



STOCHASTIC-DETCHAR UPDATES: MAY 28

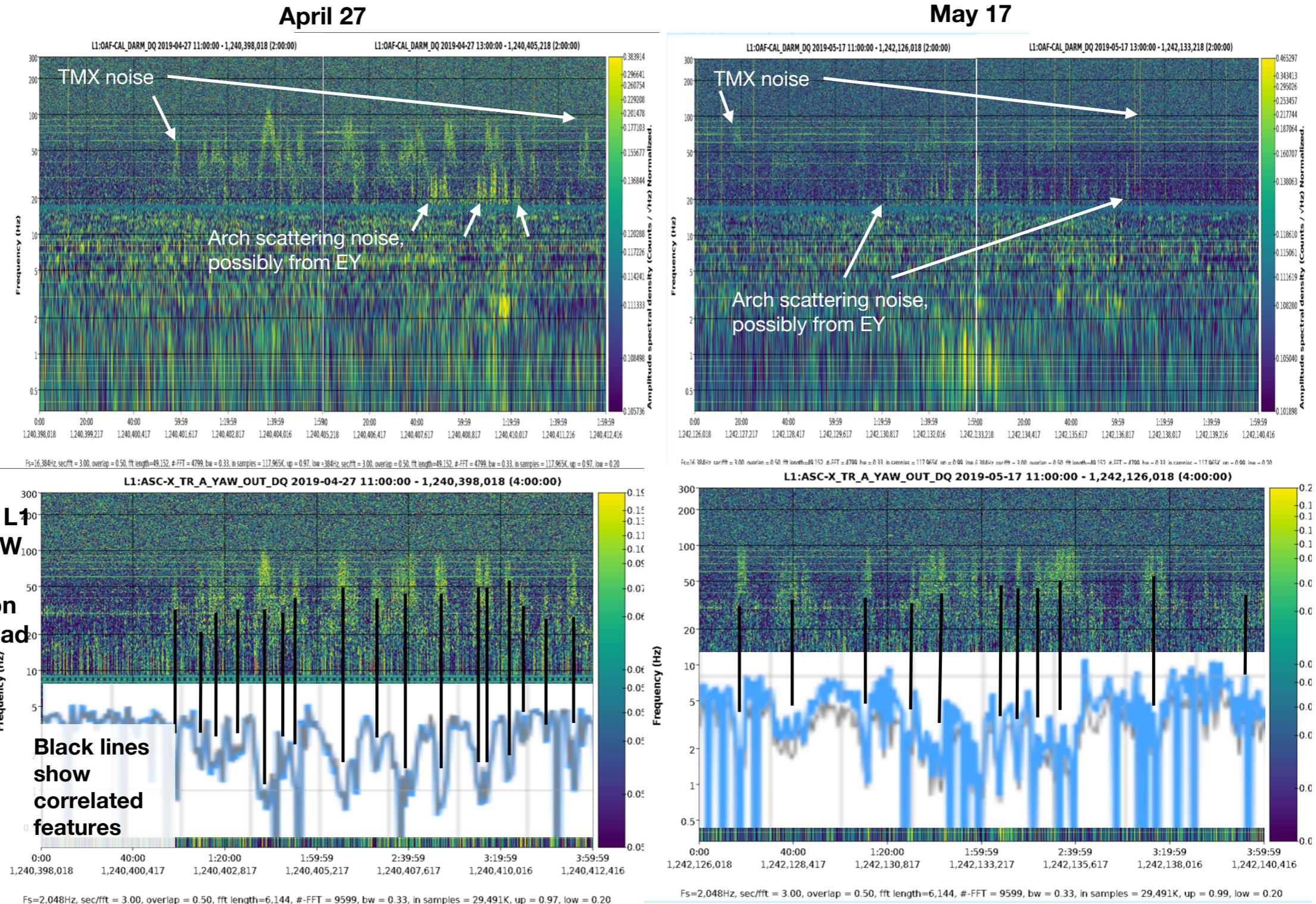
Rich Ormiston

LLO - RANGE DROPS FROM EX

- The big drops in LLO range with anthropogenic vibrations are strongly correlated with what looks like scattered light on the TMX diodes.
- The range-correlated noise has higher SNR in the TMX diode signals than in DARM, indicating that the TMX diodes witness the noise before it is combined with other noise in DARM.
- aLOG 46184

