Run13 Availability…

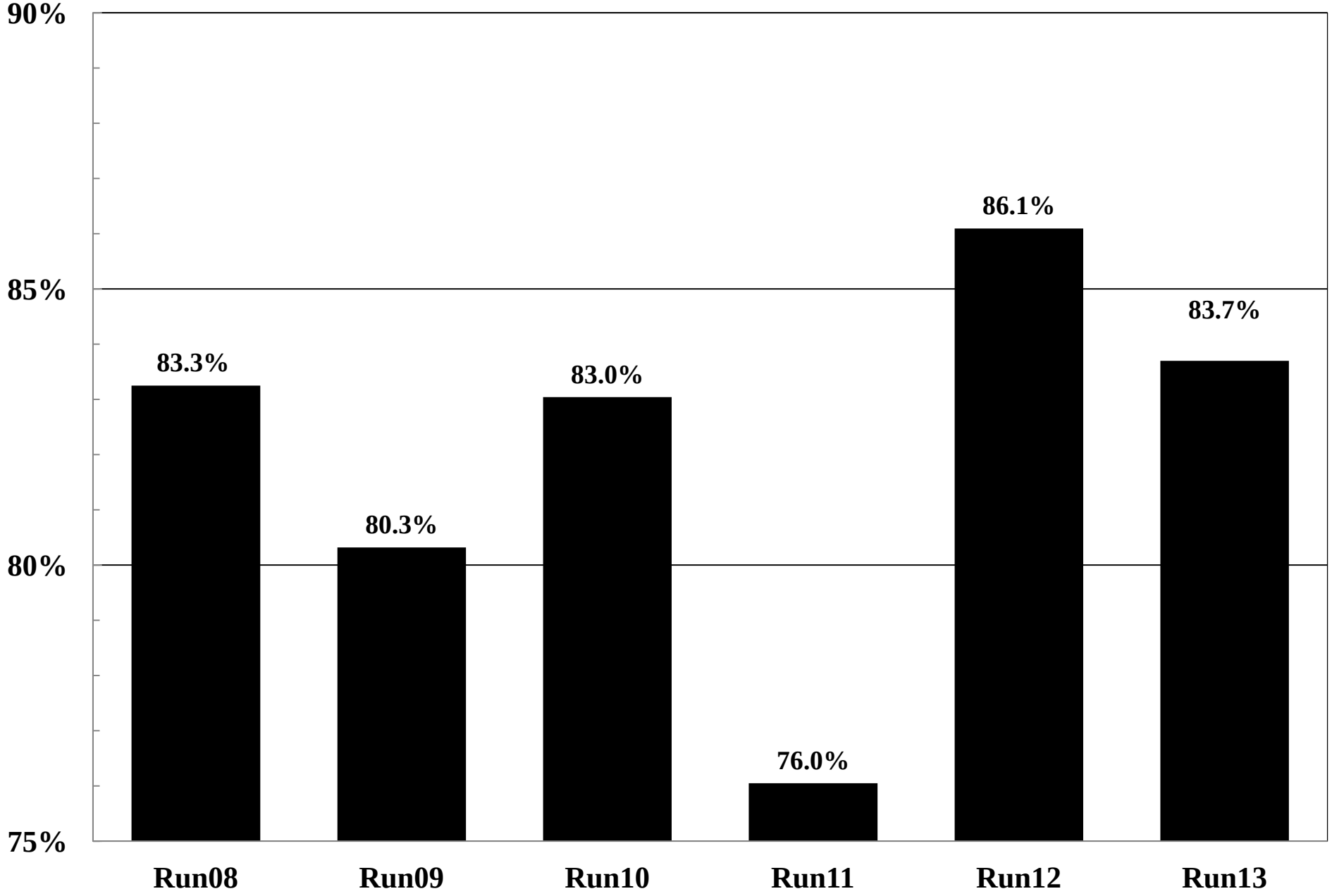
RHIC Retreat July 26, 2013

P. Ingrassia

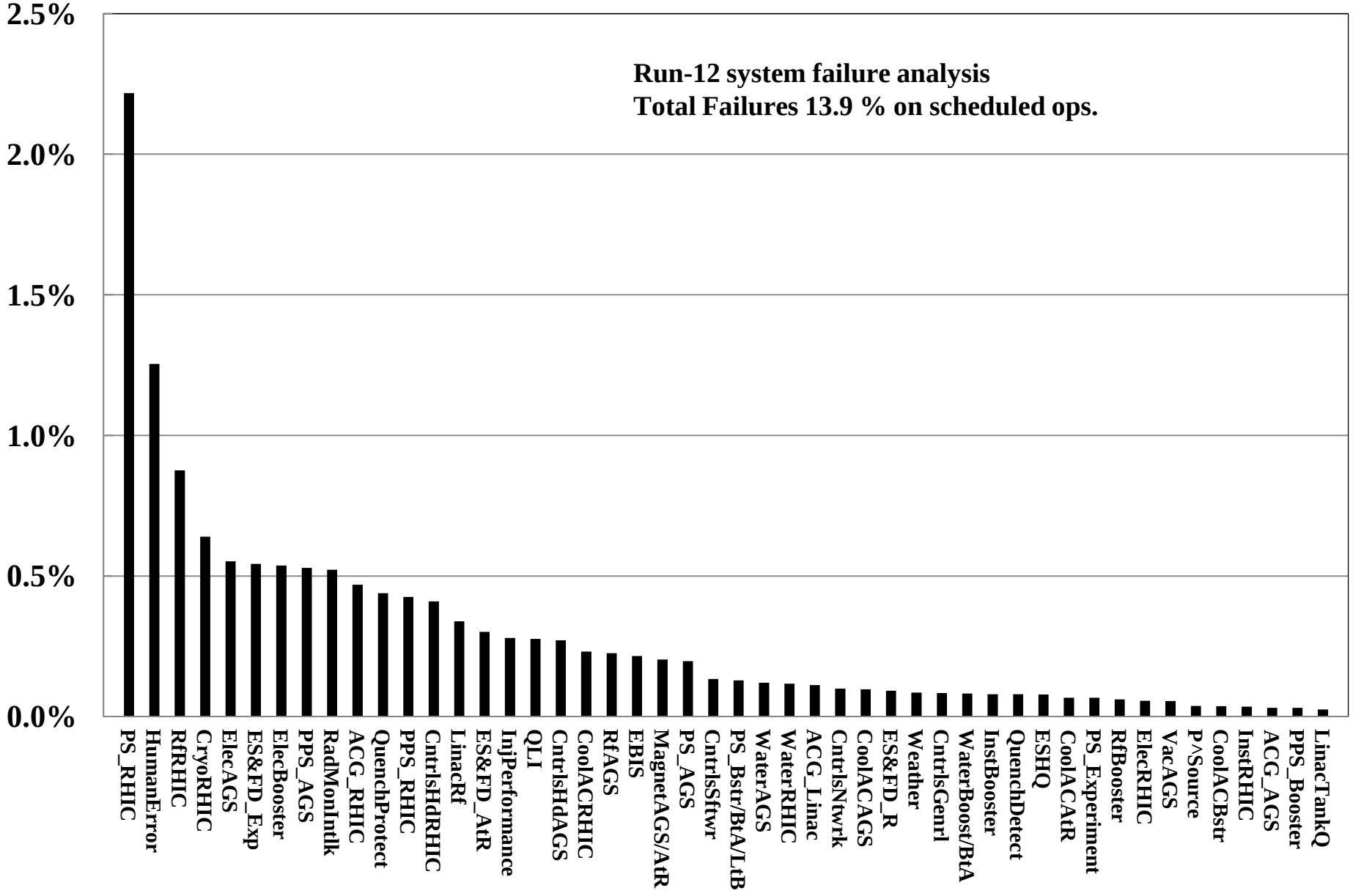
Notes – the usual disclaimer

- "Scheduled Hours" = sum of [**physics + development + apex + machine setup + experimenter setup + failure**] hours
  - maintenance and shutdown are not "scheduled (running) hours"
- Failures normalized by Scheduled Hours for the run in question.
- Failure Hour charts by system e.g. RHIC_Rf <u>NOT</u> group {RHIC_Rf, AGS_Rf, Booster_Rf}

