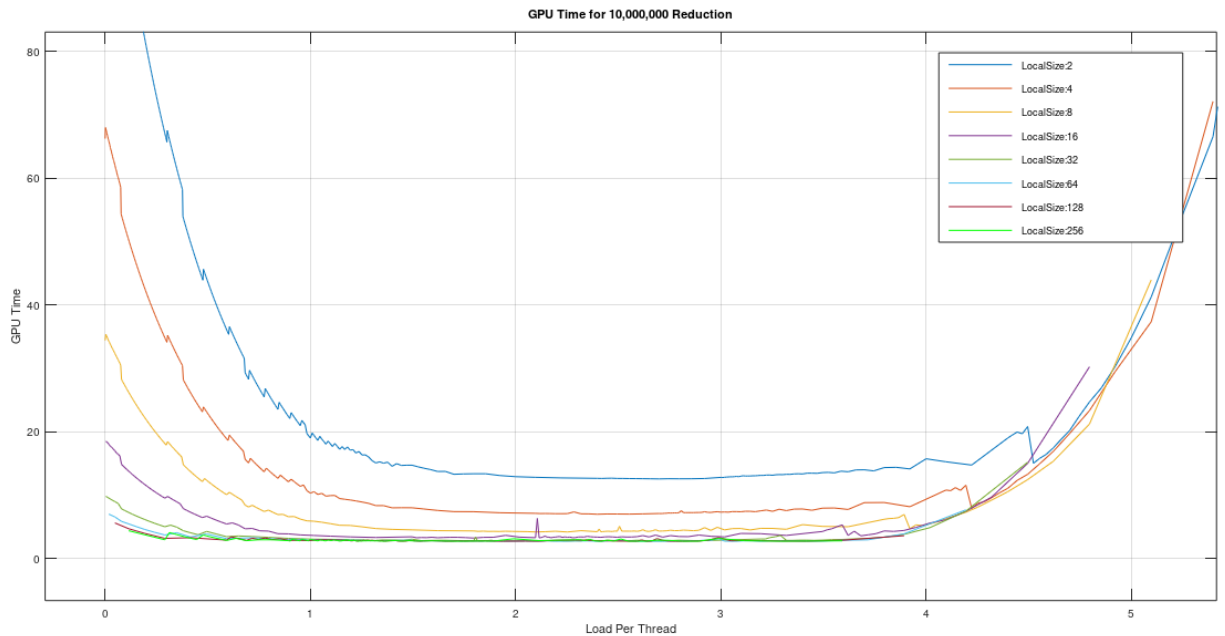


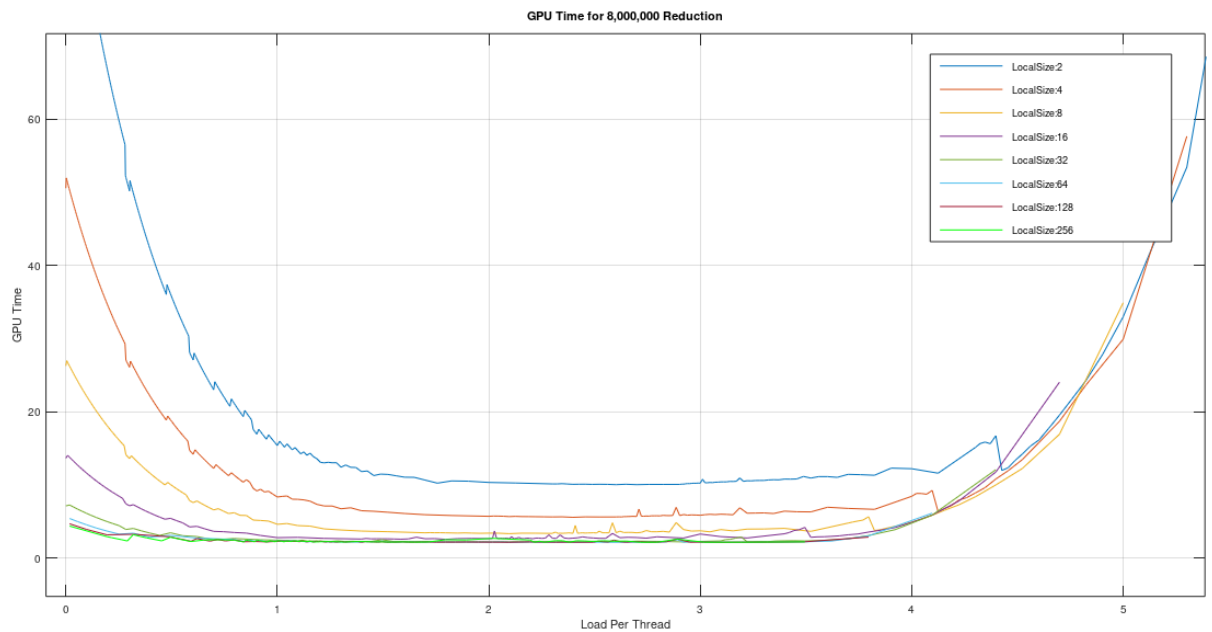
## GPU Time vs Load Per Thread Graphs

Following sets of graphs are plotted to identify the optimum local size and the load per thread for different amounts of data.

