

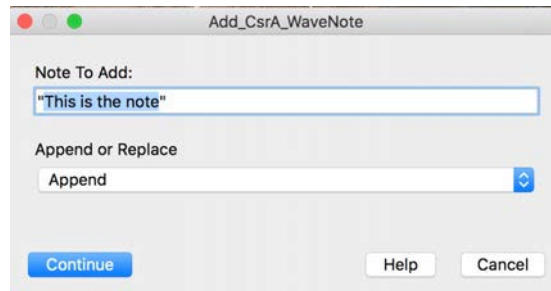
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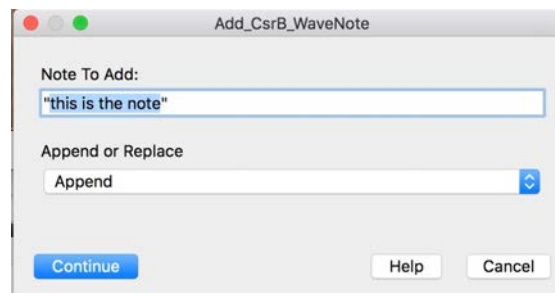
## Add\_CsrA\_WaveNote

This function adds a wavenote to the wave identified by Cursor A. Note can either append to existing note(s) or replace existing note(s). Use Replace with an empty string to clear wavenotes. See also [Add\\_CsrB\\_WaveNote](#), [Folder\\_WaveNotes](#), [Selected\\_WaveNotes](#), [Print\\_CsrA\\_WaveNote](#), [Print\\_CsrB\\_WaveNote](#).



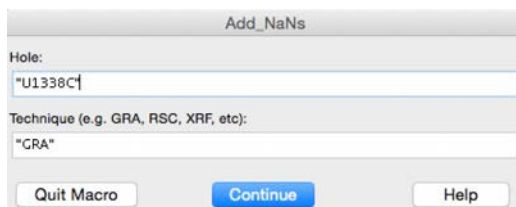
## Add\_CsrB\_WaveNote

This function adds a wavenote to the wave identified by Cursor B. Note can either append to existing note(s) or replace existing note(s). Use Replace with an empty string to clear wavenotes. See also [Add\\_CsrA\\_WaveNote](#), [Folder\\_WaveNotes](#), [Selected\\_WaveNotes](#), [Print\\_CsrA\\_WaveNote](#), [Print\\_CsrB\\_WaveNote](#).



## Add\_Nans

This function adds rows of NaNs to data from individual holes. It is primarily used as a plotting device to separate data from different cores without having straight lines in gaps. Use [Remove\\_Nans](#) to remove the blank lines between different cores. To distinguish between different sections of spliced data see the description of the Hole\_Index data waves in the User Guide. This routine requires strict [IODP Data Naming Conventions](#).

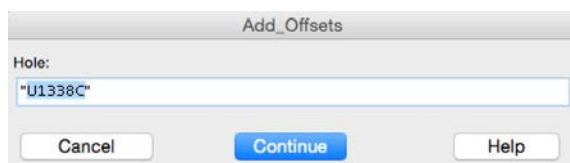


The screenshot shows a dialog box titled "Add\_Nans". It has two text input fields. The first field is labeled "Hole:" and contains the text "U1338C". The second field is labeled "Technique (e.g. GRA, RSC, XRF, etc):" and contains the text "GRA". At the bottom of the dialog, there are three buttons: "Quit Macro", "Continue", and "Help".

## Add\_Offsets

This function adds the current offset values ( in the appropriate offsets wave in root: ) to the top ( 0 ) CSF layer of the Coring Matrix to initially calculate or replace the bottom ( 2 ) CCSF layer. Each Hole is calculated by separate calls to the function.

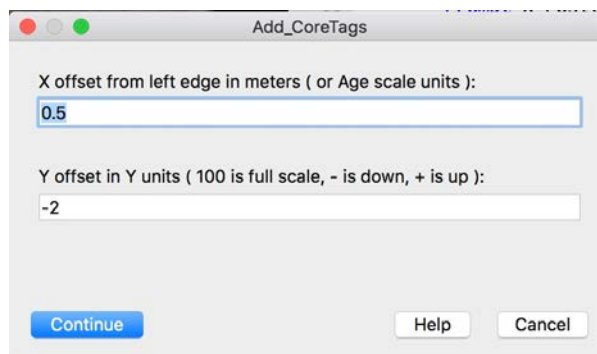
When offsets are changed, this is the first routine that must be run, followed by [Calculate\\_CCSF\\_Wave](#) to recalculate CCSF for data waves and [CSF\\_2\\_CCSF](#) to recalculate CCSF for core images.



The screenshot shows a dialog box titled "Add\_Offsets". It has one text input field labeled "Hole:" which contains the text "U1338C". At the bottom of the dialog, there are three buttons: "Cancel", "Continue", and "Help".

## Add\_CoreTags

Add\_CoreTags adds identifying Core Tags to core images. Unlike TextBoxes, Tags are affixed to the data and not coordinates on the display, meaning that they move with the data (images) when the graph scales are changed. The macro relies on strict [IODP Data Naming Conventions](#) to identify the names for the tags.



X offset from left edge in meters ( or Age scale units ):  
0.5

Y offset in Y units ( 100 is full scale, - is down, + is up ):  
-2

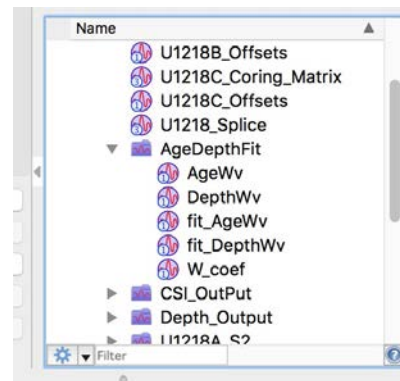
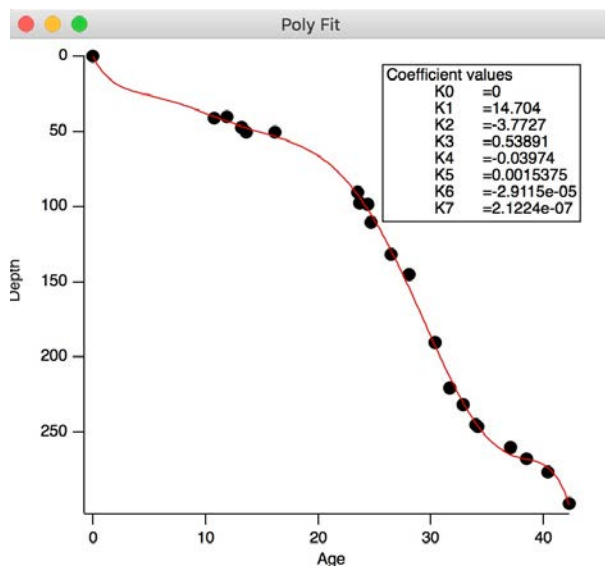
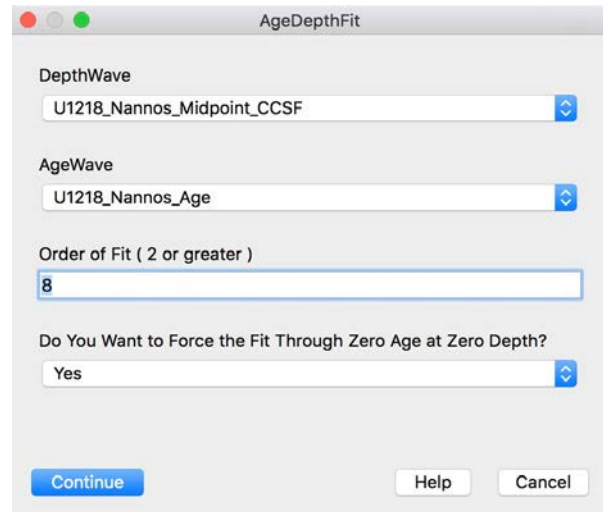
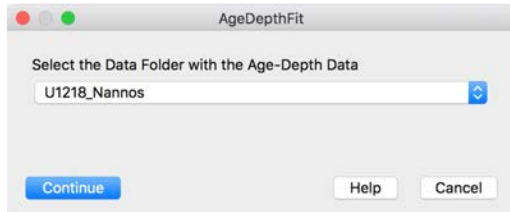
Continue Help Cancel

[Remove\\_CoreTags](#) removes all tags from a plot. All old core tags are removed when Add\_CoreTags is run before new tags are added.

NOTE: If, after core images on a graph have been tagged, more images are added, they will not be automatically tagged.

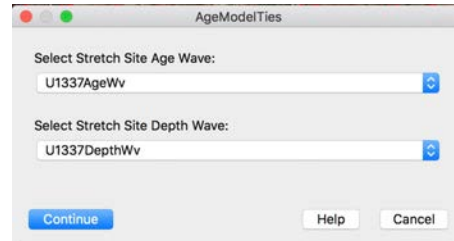
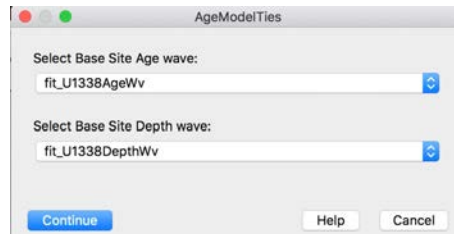
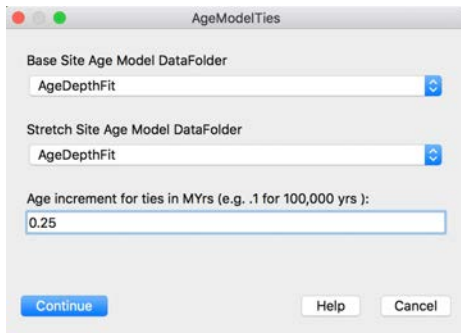
## AgeDepthFit

This function fits a polynomial ( order 2 for straight line ) through age and depth data. Data and the fit line are plotted and updated each time the function is run. Output is in a data folder named AgeDepthFit and consists of the copies of the data waves used for the fit ( with 0 added at the top of each if specified ), age and depth fit waves, and W\_coef - a wave holding the fit coefficients. See also [AgeDepthFit](#), [ImageDepth2Age](#).



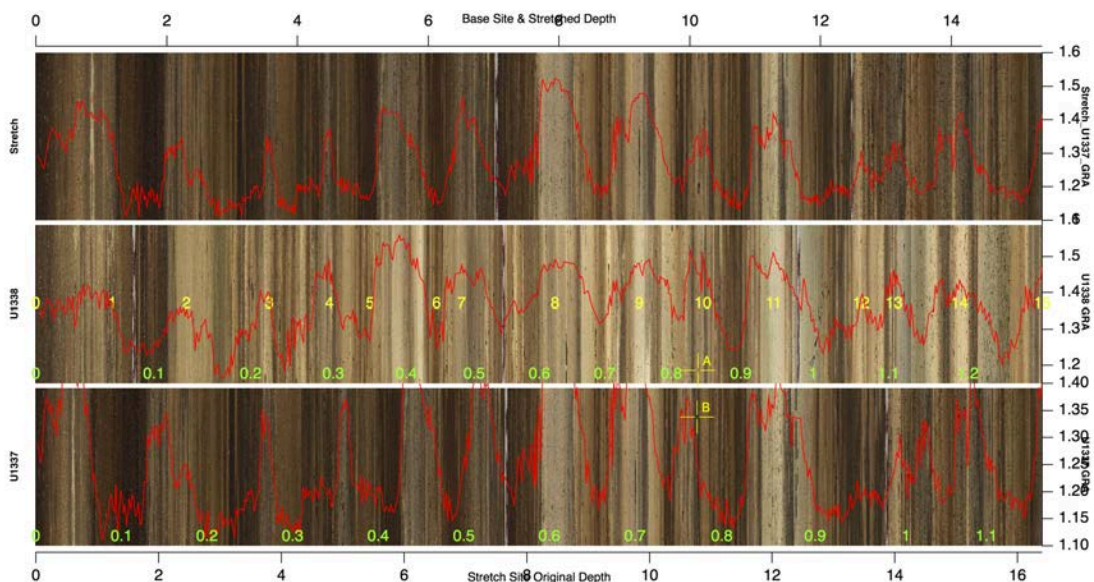
## AgeModelTies

This function uses age models for the Base and Stretch sites of a site to site correlation experiment to generate ages at a selected depth interval for each site. The results are included in a Data Folder named "AgeModelTies". The ages are appended to a graph using [AppendAgeModelTies](#). Ages from the models are initially in green. A tie type wave is also generated with type "Model" in the case that the user wants to copy these "ties" into the BaseTies, StretchTies, and TieType waves in the experiment.



- ▼ AgeModelTies
  - Ages
  - AgeTiesOnes
  - AgeTieTypes
  - BaseAgeTies
  - StretchAgeTies

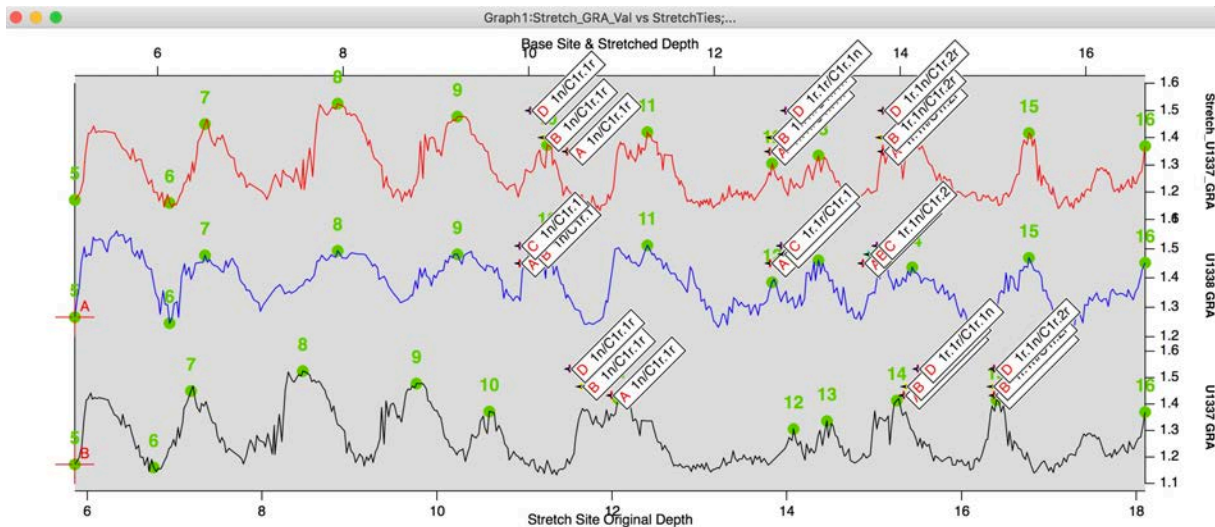
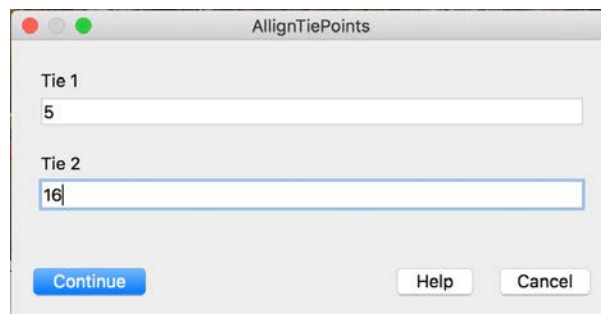
1R X 5C		8.75			
Point	Ages	AgeTiesOnes	AgeTieTypes	BaseAgeTies	StretchAgeTies
0	0	1	Models	0	0
1	0.25	1	Models	4.20019	3.48592
2	0.5	1	Models	7.14232	6.97183
3	0.75	1	Models	9.81067	10.4577
4	1	1	Models	12.6667	14.1786
5	1.25	1	Models	15.8485	18.0708
6	1.5	1	Models	19.3143	22.3697
7	1.75	1	Models	22.9462	26.6685
8	2	1	Models	26.6187	29.4623



## AlignTiePointRange

This function sets the top and bottom depth ranges for data and image graphs used in site to site correlation to the depth ranges indicated by the selected Base and Stretch tie point sets. The result is that the top and bottom scales are no longer the same, but the top and bottom ties line up for each set of data or images.

