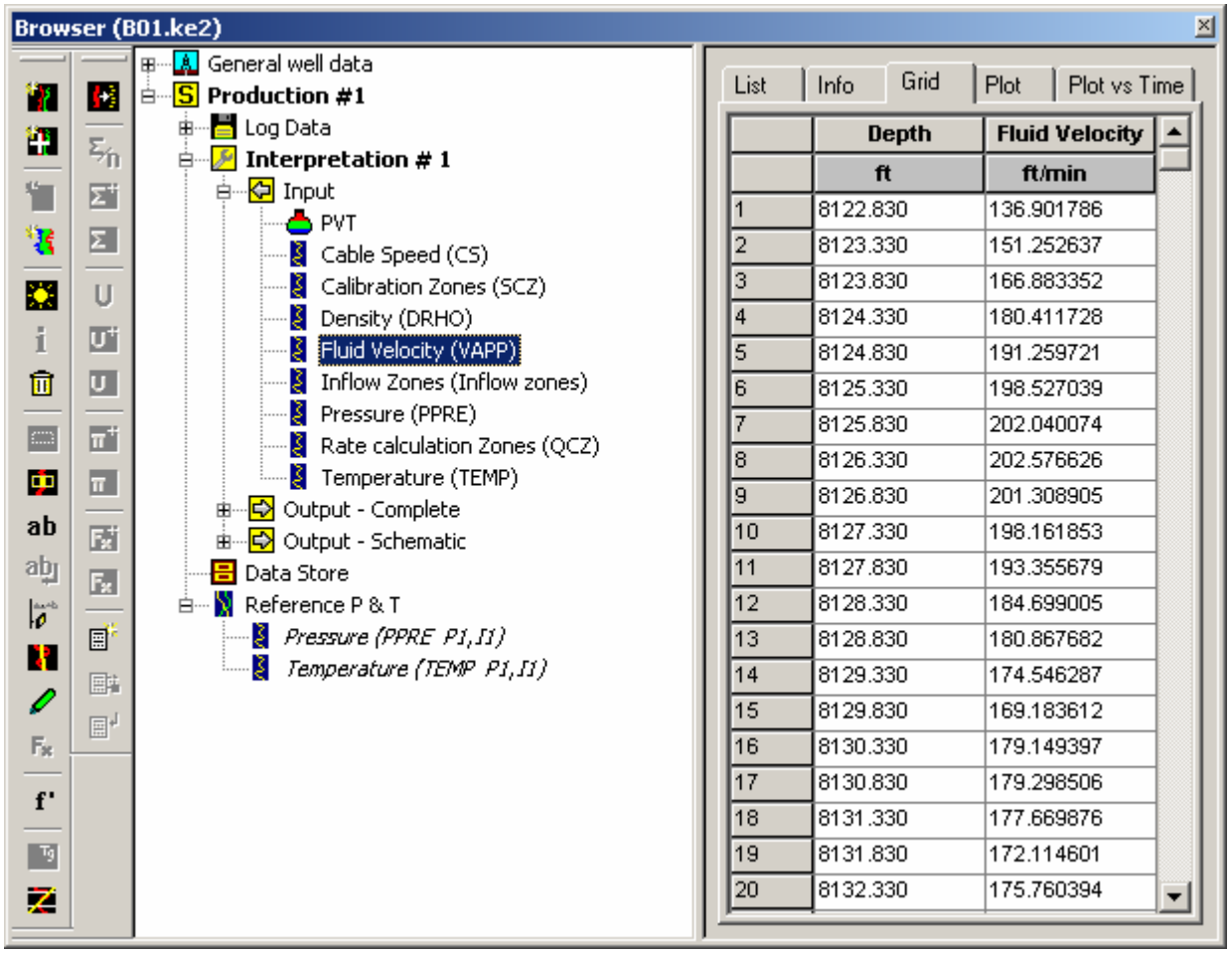
D05 • Data browser

D05.1 • Browser overview

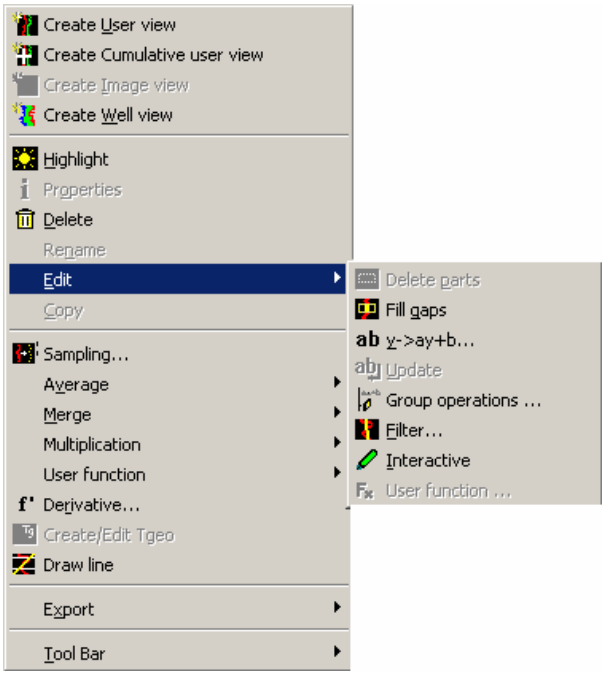
The Browser dialog is activated with the Browser option of the main menu or the icon of the main toolbar. The browser dialog is divided into two areas. On the left is a hierarchical tree view of the data in the file. The width of the tree window can be changed by dragging its border with the right window.



	Depth	Fluid Velocity
	ft	ft/min
1	8122.830	136.901786
2	8123.330	151.252637
3	8123.830	166.883352
4	8124.330	180.411728
5	8124.830	191.259721
6	8125.330	198.527039
7	8125.830	202.040074
8	8126.330	202.576626
9	8126.830	201.308905
10	8127.330	198.161853
11	8127.830	193.355679
12	8128.330	184.699005
13	8128.830	180.867682
14	8129.330	174.546287
15	8129.830	169.183612
16	8130.330	179.149397
17	8130.830	179.298506
18	8131.330	177.669876
19	8131.830	172.114601
20	8132.330	175.760394

A node in the tree preceeded by a “+” can be unfolded with a click on the “+” (or a double-click on the icon). The right side of the browser contains 5 pages: List, Infos, Grid, Plot, and Plot vs Time. When a container node (e.g. Pass, Survey, etc) is selected in the tree, its content is displayed in the “List” page. This is similar to folders in Windows Explorer. This facility can be used for some drag and drop operations. The “Info” page gives information on the selected node. The “Plot” and “Grid” pages are used when the selected node is a channel.

