



Clarity™

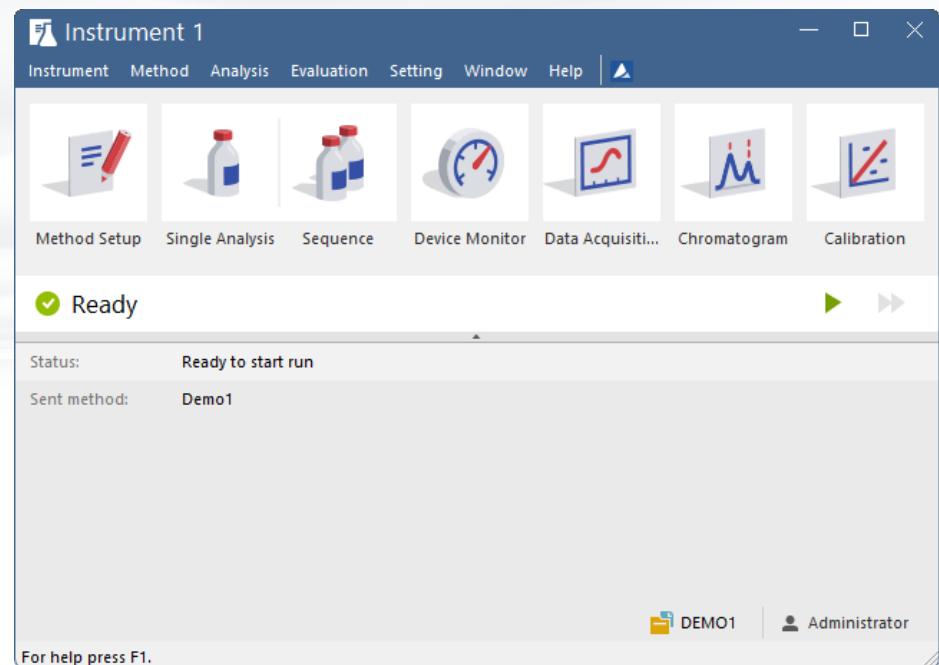
ADVANCED CHROMATOGRAPHY SOFTWARE

CLARITY TRAINING

ADVANCED – PART 2

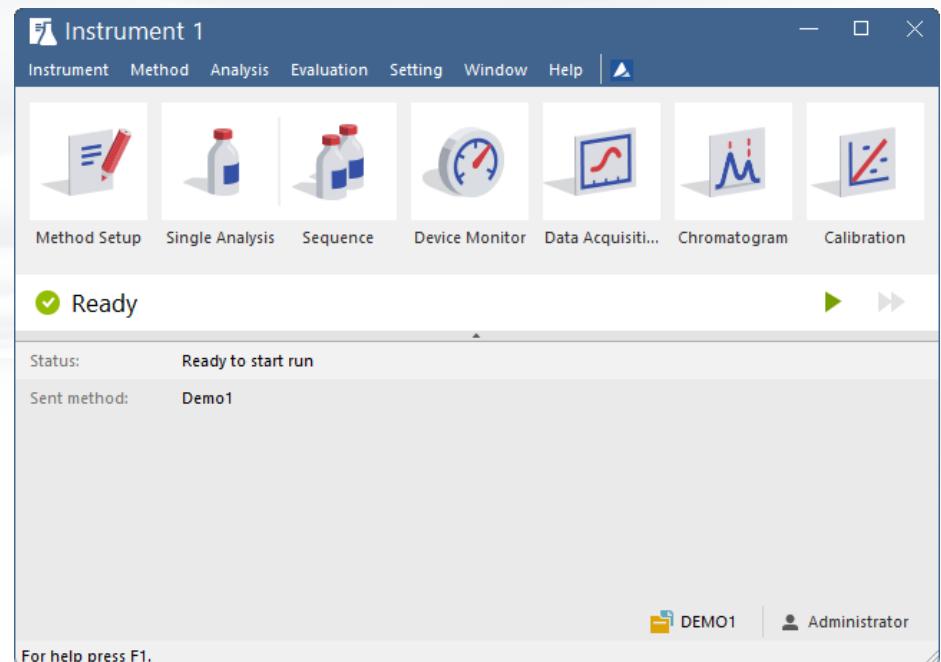
AGENDA

- Chromatogram window
 - Column setup, User columns, Noise & Drift
 - Mathematical operations, Labels
 - Result table, User variables
 - Summary table, Performance table
 - Force peak name, Peak coloring, Graph properties
- Calibration
 - LOD, LOQ
 - Calibration Options, Manual Calibration
 - Details of Calibration Point
 - Bracketing and Standard Addition
- Calculations
 - ISTD, Normalized %
- Groups



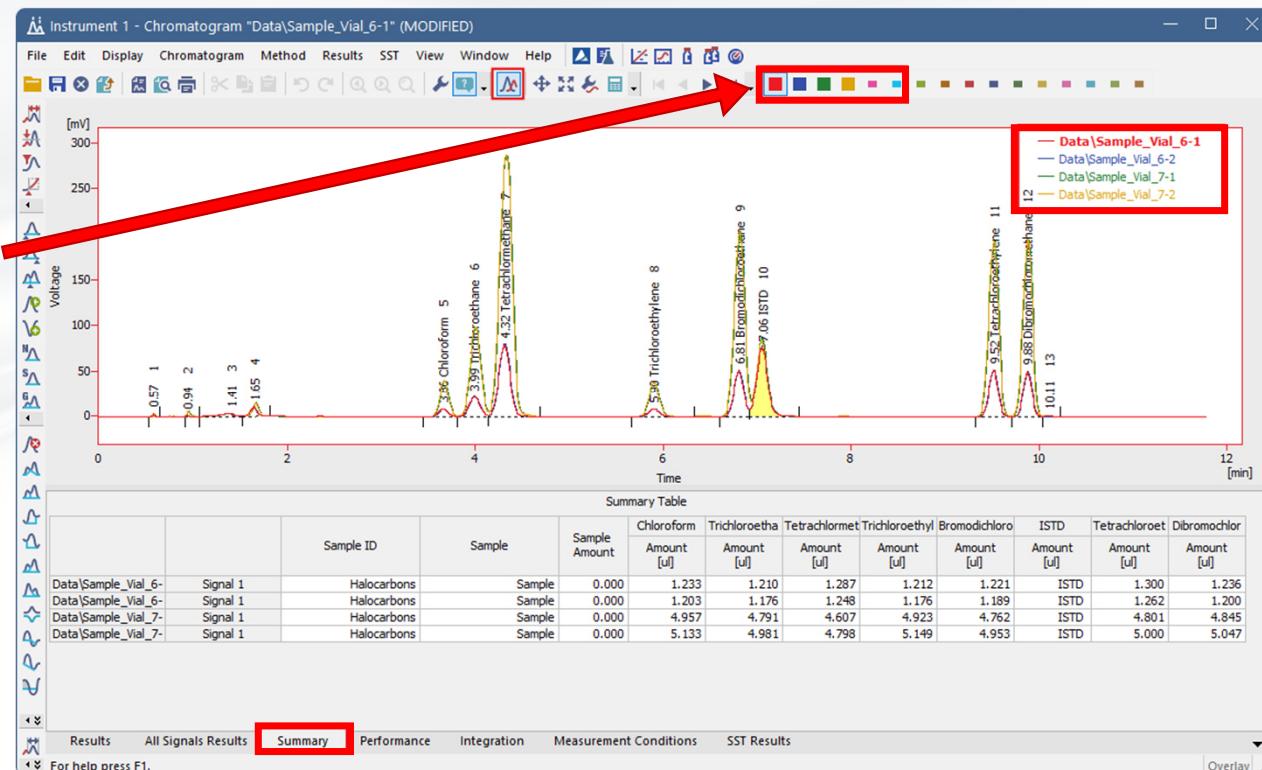
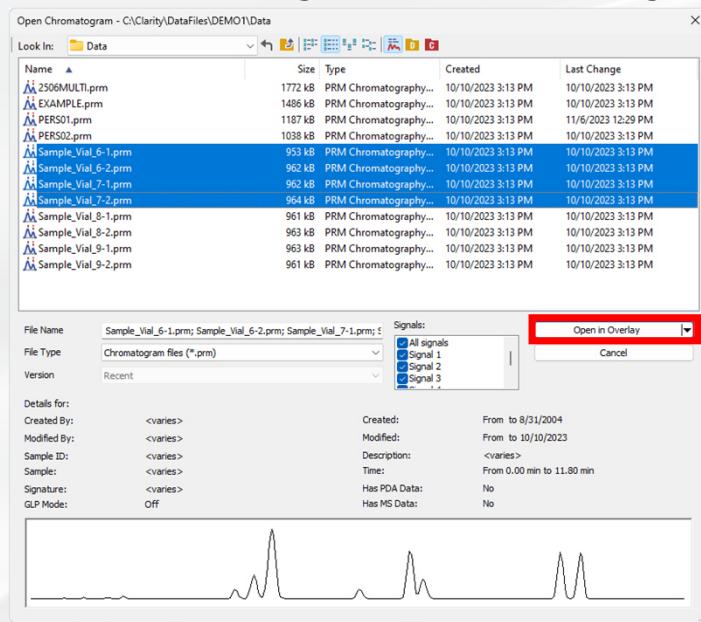
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CHROMATOGRAM WINDOW OVERLAY

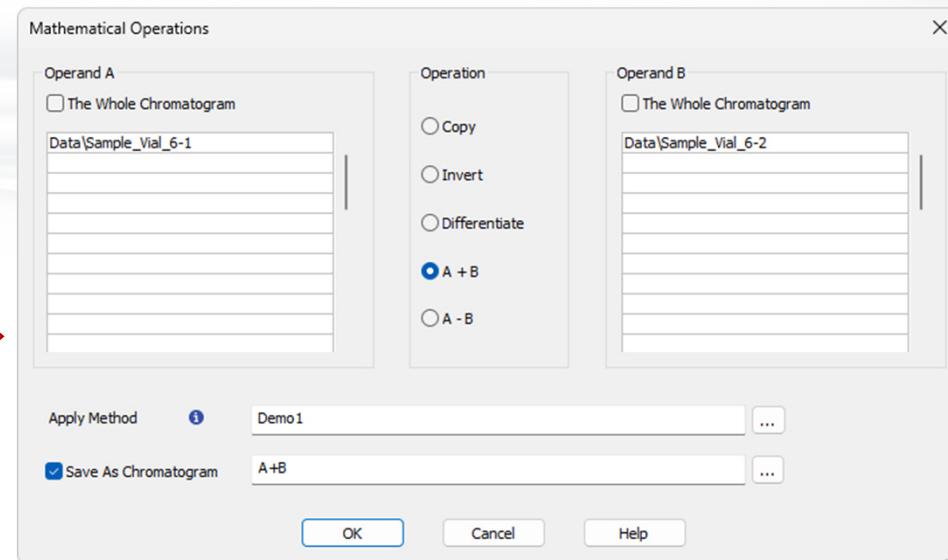
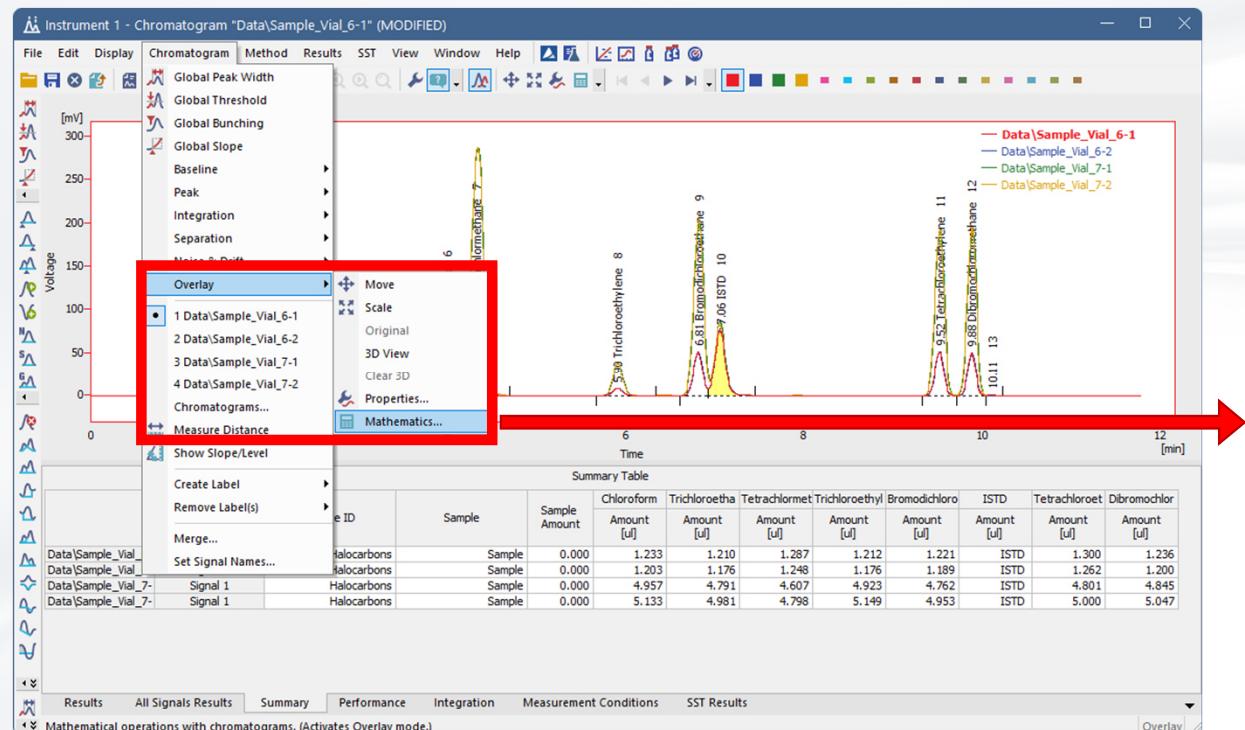
- Comparing multiple chromatograms
 - Max. number is set in User Options
- Summary table shows results of the displayed chromatograms/signals
- Hide/show signals via Ctrl+Click on signal color



