Pad

The Pad tool can be used to add blank slices around the original data set. This may be necessary to create a data set with certain dimensions or with the same number of slices in each dimension. The options for this tool are as follows:

Pad: The padding options allow users to pad a data set. Padding places the Input volume in a larger output volume at the position specified by the padding values. The pad values specify the X, Y, and Z input volume starting and ending position in the output volume. The following padding options are available:

- **X Low:** The X Low field allows users to apply padding to the starting X position for the data set.
- **X High:** The X high field allows users to apply padding to the ending X position for the data set.
- **Y Low:** The Y Low field allows users to apply padding to the starting Y position for the data set.
- **Y High:** field allows users to apply padding to the ending Y position for the data set.
- **Z Low:** field allows users to apply padding to the starting Z position for the data set.
- **Z High:** field allows users to apply padding to the ending Z position for the data set.

Equal Padding: When the Equal Padding option is enabled a pad value entered in any of the pad fields will be applied to all fields, applying the same number of slices to each side of the volume.

Pad Value: The Pad Value option allows users to assign a specific grayscale value to be assigned to the padded regions in the output volume.

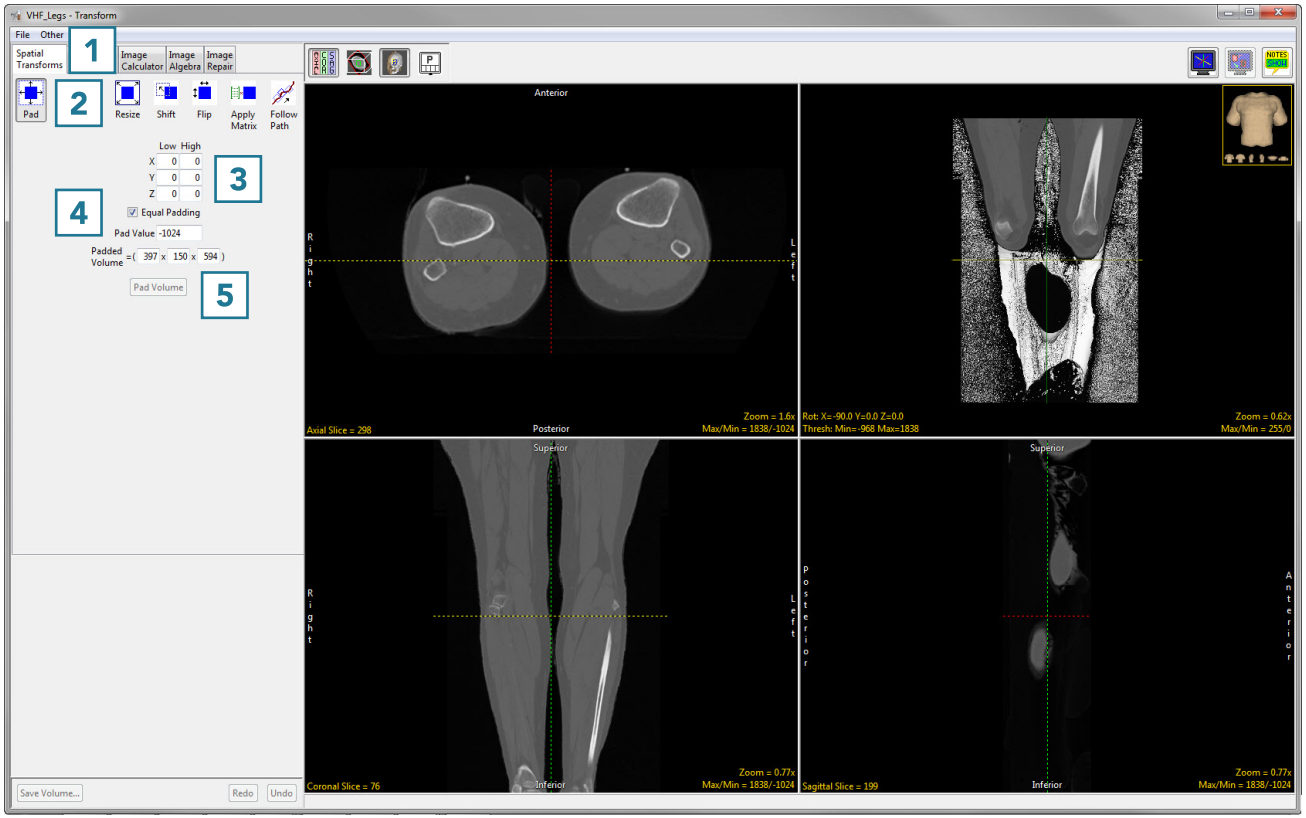
Padded Volume: The Padded Volume option allows users to specify the output dimensions of the volume.

Pad Volume: Pads the input data based on the Pad parameters specified by the user.

Using the Pad Tool

Here we use the Pad tool to add blank slices around the original data set.

To follow along, download the data set VHF_Legs from analyzedirect.com/data and load into Analyze using Input/Output.



- Select the data set to pad and open Transform. Navigate to Spatial Transforms [1] and select the Pad tool [2].
- To add a given number of slices to the low or high end of the data set in any dimension, type the number of slices to be added in the appropriate boxes [3] and the padded volume dimensions will be updated.
- To change the intensity value of the added slices, change the Pad Value [4].
- To set the padded volume dimensions, change the numbers in the appropriate boxes [5] and the low and high number of slices in each dimension will update automatically.

Using the Pad Tool (continued)

- Once the dimensions have been changed from the original dimensions, the Pad Volume button will update.
- Click Pad Volume to apply the changes [6].
- Click the Save Volume button to save the padded volume to the workspace. To retain the original volume, choose to create a new workspace volume [7] and click Save Volume [8].
- Close Transform.