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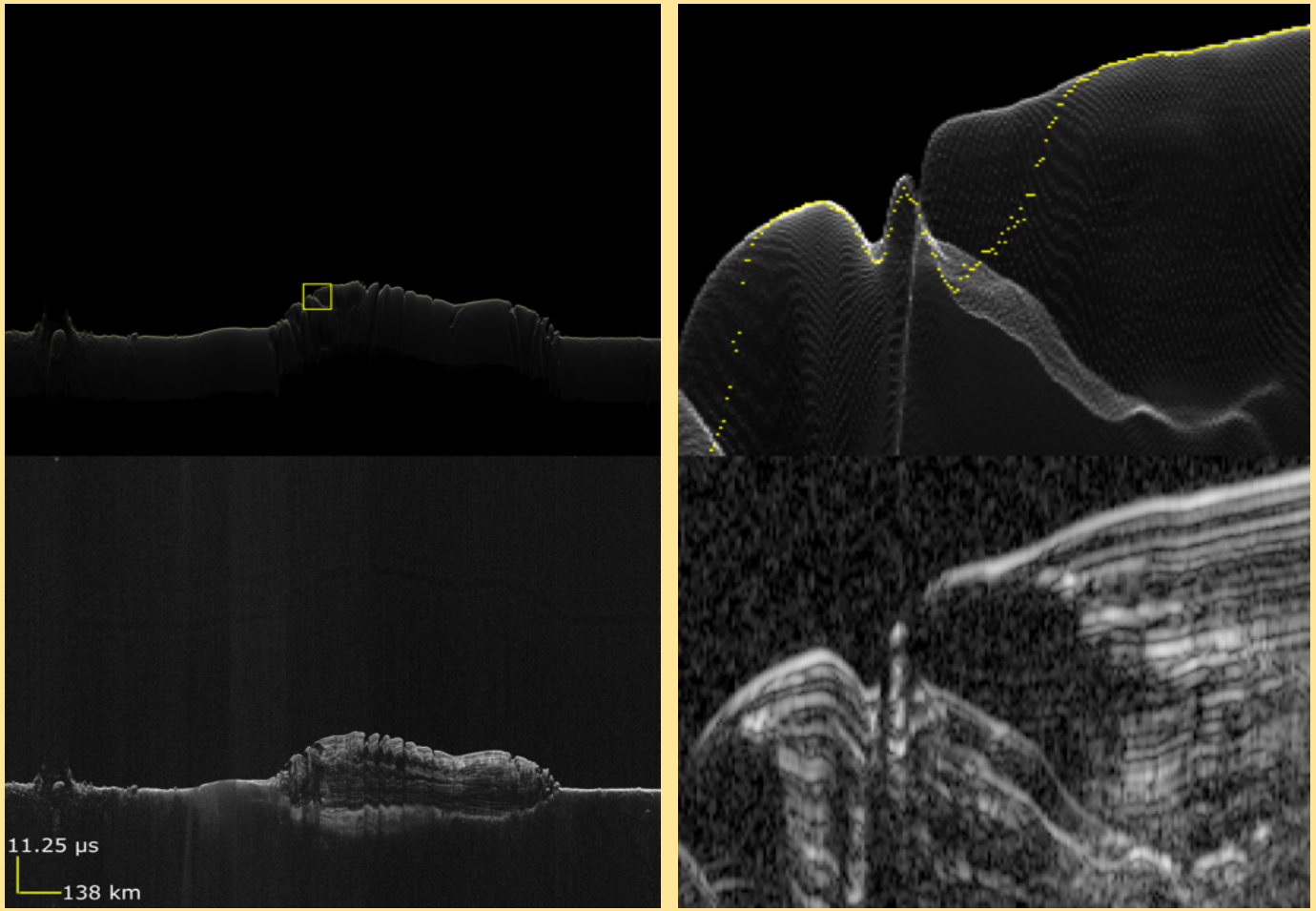
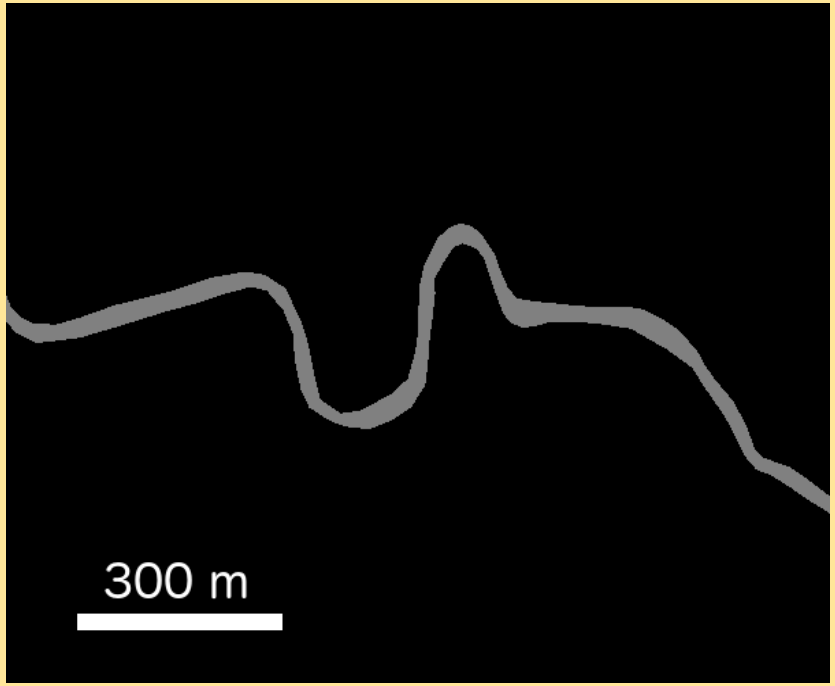
Generalized Surface Clutter Simulator



