# Microwave Update

Joshua Hoskins

# Summary

- Microwave Motor System
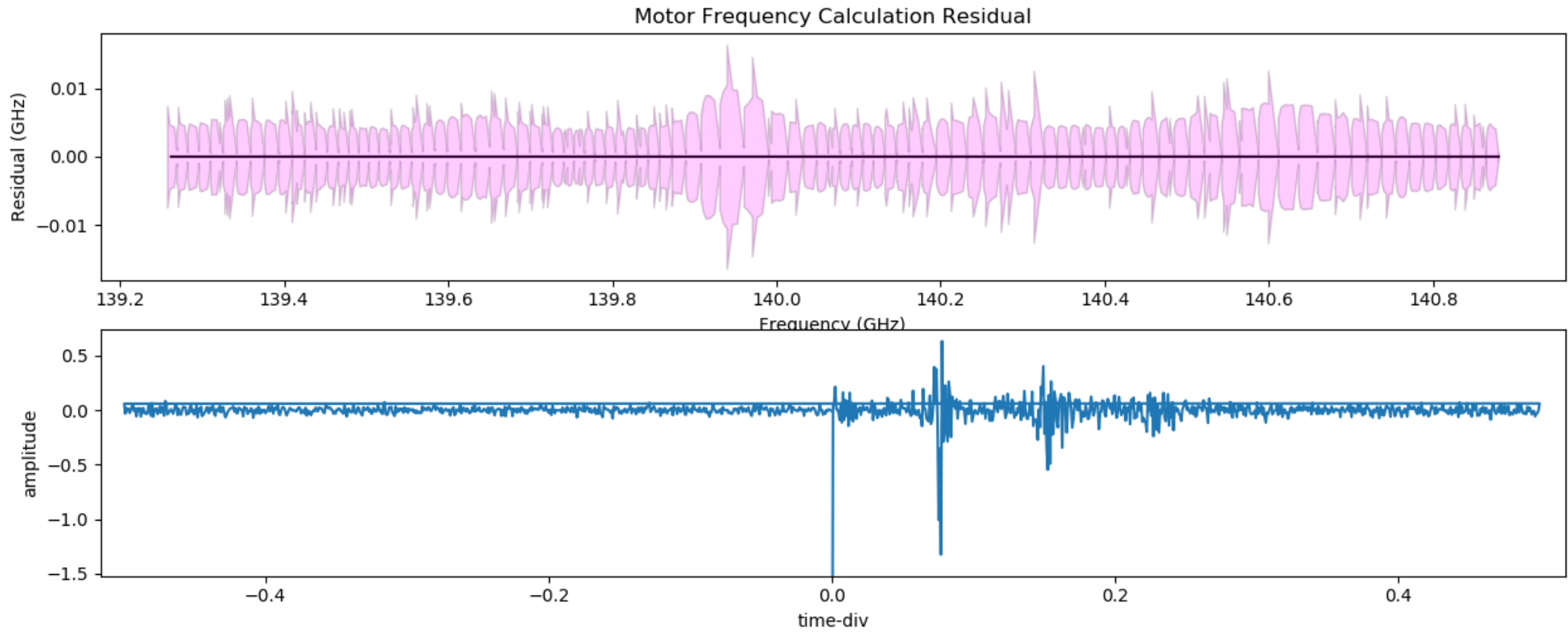- Controls Error Checking and Position Tracking
- Automated Simulation

# Motor Control System

- New motor and accompanying controller ordered.

- Controller and motor are separate to alleviate radiation worries.

- New controller is directly compatible with the current controllers communications format – no need to change code.

- New system allows us to have a HOME algorithm and absolute position read-back.

