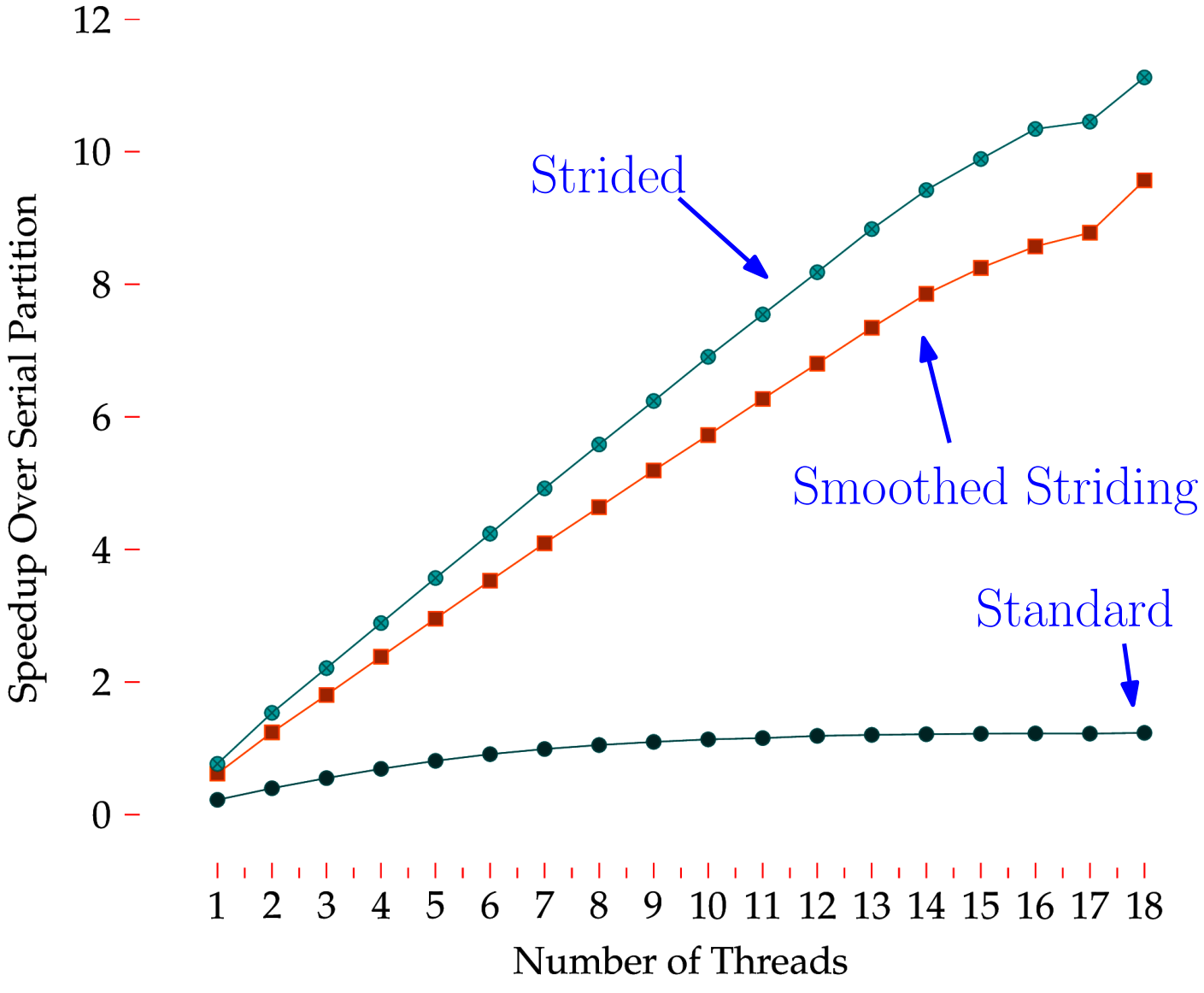
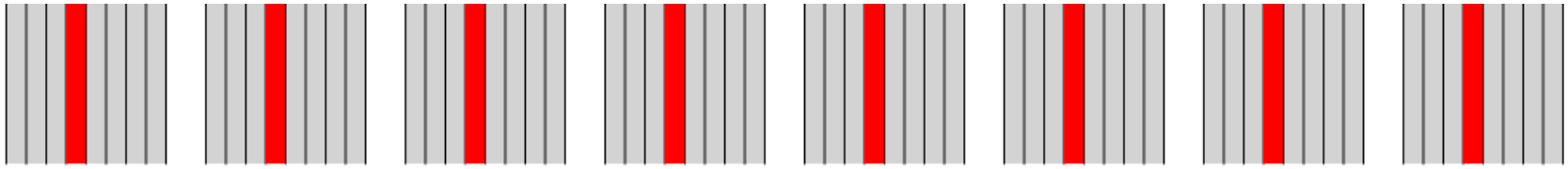
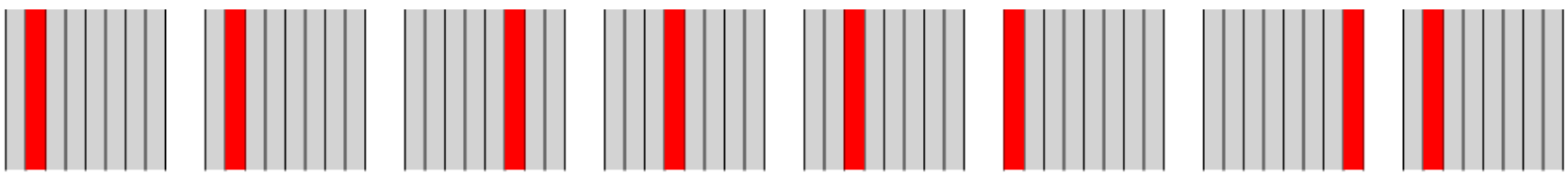

