Supplementary Material for BlendedMVS Dataset
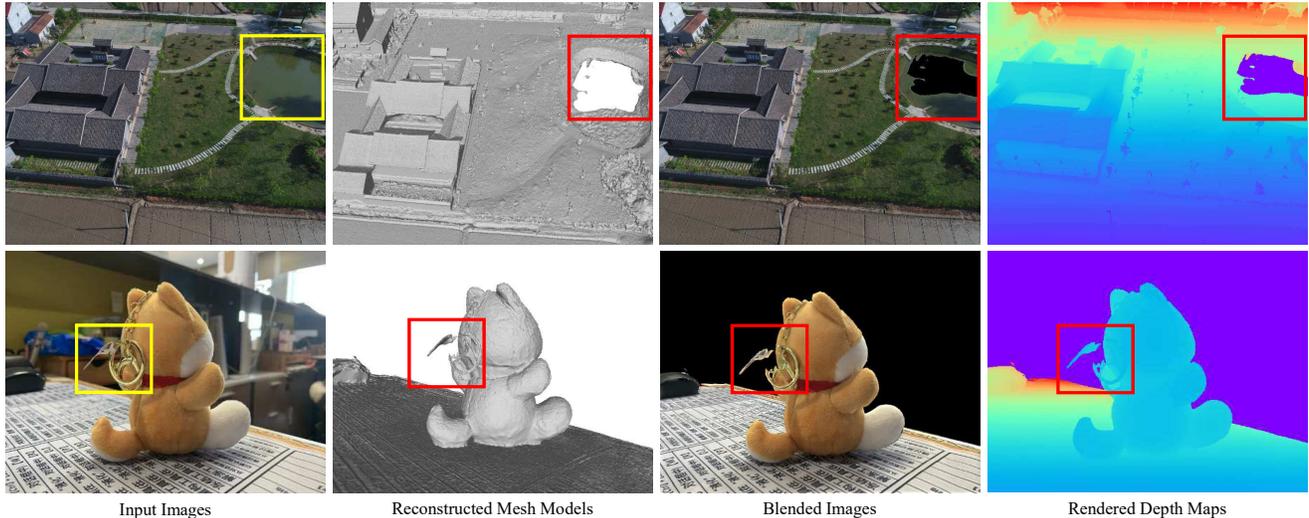

| Input Images | Reconstructed Mesh Models | Blended Images | Rendered Depth Maps |

Figure 1: Reconstruction defects in BlendedMVS datasets.

1. Imperfect Reconstruction

We visualize two imperfect mesh reconstructions during the data generation process in Fig. 1. The two yellow regions are a reflective water pond and a thin key ring respectively. We failed to reconstruct these two regions in the mesh models, and the resulting blended images and rendered depth maps are also incomplete. However, as discussed in Sec. 5.3, such reconstruction defects won't affect the network training, because we will not use the original images as training inputs, and the blended images we used could be consistent aligned to rendered depth maps.

2. Input v.s. Blended v.s. Rendered Images

In this section, we further illustrate the difference between 1) input images, 2) blended images, and 3) rendered images. The corresponding rendered depth maps are also jointly visualized in Fig. 2. The blended image has similar lightings to the input image, and also inherits detailed visual cues from the rendered image.