In addition to providing a clear view of the data structure, the browser gives access to most Emeraude editing options. Options can be selected in the browser toolbar; a quick description of the toolbar options is obtained by moving the mouse successively over each button without clicking. Alternatively access the browser popup menu with a right mouse click in the browser dialog:



Note: The size and position of the browser window is kept from one session to another. If the browser dialog box fails to appear when called, the default position can be restored using Regedit (see Troubleshooting chapter D14).

D05.2 • Browser options

Options are accessed from the browser toolbar or by invoking the browser popup menu with a right mouse click inside the browser dialog:

Create a User View		Create a user view , attached to the current survey, where any combination of channels can later be dropped.
Cumulative User view		If channel A, B and C are dropped on the user view, they will appear as A, A+B and A+B+C
Image view		Create an image view. Enabled only when a multiple probe tool is recognized inside the current survey
Well view		Create a well view to illustrate the wellbore geometry, overlay holdups, etc.
Highlight		Highlight the selected channel or pass.
Properties		Enabled when the selected browser node is General Well Data, a data Pass, or an Interpretation. For a data pass, invokes the Pass Information dialog. For General Well Data or Interpretations, it invokes the aspect dialog for automatic plots.
Delete		Delete the selected object or remove it from its parent when this parent is a user view or an average object. The “Del” key can be pressed instead.
Create/edit geothermal profile		To create or edit a geothermal profile used in temperature interpretation (can also be defined manually, see section D09.24)

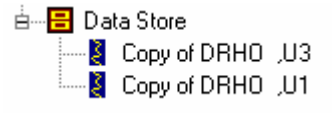
Draw Line		Calculate a least square line on a seleted interval of the active channel.
Edit	**Delete parts**	Delete a section of the selected channel.
	Fill gaps	Replaces gaps created with the Delete Parts option by a straight line.
	y -> a.y+b	Enter/edit factor/shift applied to the measure of the selected channel.
	Update	Update the selected channel with the result of y -> a.y+b.
	Group operations	Apply operations of type Y = a.Y + b to a group of channels of the same type.
	Interactive	Replace a section of the selected channel by drawing on the screen.
	Filter	Filter the selected channel.
	Sampling	To re sample selected log data, or delete a range on several curves at once.
	User function	Calls an external DLL with one channel argument.
Average	**Compute from list**	Create a lateral average in the selected Data Store or Interpretation. Channel selection is made inside a list. Access to Up/Down passes.
	Create object	Create a lateral average object in the selected Data Store or Interpretation. Channels to be averaged are dropped onto this object.
	Compute from object	Builds the average of the channels gathered under the selected average object.
Merge	**Compute from list**	Create a Merged channel in the selected Data Store or Interpretation. Channel selection is made inside a list. Access to Stations.
	Create object	Create a Merge object in the selected Data Store or Interpretation. Channels to be merged are then dropped onto this object.
	Compute from object	Merges the channels gathered under the selected merge object.
Export	**Create object**	Creates an export object, added to the browser tree. Passes or channels to be exported are dropped onto this object.
	Add pass	Adds a pass below the selected export object
	Export file	Creates the export file for passes/channel gathered under the selected export object
Multiply	**Create object**	Creates a multiplication object in the Data Store
	Compute multiplication	Compute multiplication from the selected object under the data store node.

User function	**Create object**		Creates a User function object in the Data Store
	Compute from object		Applies the user function to the selected input

D05.3 • Channel selection

The decision to edit a particular channel is normally made while looking at this channel on a plot of the main window. Editing options require that the channel be first selected inside the browser which can be done automatically, in the following manner:
Open the data browser. Click the “Nearest curve” option of the pass toolbar and click on the curve to be edited. The browser will automatically develop the necessary nodes, select the node for the picked channel, and scroll the data tree to put this node in view.

D05.4 • Data Store



Each survey has an associated Data Store, which can be used to create and store a copy of any channel. The copy is made by simply dragging and dropping the desired channel onto the Data Store. In addition to such copies, Lateral Averages can also be created (see Lateral average: compute from list and compute from object Merged channels, or multiplications. It is also possible to create in the Data Store, the result of the some user function, implemented in external DLL’s.

You would typically transfer the data that would be used for averaging or needs modification to the data store. After modification, editing, averaging, etc, the newly created channels could then be dropped (transferred) to the interpretation node and become the reference channel for the interpretation calculations.

Special properties of Data Store channels

- Name can be edited directly inside the browser
- Never plotted on automatic plots but can be plotted on user views.
- Not accessed by the average: compute from list option.
- Not accessed by the merge: compute from list option.
- Spinner channels are ignored in the calculation: editing of spinner channels must be done inside the Up/Down passes. The Data Store may then be used to keep a copy of the original data.

D05.5 • User view creation

User views are created from the browser and attached to the active survey. They are only visible when the parent survey is active. However a user view can be used to compare channels from different surveys.

Select “Create user view” in the browser popup menu or use the  icon of the browser toolbar to create a new user view in the current survey. It is named “User view#n” and is placed on the far right of the main screen.

In the data browser, the user view is represented by a node 

. The name of the channels added to the view is indicated below this node, in *italics.* In order to keep track of the actual location of those channels in the hierarchy, Emeraude uses a special naming convention.

