

Orange Kayak Update

July 12, 2011

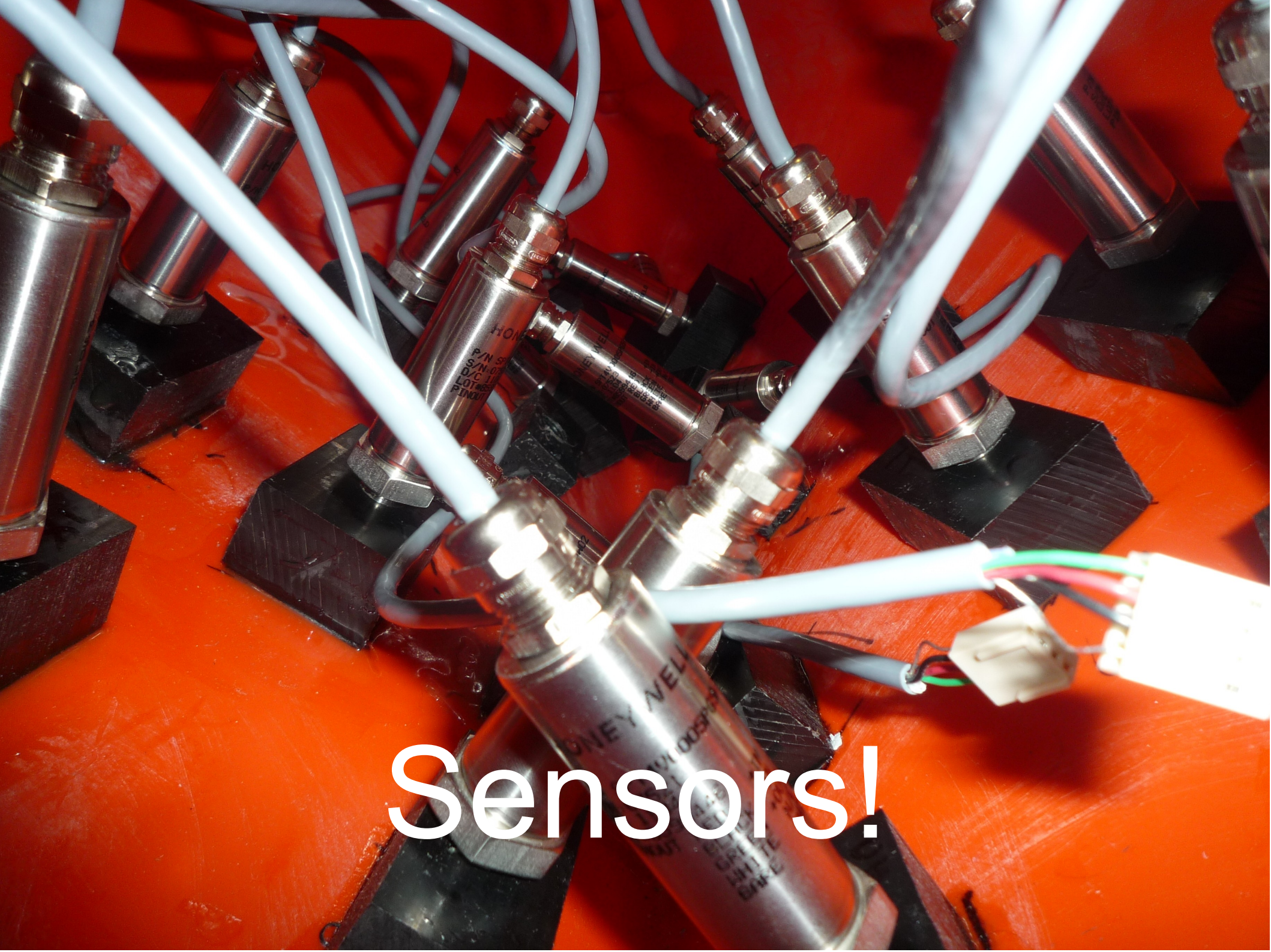


