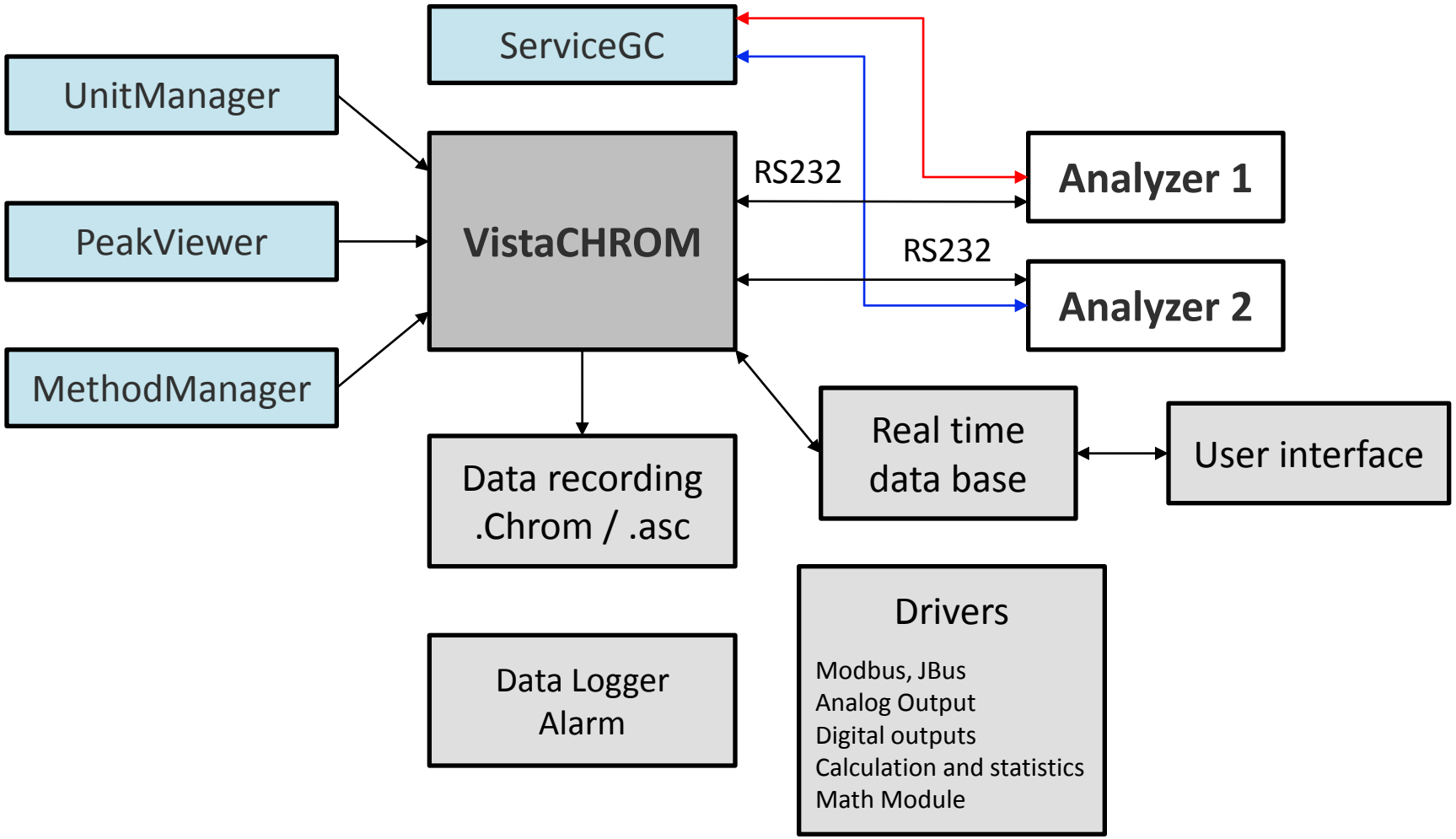
VISTACHROM 1.4.7

Chromatotec®

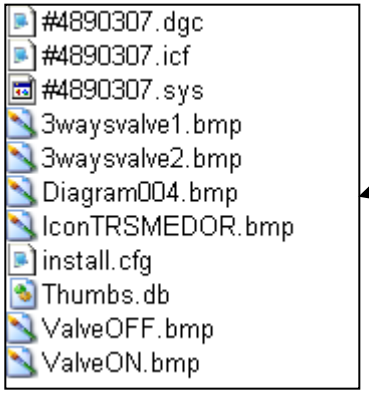
OUTLINE

- Organisation of VistaCHROM 1.4.7.
- Synoptic of the analyzer
- Method Manager
- Setup the GC
- Soft configuration
- Peak Viewer
- Unit Manager
- ServiceGC

