

STOCHASTIC - DETCHAR

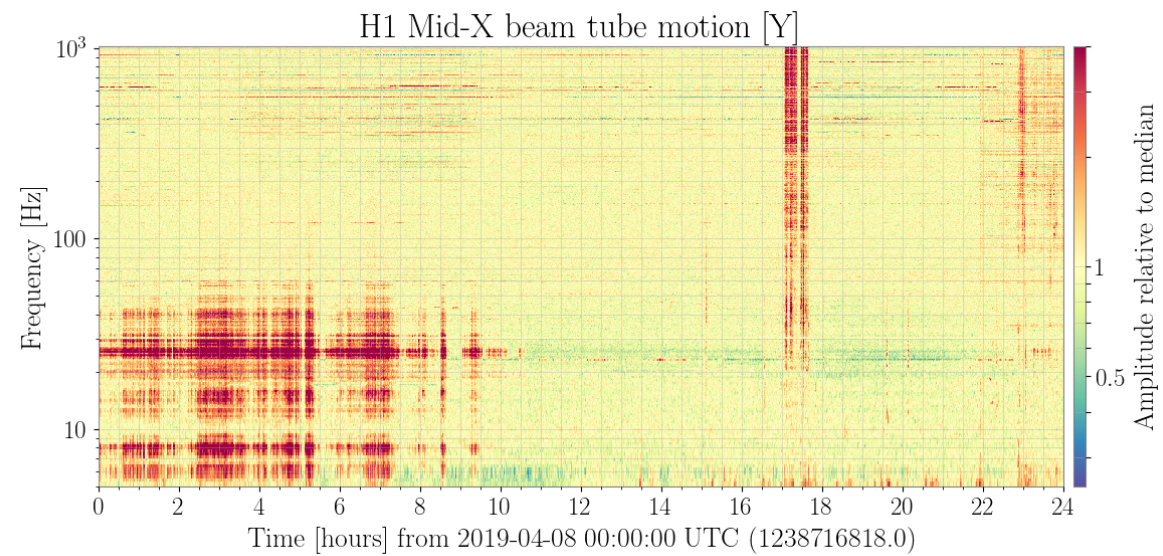
UPDATES: APRIL 16

Rich Ormiston

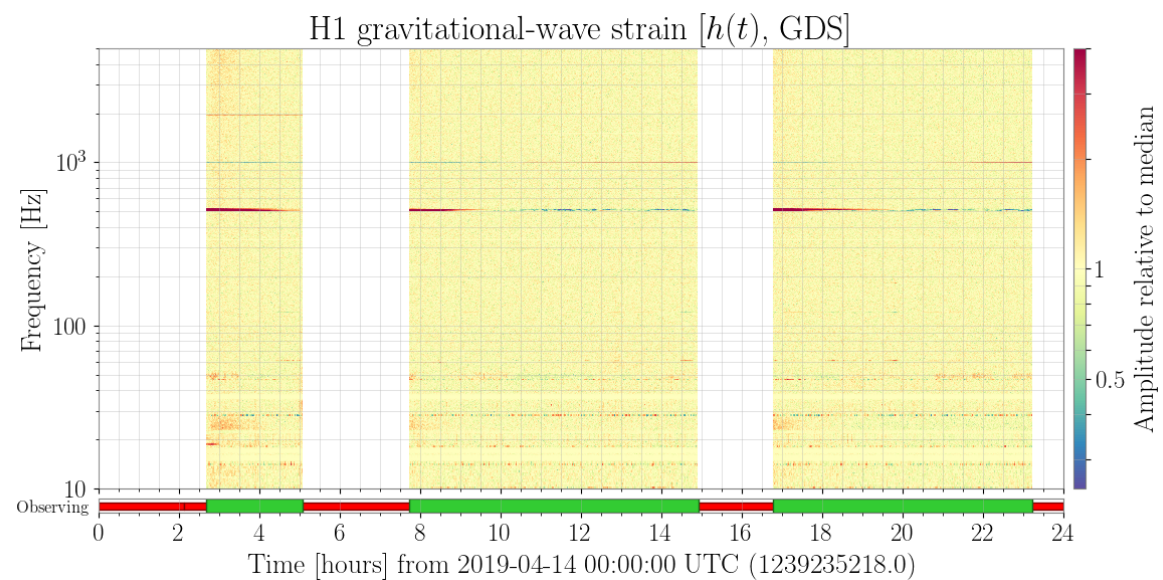
SUMMARY

- Stochastic Detchar Repo [here](#) (may move!)
- Stochastic Detchar Wiki [here](#)
- [Detchar minutes](#) for April 15
- Bad weather + anthropogenic noise at both sites - lots of ground motion, SUS activity, scattering
- Glitch rates are still high. LSC-POP_A_LF_OUT_DQ wins HVeto
- Duty cycles are ok (~60%) and BNS range > 100Mpc
- Two triggers at LLO: [S190408an](#), [S190412m](#)