Speedup Over Serial Partition
12
10
8
6
4
2
0
Strided
Smoothed Striding
Standard
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Number of Threads

Strided Algorithm groups:



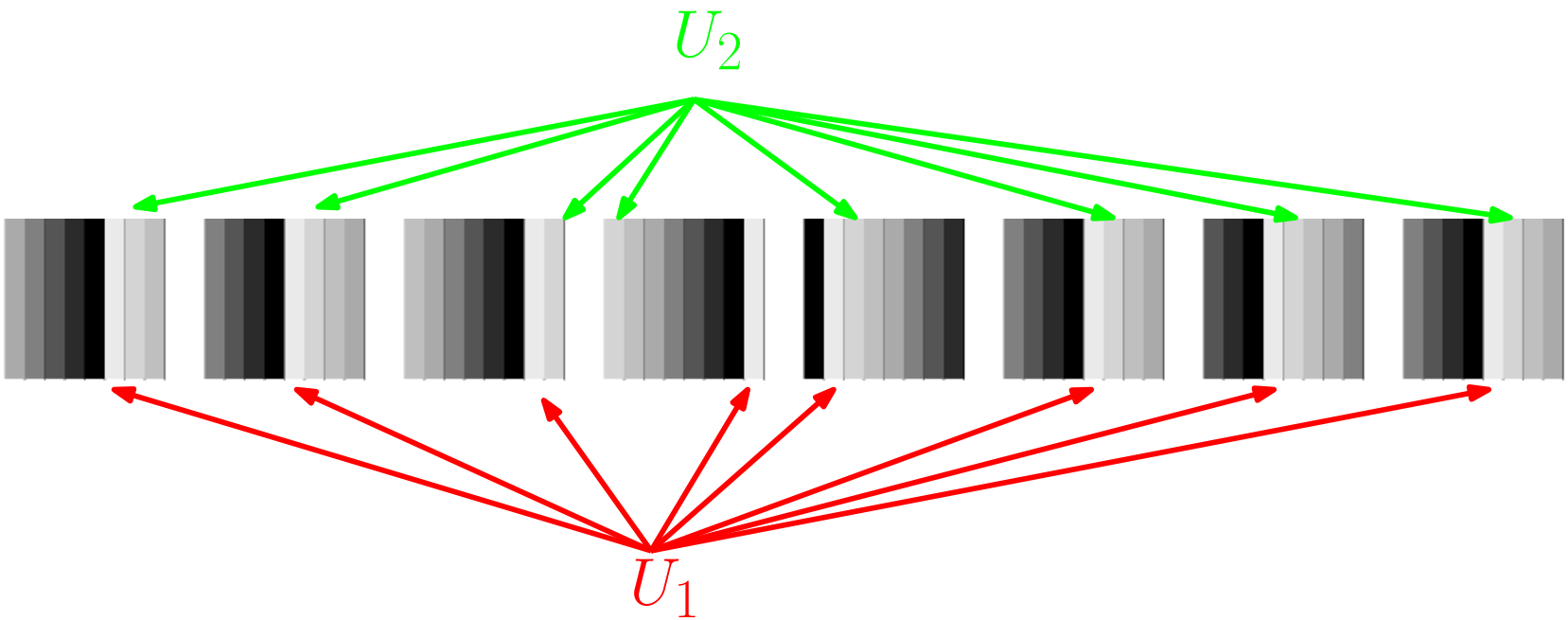
Smoothed-Striding Algorithm groups:



