

S5 Data quality and S5 “epochs”

Gabriela González (LSU),



Laura Cadonati (MIT/Umass Amherst)

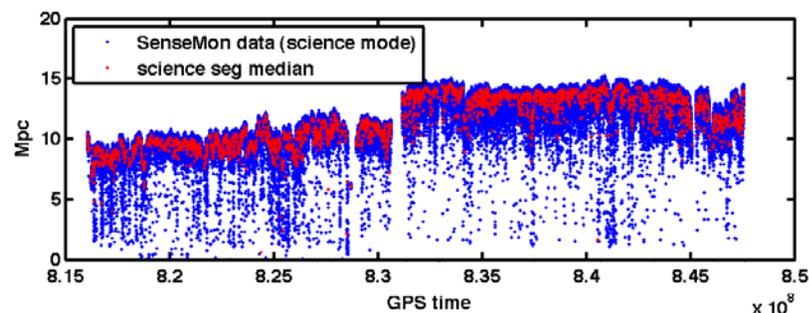
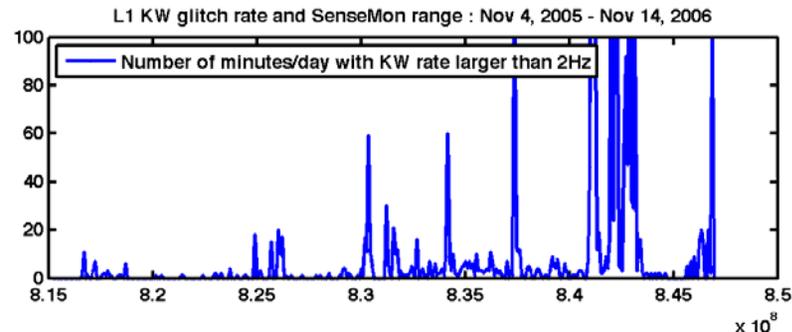
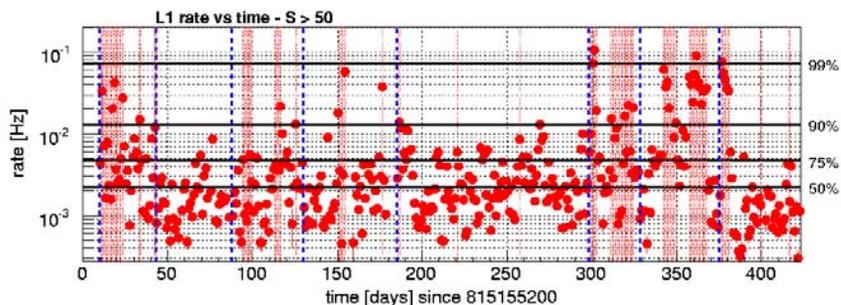
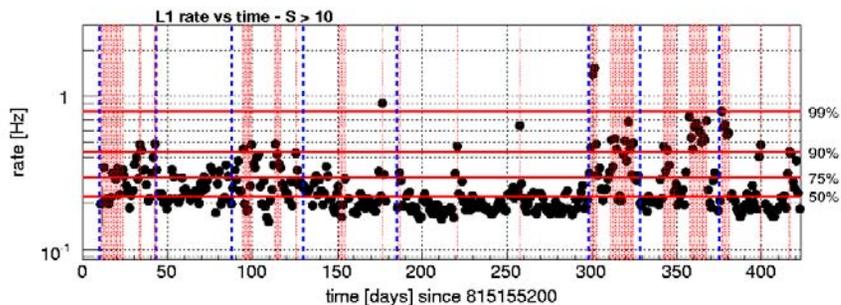


S5 DQ indicators

We used:

- » Scan of elogs and glitch reports
- » SenseMon range minute trends
- » Trends of KleineWelle rate and of fraction of time with loud glitches

to identify periods where the ifo behaviour was different enough to have a specific study of veto efficiencies and usage fraction



Useful links

- Glitch notebook:

<http://www.lsc-group.phys.uwm.edu/glitch/investigations/s5index.html>

“Epoch for veto studies in the 1st year of S5”