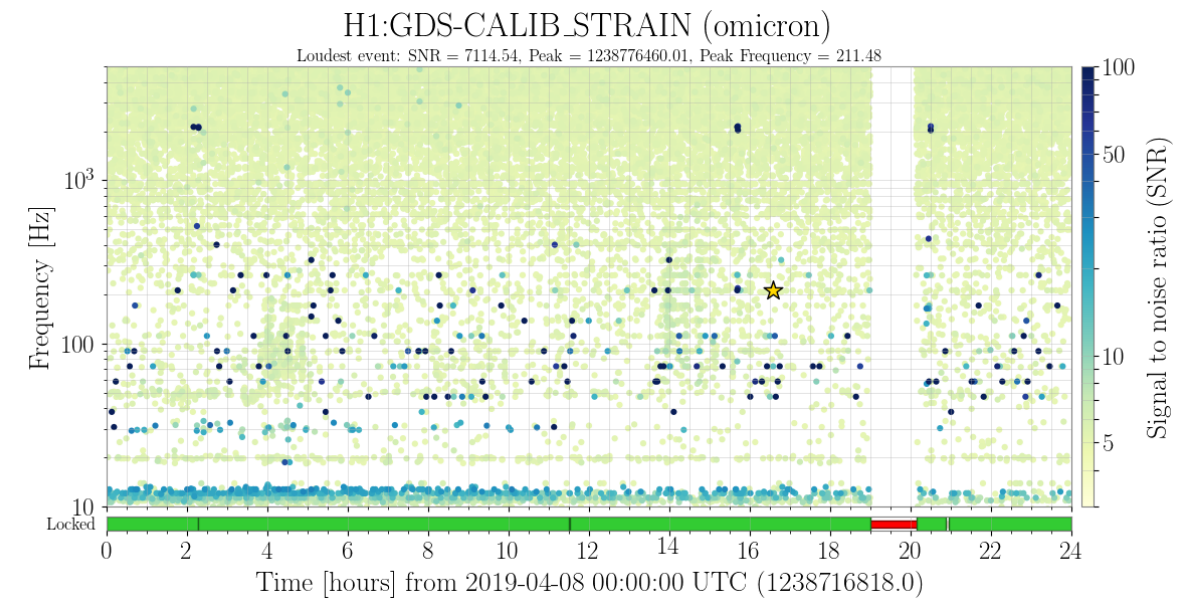
LHO: GLITCHES



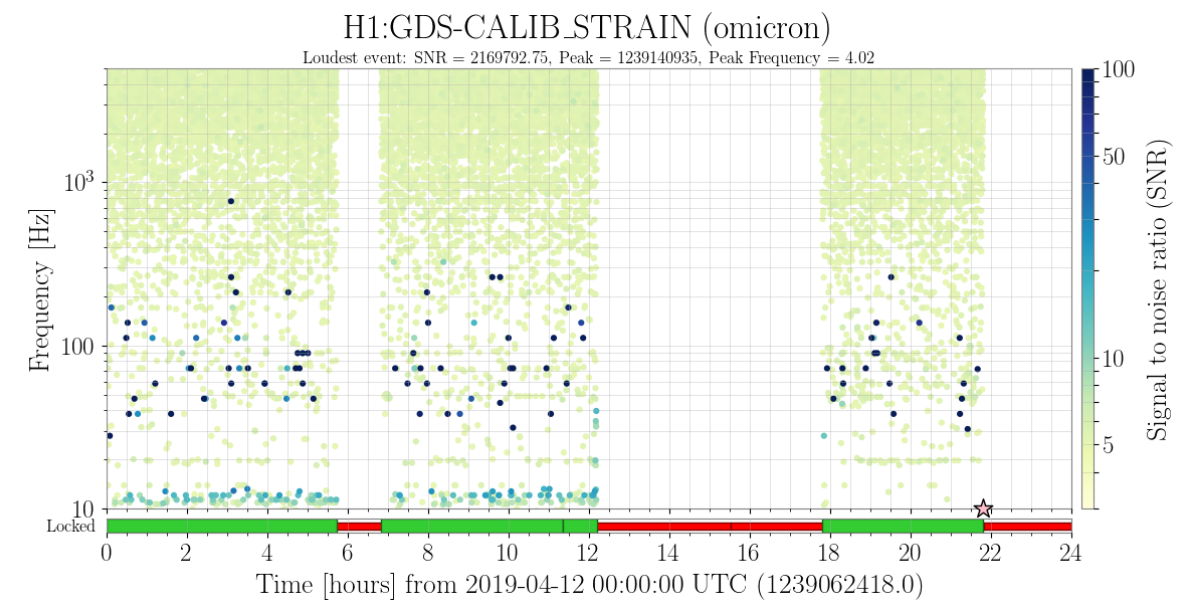
Also picked up in ACC



Violin mode ringdown following lock

