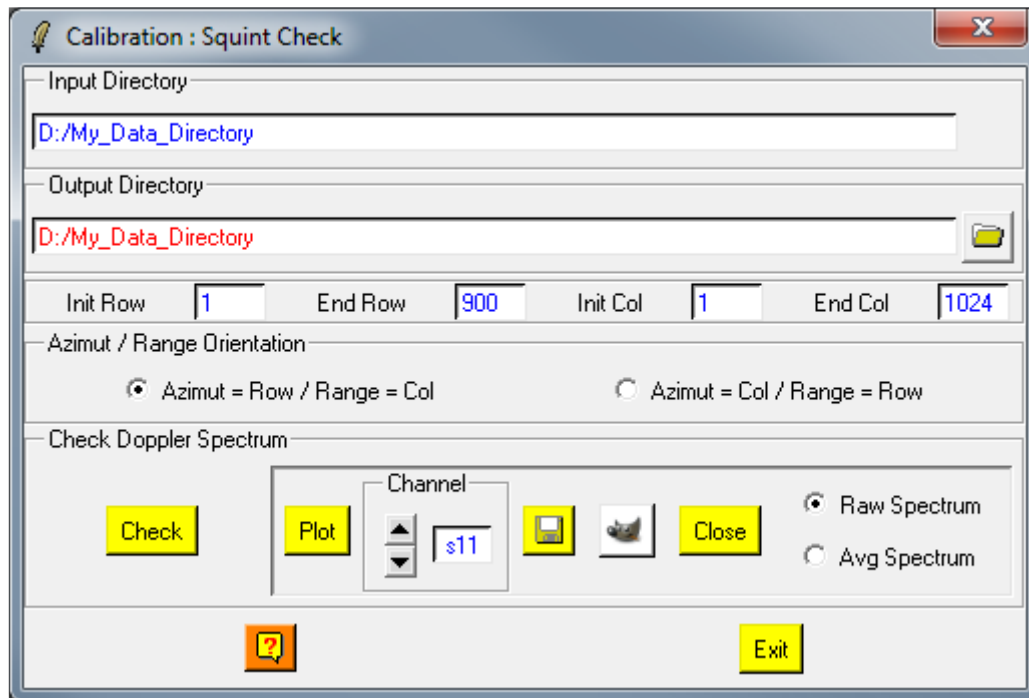# Calibration - Squint Check

Description:

Doppler Spectrum can be analysed using inverse Fourier transform along the azimuth range of the synthesized SAR image. If there exists a squint angle, the Doppler spectrum is not symmetric.

This Application can only be applied on (2x2) Sinclair matrix (**[S2]**) raw binary data format.

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 of the SAR image to be analysed.
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.

Azimut / Range Orientation:

Indicates if the azimuthal direction is along the rows of the columns of the SAR image

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Check Doppler Spectrum:

Check Apply a 1-D Fourier transform on each row or column corresponding to the azimuthal direction of the SAR image in order to get an estimation of the Doppler spectrum that is obtained by averaging all azimuthal spectrum over the entire image.
This averaged Doppler spectrum allows the user to check if a weithing process has been applied or not during the SAR data processing or if an azimuthal antenna pattern remains uncompensated in processed SAR data.

Plot Open the Display Window and plot the estimated Doppler spectrum
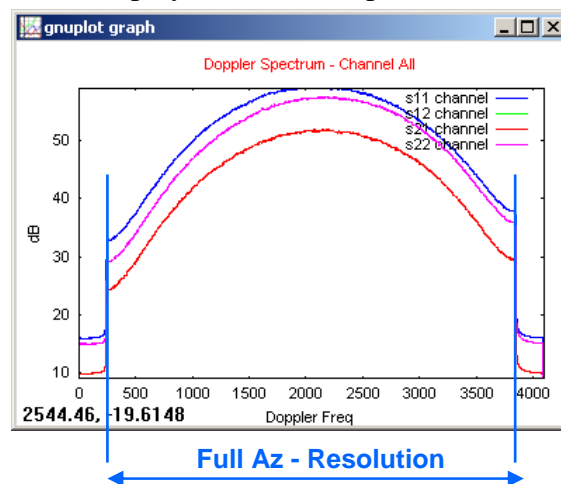
Channel Corresponds to the polarimetric channel to be displayed.
The different possibilities are : s11, s12, s21, s22 and all

    Save the scatter plot thumbnail as a GIF file.

    Display the scatter plot using GIMP

Close Close the Display Window

Result examples :