<http://www.lsc-group.phys.uwm.edu/cgi-bin/glitch-enote.pl?nb=glis5misc&action=view&page=10>

- Epochs web pages and more information:

- » L1

- » H1

- » H2

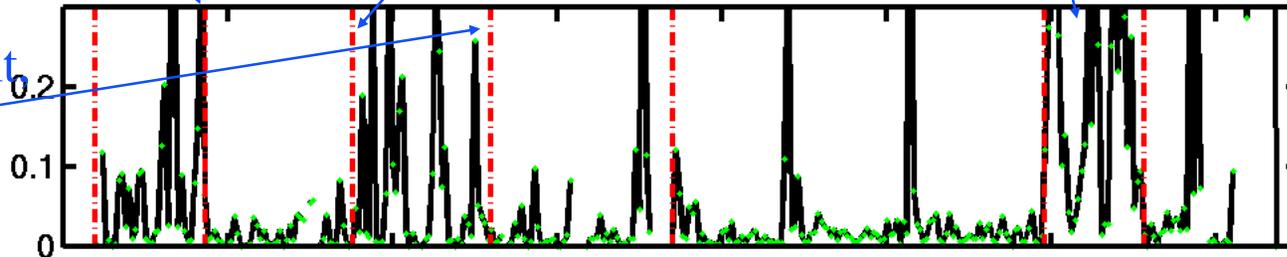
- KWrate plots

Noisy January

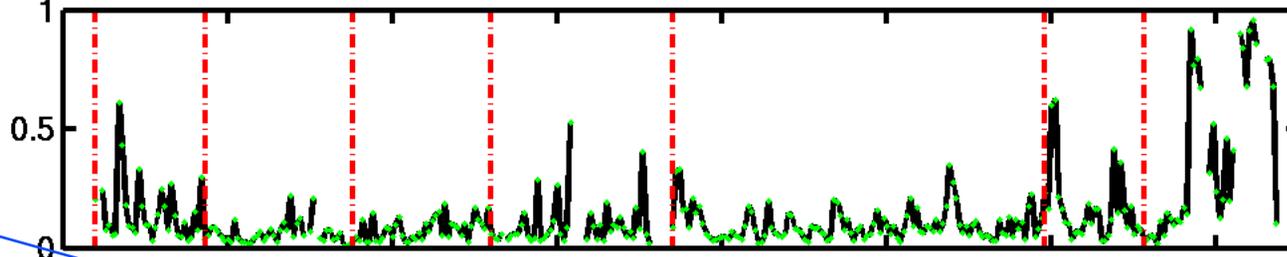
Noisy September

Input beam realignment

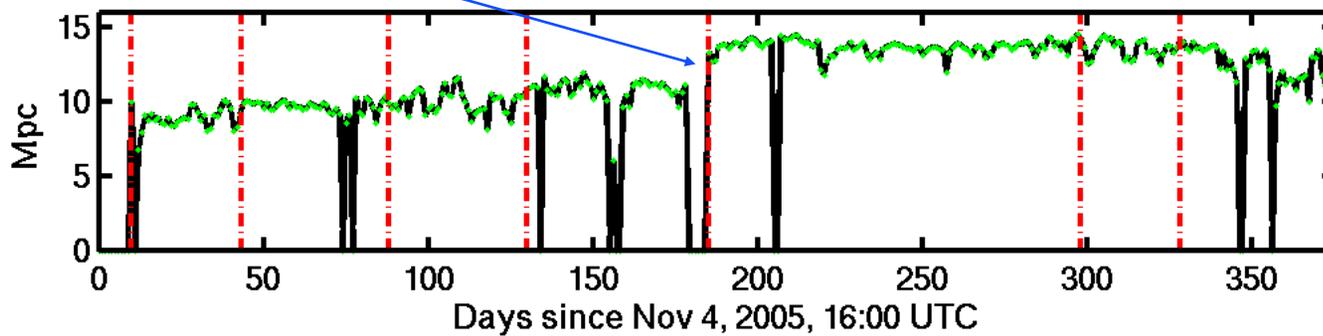
L1 S5 1yr: fraction of day with minutes when KW rate > 0.5Hz