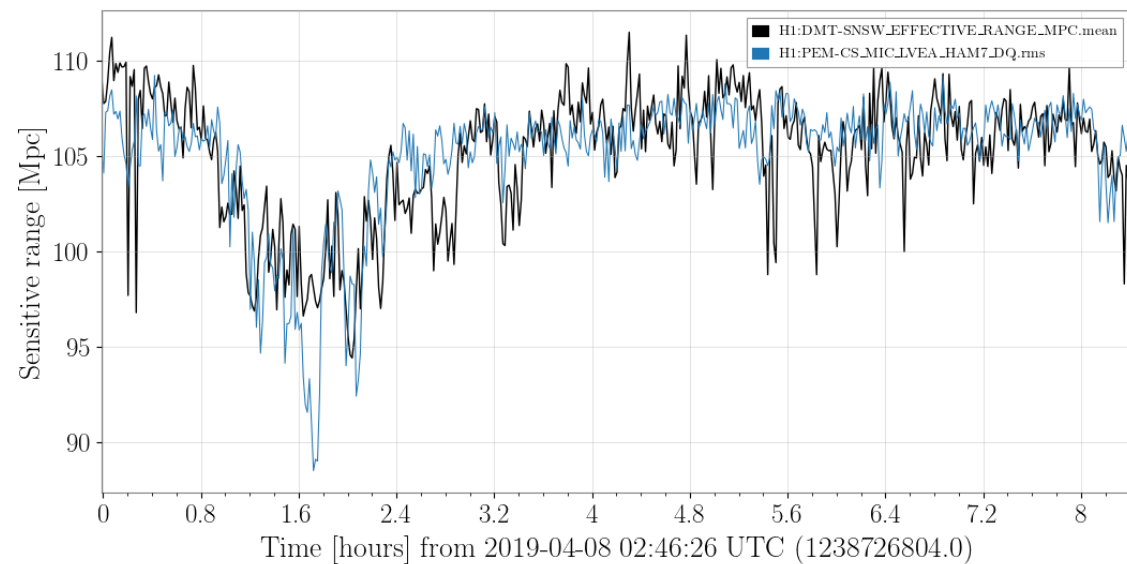


Monday 8th

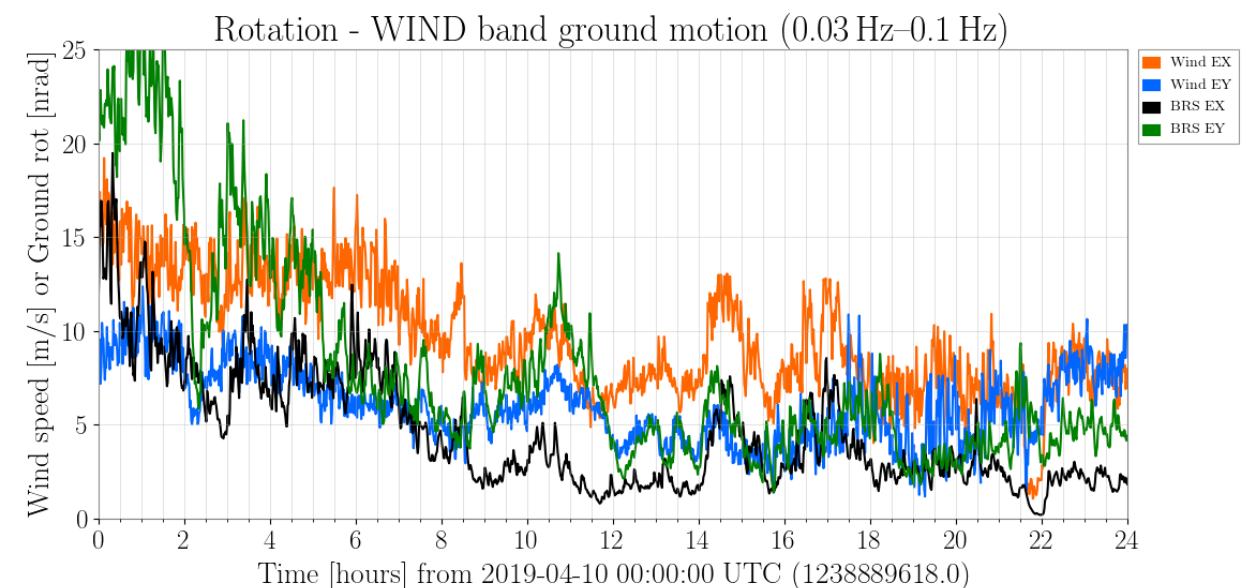
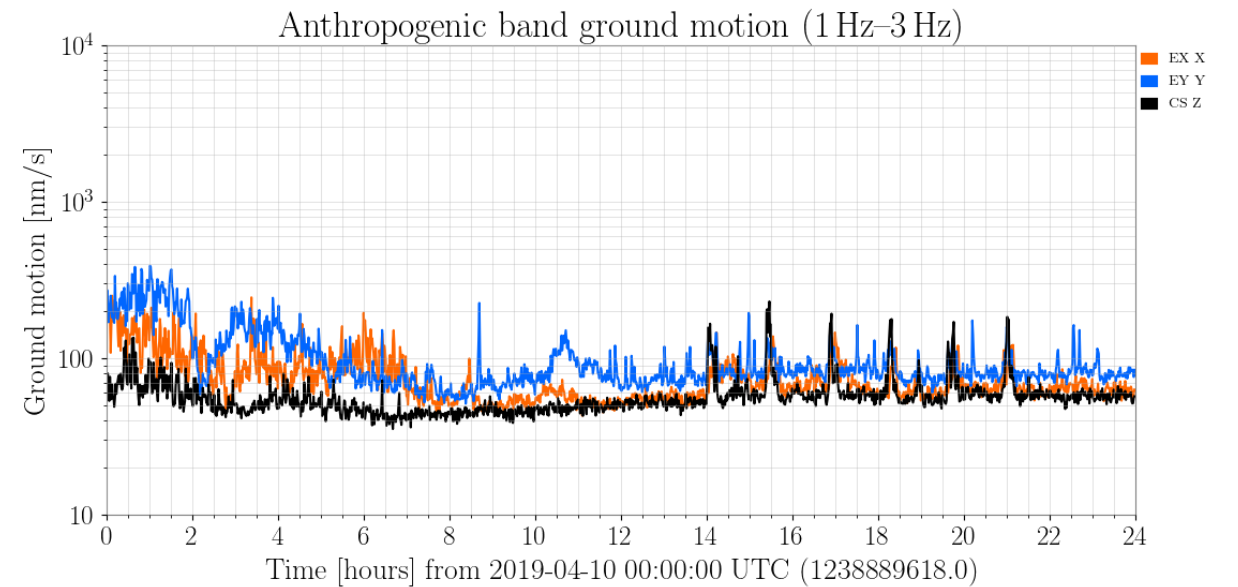


