

Detchar activity summary

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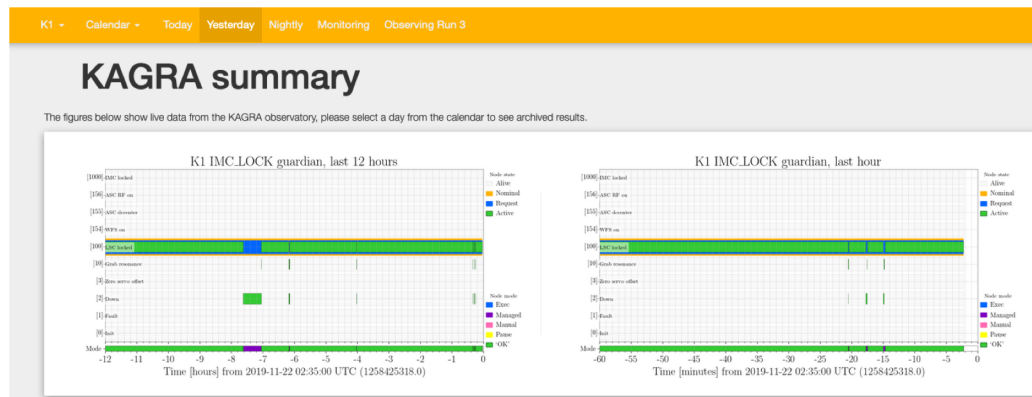
LVK PEM meeting

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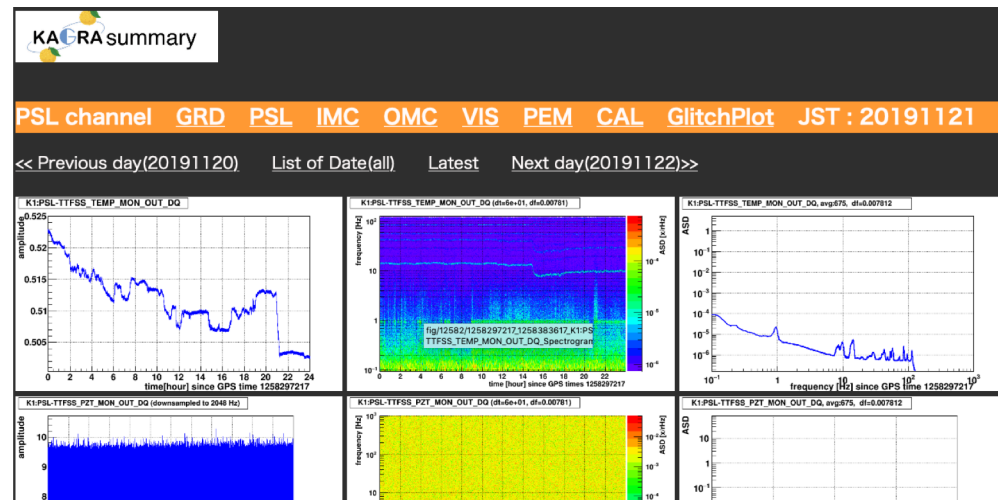
Summary page

- Daily summary page
 - Accessible only from KAGRA network
 - Updated in Sep. by Alex and Siddharth @LIGO.
 - Maintained by Oshino-san/Yokozawa-san and so on.
- Nightly summary page
 - LIGO summary page for limited time to eliminate human activity effect.
 - Silent run or very early morning(5am-6am)



Yuzu summary page

- Developed by Yuzurihara-san.
- Time series / Spectrogram / Spectrum for many channels are provided twice in a day (0-6 am result at 11am, 0-24 result at 6am +1)
 - By using Kashiwa main server, it can process more channels than daily summary page
 - Past summary viewer gives plots for many days at once.
 - JST based
 - Accessible from remote site