3. Scenes

In this section, we list all textured models used in BlendedMVS dataset. We manually crop the boundary areas of some scenes for better visualization. Models in our dataset can be roughly categorized into 1) large-scale scenes in Fig. 3, 2) small-scale objects in Fig. 4, and 3) high-quality sculptures in Fig. 5. Also, the 7 validation scenes are shown in Fig. 6.
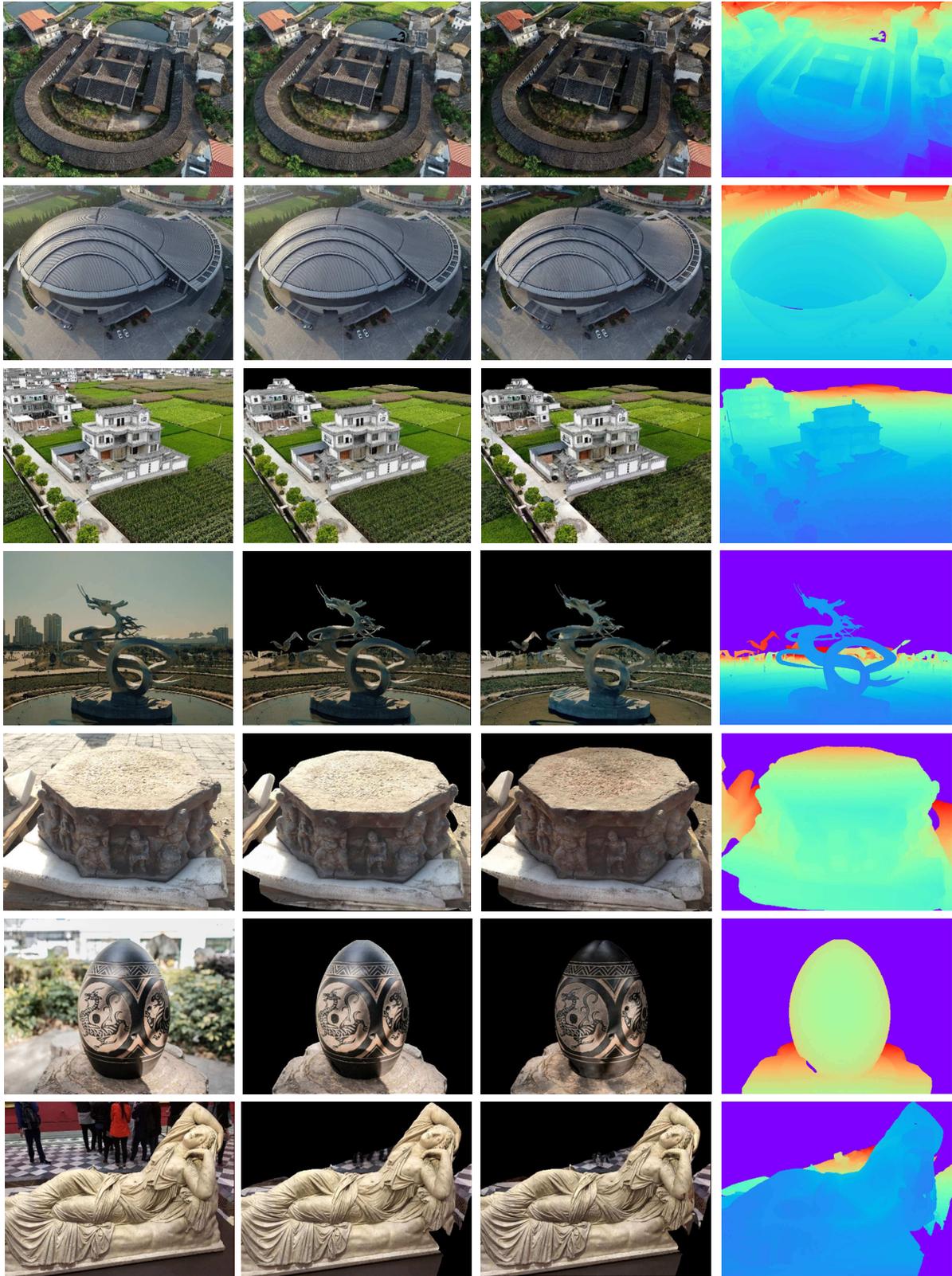
| Input Images | Blended Images | Rendered Images | Rendered Depth Maps |

