



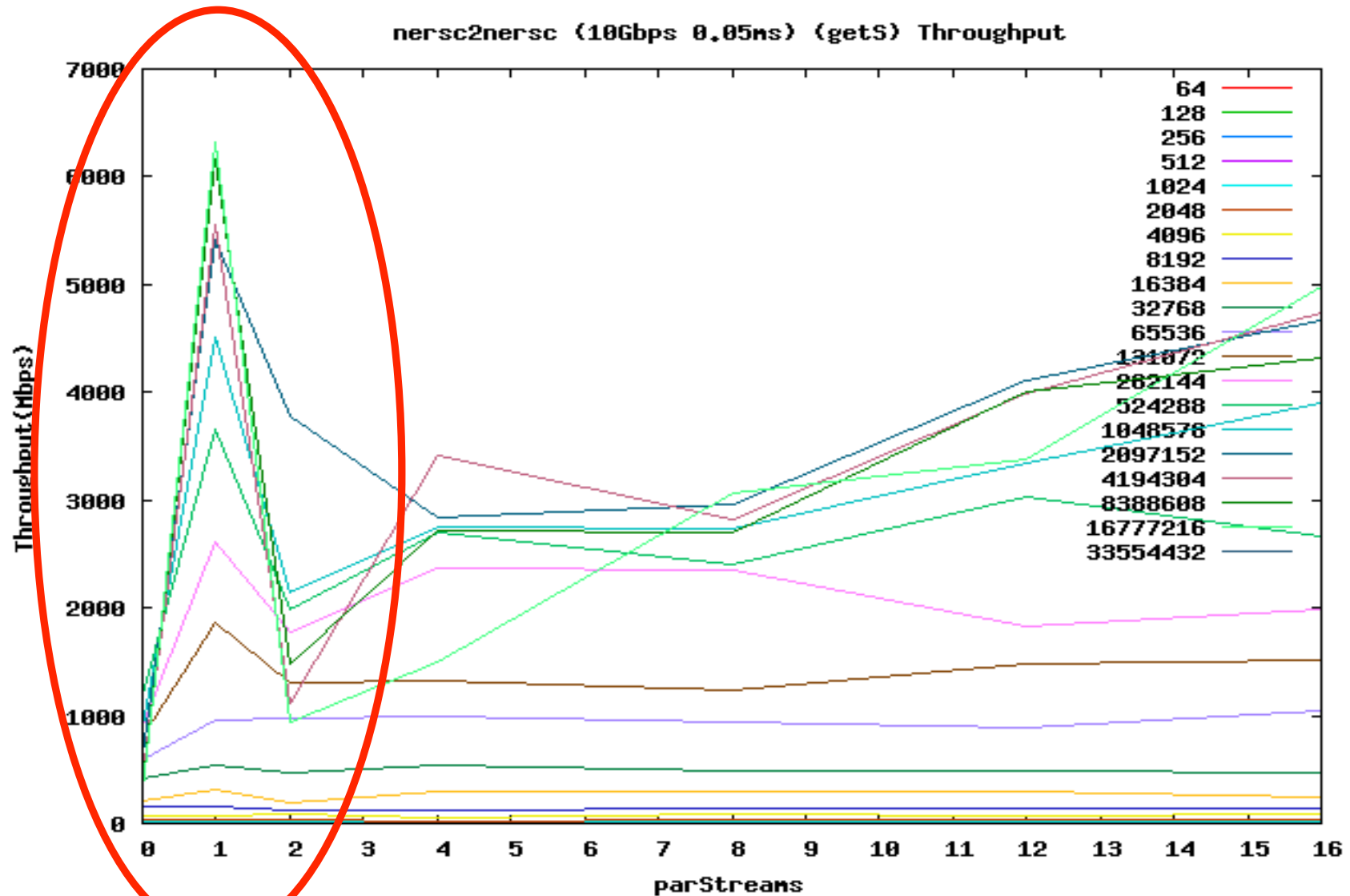
Observations on memory-memory gridftp transfers with NERSC DTN nodes

Mehmet Balman

Alex Sim

Scientific Data Management Group
Computational Research Division
Lawrence Berkeley National Laboratory

