

## 1 EPE, RMSE and AAE tables

### 1.1 Dataset 1

Table 1: EPE error for 3D flow estimated by RAFT-3D and CPD for dataset 1 with  $\Delta = 10$

Seq.	EPE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0_10	<u>0.0122</u>	<u>0.0119</u>	<u>0.0087</u>	0.0136	<u>0.0129</u>	<u>0.0133</u>	<u>0.0138</u>	<u>0.0135</u>
t10_20	0.0134	0.0150	0.0138	<u>0.0094</u>	0.0145	0.0143	0.0147	0.0142
t20_30	0.0179	0.0169	0.0235	0.0151	0.0175	0.0170	0.0175	0.0175
t30_40	0.0224	0.0232	0.0146	0.0187	0.0188	0.0180	0.0190	0.0178
t40_50	0.0284	0.0359	0.0358	0.0234	0.0196	0.0209	0.0205	0.0200
t50_60	0.0473	0.0426	0.0514	0.0310	0.0641	0.0578	0.0594	0.0626
t60_70	0.0636	0.0742	0.0903	0.0926	0.0582	0.0622	0.0925	0.0914
t70_80	<b>0.2839</b>	<b>0.2428</b>	<b>0.3258</b>	<b>0.2774</b>	<b>0.2376</b>	<b>0.2432</b>	<b>0.2814</b>	<b>0.2469</b>
t80_90	0.0946	0.0999	0.0907	0.1126	0.0973	0.1103	0.1178	0.1077
t90_100	0.0658	0.0801	0.0650	0.0789	0.0706	0.0702	0.0567	0.0622
t100_110	0.0448	0.0310	0.0393	0.0342	0.0351	0.0335	0.0348	0.0335
t110_120	0.0478	0.0455	0.0377	0.0414	0.0417	0.0469	0.0570	0.0627
t120_130	0.0458	0.0465	0.0417	0.0482	0.0446	0.0565	0.0560	0.0636
t130_140	0.0507	0.0569	0.0511	0.0525	0.0634	0.0640	0.0604	0.0507
t140_150	0.0518	0.0578	0.0583	0.0481	0.0604	0.0561	0.0597	0.0524
Avg	0.0594	0.0587	0.0632	0.0598	0.0571	0.0589	0.0641	0.0611

Table 2: RMSE error for 3D flow estimated by RAFT-3D and CPD for dataset 1 with  $\Delta = 10$

Seq.	RMSE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0_10	<u>0.0154</u>	<u>0.0148</u>	<u>0.0102</u>	0.0156	<u>0.0137</u>	<u>0.0141</u>	<u>0.0144</u>	<u>0.0141</u>
t10_20	0.0172	0.0164	0.0174	<u>0.0105</u>	0.0155	0.0153	0.0154	0.0151
t20_30	0.0198	0.0190	0.0268	0.0181	0.0186	0.0182	0.0183	0.0183
t30_40	0.0249	0.0272	0.0162	0.0210	0.0200	0.0191	0.0199	0.0187
t40_50	0.0460	0.0645	0.0518	0.0292	0.0205	0.0220	0.0216	0.0209
t50_60	0.0544	0.0475	0.0820	0.0327	0.0745	0.0706	0.0743	0.0752
t60_70	0.0691	0.0797	0.0944	0.0964	0.0666	0.0697	0.098	0.0973
t70_80	<b>0.2907</b>	<b>0.2471</b>	<b>0.3283</b>	<b>0.2819</b>	<b>0.2412</b>	<b>0.2462</b>	<b>0.2845</b>	<b>0.2630</b>
t80_90	0.1201	0.1102	0.0980	0.1231	0.1038	0.1159	0.1209	0.1151
t90_100	0.0704	0.0885	0.0709	0.0863	0.0741	0.0731	0.0619	0.0659
t100_110	0.0509	0.0347	0.0419	0.0383	0.0384	0.0387	0.0383	0.0355
t110_120	0.0522	0.0551	0.0425	0.0460	0.0469	0.0545	0.0622	0.0714
t120_130	0.0506	0.0522	0.0459	0.0524	0.0483	0.0672	0.0625	0.0718
t130_140	0.0584	0.0657	0.0565	0.0603	0.0721	0.0748	0.0686	0.0563
t140_150	0.0576	0.0697	0.0695	0.0526	0.0687	0.0643	0.0655	0.0594
Avg	0.0665	0.0662	0.0702	0.0643	0.0615	0.0642	0.0684	0.0665

Table 3: AAE error for 3D flow estimated by RAFT-3D and CPD for dataset 1 with  $\Delta = 10$

Seq.	AAE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0_10	<u>0.6966</u>	<u>0.6818</u>	<u>0.4964</u>	0.7777	<u>0.7406</u>	<u>0.7622</u>	<u>0.7912</u>	<u>0.7743</u>
t10_20	0.7625	0.8506	0.7842	0.5338	0.8230	0.8114	0.8369	0.8037
t20_30	1.0007	0.9418	1.3080	0.8408	0.9756	0.9507	0.974	0.9762
t30_40	1.2252	1.2668	0.8011	1.0188	1.0209	0.9804	1.035	0.9689
t40_50	1.5205	1.9382	1.8967	1.2312	1.0322	1.1001	1.0813	1.0524
t50_60	2.4119	2.1348	2.6811	1.5760	3.3350	3.0084	3.089	3.2524
t60_70	3.6327	4.2408	5.1554	5.2879	3.3247	3.5561	5.2829	5.2156
t70_80	<b>15.5293</b>	<b>13.1816</b>	<b>17.9625</b>	<b>15.1875</b>	<b>12.9224</b>	<b>13.2101</b>	<b>15.4417</b>	<b>13.4083</b>
t80_90	5.1325	5.4396	4.9753	6.1661	5.3201	6.0244	6.4221	5.8411
t90_100	3.6680	4.4745	3.6355	4.3813	3.9307	3.9204	3.1732	3.4444
t100_110	2.5578	1.7688	2.2451	1.9539	2.0003	1.9063	1.9828	1.9083
t110_120	2.7351	2.6012	2.1561	2.3675	2.3856	2.6810	3.2564	3.5849
t120_130	2.6174	2.6553	2.3893	2.7573	2.5541	3.2309	3.2041	3.6394
t130_140	2.8714	3.2073	2.8830	2.9631	3.5938	3.6298	3.4158	2.8691
t140_150	2.8997	3.2235	3.2701	2.7058	3.3878	3.1535	3.3769	2.956
Avg	3.2841	3.2404	3.5093	3.3166	3.1565	3.2617	3.5576	3.3797

Table 4: Number of points used to estimate 3D flow for dataset 1

Seq.	Number of flow vectors			
	cam1	cam2	cam3	cam4
t0_10	64	61	61	64
t10_20	52	55	65	61
t20_30	42	53	52	51
t30_40	33	38	42	49
t40_50	34	35	34	39
t50_60	28	23	31	30
t60_70	15	17	19	20
t70_80	11	12	10	11
t80_90	23	27	24	22
t90_100	37	25	28	28
t100_110	31	35	31	29
t110_120	46	47	39	42
t120_130	47	46	52	49
t130_140	39	45	46	40
t140_150	49	41	54	50

Table 5: EPE error for 3D flow estimated by RAFT-3D and CPD for dataset 1 with  $\Delta = 4$