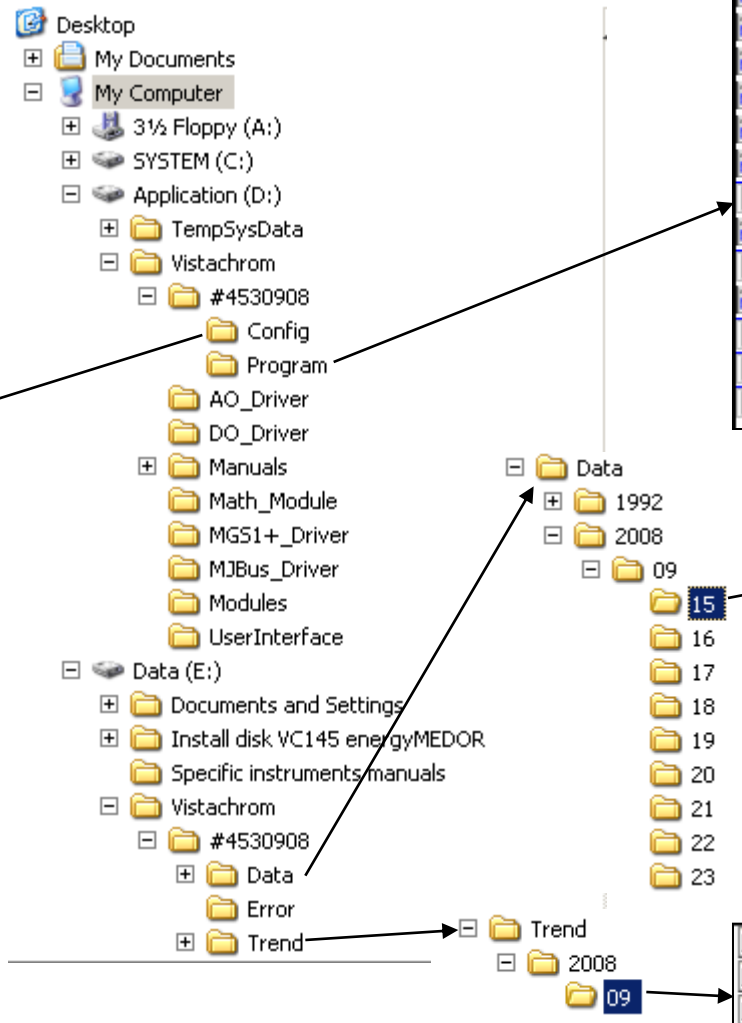
ORGANISATION OF VISTACHROM

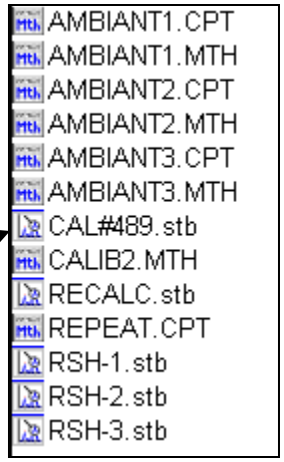


ORGANISATION OF VISTACHROM

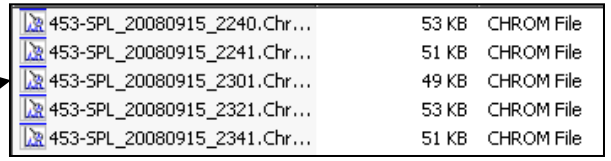


Config folder





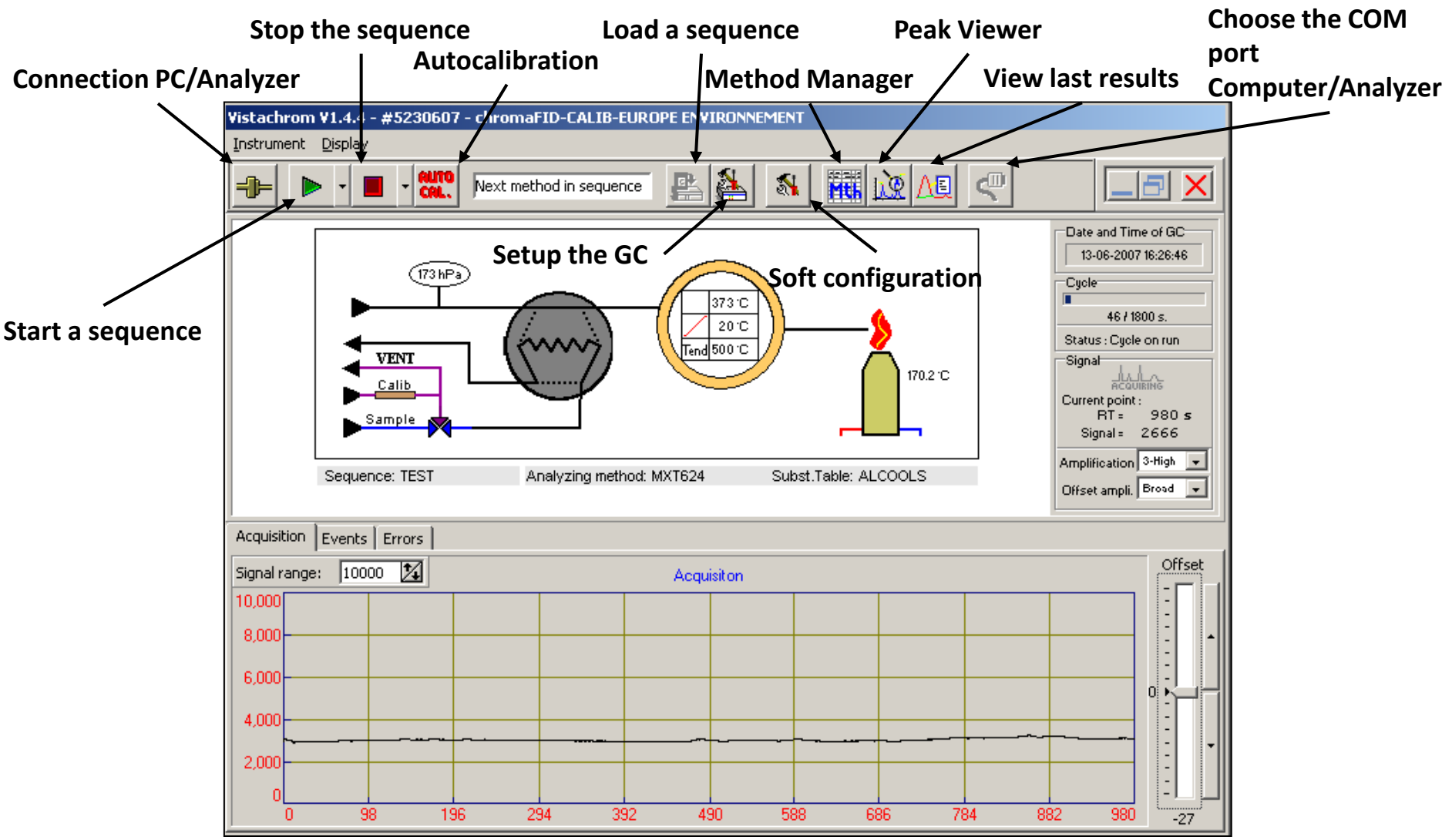
Program folder with substances tables (.stbl), methods (.mth) and sequences (.cpt)



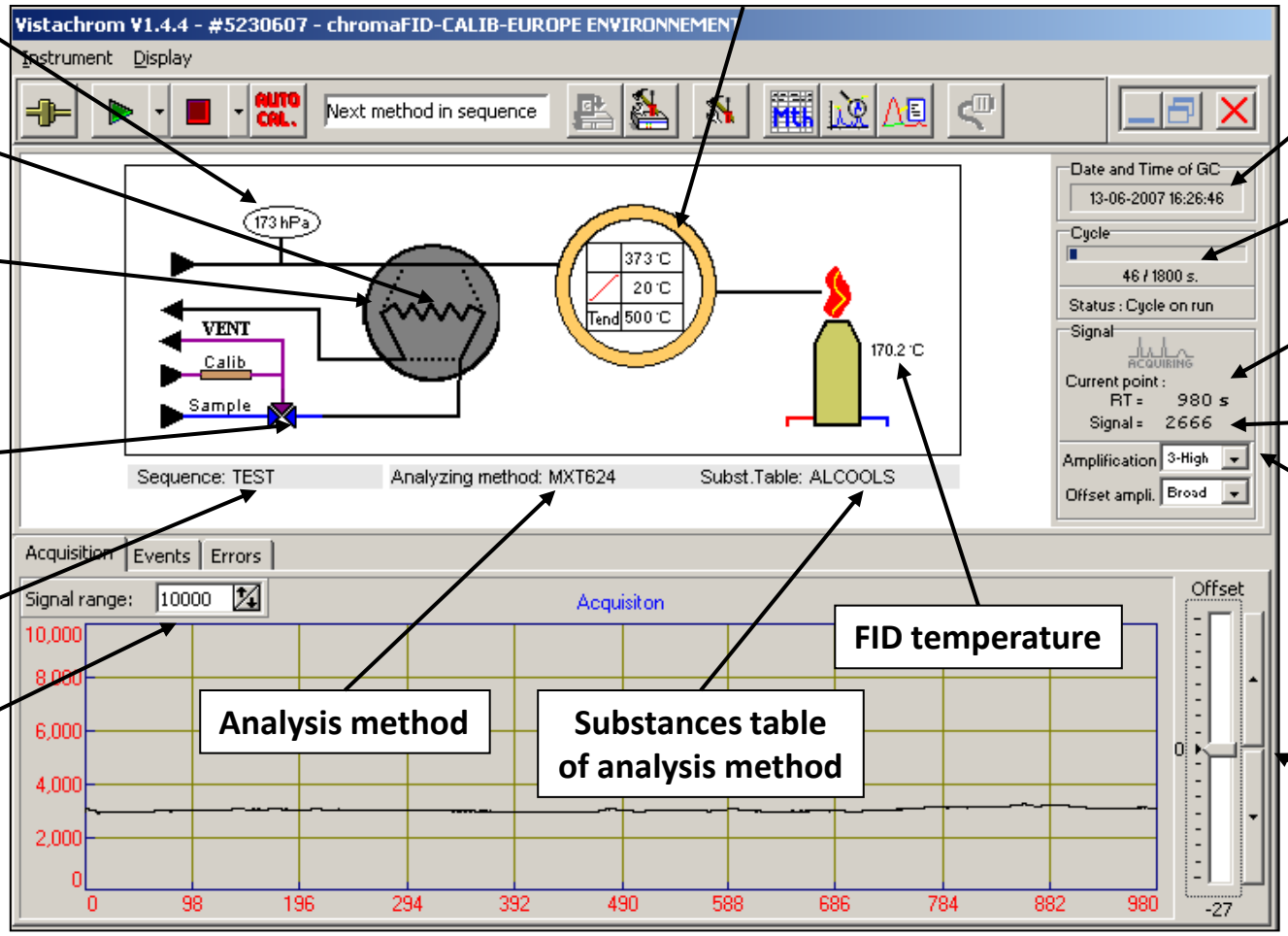
Peak Viewer data (Year/Month/Day)

ASCII data (Excel Year/Month)

SYNOPTIC OF THE ANALYZER



SYNOPTIC OF THE ANALYZER (VOC ANALYZERS)



Head column pressure

Oven temperature

GC clock

Sampling loop (or trap)