- This eliminates two previous problems.
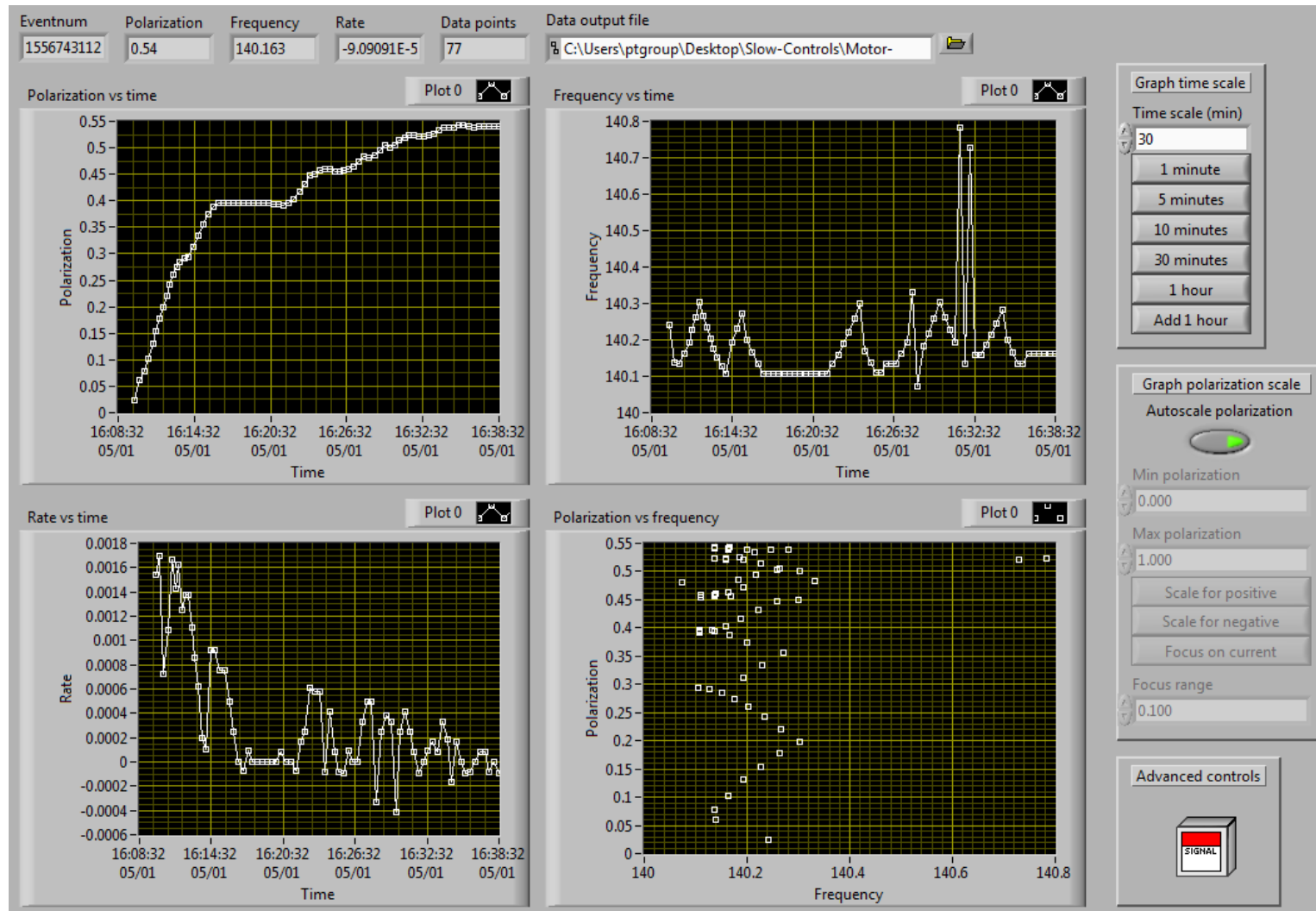
# Controls Error Checking and Position Tracking

- Tests so far have shown the calculated frequency to EIP read-back frequency track to around the 5 MHz level.

- Understanding if the frequency calibration drifts with time is important.

- The read-back from both the EIP and motor controller need better error checking or possibly less resolute sampling.

- Errors cause analysis to need substantial data cleaning.

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# Automated Simulation

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