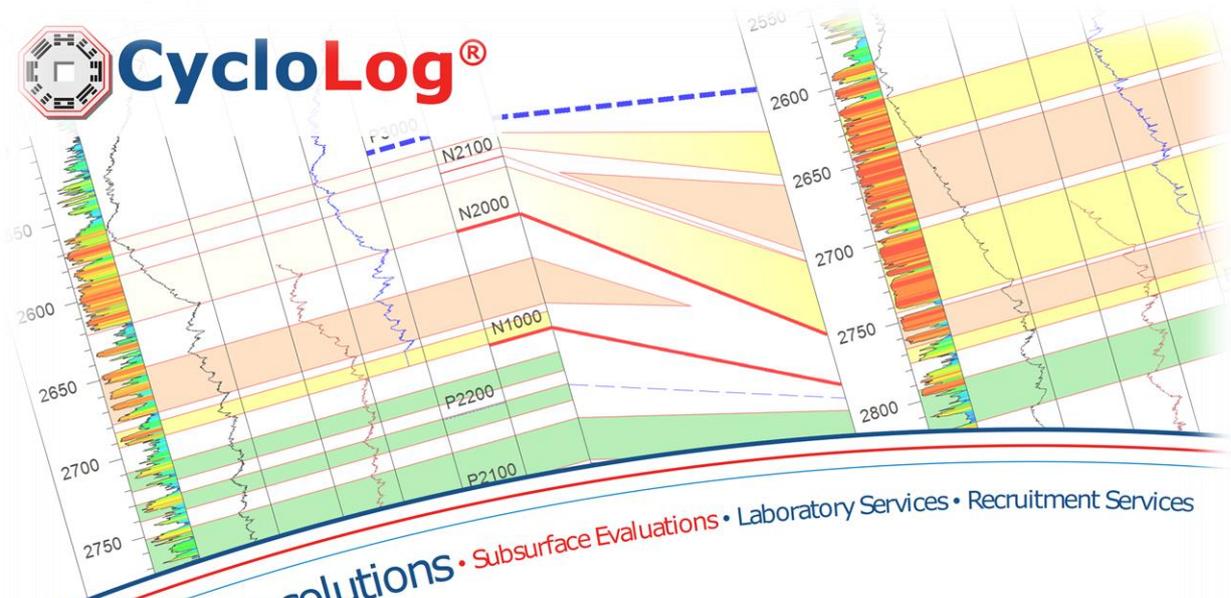




CycloLog®



From data to solutions • Subsurface Evaluations • Laboratory Services • Recruitment Services

Release Notes

CycloLog® 2021

From data to solutions • Subsurface Evaluations • Laboratory Services • Recruitment Services



Version 2021 - January 2021

In this document, new features as well as improvements, changes, known issues and problems in CycloLog® 2021 are summarized.

For detailed information about CycloLog® 2021 features, please refer to the Help manual in the CycloLog® software application or the Tutorials on our website:

