Creator: Erin Carroll

Contact: erin\_carroll@berkeley.edu

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The files in this repository collectively produce distribution maps (presence/absence) for quaking aspen (*Populus tremuloides*) over a ~1500 km^2 area near the Rocky Mountain Biological Laboratory in 2019 and 2020.

*S2SRstack2019.py* creates a quality mosaic of Sentinel-2 surface reflectance (Level 2a) imagery over 2019 minimizing clouds, shadows, and snow. The final image has 50 bands – 10 of the 13 available bands quality mosaicked for each month June-October. We exclude the three ‘atmospheric’ bands at 60m resolution. *S2SRstack2020.py* does the same for 2020.

*dist\_RF\_RMBL\_2019.ipynb* and *dist\_RF\_RMBL\_2020.ipynb* are python notebooks to be opened in Google Colab. They import the final images produced in *S2SRstack2019.py* and *S2SRstack2020.py*, respectively. Each produces an aspen cover map using a random forest classifier. Reference data was hand-delineated using high-resolution Google Earth Engine basemap imagery.