Analysis cycle clock

Injection valve

Retention time

Signal value

Electrovalve for internal calibration

Amplification level

Analyzing sequence

FID temperature

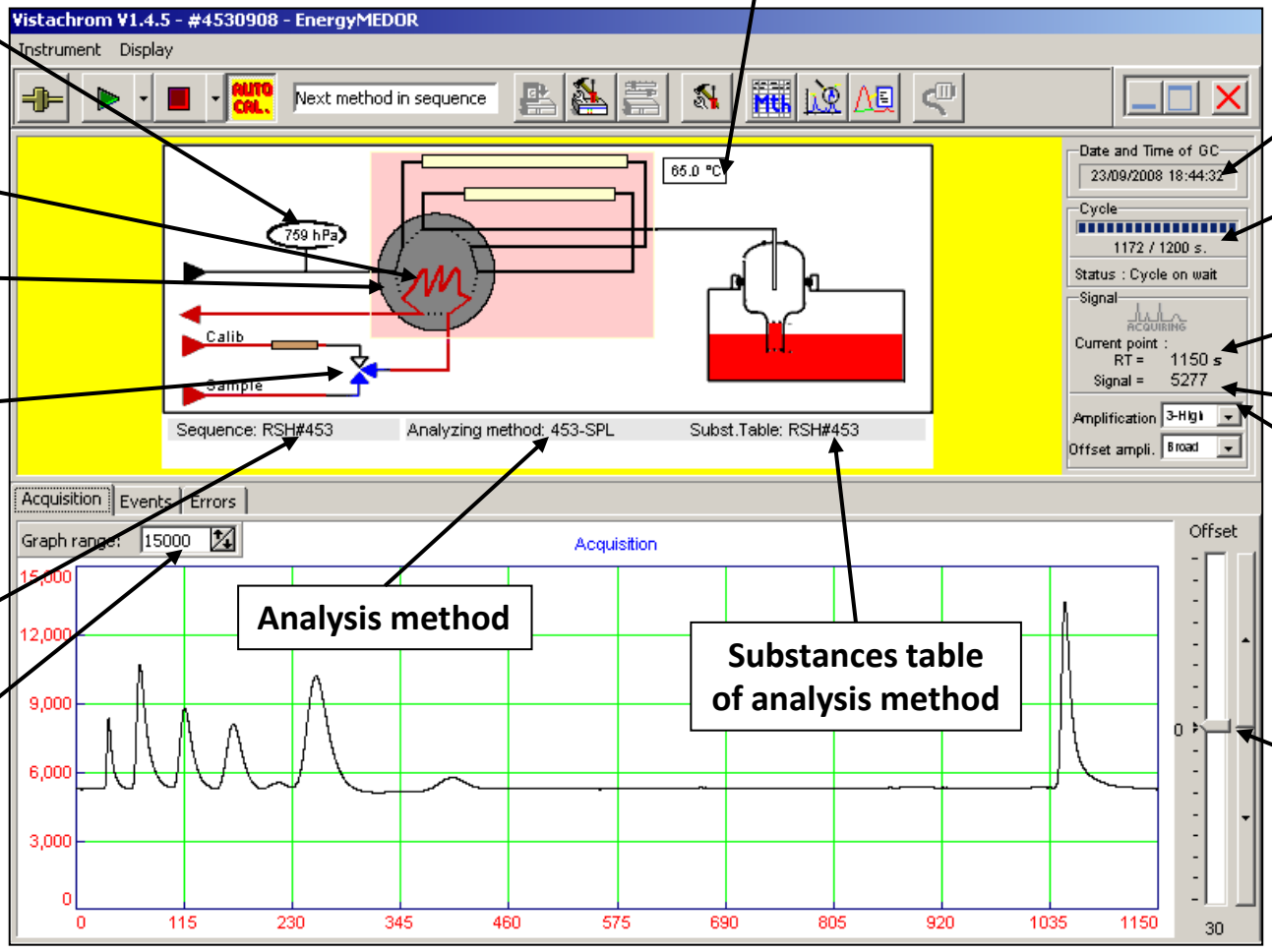
Analysis method

Substances table of analysis method

Signal range

Offset level (change the baseline value)

SYNOPTIC OF THE ANALYZER (MEDORS ANALYZERS)



Oven temperature

Head column pressure

GC clock

Sampling loop

Analysis cycle clock

Injection valve

Retention time

Electrovalve for internal calibration

Signal value

Amplification level

Analyzing sequence

Analysis method

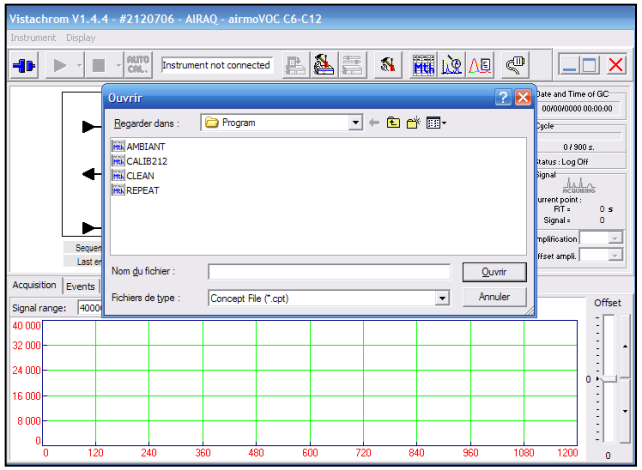
Substances table of analysis method

Signal range

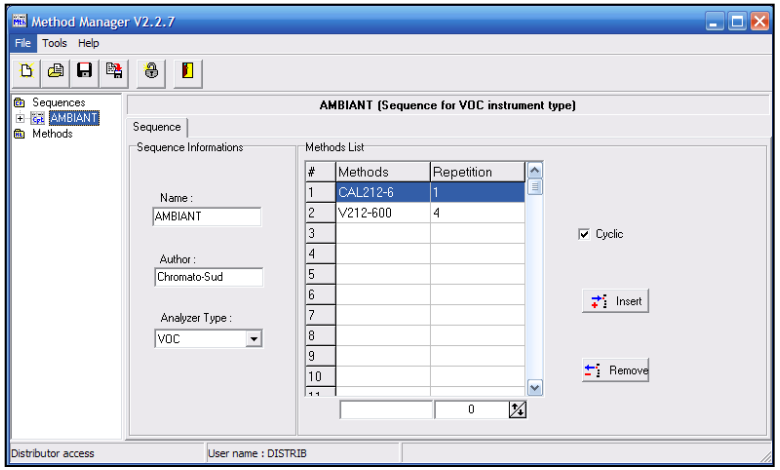
Offset level (change the baseline value)

METHOD MANAGER

- Allow you to see, create or modify:
  - Sequences
  - Methods
  - Substances tables



Choose your working sequence

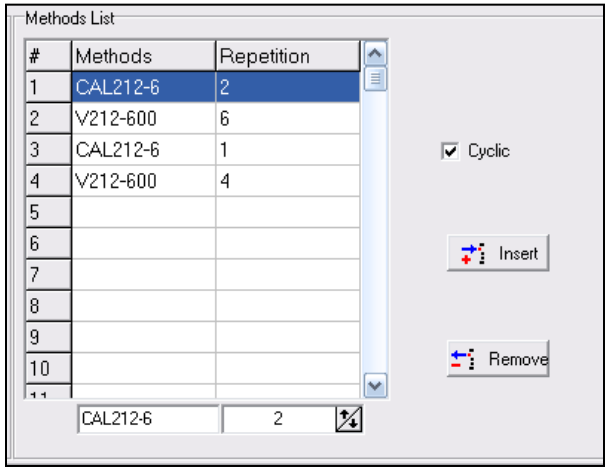


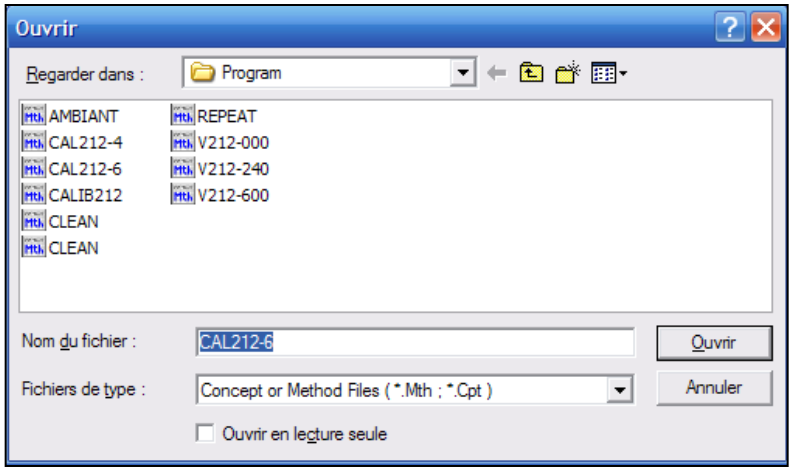
Sequence « AMBIANT » is composed by one CAL212-6 method and four V212-600 methods. This is a cycling sequence.

- You can modify the sequences: adding or removing methods

METHOD MANAGER

- You can modify the sequences: adding or removing methods which already exist.

