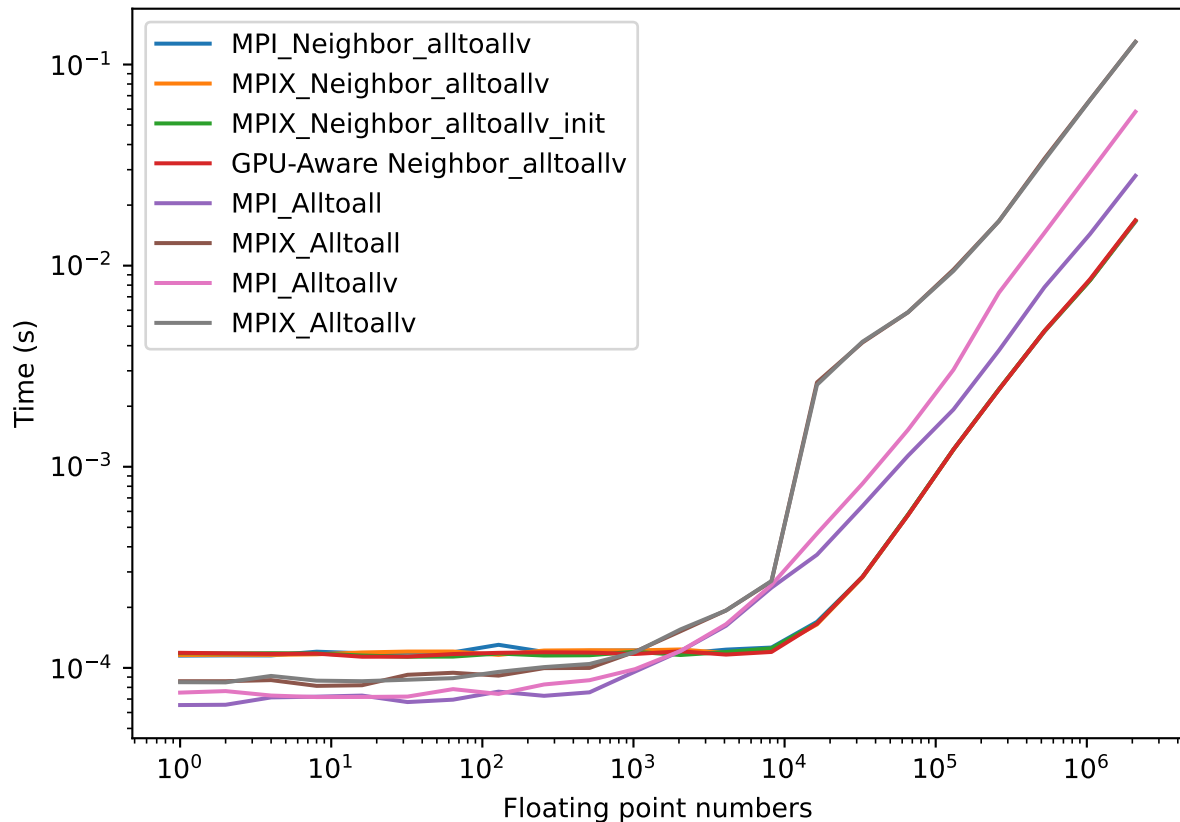
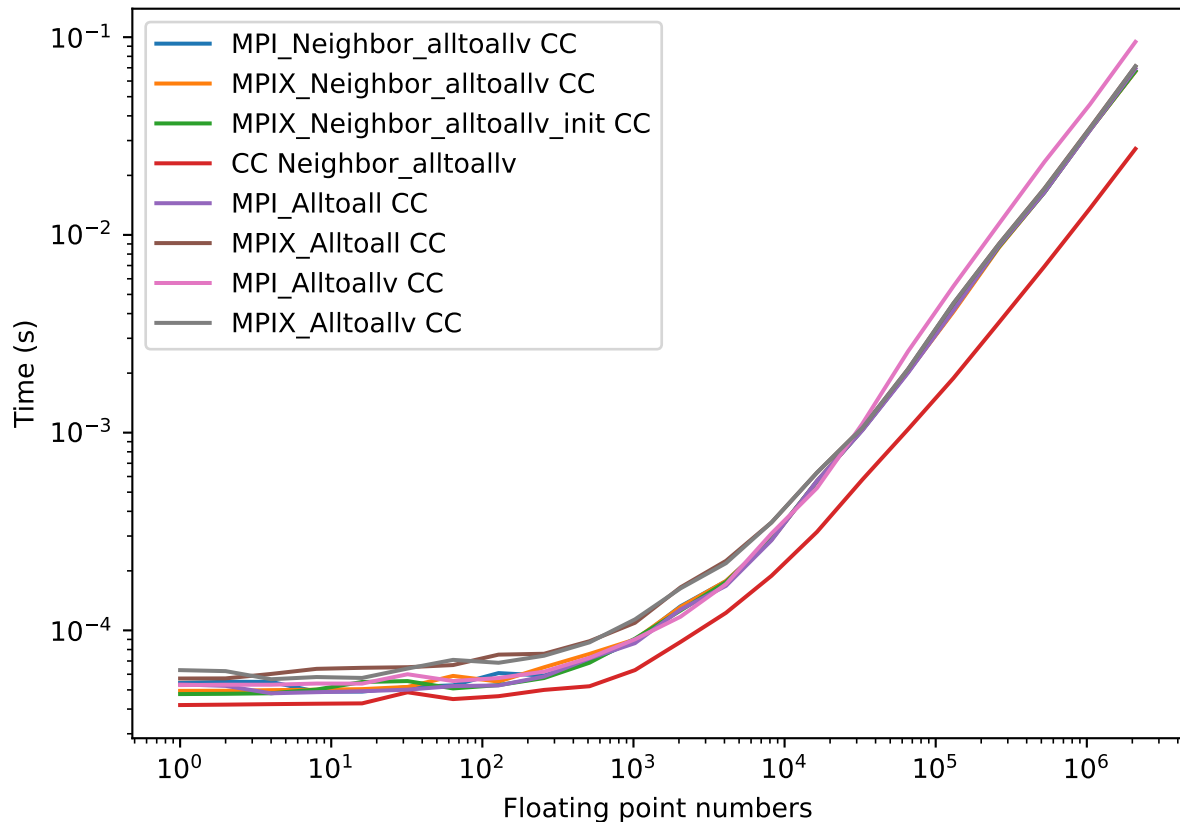