L1 S5 1yr: fraction of day with minutes containing KW triggers with sig > 50

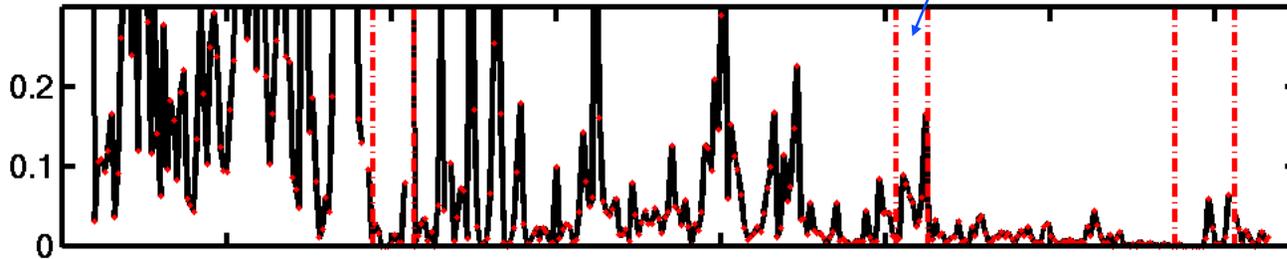


S5 L1 1yr: daily median SenseMon in science mode

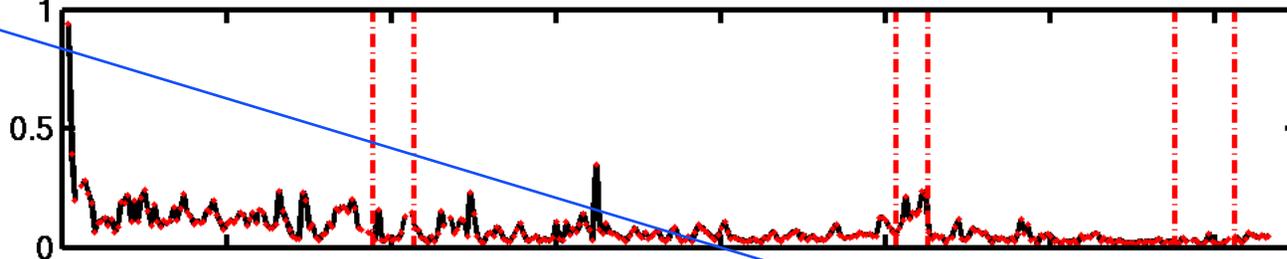


ISS glitches,
ends with PMC replacements

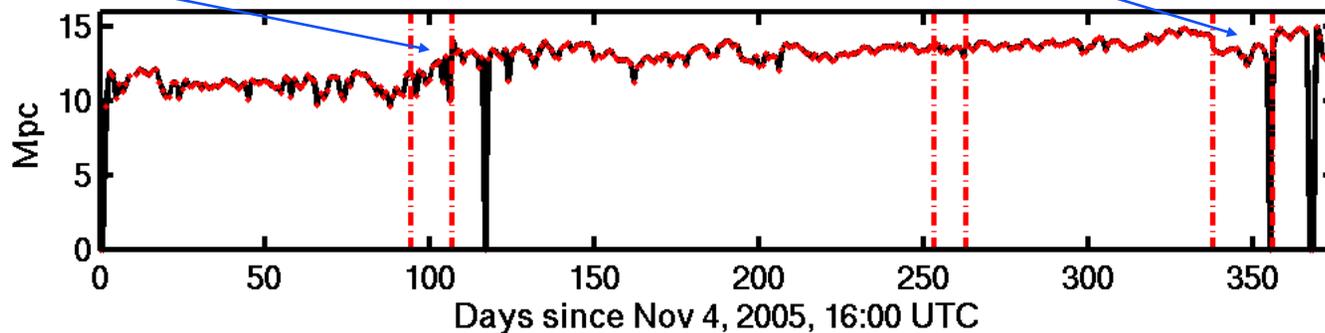
H1 S5 1yr: fraction of day with minutes when KW rate > 0.5Hz



