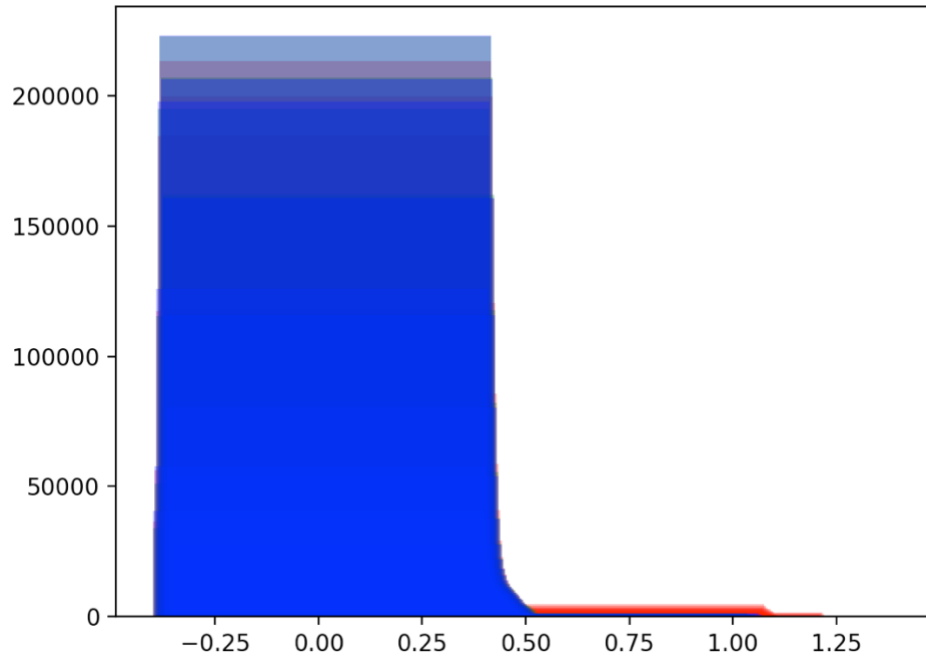
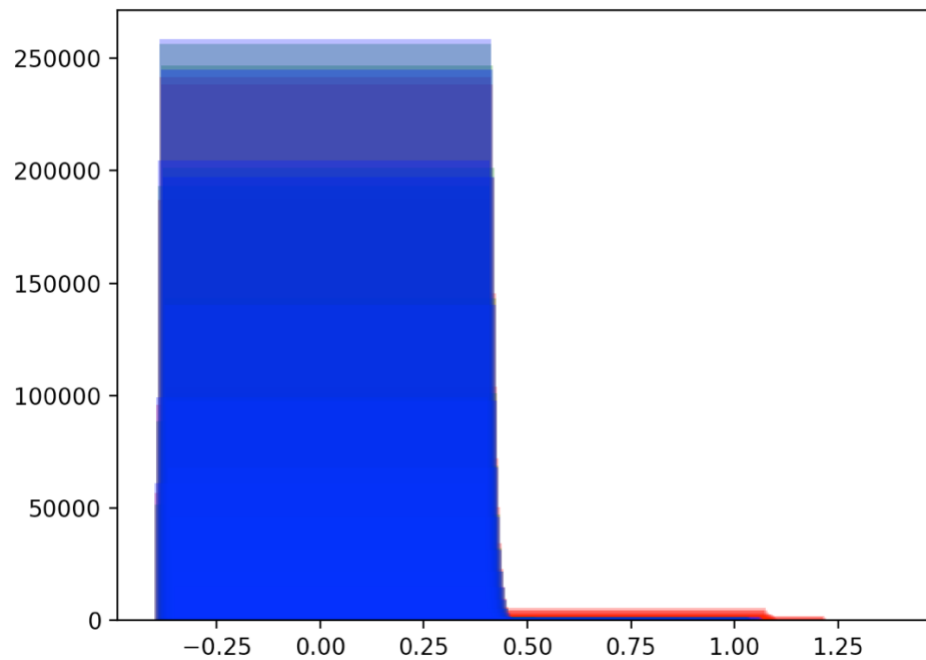


The program needs an input of file histogram.txt that contains the classification and histogram of the images.

Histogram for No Aurora



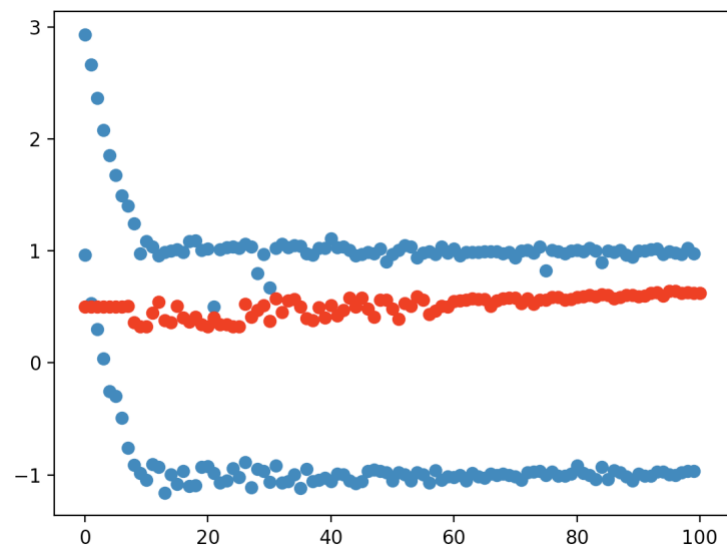
Histogram for Aurora



Epochs vs. Error (blue) and Accuracy (red)