CHROMATOGRAM WINDOW

MATHEMATICAL OPERATIONS

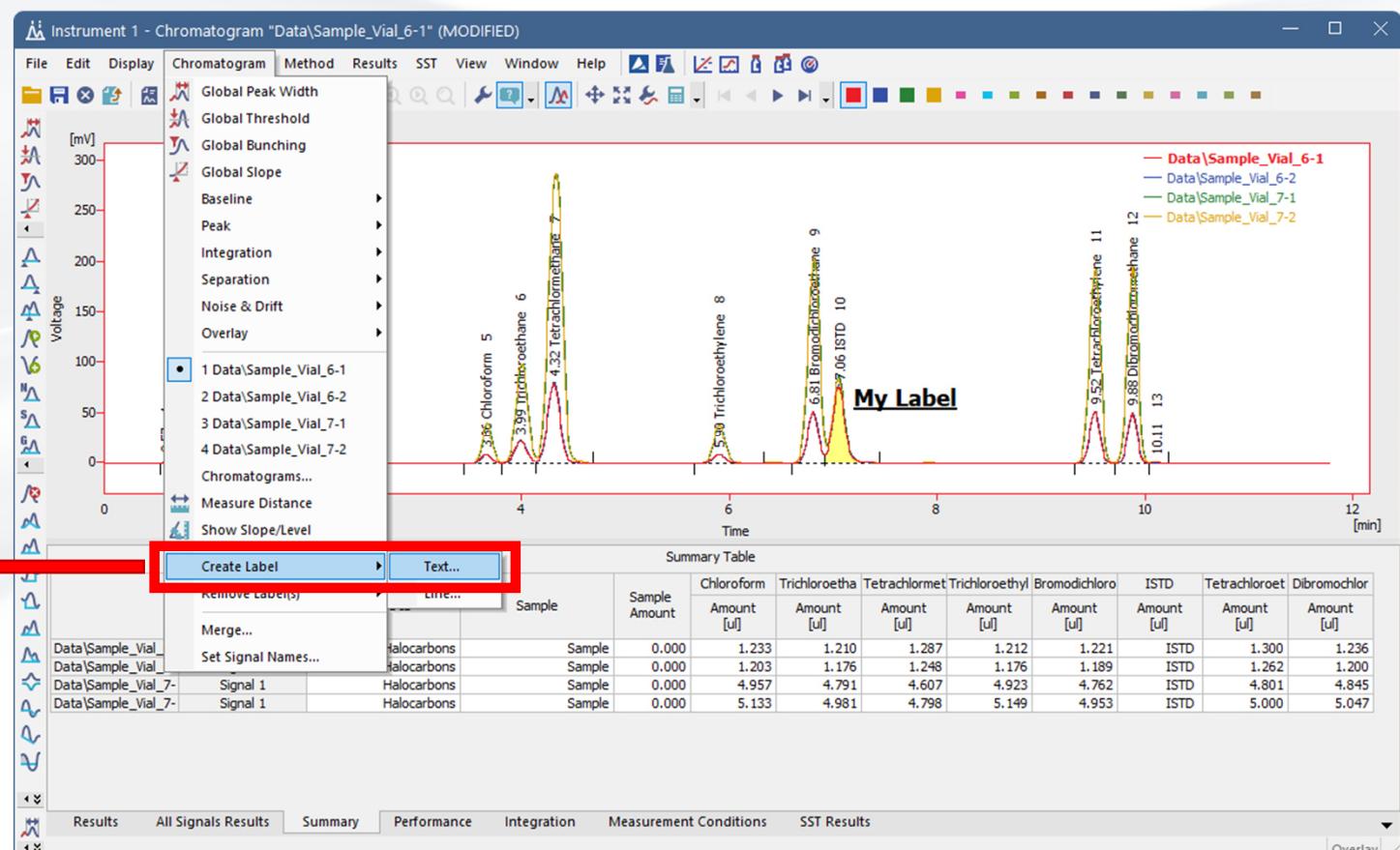
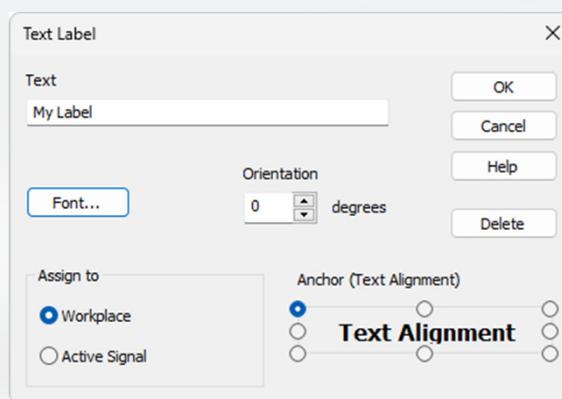
- Mathematical operations between signals/chromatograms



CHROMATOGRAM WINDOW

LABELS

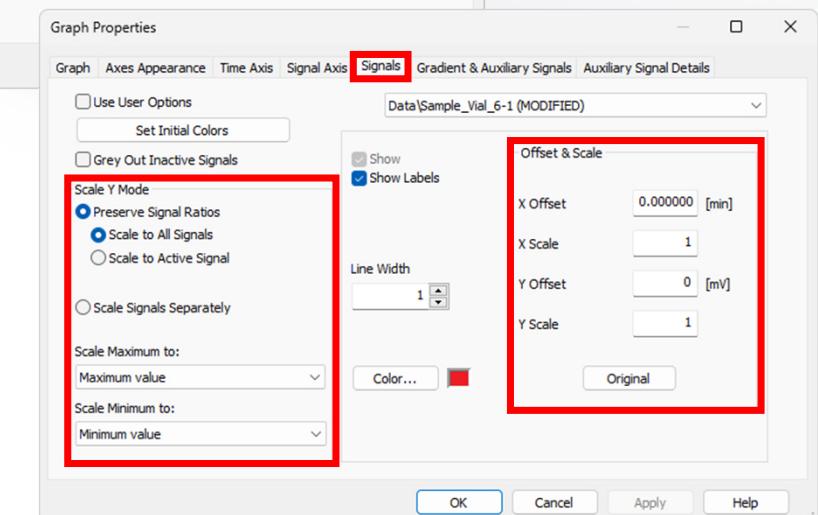
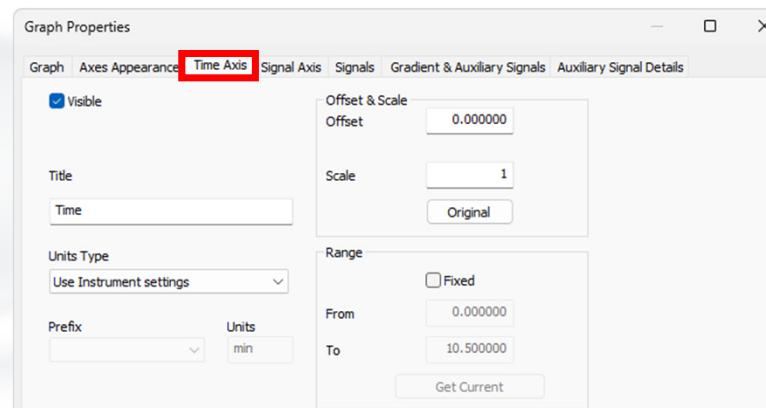
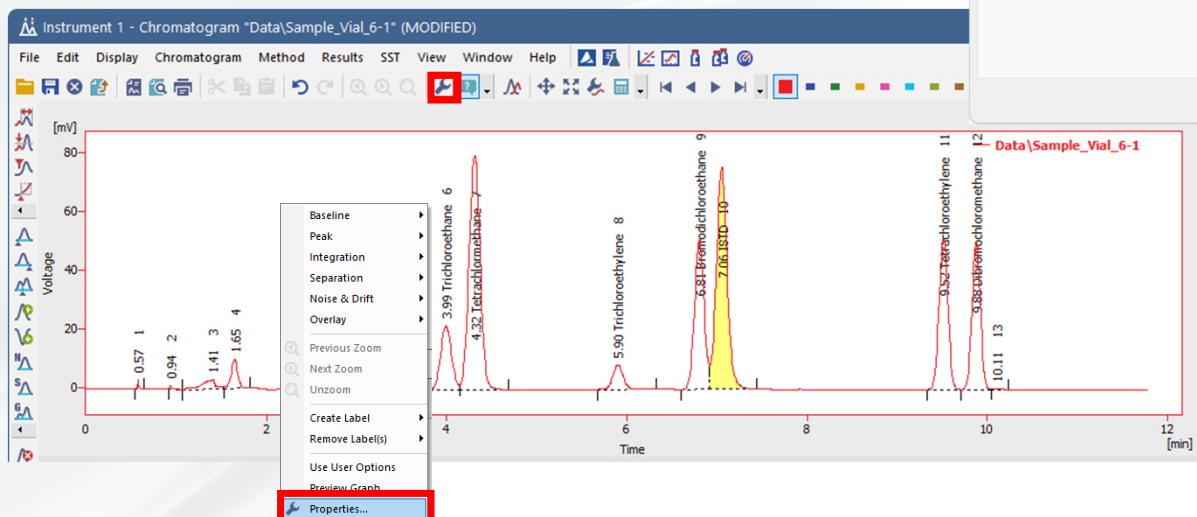
- Add text labels or lines



CHROMATOGRAM WINDOW

GRAPH PROPERTIES

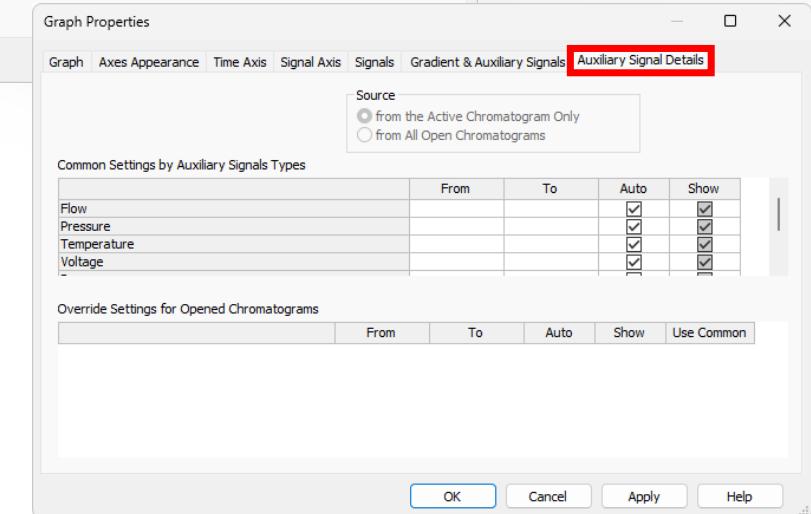
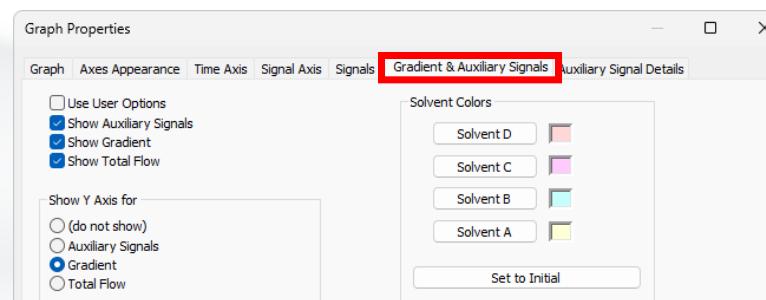
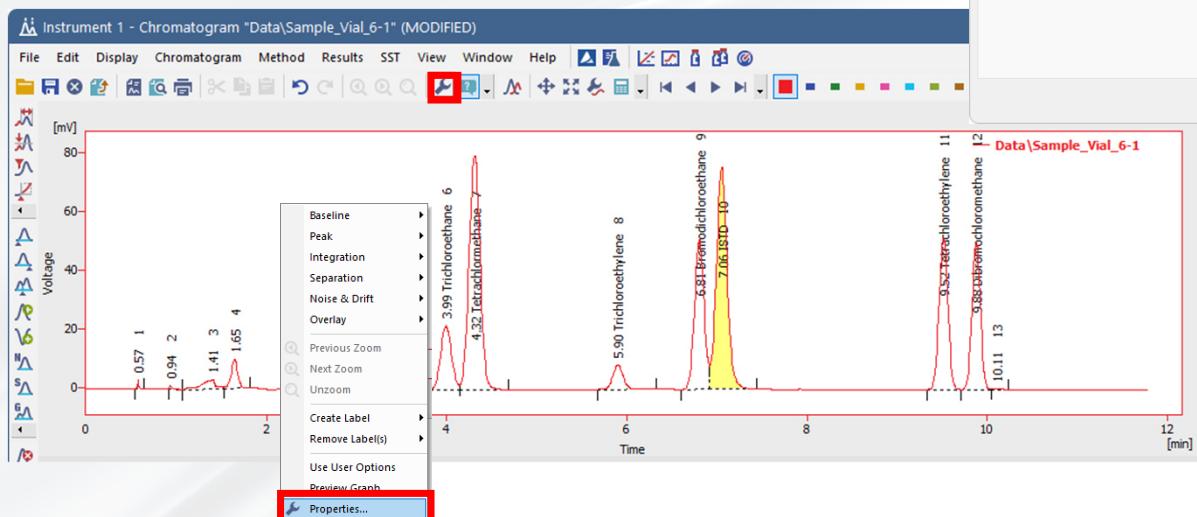
- Axis settings
- Signal scaling –general settings, settings for individual signals



