

Supplementary material for “Learned Multi-Patch Similarity”

Wilfried Hartmann¹ Silvano Galliani¹ Michal Havlena²
Luc Van Gool^{3,4} Konrad Schindler¹

¹Photogrammetry and Remote Sensing, ETH Zurich, Switzerland

²Vuforia, PTC, Vienna, Austria

³CVL, ETH Zurich, Switzerland

⁴PSI, KU Leuven, Belgium

Qualitative Results - DTU Evaluation The qualitative results on the DTU dataset are presented in (Fig. 4) in the submitted paper. There the difference to ground truth depth maps are shown for three out of six methods. In (Fig. 1) the results for the remaining three methods are shown.

The methods SAD and SIFT perform different on the CAN dataset compared to the ZNCC and LIFT results. SAD has difficulties with the homogeneous can surface. For SIFT there are more correct depth estimates on the homogeneous can surface when comparing to LIFT. For the other three datasets there are no large differences seen when comparing the two proposed methods, ZNCC with SAD and LIFT with SIFT.

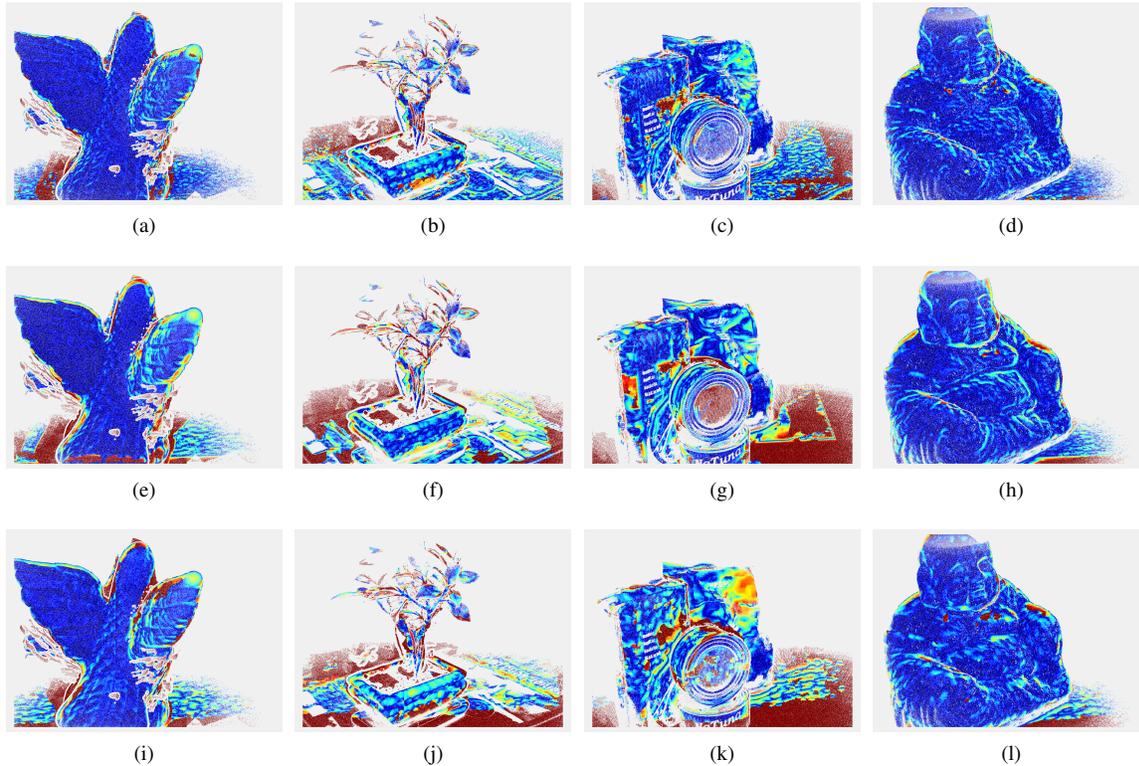


Figure 1. Plane sweeping using three different patch similarity measures. Proposed learned multi-view similarity with concatenation layer vs. pairwise SAD and pairwise SIFT. (a) - (d) difference from ground truth, proposed. (e) - (h) difference from ground truth, SAD. (i) - (l) difference from ground truth, SIFT.