DEWETRON

OXYGEN TRAINING

> DATA ANALYSIS
> POST-PROCESSING
> REPORTING

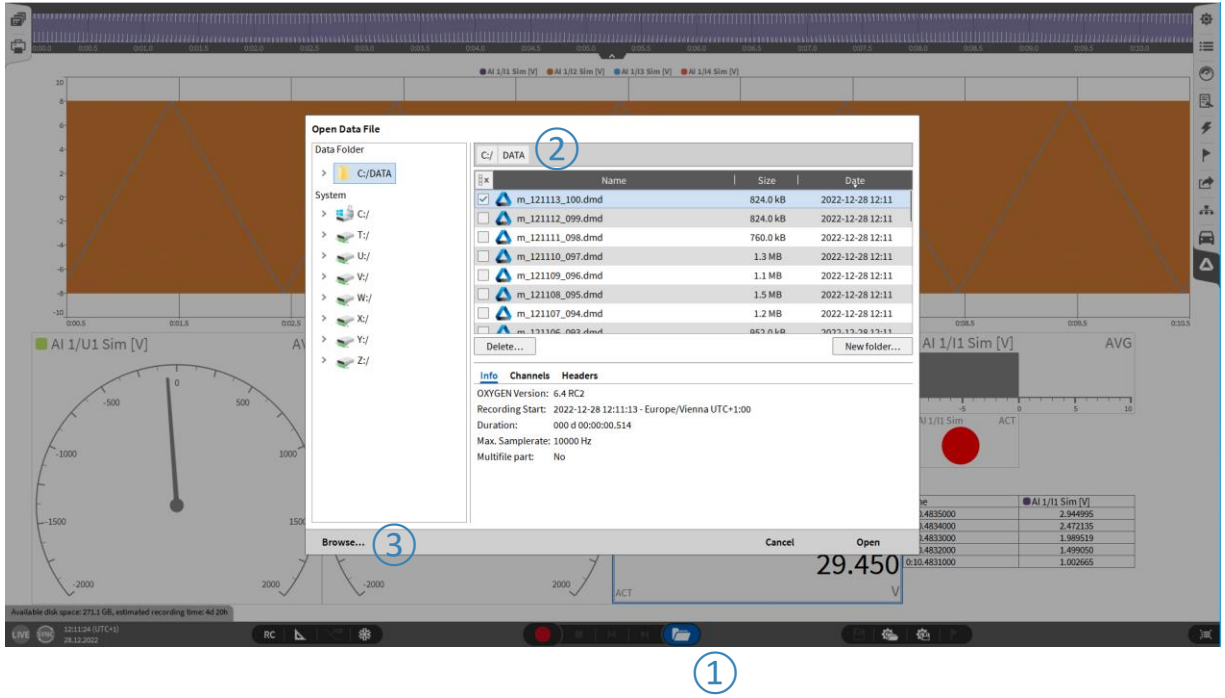
CONTENT

DEWETRON

- Opening data files
- Data export
- Recorder functionalities
- Offline Math
- Copy & Paste data to 3rd party software
- Reporting
- OXYGEN VIEWER mode
- Open multiple *.dmd-files

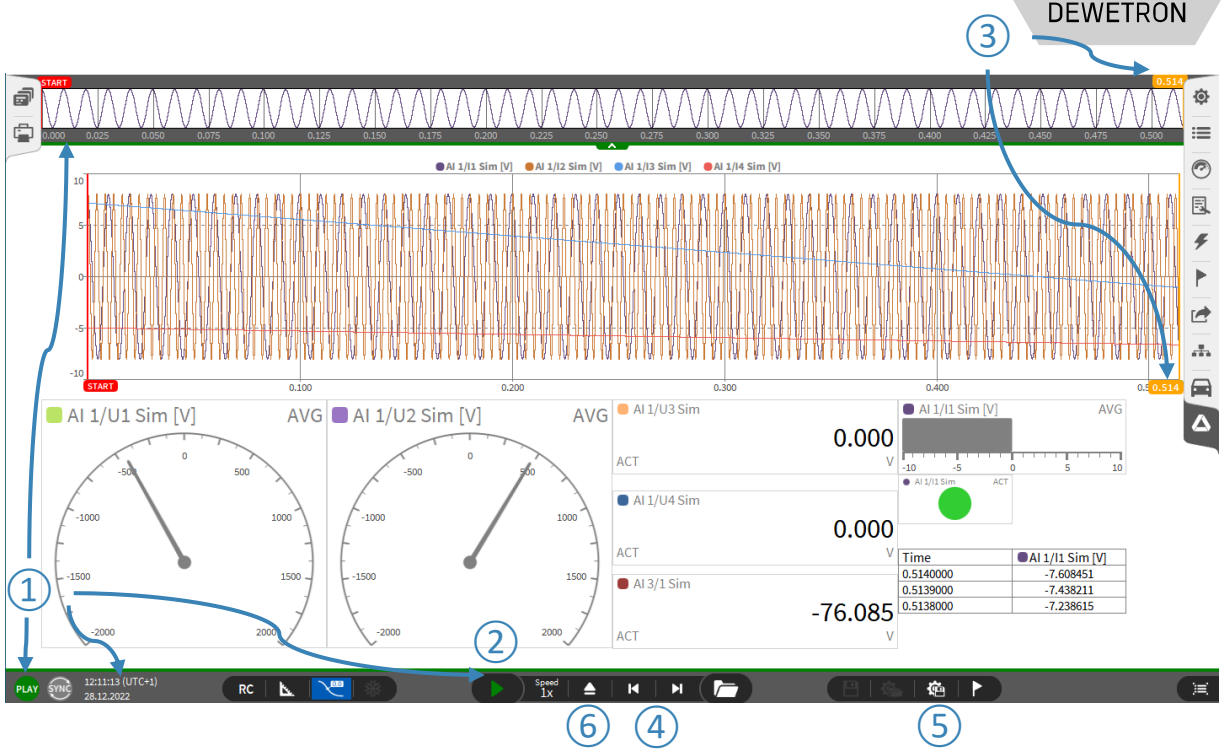
OPENING DATA FILES

①	Press the *Open Data File* button
②	Select the desired file from the dialog and press *Open*
③	Windows file browser can be accessed by clicking on *Browse…*



OPENING DATA FILES

①	Different hints indicate that a data file is loaded: > PLAY indicator > Green line on top & bottom of screen > *Play* button instead of *Rec* button
②	Pressing the *Play* button starts or pauses the file replay
③	The orange cursor in the Overview bar or in a Recoder can be moved to a certain position in the file
④	The *Fast Forward* and *Reverse* button can be used to jump through the file in 5 sec steps
⑤	The measurement setup can be extracted and stored to a dms-file with the *Store Setup* button
⑥	File can be ejected to return to the measurement mode with the *Eject* button



