

# Creating MD files one-by-one

- For 30x 1.4 GB files merged to 20 GB MD File:

	Creation (s/file)	Bin (m:ss)	Slice (m:ss)
<b>30 files</b>	34	1:25	3:55
<b>30 files - filebacked</b>	55	1:26	3:56

- Filebacked creates a larger file (<10% increase), due to boxes moving when events are added to them, leaving free space in the file
- Work on ticket #6428 to address free space issues when loading
- Further work to reduce final file size?

# Autoreduce

- Filebacked merge lends itself well for an autoreduce script – very little time required at end to do final merge and good performance for slices
- For Merlin run user would need to define:
  - Range(s) to merge
  - Energies required (same range for each?)
  - UB Matrix
  - Psi values for each range to merge