

Band Limited RMS and Peak Monitors

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Band Limited RMS Monitor Schematic

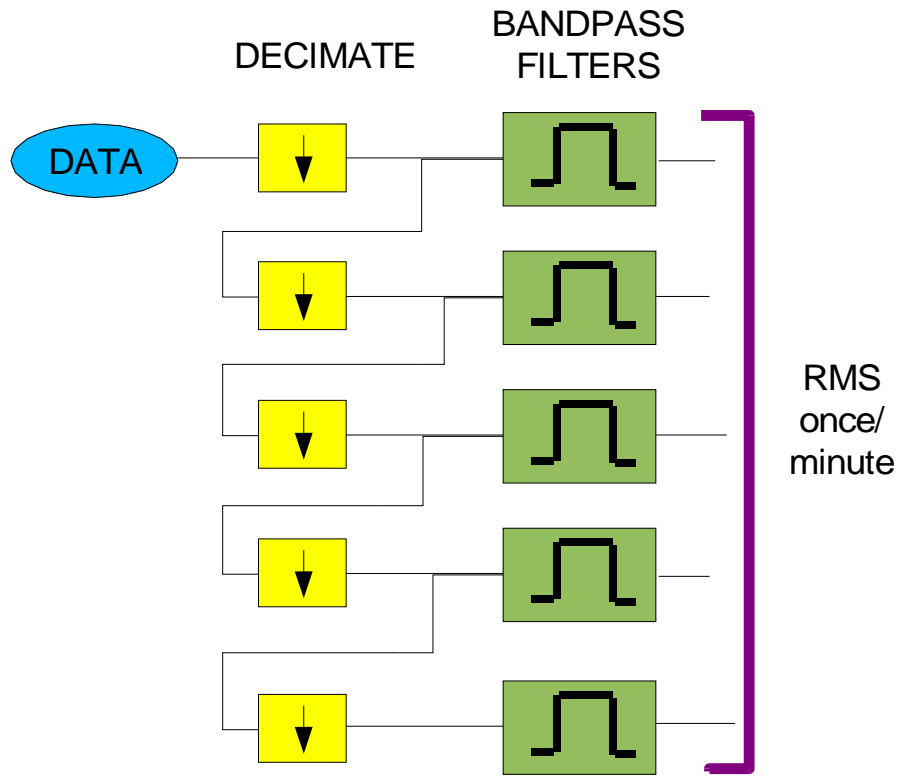


Figure 1: Schematic

DMT Viewer on Band Limited RMS Monitor

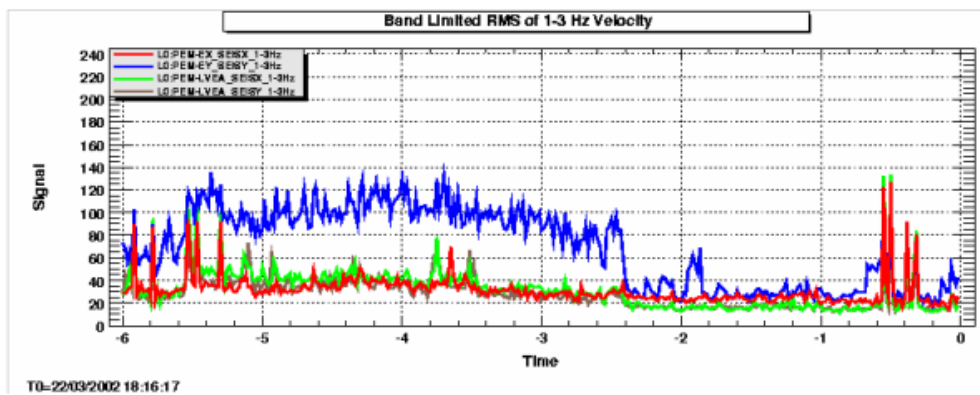


Figure 2: Screen capture of blrms monitor control room display

