

Minute Progress Update

LIGO SURF 2020

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Data quality flags and time slides over a segment

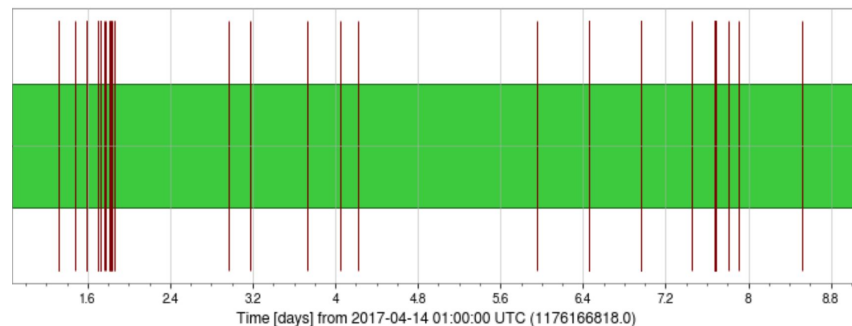
- Parameters for this investigation

- In this investigation we are looking at data from 4/14/17-4/23/17
- L1 data and H1 data
- Filtered glitches with $\text{SNR} > 6.25$ and simple chi-square consistency test

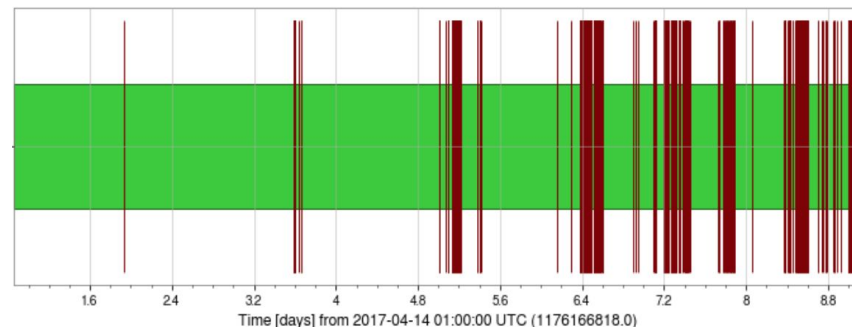
- Which flags are we looking at?

- L1/H1 CAT2 Vetoes
 - Flags with physical coupling
- 2 different flags
 - L1:DCH-ETMY_SCATTERING_GT_25HZ:1
 - H1:DCH-ETMY_L3_OPLEV_BLRMS_GT65:2

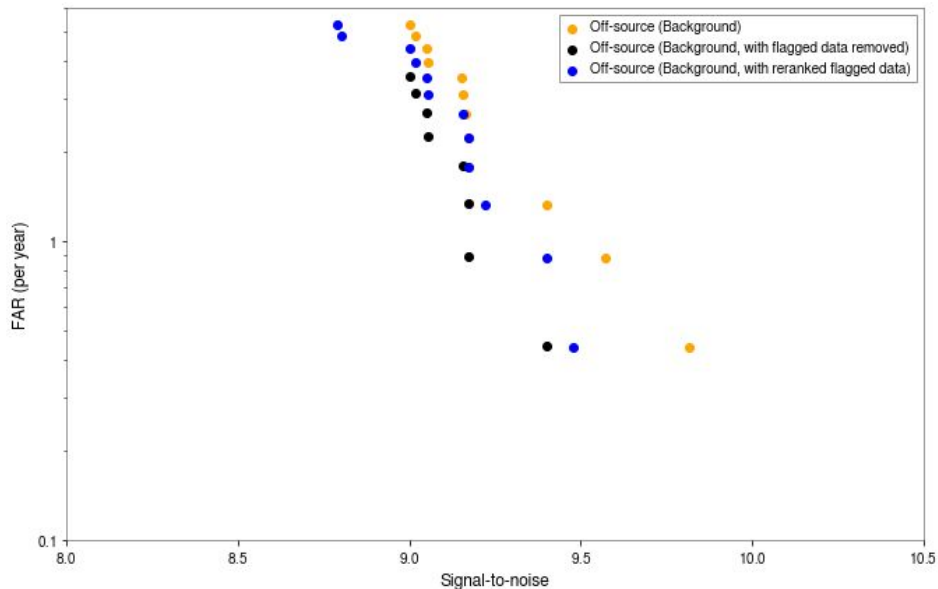
L1:DCH-ETMY_SCATTERING_GT_25HZ:1



H1:DCH-ETMY_L3_OPLEV_BLRMS_GT65:2



Time-slide results



original vs flagged comparison

The ratio of distance: 1.04

The ratio of time: 0.99

The ratio of volume * time: 1.13

original vs reranked comparison

The ratio of distance: 1.04

The ratio of time: 1.00

The ratio of volume * time: 1.11

flagged vs reranked comparison

The ratio of distance: 0.99

The ratio of time: 1.01

The ratio of volume * time: 0.98

Thank you! Questions?