Image File Format DITABIS micron

The data created by micron software have the extensions:

.IPL   Image data first channel, 16 bit per pixel

.IPH   Image data second channel, 16 bit per pixel

.IPR   Reflected light data, 16 bit per pixel

.IPC   Image data, both channels combined, 16,24 or 36 Bit pro Pixel

The micron data format consists of three parts:

1. A file header with information about the data.

2. The data ordered line by line in a continuos array of data. The organisation of the data is described in the header. The last pixel repeats the maximum value of the image.

3. A zoomed copy of the image, used for preview.

The header is a minimum of 2048 bytes long and consists of ASCII tags and data, separated by CR/LF characters. Every tag entry consists of a key word followed by a blank and an equal sign, followed by the value in ASCII characters.

The Tags come in any order. There are some tags that have to be there and some additional ones that are voluntary.

Tags that must be present:

CREATED = Time and Date String

HEADER = Length of header, typically 2048

YPIXEL = Number of pixel in Y typ. 3000..3500 pixel

XPIXEL = Number of pixel in X typ. 3000..3200 pixel

BYTE PER PIXEL = Data depth in byte, 2,3 or 4

XRESOLUTION = Resolution X in µm

YRESOLUTION = Resolution Y in µm, exact value in parentheses

THUMB-NAIL-ZOOM = Zoom factor for preview, typ. 10

Additional tags:

MAGNIFICATION: gives the magnification in the microscope.

OFFSET: gives the value that represents zero dose

OFFSET CORRECTION: Indicator wether Offset Correction was used

GAIN: Gain setting of the instrument

LASER: Laser setting of the instrument

PARAMS: Settings file used for this scan

FORMAT: Format file used for this scan

CHANNEL: Data channel used for this file

MICRON-MARK   Position, length and text of micron mark overlay

COMMENT: is always the last tag and has no equal sign after. It is followed by the comment string that may contain CR/LF characters and is terminated by a null character.