0.4
Palmir	2010-01-11	0
Palmir	2010-01-12	0
Palmir	2010-01-13	0
Palmir	2010-01-14	0
Palmir	2010-01-15	0
Palmir	2010-01-16	0
Palmir	2010-01-17	0
Palmir	2010-01-18	0
Palmir	2010-01-19	0
Palmir	2010-01-20	0
Palmir	2010-01-21	0
Palmir	2010-01-22	0
Palmir	2010-01-23	2
Palmir	2010-01-24	9.2
Palmir	2010-01-25	1.8
Palmir	2010-01-26	0.3
Palmir	2010-01-27	0
Palmir	2010-01-28	0
Palmir	2010-01-29	0.1

CodeStation	Jour	TMax (°C)	TMin (°C)	TMoy (°C)	HMax (%)	HMin (%)	HMoy (%)	Vt (m/s)	Ins (heure(dec))	Rg (MJ/m²/j
Palmir	2010-01-01	31.5	17.2	23.6	95	39	71	0.81		
Palmir	2010-01-02	31.6	17.3	23.4	94	41	72	0.97		2
Palmir	2010-01-03	31.6	17.7	23.3	94	35	72	0.88		
Palmir	2010-01-04	31	17.6	23.4	91	37	70	1.04		2
Palmir	2010-01-05	31.4	18.7	23.3	91	34	67	0.67		1
Palmir	2010-01-06	31.1	17	22.8	93	38	72	0.88		1
Palmir	2010-01-07	31.5	17.6	23.7	95	42	72	1.17		1
Palmir	2010-01-08	31.2	19.3	24	98	49	79	0.76		1
Palmir	2010-01-09	30.8	17.4	23.9	99	48	76	0.91		1
Palmir	2010-01-10	29.7	20.6	24.2	97	53	76	0.81		1
Palmir	2010-01-11	31.1	20	24	100	39	79	0.56		1
Palmir	2010-01-12	31.1	20.1	24	93	45	73	0.58		1
Palmir	2010-01-13	31.8	18.6	24.1	95	38	72	0.63		2
Palmir	2010-01-14	31.2	18.5	23.6	92	43	72	1.1		1
Palmir	2010-01-15	31.2	17.7	23.9	92	43	72	1		1
Palmir	2010-01-16	31.2	18.4	24	97	45	75	0.53		1
Palmir	2010-01-17	31.8	19.3	24.5	95	46	76	0.81		1
Palmir	2010-01-18	32.4	19.3	24.8	93	41	73	0.53		1
Palmir	2010-01-19	31.3	20	24.5	92	48	74	0.73		1
Palmir	2010-01-20	32.9	19.9	24.7	96	40	74	0.58		1
Palmir	2010-01-21	32.4	19.2	24.6	89	35	69	0.91		
Palmir	2010-01-22	29	19.1	23.6	95	57	76	0.67		1
Palmir	2010-01-23	31.6	19	23.3	97	42	79	0.82		1
Palmir	2010-01-24	32.4	17.8	22.4	98	40	83	0.82		1
Palmir	2010-01-25	28.2	19.7	22.7	99	58	85	0.84		1

Figure 5 the Climatic Data Interface

The Results Interface:

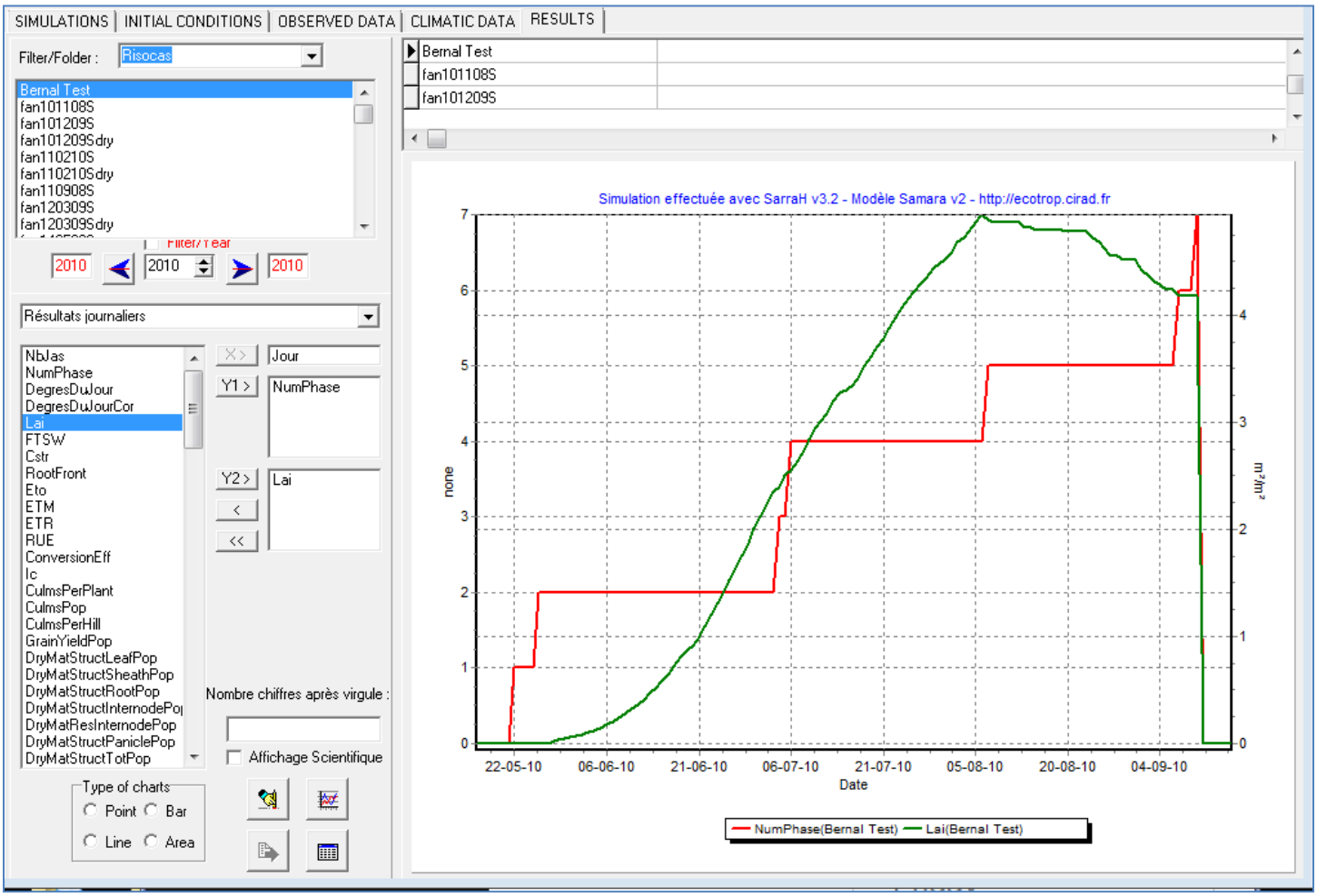


Figure 6 The Results Interface showing a sample of the results done from the simulation run

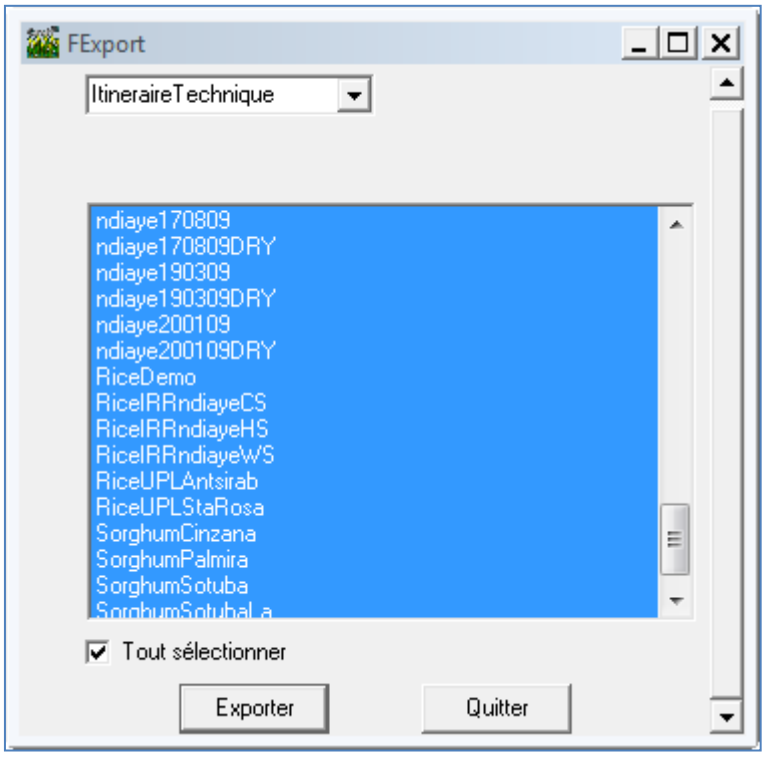
UTILITIES

Utility Buttons

Figure 7 the utility buttons (L-R) Export, Duplicate Row, Toggle Display

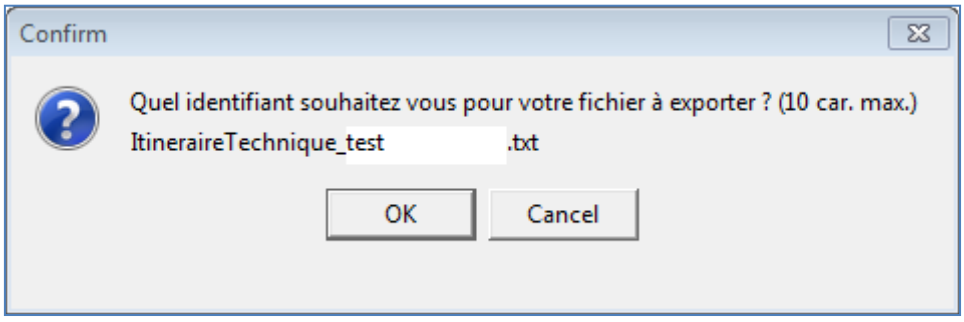
A group of three buttons are situated at the top left corner of the main interface, these are the utility buttons; detailed below are the functions of each:

a.  **is for exporting the currently displayed table, a popup window specifying the ID of which rows to import will appear. by default all rows are to be imported**



after clicking on 

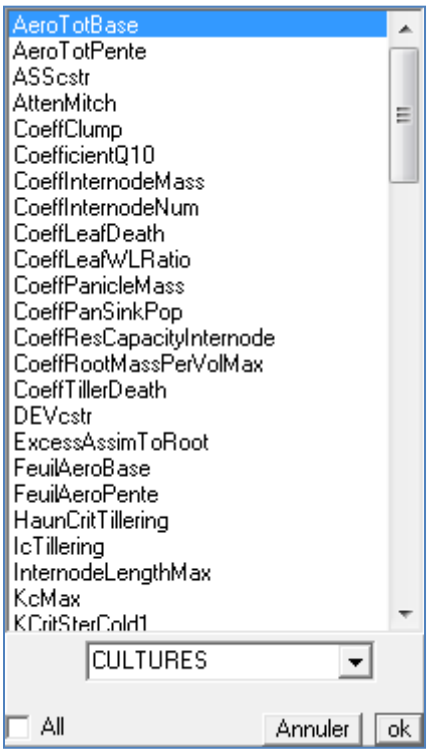
, another window prompting for a filename prefixed with the data type will appear, clicking ok will export the data into the specified file



b.  is for duplicating a highlighted row in the currently displayed table, this includes all fields in the source row. Take precaution in ensuring that a duplicated row will always have a unique ID assigned to it, otherwise an error may appear.

c. 

is used for choosing which columns will be shown on the currently displayed table, clicking on it will bring up a popup window showing which columns are shown (highlighted) and which ones are hidden (no highlights)



To add highlighted rows, simply press and hold down **CTRL** then press the **LEFT MOUSE BUTTON**, if you wish to show all columns, simply check the 

checkbox

HOW TOs

How to create and execute a simulation scenario

Creation and execution of a new simulation scenario has two phases:

Phase I: Create New Scenario

A simulation scenario has 6 components:

COMPONENT NAME	Created / Modified In
Plot	**Initial conditions → Plot and Soil**
Site	**Initial conditions → Climatic Zone**
Variety	**Initial conditions → Cultures**
Technical Management	**Initial conditions → Cultural Practices**
Model	**Source Built-in - Cannot Be Modified**
Observed data	**Observed Data Tab**

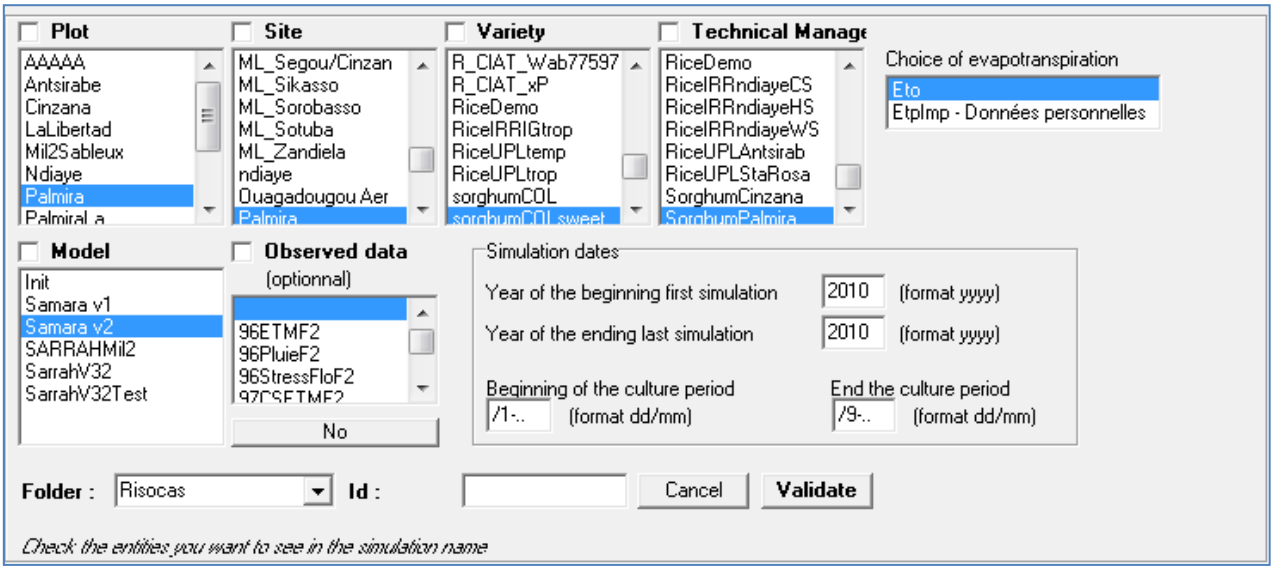


Figure 8 Simulation creation interface

While creating a simulation scenario you have different options to choose from among the existing entries which were previously saved under each component. You can create a new entry with characteristics of your interest under each component. This is important while creating a new simulation scenario for absolutely fresh conditions.