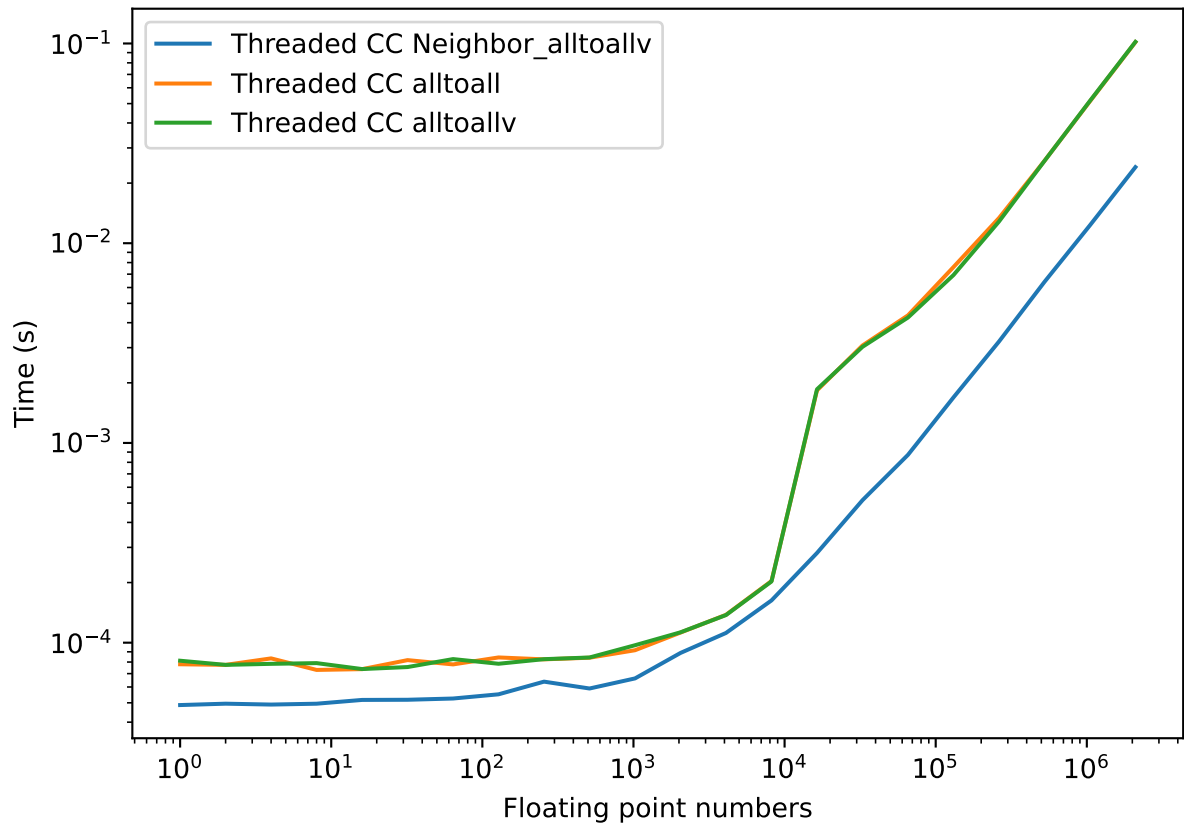
## GPU Aware



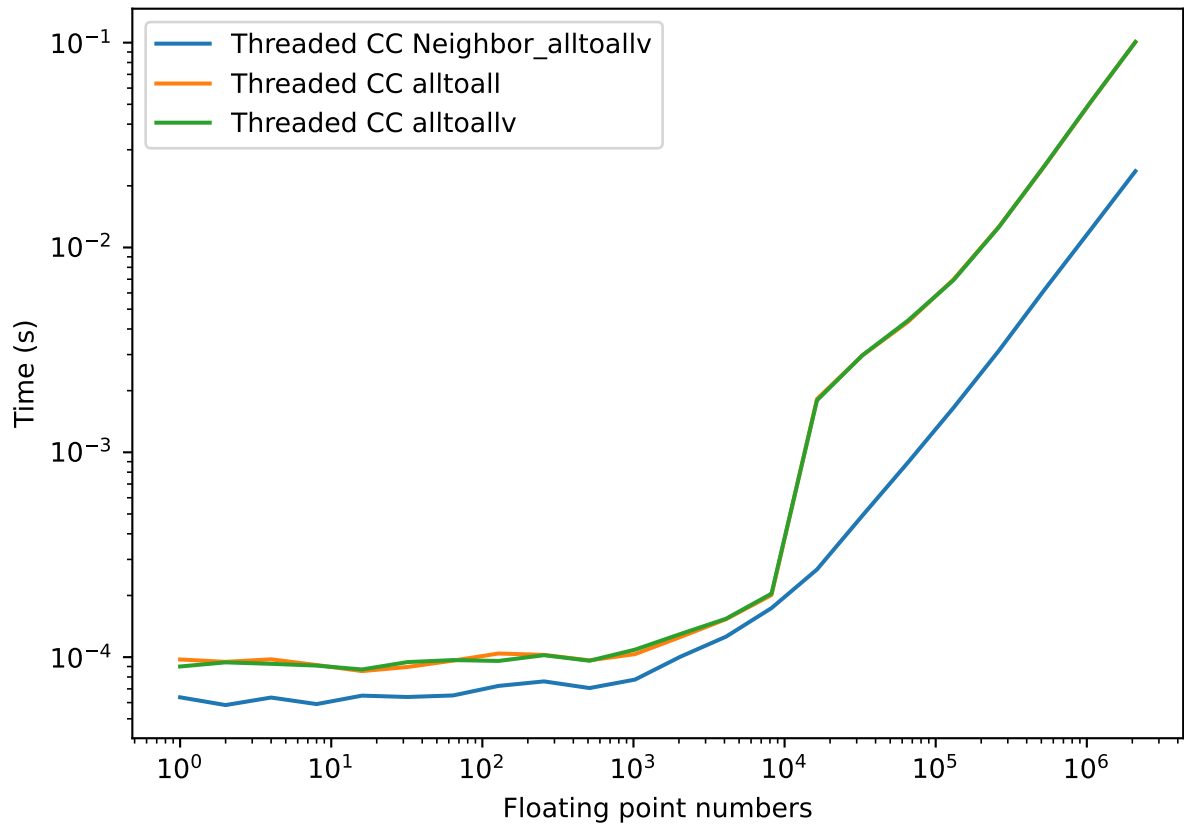
## Copy-to-CPU



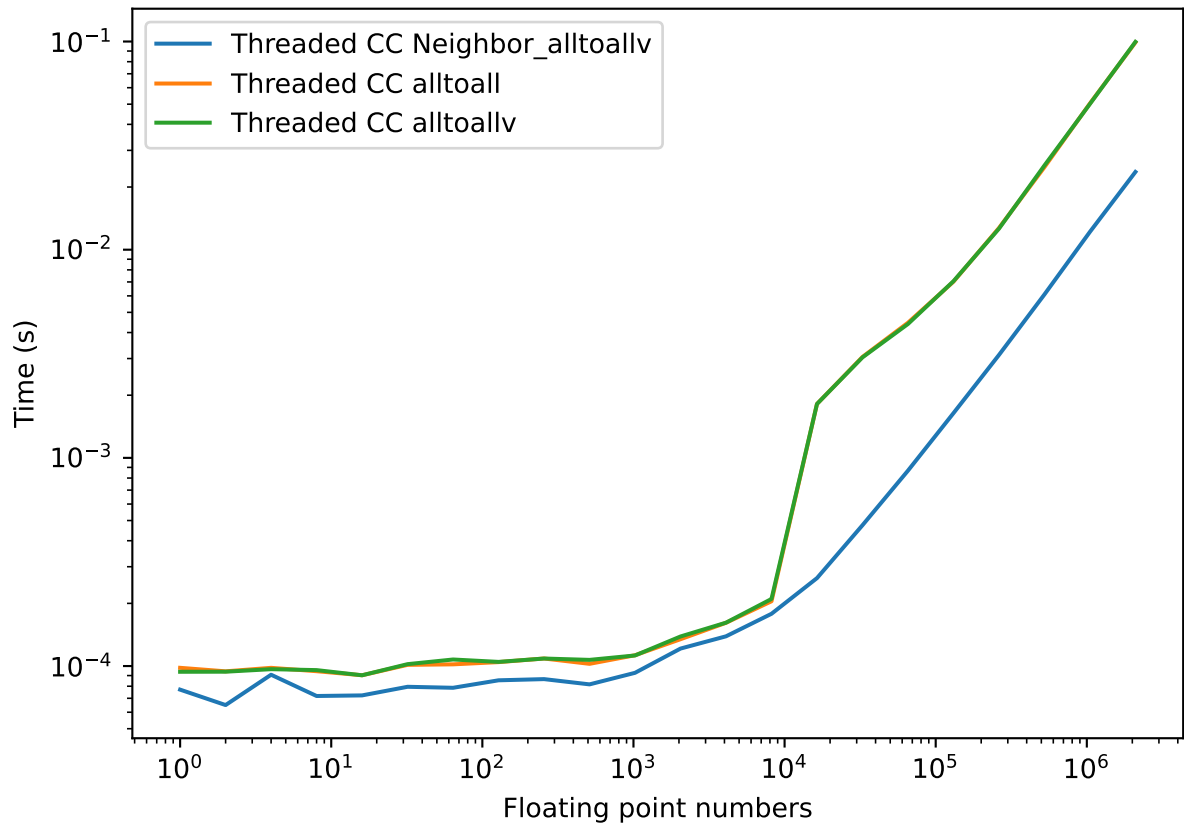
## Threaded: 2



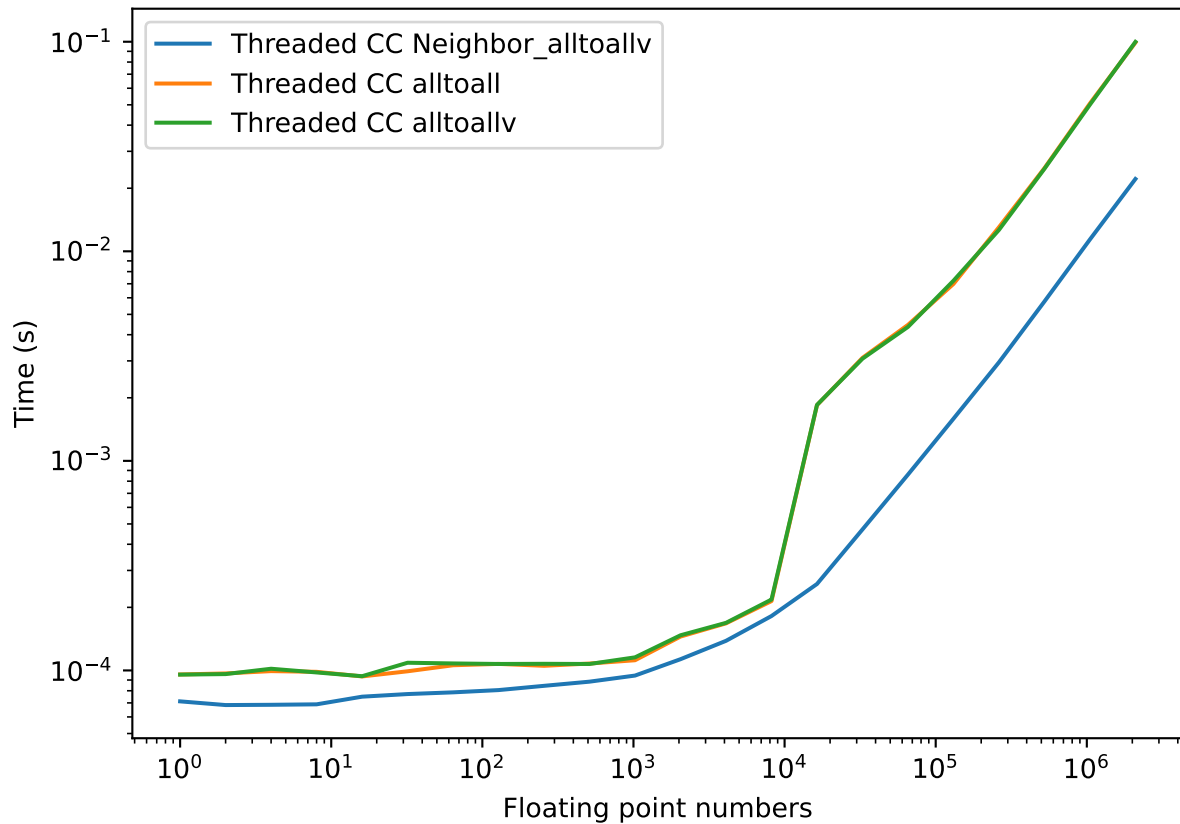
