

Run report – Technical Details and further issues

Currently state: MySQL server via UNIX socket on a PC in my office.

- I can modify, Andy can read from it
- Set up scripts on the server to log changes to a supplementary table. Must manually add comment describing the change

Options for future:

- **MySQL DB**: globally accessible [**who hosts?**]
- **SQLite**: single file DB, stored on git repo [accessible on most UNIX shells, but **ROOT needs recompilation**]
- **TTree**: text file + index [**Probably a bit less memory-efficient**]
- **Some other method**: [???

Target	p/p_o	$\delta p/p$	Data /GB
Si R?	1.3	3%	~134
AI 100	1.09	(3%)	~257
AI 50	1.07	3%	~316
Si 16P	1.06	3%	~129
AI 50	1.07	3%	~337
Si R2	1.32	3%	~ 14
Si R2	1.32	1%	~ 13

Target	p/p_o	$\delta p/p$	Data /GB
Si 16	1.06	3%	~12
		1%	~16
Si 16	1.07[5]	3%	~10
		1%	~33
Si 16	1.08	3%	~32
		1%	~ 7
AI 100	1.08	(3%)	~16
AI 100	1.07	(3%)	~43
AI 100	1.10	(3%)	~16
AI 50	1.05~8	3%	~32
Si R1	1.06[5]	1%	~11
Si R1	1.07	1%	~ 9

Target	p/p_o	$\delta p/p$	Volume
None	1.07	3%	~10
AI 50 + Sn Absorber	1.07	3%	~18
AI 50	-1.07	3%	6~13

In addition there are many fragmented data sets of

- Source calibrations
- Pulser calibrations
- Beam parameter scans
- Neutron detector trials

I don't have a very clear idea of how much of this stuff will be useful. Discuss.

Some aspects of Data Quality difficult to assess this way. Will probably need to think about as we proceed with analyses.

- Drift/decay of channels from (e.g. becoming noisy) over long runs
- Runs stopped by crate errors—is it totally random, or does it imply preceding data is corrupted?
- Weird structures seen in some runs by Andy. Maybe related to triggers? Should detail everything we know while we still remember.
- Detectors missing from otherwise good data
- Wiremap changes