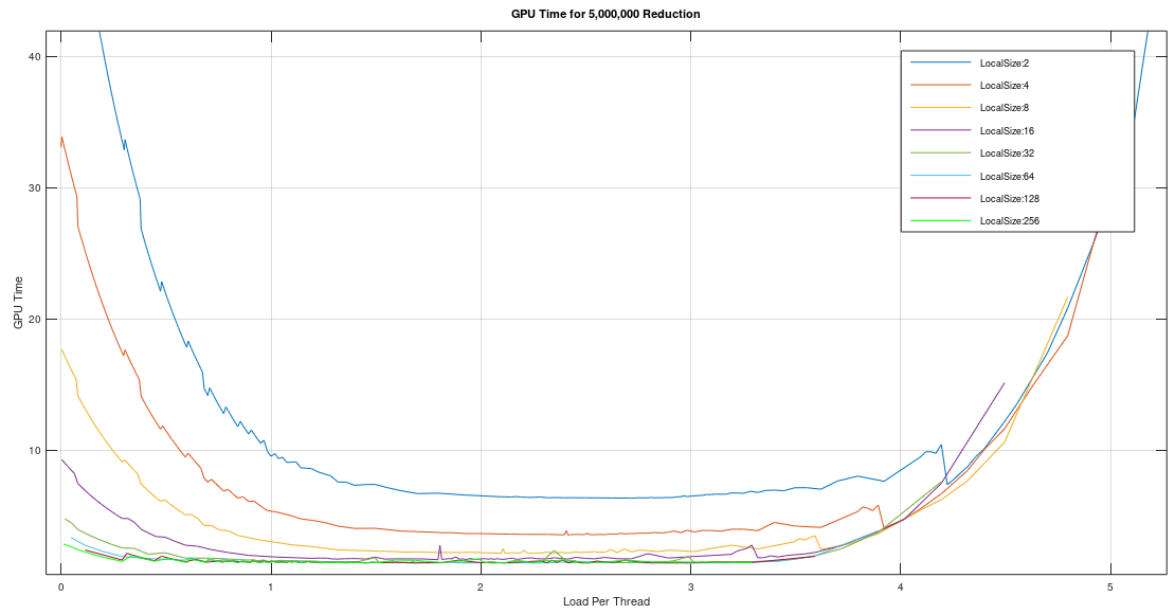
### 1. 10 million



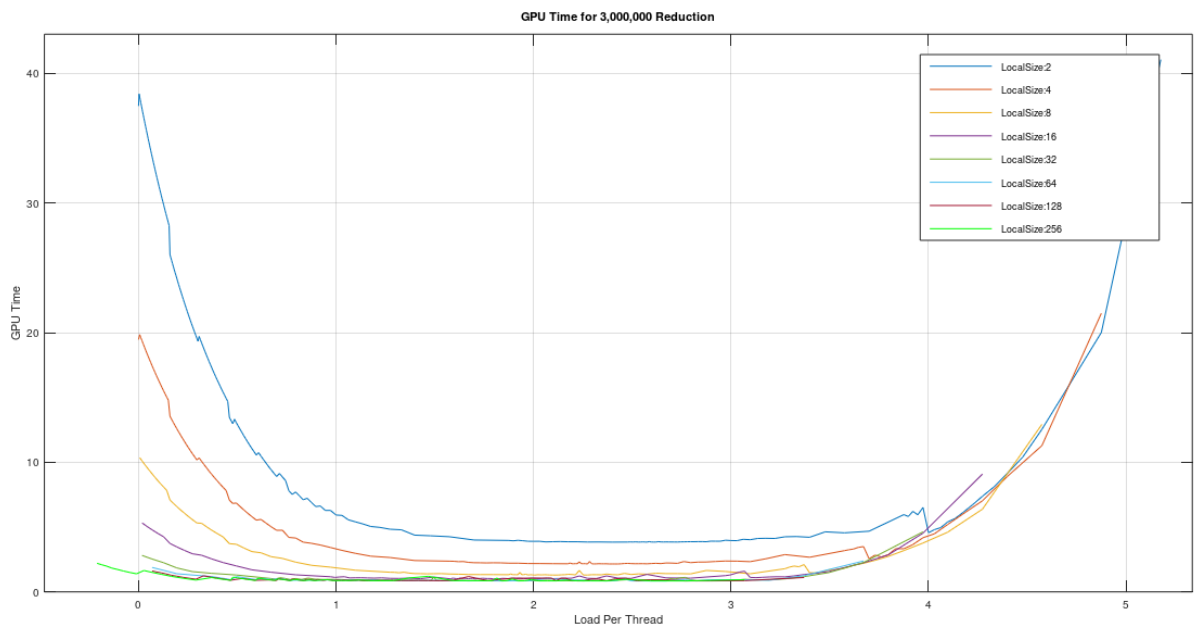
### 2. 8 million