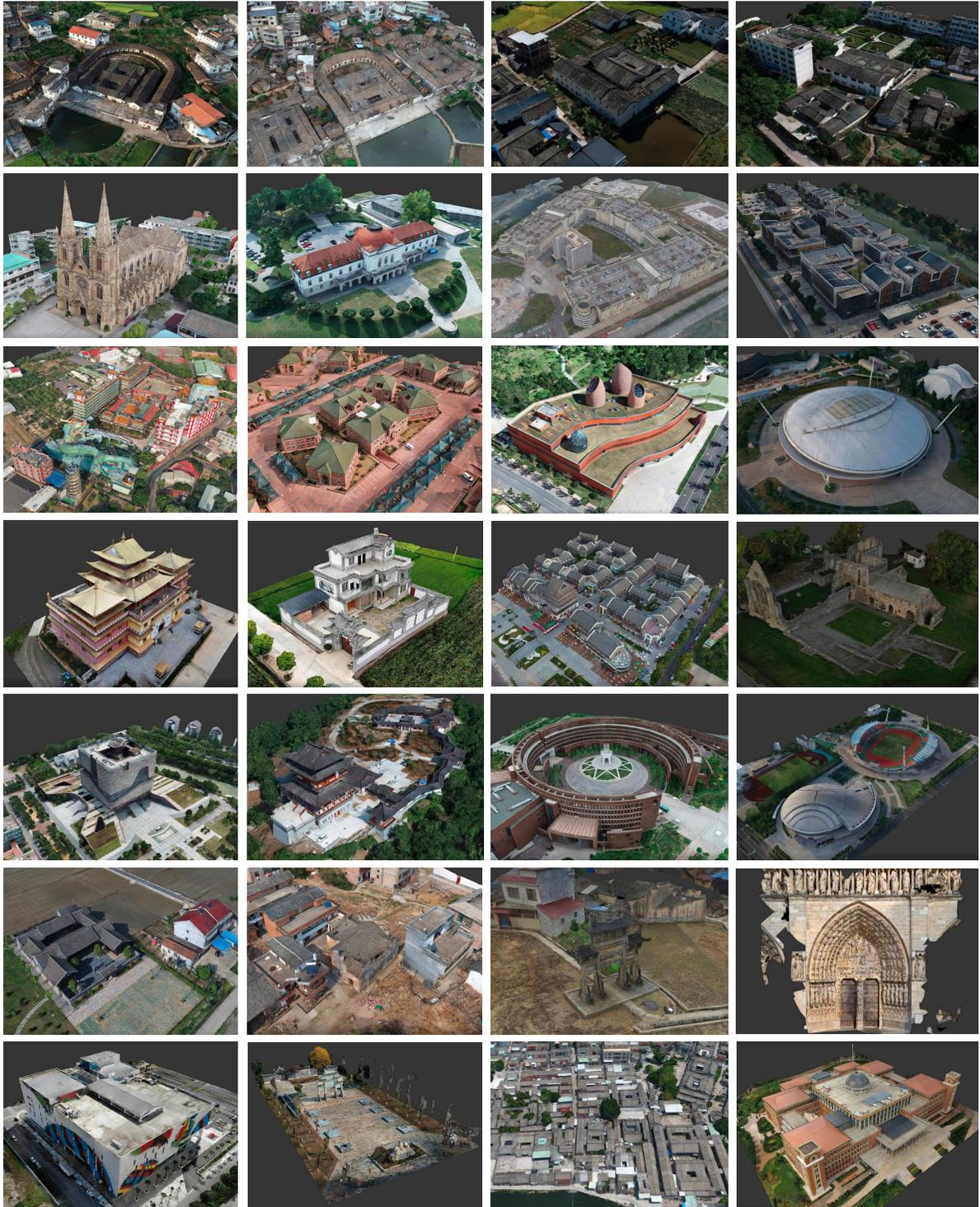Figure 2: Comparison among input images, blended images and rendered images.