Seq.	EPE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0.4	0.0069	0.0119	0.0071	0.0072	0.0123	0.0120	0.0114	0.0133
t4.8	0.0094	0.0131	0.0058	0.0093	0.0130	0.0121	0.0117	0.0123
t8.12	0.0120	0.0176	0.0117	0.0086	0.0126	0.0122	0.0127	0.0131
t12.16	0.0154	0.0223	0.0117	0.0102	0.0124	0.0126	0.0126	0.0126
t16.20	0.0134	0.0148	0.0109	0.0099	0.0128	0.0130	0.0126	0.0136
t20.24	0.0092	0.0133	0.0117	0.0065	0.0137	0.0130	0.0135	0.0137
t24.28	0.0150	0.0151	0.0119	0.0136	0.0132	0.0119	0.0136	0.0138
t28.32	0.0189	0.0266	0.0145	0.0112	0.0142	0.0132	0.0121	0.0138
t32.36	0.0223	0.0259	0.0296	0.0164	0.0152	0.0144	0.0139	0.0133
t36.40	0.0263	0.0274	0.0235	0.0159	0.0147	0.0139	0.0140	0.0137
t40.44	0.0229	0.0294	0.0290	0.0165	0.0148	0.0152	0.0149	0.0153
t44.48	0.0281	0.0300	0.0294	0.0168	0.0146	0.0158	0.0154	0.0156
t48.52	0.0196	0.0291	0.0263	0.0158	0.0159	0.0166	0.0134	0.0163
t52.56	0.0297	0.0314	0.0208	0.0213	0.0224	0.0232	0.0241	0.0212
t56.60	0.0358	0.0365	0.0311	0.0319	0.0512	0.0490	0.0533	0.0527
t60.64	0.0500	0.0525	0.0528	0.0571	0.0559	0.0662	0.0756	0.0799
t64.68	0.0499	0.0507	0.0580	0.0594	0.0486	0.0481	0.0509	0.0566
t68.72	0.0911	0.0760	0.0795	0.0931	0.0969	0.0880	0.0832	0.1003
t72.76	<b>0.1587</b>	<b>0.1597</b>	<b>0.1745</b>	<b>0.1291</b>	<b>0.1078</b>	<b>0.1146</b>	<b>0.1220</b>	<b>0.1198</b>
t76.80	0.0943	0.0991	0.1329	0.0734	0.0571	0.0626	0.0547	0.0539
t80.84	0.0512	0.0587	0.0353	0.0443	0.0592	0.0633	0.0799	0.0598
t84.88	0.0427	0.0355	0.0363	0.0385	0.0542	0.0490	0.0679	0.0615
t88.92	0.0220	0.0353	0.0228	0.0358	0.0179	0.0295	0.0348	0.0286
t92.96	0.0318	0.0332	0.0422	0.0622	0.0263	0.0293	0.0217	0.0270
t96.100	0.0377	0.0557	0.0677	0.0463	0.0425	0.0307	0.0326	0.0350
t100.104	0.0393	0.0388	0.0448	0.0311	0.0327	0.0311	0.0395	0.0374
t104.108	0.0286	0.0309	0.0238	0.0317	0.0320	0.0276	0.0303	0.0295
t108.112	0.0416	0.0384	0.0343	0.0380	0.0503	0.0422	0.0460	0.0558
t112.116	0.0379	0.0325	0.0435	0.0349	0.0390	0.0455	0.0507	0.0459
t116.120	0.0519	0.0518	0.0466	0.0430	0.0457	0.0364	0.0403	0.0444
t120.124	0.0585	0.0580	0.0634	0.0515	0.0479	0.0633	0.0591	0.0637
t124.128	0.0208	0.0210	0.0211	0.0226	0.0257	0.0270	0.0370	0.0352
t128.132	0.0376	0.0426	0.0421	0.0412	0.0455	0.0537	0.0652	0.0549
t132.126	0.0434	0.0272	0.0212	0.0283	0.0377	0.0360	0.0319	0.0348
t136.140	0.0312	0.0383	0.0311	0.0290	0.0273	0.0268	0.0212	0.0220
t140.144	0.0245	0.0464	0.0312	0.0276	0.0280	0.0322	0.0281	0.0282
t144.148	0.0426	0.0350	0.0305	0.0274	0.0328	0.0288	0.0373	0.0328
Avg	0.0371	0.0395	0.0381	0.0340	0.0342	0.0346	0.0367	0.0368

Table 6: RMSE error for 3D flow estimated by RAFT-3D and CPD for dataset 1 with  $\Delta = 4$

Seq.	RMSE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0.4	0.0079	0.0152	0.0103	0.0089	0.0129	0.0126	0.0119	0.0138
t4.8	0.0103	0.0155	0.0071	0.0108	0.0137	0.0128	0.0122	0.0128
t8.12	0.0131	0.0206	0.0142	0.0101	0.0132	0.0129	0.0132	0.0136
t12.16	0.0178	0.0243	0.0154	0.0117	0.0131	0.0133	0.0132	0.0130
t16.20	0.0165	0.0181	0.0133	0.0115	0.0136	0.0138	0.0131	0.0141
t20.24	0.0123	0.0145	0.0148	0.0077	0.0143	0.0137	0.0140	0.0142
t24.28	0.0166	0.0186	0.0144	0.0159	0.0138	0.0126	0.0141	0.0144
t28.32	0.0214	0.0299	0.0193	0.0128	0.0148	0.0139	0.0127	0.0144
t32.36	0.0238	0.0297	0.0338	0.0185	0.0158	0.0150	0.0146	0.0140
t36.40	0.0286	0.0324	0.0263	0.0174	0.0153	0.0145	0.0147	0.0143
t40.44	0.0268	0.0355	0.0342	0.0187	0.0154	0.0158	0.0155	0.0159
t44.48	0.0316	0.0337	0.0357	0.0209	0.0152	0.0164	0.0162	0.0162
t48.52	0.0238	0.0321	0.0331	0.0175	0.0167	0.0170	0.0142	0.0167
t52.56	0.0319	0.0353	0.0268	0.0229	0.0249	0.0257	0.0264	0.0235
t56.60	0.0404	0.0408	0.0363	0.0352	0.0595	0.0601	0.0602	0.0607
t60.64	0.0543	0.0569	0.0564	0.0619	0.0610	0.0717	0.0793	0.0830
t64.68	0.0540	0.0551	0.0626	0.0639	0.0525	0.0533	0.0553	0.0607
t68.72	0.1023	0.0811	0.0830	0.1048	0.1015	0.0912	0.0853	0.1030
t72.76	<b>0.1604</b>	<b>0.1661</b>	<b>0.1782</b>	<b>0.1361</b>	<b>0.1113</b>	<b>0.1179</b>	<b>0.1232</b>	<b>0.1230</b>
t76.80	0.0991	0.1032	0.1412	0.0768	0.0636	0.0692	0.0609	0.0590
t80.84	0.0574	0.0645	0.0400	0.0497	0.0646	0.0699	0.0835	0.0622
t84.88	0.0455	0.0391	0.0398	0.0399	0.0628	0.0561	0.0852	0.0718
t88.92	0.0267	0.0405	0.0261	0.0383	0.0190	0.0317	0.0370	0.0304
t92.96	0.0351	0.0339	0.0465	0.0675	0.0280	0.0305	0.0239	0.0301
t96.100	0.0451	0.0590	0.0746	0.0514	0.0451	0.0335	0.0364	0.0397
t100.104	0.0437	0.0439	0.0505	0.0353	0.0353	0.0348	0.0433	0.0407
t104.108	0.0312	0.0360	0.0268	0.0354	0.0378	0.0310	0.0341	0.0322
t108.112	0.0463	0.0420	0.0372	0.0408	0.0565	0.0474	0.0509	0.0632
t112.116	0.0403	0.0374	0.0475	0.0395	0.0460	0.0507	0.0554	0.0509
t116.120	0.0588	0.0544	0.0524	0.0468	0.0473	0.0376	0.0441	0.0473
t120.124	0.0619	0.0663	0.0729	0.0588	0.0517	0.0744	0.0682	0.0711
t124.128	0.0240	0.0239	0.0225	0.0251	0.0271	0.0283	0.0383	0.0368
t128.132	0.0406	0.0485	0.0454	0.0470	0.0513	0.0595	0.0695	0.0585
t132.126	0.0500	0.0318	0.0258	0.0316	0.0442	0.0418	0.0366	0.0391
t136.140	0.0360	0.0426	0.0324	0.0302	0.0283	0.0281	0.0227	0.0237
t140.144	0.0294	0.0526	0.0358	0.0306	0.0309	0.0359	0.0309	0.0303
t144.148	0.0478	0.0398	0.0344	0.0305	0.0363	0.0315	0.0409	0.0370
Avg	0.0409	0.0436	0.0424	0.0374	0.0371	0.0377	0.0398	0.0396

Table 7: AAE error for 3D flow estimated by RAFT-3D and CPD for dataset 1 with  $\Delta = 4$