DISPLAYING ADDITIONAL CHANNELS

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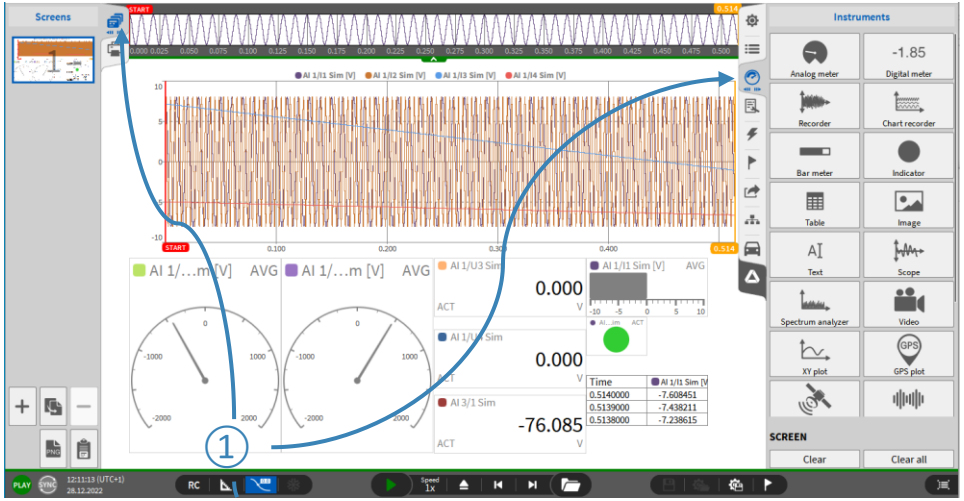
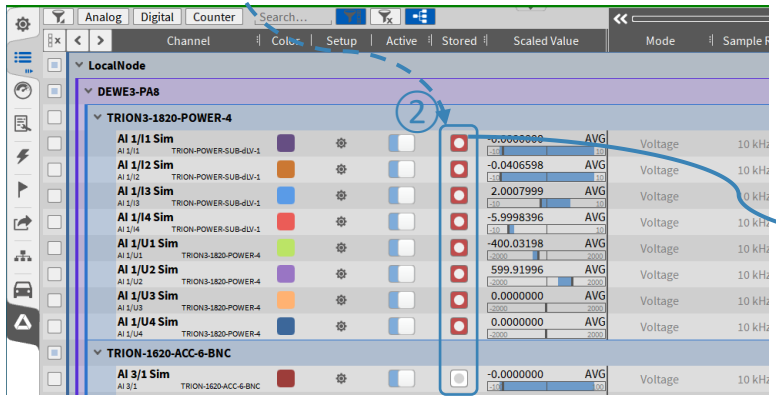
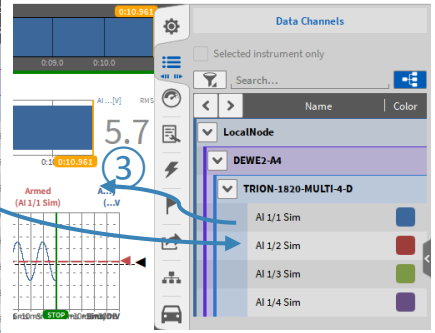
①	Design mode is still accessible to add more screens or place additional instruments on the screen
②	Other channels can be added to the instruments as well. The fact that channels are not displayed does not mean they are not stored
③	All channels activated for storing are available in the data file and can be displayed and analyzed by dragging and dropping them into an instrument

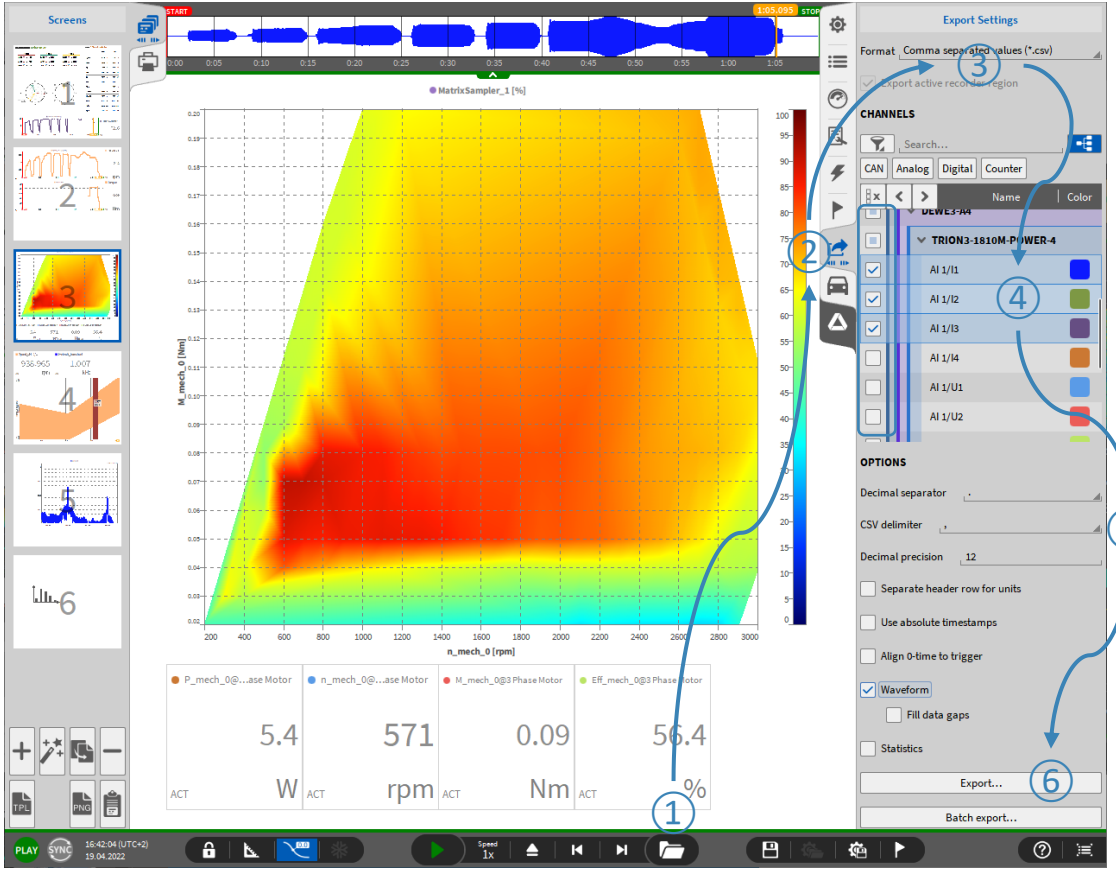






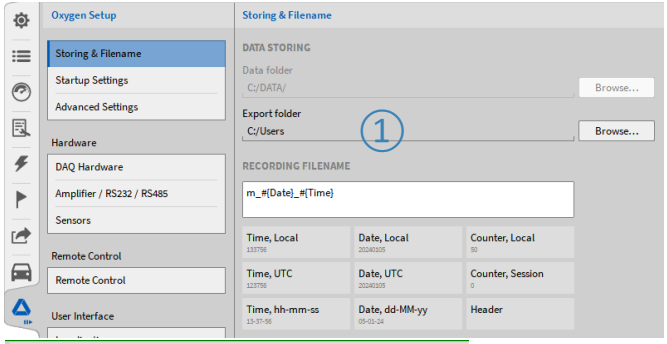
How to export data

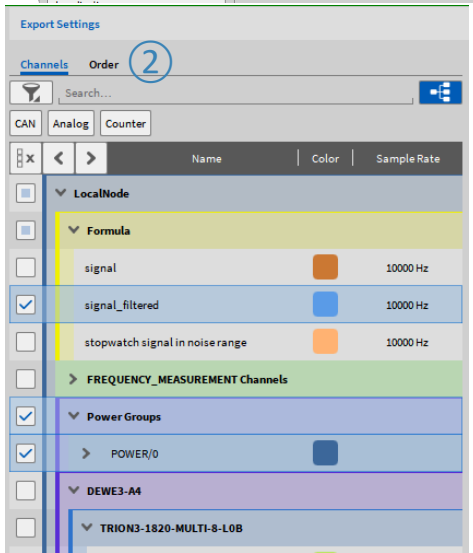
①	Open a data file
②	Go to the Export menu
③	Select the export file format: *.txt, *.csv, *.mdf4.0/4.1, *.mat, *.xlsx, *.dmd, *.rsp (rpc III), *.wav
④	Select the channels to be exported
⑤	Choose between different file format dependent options
⑥	Press the export button to specify a filename and folder

