

A parallel workload has extreme variability

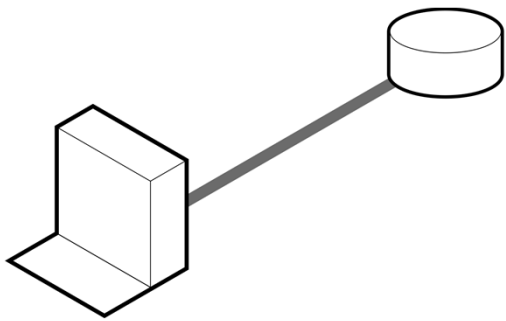
R. Henwood¹, N.W.Watkins^{2,3}, S.C. Chapman^{3,4,5}, R. McLay⁶

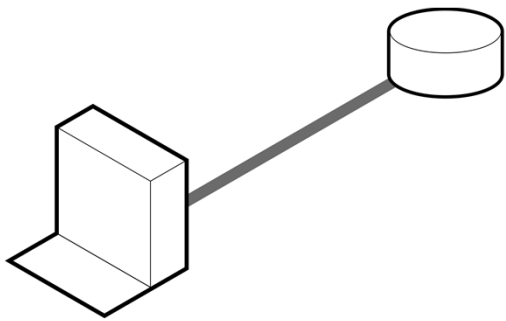
ARM

1. ARM, Austin, Texas.
2. Center for the Analysis of Time Series, LSE, UK
3. Center for Fusion, Space and Astrophysics, University of Warwick, UK
4. Dept of Mathematics and Statistics, University of Tromso, Norway
5. Max Planck Institute for the Physics of Complex Systems, Germany
6. Texas Advanced Computer Center, University of Texas

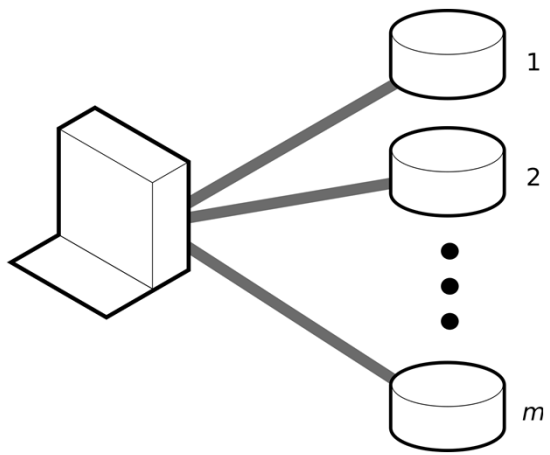
PDSW-DICS '16 WIP, Salt Lake City
November 14th 2016

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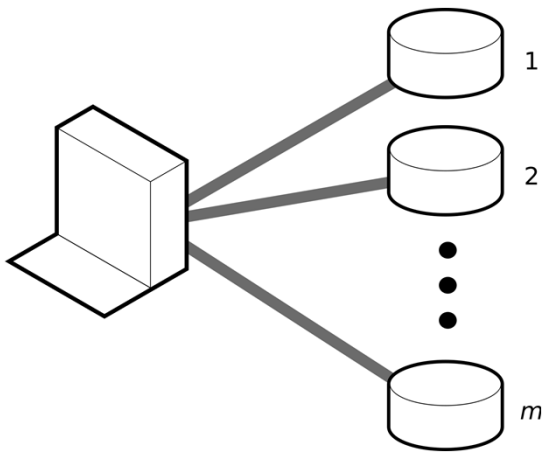