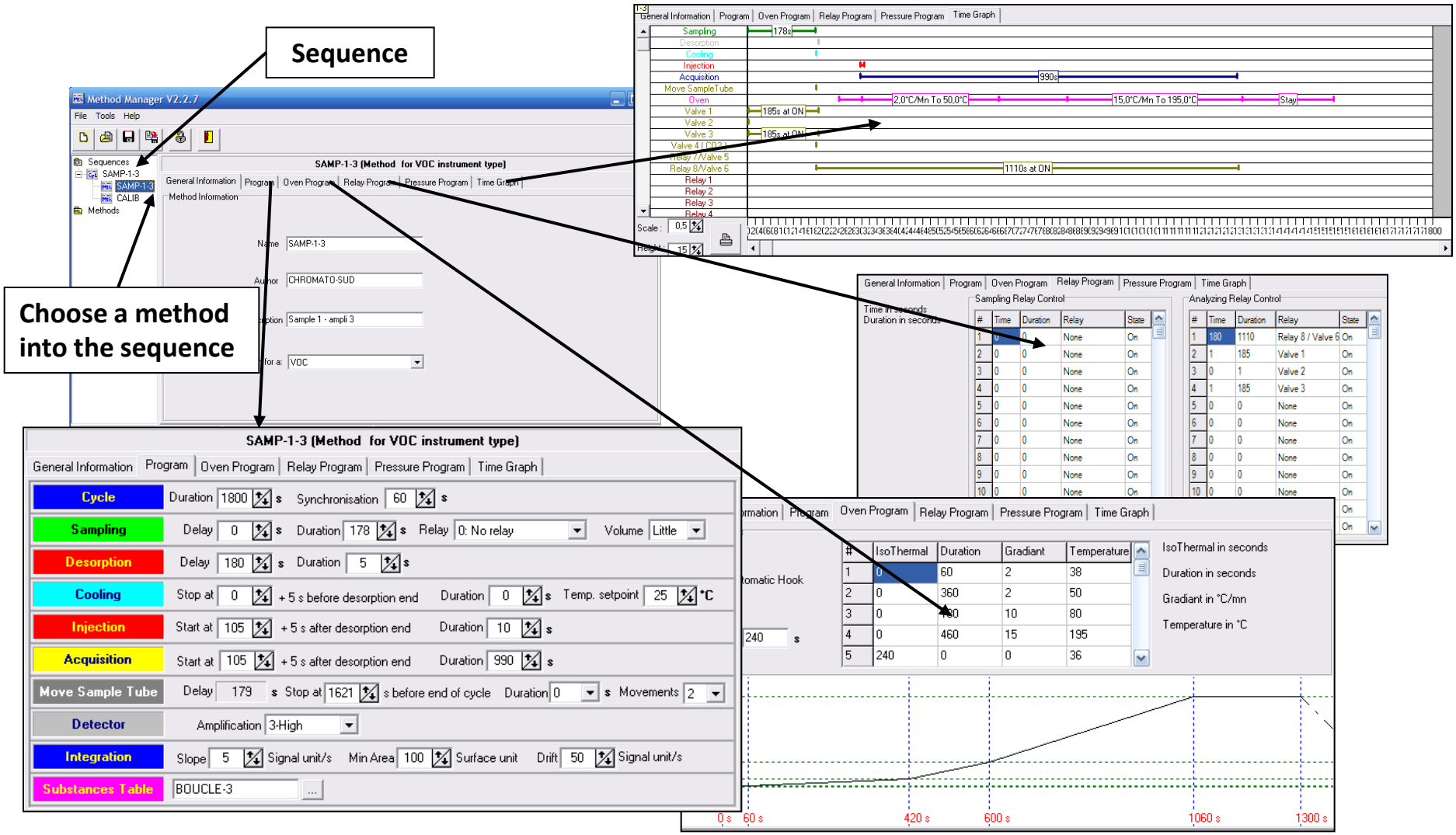




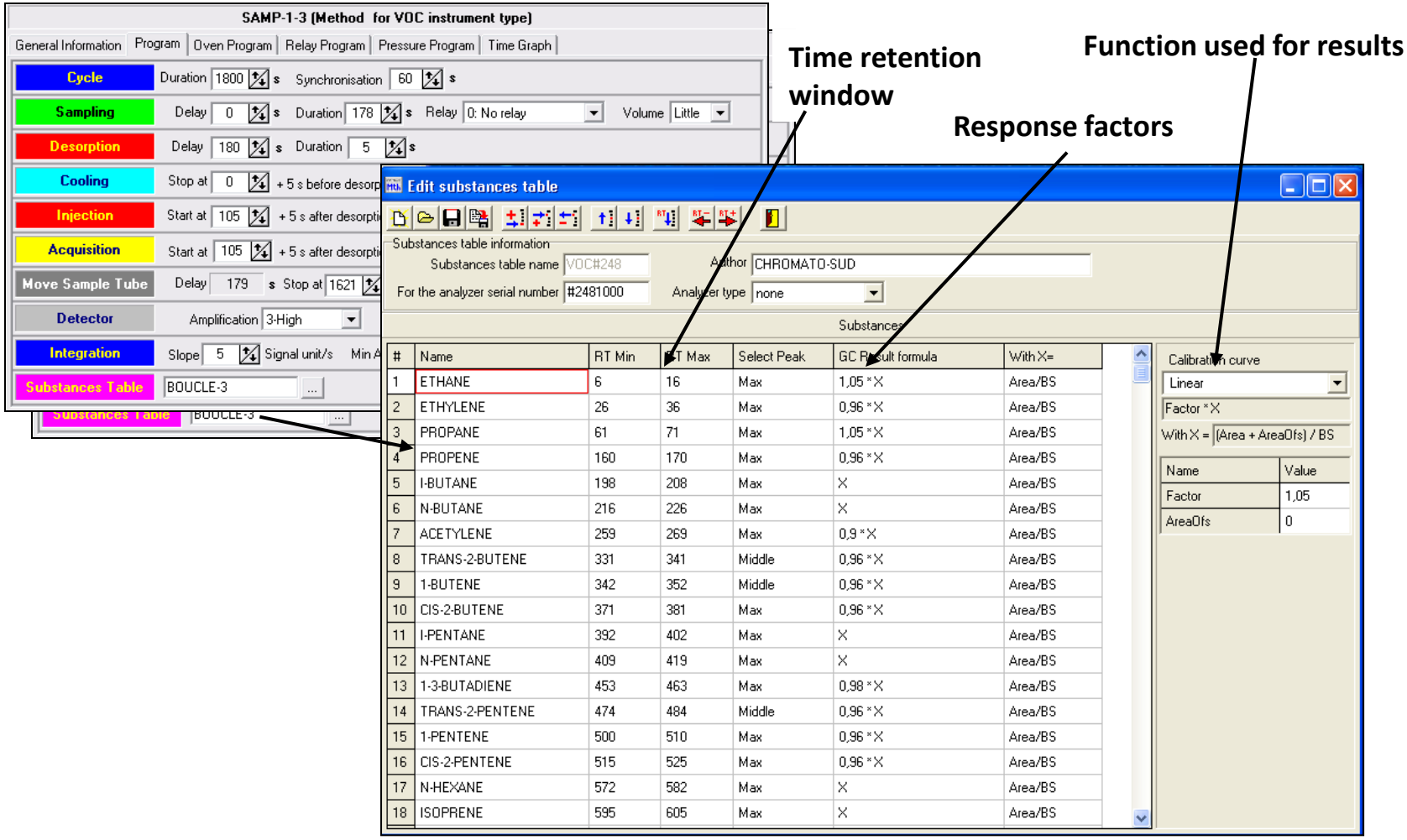
1 – Double click to choose a method
2 – Choose the number of methods
3 – Click on “INSERT” to validate

4 – Save the sequence: File Save As…

METHOD MANAGER

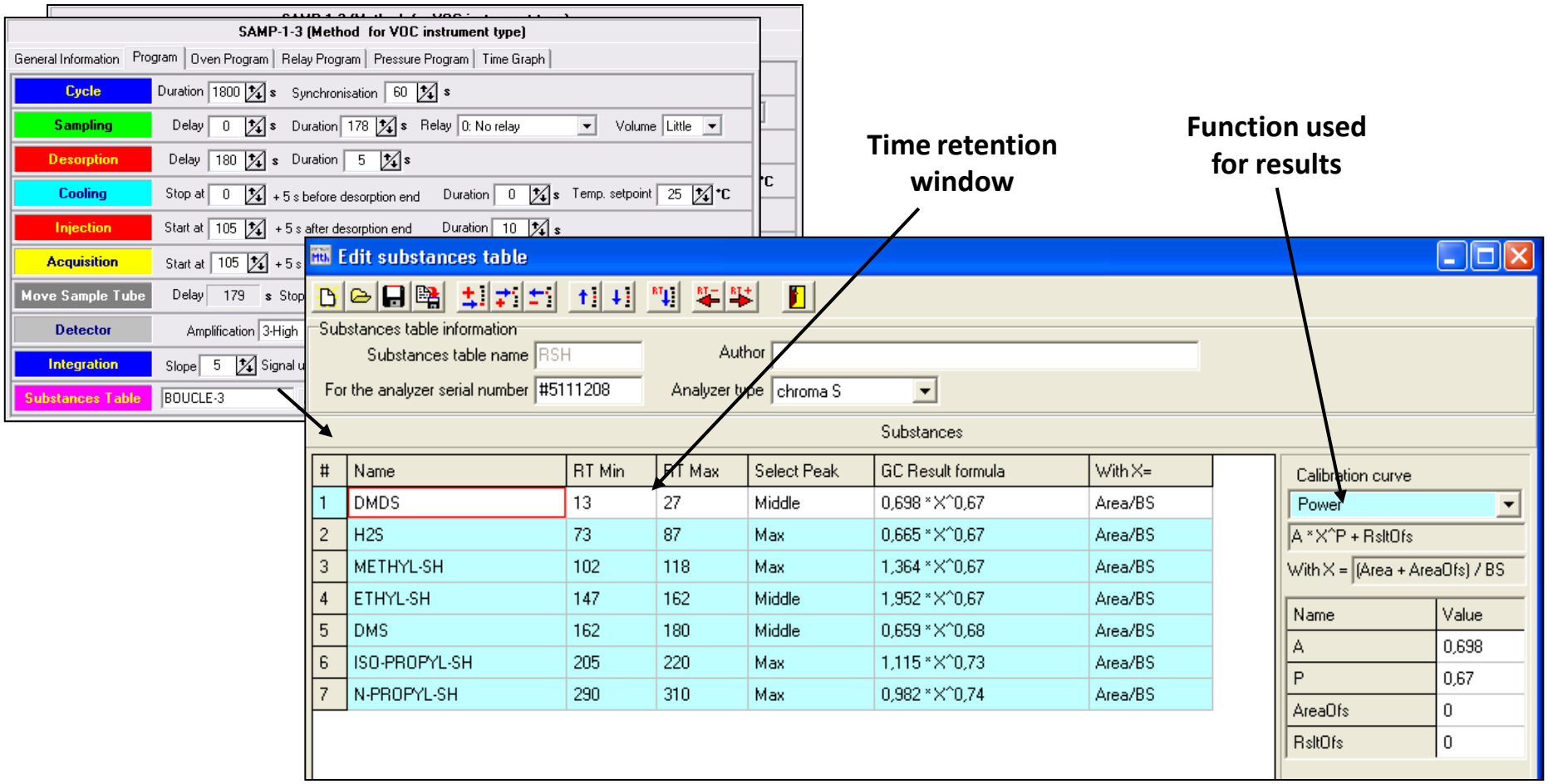


METHOD MANAGER



#	Name	RT Min	RT Max	Select Peak	GC Result formula	With X=
1	ETHANE	6	16	Max	1,05 * X	Area/BS
2	ETHYLENE	26	36	Max	0,96 * X	Area/BS
3	PROPANE	61	71	Max	1,05 * X	Area/BS
4	PROPENE	160	170	Max	0,96 * X	Area/BS
5	I-BUTANE	198	208	Max	X	Area/BS
6	N-BUTANE	216	226	Max	X	Area/BS
7	ACETYLENE	259	269	Max	0,9 * X	Area/BS
8	TRANS-2-BUTENE	331	341	Middle	0,96 * X	Area/BS
9	1-BUTENE	342	352	Middle	0,96 * X	Area/BS
10	CIS-2-BUTENE	371	381	Max	0,96 * X	Area/BS
11	I-PENTANE	392	402	Max	X	Area/BS
12	N-PENTANE	409	419	Max	X	Area/BS
13	1-3-BUTADIENE	453	463	Max	0,98 * X	Area/BS
14	TRANS-2-PENTENE	474	484	Middle	0,96 * X	Area/BS
15	1-PENTENE	500	510	Max	0,96 * X	Area/BS
16	CIS-2-PENTENE	515	525	Max	0,96 * X	Area/BS
17	N-HEXANE	572	582	Max	X	Area/BS
18	ISOPRENE	595	605	Max	X	Area/BS