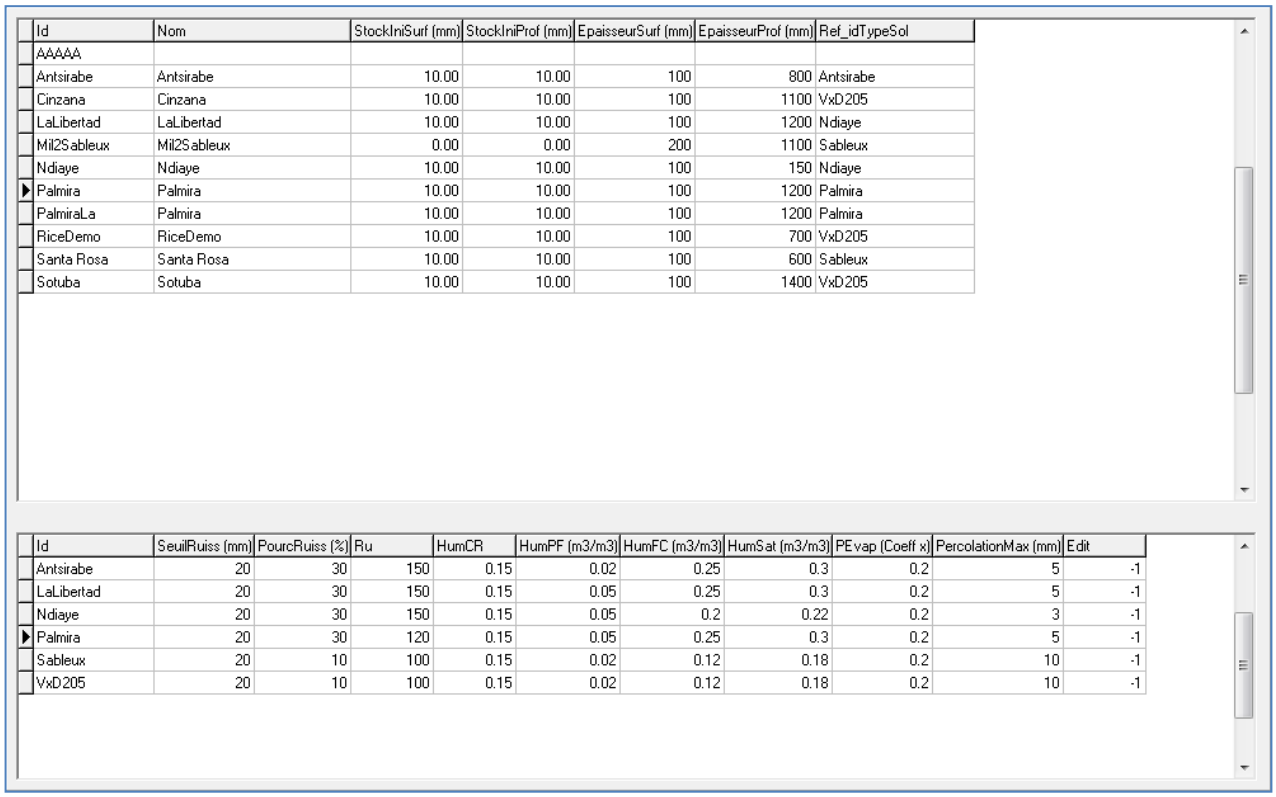
The following general steps explain how to create a new entry under each component.

Note : The same steps will work for entry into other components, but for demo purposes we will use the Plot component.

1. Hit the button labeled **'Initial Conditions'** near the top left of the interface:

2. And then below, click on **'Plot and Soil'**

3. You should see the following window appear below in the interface, here you can see the previous entries from where you can choose from in the simulation creation interface



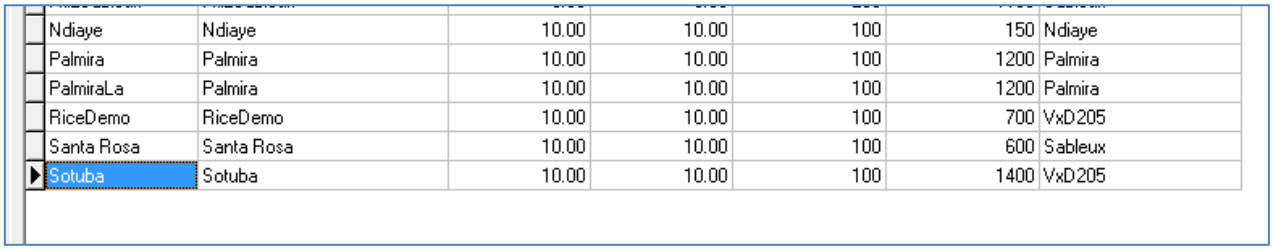
Id	Nom	StockIniSurf (mm)	StockIniProf (mm)	EpaisseurSurf (mm)	EpaisseurProf (mm)	Ref_idTypeSol
AAAAA						
Antsirabe	Antsirabe	10.00	10.00	100	800	Antsirabe
Cinzana	Cinzana	10.00	10.00	100	1100	VxD205
LaLibertad	LaLibertad	10.00	10.00	100	1200	Ndiaye
Mil2Sableux	Mil2Sableux	0.00	0.00	200	1100	Sableux
Ndiaye	Ndiaye	10.00	10.00	100	150	Ndiaye
Palmira	Palmira	10.00	10.00	100	1200	Palmira
PalmiraLa	Palmira	10.00	10.00	100	1200	Palmira
RiceDemo	RiceDemo	10.00	10.00	100	700	VxD205
Santa Rosa	Santa Rosa	10.00	10.00	100	600	Sableux
Sotuba	Sotuba	10.00	10.00	100	1400	VxD205

Id	SeuilRuiss (mm)	PourcRuiss (%)	Ru	HumCR	HumPF (m3/m3)	HumFC (m3/m3)	HumSat (m3/m3)	PEvap (Coeff x)	PercolationMax (mm)	Edit
Antsirabe	20	30	150	0.15	0.02	0.25	0.3	0.2	5	-1
LaLibertad	20	30	150	0.15	0.05	0.25	0.3	0.2	5	-1
Ndiaye	20	30	150	0.15	0.05	0.2	0.22	0.2	3	-1
Palmira	20	30	120	0.15	0.05	0.25	0.3	0.2	5	-1
Sableux	20	10	100	0.15	0.02	0.12	0.18	0.2	10	-1
VxD205	20	10	100	0.15	0.02	0.12	0.18	0.2	10	-1

To create new plot and soil characteristics:

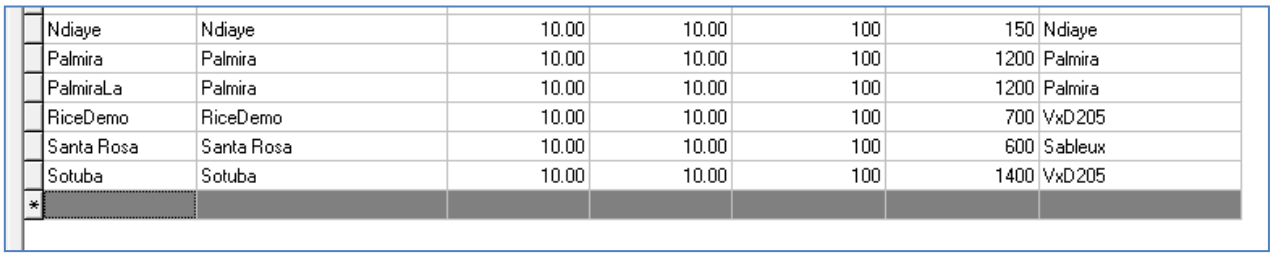
Note : These are general instructions to add rows of data, the same set of steps will also work for all other tables that accept additional entries.

a. Go to end of the table, click the bottom row like so



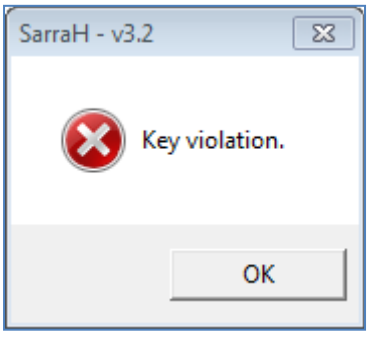
Ndiaye	Ndiaye	10.00	10.00	100	150	Ndiaye
Palmira	Palmira	10.00	10.00	100	1200	Palmira
PalmiraLa	Palmira	10.00	10.00	100	1200	Palmira
RiceDemo	RiceDemo	10.00	10.00	100	700	VxD205
Santa Rosa	Santa Rosa	10.00	10.00	100	600	Sableux
Sotuba	Sotuba	10.00	10.00	100	1400	VxD205

b. And then press the down arrow on the keyboard, a new blank row should appear; this is where you will fill in the data according to the column names;



Ndiaye	Ndiaye	10.00	10.00	100	150	Ndiaye
Palmira	Palmira	10.00	10.00	100	1200	Palmira
PalmiraLa	Palmira	10.00	10.00	100	1200	Palmira
RiceDemo	RiceDemo	10.00	10.00	100	700	VxD205
Santa Rosa	Santa Rosa	10.00	10.00	100	600	Sableux
Sotuba	Sotuba	10.00	10.00	100	1400	VxD205
*						

c. Make sure to provide a **unique ID** to each row you will add to avoid the ***key violation error*** – this simply means that a duplicate ID has been found



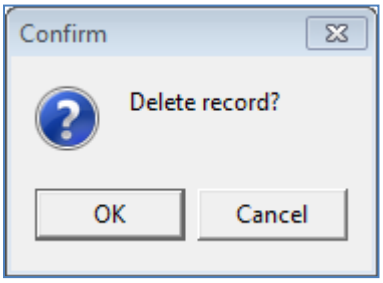
To Delete Rows of Data from the Table:

Note : These are general instructions to delete rows of data, the same set of steps will also work for all other tables that allow deletion of data.

a. Select the row you want to delete

	Sotuba	Sotuba	10.00	10.00	100	1400	VxD205
▶	Sotube	Sotuba	10.00		100	1000	

b. Then press **CTRL and DELETE** simultaneously on the keyboard, this should bring up a confirmation message



c. Once you press **OK**, the selected row will be deleted, please keep in mind that deletion of data is permanent

To Edit Data on the tables

a. Simply **double click** the cell on the table that you wish to edit

b. In case the table is non editable by default, there usually are buttons in the interface that will allow editing once you click them such as 

which toggles edit mode on or off

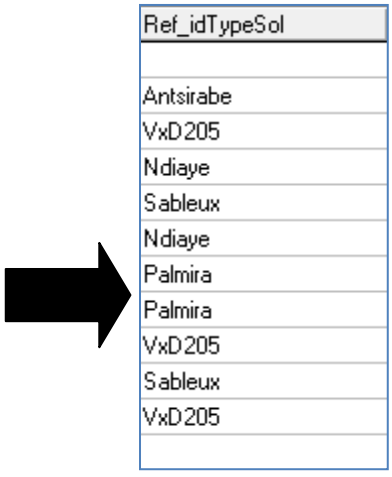
COMPONENT SPECIFIC INSTRUCTIONS

Outlined in the previous pages are general steps to work with the components (creation, deletion, editing of rows of data for a component) however, there are some parts of the system which are not yet fully intuitive for a new user, we will outline some points that will be helpful in the creation, deletion, and modification of each specific components in the next few pages.

a. PLOT AND SOIL

There are two tables in the interface, the top one displays the plot setup (Table A), and the bottom one gives the soil attributes (Table B), the **Ref_idTypeSol** column in Table A contains values which can only be added, edited, or selected from Table B

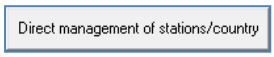
Id	SeuilRuiss (mm)	PourcRuiss (%)
Antsirabe	20	30
LaLibertad	20	30
Ndiaye	20	30
Palmira	20	30
Sableux	20	10
VxD205	20	10



Ref_idTypeSol
Antsirabe
VxD205
Ndiaye
Sableux
Ndiaye
Palmira
Palmira
VxD205
Sableux
VxD205

Figure 9 Left: soil type table (Table B) Right : Ref_idTypeSol from Plot setup table (Table A)

b. CLIMATIC ZONE

The interface for climatic zone only includes selection of rain and meteorology code stations plus the assignment of KPar value, the creation of the code stations however is not done here but in another interface entered by clicking 

(please refer to "**To create a new station, country, or continent**" guide for further details) , the editing and deletion of specific rows of each code station is also done in another interface found under the "**CLIMATIC DATA**" tab, both rain and meteorology data can be found here.

