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# **absGlitch: An Absolute Threshold-based Glitch Monitor**

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## Why “absGlitch”?

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It's based on Masahiro Ito's glitchMon monitor.

However, rather than using '3 ?' thresholds, we give thresholds in units of ADC counts. This makes absGlitch more sensitive to gradual changes in noise.

absGlitch produces and serves histograms of glitch amplitudes:

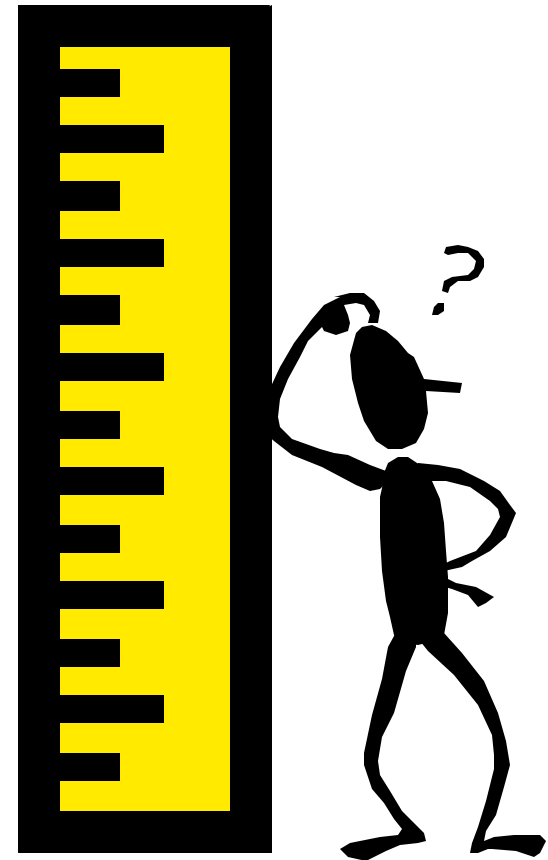
- For a single “Log Interval”
- For the entire duration of the monitor

absGlitch can be used by the Burst group to veto events.

# How do you set thresholds?

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- ❑ absGlitch has a variety of output:
  - Log file output
  - Data file output (triggers)
  - Trigger manager output
- ❑ You can use the log file output to re-write your configuration file.
- ❑ Successful iterations of absGlitch on offline data provides all the info you need to set reasonable thresholds.





# Input and Output

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## Configuration File:

- “Header” section sets global parameters
- “Channel” section sets parameters for individual channels
  - Threshold level
  - Whether the Operating State Condition needs to be satisfied first
  - Filter parameters

## Data File:

- Labels for all fields are at the beginning of each file
- Event timestamps are given both in GPS and UTC
- Precisely overlaps GDS\_trigger metadata information

## Log File:

- “Header” section repeats the configuration file... (“Now what configuration file did I use to produce this output?”)
- Prints the histogram data available for each channel every Log\_Interval seconds (i.e. number of triggers at each amplitude level, dead time due to each level, etc.)



## More Info Please...

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Check out: <http://www.ligo-wa.caltech.edu/~rrahkola/absGlitch/>, or the documents associated with your local distribution of GDS (post-LSC mtg)