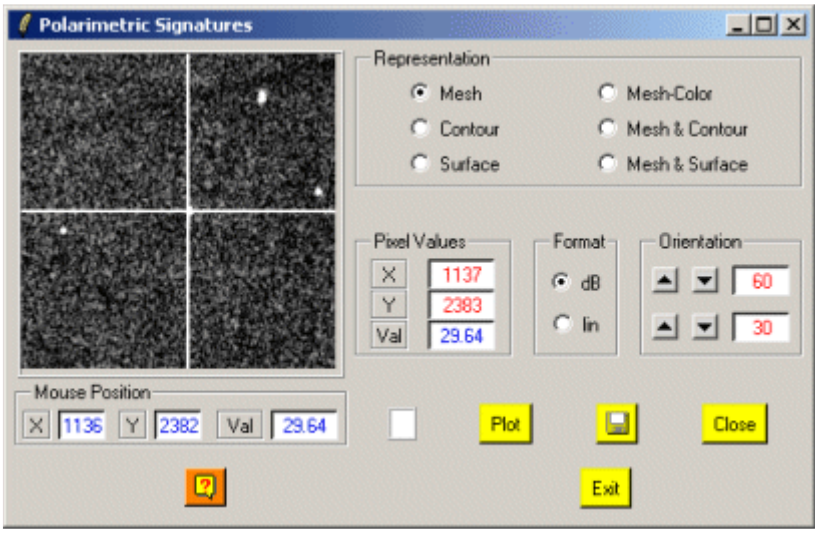
Polarimetric Signatures



Description:

This Application is used to analyse the Target Polarimetric Co-Pol and Cross-Pol Signatures and the results display is achieved by the way of an interactive Graphical User Interface.

Comments:

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

Mouse Position:

X, Y	Give the Mouse pointer position in pixels. The Top-Left position corresponds to the (1,1) value and the Bottom-Right position corresponds to the (Nrows, Ncols) value.
Value	Display the pixel value (Note: this functionality is only valid if the active image is an 8-bits Windows Bitmap image).

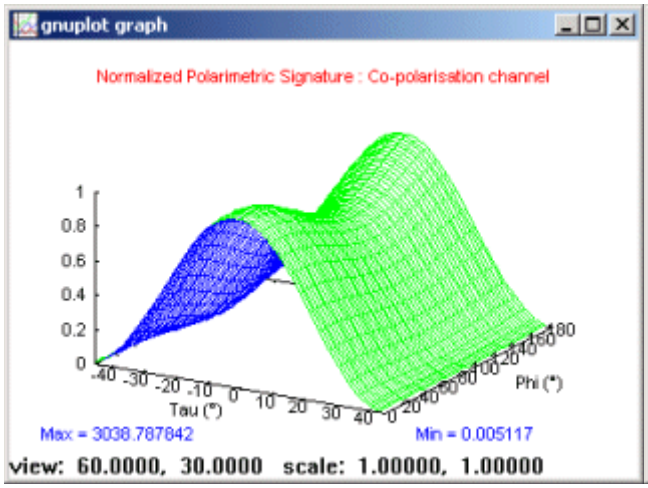
Functionalities:

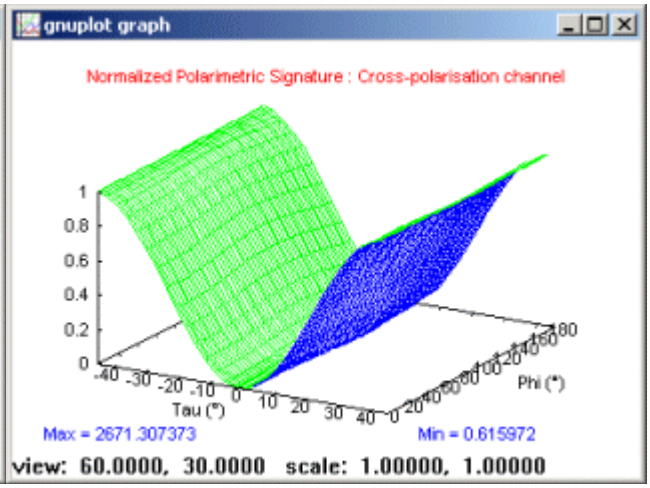
Plot	Plot the Point Target Polarimetric Co-Pol and Cross-Pol signatures
	Save the active Display Window
Close	Close the Display Window