Adding a channel to a user view

To add a channel to a user view, select this channel in the data browser with the left mouse button, drag and drop it in the user view. Alternatively you can drop it onto the “User View #n” icon in the browser. Another way to select the “List” page on the right is to click the “User View #n” icon in the tree, and then drop channels directly on the “List” page.
For each channel the header of the user view indicates the scale, the aspect, and a name constructed with the same convention as used in the data browser (see section D02.3). User view headers can be “condensed” to a drop list. This option is given in the Log title option of the log popup menu and is accessed by a right click on any plot (section D03.3).
In a user view, one channel is **active** at a time and its legend appears in bold characters. When the mouse is moved inside a user view, the horizontal coordinate displayed in the status bar at the bottom of the screen pertains to the active channel. The active channel is by default the last one dropped in the view. To change the active channel, click on the corresponding legend line in the user view header. When the user view header is condensed, the active channel corresponds to the current selection in the header drop list.

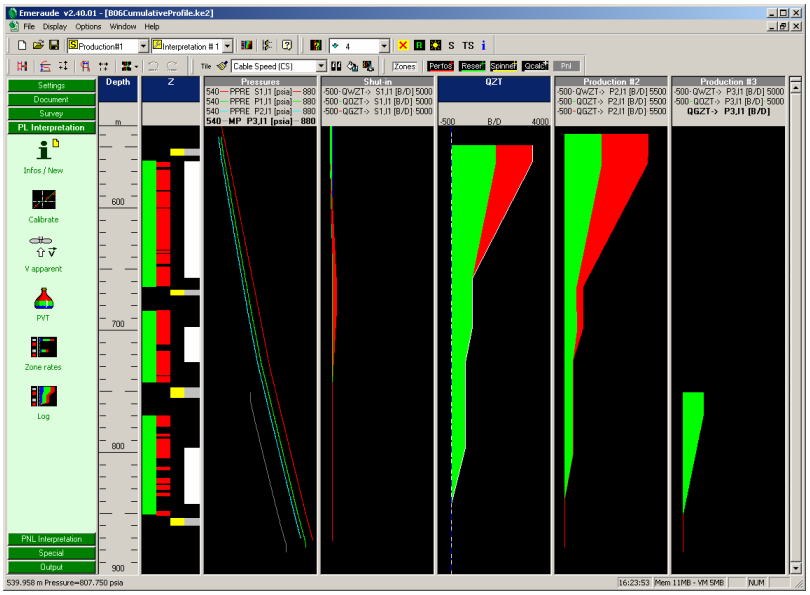
Removing a channel from a user view

A channel is removed from a user view by selecting the corresponding browser node and selecting “Delete”. This option does not delete the data.

D05.6 • Cumulative user view

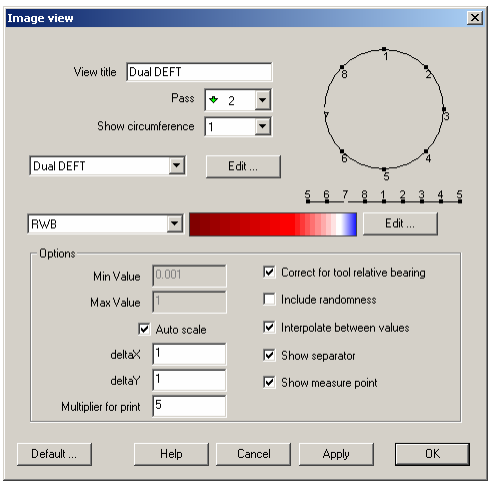


The user can define a user view as "cumulative" in which case channels plotted are successive sums of the channels. E. g. when dropping channels A, B, and C on a cumulative user view, Emeraude calculates and displays: A, A+B, A+B+C. Cumulative user views are created in a manner analogous to “standard user views” (see user view creation, section D05.5). You can use cumulative user views to create within a survey, rate plots with the results of other surveys:



D05.7 • Image view

Image views are created using the  icon of the data browser (or the corresponding option of the browser popup menu). This option is enabled when a multiple probe tool is recognized inside the active survey (see D08.4: Survey – Tool Info). When an image view is created the following dialog is displayed. You can also access this dialog for an existing image view with a right click on the view, then “Properties”.



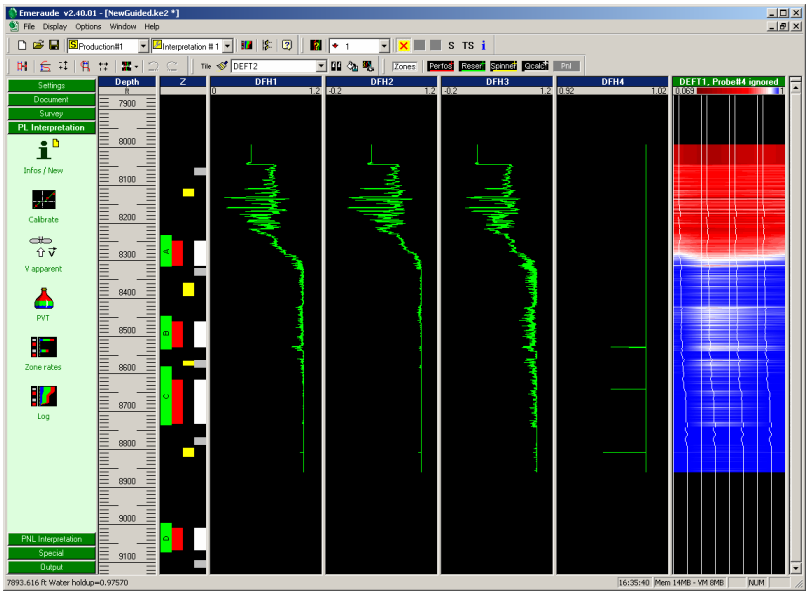
The “Image View” dialog allows the definition of:

- a specific title.
- the tool to be used from the list defined in the tool info dialog (D08.4).
- the particular pass to display in the image.
- the image view color scale (Color Scales are described in section D06.6).

