

REDD+ for the Guiana Shield

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

SENTINEL 1 DATA PROCESSING

Objective

This tutorial is designed to explain how to process Sentinel-1 data using mainly Snap but also Qgis and OTB.

Practical Work

The processing is dividing in 2 steps, one to generate orthorectified data with snap and second to do post processing like speckle lee filtering or generate a color composition.

1. ***Step 1 Snap pre-processing***

1. [Subset](#)
2. Apply precise orbit
3. Remove GRD border noise
4. Calibration
5. Multilook 2x2
6. Terrain Flattening
7. Terrain correction (export in tiff format)

Click here to see the video

[SnapAllS1Processing.mp4](#)

In addition, as shown in the next video you can create a graph to automate these processing.

Click here to see the video

[SnapGraphBuilder.mp4](#)

Next see this video to use a graph

Click here to see the video

[SnapRunGraphBuilder.mp4](#)



2. ***Step 2 post-processing***

- a) Based on the previous step we need first to create a layer stack of the intensities, VV VH for example.

Click here to see the video

[QgisRasterLayerStacking.mp4 or YouTube](#)

- b) Use Qgis script to apply Lee filtering and/or generate color composition (need Snap)

Click here to see the video

[ProcessDualPolIntensities.mp4](#)