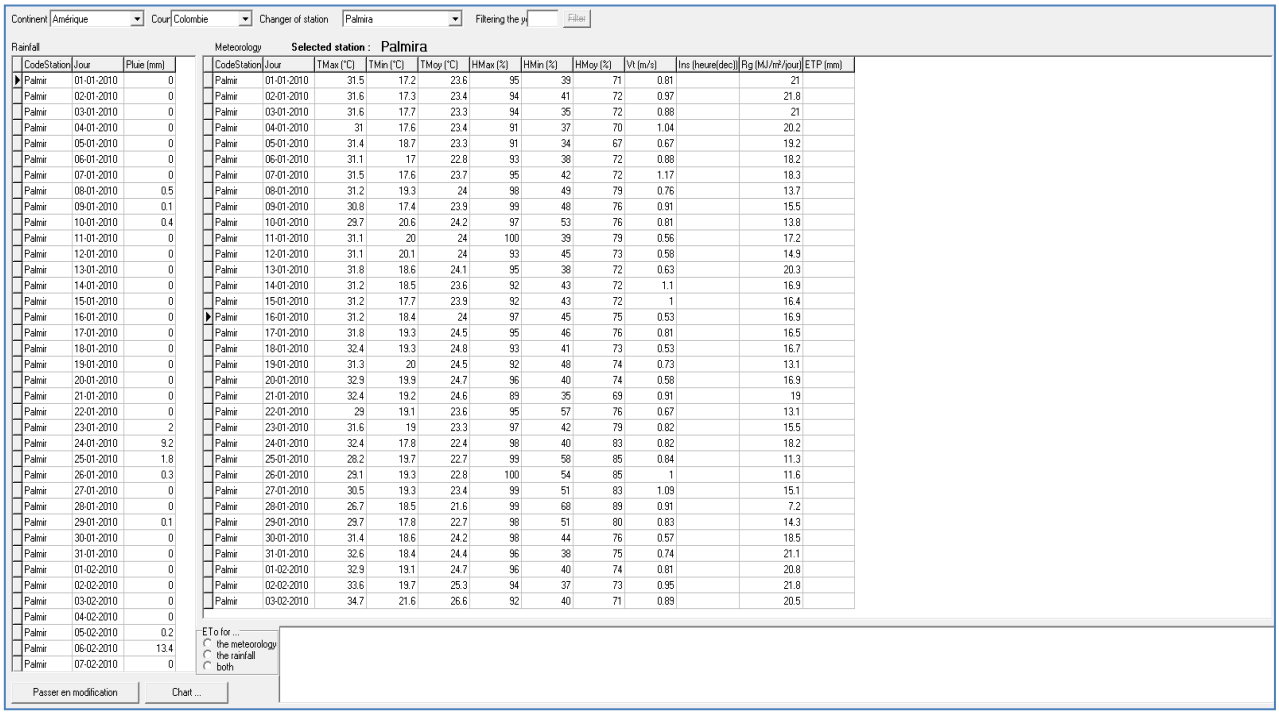
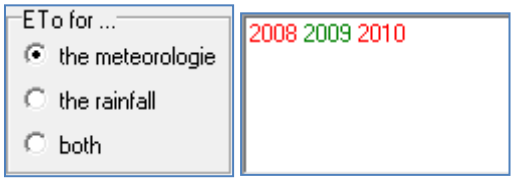


Figure 10 climatic data interface, both rain and meteorology data are displayed

Additionally, a group of radio buttons can be found at the bottom of the interface, right beside a large display box containing year numbers.



The display box on the right displays the available years for the data type indicated by the chosen fields in the radio button group to the left. The years are color coded, **RED** for years with missing data, **GREEN** for years with complete data, **GRAY** for years without any data.

c. CULTURES

By default, all parameters used by SAMARA V2 are shown in the table to the right, clicking on 

will filter the table into frequently used parameters, clicking the button again will filter it into non-frequently used parameters.

Additionally, all parameters are divided into functional groups indicated by the color of the cells in each column. The groupings are as follows:

- Phenology and Photoperiodism
- Light extinction and conversion
- Maintenance Respiration
- Water relations
- Root growth
- Leaf properties
- Internode properties
- Panicle properties
- Tillering
- Seed properties

d. CULTURAL PRACTICES

The column named **Ref_IdIrrigation** accepts entries coming from an irrigation list, clicking Add an irrigation brings up the window where you can add, edit, or delete entries for irrigation

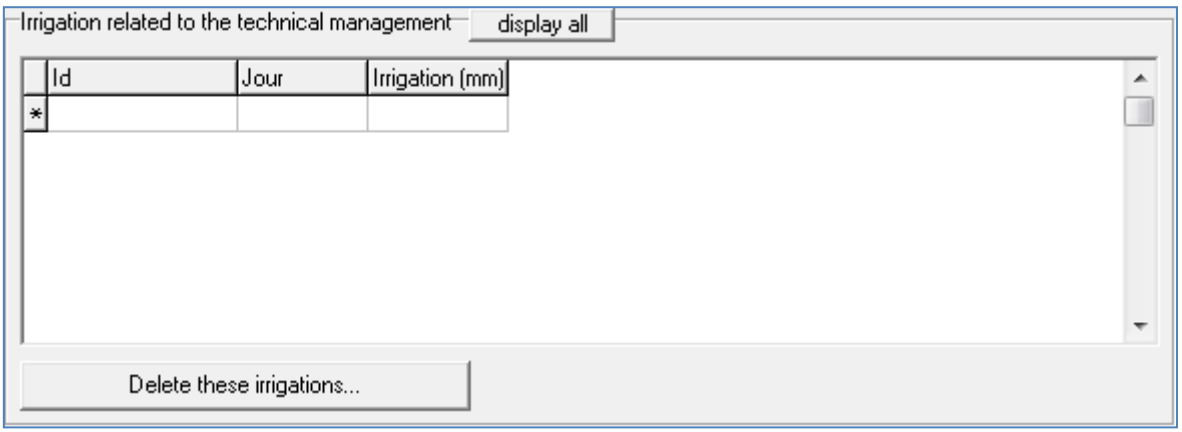


Figure 11 irrigation entries window

PHASE II: Create and execute new simulation scenario

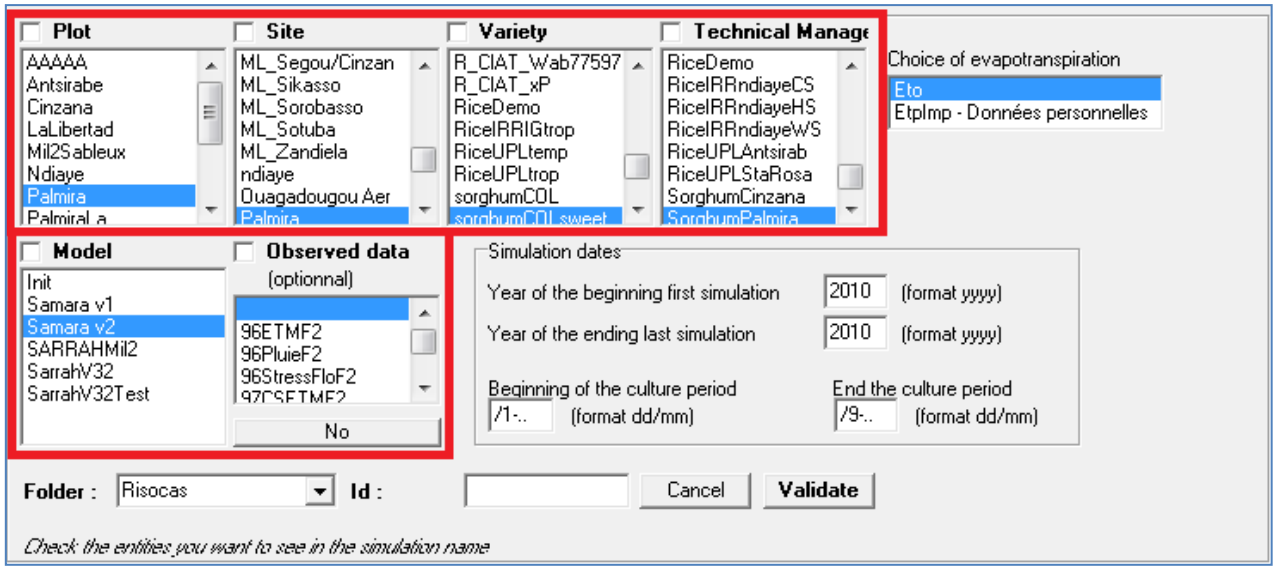
Following all the steps in **PHASE I**, you should have created new entries under each of the five components (the 6th one is the model itself). The following steps explain how to create and execute a new simulation scenario.

Creation of a Simulation Setup

a. Hit the button 

located at the lower left corner of the simulation interface

b. The interface should show six check boxes with bold headers, these are the six components of a simulation scenario shown beforehand. Select which entry you wish to use for at least 5 of the 6 components in case you don't have any observed data to use with the simulation



c. Fill in the rest of the fields concerning the dates, making sure that the formatting for the date in SAMARA and the windows system is in the **dd/MM/yyyy** format (further discussed in the **date format correction** section of this manual). Make sure the start and end dates of simulation comprise your experimental duration.

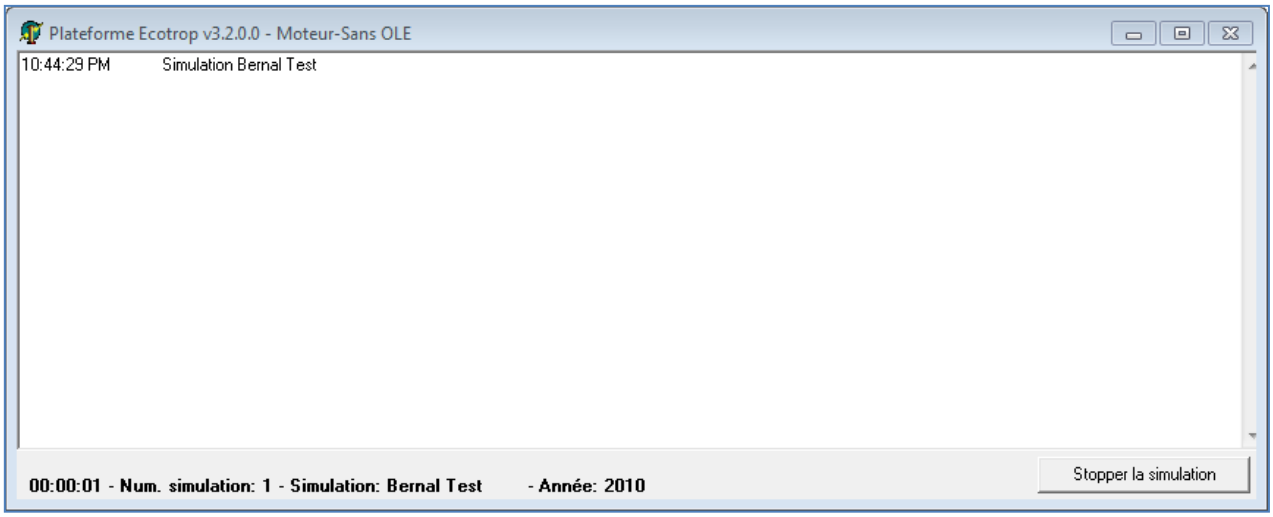
d. Choose which folder to save the simulation setup in, then provide a unique ID for your simulation setup; this ID will be the name of the entry that will be displayed on the simulations scenario list

e. Click on Validate next to the ID entry field to save the settings, attempting to exit the interface without choosing to save or cancel the changes will result in an error. If no error appears, your new simulation ID will now be an entry in the simulations list in the simulations interface

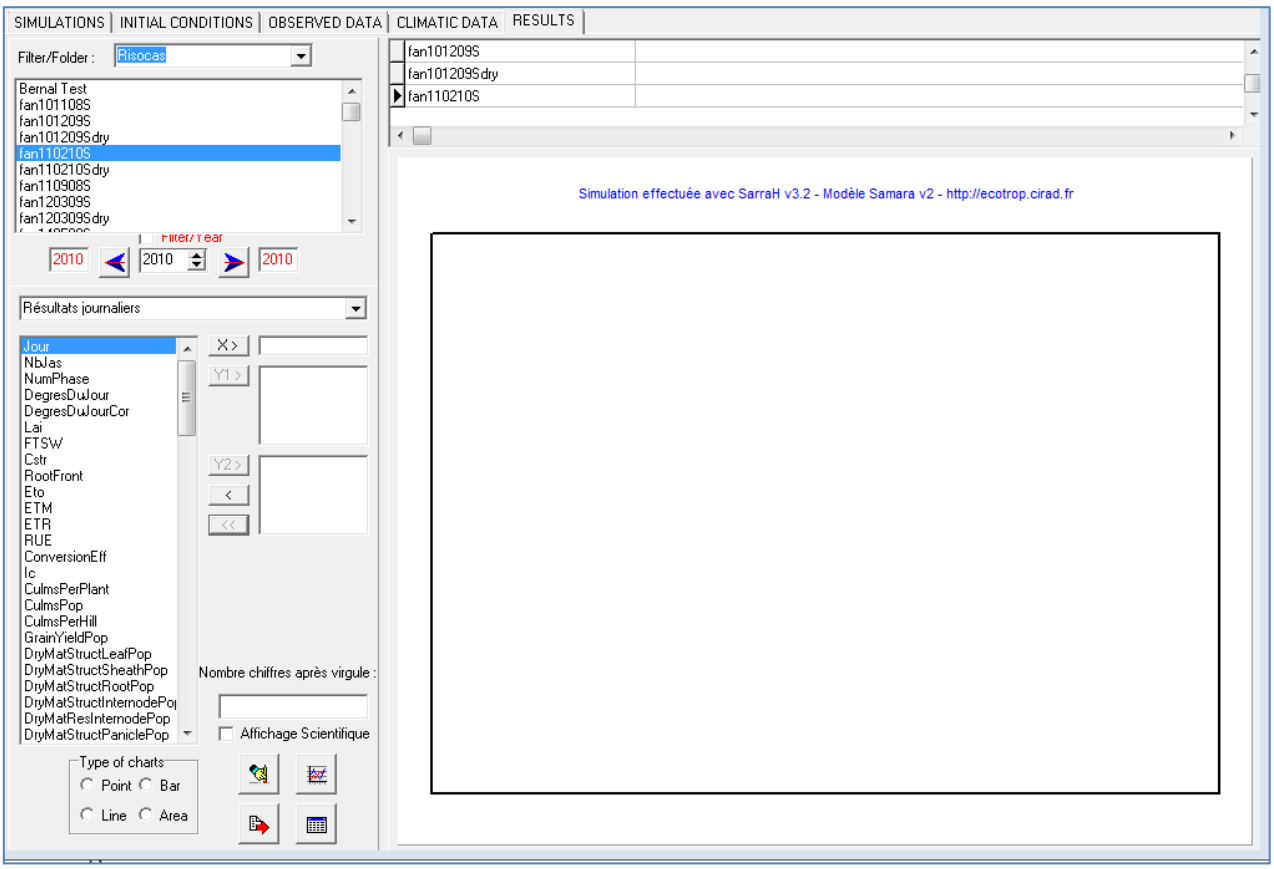
Running A Simulation

Now you are ready to simulate the provided conditions with your unique simulation scenario ID. The steps below describe how to run a newly created scenario.