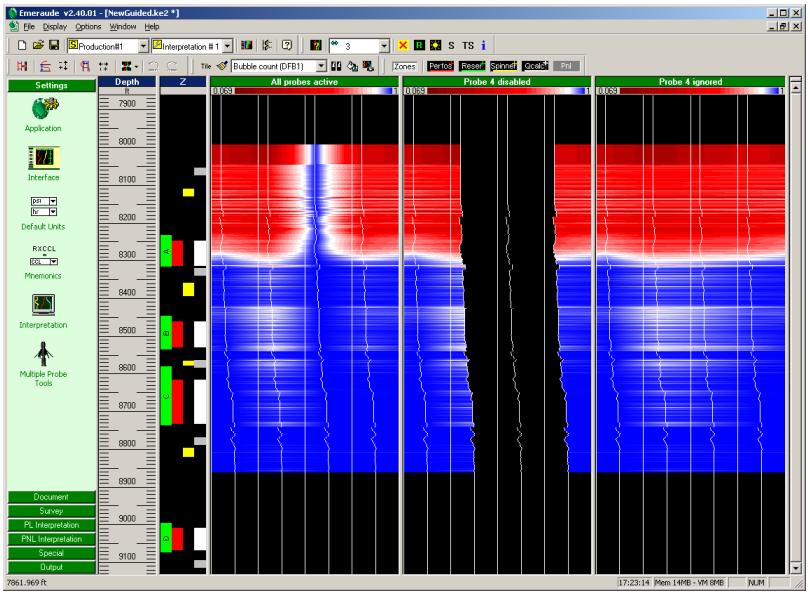
At this stage, you can recall the “Tool info” and/or the “Color scale” dialogs (via the “Edit” buttons) in order to view/edit the current options. Other controls specific to the image view are:

- “Min” and Max” define the scale range - if “Auto Scale” is checked, taken as the channel bounds.
- “delta X” & “deltaY” define the horizontal & vertical resolution in pixels.
- “Correct for tool relative bearing” corrects the image for the tool rotation using the relative bearing: the center of the view represents the top of the well.
- “Interpolate between values”: create a linear interpolation between two consecutive probe measurements.
- “Show separator”: show vertical lines splitting the track in as many intervals as there are probes.
- “Show measure point”: shows the probe position (undulating white line on the view in the middle of each track).

An example of a DEFT holdup view is given below:



On the Figure above, the view is corrected for bearing. The view shows “separators” (vertical white lines) that correspond from left to right to angles -90, 0, 90 from the top of the pipe. On the view are also indicated as white curves the probe traces. The next figure shows the effect of probe status, changing the status of probe 4 from active, to disabled, and then Ignore.



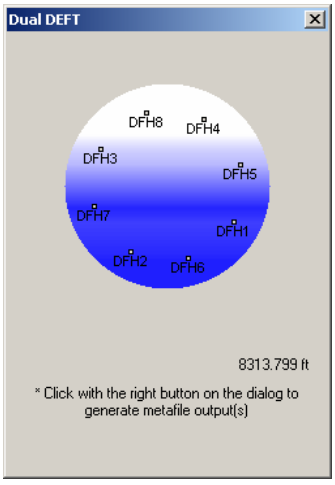
Note: probe status is defined uniquely as part of the tool info. To create a layout as above requires that copies of the tool be created in Settings so that different conditions can be handled simultaneously.

Cross section

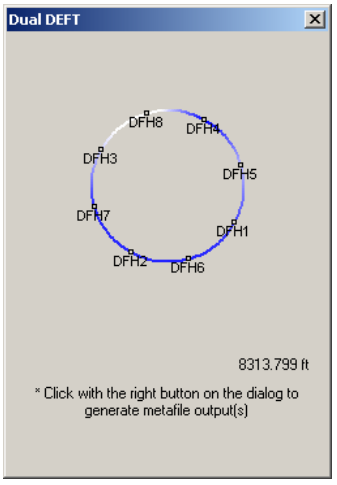
This option can be used to see an orientated “cross section” anywhere along the log. The geometric parameters of the tool must have been defined beforehand in the Survey - Tool Infos – Multiple Probe Tool dialog.

To activate the cross section dialog: right click on an image view and select “Cross-section”. With this dialog on the screen, any time you press the Shift key with the mouse cursor inside the parent image view, the dialog is updated. If you keep the shift key pressed, and move the mouse Up/Down inside the parent image, the cross section is updated continuously.

Cross-section with the “Stratified average”

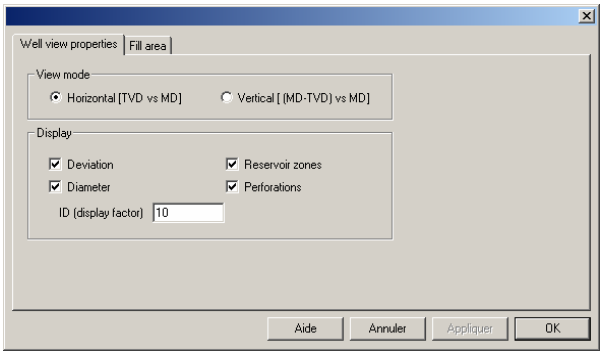


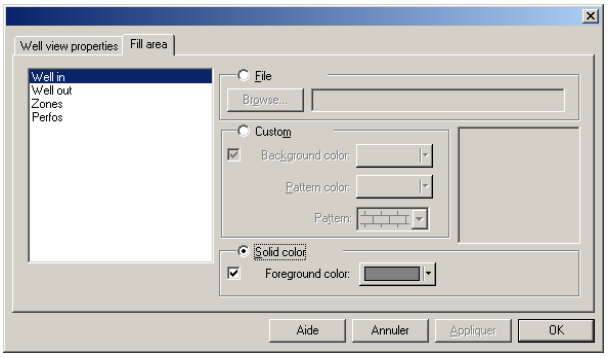
Cross-section with the “Simple average” (or CAT specific processing for stratified flow)



D05.8 • Well view

Well views can be created from the data browser using the  icon (or the corresponding option of the browser popup menu. After selection a dialog with the following 2 pages appears:





The list of candidate channels for a well view is described below. Channels can be added via the dialog above (called at the view creation, it may be recalled with the view popup menu: “Properties” option). Channels can also be dragged and dropped directly from the data browser onto a user view.