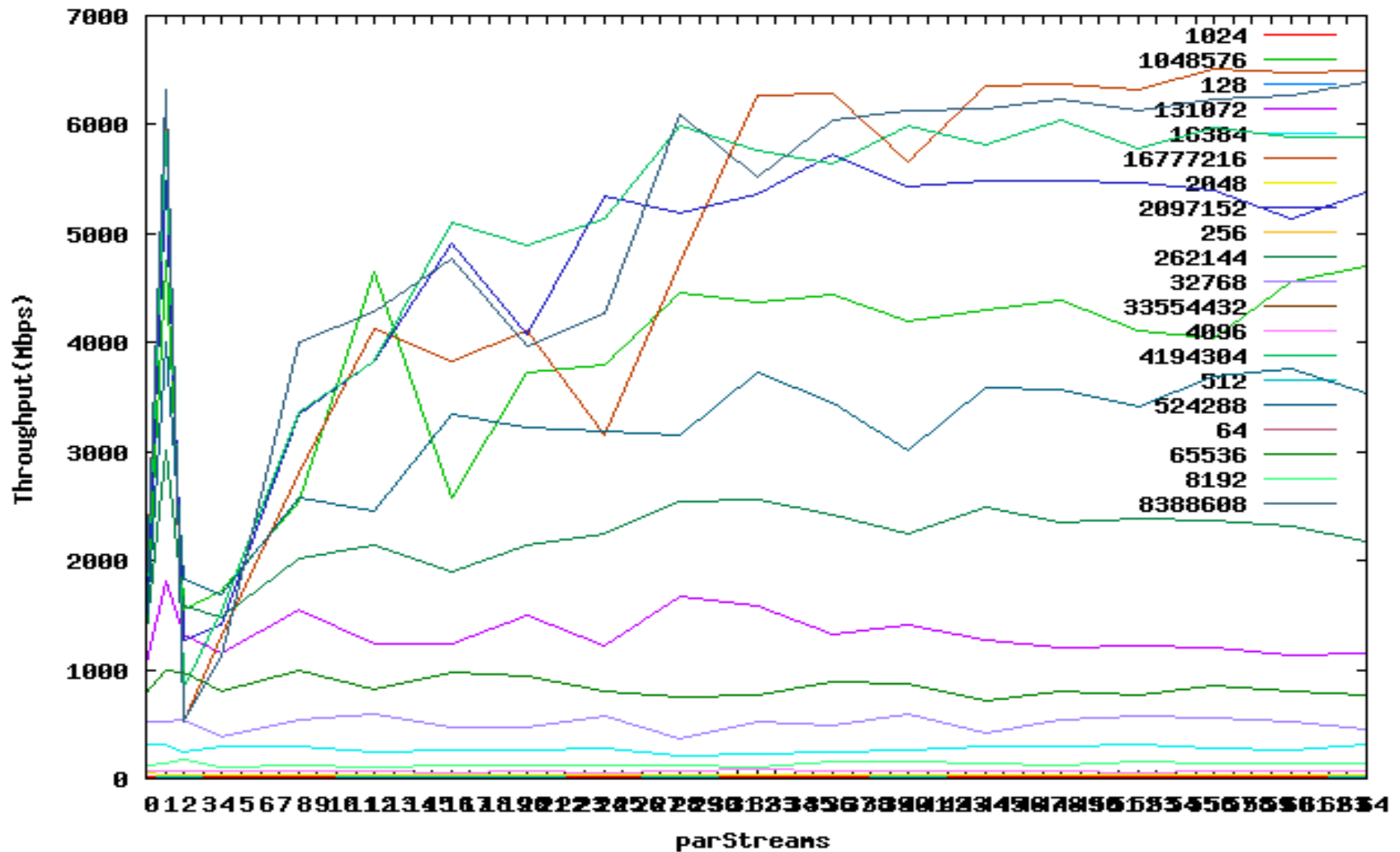
NERSC-NERSC / GET case



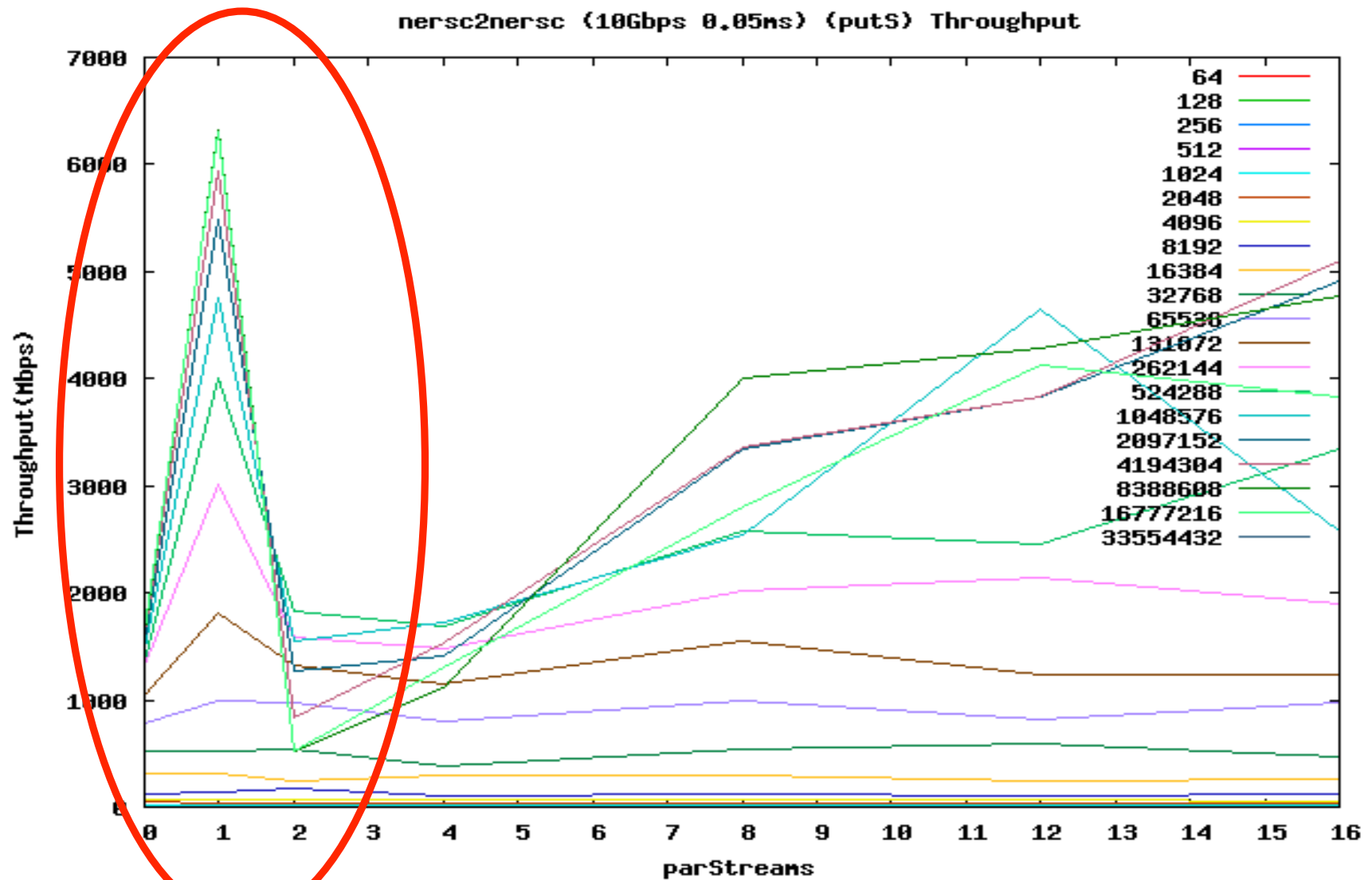


NERSC-NERSC / PUT case

nersc2nersc (10Gbps 0.05ns) (putS) Throughput

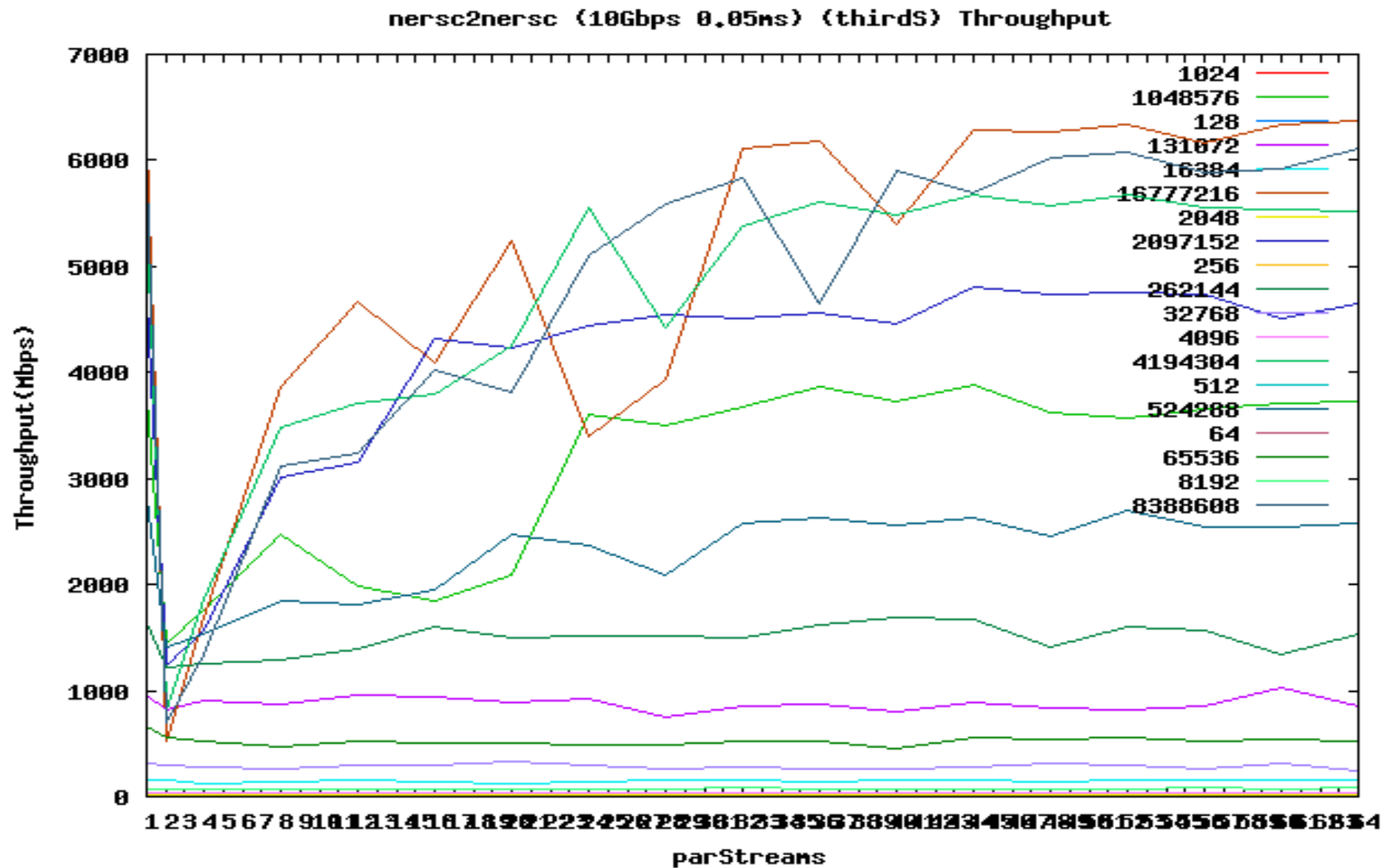