Friday 12

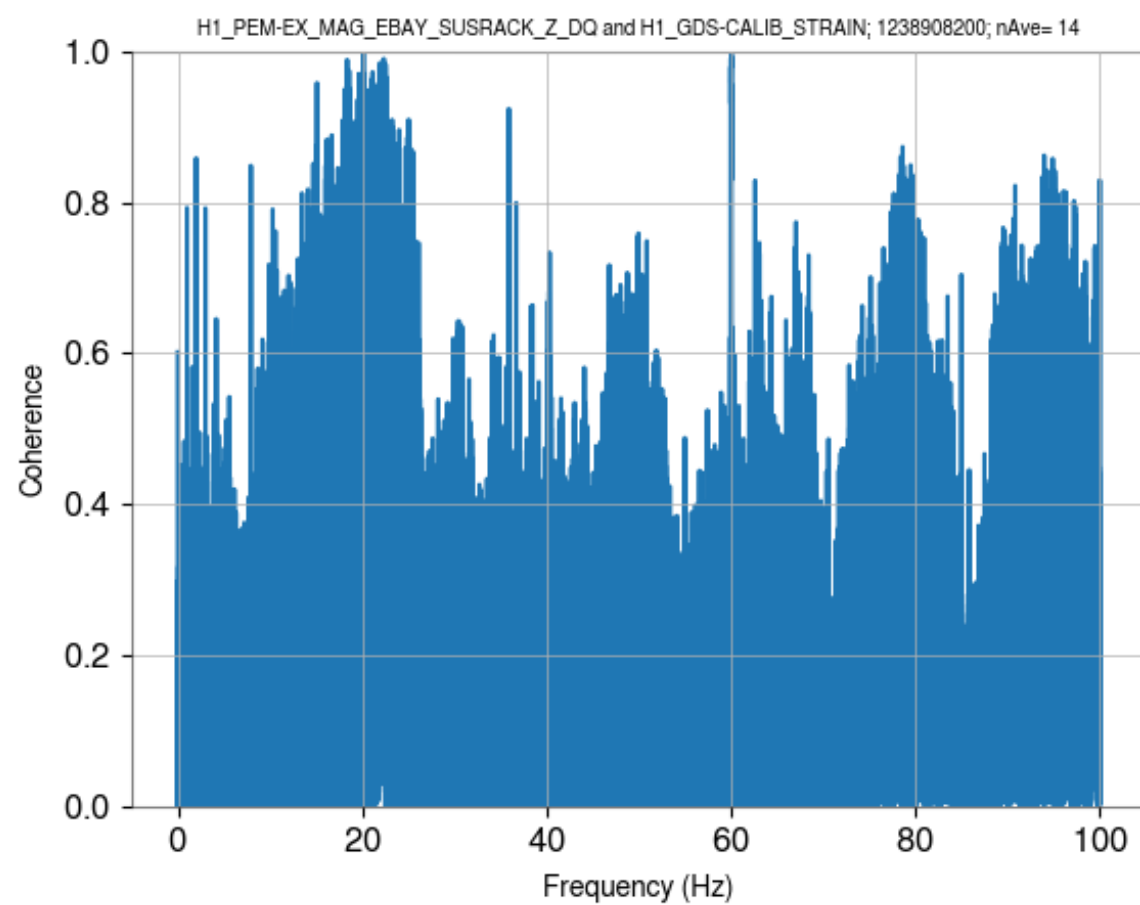
LHO: RECURRING ISSUES



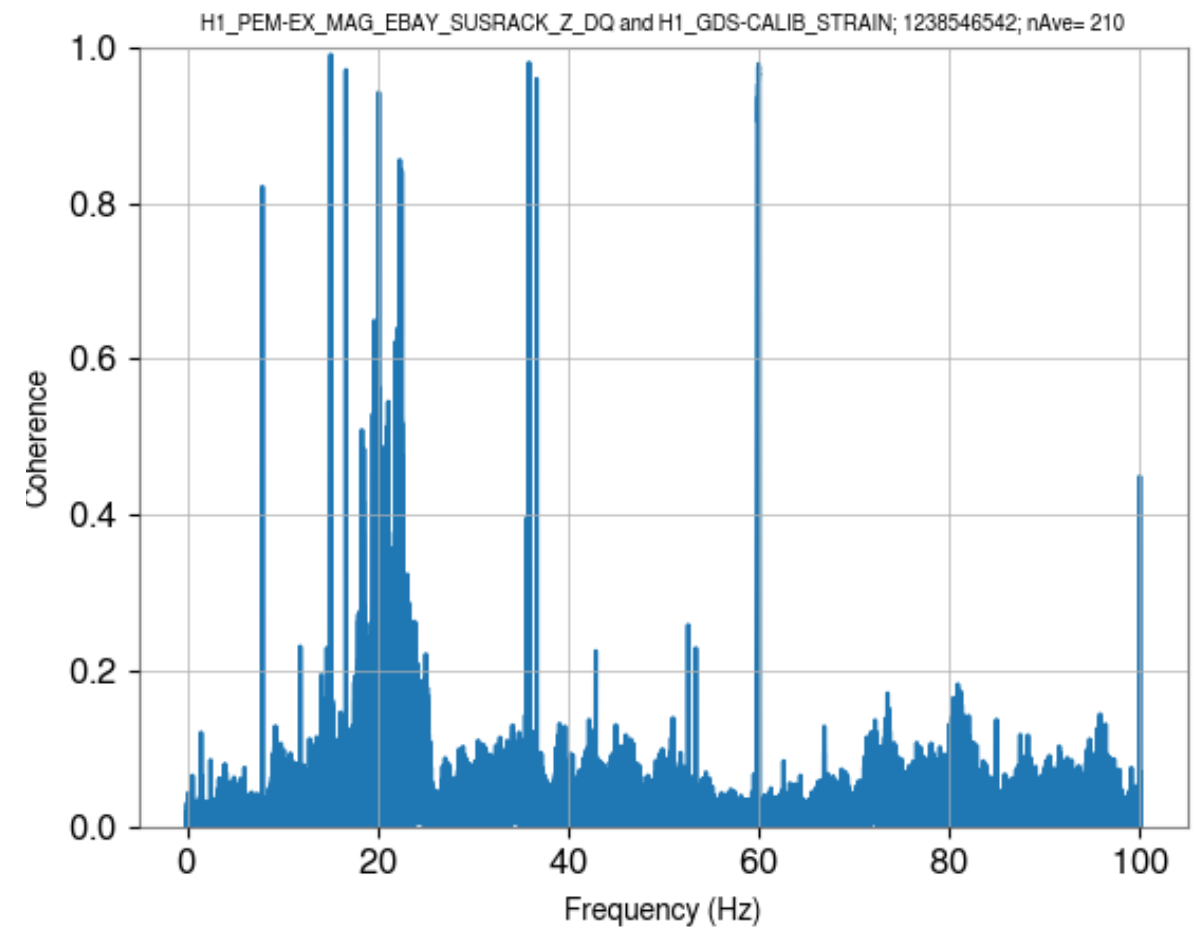
Strong winds (BR),
anthropogenic noise (TR), lasso
regression showing correlation
of BNS range and PEMs (TL)