Seq.	AAE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0.4	0.3927	0.6814	0.4079	0.4148	0.7032	0.6864	0.6533	0.7631
t4.8	0.5380	0.7487	0.3310	0.5332	0.7449	0.6925	0.6718	0.7032
t8.12	0.6884	1.0062	0.6708	0.4947	0.7236	0.6982	0.7259	0.7482
t12.16	0.8784	1.2727	0.6668	0.5829	0.7083	0.7184	0.7223	0.7188
t16.20	0.7684	0.8435	0.6216	0.5680	0.7324	0.7413	0.7187	0.7776
t20.24	0.5267	0.7603	0.6663	0.3728	0.7800	0.7402	0.7739	0.7801
t24.28	0.8575	0.8592	0.6801	0.7742	0.7513	0.6796	0.7746	0.7856
t28.32	1.0730	1.5115	0.8222	0.6360	0.8112	0.7539	0.6912	0.7885
t32.36	1.2682	1.4706	1.6795	0.9313	0.8634	0.8221	0.7937	0.7590
t36.40	1.4882	1.5519	1.3341	0.9032	0.8355	0.7875	0.7965	0.7781
t40.44	1.2985	1.6603	1.6396	0.9366	0.8373	0.8612	0.8427	0.8675
t44.48	1.5840	1.6912	1.6606	0.9505	0.8259	0.8957	0.8700	0.8818
t48.52	1.1032	1.6386	1.4726	0.8899	0.8981	0.9356	0.7532	0.9166
t52.56	1.6672	1.7571	1.1665	1.1928	1.2612	1.3051	1.3576	1.1923
t56.60	2.0089	2.0379	1.7445	1.7848	2.8926	2.7663	3.0116	2.9754
t60.64	2.8485	2.9848	3.0044	3.2542	3.1856	3.7688	4.3029	4.5494
t64.68	2.8544	2.9050	3.3186	3.3976	2.7825	2.7530	2.9117	3.2423
t68.72	5.1860	4.3236	4.5134	5.2975	5.5090	5.0009	4.7207	5.7036
t72.76	<b>9.0216</b>	<b>9.0747</b>	<b>9.9135</b>	<b>7.3277</b>	<b>6.1110</b>	<b>6.4937</b>	<b>6.9148</b>	<b>6.7892</b>
t76.80	5.3582	5.6252	7.5653	4.1661	3.2349	3.5481	3.1053	3.0548
t80.84	2.9072	3.3318	2.0115	2.5205	3.3503	3.5930	4.5132	3.3778
t84.88	2.4299	2.0253	2.0687	2.1955	3.0700	2.7870	3.8359	3.4850
t88.92	1.2586	2.0195	1.3040	2.0453	1.0237	1.6845	1.9864	1.6338
t92.96	1.8105	1.8942	2.4104	3.5494	1.4993	1.6705	1.2378	1.5398
t96.100	2.1497	3.1819	3.8677	2.6404	2.4258	1.7539	1.8586	1.9935
t100.104	2.2491	2.2189	2.5650	1.7775	1.8687	1.7772	2.2540	2.1402
t104.108	1.6397	1.7703	1.3654	1.8162	1.8291	1.5809	1.7358	1.6902
t108.112	2.3794	2.2006	1.9636	2.1729	2.8784	2.4145	2.6319	3.1926
t112.116	2.1707	1.8588	2.4916	1.9957	2.2351	2.6039	2.9052	2.6263
t116.120	2.9712	2.9682	2.6698	2.4618	2.6168	2.0822	2.3079	2.5420
t120.124	3.3435	3.3141	3.6253	2.9485	2.7403	3.6203	3.3774	3.6467
t124.128	1.1885	1.2049	1.2060	1.2972	1.4724	1.5451	2.1169	2.0142
t128.132	2.1519	2.4353	2.4040	2.3555	2.6054	3.0701	3.7295	3.1427
t132.126	2.4798	1.5551	1.2096	1.6175	2.1547	2.0602	1.8238	1.9922
t136.140	1.7822	2.1872	1.7730	1.6558	1.5616	1.5305	1.2142	1.2597
t140.144	1.4014	2.6439	1.7837	1.5752	1.6004	1.8393	1.6093	1.6138
t144.148	2.4260	1.9948	1.7409	1.5635	1.8740	1.6433	2.1332	1.8767
Avg	2.4260	1.9948	1.7409	1.5635	1.8740	1.6433	2.1332	1.8767

Table 8: Number of flow vectors for dataset 1 with  $\Delta = 4$ 

Number of flow vectors				
Seq.	cam1	cam2	cam3	cam4
t0_4	64	61	61	64
t4_8	64	62	71	63
t8_12	58	57	63	66
t12_16	50	58	60	57
t16_20	50	55	55	44
t20_24	42	53	52	51
t24_28	38	42	45	43
t28_32	34	46	43	49
t32_36	31	40	42	47
t36_40	34	35	40	40
t40_44	34	35	34	39
t44_48	29	30	33	33
t48_52	27	24	28	32
t52_56	23	20	21	24
t56_60	21	23	22	23
t60_64	15	17	19	20
t64_68	29	33	31	28
t68_72	21	20	14	16
t72_76	21	19	17	21
t76_80	25	27	33	32
t80_84	23	27	24	22
t84_88	16	22	24	18
t88_92	35	29	28	35
t92_96	33	23	33	27
t96_100	23	26	31	28
t100_104	31	35	31	29
t104_108	40	41	38	40
t108_112	46	52	46	38
t112_116	44	43	44	48
t116_120	52	46	59	56
t120_124	47	46	52	49
t124_128	52	52	46	54
t128_132	54	54	45	55
t132_126	36	43	39	39
t136_140	41	40	47	32
t140_144	49	41	54	50
t144_148	49	51	60	52

## 1.2 Dataset 2

Table 9: EPE error for 3D flow estimated by RAFT-3D and CPD for dataset 2 with  $\Delta = 10$

Seq.	EPE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0_10	0.0179	0.0207	0.0170	0.0180	0.0798	0.0968	0.0763	0.0899
t10_20	0.0918	0.0987	0.0903	0.0744	0.1280	0.1398	0.1398	0.1444
t20_30	<b>0.2465</b>	<b>0.2025</b>	<b>0.2640</b>	<b>0.2160</b>	<b>0.2440</b>	<b>0.2362</b>	<b>0.2674</b>	<b>0.1970</b>
t30_40	0.1625	0.1622	0.1570	0.1565	0.1624	0.2112	0.1671	0.1835
t40_50	0.1127	0.1255	0.0950	0.1194	0.1562	0.1767	0.1428	0.1337
t50_60	0.0630	0.0575	0.0605	0.0746	0.0728	0.1246	0.1040	0.0851
t60_70	0.0838	0.0663	0.0612	0.0775	0.0916	0.1419	0.1170	0.1046
t70_80	0.1177	0.0819	0.0959	0.1029	0.1145	0.1082	0.2203	0.1220
t80_90	0.0714	0.0785	0.0634	0.0793	0.0643	0.1294	0.1220	0.0747
t90_100	0.1310	0.1265	0.1124	0.1259	0.1086	0.1211	0.2113	0.1071
t100_110	0.1436	0.1126	0.1080	0.1121	0.0889	0.1340	0.1121	0.1034
t110_120	0.0795	0.0920	0.0854	0.0853	0.0817	0.0969	0.1156	0.0955
t120_130	0.0949	0.0933	0.1204	0.0994	0.0874	0.1000	0.1420	0.1047
t130_140	0.0631	0.0722	0.0968	0.0761	0.0702	0.0720	0.0932	0.0833
t140_150	0.0478	0.0512	0.0474	0.0443	0.0477	0.0479	0.0454	0.0550
Avg	0.1018	0.0961	0.0983	0.0974	0.1065	0.1291	0.1384	0.1123

Table 10: RMSE error for 3D flow estimated by RAFT-3D and CPD for dataset 2 with  $\Delta = 10$