CHROMATOGRAM WINDOW

GRAPH PROPERTIES

- Gradient display option
- Auxiliary signals options



CHROMATOGRAM WINDOW

SETUP COLUMNS

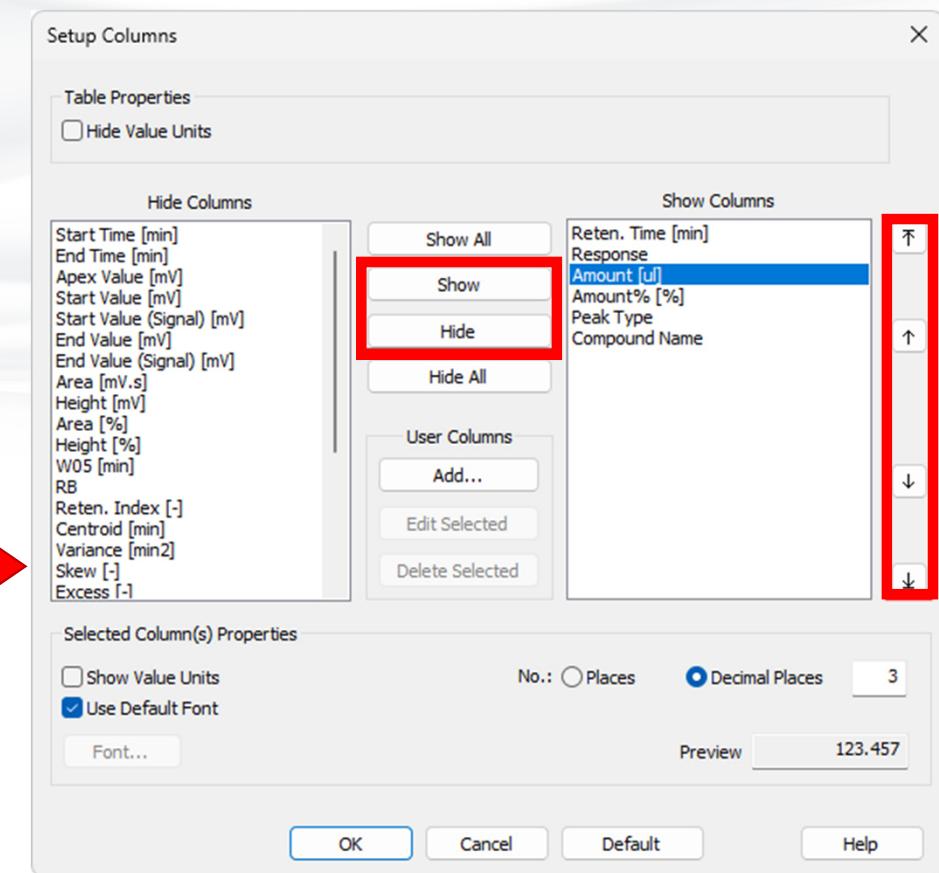
- Operable from the context menu of any table
- Hide/Show columns
- Change the order of columns

Result Table (ISTD - Data\Sample_Vial_6-2)

	Reten. Time [min]	Response	Amount [uL]	Amount% [%]	Peak Type	Compound Name
1	0.580	3.963	0.000	0.0		isobutane
2	0.940	2.035	0.000	0.0		chloroethane
3	1.400	35.640	0.000	0.0		trichloromethane
4	1.650	51.550	0.000	0.0		chloroethylene
5	3.667	62.733				1,1-dichloroethane
6	4.000	188.187				1,1-dichloroethylene
7	4.320	701.151				trichloroethylene
8	5.910	67.722				1,1,1-trichloroethane
9	6.817	387.435				1,1,2-trichloroethane
10	7.060	665.757				1,1,2,2-tetrachloroethane
11	9.527	363.746				1,1,2,2-tetrachloroethylene
12	9.887	333.096				1,1,2,2-tetrachloromethane
13	10.107	2.966				1,1,2,2-tetrachloroethane
	Total					

Results All Signals Results Summary Performance Integration Measurement Conditions SST Result

Setup columns



CHROMATOGRAM WINDOW

USER COLUMNS – RRT (RELATIVE RETENTION TIME)

- Access via context menu in Result/Summary table
- Add custom calculations
- Special values menu for more options
- Specify user variables

Result Table (ESTD - Data\2506MULTI - UV)						
	Reten. Time [min]	Response	Amount [g/l]	Amount% [%]	Peak Type	Compound Name
1	4.565	3.408	0.025	0.3	Ordn	oxalic
2	5.200				Ordn	citric
3	5.415				Ordn	tartaric
4	6.300				Ordn	malic
8	8.160				Ordn	succinic
9	8.550				Ordn	lactic
11	10.345				Ordn	acetic
C11	12.710					methanol
Total						

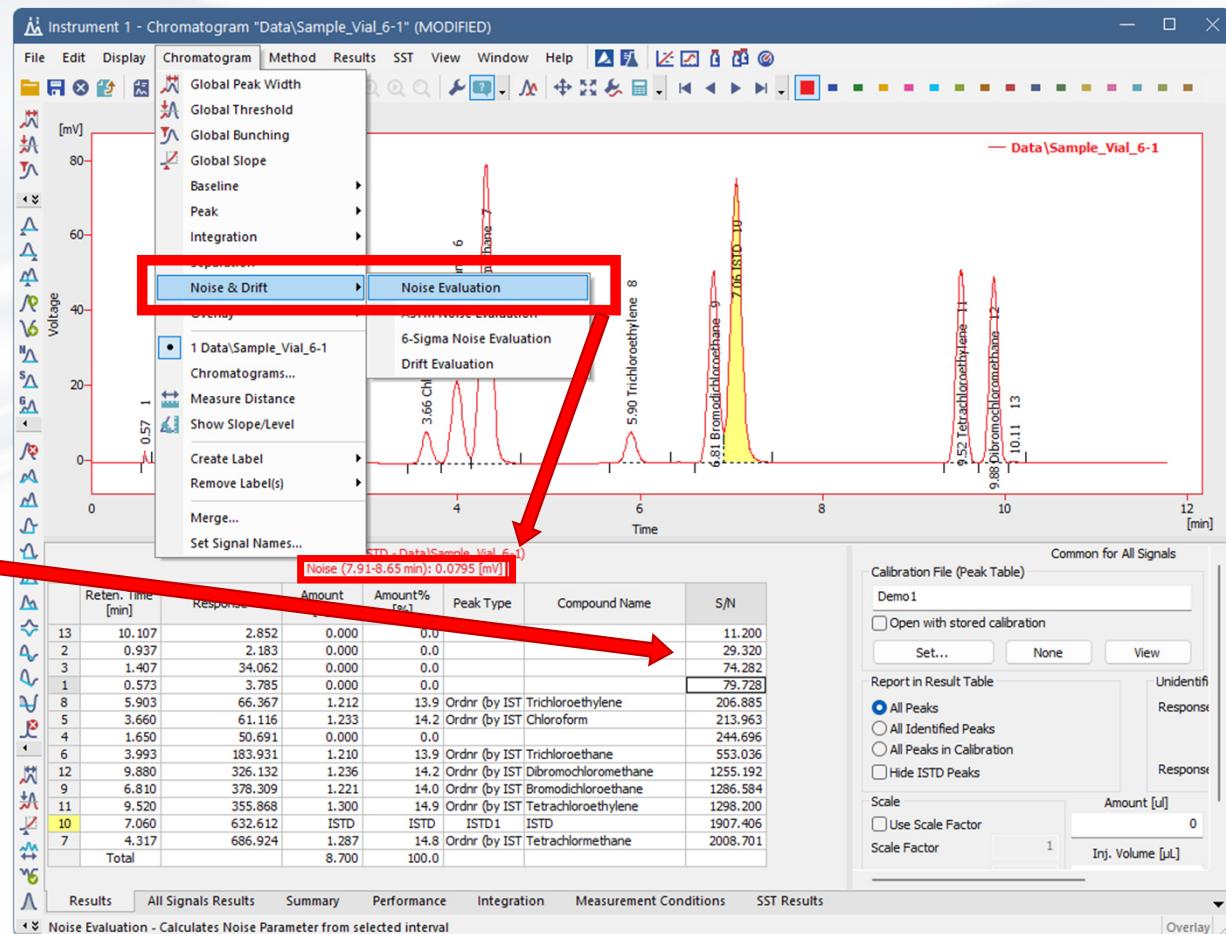
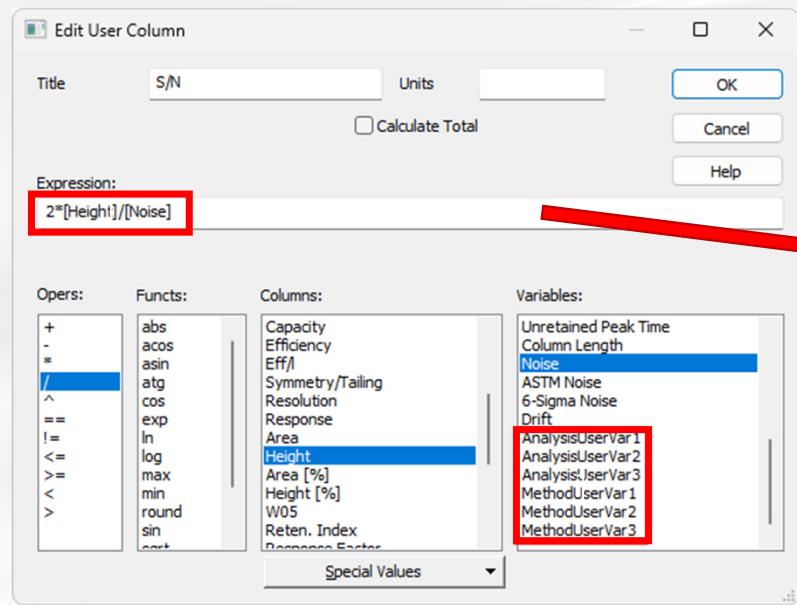
The screenshot shows the 'Add User Column' dialog box and a chromatogram table. The dialog box has 'RRT' in the 'Title' field and '[Reten. Time]/[citric\$Reten. Time]' in the 'Expression:' field. The 'Special Values' list in the dialog is highlighted with a red box and includes options like Sum, Average, Std. Deviation, Minimum, Maximum, First, Last, Previous, Next, and Compound. A red arrow points from the 'User Columns' context menu in the table to the 'Add...' option in the dialog. Another red arrow points from the 'Special Values' list in the dialog to the 'Special Values' column in the chromatogram table.