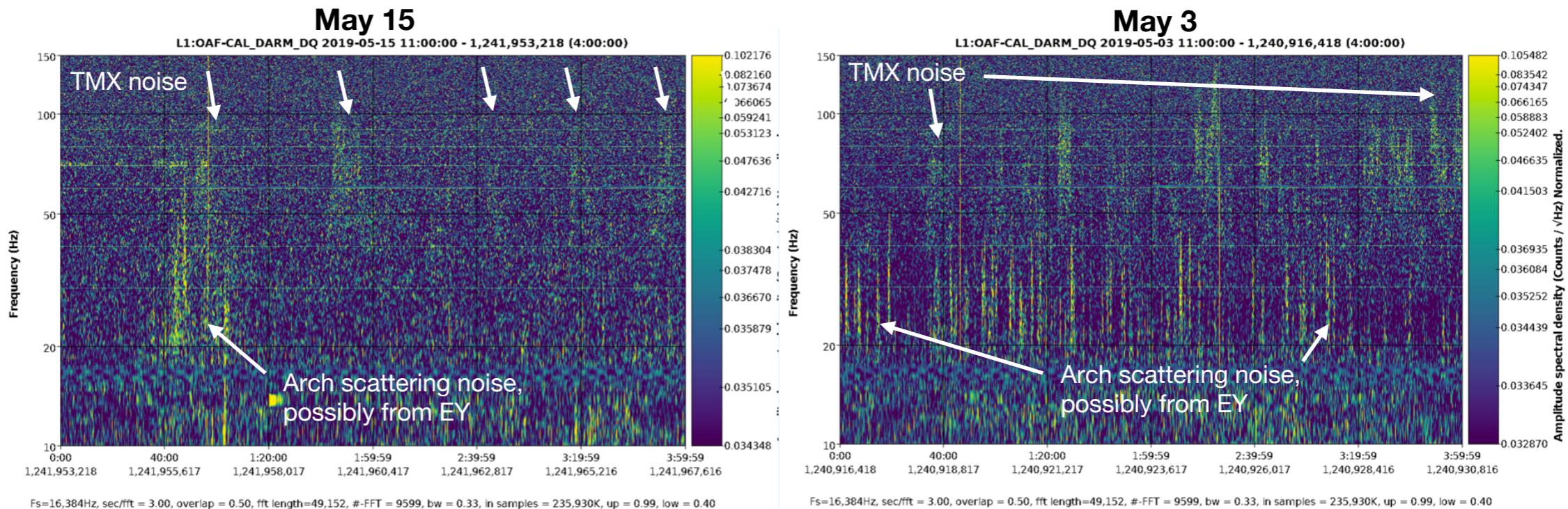
LLO - RANGE DROPS FROM EX

**L1 DARM
4 hours**

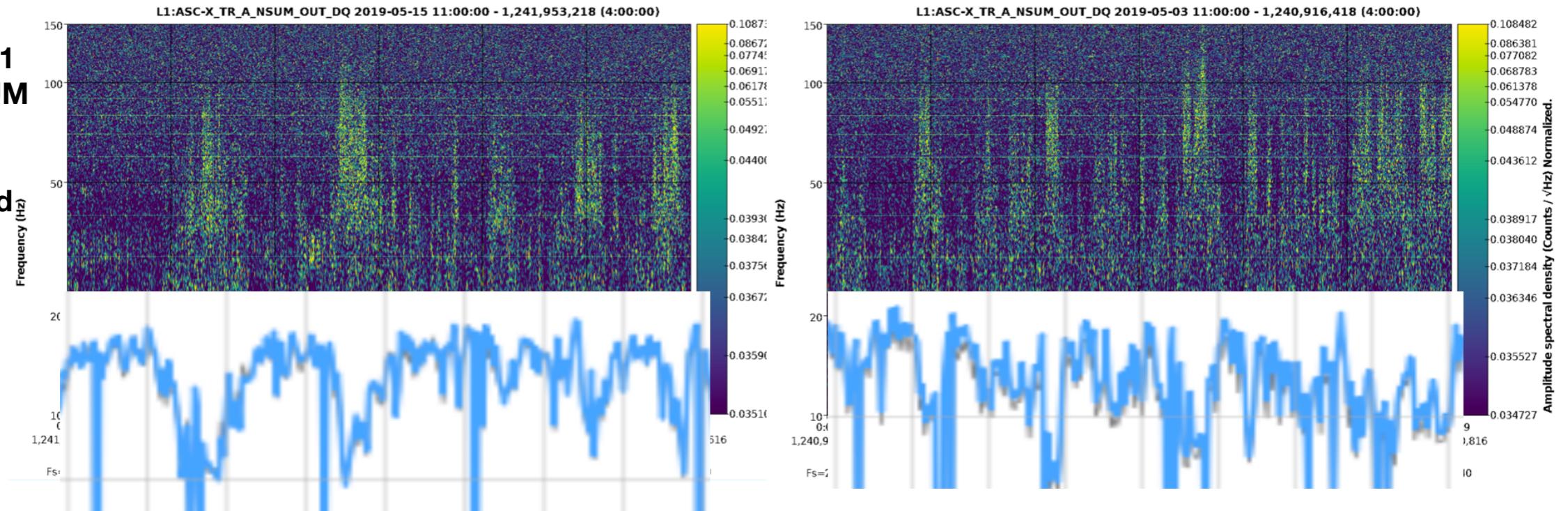


LLO - RANGE DROPS FROM EX

