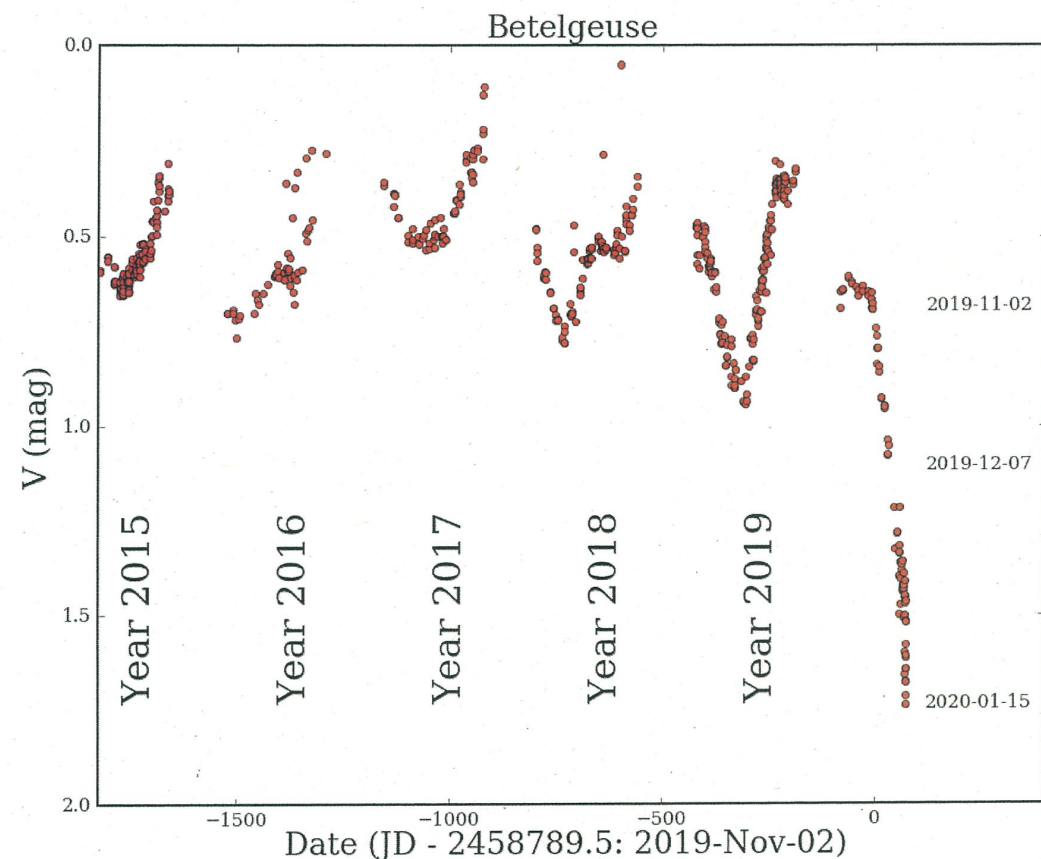
