

Άσκηση 1

Γενικές παρατηρήσεις

Τι περιμένουμε να δούμε:

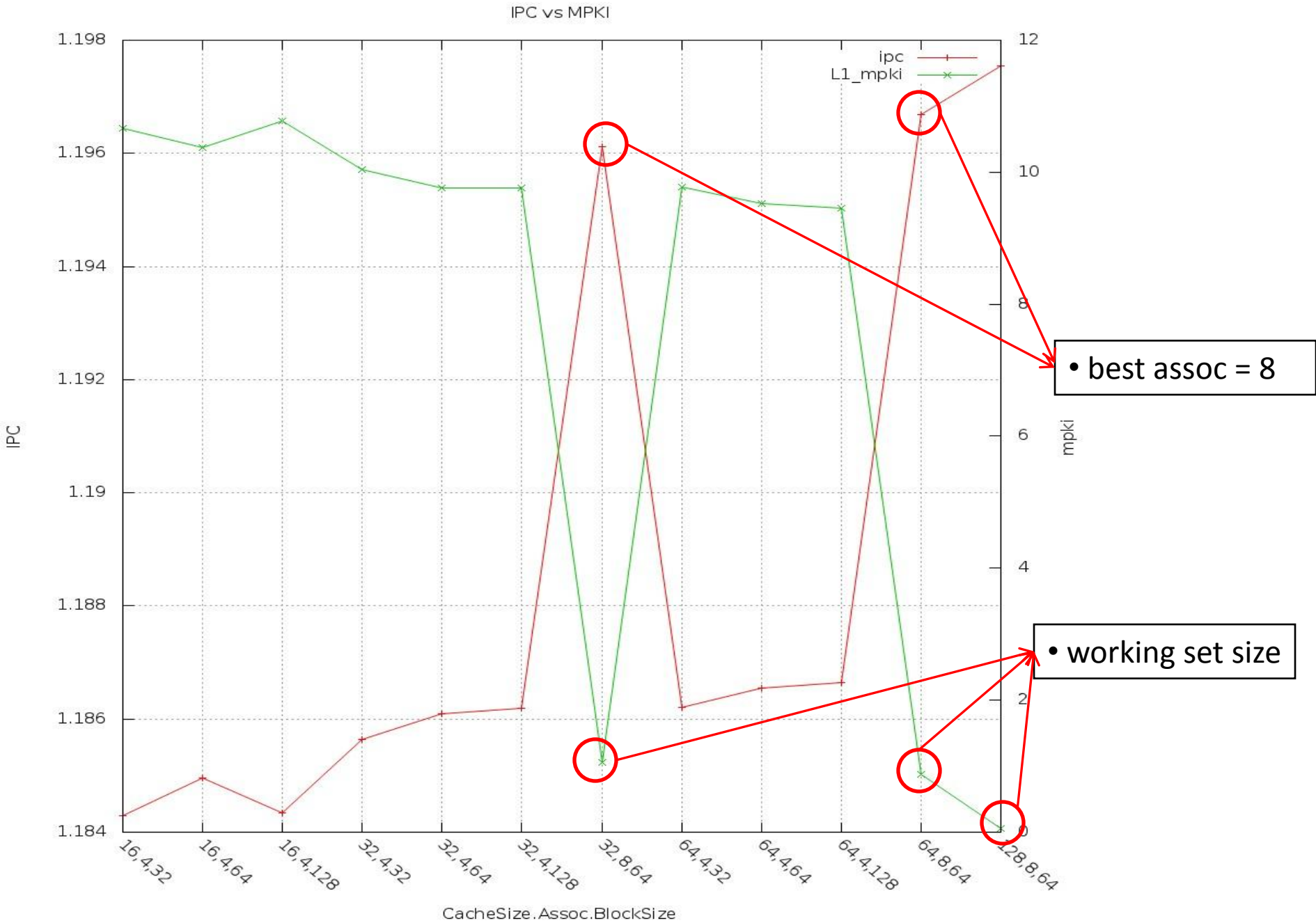
1. Μεγαλύτερη χωρητικότητα → Μείωση capacity misses → Βελτίωση απόδοσης
2. Μεγαλύτερο associativity → Μείωση conflict misses → Βελτίωση απόδοσης
3. Μεγαλύτερο block size → Μείωση compulsory misses → Βελτίωση απόδοσης (?)

Τι μπορούμε να συμπεράνουμε για την εφαρμογή:

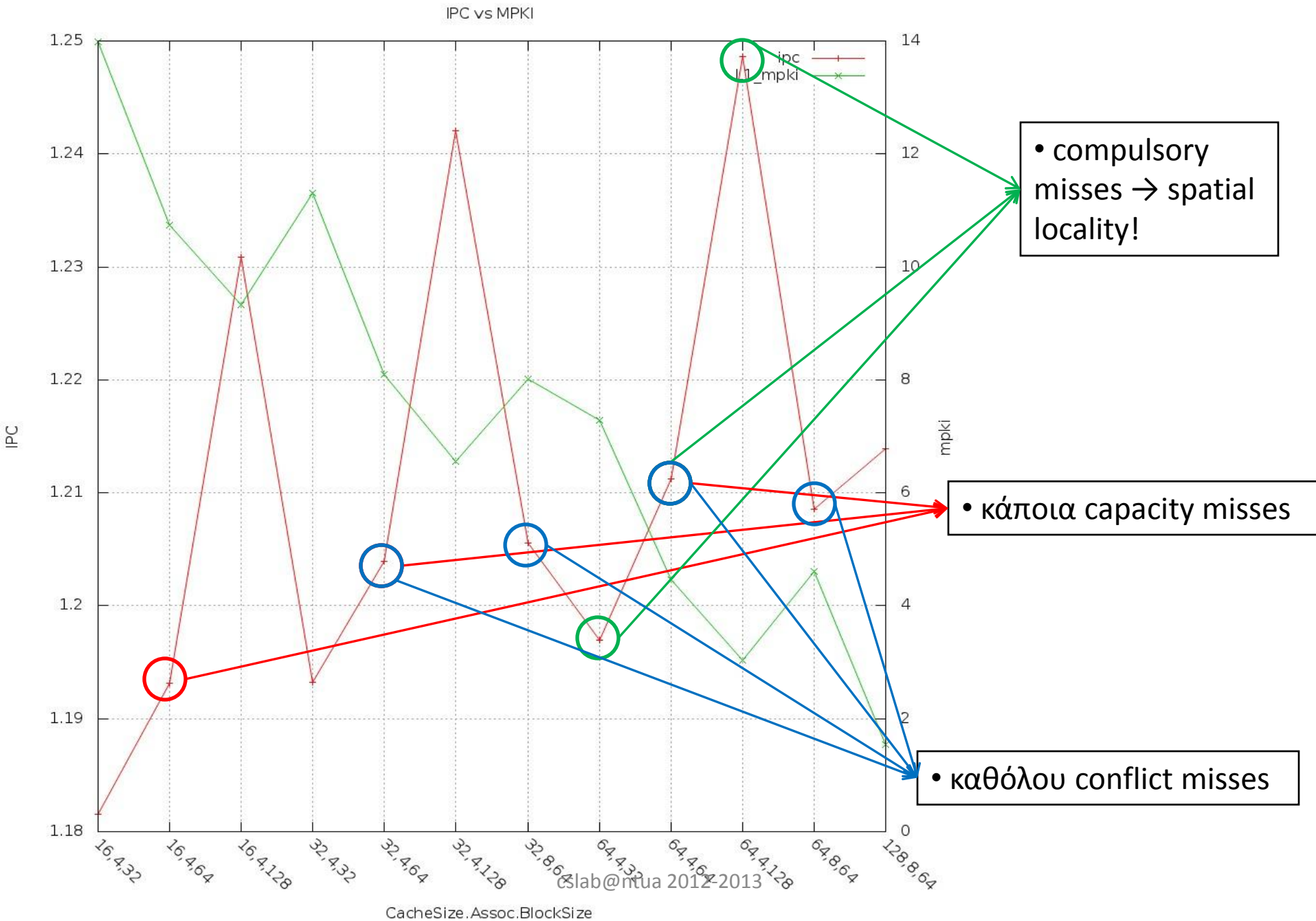
1. Working set size
2. Access pattern (stream vs. reuse, stride, conflicts)
3. Cache sensitivity