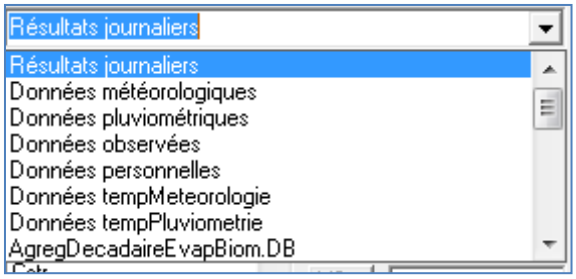
a. Choose your simulation **ID** and hit the button Launch... at the bottom of the simulation scenarios list, a window should appear for a moment which indicates the simulation is being done.



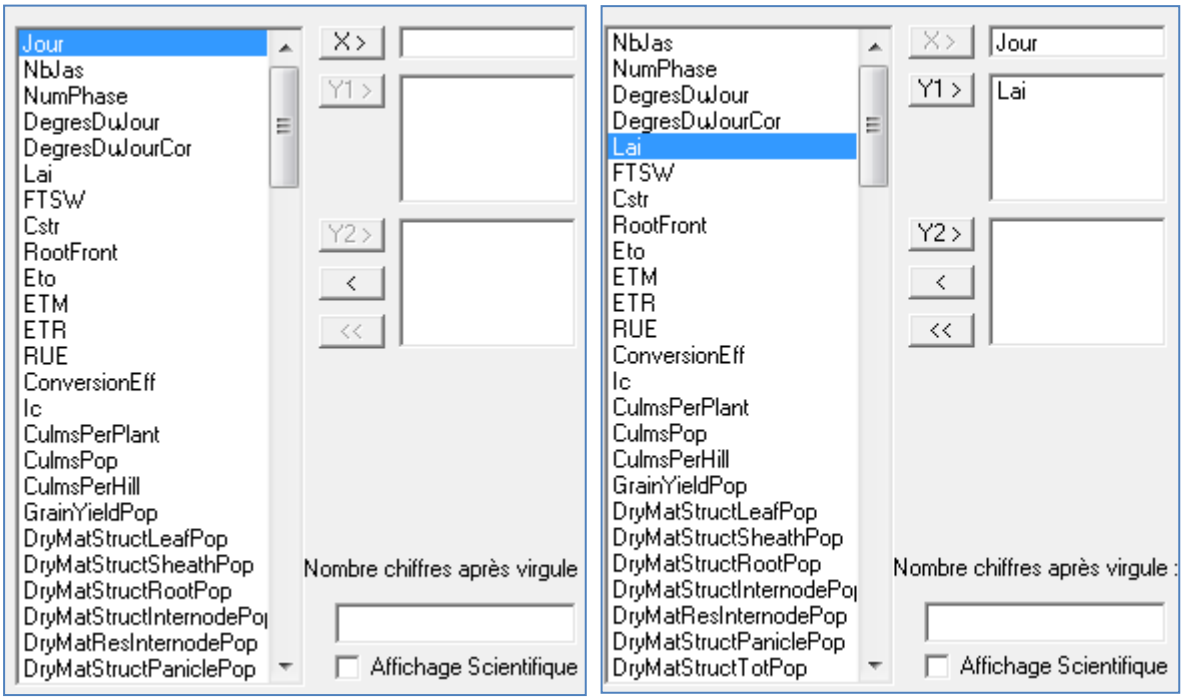
b. Once the simulation is done you can view the results of simulation by clicking the RESULTS tab at the top of the interface. A window with a graph display to the right should appear



c. To the left of the window is the “variables to be graphed” section, this is where you will choose which parameters to view on the graph to the right. A dropdown box filters the outputs / observed variables into different categories



d. Select the variables which you want to view by clicking them from the list to the left and then pressing X> to set the x axis and then Y1> or Y2> depending on how you want to view the graph. < and << removes a previously selected variable and removes all selected variables respectively. Once all the variables of interest are selected, we are ready to graph.



To Graph the Results

A group of four buttons can be found to the lower left of the results interface

 is for refreshing the graph and deleting what is currently graphed

 is for graphing the selected **X** and **Y1, Y2** variables in the previous step

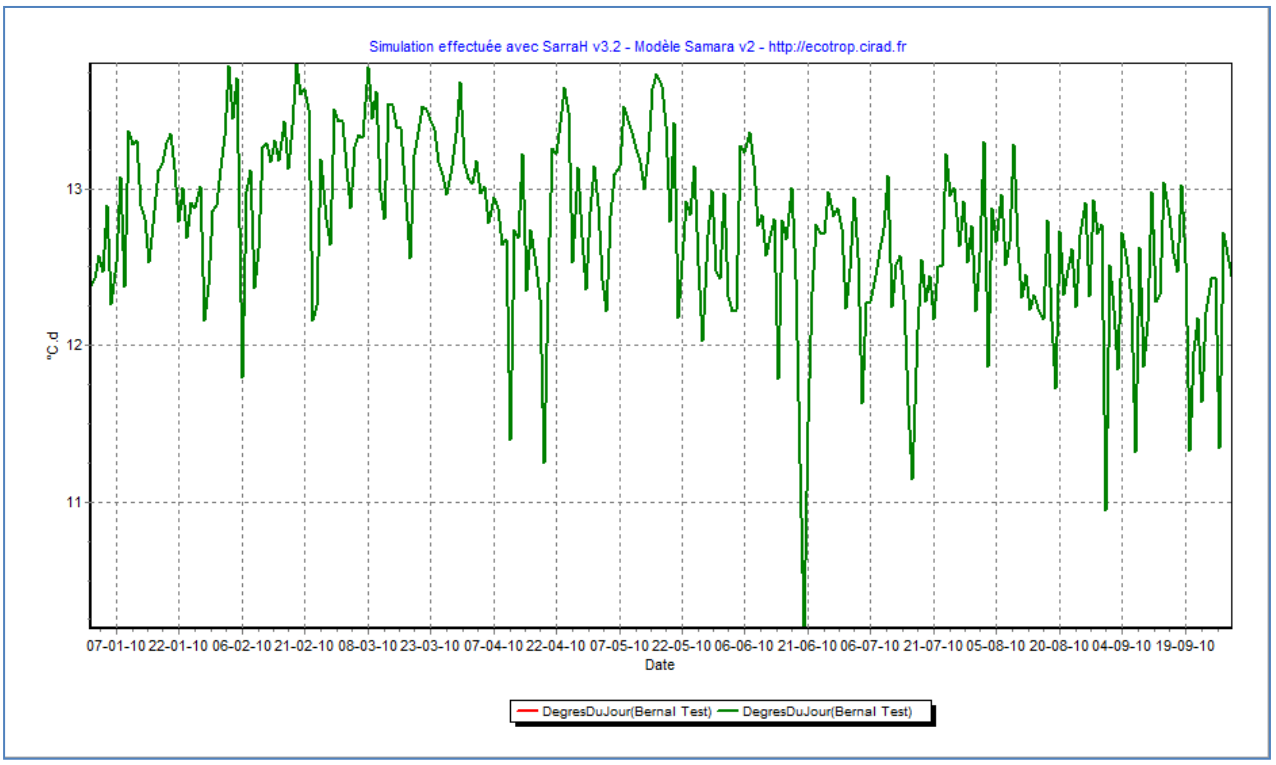


Figure 12 graph of a simulation result with chosen variable Jour and DegreesDuJour

 is for viewing the results in tabular mode, every output in the currently selected category is shown regardless of which parameters are chosen for X, Y1, and Y2

IdSimule	NumeroSimule	Jour	NbJas (d)	NumPhase (none)	DegresDuJour (°C.d)	DegresDuJourCor (°C.d)	Lai (m²/m²)	MaxLai (m²/m²)	FTSW (none
Bernal Test	1	01-01-2010	-141		12.3832167832168	12.3832167832168	0	0	0
Bernal Test	1	02-01-2010	-140		12.4304195804196	12.4304195804196	0	0	0
Bernal Test	1	03-01-2010	-139		12.5723021582734	12.5723021582734	0	0	0
Bernal Test	1	04-01-2010	-138		12.4716417910448	12.4716417910448	0	0	0
Bernal Test	1	05-01-2010	-137		12.894094488189	12.894094488189	0	0	0
Bernal Test	1	06-01-2010	-136		12.2624113475177	12.2624113475177	0	0	0
Bernal Test	1	07-01-2010	-135		12.526618705036	12.526618705036	0	0	0
Bernal Test	1	08-01-2010	-134		13.0718487394958	13.0718487394958	0	0	0
Bernal Test	1	09-01-2010	-133		12.3746268656716	12.3746268656716	0	0	0
Bernal Test	1	10-01-2010	-132		13.3648351648352	13.3648351648352	0	0	0
Bernal Test	1	11-01-2010	-131		13.2792792792793	13.2792792792793	0	0	0
Bernal Test	1	12-01-2010	-130		13.3086363636364	13.3086363636364	0	0	0
Bernal Test	1	13-01-2010	-129		12.8954545454545	12.8954545454545	0	0	0
Bernal Test	1	14-01-2010	-128		12.8090551181102	12.8090551181102	0	0	0
Bernal Test	1	15-01-2010	-127		12.53	12.53	0	0	0
Bernal Test	1	16-01-2010	-126		12.775	12.775	0	0	0
Bernal Test	1	17-01-2010	-125		13.1164	13.1164	0	0	0
Bernal Test	1	18-01-2010	-124		13.1568702290076	13.1568702290076	0	0	0
Bernal Test	1	19-01-2010	-123		13.2920353982301	13.2920353982301	0	0	0
Bernal Test	1	20-01-2010	-122		13.3534615384615	13.3534615384615	0	0	0
Bernal Test	1	21-01-2010	-121		13.1272727272727	13.1272727272727	0	0	0
Bernal Test	1	22-01-2010	-120		12.7873737373737	12.7873737373737	0	0	0
Bernal Test	1	23-01-2010	-119		13.0079365079365	13.0079365079365	0	0	0
Bernal Test	1	24-01-2010	-118		12.6835616438356	12.6835616438356	0	0	0
Bernal Test	1	25-01-2010	-117		12.9123529411765	12.9123529411765	0	0	0
Bernal Test	1	26-01-2010	-116		12.8729591836735	12.8729591836735	0	0	0
Bernal Test	1	27-01-2010	-115		13.0138392857143	13.0138392857143	0	0	0
Bernal Test	1	28-01-2010	-114		12.155487804878	12.155487804878	0	0	0