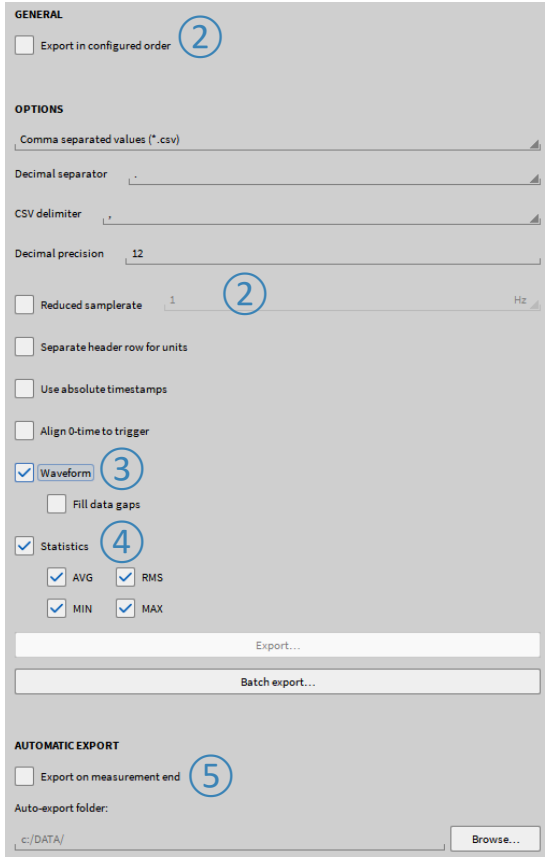


EXPORT OPTIONS

①	Default Export folder can be specified in *OXYGEN Setup → Storing & Filename*
②	Reduced the sample rate of exported channels
③	Waveform exports the recorded data
④	Statistics exports additionally average, minumum, maximum and root mean square of the data with a window length defined in the trigger settings
⑤	To automatically export the measurement file to the selected folder

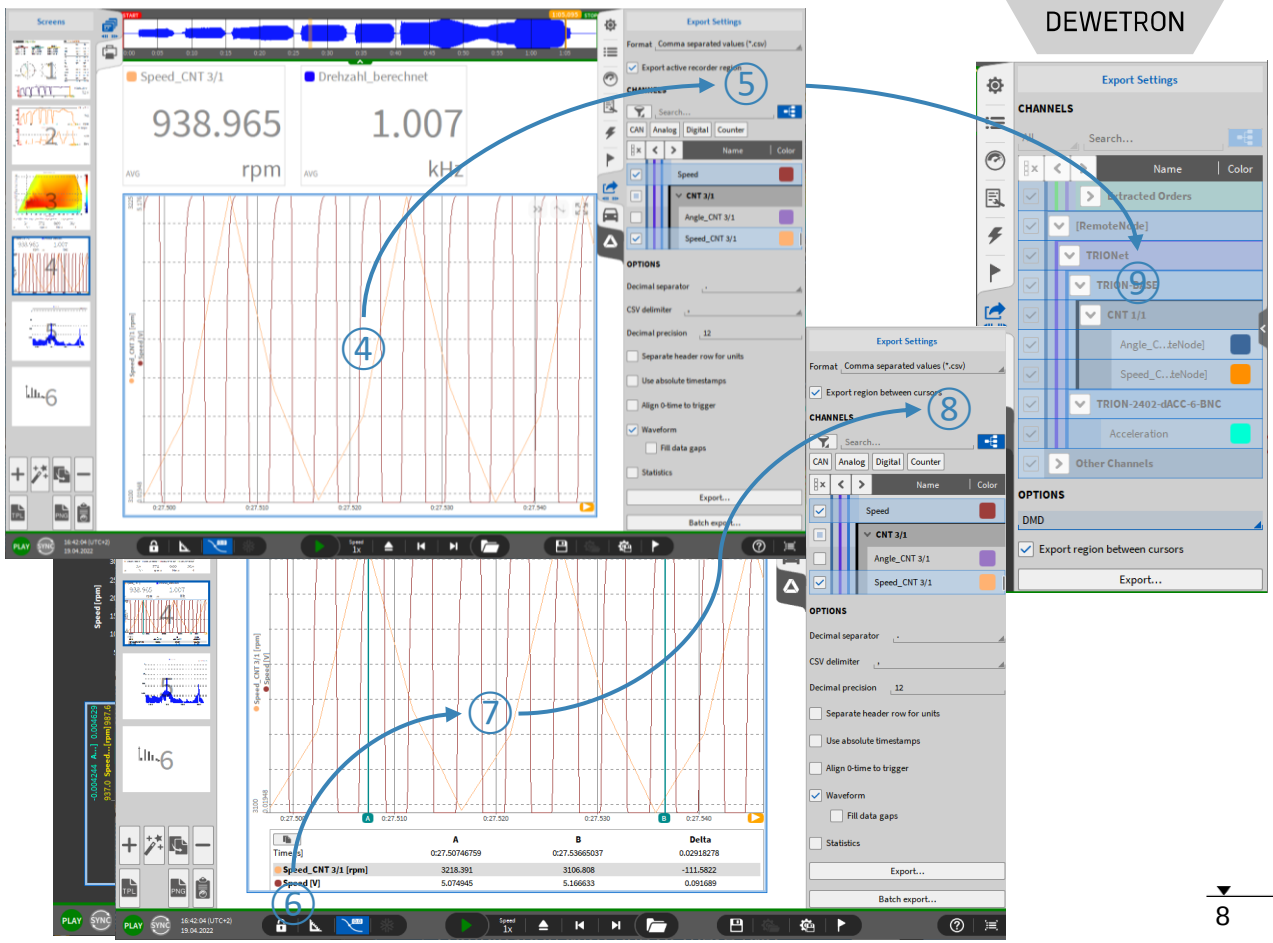






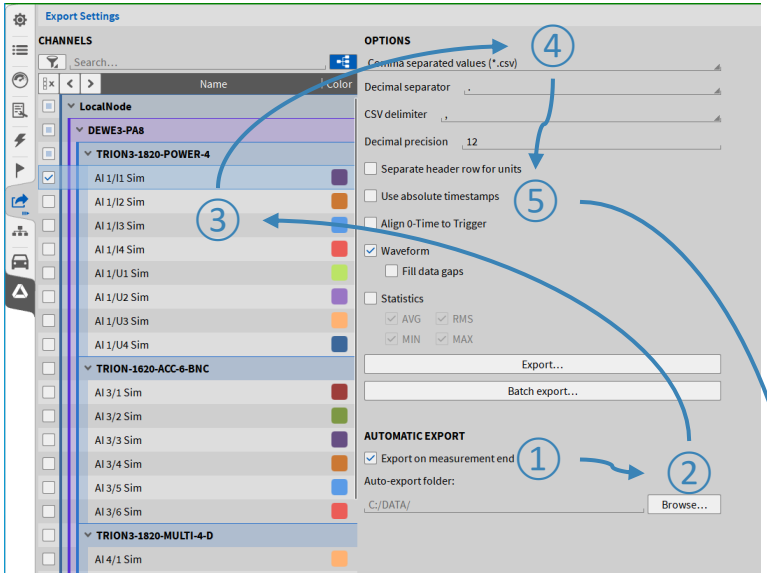
EXPORT OPTIONS

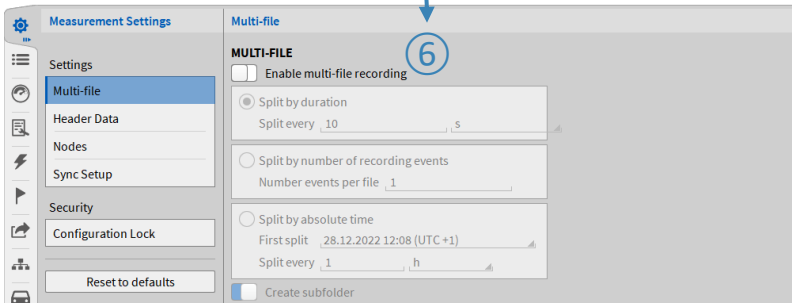
④	If a Recorder is selected during export, the selected signals can be exported only for the timespan displayed in the Recorder
⑤	*Export active recorder region* must be selected herefor
⑥	Cursors can be activated as well
⑦	If cursors are activated in the Recorder, the data of the selected signals can be exported only for the timespan between the cursors
⑧	*Export region between cursors* must be selected herefor
⑨	The dmd export can be used in combination with one of these two possibilities to decrease the file size of dmd files. **Dmd export supports no channel selection but exports all available channels**