Διαφορετικά L1D/L1I configurations

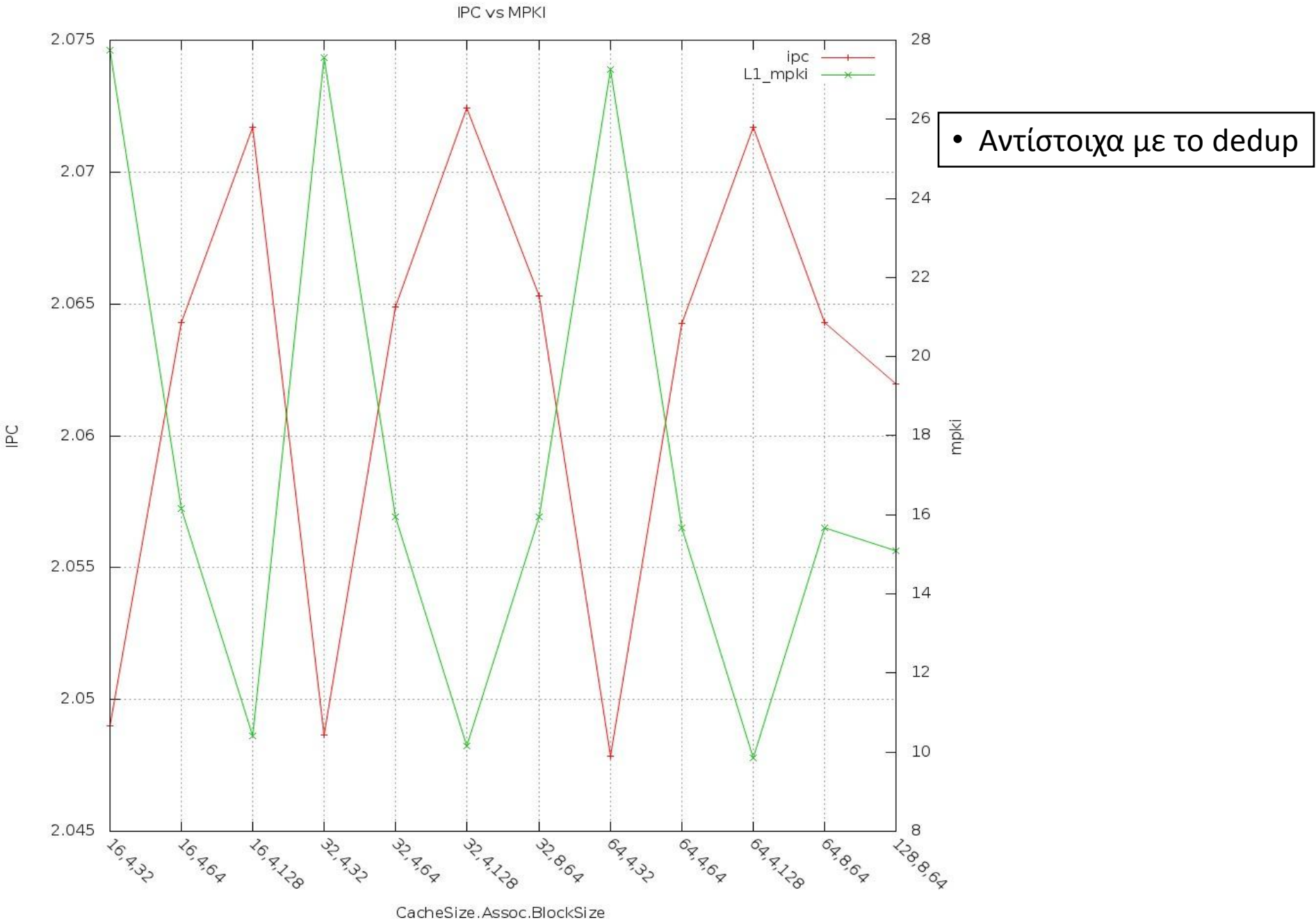
blackscholes



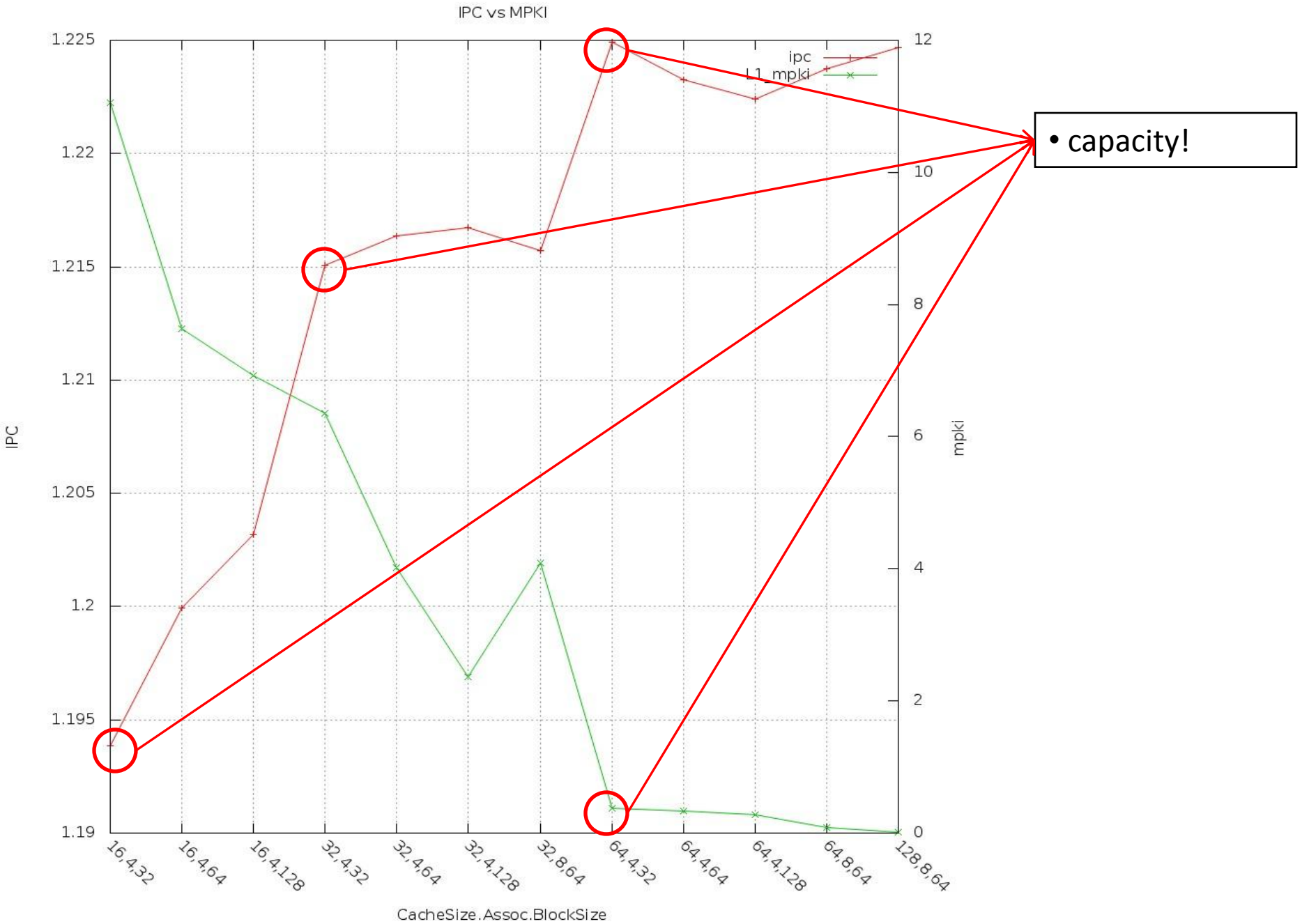
dedup



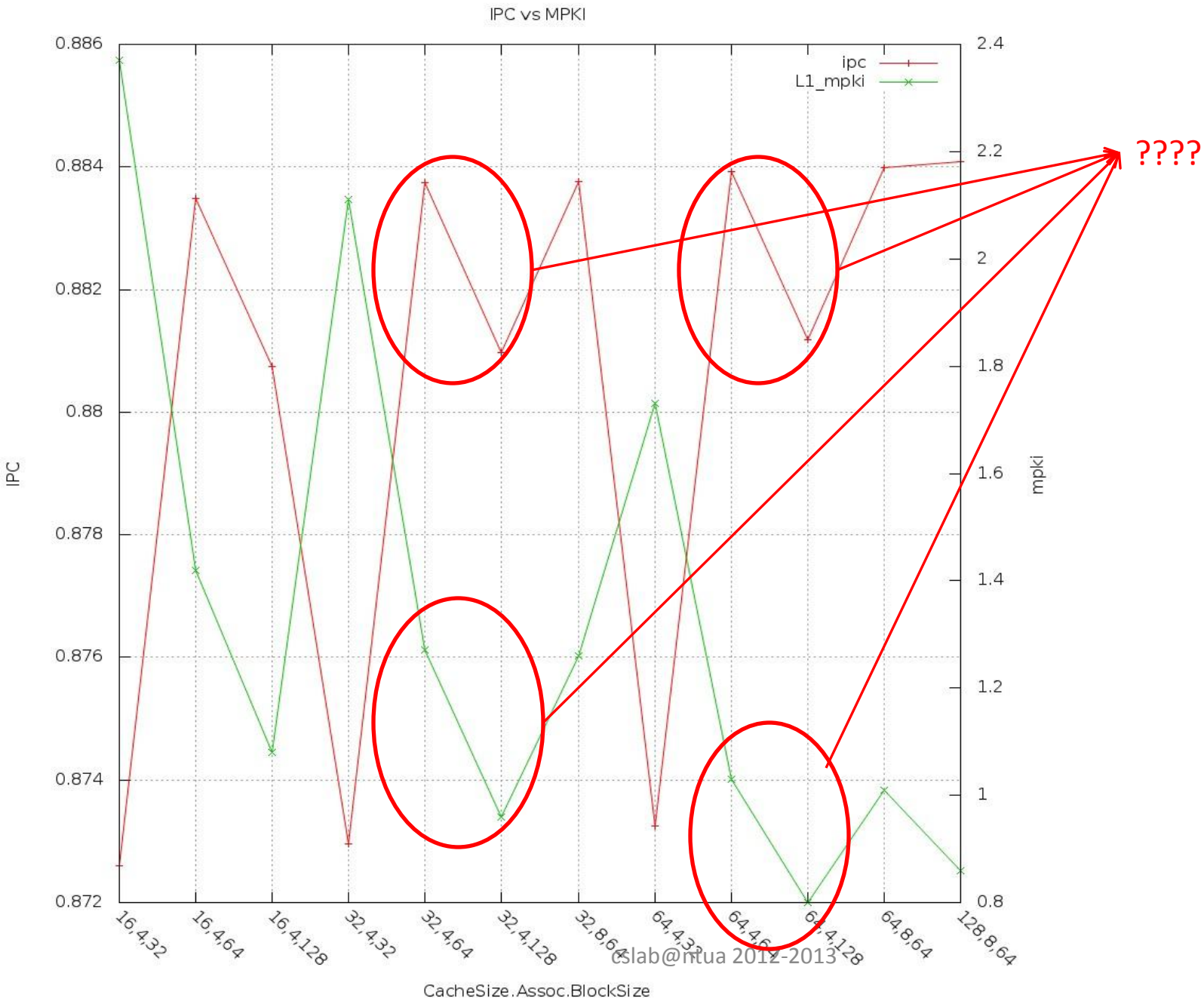
streamcluster