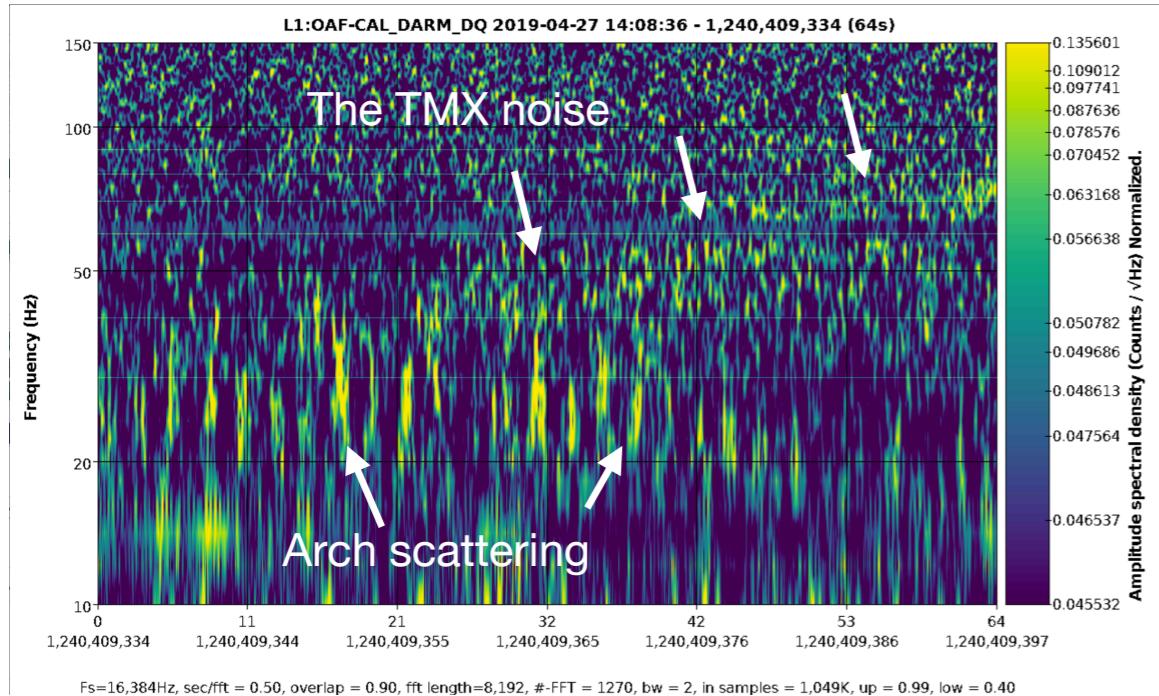
**L1 DARM
4 hours**



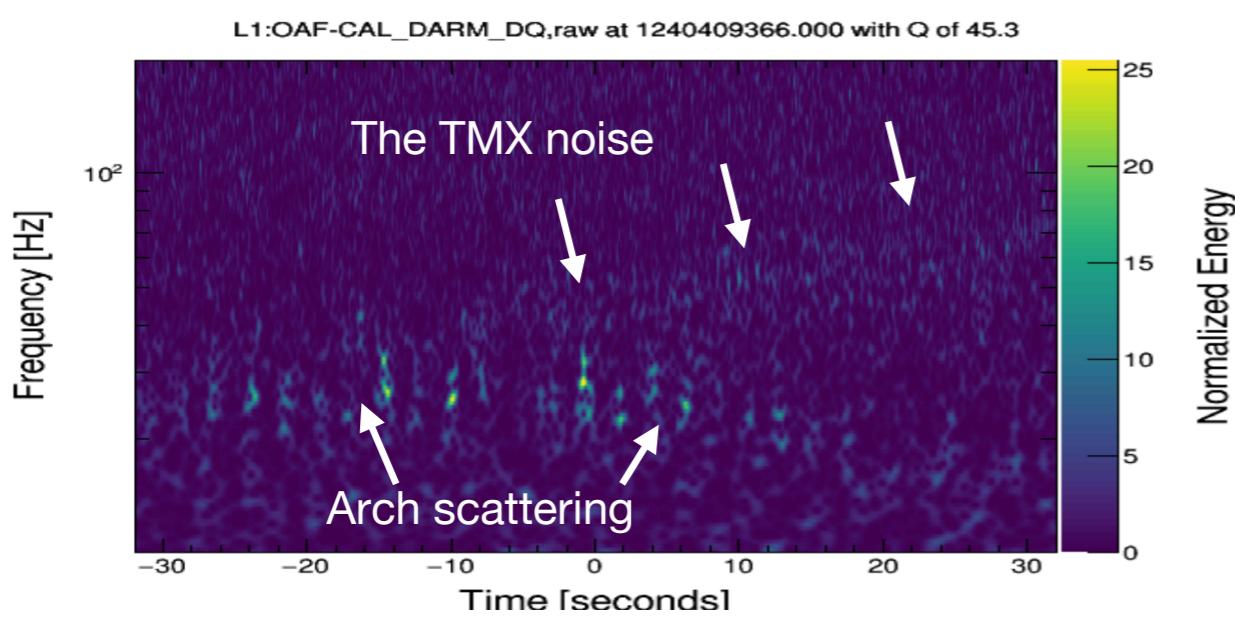
**TMX noise: L1
X_TR_A_NSUM
signal from
transmission
monitor quad
photodiode**



