Benchmark Data for Moment Shadow Mapping

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As explained in the paper moment shadow mapping has been found to be a promising technique by benchmarking 66045 candidate techniques. These candidate techniques have been evaluated using four shadow maps of three different scenes.

Among with this document you should find four directories providing all data required to reproduce this benchmark. Each directory provides data for one of the four shadow maps and contains the following files:

`DirectionalLightShadowMap00.tif:` The shadow map used for this part of the benchmark. The brightness values in this high-dynamic-range TIFF image are to be interpreted as depth values in the range from zero (black) to one (white).

`DirectionalLightShadowMapXX.tif` **for** `XX`> 0**:** These files provide shadow maps for all surfaces which are not visible in the common shadow map because they failed the depth test. Backfaces are not included because they do not receive any light. Together these shadow maps provide a complete, discretized representation of the frontfacing scene geometry. Each surface is visible in exactly one of these shadow maps.

`DepthBias_XX.tif:` To obtain meaningful results in the benchmark it is important to avoid wrong self-shadowing in the ground truth (percentage closer filtering). Otherwise other techniques would be punished for not reproducing this artifact. Therefore, sophisticated depth biasing has to be used. For each shadow map these files provide the values of the depth bias used for the respective surface. The brightness values need to be interpreted as scalars as described above and then need to be multiplied by 0.04 to obtain the final depth bias. The final depth bias should be subtracted from the depth in the shadow map before evaluating the filtered shadow intensity.

`Quicksave.txt:` This file can be copied to the `Output` directory in the working directory of the shadow mapping demo that comes with the paper. Then pressing F4 in the shadow mapping demo will restore the light direction (and other attributes) used during generation of this shadow map.

Hopefully, this provides you with all the information you need to apply this benchmark to shadow mapping techniques. If questions remain unanswered, please contact Christoph Peters under peters@cs.uni-bonn.de.