<https://cyclolog.com/support/tutorials/>

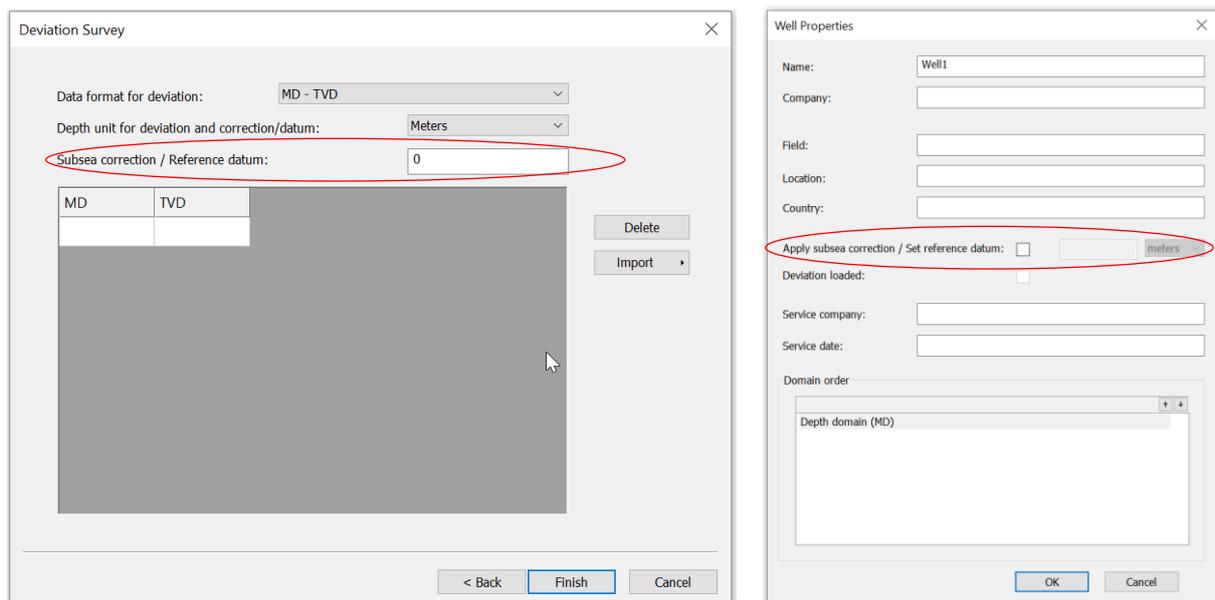
Release features

The CycloLog 2021 version has two key features that have been implemented, strongly improving the user's workflow and time efficiency. These are the management of the depth domains and the Break/Reservoir Sets in the correlation panel. The improvements fit in our long term strategy to improve work with multiple wells, to further integrate datasets and to facilitate accurate-cost effective correlations.

