

Out of Core Photon-Mapping for Large Buildings

[Additional figures]

paper1004

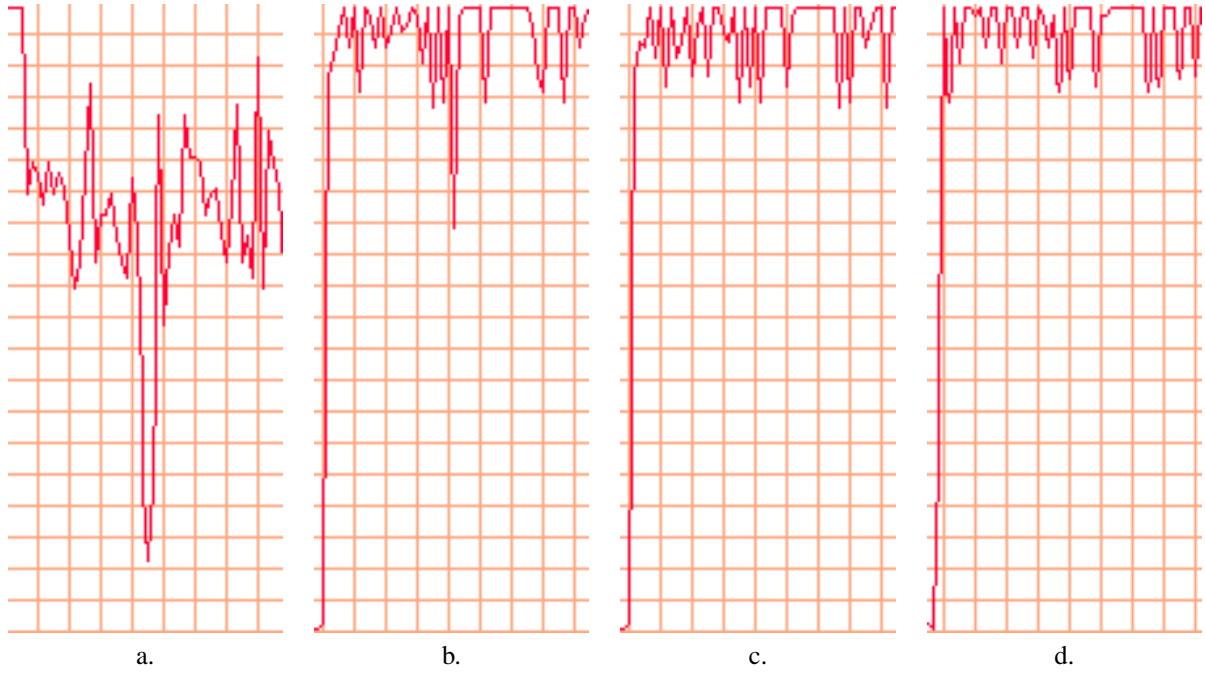


Figure 1: Use of CPU during global illumination for the octagon building according to *MAX_TMP_PHOTONS*. An interval on the abscissa represents 5 seconds and an interval on ordinates represents 5% of CPU use: a. With *MAX_TMP_PHOTONS* = 500, allocated memory is not sufficient and disks reads and writes reduce CPU efficiency. - b. *MAX_TMP_PHOTONS* = 5000, CPU is used more efficiently with some remaining falling off. - c. *MAX_TMP_PHOTONS* = 10 000, disk is much less required and 100% CPU is used most of the time. - d. *MAX_TMP_PHOTONS* = 20 000, there is almost no difference than with b. disk accesses cannot be further reduced with this method.

