



DMT Monitors -- Status Update for Upper Limits Analysis

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DMT Monitors

- **Infrastructure of DMT monitors and the monitors themselves continue to increase and improve (see status table as of E5)**
- Great potential for detector characterization
- **But...**
 - » **Functionality and documentation very uneven**
 - » **Objective evaluation of monitors largely lacking**

DMT Monitors (status in E5)

DMT Monitors	Scientists	Log File Output	Trend Frame Output	Database Triggers Generated	Run by Process Manager	DMT Viewer Interface	Real-time HTML Summary	Histogram Display (avail Aug)
Line Noise	B. Allen, A. Ottewill E. Daw, S. Klimenko	Yes Yes	Yes Yes	Yes	Yes	Yes Yes		
Seismic Noise	E. Daw	Yes	Yes		Yes	Yes		
Correlations	B. Allen, A. Ottewill	Yes		Yes		Stand-alone		
Bilin. Couplings	S. Penn	Yes			Yes	Stand-alone		
Band-lim. RMS	E. Daw	Yes	Yes		Yes	Yes		
Non-Gauss. Noise	L.S. Finn, G. Gonzalez, & P. Sutton	Yes				Yes + GUI		
Power Spect. Trans.	S. Mohanty							
Servo Monitor	D. Chin, K. Riles	Yes		Yes	Yes	Yes		
Event Catalog	J. Sylvestre	Yes			Yes	(GUI)	Yes	
Glitches	M. Ito	Yes		Yes	Yes	Yes		Yes
Mag Field Trans	R. Frey, R. Rahkola	Yes			Yes			
Earthquakes	R. Frey, R. Rahkola	Yes		Yes	Yes		(Yes)	
Lock Transitions	D. Chin, K. Riles	Yes		Yes	Yes	Yes	Yes	
Power Mains	D. Sigg	Yes	Yes		Yes	Yes	Yes	
GPS Time Ramp	S. Marka	Yes	Yes		Yes	Yes		
PSL Glitches	R. Savage, J. Zweizig	Yes		Yes	Yes			
Bit Checking	J. Zweizig	Yes		Yes	Yes	Yes	Yes	
Slice Checking	J. Zweizig	Yes		Yes	Yes		(Yes)	
Frame Checking	J. Zweizig	Yes		Yes	Yes			

DMT Infrastructure	Scientists	Online Code	Integrated
Oper. State Conds.	D. Chin, K. Riles	Yes	Yes
Time-Freq Plots	S. Mohanty J. Sylvestre P. Sutton	Yes Yes Yes	Yes
Wavelet Tools	S. Klimenko	Yes	Yes
IIR Filters	E. Daw	Yes	Yes
Histograms	M. Ito	Yes	Yes

(Red = New since March 2001)

DMT Monitors

- Need more scientists looking at real data with these monitors and looking at triggers already stored in database for E2-E5 runs (Give feedback to authors!)
- If you want to know what real, multi-channel data looks like, come to the engineering runs!
-> E5 turnout disappointingly low
- Or at least come to the site between runs when the IFO's are in lock
- And of course, look offline at data already in hand

Reporting Results

- Please report your findings in monthly detector characterization teleconferences or in the LSC meeting detchar sessions. Join an En investigation! (c.f. reports by P. Fritschel, N. Christensen)
- Everyone benefits from better communication