

Procedure to read ALOS complex data to a MATLAB array

Open original data in ENVI using file/open external file and using ALOS/PALSAR in the drop-down menus.

Go to “basic Tools tab” and use

“basic tools/preprocessing/General purpose utilities/convert complex data” this allows to convert to a 5-band envi file with (power, magnitude, Real Imaginary and phase) by default. You can use radio buttons to switch any of these off and get just the real and imaginary values.

Save the file as “envi standard” format. I have been giving this the extension .cpx to recognize it – but you can call it .env if you want. This will also create a header .hdr file.

Copy or FTP the data file and the header file to your MATLAB directory.

In matlab use `envi_read_cpx.m`. This is a cut-down version of `enviread.m` which does not need “Geo-Location vectors”. It needs also `read_envihdr.m` to read the header. An example script is `read_cpx.m`. This will read the data in to an array `a(:,n)` say where `n` is the number of bands created by envi.