## Threaded: 4



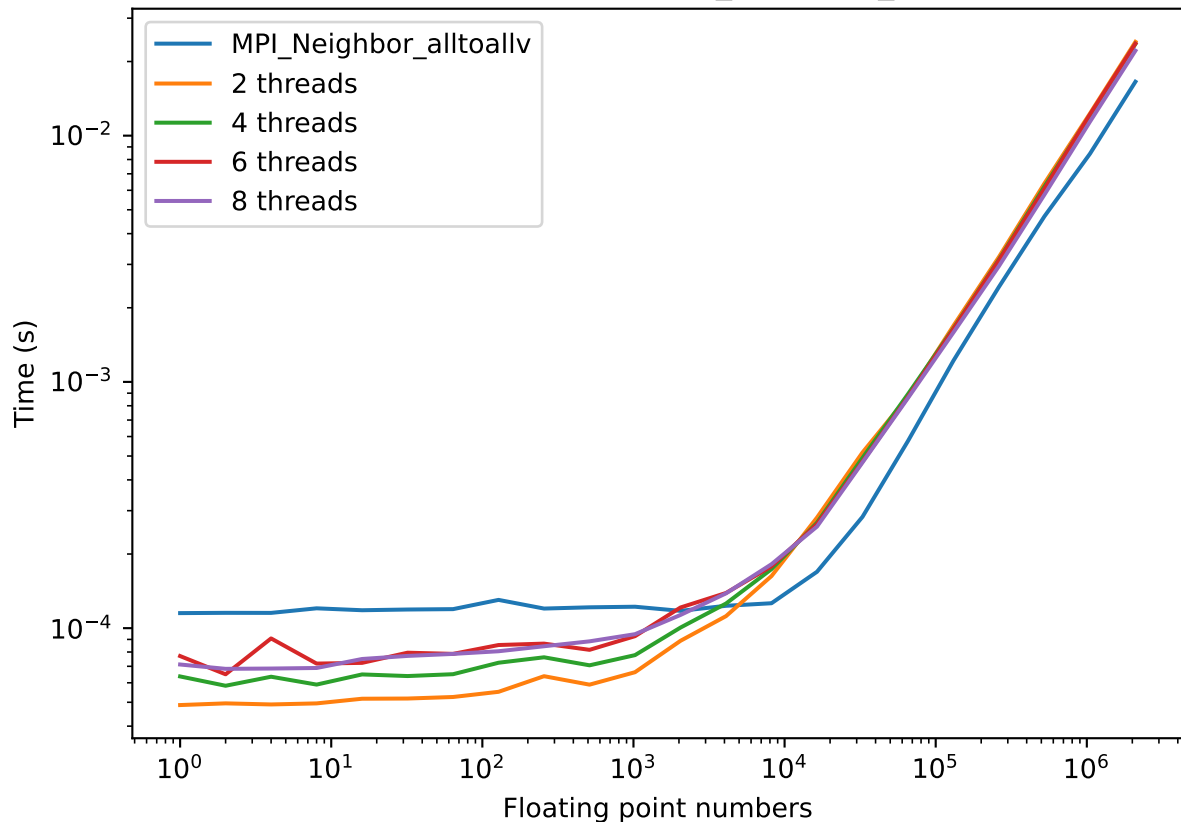
## Threaded: 6



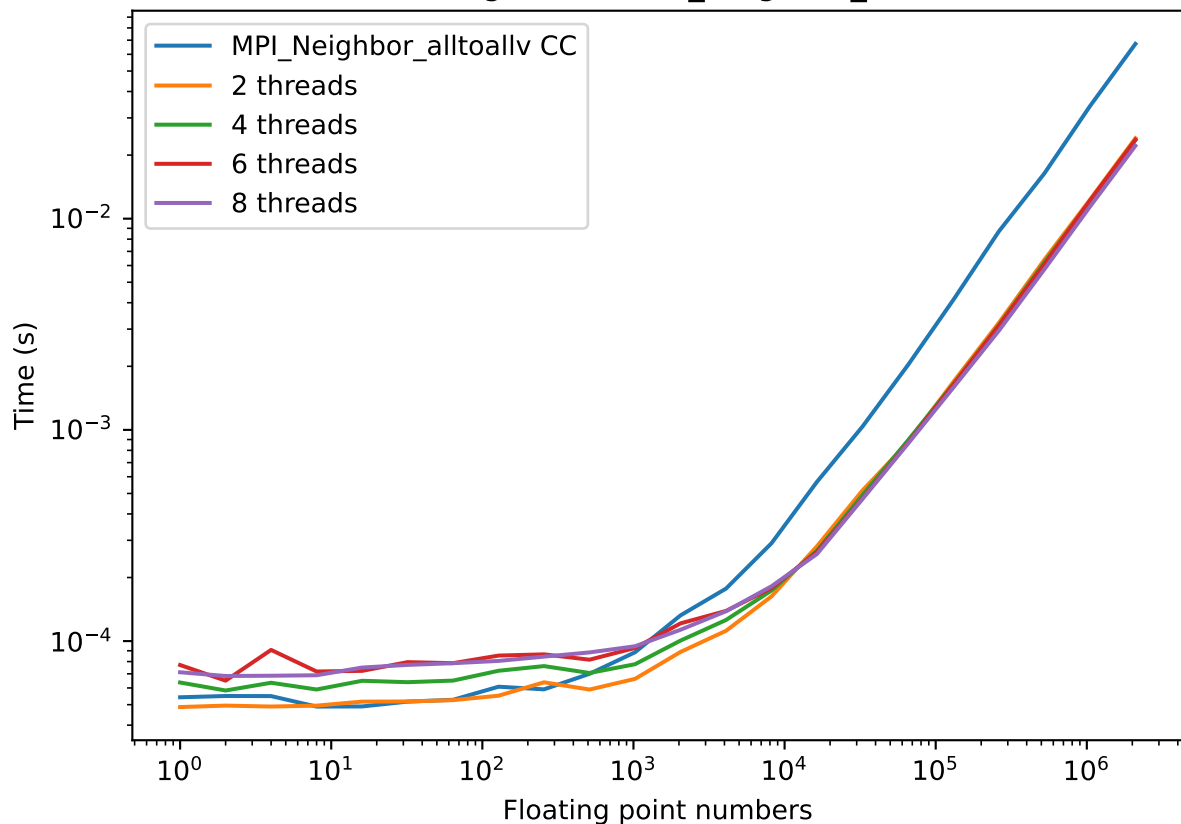
## Threaded: 8



Threaded Neighbor vs MPI\_Neighbor\_alltoallv