METHOD MANAGER

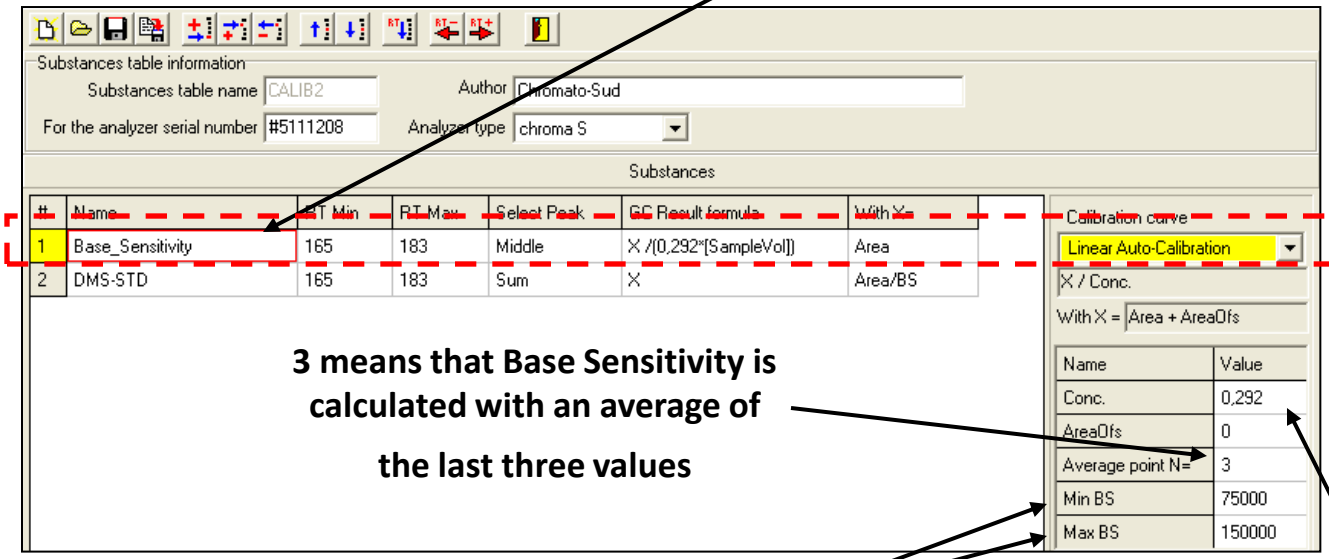


#	Name	RT Min	RT Max	Select Peak	GC Result formula	With X=
1	DMDS	13	27	Middle	0,698 * X^0,67	Area/BS
2	H2S	73	87	Max	0,665 * X^0,67	Area/BS
3	METHYL-SH	102	118	Max	1,364 * X^0,67	Area/BS
4	ETHYL-SH	147	162	Middle	1,952 * X^0,67	Area/BS
5	DMS	162	180	Middle	0,659 * X^0,68	Area/BS
6	ISO-PROPYL-SH	205	220	Max	1,115 * X^0,73	Area/BS
7	N-PROPYL-SH	290	310	Max	0,982 * X^0,74	Area/BS

Function: $Y = A \times X^P$

METHOD MANAGER (CALIBRATION / AUTO-CALIBRATION SUBSTANCES TABLE)

Special line for auto-calibration (calculation of the new Base Sensitivity thanks to the known standard calibration concentration)

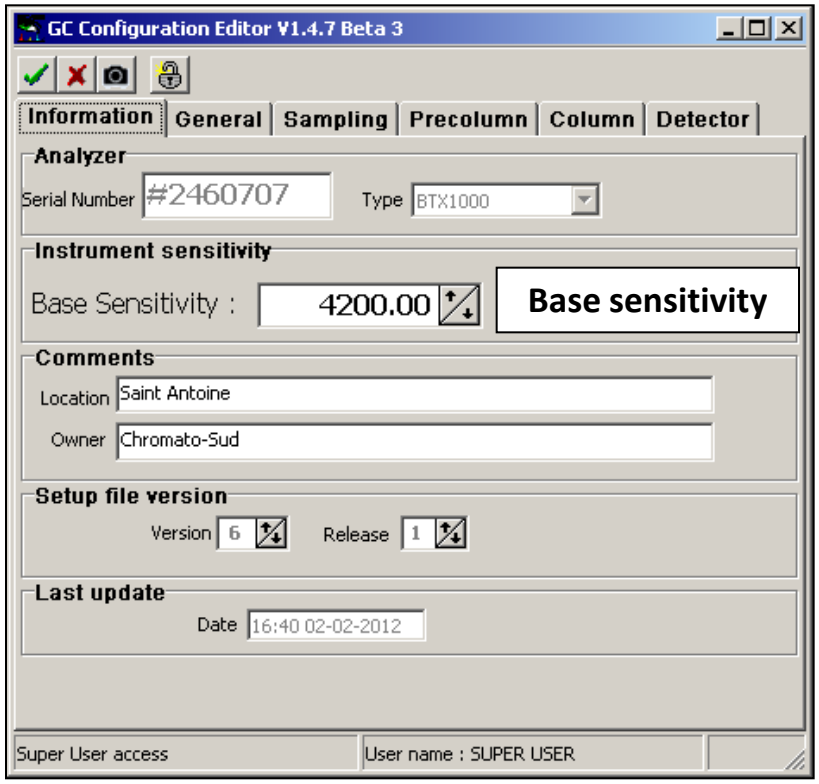


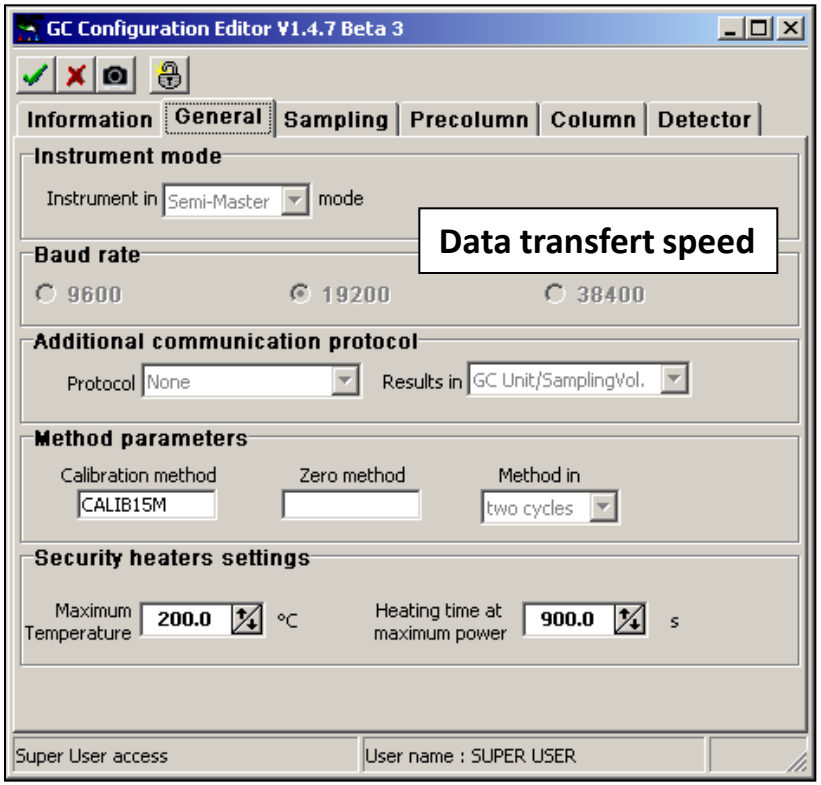
3 means that Base Sensitivity is calculated with an average of the last three values

Alarm Window (known concentration of the standard +-X%)