NERSC-NERSC / PUT case



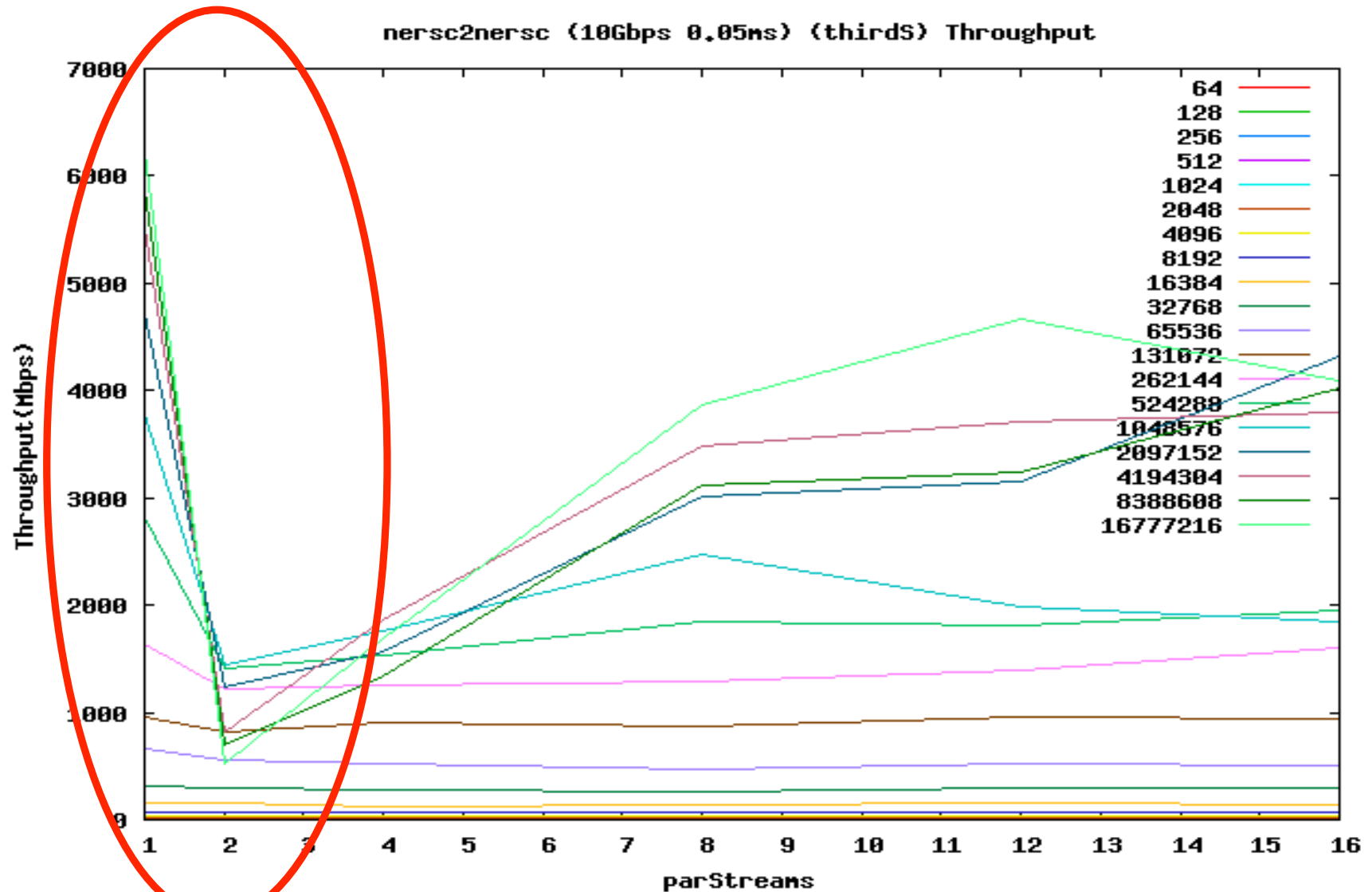


NERSC-NERSC / 3rd party case





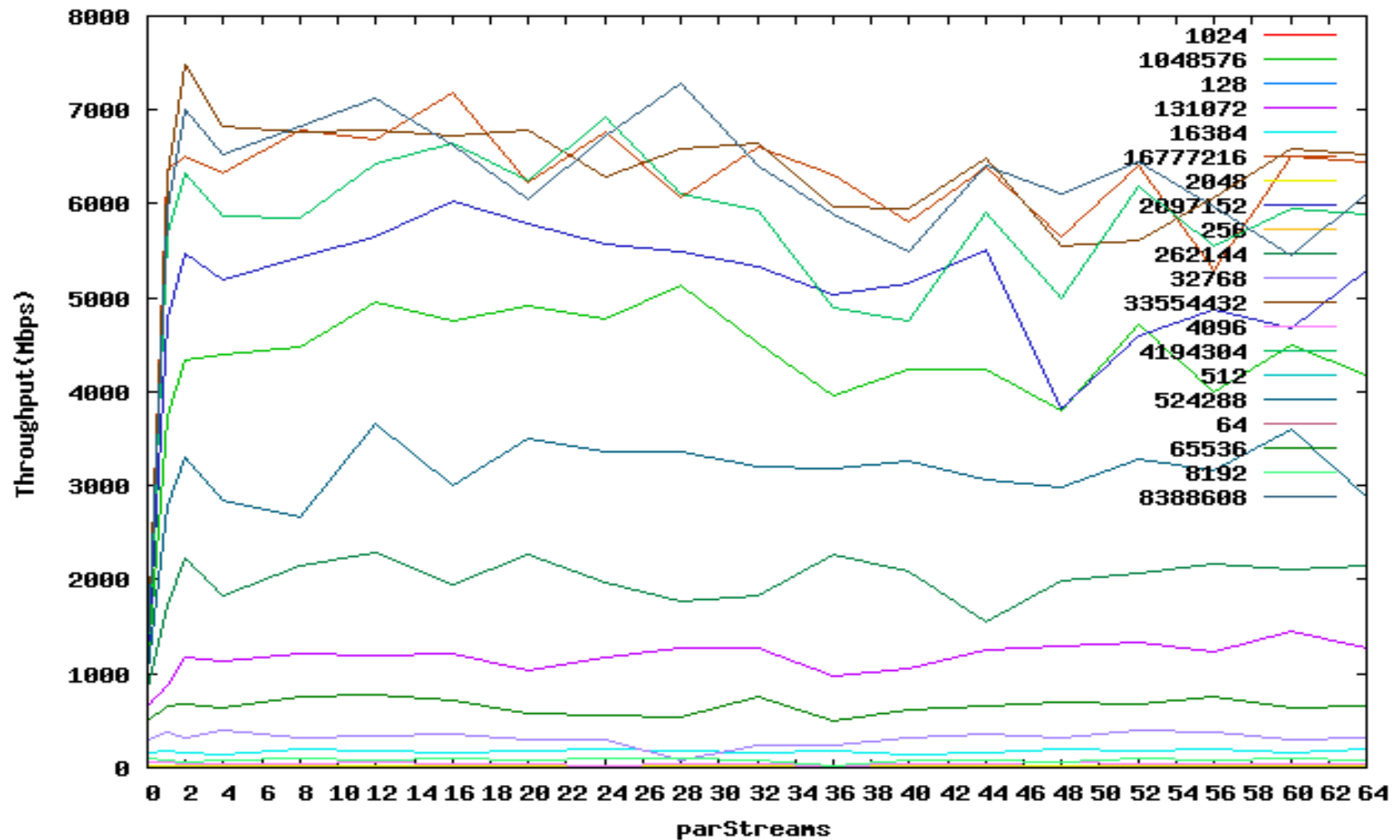
NERSC-NERSC / 3rd party case



