Import Tool for Drishti

This manual describes import uility for Drishti. The import utility converts the volume files from users' own format into the format that Drishti can understand - i.e. .pvl.nc format.

The present version allows conversion of following formats :

- .raw
- .nc (netCDF)
- .tom (QMUL)
- .hdr (Analyze 7.5)
- .hdf (HDF4)
- standard image stack (.bmp, .gif, .tiff, .png, .jpg, etc ...)
- standard image stack for RGB/RGBA volumes
- 16/32 bit grayscale image stack (.tiff)
- DICOM image stack
- raw slices (with or without header for each slice)

Drag-and-Drop facility is available for this utility. The volume files or directory containing image files can be dropped into the mainwindow for conversion.

The mainwindow is divided into two windows - histogram window and image window. Histogram window is used for display of 1D histogram of the loaded volume. Image window displays the currently selected slice of the volume.

Users can toggle visibility of Histogram window by using check-box at the top of the mainwindow.

Coloring for volume slices can be changed by selecting color range from drop-down box at the top and suitable changing the colors in the color gradient widget at the right of the drop-down box.

When images are loaded for generation of RGB/RGBA volumes, histogram window and color gradient widget will be hidden.

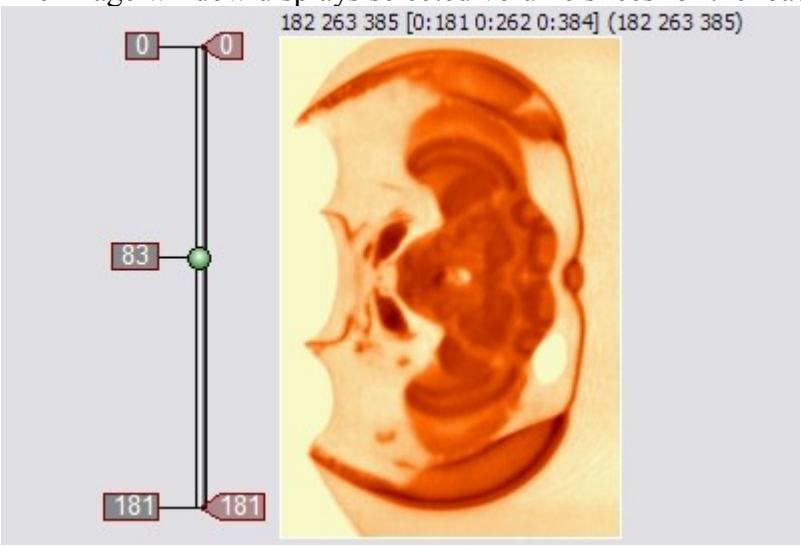
The radio buttons **Z/Y/X** allow users to select slicing direction.

Use **Save As** to save the selected subvolume as a .raw file and convert it into .pvl.nc file. During the save process users can also reduce the volume size by subsampling.

When images are loaded for RGB/RGBA volumes, **Save As** will save the data as an RGB/RGBA volume. User will be asked whether to save alpha(A) channel to make RGBA volume.

Image Window

The image window displays selected volume slices for the loaded volume



The window displays a slider bar along side the image. Users can move the green marker to select a slice in the given slicing direction. The red markers on the right of the slider act as bounds for slicing.

Grid size and currently selected subvolume information is displayed at the top of the slice.

Subvolume can be selected by changing bounds on the slider. Users can also shift key with left mouse drag for selecting a bounding box. Edges of the bounding box can be moved by left mouse drag. Users can thus define subvolume region in all 3 axes. Region outside bounding box is dark shaded to clearly differentiate the two regions.

When images are loaded for generation of RGB/RGBA volume, these will be shown in their original colours. Histogram window and color gradient widget will be hidden.

Press **s** for triggering **Save As**.

Key(s)	Description
Mouse wheel **Up/Down arrow**	Change slice.
Right mouse	Get coordinate, raw and mapped values.
Ctrl + 0	Set image magnification to 1
Ctrl + +/-	Increase/decrease image magnification
s	Save As
Alt + s	Save image of current slice.