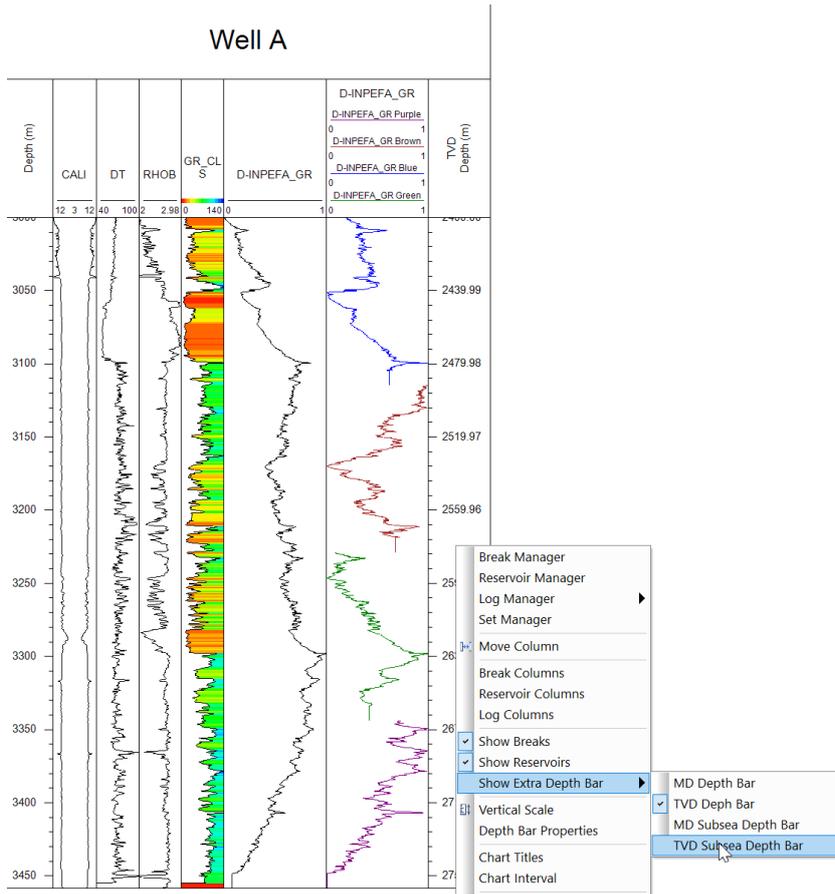
Improved workflow with depth domains

In CycloLog 2021 we have worked to improve user experience in depth domain management. CycloLog is set apart to by its as several algorithms are founded in the frequency analyses, therefore the TVD domain is resampled during loading stage. The following upgrades have been performed:

- *LAS File* loading now allows a reference datum to be filled out, which can be used for the secondary depth axis. This can also be added later in the *Well Properties* window.



- Extra depth bar improved, the secondary axis can be used to display MDSS and TVDSS.



- All curves generated in TVD or MD can be exported in either MD or TVD. This feature is present in both the individual or batch .las export. Note that as in CycloLog the TVD domain is resampled, the export from TVD to MD requires another domain conversion. The results will not be identical to the original, therefore multiple iterations of import->exports->import etc. are not advised.

LAS File Export Wizard

Logs

Source

Well: Well A

Domain: Depth domain (TVD)

Top: 2400

Bottom: 2766.95

Target

Domain: Depth domain (TVD)
Depth domain (TVD)
Depth domain (MD)