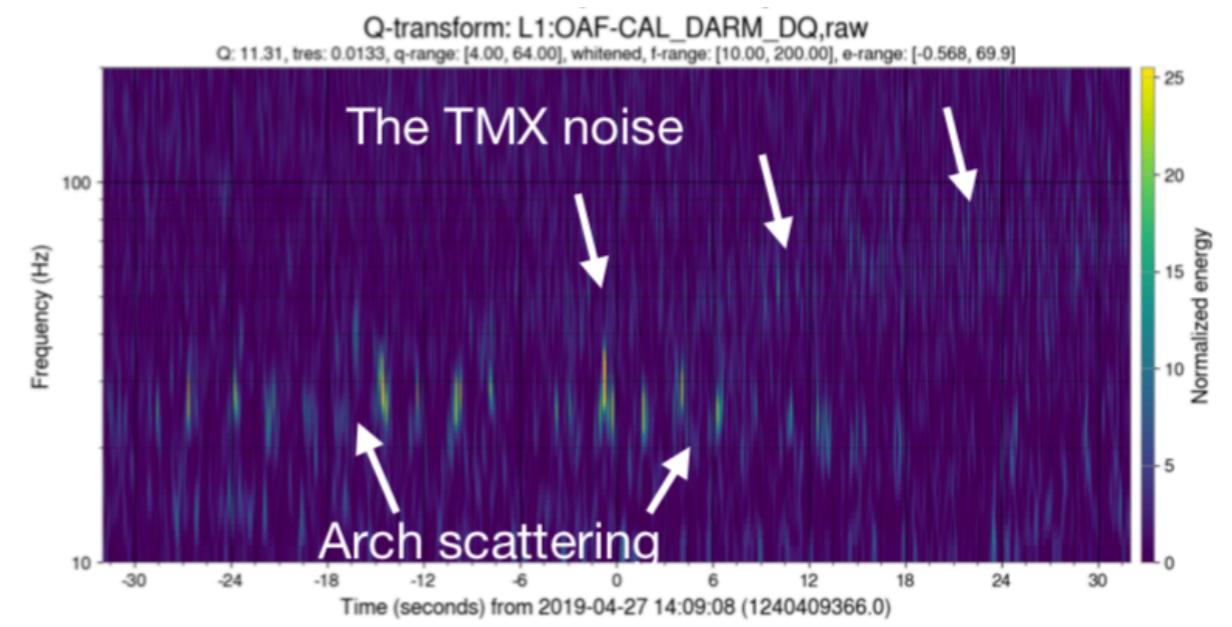
LLO - RANGE DROPS FROM EX