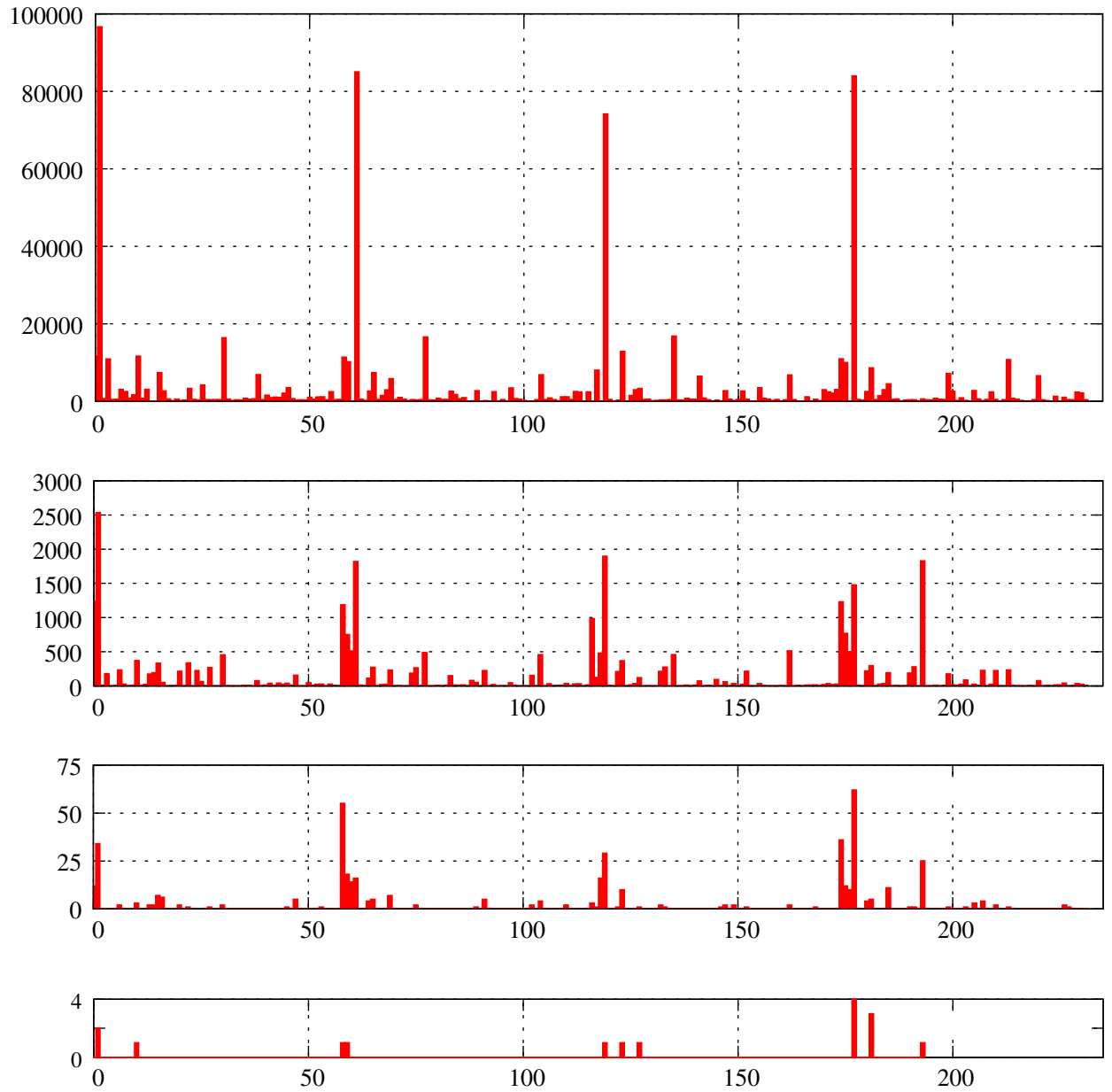


Figure 2: Number of photons processed for each room loaded in memory during computations for our octagon building. Peaks correspond to corridors where a high number of photons enter through portals. We represent only the four first steps (after too less photons remain).



Figure 3: Images from the L-Building.



Figure 4: Images from the Z-Building.

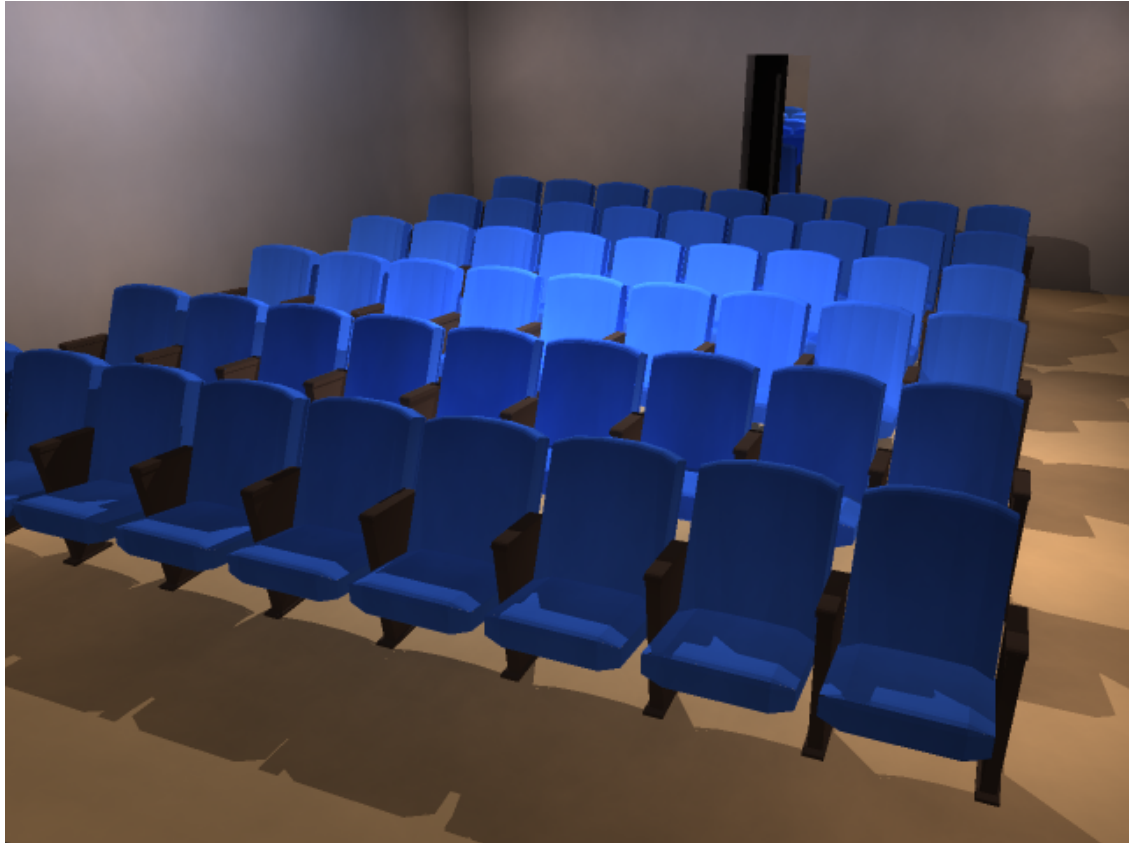


Figure 5: Images from our octagon building.



Figure 6: Image from our octagon building.



Figure 7: Images from the Tower_100 building.



Figure 8: Images from the Tower_100 building.