TVD/Deviation

When this option is selected in the dialog above the search logic is to look for a deviation channel in the current interpretation first, then inside the General Well Data if unsuccessful. If no deviation can be found, a TVD channel is searched along the same path. The deviation/TVD information is used to give a representation of the wellbore geometry, and depends on the view mode selection:

View mode

- Horizontal: a pair of TVD curves is plotted. The track vertical axis corresponds to the physical horizontal axis. The scale is inverted so the left of the track is the bottom of the wellbore.
- Vertical: a pair of curves based on MD-TVD is plotted. The track vertical axis thus represents the physical vertical axis. *Note: the well view can work from the knowledge of deviation only, and even if the deviation is defined only within the logged interval. The calculated TVD is thus a TVD variation relative to the first MD of the deviation channel.*

Internal diameter / Caliper

When this option is selected the search logic is to look in the current interpretation first, then inside the General Well Data if unsuccessful. The diameter information is taken into account to draw the wellbore representation.

ID (display factor)

Coefficient allowing to enlarge the displayed pipe ID.

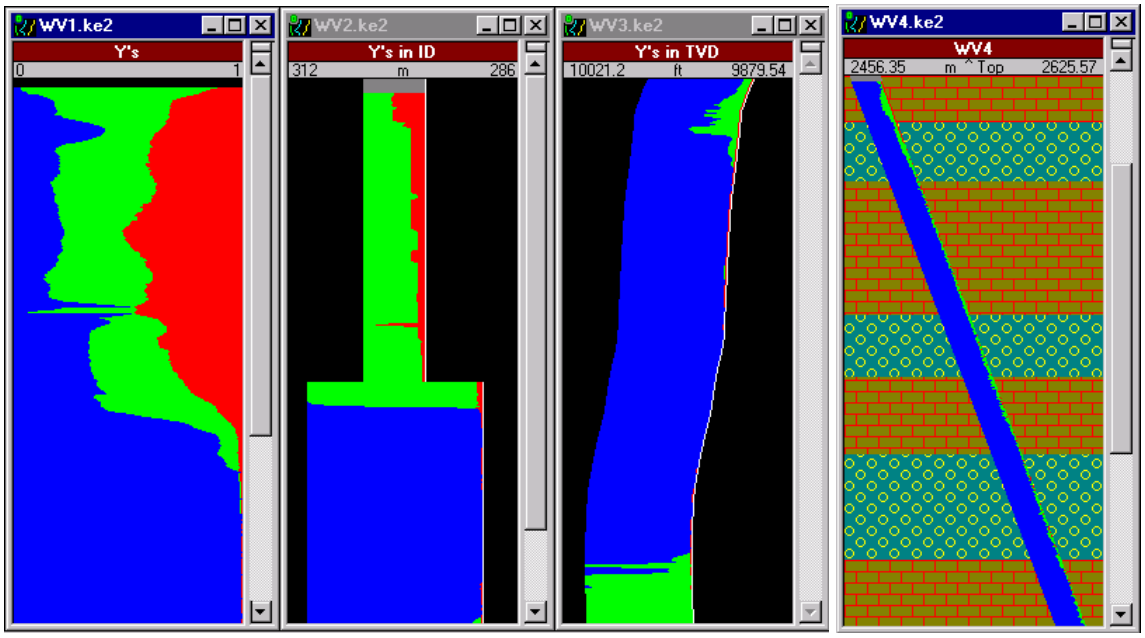
Zones

- Perforations, reservoir zones, etc. They appear outside the wellbore on the well view with their current aspect, as defined in the Document Information, Zone Colors tab.

Holdups

- Water, oil, or gas holdup either as direct measurements or complete output. Holdups have to be dropped directly from the browser. The order in which they are dropped is irrelevant. Depending on the view mode, and the horizontal scale status, Emeraude will use the adequate order.

The second page in the well view property dialog allows the definition of colors/patterns to fill the area outside, and possibly, inside the wellbore. The examples on the next page illustrate some of the possibilities offered by the well views.



D05.9 • Delete parts / Fill gaps

Enabled when a single channel is selected; deletes the points in a user defined interval selected either from the Grid page, Plot page, or any plot on the main window that shows the selected channel.
Grid: Select a range of lines by clicking on the button to the left of the first line, drag down to the bottom line and release the mouse button. Then select “Delete parts” in the browser popup menu (or click in the browser toolbar). Note that the grid scrolls automatically when dragged to the top or bottom.

Plot: (in browser or main window): Select the “Delete parts” option from the browser popup menu (or via the toolbar), click the mouse at the top of the desired interval, drag to the desired lower limit and release the mouse button.

Fill Gaps

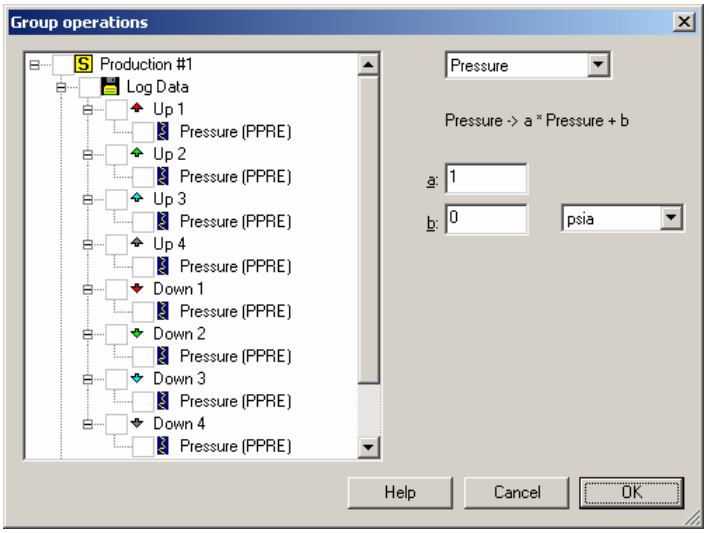
Gaps created with the Delete parts option can later be filled with a straight line using the “Fill gaps” option of the browser popup (or in the browser toolbar). The “Fill gaps” option requires the maximum size of the gaps to be filled (i.e. gaps above this size will stay gaps).

