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Getting “old” Data for Diagnostics Analysis

- Read frames from disk (?MB for each sec) :

All channels	5 times real-time
1-10 channels	50-100 times real-time

- Read frames from a tape:
 - 2 minute delay
 - 10-20 MB/s
 - Full data: 3MB/s/ifo
 - Read full LIGO data at 4 times real-time (compression of 2)



Data Access from Archive

□ Model 1: frame-by-frame (compression by 2)

# of channels	requested time	duration of read	Internet (T1 100kB/s)
1	1 week	2 days	2 days
1000	1 week	2 days	1 year

□ Model 2: channel-by-channel (compression by 2)

channel sample/type	requested time	duration of read	Internet (T1 100kB/s)
16kHz/float	1 week	1/2 hour	2 days
2kHz/short	1 week	1-2 min	3 hours



User Models

- ❑ Model 0: Work with on-line data only
- ❑ Model 1: Home Institute/Reduced data sets
 - From real-time: wait for a new set: days
 - From full frames: wait for a new set: months(?)
 - From striped frames: wait for a new set: days/weeks
- ❑ Model 2: Computers near archive/remote program
 - From full frames: probably impractical (overload)
 - From striped frames: new results within hours
- ❑ Model 3: Home Institute/Internet
 - Probably only useful for selection/correlation of events

THIS IS
WHAT
YOU
REALLY
WANT

A blue arrow points from the text "THIS IS WHAT YOU REALLY WANT" to the bullet point "From striped frames: new results within hours" under Model 2.