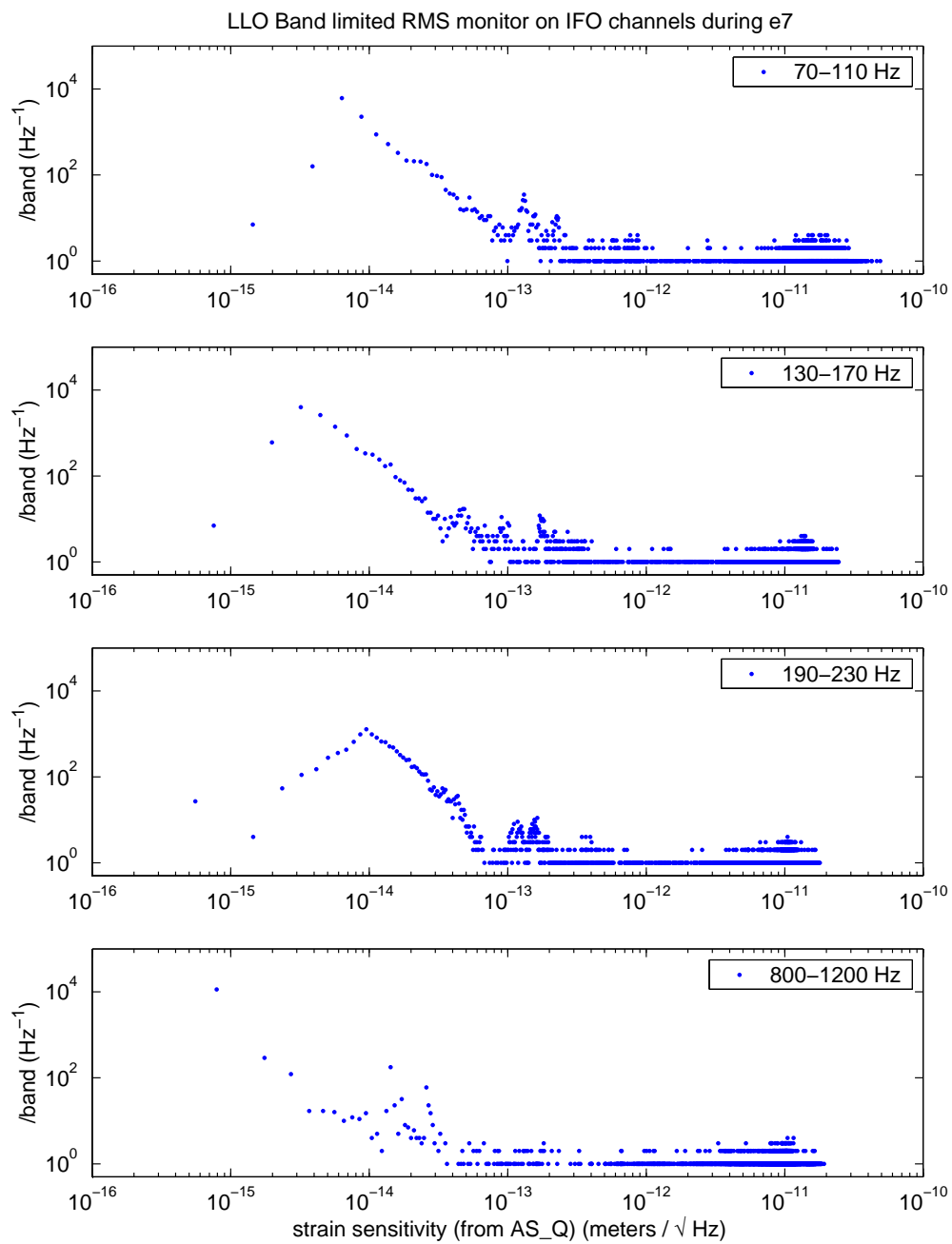


Figure 3: Band noise in antisymmetric channel during e7 lock stretches

Peak Monitor

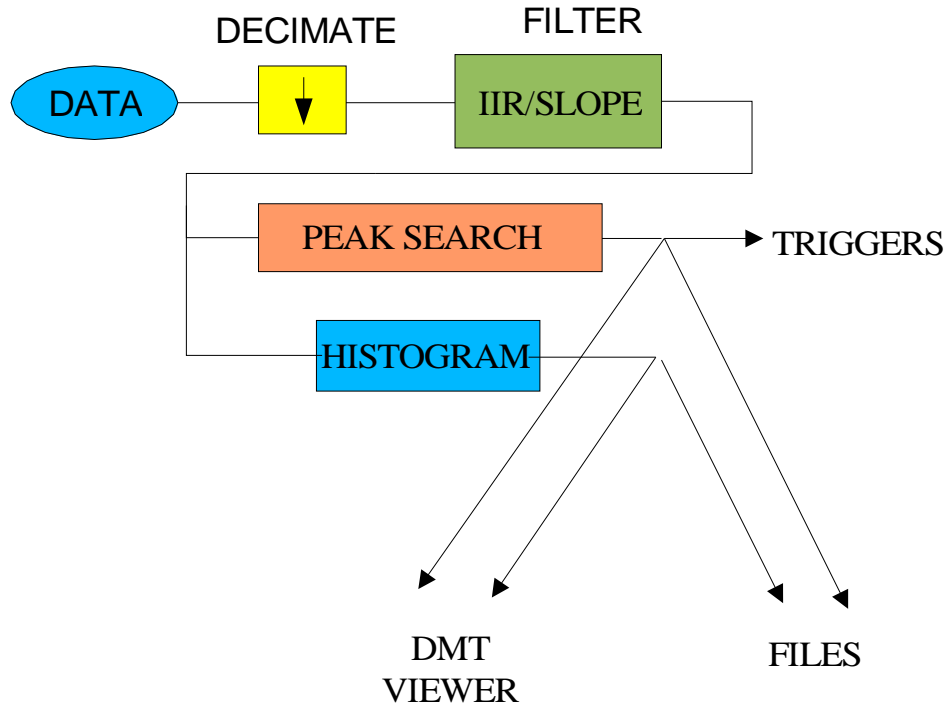


Figure 4: Schematic

Histogram output example

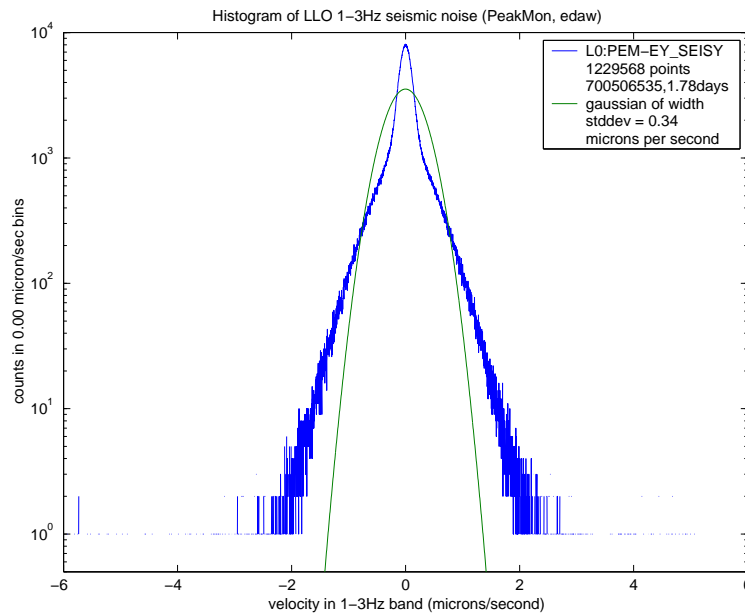


Figure 5: Histogram of 1-3Hz seismic noise in LLO Y endstation Y axis over 1.8 days

Conclusions

- BLRMS is now used for monitoring:
 - seismic noise levels
 - interferometer channels
 - microseismic feedforward performance
 - wavefront sensors
- PeakMon measures maximum llo mirror velocities of 8 microns/sec over a 1.8 day period
- **Future**
 - Develop triggers for burst vetos
 - (perhaps) develop GUI
 - (perhaps) merge BLRMS and peakMon