D05.10 • y -> a.y + b / Update / Group operations

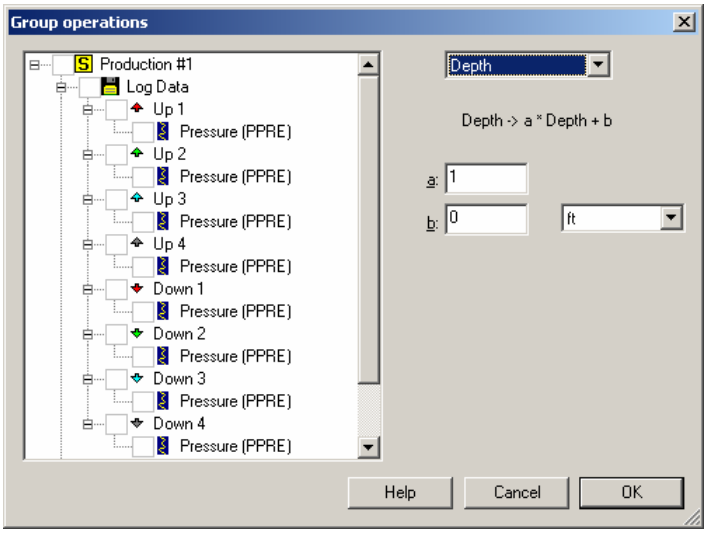
y -> a.y+b option of the browser popup - in the browser toolbar. This option is used to modify linearly the Y values of a selected channel. By default all a’s and b’s are equal to 1 and 0. When different values are entered, the actual channel data is not modified and the change is reversible. A typical use of this option is to offset a density or capacitance reference channel inside an interpretation.

Update option of the browser popup - in the browser toolbar
Warning: This applies the shift and factor to the actual data, **resetting a and b to 1 and 0.**

Group operations: To use this option, you should select a channel of the desired type, then click on the “Group operations” icon .
The dialog below is displayed showing, to the left, a subset of the data tree with the channels of the same type as the selected one. You can check the candidate channels for the operations, enter a & b, and execute with OK.

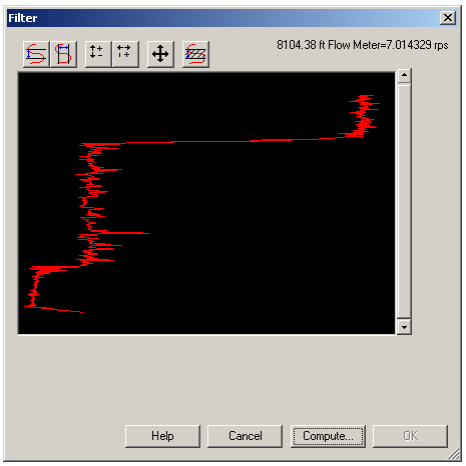


The shift can be applied to the measure or to the depth part of the channel, allowing the user to depth shift channel individually. The user can select which part of the channel (measure or depth) he wishes to shift from the top right combo box.



D05.11 • Filter

From the browser popup menu or  in the browser toolbar. Applies a moving window algorithm on all or part of a channel.



The selected channel appears in a plot which can be rescaled using the toolbar above the plot. Options in the toolbar are as follows:

 Interactive zoom on depth

 Interactive zoom on measure

 Dynamic zoom on depth

 Dynamic zoom on measure

 Show All: rescales to show the entire channel

 Compute the selected filter only on a part of the data set (see below).

The scale options (except Show All) are similar to those in the main window – see Zoom options, section D03.7.

To filter the complete data set

After selecting the filter type, click on **Compute** to enter required parameters and filter the channel. The resulting curve is plotted in yellow for comparison with the input channel. The replacement is done when OK is selected.

To filter a part of the data set

After selecting the filter type, click the rightmost button of the toolbar, click for the first limit, drag down to the bottom limit, and release the mouse. Enter the required filter parameters in the subsequent dialog and validate with OK. The resulting curve is plotted in yellow for comparison with the input channel. The replacement is done when OK is selected.

D05.12 • Interactive edit

Selected in the browser popup menu – or the  button of the browser toolbar.
The interactive edition can be executed on the "Plot" page of the browser, or directly on a main screen plot showing the selected channel. The most convenient way of editing is on the main screen; open the browser and move or resize the browser dialog so that the curve to be edited is still visible. Next, select the "Interactive" edit option. Click directly and draw on the curve to edit.

Validate/Cancel

Opening the Interactive edit displays a floating dialog with "Validate" and "Cancel" options to terminate editing. Validation can also be opened with a double or a right click in the view where the channel is edited.

D05.13 • Derivative algorithm

Selected in the browser popup menu – or the  button of the browser toolbar.
Enabled for any type of channel, this option has the following behavior:

Pressure

Creates a pseudo-density channel added to the parent pass, Data store, or interpretation. The created channel is a density with mnemonic **DPDZ**. This is the straight result of the derivation, i.e. the actual pressure gradient, not corrected for pipe frictions or deviation.
A pseudo-density can be used in an interpretation as a gradio. For a standard density it is critical to define the tool properties in the Tools option of the survey panel so that the appropriate corrections are applied. This is not required when using a pseudo-density as Emeraude can readily recognize this channel. In the calculation routines Emeraude automatically will correct the channel reading for deviation and pipe friction.

Other channel types (temperature, rate, etc…)

When the selected channel belongs to a pass, a Data Store, or the General Well Data, the derivative is added to the parent. When the selected channel belongs to an interpretation, the result of the derivation is added to the Data Store of the parent Survey. The derivative is created as a channel of type "Other", and its unit is fixed. The mnemonic is constructed as **XX_D** where **XX** is the mnemonic of the source channel. The name of the channel is **dXX/dZ, unit**.
The derivative is computed using a 3-point central difference algorithm that removes errors of the second order. With a smoothing value equal to *0*, consecutive points are used. With a smoothing value equal to *L*, the two points are the closest ones such that their distance to point *[i]* is at least *L*.

In the dialog where the smoothing is entered, a checkbox allows the same processing to be applied automatically to all channels of the same type within the current survey.

D05.14 • Working with user functions

The browser editing capabilities include the possibility to call a function in an external DLL complying with a specific API (Application Programming Interface). The API allows functions with an arbitrary number of input channels, as well as any number of input floating point arguments. In programmatic form, the API makes provisions for functions of type:

NewY = Function(X, Y1, Y2, .. , Yn, a1, a2, .. , an);

where the Y's are the channel values, and the a's are the floating point arguments.

