

Allsky Camera Network for Detecting Bolides Test Plan Document

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Functional Requirements Tests:

Classification of Events:

- We will train our model using videos that either contain bolides, no bolides, or undesirable objects like planes. The goal of the model is to give us a probability that the moving object in the video is a bolide.
- In order to make sure our model is accurate, we will set aside a portion of the testing data that the model has never seen and feed the model this data. Using a confusion matrix and a classification report will allow us to assess the model's performance.

Hardware and Node Interaction

- To test if a user is able to perform the below operations we will use Playwright to simulate a user performing these tasks and then verify api responses.
 - Set noise threshold
 - Set sum threshold
 - Set max events per hour
 - Set dev name
 - Set archive path
 - Toggle Start/Stop
 - Make Composite
 - Analyze
 - Make star map
 - Get video
 - Get image
 - Get csv file
 - Force trigger an event

- Update stars
- Health check (self test)

Interface Requirements

- For each of our API endpoints, we will test each endpoint and validate the response.