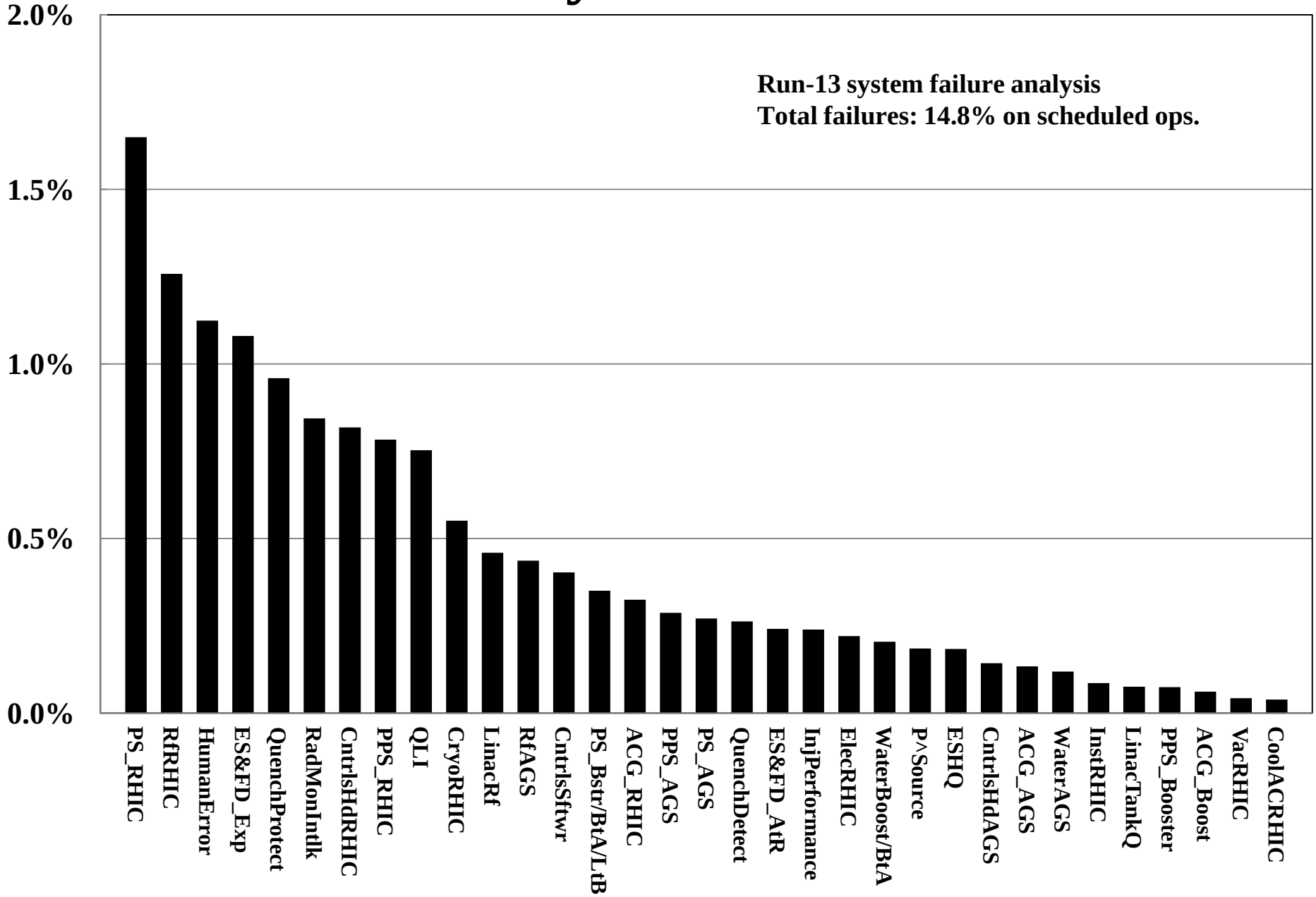
Availability Run08 - Run13



Run12 System Failure > 1 hr

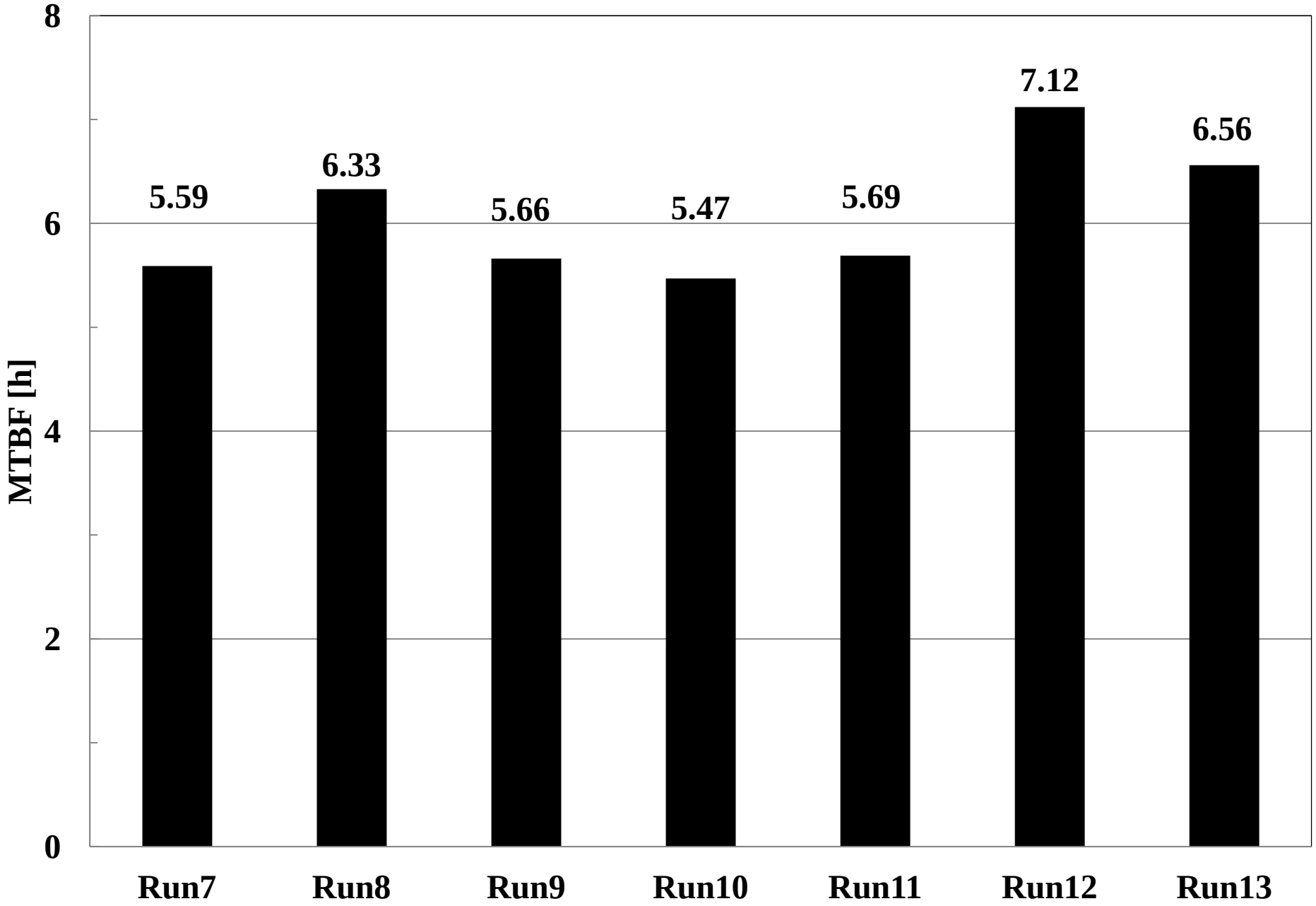


Run13 System Failure > 1 hr

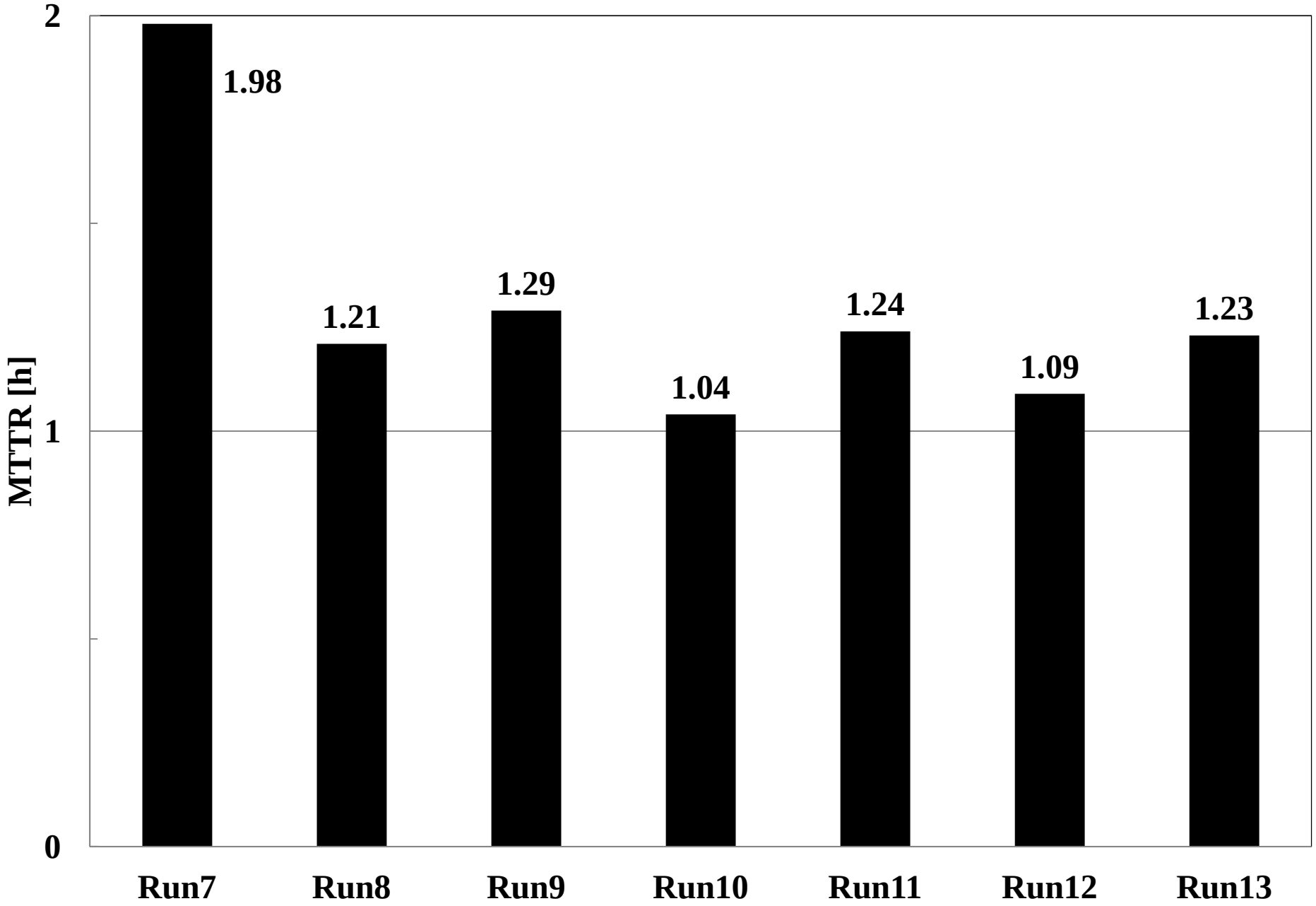


Mean
Time Analysis