The browser interface supports two types of calls. You can select a channel in the browser, and call a user function with this channel as first argument, followed by possible floating-point values. The result may override the source channel (same type/mnemo), or be added as a new channel to the parent container. Alternatively, you can create in the Data Store a "User function object" corresponding to a function with any number of input channels, drop those channels on the object, and generate the result. The output mnemonic may be forced by the DLL of be user defined. Beware that this choice will govern unit conversions for the resulting channel.

User function path

To use DLL's located in another directory than the Emeraude.exe directory, you should replace the path in "Settings – Application – External user functions". Once this is done, the calls proceed as follows. Note that only one directory is considered so all required DLL's need to be at the same location.

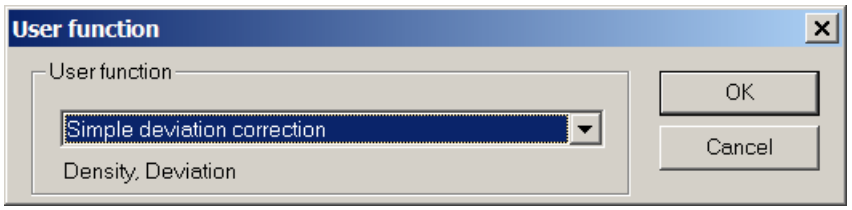
Single channel edition

Select a channel in the browser and then "Edit – User function" (or the corresponding icon). Note that the option will be enabled only if there are user DLL's in the defined path that take one argument of the selected type. The list of valid functions is then displayed and after selection, possible function parameters are

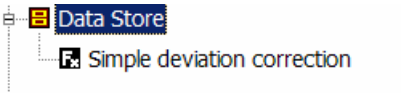
entered. You may then replace the existing channel, or else give a new mnemonic and create a new channel.

User function object in the Data Store

Select the Data Store node and then "User function – Create object", or use or the  icon of the toolbar. You are requested to select the DLL that you wish to use:



This is done so that Emeraude can get from the DLL the expected number of input channels and also their type. A new node appears in the Data Store, bearing the name of the selected DLL.



Drag and drop the required channels on the user function object. Note that Emeraude will only let you drop something of the expected type. When all the required channels have been dropped, the option "User function – Compute from object" (or or the  icon) is enabled, and can be called to get the result.

Note that a development toolkit including a sample DLL with its source code in C++, showing the API details can be provided on request.

D05.15 • User functions Reference

SimpleDeviationCorrection.dll

Input channels: Density, Deviation
Input parameters: None
Output mnemo: Free (should be a density!)
Function detail: $r_{out} = \frac{r_{in}}{\cos(deviation)}$

SDI

Input channels: SDI density tool frequency
Input parameters: Tool count in air, count in water, air density, water density
Output mnemo: DENS_NFD

Function detail: $$r = r_{air} + (r_{water} - r_{air}) \times \frac{\ln\left(Counts / Counts_{air}\right)}{\ln\left(Counts_{water} / Counts_{air}\right)}$$

TVD

Input channels: Deviation
Input parameters: Tie-in point: Depth(index=0) and corresponding TVD(index=0)
Output mnemo: TVD

D05.16 • Geothermal profile interactive creation/edition

This option is accessed using the browser popup menu or the icon  of the browser toolbar.

Geothermal profile creation

The geothermal profile can also be defined manually in the Interpretation Infos/New dialog (Temperature tab). When using the interactive browser option, the geothermal profile is calculated from a selected interval of the interpretation reference temperature. The screen should be set up with a view showing this channel. Select the channel in the browser, and the option is enabled. Click on the view displaying the reference temperature for the start and drag to extend the interval. As you drag, the line resulting from a regression on the defined interval is displayed. Release the mouse to validate your input.
The geothermal profile is added to the interpretation input node. It is not plotted anywhere by default except on the temperature match view.

For simplicity, the following path is recommended:

1. In the Interpretation Infos/new dialog, Temperature tab: select Match Temperature
2. In the same dialog, Interpretation views tab, make sure the checkbox for match views is on.
3. Define the geothermal profile directly on the Temperature match view: the geothermal profile will be plotted on that same view after creation.

Geothermal profile edition

The same browser option can be used for that purpose but one should select the geothermal profile first. As above, you should have set up the screen with a view displaying the geothermal profile (i.e. the temperature match view). After clicking on the geothermal profile in the Interpretation input node, and selecting the Create/edit Tgeo, handles appear on the profile:

- A middle handle with vertical/lateral arrows: click on this handle and drag to translate the profile in depth, or in temperature.
- Two extreme handles indicating a rotation: click on those handles and drag to rotate the profile around its centre point.

An existing simulated temperature is NOT updated after an interactive modification of the geothermal profile. You must generate the schematic rate logs to see the change.

D05.17 • Sampling / Deleting

The toolbar button,  can be used for actions, on a selected set of logs:

- Re-sampling.
- Deleting a range.

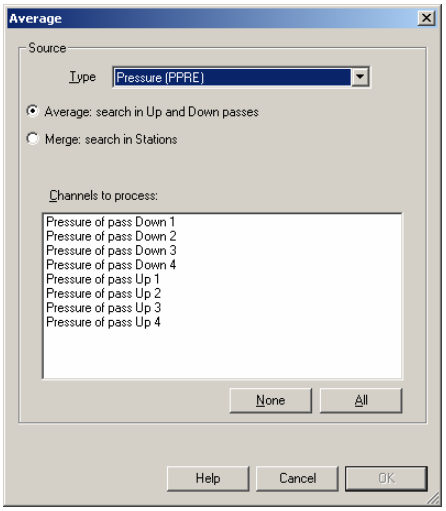
This option can also be accessed from the browser popup menu.

The user chooses the data that needs re sampling by checking the nodes on/off with a red check . By default, all descendents of a checked node are checked.
The sampling is specified with respect to a depth interval.
Sampling and range deletion are permanent.

D05.18 • Lateral average: compute from list

Selected in the browser popup menu or the  button of the browser toolbar and is enabled when the selected item of the data browser is a valid destination, i.e. an Interpretation or a Data store.