LHO: MAGNETOMETER FCSAN

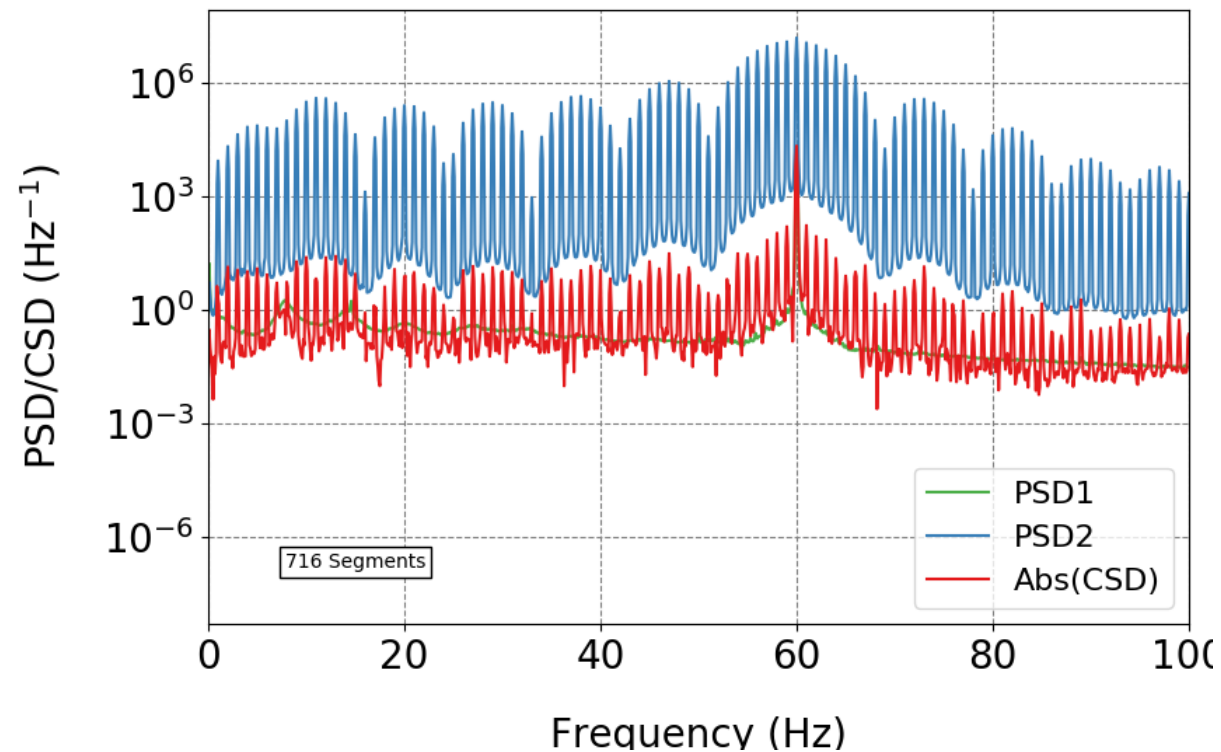


April 10, 2019



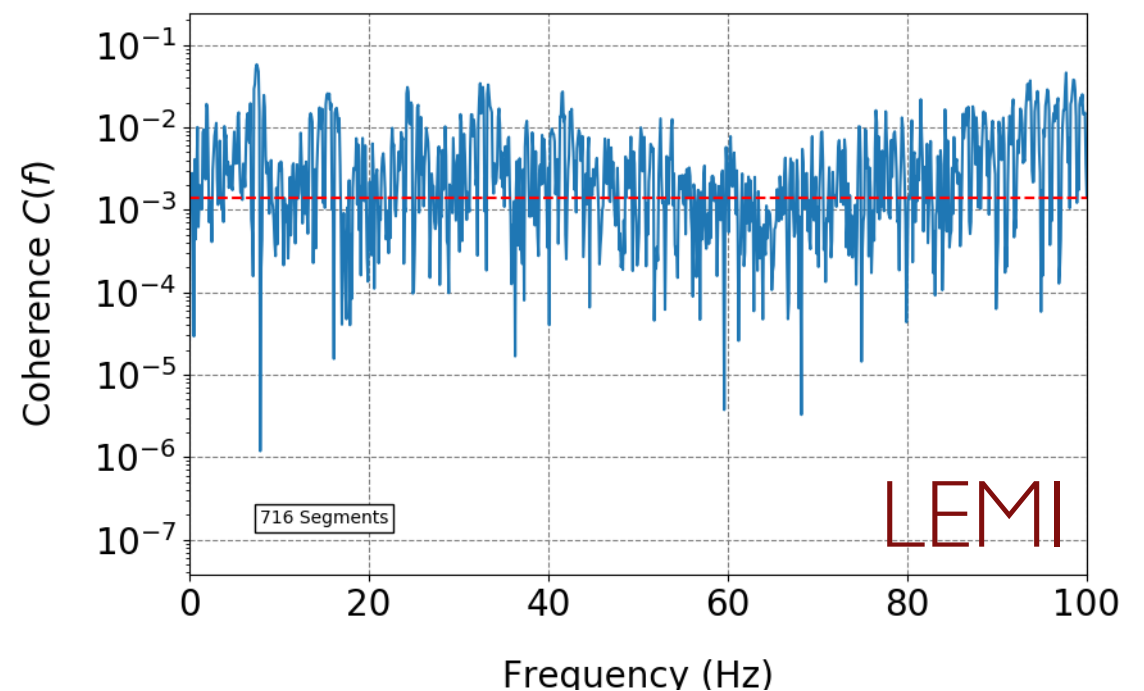
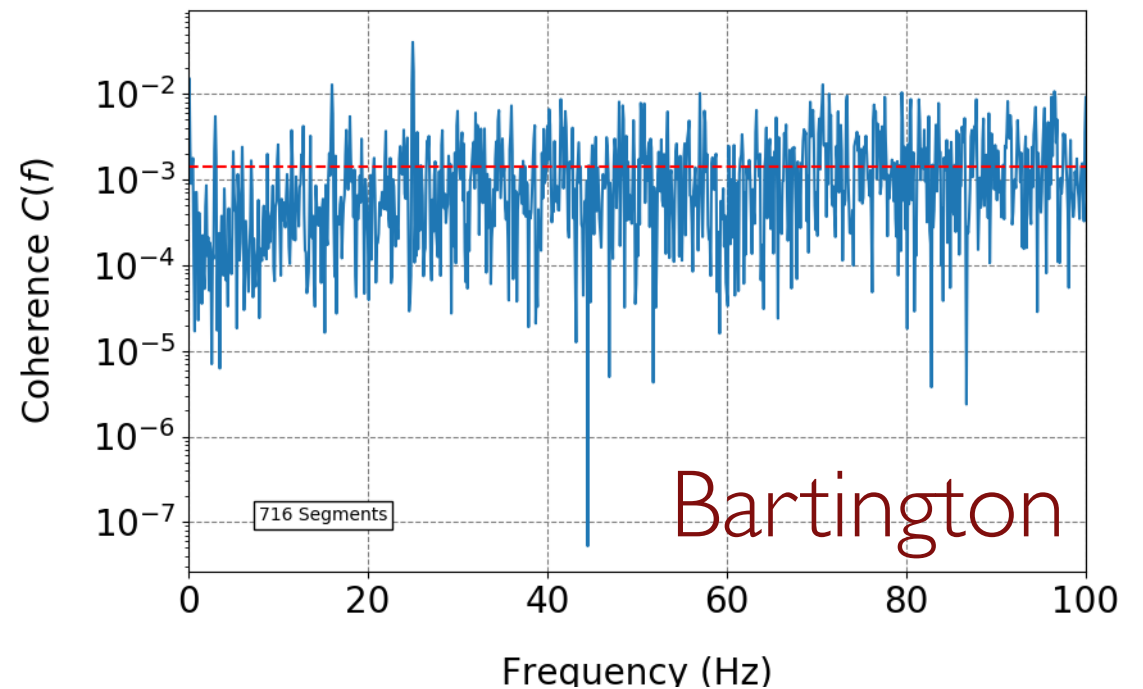
week of April 13

