Joint Bilateral Propagation Upsampling for Unstructured Multi-View Stereo Supplementary Material

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This material provides an additional quantitative evaluation on ETH3D benchmark. For fair comparison, we have conducted all experiments on ETH3D benchmark dataset. Table. 1 shows the quantitative evaluation statistics on the whole ETH3D benchmark dataset, validating the efficiency and effectiveness of our method.

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courtyard	0.01	0.02	Accuracy 0.05	0.1	0.2	0.01	0.02	mpleten 0.05	0.1	0.2	0.01	0.02	F1 score	0.1	0.2
COLMAP	0.823	0.920	0.963	0.994	0.998	0.413	0.606	0.742	0.802	0.847	0.550	0.731	0.838	0.888	0.916
BI	0.642	0.823	0.939	0.982	0.992	0.426	0.708	0.848	0.896	0.919	0.512	0.761	0.891	0.937	0.954
BGU	0.437	0.645	0.858	0.945	0.984	0.265	0.524	0.711	0.788	0.841	0.330	0.578	0.778	0.859	0.907
FBS	0.197	0.343	0.601	0.792	0.923	0.150	0.334	0.568	0.697	0.799	0.170	0.338	0.584	0.742	0.856
JBU	0.643	0.822	0.940	0.983	0.993	0.424	0.702	0.844	0.893	0.917	0.511	0.758	0.889	0.935	0.953
Ours	0.639	0.820	0.937	0.980	0.991	0.432	0.717	0.862	0.911	0.933	0.515	0.765	0.898	0.945	0.961
delivery_area															
COLMAP	0.803	0.912	0.978	0.992	0.995	0.428	0.580	0.740	0.830	0.905	0.558	0.709	0.842	0.903	0.948
BI	0.739	0.858	0.937	0.962	0.973	0.552	0.691	0.816	0.885	0.935	0.632	0.766	0.873	0.922	0.954
BGU	0.338	0.507	0.743	0.876	0.952	0.299	0.496	0.676	0.769	0.852	0.318	0.502	0.708	0.819	0.899
FBS	0.149	0.255	0.470	0.663	0.823	0.138	0.293	0.524	0.668	0.788	0.144	0.273	0.495	0.666	0.805
JBU	0.739	0.858	0.938	0.963	0.974	0.545	0.682	0.808	0.879	0.931	0.627	0.760	0.868	0.919	0.952
Ours	0.725	0.846	0.930	0.958	0.971	0.571	0.722	0.855	0.918	0.955	0.639	0.779	0.891	0.938	0.963
electro															
COLMAP	0.926	0.973	0.994	0.998	0.999	0.422	0.544	0.679	0.769	0.850	0.580	0.698	0.807	0.868	0.918
BI	0.815	0.892	0.952 0.859	0.976	0.988	0.538 0.266	0.670 0.434	0.780 0.605	0.851	0.910	0.648 0.347	0.765 0.527	0.857	0.909	0.947 0.884
FBS	0.301	0.669	0.839	0.940	0.914	0.266	0.434	0.605	0.709	0.807	0.347	0.342	0.710	0.703	0.825
JBU	0.282	0.443	0.082	0.824	0.914	0.146	0.278	0.476	0.847	0.755	0.192	0.763	0.855	0.703	0.823
Ours	0.817	0.893	0.933	0.971	0.989	0.555	0.696	0.812	0.884	0.907	0.654	0.766	0.833	0.907	0.940
kicker	0.191	0.611	0.343	0.311	0.364	0.000	0.090	0.612	0.004	0.554	0.054	0.770	0.613	0.525	0.998
COLMAP	0.927	0.967	0.987	0.992	0.994	0.167	0.235	0.359	0.498	0.685	0.283	0.378	0.526	0.663	0.811
BI	0.767	0.856	0.919	0.947	0.970	0.370	0.233	0.631	0.765	0.899	0.499	0.612	0.748	0.846	0.933
BGU	0.520	0.695	0.881	0.957	0.987	0.204	0.275	0.389	0.505	0.665	0.293	0.394	0.540	0.662	0.794