Solution:

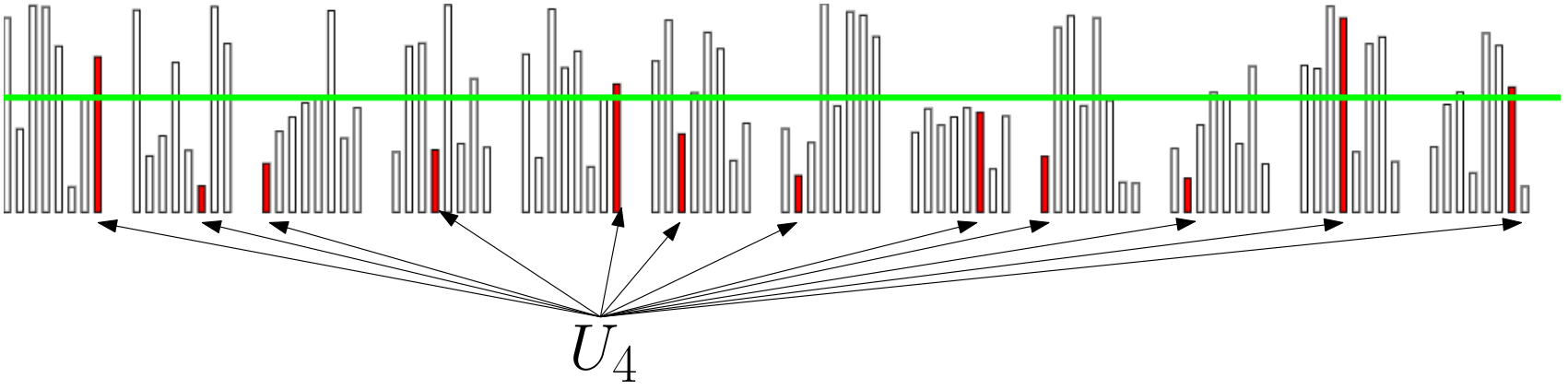
- Store a single group
- Determine other groups by a circular shift

Note: groups are not independent, but each is random.

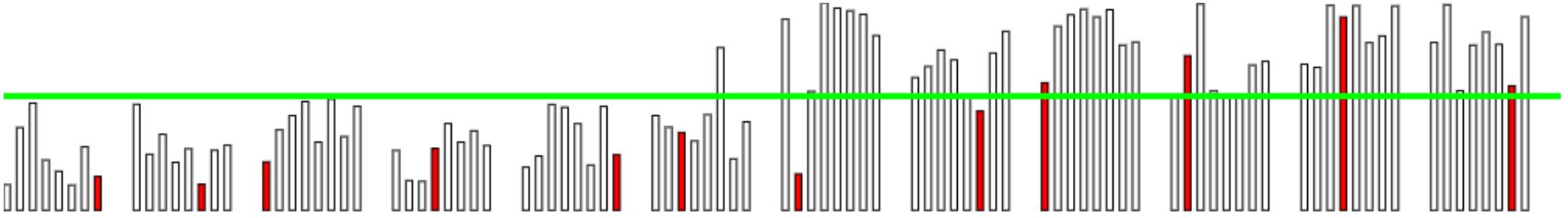


Smoothed Striding Algorithm

Form groups U_i containing a random element from each chunk.