Seq.	RMSE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0_10	0.0229	0.0280	0.0258	0.0251	0.0939	0.1119	0.0876	0.1016
t10_20	0.1123	0.1199	0.1071	0.1139	0.1339	0.1623	0.1492	0.1676
t20_30	<b>0.2751</b>	<b>0.2288</b>	<b>0.2958</b>	<b>0.2433</b>	<b>0.2653</b>	<b>0.2640</b>	<b>0.2913</b>	<b>0.2416</b>
t30_40	0.1794	0.1812	0.1765	0.1738	0.1827	0.2237	0.1843	0.1984
t40_50	0.1245	0.1470	0.1150	0.1364	0.1646	0.1982	0.1578	0.1439
t50_60	0.0710	0.0674	0.0675	0.0806	0.0782	0.1313	0.1233	0.0923
t60_70	0.0933	0.0781	0.0702	0.0875	0.0971	0.1630	0.1228	0.1099
t70_80	0.1305	0.1066	0.1113	0.1187	0.1255	0.1505	0.2550	0.1386
t80_90	0.0847	0.0860	0.0719	0.0953	0.0730	0.1424	0.1731	0.0870
t90_100	0.1471	0.1439	0.1312	0.1406	0.1204	0.1344	0.2620	0.1195
t100_110	0.1807	0.1253	0.1235	0.1249	0.0995	0.1447	0.1216	0.1126
t110_120	0.0985	0.1073	0.1008	0.0981	0.0962	0.1102	0.1310	0.1086
t120_130	0.1205	0.1091	0.1408	0.1226	0.1067	0.1189	0.1643	0.1227
t130_140	0.0742	0.0846	0.1123	0.0973	0.0759	0.0870	0.1135	0.0921
t140_150	0.0528	0.0553	0.0518	0.0480	0.0518	0.0510	0.0494	0.0580
Avg	0.1178	0.1112	0.1134	0.1137	0.1176	0.1462	0.1591	0.1263

Table 11: AAE error for 3D flow estimated by RAFT-3D and CPD for dataset 2 with  $\Delta = 10$

Seq.	AAE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0_10	<u>1.0008</u>	<u>1.1603</u>	<u>0.9490</u>	<u>1.0071</u>	4.4814	5.4392	4.2887	5.0565
t10_20	4.7707	5.1289	4.7035	3.8799	6.6919	7.3585	7.3450	7.5990
t20_30	<b>13.6950</b>	<b>11.4263</b>	<b>14.6339</b>	<b>12.0692</b>	<b>13.6520</b>	<b>13.3192</b>	<b>14.9121</b>	<b>11.0849</b>
t30_40	9.0805	9.0859	8.8176	8.7594	9.0759	11.8167	9.3755	10.2652
t40_50	6.3817	7.0730	5.3628	6.7043	8.8231	9.8210	8.0297	7.5198
t50_60	3.6011	3.2805	3.4571	4.2603	4.1569	7.0983	5.8862	4.8505
t60_70	4.7617	3.7658	3.4766	4.4020	5.2088	7.9596	6.6507	5.9176
t70_80	6.6617	4.5918	5.4068	5.8211	6.4842	6.0633	12.2640	6.8746
t80_90	4.0543	4.4358	3.5760	4.4808	3.6546	7.3053	6.7338	4.2358
t90_100	7.3008	7.0282	6.1991	7.0274	6.0464	6.7147	11.5844	5.9837
t100_110	7.9770	6.2897	6.0036	6.2301	4.9564	7.4691	6.2163	5.7560
t110_120	4.4524	5.1315	4.7617	4.7569	4.5709	5.3707	6.4122	5.3425
t120_130	5.3670	5.2231	6.7250	5.5774	4.9450	5.5836	7.8807	5.8864
t130_140	3.5943	4.1070	5.4878	4.3133	4.0032	4.0915	5.2781	4.7461
t140_150	2.7283	2.9242	2.7062	2.5335	<u>2.7284</u>	<u>2.7345</u>	<u>2.5944</u>	<u>3.1459</u>
Avg	5.6952	5.3768	5.4844	5.4548	5.9653	7.2097	7.6968	6.2843

Table 12: Number of points used to estimate 3D flow for dataset 2

	Number of flow vectors			
	cam1	cam2	cam3	cam4
t0_10	128	103	142	95
t10_20	52	34	60	37
t20_30	52	30	51	25
t30_40	112	82	108	84
t40_50	31	43	46	60
t50_60	93	57	68	72
t60_70	123	107	83	66
t70_80	106	31	62	41
t80_90	94	47	61	55
t90_100	123	96	30	66
t100_110	106	91	42	56
t110_120	80	111	55	46
t120_130	55	96	57	62
t130_140	88	95	77	76
t140_150	125	157	120	104



Table 13: EPE error for 3D flow estimated by RAFT-3D and CPD for dataset 2 with  $\Delta = 4$

	EPE							
	RAFT-3D				CPD			
t0.4	0.0076	0.0128	0.0110	0.0155	0.0736	0.0911	0.0693	0.0858
t4.8	0.0119	0.0185	0.0097	0.0077	0.0646	0.0953	0.0652	0.0971
t8.12	0.0142	0.0145	0.0121	0.0151	0.0593	0.0966	0.0581	0.0799
t12.16	0.0123	0.0192	0.0099	0.0201	0.0749	0.0783	0.0751	0.0817
t16.20	0.0935	0.0702	0.0835	0.0600	0.1069	0.1112	0.1077	0.1145
t20.24	<b>0.1225</b>	<b>0.1121</b>	<b>0.1391</b>	<b>0.0984</b>	<b>0.1305</b>	0.1310	<b>0.1330</b>	<b>0.1353</b>
t24.28	0.0947	0.0768	0.0974	0.0784	0.0899	0.0946	0.1025	0.0885
t28.32	0.0154	0.0214	0.0250	0.0208	0.0358	0.0777	0.0389	0.0624
t32.36	0.0833	0.0867	0.0806	0.0796	0.0939	<b>0.1360</b>	0.0903	0.1148
t36.40	0.0748	0.0776	0.0803	0.0814	0.0836	0.1237	0.0995	0.1055
t40.44	0.0575	0.0562	0.0508	0.0627	0.0825	0.1042	0.0753	0.0856
t44.48	0.0400	0.0477	0.0372	0.0701	0.0693	0.1136	0.0664	0.0732
t48.52	0.0358	0.0332	0.0300	0.0435	0.0510	0.1077	0.0710	0.0712
t52.56	0.0295	0.0259	0.0334	0.0279	0.0485	0.1022	0.0887	0.0725
t56.60	0.0271	0.0312	0.0255	0.0388	0.0451	0.1100	0.0877	0.0767
t60.64	0.0183	0.0218	0.0168	0.0283	0.0456	0.1191	0.0852	0.0720
t64.68	0.0458	0.0308	0.0330	0.0416	0.0547	0.1107	0.0950	0.0818
t68.72	0.0616	0.0380	0.0447	0.0531	0.0630	0.1200	0.0944	0.0857
t72.76	0.0566	0.0406	0.0446	0.0465	0.0514	0.0671	0.0989	0.0788
t76.80	0.0378	0.0363	0.0423	0.0457	0.0382	0.0427	0.0997	0.0611
t80.84	0.0286	0.0324	0.0413	0.0363	0.0272	0.0965	0.0885	0.0433
t84.88	0.0353	0.0397	0.0309	0.0384	0.0327	0.0862	0.0454	0.0366
t88.92	0.0472	0.0453	0.0490	0.0465	0.0403	0.0924	0.0480	0.0435
t92.96	0.0535	0.0564	0.0569	0.0538	0.0463	0.0990	0.0656	0.0474
t96.100	0.0537	0.0549	0.0600	0.0587	0.0466	0.0942	0.0810	0.0589
t100.104	0.0539	0.0604	0.0633	0.0505	0.0409	0.0861	0.0848	0.0564
t104.108	0.0454	0.0425	0.0585	0.0380	0.0352	0.0686	0.0784	0.0539
t108.112	0.0417	0.0374	0.0504	0.0316	0.0330	0.0708	0.0693	0.0448
t112.116	0.0422	0.0392	0.0480	0.0353	0.0357	0.0653	0.0875	0.0444
t116.120	0.0390	0.0430	0.0441	0.0342	0.0365	0.0667	0.0874	0.0408
t120.124	0.0371	0.0434	0.0488	0.0444	0.0367	0.0577	0.0821	0.0462
t124.128	0.0312	0.0439	0.0548	0.0429	0.0337	0.0585	0.0780	0.0467
t128.132	0.0308	0.0391	0.0463	0.0278	0.0338	0.0462	0.0635	0.0355
t132.126	0.0282	0.0358	0.0439	0.0338	0.0344	0.0401	0.0559	0.0386
t136.140	0.0255	0.0261	0.0285	0.0268	0.0347	0.0344	0.0394	0.0348
t140.144	0.0236	0.0266	0.0219	0.0234	0.0287	0.0325	0.0338	0.0328
t144.148	0.0221	0.0252	0.0202	0.0218	0.0279	0.0312	0.0317	0.0311
Avg	0.0427	0.0422	0.0452	0.0427	0.0531	0.0854	0.0763	0.0665