AUTOMATIC EXPORT

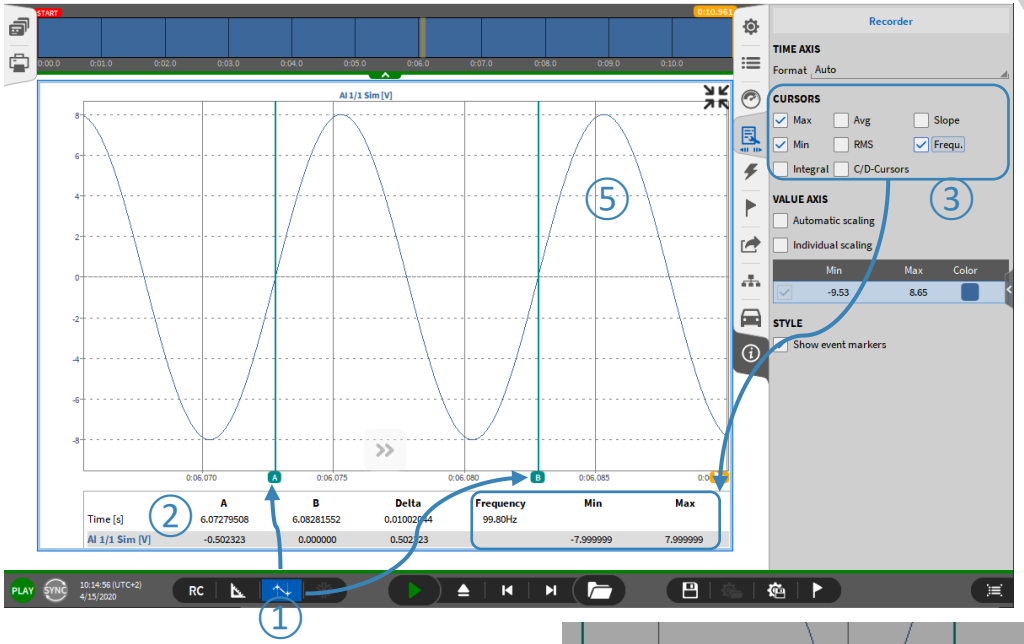
①	The Export menu can also be accessed in Live mode during setup generation to activate the option to automatically *Export the data after measurement end*
②	A separate export folder can be specified
③	Individual channels for export can be selected
④	Export format can be specified
⑤	Format dependent options are available
⑥	In case of Multi-File recording, data since recording start will be exported to one single file but not be split up in individual files

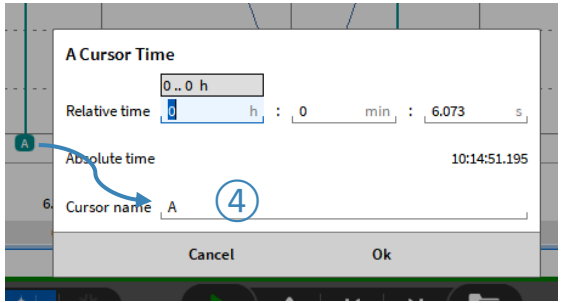




RECORDER & A/B CURSORS

①	Activate the Cursors with the *Cursor* button The A/B cursors can be moved with the mouse
②	Actual position and signal value for all signals in the Recorder can be seen in the table below
③	Certain Statistics for the signal between both cursors can be selected in the Recorder Properties
④	A/B cursors can be renamed in the popup which opens with a click on the cursor name Deactivating and activating cursors again keeps the individual name stored and cursors of several Recorders can be renamed individually

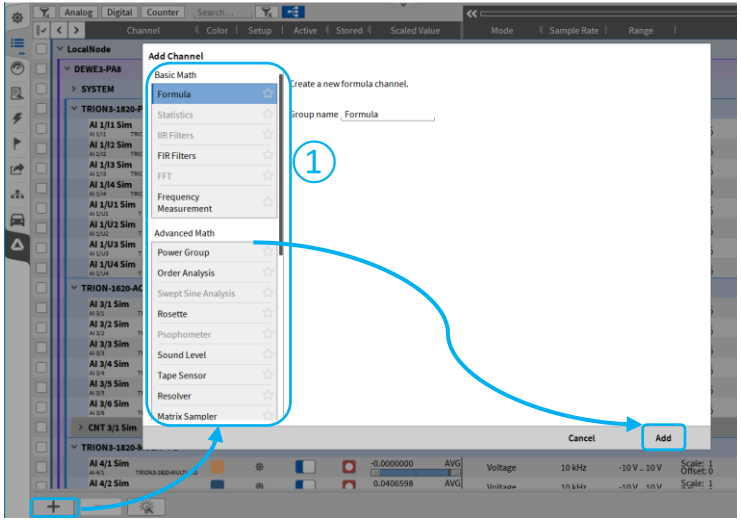


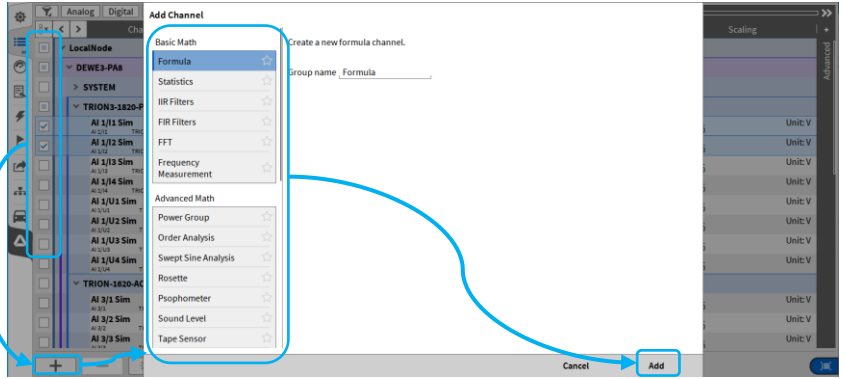


Remark:
Cursors can be activated for Recorder, Chart Recorder and Scope

OFFLINE MATH

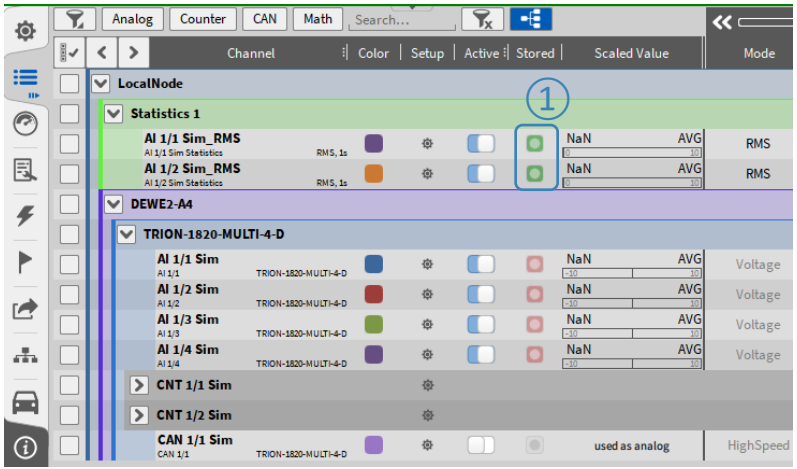
①	Basic and Advanced Math (except Power Groups) can be created offline
②	Reference channels must be selected before creating > Statistics > Filters > FFT > Swept Sine Analysis > Psophometers

