

KAGRA status

Virgo-KAGRA PEM meeting

2020/12/23

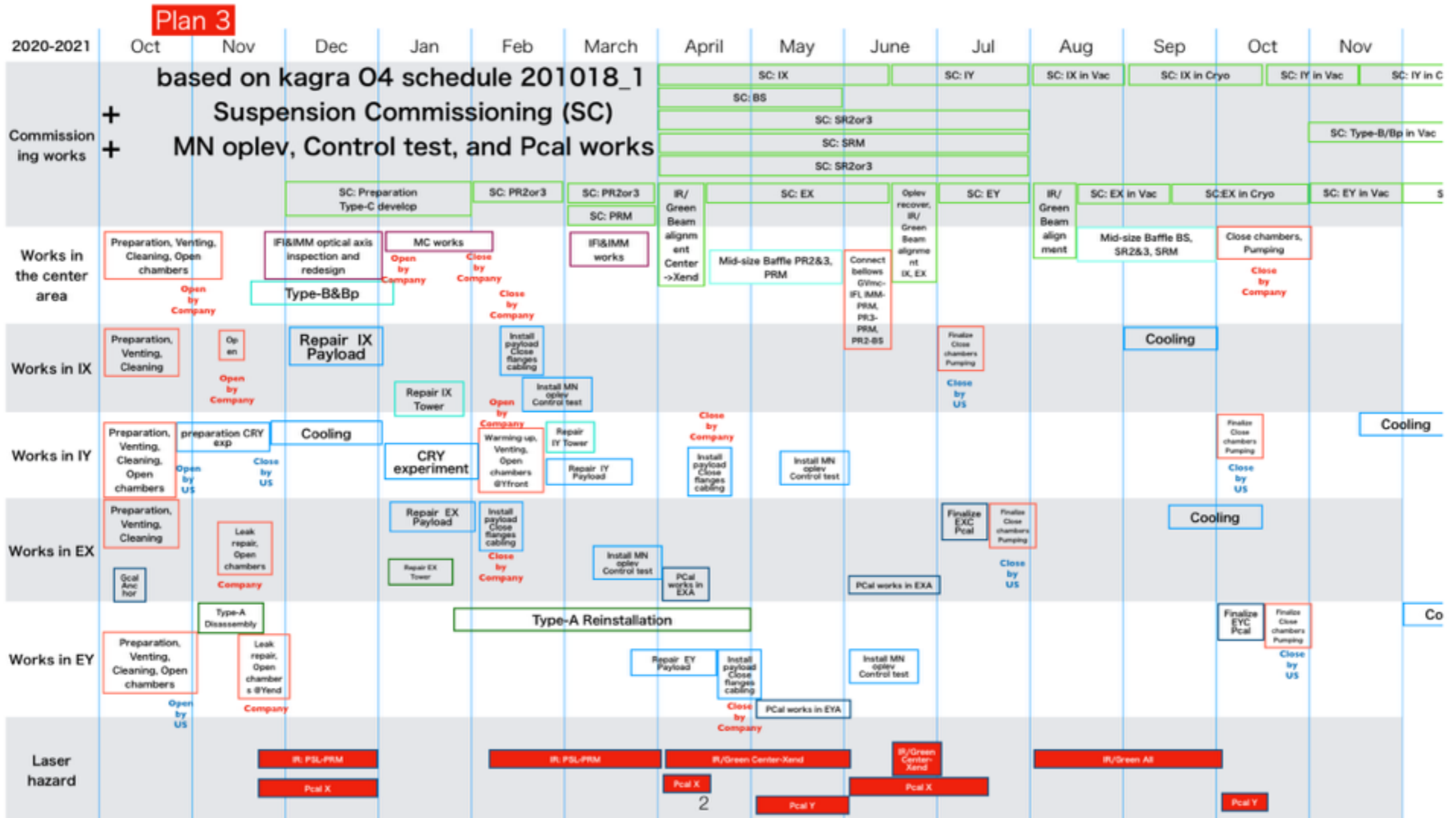
Takaaki Yokozawa

Contents of this meeting

Agenda

- KAGRA detector status & Update of the KAGRA PEM from last meeting (Yokozawa)
 - Status of PEM injection paper (Washimi)
- the ongoing infrastructure mitigation works for AdV+ (Federico if have)
- Investigation about lightening (Washimi, Kamiel)
 - (Again) Investigation of the spectrum
 - Provide the information from Blitzortung
- Project of the KAGRA newtonian noise measurements
 - Theory
 - Seismometer analysis(Francesca)
 - Water fluid, Infrasound (Washimi)