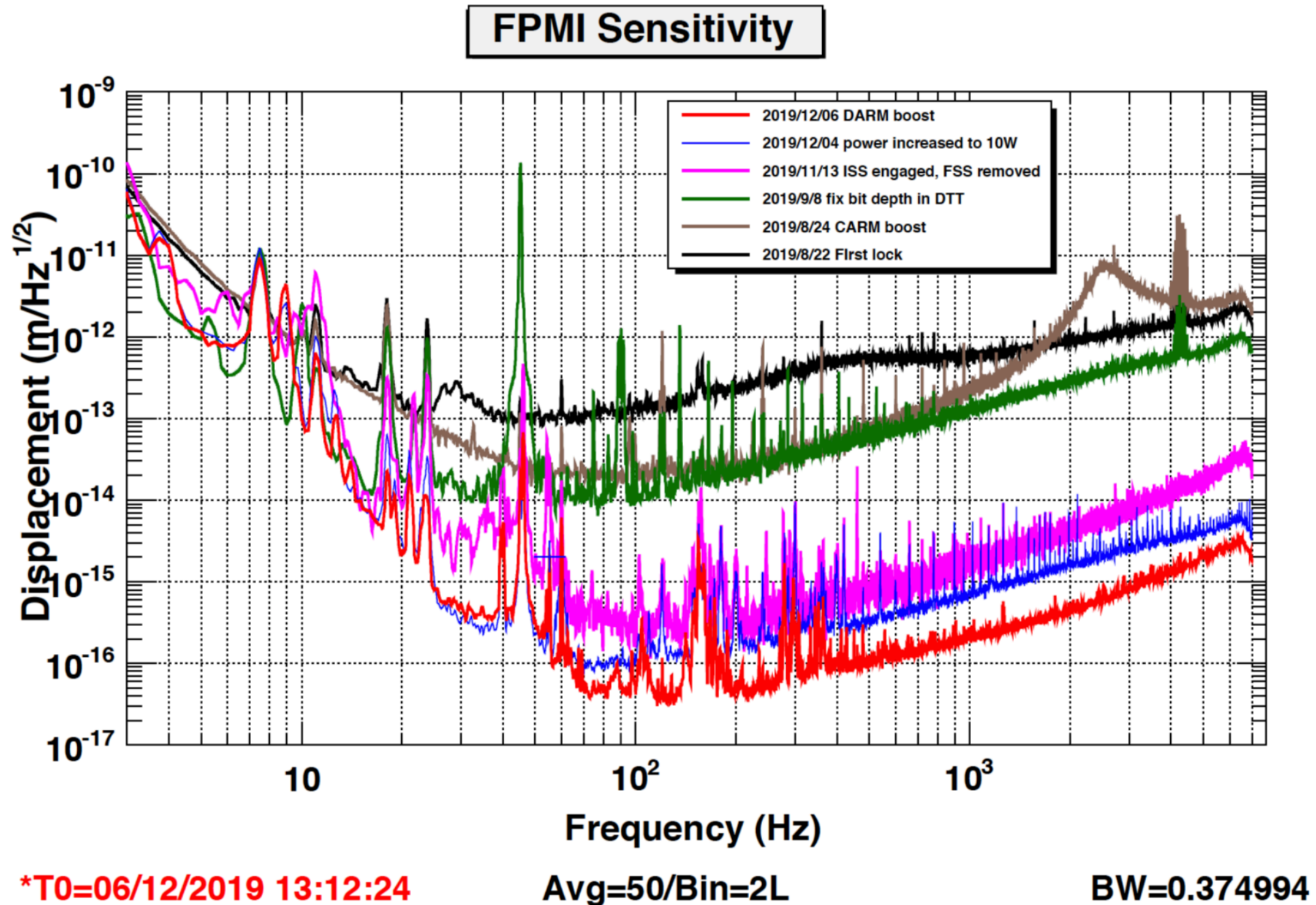