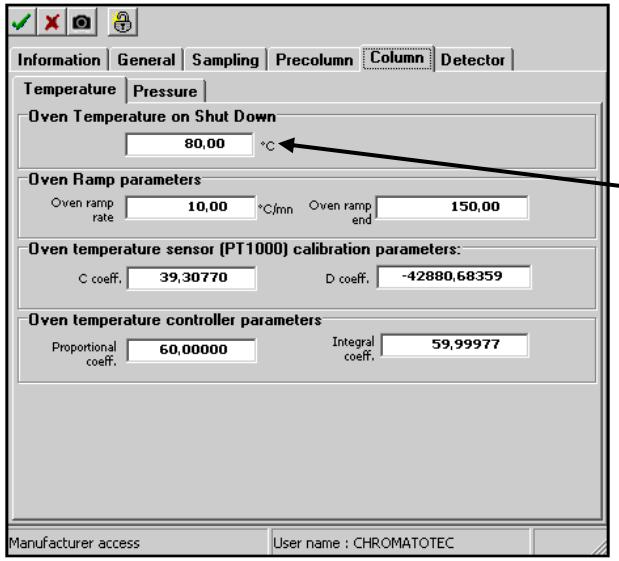
Known concentration of the calibration standard (mg/m3)

SETUP THE GC

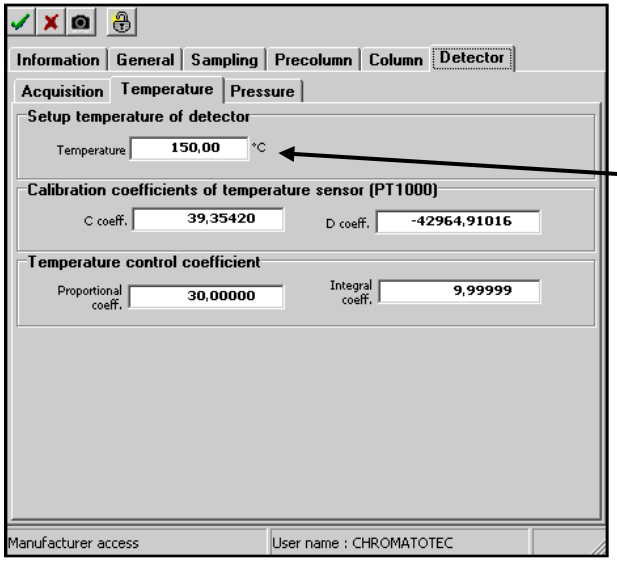

GC Configuration Editor V1.4.7 Beta 3
Information
General
Sampling
Precolumn
Column
Detector
Analyzer
Serial Number
#2460707
Type
BTX1000
Instrument sensitivity
Base Sensitivity :
4200.00
Base sensitivity
Comments
Location
Saint Antoine
Owner
Chromato-Sud
Setup file version
Version
6
Release
1
Last update
Date
16:40 02-02-2012
Super User access
User name : SUPER USER


GC Configuration Editor V1.4.7 Beta 3
Information
General
Sampling
Precolumn
Column
Detector
Instrument mode
Instrument in
Semi-Master
mode
Data transfert speed
Baud rate
9600
19200
38400
Additional communication protocol
Protocol
None
Results in
GC Unit/SamplingVol.
Method parameters
Calibration method
CALIB15M
Zero method
Method in
two cycles
Security heaters settings
Maximum Temperature
200.0
°C
Heating time at maximum power
900.0
s
Super User access
User name : SUPER USER

SETUP THE GC



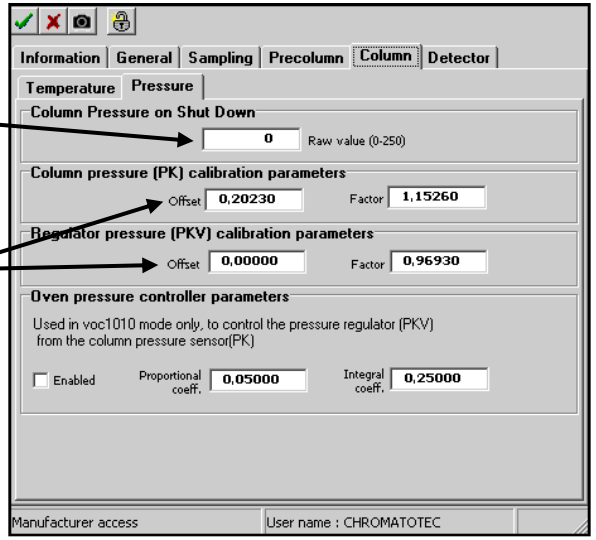
Temperature of the column oven when the analyzer is in stand by mode

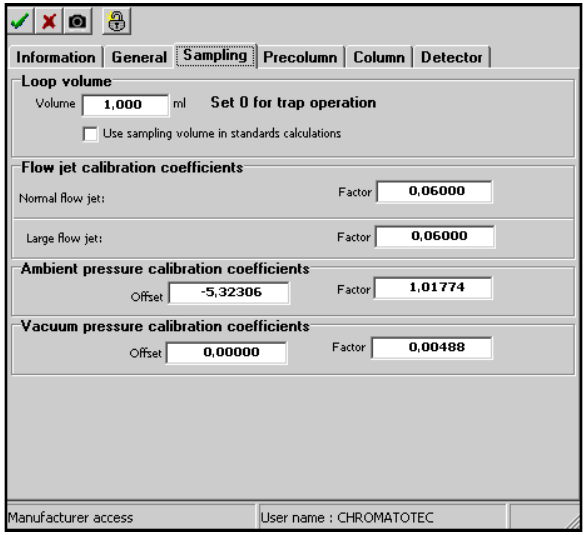


Temperature of the detector (or permeation oven for MEDORS analyzers)