Arch Scattering != TMX Noise



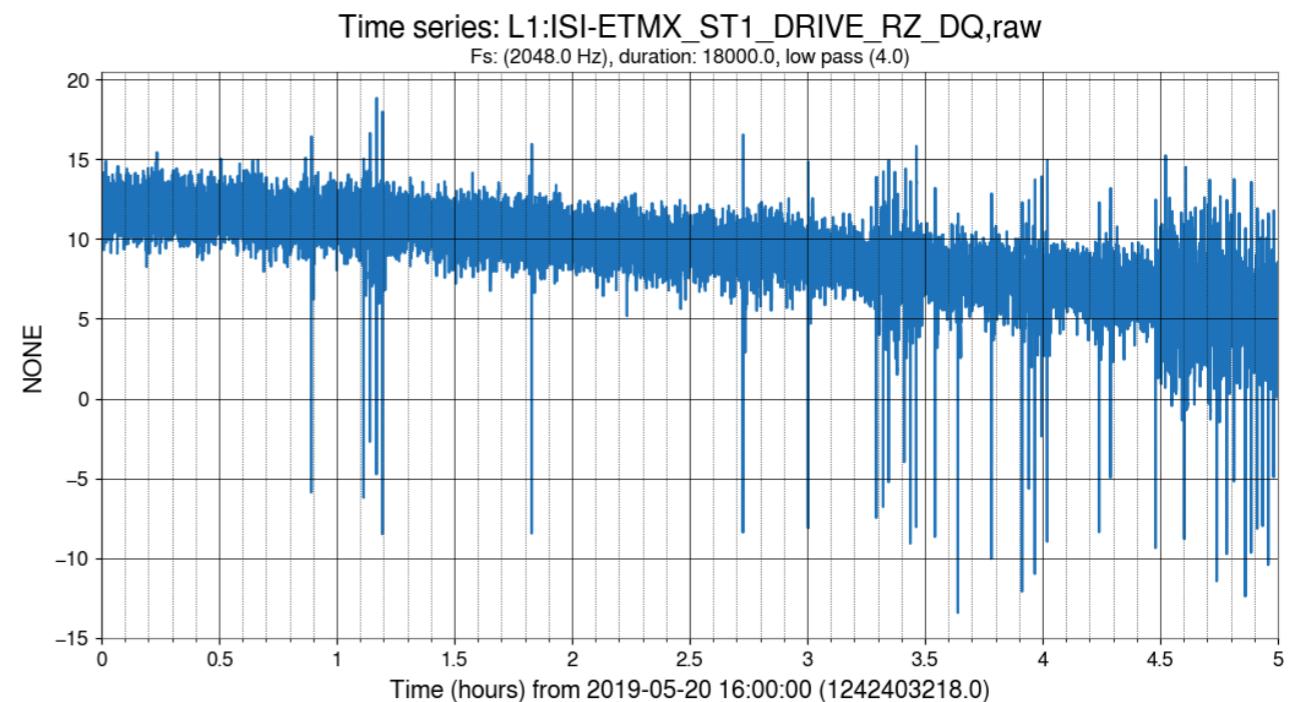