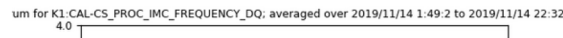
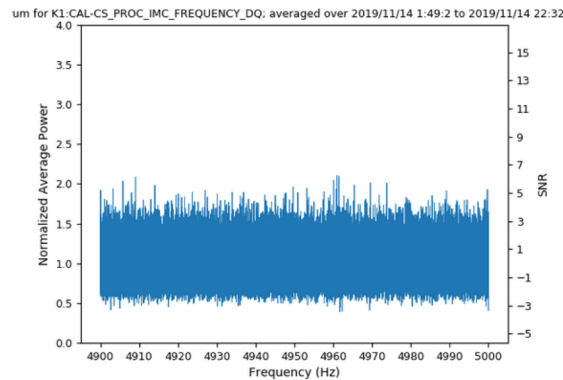
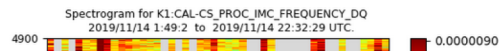
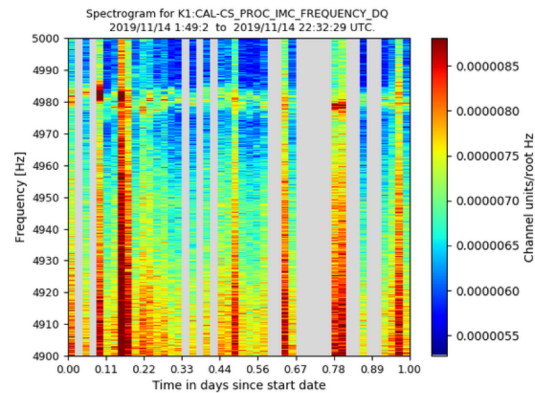
Line noise study

- FScan
 - Managed by Oshino-san
 - Used for line noise status during ER

FSCAN PLOTS

Click on a plot to see the .png source file. Click on a link below a plot to get the SFT timestamps, the spectrogram data file, frequency vs power and SNR data file.

Fscan Plots: Fscans Plots (Reverse Order):



SFT Timestamps:
[spec_4900.00_5000.00_K1_1257724818_12578](#)
Spectrogram data:
[spec_4900.00_5000.00_K1_1257724818_12578](#)
Freq. vs Power:
[spec_4900.00_5000.00_K1_1257724818_12578](#)
Freq. vs Power (Sorted):
[spec_4900.00_5000.00_K1_1257724818_12578](#)
List of found combs :
[spec_4900.00_5000.00_K1_1257724818_12578](#)

NoEMi

- Installation is ongoing by Ornella @Virgo.
 - We have google spread sheet line noise database (developed by Yokozawa-san),
 - but we will move to NoEMi line database when prepared

Glitch study

- Omicron
 - Available on Kamioka server.
 - Automatically run every 15 minutes. (Automation by Yamamoto-san)
 - Planning to install in Kashiwa main server (pending ?)

GlitchPlot

- Developed by Yuzurihara-san and me.
- GlitchPlot helps to investigate the cause of glitch/lock loss by providing basic plots of trigger and auxiliary channels.
 - The result is available on Yuzu summary page.
 - Voting form for the glitch origin
 - Opinions are summarized in a google spread sheet

KAGRA summary

GlitchPlot channel GRD PSL IMC OMC VIS PEM CAL GlitchPlot
20191114

Back to trigger_list List of Date(all)

Yuzu summary needs your help to classify the glitch origin.

1. Fill your name
Your name:

2. Are you familiar with the latest KAGRA?
 Yes (On-site researcher) No (Off-site researcher)

3-1. Suspect the glitch origin.
No idea:

3-2. If you want, you can specify the sensor and location where the glitch was found.
Sensor: Location:

4. Add any suspects about the origin, comment, request, or fan letter to developers.
comment or fan letter:

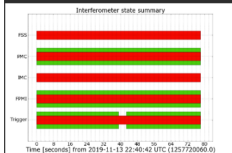
Submit

Thank you in advance, we really appreciate your help.
You can see the result in [GlitchPlot Catalog](#).