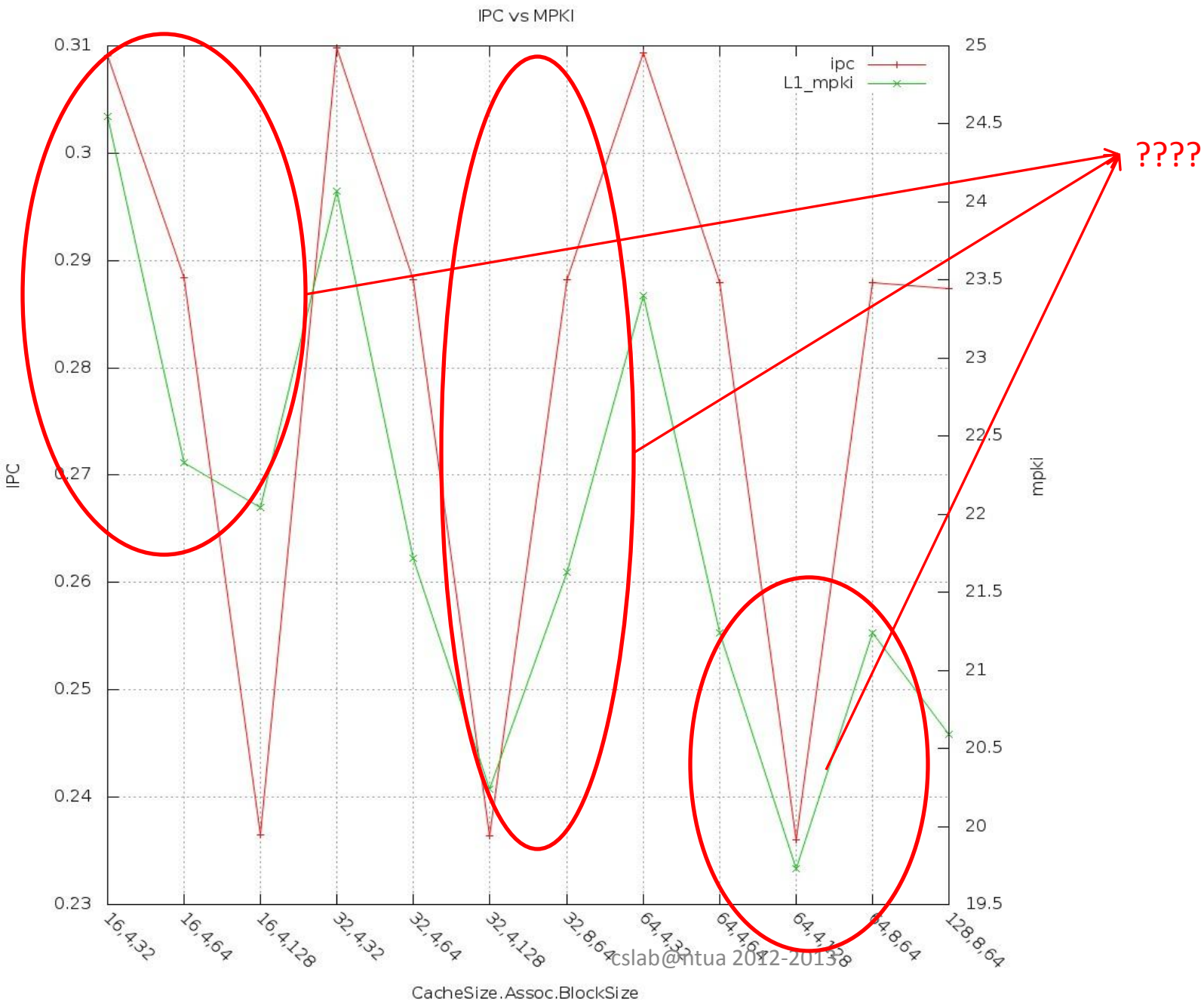
swaptions



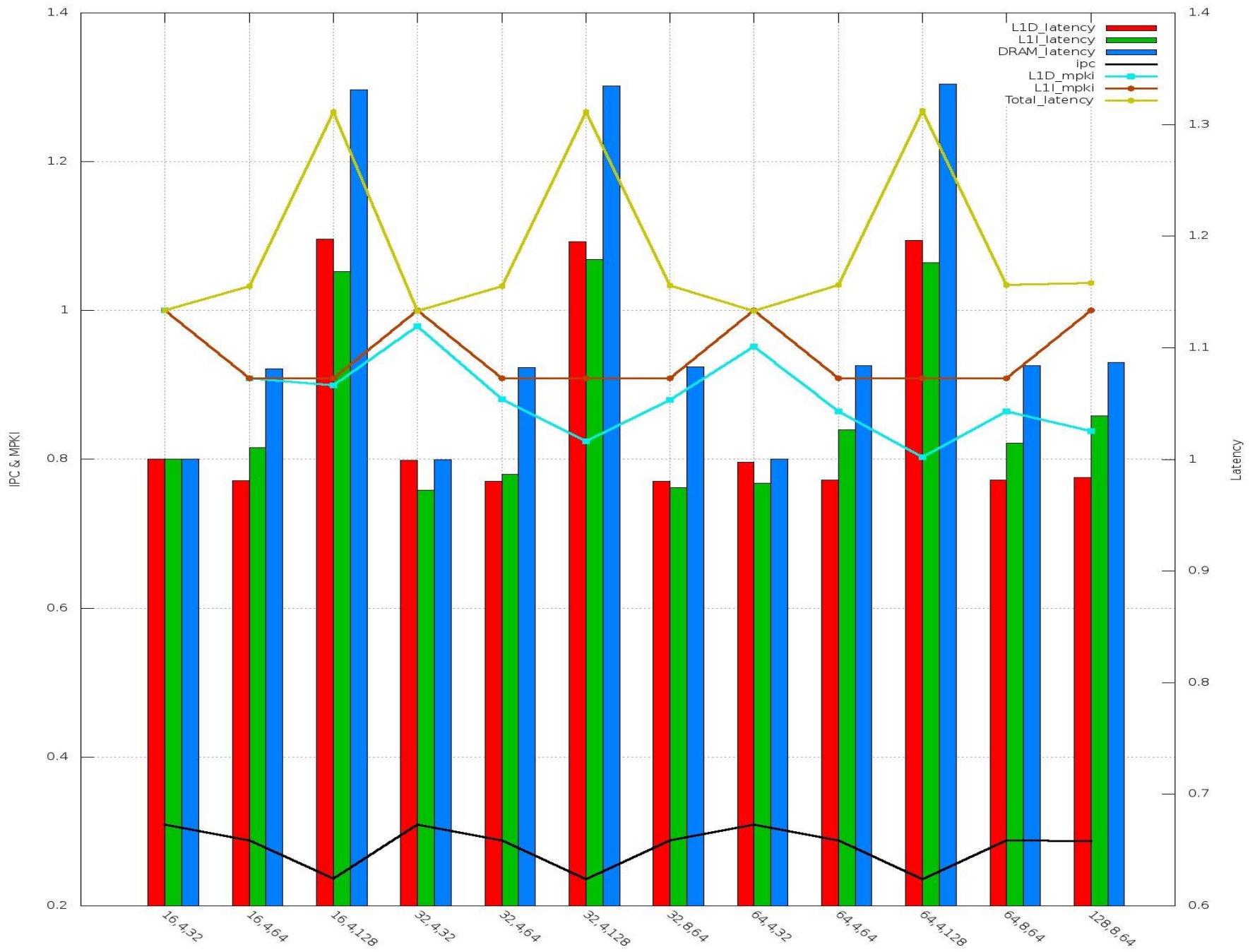
fluidaminate



canneal

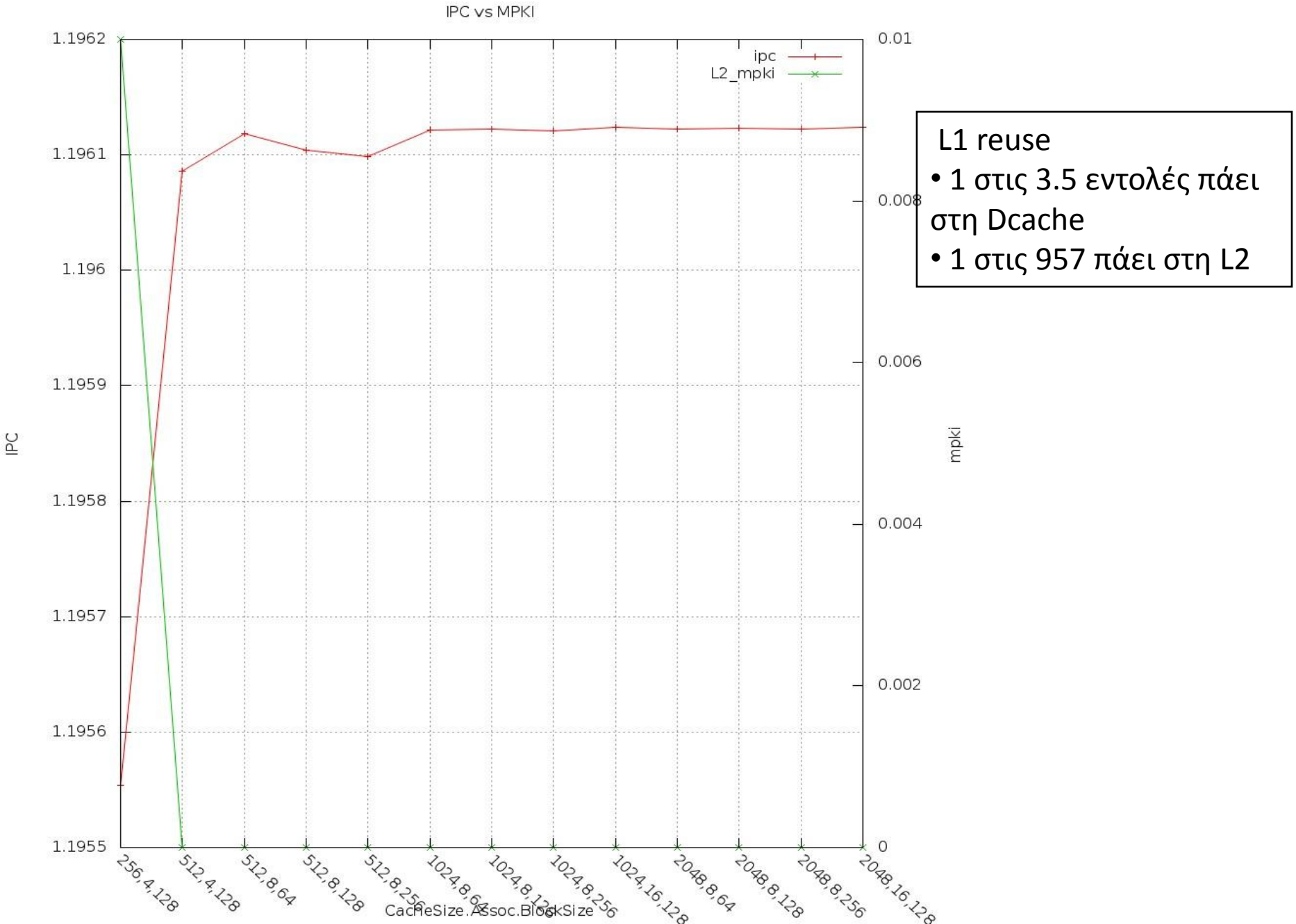


canneal



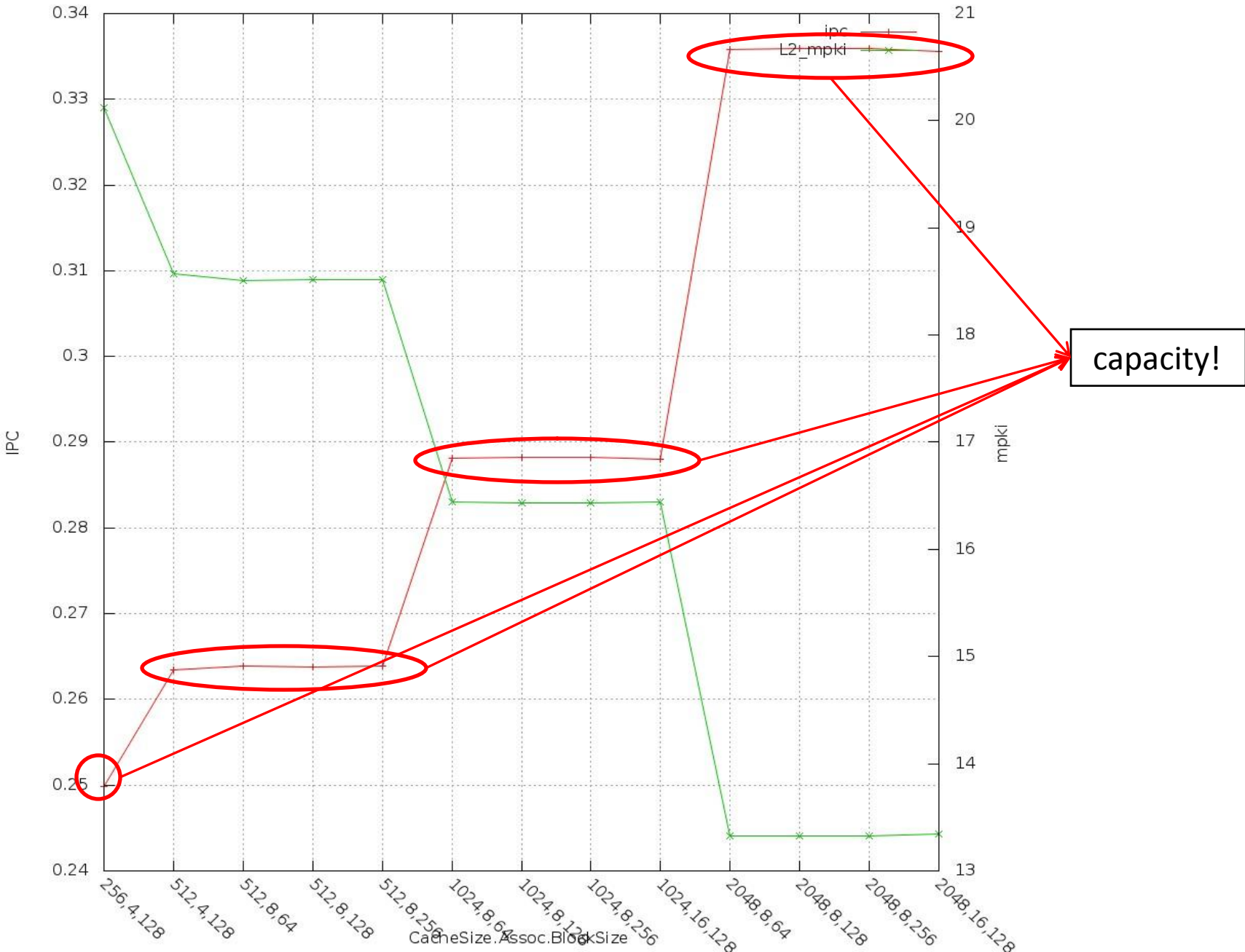
