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1 First look (Oct 25, 2015) at SQUID data taken on Oct 5, 2015 while powering on the lab

Some useful channels:

- Squid channel **y1** was connected to a large, **z** oriented pick-up coil. Thus it measured the same magnetic field direction as **z1** and **z2** but with different sensitivity.
- Squid channel **x2** was not in FLL mode, making it a test of other noise in the electronics chain.
- Tobias used Helmholtz coils to find a relative calibration of 5.552 between the pick-up coil and **z** channels.

1.1 With the rest of the electronics in the lab turned off

Data contained in file : "2015-10-05 13-45-38.031713.dig". Taken together they suggest that the

- Pickup coil shows ~ 5 times more spread in voltage vs. time as the normal squid coils, in agreement with Tobi's calibration.
- Disconnected channel shows ~ 12 times less voltage spread.

Taken together (and shown in ?? this data set suggests that, with everything in the room turned off, the squid channels are seeing real magnetic field noise.

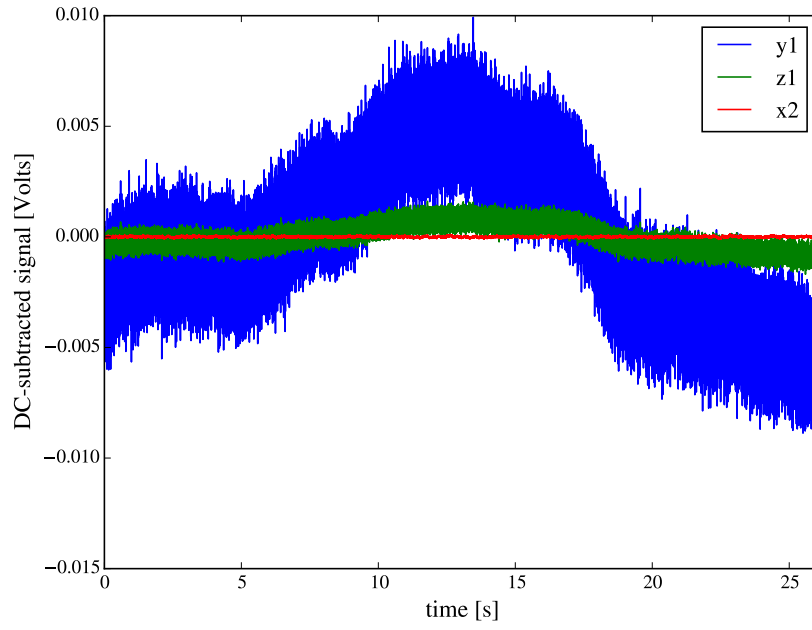


Figure 1: Data taken with all non-squid electronics in the lab shut-off. Comparison of a typical squid channel **z1** with the disconnected channel **x2** and the large pickup coil **y1**, with DC offsets removed.