H1 S5 1yr: fraction of day with minutes containing KW triggers with sig > 50



S5 H1 1yr: daily median SenseMon in science mode



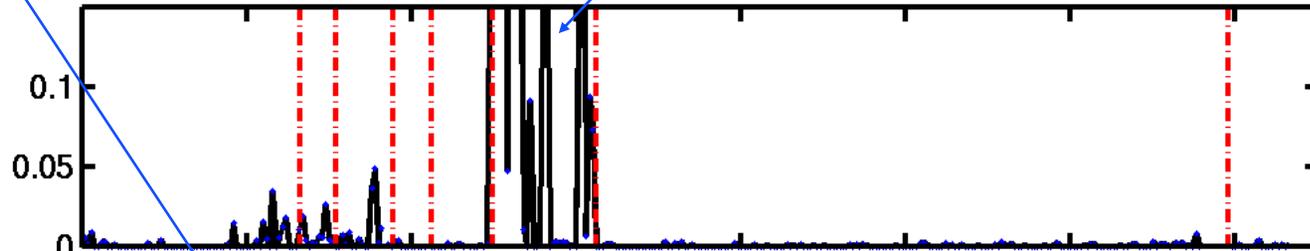
EQ,
charged ITMY

Commissioning

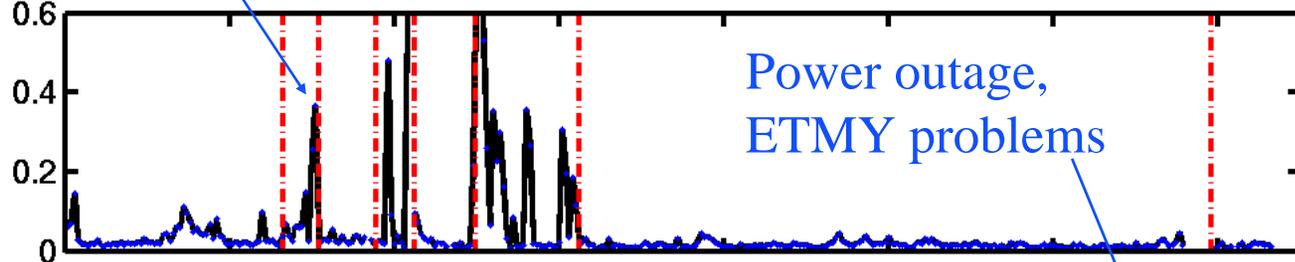
Noisy March (?)

MMT3 oplev

H2 S5 1yr: fraction of day's data with minutes when KW rate > 0.5Hz



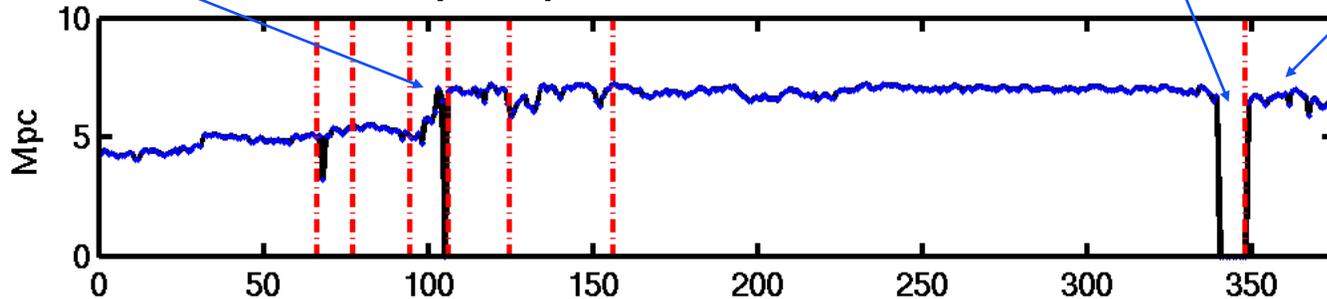
H2 S5 1yr: fraction of day's data with minutes containing KW triggers with sig > 50



Power outage,
ETMY problems

Commissioning

S5 H2 1yr: daily median SenseMon in science mode



ETMY
problems?