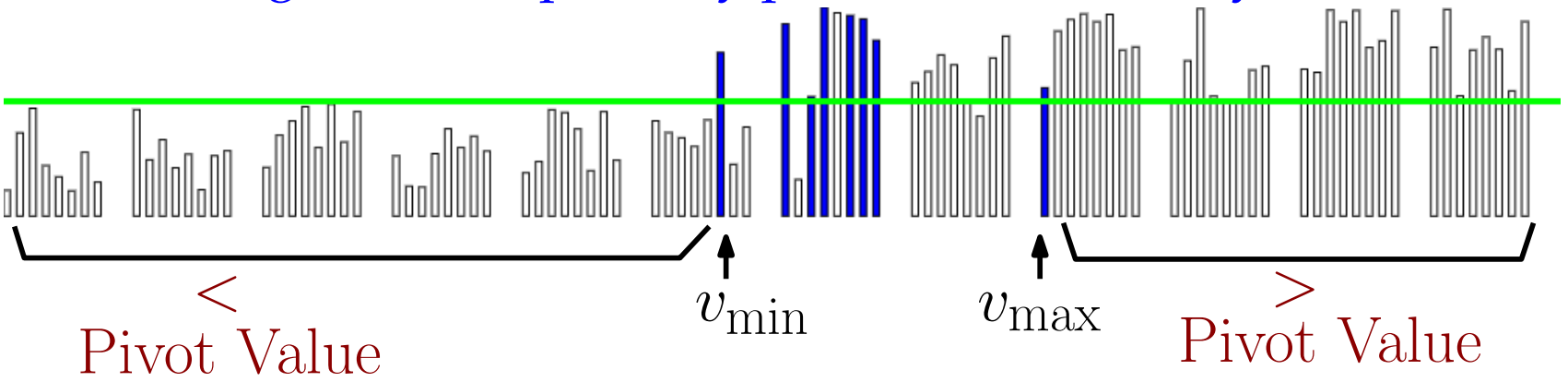
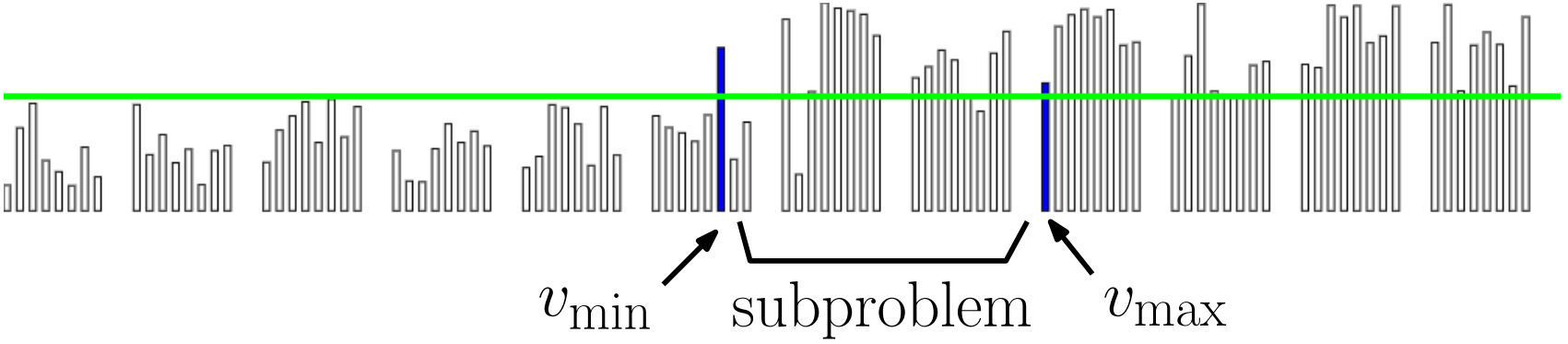


Perform **serial partitions** on each U_i **in parallel over the** U_i**'s.**



Smoothed Striding Algorithm

Partitioning the U_i's "partially partitions" the array.



Recursively partition the subarray.