



File Format Specification

Imadeus ROI

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1 Change history

Revision	Date	Author	Description
1.0	26.6.2007	Calle Laakkonen	Separated from tpcroi.net document

2 Background

The Imadeus ROI format is used by the Imadeus software.

Note that this is not an official Imadeus format specification document. This document was produced by examining files created by Imadeus and the Imadeus Version 1.15 Technical Documentation rev. 8

(<http://forima.com/imadeus/documents/Imadeus%20v1.15%20Technical%20Documentation%20rev%208.pdf>)

3 Format

The ROI file is divided into sections. Sections begin with “[<section name>]” and continue until another section is started. Sections cannot be nested.

Each section contains key and value pairs, separated by a “=” sign. There is no separating white space around the equals sign. The value may be left blank.

Blank lines are ignored.

Imadeus supports bilateral VOIs. Each side of the VOI is stored separately, with the VOI names suffixed with “sin” and “dx”.

3.1 [Definition] section

The [Definition] section contains settings common to all the ROIs in the file.

Key	Value	Example
Regions	The number of VOIs in the file.	27
Image	Reference image path.	C:\temporary files\test.img
RawImage	Not used	
Name	Not used	VOITable
Orientation	Not used	LPH
Orient	Not used	0
XResolution	Size of the image in voxels.	128
YResolution		128
ZResolution		35
XVoxelDim	Size of the image voxel in millimeters.	2,34375



YVoxelDim		2,34375
ZVoxelDim		4,25
XFlip	Flip image in X, Y or Z directions. Allowed values are 0 and 1.	1
YFlip		0
ZFlip		0
XOri	Coordinate origin.	64
YOri		64
ZOri		18
Comment	Comments about the ROI.	

3.2 [ROI*] sections

Although named ROI, these sections actually describe Volumes of Interest. The sections are named [ROI1], [ROI2], [ROI3], and so on. The number of sections must match the Region count set in the [Definition] section.

Key	Value	Example
Name	Name of this VOI. One space is allowed as a separator for the side suffix (sin or dx)	ac sin
nRegion	The number of regions (ROIs) in this VOI.	4
Color	VOI color (used in Imadeus) (format unknown)	0
col	unknown	65535
Region*	ROI polygon coordinates. <Z> 2 <points> <coordinates pairs>	20,2,4, 65.00, 87.00, 69.00, 87.00, 69.00, 84.00, 65.00, 79.00

The regions are named like the ROI sections: Region1, Region2, Region3, and so on. The value consists of three numbers, followed by the coordinates for each point in the polygon.

The first number is the (zero based) plane number of the region. The second number is always 2 for compatibility reasons. The third number is the number of points in the polygon.

Remember that the coordinate origin set in the [Definition] section must be taken in account for X, Y and plane values.

The point coordinates

3.3 [Combinations] section

The [Combinations] section defines named combinations of VOIs.

Unclear: how are bilateral VOIs handled?

Key	Value	Example
Comb*	VOI combinations. <name> 0 <count> <VOI names>	str 0 2 cau put



3.4 [Creator] section

The [Creator] section contains information about the creator of the ROI file.

Key	Value	Example
ProductName	Name of the software that produced the file.	Imadeus Advance
Version	Version number of the software that produced this file.	1.50.100.[360]
Copyright	Copyright notice.	copyright © Forima Inc 2001-2002