Select logs

GR
 DT
 RHOB
 CALI
 GR_CLS
 D-INPEFA_GR
 D-INPEFA_GR Blue
 D-INPEFA_GR Brown
 D-INPEFA_GR Green
 D-INPEFA_GR Purple

Select All Select None

OK Cancel

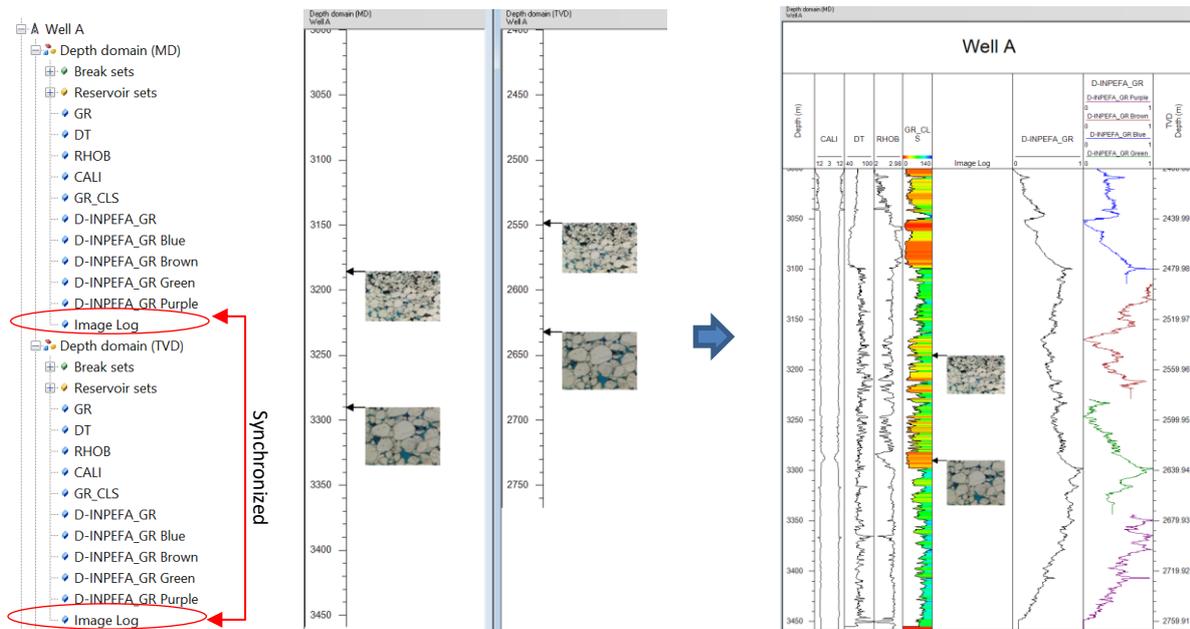
Batch Export LAS

Exp.	LAS File	Well name	Source domain	Source top	Source bottom	Target domain	Curve list
<input type="checkbox"/>	Well1.las	Well1	Depth domain (MD)	3600.00	4034.80	Depth domain (MD)	GR DT RHOB ILD C
<input type="checkbox"/>	L10-18.las	L10-18	Depth domain (MD)	3200.00	3663.80	Depth domain (MD)	GR DT RHOB NPH
<input type="checkbox"/>	L10-33.las	L10-33	Depth domain (MD)	3550.00	3838.99	Depth domain (MD)	GR DT RHOB NPH
<input type="checkbox"/>	L11-02.las	L11-02	Depth domain (MD)	3550.00	3990.80	Depth domain (MD)	GR DT RHOB NPH
<input checked="" type="checkbox"/>	Well A.las	Well A	Depth domain (TVD)	2400.00	2766.95	Depth domain (MD)	GR DT RHOB CALI

Select All Select None Source Domain Target Domain Export Close

MD
TVD

- Automatic synchronisation of TVD and MD depth domains across the following type of data: Reservoirs, Breaks, Plug data Log, Tadpole Log, Casing Log, Interval Log, Comment Log, Biostratigraphy Log, Image Log and Bar Log. Below an example for the thin-section photo micrograph images (Image Log).