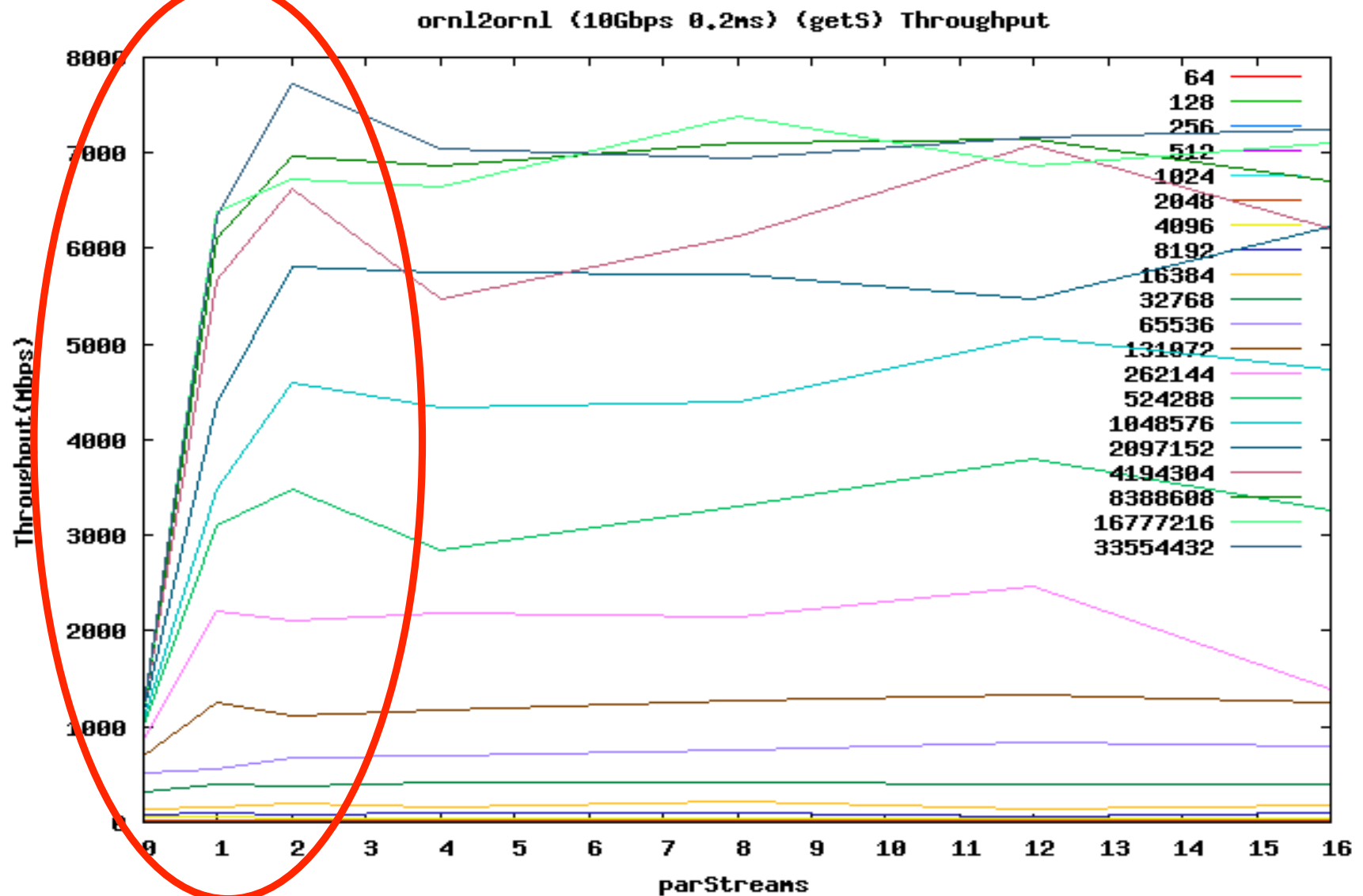


ORNL-ORNL / GET case

ornl2ornl (10Gbps 0.2ns) (getS) Throughput

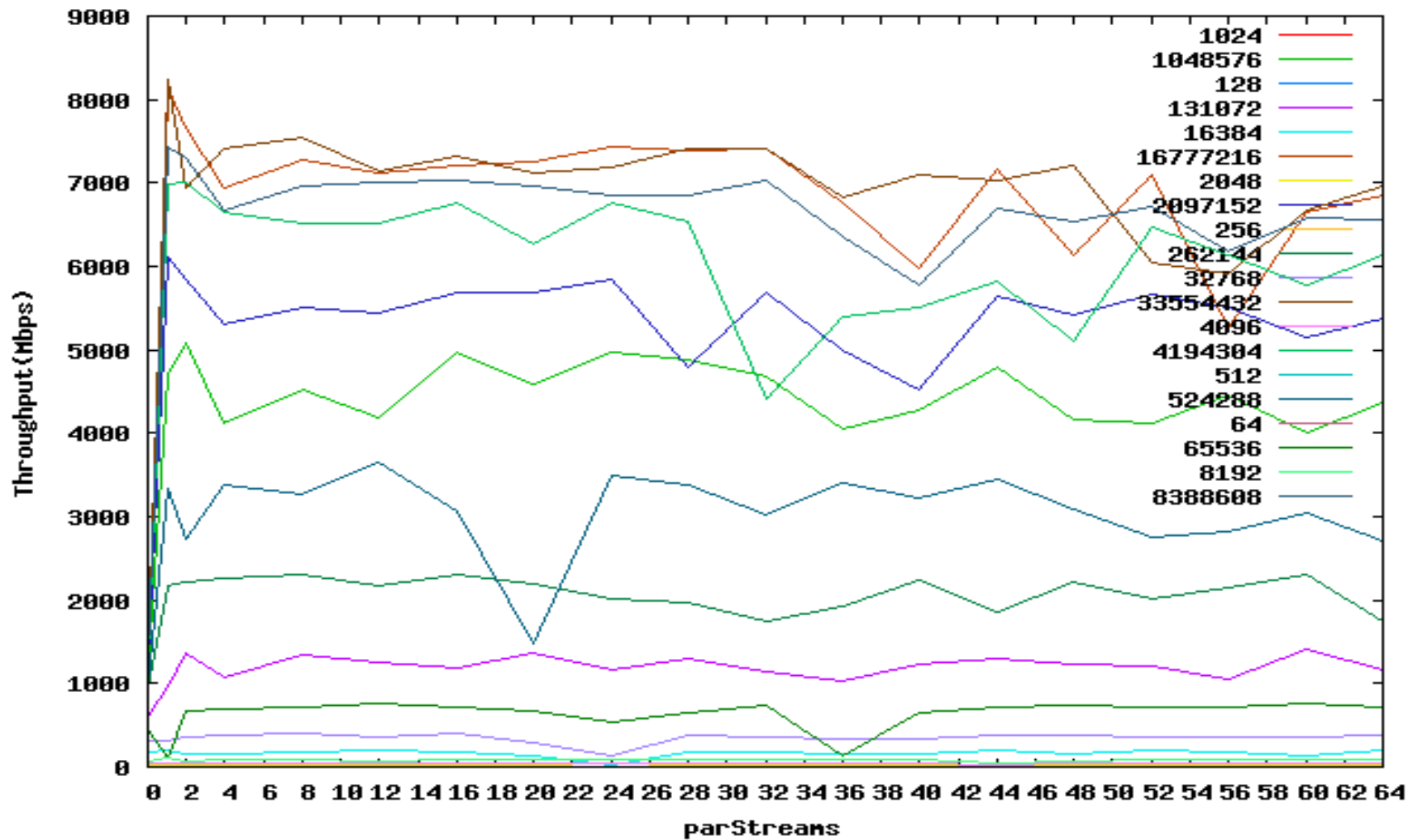


ORNL-ORNL / GET case

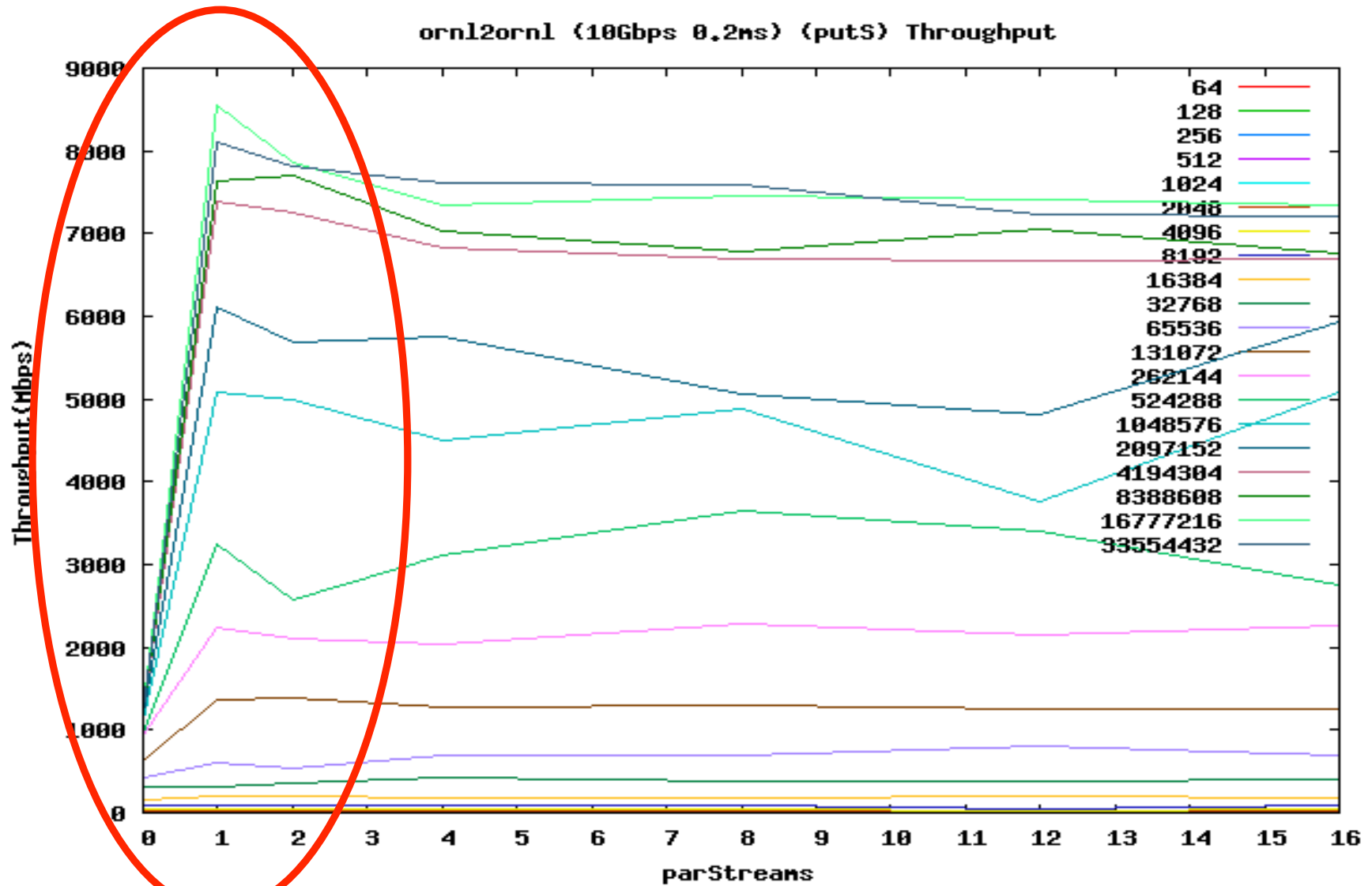