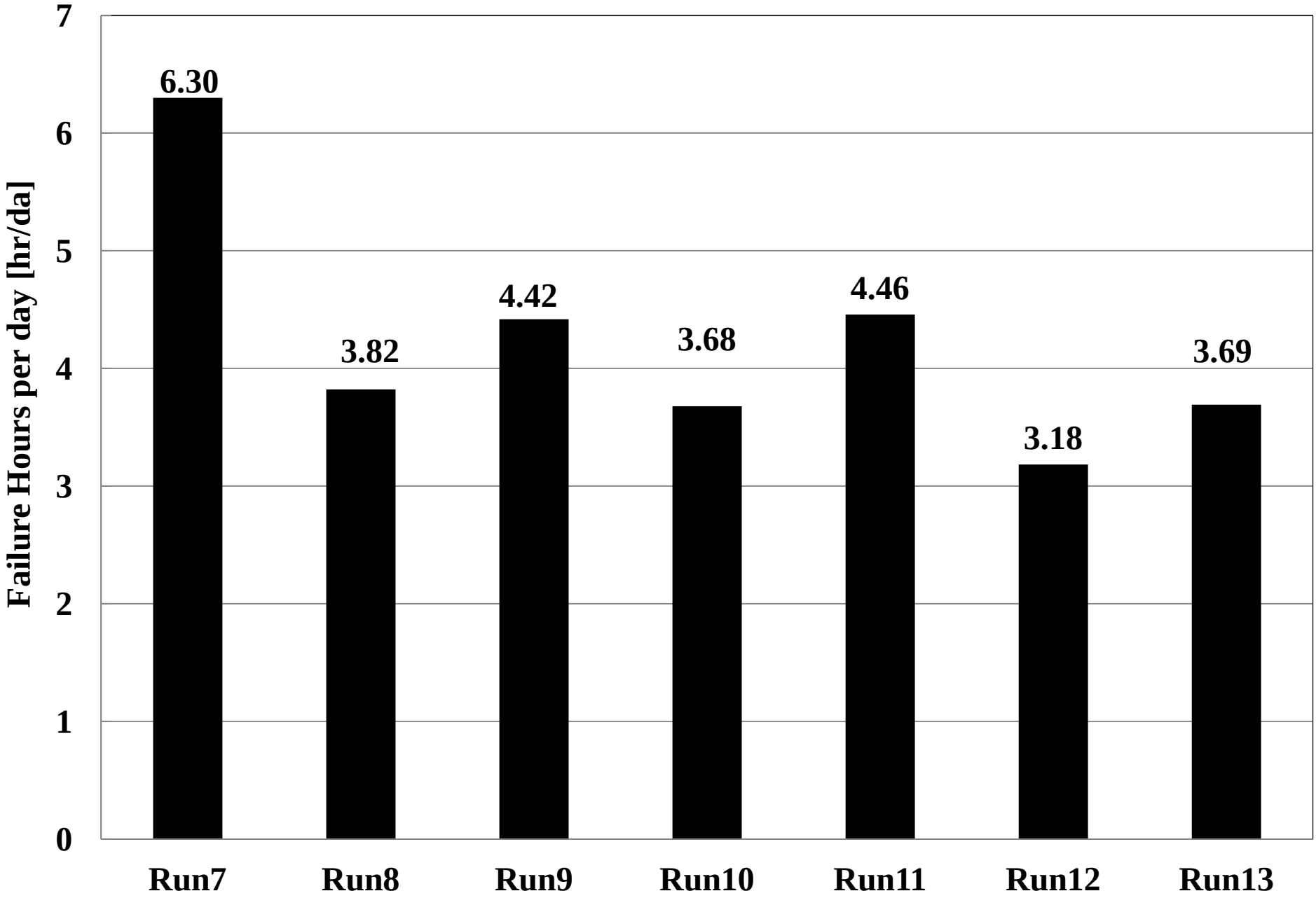
Mean Time Analysis: MTBF



Mean Time Analysis: MTTR

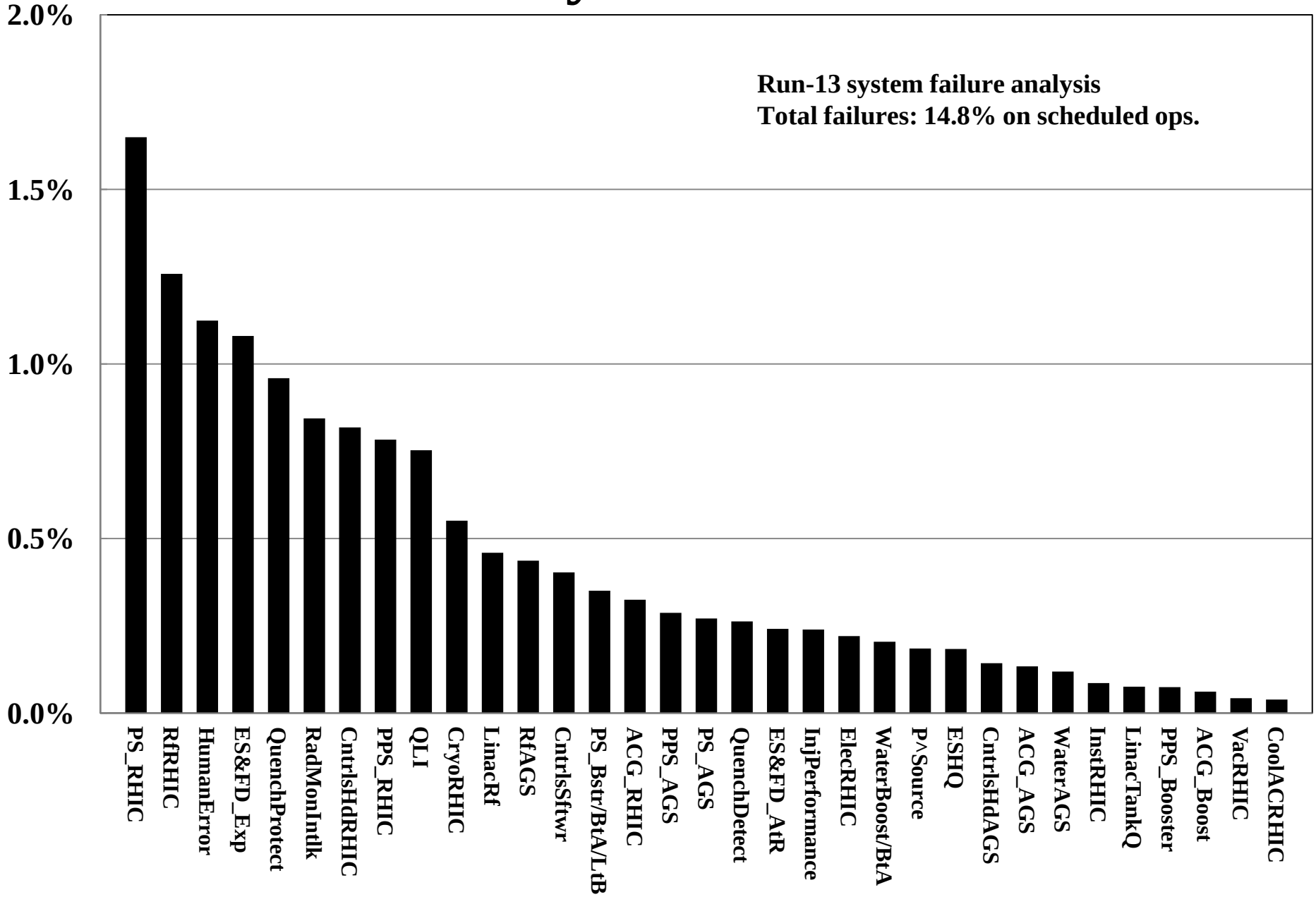


Average failure hours per day

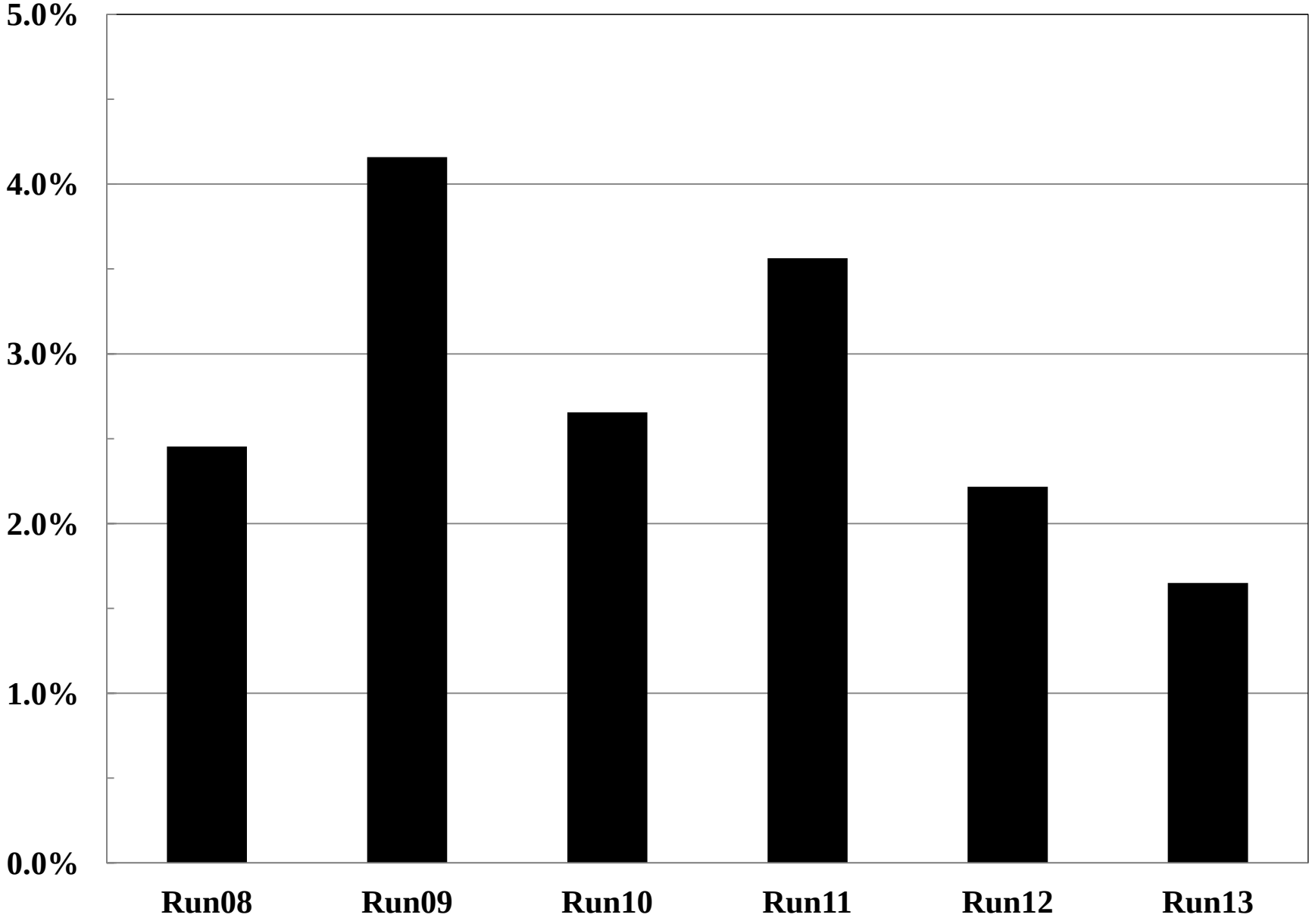