LHO: MAGNETOMETERS

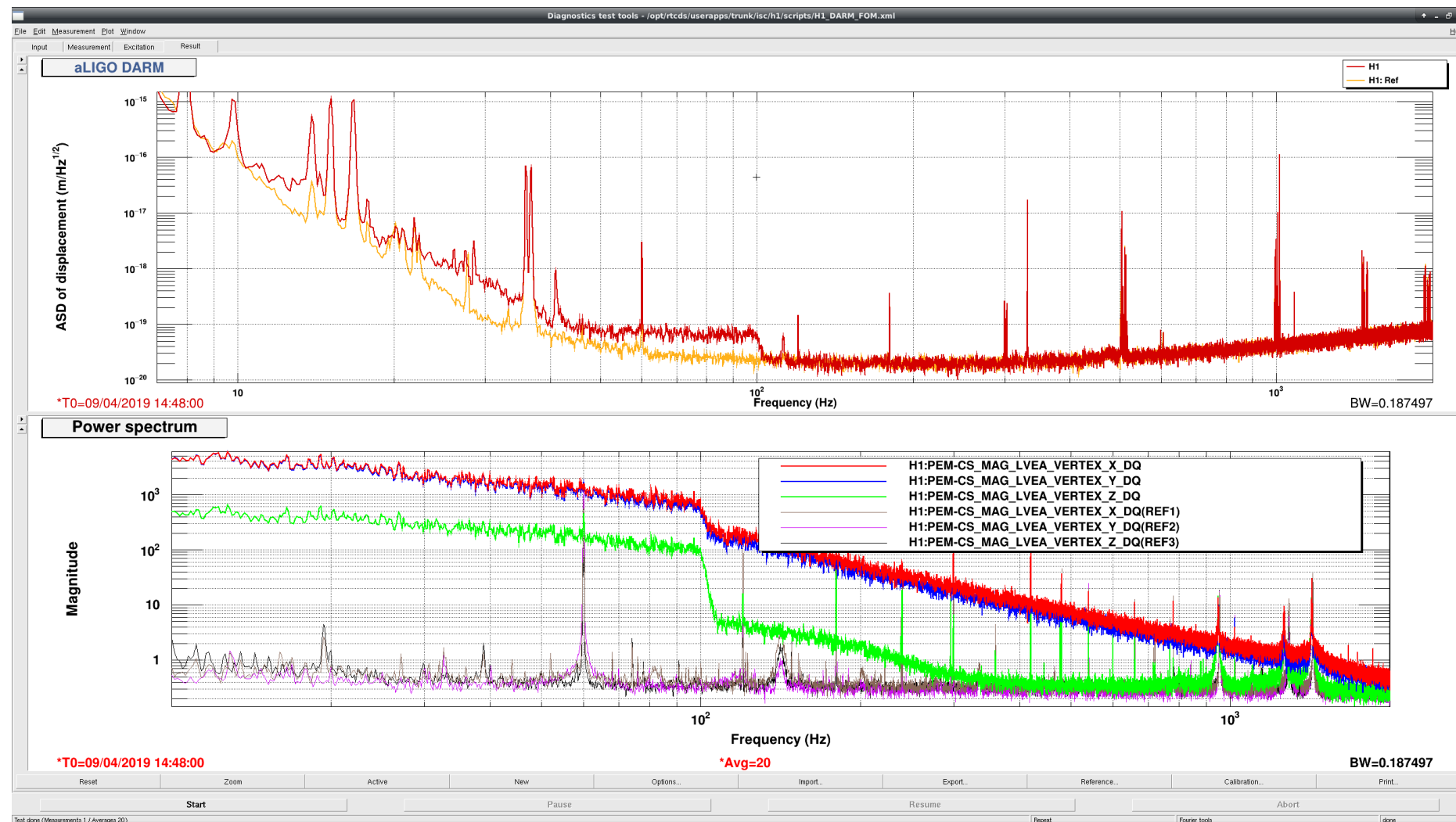


Odd behavior from
20:00-21:00 UTC on April 10.
Not observed since (I think).
Maybe add to Stochmon?

[Wiki page](#)