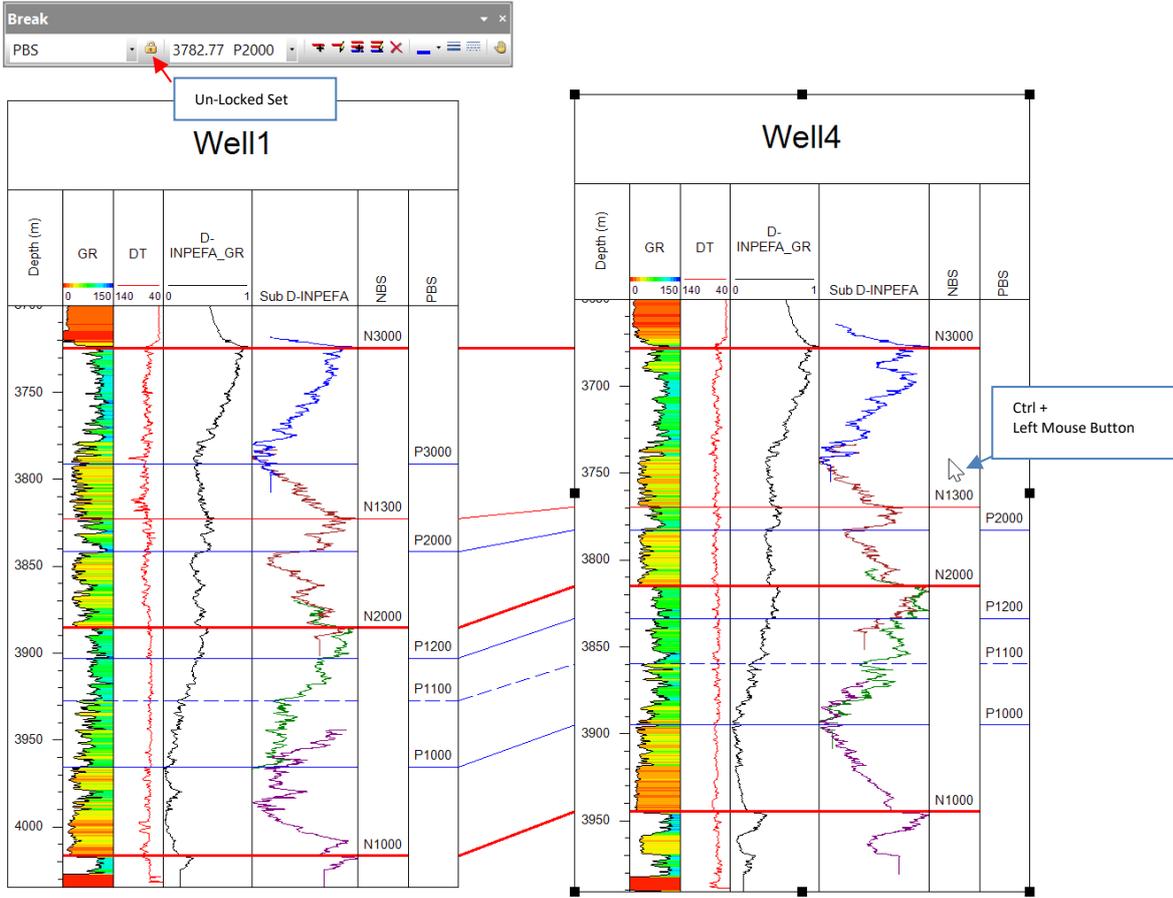
Break and Reservoir Sets

Working with Break and Reservoir Sets is now more intuitive and requires less mouse clicks.

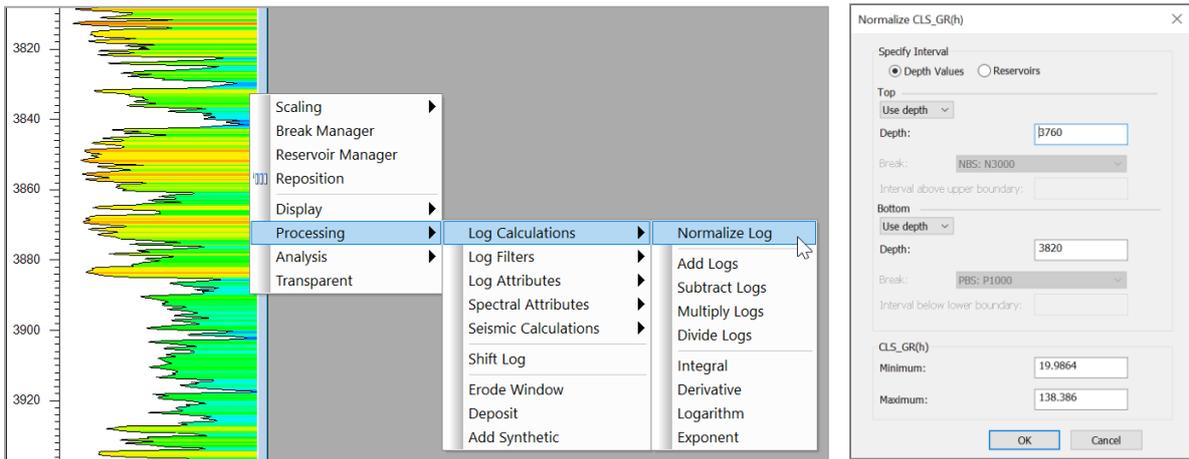
When working in a correlation panel, adding Breaks or Reservoirs in the same set required a sequence of locking and unlocking the Active Sets. A new logic has been inserted to improve the user experience:

- With no locked set: The last added or selected break/reservoir set is remembered when adding a new break (Ctrl+left mouse button) from well to well.
- With locked set; Only the locked break/reservoir set can be edited in the correlation panel. Preventing accidental editing or moving of nearby breaks from other sets.

Example below shows set 'PBS' is unlocked and P3000 was added in Well 1. User proceeds to add the new break in Well 4, 'Ctrl+left mouse button' in the last selected set (PBS), or 'Ctrl+left double click' for adding the break and opening properties log to add its name and edit.