System Failure Impact as a per cent of Operating Hours – by Run

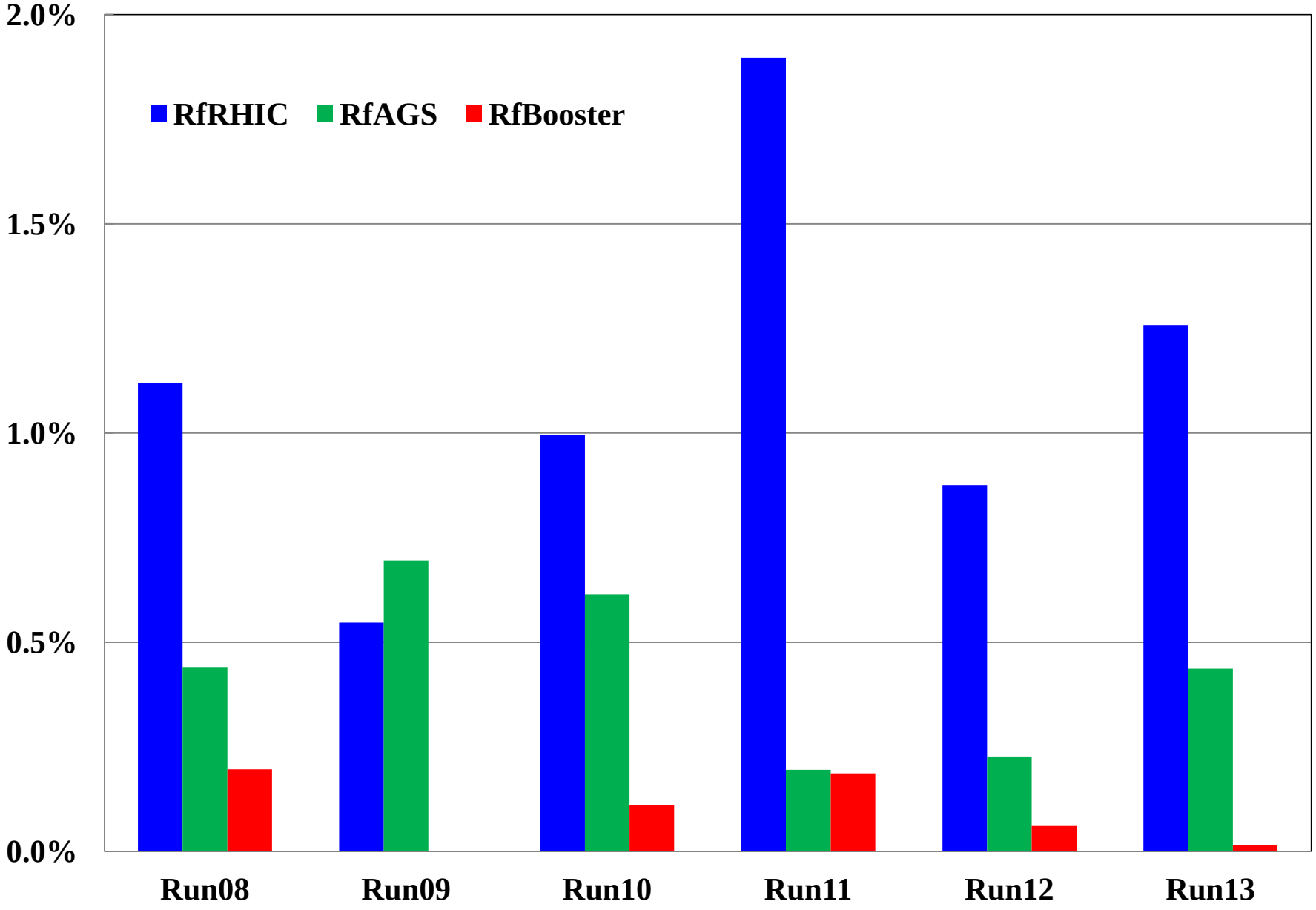
Run13 System Failure > 1 hr



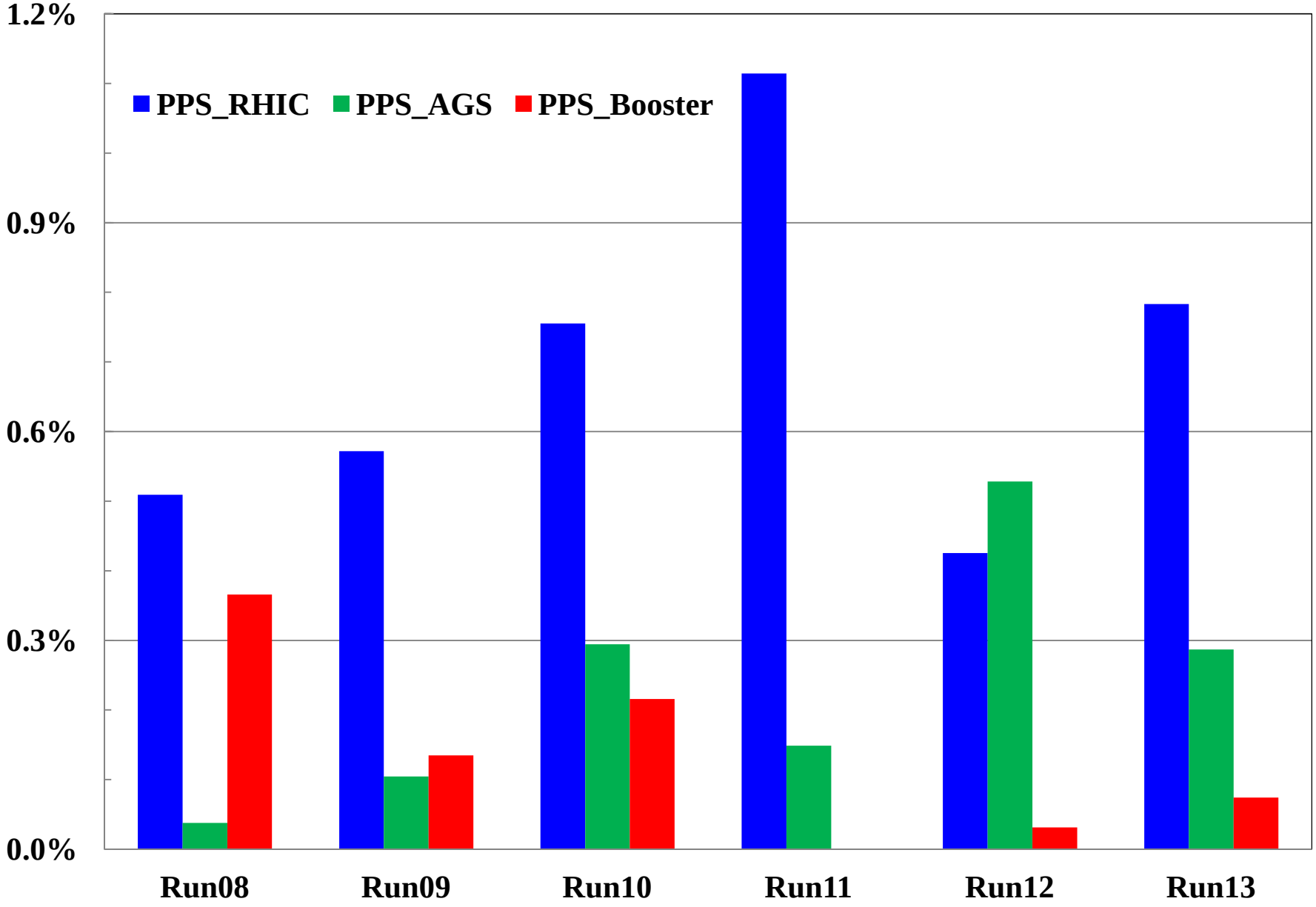
RHIC PS Failure as % Operating Hours



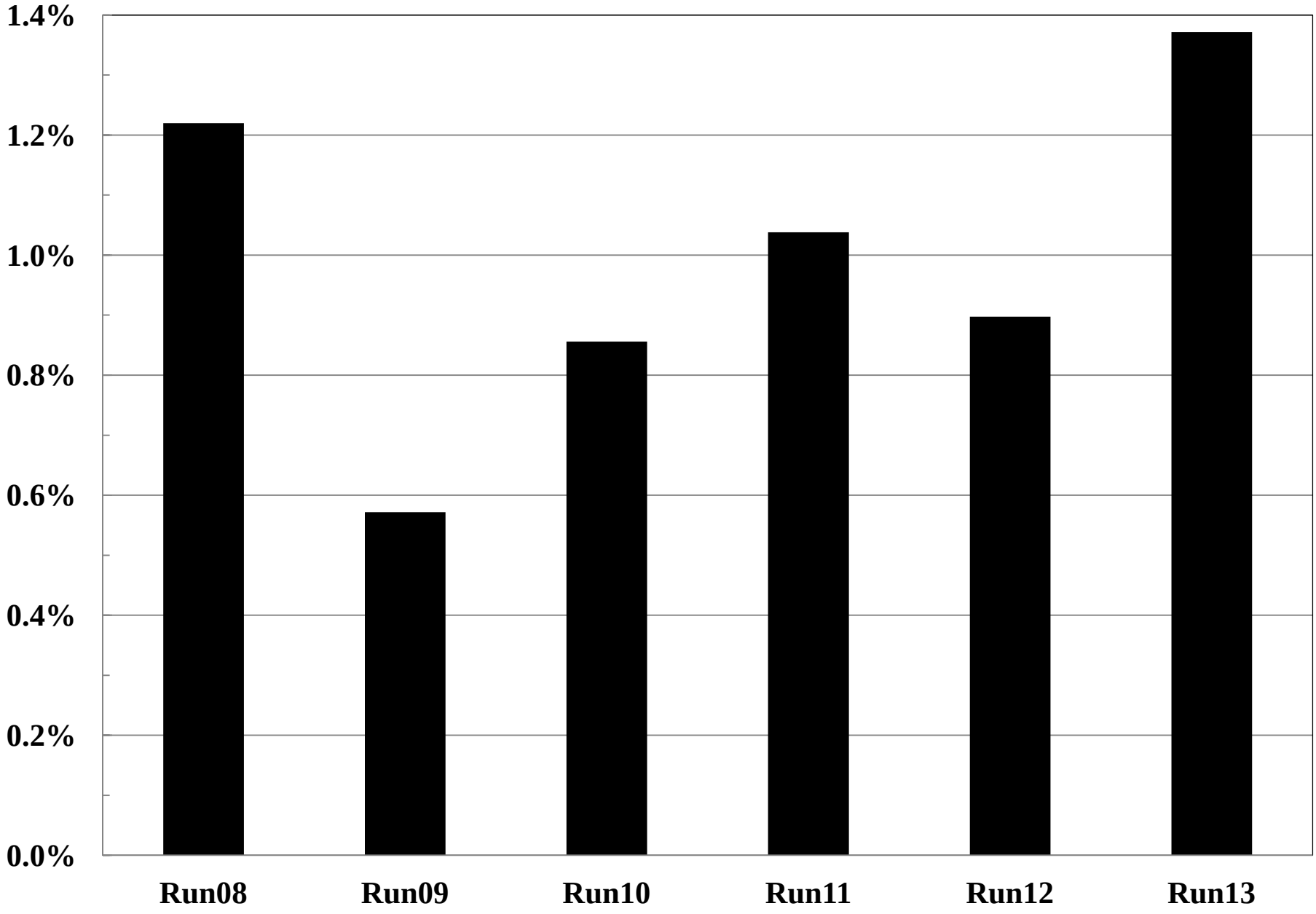