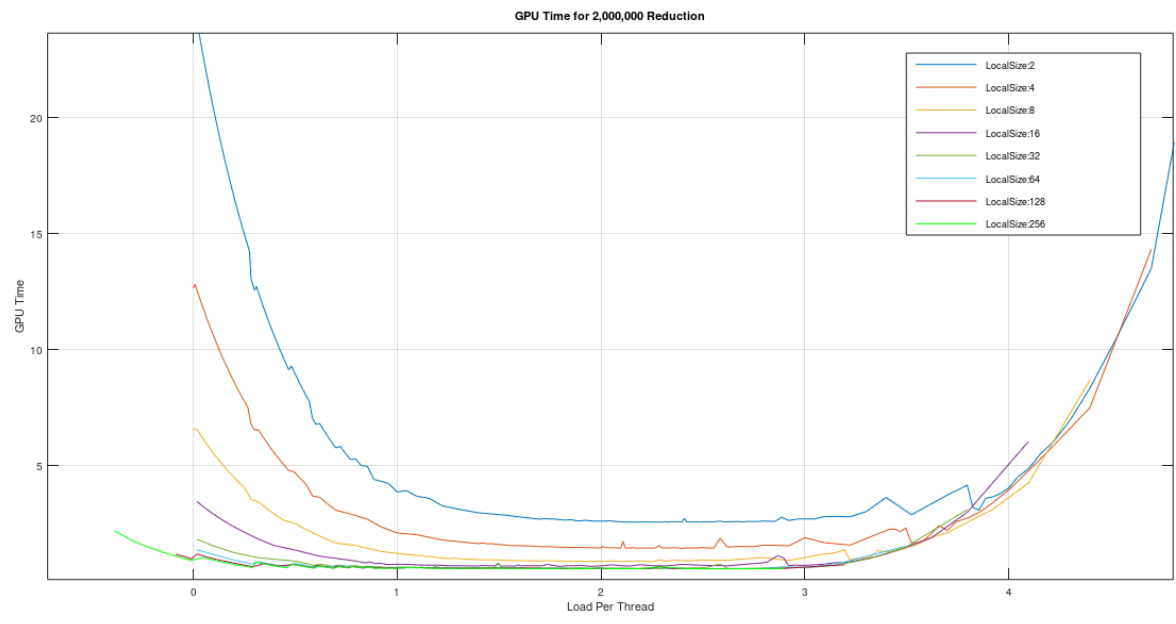
### 3. 5 million



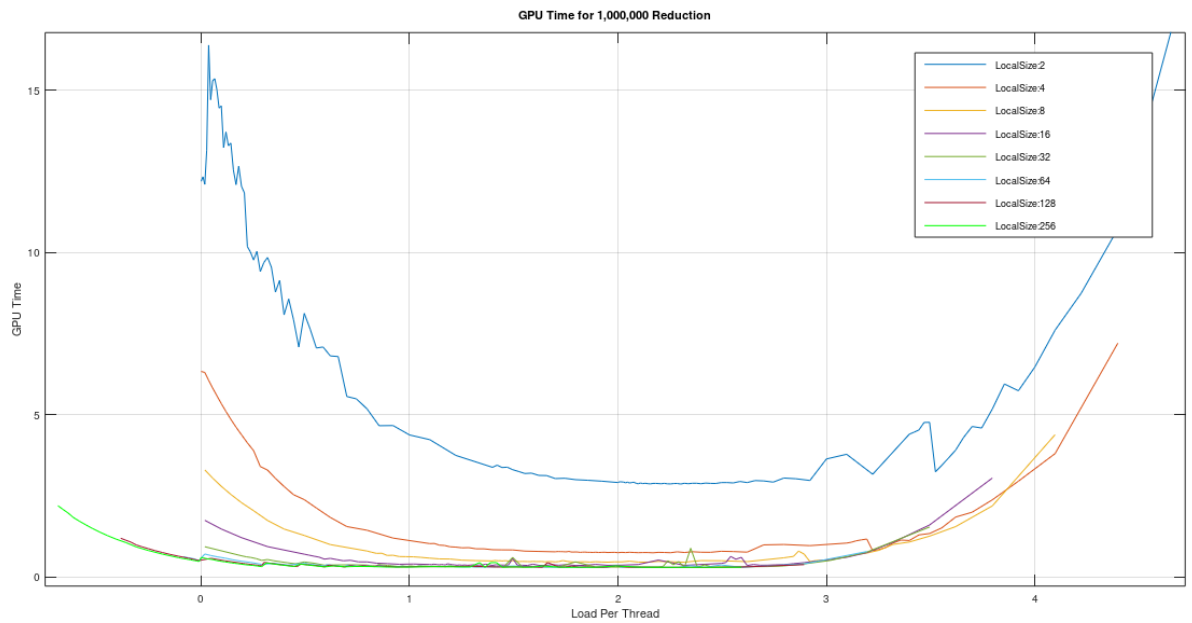
### 4. 3 million



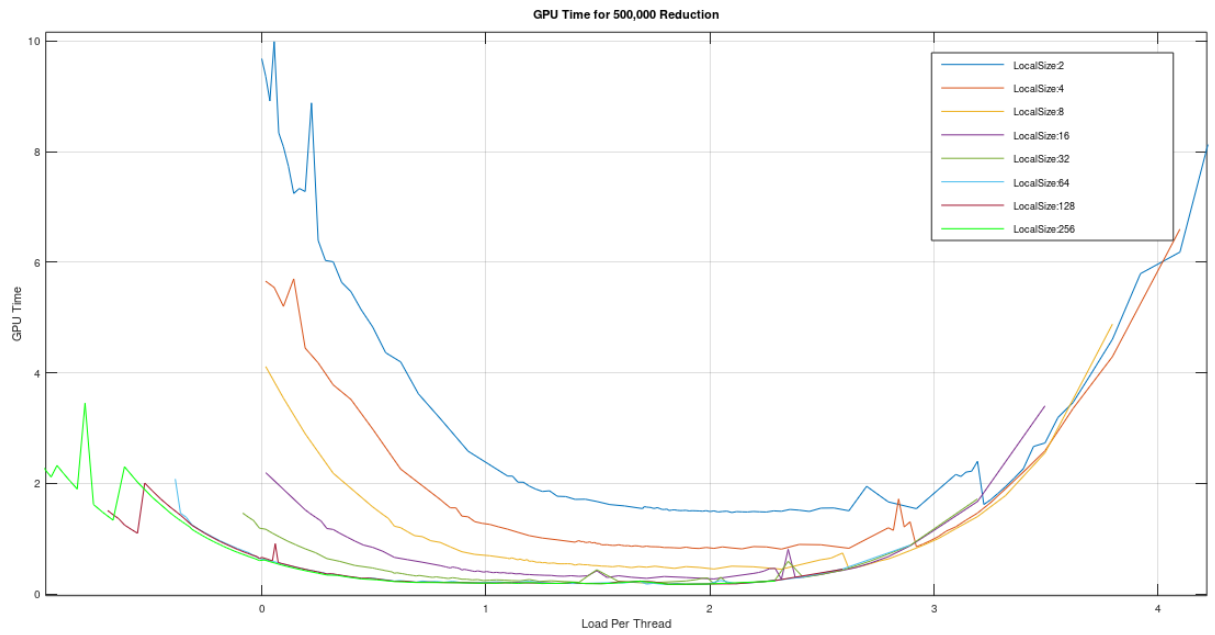