Compound Name	RRT
oxalic	0.878
citric	1.000
tartaric	1.041
malic	1.212
succinic	1.569
lactic	1.644
acetic	1.989
methanol	2.444
	11.778

CHROMATOGRAM WINDOW

USER COLUMNS – NOISE & DRIFT

- Set noise interval
- Add Signal/Noise calculation to a user column
- User variables can be used



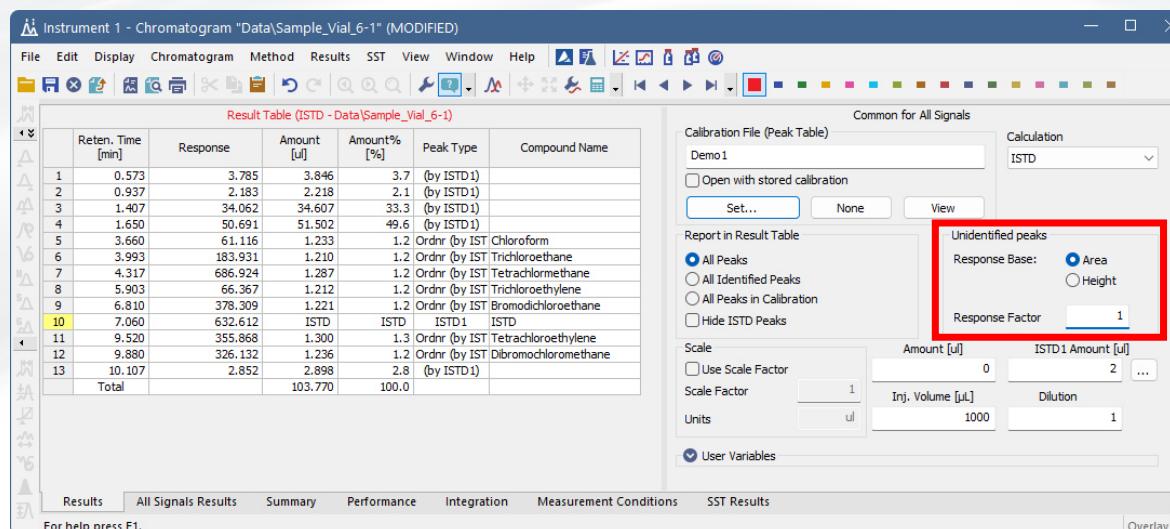
CHROMATOGRAM WINDOW

UNIDENTIFIED PEAKS – UNCALIBRATED RESPONSE

- Manually assign response base and factor to **unidentified peaks** (peaks not present in calibration)
- Calculation of amounts of unidentified (uncalibrated) compounds:

$$\text{Amount} = [\text{Response Base}] \times [\text{Response Factor}]$$

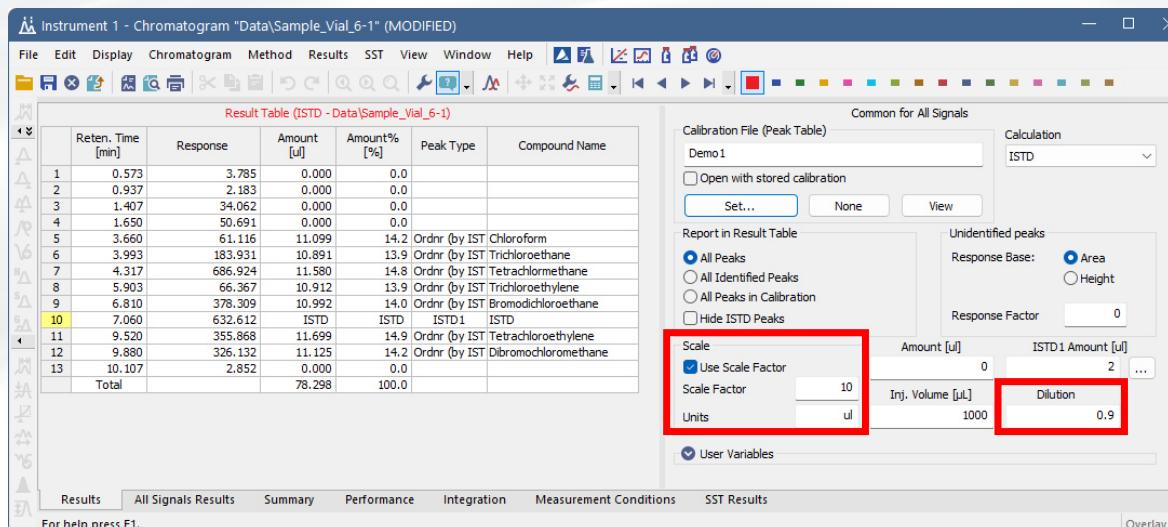
- Provides a “single-point quantification” of unidentified compounds (e.g., for universal response detectors like ELSD, FID, RI, etc.)



CHROMATOGRAM WINDOW

SCALE & DILUTION

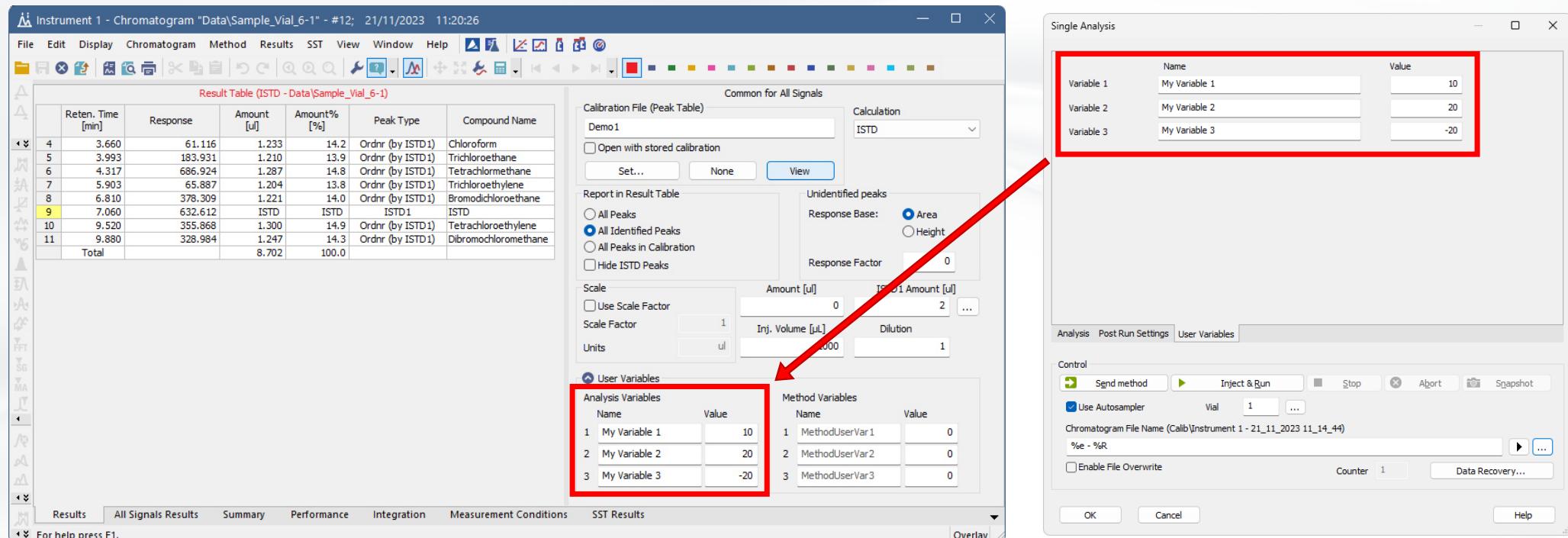
- **Scale** factor multiplies values in the Amount column and the Sample Amount (the entered units are used in the Amount when scaled, overriding the calibration settings)
 - Method-specific (can be used only when calibration is set)
- **Dilution** multiplies values in the Amount column
 - Sample-specific (can also be entered via Sequence or Single Analysis)



CHROMATOGRAM WINDOW

USER VARIABLES – ANALYSIS VARIABLES

- **Analysis Variables** are propagated from **Single Analysis** or Sequence to the measured chromatogram
 - These can be used for custom calculations in the Result Table



Instrument 1 - Chromatogram "Data\Sample_Vial_6-1" - #12; 21/11/2023 11:20:26

File Edit Display Chromatogram Method Results SST View Window Help

Result Table (ISTD - Data\Sample_Vial_6-1)

	Reten. Time [min]	Response	Amount [µL]	Amount [%]	Peak Type	Compound Name
4	3.660	61.116	1.233	14.2	Ordnr (by ISTD 1)	Chloroform
5	3.993	183.931	1.210	13.9	Ordnr (by ISTD 1)	Trichloroethane
6	4.317	686.924	1.287	14.8	Ordnr (by ISTD 1)	Tetrachlormethane
7	5.903	65.887	1.204	13.8	Ordnr (by ISTD 1)	Trichloroethylene
8	6.810	378.309	1.221	14.0	Ordnr (by ISTD 1)	Bromodichloroethane
9	7.060	632.612	ISTD	ISTD	ISTD1	ISTD
10	9.520	355.868	1.300	14.9	Ordnr (by ISTD 1)	Tetrachloroethylene
11	9.880	328.984	1.247	14.3	Ordnr (by ISTD 1)	Dibromochloromethane
	Total		8.702	100.0		

Common for All Signals

Calibration File (Peak Table) Demo 1 Calculation ISTD

Open with stored calibration Set... None View

Report in Result Table Unidentified peaks

All Peaks All Identified Peaks All Peaks in Calibration Hide ISTD Peaks

Response Base: Area Height

Response Factor 0

Scale Use Scale Factor Amount [µL] 15.01 Amount [µL] 2 ...

Scale Factor 1 Inj. Volume [µL] 1000 Dilution 1

Units µL

User Variables

Analysis Variables

Name	Value
1 My Variable 1	10
2 My Variable 2	20
3 My Variable 3	-20

Method Variables

Name	Value
1 MethodUserVar1	0
2 MethodUserVar2	0
3 MethodUserVar3	0

Analysis Post Run Settings User Variables

Control

Use Autosampler Vial 1 ...

Chromatogram File Name (Calib\Instrument 1 - 21_11_2023 11_14_44)
%e - %R

Enable File Overwrite Counter 1 Data Recovery...

OK Cancel Help

CHROMATOGRAM WINDOW

USER VARIABLES – ANALYSIS VARIABLES

- **Analysis Variables** are propagated from Single Analysis or **Sequence** to the measured chromatogram
 - These can be used for custom calculations in the Result Table

Instrument 1 - Chromatogram "Data\Sample_Vial_6-1" - #12; 21/11/2023 11:20:26

Instrument 1 - Sequence Demo1 (MODIFIED)

Result Table (ISTD - Data\Sample_Vial_6-1)

	Reten. Time [min]	Response	Amount [uL]	Amount [%]	Peak Type	Compound Name
4	3.660	61.116	1.233	14.2	Ordnr (by ISTD 1)	Chloroform
5	3.993	183.931	1.210	13.9	Ordnr (by ISTD 1)	Trichloroethane
6	4.317	686.924	1.287	14.8	Ordnr (by ISTD 1)	Tetrachlormethane
7	5.903	65.887	1.204	13.8	Ordnr (by ISTD 1)	Trichloroethylene
8	6.810	378.309	1.221	14.0	Ordnr (by ISTD 1)	Bromodichloroethane
9	7.060	632.612	ISTD	ISTD	ISTD	ISTD
10	9.520	355.868	1.300	14.9	Ordnr (by ISTD 1)	Tetrachloroethylene
11	9.880	328.984	1.247	14.3	Ordnr (by ISTD 1)	Dibromochloromethane
	Total		8.702	100.0		

Calibration File: Demo1

	Status	Run	SV	EV	I/V	Sample ID	Sample	Sample Amount	ISTD1	Sample Dilut.	Inj. Vol. [uL]	My Variable 1	My Variable 2	My Variable 3	File Name	Sample Type	Lvl	Method Name	Report Style	Open	Open Calib.	Print
1	1:1	1:A1	1:A1	1	1	Halocarbons	Std_1	0.400	2.000	1.000	5.00	10.000	20.000	-20.000	6Q	Stan	1	Demo1	Calibration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	1:B1	1:B1	1	1	1	Halocarbons	Std_2	1.000	2.000	1.000	5.00	10.000	20.000	-20.000	6Q	Stan	2	Demo1	Calibration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	1:C1	1:C1	1	1	1	Halocarbons	Std_3	3.000	2.000	1.000	5.00	10.000	20.000	-20.000	6Q	Stan	3	Demo1	Calibration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	1:D1	1:D1	1	1	1	Halocarbons	Std_4	5.000	2.000	1.000	5.00	10.000	20.000	-20.000	6Q	Stan	4	Demo1	Calibration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	1:E1	1:B2	2	2	2	Halocarbons	Sample	5.000	2.000	1.000	5.00	10.000	20.000	-20.000	6Q	Vial...	Unkn	Demo1	Analysis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6																						

Analysis Variables

Name	Value
1 My Variable 1	10
2 My Variable 2	20
3 My Variable 3	-20

Method Variables

Name	Value
1 MethodUserVar1	0
2 MethodUserVar2	0
3 MethodUserVar3	0

For help press F1.