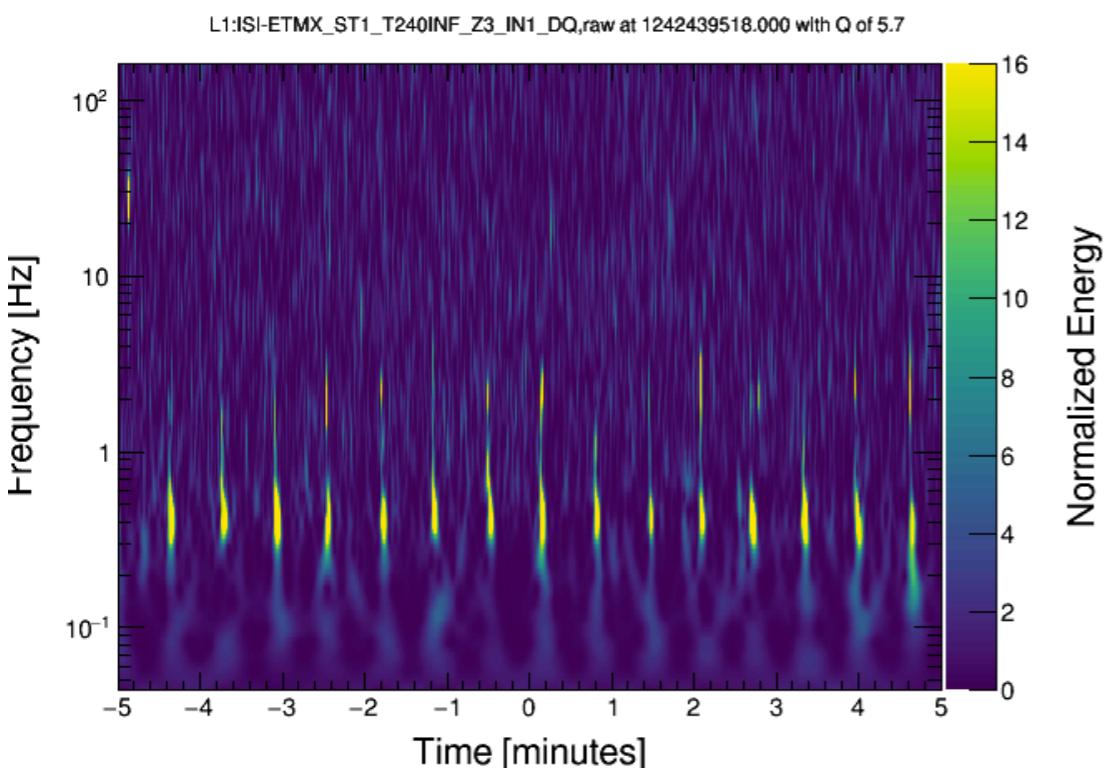
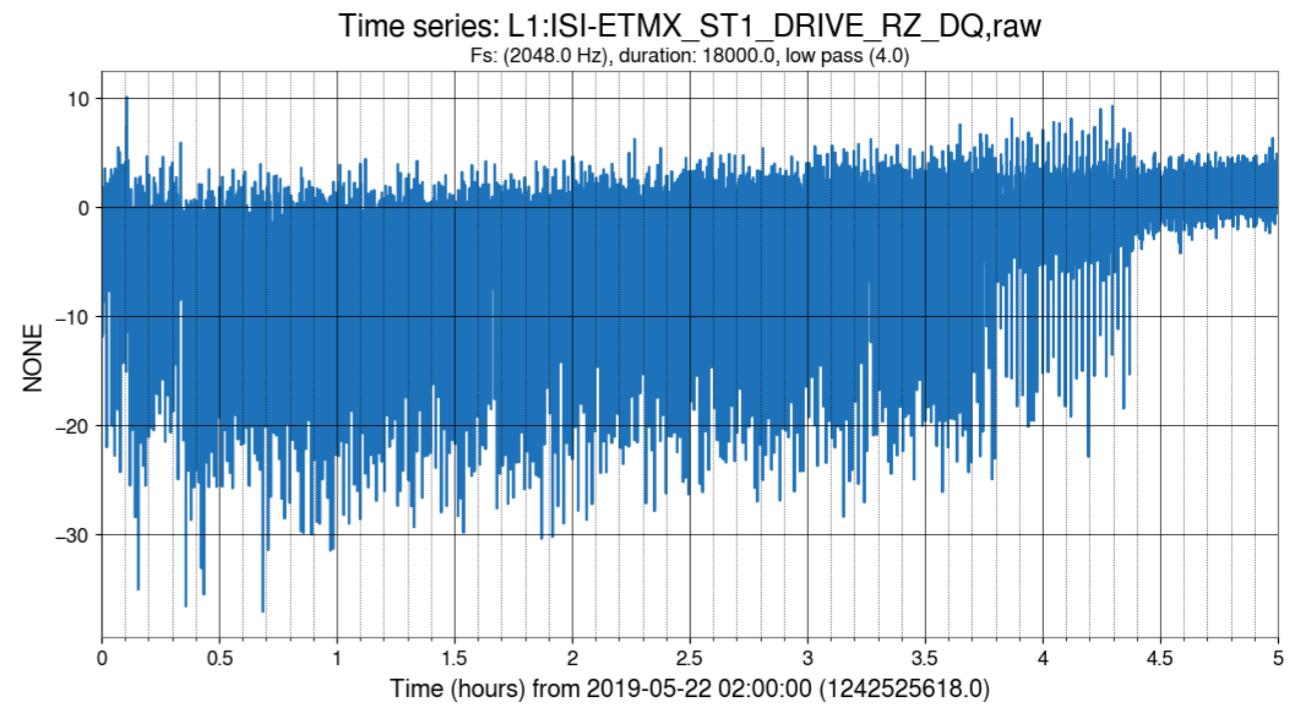
Omega Scan