Διαφορετικά L2 configurations

blackscholes

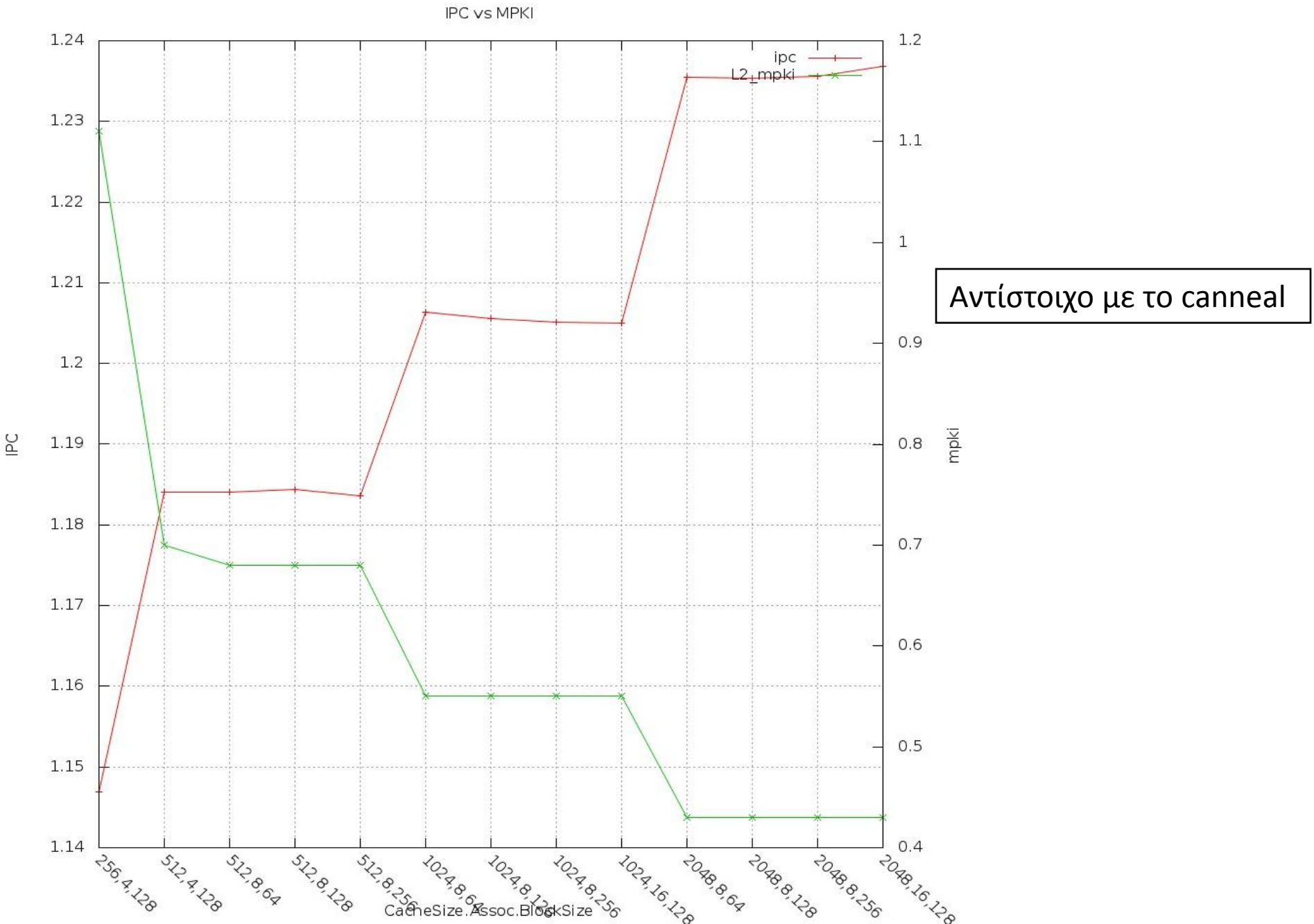


canneal

IPC vs MPKI

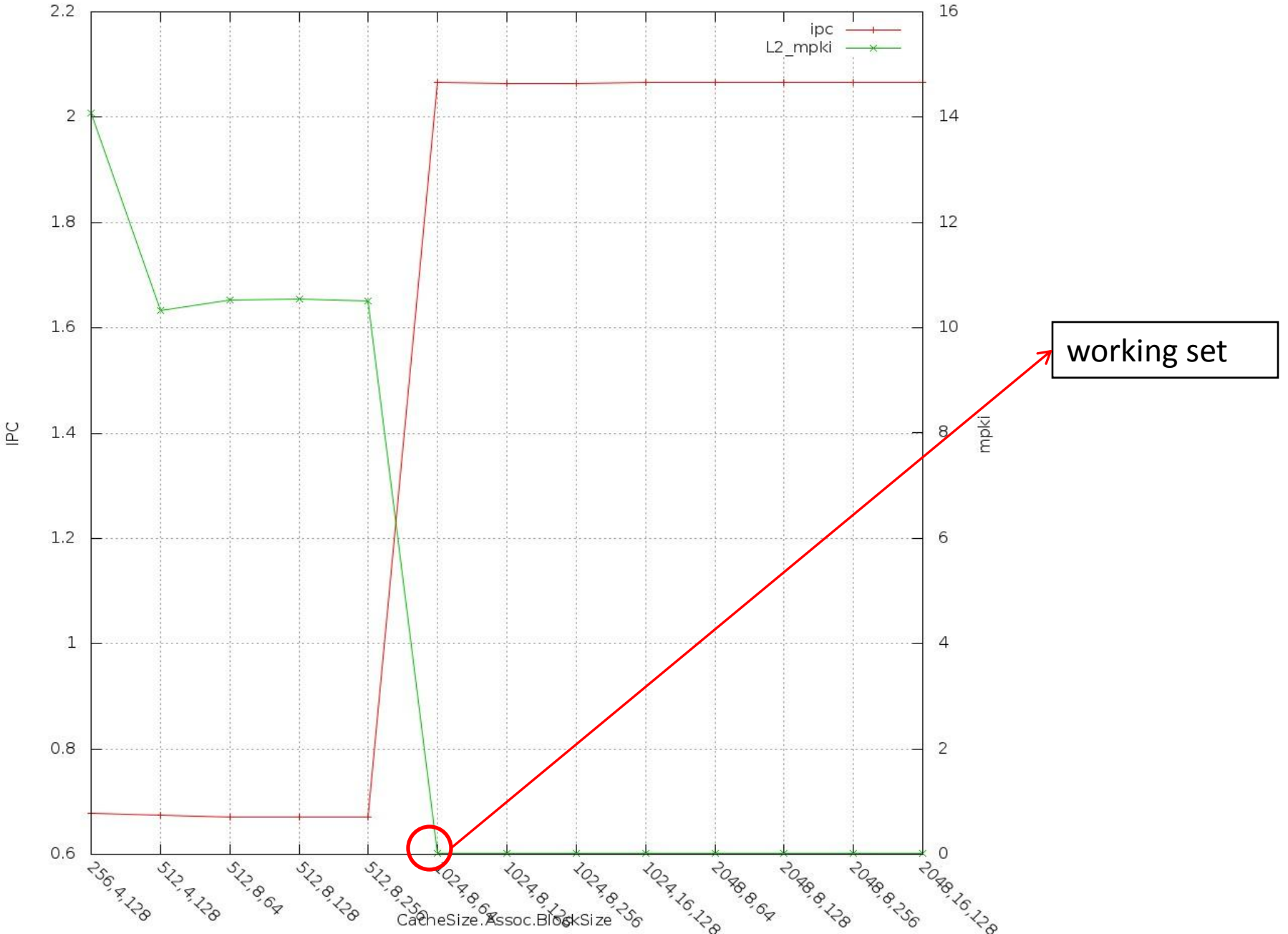


dedup