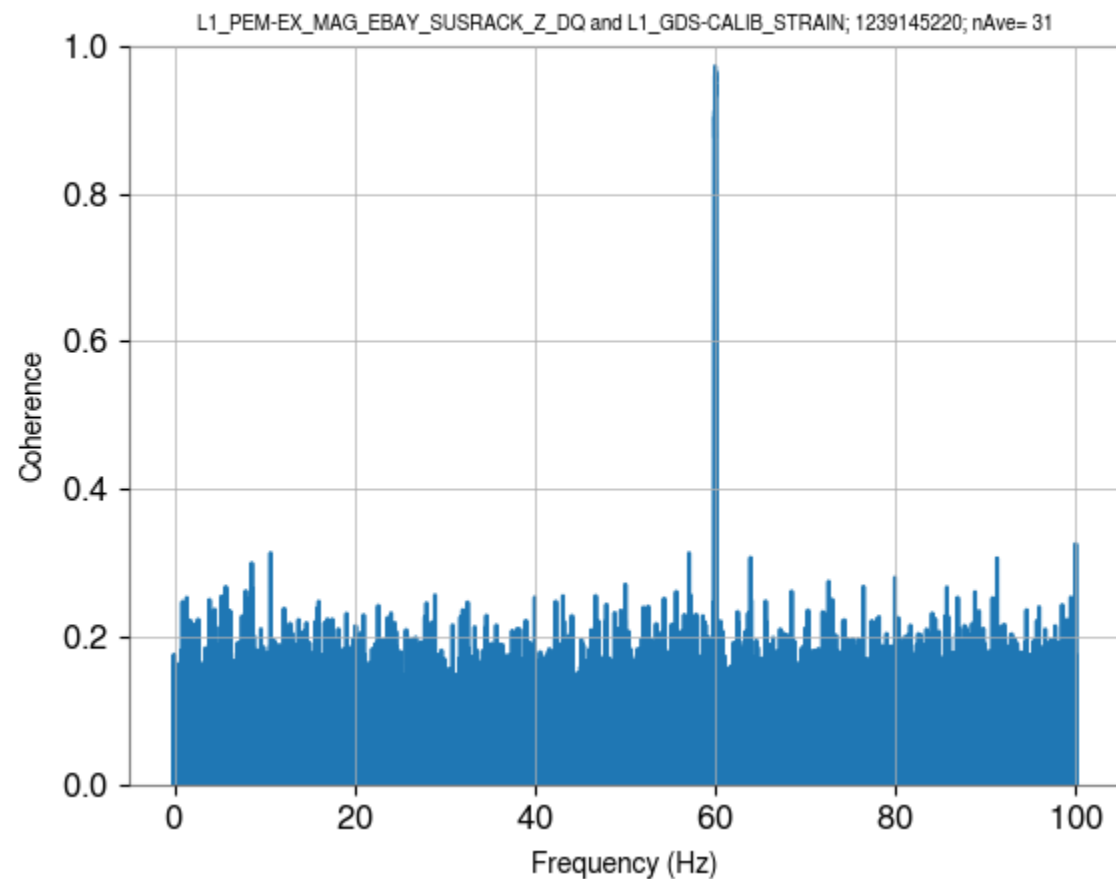


LHO: MAGNETIC INJECTIONS

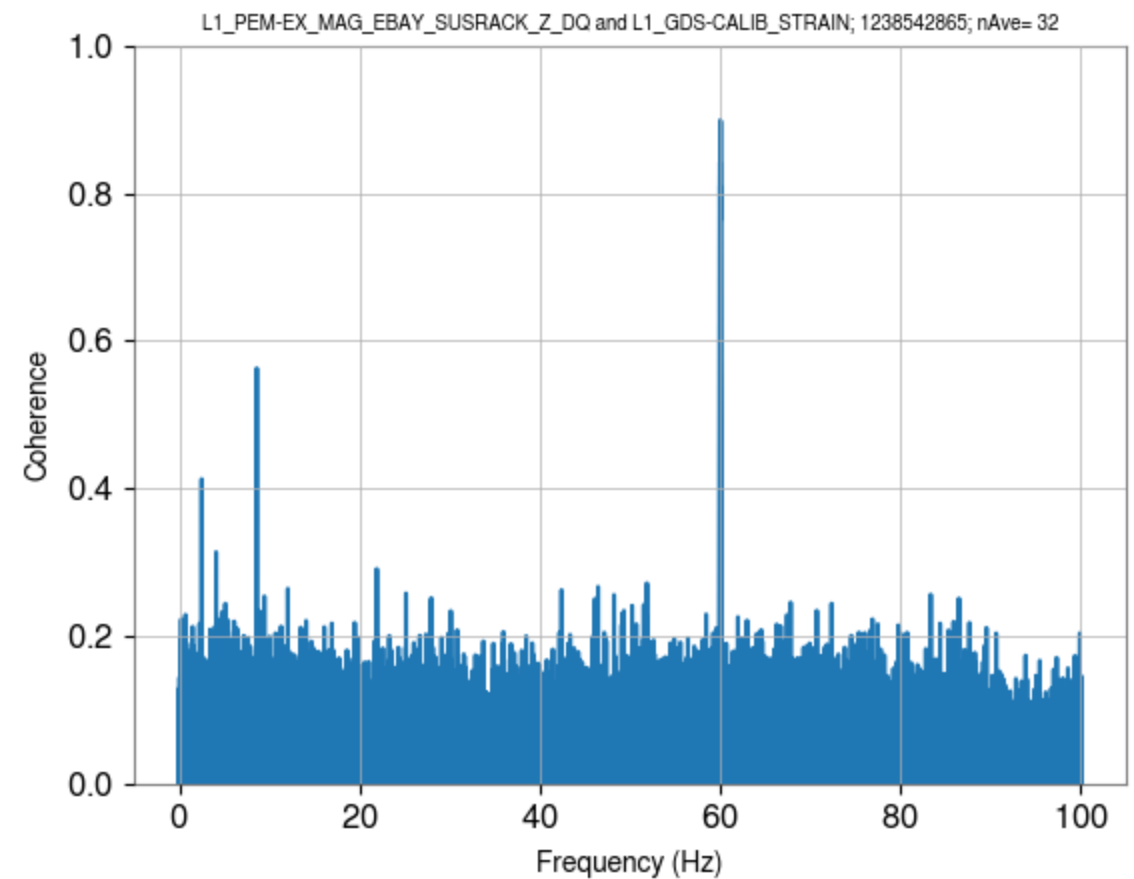


Big coil injections, but no LEMIs yet (about 2 weeks away).
LLO has LEMIs up, but no large coil injections