5. 2 million



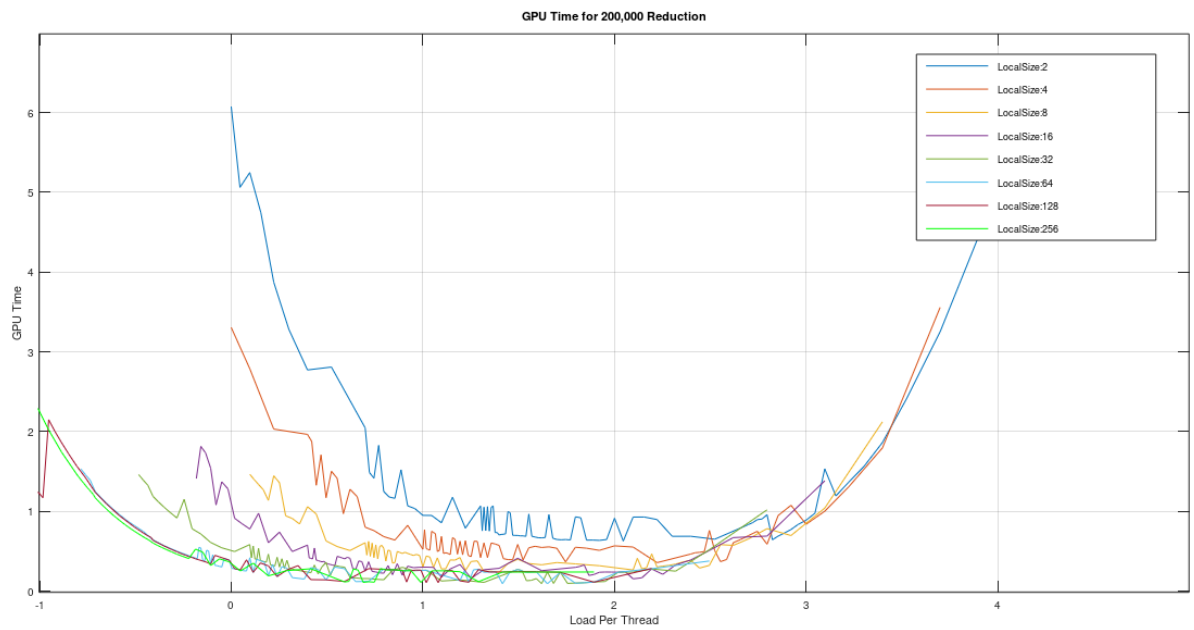
6. 1 million



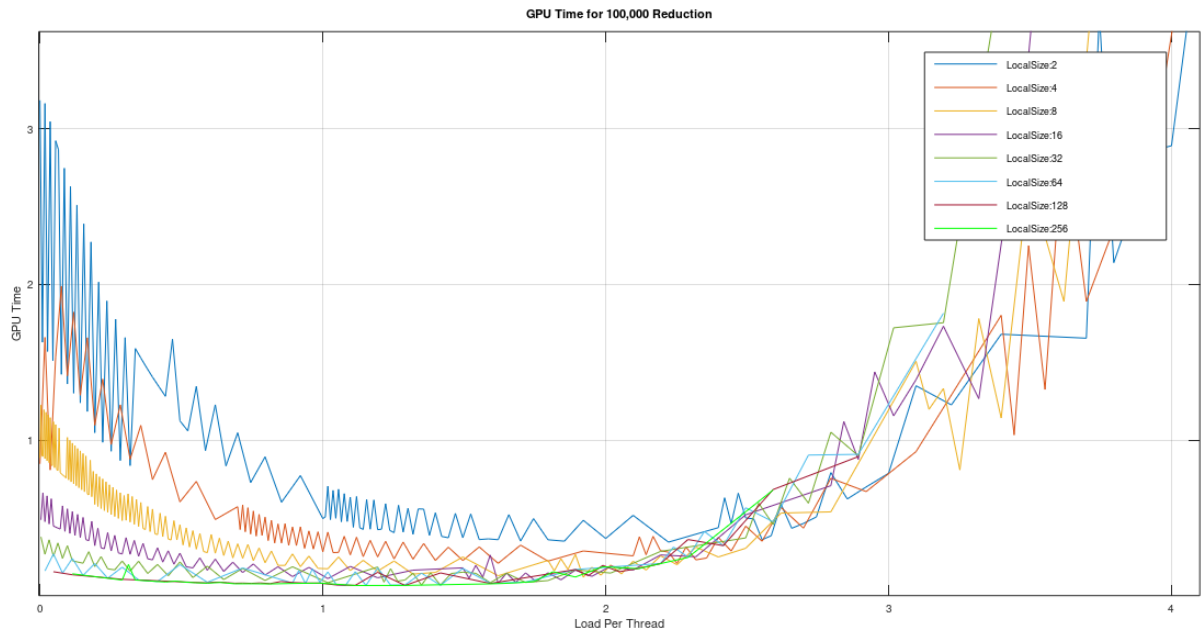