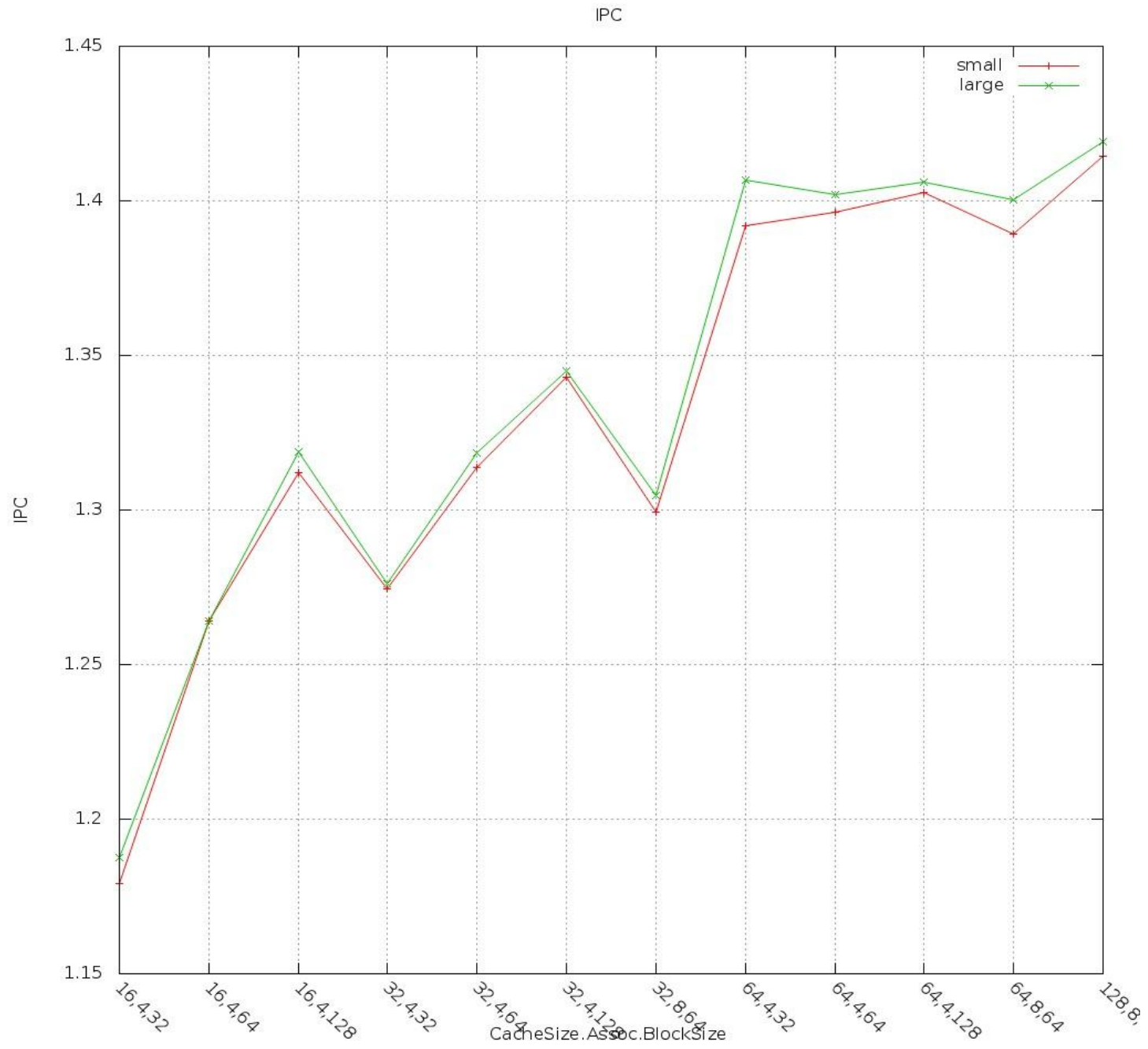
streamcluster

IPC vs MPKI

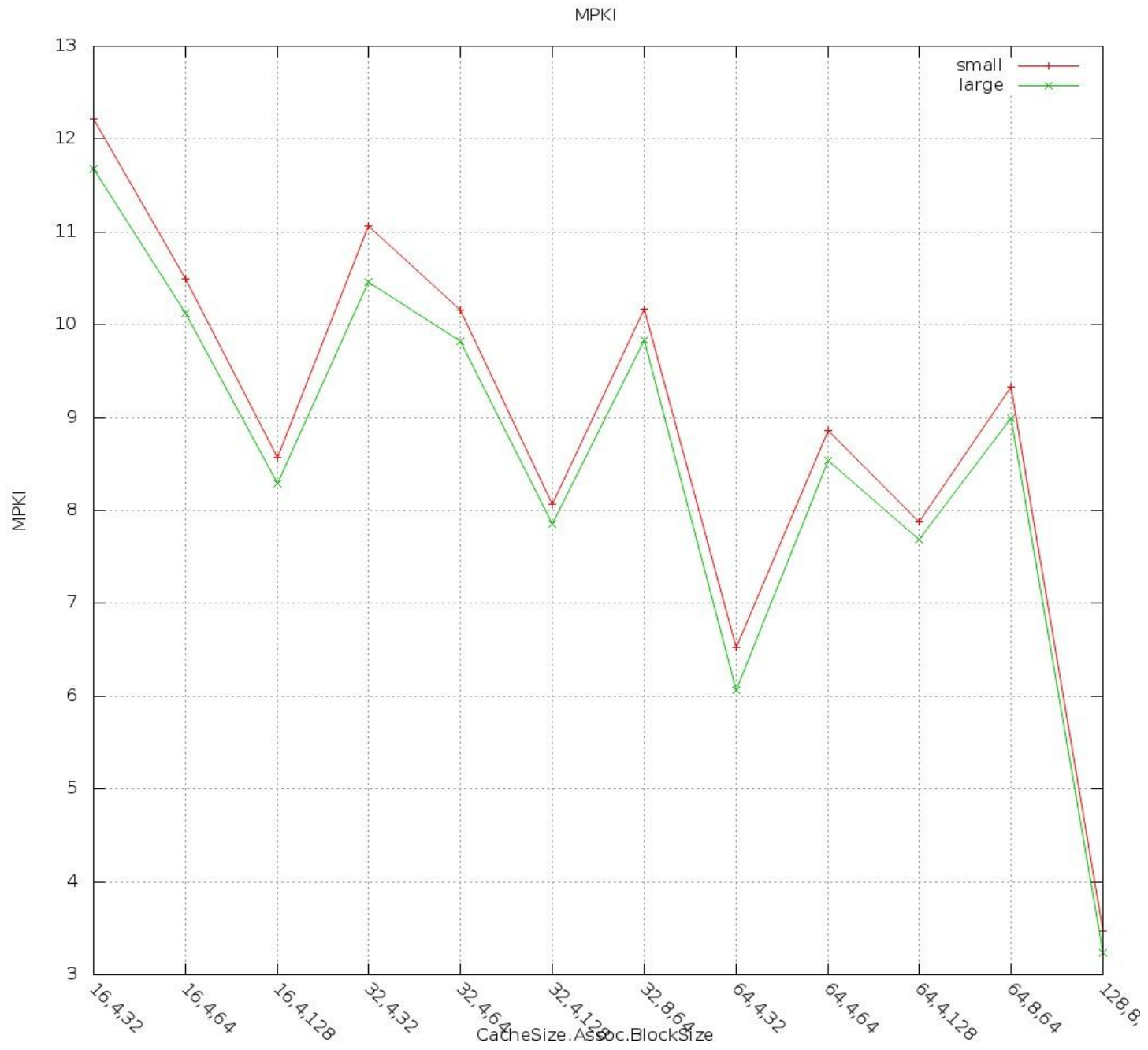


Large input vs. small

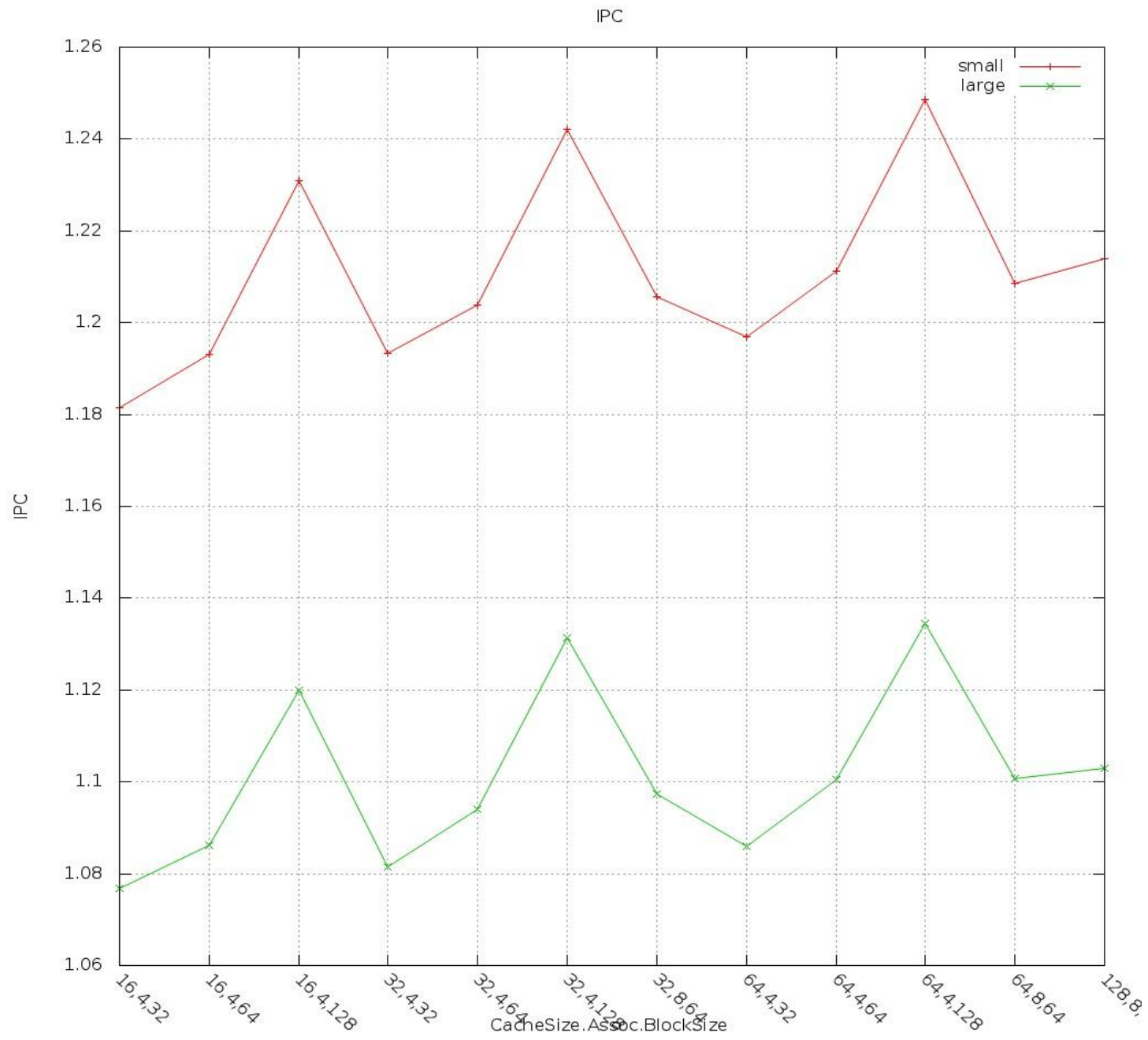
bodytrack



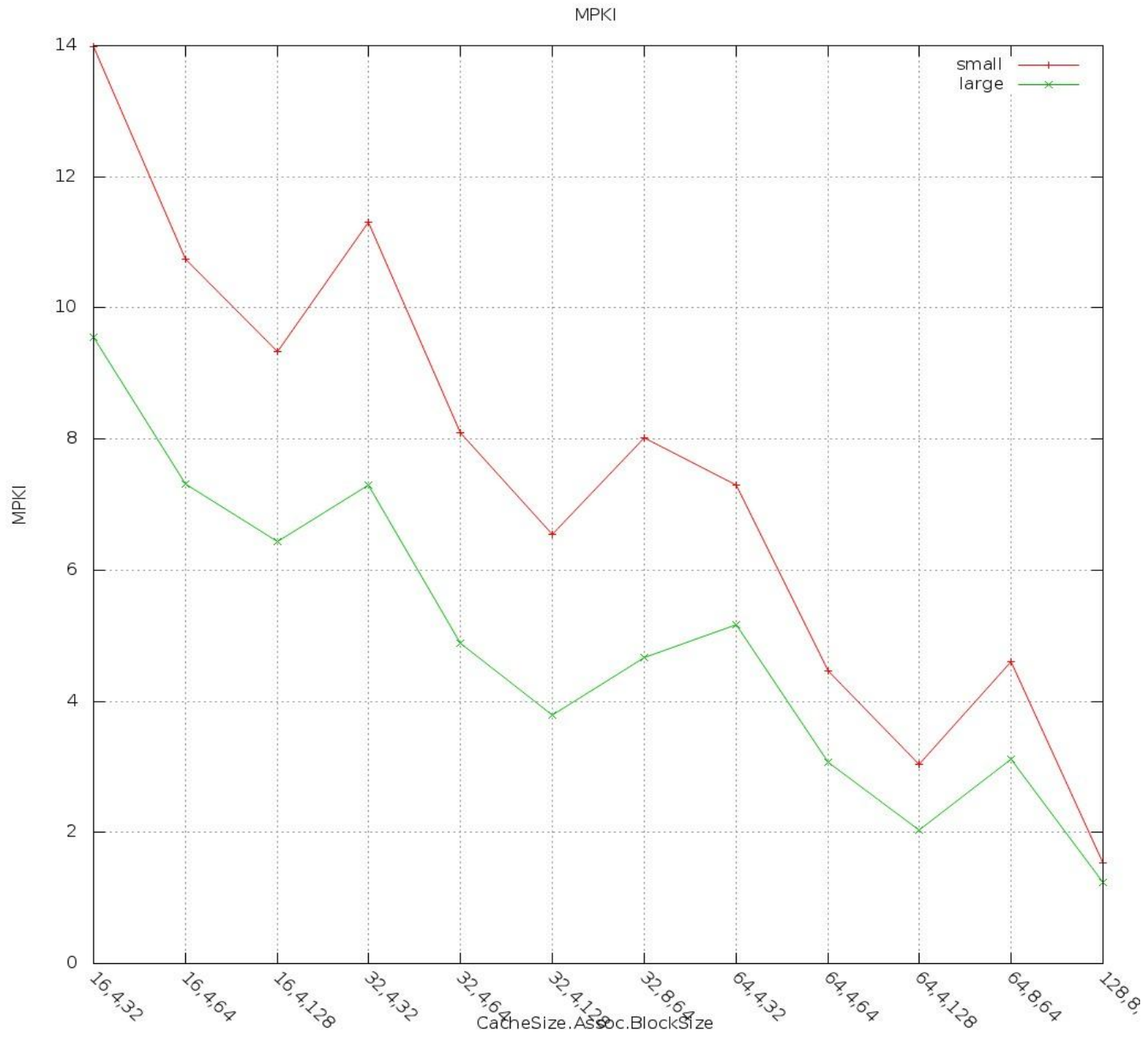
