



Data Quality Flagging S5 Elog Entries

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Issue:



Important DQ Information in Elogs

- Elogs - Electronic logs for both Livingston and Hanford sites
- Record of observations made of environmental and detector issues that could affect data quality
- Need a list of “flags” based on these observations
 - » Date of observation may not be the same as data affected
 - » Computer-readable list



Work Done So Far

- Webpage <http://www.andrews.edu/~tzs/detchar>
- Two Andrews undergraduates - Nick Valles and Jon Van Ornam started listing DQ flags
 - » ~ 2 months at each site

The screenshot shows a web browser window titled "AUGWG Detchar" with the URL <http://www.andrews.edu/~tzs/detchar/>. The page features the LIGO logo on the left and the Andrews University logo on the right. The main heading is "Andrews University Gravitational Wave Group" followed by "Detector Characterization Projects". Below this is a section titled "S5 Elog Data Quality Flags" with a paragraph of text and a table of links.

Andrews University Gravitational Wave Group

Detector Characterization Projects

S5 Elog Data Quality Flags

Operators and SciMons frequently record events and conditions in the elogs ([Hanford](#), [Livingston](#)) that have a bearing on detector performance and data quality. The purpose of this project is to compile a list of these observations along with the times and data segments that may be affected. These lists may be found in various formats in the table below.

Hanford	Livingston
Daily Lists (html)	Daily Lists (html)
Cumulative List (html)	Cumulative List (html)
Cumulative List (txt)	Cumulative List (txt)

March 21, 2007

LIGO-G070101-00-Z

This work is supported by a grant from the [Office of Scholarly Research](#) at Andrews University. Questions and comments regarding this page should be directed to [tzs at andrews.edu](mailto:tzs@andrews.edu)



Work Done So Far

S5 Daily Elog Flags for Livingston

http://www.andrews.edu/~tzs/detchar/S5_LLODaily.html

Getting Started Latest Headlines home Apple Amazon eBay Yahoo! News

S5 LLO Elog Flags for 2006-03-02

Seg Num	Short Description	GPS Start Time	GPS Stop Time	Local Start Time	Local Stop Time	DQ Flag Link
1081-1113	Y-Endstation Chiller Failure	825271214	825435014	Mar 01, 2006 12:00:00 CST	Mar 03, 2006 09:30:00 CST	Link
1086	Train	825327914	825329594	Mar 02, 2006 3:45:00 CST	Mar 02, 2006 4:13:00 CST	Link
1087	Daytime construction and truck traffic	825338354	825338664	Mar 02, 2006 6:39:00 CST	Mar 02, 2006 6:44:10 CST	Link
1088	105 Hz PRC line showing up in DARM	825384831	825398126	Mar 02, 2006 19:33:37 CST	Mar 02, 2006 23:15:12 CST	Link
1088-1107	Unusually high data variance, Low inspiral range	825395414	825429614	Mar 02, 2006 22:30:00 CST	Mar 03, 2006 08:00:00 CST	Link

March 2006

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

April 2006

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

May 2006

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

June 2006

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

March 21, 2007

LIGO-G070101-00-Z Done



Work Needed

- Fill in the rest of the webpages!
 - » Translate elog observations to data quality flags
 - » Record start & stop times, segments affected, etc
- Call for volunteers



Ideas for Improvements

- Increase automation for generating web pages
- Switch computer-readable format to ilwd
 - » ilwd - xml with certain headers
 - » ilwdread - MATLAB function in Ligotools
 - » ilwdwrite - MATLAB function to write ilwd
- Any suggestions?