Single Analysis: Ready - Ready to start run | Vial: 1:B1 / Inj.: 1

File Name: Active

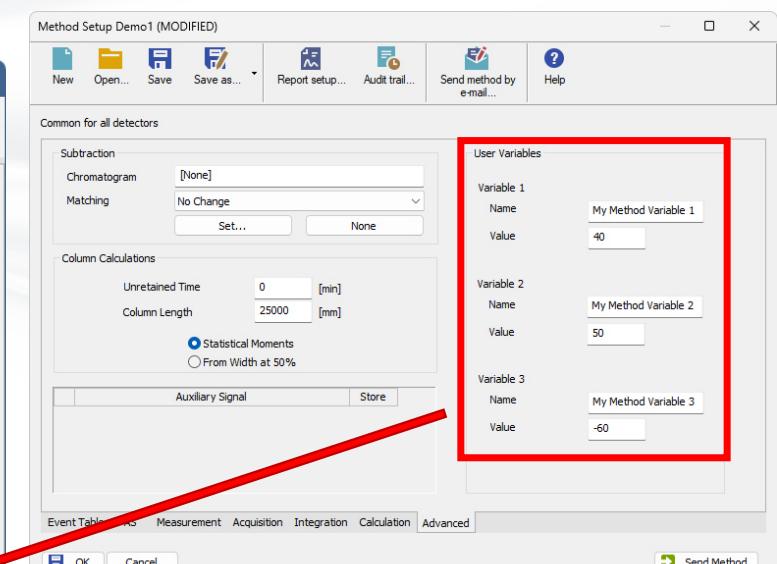
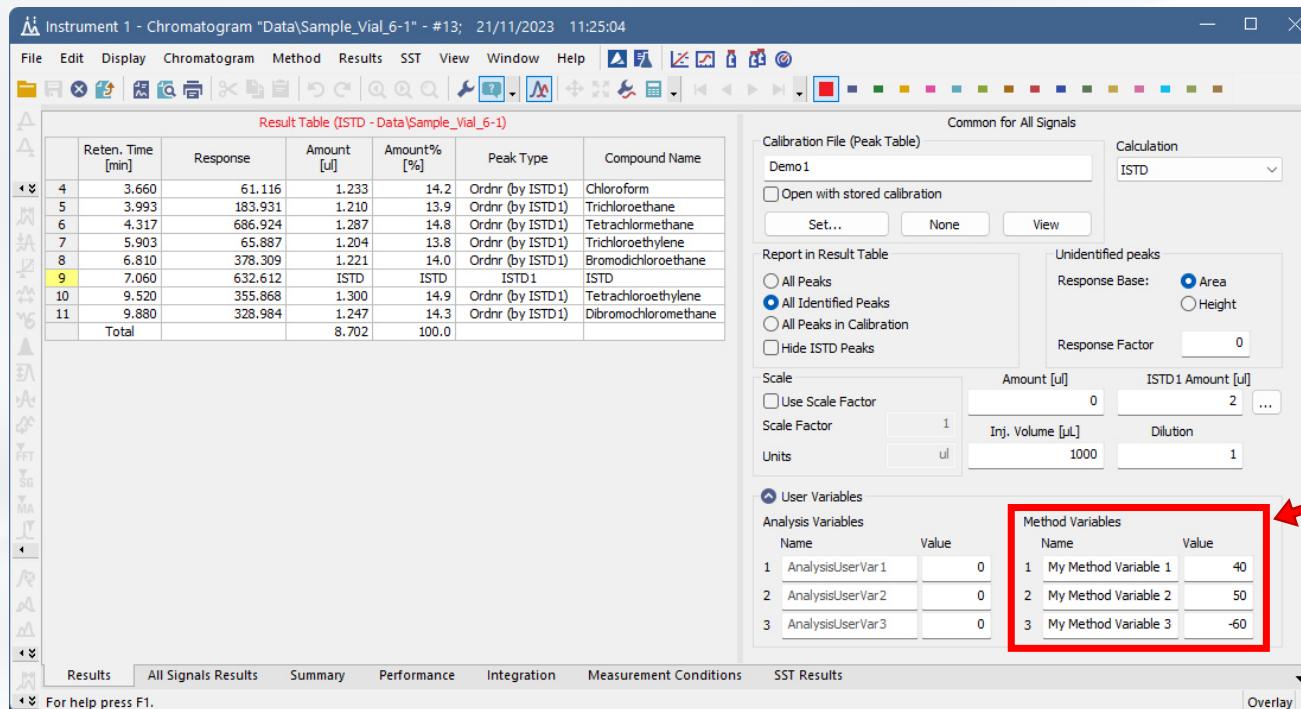
Results All Signals Results Summary Performance Integration Measurement Conditions SST Results Overlay

For help press F1.

CHROMATOGRAM WINDOW

USER VARIABLES – METHOD VARIABLES

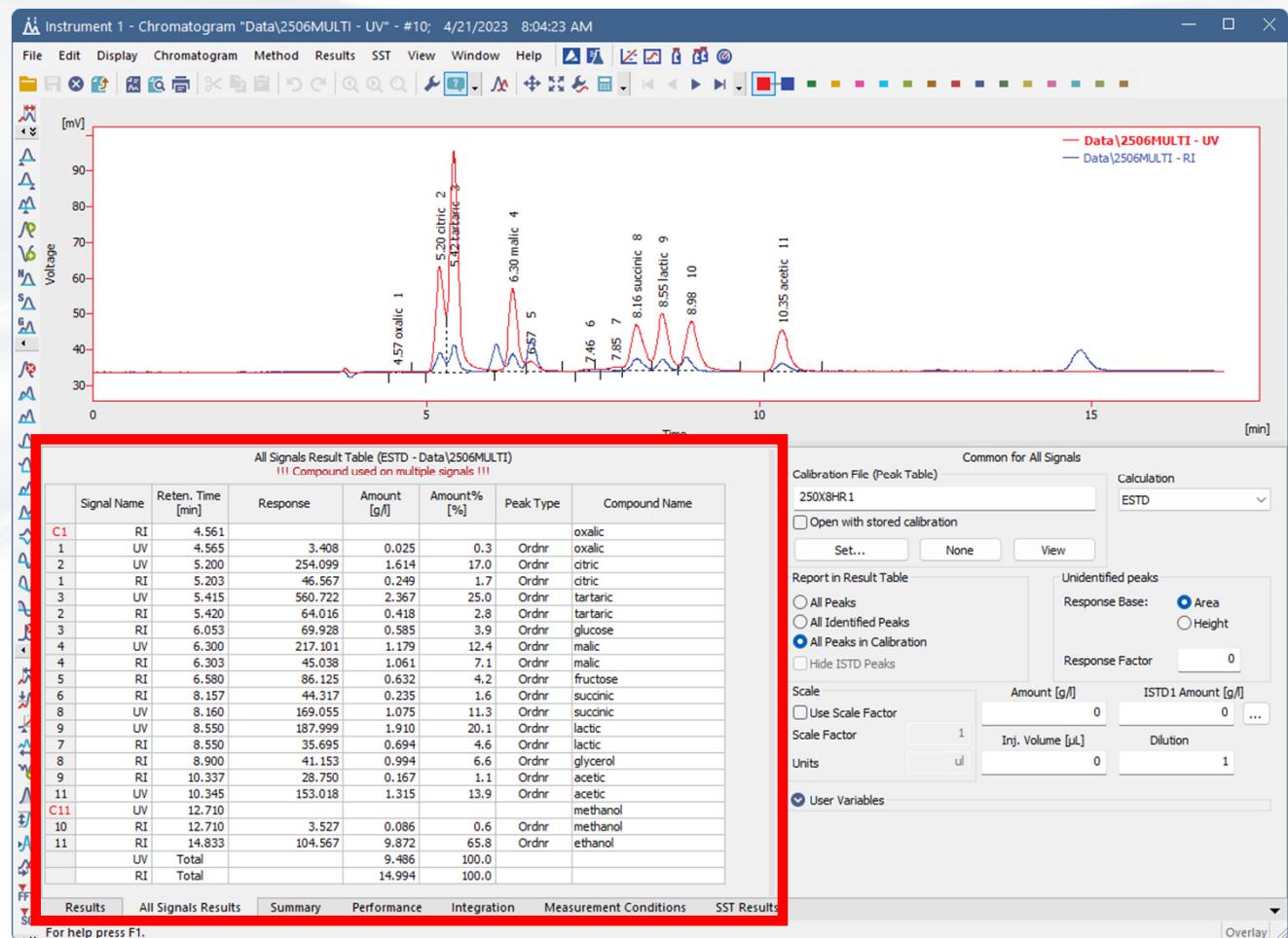
- Method Variables are propagated from Method Setup – Advanced tab to the measured chromatogram
 - These can be used for custom calculations in the Result Table



CHROMATOGRAM WINDOW

ALL SIGNALS RESULTS TABLE

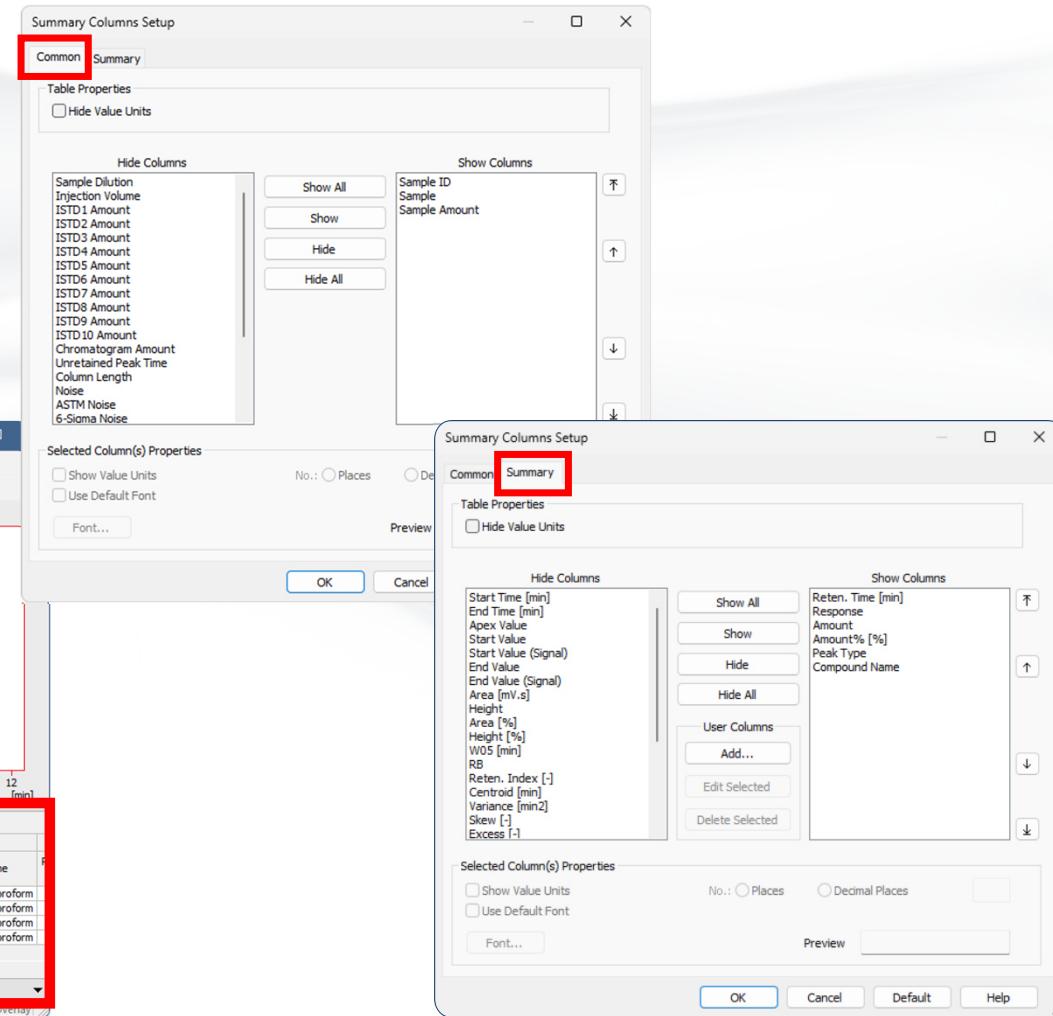
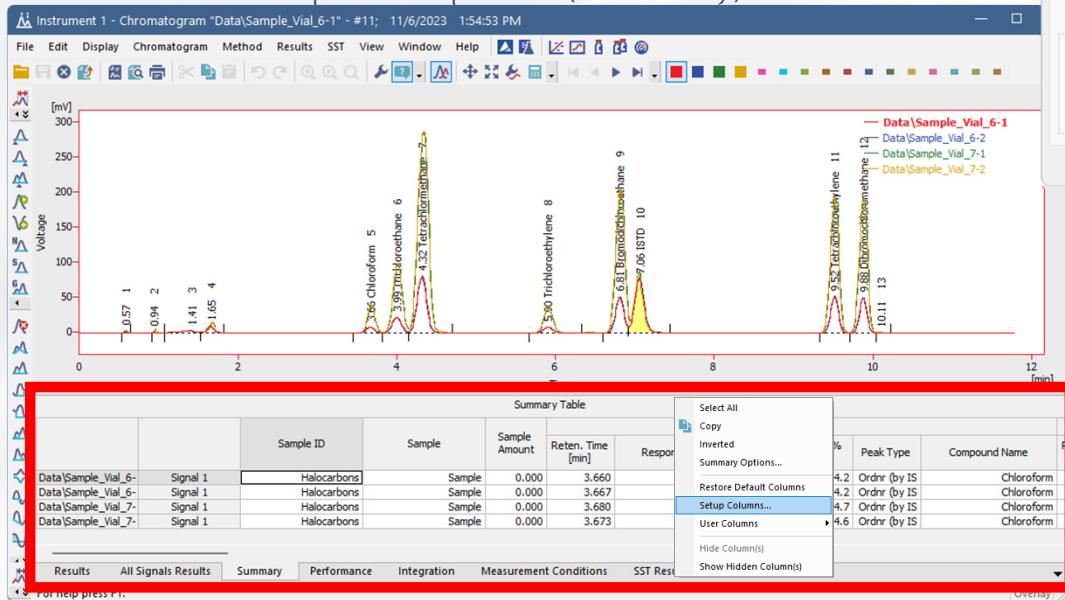
- Results for all signals of selected chromatogram in one table



CHROMATOGRAM WINDOW

SUMMARY TABLE

- Summary of all opened chromatograms and signals based on calibration settings
- Setup columns:
 - Common for all compounds
 - Compound-specific (Summary)



CHROMATOGRAM WINDOW

SUMMARY TABLE OPTIONS

- Accessible through the context menu
- Table inversion, header organization...