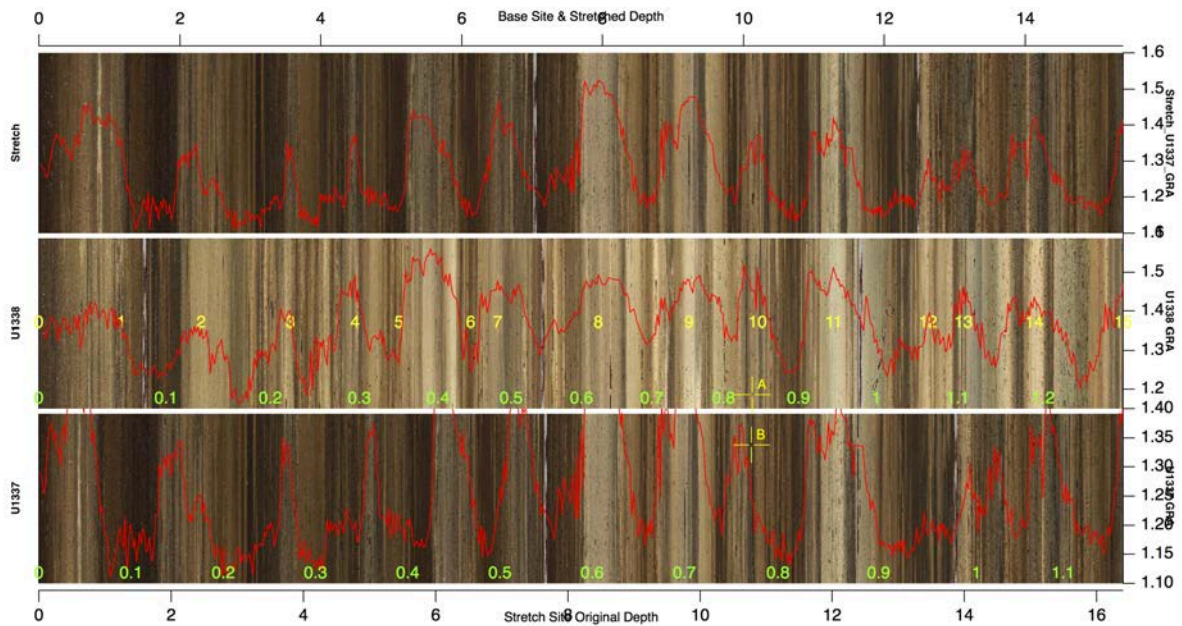
See also [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_CSITieList](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [Site\\_2\\_Site\\_Ties](#), and [TagText\\_ReSize](#).





## AppendAgeModelTies

This function appends the results of running [AgeModelTies](#) to a data or image graph during site to correlation experiments. There is no prompt. The ages are placed at the bottom of the Base and Stretch data or image plots, initially in green.



## Append\_Core\_Images

This function appends all of the core images from a specified hole to an active or new graph. This routine requires strict [IODP Data Naming Conventions](#).

Append\_Core\_Images

Hole

New Plot or Append?

Axis Portion Bottom (%):

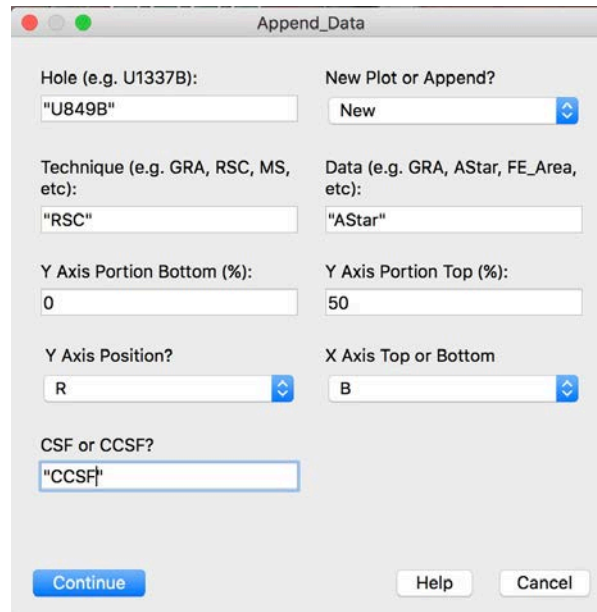
Axis Portion Top (%):

Size

See also [Append\\_Selected\\_Core\\_Images](#), [Append\\_Spliced\\_Image](#).

## Append\_Data

This macro appends data using the [IODP Data Naming Conventions](#) in the properly named data folders. Depth may be plotted on the Top or Bottom axis. The user may select Left, Right or an existing Y axis. The portion of the Y axis may also be selected for plotting multiple data on a single graph. See also: [Append\\_Selected\\_Data](#) and [Browser\\_Plot](#).



The screenshot shows a dialog box titled "Append\_Data" with the following fields and controls:

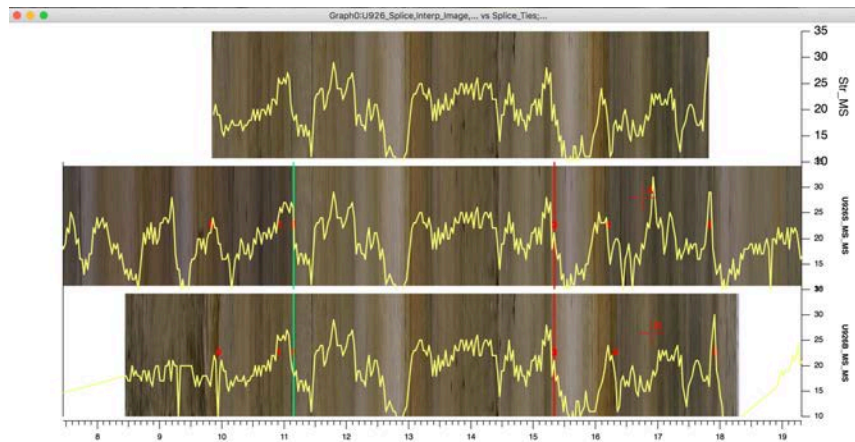
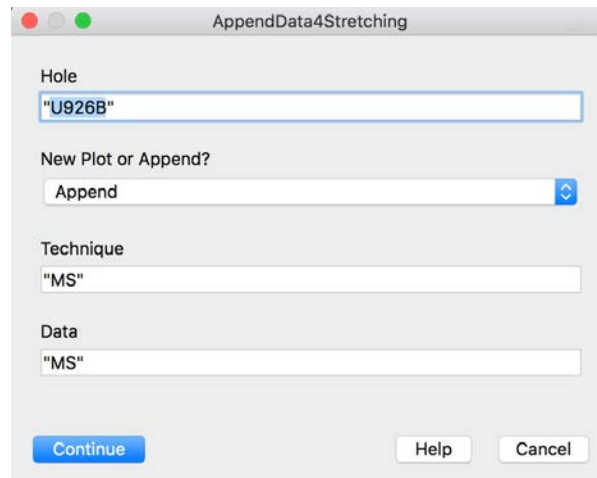
Hole (e.g. U1337B): "U849B"	New Plot or Append?: New
Technique (e.g. GRA, RSC, MS, etc): "RSC"	Data (e.g. GRA, AStar, FE_Area, etc): "AStar"
Y Axis Portion Bottom (%): 0	Y Axis Portion Top (%): 50
Y Axis Position?: R	X Axis Top or Bottom: B
CSF or CCSF? "CCSF"	

Buttons: Continue, Help, Cancel

## AppendData4Stretching

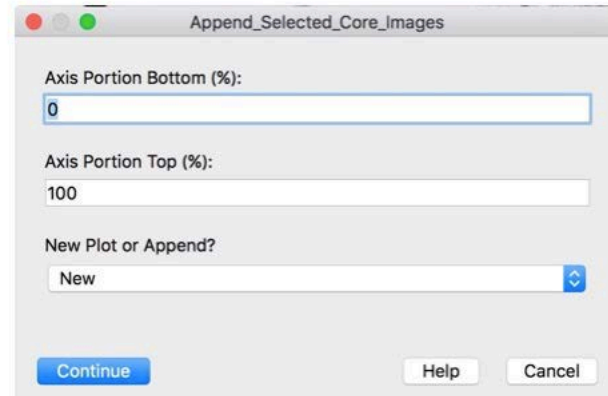
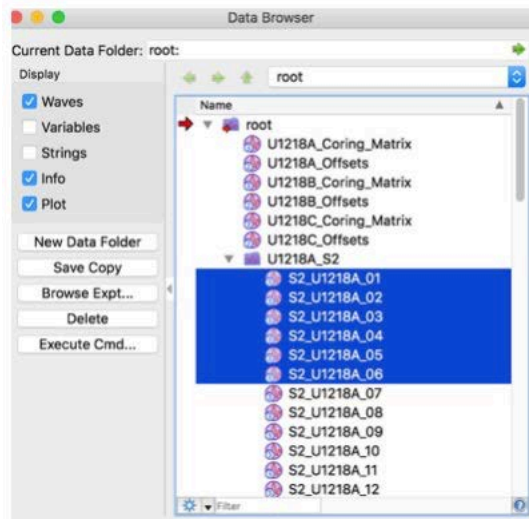
This function appends data to a core stretching graph or will create a new graph with data only. Data are stretched using [StretchOffSpliceData](#). Tie points can be recorded from cursors on either images or data traces.

See also [Core\\_Stretch\\_Image\\_SetUp](#), [Record\\_Stretch\\_Ties](#), [New\\_Core](#), [Concatenate\\_Ties](#), [StretchOffSpliceData](#), [CCSF\\_2\\_OffSplice](#), [AppendSpliceLines4Stretching](#), and [Core\\_Stretch](#).



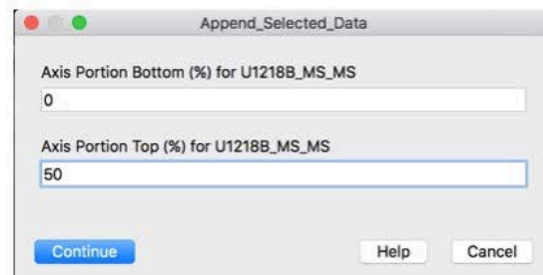
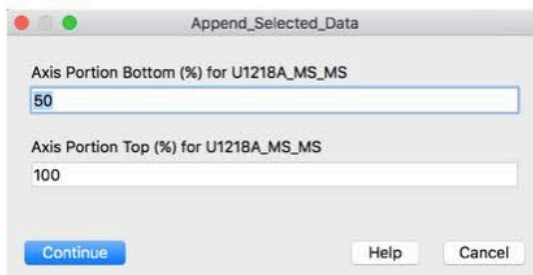
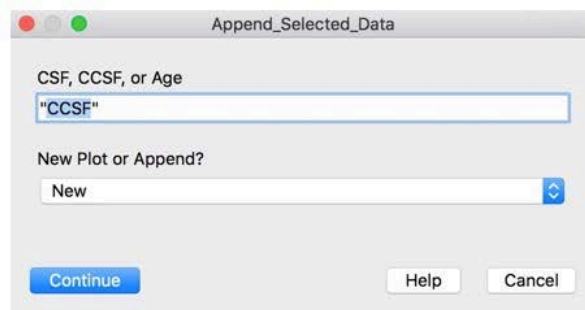
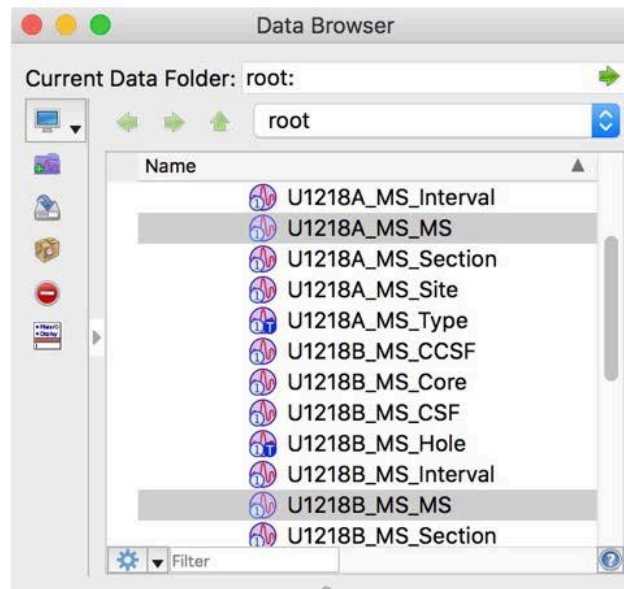
## Append\_Selected\_Core\_Images

This function appends core images selected in the DataBrowser. The routine checks to be sure that the images have been selected before the macro is run. User can specify what portion of the Y axis is used for the plot. As Append-only, there must be an open graph window when the routine is run. The default Y axis name is the Hole name. See also [Append\\_Core\\_Images](#) and [Append\\_Spliced\\_Image](#).



## Append\_Selected\_Data

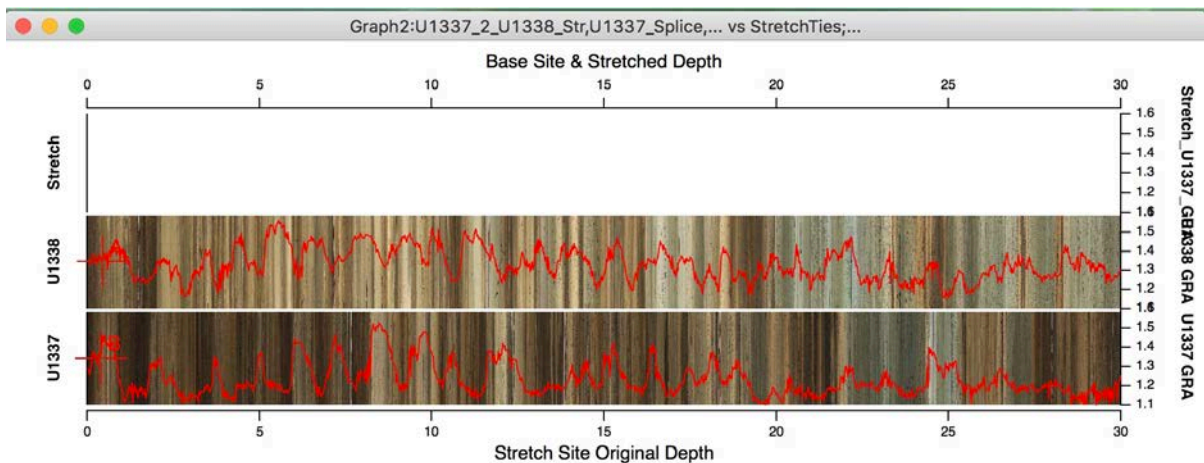
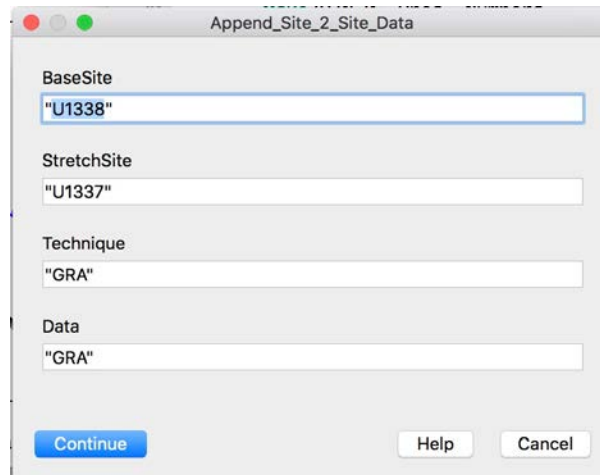
This function uses the prescribed [IODP Data Naming Conventions](#) - Hole\_Technique\_Data and plots versus specified Depth or Age. Data waves are selected in the Data Browser prior to running the function. Multiple waves can be selected and for each wave chosen the user is asked for the interval to be used along the Y axis for the plot. This function does not presently work for the older format of Spliced data waves ( "\_Splice\_" ). To append older Spliced data use [Browser\\_Plot](#) or rename the spliced waves to the new "S" convention.



## Append\_Site\_2\_Site\_Data

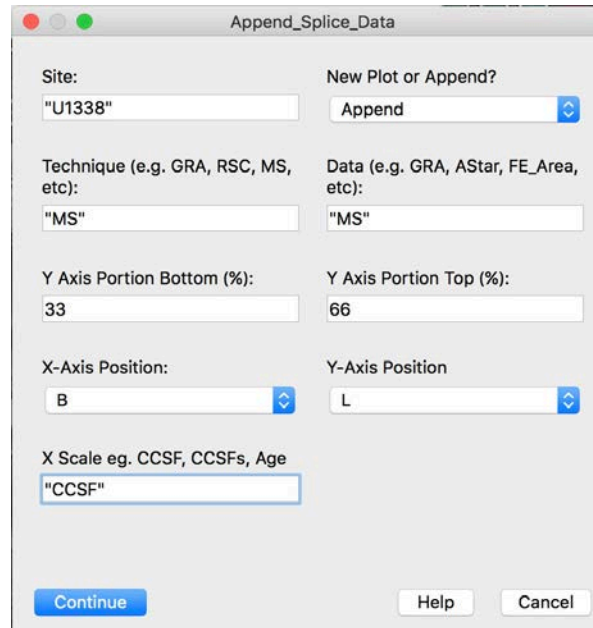
This function appends data for site to site correlation to an existing plot. Generally it would be used to add data to site to site image plots. For new data plots for site to site correlation use Site\_2\_Site\_Data\_SetUp.

See also [AlignTiePointRange](#), [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_CSITieList](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [Site\\_2\\_Site\\_Ties](#), and [TagText\\_ReSize](#).



## Append\_Splice\_Data

This macro appends spliced data using the [IODP Data Naming Conventions](#) in the properly named data folders. Depth may be plotted with the X-axis on the top or bottom. Data on the Y axis may be Left, Right, or an existing axis. For more recent data splices it is now recommended to use an "S" rather than "\_Splice\_" to identify spliced data. In that case use [Append\\_Data](#) to plot both single hole and spliced data.