ORNL-ORNL / PUT case

ornl2ornl (10Gbps 0.2ms) (putS) Throughput

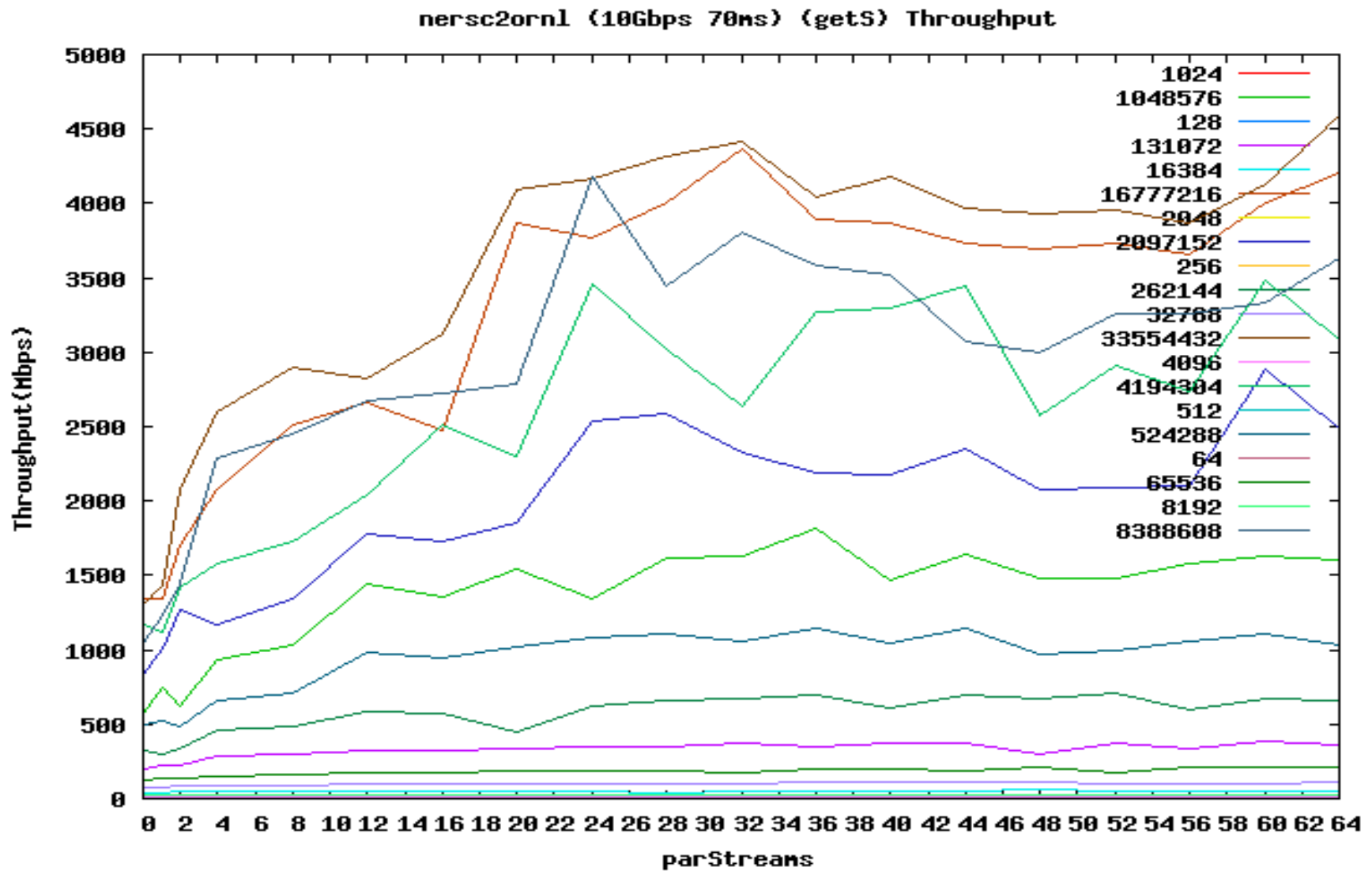


ORNL-ORNL / PUT case

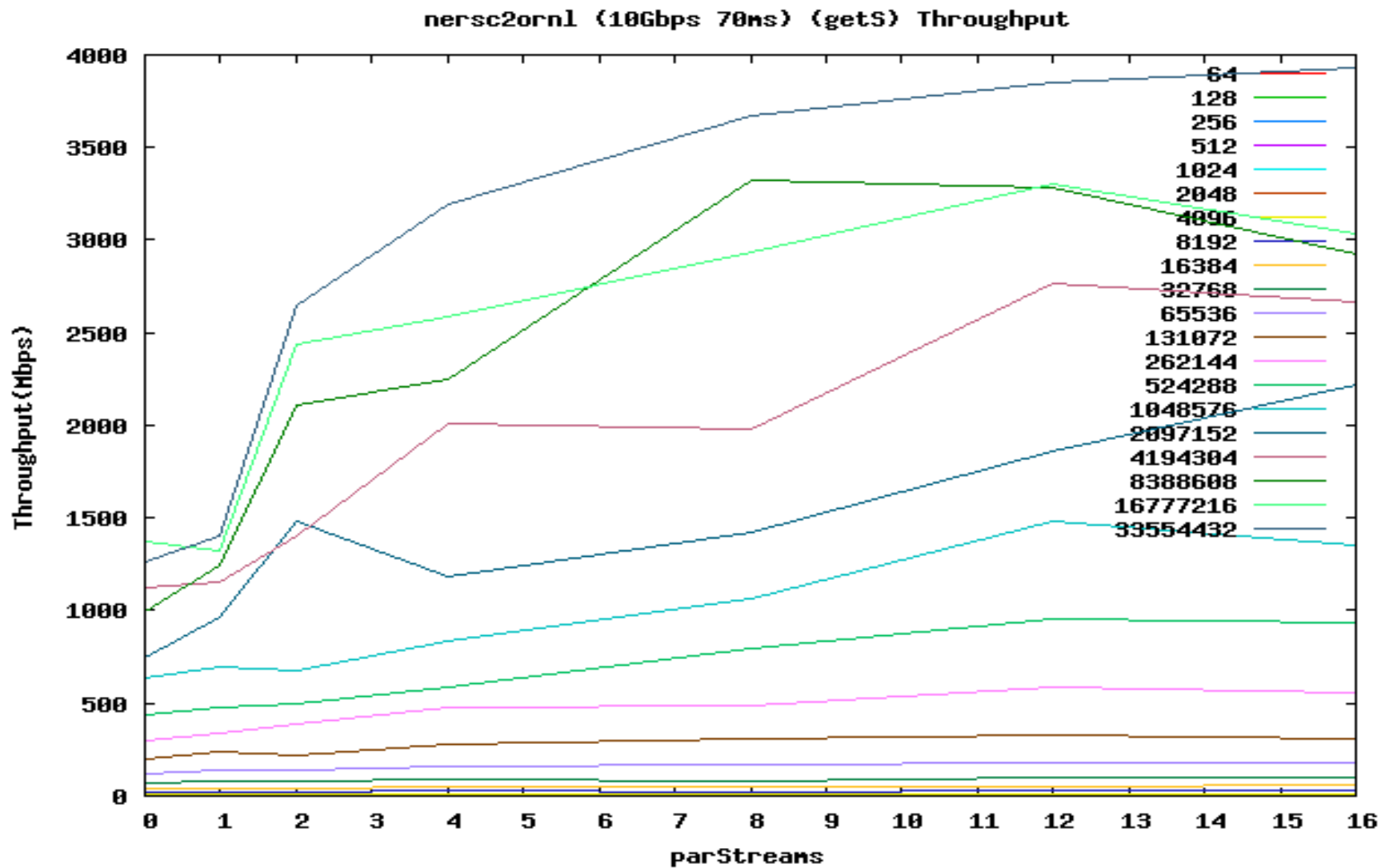




NERSC->ORNL case

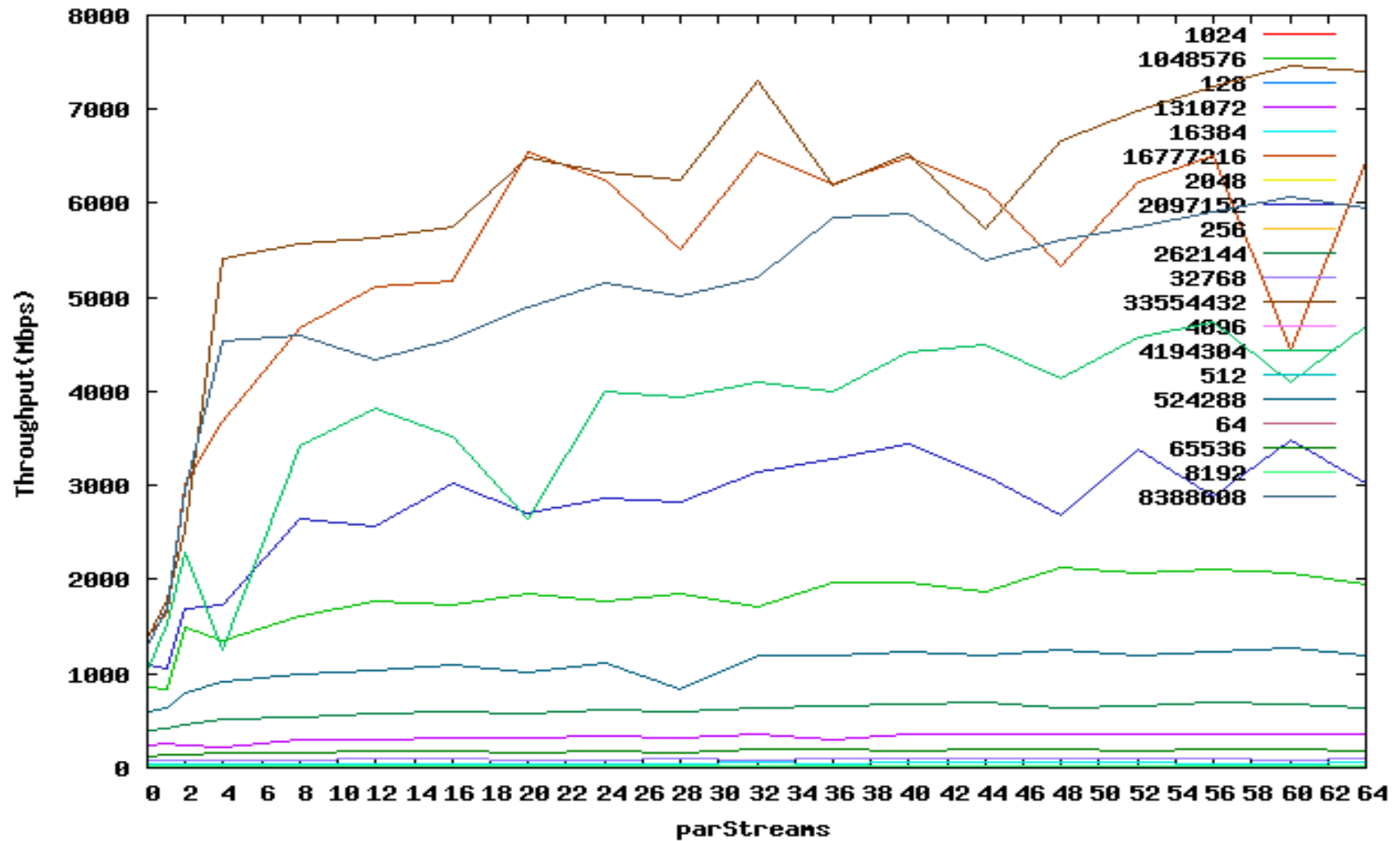