## 7. 500k



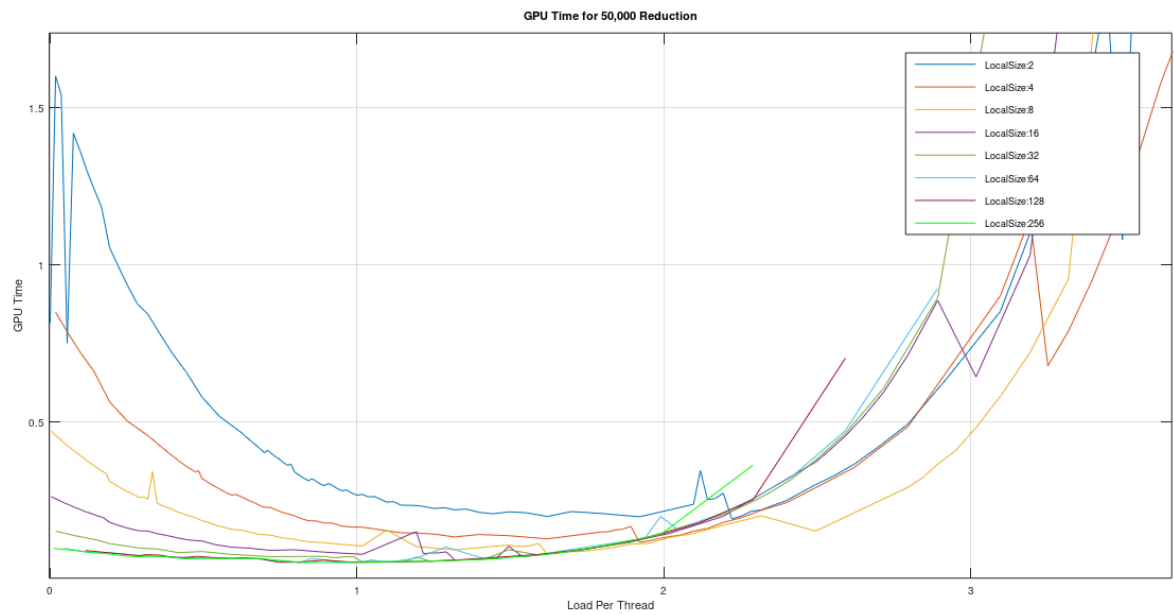
## 8. 200k



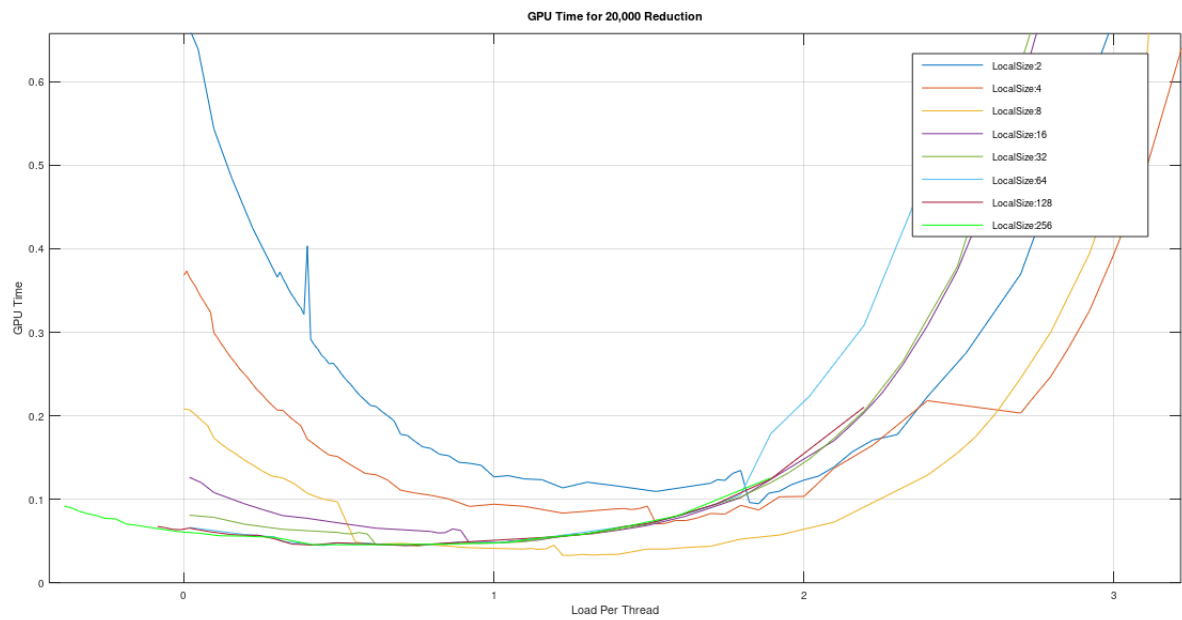
9. 100k



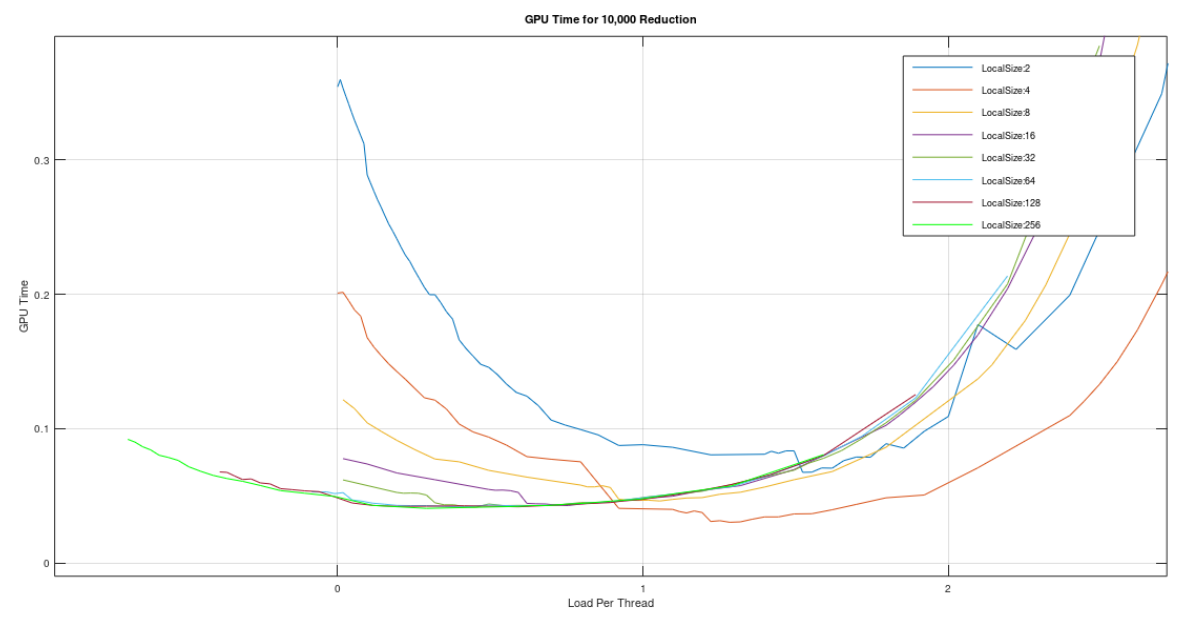
