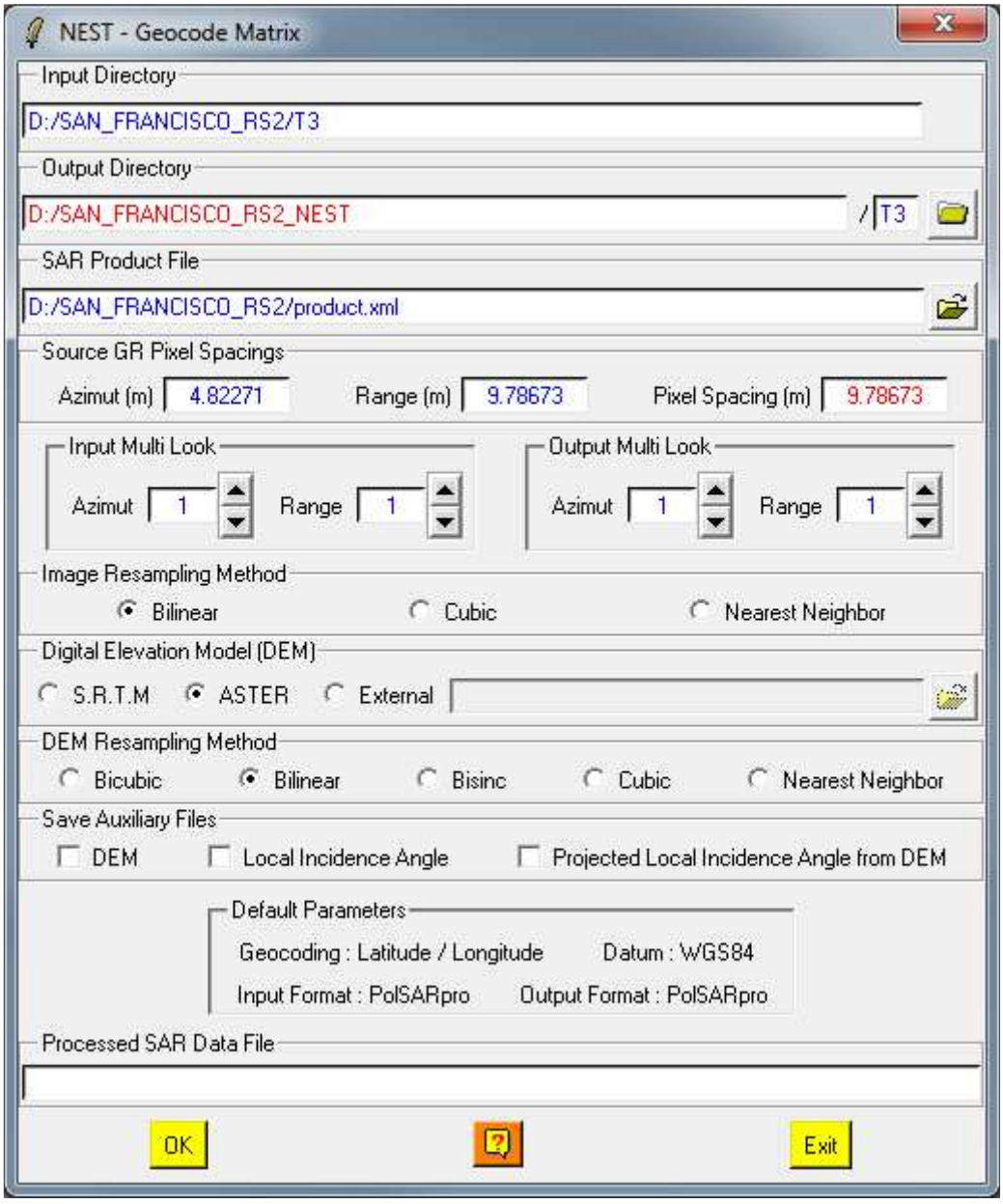
NEST Matrix



Description:

This function offers the possibility to geocode fully or partial polarimetric data sets using the ESA - NEST software.

The geocoding process can only be applied on RADARSAT-2 and TerraSAR-X datasets.

This functionality is only available for :

- **[T3]** : 3x3 complex Coherency Matrix raw binary data.

- **[C2]** : 2x2 complex Covariance Matrix raw binary data.

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** containing the polarimetric data sets.
Output Directory	Indicates the location of the data output directory. The default value is set automatically to : **Main Directory_NEST**.

Processing Parameters:

SAR Product File	This corresponds to the : • RADARSAT 2 product File (product.xml) • TerraSAR-X product File (product.xml)
Source GR Pixel Spacings	Once the SAR product file selected, this functionality derived from the acquisition metadata, the azimuth and range pixel sizes (in blue) and proposes the final pixel size to be considered during the geocoding process. Users can change this value (in red).
Input / Output multi look	The goecoding process is applied on extracted fully or partial polarimetric data sets which can result of a multi-looking data extraction. In such a case, the input multi look must be indicated. If a multi-look is needed during the geocoding process, the user must enter the multi-look value. **This step is important as it affects the pixel sizes**.
Image Resampling Method	Three resampling methods are proposed to be used during the geocoding process.
Digital Elevation Model	The user must indicate which DEM will be use during the geocoding process by choosing between SRTM-DEM file, ASTER-DEM file or an external DEM file..
DEM Resampling Method	Three resampling methods of the DEM are proposed to be used during the geocoding process.
Save Auxiliary Files	Different Auxiliary files can be saved during the geocoding process, like the final DEM, the local incidence angle or the projected local incidence angle from the DEM