

The modules are shielded, then the data rate jumps at ~1am and 7am do not show up again.

Improving the grounding:

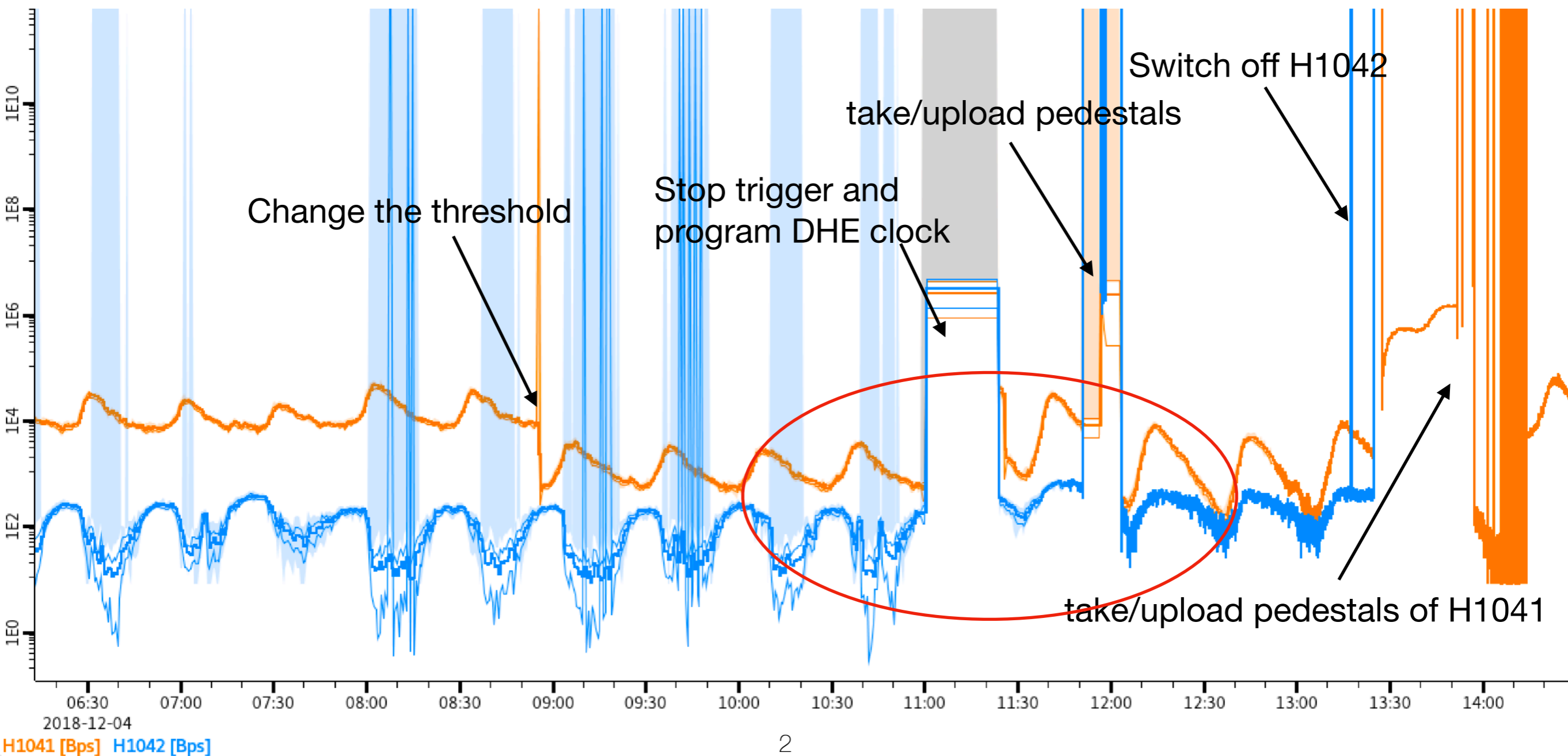
The AGND/DGND (from Kapton) is grounded to the rack, which is the common grounding point.