10. 50k



11. 20k



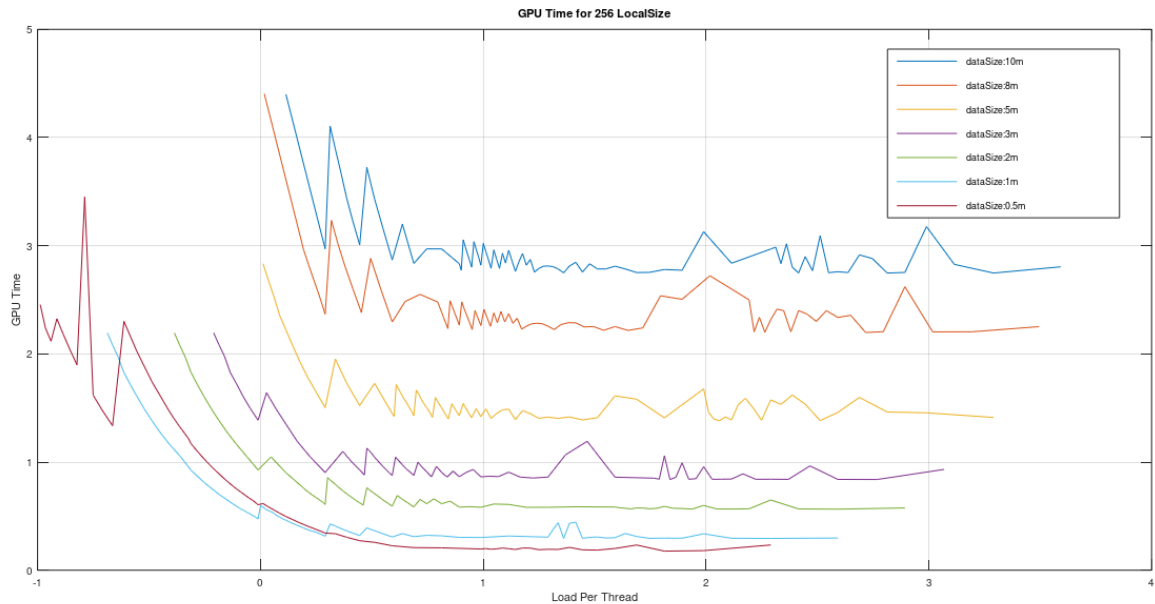
12. 10k



By observing above graphs, it can be concluded that the best local size for almost every data size is 256. So here onwards let's compare the graphs for different data sizes with local size 256.

## GPU Time vs Load Per Thread for Different Data Sizes (Local Size = 256)

### 1. Data Size >100,000



### 2. Data Size <=100,000