Rf Failure as % Operating Hours



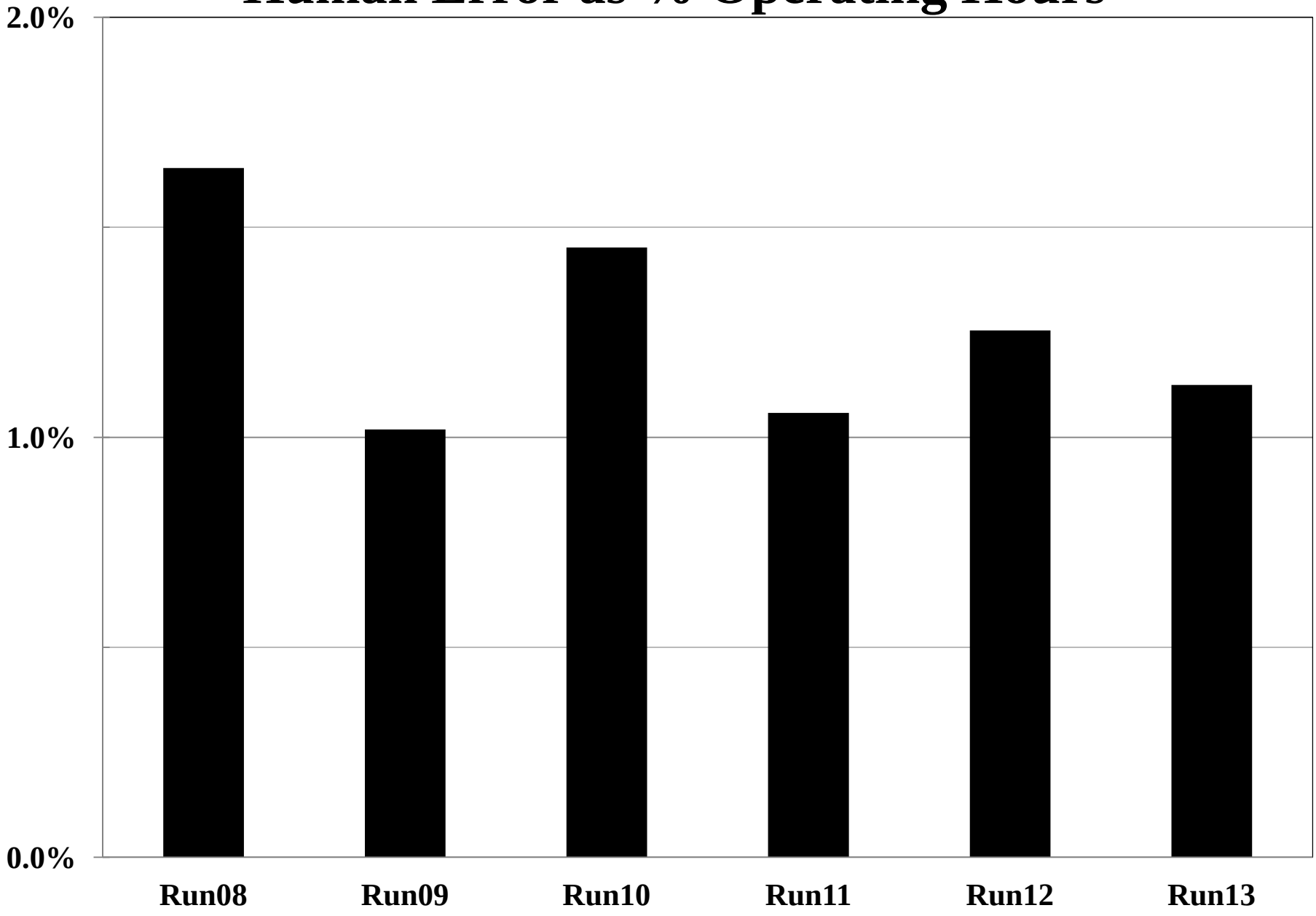
PulsedPower Failure as % Operating Hours



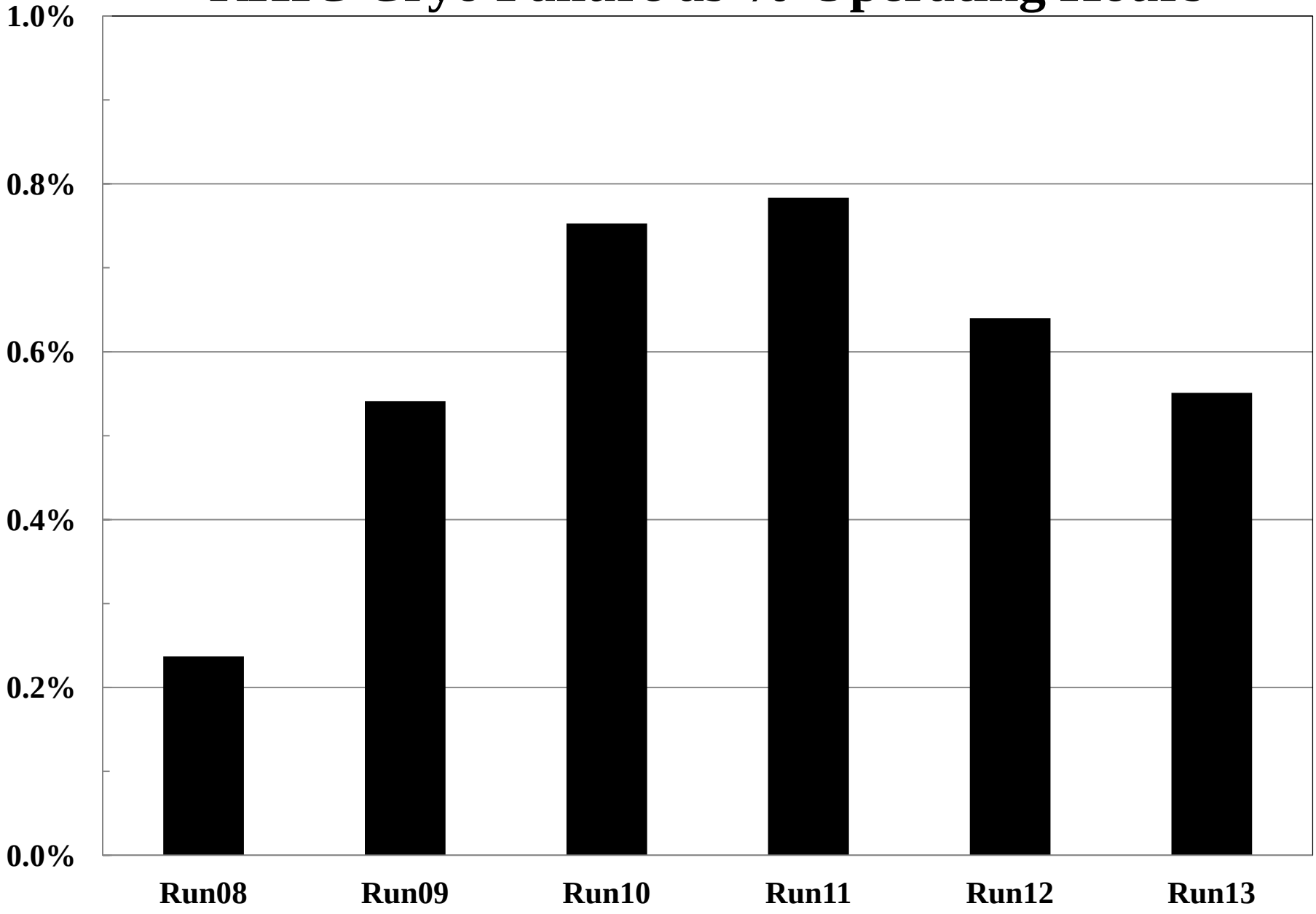
Controls (Hd+Sft) Failure as % Operating Hours