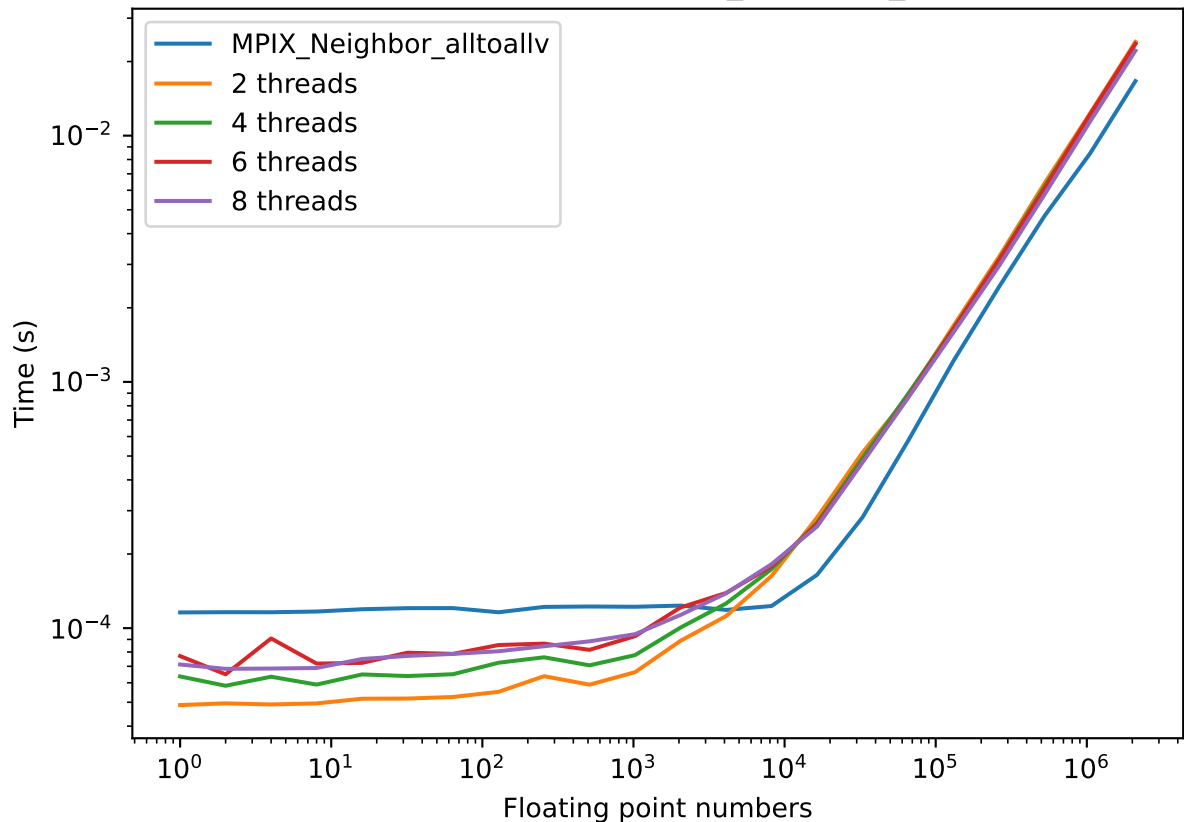


Threaded Neighbor vs MPI\_Neighbor\_alltoallv CC

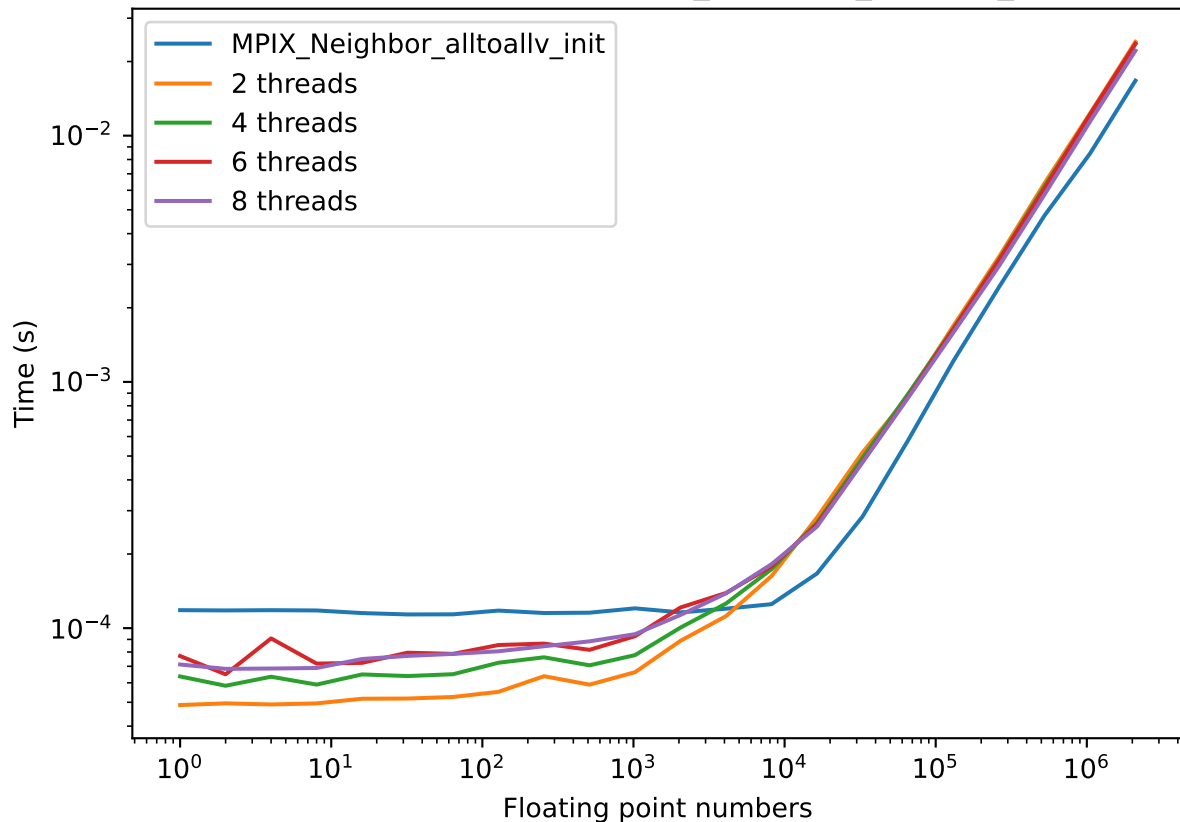




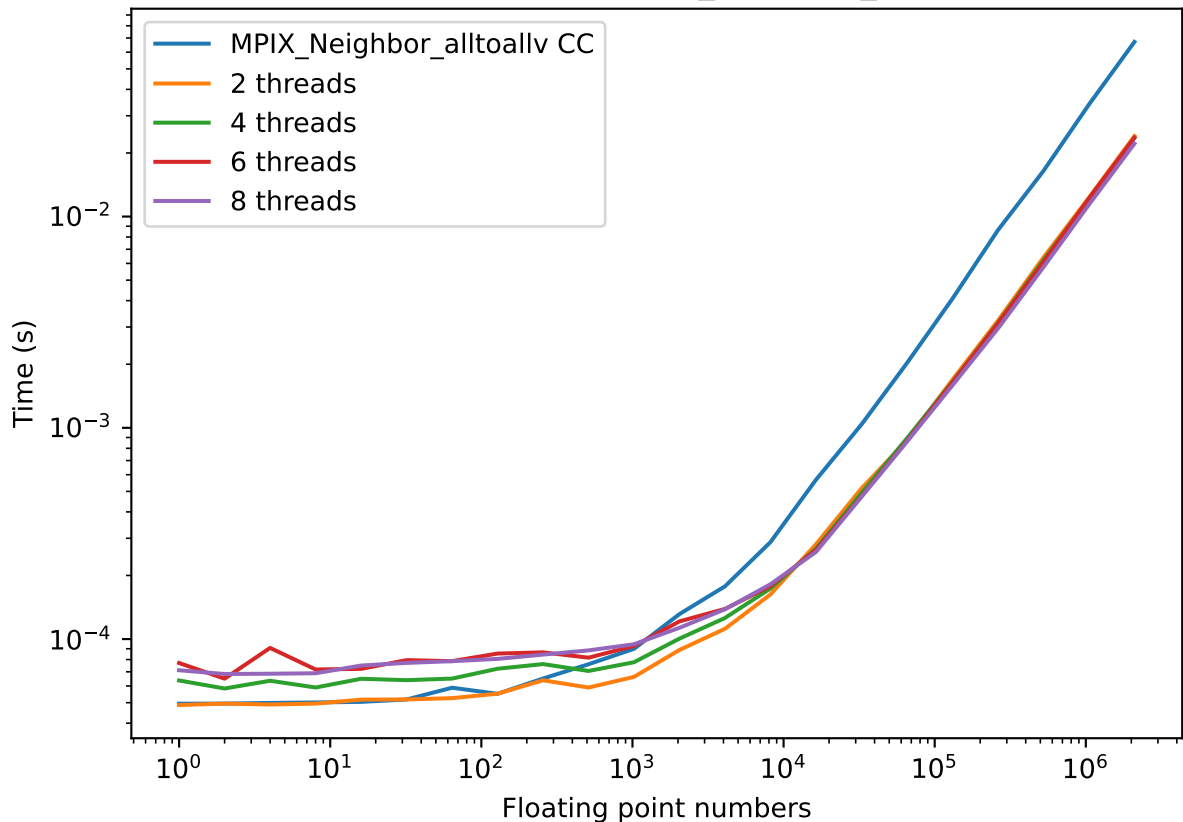
Threaded Neighbor vs MPIX\_Neighbor\_alltoallv