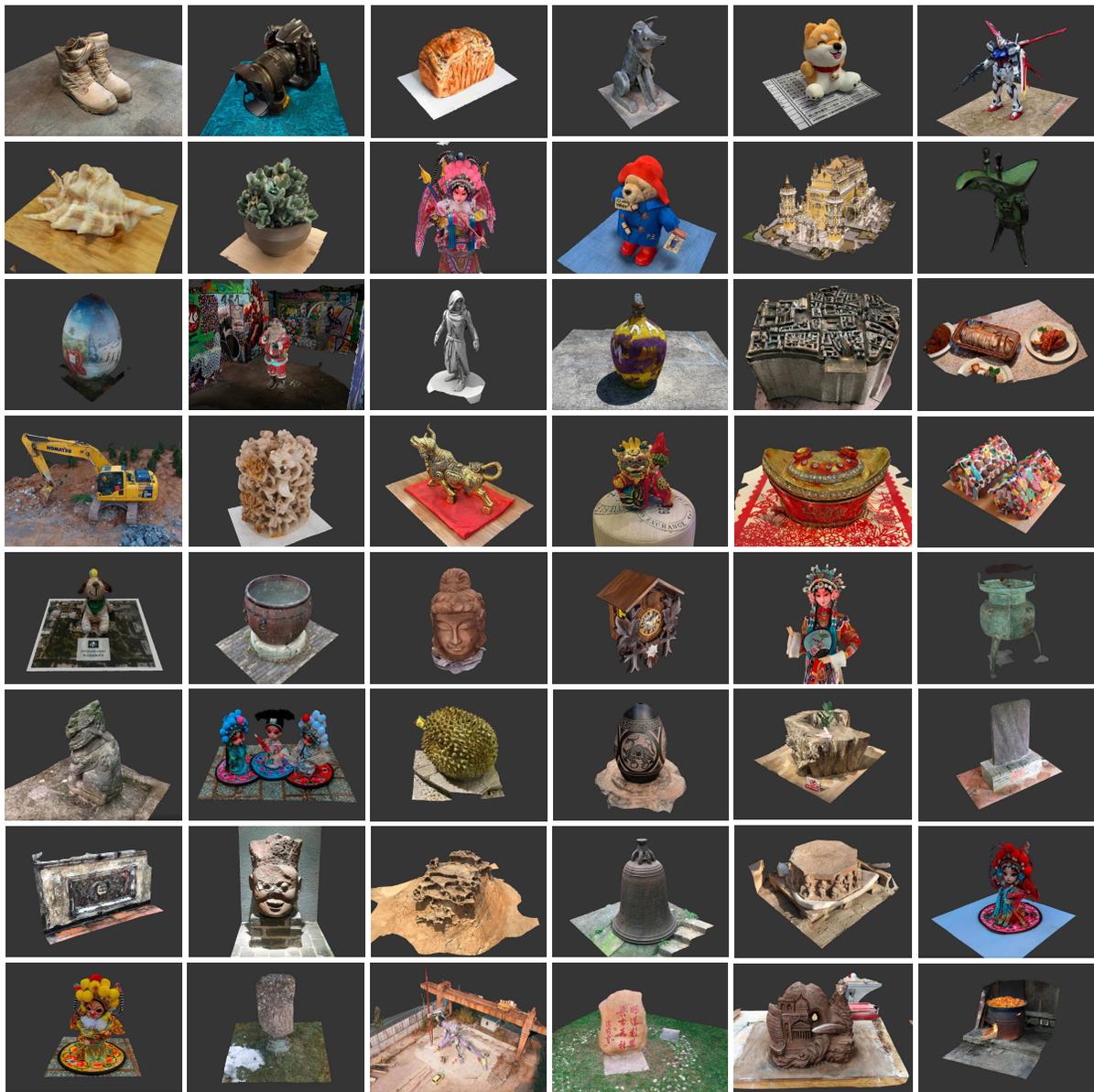Figure 3: Large-scale outdoor scenes in BlendedMVS dataset.

