

# Space-Eye classification dataset

# Overview

PlanetScope 4-band satellite images which are classified in “ships” and “non-ships”.

Additional information on each image, especially ships, in .csv format.

About 1600 samples images.

Basic introduction in notebook with loading examples:

# Tips and tricks for models

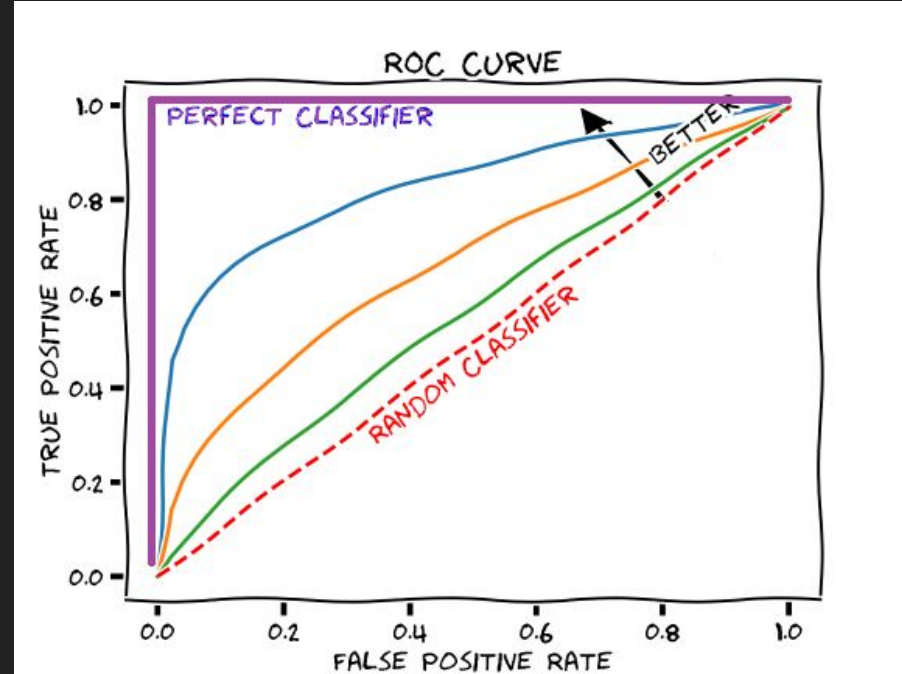
- Try pretrained models
  - Use data augmentation techniques
  - If you have a RGB-pretrained model try duplicating a color channel of the first layer for the NIR channel
  - Be careful with channel ordering (BGRN is awful)
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- Or just cut the NIR channel and use the model as is - it'll be slightly worse...

# How to evaluate - ROC Curve & F1 scores

There's no given split, please use 5-fold cross-validation.

We don't just want accuracy as a metric, it's actually worse missing a sinking ship than having a wrong detection.

Therefore we don't want any false negatives. To best evaluate your model for this task please provide a ROC curve, AUC and the F1 score.



# Additional evaluations

If you want to learn more about your model and help us understand the data better do some additional evaluations using the AIS ship data like:

- Performance of the model for ships “underway using engine”
- Performance of the model for ships with length < 50m
- ...

# Real world use?

If you want to allow us to use your model for actual application please provide the following:

- Provide **one** output which is 0 if there is no ship and 1 if there is a ship
- The trained model
- A requirements file including versions
- Documented code to run your model
- Documented code including any data preprocessing steps