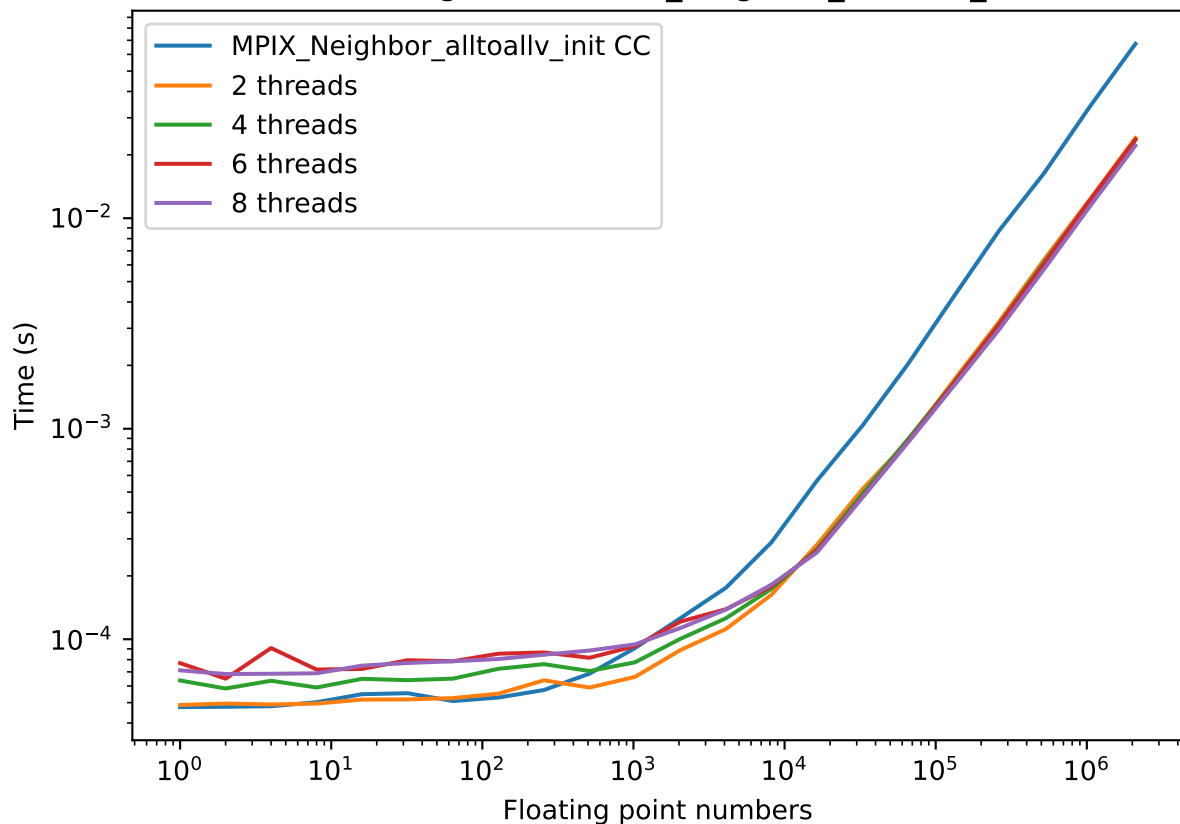
# Threaded Neighbor vs MPIX\_Neighbor\_alltoallv\_init



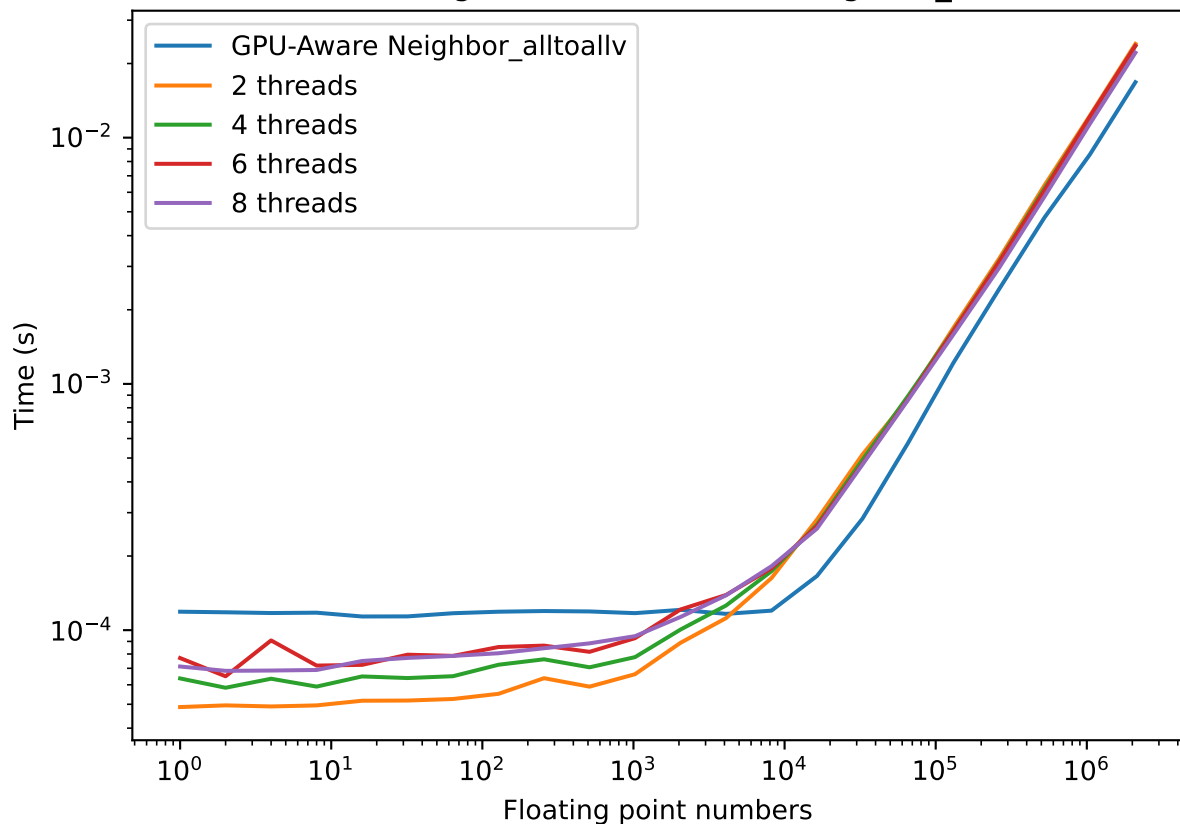
Threaded Neighbor vs MPIX\_Neighbor\_alltoallv CC