Drilled holes for sensors





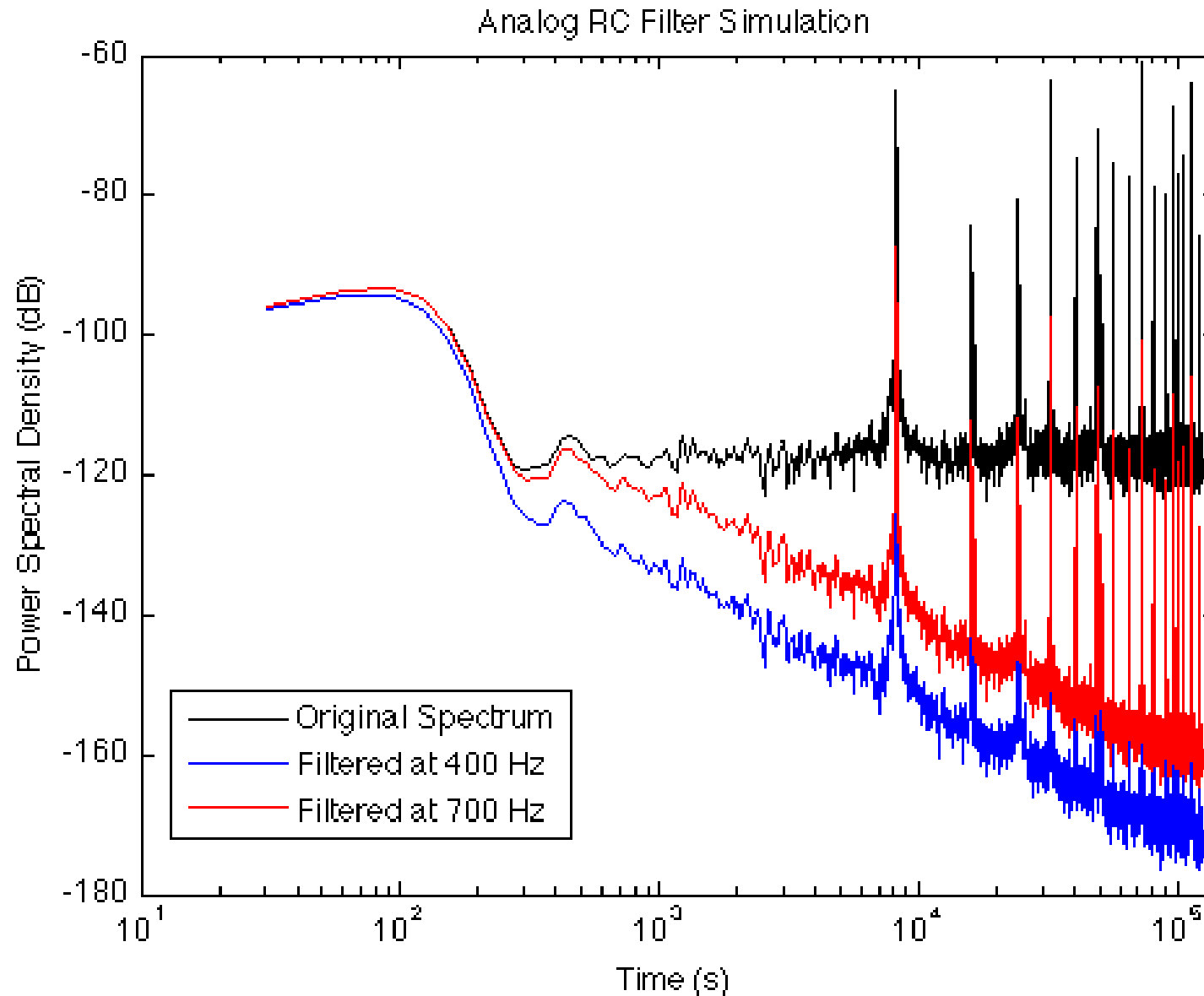
sealed leaking tabs



Sensors!