Q-Transform

LLO - ETMX ISI GLITCHING

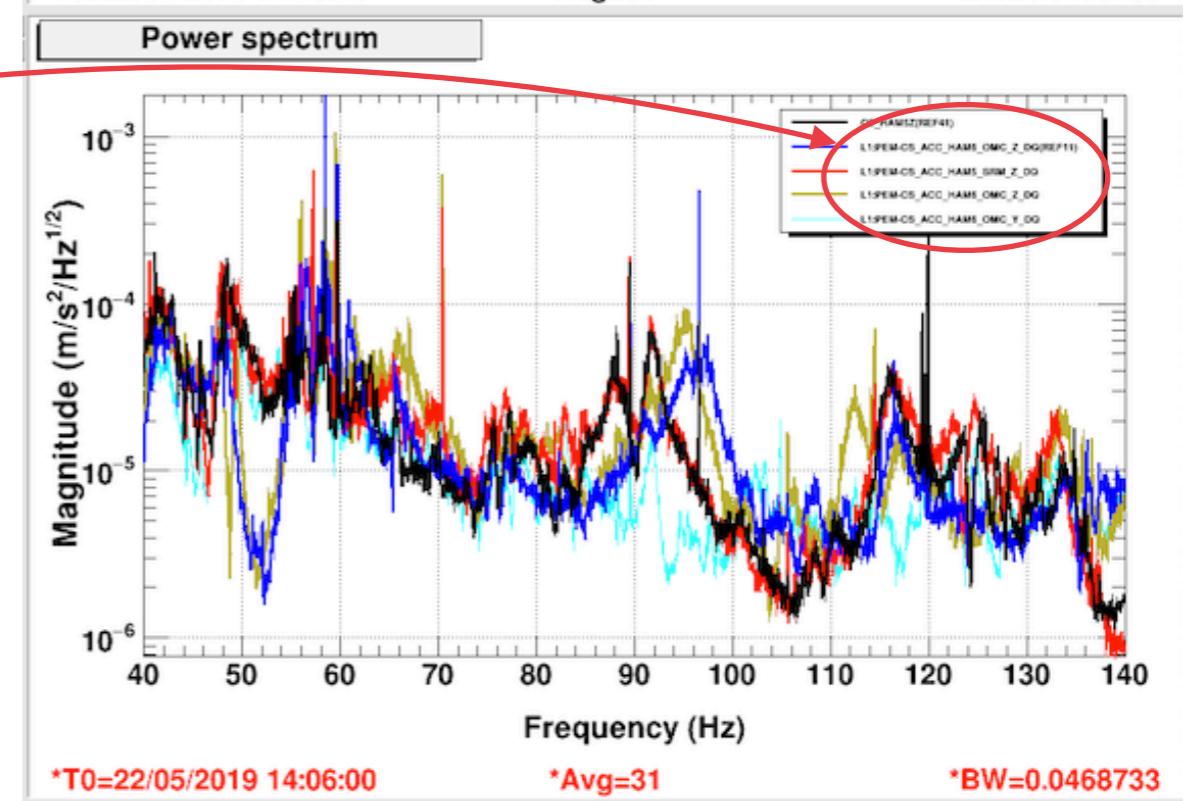
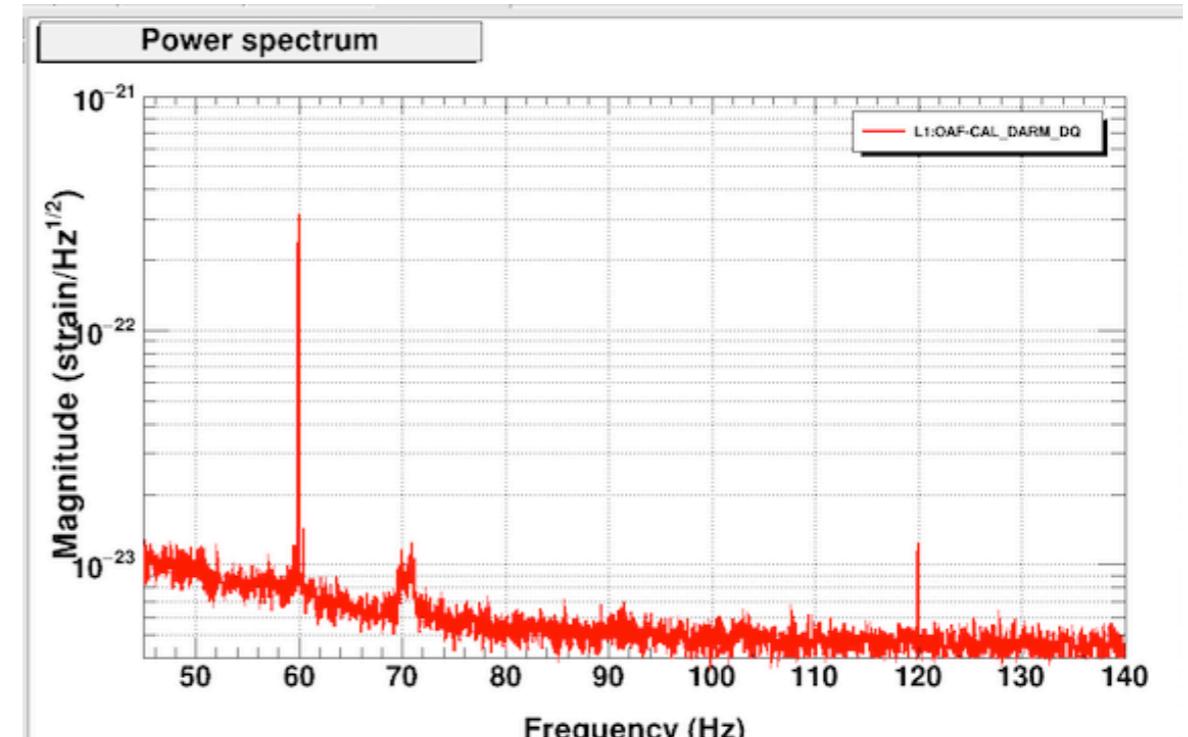
- Starts May 20th
- Occurs every ~40 seconds
- Not coupled into DARM
- [aLOG 46182](#)