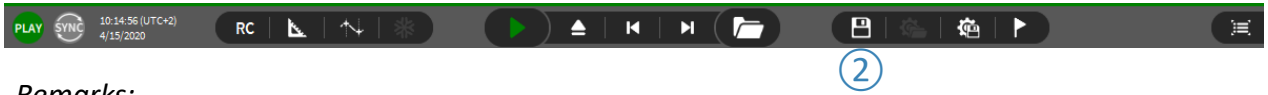




OFFLINE MATH

①	Offline created channels are marked with a green *Stored b*utton
②	Any changes to a data file can be stored with the *Store* button



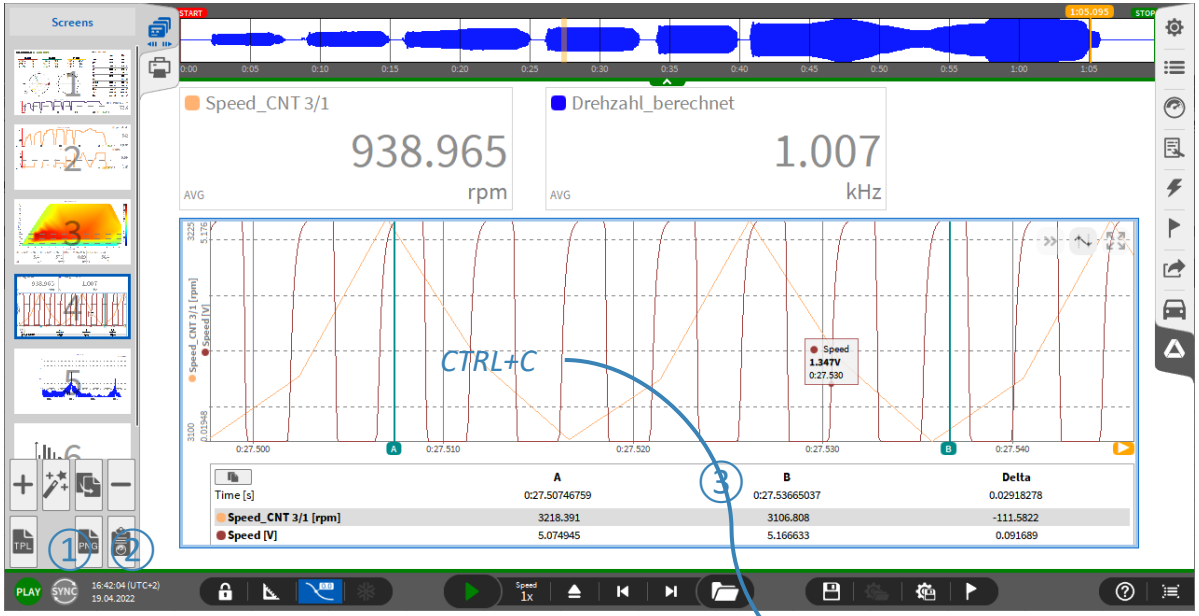


Remarks:

- > *After closing and reopening a data file again, the offline created channels cannot be edited any more*
- > *Thus, it's not possible to edit settings of an online calculated channel*
- > *It is not possible to edit the settings of an analog channel, digital or counter channel offline*
- > *Please keep in mind that the results of an offline calculated channel can differ from an online calculated channel, i.e. filters as they are oscillating at the beginning*

COPY & PASTE DATA

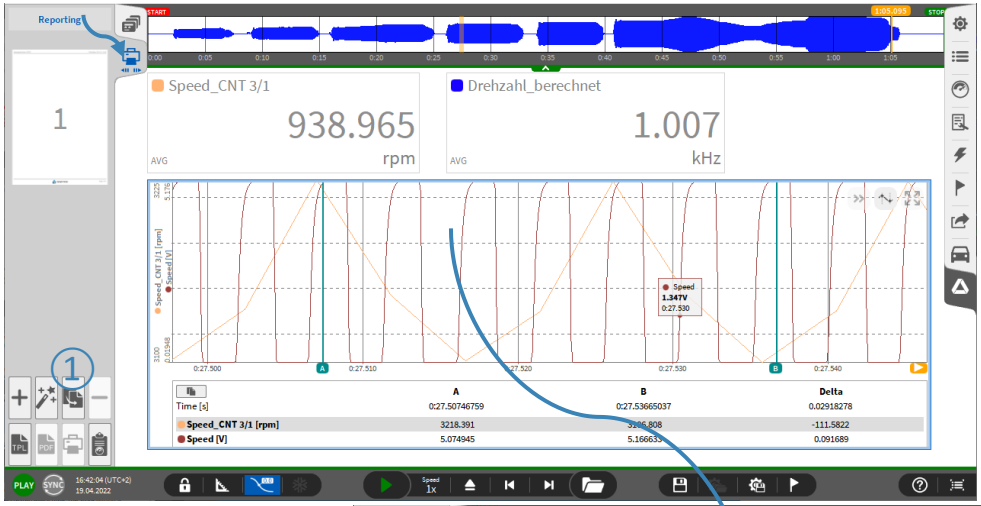
①	Export the entire screen or the currently selected instrument to *.png or *.jpg
②	Copy the entire screen or the currently selected instrument to clipboard
③	Copy the actual recorder data to clipboard to paste it to Excel or misc

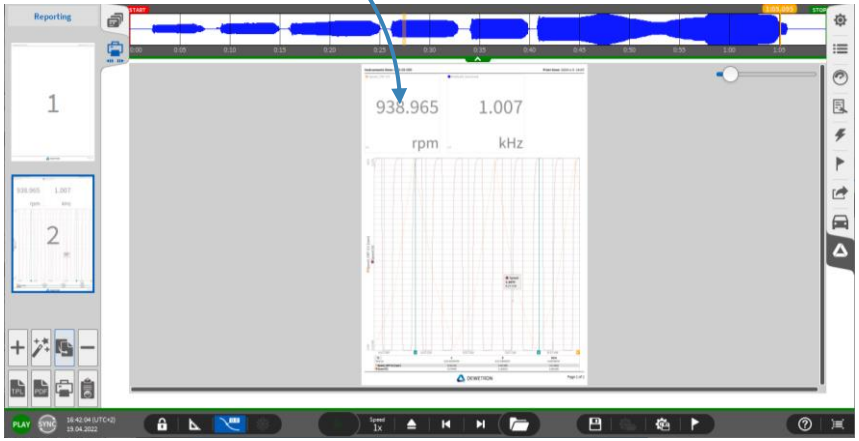


	A	B	C	D	E
1	Channel	Unit	A	B	Delta
2	Time	s	27.50746759	27.53665037	0.029182778
3	Speed_CNT 3	rpm	3218.390713	3106.808467	-111.582246
4	Speed	V	5.074944799	5.166633437	0.091688638
5					

