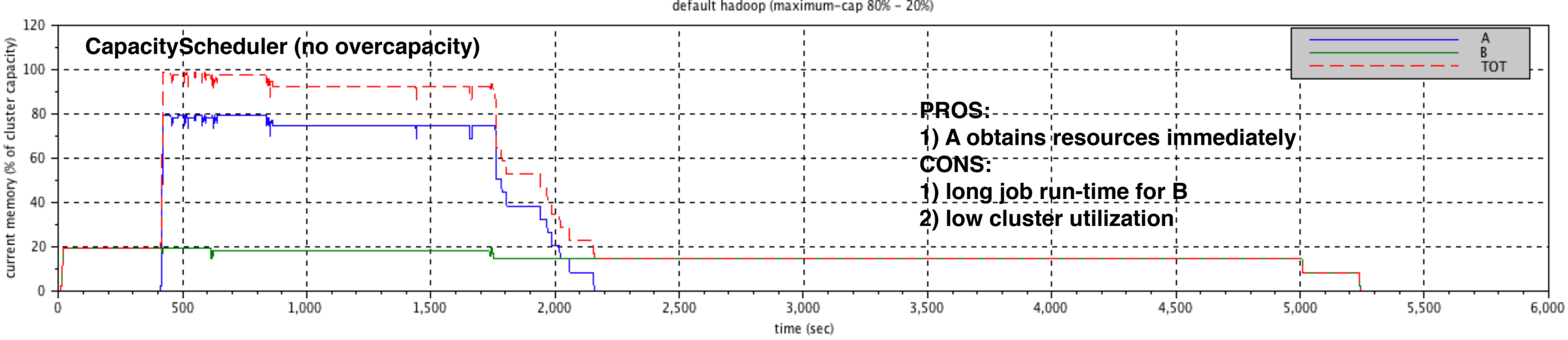
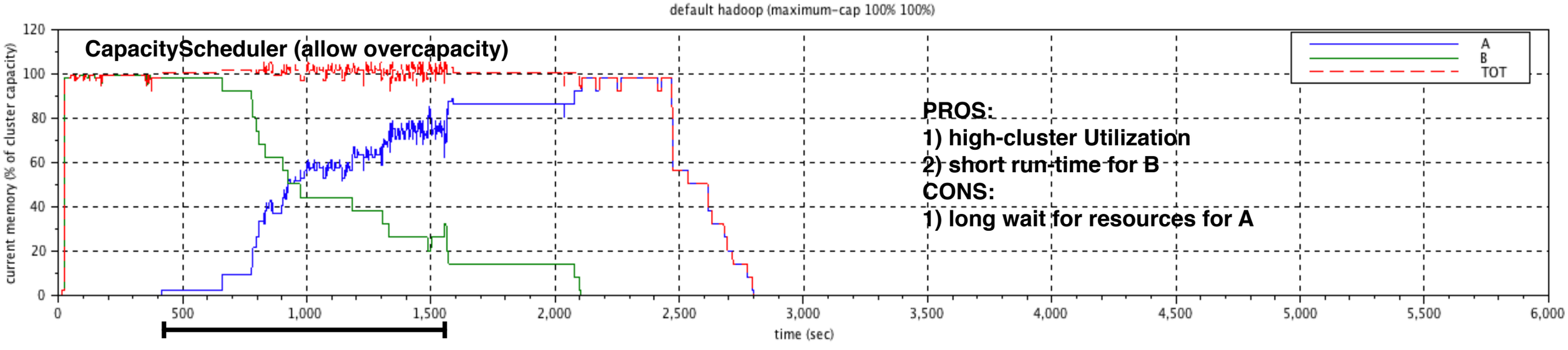
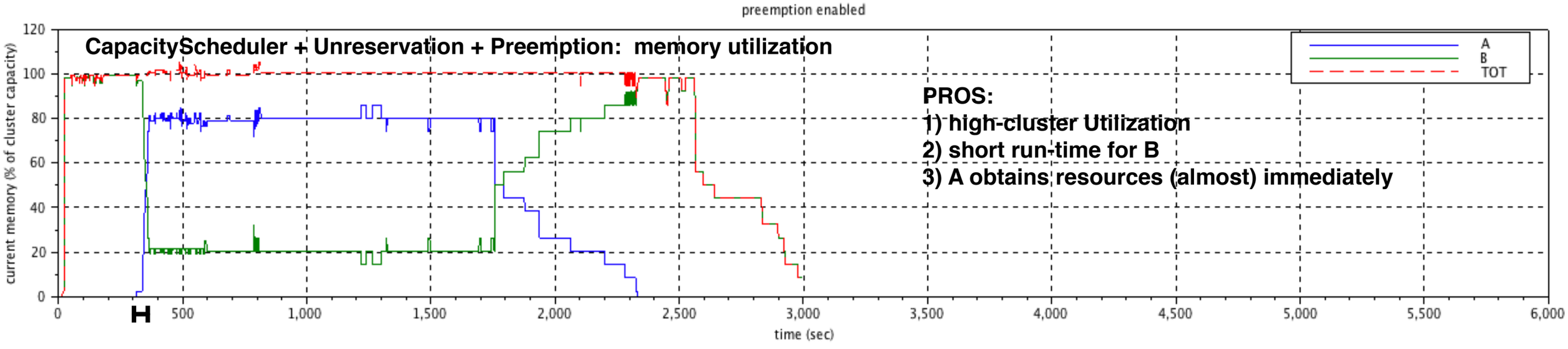
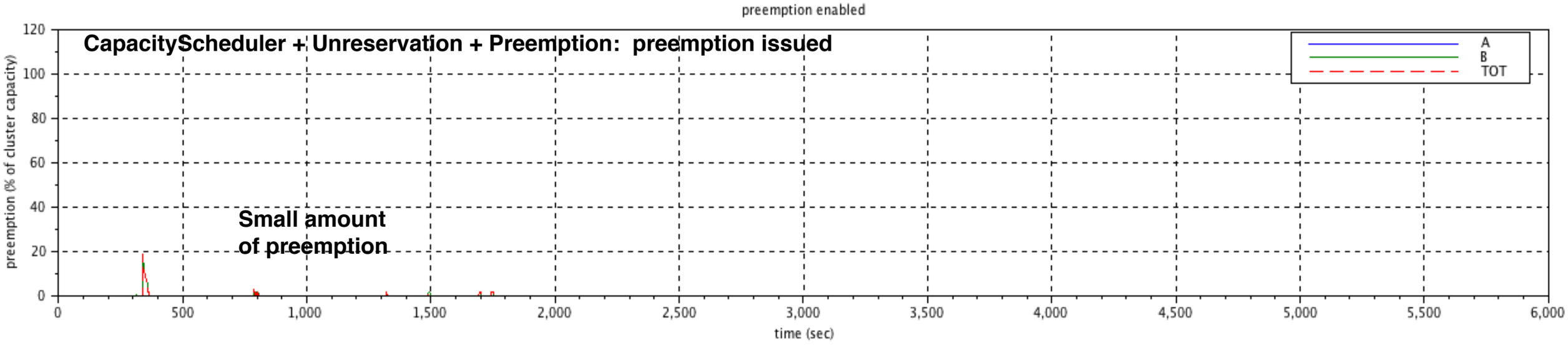

default hadoop (maximum-cap 80% - 20%)
CapacityScheduler (no overcapacity)
A
B
TOT
current memory (% of cluster capacity)
time (sec)
PROS:
1) A obtains resources immediately
CONS:
1) long job run-time for B
2) low cluster utilization


default hadoop (maximum-cap 100% 100%)
CapacityScheduler (allow overcapacity)
A
B
TOT
current memory (% of cluster capacity)
time (sec)
PROS:
1) high-cluster Utilization
2) short run-time for B
CONS:
1) long wait for resources for A


preemption enabled
CapacityScheduler + Unreservation + Preemption: memory utilization
A
B
TOT
current memory (% of cluster capacity)
time (sec)
PROS:
1) high-cluster Utilization
2) short run-time for B
3) A obtains resources (almost) immediately


preemption enabled
CapacityScheduler + Unreservation + Preemption: preemption issued
A
B
TOT
preemption (% of cluster capacity)
time (sec)
Small amount
of preemption