Chapter 5 Training: A Step by Step Tutorial to Map Forest Biomass with Radar Remote Sensing

Scripts
This training is done through GUIs, and does not require any additional scripts.

Data
The data files included in the zipped folder include the following:

Folder: ALOS
- *N29E080_15_sl_HH_FO2DAR*
- *N29E080_15_sl_HV_FO2DAR*
- *N29E080_16_sl_HH_FO2DAR*
- *N29E080_16_sl_HV_FO2DAR*
- *N29E080_17_sl_HH_FO2DAR*
- *N29E080_17_sl_HV_FO2DAR*

Folder: Ground_Plots
- *Plots.shp (plus other necessary files)*

Folder: Lidar
- *dsm_5m.tif*
- *dtm_5m.tif*
- *lidar_100m_polygons.shp (plus other necessary files)*
- *Lidar_boundary.shp (plus other necessary files)*
- *lidar_systematic_sampling.shp (plus other necessary files)*

Folder: Results
- *Appendix_A.docx*

Data Credit:
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A note on unzipping files: if you find you are on a Mac and have trouble unzipping the files manually (for example instead of unzipping it gives you a .zip.cpgz file), you will need to use the Terminal to unzip the file. Open up the terminal and run the following command:

unzip location/of/file/filename.zip

Be sure to replace "location/of/file/filename.zip" with the actual file path of the zipped file.

This will unzip the file into your home directory, which you can then move to whichever location you prefer.

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Supplemental materials
Additional materials are included in the SupplementaryMaterials.zip folder. These files are not necessary to complete the training, but provide information that may be helpful.

The supplemental materials in the zipped folder include:

- *ALOS PALSAR Orthorectification Tutorial.pdf*
- *GOFC-FOLD_Sourcebook.pdf*
- *S1TBX SAR Basics Tutorial.pdf*
- *Saatchi_carbon.pdf*
- *Saatchi_grnd_lidar.pdf*
- *Saatchi_review_SAR.pdf*
- *Saatchi_role_of_SAR.pdf*
- *Saatchi_SAR_biomass_Monitoring.pdf*
- *Saatchi_SAR_biomass.pdf*
- *Saatchi_SAR_Missions.pdf*
- *Saatchi_uncertainty_analysis.pdf*