

Supplementary Material:

Convolutional Sparse Coding for Single-shot HDR Imaging

Ana Serrano¹ Felix Heide² Diego Gutierrez¹ Gordon Wetzstein² Belen Masia^{1,3}
¹ Universidad de Zaragoza ² Stanford University ³ MPI Informatik

A Additional results

In this document we include additional results of our technique. Each of the following figures corresponds to a different HDR scene (scenes from the HDR Photographic Survey¹ and the EMPA HDR Image Database²). For each scene, we show, in reading order: tone mapped versions of both the ground truth and recovered images (tonemapped using PhotoshopTM's *local adaptation*), a comparison of both HDR images in false color (scale is in stops, that is, $\log_2(\text{luminance})$), and three different exposures of our recovered HDR image (low, middle and high, respectively).

¹<http://rit-mcsl.org/fairchild/HDR.html>

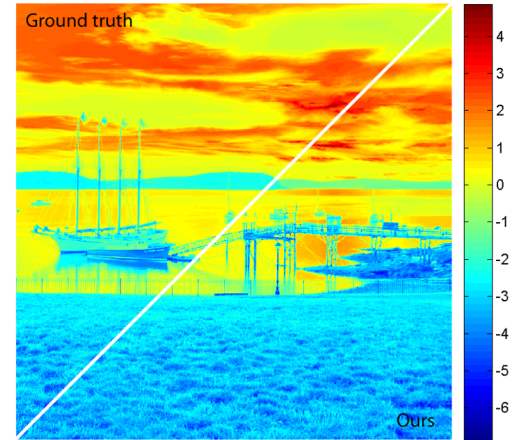
²<http://www.empamedia.ethz.ch/hdrdatabase/index.php>