The screenshot shows a dialog box titled "Append\_Splice\_Data" with the following fields and options:

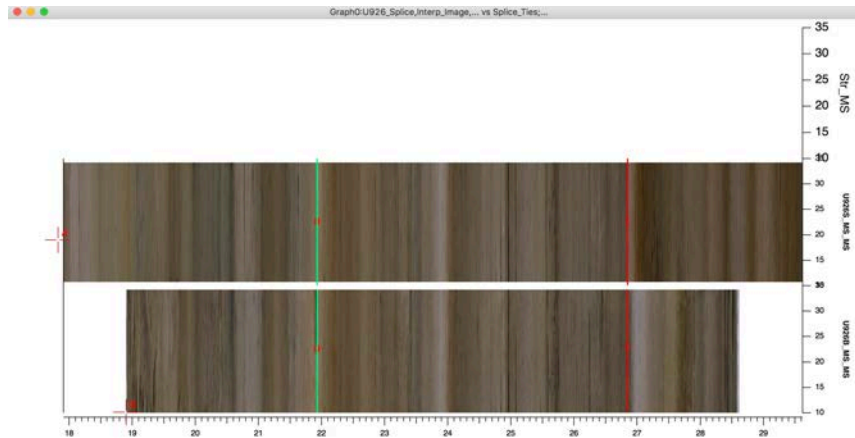
- Site:** Text input field containing "U1338".
- New Plot or Append?:** Dropdown menu with "Append" selected.
- Technique (e.g. GRA, RSC, MS, etc):** Text input field containing "MS".
- Data (e.g. GRA, AStar, FE\_Area, etc):** Text input field containing "MS".
- Y Axis Portion Bottom (%):** Text input field containing "33".
- Y Axis Portion Top (%):** Text input field containing "66".
- X-Axis Position:** Dropdown menu with "B" selected.
- Y-Axis Position:** Dropdown menu with "L" selected.
- X Scale eg. CCSF, CCSFs, Age:** Text input field containing "CCSF".

At the bottom of the dialog box are three buttons: "Continue" (highlighted in blue), "Help", and "Cancel".

## AppendSpliceLines4Stretching

This function plots vertical green lines at the top of splice intervals and red lines at the bottoms when they are present in a core used in the core stretching graph. The function uses splice data from the Splice\_Intervals folder.

See also [Core\\_Stretch\\_Image\\_SetUp](#), [Record\\_Stretch\\_Ties](#), [New\\_Core](#), [Concatenate\\_Ties](#), [CCSF\\_2\\_OffSplice](#), [AppendData4Stretching](#), [StretchOffSpliceData](#), and [Core\\_Stretch](#)



## Append\_Spliced\_Image

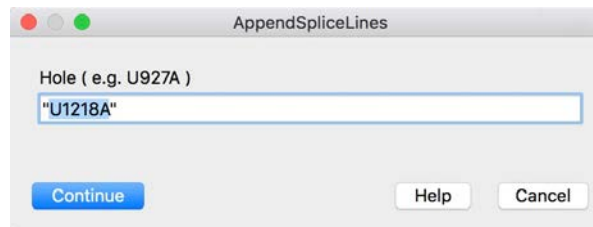
This macro appends a spliced image. The image may be scaled by depth ( CCSF ) or Age. The CCSF scaled image has no identifier ( e.g. U849\_Splice ) while the age image will include the age modifier ( e.g. U849\_Splice\_Age ). Note that the user can select either Top or Bottom for the X-axis. This is useful when one wants to plot the spliced image versus both age and depth on the same graph. By default, the spliced image is located in root:

See also [Append\\_Selected\\_Core\\_Images](#) and [Append\\_Core\\_Images](#).



## AppendSpliceLines4Stretching

This function

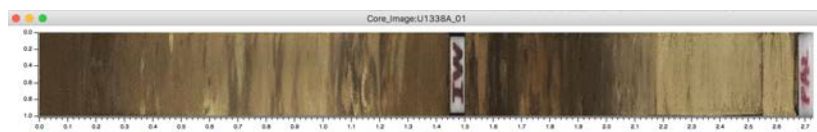
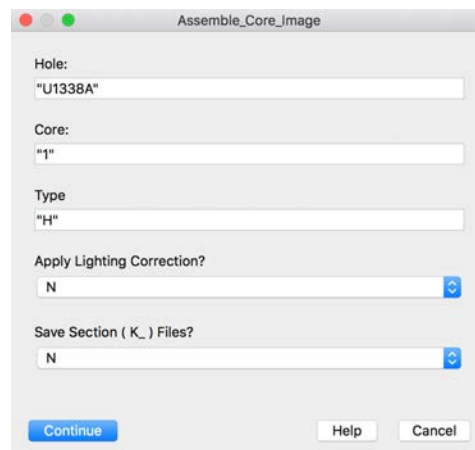


See also [Core\\_Stretch\\_Image\\_SetUp](#), [Record\\_Stretch\\_Ties](#), [New\\_Core](#), [Concatenate\\_Ties](#), [AppendData4Stretching](#), [StretchOffSpliceData](#), and [Core\\_Stretch](#)

## Assemble\_Core\_Image

This function assembles section images into a single core image. The section images need to be in a folder that is identified by "K\_U1338A\_01H" or whatever is the appropriate Hole and Core Number. The assembled core image is displayed at the completion of the process.

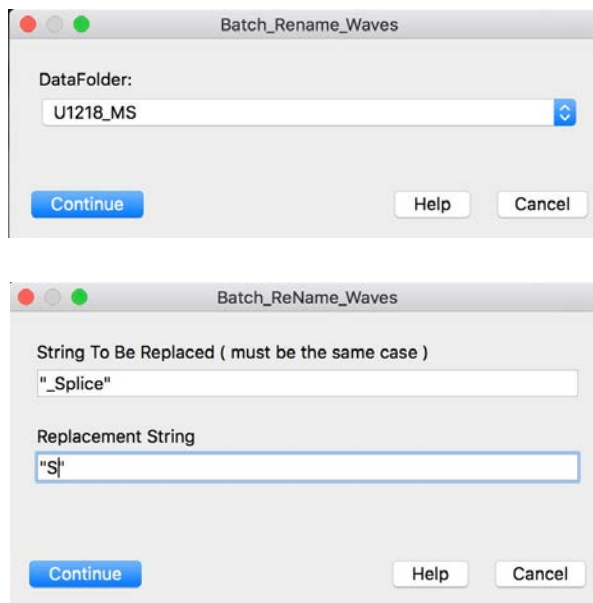
The **Lighting Correction** is only used for section images that have been cut from core box photos. **Section files should always be saved for images cut from core box photos** because of the time needed to capture them. Saving line scan section images is not recommended as they tend to make for really large ( in Mbytes ) experiments.



See also [Universal\\_Image\\_Loader](#), [S2\\_Reduce\\_Image\\_Size](#).

## Batch\_Rename\_Waves

This function will change names of waves. The User identifies a folder ( or root: ) and all instances of the defined change in the folder wave names will be done. In this example we change from the old version of spliced data wave names to the preferred protocol.



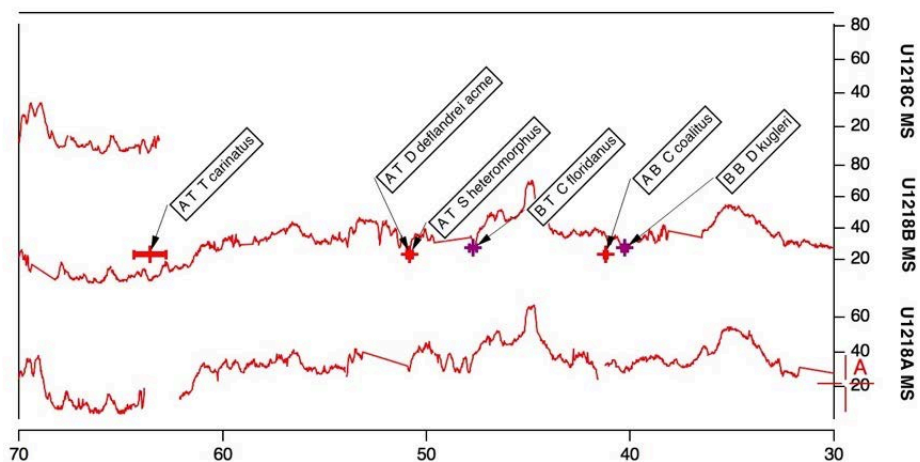
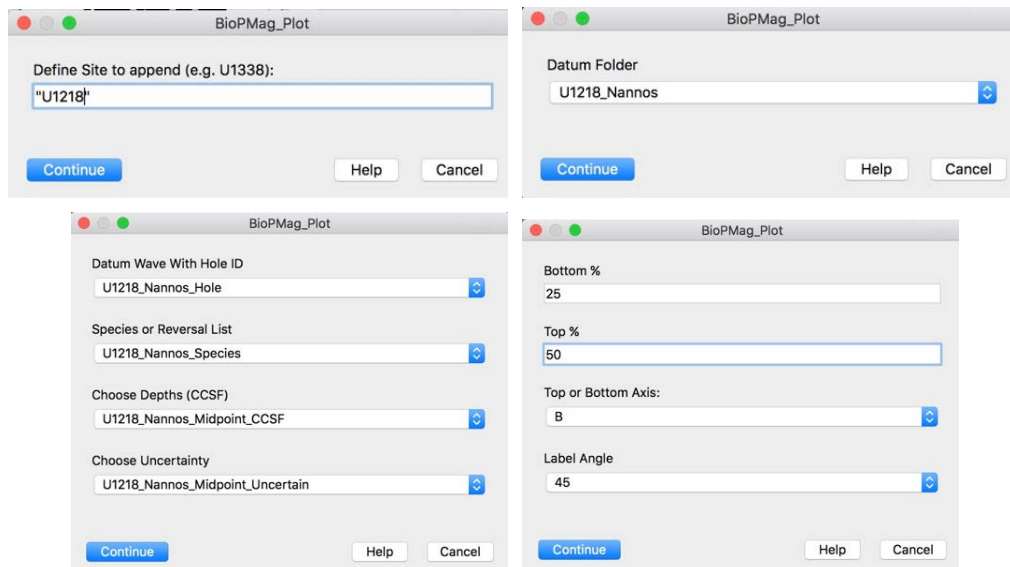
**Note:** After any re-naming, either in the Data Browser, with the IGOR Rename function or using this batch function it is a good practice to run [Clean\\_Expt\\_Fldrs](#) to clear the experiment folder of leftovers.

## BioPmag\_Plot

This function uses a series of windows to plot Tags of biostratigraphic or paleomagnetic data on a data plot. The first letter in each Tag is the Hole where the datum was identified. Since Tags are used, they maintain their depth position when depth scales are changed for the plot. Data use the [IODP Data Naming Conventions](#), e.g.

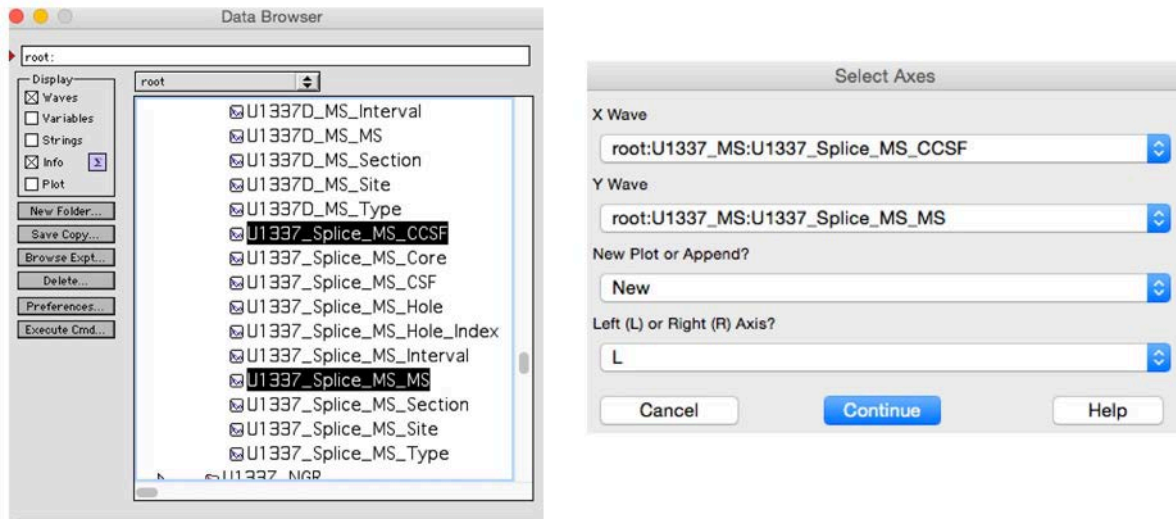
- ▼ U1218\_Nannos
  - U1218\_Nannos\_Age
  - U1218\_Nannos\_Bottom\_Core
  - U1218\_Nannos\_Bottom\_Interval
  - U1218\_Nannos\_Bottom\_Section
  - U1218\_Nannos\_Bottom\_Type
  - U1218\_Nannos\_Hole
  - U1218\_Nannos\_Midpoint\_CCSF
  - U1218\_Nannos\_Midpoint\_CSF
  - U1218\_Nannos\_Midpoint\_Uncertain

Data from all holes are contained in single waves as opposed to individual waves for each hole. A series of prompts identify the data, depths, Holes, and uncertainty ( if any ). See also [Stretched\\_BioPmag\\_Plot](#) and [TagText\\_ReSize](#).



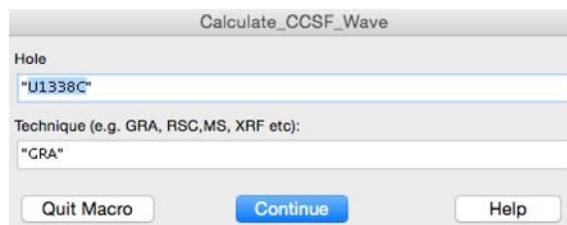
## Browser\_Plot

Use this function to plot data that have been selected in the Data Browser. User may choose X and Y axes by selecting 2 waves in the Data Browser or choose 1 wave and plot versus a calculated X axis for scaled data. X axis defaults to the bottom. Y axis is selectable as L, R, or an existing axis. When no existing Y axis is chosen, the Y axis is named and labelled with the name of the data wave. Strict IODP naming conventions are not required. The user specifies either a New plot, which opens a new window, or an Append, which adds to the top graph.



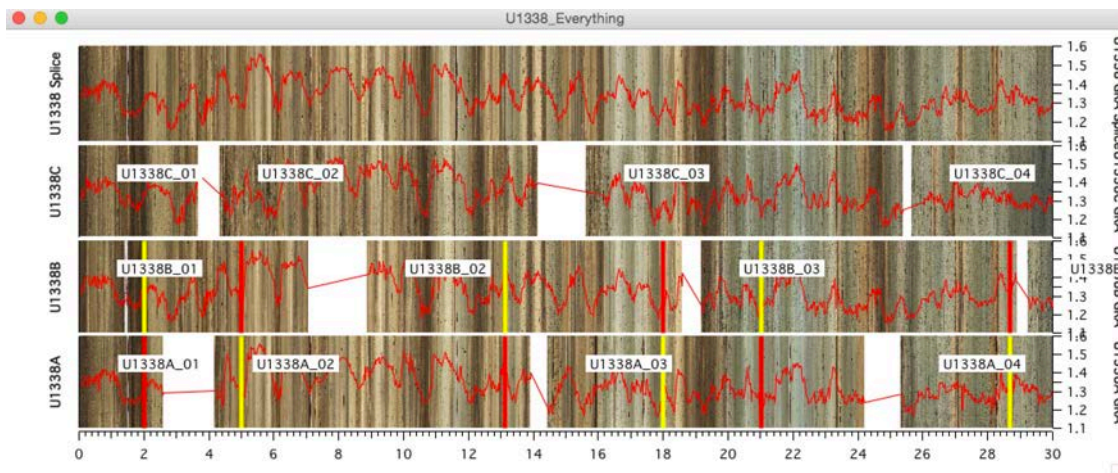
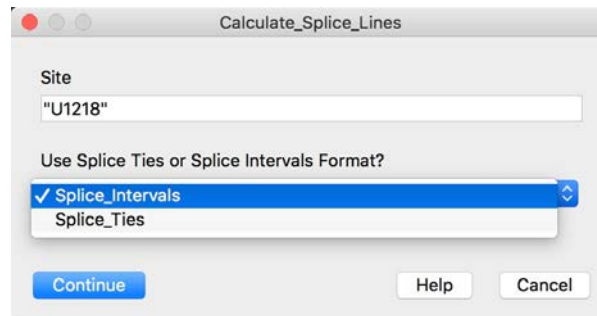
## Calculate\_CCSF\_Wave

Calculates CCSF for the specified Data type and Hole. This function works by adding the value of the offset for a core to data from that core with existing CSF values. It will produce an error if there are no CSF values. This routine requires strict [IODP Data Naming Conventions](#).



## Calculate\_Splice\_Lines

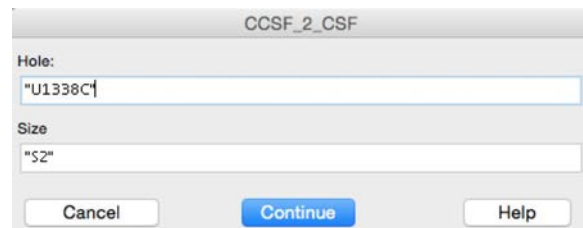
This function calculates splice lines based on [Splice\\_Intervals](#) or [Splice\\_Ties](#). The splice lines can then be plotted on top of individual hole core images and a spliced image using [Plot\\_Splice\\_Lines](#). Yellow bars are the splice section tops, red the bottoms.