bodytrack



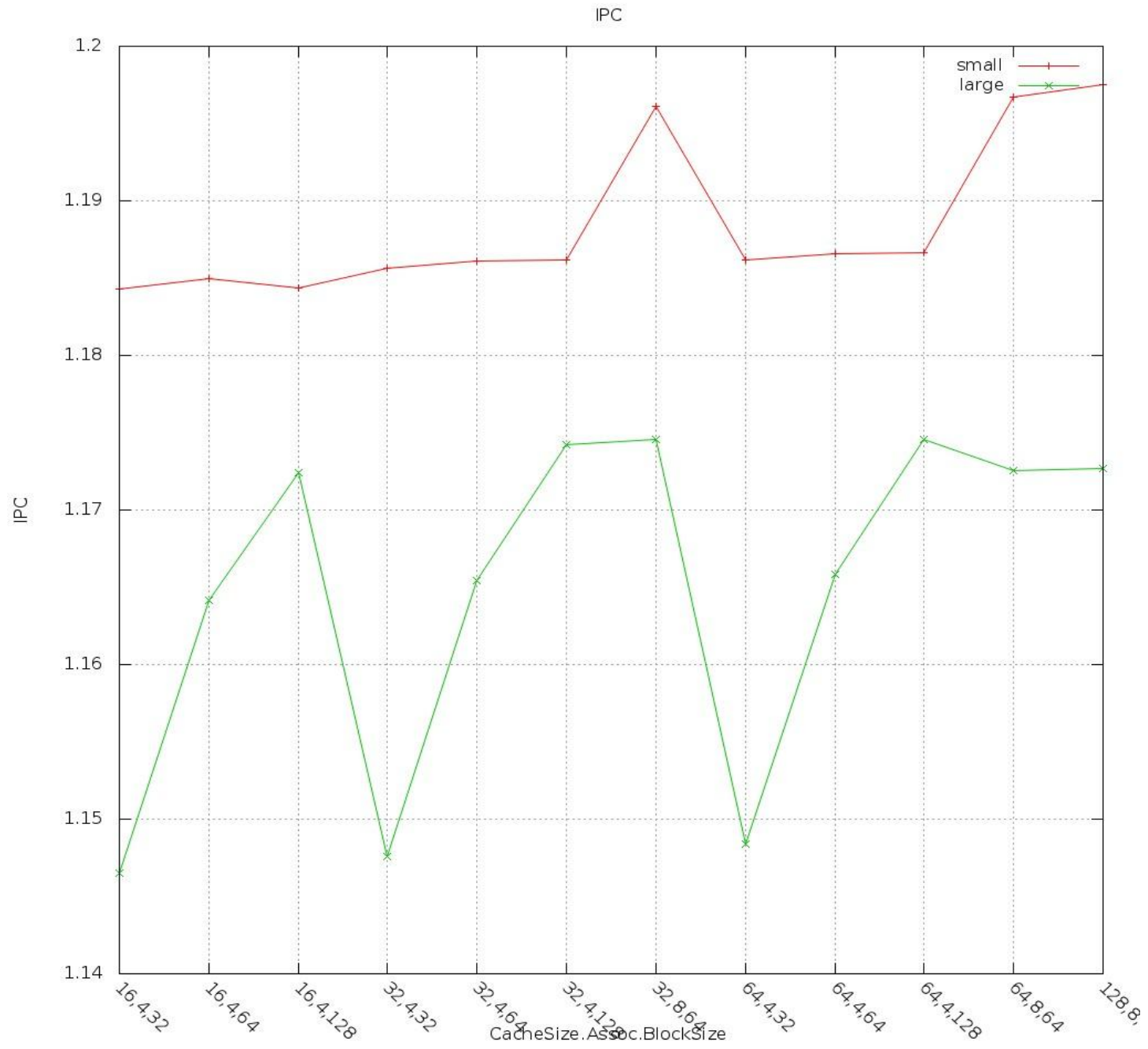
dedup



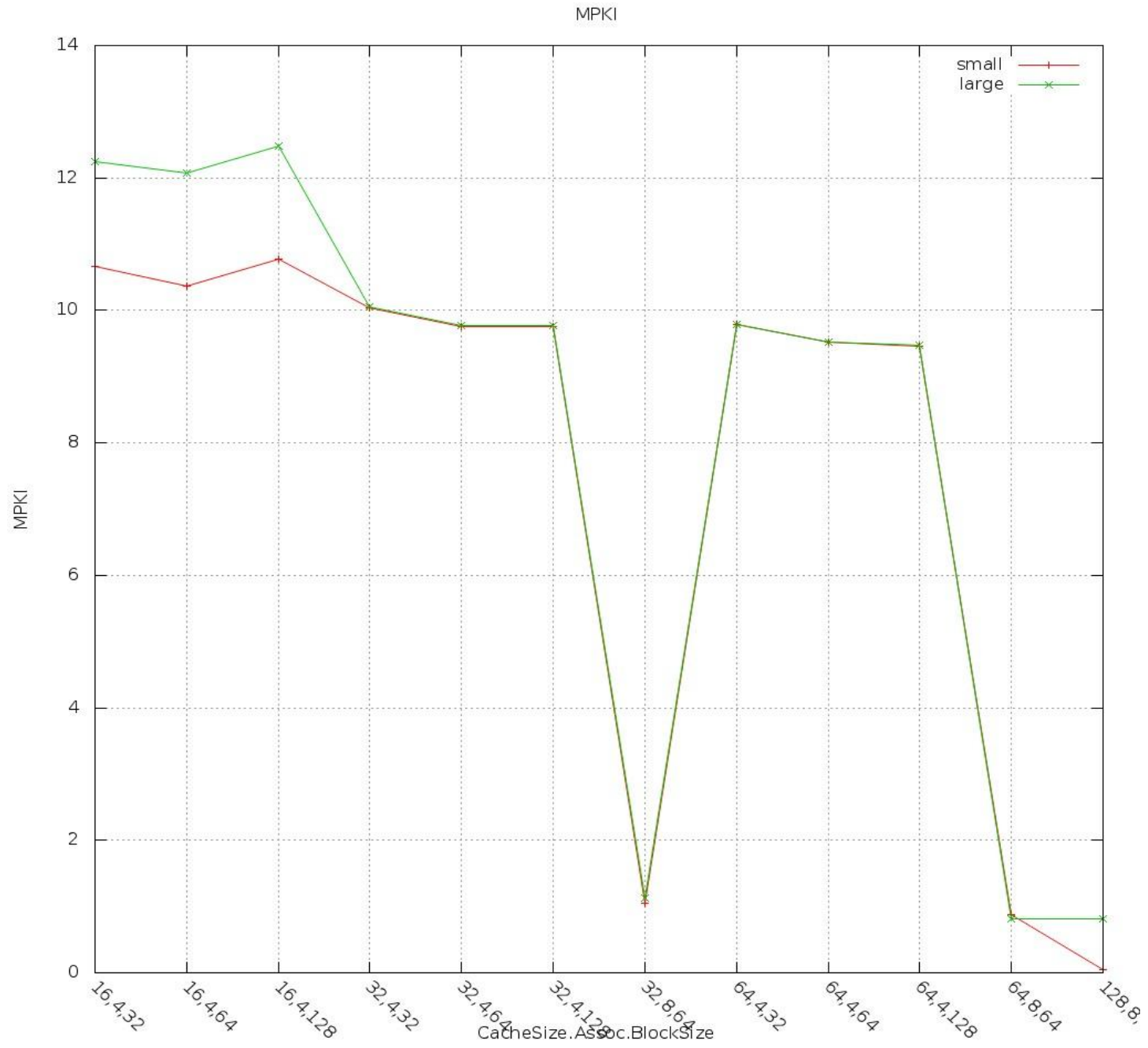
dedup



blackscholes



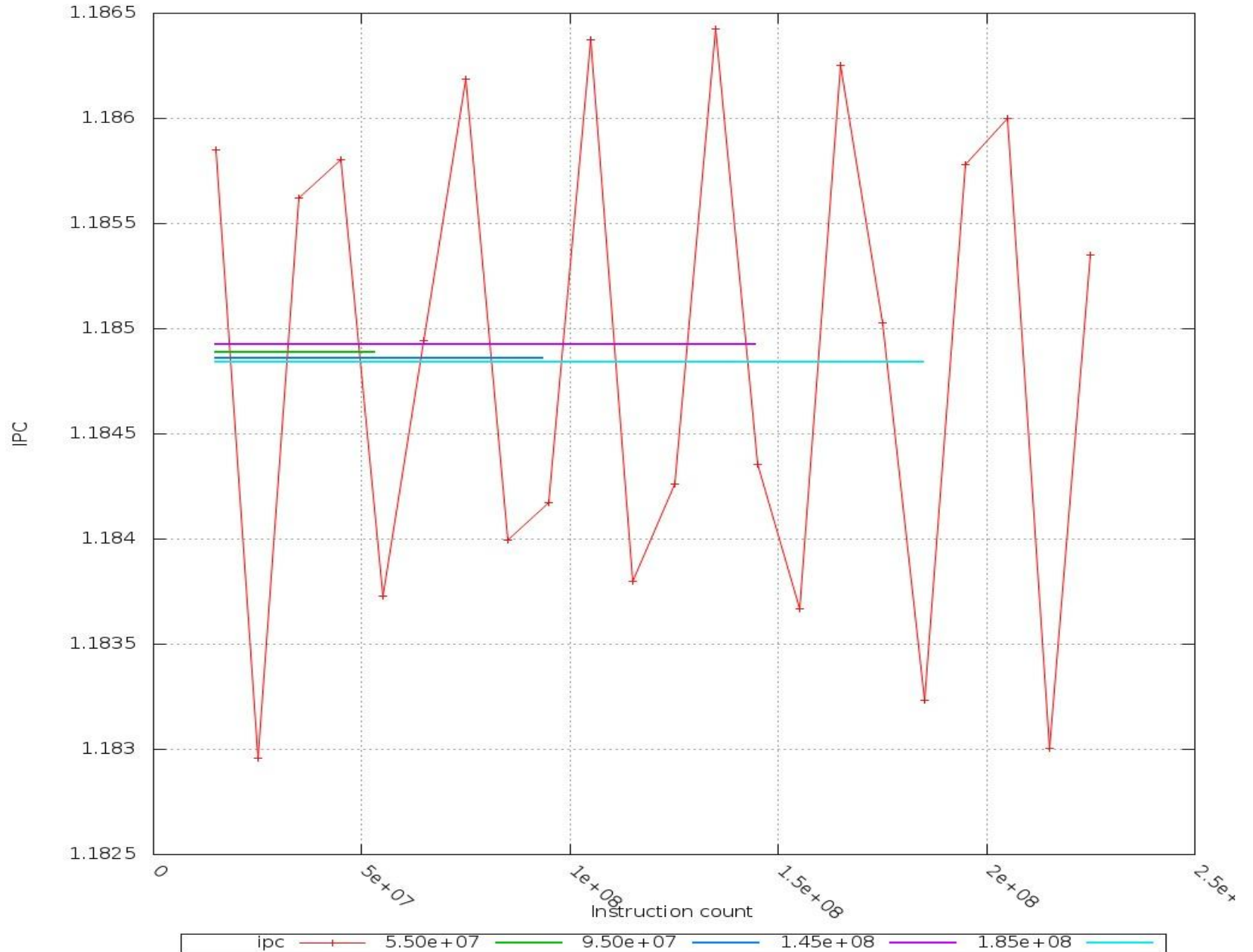
blackscholes