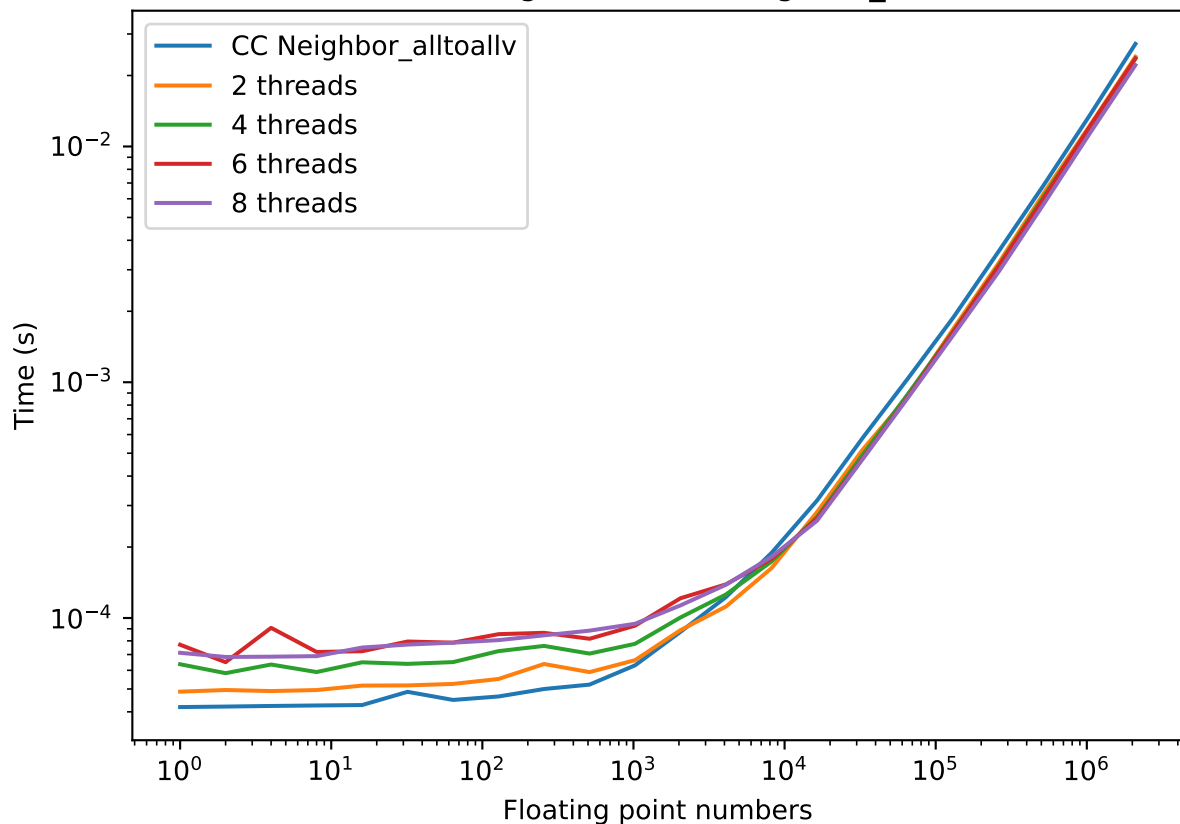
Threaded Neighbor vs MPIX\_Neighbor\_alltoallv\_init CC



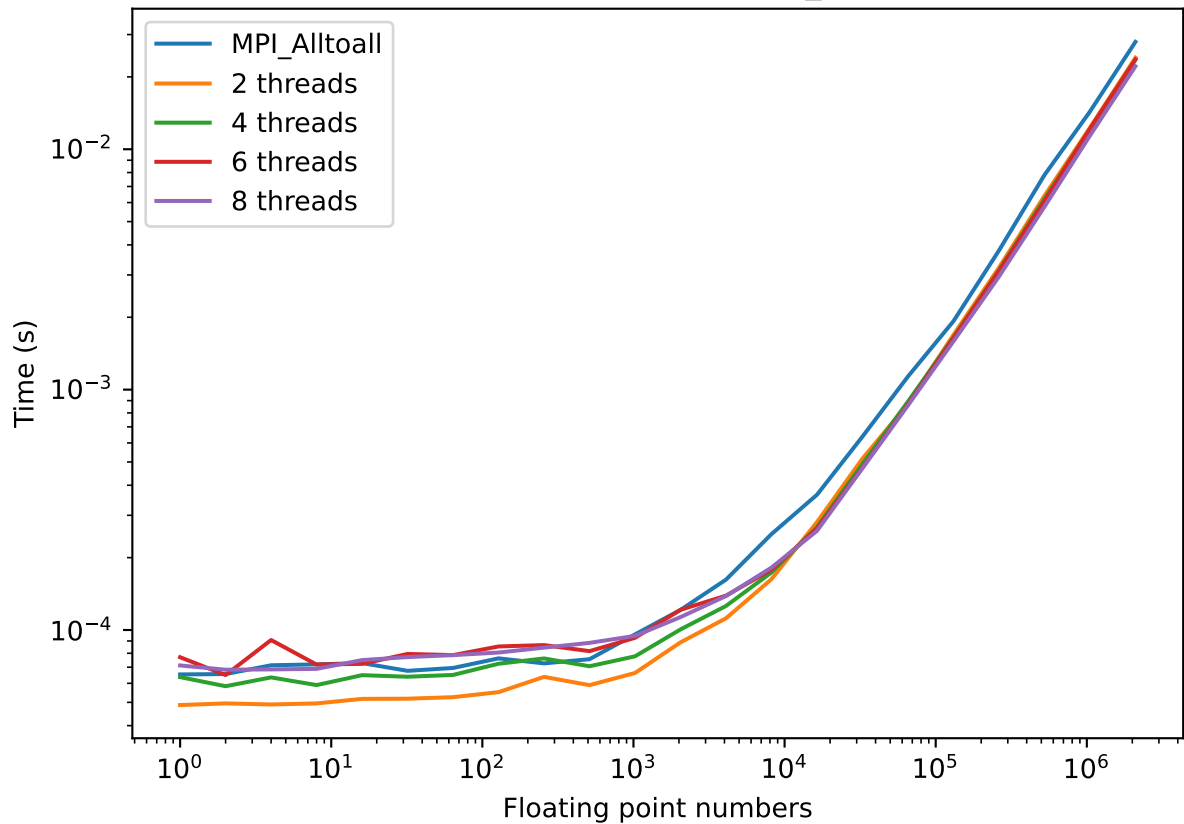
Threaded Neighbor vs GPU-Aware Neighbor\_alltoallv



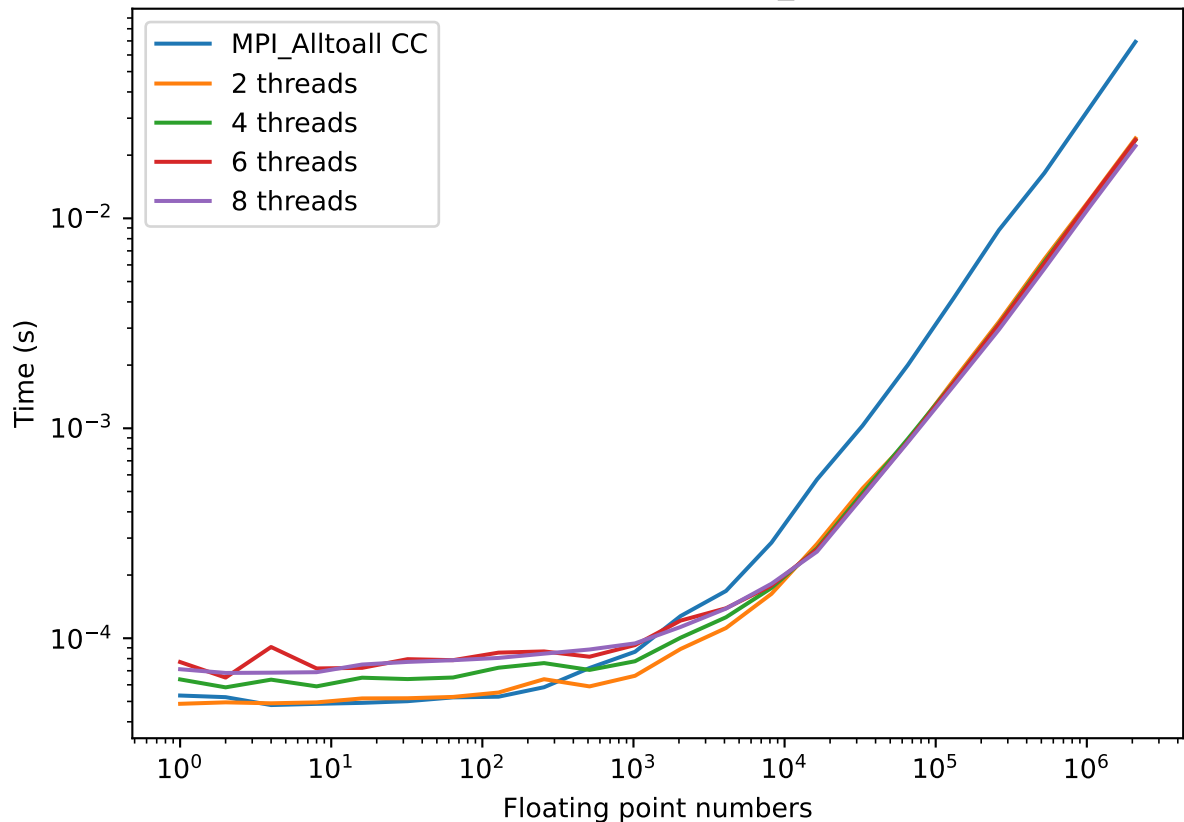
Threaded Neighbor vs CC Neighbor\_alltoallv