## CCSF\_2\_CSF

CCSF\_2\_CSF scales core Images to their original CSF values. If offsets have been changed, the [Add\\_Offsets](#) macro must first be run to reflect the changes in the Coring Matrix.

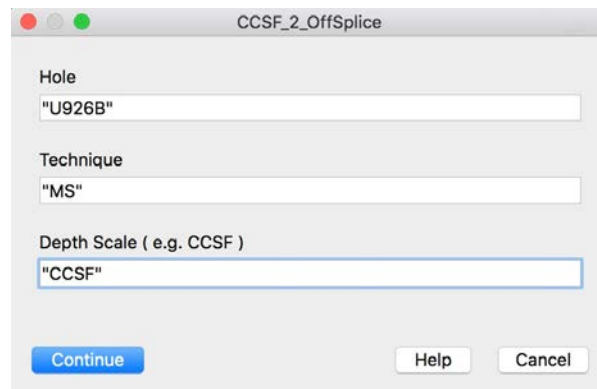
[CSF\\_2\\_CCSF](#) scales core Images to their CCSF values.




## CCSF\_2\_OffSplice

This function creates a new depth scale for the selected hole and data type that has "Offspl" appended to the end of the name of the depth scale selected in the prompt. The new depth scale is interpolated from the concatenated Hole tie points created by [Concatenate\\_Ties](#).

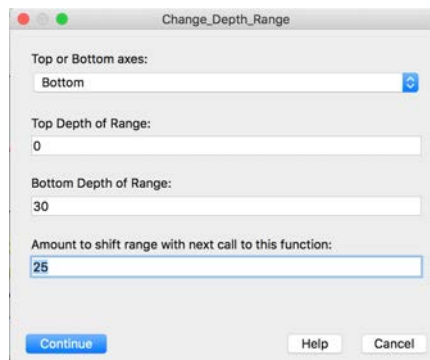
See also [Core\\_Stretch\\_Image\\_SetUp](#), [Record\\_Stretch\\_Ties](#), [New\\_Core](#), [Concatenate\\_Ties](#), [AppendData4Stretching](#), [StretchOffSpliceData](#), [AppendSpliceLines4Stretching](#), and [Core\\_Stretch](#)



-  U926A\_MS\_Section
-  U926A\_MS\_Site
-  U926A\_MS\_Type
-  U926B\_MS\_CCSF
-  U926B\_MS\_CCSFOffspl
-  U926B\_MS\_Core
-  U926B\_MS\_CSF
-  U926B\_MS\_Hole
-  U926B\_MS\_Interval

## Change\_Depth\_Range

This routine will change the either top or bottom axes of all open graphs simultaneously. It is useful if you have separate graphs of different data types, such as GRA, MS, and Images. The first time the macro is run the user sets the top and bottom depth limits as well as an increment. The next time it is run the limits will change by the amount of the increment. It has a keyboard shortcut of CMD-5 that allows a user to rapidly step through plotted data by repeatedly pressing CMD-5 and then RETURN.



## Clean\_Expt\_Fldrs

This function removes binary waves from an experiment folder that are no longer being used in the experiment. IGOR has the annoying habit of not removing files when they are renamed or deleted from an experiment, or sometimes when they are moved from one folder to another ( this can result in duplication of binary waves ). There is no prompt. A report is printed to the History area of folders checked and binary files removed:

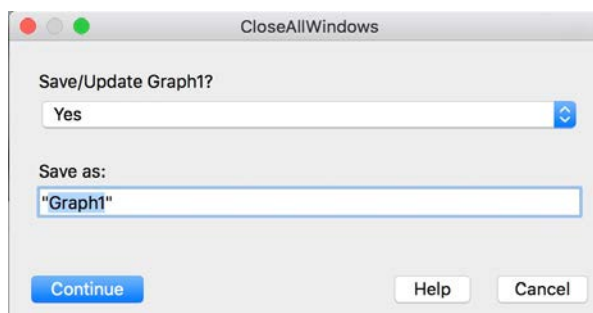
```
Clean_Expt_Fldrs()
root:
  U848A_GRA_CCSF Deleted From Experiment Folder
  U848A_GRA_GRA Deleted From Experiment Folder
U1218_MS:
  U848A_MS_CCSF Deleted From Experiment Folder
  U848A_MS_MS Deleted From Experiment Folder
U1218_Nannos:
Xtras:
U1218_Splice_Ties:
U1218_Splice_Intervals:
```

**Note:** If you delete an entire Folder in an experiment the folder will persist in the Experiment Folder and must be manually removed to the trash.

## CloseAllWindows

When Users exchange unpacked experiments sometimes there are data waves missing for one reason or another when the person receiving the experiment attempts to open it. The User can skip loading individual waves and still open the experiment unless the missing wave is used in an open graph or table. Then the only recourse is to abort the experiment load.

This problem can be countered by using this function. It will cycle through open windows and tables prompting the User to close each in succession and whether to save/update the window macro. Once the experiment is re-opened the user can use [RecallWindows](#) to reverse the process. If there are missing waves in the graphs or tables they will have trouble re-opening, but the experiment will be open and not aborted.



## Concatenate\_Ties

This function adds together ( concatenates ) the splice ties from all of the individual cores in a hole into a master tie record for the hole ( e.g. U926B\_Core\_Ties, U926S\_Core\_Ties ). This master splice list is used by [CCSF\\_2\\_OffSplice](#) to recalculate CCSF values for data outside of the splice to better align with data included in the splice.

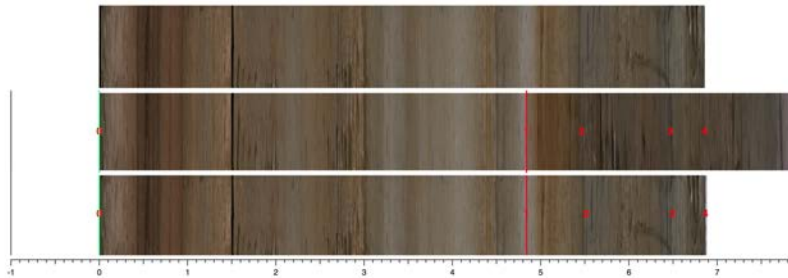
See also [Core\\_Stretch\\_Image\\_SetUp](#), [Record\\_Stretch\\_Ties](#), [New\\_Core](#), [CCSF\\_2\\_OffSplice](#), [AppendData4Stretching](#), [StretchOffSpliceData](#), [AppendSpliceLines4Stretching](#), and [Core\\_Stretch](#)



## Core\_Stretch

This function stretches the core image in the core stretch image setup graph to match tie points in the tie table.

See also [Core\\_Stretch\\_Image\\_SetUp](#), [Record\\_Stretch\\_Ties](#), [New\\_Core](#), [Concatenate\\_Ties](#), [AppendData4Stretching](#), [StretchOffSpliceData](#), and [AppendSpliceLines4Stretching](#)

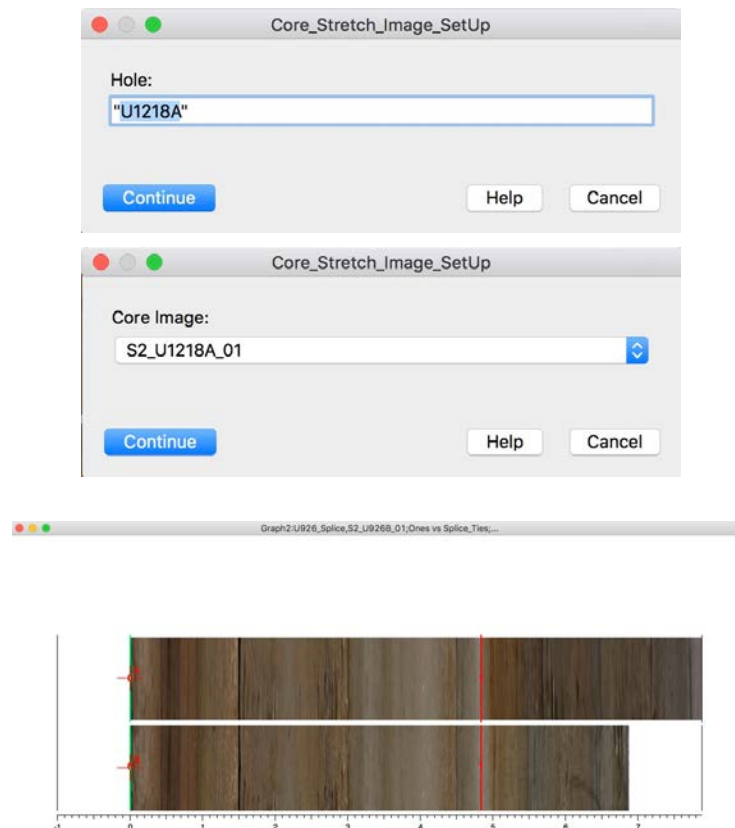




## Core\_Stretch\_Image\_SetUp

This function creates a graph with the Site spliced image and individual core from one of the holes of the site. It is used to stretch features in the core that are not within the splice ( off-splice ) to features within the splice. A Core Tie Table is also opened to hold the tie values. If splice points are present in the core selected they will be added to the tie table and plotted on the core and spliced images. The function uses splice data from the Splice\_Intervals folder. Run [AppendSpliceLines4Stretching](#) to create vertical lines delineating the splice section limits Green lines for the top of the splice sections and red lines for the bottoms. Run [Core\\_Stretch](#) to get a stretched version of the core image.

See also [Record\\_Stretch\\_Ties](#), [New\\_Core](#), [Concatenate\\_Ties](#), [AppendData4Stretching](#), [StretchOffSpliceData](#), [AppendSpliceLines4Stretching](#), and [Core\\_Stretch](#)



## Create\_Coring\_Matrix

This function is used to form a Coring Matrix. The user loads Core Section Summaries from one of the ocean drilling databases (JANUS, LIMS). It uses pulldown menus to allow the User to identify the data waves holding CSF/mbsf, core, section, and section length values. The Coring matrix is a three layer table with the top layer (Layer 0) holding the CSF/mbsf depths to the tops of each section of core for a Hole. Core numbers are read vertically (row number) and Section numbers read across (columns). The middle layer (1) contains the lengths of each section and the bottom layer (2) stores the shifted depths to the tops of each section (CCSF/mcd).

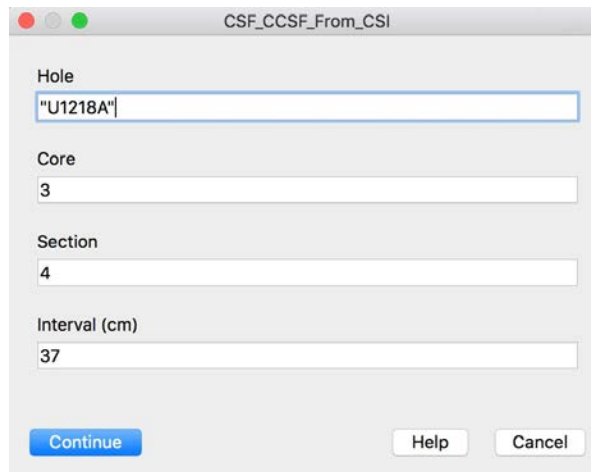
## CSF\_2\_CCSF

CSF\_2\_CCSF scales core images to their CCSF values. If offsets have been changed, the [Add\\_Offsets](#) macro must first be run to reflect the changes in the Coring Matrix.

[CCSF\\_2\\_CSF](#) scales core images to their original CSF values.

## CSF\_CCSF\_from\_CSI

This function calculates CSF and CCSF for the input Hole, Core, Section, and Interval using the Coring\_Matrix. Results are printed in History separated by a tab character so that they can be copied and pasted into adjacent columns in a table:



The screenshot shows a dialog box titled "CSF\_CCSF\_From\_CSI". It contains four input fields with the following values:

- Hole: "U1218A"
- Core: 3
- Section: 4
- Interval (cm): 37

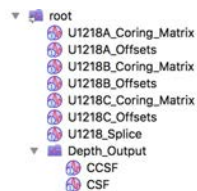
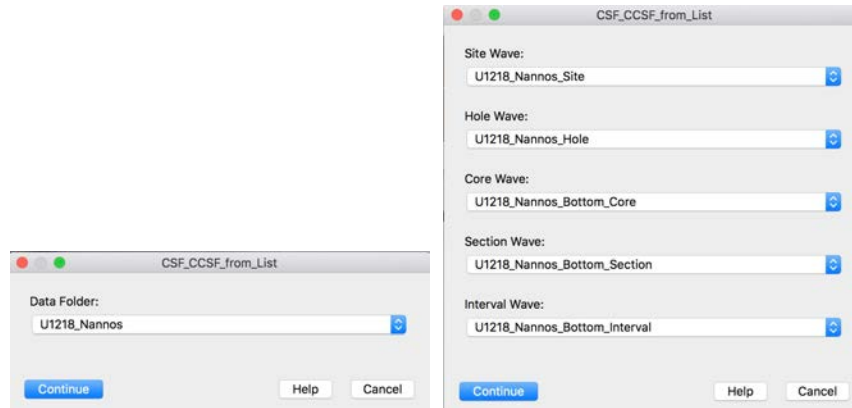
At the bottom of the dialog, there are three buttons: "Continue", "Help", and "Cancel".

```
CSF_CCSF_from_CSI( )  
CSF      CCSF  
22.57    24.91
```

See also [CSF\\_CCSF\\_from\\_List](#).

## CSF\_CCSF\_from\_List

This function recalculates CSF and CCSF from Lists of Site, Hole, Core, Section, and Interval. It first prompts for the folder containing the lists and then for the waves needed for the calculation. The results are written into a new folder in root: named "Depth\_Output". The resultant waves have the generic names "CSF" and "CCSF" and will be overwritten each time the function is run.



See also [CSF\\_CCSF\\_from\\_CSI](#).

## CSI\_From\_CsrA\_CCSF

Place the cursor on a wave or Core image and the CSI information will be printed to History. Note that this does not work for Spliced data at present.

Example:

```
CSI_From_CsrA_CCSF()
```

```
U849 D1 H 2 116 6.66 9.96
```

See also [CSI\\_From\\_Depth](#), [CSI\\_From\\_List](#), [CSI\\_From\\_CsrB\\_CCSF](#), [CSI\\_From\\_SpliceDepth](#), [CSI\\_From\\_SpliceList](#).

## CSI\_From\_CsrB\_CCSF

Place the cursor on a wave or Core image and the CSI information will be printed to History. Note that this does not work for Spliced data at present.

Example:

```
CSI_From_CsrB_CCSF()
```

```
U849 D1 H 2 116 6.66 9.96
```

See also [CSI\\_From\\_Depth](#), [CSI\\_From\\_List](#), [CSI\\_From\\_CsrA\\_CCSF](#), [CSI\\_From\\_SpliceDepth](#), [CSI\\_From\\_SpliceList](#).

## CSI\_From\_Depth

This function prints the sample ID of an input depth. Results are printed in History separated by tab characters for easy copying into a table. In the case where there is overlap of successive cores both results are printed.

```
CSI_From_Depth( )
```

```
U1218 B 7 H 1 1 51.41 58.70
```

See also [CSI\\_From\\_List](#), [CSI\\_From\\_CsrA\\_CCSF](#), [CSI\\_From\\_CsrB\\_CCSF](#), [CSI\\_From\\_SpliceDepth](#), [CSI\\_From\\_SpliceList](#).

## CSI\_From\_List

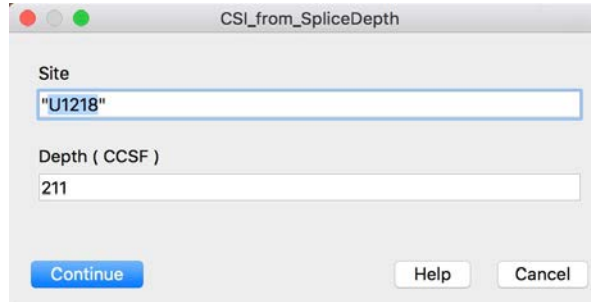
The user inputs Site and a list of CCSF depths and Holes. Output waves with generic names are stored in a data folder named "CSI\_Output" and displayed as a table. Output waves are overwritten each time the function is run.

The image displays two screenshots of the 'CSI\_From\_List' dialog box. The top screenshot shows the 'Data Folder' field set to 'U1218\_Spice\_Intervals'. The bottom screenshot shows the 'Depth Scale' set to 'CCSF', 'Site' set to 'U1218', 'Hole List' set to 'Hole\_Top', 'Depth List' set to 'CCSF\_Top', and 'Include Core Catchers?' set to 'N'. Both screenshots include 'Continue', 'Help', and 'Cancel' buttons.

See also [CSI\\_From\\_Depth](#), [CSI\\_From\\_CsrA\\_CCSF](#), [CSI\\_From\\_CsrB\\_CCSF](#), [CSI\\_From\\_SpiceDepth](#), [CSI\\_From\\_SpiceList](#).

## CSI\_From\_SpliceDepth

This function returns the Splice sample ID for an input CCSF depth. Results are printed in History separated by tab characters for easy pasting into tables.