Trigger information

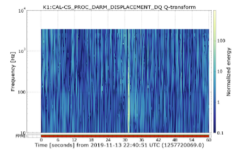
index	JST time	GPS time	Interferometer	max SNR	frequency [Hz] @ max SNR	duration [s]	trigger channel
1	2019 11 14 07:41:22.0	1257720099.0	during_lock	1389	95.4	3.750	K1:CAL-CS_PROC_DARM_DISPLAC

Interferometer state summary

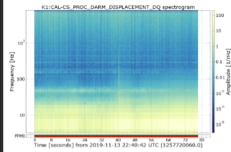


Triggered by K1:CAL-CS_PROC_DARM_DISPLACEMENT_DQ at GPS=1257720099.0 JST=2019 07:41:22.0

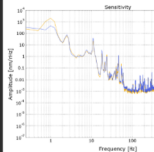
K1:CAL-CS_PROC_DARM_DISPLACEMENT_DQ Q-spectrum



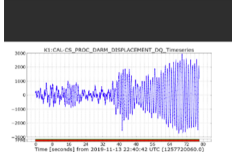
K1:CAL-CS_PROC_DARM_DISPLACEMENT_DQ spectrogram



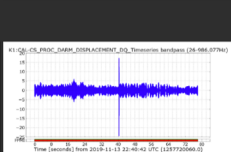
Sensitivity



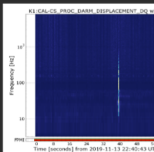
K1:CAL-CS_PROC_DARM_DISPLACEMENT_DQ Transients



K1:CAL-CS_PROC_DARM_DISPLACEMENT_DQ Transients (24.666-677Hz)



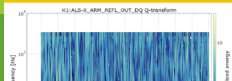
K1:CAL-CS_PROC_DARM_DISPLACEMENT_DQ S2



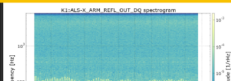
Suggested channels (1) (K1:CAL-CS_PROC_DARM_DISPLACEMENT_DQ) at GPS=1257720099 JST=2019 11 14 07:41:22.0

Suggested channels (2) (K1:CAL-CS_PROC_DARM_DISPLACEMENT_DQ) at GPS=1257720099 JST=2019 11 14 07:41:22.0


K1:CAL-S_ARM_REF1_OUT_DQ Q-spectrum



K1:CAL-S_ARM_REF1_OUT_DQ spectrogram



K1:CAL-S_ARM_REF1_OUT_DQ S2



hvento

- Managed by Oshino-san.
- Maintenance is ongoing.

Commissioning tool

- Pastavi (Past data viewer)
 - Developed by Yuzurihara-san, Andrew (@Virgo), and Yamamoto-san
 - Web GUI tool to make plots of old data.
 - * Kamioka server keeps data only ~ 2 weeks

Pastavi (Past data viewer)

now single channel mode : [\[single channel mode\]](#) [\[multiple channel mode\]](#)

1. select date + time

- start time = 2019 / 11 / 22 11 39 10 JST UTC
 - end time = 2019 / 11 / 22 11 41 10
 - duration to future = 200
 - duration to past = 200
- gps_beg = 1256999900 gps_end = 1257000100

2. select channel from form

1. K1:OMC-DCPD_A_OUT_DQ
2. smart method (under construction)

3. select plot type

- TimeSeries WhitenTimeSeries PowerSpectrum AveragePSD
 Spectrogram ManySpectrograms WhitenSpectrogram ManyWhitenSpectrograms

Make plot Reset

- ▶ [Option] Timeseries
- ▶ [Option] WhitenTimeSeries
- ▶ [Option] PowerSpectrum
- ▶ [Option] AveragePSD
- ▶ [Option] Spectrogram
- ▶ [Option] ManySpectrograms
- ▶ [Option] WhitenSpectrogram
- ▶ [Option] ManyWhitenSpectrogram

Make plot

Bruco

- When silent run is performed, it runs every 10 minutes (automated by Yamamoto-san)
- Used to investigate the dominant noise source.

Spectrogram/coherencegram tool

- Developed by me.
- GUI tool to get Spectrogram/coherencegram in Kamioka.
 - GWpy based.
 - It has real time update mode. The plot can be updated using the latest data automatically.

