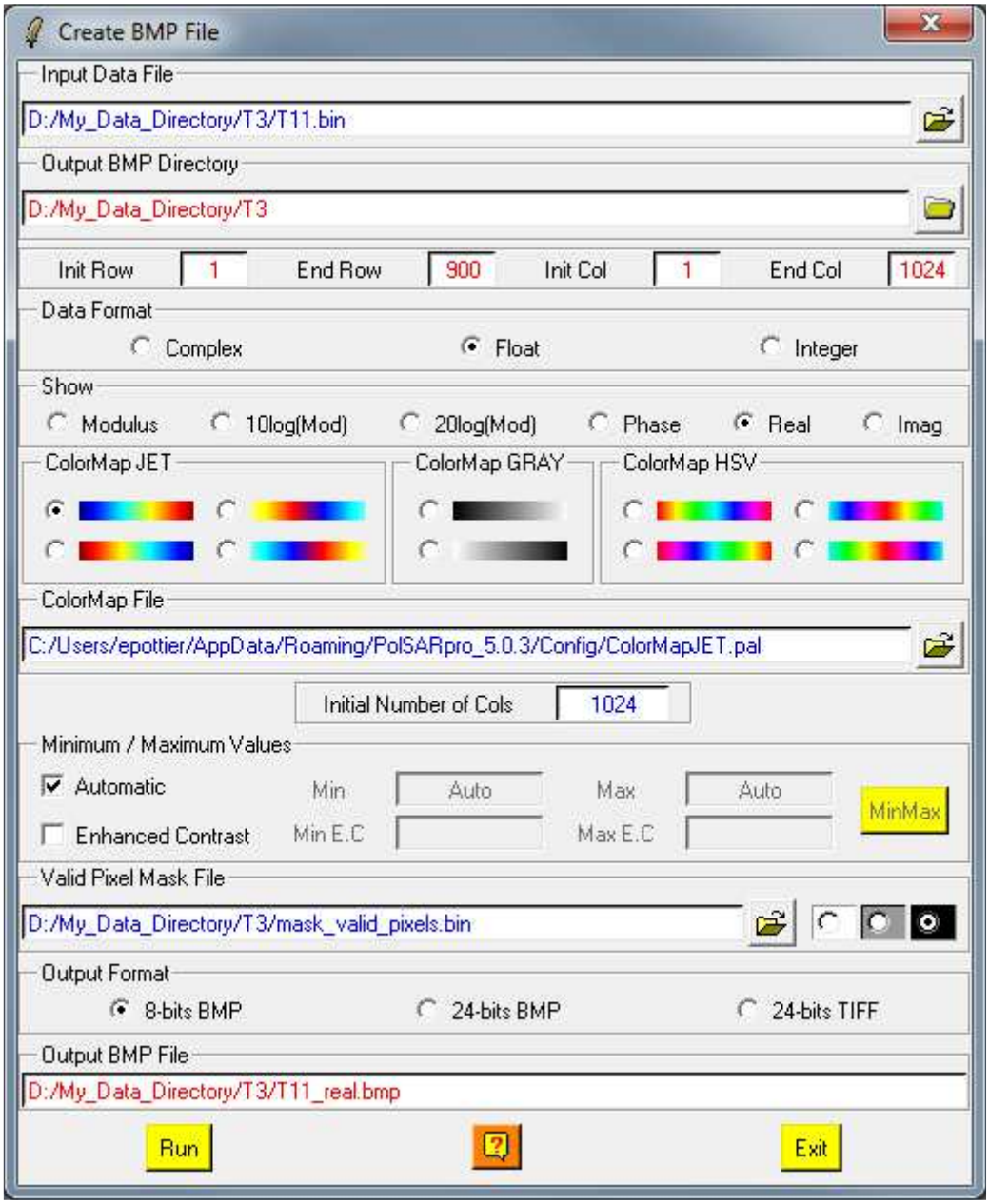
Create BMP File



Description:

This function is used to create an bitmap (BMP) or tiff (TIFF) image file of parameters extracted from a polarimetric raw binary data file.

Comments:

Parameters written in Red can be modified directly by the user from the keyboard.

Input/Output Arguments:

Input Data File Indicates the complete location of the binary data file to be imaged.

Output BMP Directory Indicates the location of the processed Bitmap data output directory.
The default value is set automatically to the **Input Directory** extracted from the Input Data File name.

Output BMP File Indicates the name of the bitmap output file. The default value is set to the concatenation of the input file name with an extension indicating the type of imaged parameter, e.g. real or imaginary parts, linear or dB modulus ...

Output Image Number of Rows/Columns:

The output image numbers of rows and columns are initialised to the input data set dimensions.
Users wishing to process a sub-part of the initial image can modify the **Init** and **End** values of the converted images rows and columns.
Note: init and end values have to remain within the range defined by the input image dimensions.

Processing Parameters:

Data Format Indicates the type of input data.

- Complex : 4 bytes interlaced real and imaginary parts.
- Float : 4 bytes real data.
- Integer : 2 bytes real data.

Show Indicates the mode of representation. The default value is set to **real**.

- Modulus : Modulus of real / complex input data (linear scale).
- 10*log10(Modulus) : Modulus of real / complex input data (db scale).
- 20*log10(Modulus) : Modulus of real / complex input data (db scale).
- Phase : Argument of complex input data (linear scale).
- Real : Real part of complex input data (linear scale).
- Imag : Imag part of complex input data (linear scale).

ColorMap Choice of a 256 colors ColorMap

- Jet : Blue to Red ColorMap.
- Gray : Grayscale from White to Black ColorMap.
- Hsv : Red to Red ColorMap (useful for Phase representation).

It is also possible to select a predefined colormap file.

Min / Max Values Scales the output data range of variation

- Automatic : The first colormap index is assigned to values inferior or equal to min, while the last colormap index is assigned to values superior or equal to max.

If selected, the program automatically search the min and max values of the data, otherwise min and max values are fixed by the user.

	• Enhanced Contrast : The program automatically adapts the color scale (colorbar) to data distribution. Min and max are set so that 5% of the total number of pixels are superior to max and 5% are inferior to min.
Valid Pixel Mask File	Indicates the complete location of the valid pixel mask file corresponding to the binary data file to be imaged. The non-valid pixels are imaged in white/gray/black colour according to the user choice.
Output Format	According to the user choice, the image file created will be an 8-bit dynamic range (Windows Bitmap) bitmap file, or a 24-bit dynamic range (Windows Bitmap) bitmap file or a 24-bit dynamic range TIFF file

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