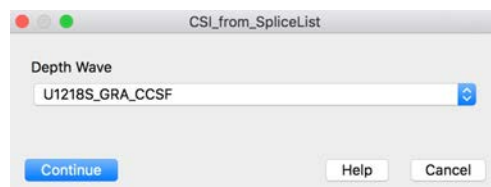
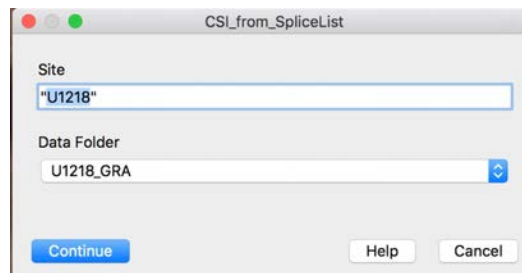


```
CSI_from_SpliceDepth( )
U1218 B 21 H 3 93 188.73 211.00
```

See also [CSI\\_From\\_Depth](#), [CSI\\_From\\_List](#), [CSI\\_From\\_CsrA\\_CCSF](#), [CSI\\_From\\_CsrB\\_CCSF](#), [CSI\\_From\\_SpliceList](#).

## CSI\_From\_SpliceList

The User inputs Site and a list of CCSF depths. Output waves with generic names are stored in a data folder named "CSI\_Output" and displayed as a table. Output waves are overwritten each time the function is run.



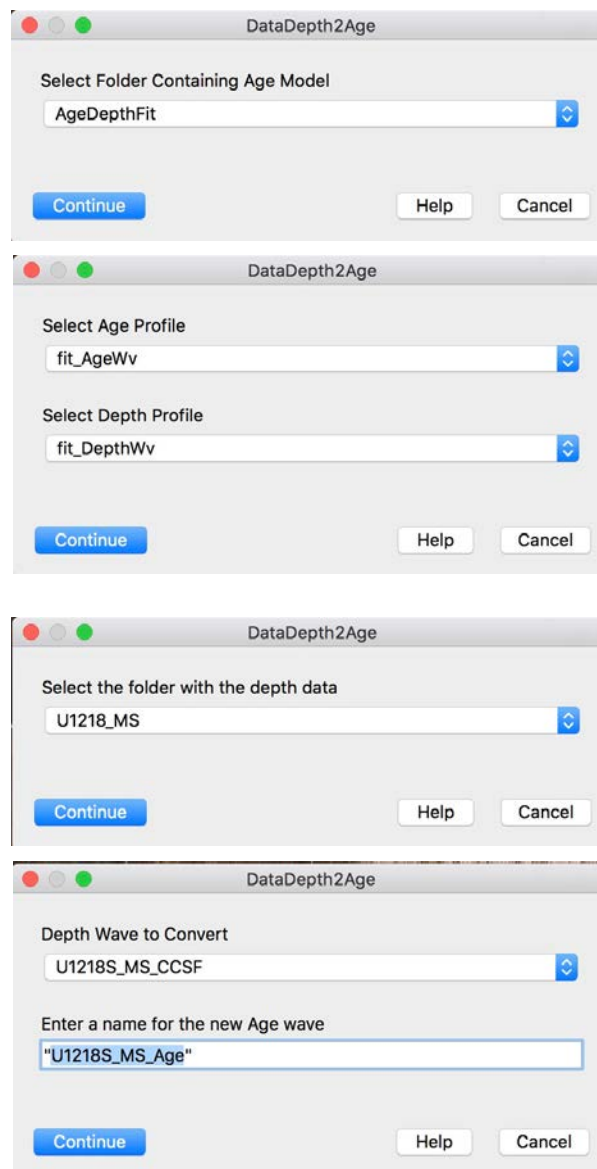
See also [CSI\\_From\\_Depth](#), [CSI\\_From\\_List](#), [CSI\\_From\\_CsrA\\_CCSF](#), [CSI\\_From\\_CsrB\\_CCSF](#), [CSI\\_From\\_SpliceDepth](#).

## Cursors\_2\_Saved\_Positions

This function will move cursors on the active graph to positions ( depth or age ) that were saved by running [Save\\_Cursor\\_Positions](#). There is no prompt.

## DataDepth2Age

This function generates an age wave corresponding to a selected depth wave based on an age model ( use millions of years ) specified by the user. The age wave is created in the same folder as the depth wave. The function checks the age model to be sure that there are no reversals in age or depth. For data such as biostratigraphy where there may be some confusion, run [AgeDepthFit](#) to fit the data and then use the fit waves for the age model. See also [ImageDepth2Age](#).

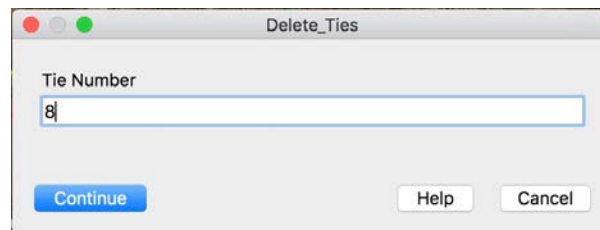




## Delete\_Ties

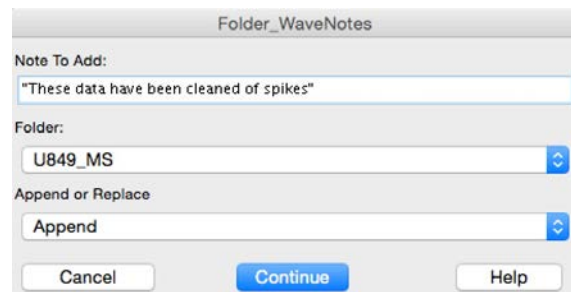
This function deletes ties used in site to site correlation experiments.

See also [AlignTiePointRange](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_CSITieList](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [Site\\_2\\_Site\\_Ties](#), and [TagText\\_ReSize](#).



## Folder\_WaveNotes

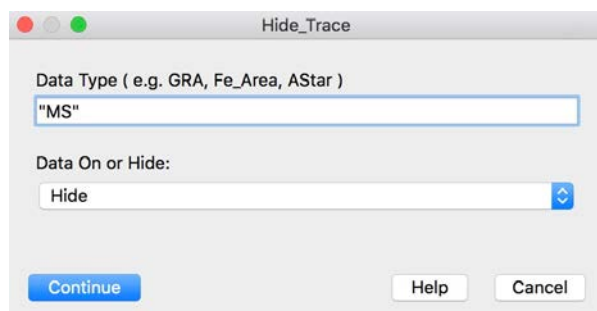
This function appends or replaces WaveNotes for all of the waves in the selected folder. When the function runs the user inputs the note, selects the data folder, and chooses to Append the note to existing notes (if any) or Replace existing notes with a new note. To erase existing notes, use Replace with an empty note string. See also [Print\\_CsrA\\_WaveNote](#), [Print\\_CsrB\\_WaveNote](#), [Add\\_CsrA\\_WaveNote](#), [Add\\_CsrB\\_WaveNote](#), and [Selected\\_WaveNotes](#).



## Hide\_Trace

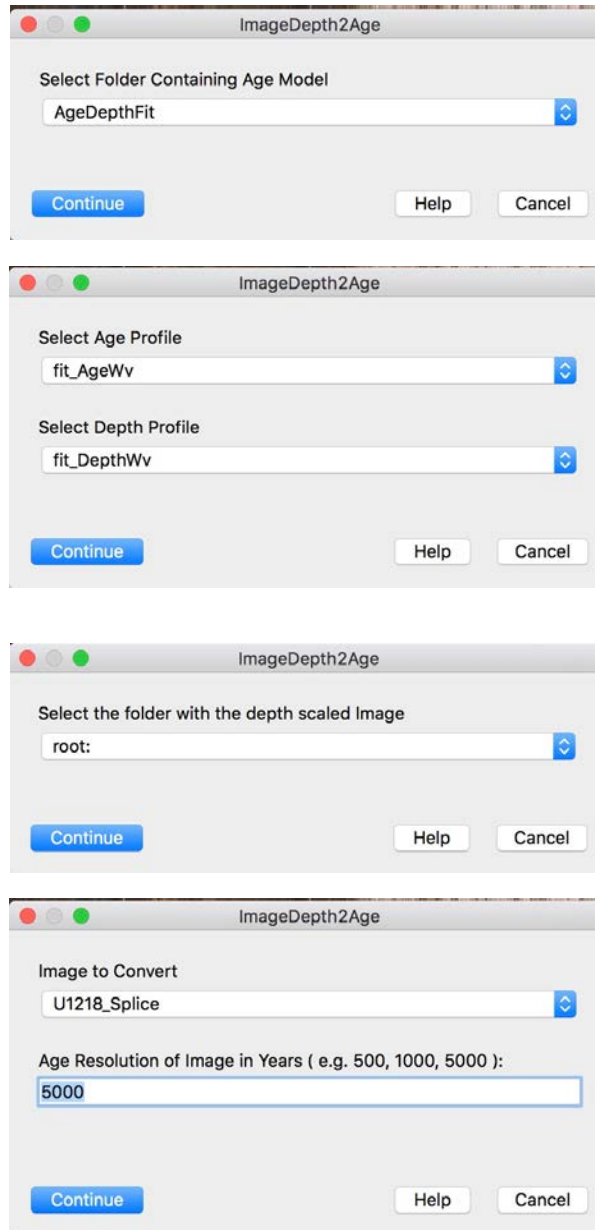
This routine will hide all of the traces of the specified data type on the top graph e.g. GRA from multiple holes and the splice. Useful when plotting several data types on top of an image. User may selectively turn different data types on and off.

Note that the "Data Type" in the dialog sets a string that is compared to Axis Names. For example, if "GRA" is specified, then only those axes with "GRA" in the name will be hidden. Axis names are not the same as Axis labels - an axis name might be a default such as "Left" while the label, added later, reflects the data plotted. In general, if you use one of the IODP data plotting macros, the axis names will automatically reflect the name of the data.



## ImageDepth2Age

This function generates an age-scaled core image corresponding to a selected depth-scaled image based on an age model ( use millions of years ) specified by the user. The age-scaled image is created in the same folder as the depth-scaled image with the same name with "\_Age" appended. User selects the age scaling increment. The function checks the age model to be sure that there are no reversals in age or depth. For data such as biostratigraphy where there may be some confusion, run [AgeDepthFit](#) to fit the data and then use the fit waves for the age model. See also [DataDepth2Age](#).



## IODP Data Naming Conventions

Hole\_Technique\_Data

Many of the plotting and processing routines developed for IGOR ocean drilling data rely on a strict naming convention for data waves and data folders. Note the need for the "U" prefix on Site numbers, even if they were drilled prior to its introduction. This makes programming considerably simpler.

Data from individual Holes have 3 part names separated by underscores. First the Hole, then the Technique, and finally the Data.

Examples: U849A\_GRA\_CCSF, U849A\_GRA\_GRA, U849A\_GRA\_Core

Many of the routines (but not all at this point) will work with Data names consisting of several parts, such as:

U1337A\_XRF\_CaCO3\_NMS

**NOTE - Update:** It is now recommended to use "S" rather than "\_Splice\_" in the [Splice\\_Data](#) function to identify spliced data so that the waves now look in form similar to individual Hole waves e.g. U849S\_GRA\_CCSF

Older spliced data have the word "Splice" inserted and have no Hole designation.

Examples: U849\_Splice\_GRA\_CCSF, U849\_Splice\_GRA\_GRA, U849\_Splice\_GRA\_Core

As the older spliced data are a special case, there are several routines provided specifically for them alone. Other routines, such as [Browser\\_Plot](#), will work for any data.

See the **CODD User Guide** for more description.

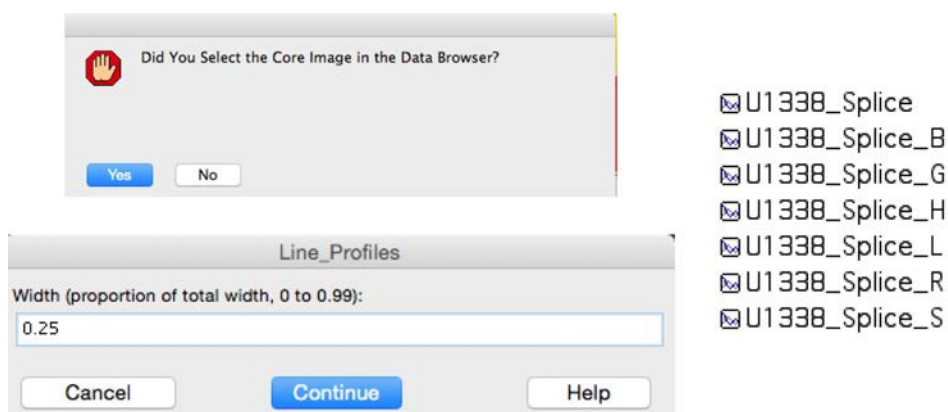
## Kill\_Globals

This function kills all global variables and strings. Globals are used to carry values such as "Hole" or "Core" forward from the running of one function to the next. It is provided because occasionally there are globals formed in data folders that conflict with same-named globals in root:. This should be a rare occurrence, but if the User is getting some strange results it is worthwhile running this function and re-setting the globals.



## Line\_Profiles

This macro produces X-axis line profiles of a selected RGB color image. In addition to profiles of R, G, and B it also produces profiles of Hue, Saturation, and Lightness ( H, S, L ). It first checks to see if an image has been selected in the browser and then asks how much of the image (Width) should be averaged in making the profiles. The width extends from the center line of the image, so that a with value of 20 averages all pixels that are 10% above or below the image center line. In practice, the wider the average the less "spiky" the line profiles. The line profiles are written to the root: directory regardless of the folder containing the image. The image need not be displayed when the routine is run.



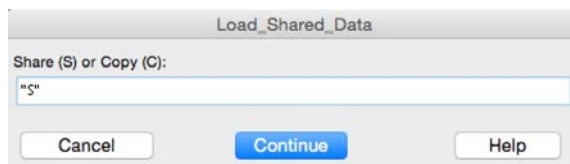
See also [RGB\\_Split](#).

## Load\_Core\_Photo

This function loads core box photos and displays them in an image on the screen so that the User may "cut" individual sections from the image using [Section\\_Cut](#).

## Load\_Shared\_Data

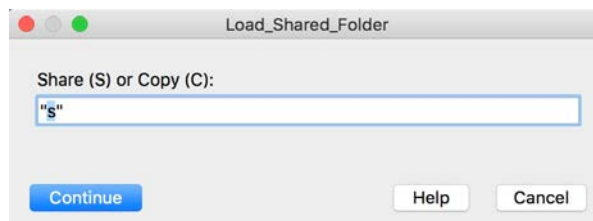
This routine will either set up IGOR binary wave sharing with an external folder or make copies of external waves for the open experiment. The waves will be copied to whatever folder, including root:, that is active. In practice the user generally creates a new data folder, such as "U1219\_GRA" and makes it the active folder. Then this routine is used to share/load the GRA data. Coring Matrices and Offset data are usually loaded into root:.



See also [Load\\_Shared\\_Folder](#).

## Load\_Shared\_Folder

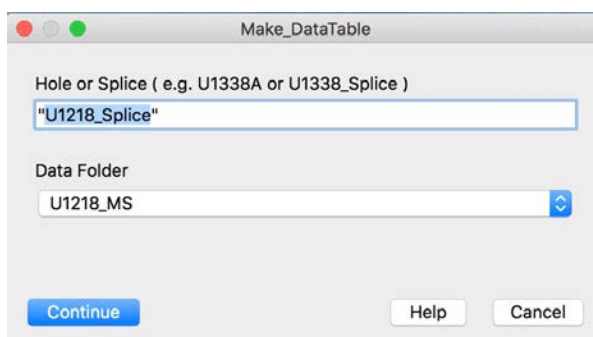
This routine will either set up IGOR binary wave sharing with an external folder or make copies of external waves for the open experiment. The folder will be copied to root:. Coring Matrices and Offset data are usually loaded into root:.



See also [Load\\_Shared\\_Data](#).

## Make\_DataTable

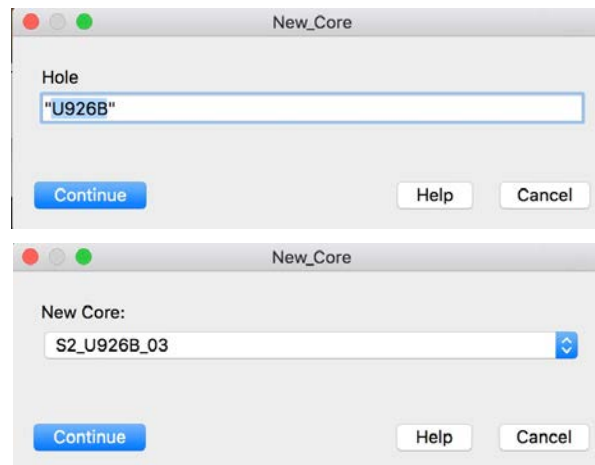
Use this function to make a data table. It sets up the table with site, hole, core, type, section, interval and depths in the first columns followed by data in alphabetical order. For the "old" splice data designation use "\_Splice", use "S" for the newer splice designation.