Εξέλιξη στο χρόνο

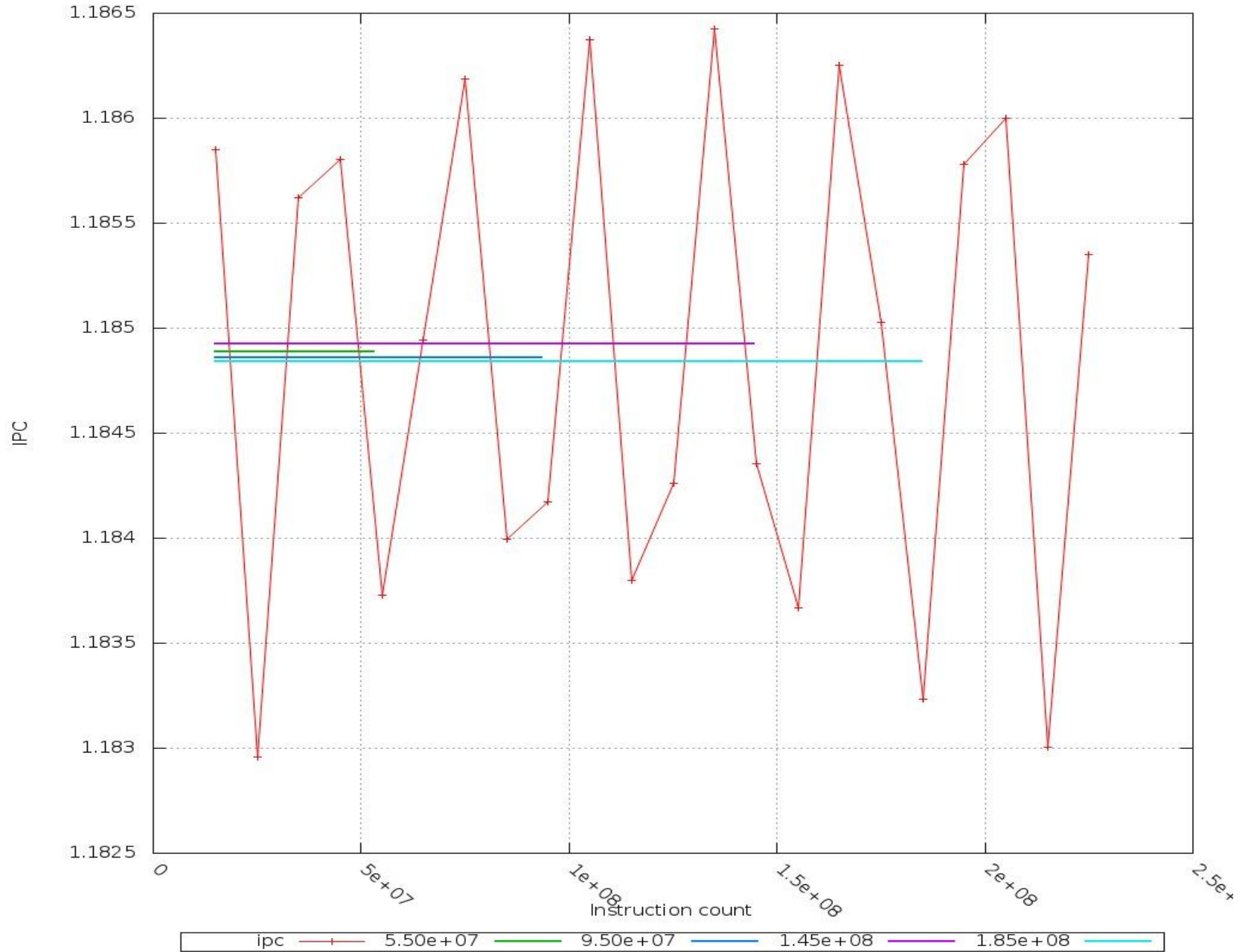
blackscholes

IPC (Total: 1.1842868165)



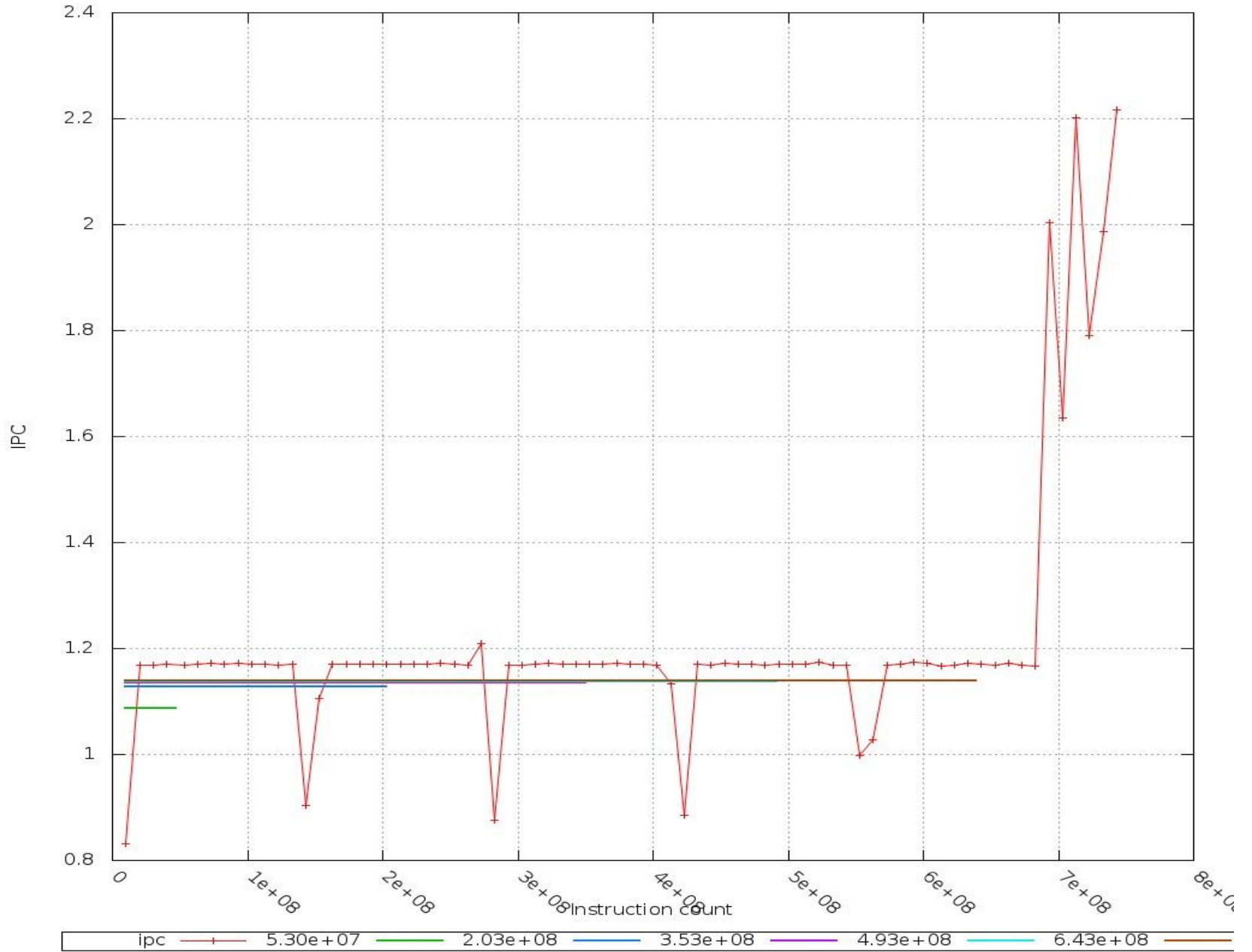
blackscholes

IPC (Total: 1.1842868165)