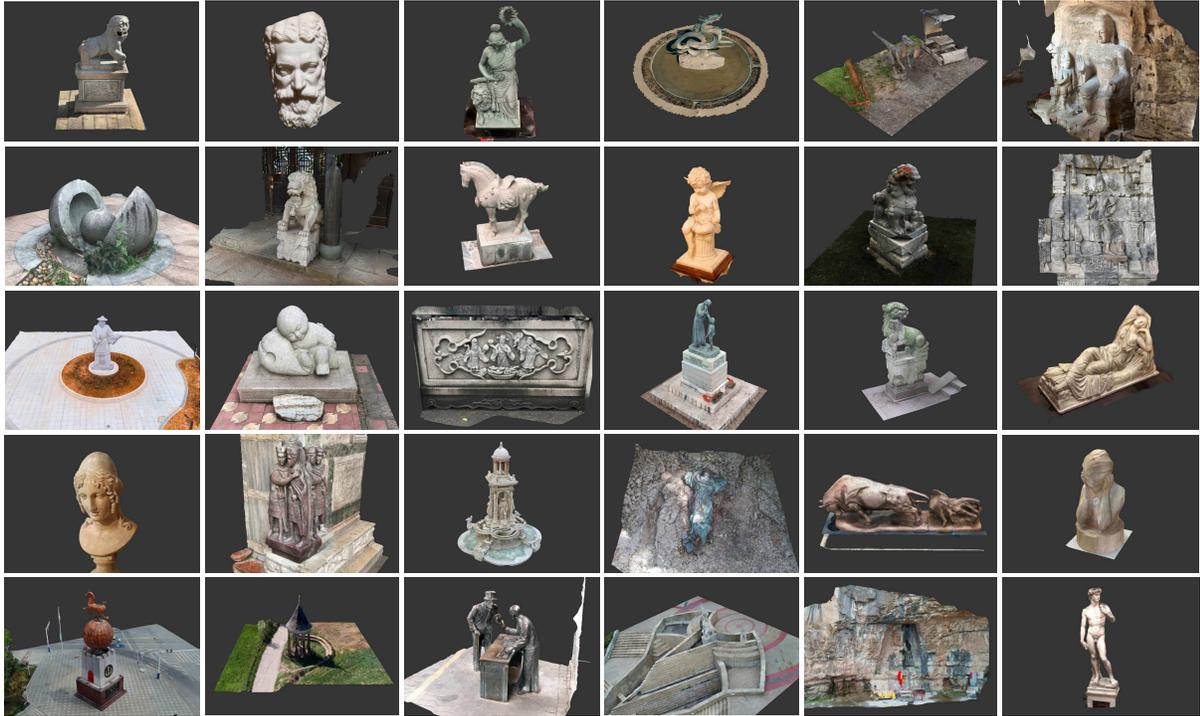Figure 4: Small-scale objects in BlendedMVS dataset.
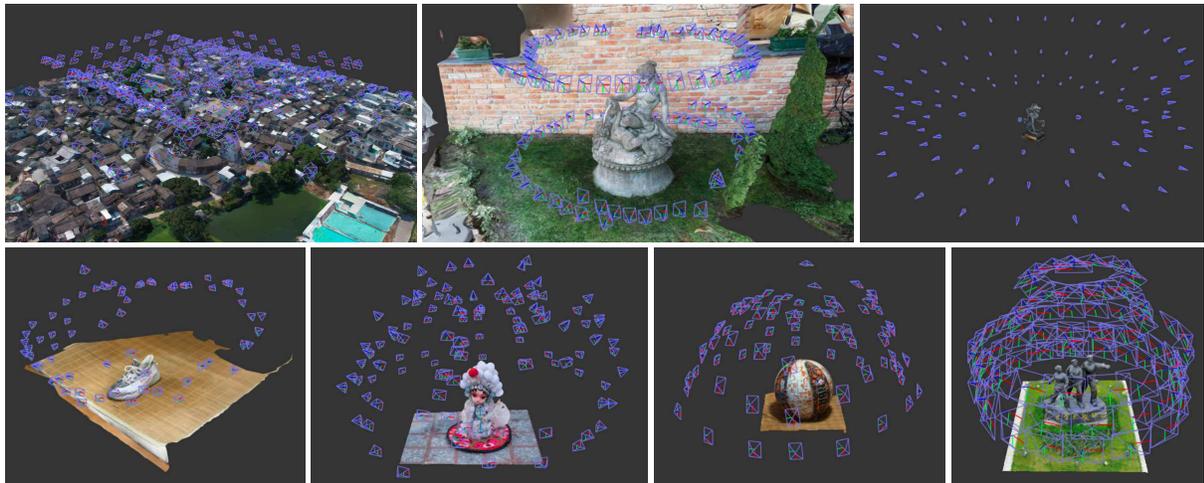
Figure 5: High-quality sculptures in BlendedMVS datasets.

Figure 6: Validation scenes with camera trajectories.