 is for importing data from the tabulated results into a tab delimited text file

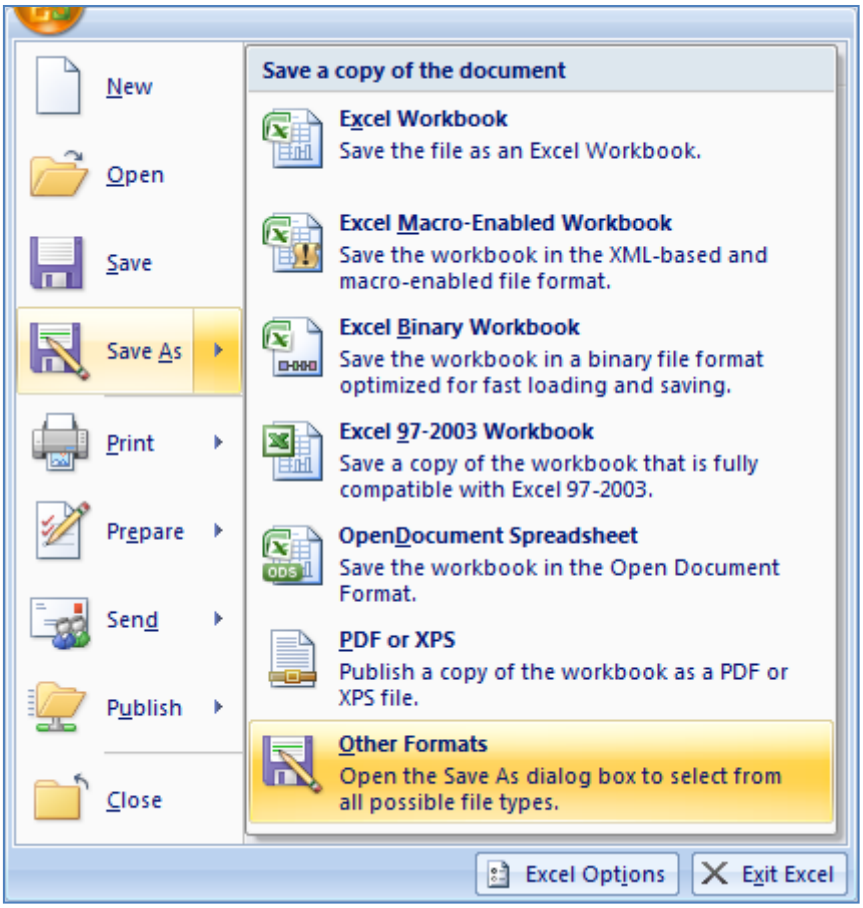
DATA IMPORTATION

To create a tab delimited file from MSExcel

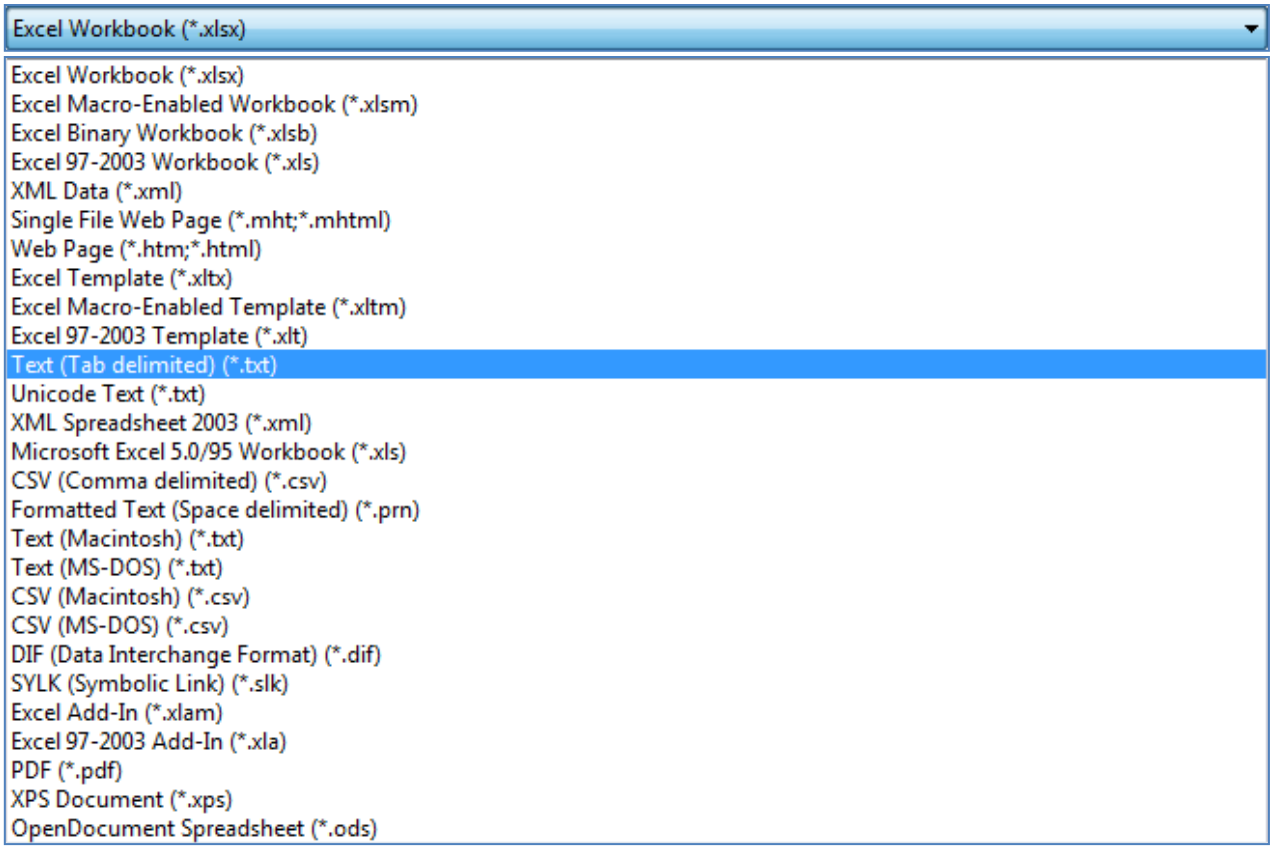
The excel file may be delimited by several symbols but it is recommended to use tabulations for the purpose of uniformity. Below is how to save an excel file into a tab delimited text file

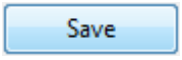
> **Note :** Samara can use non tab delimited files (files delimited by space, colon, etc.) but for uniformity, we will use the tab delimited formatting

a. From the excel interface, click on the  button located at the very corner on the upper left, this will bring up a dropdown list; select `**Save As**` then click on `**Other Formats**` here



b. A file selection window will pop up, from here select the type of file you want to save it as, in our case, a tab delimited text file



c. After clicking on 

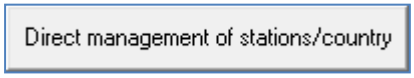
, the file should be saved as a tab delimited text file.

To create a new station, country, or continent

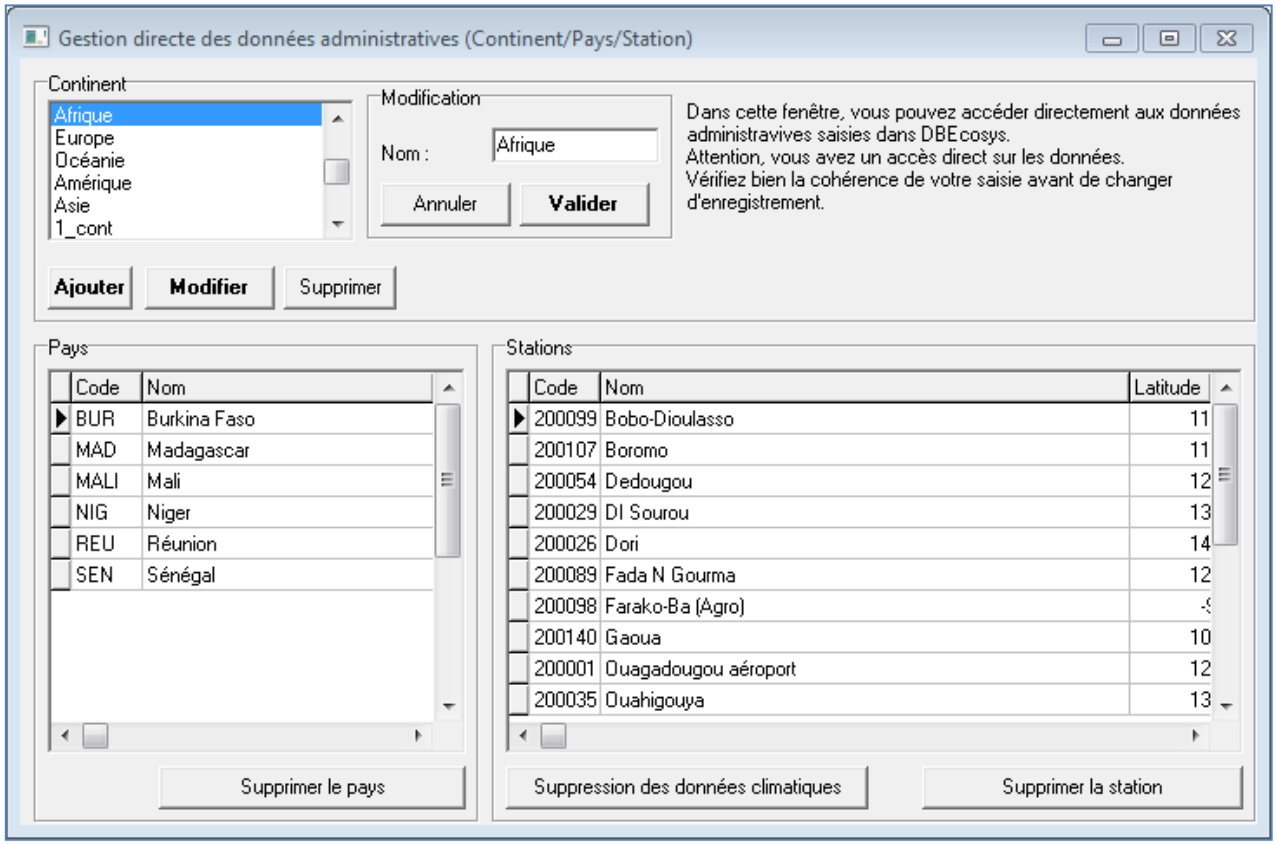
a. At the Samara main interface, open the **Initial Conditions** tab

b. Click on **Climatic Zone**

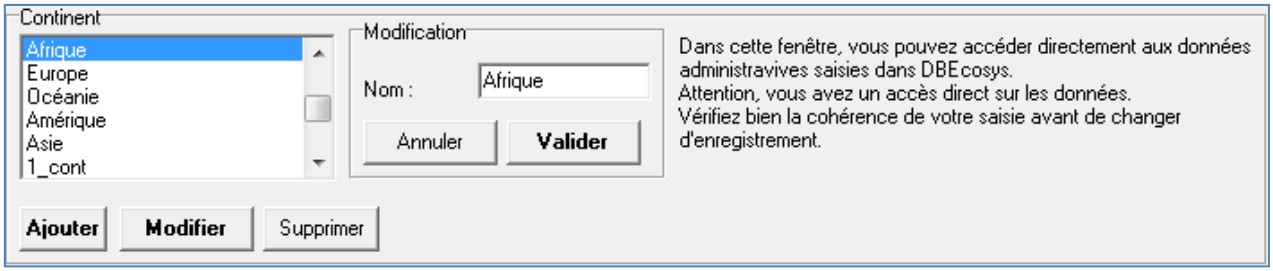
c. Along the top of the window, click on **Direct management of stations/country**.



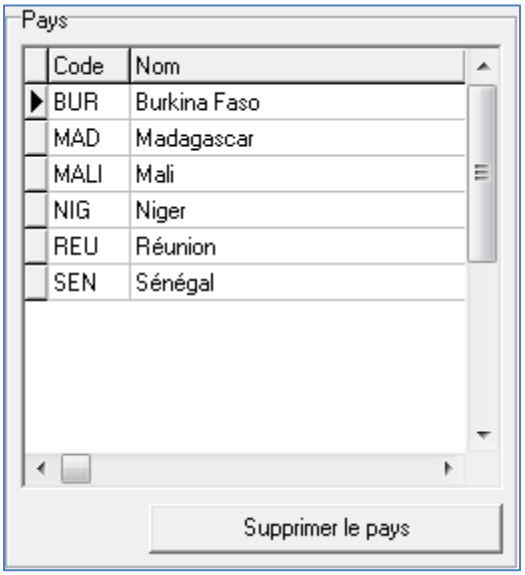
d. Wait for the data administration window to appear



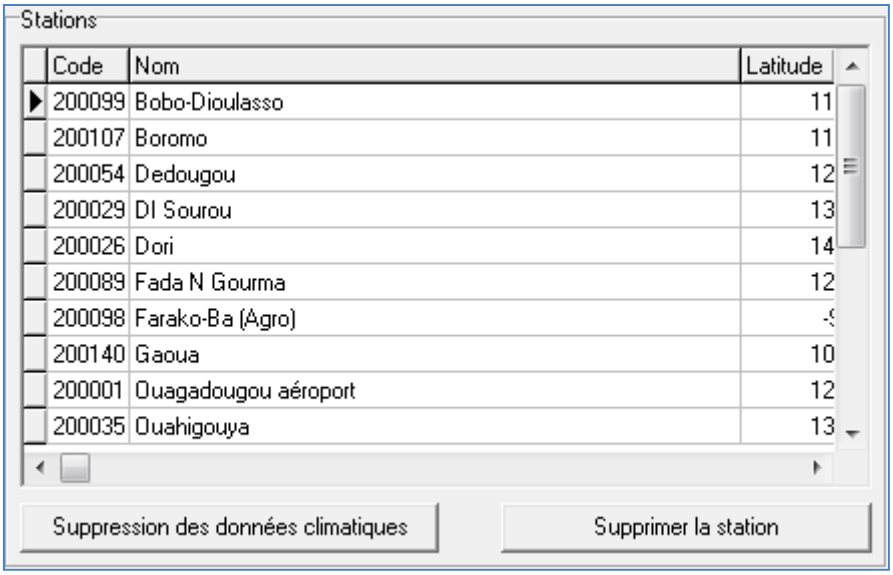
e. Now you can choose, add, modify or delete a continent from the list. click on Ajouter, type in the desired name of the continent on the name field, then click on Valider. Your new continent is now saved to the database



f. Now specify country for weather station location. If you don't see the country of your weather station location, go to the end of the matrix hit the down arrow on the keyboard and you should be able to enter country code and name (please refer to the section named ` **To create new plot and soil characteristics** ` for the detailed procedure).



g. Once you enter the country code and name then in the second matrix on right hand side of the window you can enter the weather station code, name, latitude, longitude and altitude in the similar way.



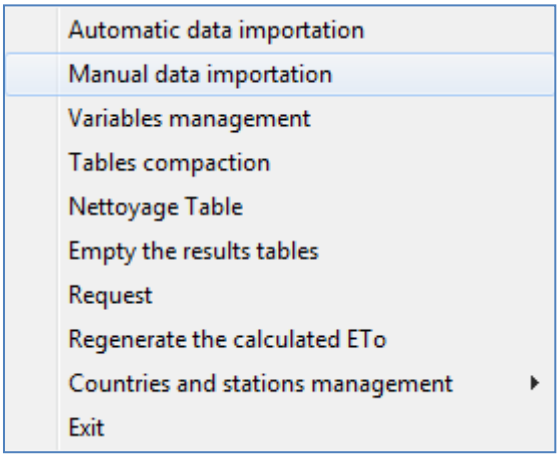
To Import Data

Note : These are general instructions to import sets of data, the same set of steps will also work for all other data types as long as they are in the proper file format, for this example we will import plot and soil data.

