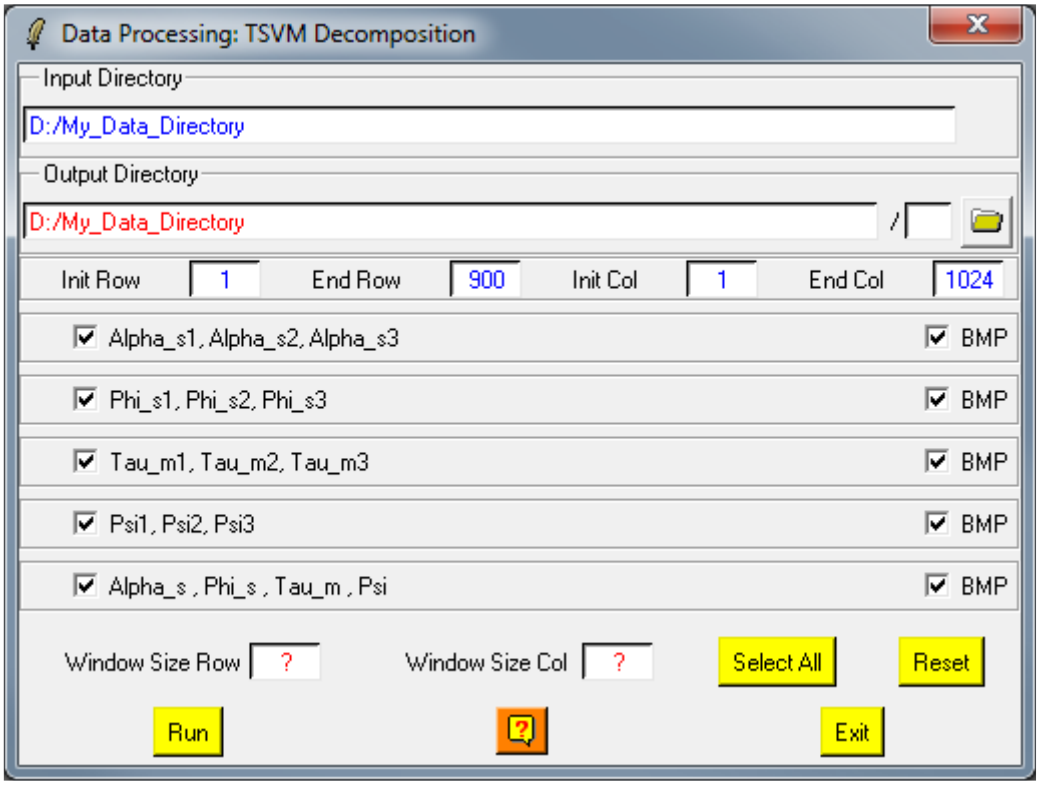
Polarimetric Decomposition



Description:

This function offers the possibility to apply the R. Touzi TSVM Polarimetric Target Decompostion Theorems on polarimetric data set.
An option may be set to simultaneously create the corresponding bitmap image files

Comments:

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

Input/Output Arguments:

Input Directory	Indicates the location of the considered **Main Directory (MD)** containing the polarimetric data sets to be filtered.
Output Directory	Indicates the location of the data output directory.

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:

Window Size Data to be decomposed may be processed through an additional filtering procedure consisting of a boxcar filter. Users have then to set the size of the (N*N) sliding window used to compute the local estimate of the average matrix.
The default value of N is set to **0**. Users wishing to avoid additional filtering may set N to **1**.

Decomposition The corresponding output files are :

TSVM - Touzi Decomposition

- MD / TSVM_psi.bin
- MD / TSVM_psi1.bin
- MD / TSVM_psi2.bin
- MD / TSVM_psi3.bin
- MD / TSVM_phi_s.bin
- MD / TSVM_phi_s1.bin
- MD / TSVM_phi_s2.bin
- MD / TSVM_phi_s3.bin
- MD / TSVM_alpha_s.bin
- MD / TSVM_alpha_s1.bin
- MD / TSVM_alpha_s2.bin
- MD / TSVM_alpha_s3.bin
- MD / TSVM_tau_m.bin
- MD / TSVM_tau_m1.bin
- MD / TSVM_tau_m2.bin
- MD / TSVM_tau_m3.bin