# Using the Intensity Scale Tool

Modifying Image Data Type

Changing the data type can reduce the size of the data on disk. In this example, a microCT data set has a data type of Float and the size of the image data is 92.71 MB. Changing the data type to signed 16-bit reduces the size of the data set by about 50% to 46.35 MB without having a significant effect on the voxel intensities.

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

- Select the data set to scale and open Transform.
- Navigate to Intensity Transforms [1].
- Select the Intensity Scale tool [2].
- Select the Signed 16-bit data type from the Output drop-down menu [3].
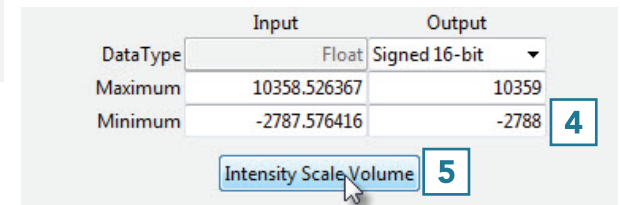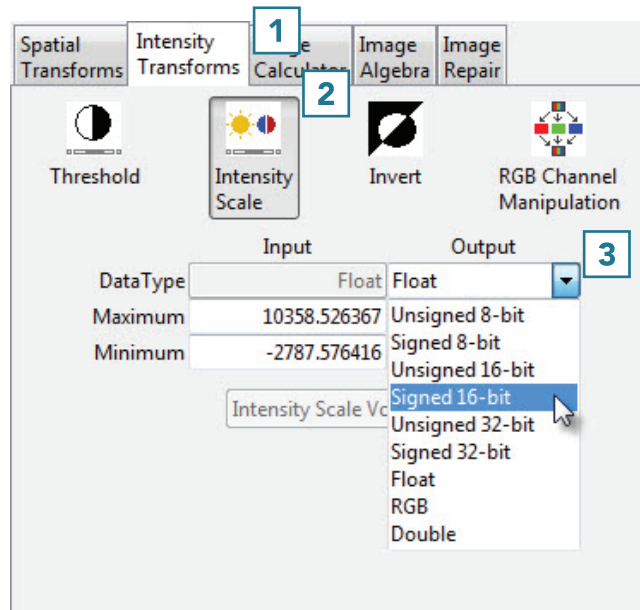
The maximum and minimum values will be set to the default values for the signed 16-bit data type.
- Change these values to match the maximum and minimum input values, rounding to the nearest whole number [4].
- Click Intensity Scale Volume [5] to apply the changes.

Using the Intensity Scale Tool (continued)

- Click Save Volume [6] to save the scaled data set.

- In the Save Transformed window, choose to create a new workspace volume [7].
- Rename the file [8].
- Click Save Volume [9].
- Close Transform.