

# REDD+ for the Guiana Shield

Technical and Regional Platform for the  
Development of REDD+ in the Guiana Shield

## How to Process Jaxa Palsar Mosaic

**Objective** : This tutorial is designed to explain how to process Jaxa Palsar Mosaic.  
These data have rules and copyright to use it (from Jaxa Website)

### 1) Make Mosaic of downloaded HH and HV polarisation

After downloading the Jaxa Palsar mosaic data you probably need to “merge” all the HH and HV tile in one File.

To do that you need first to make mosaic of HH polarisation and to HV polarisation.

Click here to see the video

[QgisRasterMosaic.mp4](#) or [YouTube](#)

### 2) Make Layer stacking of HH mosaic and HV mosaic

Now you just need to make layer stacking of new HH and HV mosaic file (create vrt file).

Click here to see the video

[QgisRasterLayerStacking.mp4](#) or [YouTube](#)

### 3) Export vrt to Tiff

In qgis we will export the previously created vrt file to tiff.

**Optional:** If you want to **clip the data** on the display are, contrary to the video where you export all the layer extent, **click** on **Map view extent**.

Click here to see the video

[QgisRasterExport.mp4](#) or [YouTube](#)

### 4) Import Data in Nest

Now we will process data in NEST so we need to import it.

Click here to see the video

[NestImportRaster.mp4](#) or [YouTube](#)

### 5) Convert Amplitude to intensity in Nest

In order to apply Lee Speckle filtering it's better to previously convert Original Amplitude data to intensity?

Click here to see the video

[NestJaxaAmpToInt.mp4](#) or [YouTube](#)

### 6) Lee Speckle filtering in Nest

In order to reduce the speckle we will apply a Lee Speckle filtering.

Click here to see the video

[NestJaxaLeeSpeckleFiltering.mp4](#) or [YouTube](#)

## 7) Derived Indices processing

In order to enhance the information contained in the data we can produce some derived indices. The simple indices proposed in the video are useful to better display radar and consequently better analyze the land cover.

Based on the new derived indices we can make color composition in order to see the potential of the data.

Click here to see the video

[NestJaxaGenerateIndices.mp4](#) or [YouTube](#)

## 8) Export results

At last, in order to use the processed data in any other common software such as Qgis or Orfeo Toolbox for example, we need to export the NEST data in more common format such as Geotiff or Envi.

Click here to see the video

[NestExportRaster.mp4](#) or [YouTube](#)