Analog RC filter

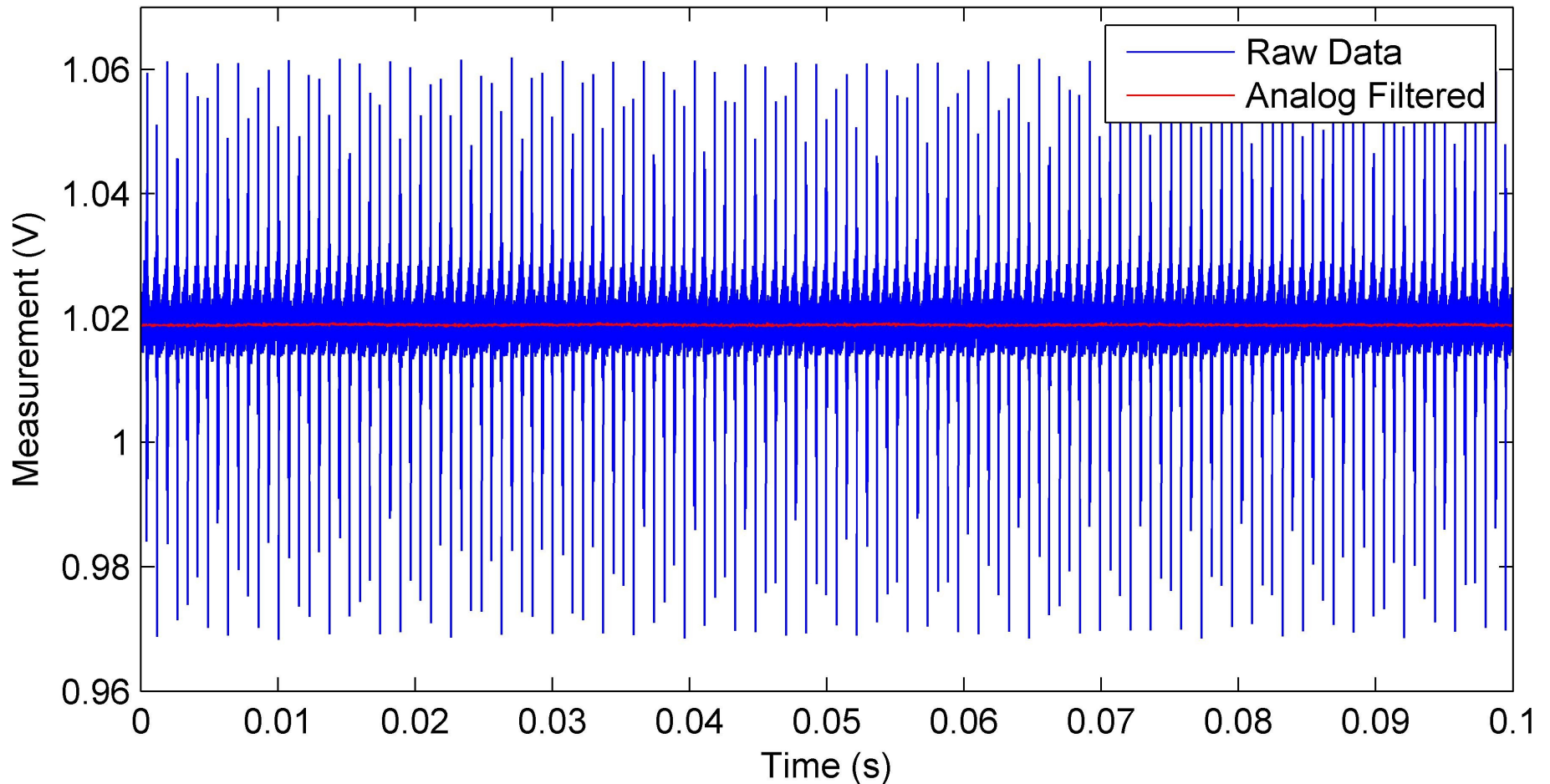
to remove aliased noise at $> 8\text{kHz}$