# Threaded Neighbor vs MPI\_Alltoall

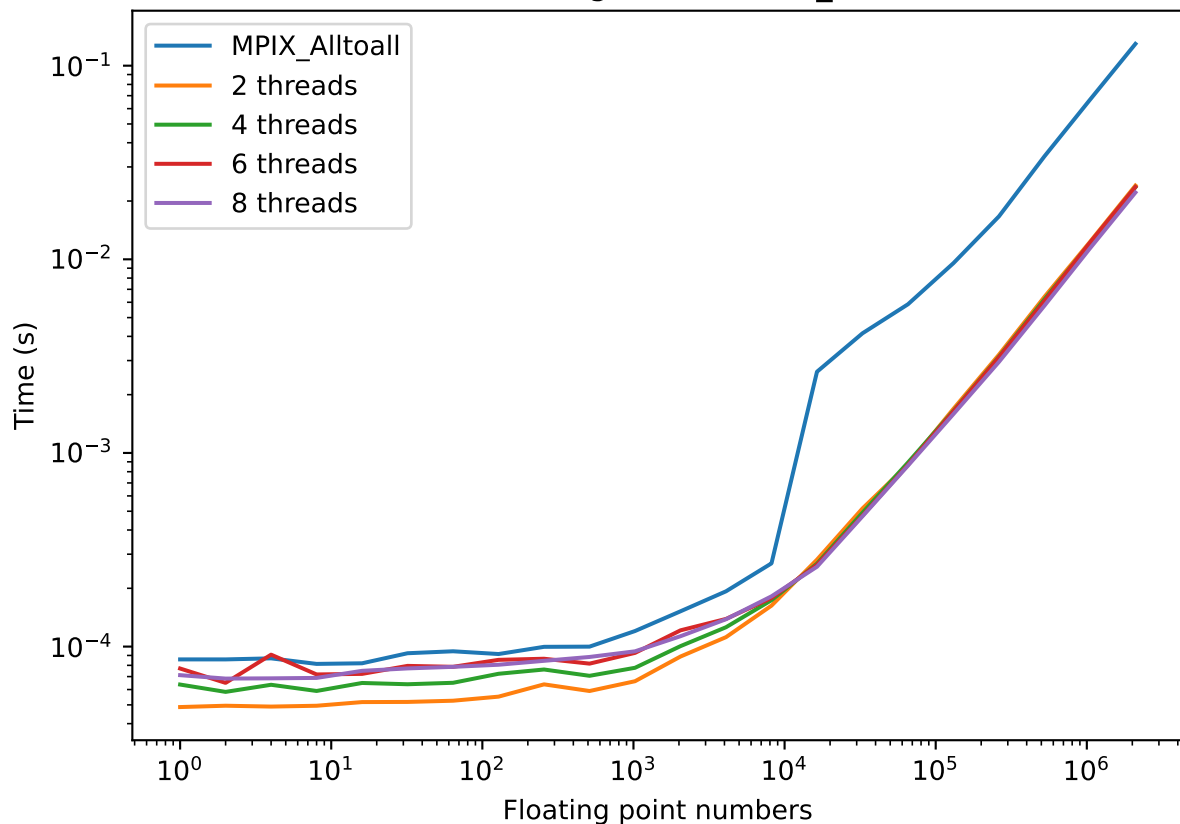


# Threaded Neighbor vs MPI\_Alltoall CC

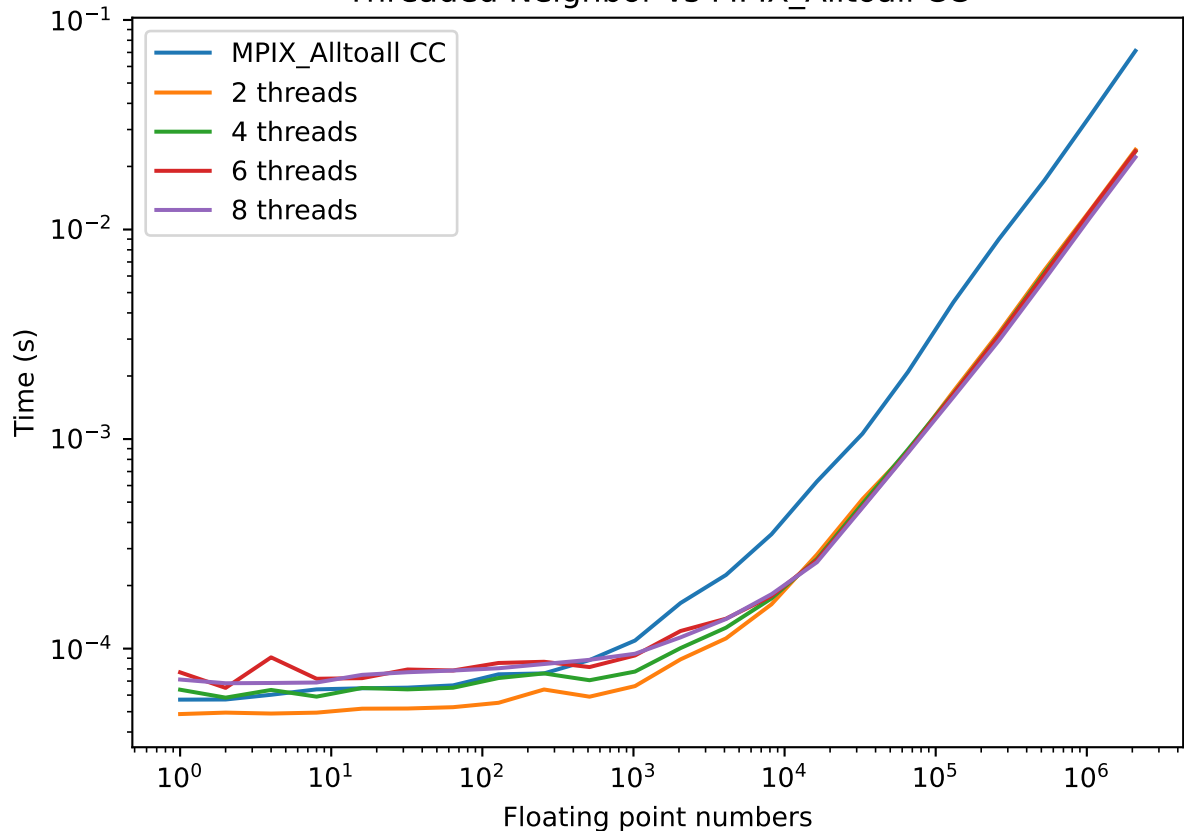




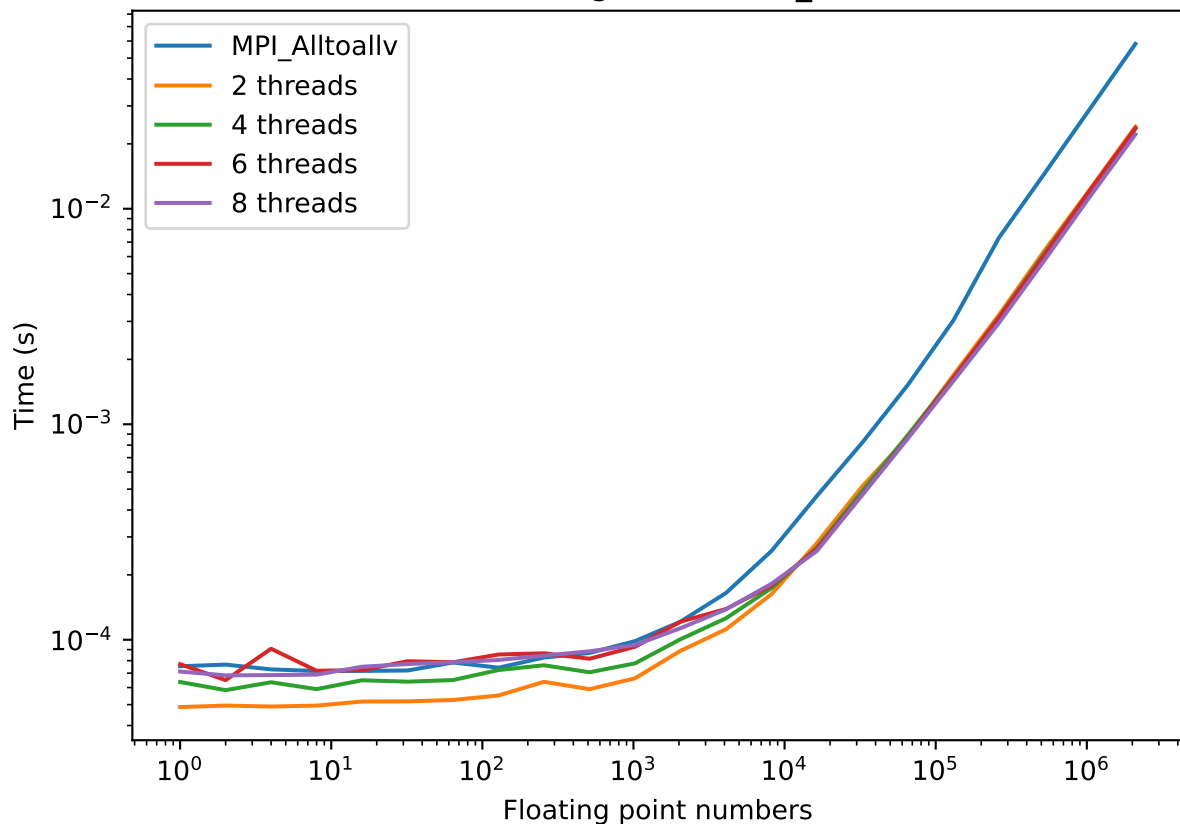
Threaded Neighbor vs MPIX\_Alltoall



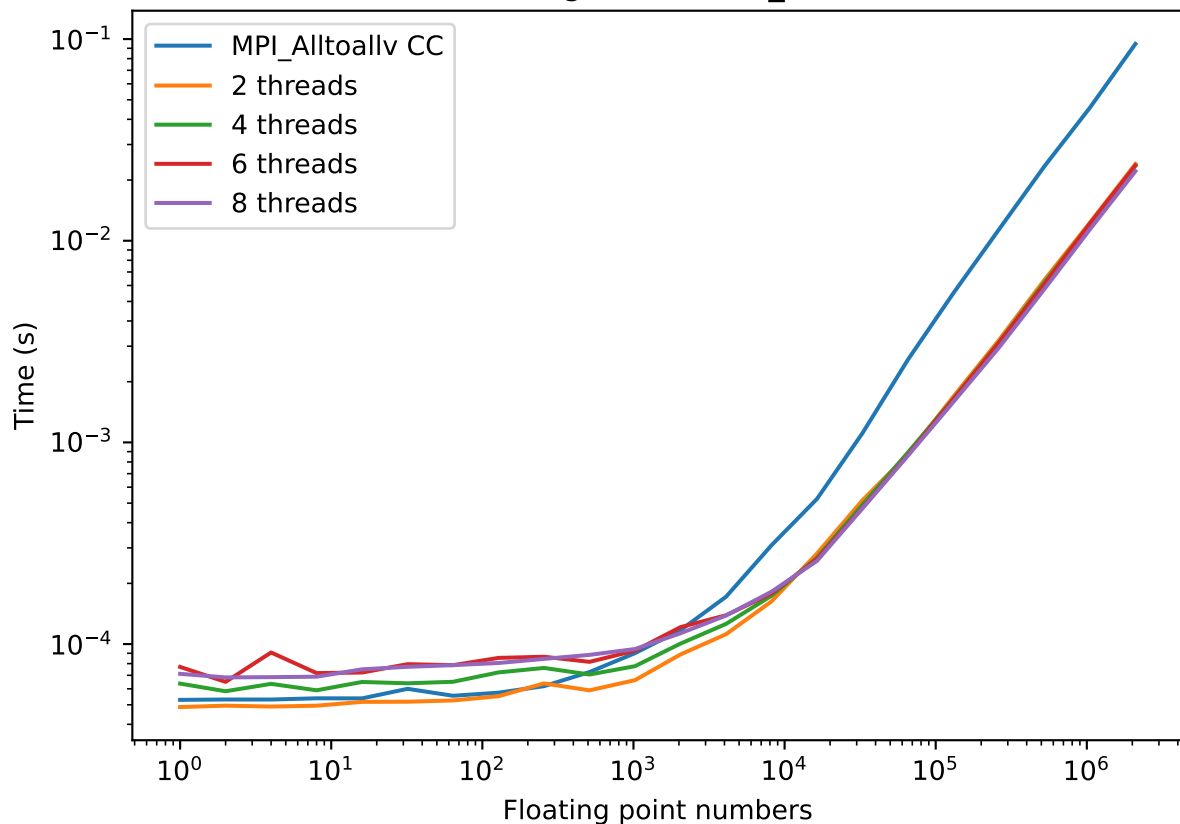