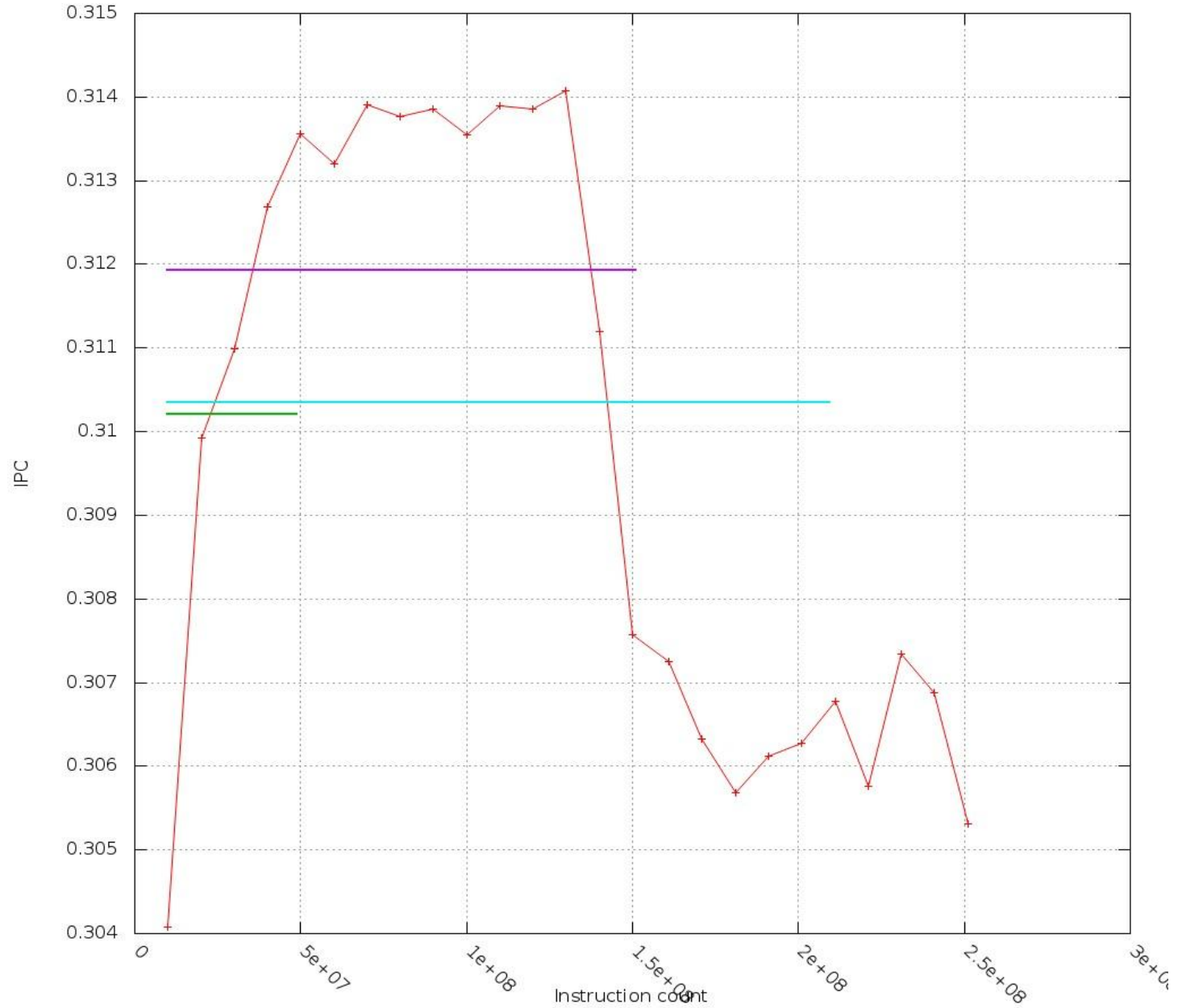
bodytrack

IPC (Total: 1.1793576965)



canneal

IPC (Total: 0.309505660038)



ipc —+— 5.00e+07 — 1.01e+08 — 1.52e+08 — 2.11e+08

freqmine

IPC (Total: 1.10552327998)