Table 14: RMSE error for 3D flow estimated by RAFT-3D and CPD for dataset 2 with  $\Delta = 4$

	RMSE							
	RAFT-3D				CPD			
t0.4	0.0139	0.0178	0.0234	0.0205	0.0894	0.1074	0.0821	0.0981
t4.8	0.0144	0.0219	0.0131	0.0086	0.0752	0.1124	0.0749	0.1145
t8.12	0.0235	0.0160	0.0182	0.0180	0.0656	0.1172	0.0646	0.0896
t12.16	0.0155	0.0242	0.0114	0.0241	0.0788	0.0885	0.0787	0.0917
t16.20	0.1138	0.0795	0.1021	0.0687	0.1154	0.1202	0.1146	0.1220
t20.24	<b>0.1337</b>	<b>0.1251</b>	<b>0.1532</b>	<b>0.1161</b>	<b>0.1387</b>	0.1451	<b>0.1442</b>	<b>0.1484</b>
t24.28	0.1122	0.0884	0.1098	0.0858	0.0996	0.1032	0.1135	0.0984
t28.32	0.0168	0.0246	0.0289	0.0232	0.0400	0.0881	0.0428	0.0712
t32.36	0.0942	0.0937	0.0898	0.0906	0.1036	0.1440	0.0983	0.1218
t36.40	0.0873	0.0876	0.0879	0.0903	0.0951	0.1343	0.1085	0.1133
t40.44	0.0622	0.0635	0.0583	0.0723	0.0867	0.1135	0.0826	0.0927
t44.48	0.0460	0.0557	0.0447	0.0819	0.0754	0.1234	0.0753	0.0831
t48.52	0.0392	0.0376	0.0362	0.0488	0.0575	0.1161	0.0947	0.0800
t52.56	0.0324	0.0299	0.0365	0.0316	0.0533	0.1108	0.1191	0.0806
t56.60	0.0300	0.0356	0.0288	0.0422	0.0505	0.1201	0.0995	0.0842
t60.64	0.0221	0.0257	0.0207	0.0317	0.0497	<b>0.1453</b>	0.0956	0.0818
t64.68	0.0510	0.0347	0.0367	0.0480	0.0580	0.1285	0.1024	0.0874
t68.72	0.0675	0.0463	0.0490	0.0588	0.0667	0.1385	0.1019	0.0968
t72.76	0.0636	0.0472	0.0514	0.0514	0.0579	0.0872	0.1066	0.0889
t76.80	0.0436	0.0426	0.0461	0.0538	0.0424	0.0578	0.1067	0.0702
t80.84	0.0329	0.0350	0.0468	0.0419	0.0311	0.1187	0.1406	0.0510
t84.88	0.0414	0.0434	0.0379	0.0437	0.0368	0.0983	0.0804	0.0419
t88.92	0.0542	0.0525	0.0556	0.0552	0.0453	0.1153	0.0564	0.0481
t92.96	0.0591	0.0639	0.0663	0.0637	0.0505	0.1224	0.0705	0.0526
t96.100	0.0593	0.0614	0.0682	0.0636	0.0512	0.1228	0.0918	0.0634
t100.104	0.0646	0.0652	0.0737	0.0551	0.0454	0.0962	0.0961	0.0601
t104.108	0.0537	0.0469	0.0669	0.0420	0.0390	0.0781	0.0912	0.0581
t108.112	0.0517	0.0411	0.0599	0.0357	0.0373	0.0840	0.0853	0.0487
t112.116	0.0487	0.0443	0.0557	0.0407	0.0404	0.0769	0.1021	0.0491
t116.120	0.0451	0.0497	0.0527	0.0404	0.0413	0.0782	0.1003	0.0467
t120.124	0.0453	0.0499	0.0560	0.0519	0.0438	0.0671	0.0959	0.0520
t124.128	0.0407	0.0522	0.0618	0.0533	0.0392	0.0696	0.0925	0.0530
t128.132	0.0370	0.0466	0.0559	0.0339	0.0390	0.0568	0.0785	0.0401
t132.126	0.0324	0.0399	0.0502	0.0464	0.0371	0.0469	0.0665	0.0422
t136.140	0.0296	0.0296	0.0326	0.0315	0.0365	0.0383	0.0462	0.0369
t140.144	0.0265	0.0288	0.0237	0.0262	0.0312	0.0350	0.0378	0.0346
t144.148	0.0251	0.0280	0.0221	0.0248	0.0307	0.0328	0.0349	0.0326
Avg	0.0495	0.0480	0.0522	0.0491	0.0588	0.0983	0.0885	0.0737

Table 15: AAE error for 3D flow estimated by RAFT-3D and CPD for dataset 2 with  $\Delta = 4$

	AAE							
	RAFT-3D				CPD			
t0.4	0.4350	0.7339	0.6308	0.8842	4.1956	5.1835	3.9570	4.8941
t4.8	0.6780	1.0509	0.5557	0.4406	3.6857	5.4091	3.7207	5.5134
t8.12	0.8023	0.8223	0.6866	0.8526	3.3720	5.4583	3.2993	4.5360
t12.16	0.6926	1.0766	0.5548	1.1252	4.2282	4.4162	4.2369	4.6120
t16.20	5.2868	3.9429	4.7130	3.3833	6.0485	6.2633	6.0923	6.4566
t20.24	<b>6.9488</b>	<b>6.3769</b>	<b>7.8810</b>	<b>5.6046</b>	<b>7.4138</b>	7.4492	<b>7.5480</b>	<b>7.6948</b>
t24.28	5.3918	4.3871	5.5522	4.4806	5.1291	5.4005	5.8483	5.0521
t28.32	0.8794	1.2285	1.4335	1.1930	2.0471	4.4354	2.2256	3.5644
t32.36	4.7521	4.9511	4.6080	4.5446	5.3576	<b>7.7453</b>	5.1591	6.5436
t36.40	4.2650	4.4313	4.5851	4.6444	4.7697	7.0288	5.6694	6.0073
t40.44	3.2869	3.2085	2.9025	3.5735	4.7094	5.9211	4.2939	4.8750
t44.48	2.2835	2.7263	2.1246	3.9924	3.9511	6.4450	3.7835	4.1684
t48.52	2.0456	1.8988	1.7180	2.4891	2.9110	6.1229	4.0274	4.0634
t52.56	1.6865	1.4811	1.9143	1.5991	2.7711	5.8230	5.0126	4.1367
t56.60	1.5502	1.7851	1.4599	2.2220	2.5800	6.2678	5.0065	4.3793
t60.64	1.0488	1.2458	0.9594	1.6209	2.6087	6.7284	4.8696	4.1033
t64.68	2.6178	1.7638	1.8864	2.3766	3.1275	6.2859	5.4272	4.6617
t68.72	3.5185	2.1708	2.5553	3.0302	3.6031	6.7985	5.3894	4.8753
t72.76	3.2313	2.3163	2.5494	2.6602	2.9365	3.8203	5.6441	4.4857
t76.80	2.1624	2.0711	2.4142	2.6122	2.1860	2.4396	5.6952	3.4869
t80.84	1.6359	1.8539	2.3620	2.0781	1.5558	5.4722	4.9563	2.4707
t84.88	2.0193	2.2667	1.7683	2.1943	1.8682	4.8981	2.5555	2.0900
t88.92	2.6930	2.5824	2.7964	2.6511	2.3035	5.2208	2.7314	2.4850
t92.96	3.0490	3.2183	3.2455	3.0684	2.6403	5.5928	3.7303	2.7048
t96.100	3.0600	3.1291	3.4234	3.3450	2.6578	5.3069	4.5954	3.3542
t100.104	3.0751	3.4471	3.6122	2.8797	2.3319	4.8828	4.7953	3.2140
t104.108	2.5893	2.4262	3.3397	2.1665	2.0071	3.8890	4.4333	3.0700
t108.112	2.3819	2.1320	2.8747	1.8053	1.8842	4.0059	3.9175	2.5538
t112.116	2.4064	2.2346	2.7396	2.0126	2.0361	3.6952	4.9415	2.5307
t116.120	2.2268	2.4500	2.5159	1.9496	2.0884	3.7790	4.9363	2.3258
t120.124	2.1214	2.4747	2.7849	2.5313	2.0951	3.2765	4.6470	2.6411
t124.128	1.7823	2.5089	3.1250	2.4526	1.9274	3.3345	4.4231	2.6681
t128.132	1.7630	2.2356	2.6440	1.5910	1.9350	2.6375	3.6092	2.0337
t132.126	1.6144	2.0509	2.5096	1.9303	1.9708	2.2909	3.1878	2.2102
t136.140	1.4604	1.4959	1.6291	1.5359	1.9846	1.9681	2.2506	1.9905
t140.144	1.3511	1.5255	1.2566	1.3418	1.6463	1.8580	1.9351	1.8768
t144.148	1.2653	1.4442	1.1575	1.2499	1.6006	1.7852	1.8141	1.7833
Avg	2.4340	2.4093	2.5802	2.4355	3.0315	4.8469	4.3342	3.7868