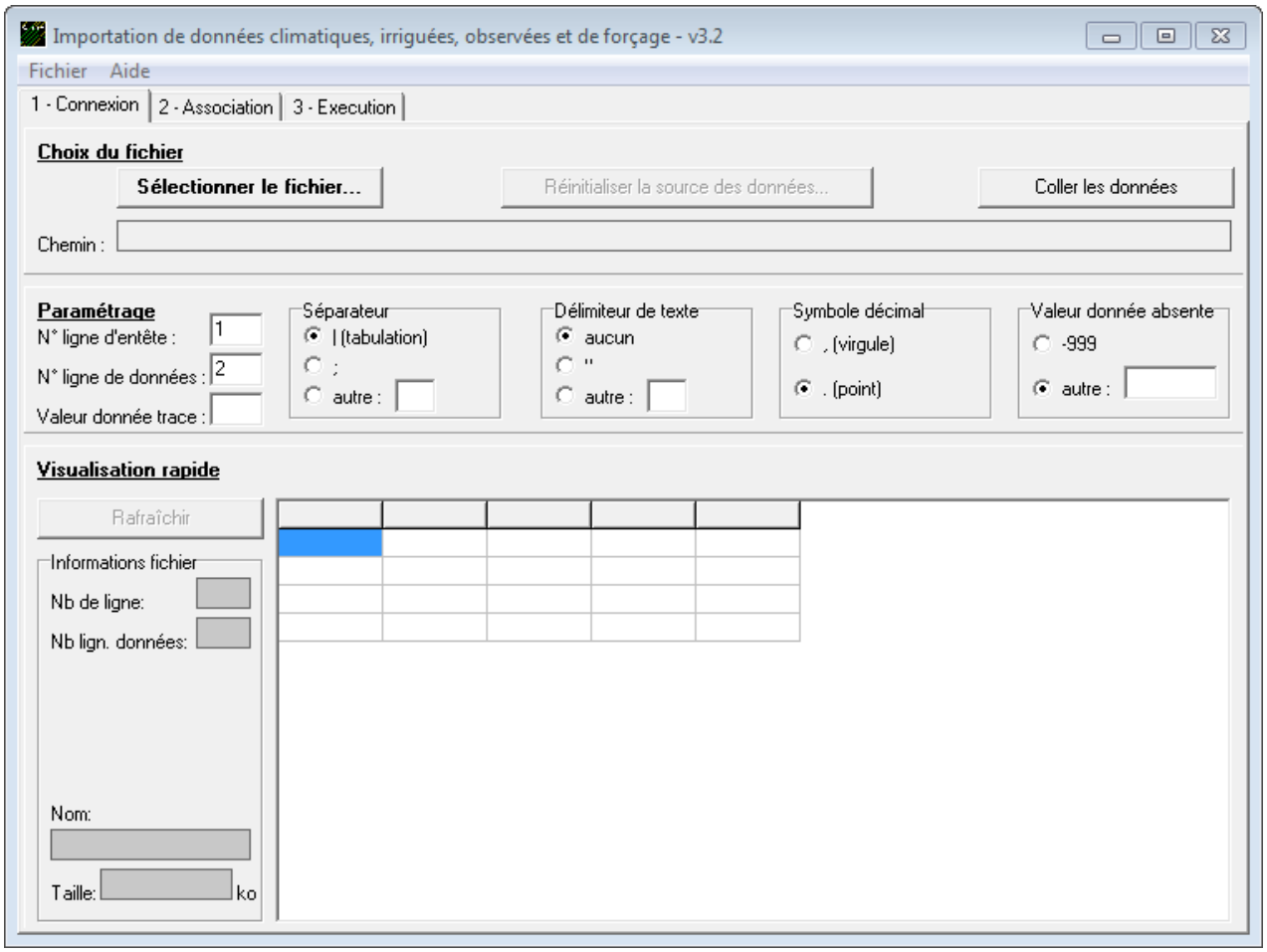
The following steps explain the processes of importing climatic data into SAMARA data base. We will detail the manual steps in importing data below, header names used for files to be used in manual importation need not be exactly like the header names in SAMARA as there will be a step in the procedure which will take care of the association.

a. Hit the button Tools on the very corner at the top left of the main interface

b. Select **manual data importation**



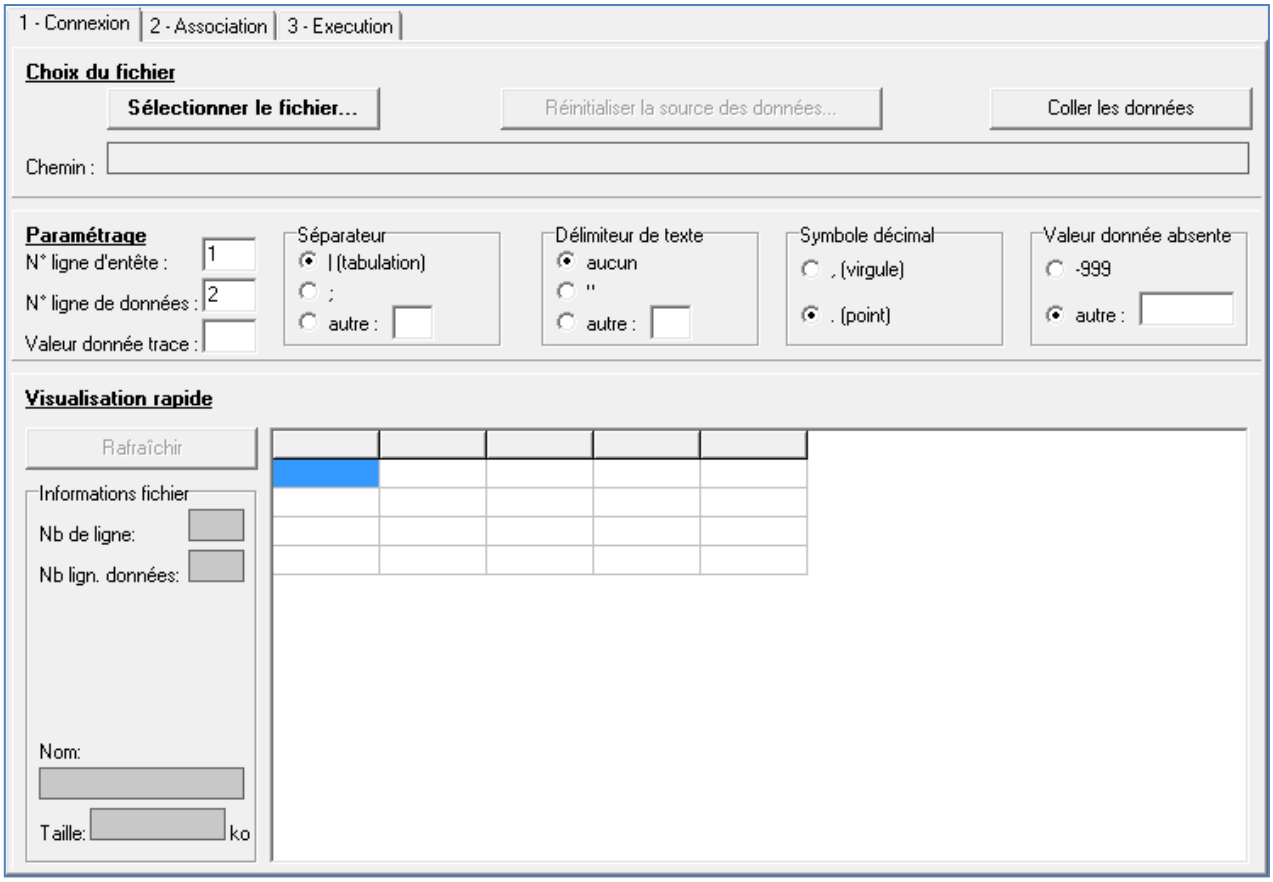
c. Wait for a new window to appear, this is the manual importation interface



Note : You can click on any tab among 

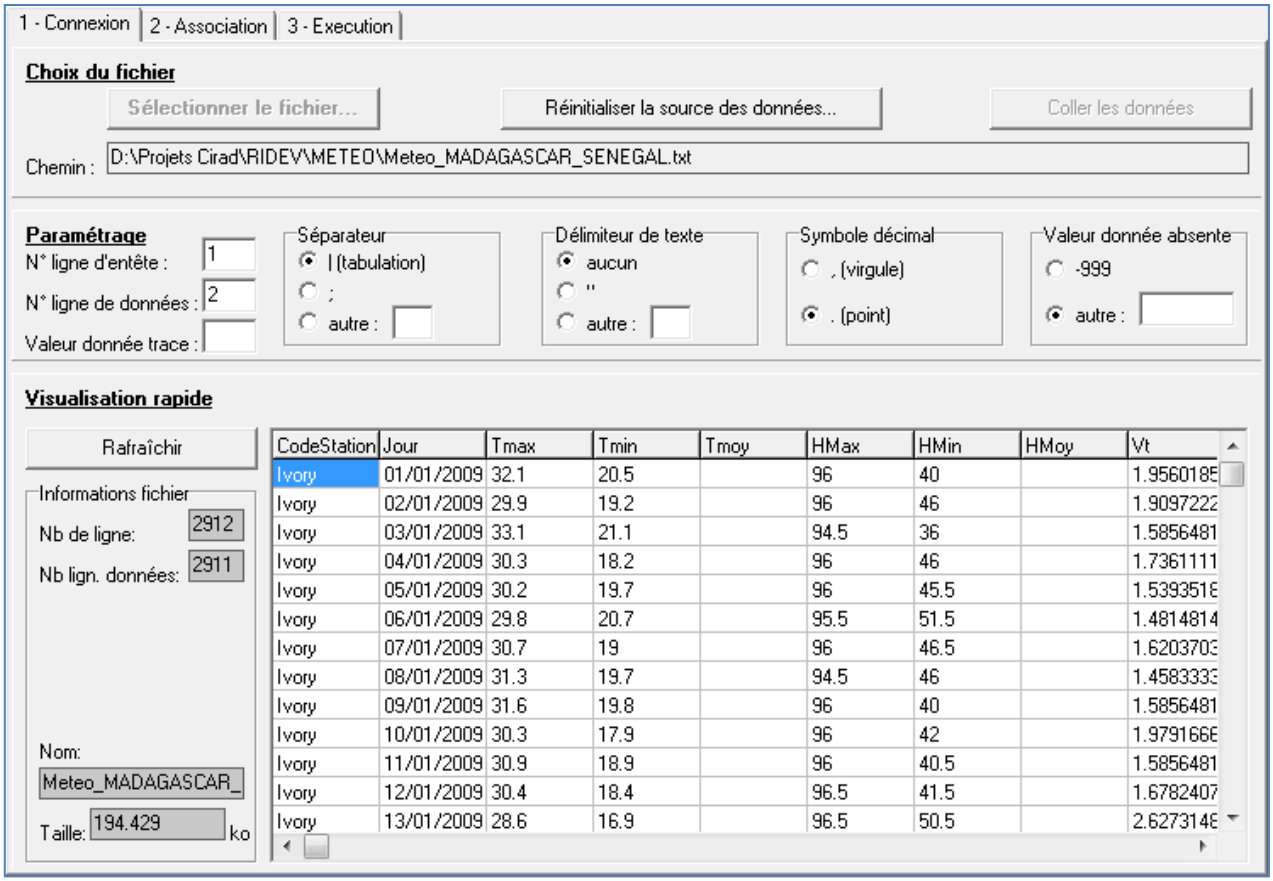
but it won't work unless you have previously done a previous step among the three

d. Select the 1 - Connexion tab, a file importation interface should appear

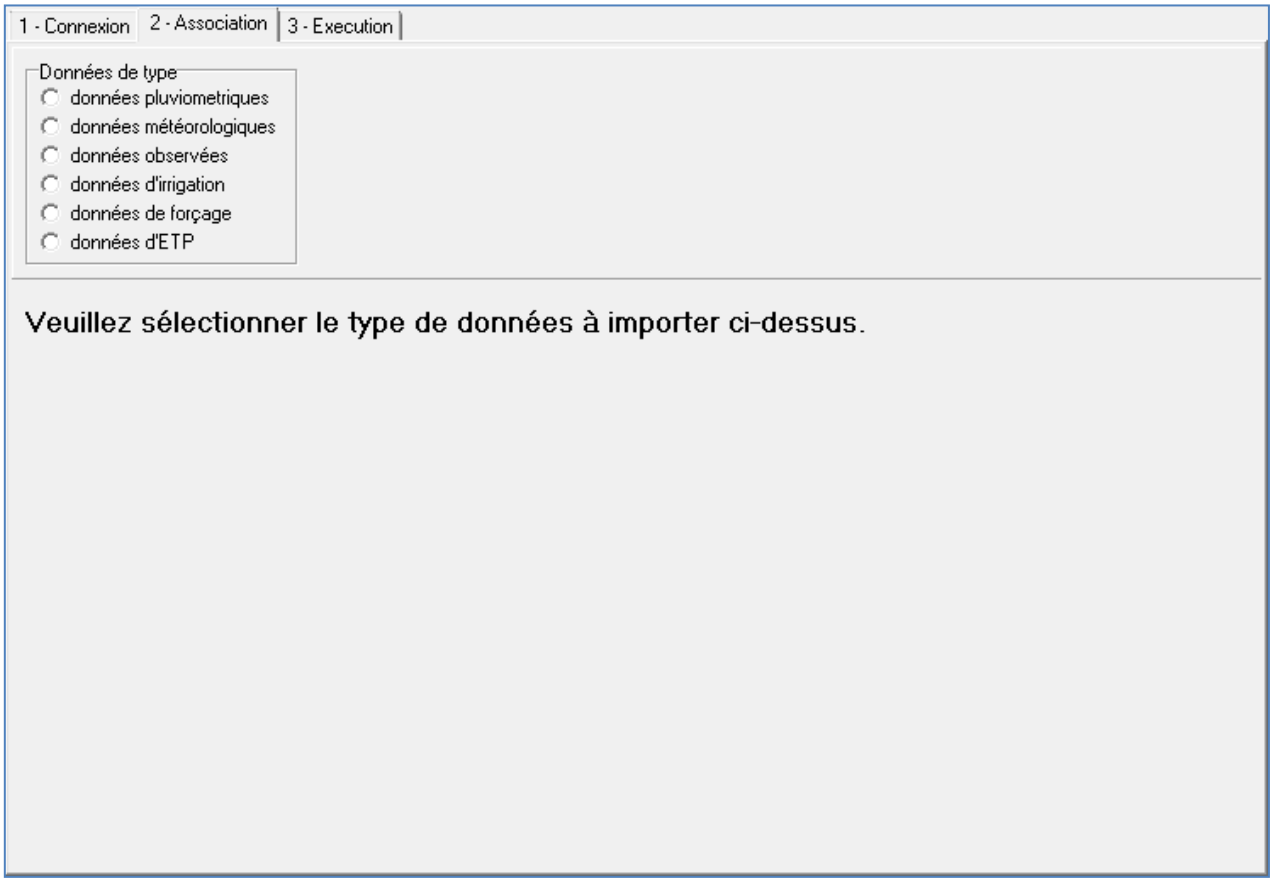


e. Click the button Sélectionner le fichier... in this interface and select the file containing the data to be imported from your system, again the default format is a tab delimited text file.

