28.4.10 #5

The best current graph is shown here, with no load attached to motor

The gain used are P:0.1 I:0.01. The gain changes error to percent of PWM duty cycle. (negative change direction). So the unit for P and I is `Duty_percent/mA`
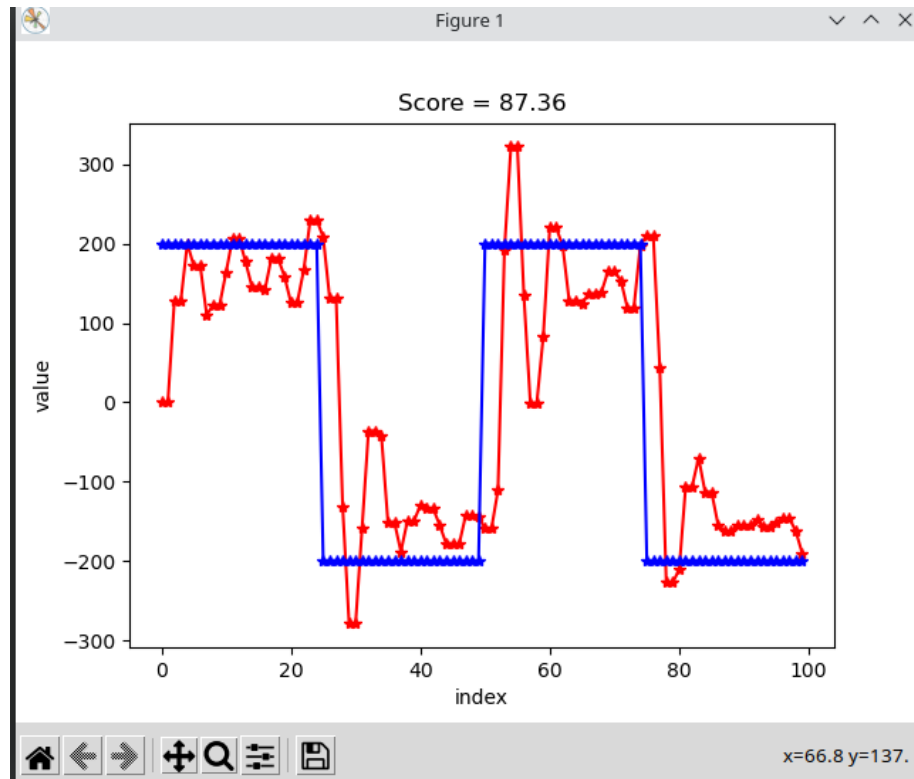

Figure 1: Current test

28.4.12 #5

The PID Gain I used is 70 0 70

Since the mounting of the motor is not idea, the exact value and result changes as the tape gets loose.

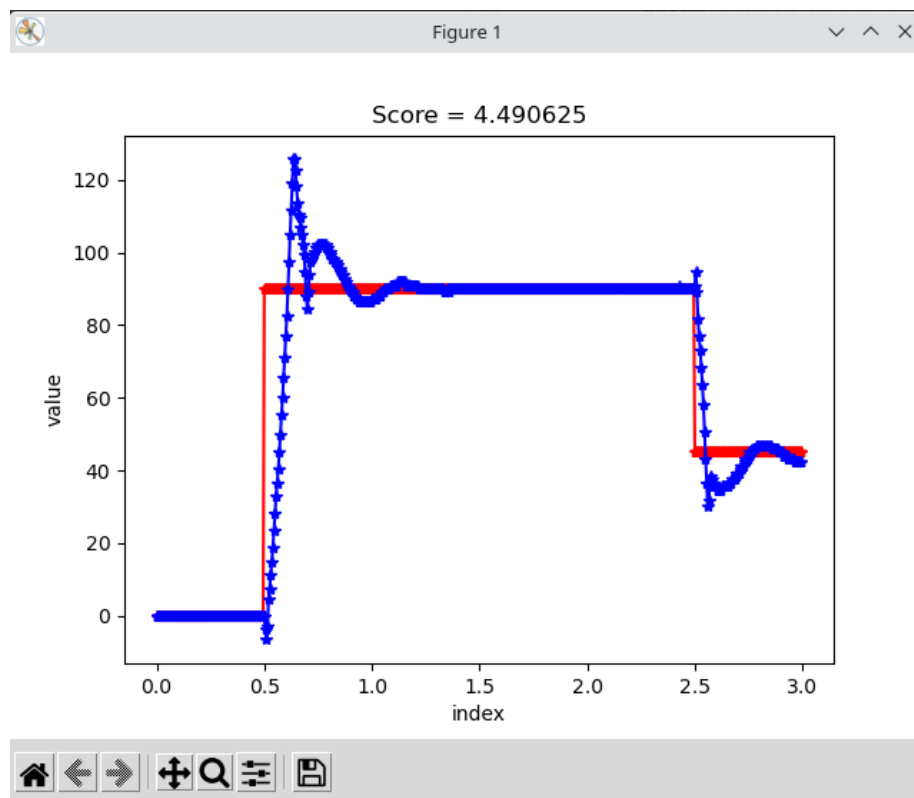Since I have converted everything to encoder reading when doing PID, there are quite a bit of rounding error in the output.
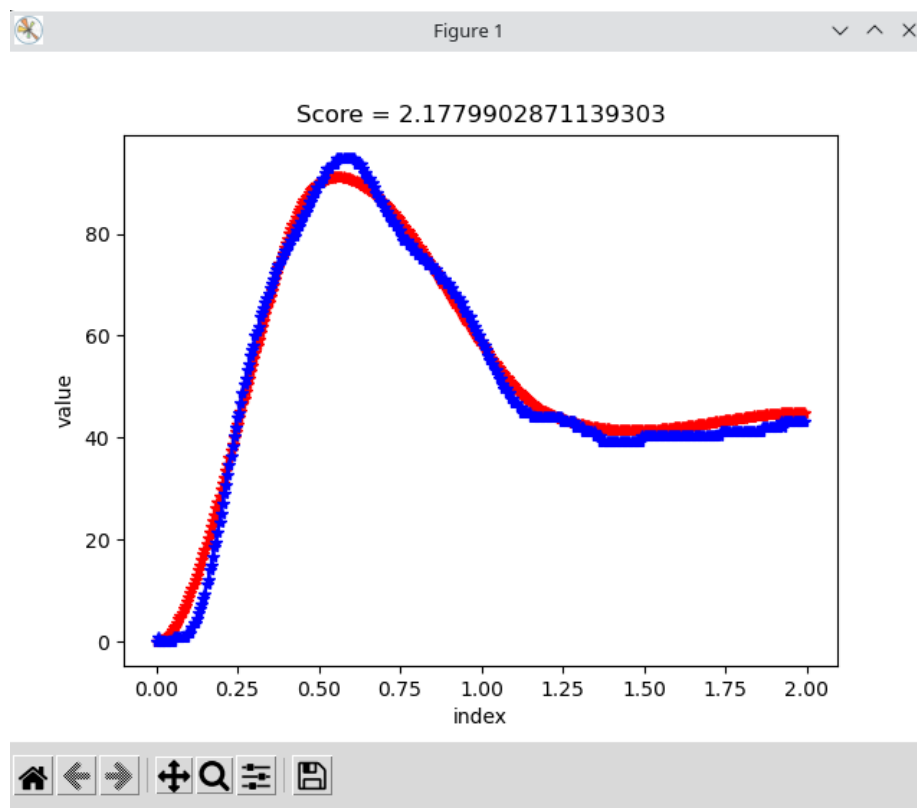
1

Figure 2: Alt text

Figure 3: Alt text