

Calibration, Response, Data Quality

LSC meeting, March 16, 2001

LIGO-G010090-00-D



Calibration

- □ 5000 channels / ifo ► separate GW signal from rest
- □ 2 DC groups: transfer function & timing
- Records in XML format:
 - Done for LHO PEM
 - Web interface in the works
 - DTT uses it (read, write, modify, apply)
 - DB backend?
- Availability of calibration for GW signal: When? How good?



Standard Response

□ Trend

- Second and minute
- Mean, min, max, rms., std. dev., N

Periodic reference spectra

- DMT/DSS (data set summary) builder
- > XML definition of t-/f-series, psd, transfer func., etc.
 - o Can be viewed by DTT
- ➢ Needs to done: XML ► DB ► clients
- □ Requirements for *h* spectra
 - Resolution, bandwidth, averaging, etc.
 - Search specific?



Data Quality Information

- Not a lot done so far
- □ Need:
 - Scanner" to capture what gets send to the archive:
 - Channels information, on-time, run numbers, etc.
 - Lock stretch monitor (worked on) First cut done by shift crew
 - Standard measure: e.g., average distance for a reference source?
 - Other measures?
 - Ring-down? DMT trigger "happiness"? Analysis specific?
 - DB definition of DQI
 - Way to generate lists of time intervals for analysis
 - > Way to "load" this list into the data feeder of the analysis
- □ Will be first task of UL groups to refine what's good data