Remote Sensing ML Investigation

Unsupervised models were used on LandSat sensor data to create a map of different regions. This allows the viewer to quickly identify regions that absorb the same way across all seven of the bands used.

A black rectangular object with numbers

AI-generated content may be incorrect.

LandSat 8 RGB image of a coastline

K means clustering was used as an initial model ans was able to extract 3 discrete categories from the data. (Water, dry regions and forested regions)

A yellow and blue chart

AI-generated content may be incorrect.

K Means identified regions

HDBSCAN was able to extract the same regions, but also generated outliers that seem to show lakes as an additional outlier region.

A blue and purple rectangular object with numbers

AI-generated content may be incorrect.

HDBSCAN identified regions