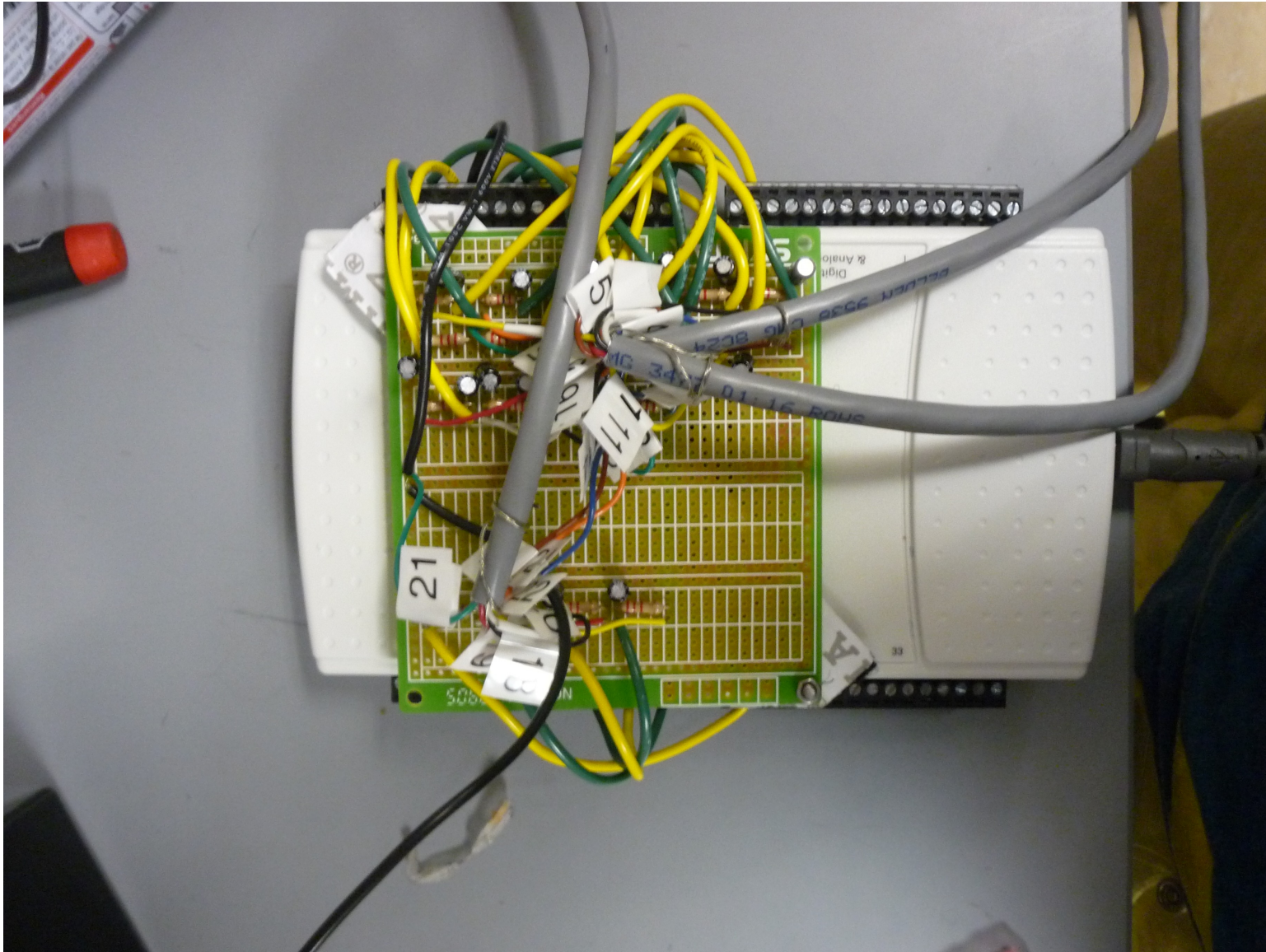
Analog RC filter

to remove aliased noise at $> 8\text{kHz}$

Results with RC Filter at 796 Hz