## New\_Core

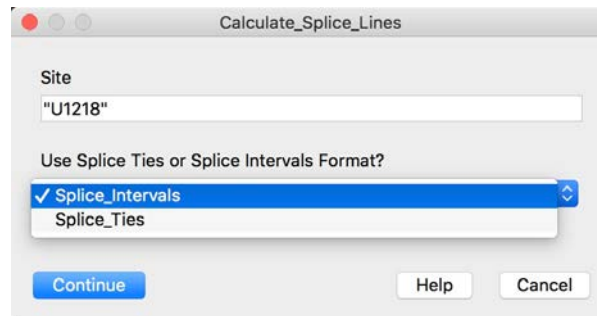
This function puts a new core on the core stretching graph. If splice tie points and/or other tie points for the selected core are present they are plotted and added to the core tie table. Run [Core\\_Stretch](#) and [StretchOffSpliceData](#) to update the graph if ties are already established.

See also [Core\\_Stretch\\_Image\\_SetUp](#), [Record\\_Stretch\\_Ties](#), [Concatenate\\_Ties](#), [CCSF\\_2\\_OffSplice](#), [AppendData4Stretching](#), [StretchOffSpliceData](#), [AppendSpliceLines4Stretching](#), and [Core\\_Stretch](#)

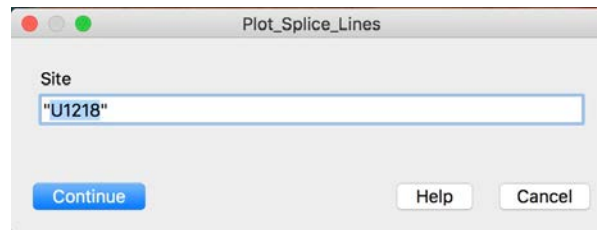


## Plot\_Splice\_Lines

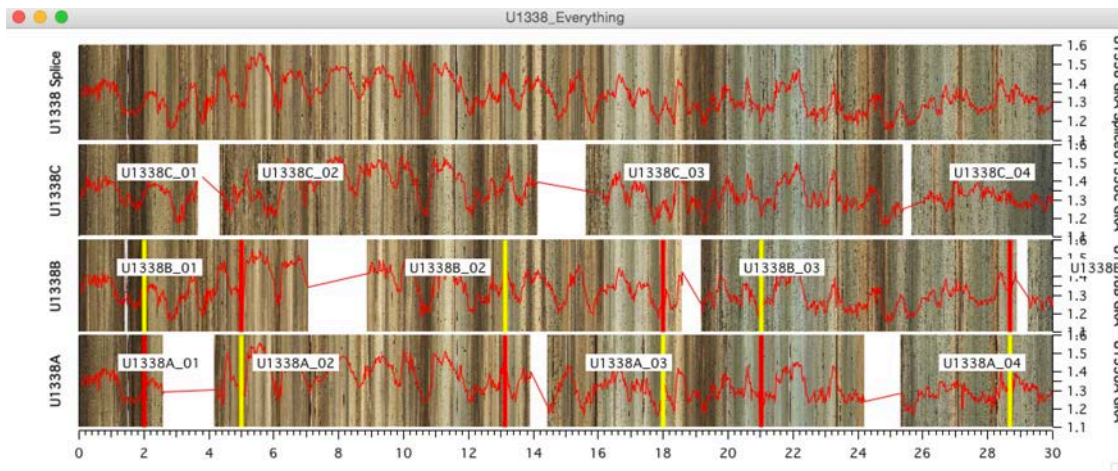
Use [Calculate\\_Splice\\_Lines](#) to make the waves necessary to plot splice lines on graphs of core images. The splice lines define the tops and bottoms of the spliced intervals defined by the splice table. User can choose the [Splice\\_Ties](#) or [Splice\\_Intervals](#) format data to splice the data. The splice lines are automatically stored in a folder titled "UXXX\_Splice\_Lines" and are applied to a graph using the macro Plot\_Splice\_Lines. See below for an example of the appearance of the lines. Currently the lines do not plot on graphs of vector data; use the Index wave ( e.g. U849\_Splice\_GRA\_Hole\_Index ) to distinguish splice sections in "wiggle" data by color.



Use Plot\_Splice\_Lines to add splice lines to a data plot. See example below.



Below: Graph of GRA data plotted on top of core and spliced images including Tags to identify cores and Splice Lines to delineate tops (yellow) and bottoms (red) of splice sections.





## Print\_CsrA\_WaveNote

Put Cursor A on a wave or image and this function will print WaveNote(s) attached to that wave or tell the user that there are no WaveNotes.

Example:

```
CsrA_WaveNote()
```

```
U849A_GRA_GRA NOTE:These data have been cleaned of spikes.
```

## Print\_CsrB\_WaveNote

Put Cursor B on a wave or image and this function will print WaveNote(s) attached to that wave or tell the user that there are no WaveNotes.

Example:

```
CsrB_WaveNote()
```

```
U849A_GRA_GRA NOTE:These data have been cleaned of spikes.
```

## RecallWindows

This function prompts the User to reopen graphs and tables that were stored in a list created by [CloseAllWindows](#). It is advised to close all windows before transferring an unpacked experiment to another User to avoid problems with missing waves and having to abort loading the transferred experiment.



## Record\_Stretch\_Ties

This function adds cursor positions as core ties to the Core Tie Table and puts the tie point numbers on the core and splice images in the core stretching graph. The A cursor needs to be on the spliced image or data and the B cursor belongs on the core image or data. There is no prompt.

See also [Core\\_Stretch\\_Image\\_SetUp](#), [New\\_Core](#), [Concatenate\\_Ties](#), [CCSF\\_2\\_OffSplice](#), [AppendData4Stretching](#), [StretchOffSpliceData](#), [AppendSpliceLines4Stretching](#), and [Core\\_Stretch](#)



## Remove\_Nans

Removes NaNs between data from different cores in the selected Hole. Essentially reverses the results of [Add\\_Nans](#). This routine requires strict [IODP Data Naming Conventions](#).

Remove\_NaNs

Hole:

Technique (e.g. GRA, RSC, XRF, etc):

## Remove\_CoreTags

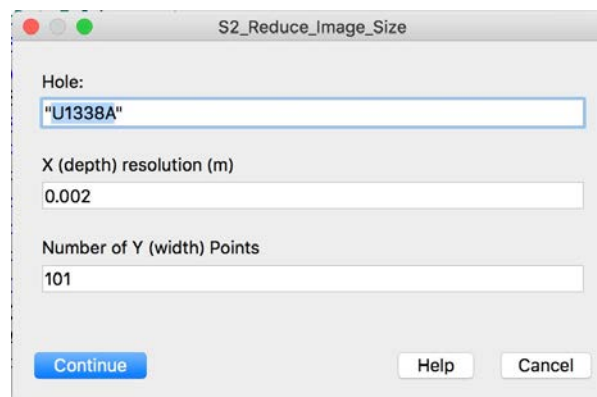
Remove\_CoreTags removes all core tags from a plot. There is no dialog. To remove all tags, including non core tags, use "Delete Annotations" under the "Graph" menu. See also [Add\\_CoreTags](#).

## RGB\_Split

RGB\_Split produces grayscale images of R, G, and B layers of an RGB image. An image is selected from anywhere in the data browser. The 3 resultant images are written to root. This macro may take several seconds to run for large images, such as higher resolution core scanner images. See also [Line\\_Profiles](#).

## S2\_Reduce\_Image\_Size

This function makes smaller images at lower resolution suitable for forming spliced images or plotting of large number of core images. Resulting image have the same name as the initial images in root: and are stored in a new Folder with "\_S2" appended to the name, e.g. U1338A\_S2. S2 image folders are called for in many of the Codd display functions.



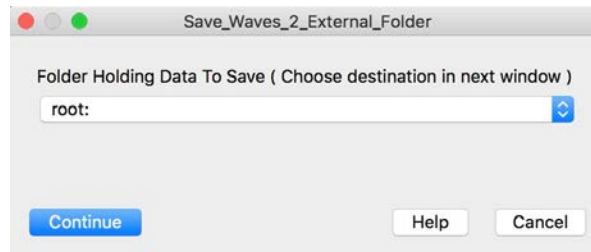
See also [Universal\\_Image\\_Loader](#), [Assemble\\_Core\\_Image](#).

## Save\_Cursor\_Positions

This function records the depth or age of Cursors A, B, C, and D that are active on the top graph. [Cursors\\_2\\_Saved\\_Positions](#) will move the Cursors to the saved positions on any graph that is the active ( top ) graph. The cursors whose positions have been saved must be active on the current top graph. The saved positions will remain until the function is run again. There is no prompt.

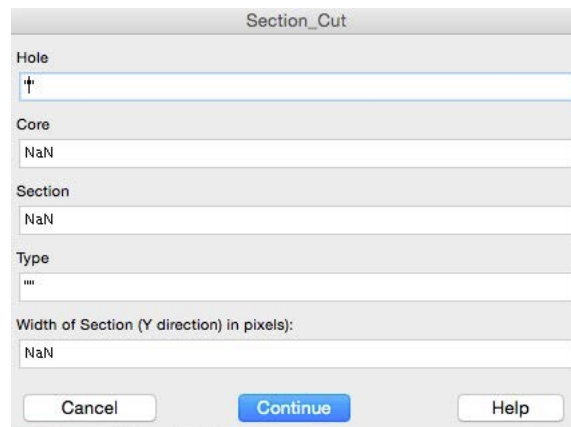
## Save\_Waves\_2\_External\_Folder

The user simply selects an external folder and all waves in the selected data folder are copied to and shared with the external folder. The data are saved as IGOR binary waves. If copies of the binary waves already exist in the external folder they will be overwritten. This routine can be useful if the user has experimented with copies of a dataset and wants to have the result replace the originals in all experiments sharing those data. **CAUTION:** Use of this macro will reset shared links. If, for instance, GRA data are already shared with an external folder and then are saved to a different external folder, the data in the experiment will be linked to the new external folder. If other experiments are linked to the original external folder, the data in the 2 experiments will no longer be identical if changes are made in one of them.



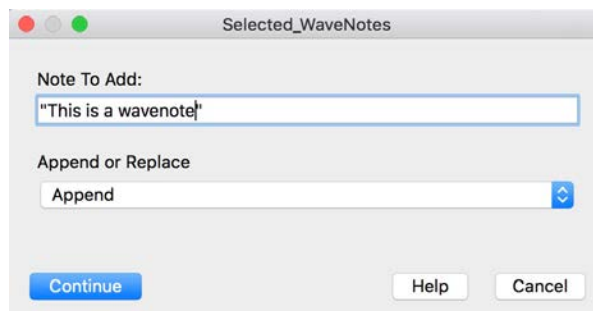
## Section\_Cut

This function uses cursors to define the tops and bottoms of sections in a core box photo image.



## Selected\_WaveNotes

This function appends or replaces WaveNotes for waves selected in the DataBrowser. When the function runs the user inputs the note and chooses to Append the note to existing notes (if any) or Replace existing notes with a new note. To erase existing notes, use Replace with an empty note string. See also [Print\\_CsrA\\_WaveNote](#), [Print\\_CsrB\\_WaveNote](#), [Add\\_CsrA\\_WaveNote](#), [Add\\_CsrB\\_WaveNote](#), [Folder\\_WaveNotes](#).



## Set\_Cursors\_Black

These functions turn any cursor on the active graph into the Cross and Letter style in the selected color. Works for Cursor A, B, C, and D

## Set\_Cursors\_White

These functions turn any cursor on the active graph into the Cross and Letter style in the selected color. Works for Cursor A, B, C, and D

## Set\_Cursors\_Yellow

These functions turn any cursor on the active graph into the Cross and Letter style in the selected color. Works for Cursor A, B, C, and D

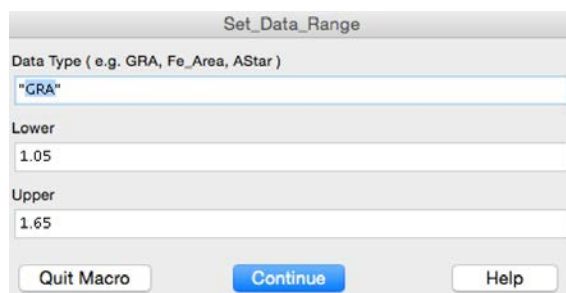
## Set\_Cursors\_Red

These functions turn any cursor on the active graph into the Cross and Letter style in the selected color. Works for Cursor A, B, C, and D

## Set\_Data\_Range

Use this routine to simultaneously change all axes of the same type that are displayed in the top graph. It is useful when displaying GRA, MS, or other data from multiple holes or sites on the same plot.

Note that the "Data Type" in the dialog sets a string that is compared to Axis Names. For example, if "GRA" is specified, then only those axes with "GRA" in the name will be scaled. Axis names are not the same as Axis labels - an axis Name might be a default such as "Left" while the axis Label, added later, reflects the data plotted. The axis label and the axis name are 2 different things in Igor. In general, if you use one of the Codd data plotting macros, the axis names will automatically reflect the type of data.



The image shows a dialog box titled "Set\_Data\_Range". It has three input fields: "Data Type ( e.g. GRA, Fe\_Area, AStar )" containing the text ""GRA"", "Lower" containing "1.05", and "Upper" containing "1.65". At the bottom, there are three buttons: "Quit Macro", "Continue", and "Help".

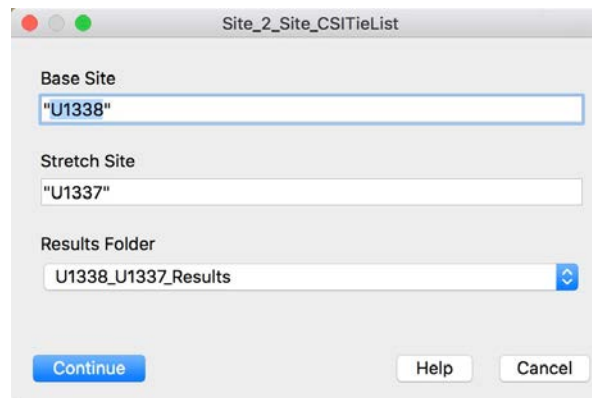
## Share\_Single\_Wave

This routine has no dialog. The user simply selects the IGOR binary wave to be loaded into the active folder. There is no option to copy the wave, only share. The same thing can be accomplished by double clicking the binary wave, with the added choice to share or copy. See also [Load\\_Shared\\_Data](#) and [Load\\_Shared\\_Folder](#).

## Site\_2\_Site\_CSITieList

This function uses coring matrices and splice interval data from Base and Stretch Sites in a site to site correlation experiment to calculate Hole, Core, Section, Interval, CSF, and CCSF for each pair of tie points identified in the experiment. The results are opened as a table and stored in a new data folder named with the base and stretch sites plus "TieTable" ( e.g. U1338\_2\_U1337\_TieTable).

See also [AlignTiePointRange](#), [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [Site\\_2\\_Site\\_Ties](#), and [TagText\\_ReSize](#).

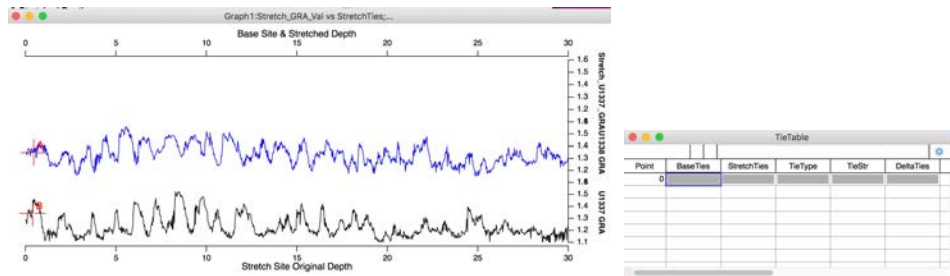
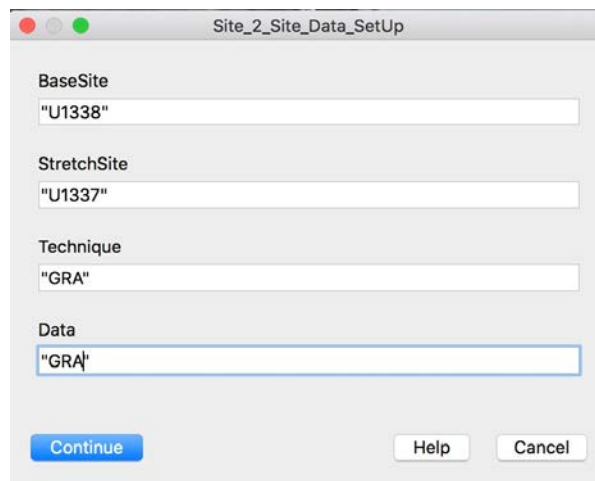


Point	U1338Site	U1338Hole	U1338Core	U1338Sec	U1338Int	U1338CSF	U1338CCSF	TiesTo	U1337Site	U1337Hole	U1337Core	U1337Sec	U1337Int	U1337CSF	U1337CCSF
0	U1338	A	1	1	0	0.00	0.00	Ties To	U1337	B	1	1	0	1.00	0.00
1	U1338	A	1	1	117	1.17	1.17	Ties To	U1337	B	1	1	83	1.83	0.83
2	U1338	B	1	2	80	2.30	2.30	Ties To	U1337	B	1	2	72	3.22	2.22
3	U1338	B	1	3	57	3.57	3.57	Ties To	U1337	B	1	3	74	4.74	3.74
4	U1338	B	1	3	149	4.49	4.49	Ties To	U1337	A	2	4	37	10.37	5.06
5	U1338	A	2	1	93	3.63	5.11	Ties To	U1337	A	2	4	117	11.17	5.86
6	U1338	A	2	2	45	4.65	6.13	Ties To	U1337	A	2	5	57	12.07	6.76
7	U1338	A	2	2	83	5.03	6.51	Ties To	U1337	A	2	5	100	12.50	7.19
8	U1338	A	2	3	76	6.46	7.94	Ties To	U1337	C	2	4	20	6.60	8.47
9	U1338	A	2	4	55	7.75	9.23	Ties To	U1337	C	2	5	0	7.90	9.77
10	U1338	A	2	5	2	8.72	10.20	Ties To	U1337	C	2	5	83	8.73	10.60
11	U1338	A	2	5	110	9.80	11.28	Ties To	U1337	A	3	1	118	16.18	12.07
12	U1338	A	2	6	94	11.14	12.62	Ties To	U1337	A	3	3	19	18.19	14.08
13	U1338	A	2	6	144	11.64	13.12	Ties To	U1337	A	3	3	57	18.57	14.46
14	U1338	B	2	4	74	12.84	14.13	Ties To	U1337	A	3	3	137	19.37	15.26
15	U1338	B	2	5	50	14.10	15.39	Ties To	U1337	A	3	4	101	20.51	16.40

## Site\_2\_Site\_Data\_SetUp

This function sets up data waves for site to site correlation. The data to be stretched/shrunk is plotted against the bottom axis while the base site data and the eventual stretched data are plotted against the top axis. New waves for tie depths and tie type ( data used to select the tie ) as well as a stretching factor and the absolute difference between ties are created in root: if they are not already in existence.