KAGRA detector status & Update of the KAGRA PEM from last meeting

Virgo-KAGRA meeting
2020/01/22
Takaaki Yokozawa



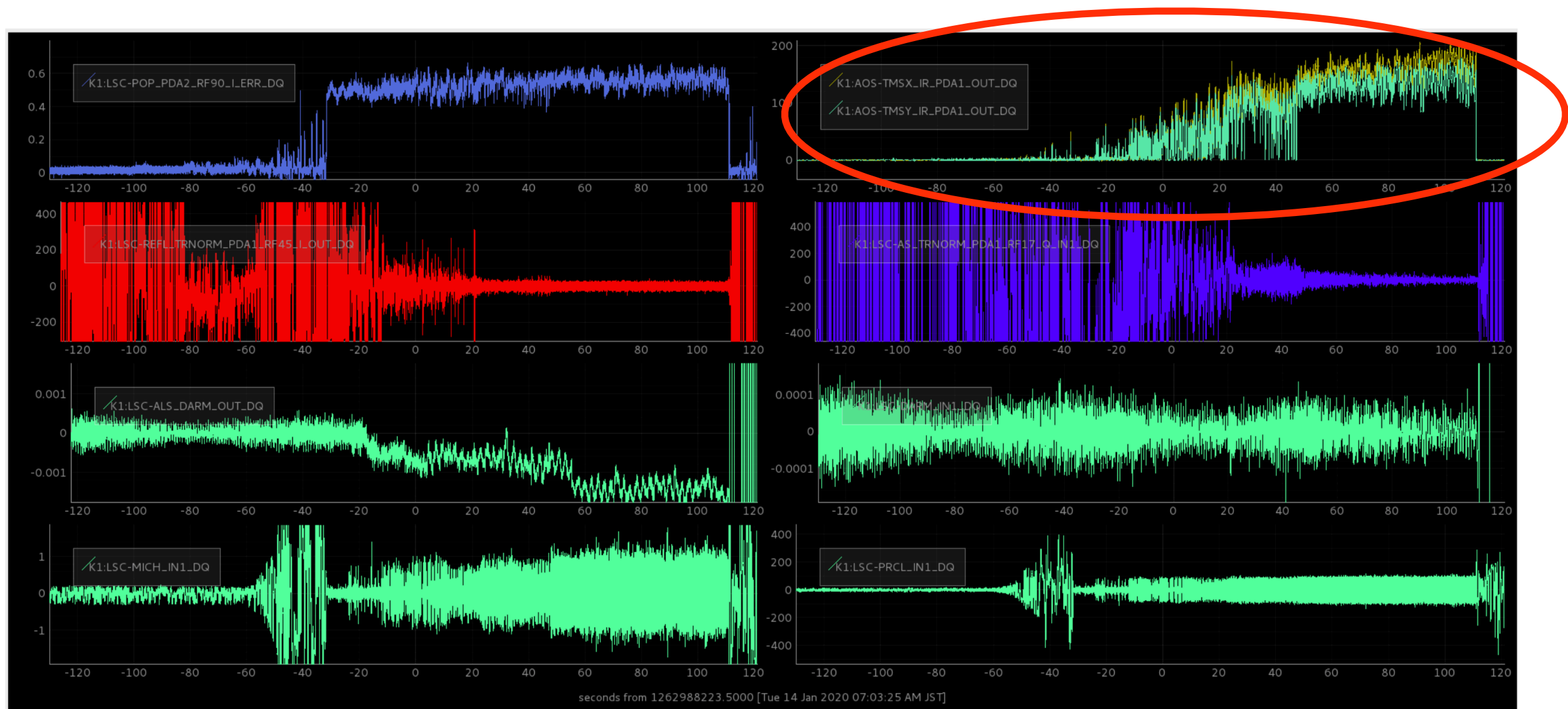
KAGRA detector status



- Best sensitivity is achieved at 6th Dec. (BNS detection range is about 25kHz)