Representation:

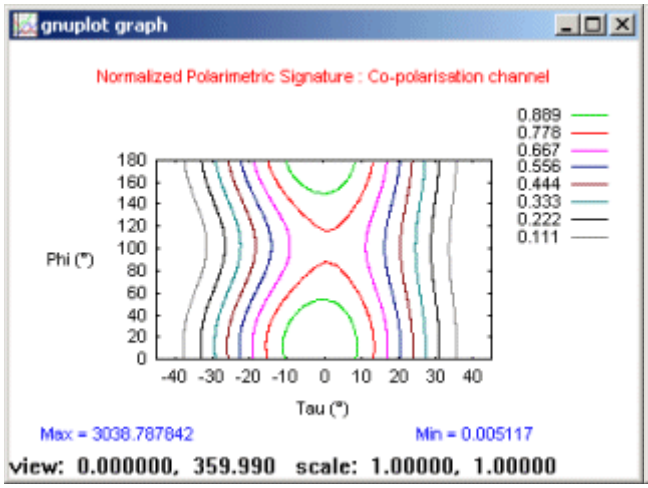
The different offered representation formats are the following;

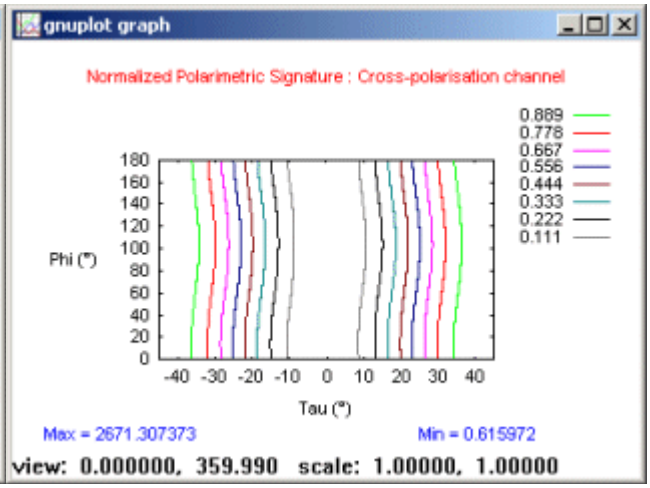
Mesh



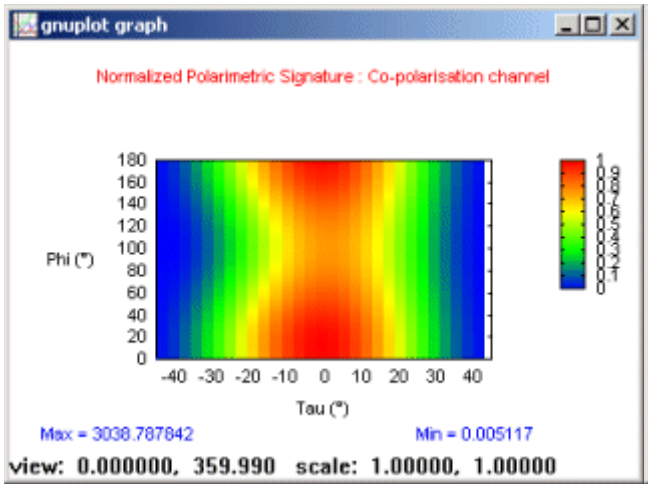


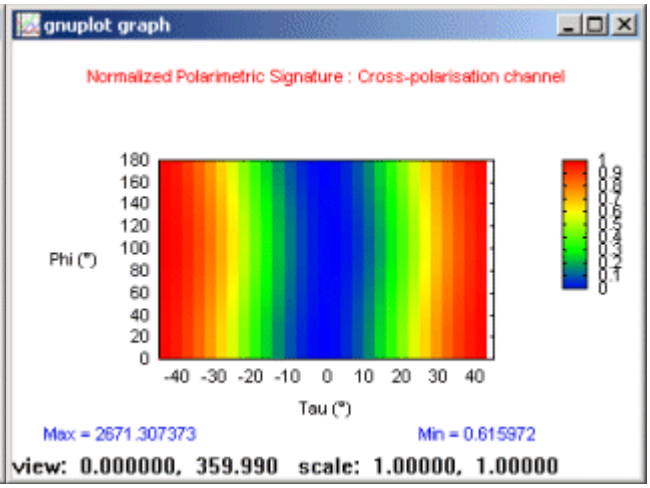
Contour



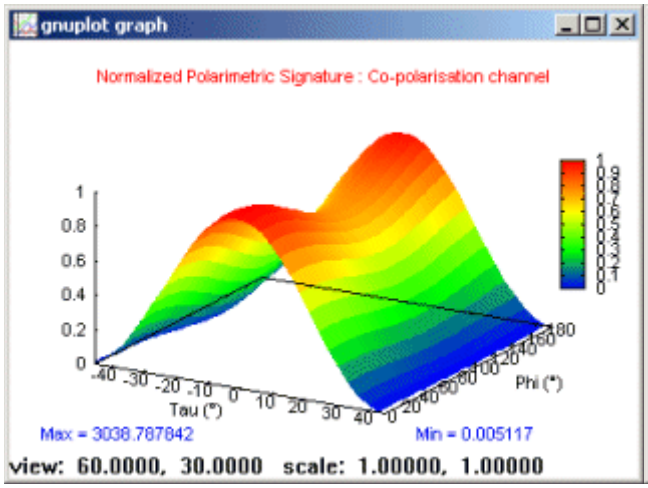


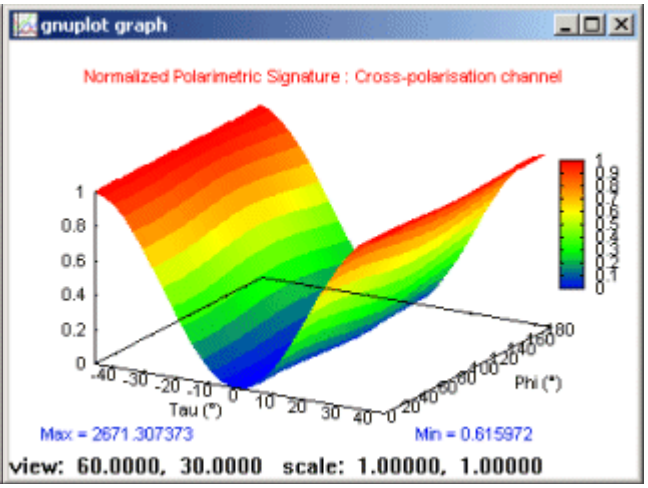
Surface



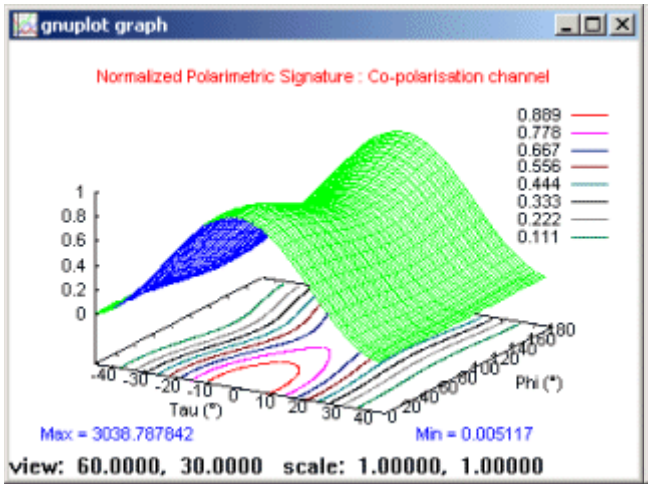


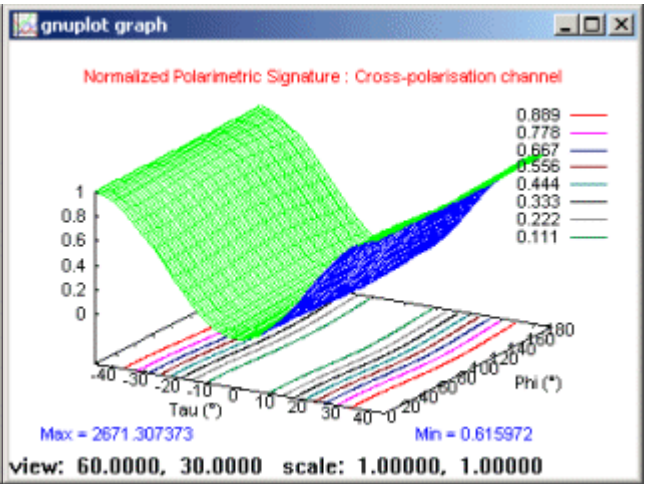
Mesh Color



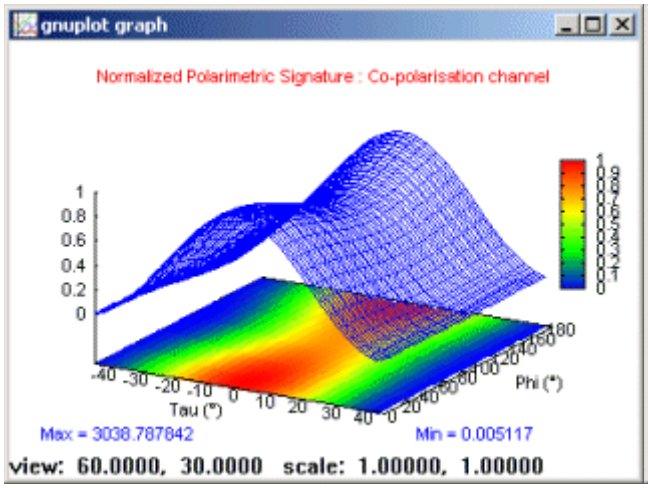


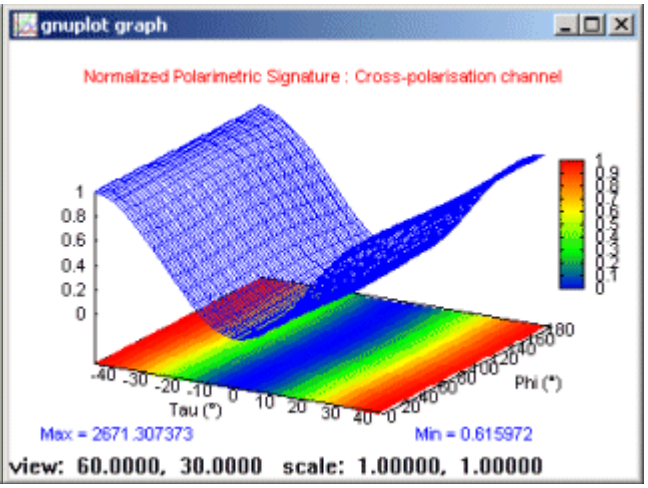
Mesh & Contour





Mesh & Surface





Pixel Values:

Give the Point Target position in pixels.

Format:

Define the Point Target Amplitude representation (in dB or linear) .

Orientation Values:

Command the viewing angle and control how the 3-d coordinates of the plot are mapped into the 2-d screen space. These values provide controls for both rotation and scaling of the plotted data. Two rotations (**rot_x** and **rot_z**) control the rotation angles (in degrees) in a virtual 3-D coordinate system aligned with the screen such that initially (that is, before the rotations are performed) the screen horizontal axis is x, screen vertical axis is y, and the axis perpendicular to the screen is z.
The rotation **rot_x** is bounded to the [0:180] range with a default of **60** degrees.
The rotation **rot_z** is bounded to the [0:360] range with a default of **30** degrees.

Note: On a 3-D representation, selecting the graph with the left Mouse button then moving the Mouse inside the Display Window can automatically change the view angles.

Polarimetric Signatures Procedure Steps:

- **1** : Point on the Target using the Mouse and the Cross Lines.
- **2** : Select the Point Target by clicking on the left Mouse button.
- **3** : Click on Plot button to open the display window
- **4** : Select the representation format to change the display
- **5** : Goto step 1 to proceed with another Point Target.