Table 16: Number of flow vectors for dataset 2 with  $\Delta = 4$ 

Number of flow vectors				
Seq.	cam1	cam2	cam3	cam4
t0_4	128	103	142	95
t4_8	91	64	102	64
t8_12	63	45	75	42
t12_16	45	30	48	33
t16_20	50	27	52	30
t20_24	52	30	51	25
t24_28	54	21	56	24
t28_32	82	44	84	44
t32_36	45	62	53	62
t36_40	31	57	35	54
t40_44	31	43	46	60
t44_48	58	25	66	53
t48_52	90	31	78	70
t52_56	112	67	70	73
t56_60	140	110	82	92
t60_64	123	107	83	66
t64_68	119	66	78	54
t68_72	104	43	70	46
t72_76	104	38	54	40
t76_80	97	38	58	40
t80_84	94	47	61	55
t84_88	116	96	49	58
t88_92	130	117	39	61
t92_96	112	74	34	57
t96_100	111	83	44	58
t100_104	106	91	42	56
t104_108	97	103	56	47
t108_112	82	110	51	49
t112_116	66	61	50	46
t116_120	63	98	46	48
t120_124	55	96	57	62
t124_128	61	95	66	65
t128_132	74	92	69	72
t132_126	88	106	89	88
t136_140	98	130	111	96
t140_144	125	157	120	104
t144_148	129	154	119	112

### 1.3 Dataset 3

Table 17: EPE error for 3D flow estimated by RAFT-3D and CPD for dataset 3 with  $\Delta = 10$

Seq.	EPE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0_10	0.0504	0.0473	0.0468	0.0477	0.0868	0.1074	0.0852	0.1048
t10_20	<b>0.0976</b>	<b>0.0976</b>	<b>0.0946</b>	<b>0.0861</b>	<b>0.1105</b>	<b>0.1379</b>	<b>0.1118</b>	<b>0.1332</b>
t20_30	0.0390	0.0407	0.0594	0.0379	0.0463	0.0916	0.0585	0.0855
t30_40	0.0305	0.0301	0.0378	0.0365	0.0357	0.0716	0.0380	0.0696
t40_50	0.0205	0.0215	0.0208	0.0193	0.0344	0.0767	0.0415	0.0741
t50_60	0.0177	0.0238	0.0217	0.0183	0.0322	0.0796	0.0413	0.0731
t60_70	0.0140	0.0189	0.0227	0.0178	0.0287	0.0746	0.0336	0.0723
t70_80	0.0150	0.0258	0.0187	0.0165	0.0293	0.0743	0.0307	0.0712
t80_90	0.0115	0.0277	0.0166	0.0154	0.0277	0.0725	0.0287	0.0696
t90_100	0.0109	0.0249	0.0156	0.0164	0.0258	0.0688	0.0272	0.0735
t100_110	0.0097	0.0222	0.0136	0.0154	0.0253	0.0691	0.0272	0.0674
t110_120	0.0093	0.0215	0.0144	0.0148	0.0251	0.0694	0.0262	<u>0.0648</u>
t120_130	0.0096	0.0125	0.0120	0.0135	0.0234	0.0695	0.0254	0.0689
t130_t140	<u>0.0082</u>	0.0119	<u>0.0108</u>	<u>0.0119</u>	0.0214	0.0681	0.0253	0.0656
t140_150	0.0085	<u>0.0114</u>	0.0117	0.0120	<u>0.0206</u>	<u>0.0603</u>	<u>0.0244</u>	0.0669
Avg	0.0235	0.0292	0.0278	0.0253	0.0382	0.0794	0.0417	0.0774

Table 18: RMSE error for 3D flow estimated by RAFT-3D and CPD for dataset 3 with  $\Delta = 10$

Seq.	RMSE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0_10	0.0602	0.0581	0.0560	0.0577	0.1036	0.1194	0.0991	0.1195
t10_20	<b>0.1144</b>	<b>0.1192</b>	<b>0.1058</b>	<b>0.1007</b>	<b>0.1241</b>	<b>0.1504</b>	<b>0.1258</b>	<b>0.1455</b>
t20_30	0.0419	0.0465	0.0718	0.0428	0.0489	0.1014	0.0650	0.0939
t30_40	0.0348	0.0338	0.0429	0.0428	0.0381	0.0793	0.0404	0.0800
t40_50	0.0232	0.0245	0.0247	0.0235	0.0379	0.0854	0.0457	0.0844
t50_60	0.0202	0.0274	0.0248	0.0218	0.0348	0.0899	0.0461	0.0849
t60_70	0.0160	0.0231	0.0263	0.0209	0.0315	0.0835	0.0367	0.0848
t70_80	0.0169	0.0291	0.0217	0.0197	0.0318	0.0821	0.0338	0.0830
t80_90	0.0134	0.0342	0.0194	0.0180	0.0302	0.0812	0.0313	0.0820
t90_100	0.0120	0.0282	0.0179	0.0192	0.0281	0.0758	0.0295	0.0849
t100_110	0.0111	0.0254	0.0158	0.0188	0.0273	0.0753	0.0292	0.0759
t110_120	0.0104	0.0261	0.0165	0.0168	0.0272	0.0757	0.0283	<u>0.0742</u>
t120_130	0.0105	0.0147	0.0141	0.0148	0.0256	0.0756	0.0274	0.0814
t130_t140	<u>0.0094</u>	0.0142	<u>0.0124</u>	<u>0.0132</u>	0.0234	0.0745	0.0274	0.0745
t140_150	0.0098	<u>0.0138</u>	0.0133	0.0134	<u>0.0224</u>	<u>0.0650</u>	<u>0.0263</u>	0.0795
Avg	0.0269	0.0346	0.0322	0.0296	0.0423	0.0876	0.0461	0.0886

Table 19: AAE error for 3D flow estimated by RAFT-3D and CPD for dataset 3 with  $\Delta = 10$

Seq.	AAE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0_10	2.8469	2.6714	2.6397	2.6963	4.9097	6.0758	4.8270	5.9255
t10_20	<b>5.4736</b>	<b>5.4810</b>	<b>5.2895</b>	<b>4.8155</b>	<b>6.2243</b>	<b>7.7310</b>	<b>6.2948</b>	<b>7.4571</b>
t20_30	2.2338	2.3302	3.3911	2.1703	2.6493	5.2221	3.3444	4.8800
t30_40	1.7455	1.7250	2.1657	2.0865	2.0444	4.0844	2.1749	3.9713
t40_50	1.1766	1.2327	1.1920	1.1055	1.9704	4.3818	2.3739	4.2300
t50_60	1.0133	1.3632	1.2412	1.0457	1.8416	4.5444	2.3647	4.1726
t60_70	0.7994	1.0835	1.2995	1.0225	1.6417	4.2608	1.9221	4.1247
t70_80	0.8621	1.4750	1.0698	0.9443	1.6777	4.2429	1.7606	4.0622
t80_90	0.6583	1.5865	0.9498	0.8801	1.5890	4.1399	1.6459	3.9692
t90_100	0.6267	1.4255	0.8912	0.9392	1.4775	3.9296	1.5572	4.1933
t100_110	0.5565	1.2719	0.7815	0.8804	1.4493	3.9471	1.5590	3.8528
t110_120	0.5314	1.2301	0.8259	0.8457	1.4360	3.9659	1.4995	3.7050
t120_130	0.5489	0.7177	0.6884	0.7737	1.3423	3.9704	1.4550	3.9339
t130_t140	0.4694	0.6828	0.6184	0.6829	1.2278	3.8892	1.4487	3.7500
t140_150	0.4863	0.6532	0.6685	0.6901	1.1791	3.4498	1.3967	3.8204
Avg	1.3352	1.6620	1.5808	1.4386	2.1773	4.5223	2.3750	4.4032