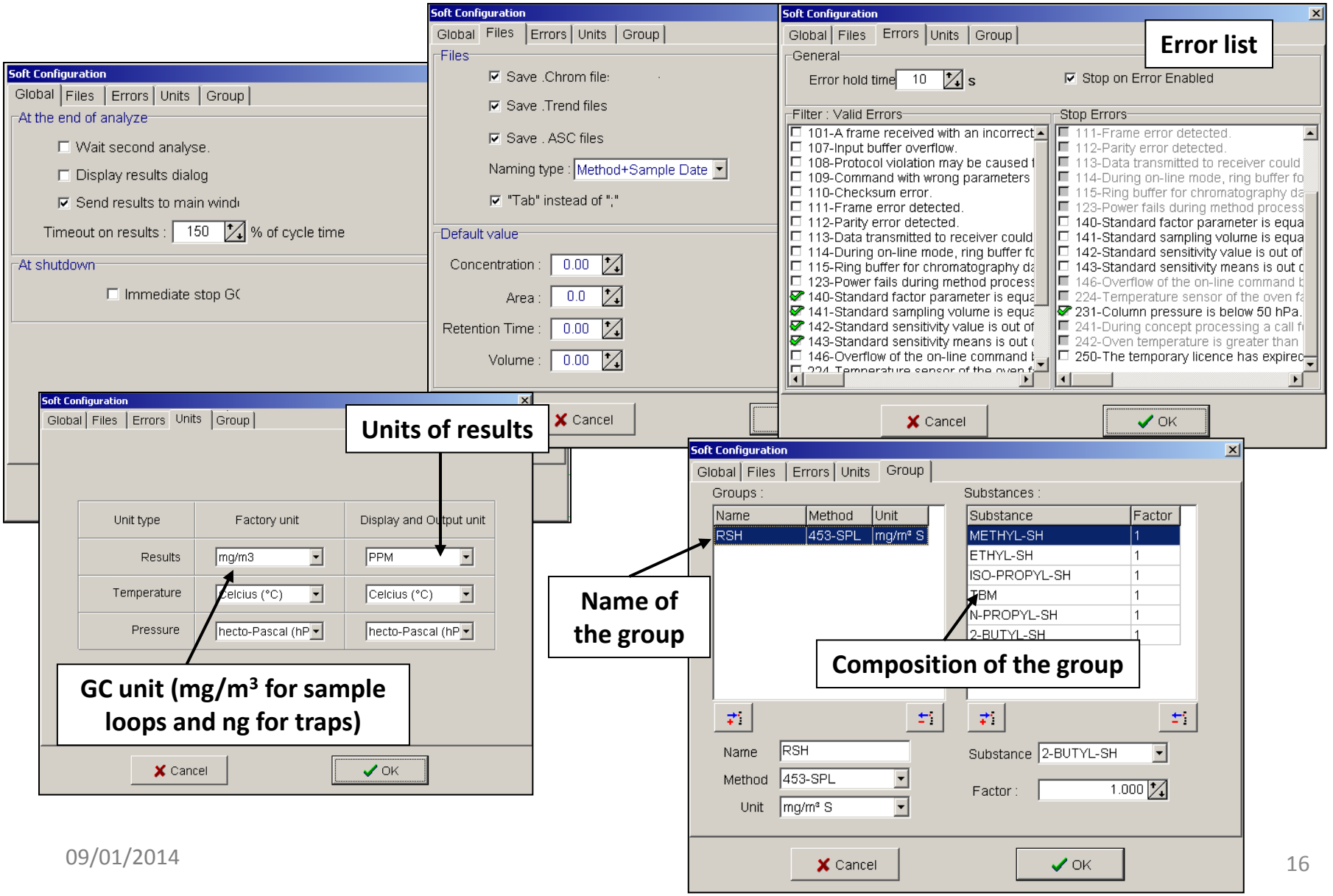
Control of piezo valve

Preset values for pressure regulators



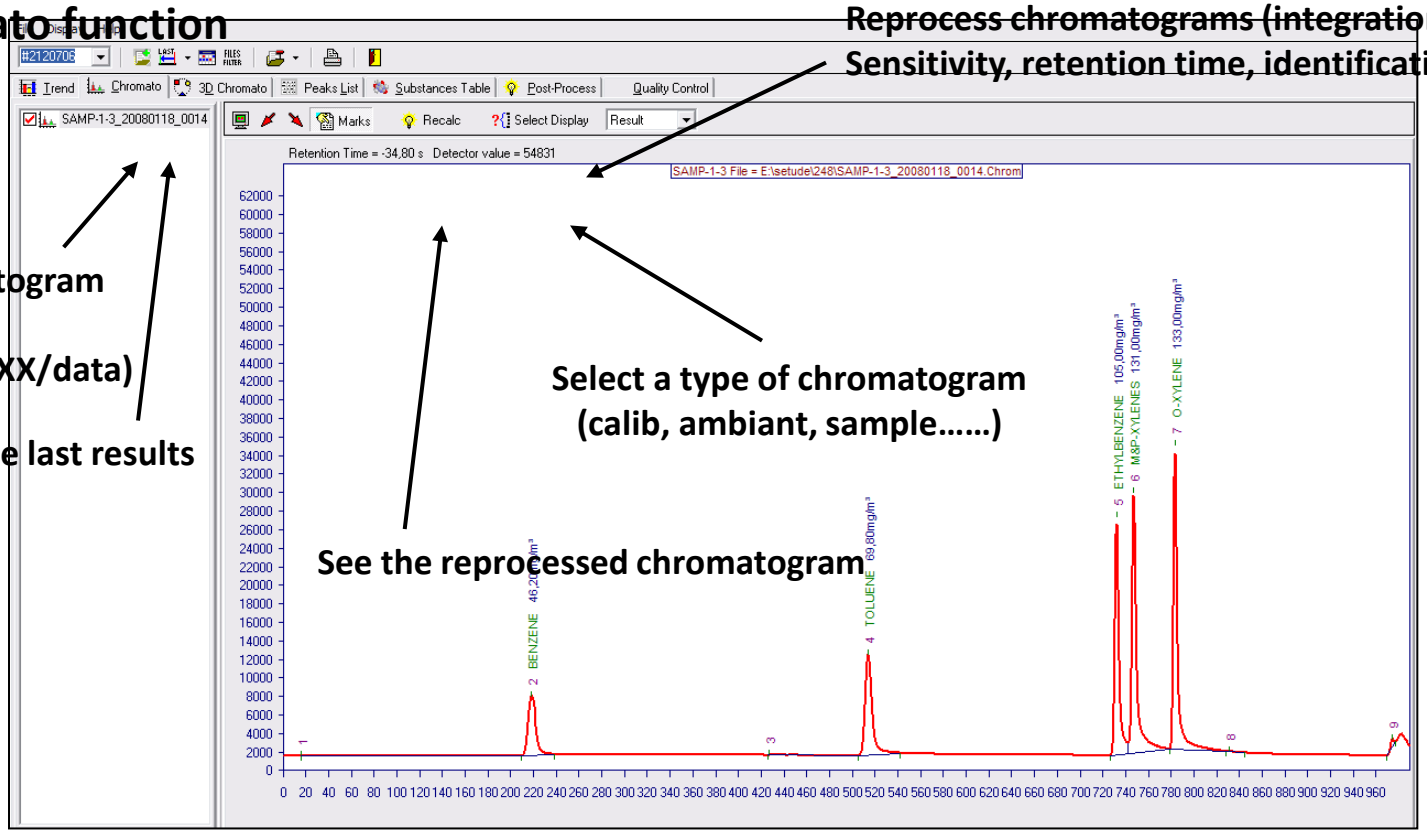


SOFT CONFIGURATION



PEAK VIEWER

- **Chromato function**



Reprocess chromatograms (integration, Base Sensitivity, retention time, identification…)

Open a chromatogram (located into E:Data/#XXXXXXX/data)

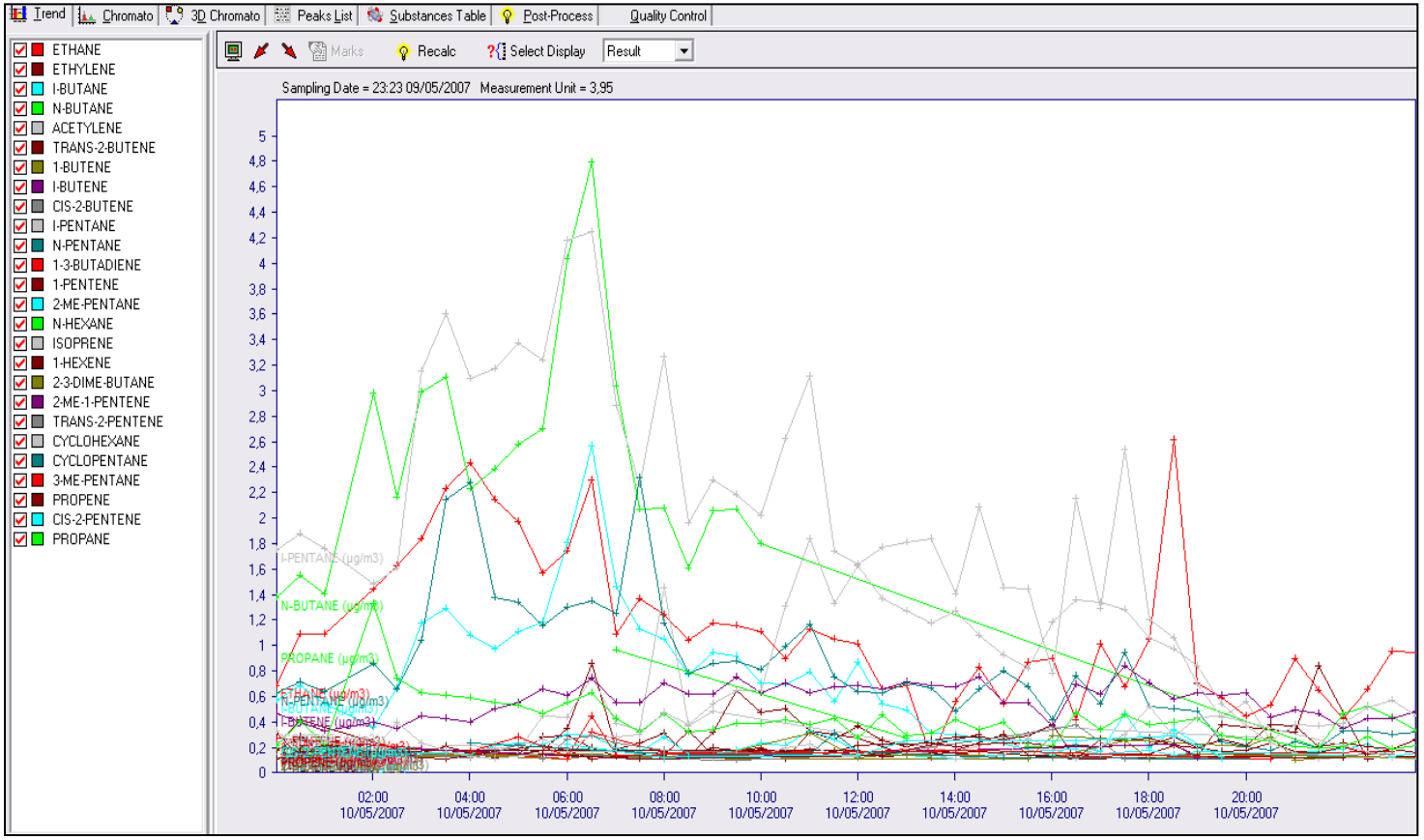
See last results

Select a type of chromatogram (calib, ambiant, sample……)

See the reprocessed chromatogram

PEAK VIEWER

- **Trend function (follow a parameter during the time)**



PEAK VIEWER

- **Post process function**

1) Select chromatograms you want to reprocess

2) Select Post process tab

3) Select the substances table

4) Select the unit of your BS (ng for trap or mg/m^3 for loop) and of your results