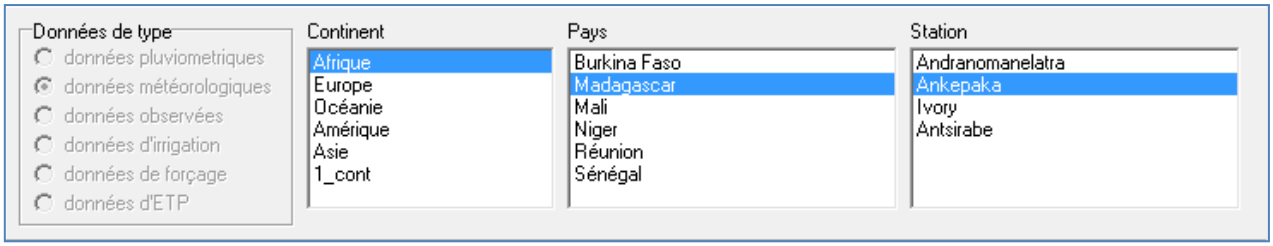
f. You should see a preview of the data (ready to be imported) inside the grid displayed in the interface.



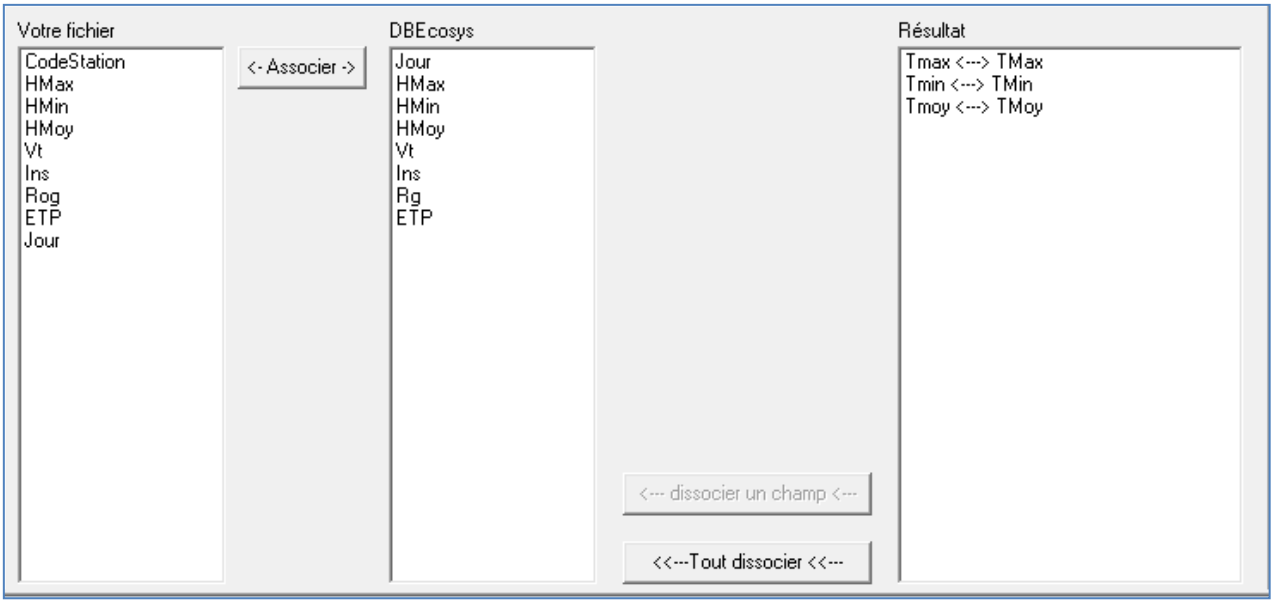
g. Now hit the 2 - Association tab on the top of the same window and a window should appear



h. Specify what data type you will enter and the station it falls under at the upper part of this interface

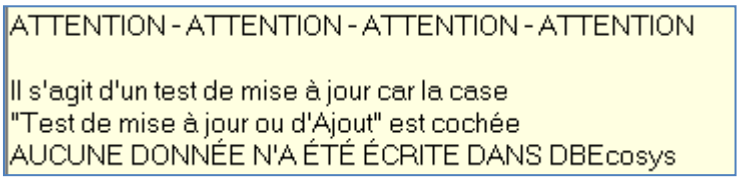


i. An association section will appear below, this is where we will associate the header names we used in the files with the header names used by Samara just in case they differ (say the file is in another language); press <- Associer -> after selecting the two header names which you choose to be associated. Results will appear on the list to the right.



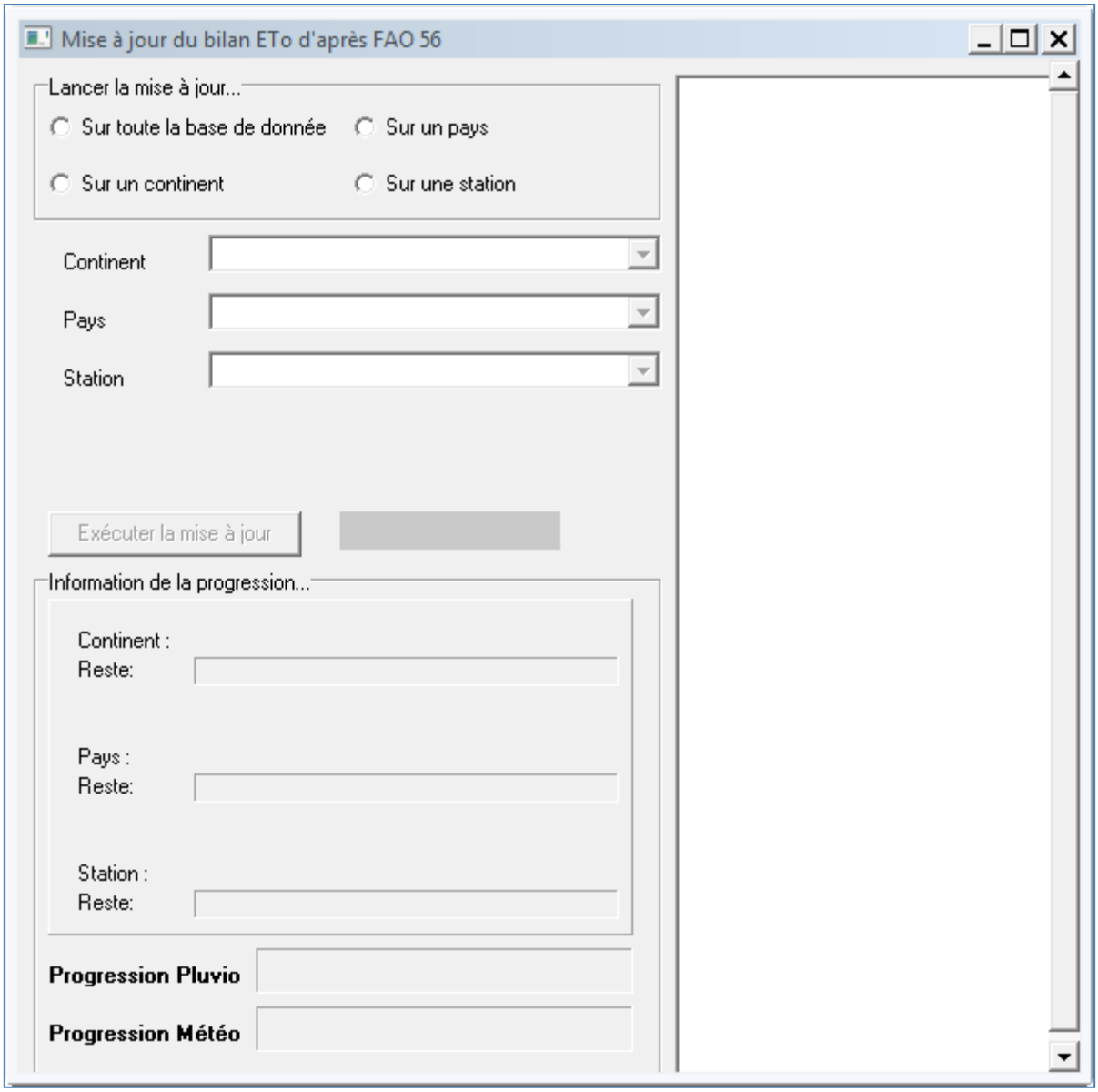
j. Once done, select the 3 - Execution tab and a window like the one below should appear

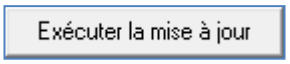
k. Leaving the Tester avant de mettre à jour ou d'ajouter checked (as shown) and clicking the button Importation... will run a test execution whether the data can be imported or not (if there is conflict with values or date format in the file) no actual data will be saved



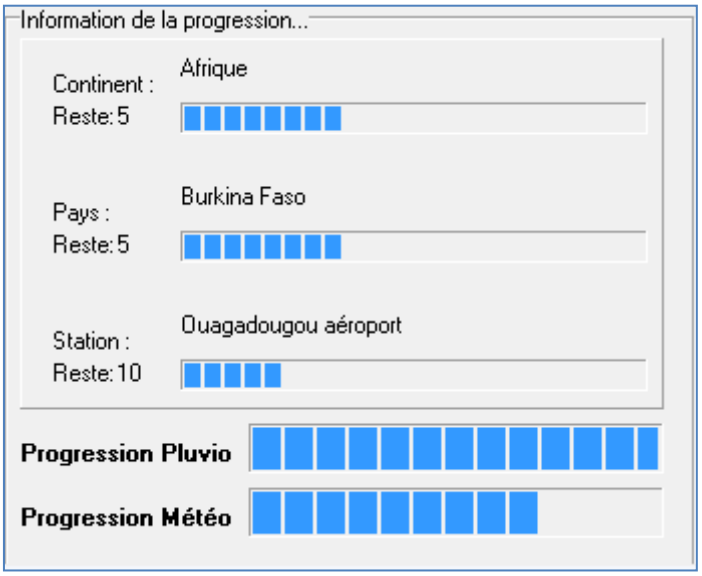
l. Once you confirm that the data can be imported, simply uncheck the checkbox mentioned above and click Importation... again, this time the data will be imported and saved to the database

m. After importation of data has been done, a window that prompts you to update FAO will appear; You may choose from several available scopes according to the scope of the data you have imported



n. After specifying the scope, press 

and the update should begin



o. Once the processing is over, close all windows except main interface. Now go to main interface and hit the button **CLIMATIC DATA** on top, you should find your imported data into database by selecting continent, country and weather station location you created earlier.

DATE FORMAT CORRECTION

How to spot an erroneous date format

Some installations of Windows have the default date format set to something other than "**dd/MM/yyyy**", this can be observed when viewing the simulations setup window (**simulations → creation and realization → modify**)

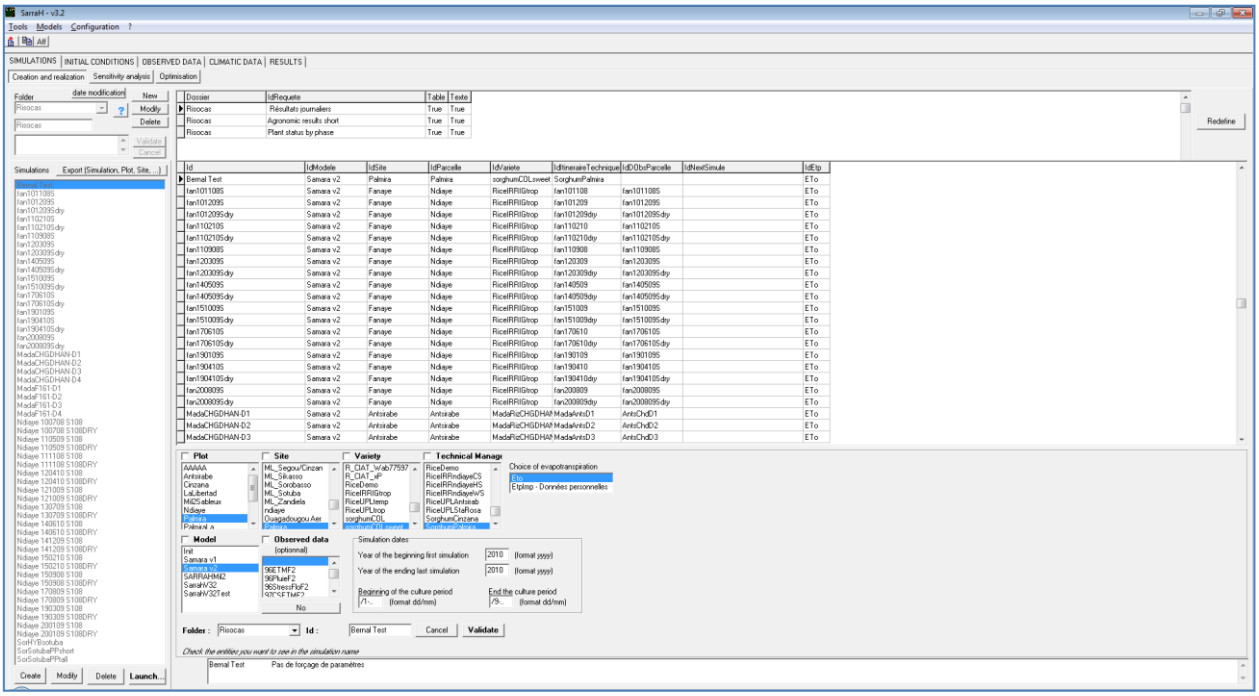


Figure 13 Simulation Setup Window

The error can be pointed out specifically in the "**simulation dates**" segment where the format which should be dd/mm is instead displayed as another format.