FBS	0.320	0.475	0.687	0.821	0.935	0.119	0.181	0.282	0.399	0.598	0.173	0.262	0.400	0.537	0.729
JBU	0.768	0.855	0.919	0.947	0.971	0.363	0.467	0.619	0.752	0.885	0.493	0.604	0.740	0.838	0.926
Ours	0.763	0.854	0.919	0.946	0.969	0.400	0.518	0.684	0.813	0.925	0.525	0.645	0.784	0.875	0.946
meadow															
COLMAP	0.765	0.876	0.926	0.950	0.986	0.066	0.146	0.320	0.415	0.468	0.122	0.250	0.475	0.578	0.635
BI	0.705	0.842	0.943	0.973	0.990	0.249	0.370	0.485	0.551	0.622	0.368	0.514	0.641	0.704	0.764
BGU	0.625	0.815	0.955	0.985	0.996	0.181	0.278	0.378	0.442	0.502	0.281	0.414	0.541	0.610	0.667
FBS	0.114	0.210	0.487	0.834	0.970	0.041	0.122	0.305	0.399	0.489	0.060	0.154	0.375	0.540	0.650
JBU	0.661	0.813	0.928	0.961	0.983	0.276	0.411	0.532	0.593	0.655	0.389	0.546	0.677	0.733	0.786
Ours	0.666	0.810	0.925	0.963	0.986	0.297	0.448	0.583	0.656	0.729	0.411	0.577	0.715	0.780	0.838
office								0.044	0.1=1	0.004	0.000		0.510	0.040	
COLMAP	0.906	0.942	0.984	0.995	0.998	0.172	0.232	0.344	0.471	0.624	0.289	0.372	0.510	0.640	0.768
BI	0.807	0.906	0.965	0.984	0.988	0.180	0.312	0.425	0.534	0.672	0.294	0.464	0.590	0.692	0.800
BGU FBS	0.636	0.793 0.557	0.919 0.722	0.971	0.990	0.106	0.149	0.221	0.303	0.427	0.182	0.251	0.356	0.462	0.597 0.534
JBU	0.433	0.893	0.722	0.838	0.921	0.094	0.131	0.202	0.275	0.705	0.154	0.213	0.515	0.414	0.534
Ours	0.790	0.893	0.957	0.978	0.985	0.200	0.384	0.457	0.626	0.705	0.319	0.490	0.667	0.721	0.822
pipes	0.151	0.671	0.540	0.913	0.962	0.221	0.364	0.010	0.020	0.750	0.049	0.000	0.007	0.702	0.041
COLMAP	0.968	0.986	0.994	0.996	0.997	0.139	0.212	0.344	0.456	0.572	0.244	0.349	0.511	0.626	0.727
BI	0.850	0.912	0.949	0.964	0.982	0.254	0.337	0.441	0.520	0.605	0.391	0.492	0.602	0.675	0.749
BGU	0.619	0.794	0.942	0.982	0.995	0.067	0.106	0.187	0.272	0.375	0.121	0.188	0.312	0.426	0.545
FBS	0.427	0.620	0.832	0.935	0.979	0.054	0.105	0.209	0.316	0.437	0.096	0.180	0.334	0.472	0.604
JBU	0.857	0.917	0.952	0.966	0.984	0.248	0.327	0.430	0.509	0.595	0.385	0.483	0.592	0.666	0.742
Ours	0.839	0.906	0.948	0.964	0.982	0.275	0.368	0.476	0.553	0.631	0.415	0.523	0.634	0.703	0.768
playground															
COLMAP	0.694	0.809	0.934	0.983	0.995	0.243	0.383	0.595	0.720	0.816	0.360	0.520	0.727	0.831	0.897
BI	0.591	0.741	0.902	0.967	0.987	0.423	0.575	0.750	0.839	0.896	0.493	0.648	0.819	0.898	0.939
BGU	0.438	0.616	0.845	0.946	0.985	0.263	0.412	0.573	0.674	0.772	0.329	0.494	0.683	0.787	0.866
FBS	0.198	0.311	0.543	0.757	0.894	0.130	0.247	0.418	0.551	0.694	0.157	0.275	0.472	0.638	0.781
JBU	0.593	0.743	0.904	0.968	0.989	0.418	0.568	0.741	0.833	0.892	0.490	0.644	0.815	0.896	0.938