With this option dialog, a lateral average can be created for any data type present in Up and Down passes of the survey in the selected browser node. *For averaging channels from sources other than the Up and Down passes, the "Lateral average: compute from object" option should be used instead.*



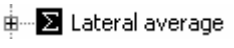
After selecting the data type in the drop list at the top of the dialog, Emeraude displays a list of all available channels of this type. The "All" / "None" buttons and the standard list selection can be used to define the desired input. When OK is pressed, the average is calculated and the corresponding channel is added below the selected node.

The "Compute from list" dialog is also opened when defining the interpretation reference channels from Up and Down passes.

Note: When adding a gradio channel to an interpretation with this option, Emeraude automatically constructs the corresponding cable speed average and adds it to the interpretation.

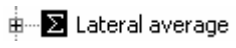
D05.19 • Lateral average: compute from object

Selected in the browser popup menu or the  button of the browser toolbar and is enabled when the selected item of the data browser is a valid destination, i.e. an Interpretation or a Data store.

Creates an "average object" identified in the data browser by the icon: 

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This object only serves as a recipient for the input channels and is eventually replaced by the average result when the calculation is over.
The channels to be laterally averaged are dragged and dropped upon the “average object”. When the first channel is dropped a “+” appears in front of the “average object” allowing this node to develop. The selected input channels (aliases) are indicated below with the same naming convention as in other options.

It is possible to use the “List” page on the right of the browser, to simplify the drag and drop operation. Use the “List page” to keep the “average object” in view, and drag to it from the browser tree.
Once the input channels are defined, the average can be calculated by clicking on the 

node, and then “Compute from object” in the browser popup menu or  in the browser toolbar. The result of the lateral average replaces the average object.
Channels dragged to an average object must have the same type but not necessarily the same mnemonic. The mnemonic of the result will always be that of the first channel in the list.

D05.20 • Merge: compute from list

Selected in the browser popup menu or the  button of the browser toolbar and is enabled when the selected item of the data browser is a valid destination, i.e. an Interpretation or a Data store.
With this option, a merged channel can be created for any data type present in **stationary** passes of the survey owning the selected browser node. The channel selection dialog is identical to that of the “Average: compute from list” option.
After selecting the data type in the drop list at the top of the dialog, Emeraude displays a list of all available channels. The “All” / “None” buttons as well as the standard list selection operations can be used to define the desired input. When OK is pressed, the merge is calculated and the corresponding channel is added below the selected node.

Merge algorithm

The algorithm is designed to merge several channels without overlap, into a single output channel. In particular, it is a required step to handle stationary measurements (other than spinners) inside the interpretation. For instance if an oil velocity VO is present in 3 stations, the three individual VO channels must be merged into one unique interpretation reference channel. For each merged channel, Emeraude calculates an average value if several points share the same depth. Also, the merge result keeps gaps between original channels by introducing one absent value between them. This will be revealed by gaps on the plotted result. For instance, assuming that we have 3 stationary VO channels, say at 5000, 5005, and 5010, each with 100 points. The results will be as follows:

(5000, Lateral average of the 100 values measured at 5000 ft)
N/A
(5005, Lateral average of the 100 values measured at 5005 ft)
N/A
(5010, Lateral average of the 100 values measured at 5010 ft)

D05.21 • Merge: compute from object

Selected in the browser popup menu– or the button of the browser toolbar. Enabled when the selected item of the data browser is a valid destination, i.e. an Interpretation or a Data store.

Creates an “merge object” identified in the data browser by the icon: Merge object

This object only serves as a recipient for the input channels and is eventually replaced by the merge result when the calculation is over. The channels to be merged are dragged and dropped upon the “merge object”. When the first channel is dropped a “+” appears in front of the “merge object” allowing to develop this node. The selected input channels (aliases) are indicated below with the same naming conventions as in other options. It is possible to use the “List” page on the right of the browser, to simplify the drag and drop operation. Use the “List page” to keep the “merge object” in view, and drag to it from the browser tree.

Once the input channels are defined, the merged channel is calculated by clicking on the Merge object node, and then “Compute from object” in the browser popup menu or in the browser toolbar. The result replaces the merge object.

D05.22 • Browser export options

Creating an export object

The definition/creation of an export file starts with the creation of an **Export object**, which will represent the file content. An Export object is created with the button of the toolbar or the “Export – Create object “ option of the browser popup menu. The export object is shown with the icon at the bottom of the data tree

Adding channels to an export object

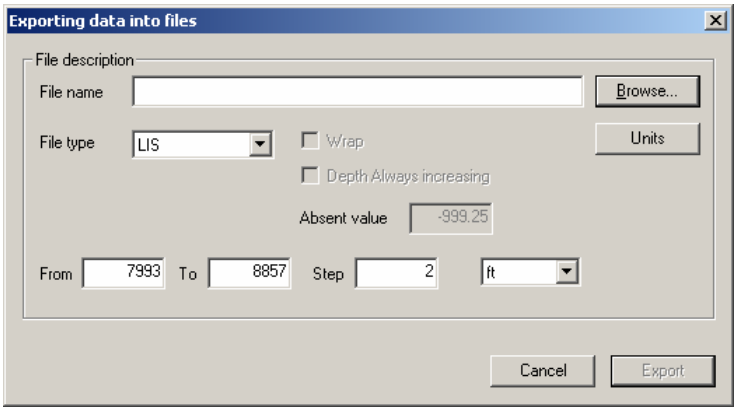
The first time a channel is dropped onto an empty export object a pass is created below the node and receives this channel, as well as subsequent ones.

Adding passes to an export file

An entire Log Data pass can be dragged and dropped on to an Export object. The button of the browser toolbar of the “Export – Add pass” option of the browser popup can be used to create an empty custom pass. Channels for export are then selectively dropped on a particular export pass.

Creating the export file

After selecting an export object in the data browser, the file is created with the button of the browser toolbar or the “Export – Create file” option of the browser popup. A dialog appears where the file type, name and location, the depth limits and increment. The absent value can be re-defined. The file is created when selecting “Export”.



D05.23 • Multiplication

A multiplication object can be created in the data store with the browser button . Channels can be dropped on the multiplication object Multiplication object and the multiplication operation carried out with the browser button . This will replace the object Multiplication object in the data store with the result with naming convention name x name x name unit*unit*unit.