NERSC->ORNL case

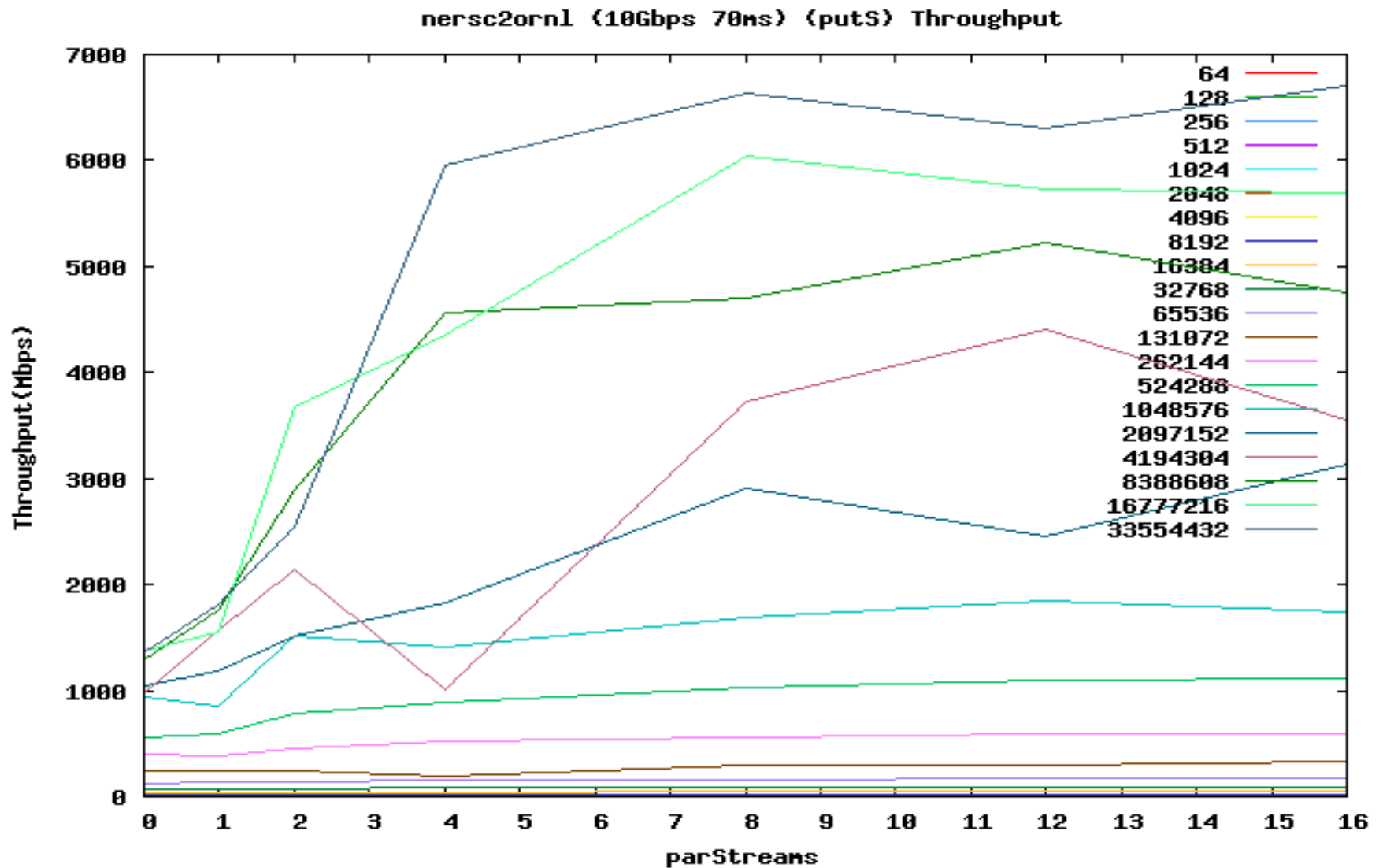


ORNL->NERSC case

nersc2ornl (10Gbps 70ms) (putS) Throughput

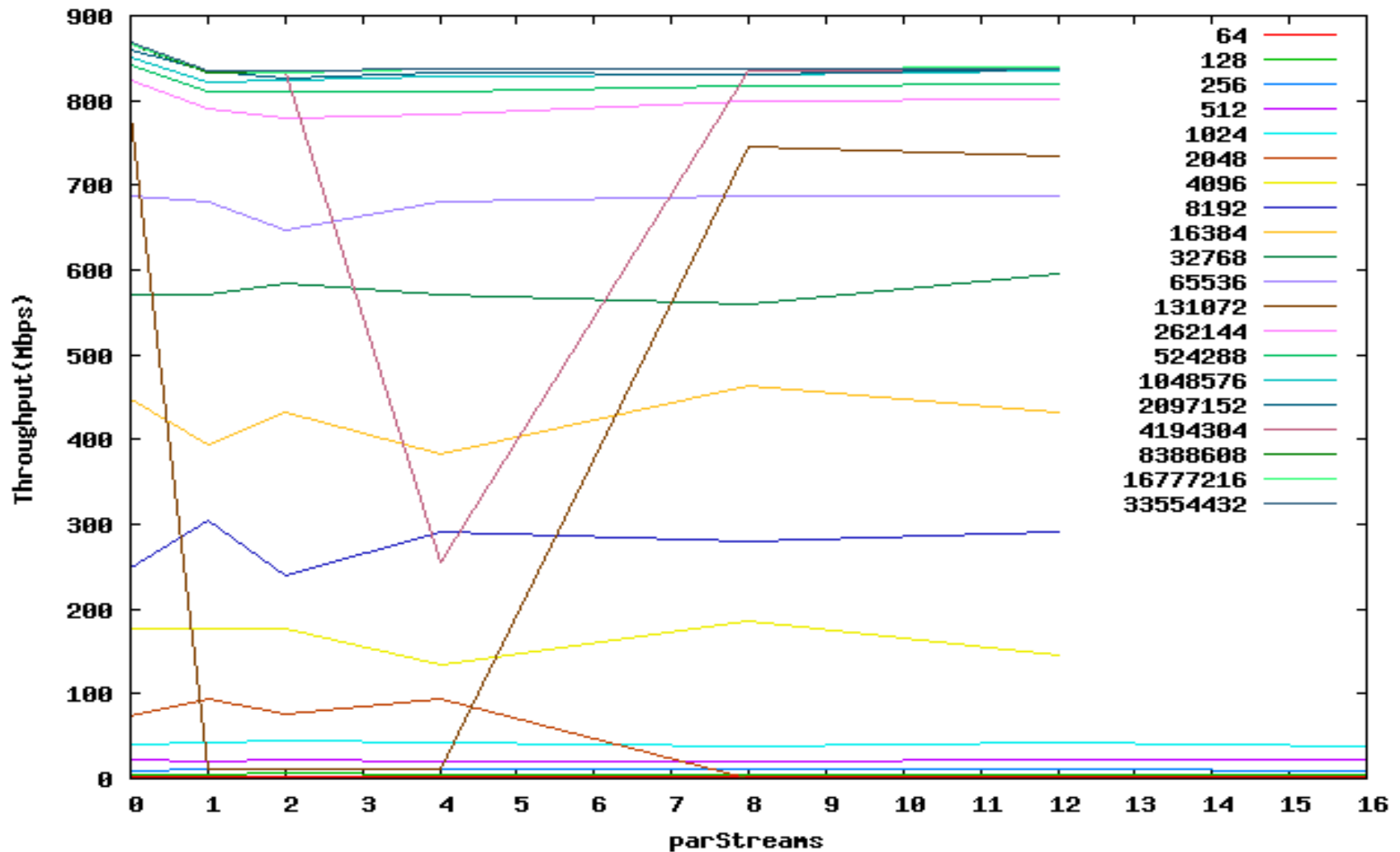


ORNL->NERSC case