LLO - 70HZ NOISE (AGAIN)

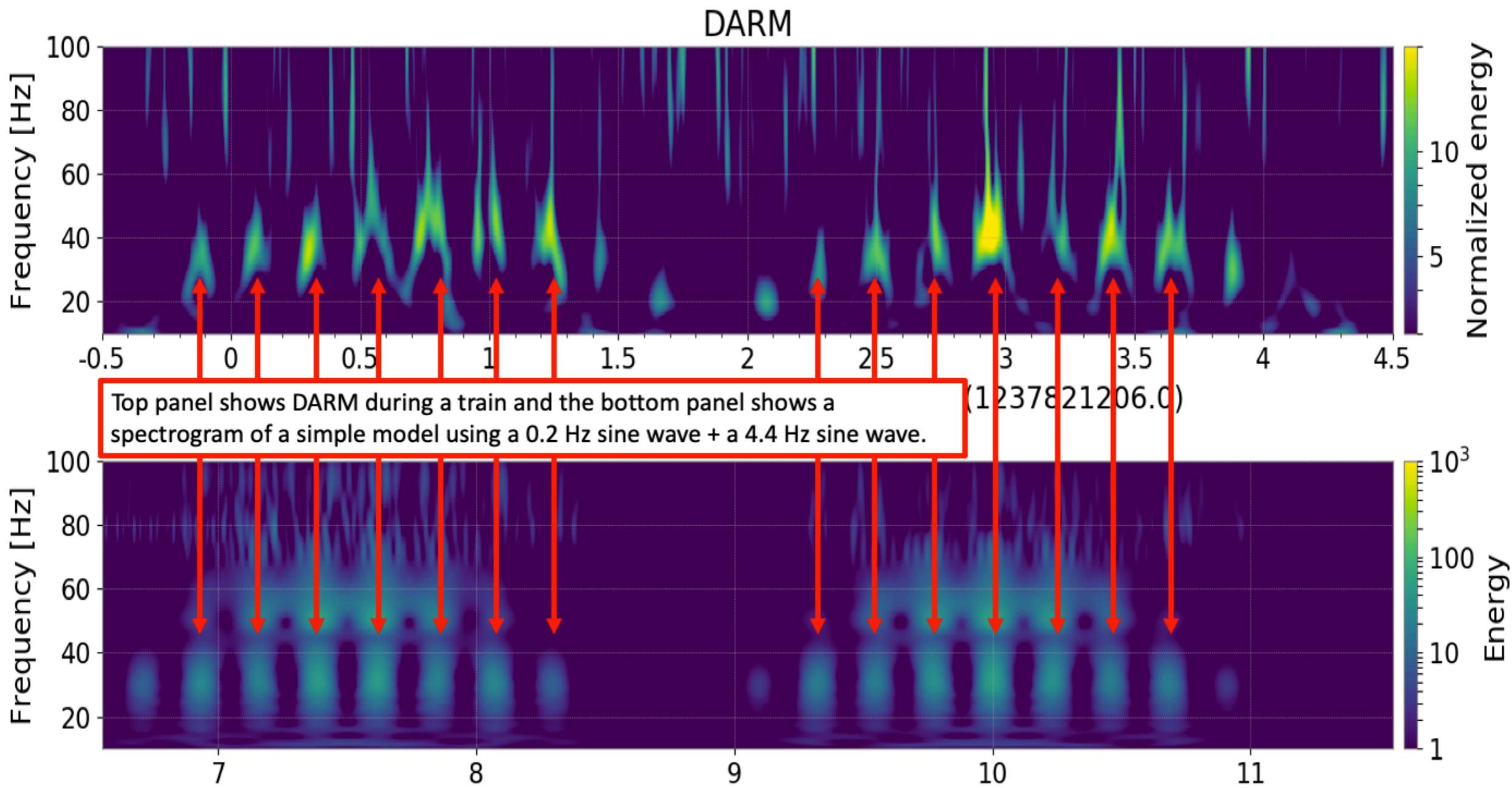
- 70Hz Noise in Ham5/6 Area
- Intermittent
- Seen by accelerometers
- aLOG 46149

ACC_HAM{5..6}

LLO - ANTHROPOGENIC NOISE

EY Shaker Injections look like 'daytime noise' ([aLOG 46089](#))



LLO - ANTHROPOGENIC NOISE

...a train that looks a lot like our injection in DARM, but not quite the same frequency (train looks to be more like ~4 Hz)