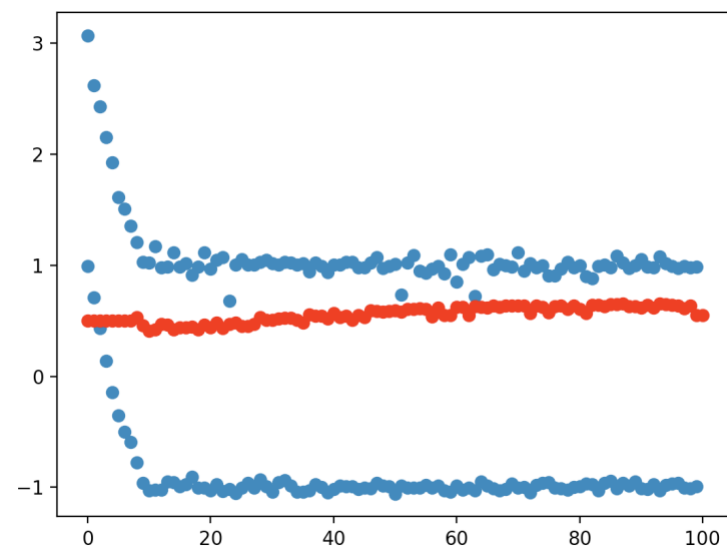
$\mu = 0.001$

total accuracy = 0.5575



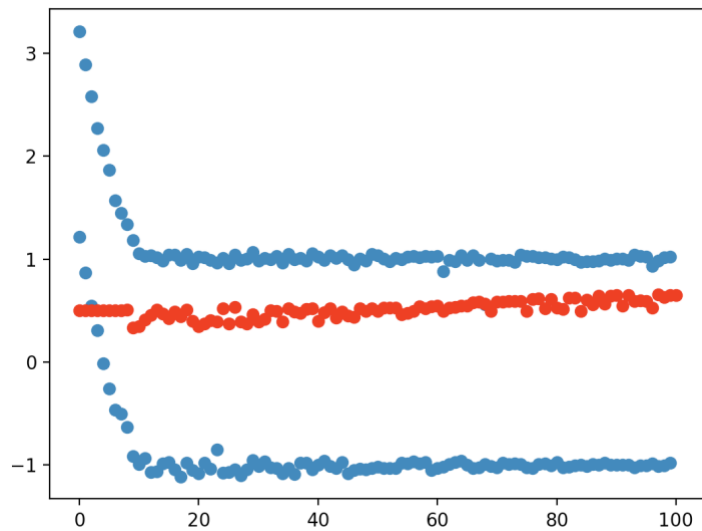
$\mu = 0.01$

total accuracy = 0.565



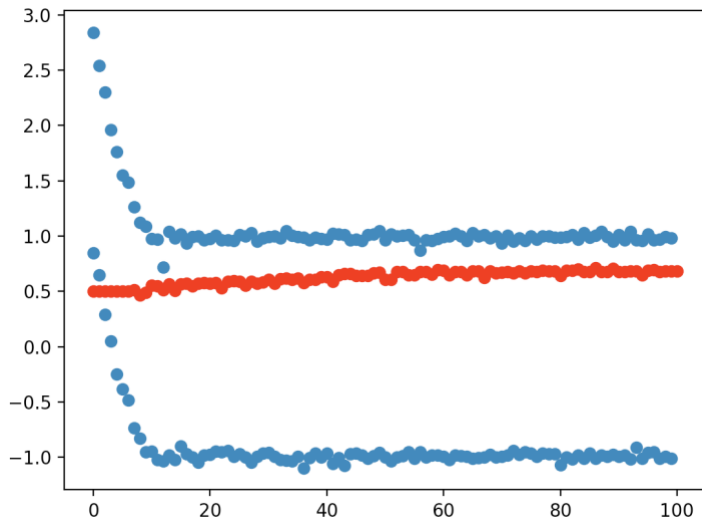
$\mu = 0.1$

total accuracy = 0.65



$\mu = 0.15$

total accuracy = 0.685



When looking at the unknown images and comparing them to their predicted values, I would say that the model is somewhat accurate. Pictures that are brighter or have more contrasting colors tend to be predicted as having an aurora, though sometimes there were false positives created by cloud and sky placements.