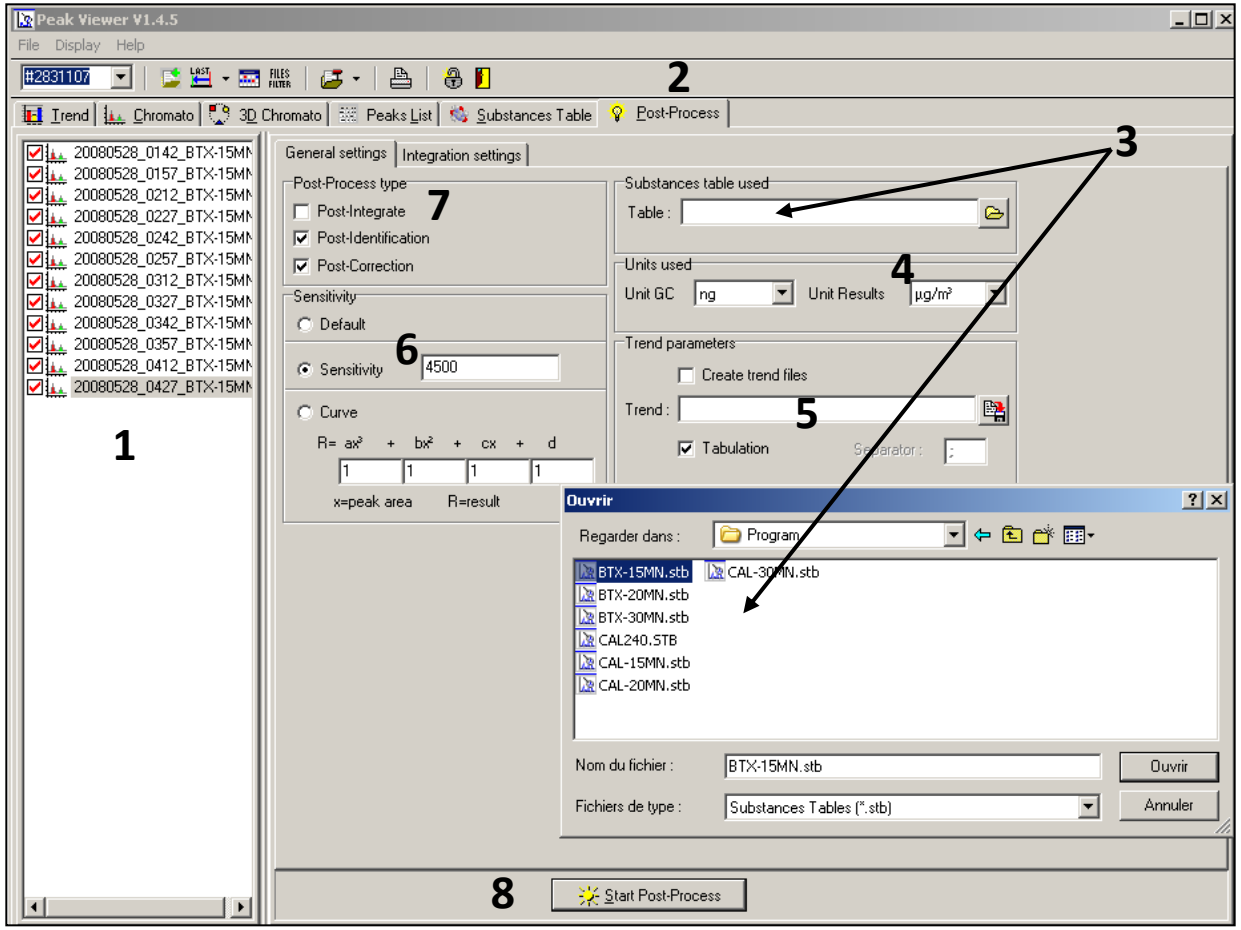
5) Create ASCII files

6) Give a BS value

7) Retreatment functions

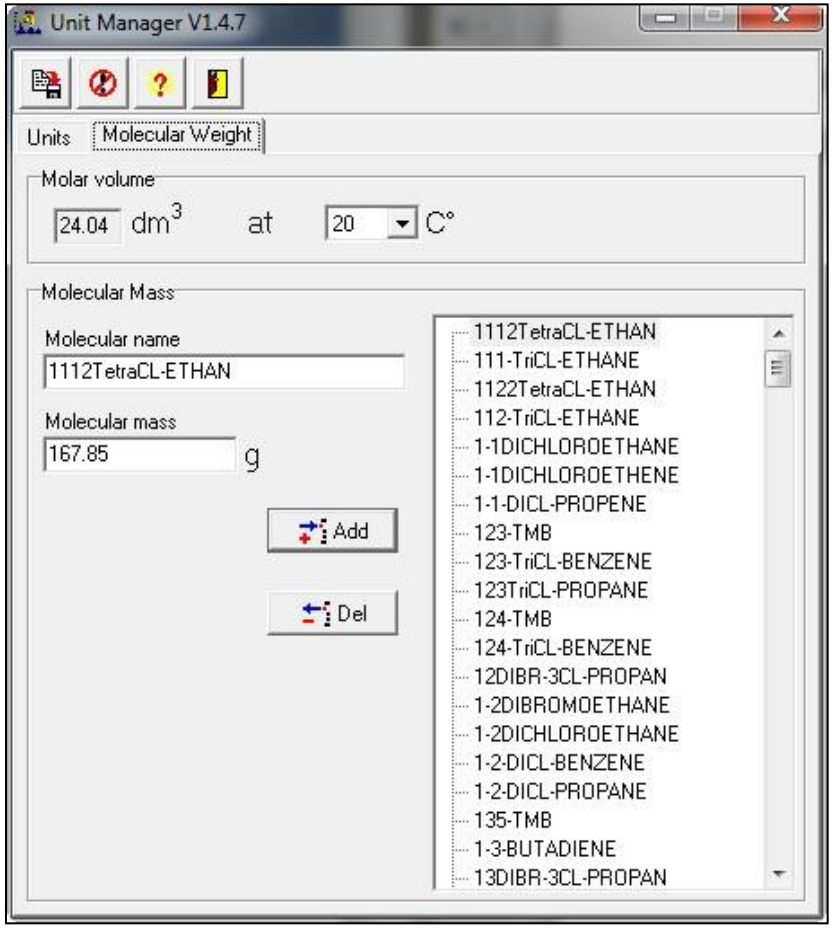
8) Click on Start Process

9) Select Chromato tab and click on « Recalc » to see the chromatogram post calculated.



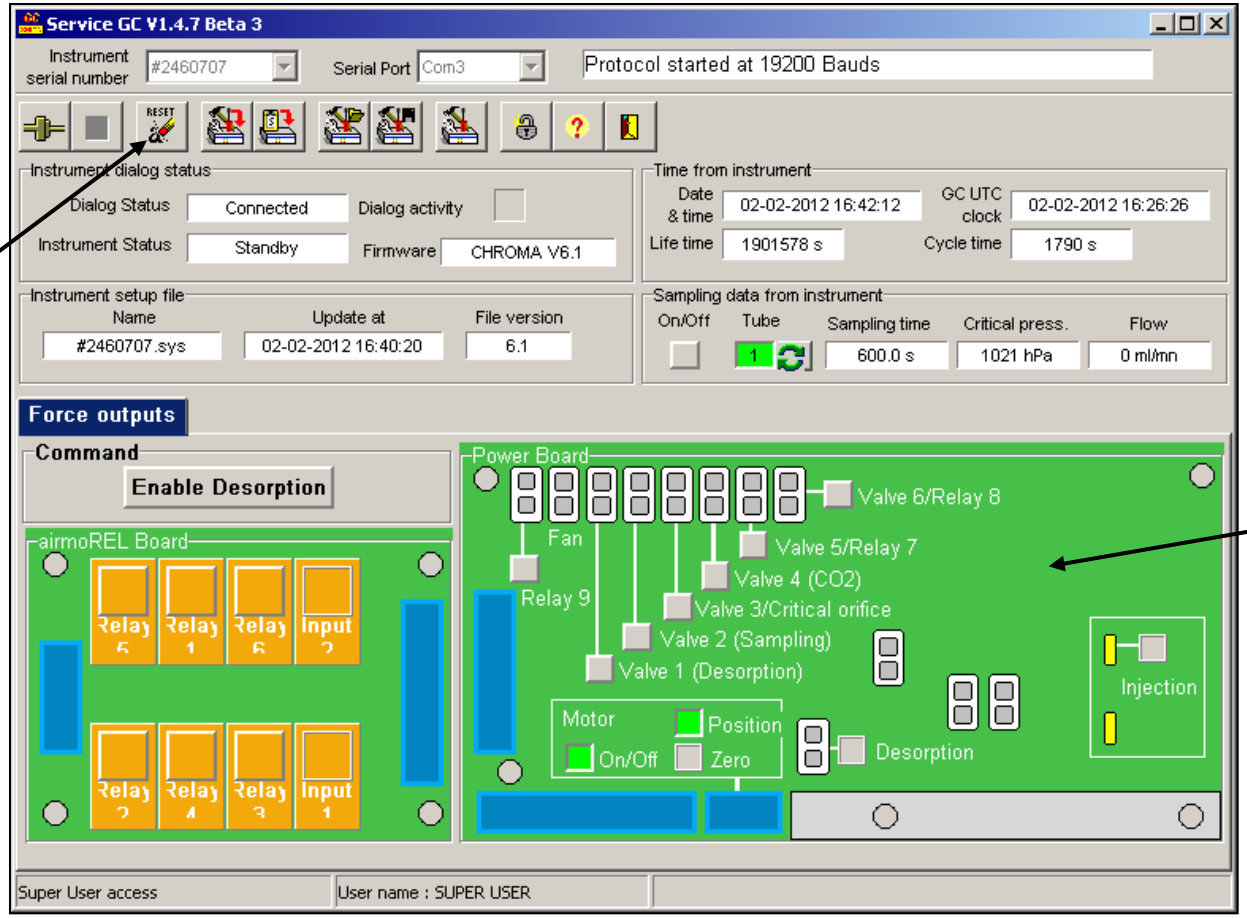
UNIT MANAGER

- **D:Application/Vistachrom/UnitManager**



SERVICE GC

- **D:Application/Vistachrom/ServiceGC**



Reset of analyzer

Control the relays and valves of the analyzer

Thank you for your attention !