REPORTING

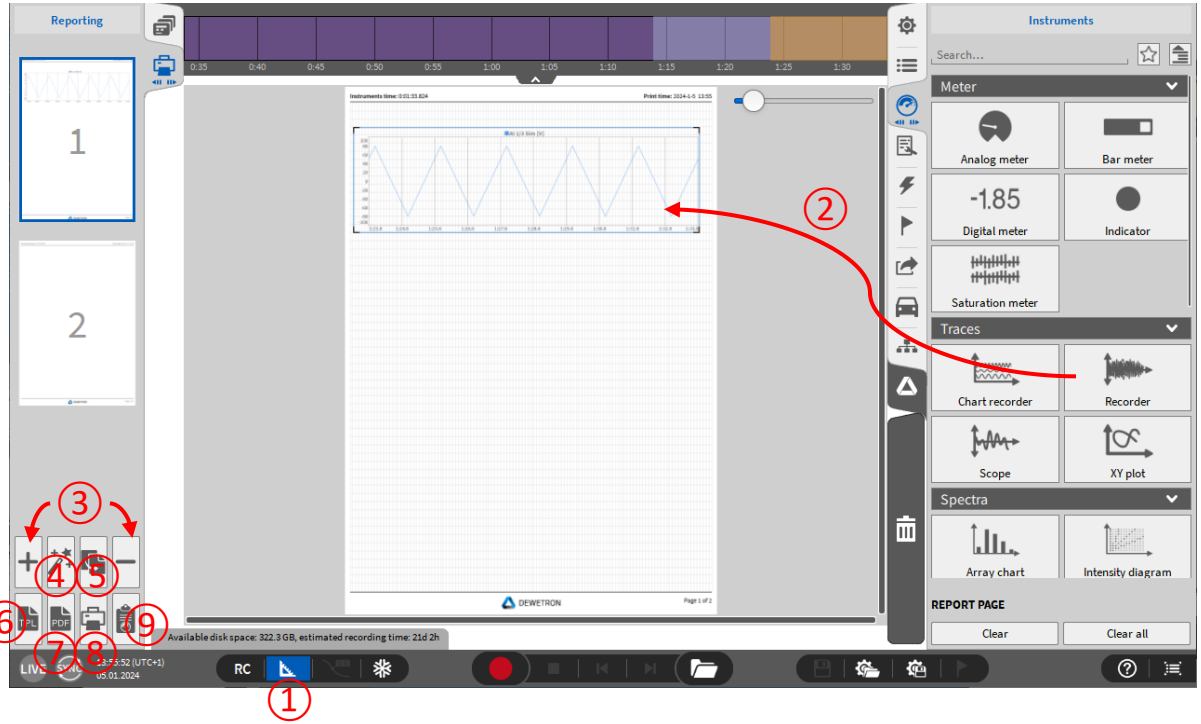
① Go to the Reporting menu and press the *Copy* button to add the current screen to a report that can be exported as *.pdf





REPORTING

①	Design Mode can be activated as well…
②	…to configure your reporting page in the same manner as a measurement screen
③	Pages can be added or deleted
④	Add predefined item
⑤	Clone page
⑥	Save page as template
⑦	Export the report as *.pdf
⑧	Send the report to a printer
⑨	Copy the actual report page or currently selected instrument to clipboard



REPORTING

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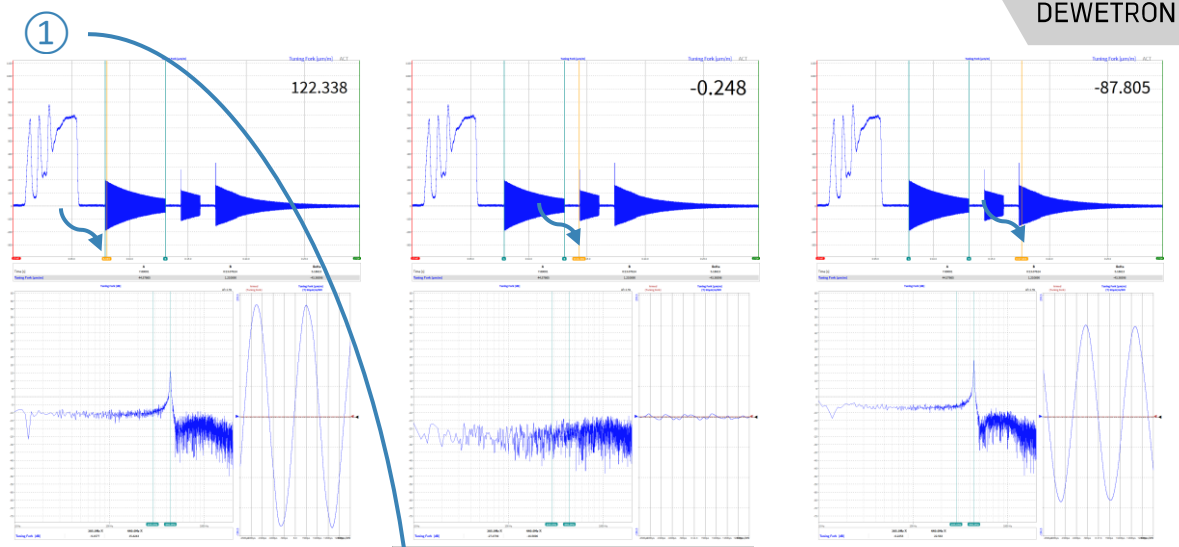
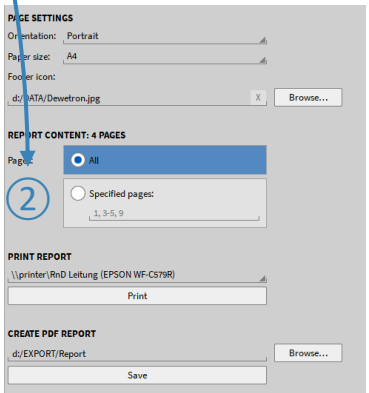
① The orange cursor can be placed on different positions for every single page to analyze different events
All instruments on the same page are linked to the orange cursor

② The Report settings can be accessed by expanding the Report menu to the full screen
> Set the orientation to landscape or portrait
> Choose A4 or letter paper size
> Select an icon for the footer
> Export only specific pages on request
> Select a printer
> Select an export directory for the *.pdf file

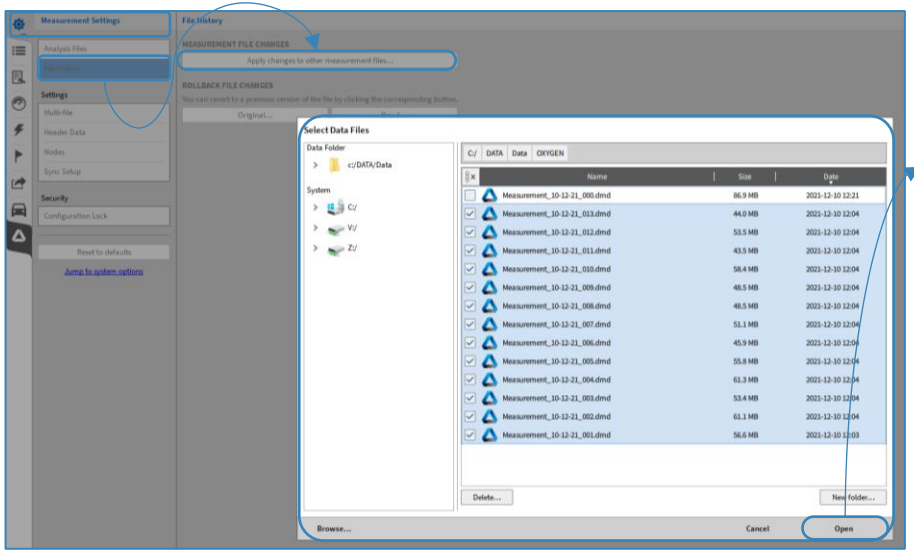


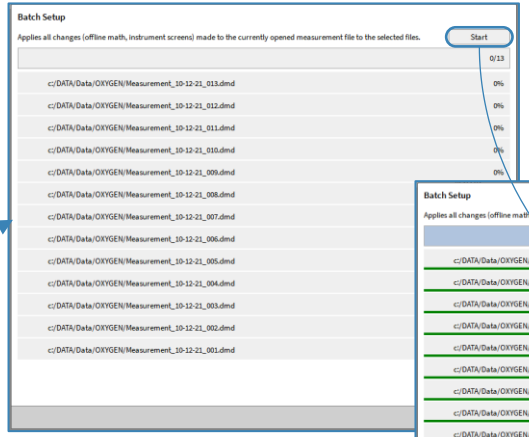


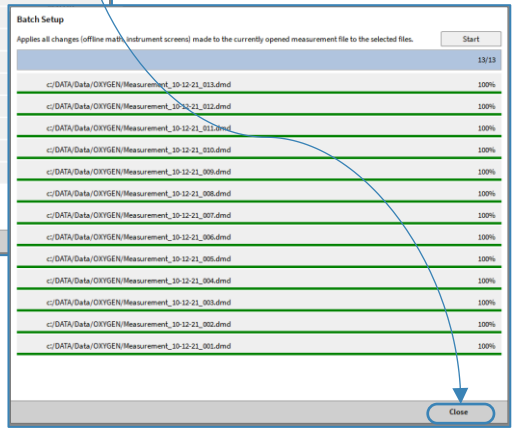
Remark:
A report template can already be stored to the dms- (setup) file