Table 20: Number of points used to estimate 3D flow for dataset 3

Seq.	Number of flow vectors			
	cam1	cam2	cam3	cam4
t0_10	126	104	141	94
t10_20	85	58	99	58
t20_30	98	78	104	77
t30_40	103	84	113	91
t40_50	103	94	111	91
t50_60	104	90	98	87
t60_70	96	88	101	92
t70_80	94	91	90	94
t80_90	102	85	96	89
t90_100	92	82	91	84
t100_110	88	82	96	87
t110_120	96	75	88	78
t120_130	94	73	92	79
t130_140	83	78	84	83
t140_150	89	77	91	80

Table 21: EPE error for 3D flow estimated by RAFT-3D and CPD for dataset 3 with  $\Delta = 4$

Seq.	EPE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0.4	0.0134	0.0176	0.0132	0.0160	<b>0.0721</b>	0.0914	0.0696	0.0873
t4.8	0.0243	0.0223	0.0239	0.0226	0.0669	0.0905	0.0679	0.0968
t8.12	0.0372	0.0326	0.0408	0.0341	0.0659	0.0898	0.0701	<b>0.0982</b>
t12.16	<b>0.0438</b>	<b>0.0419</b>	<b>0.0524</b>	<b>0.0494</b>	0.0686	<b>0.0997</b>	<b>0.0728</b>	0.0969
t16.20	0.0359	0.0387	0.0386	0.0414	0.0548	0.0891	0.0540	0.0960
t20.24	0.0270	0.0268	0.0350	0.0357	0.0384	0.0835	0.0532	0.0774
t24.28	0.0153	0.0210	0.0251	0.0191	0.0349	0.0766	0.0477	0.0761
t28.32	0.0202	0.0165	0.0284	0.0219	0.0341	0.0688	0.0487	0.0678
t32.36	0.0147	0.0146	0.0253	0.0268	0.0337	0.0668	0.0462	0.0701
t36.40	0.0114	0.0143	0.0191	0.0175	0.0323	0.0710	0.0521	0.0705
t40.44	0.0102	0.0120	0.0159	0.0171	0.0332	0.0733	0.0459	0.0722
t44.48	0.0098	0.0205	0.0138	0.0141	0.0308	0.0763	0.0467	0.0766
t48.52	0.0081	0.0189	0.0142	0.0124	0.0297	0.0750	0.0435	0.0713
t52.56	0.0082	0.0187	0.0128	0.0124	0.0304	0.0775	0.0429	0.0758
t56.60	0.0081	0.0203	0.0169	0.0149	0.0293	0.0758	0.0400	0.0716
t60.64	0.0077	0.0131	0.0147	0.0128	0.0263	0.0745	0.0363	0.0711
t64.68	0.0084	0.0124	0.0140	0.0124	0.0285	0.0719	0.0333	0.0717
t68.72	0.0076	0.0176	0.0150	0.0128	0.0284	0.0722	0.0323	0.0736
t72.76	0.0079	0.0119	0.0137	0.0126	0.0271	0.0749	0.0301	0.0700
t76.80	0.0070	0.0178	0.0121	0.0133	0.0259	0.0714	0.0302	0.0673
t80.84	0.0072	0.0198	0.0123	0.0127	0.0255	0.0709	0.0284	0.0708
t84.88	0.0072	0.0173	0.0131	0.0135	0.0265	0.0723	0.0270	0.0680
t88.92	0.0062	0.0185	0.0124	0.0132	0.0244	0.0704	0.0265	0.0694
t92.96	0.0066	0.0106	0.0115	0.0137	0.0251	0.0693	0.0257	0.0778
t96.100	0.0063	0.0101	0.0122	0.0132	0.0258	0.0661	0.0261	0.0687
t100.104	0.0065	0.0178	0.0097	0.0120	0.0258	0.0696	0.0267	0.0660
t104.108	0.0069	0.0105	0.0107	0.0114	0.0231	0.0680	0.0257	0.0668
t108.112	0.0056	0.0101	0.0097	0.0132	0.0232	0.0674	0.0247	0.0671
t112.116	0.0060	0.0100	0.0092	0.0120	0.0241	0.0691	0.0245	0.0678
t116.120	0.0064	0.0076	0.0096	0.0107	0.0216	0.0643	0.0242	0.0689
t120.124	0.0069	0.0092	0.0089	0.0100	0.0224	0.0704	0.0240	0.0662
t124.128	0.0062	0.0085	0.0077	0.0097	0.0221	0.0708	0.0232	0.0654
t128.132	0.0064	0.0083	0.0082	0.0084	0.0214	0.0690	0.0234	0.0643
t132.126	0.0063	0.0080	0.0076	0.0094	0.0228	0.0682	0.0232	0.0663
t136.140	0.0061	0.0084	0.0081	0.0096	0.0209	0.0646	0.0227	0.0603
t140.144	0.0058	0.0089	0.0079	0.0095	0.0206	0.0615	0.0230	0.0667
t144.148	0.0072	0.0084	0.0074	0.0088	0.0210	0.0595	0.0223	0.0646
Avg	0.0118	0.0163	0.0165	0.0165	0.0321	0.0736	0.0374	0.0731

Table 22: RMSE error for 3D flow estimated by RAFT-3D and CPD for dataset 3 with  $\Delta = 4$