Summary Table Options

Table Inverted

Show All Signals

Chromatogram Header

Chromatogram / Signal

Signal / Chromatogram

Summary Table

	Data\Sample_Vial_6-	Data\Sample_Vial_6-	Data\Sample_Vial_7-	Data\Sample_Vial_7-	
	Signal 1	Signal 1	Signal 1	Signal 1	
Sample ID	Halocarbons	Halocarbons	Halocarbons	Halocarbons	
Sample	Sample	Sample	Sample	Sample	
Sample Amount	0.000	0.000	0.000	0.000	
Chloroform	Reten. Time [min]	3.660	3.667	3.680	3.673
	Response	61.116	62.733	271.936	268.931
	Amount [µl]	1.233	1.203	4.957	5.133
	Amount [%]	14.2	14.2	14.7	14.6
	Peak Type	Ordnr (by ISTD1)	Ordnr (by ISTD1)	Ordnr (by ISTD1)	Ordnr (by ISTD1)
	Compound Name	Chloroform	Chloroform	Chloroform	Chloroform
Trichloroethane	Reten. Time [min]	3.993	4.000	4.017	4.010
	Response	183.931	188.187	806.060	800.418
	Amount [µl]	1.210	1.176	4.791	4.981
	Amount [%]	13.9	13.9	14.2	14.2
	Peak Type	Ordnr (by ISTD1)	Ordnr (by ISTD1)	Ordnr (by ISTD1)	Ordnr (by ISTD1)
	Compound Name	Trichloroethane	Trichloroethane	Trichloroethane	Trichloroethane

Results All Signals Results Summary Performance Integration Measurement Conditions SST Results

Summary Table

	Sample ID	Sample	Sample Amount	Reten. Time [min]	Response	Amount [µl]	Amount [%]	Peak Type	Compound Name
Chloroform	Data\Sample_Vial_6-	Signal 1	Halocarbons	Sample	0.000	3.660	61.116	1.233	14.2
	Data\Sample_Vial_6-	Signal 1	Halocarbons	Sample	0.000	3.667	62.733	1.203	14.2
	Data\Sample_Vial_7-	Signal 1	Halocarbons	Sample	0.000	3.680	271.936	4.957	14.7

Summary Table Options

Table Inverted

Show All Signals

Chromatogram Header

Chromatogram / Signal

Signal / Chromatogram

Report in Summary Table

All Identified Peaks

All Peaks in Calibration

Parameter Header

Compound / Parameter

Parameter / Compound

Summary Table

	Sample ID	Sample	Sample Amount	Reten. Time [min]	Response	Amount [µl]	Amount [%]	Peak Type	Compound Name
Chloroform	Data\Sample_Vial_6-	Signal 1	Halocarbons	Sample	0.000	3.660	61.116	1.233	14.2
	Data\Sample_Vial_6-	Signal 1	Halocarbons	Sample	0.000	3.667	62.733	1.203	14.2
	Data\Sample_Vial_7-	Signal 1	Halocarbons	Sample	0.000	3.680	271.936	4.957	14.7

Summary Table Options

Table Inverted

Show All Signals

Chromatogram Header

Chromatogram / Signal

Signal / Chromatogram

Report in Summary Table

All Identified Peaks

All Peaks in Calibration

Parameter Header

Compound / Parameter

Parameter / Compound

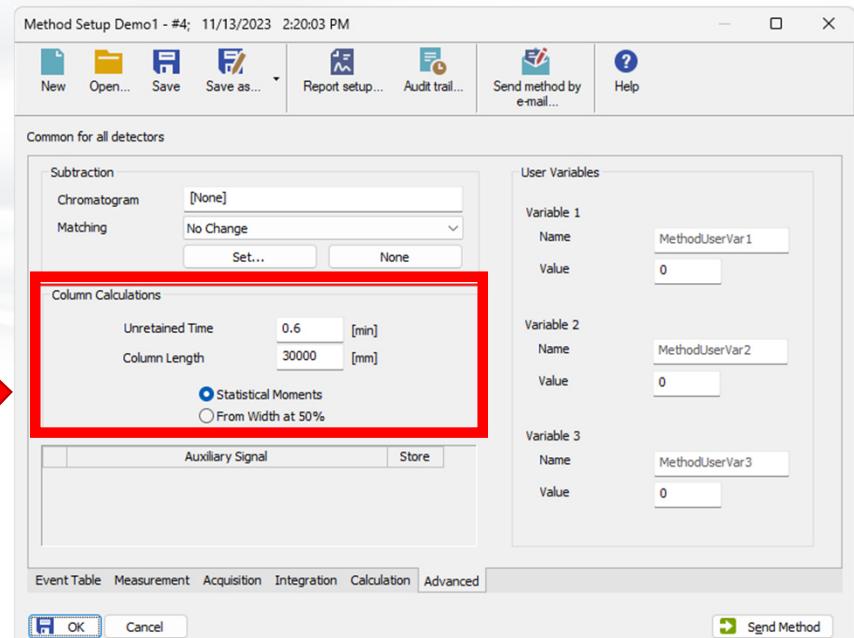
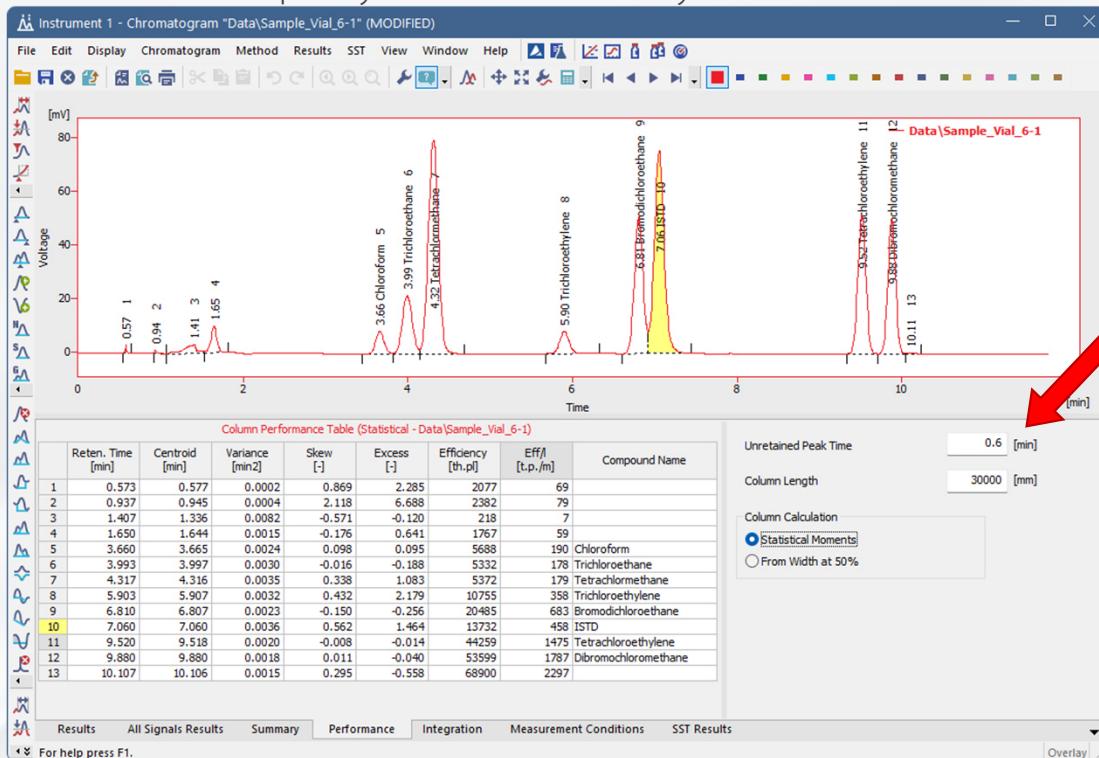
Summary Table

	Sample ID	Sample	Sample Amount	Chloroform	Trichloroethane	Tetrachloroethane	Trichloroethylene	Bromodichloroethane	ISTD	Tetrachloroethylene	Dibromodichloroethane	
Chloroform	Data\Sample_Vial_6-	Signal 1	Halocarbons	Sample	0.000	3.660	3.993	4.317	5.903	6.810	7.060	9.520
	Data\Sample_Vial_6-	Signal 1	Halocarbons	Sample	0.000	3.667	4.000	4.320	5.910	6.817	7.060	9.527
	Data\Sample_Vial_7-	Signal 1	Halocarbons	Sample	0.000	3.680	4.017	4.340	5.910	6.827	7.060	9.530
	Data\Sample_Vial_7-	Signal 1	Halocarbons	Sample	0.000	3.673	4.010	4.327	5.907	6.820	7.053	9.527

CHROMATOGRAM WINDOW

PERFORMANCE TABLE

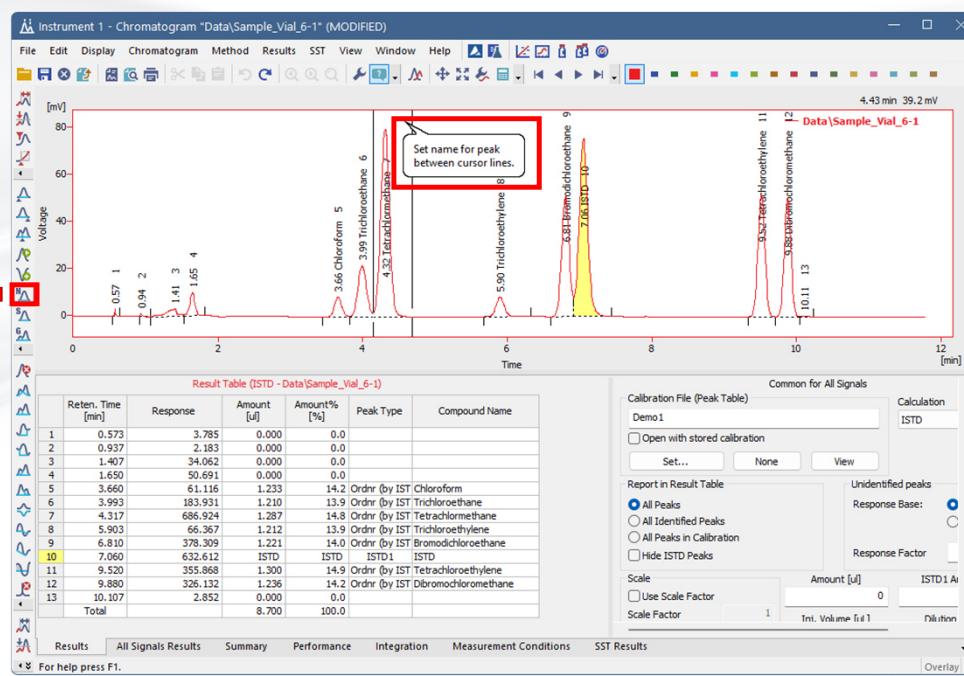
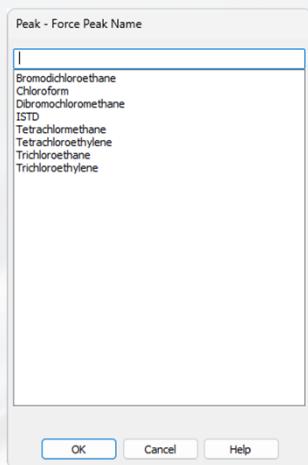
- Set calculation type
- Values for capacity ratio and efficiency from the used method