*.DMD BATCH PROCESSING

- Possibility to apply changes from one *.dmd-file to other *.dmd-files automatically
- *.dmd-files must be created with the same *.dms-file
- Changes imply
  - Offline changes in the channel list (Formulas, Powergroups, CAN channels,…)
    - Aka anything with a green *Stored* button
  - Changes to the measurement screen







*.DMD-FILE HISTORY

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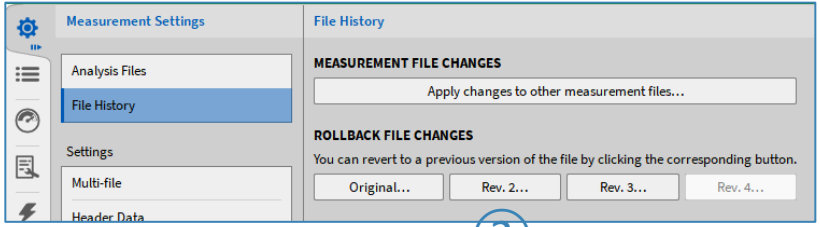
- *.dmd-file history included to revert changes
- A new storage point will be created every time, the *Store* button is pressed (①)
- Possibility to revert changes and return to previous storage points (②)

①



②

RETURNING TO DATA ACQUISITION (LIVE) MODE

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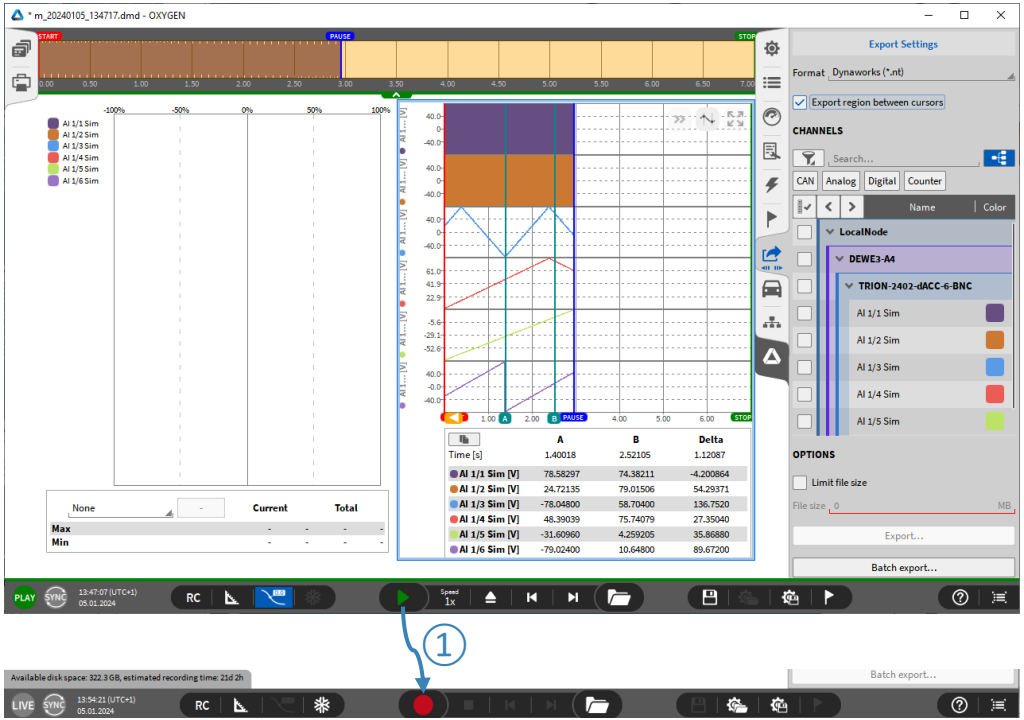
① To close a data file and return to *LIVE* mode for a new recording, press the *Eject* button



OXYGEN VIEWER

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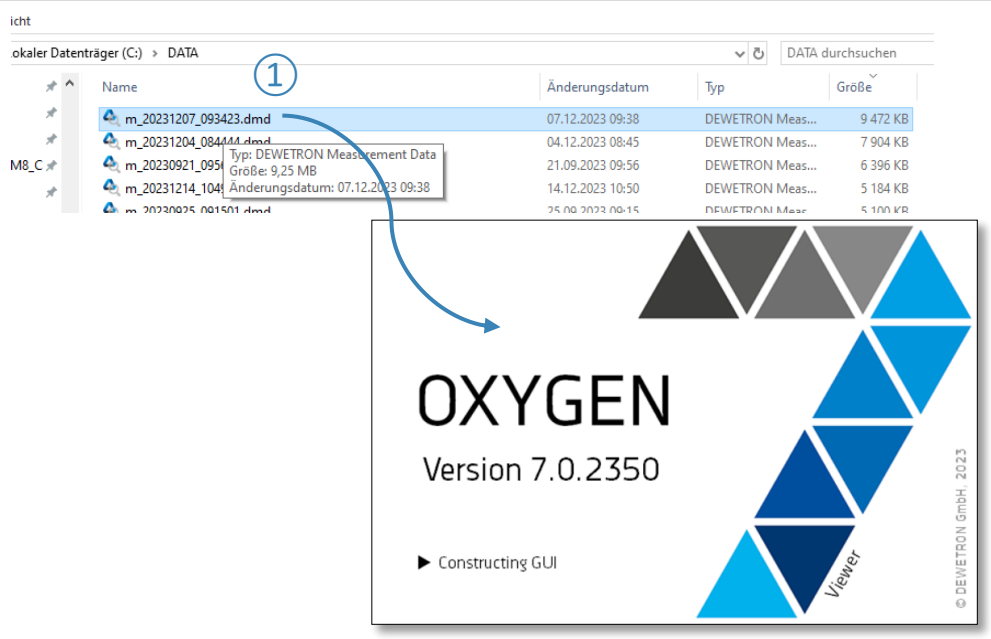
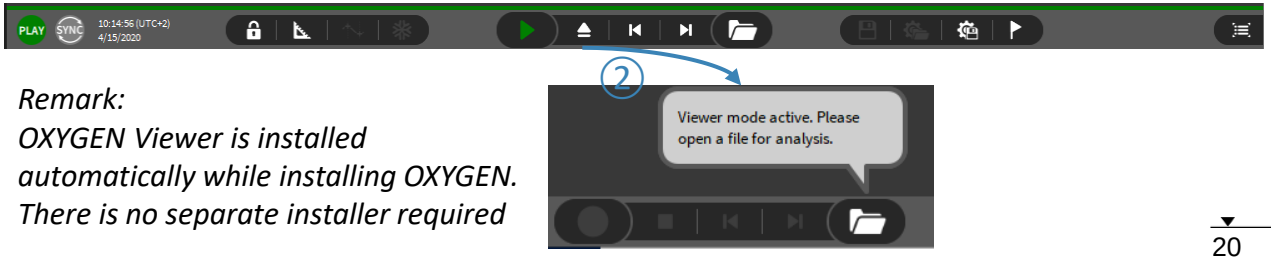
①	When a data file is opened with double click from the Windows Explorer, it is automatically opened with the OXYGEN Viewer. OXYGEN Viewer can be used to open several data files in parallel (each with a separate OXYGEN Viewer instance) for comparison. It is also possbile to open a data file with OXYGEN Viewer while a Recording is still active
②	If a file is ejected from the Viewer mode, it is only possible to open another data file but not to start a recording





Remark:
OXYGEN Viewer is installed automatically while installing OXYGEN. There is no separate installer required

