# PX4 Quadrotor - PID Analysis
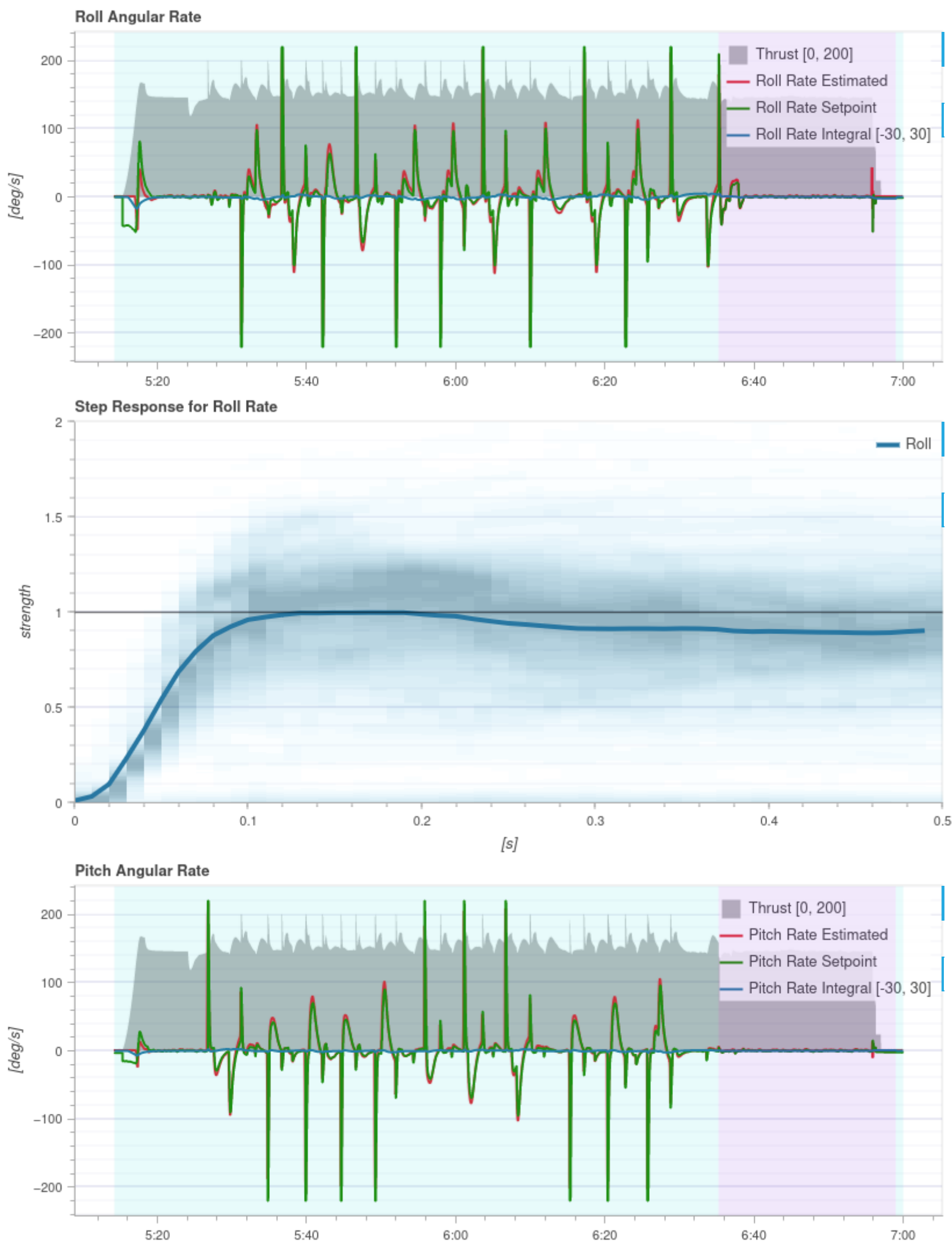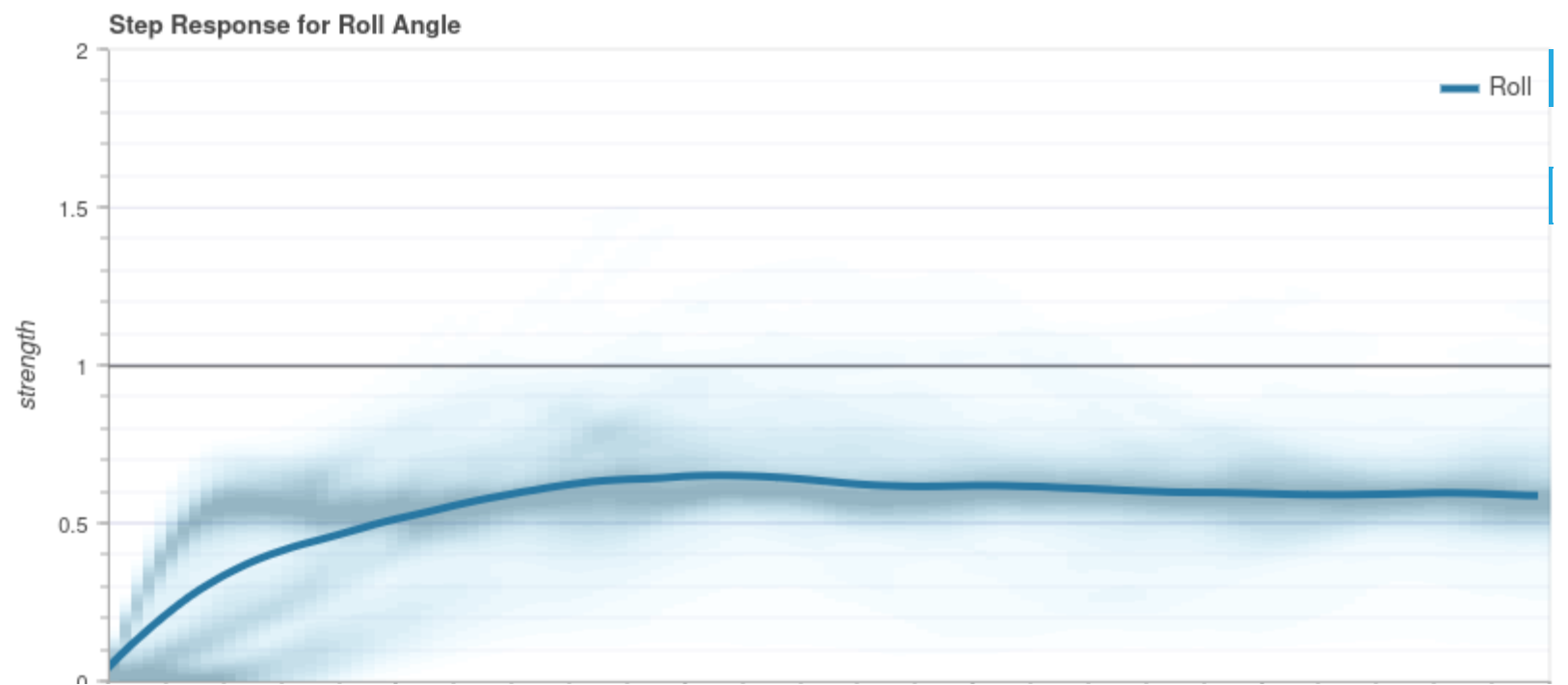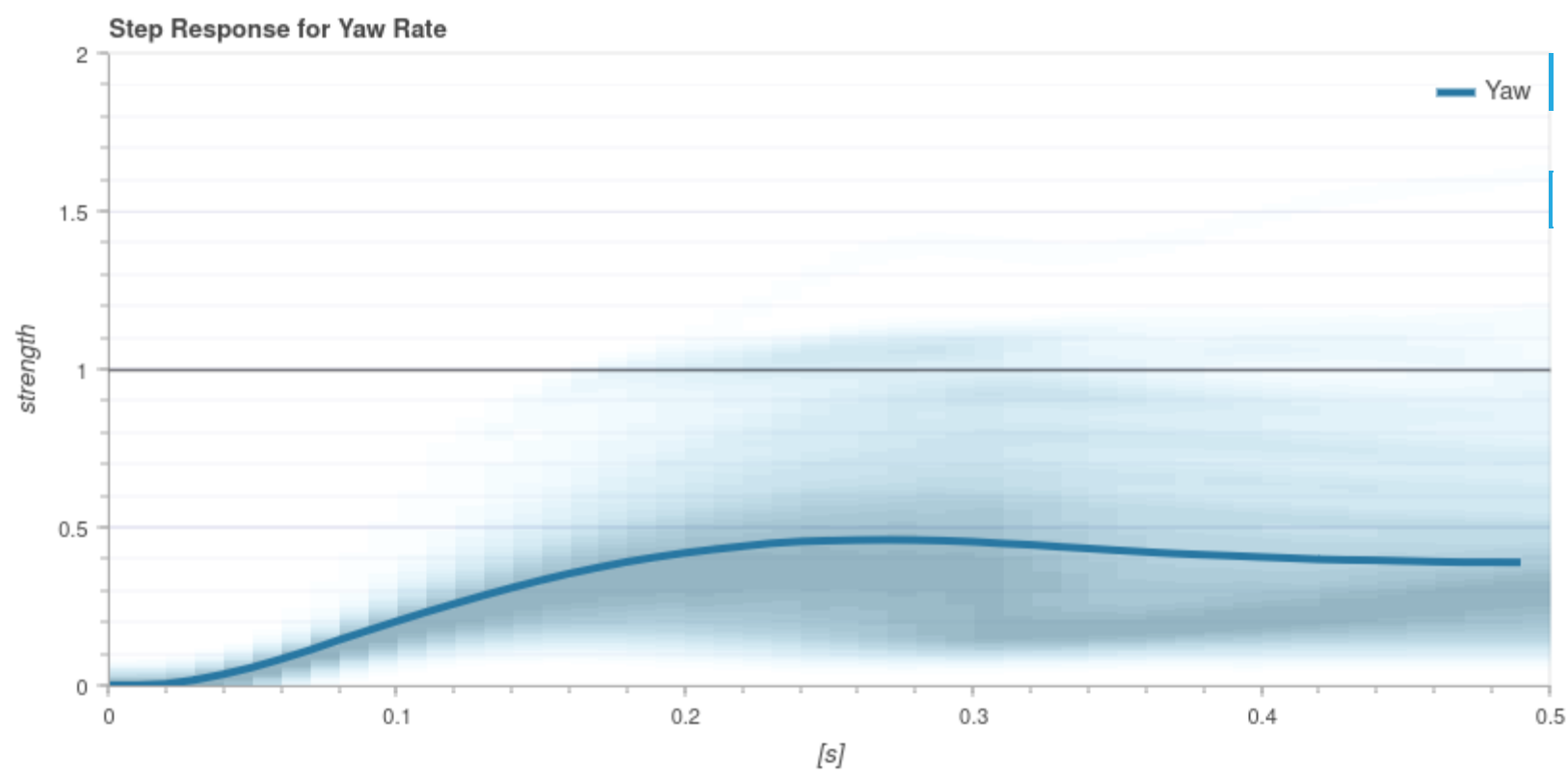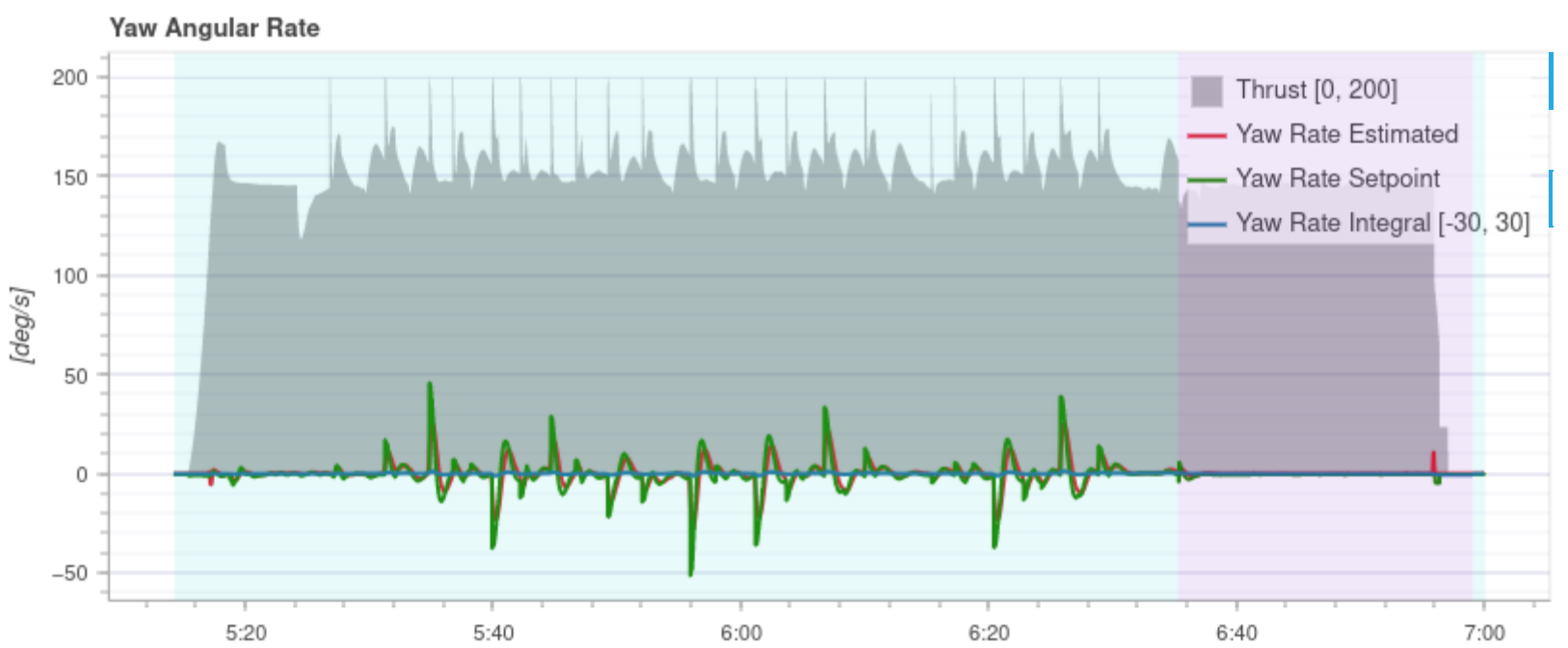