Sept 1999 40m Data Run

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Sep 17 04:00:00 - Sep 19 14:00:00

Best Performance: $1 \times 10^{-17} \, (m/(\sqrt{Hz}))$

40m works better at night
  Evenings: .2-1 hours > 90% locked
  Mornings:
.1-.5 hours 50-80% locked

Locks were better 2nd and 3rd day (weekend)

Develop Software tools

- Create database containing statistics and simple query tools
- Develop Perl scripts to automate data processing
- Develop software to interact with database and extract desired channels during specified time intervals
- Develop tools to characterize the run
Data Analysis issues under study

• Characterize the quality of the data
• Study non-stationarity of the data
• Study non-gaussianity of the data
• Look for burst events
  Outliers in the time series
  Match filtering techniques
Figure 1
Figure 2

Uptime distribution for Sept−1999 40m run

Number of hours

Uptime [%]
Figure 3

Uptime history for Sept–1999 40m run

Tama LOCKED
Tama UNLOCKED
Figure 4
How stationary is the GW channel

Figure 5