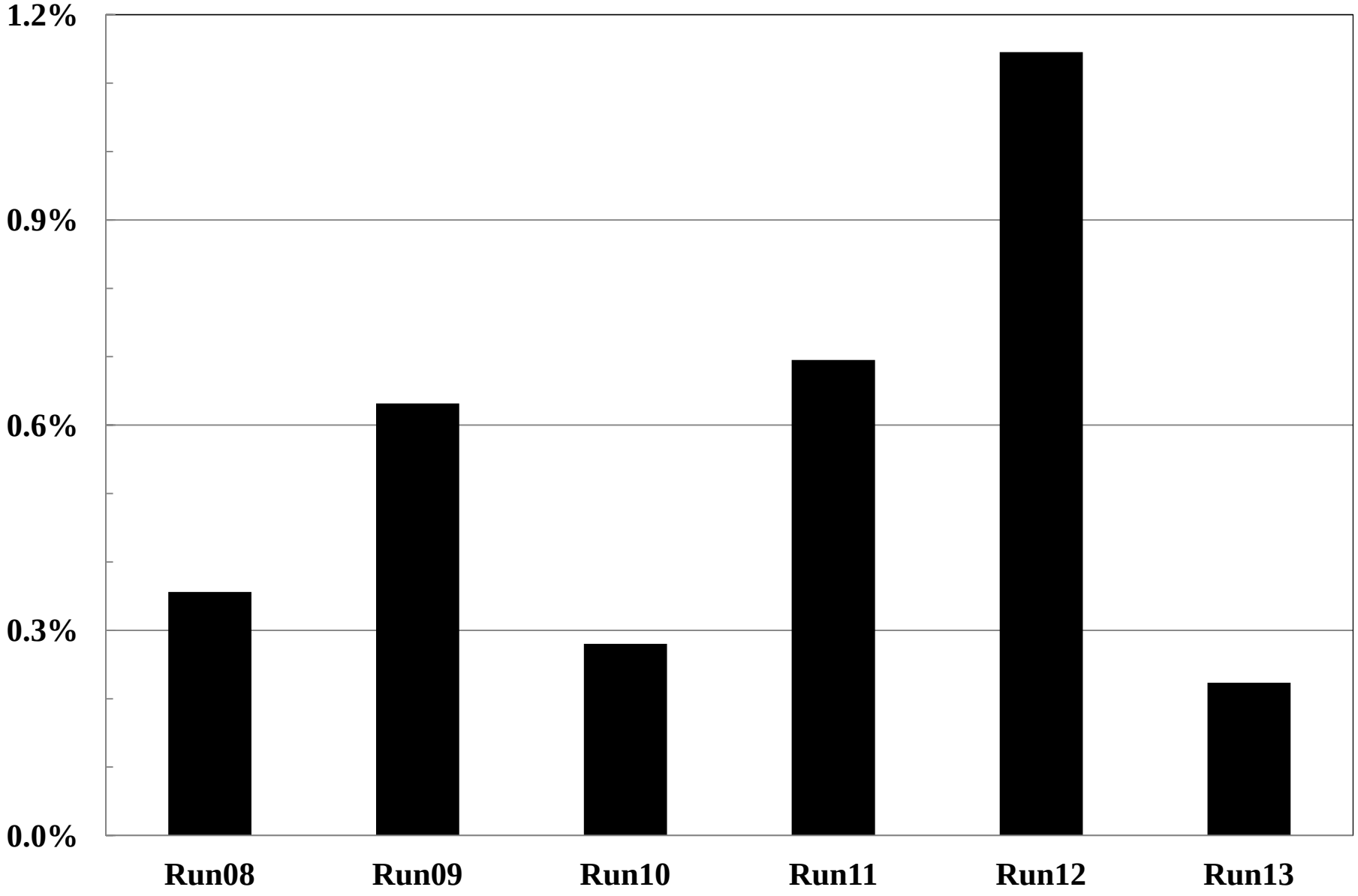
Human Error as % Operating Hours



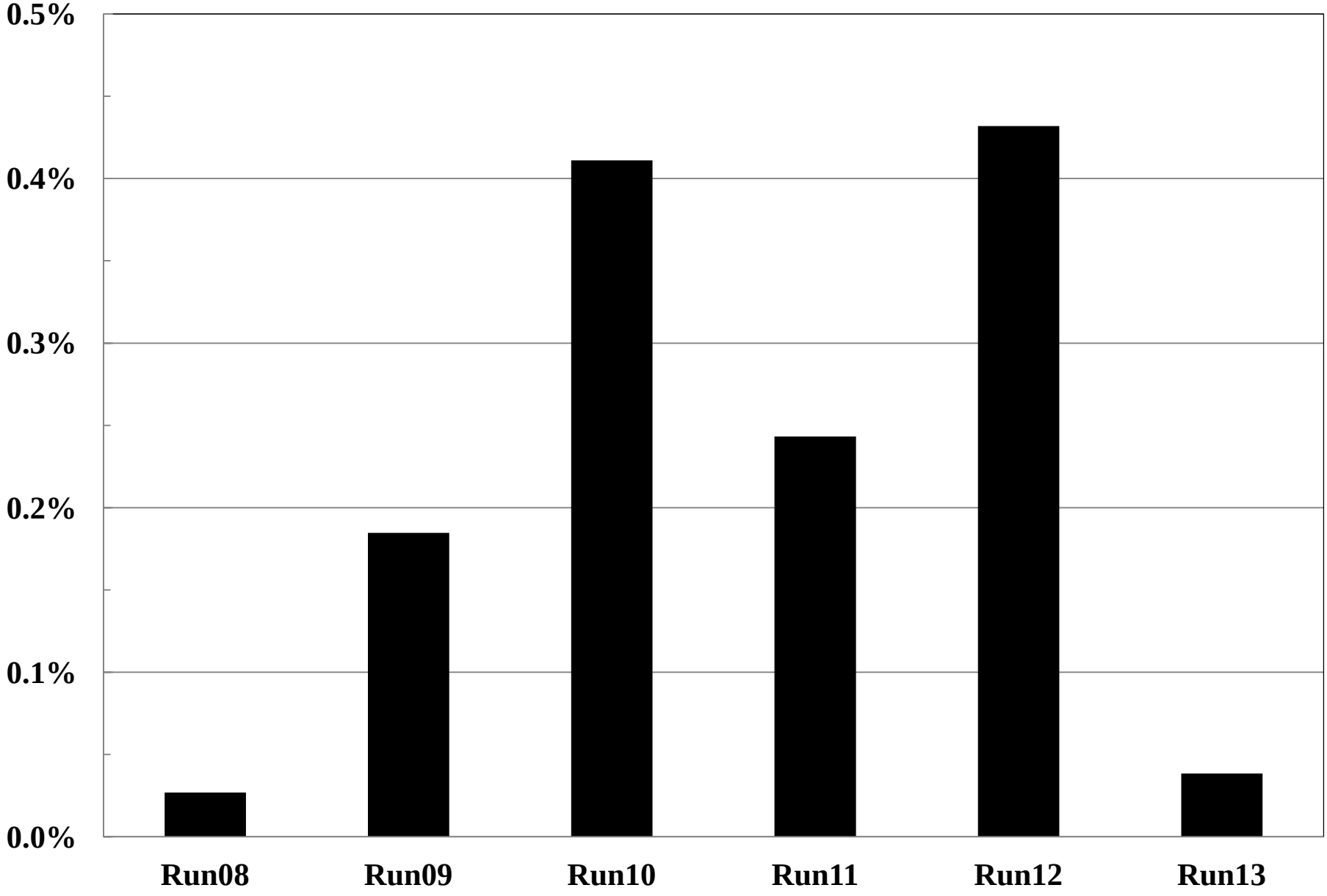
RHIC Cryo Failure as % Operating Hours



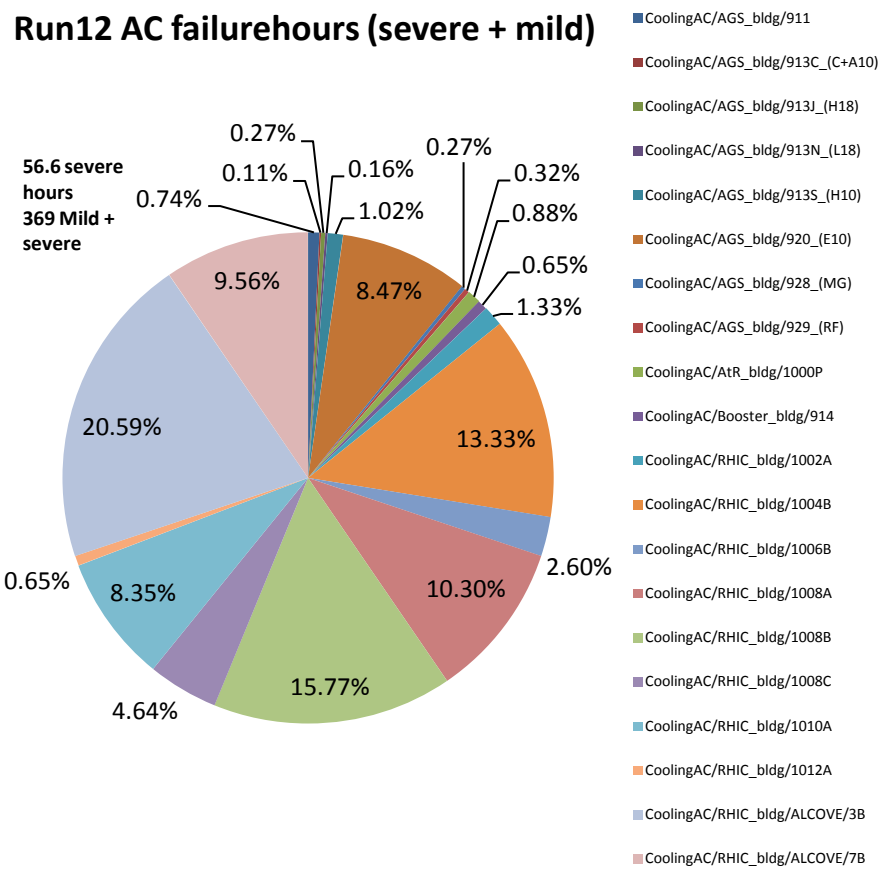
Electric Power Failure as % Operating Hours