Ours	0.592	0.742	0.902	0.966	0.987	0.431	0.588	0.766	0.857	0.909	0.499	0.656	0.829	0.908	0.946
relief															
COLMAP	0.910	0.961	0.991	0.996	0.997	0.416	0.516	0.659	0.762	0.839	0.571	0.671	0.792	0.863	0.911
BI	0.825	0.899	0.951	0.969	0.980	0.548	0.660	0.782	0.855	0.912	0.659	0.761	0.858	0.908	0.945
BGU FBS	0.546	0.728	0.912 0.716	0.971	0.990 0.941	0.322	0.429	0.575	0.686	0.787	0.405	0.540	0.705	0.804	0.877 0.813
JBU	0.291	0.454	0.716	0.865	0.941	0.175	0.276	0.444	0.575	0.715	0.218	0.344	0.548	0.691	0.813
Ours	0.806	0.901	0.931	0.965	0.981	0.542	0.686	0.773	0.849	0.908	0.665	0.736	0.853	0.905	0.943
relief_2	0.000	0.000	0.540	0.000	0.010	0.001	0.000	0.000	0.019	0.020	5.000	5.115	0.011	5.520	0.001
COLMAP	0.883	0.953	0.990	0.995	0.997	0.452	0.562	0.696	0.777	0.850	0.598	0.707	0.817	0.873	0.918
BI	0.779	0.863	0.927	0.955	0.970	0.547	0.667	0.779	0.845	0.904	0.643	0.752	0.847	0.897	0.936
BGU	0.537	0.708	0.890	0.956	0.984	0.334	0.457	0.607	0.701	0.791	0.412	0.555	0.722	0.809	0.877
FBS	0.288	0.439	0.688	0.832	0.915	0.180	0.298	0.480	0.603	0.724	0.221	0.355	0.565	0.699	0.808
JBU	0.783	0.865	0.929	0.956	0.971	0.538	0.657	0.771	0.839	0.899	0.638	0.747	0.843	0.894	0.934
Ours	0.772	0.857	0.924	0.954	0.970	0.560	0.686	0.800	0.862	0.915	0.649	0.762	0.857	0.906	0.941
terrace															
COLMAP	0.909	0.958	0.984	0.992	0.996	0.570	0.705	0.839	0.921	0.970	0.701	0.813	0.905	0.955	0.983
BI	0.874	0.935	0.970	0.983	0.991	0.650	0.767	0.863	0.931	0.975	0.745	0.843	0.913	0.956	0.983
BGU	0.497	0.687	0.877	0.947	0.978	0.432	0.643	0.797	0.872	0.927	0.462	0.664	0.835	0.908	0.952
FBS	0.245	0.402	0.667	0.833	0.927	0.235	0.422	0.670	0.805	0.896	0.240	0.412	0.668	0.819	0.911
JBU	0.867	0.930	0.968	0.981	0.990	0.658	0.779	0.874	0.941	0.981	0.748	0.848	0.919	0.960	0.985
Ours	0.860	0.927	0.967	0.980	0.989	0.668	0.794	0.895	0.958	0.990	0.752	0.855	0.930	0.969	0.989
terrains		0.000	0.050	0.005	0.003	0.400	0.550	0.500	0.07.0	0.000	0.07.	0.500	0.00=	0.000	0.0:=
COLMAP		0.938	0.972	0.985	0.991	0.468	0.570	0.720	0.816	0.906	0.614 0.628	0.709 0.721	0.827	0.893 0.878	0.947
TO T	0.891		0.000	0.000								11 7 7 7 7			0.929
BI	0.743	0.816	0.889	0.929	0.955	0.543	0.646	0.759	0.833						
BGU	0.743 0.436	0.816 0.591	0.791	0.900	0.959	0.276	0.399	0.565	0.689	0.806	0.338	0.476	0.659	0.781	0.876
BGU FBS	0.743 0.436 0.204	0.816 0.591 0.313	0.791 0.506	0.900 0.662	0.959 0.808	0.276 0.155	0.399 0.253	0.565 0.429	0.689 0.598	0.806 0.776	0.338 0.176	0.476 0.280	0.659 0.464	0.781 0.629	0.876 0.792
BGU	0.743 0.436	0.816 0.591	0.791	0.900	0.959	0.276	0.399	0.565	0.689	0.806	0.338	0.476	0.659	0.781	0.876

Table 1: Quantitative statistics of accuracy, completeness and F1 score on all datasets of ETH3D benchmark.