

URA Weekly Progress Report

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Week: Feb 2 – Feb 8

Tasks Accomplished:

I ended up taking the approach of comparing ratio pixel colors.

I wrote a function that

- 1) reads and crops the pre-classified images
- 2) masks everything that is not the panel
- 3) randomly selects pixels in the image and classify the pixel to area with snow, area with no snow or masked area
- 4) for each image, gets ratio between the number of pixel (area with snow) and number of pixel (area with no snow)
- 5) plots the ratios

Using approximately 100 images in each category (snow or no snow), I set an initial value to classify if a pixel represents panel image with snow on it (sum of RGB values > 300). The rest of the pixels are considered as either the mask part (if all three of the color values are 0) or a panel image pixel with no snow (everything else).

Road Blocks:

I currently have the ratios for the two categories, but I will still need to define a metric to test how accurate this method of classification is. I would like some guidance on how I can improve the current cut off of determination.

Plan For Next Week:

Base on our discussion, I would like to define a metric to test accuracy, and potentially improve on current method to increase accuracy.