Example:
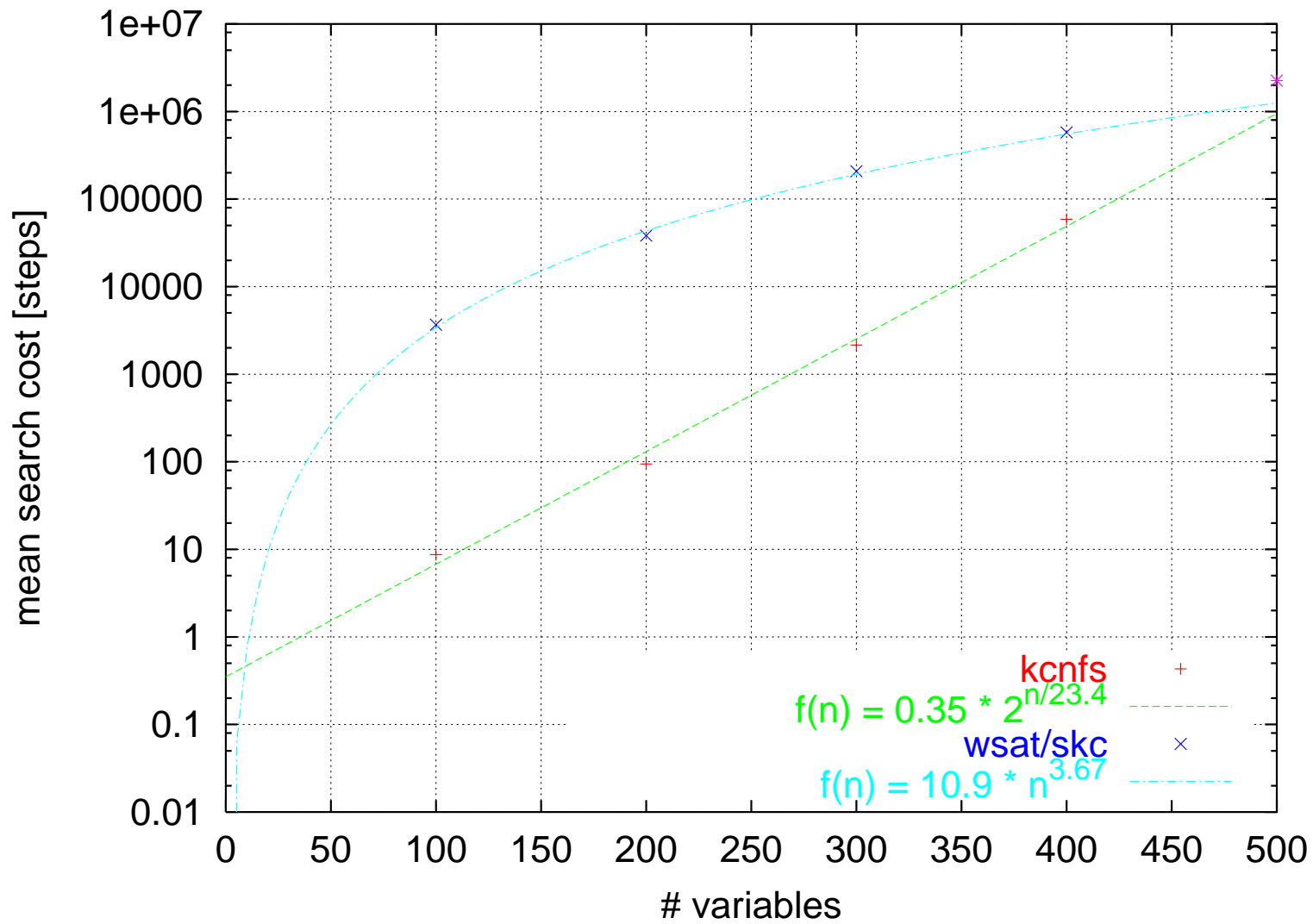
For a given SLS algorithm for SAT applied to a specific SAT instance we observe
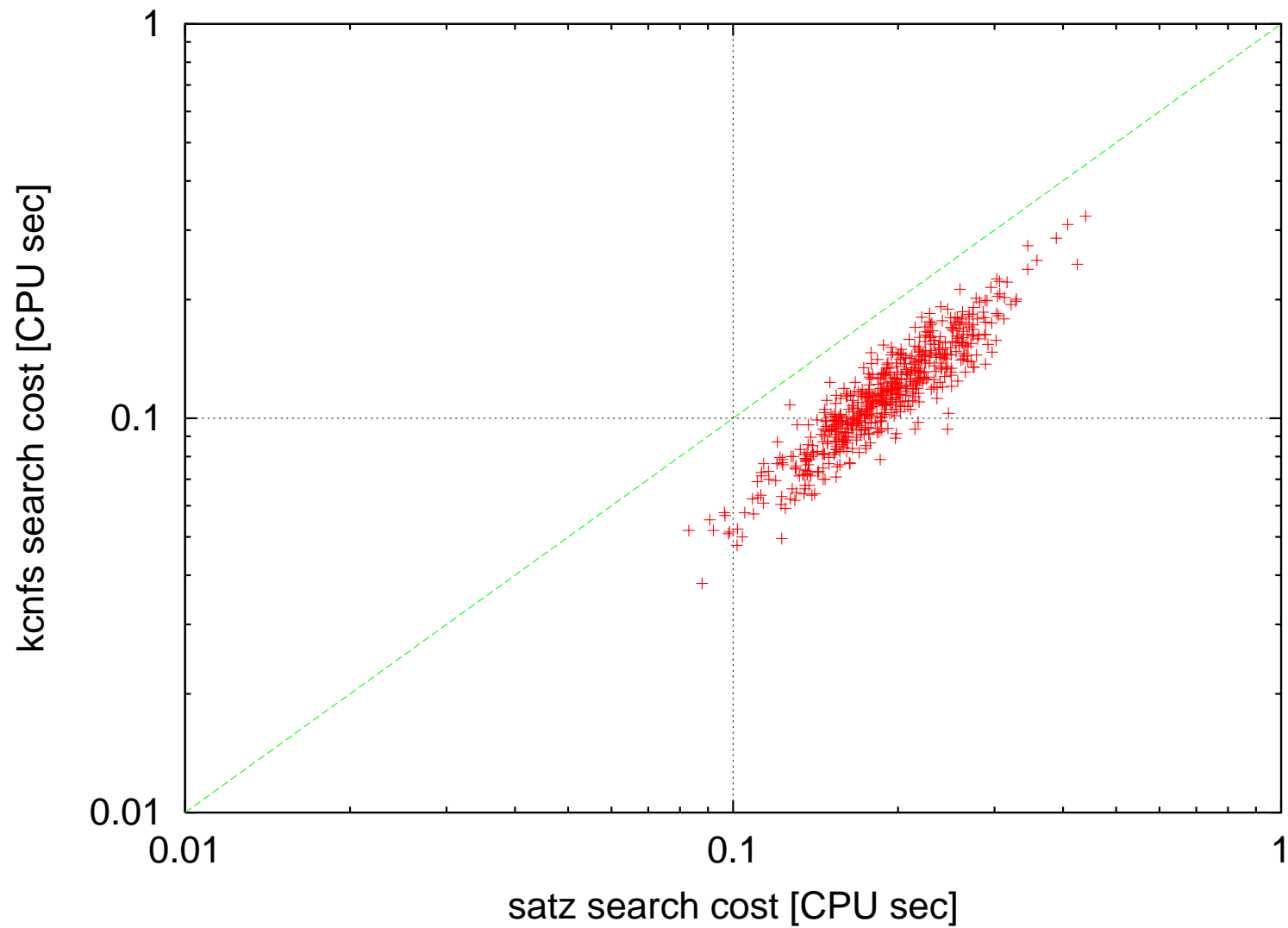
- a median run-time of 38 911 search steps (*operation count*);

- the CPU time required for each search step is 0.027ms, while initialisation takes 0.8ms (*cost model*)

  when running the algorithm on an Intel Xeon 2.4GHz CPU with 512KB cache and 1GB RAM running Red Hat Linux, Version 2.4smp (*run-time environment*).

Empirical scaling of algorithm performance

mean search cost [steps]

variables

kcnfs +
$f(n) = 0.35 * 2^{n/23.4}$
wsat/skc ×
$f(n) = 10.9 * n^{3.67}$

Correlation of algorithm performance (each point one instance)

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