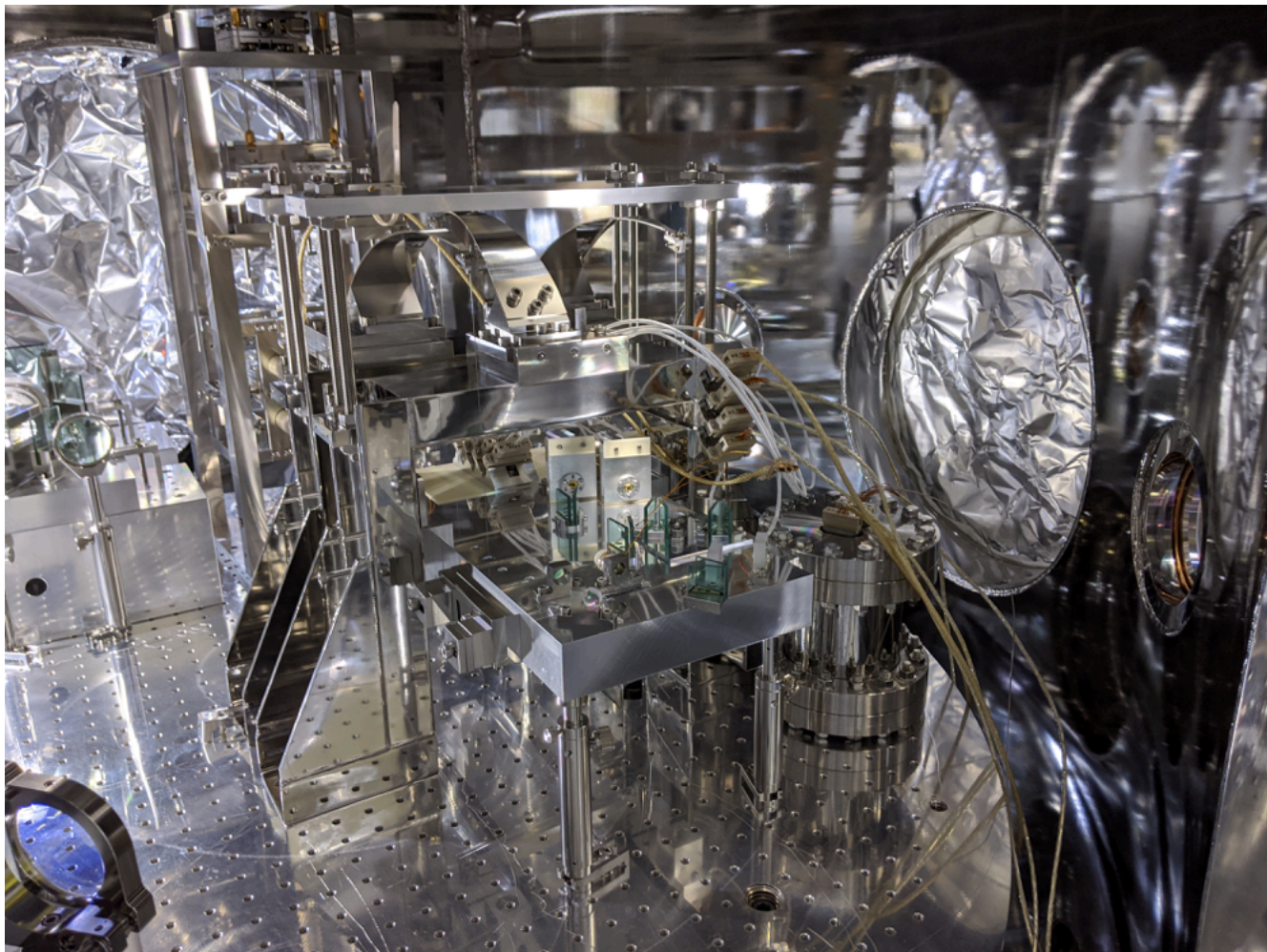
KAGRA detector status (This 1 month)

- Engineering run was conducted from 17th to 24th Dec.
 - Check the stability of KAGRA FPMI interferometer
 - Total duty cycle was about 86%
 - The BNS range was 5.7 kpc - 8.6 kpc
 - The longest lock was 16.5 hour
- Lock acquisition trial toward the PRFPMI is ongoing



KAGRA detector status (This 1 month)

- Alignment Sensing and Control implementation was ongoing
 - For the PRFPMI
- OMC installation is ongoing
 - We installed into the chamber and started the pumping down



PEM and noise hunting

- PEM activity is not so active in this one month
- Stop the FFU and air cooler at the same time.
But we couldn't find the significant improvement in the noise floor
- We held the acoustic injection to IFO refl table
 - We can evaluate the coupling function, but we need to investigate the noise path
 - Master thesis of Taiki Tanaka

