

# Spatial Filters

The Spatial Filters module enables the application of two-dimensional and three-dimensional filters to image data. This exercise will demonstrate how to apply a filter in the Spatial Filters module to your data.

1. Load the **MRI\_3D\_Head.awv** data set from the **\$:\BIR\images\TutorialData** directory.
2. Open the **Spatial Filters** module (**Process > Spatial Filters**).
3. Open the **Preview Options** window (**Generate > Preview Options**).
4. Select the **Loaded and Preview Volumes** option (figure 1). This will preview the original data set and a copy of the data set with any filter applied, side-by-side.
5. Open the **Filters** window (**Generate > Filters**).
6. In the Filters window, select the Low Pass filter by clicking the radio button next to the option (figure 2).
7. Now, click **Preview**. The original data set and the filtered data set will be displayed side-by-side in the main Spatial Filters window (figure 3), the filtered data set appears on the right.
8. Preview several other filters, noting the effect of each.
9. To apply a filter to the data set, click **Filter** in the Filters window. A dialog box will be returned stating that the action modifies the loaded volume, click **Change a Copy of the Loaded Volume**.
10. A filtered copy of your volume will be saved to the Analyze workspace.
11. Close the Spatial Filters module before proceeding to the next exercise.

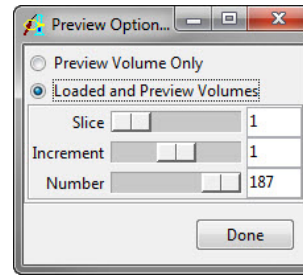


Figure 1

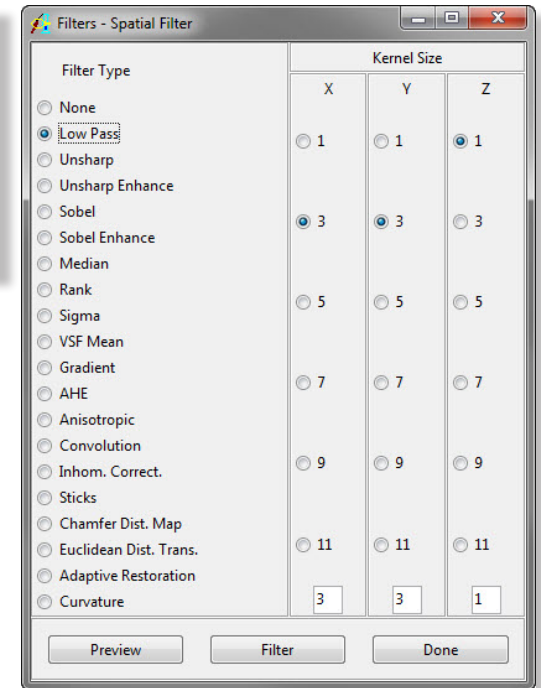


Figure 2

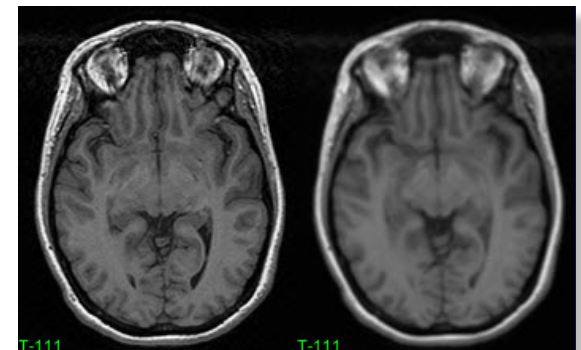


Figure 3