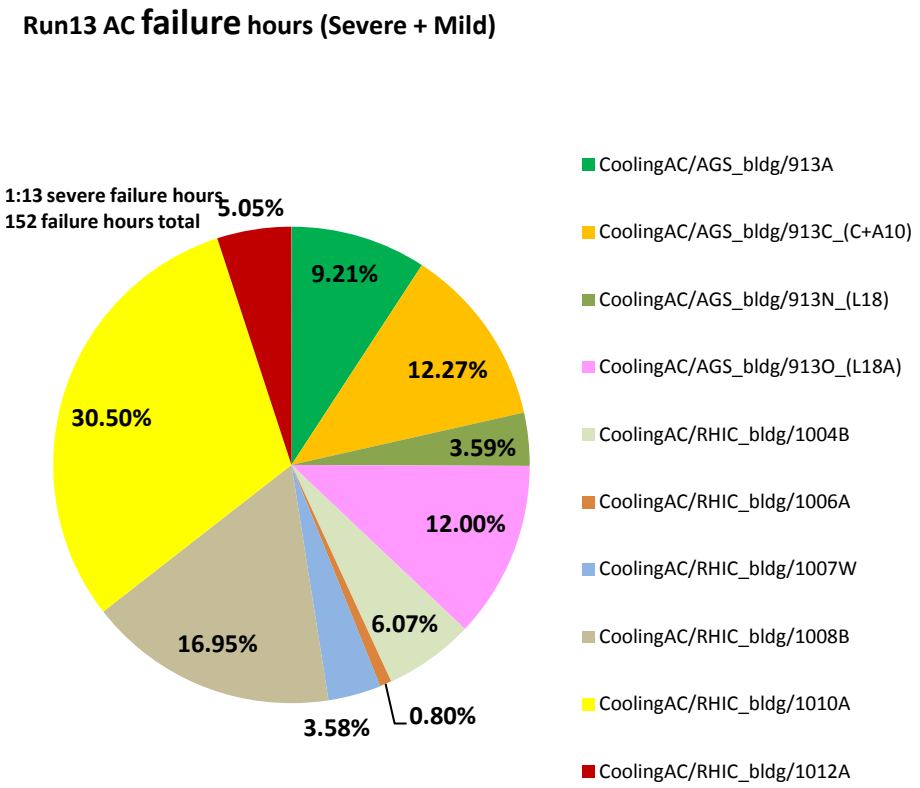


Air Conditioning Failure as % Operating Hours

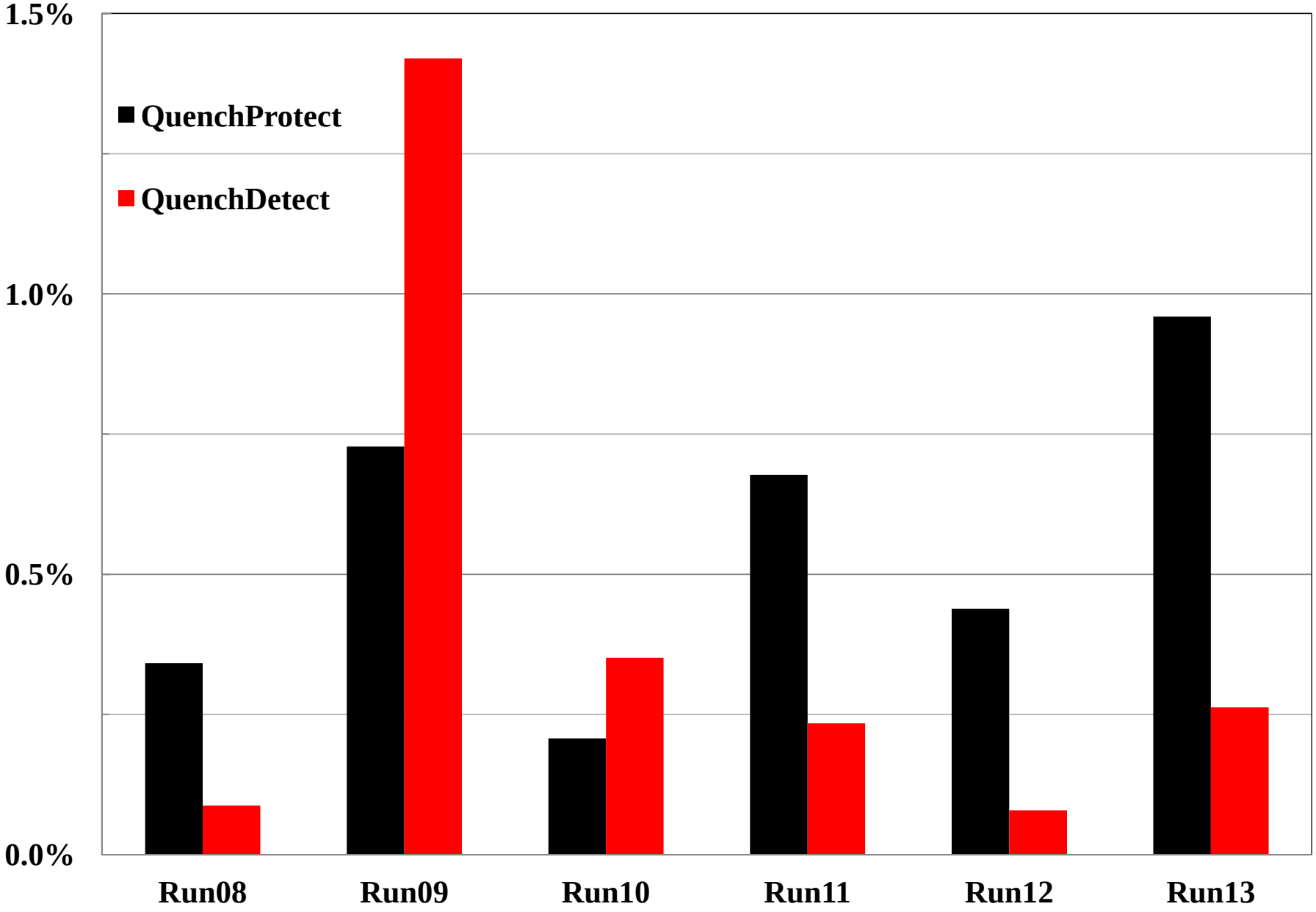


Air Conditioning Run12 Vs Run13

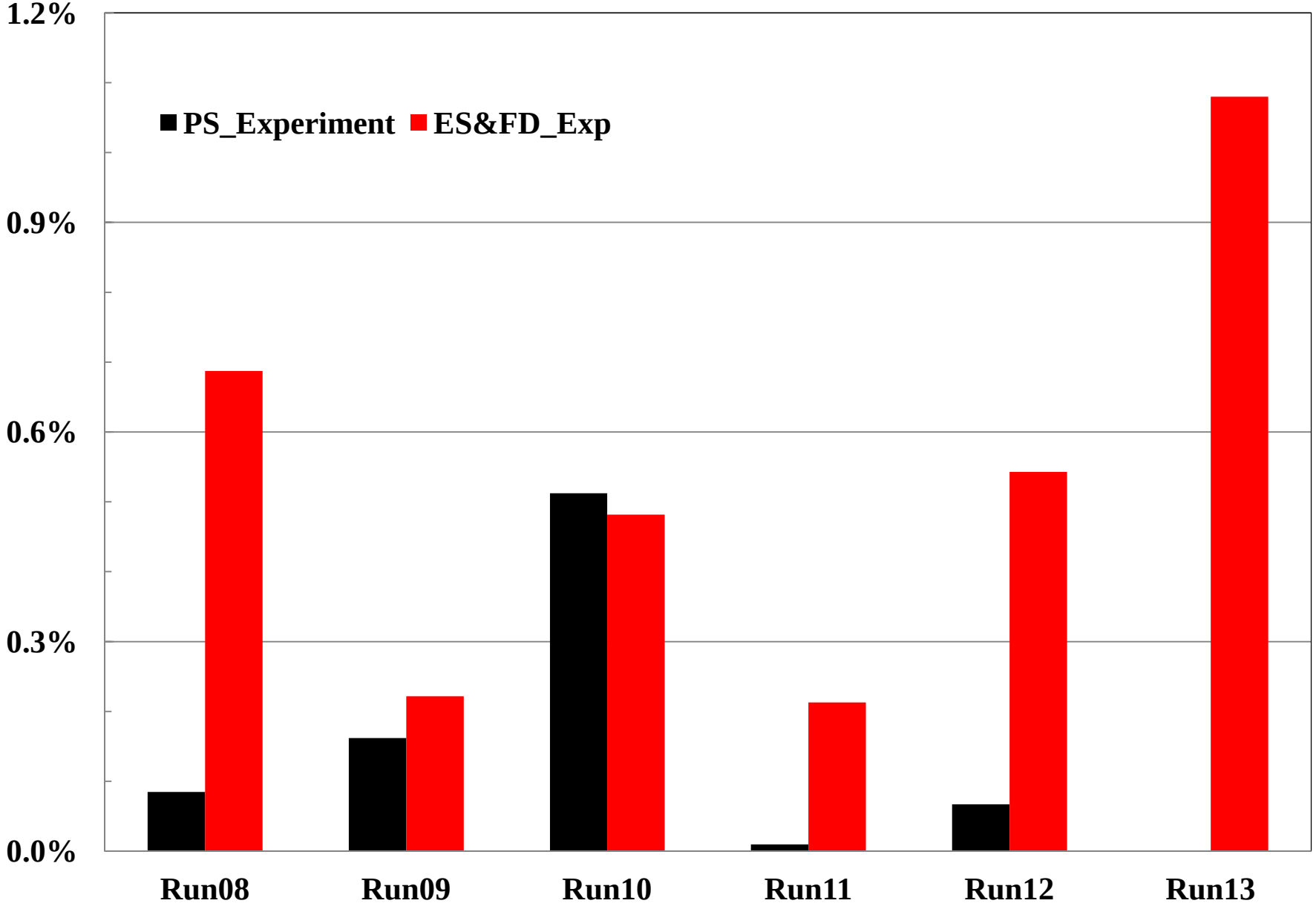




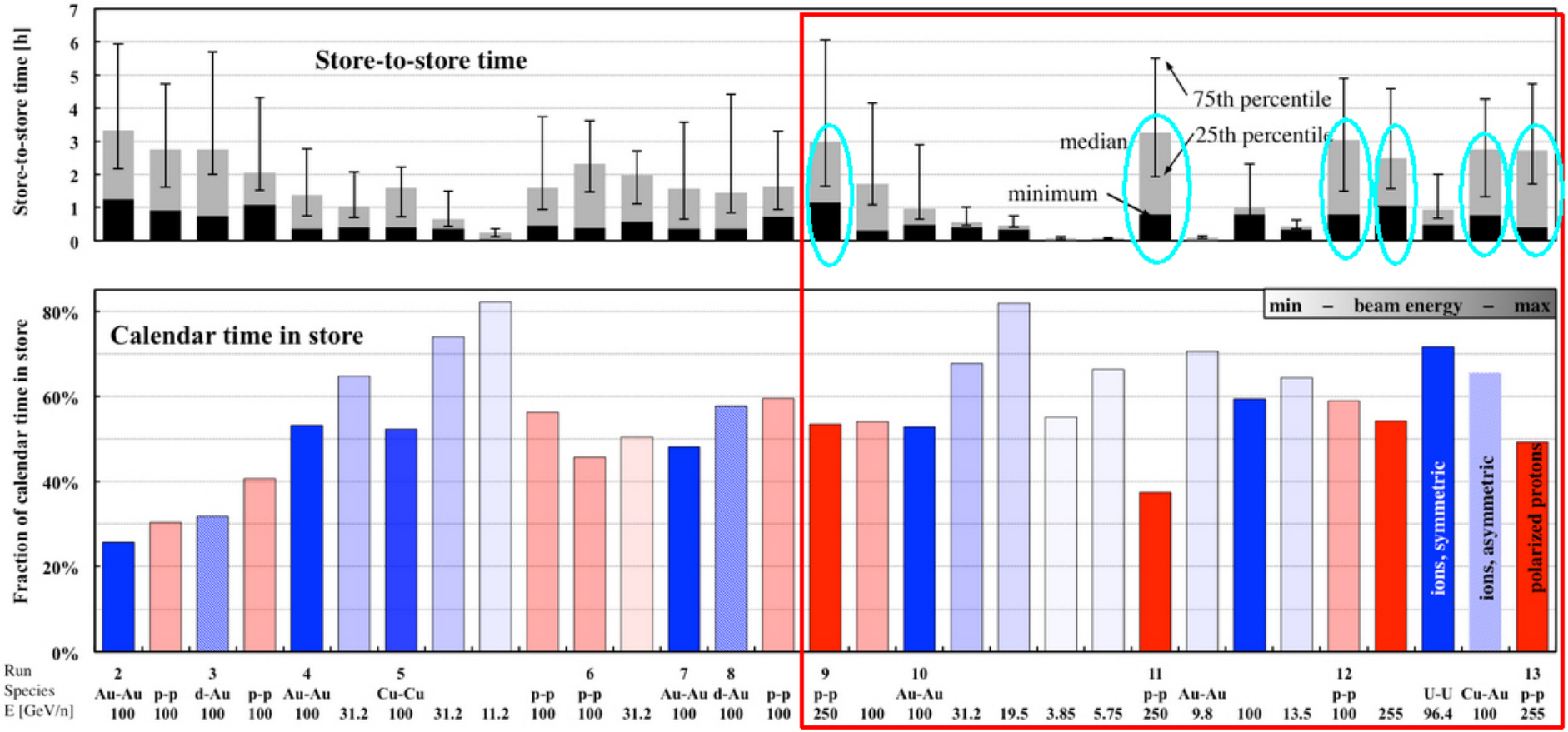
Quench Protect/Detect Failure as % Operating Hours