- Additional clarity and efficiency in the 'Normalise Log' tool. After updating the depth the min-max values are automatically updated for the user.



Further Updates

Countless small improvements have been performed to update the user friendliness of the Software:

- Reduce amount of mouse clicks in *Apply* and *Calculate* buttons.
- Improvements in the display and tables in the different screen resolutions. This allows to display correctly all the windows, dropdown menus and tables.

Compatibility

The CodeMeter and AxProtector technology developed by WIBU-Systems is used for licensing as well as protection of CycloLog® 2021 software. The encryption technology and CycloLog® 2021 software are compatible with Windows 10. These are further improved in the new installer.

Known Issues

The following issues and problems related to the CycloLog® 2021 functionalities are known. We aim to fix these in a near future release.

Small visual displacements

Due to the pandemic, work environments had to be adapted for our clients. In some cases minor displacements in some of our menu's are reported. The functionality is not impaired, and we continue to resolve all these display issues.

MESA and Log Response data panes cannot be scaled with mouse pointer

In CycloLog® 2021, the user can manually change the vertical scaling of log data panes and composite well charts by placing the mouse pointer on the depth bar, subsequently holding down the left mouse button (LMB), and then dragging the pointer up or down. This way the vertical scaling can be adjusted according to the user's preference. This functionality, however, is not supported for the Log Response and MESA data panes.

Workaround

To change the vertical scaling using the dragging functionality, the user is advised to open another log data pane next to the MESA or 'Log Response' panes. Make sure that Toggle Auto Vertical Scaling is activated and then drag with the LMB the depth bar of the opened log. This way the user can set his preferred scale.

Alternatively, click with the right mouse button (RMB) on the MESA or 'Log Response' data panes and select Vertical Scale to set the preferred vertical scaling.

Exporting log data as ASCII file yields impractical file structure

The data structure of a log data file in ASCII format that has been exported from CycloLog® 2021 is not ideal. In the ASCII file header, the log names are listed below each other, in separate rows. Re-importing such a file into a new CycloLog project (using the General ASCII import functionality) will require a manual input of the log names for each of the logs listed in the import wizard, which can be time consuming.

Workaround

Before importing an ASCII file into CycloLog, the user should check and, when necessary, adjust the structure of the log names header in the ASCII file. This can be done using a data processing software such as Excel (or Notepad). All log names should be in one row and separated by TABS (see example below).

Alternatively, the user can export the log data from CycloLog as a LAS or CLG (CycloLog) format file.

DEPTH	Log1	Log2	Log3	Log4		
3600.000000		8.291000	68.081497	0.000000	0.000000	
3600.200000		20.959227	67.850243	0.000000	0.000000	
3600.400000		54.639637	68.026237	0.000000	0.000000	
3600.600000		57.169765	68.301064	0.000000	0.000000	
3600.800000		57.303669	68.265106	0.000000	0.000000	
3601.000000		19.155800	67.964798	0.000000	0.000000	
3601.200000		16.259031	67.728462	0.000000	0.000000	
3601.400000		15.155625	67.577156	0.000000	0.000000	
3601.600000		14.593274	67.484848	0.000000	0.000000	
3601.800000		13.377397	67.458305	0.000000	0.000000	
3602.000000		11.191200	67.519203	0.000000	0.000000	
3602.200000		9.685138	67.632431	0.000000	0.000000	
3602.400000		9.021322	67.771362	0.000000	0.000000	

Example of an ideal ASCII file structure for import into CycloLog ®.

Contact

Please contact the PanTerra Geoconsultants Support team for any questions about the CycloLog® software or for suggestions that would help us to improve our software. We strongly rely on Users to provide ideas for improvements, not only to the software but also to all related documentation.

Contact our support team at: cycloLog@panterra.nl, or call: +31 (0) 71 58 13 501 Our normal office hours are CET, from 9 AM to 5 PM, Monday to Friday.

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