See also [AlignTiePointRange](#), [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [Site\\_2\\_Site\\_Ties](#), [TagText\\_ReSize](#), [Site\\_2\\_Site\\_CSITieList](#).





## Site\_2\_Site\_Data\_Stretch

This function

See also [AlignTiePointRange](#), [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [Site\\_2\\_Site\\_Ties](#), [TagText\\_ReSize](#), [Site\\_2\\_Site\\_CSITieList](#).

Site\_2\_Site\_Data\_Stretch

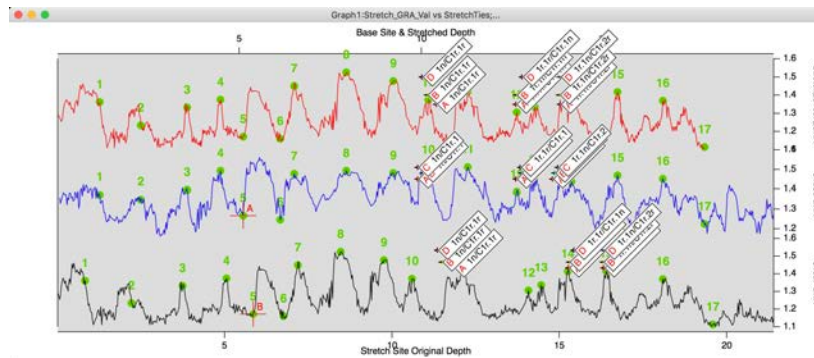
BaseSite  
"U1338"

StretchSite  
"U1337"

Technique  
"GRA"

Data  
"GRA"

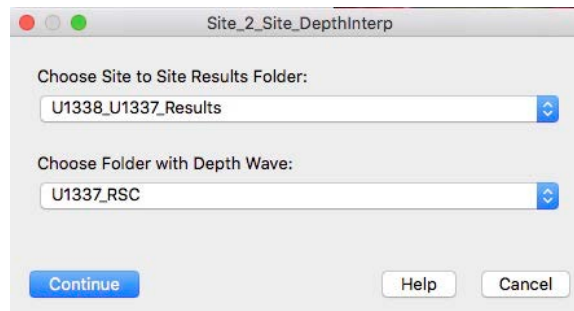
Continue Help Cancel



## Site\_2\_Site\_DepthInterp

This function allows a user to stretch a selected depth wave based on ties established by a site to site correlation experiment. The output file name can be specified and will reside in the same folder as the depth wave. The preferred output wave name is the same as the input wave with the Base Site name appended.

See also [AlignTiePointRange](#), [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [Site\\_2\\_Site\\_Ties](#), [TagText\\_ReSize](#), [Site\\_2\\_Site\\_CSITieList](#).

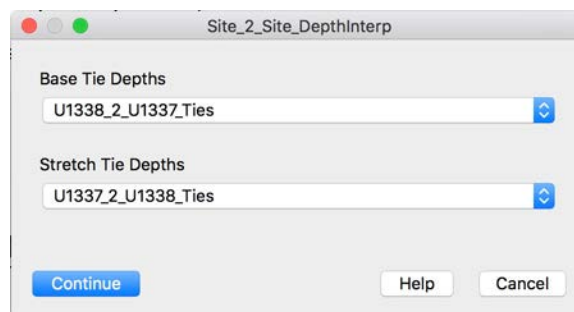


Site\_2\_Site\_DepthInterp

Choose Site to Site Results Folder:  
U1338\_U1337\_Results

Choose Folder with Depth Wave:  
U1337\_RSC

Continue Help Cancel

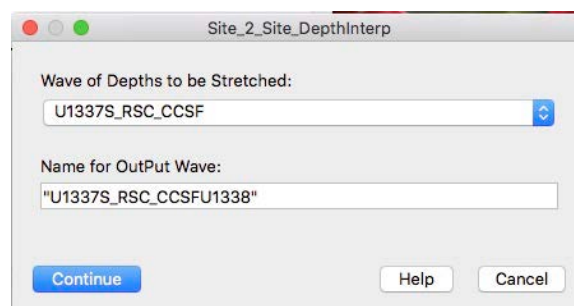


Site\_2\_Site\_DepthInterp

Base Tie Depths  
U1338\_2\_U1337\_Ties

Stretch Tie Depths  
U1337\_2\_U1338\_Ties

Continue Help Cancel



Site\_2\_Site\_DepthInterp

Wave of Depths to be Stretched:  
U1337S\_RSC\_CCSF

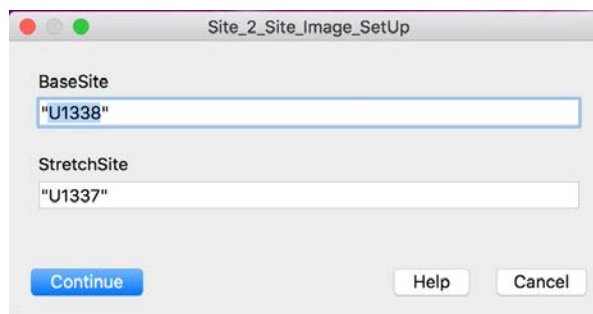
Name for OutPut Wave:  
"U1337S\_RSC\_CCSFU1338"

Continue Help Cancel

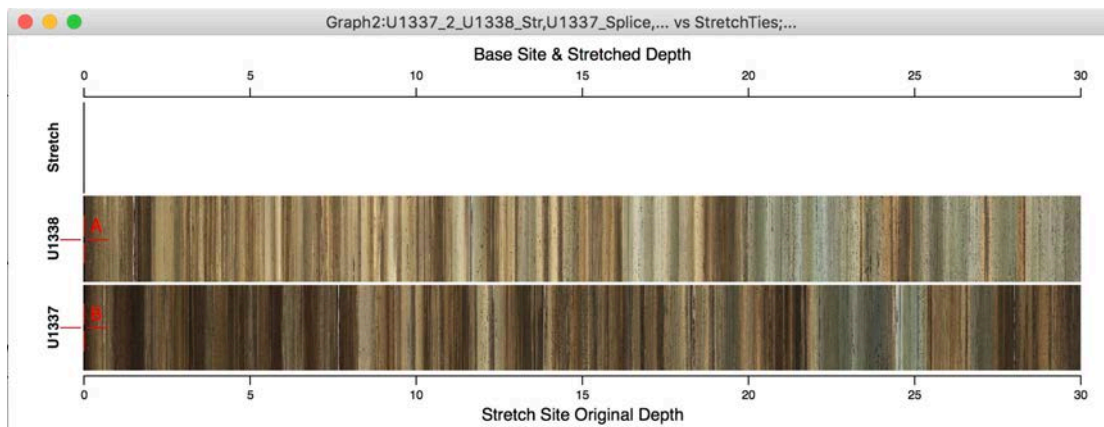
## Site\_2\_Site\_Image\_SetUp

This function sites up images from a Base Site and a Stretch Site for Site-To-Site correlation. The image to be stretched/shrunk is plotted against the bottom axis while the base site image and the eventual stretched image are plotted against the top axis. New waves for tie depths and tie type ( data used to select the tie ) as well as a stretching factor and the absolute difference between ties are created in root: if they are not already in existence.

See also [AlignTiePointRange](#), [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [Site\\_2\\_Site\\_Ties](#), [TagText\\_ReSize](#), [Site\\_2\\_Site\\_CSITieList](#).



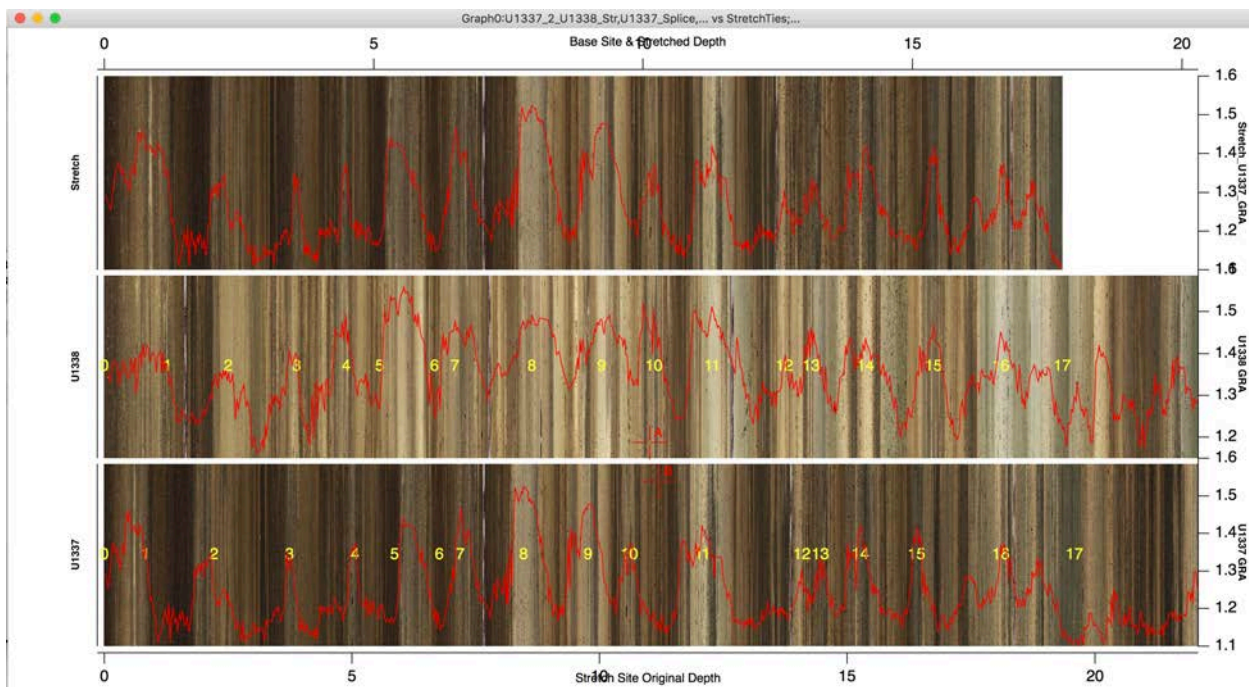
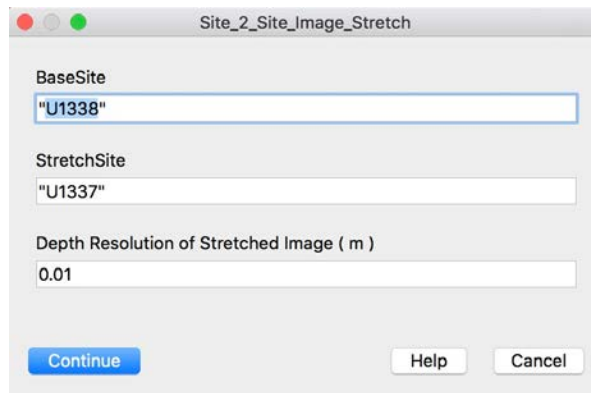
Point	BaseTies	StretchTies	TieType	TieStr	DeltaTies
0					



## Site\_2\_Site\_Image\_Stretch

This function stretches the Stretch Site image to match the Base Site image based on tie points identified in a site to site experiment. The resultant image is placed in root..

See also [AlignTiePointRange](#), [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Ties](#), [TagText\\_ReSize](#), [Site\\_2\\_Site\\_CSITieList](#).



## Site2Site2Site\_DepthCalc

Under development.

See also [AlignTiePointRange](#), [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [Site\\_2\\_Site\\_Ties](#), [TagText\\_ReSize](#), [Site\\_2\\_Site\\_CSITieList](#).


## Site\_2\_Site\_Ties

This function records ties for site to site correlation. Tie depths as well as the data used to pick the tie points are entered into the Tie Point Table and saved to the appropriate Results folder when the Stretch Site data and image are stretched. There is no prompt.

See also [AlignTiePointRange](#), [Delete\\_Ties](#), [Site\\_2\\_Site\\_Data\\_SetUp](#), [Site\\_2\\_Site\\_Data\\_Stretch](#), [Site\\_2\\_Site\\_DepthInterp](#), [Site2Site2Site\\_DepthCalc](#), [Site\\_2\\_Site\\_Image\\_SetUp](#), [Site\\_2\\_Site\\_Image\\_Stretch](#), [TagText\\_ReSize](#), [Site\\_2\\_Site\\_CSITieList](#).

## Sort\_By\_Core

Use this routine to sort data by Core-Section-Interval. It is used mostly in the case where a query to a database returns data sorted by depth and there is overlap between the depths of the bottom of a core and the top of the next deeper core. The data are intermixed with data from a section 7 interleaved with data from section 1 of the next core. This routine requires strict [IODP Data Naming Conventions](#). See also [Sort\\_By\\_Data](#) and [Make\\_DataTable](#).



Sort\_By\_Core

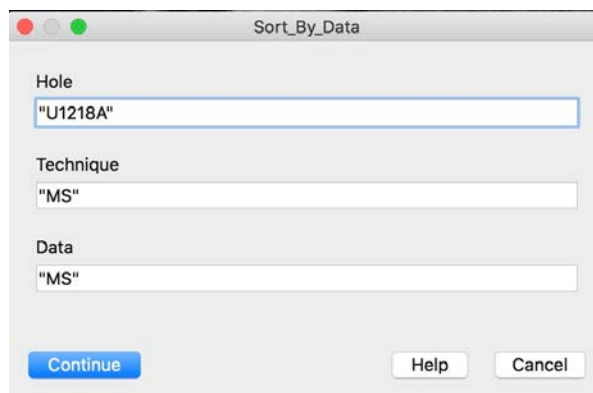
Hole:  
"U1338C"

Technique:  
"GRA"

Quit Macro Continue Help

## Sort\_By\_Data

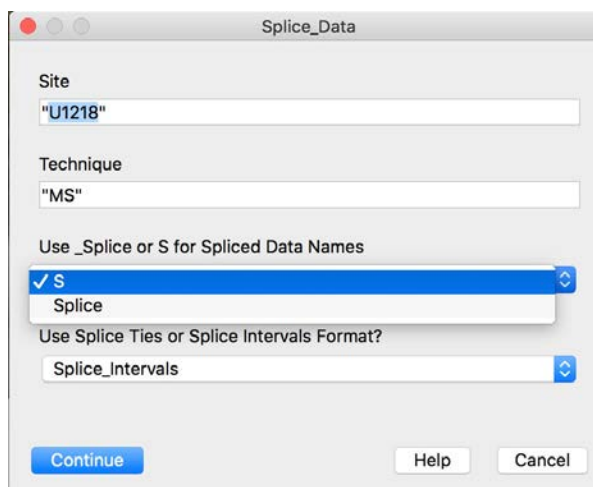
This routine is mainly used to remove NaNs from data. Best practice is to use [Make\\_DataTable](#) to display all of the waves associated with a hole and technique. Then run the function. NaN's will be grouped at the bottom of the table and can be cut. Finally, run [Sort\\_By\\_Core](#) to restore data to their proper order.



The screenshot shows a dialog box titled "Sort\_By\_Data". It contains three text input fields: "Hole" with the value "U1218A", "Technique" with the value "MS", and "Data" with the value "MS". At the bottom, there are three buttons: "Continue" (highlighted in blue), "Help", and "Cancel".

## Splice\_Data

This routine writes or recalculates spliced data waves in the data folder holding the selected data type. The splice relies on the CCSF depth ranges of the pieces of the splice from the different holes. User can choose the [Splice\\_Ties](#) or [Splice\\_Intervals](#) format data to splice the data. This routine requires strict [IODP Data Naming Conventions](#).