Surface clutter simulation for SHARAD radargram 1294501 crossing Planum Boreum, Mars. Created with MOLA gridded data product.

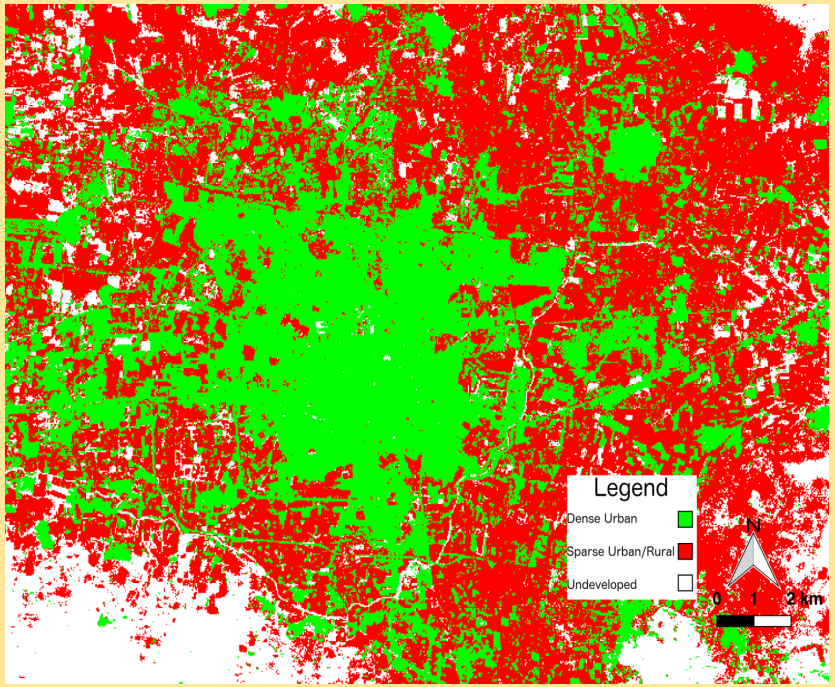
- Surface clutter simulation is a useful tool for analysis of airborne and spaceborne radar sounding data
- Several dataset/instrument specific simulators exist, but these require a rewrite to work with new data
- A generalized clutter simulator allows application to new data without modification

Channel Geometry



- Moving algorithm to find channel center, channel length, and channel width from MATLAB to Python
- Useful for quantitatively looking at change over time
- github.com/mchristoffersen/ChanGeom

Land Use/Land Change Analysis Framework



- Software to easily perform LU/LC analysis on multiband raster imagery using several different classification algorithms
- Final project for summer IS-GEO course
- github.com/mchristoffersen/landuse