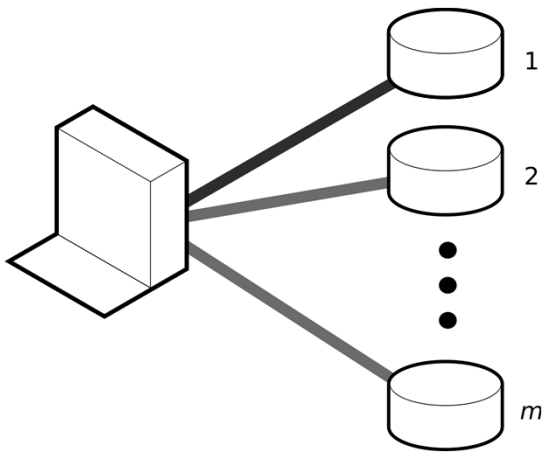
X



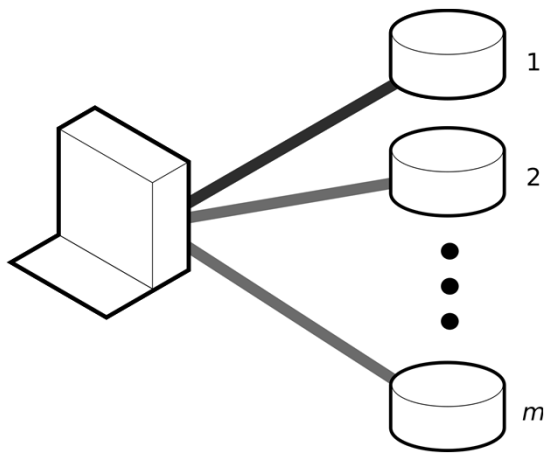
X



X_1
 X_2
 \vdots
 X_m



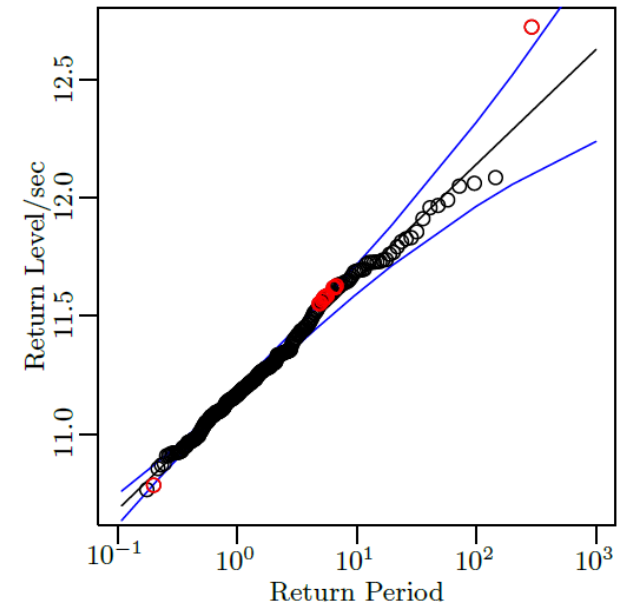
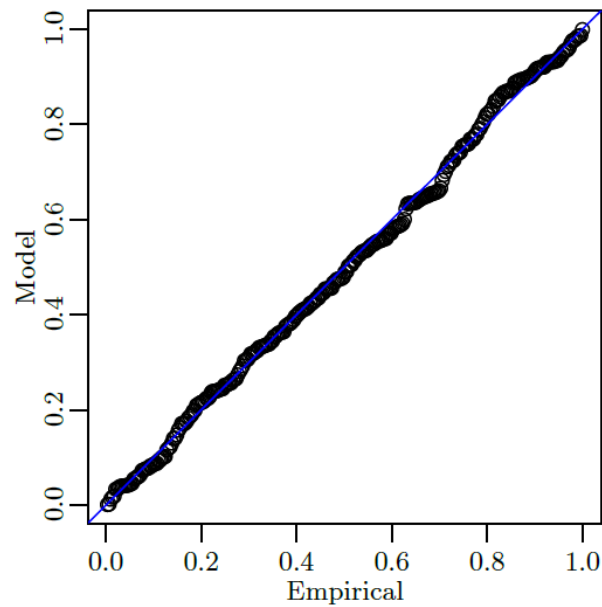
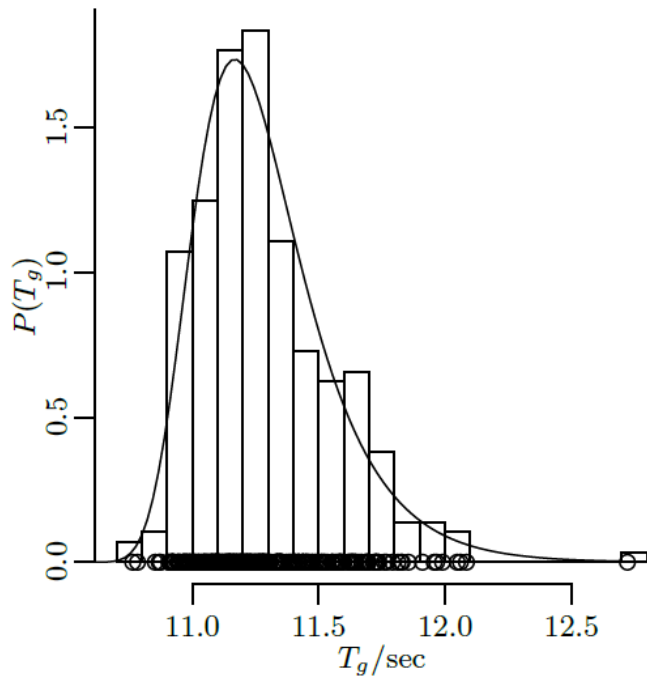
$$\max \left\{ \begin{array}{c} X_1 \\ X_2 \\ \vdots \\ X_m \end{array} \right\}$$



$$\rightarrow \max \left\{ \begin{array}{c} X_1 \\ X_2 \\ \vdots \\ X_m \end{array} \right\} \rightarrow P_{\mu, \sigma}(x) = e^{-e^{\left(\frac{x-\mu}{\sigma}\right)}}$$

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Results: 400 observations on Lustre



For comparison: Portpirie annual max sea levels