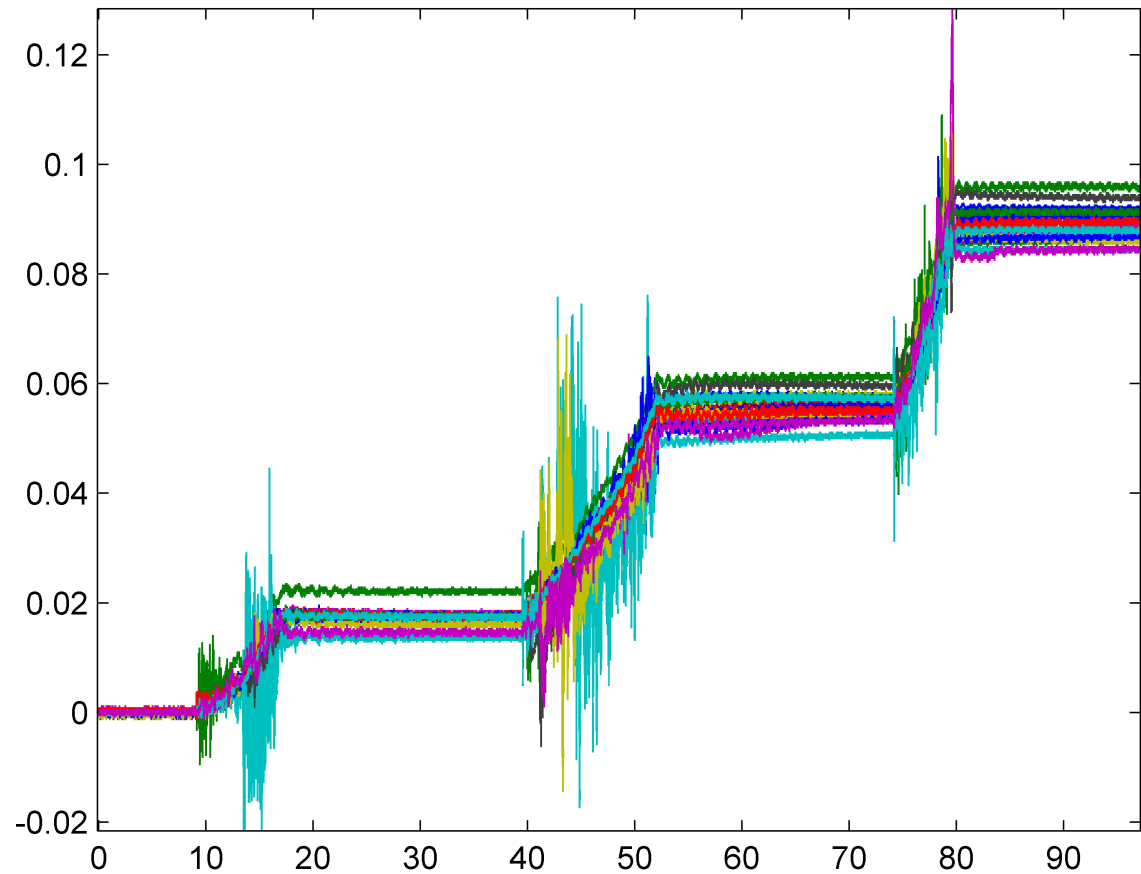


Board populated with filters



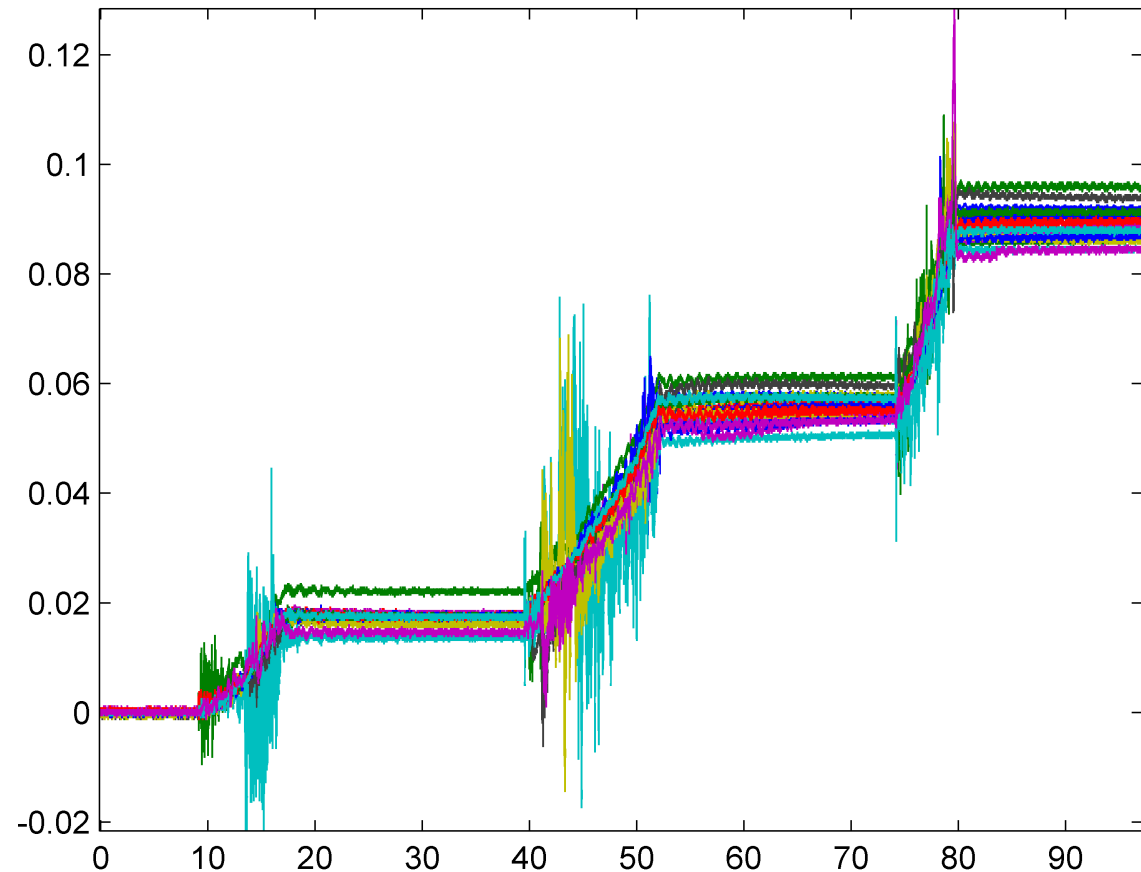
Hydrostatic of all sensors with analog filter

Calibration. 10cm between start and end.



Hydrostatic Calibration of all sensors with analog filter

Calibration. 10cm between start and end.



