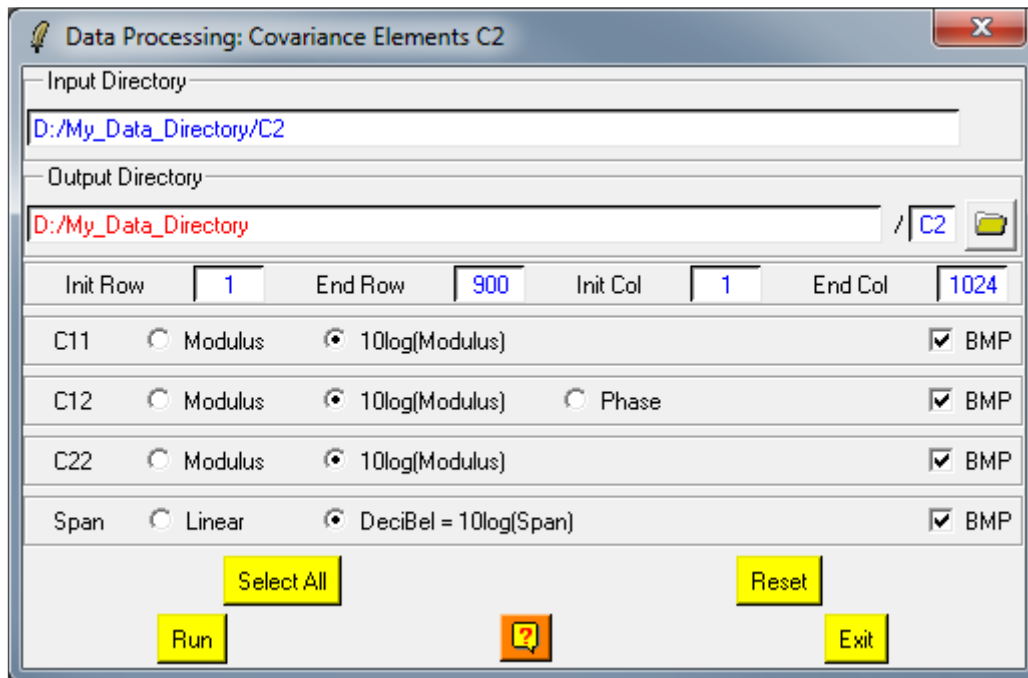


Covariance [C2] matrix Elements Processing



Data Processing: Covariance Elements C2

Input Directory: D:/My_Data_Directory/C2

Output Directory: D:/My_Data_Directory / C2

Init Row: 1 End Row: 900 Init Col: 1 End Col: 1024

C11: ☐ Modulus ☒ 10log(Modulus) ☒ BMP

C12: ☐ Modulus ☒ 10log(Modulus) ☐ Phase ☒ BMP

C22: ☐ Modulus ☒ 10log(Modulus) ☒ BMP

Span: ☐ Linear ☒ DeciBel = 10log(Span) ☒ BMP

Buttons: Run, Select All, Reset, Exit

Description:

Creates binary files corresponding to the modulus and argument of the (2x2) complex Covariance matrix ([C2]) raw binary data.
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 complete location of the considered **MainDirectory / C2 (MD / C2)** containing the [C2] matrix data to be processed.

Output Directory Indicates the location of the processed data output directory.
The default value is set automatically to : **MainDirectory / C2 (MD / C2).**

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.

Selection of the Channels to be Processed:

Several channels may be processed at a time. The selection of the BMP options enables the creation of output bmp files.

Users may choose between three types of output binary data :

- **Modulus** : Linear representation of the considered **[C2]** element amplitude. Output file name : Cij_mod.bin (.bmp)
 - **Modulus** : Element amplitude in $\text{dB} = 10 \log_{10}(\text{Modulus})$. Output file name : Cij_dB.bin (.bmp)
 - **Phase** : Argument of the considered complex **[C2]** element (Only available for off-diagonal elements). Output file name : Cij pha.bin (.bmp)

 - **Span** : Corresponds to the sum of the diagonal elements of **[C2]**, may also be processed (linear and dB) using this program.
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