Seq.	RMSE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0.4	0.0192	0.0214	0.0225	0.0216	<b>0.0893</b>	0.1069	0.0828	0.1027
t4.8	0.0284	0.0282	0.0282	0.0286	0.0792	0.1042	0.0815	<b>0.1167</b>
t8.12	0.0423	0.0390	0.0459	0.0420	0.0760	0.1033	0.0834	0.1136
t12.16	<b>0.0514</b>	<b>0.0488</b>	<b>0.0580</b>	<b>0.0579</b>	0.0792	<b>0.1146</b>	<b>0.0860</b>	0.1068
t16.20	0.0394	0.0436	0.0426	0.0450	0.0607	0.1029	0.0628	0.1097
t20.24	0.0297	0.0307	0.0408	0.0412	0.0423	0.0956	0.0620	0.0865
t24.28	0.0170	0.0245	0.0275	0.0214	0.0383	0.0880	0.0594	0.0894
t28.32	0.0224	0.0180	0.0325	0.0257	0.0377	0.0786	0.0593	0.0787
t32.36	0.0177	0.0164	0.0292	0.0327	0.0376	0.0758	0.0563	0.0801
t36.40	0.0130	0.0157	0.0212	0.0224	0.0359	0.0800	0.0617	0.0812
t40.44	0.0116	0.0140	0.0177	0.0206	0.0373	0.0825	0.0545	0.0829
t44.48	0.0114	0.0241	0.0160	0.0148	0.0346	0.0860	0.0565	0.0904
t48.52	0.0093	0.0223	0.0165	0.0133	0.0332	0.0847	0.0516	0.0830
t52.56	0.0095	0.0218	0.0154	0.0135	0.0340	0.0878	0.0504	0.0900
t56.60	0.0093	0.0239	0.0193	0.0161	0.0329	0.0855	0.0457	0.0836
t60.64	0.0088	0.0152	0.0171	0.0141	0.0298	0.0841	0.0409	0.0829
t64.68	0.0094	0.0142	0.0158	0.0141	0.0316	0.0807	0.0372	0.0826
t68.72	0.0084	0.0199	0.0181	0.0147	0.0313	0.0801	0.0365	0.0861
t72.76	0.0095	0.0138	0.0158	0.0139	0.0303	0.0844	0.0341	0.0798
t76.80	0.0077	0.0204	0.0138	0.0153	0.0288	0.0798	0.0336	0.0777
t80.84	0.0083	0.0229	0.0139	0.0142	0.0285	0.0800	0.0315	0.0837
t84.88	0.0080	0.0195	0.0146	0.0161	0.0293	0.0800	0.0299	0.0785
t88.92	0.0069	0.0214	0.0136	0.0149	0.0272	0.0781	0.0293	0.0815
t92.96	0.0073	0.0124	0.0131	0.0161	0.0275	0.0768	0.0287	0.0895
t96.100	0.0069	0.0116	0.0133	0.0158	0.0282	0.0744	0.0286	0.0785
t100.104	0.0073	0.0206	0.0109	0.0136	0.0282	0.0762	0.0291	0.0754
t104.108	0.0078	0.0121	0.0122	0.0132	0.0256	0.0740	0.0283	0.0761
t108.112	0.0063	0.0118	0.0113	0.0152	0.0256	0.0734	0.0272	0.0761
t112.116	0.0068	0.0117	0.0105	0.0137	0.0264	0.0762	0.0271	0.0769
t116.120	0.0074	0.0092	0.0108	0.0119	0.0239	0.0697	0.0267	0.0810
t120.124	0.0077	0.0113	0.0100	0.0111	0.0247	0.0766	0.0263	0.0789
t124.128	0.0073	0.0103	0.0086	0.0104	0.0241	0.0776	0.0256	0.0750
t128.132	0.0075	0.0103	0.0092	0.0089	0.0236	0.0759	0.0258	0.0740
t132.126	0.0076	0.0099	0.0086	0.0098	0.0248	0.0748	0.0255	0.0755
t136.140	0.0072	0.0109	0.0093	0.0101	0.0230	0.0696	0.0250	0.0704
t140.144	0.0071	0.0111	0.0090	0.0102	0.0227	0.0664	0.0253	0.0798
t144.148	0.0084	0.0107	0.0084	0.0094	0.0229	0.0641	0.0244	0.0768
Avg	0.0135	0.0190	0.0190	0.0190	0.0361	0.0824	0.0433	0.0847



Table 23: AAE error for 3D flow estimated by RAFT-3D and CPD for dataset 3 with  $\Delta = 4$

Seq.	AAE							
	RAFT-3D				CPD			
	cam1	cam2	cam3	cam4	cam1	cam2	cam3	cam4
t0.4	0.7661	1.0073	0.7565	0.9137	<b>4.1084</b>	5.2029	3.9720	4.9716
t4.8	1.3880	1.2745	1.3633	1.2943	3.8197	5.1495	3.8748	5.4969
t8.12	2.1190	1.8581	2.3246	1.9434	3.7622	5.1013	3.9956	<b>5.5724</b>
t12.16	<b>2.4964</b>	<b>2.3875</b>	<b>2.9840</b>	<b>2.8140</b>	3.9166	<b>5.6585</b>	<b>4.1518</b>	5.5119
t16.20	2.0493	2.2108	2.2075	2.3650	3.1327	5.0735	3.0897	5.4604
t20.24	1.5446	1.5335	2.0046	2.0443	2.1985	4.7601	3.0446	4.4170
t24.28	0.8745	1.2027	1.4397	1.0948	2.0000	4.3678	2.7242	4.3416
t28.32	1.1596	0.9478	1.6285	1.2537	1.9503	3.9272	2.7803	3.8673
t32.36	0.8431	0.8353	1.4490	1.5377	1.9314	3.8121	2.6395	4.0019
t36.40	0.6547	0.8187	1.0923	1.0009	1.8473	4.0556	2.9800	4.0224
t40.44	0.5835	0.6886	0.9136	0.9814	1.8996	4.1865	2.6264	4.1195
t44.48	0.5615	1.1762	0.7902	0.8095	1.7642	4.3572	2.6721	4.3707
t48.52	0.4654	1.0851	0.8122	0.7095	1.7038	4.2844	2.4900	4.0694
t52.56	0.4710	1.0714	0.7334	0.7116	1.7436	4.4259	2.4522	4.3244
t56.60	0.4648	1.1652	0.9702	0.8516	1.6783	4.3299	2.2870	4.0883
t60.64	0.4432	0.7502	0.8396	0.7320	1.5036	4.2567	2.0808	4.0547
t64.68	0.4827	0.7090	0.7999	0.7103	1.6336	4.1086	1.9043	4.0938
t68.72	0.4353	1.0069	0.8612	0.7307	1.6281	4.1217	1.8520	4.2000
t72.76	0.4507	0.6810	0.7831	0.7215	1.5497	4.2780	1.7216	3.9971
t76.80	0.4005	1.0199	0.6924	0.7633	1.4820	4.0797	1.7269	3.8454
t80.84	0.4111	1.1342	0.7065	0.7281	1.4627	4.0517	1.6240	4.0374
t84.88	0.4143	0.9928	0.7485	0.7748	1.5172	4.1316	1.5443	3.8816
t88.92	0.3571	1.0607	0.7093	0.7574	1.3979	4.0209	1.5153	3.9585
t92.96	0.3786	0.6058	0.6606	0.7850	1.4374	3.9596	1.4693	4.4382
t96.100	0.3615	0.5793	0.6965	0.7556	1.4785	3.7747	1.4930	3.9232
t100.104	0.3745	1.0180	0.5564	0.6890	1.4789	3.9796	1.5269	3.7727
t104.108	0.3978	0.6004	0.6144	0.6550	1.3261	3.8868	1.4708	3.8154
t108.112	0.3186	0.5802	0.5574	0.7575	1.3269	3.8536	1.4120	3.8314
t112.116	0.3449	0.5704	0.5293	0.6879	1.3776	3.9467	1.4014	3.8737
t116.120	0.3693	<u>0.4368</u>	0.5496	0.6139	1.2398	3.6757	1.3855	3.9346
t120.124	0.3945	0.5255	0.5097	0.5755	1.2820	4.0256	1.3738	3.7758
t124.128	0.3560	0.4883	0.4387	0.5545	1.2646	4.0464	1.3269	3.7377
t128.132	0.3653	0.4782	0.4694	<u>0.4793</u>	1.2250	3.9408	1.3415	3.6753
t132.126	0.3635	0.4588	0.4331	0.5382	1.3043	3.8974	1.3300	3.7904
t136.140	0.3501	0.4841	0.4649	0.5483	1.1997	3.6914	1.2986	3.4466
t140.144	0.3320	0.5099	0.4552	0.5454	<u>1.1786</u>	3.5163	1.3170	3.8076
t144.148	0.4108	0.4799	<u>0.4236</u>	0.5050	1.2020	3.4033	1.2763	<u>3.6854</u>
Avg	0.6744	0.9306	0.9306	0.9441	1.8366	4.1984	2.1398	4.1679

Table 24: Number of flow vectors for dataset 3 with  $\Delta = 4$ 

Number of flow vectors				
Seq.	cam1	cam2	cam3	cam4
t0_4	126	104	141	94
t4_8	97	80	119	80
t8_12	84	60	98	62
t12_16	90	58	94	62
t16_20	86	54	91	55
t20_24	98	78	104	77
t24_28	105	91	102	85
t28_32	101	85	111	92
t32_36	107	94	114	92
t36_40	110	90	106	94
t40_44	103	94	111	91
t44_48	108	88	105	93
t48_52	102	86	103	92
t52_56	99	85	102	90
t56_60	102	94	101	88
t60_64	96	88	101	92
t64_68	95	84	97	90
t68_72	96	92	95	92
t72_76	93	91	90	90
t76_80	96	89	98	95
t80_84	102	85	96	89
t84_88	99	78	100	97
t88_92	93	84	95	88
t92_96	93	84	92	85
t96_100	89	83	89	81
t100_104	88	82	96	87
t104_108	88	81	92	87
t108_112	100	82	90	79
t112_116	94	78	91	80
t116_120	90	79	91	84
t120_124	94	73	92	79
t124_128	90	76	84	88
t128_132	86	72	86	81
t132_126	86	82	91	84
t136_140	86	73	94	82
t140_144	89	77	91	80
t144_148	85	76	87	84