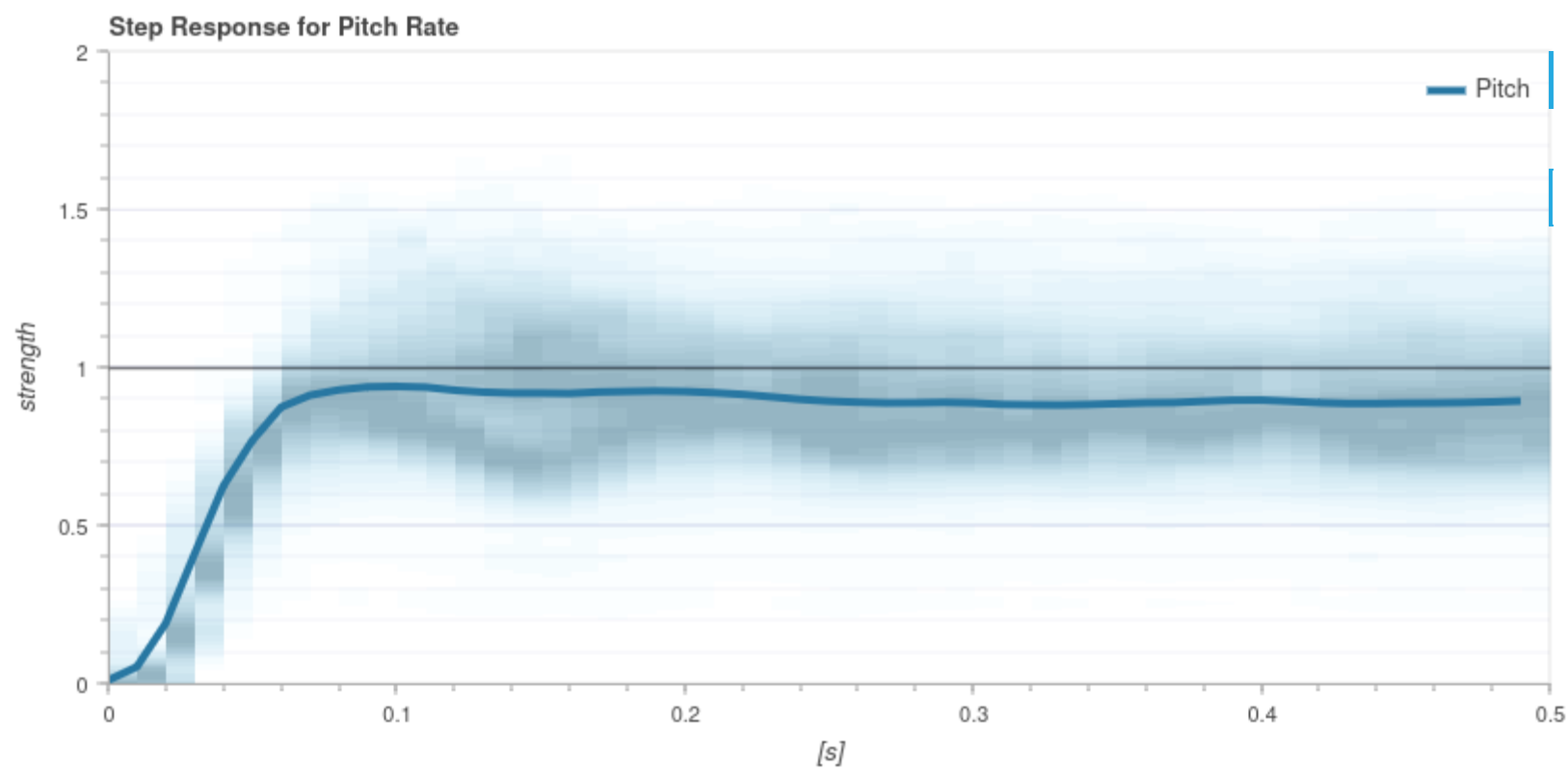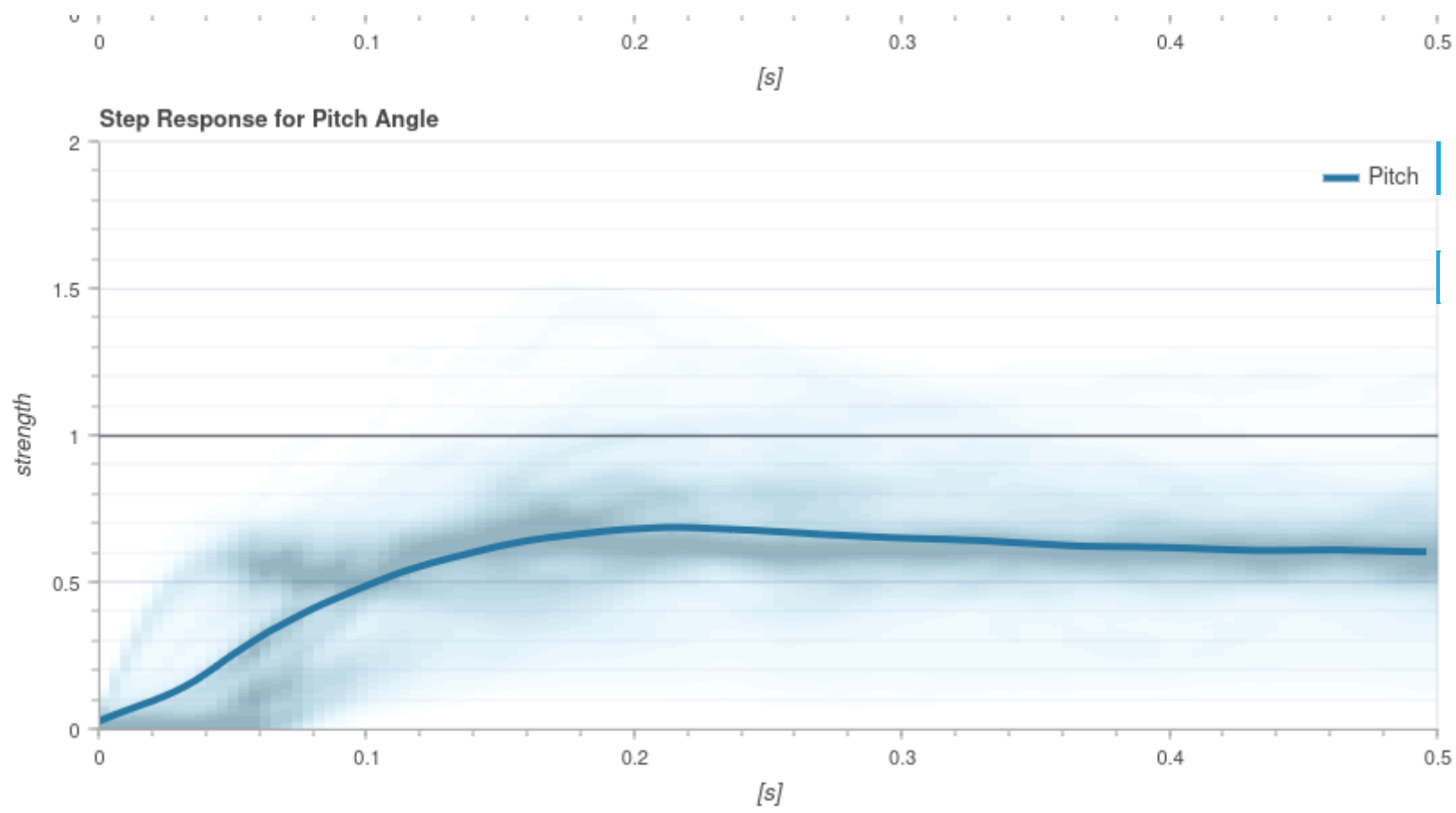
## Varundev Sukhil - Freefly Technical Challenge

This page shows step response plots for the PID controller. The step response is an objective measure to evaluate the performance of a PID controller, i.e. if the tuning gains are appropriate. In particular, the following metrics can be read from the plots: response time, overshoot and settling time.

The step response plots are based on PID-Analyzer, originally written for Betaflight by Florian Melsheimer. Documentation with some examples can be found here.

The analysis may take a while...



Roll Angular Rate



Step Response for Roll Rate



Pitch Angular Rate

### Step Response for Pitch Rate



### Yaw Angular Rate



### Step Response for Yaw Rate



### Step Response for Roll Angle

## Step Response for Pitch Angle