OPEN MULTIPLE *.DMD-FILES

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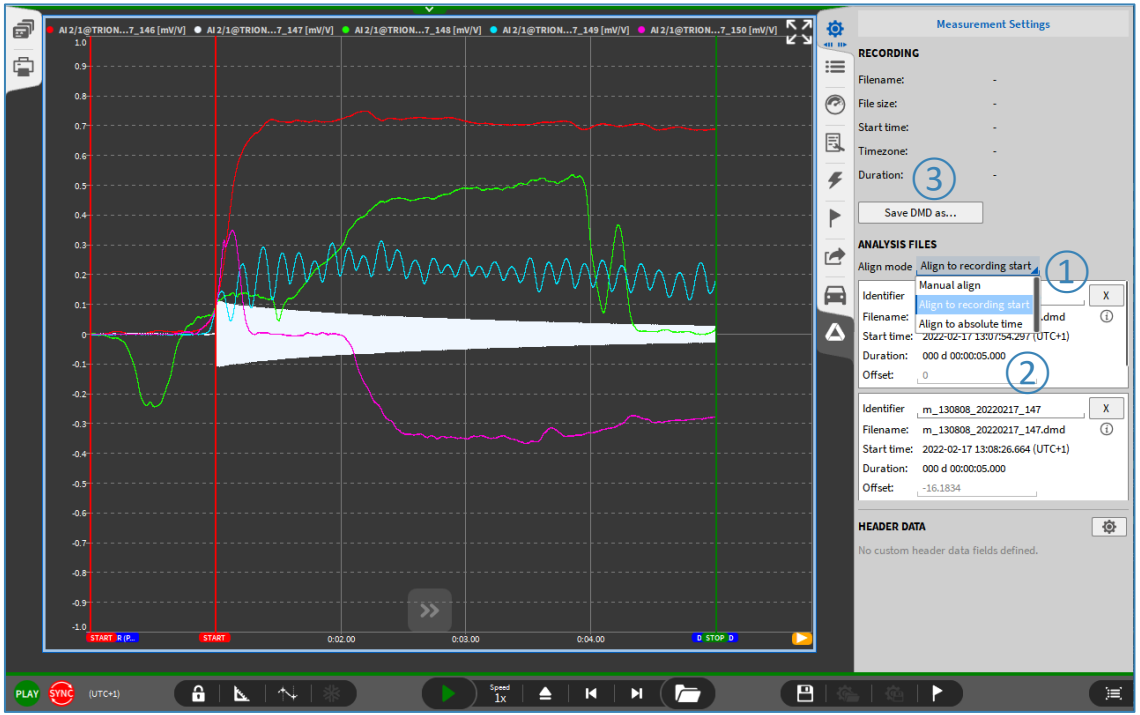
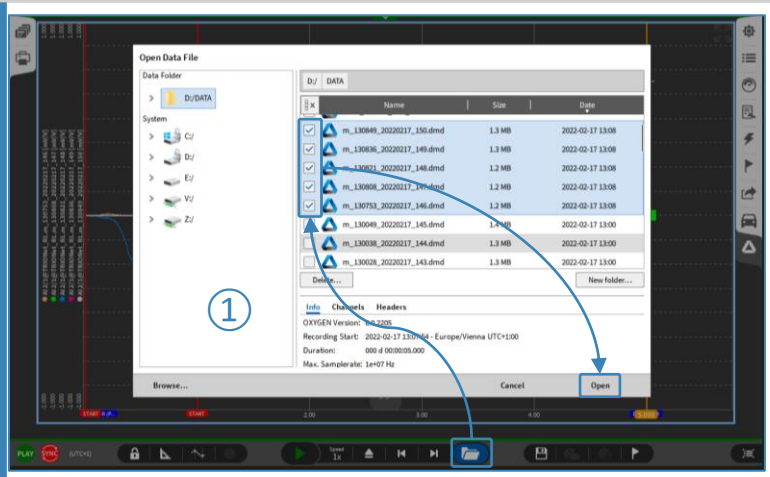
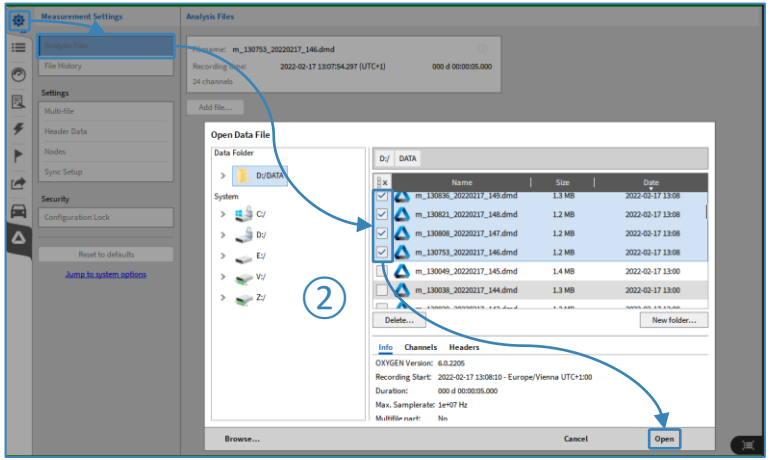


OPEN MULTIPLE *.DMD-FILES

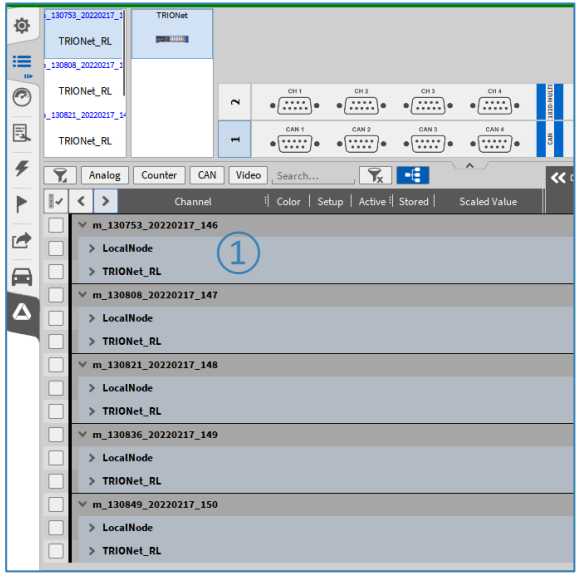
- How to:
- Use the *Open data file* popup (①)
- Use *Add file…* option in Measurement Settings (②)

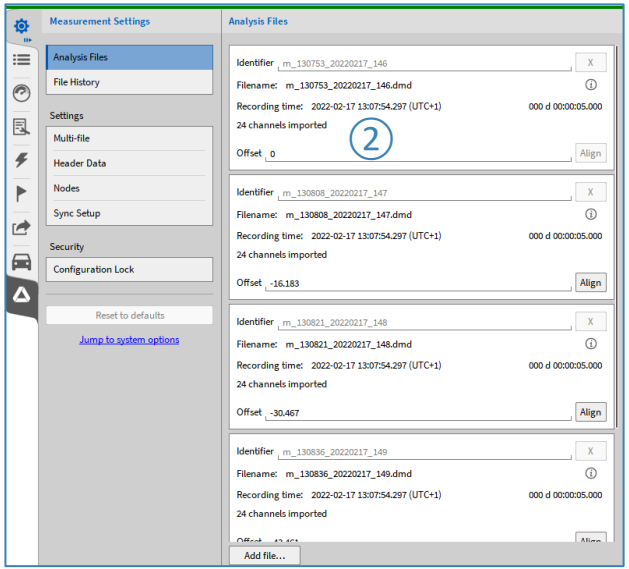




OPEN MULTIPLE *.DMD-FILES

- Each loaded *.dmd-file has a separate group in the Channel List (①)
- Overview of all loaded files available in *Measurement Settings* → *Analysis files* (②)





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