LLO: FSCANS



April 13, 2019

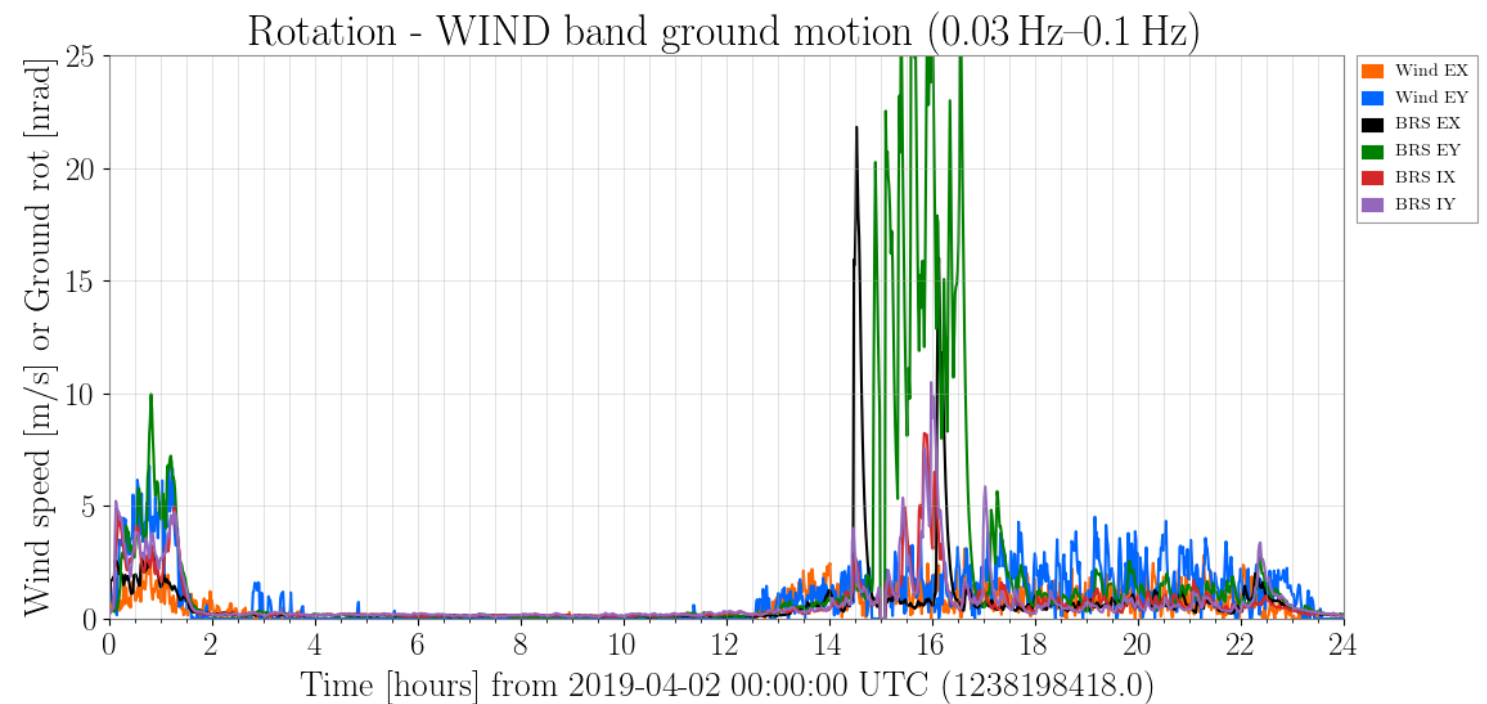


Week of April 6th

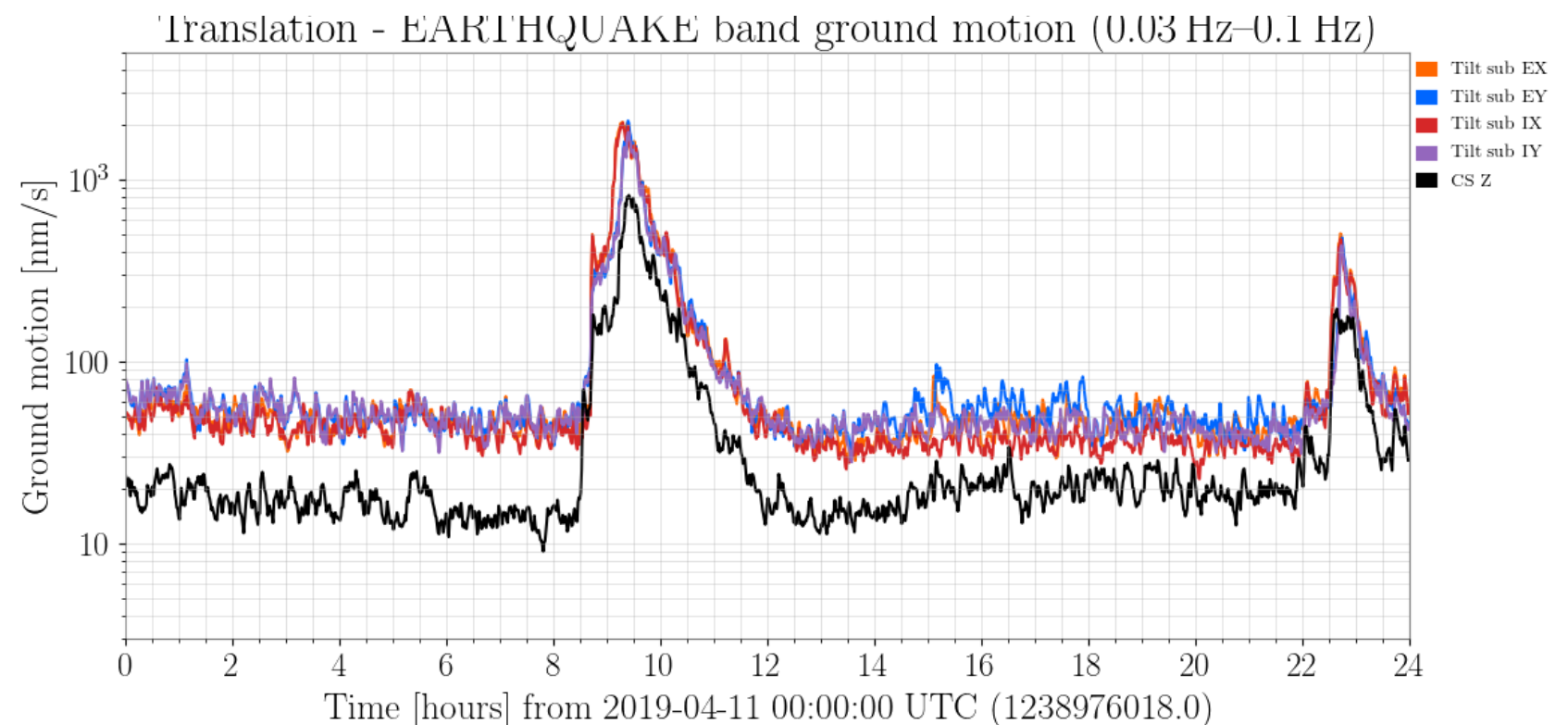
Looks much better than Hanford!

LLO: GROUND MOTION

Connection between
ground motion and
ETMY on April 2



Earthquake on
April 11



LLO: OTHER

- LSC-POP_A_LF_OUT_DQ wins HVeto
- Squeezing causing lock loss April 11 & 8
- ISS peaks in spectra at 2.3, 4.6, and 6.9 kHz since Saturday April 6 ([aLOG](#))
- PCAL spectra look good
- Unable to lock on Sunday due to weather