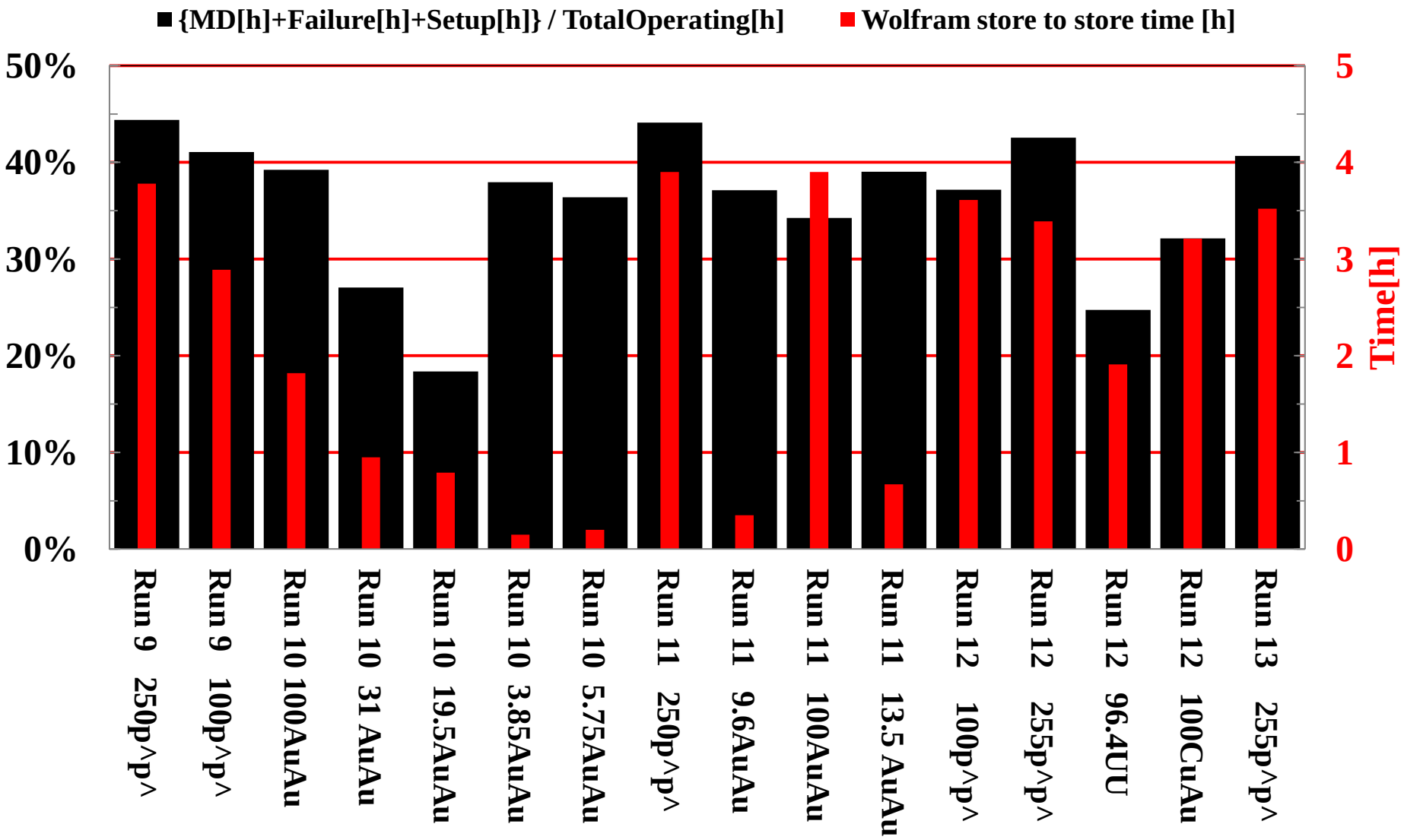
Experiment Failure as % Operating Hours



Wolfram observes no improvement in Store to Store Times Run09 thru Run13



Reasonable agreement – store to store time f(Failure, Setup, Machine Development)



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