Ground truth - tonemapped



Recovered - tonemapped



Comparison - log2 luminance



Low exposure



Mid exposure



High exposure

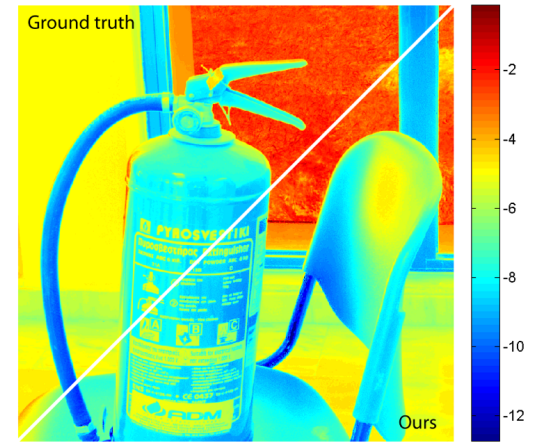
Figure S.1: Bar Harbor Pre-Sunrise



Ground truth - tonemapped



Recovered - tonemapped



Comparison - log₂ luminance



Low exposure



Mid exposure



High exposure

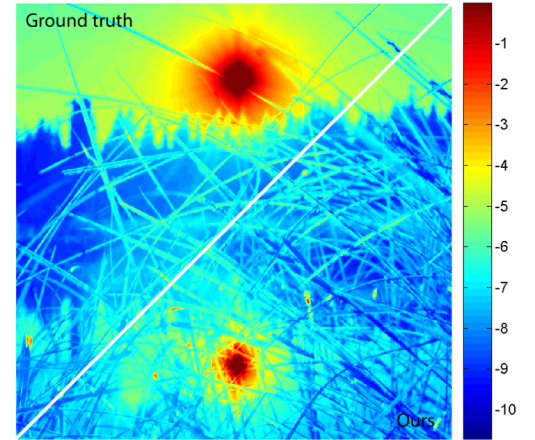
Figure S.2: Forth3



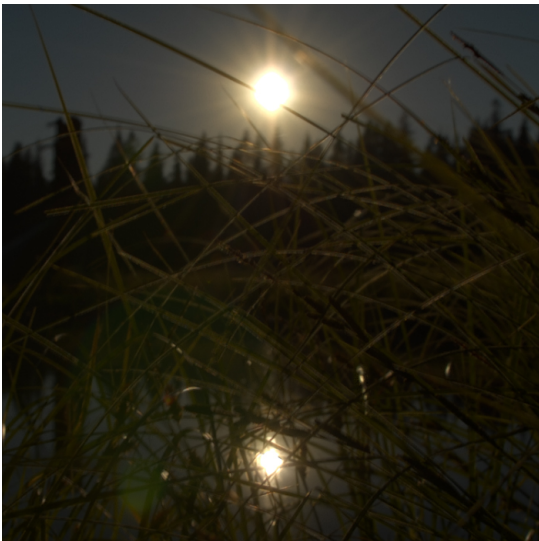
Ground truth - tonemapped



Recovered - tonemapped



Comparison - log₂ luminance



Low exposure



Mid exposure



High exposure

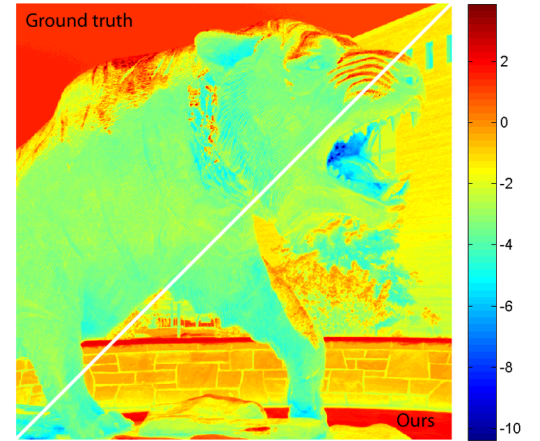
Figure S.3: Horseshoe Lake



Ground truth - tonemapped



Recovered - tonemapped



Comparison - log2 luminance



Low exposure



Mid exposure



High exposure

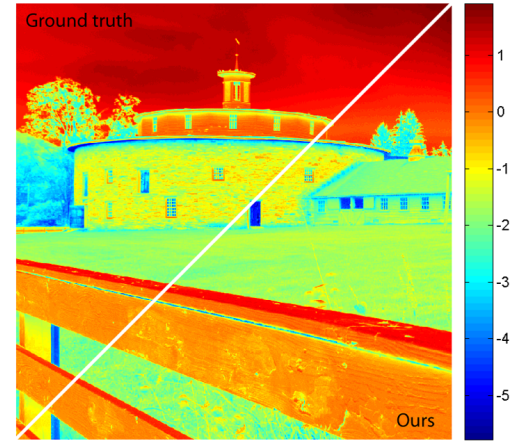
Figure S.4: RIT Tiger



Ground truth - tonemapped



Recovered - tonemapped



Comparison - log2 luminance



Low exposure



Mid exposure



High exposure

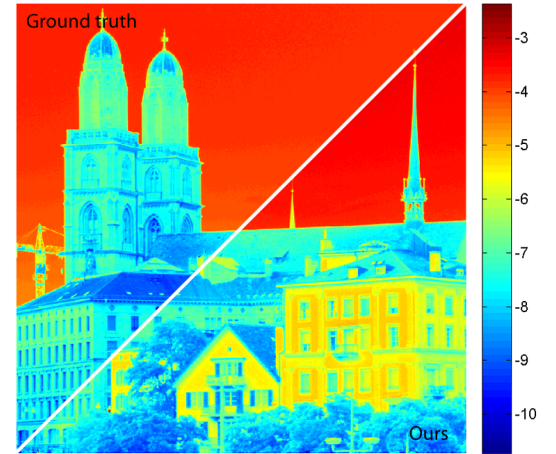
Figure S.5: Round Stone Barn



Ground truth - tonemapped



Recovered - tonemapped



Comparison - log2 luminance



Low exposure



Mid exposure



High exposure

Figure S.6: Zürich