KAGRA schedule



- IX, EX payload repair work
- IY started cooling down
- Scattered light investigation in IMM area

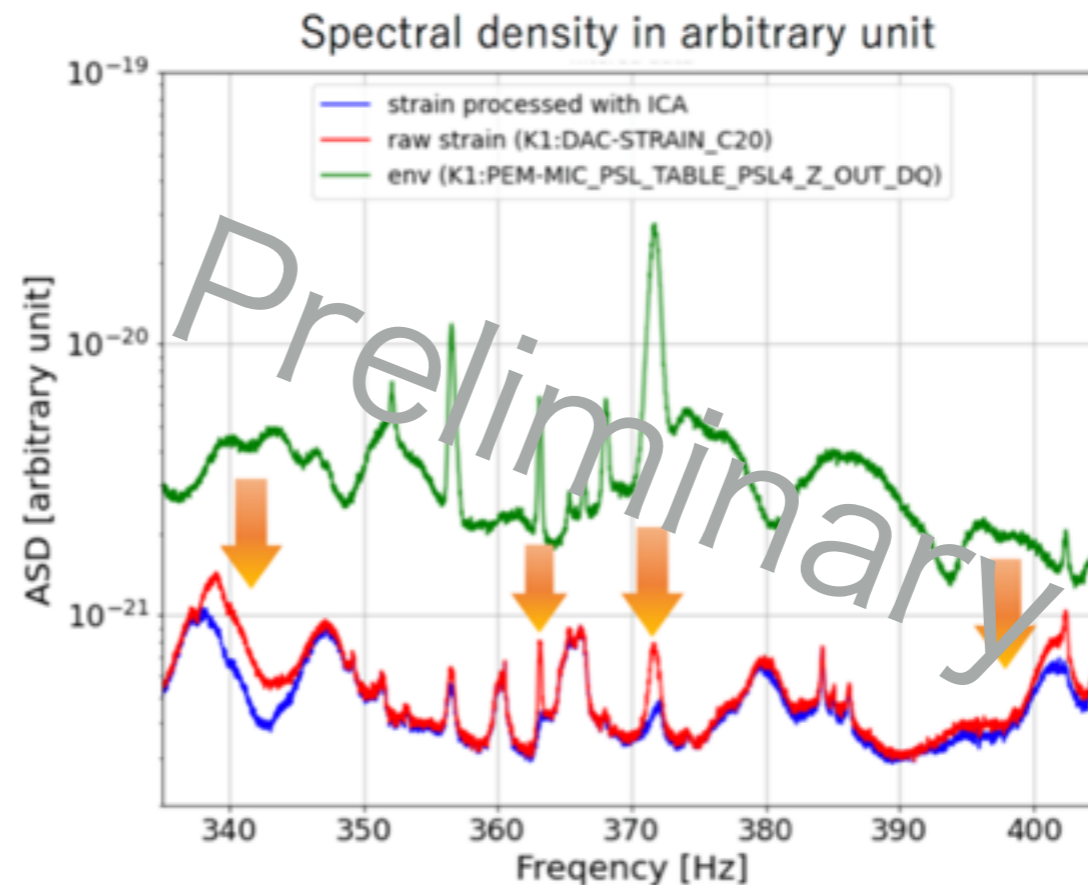
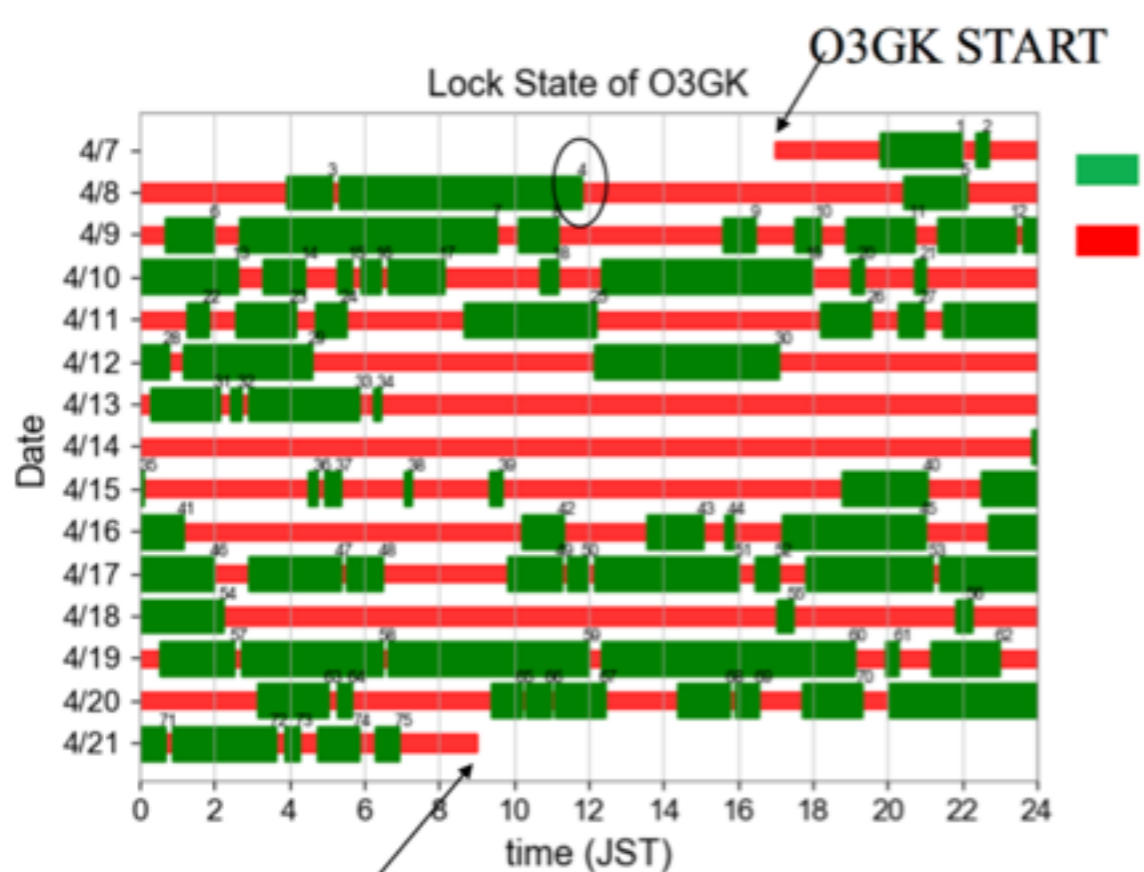
PEM activities

- We prepared own desk inside the experimental area



PEM activities

- Temperature control
 - After O3GK, the temperature became higher because of tuning on the funs and injecting the dry air to keep the chamber good state
 - Temperature control became difficult, but now it became rather stable
- Lock loss analysis during O3GK (PEM?)
- Offline noise subtraction using independent component analysis
 - Not explain detail, but we succeeded to subtract acoustic noise from DARM



PEM activities

- Water fluid analysis
 - The detail will be explained by Washimi-san
- Lightning issue
 - The discussion was done in previous meeting, but if we have time I want to ask Washimi-san to explain again
 - Lightning list during O3
- Newtonian noise investigation
 - I read Francesca's thesis and wrote comments
 - Discussion of schedule
 - I asked Miyo-san to make frame file of the microphone
 - Publication plan
 - Future NN noise investigation(continued discussion item)