CHROMATOGRAM WINDOW

FORCE PEAK NAME

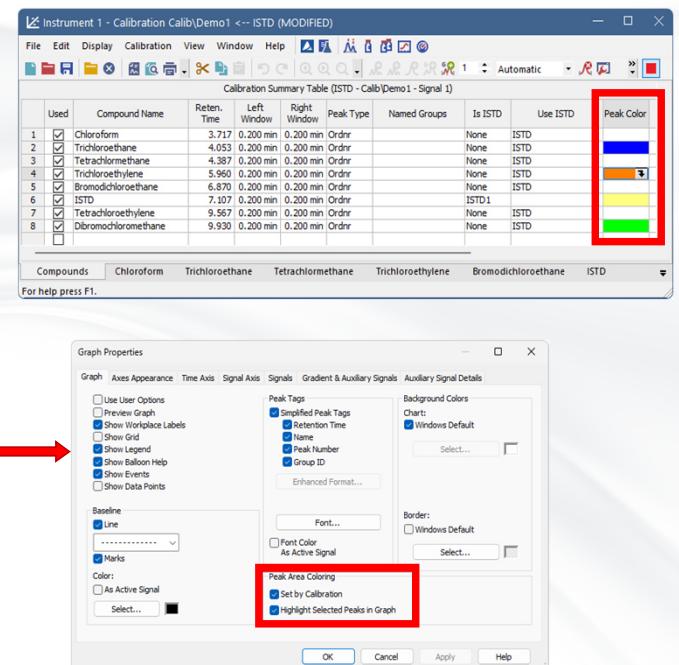
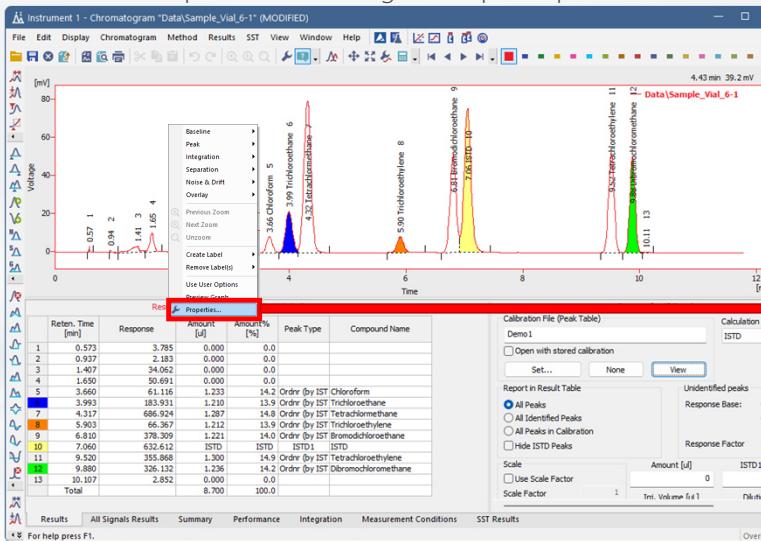
- Set compound from calibration
- Set custom name



CHROMATOGRAM WINDOW

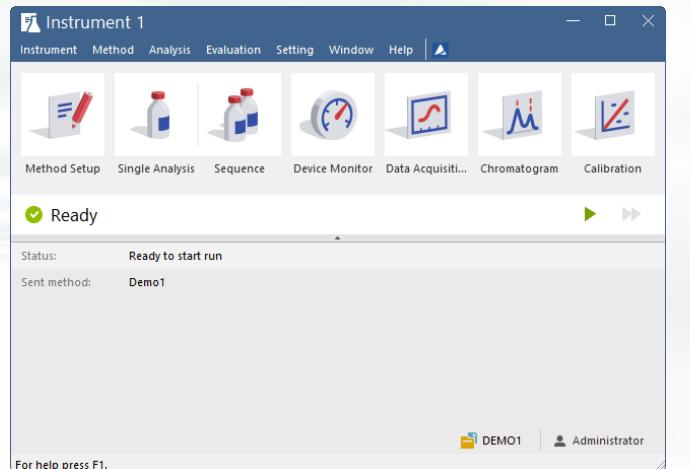
PEAK COLORS

- Set via Calibration,
- Set peak area coloring via Graph Properties



AGENDA

- Chromatogram window
 - Column setup, User columns, Noise & Drift
 - Mathematical operations, Labels
 - Result table, User variables
 - Summary table, Performance table
 - Force peak name, Peak coloring, Graph properties
- Calibration
 - LOD, LOQ
 - Calibration Options, Manual Calibration
 - Details of Calibration Point
 - Bracketing and Standard Addition
- Calculations
 - ISTD, Normalized %
- Groups



CALIBRATION

LOD, LOQ

- Limit of Detection (LOD) and Limit of Quantification (LOQ) – amounts lower than LOD/LOQ specified in calibration are marked accordingly in chromatogram Peak Type

Instrument 1 - Calibration CalibASTM6730_C5-C15-RI <- ESTD (MODIFIED)

File Edit Display Calibration View Window Help

Calibration Summary Table (ESTD - CalibASTM6730_C5-C15-RI - Signal 1)

Used	Compound Name	Reten. Time	Left Window	Right Window	Peak Type	Named Groups	Is ISTD	Use ISTD	Peak Color	Reten. Index	LOD	LOQ	Response Base	Manual Resp. Factor	Response	Amount	Resp. Fact.	Rec No.	Level 1
1	<input checked="" type="checkbox"/> n-Pentane	12.857	0.200 min	0.200 min	Ordnr	None				500.000	0.000	0.000	A	0.0000	4724.4275	0.000	0.00000	1/1	...
2	<input checked="" type="checkbox"/> n-Hexane	20.430	0.200 min	0.200 min	Ordnr	None				600.000	0.000	0.000	A	0.0000	3449.1477	0.000	0.00000	1/1	...
3	<input checked="" type="checkbox"/> n-Heptane	28.863	0.200 min	0.200 min	Ordnr	None				700.000	0.000	0.000	A	0.0000	6432.241	0.000	0.00000	1/1	...
4	<input checked="" type="checkbox"/> n-Octane	38.693	0.200 min	0.200 min	Ordnr	None				800.000	0.000	0.300	A	0.0000	10594.7032	0.000	0.00000	1/1	...
5	<input checked="" type="checkbox"/> n-Nonane	49.687	0.200 min	0.200 min	Ordnr	None				900.000	0.000	0.300	A	0.0000	11577.9428	0.000	0.00000	1/1	...
6	<input checked="" type="checkbox"/> n-Decane	61.063	0.200 min	0.200 min	Ordnr	None				1000.000	0.000	0.300	A	0.0000	6271.1765	0.000	0.00000	1/1	...
7	<input checked="" type="checkbox"/> n-Undecane	72.393	0.200 min	0.200 min	Ordnr	None				1100.000	0.100	0.300	A	0.0000	12734.3308	0.000	0.00000	1/1	...
8	<input checked="" type="checkbox"/> n-Dodecane	83.017	0.200 min	0.200 min	Ordnr	None				1200.000	0.100	0.300	A	0.0000	6416.3005	0.000	0.00000	1/1	...
9	<input checked="" type="checkbox"/> n-Tridecane	93.273	0.200 min	0.200 min	Ordnr	None				1300.000	0.100	0.300	A	0.0000	13119.1941	0.000	0.00000	1/1	...
10	<input checked="" type="checkbox"/> n-Tetradecane	102.720	0.200 min	0.200 min	Ordnr	None				1400.000	0.100	0.300	A	0.0000	6801.6947	0.000	0.00000	1/1	...
11	<input checked="" type="checkbox"/> n-Pentadecane	111.883	0.200 min	0.200 min	Ordnr	None				1500.000	0.100	0.300	A	0.0000	14941.0531	0.000	0.00000	1/1	...

Compounds n-Pentane n-Hexane n-Heptane n-Octane n-Nonane n-Decane n-Undecane n-Dodecane

For help press F1.

Instrument 1 - Chromatogram "Data\N_PARAFFINS_FOR_ASTM6730 - Detector A" - #12; 20/04/2023 23:08:18

File Edit Display Chromatogram Method Results SST View Window Help

Result Table (ESTD - Data\N_PARAFFINS_FOR_ASTM6730 - Detector A)

Reten. Time [min]	Response	Amount [mg]	Amount [%]	Peak Type	Compound Name
1	2288.743	0.000	0.0	Ordnr Free	n-Pentane
2	3449.147	0.000	0.0	Ordnr Free	n-Hexane
3	6432.241	0.000	0.0	Ordnr Free	n-Heptane
4	7015.205	0.000	0.0	< LOQ Ordnr	n-Octane
5	7091.212	0.000	0.0	< LOQ Ordnr	n-Nonane
6	7514.664	0.000	0.0	< LOQ Ordnr	n-Decane
7	7323.7085	0.000	0.0	< LOQ Ordnr	n-Undecane
8	7835.542	0.000	0.0	< LOQ Ordnr	n-Dodecane
9	6239.622	0.000	0.0	< LOQ Ordnr	n-Tridecane
10	8052.391	0.000	0.0	< LOQ Ordnr	n-Tetradecane
11	7469.893	0.000	0.0	< LOQ Ordnr	n-Pentadecane
Total		0.000	100.0		

Results All Signals Results Summary Performance Integration Measurement Conditions SST Results

Calibration File (Peak Table) ASTM6730_C5-C15-RI

Common for All Signals

ASTM6730_C5-C15-RI

Open with stored calibration Set... None View

Report in Result Table

All Peaks All Identified Peaks All Peaks in Calibration Hide ISTD Peaks

Unidentified peaks Response Base: Area Height

Response Factor

Calibration

Instrument 1 - Chromatogram "Data\N_PARAFFINS_FOR_ASTM6730 - Detector A" - #12; 20/04/2023 23:08:18

File Edit Display Chromatogram Method Results SST View Window Help

Result Table (ESTD - Data\N_PARAFFINS_FOR_ASTM6730 - Detector A)

Reten. Time [min]	Response	Amount [mg]	Amount [%]	Peak Type	Compound Name
1	2288.743	0.000	0.0	Ordnr Free	n-Pentane
2	3449.147	0.000	0.0	Ordnr Free	n-Hexane
3	6432.241	0.000	0.0	Ordnr Free	n-Heptane
4	7015.205	0.000	0.0	< LOQ Ordnr	n-Octane
5	7091.212	0.000	0.0	< LOQ Ordnr	n-Nonane
6	7514.664	0.000	0.0	< LOQ Ordnr	n-Decane
7	7323.7085	0.000	0.0	< LOQ Ordnr	n-Undecane
8	7835.542	0.000	0.0	< LOQ Ordnr	n-Dodecane
9	6239.622	0.000	0.0	< LOQ Ordnr	n-Tridecane
10	8052.391	0.000	0.0	< LOQ Ordnr	n-Tetradecane
11	7469.893	0.000	0.0	< LOQ Ordnr	n-Pentadecane
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Results All Signals Results Summary Performance Integration Measurement Conditions SST Results

Calibration File (Peak Table) ASTM6730_C5-C15-RI

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ASTM6730_C5-C15-RI

Open with stored calibration Set... None View

Report in Result Table

All Peaks All Identified Peaks All Peaks in Calibration Hide ISTD Peaks

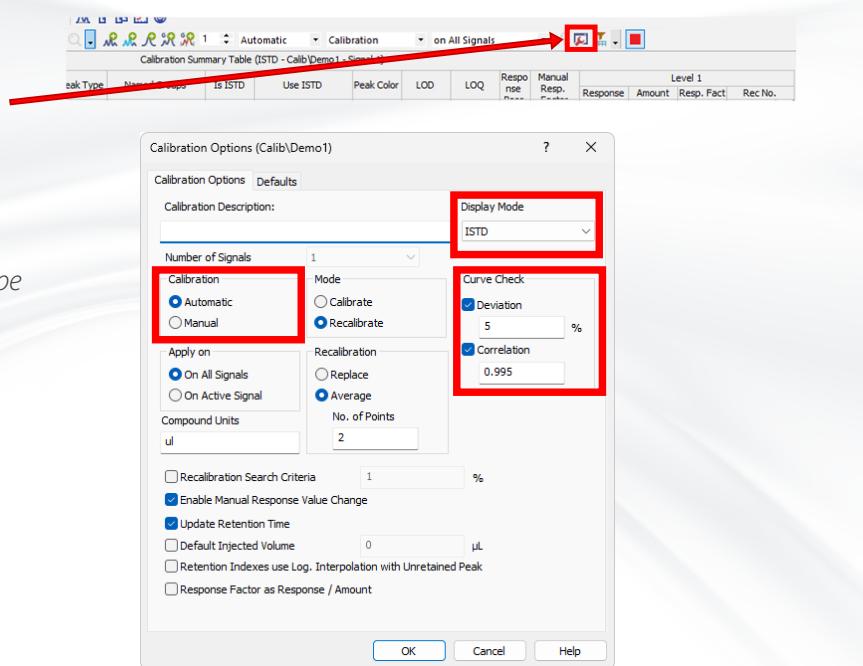
Unidentified peaks Response Base: Area Height

Response Factor

CALIBRATION

CALIBRATION OPTIONS

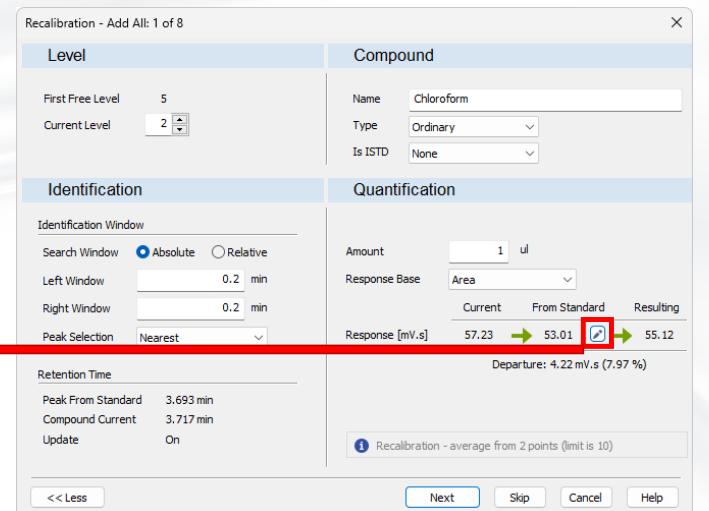
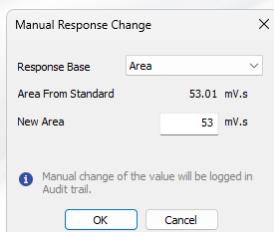
- Open via *Calibration – Options* or Calibration Options button
- Display Mode – related to calculation types: ESTD, ISTD, NORM, STDADD
- Calibration curve check – threshold used for the **Failure** message in *Result Table – Peak Type*
- Automatic/Manual calibration