Threaded Neighbor vs MPIX\_Alltoall CC



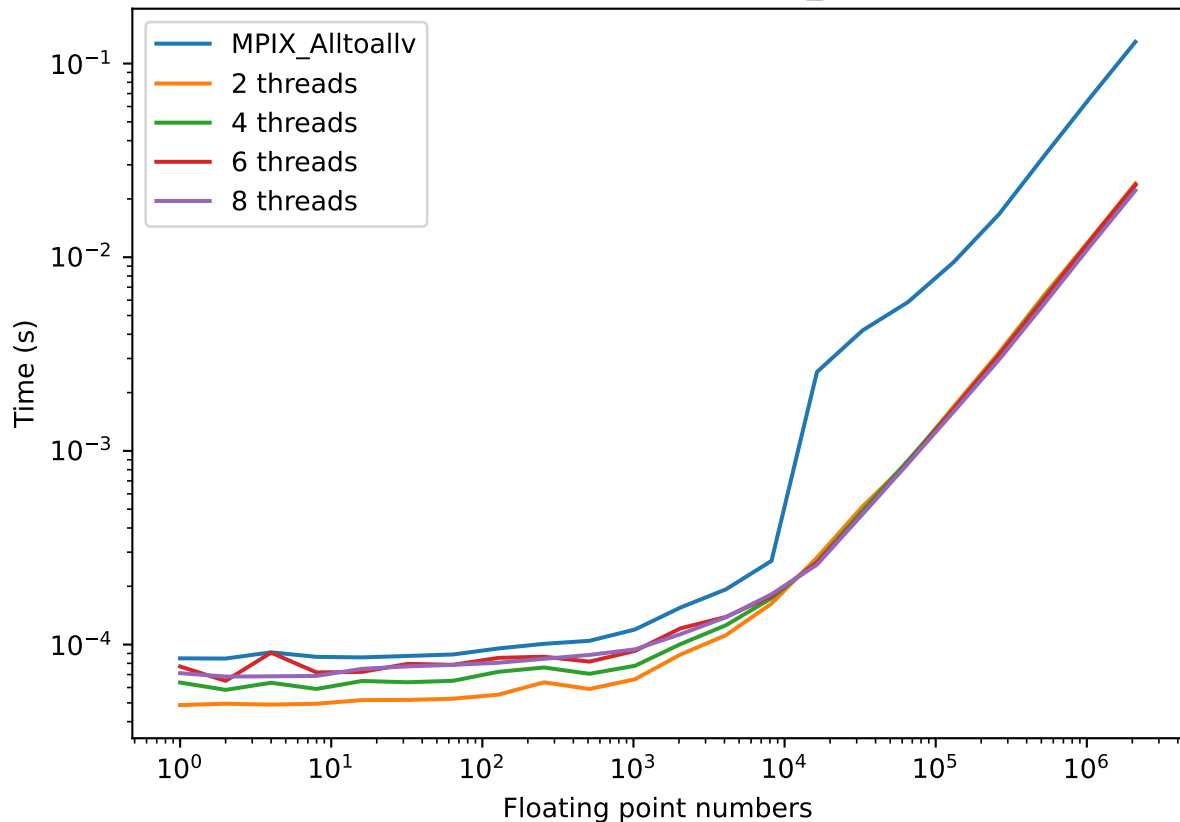
# Threaded Neighbor vs MPI\_Alltoallv



# Threaded Neighbor vs MPI\_Alltoallv CC



# Threaded Neighbor vs MPIX\_Alltoallv



Threaded Neighbor vs MPIX\_Alltoallv CC