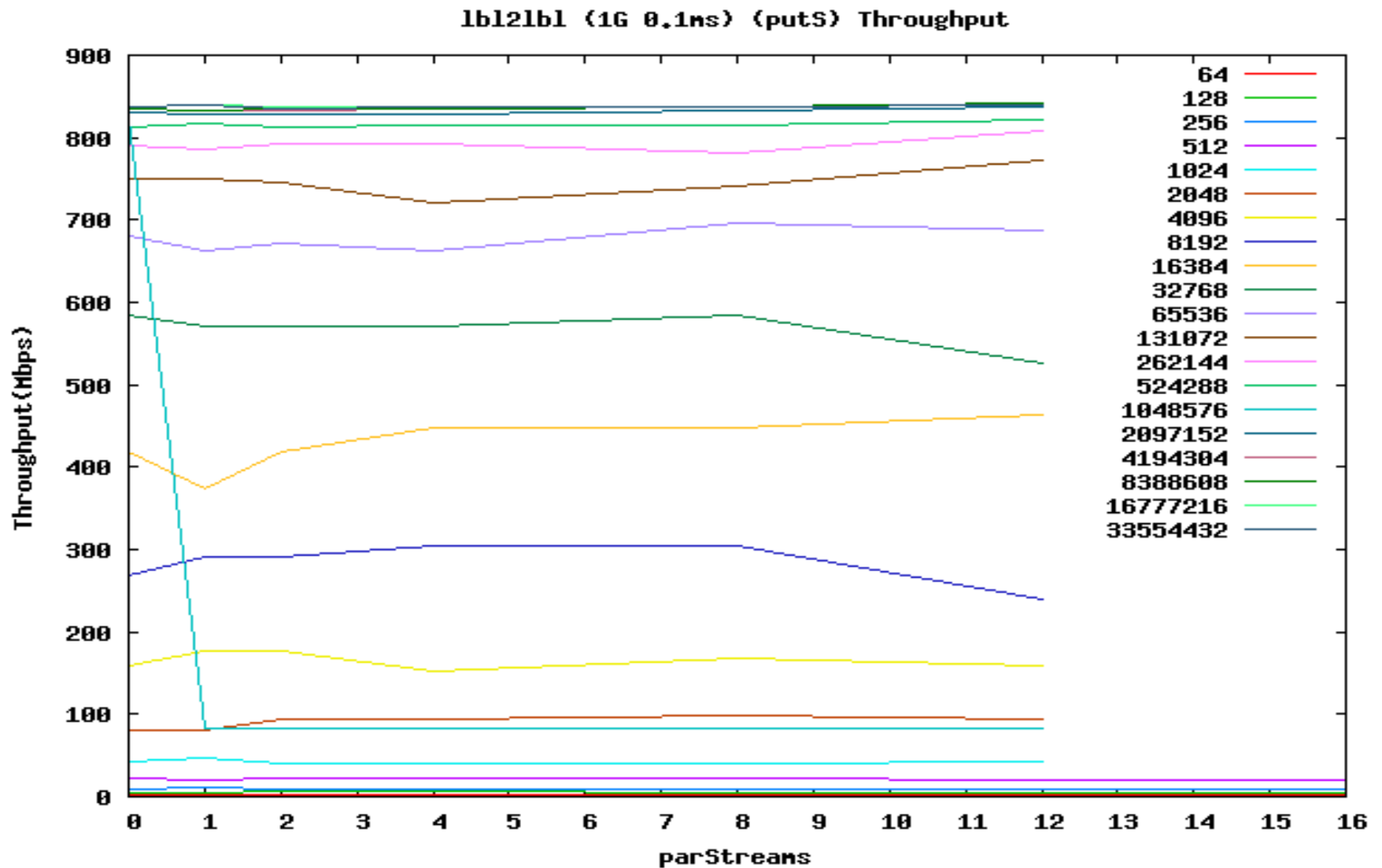
LBNL-LBNL / GET case

lbl2lbl (1G 0.1ns) (getS) Throughput





LBNL-LBNL / PUT case





Observation/Question

- **What makes 1 parallel stream performance one of the optimal conditions on NERSC DTN nodes?**
 - **ORNL DTN nodes do not show the same behavior**
 - **LBNL 1Gbps nodes do not show either**
 - **Transfers with longer latency do not show the same behavior either**