CALIBRATION

MANUAL CALIBRATION

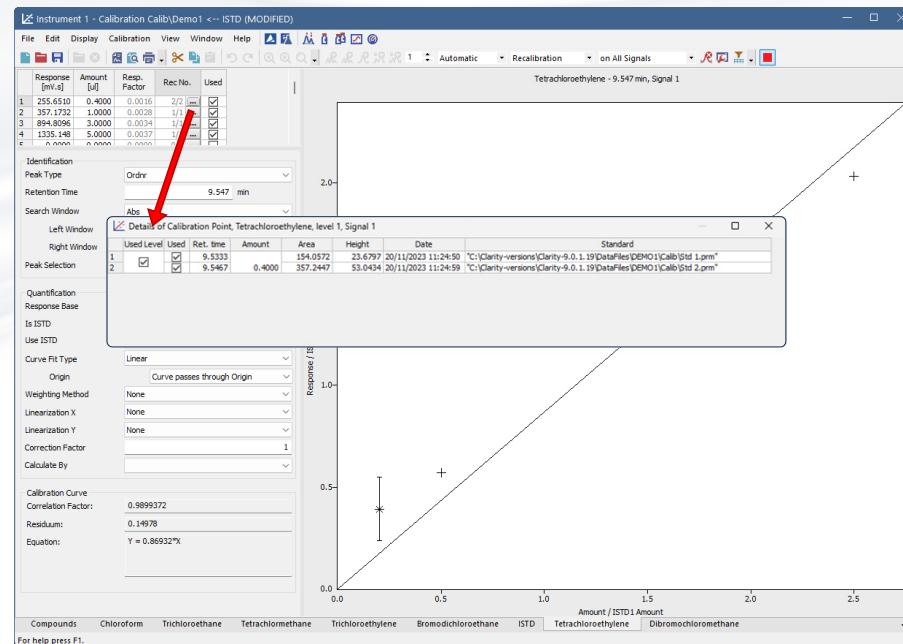
- Accessible when adding points to calibration if Manual calibration is selected in Calibration Options
- You can edit:
 - Calibration level
 - Identification criteria
 - Compound information
 - Response options (Area, Height, or Area %)
- Manual response adjustment



CALIBRATION

DETAILS OF CALIBRATION POINT

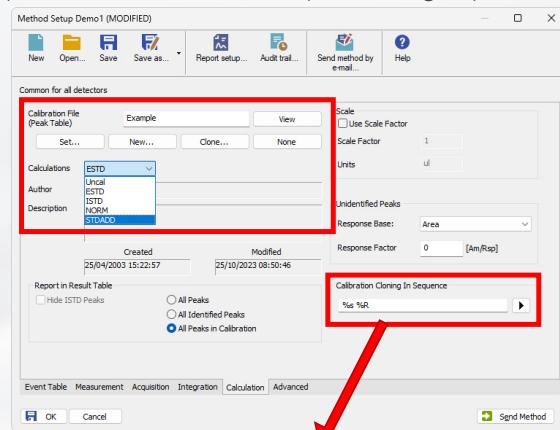
- When recalibrating a level using more points, you can view calibration point details for selected level (accessible also via *Calibration – Show Details*)
- Checkbox state – include/omit from calibration



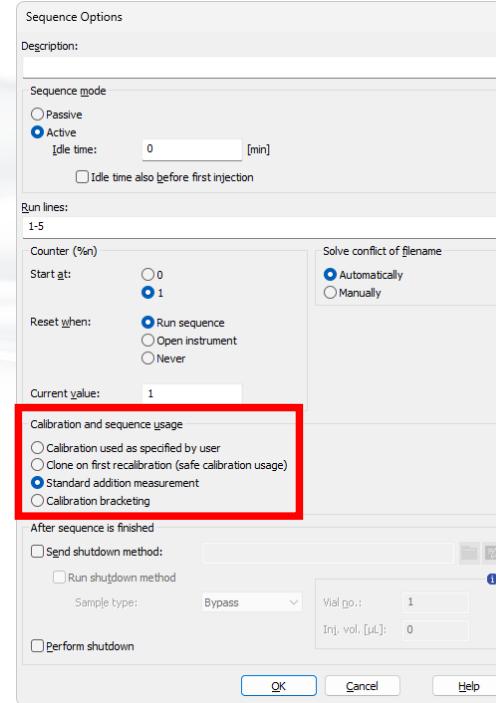
CALIBRATION

BRACKETING AND STANDARD ADDITION

- Calibration in Method is used according to the *Sequence Options – Calibration and sequence usage* option



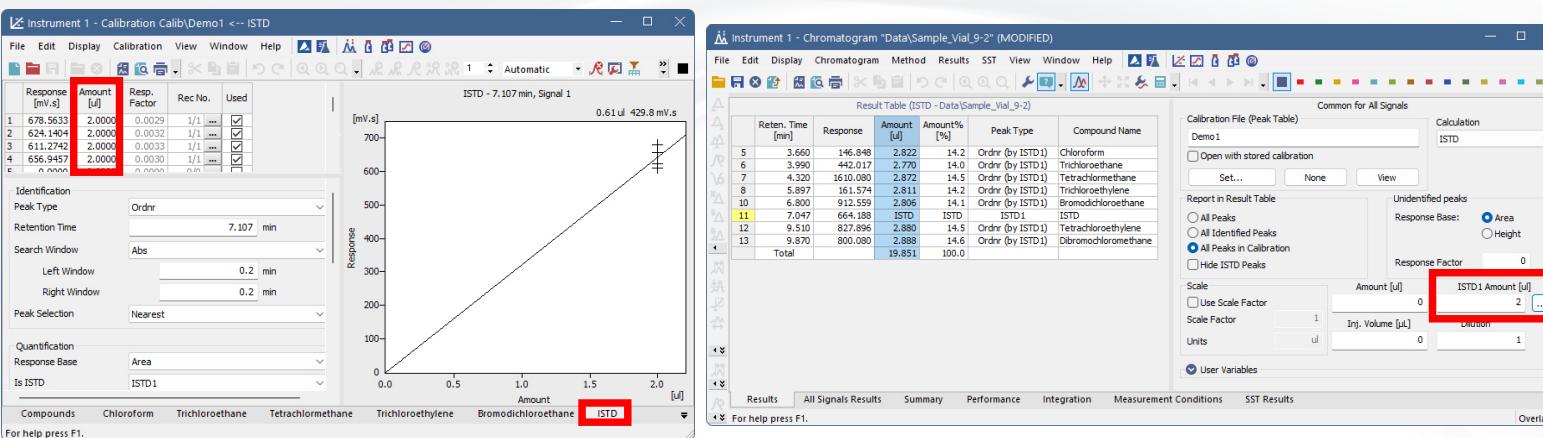
- Name of calibration clone used if the method selected in *Calibration and sequence usage* supports cloning



CALCULATIONS

ISTD

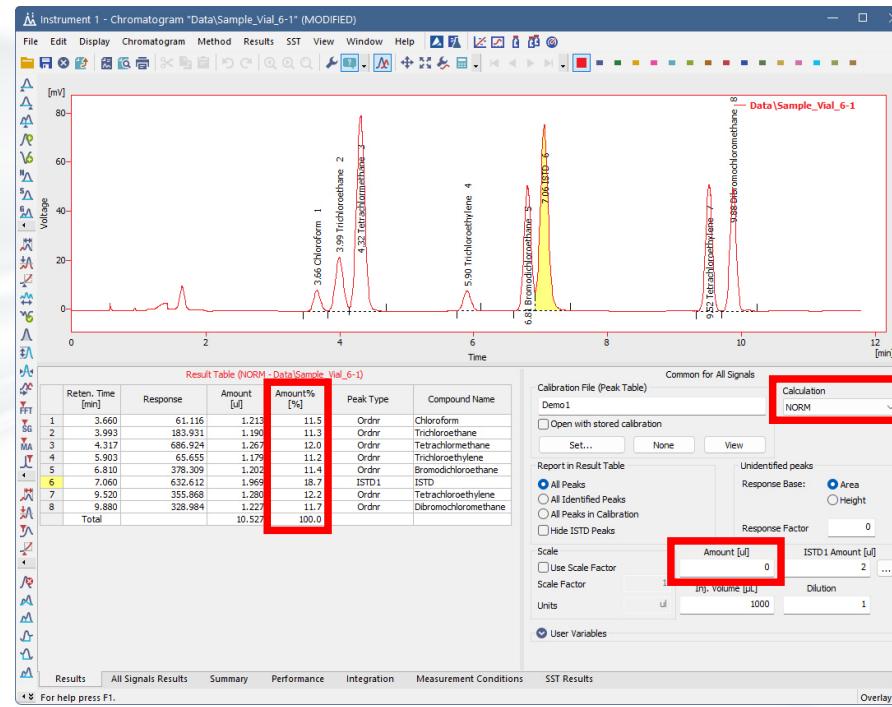
- Up to ten ISTD compounds can be present in the calibration/sample
- 2 types of ISTD calculations available:
 - Any amount of ISTD (both calibration and sample chromatogram contain the used ISTD amount)
 - Same amount of ISTD in samples and standards (ISTD amount = 0 in **both** locations)



CALCULATIONS

NORMALIZED %

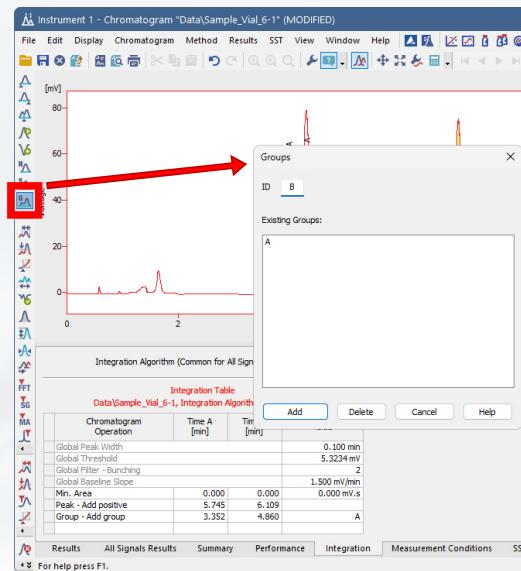
- Amount % column contains the normalized percentage **if all integrated peaks are calibrated**
- If the Sample Amount is 0, compounds in the Amount % column add up to a total of 100%
- Otherwise, the value serves as the total sum of Amount %, and values in the Amount % column are normalized to the Amount set
- NORM is the same as ESTD, except it additionally checks that both all identified peaks are calibrated, **and** all peaks from calibration are identified in the sample chromatogram



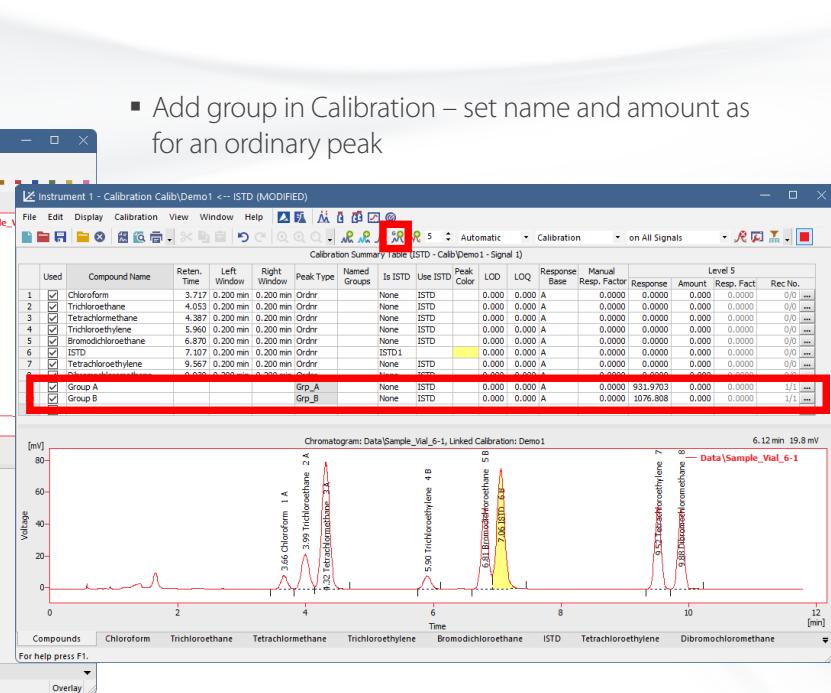
GROUPS

CREATING A GROUP

- Set group ID and add peaks to the group



- Add group in Calibration – set name and amount as for an ordinary peak



23.0331



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ADVANCED CHROMATOGRAPHY SOFTWARE



SHORT BREAK