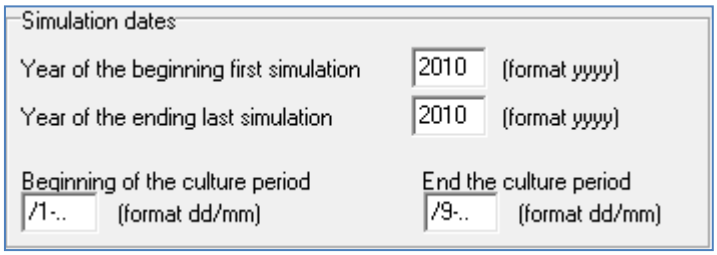
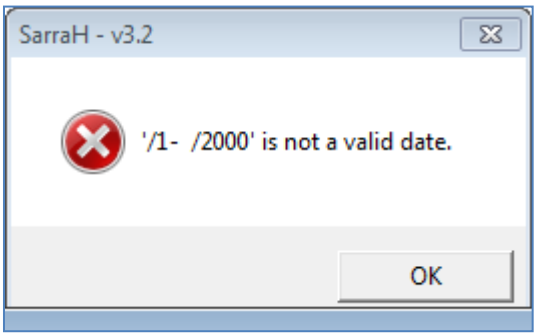
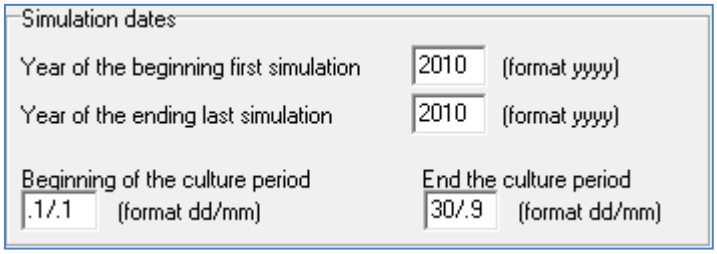


Figure 14 Erroneous Simulation Dates format

When we try to validate / run SAMARA with such erroneous date formatting, we will get an error like the one below and the interface will be unresponsive.



when correctly formatted, the display of figure 14 should be like so :



To correct the date formatting

Note : these steps are done using Windows 7 but shouldn't vary much across windows operating systems.

1. Click on the start button, in this case is a circle in the lower left corner with the windows logo

Figure 15 The windows start button / windows button as it appears in Windows 7

2. This will bring up the following popup, select **Control Panel** from the popup selection that appears

Figure 16 Popup list with Control Panel Selected

3. Another window will appear containing various options, click the "**Clock, Language, and Region**" option here

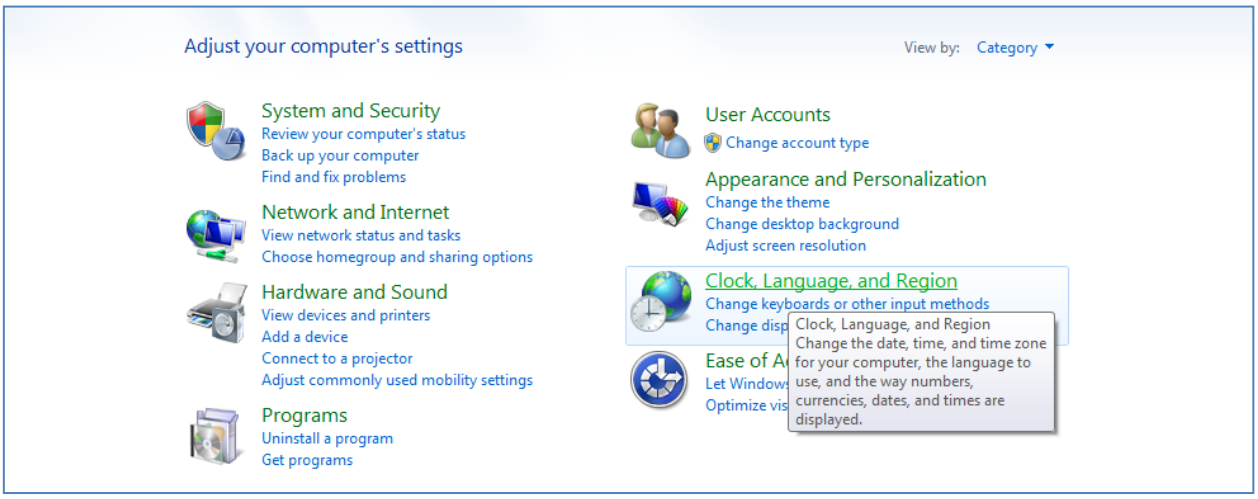
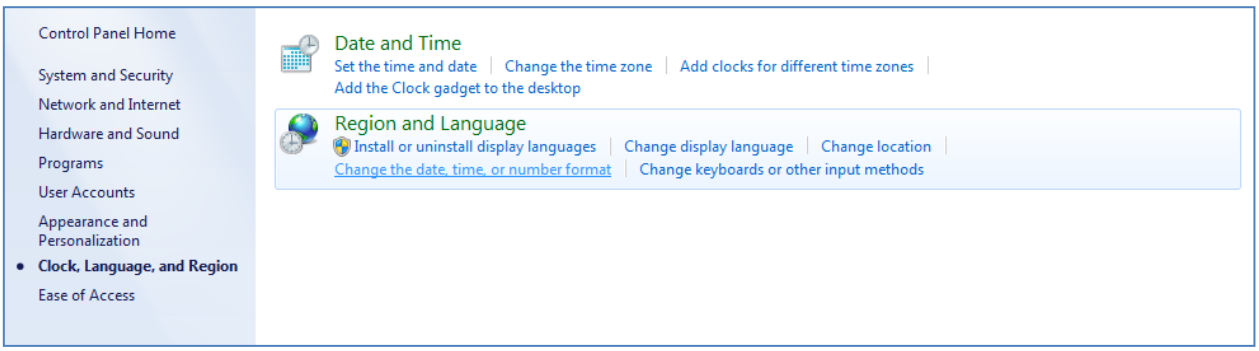
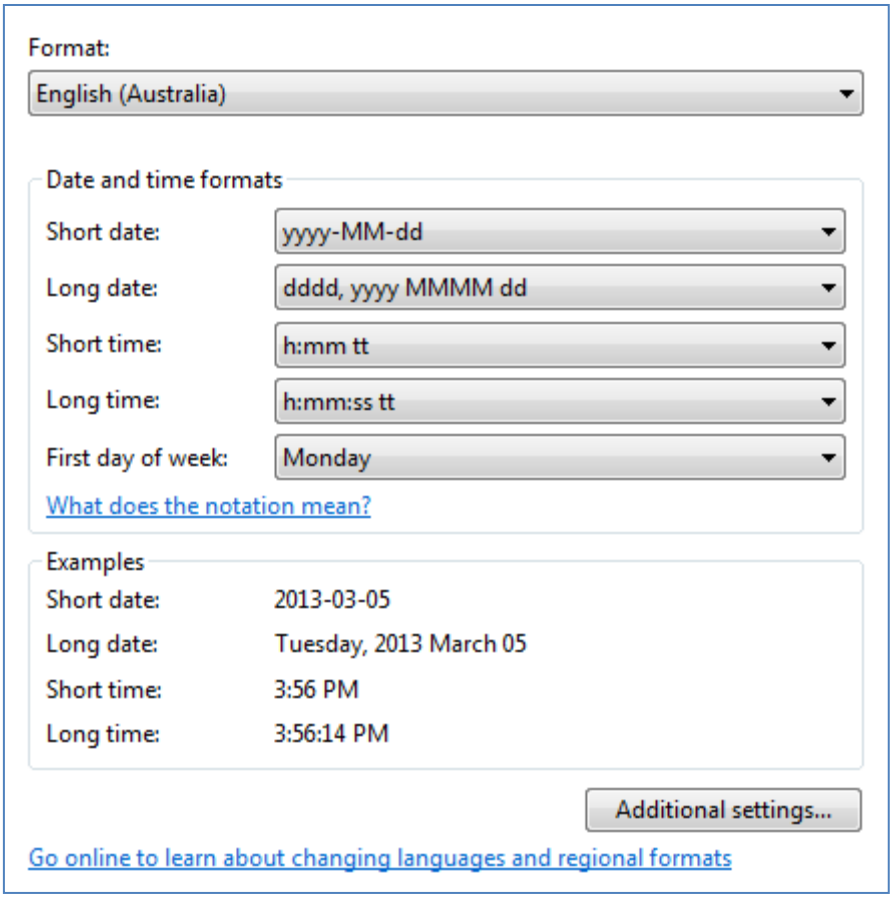


Figure 17 Control panel window containing various options

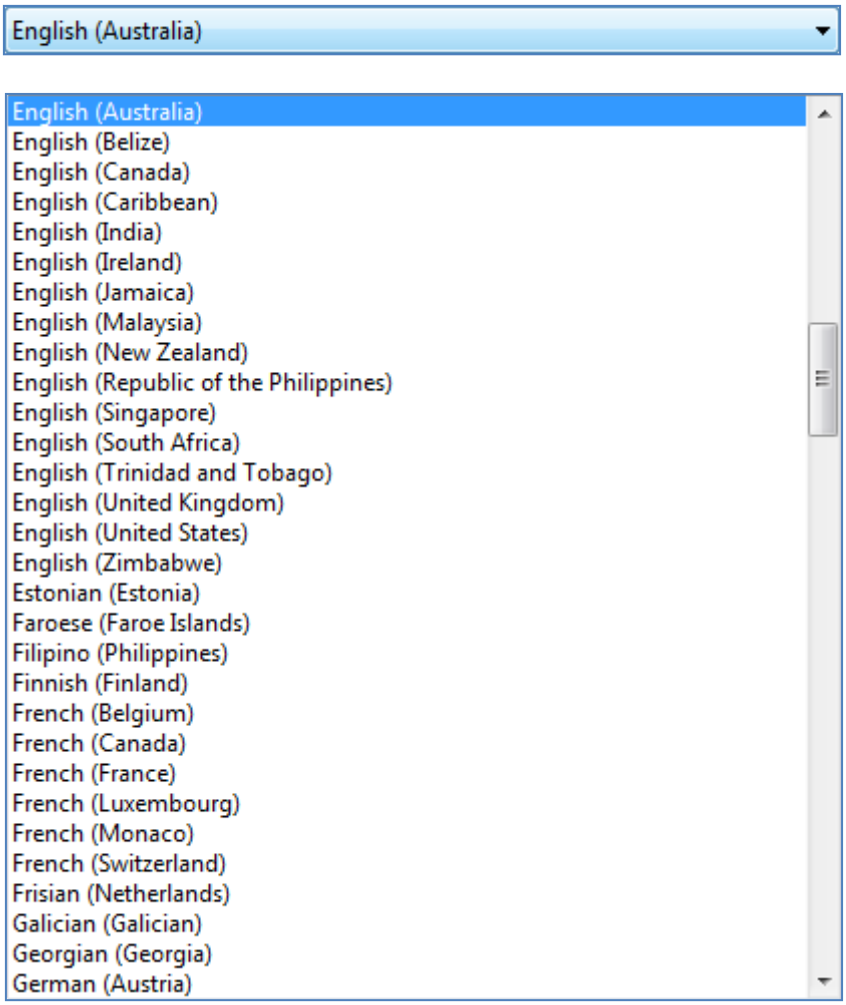
4. From the next menu that appears, a menu like the one pictured below will appear, click the "**Region and Language**" option from this menu



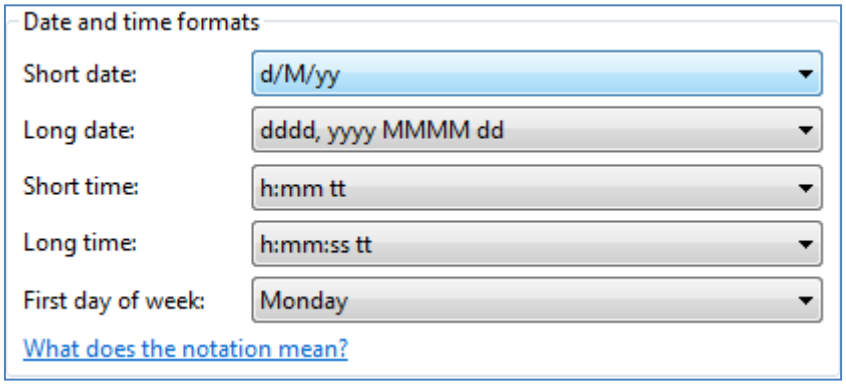
5. Another window will appear, this will contain the various format options for the date and time

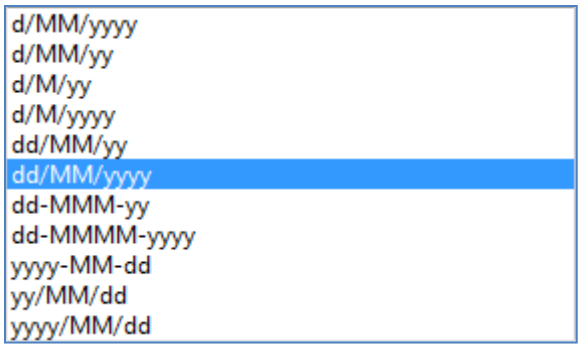


6. Click on the topmost dropdown box labeled “**Format**” , from the various choices , select **English(Australia)** this contains the format we want



7. from the dropdown box labelled “**Short date**” , select the “**dd/MM/yyyy**” format





8. Click on 

at the lower right corner of the window

9. **Restart Samara** for the changes to take effect