The cooling block is also grounded to the rack



H1041 -> DHE53  
H1042 -> DHE54

In the beginning, the oscillation of both modules has a 180deg shift in phase, then we notice the clock of several other DHEs are not correctly programmed, after DHEs clock were programmed, the shift disappeared.

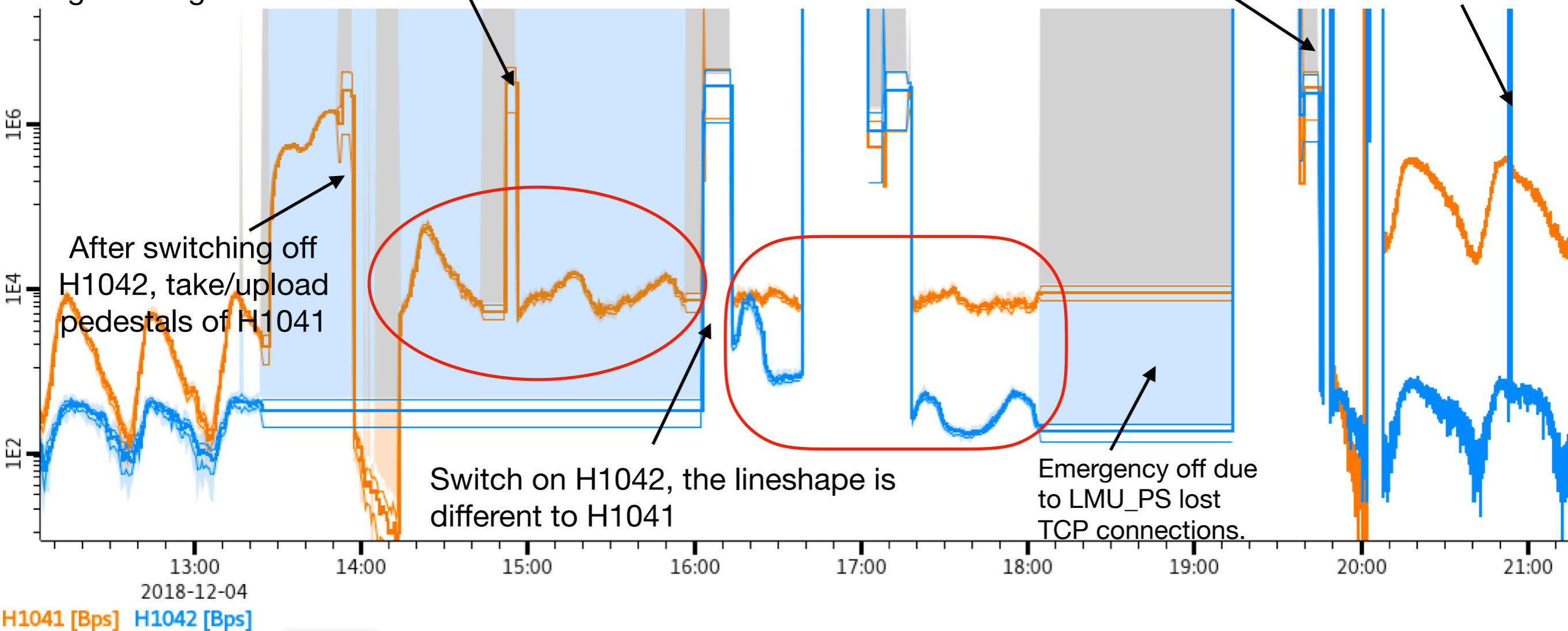


## continue...

Disconnected DHC 50 from FTSW, and reconnected, DHC50 lost synchronization from FTSW, then the lineshape of oscillation got changed

Swap modules and DHEs, i.e. H1041->DHE54, H1042->DHE53, DHC stay unsynchronized from FTSW, the lineshape looks the same as before

Synchronize DHC to FTSW by programming DHC clock, lineshape did not change



\*After disconnecting DHC from FTSW, the DHE/DHI channels appeared to be disconnected. This was not observed before moving DHH to the top of Belle2.