

# Data for: “Mapping the Topographic Features of Mining-Related Valley Fills using Mask R-CNN Deep Learning and Digital Elevation Data”

Maxwell, A.E., P. Pourmohammadi, and J. Poyner, 2020. Mapping the topographic features of mining-related valley fills using mask R-CNN deep learning and digital elevation data, *Remote Sensing*, 12(3): 1-23. <https://doi.org/10.3390/rs12030547>.

## Folders

**ky1\_validation:** validation data for area in Kentucky

**ky2\_validation:** validation data for a second area in Kentucky

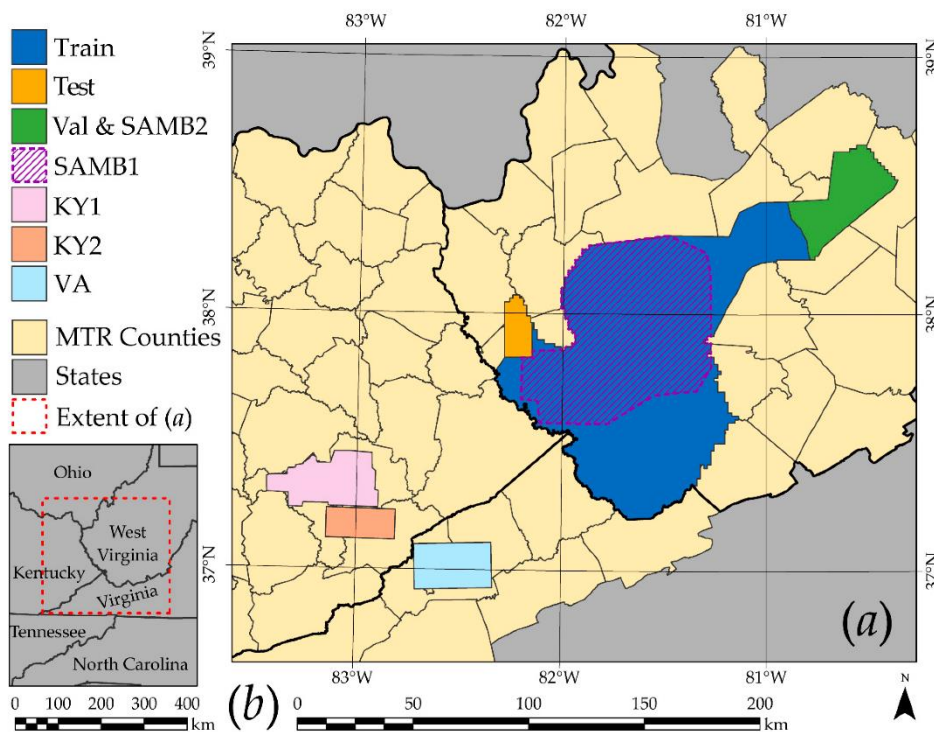
**testing:** data used to test model performance at the end of each training epoch

**training:** data used to train the model

**vir\_validation:** validation data for area in Virginia

**wv\_validation:** validation data for area in West Virginia

\*We did not provide data for the SAMB1 and SAMB2 validation sets, as these datasets were derived using photogrammetric methods and were only used to test model generalization in the original paper. We only provide the LiDAR-derived data here.



## Provided Data in Each Folder

**DEM:** LiDAR-derived DEM (2m spatial resolution, elevation in meters)

**Slopesshade:** slopesshade derived from DEM

$$1 - \frac{Slope}{90} \times 255$$

**Mask:** vector mask of area extent

**Vfills:** digitized and manually interpreted valley fills

\*We provided the input data as opposed to the derived chips so that users could more easily adapt the data to their own needs. For example, chips can be generated using different sizes, to support semantic segmentation, or to support instance segmentation.