• I used in the program multiple processes and multiple threads in order to show how parallelism can improve execution time of the program.

• 1-10 -x -.5 -y .5 -s 1 -m 2000

The very first process takes 59 seconds, but adding every next process time is decreasing .This is a power of daughter process cause both daughter and parent processes are working in parallel, because for creating the same number of pictures computer uses less time ;If we don’t use multiple processes, it takes about a second for creating 1 image, more processes we use – less time we need, as several images are creating simultaneously.

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A: -x -.5 -y .5 -s 1 -m 2000 -n 1-50

B: -x 0.2869325 -y 0.0142905 -s .000001 -W 1024 -H 1024 -m 1000 -n 1-50

As we can see from graphics the more threads we use less time we spend. Curves A and B have different shapes because line B accept the larger image then default and variables in B contain more complicated data for calculation.

In conclusion parallelism is very usefull for using different processes and threads in the same time. It helps to save time for reaching the same result.