



Summary of Detector Characterization Sessions

Keith Riles
(University of Michigan)



Activities

Much DetChar activity since August meeting:

- **DMT software:**
 - » New or improved background monitors
 - » More infrastructure support
 - » More DMT-based interactive tools
- **Other software & tool development:**
 - » Reduced data set generation (customized & standard)
 - » Web sites for reference information & data access



Activities

E6 & E7 work:

- **Voluntary manning of 40 8-hour shifts (E6) and 140 12-hour shifts (E7)**
- **Thirteen investigation teams**
- **Synergy with upper limits group studies in detector characterization**



But...(lessons learned)

Need more effective feedback from DMT monitors:

- Many monitors lacking summary html page
- Need more guidance on what is “normal”
- Need global DMT status and alarm handler web page
- Need online figure of merit for astrophysical sensitivity
- Need integration of DMT-produced trends into Data Viewer playback



Need more automation of mundane scimon tasks to make better use of scientist time on shift

- Keeping track of “clean” locked segments
- Defining / retrieving reference spectra
- Producing/logging graphical output

Need feedback from on-site downstream analysis:

- Confirmation that LDAS pipeline (data & trigger flow) is working & ability to fix simple problems
- Trigger rates / sensitivities from burst / inspiral search engines to spot pathologies early



So...get ready for E8

Next engineering run devoted to shakedown of software and procedures → S1 dress rehearsal

Saturday morning June 8 to Monday evening June 10
Hanford Site

**ALL DMT MONITOR AUTHORS
STRONGLY URGED TO PARTICIPATE**

- Show up early and stay afterward!
- Experience should be intensive but rewarding

LIGO-G020057-00-00-Z



Then get ready for S1...

Will need comparable number of shift takers as for E7

Still training a pool of scimon shift takers and signing up is still voluntary

Long-term shift allocation scheme undefined for now

As upper limit groups examine data,



Presentations in DC Sessions

Tremendous activity – more than 40 DetChar talks!

- Can't begin to do justice to these in brief summary
- [Agenda](#)



Summary

2002 will be a busy and critical year for everyone

Commissioners need DetChar help

Upper Limits analysts need DetChar help

Much tool infrastructure now available,
but not adequately exploited.

Relatively little effort now can make a big difference

Please seize the opportunities