~1V per meter



Kayak Software Update

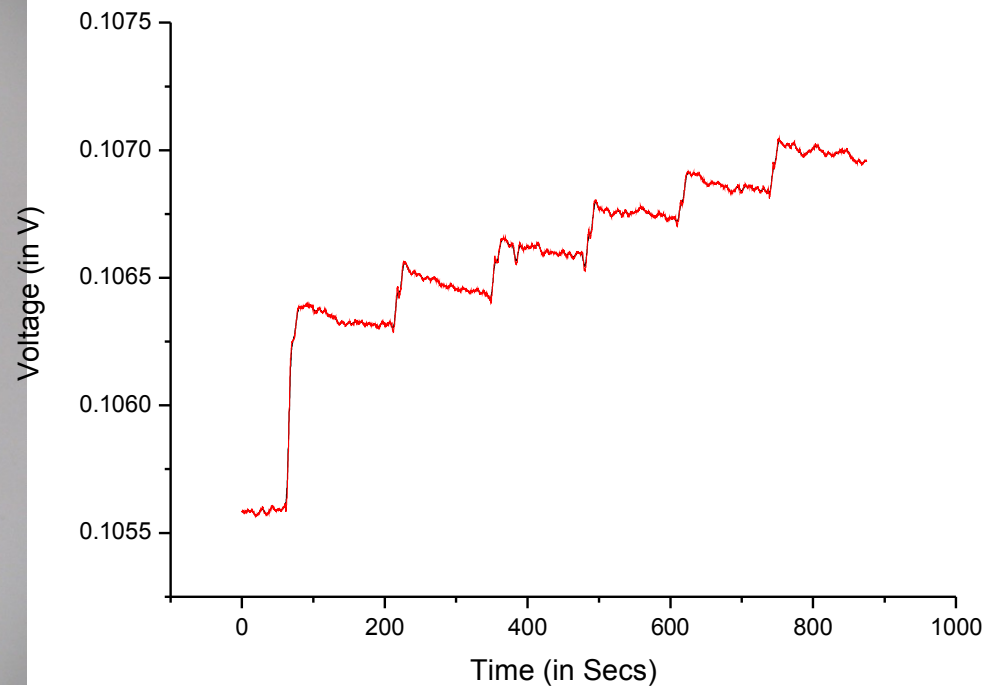
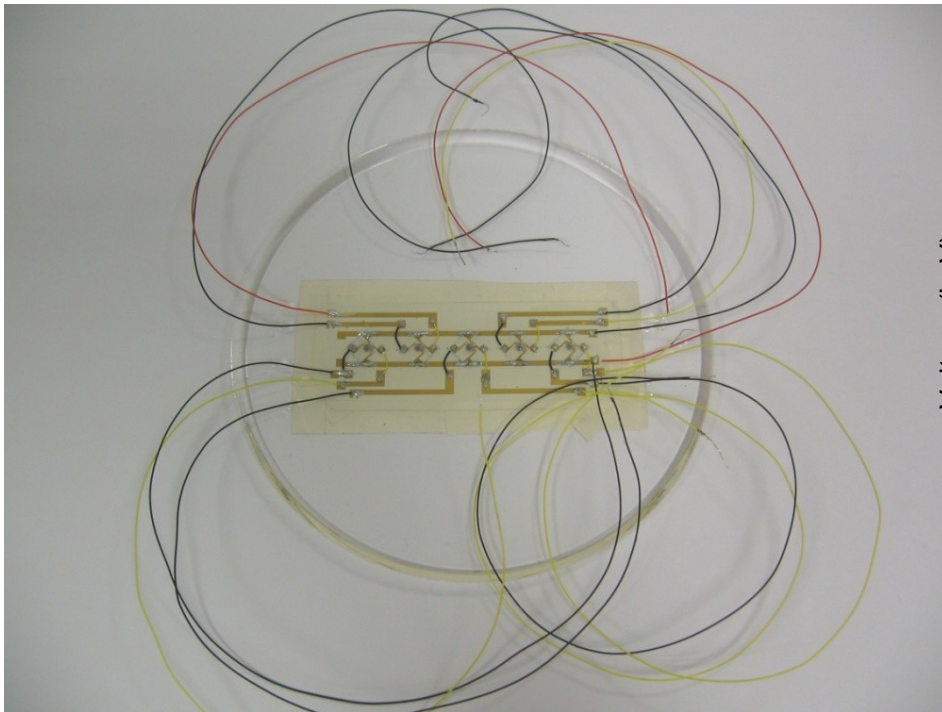
- Windows & Labview installed, with vi
- Remote desktop to windows computer and ssh to linux computer at the same time setup
- Tested logging of GPS, compass, inertial motion unit, and pressure
- To Do:
 - Code to put data into a convenient form

Pool Test

- Tomorrow from 2-5pm
- Will Test:
 - Water-proofing
 - Simultaneous communication and data collection with two computers
 - Measure pressure of typical magnitude stimulus (push kayak around by hand)
 - Roughly verify calibration

Chee Wee's Sensor Array on Kayak

- Array sensor testing on Thursday
- Mount on kayak



Chee Wee's Sensor Processing

