## Image Repair

The Image Repair module is a module that includes the ability to designate bad slices or subregions that can be 'repaired' by copying voxels from neighboring slices, interpolating across neighboring slices, copying from a related volume, or removed from the volume. Subregion repair includes the ability to blend voxels at the edge of the region.

- 1. Load the VH\_Abdomen.avw data set from the \$:\BIR\images\ TutorialData directory.
- 2. Open the Image Repair module (Process > Image Repair).
- 3. In the Image Repair module (figure 1), use the Displayed Slice slider bar to locate the first corrupt slice. Note that the first corrupt slice is slice 276.
- 4. In the **Bad Slice(s)** portion of the window, set slice **276** as the first bad slice.
- 5. Now, use the Displayed Slice slider bar to locate the last corrupt slice. Note: the last corrupt slice is slice 279.
- 6. In the Bad Slice(s) portion of the window, set slice 279 as the last bad slice.
- 7. Select **Interpolate Between the First Good Slices** for the correction method.
- Click Repair Slice(s). A dialog box will be returned, click Change a Copy of the Loaded Volume. The fix will now be applied to a copy of the data set; the fixed data set will be saved to the Analyze workspace as 'VH\_Abdomen0'.
- 9. Close the Image Repair module before proceeding to the next task.





## Image Repair: Repair a Bad Region

The 'Bad Region' option provides the user the ability to define only a selected region to be repaired. To demonstrate this option we will use the VH\_Abdomen data set and repair only the corrupt regions.

- 1. Select the VH\_Abdomen data set in the Analyze workspace and open the Image Repair module (Process > Image Repair).
- 2. As in the main exercise, set slice **276** as the first bad slice and slice **279** as the last bad slice.
- 3. Select the **Bad Region** option, the region boundaries and region sliders will appear.
- Adjust the region sliders until just the corrupt area is defined (figure 1).
- 5. Try adjusting the **Blend Border** and **Correction Method**. Review the different results.
- 6. Click **Repair Slice(s)**. Slices 276 through 279 will be corrected according to the region and correction method. A dialog box will be returned, click **Change a Copy of the Loaded Volume**.
- 7. Close the Image Repair module before proceeding to the next exercise.

👔 VH_Abdomen - Image Repair	
File View Other Help	
Current	Corrected Preview
I Displayed Slice	
	277
Bad Slice(s)	
Transverse	💿 Coronal 💿 Sagittal
276	279
■ Bad Region	
1 X 37	247 44
	247 ПА
LY 134	159 HY
Show Border Blend Border	10
Correction Method	
🔘 None	Copy from Related Volume
Copy the Closest Good Slice	Remove the Bad Slices Repair Slice(s)
Interpolate Between the First Good Slices	Erase the Bad Slices

Figure 1