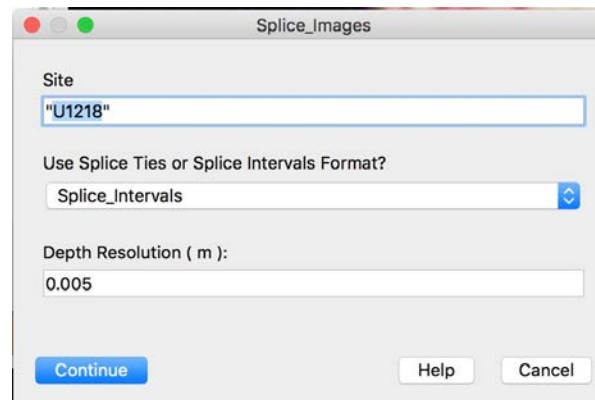


The screenshot shows a dialog box titled "Splice\_Data". It contains several fields: "Site" with the value "U1218", "Technique" with the value "MS", a dropdown menu for "Use \_Splice or S for Spliced Data Names" with "S" selected, and another dropdown menu for "Use Splice Ties or Splice Intervals Format?" with "Splice\_Intervals" selected. At the bottom, there are three buttons: "Continue" (highlighted in blue), "Help", and "Cancel".

See also [Splice\\_Tie\\_Table](#), [Splice\\_Interval\\_Table](#).

## Splice\_Images

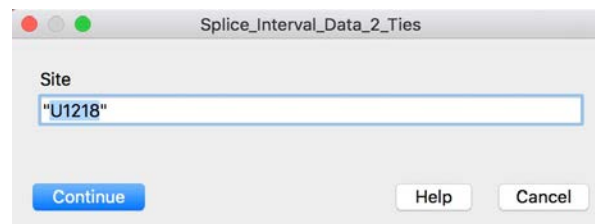
This macro uses the information from the Splice-data folder to form a single spliced core image. The image is written to the root: directory and is named UXXX\_Splice. User can choose the [Splice\\_Ties](#) or [Splice\\_Intervals](#) format data to splice the data.



See also [Splice\\_Tie\\_Table](#), [Splice\\_Interval\\_Table](#).

## Splice\_Interval\_Data\_2\_Ties

Uses data in the [Splice\\_Intervals](#) data folder to create or overwrite a [Splice\\_Ties](#) folder and displays a Splice Tie table. This function should not be used to simply create a table. That can be done using [Splice\\_Tie\\_Table](#). See also [Splice\\_Interval\\_Table](#) and [Splice\\_Tie\\_Data\\_2\\_Intervals](#).



## Splice\_Interval\_Table

Will create a table of [Splice\\_Intervals](#) from the appropriate splice tie folder. See also [Splice\\_Tie\\_Table](#).

**Splice\_Intervals**

[Splice\\_Ties](#) are the older form of splice data that, when displayed as a table, report splice positions on a single line, e.g.

U849	A	1	H	6	62	8.12	8.12	Tie	U849	C	1	H	5	51	7.37	8.12
U849	C	1	H	7	16	10.02	10.77	Tie	U849	B	2	H	2	62	8.82	10.77
U849	B	2	H	6	96	15.16	17.11	Tie	U849	C	2	H	3	61	14.11	17.11

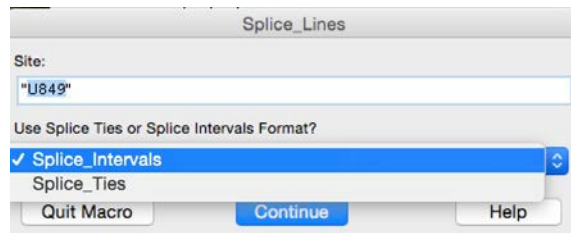
[Splice\\_Intervals](#) were introduced in 2015. When displayed as a table they contain the interval from each core that is included in the splice, e.g.

U849	A	1	H	3	57	3.57	3.57	6	62	8.12	8.12
U849	C	1	H	5	51	7.37	8.12	7	16	10.02	10.77
U849	B	2	H	2	62	8.82	10.77	6	96	15.16	17.11

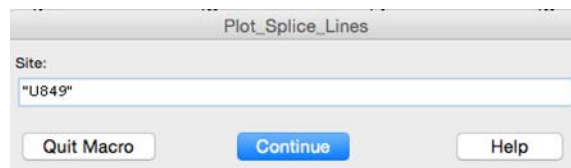


## Splice\_Lines

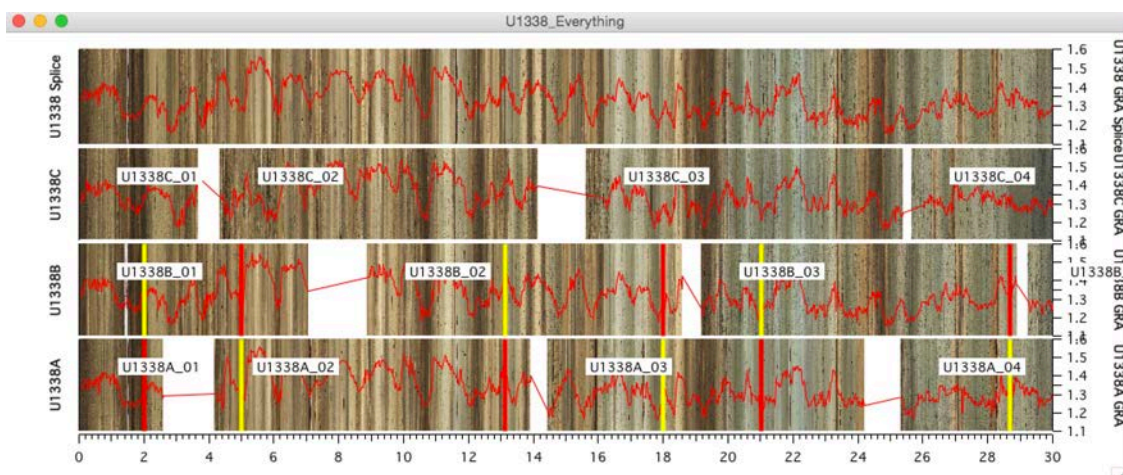
Use this Splice\_Lines to make the waves necessary to plot splice lines on graphs of core images. The splice lines define the tops and bottoms of the spliced intervals defined by the splice table. User can choose the [Splice\\_Ties](#) or [Splice\\_Intervals](#) format data to splice the data. The splice lines are automatically stored in a folder titled "UXXX\_Splice\_Lines" and are applied to a graph using the macro Plot\_Splice\_Lines. See below for an example of the appearance of the lines. Currently the lines do not plot on graphs of vector data; use the Index wave ( e.g. U849\_Splice\_GRA\_Hole\_Index ) to distinguish splice sections in "wiggle" data by color.



Use [Plot\\_Splice\\_Lines](#) to add splice lines to a data plot. See example below.

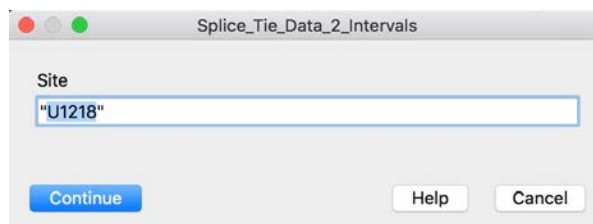


Below: Graph of GRA data plotted on top of core and spliced images including Tags to identify cores and Splice Lines to delineate tops (yellow) and bottoms (red) of splice sections.



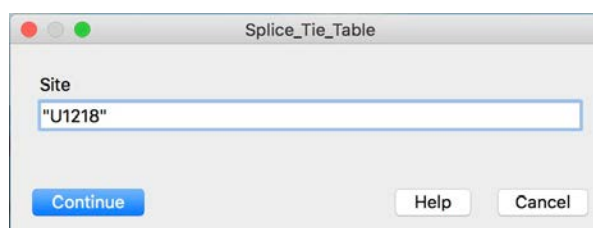
### Splice\_Tie\_Data\_2\_Intervals

Uses data in the [Splice\\_Ties](#) data folder to create or overwrite a [Splice\\_Intervals](#) folder and displays a Splice Interval table. This function should not be used to simply create a table. That can be done using [Splice\\_Interval\\_Table](#). See also [Splice\\_Tie\\_Table](#) and [Splice\\_Interval\\_Data\\_2\\_Ties](#).



### Splice\_Tie\_Table

Will create a table of [Splice\\_Ties](#) in the appropriate splice tie folder. See also [Splice\\_Interval\\_Table](#).



### Splice\_Ties

[Splice\\_Ties](#) are the older form of splice data that, when displayed as a table, report splice positions on a single line, e.g.

```
U849 A 1 H 6 62 8.12 8.12 Tie U849 C 1 H 5 51 7.37 8.12
U849 C 1 H 7 16 10.02 10.77 Tie U849 B 2 H 2 62 8.82 10.77
U849 B 2 H 6 96 15.16 17.11 Tie U849 C 2 H 3 61 14.11 17.11
```

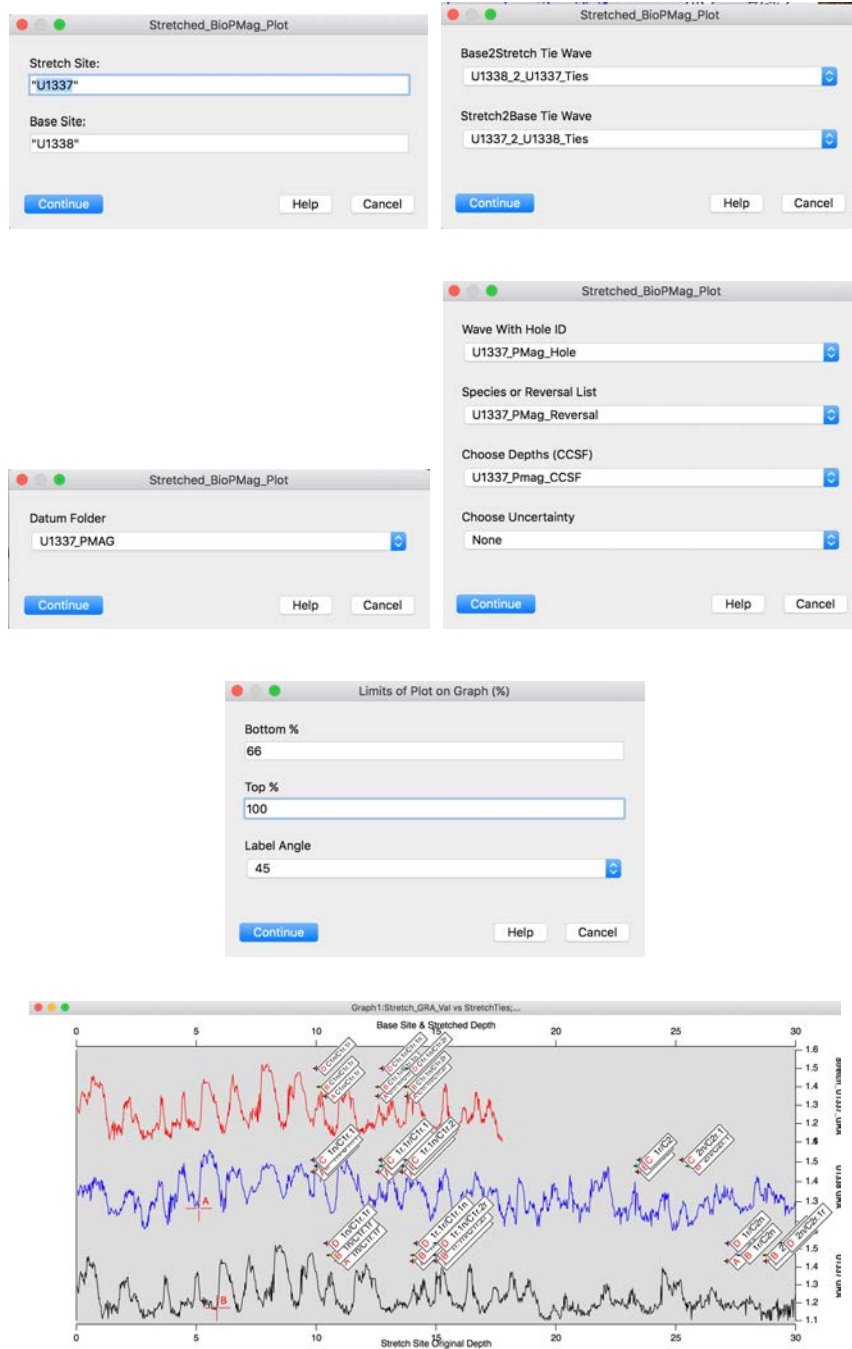
[Splice\\_Intervals](#) were introduced in 2015. When displayed as a table they contain the interval from each core that is included in the splice, e.g.

```
U849 A 1 H 3 57 3.57 3.57 6 62 8.12 8.12
U849 C 1 H 5 51 7.37 8.12 7 16 10.02 10.77
U849 B 2 H 2 62 8.82 10.77 6 96 15.16 17.11
```

## Stretched\_BioPmag\_Plot

This function calculates the stretched depth of datums of a Stretch Site on the Base Site depth scale for a site to site correlation experiment.

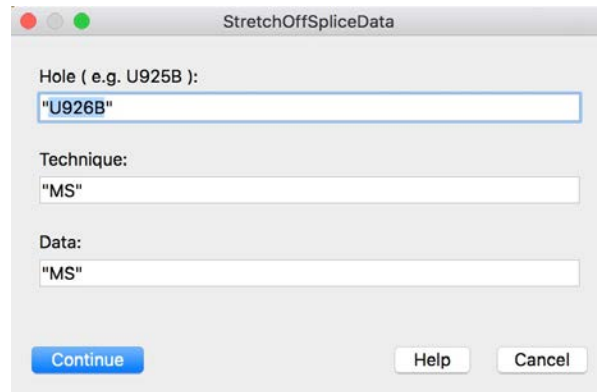
See also [BioPmag\\_Plot](#) and [TagText\\_ReSize](#).



## StretchOffSpliceData

This function stretches/shrinks data traces to match the tie points between Spliced and OffSplice data. Stretching is done according to ties in the Core Tie Table.

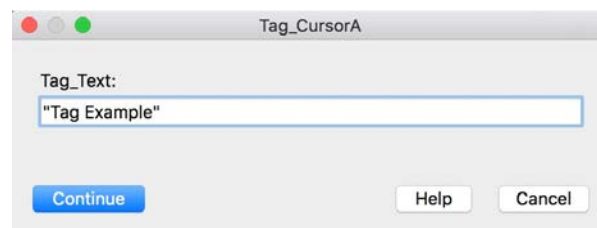
See also [Core\\_Stretch\\_Image\\_SetUp](#), [Record\\_Stretch\\_Ties](#), [New\\_Core](#), [Concatenate\\_Ties](#), [CCSF\\_2\\_OffSplice](#), [AppendData4Stretching](#), [AppendSpliceLines4Stretching](#), and [Core\\_Stretch](#)



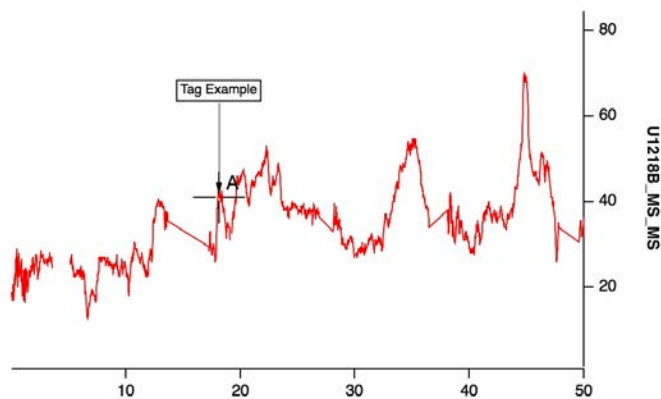
The screenshot shows a dialog box titled "StretchOffSpliceData". It contains three input fields: "Hole ( e.g. U925B ):" with the value "U926B", "Technique:" with the value "MS", and "Data:" with the value "MS". At the bottom, there are three buttons: "Continue" (highlighted in blue), "Help", and "Cancel".

## Tag\_CursorA

This function will add a user supplied Tag on a data wave at Cursor A.

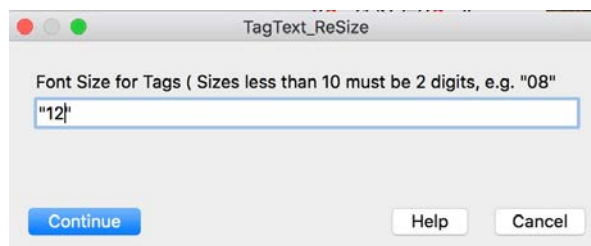


The screenshot shows a dialog box titled "Tag\_CursorA". It contains one input field: "Tag\_Text:" with the value "Tag Example". At the bottom, there are three buttons: "Continue" (highlighted in blue), "Help", and "Cancel".



## TagText\_ReSize

This function allows the user to change the font size of the datum tags attached by [BioPmag\\_Plot](#) and [Stretched\\_BioPmag\\_Plot](#).



## Universal\_Image\_Loader

This function loads section images from external files. The images are stored in a data folder named ( per example ) K\_U1338A\_01H or the appropriate Hole and Core number. The User should set a Path to the folder holding the section image JPEGs before running the function. Remember to change the core, section, and type numbers when loading core numbers greater than 9 ( see examples below ).

See also [Assemble\\_Core\\_Image](#), [S2\\_Reduce\\_Image\\_Size](#).

