	MegaDepth								ScanNet									Planar												IMC PhotoTourism														
Pipeline	Filtered	Precision B	ecall AU	C ₆₅ At	C_{010}^F AUC	E AUC.	2 AUC 65	AUCE I	AUC_{020}^{E}	AUC ₂	Filtered	Precision	Recall	AUCF /	UC_{010}^F A	UC ₆₂₀ A	JC _Z AU	CE AUC	E AUC	E AUC	Filter	ed Precisio	ion Recall	AUC#	5 AUC#	AUC_{015}^{H}	AUC_{\square}^H	Filtered	Precision 1	ecall AU	CF AUC	AUCF 200 AUCF	AUC ₂	AUC_{05}^{E}	AUC_{010}^{E}	$AUC_{0:20}^{E}$	AUCZ A	$UC_{\Omega(S,\frac{1}{2})}^{F}AU$	$C_{0(10,1)}^{F}$ AUC	F 0(20,2) AU	C_{\square}^F $AUC_{0(1)}^E$	$_{S,\frac{1}{2})}$ $AUC_{\Omega(10}^{E}$	$_{(0,1)}$ AUC $_{(0)(20)}^{E}$	2) AUC ^E
Key.Net+AffNet+HardNet+NNR +MAGSAC+	0.00 56.23	55.25 100. 92.17 74.	0.0	0 0.	1 0.73	0.28	42.88	59.51 60.06	73.52 74.95	58.64 59.92	0.00	35.32	99.16 49.87	0.04	0.21 (99 0.	1 10.80	22.44	36.13 37.73	23.12 24.26	0.00	61.39	97.68	0.95	2.25 57.76	4.29	26.29	0.00 59.19	49.95	0.00 45 26.3	2 0.23	1.43	0.56 38.89	45.66 46.60	62.62	75.56 6	61.28	0.05	1.31 28.3	21 0.50 31 19.13		31.72 32.26		
+MAGSAC _↓		92.95 64.		3 46.			43.23	60.95	75.20	59.79	74.80		42.62	6.79	5.31 26	67 16.					78.55		30.71	43.42	56.22	62.86	48.30	64.40	88.99 63	53 27.3	39.89		40.04	45.91	62.22	75.25	61.13	1.18 19	12 29.			31.76	46.47	32.43
+ACNe +MAGSAC.	44.49 58.65	88.17 89. 91.88 72	73 8.6 18 30.4		0 41.20 7 61.87	23.71	40.36 42.14	58.93 60.52	74.72 75.64	58.00 59.43	57.15 74.24	58.68 64.58	71.79 46.79	2.02 6.48 1	7.79 20 5.98 25	16 9. 50 17.	9 10.63 2 10.23	23.07 22.97	38.42 37.94	24.04 23.71	39.88 73.41	75.03 84.85	76.36 38.13	24.14 38.58	34.89 53.48	40.15 60.11	43.88	52.28 63.20	87.51 85 93.91 69	05 6.6 45 28.1	4 18.32 9 43.55	37.84 59.36	20.94 43.70	46.20 45.88	63.55 63.38	76.53	62.10 61.93 1	2.53 6 0.72 19	.48 13.3 .35 30.1	77 7.55	17.55	30.72	46.48 46.29	31.58 31.34
+MAGSAC _↓	63.78	95.58 63.						60.17		58.97	77.67				5.65 25	15 17.	6 10.75	23.47	38.72	24.33	81.25	85.18	26.91	38.11	52.75	59.77	44.39	67.49		66 28.90			44.37		63.54		62.11 1		187 31.3	25 20.74		30.78	46.58	31.59
+AdaLAM +MAGSAC+	94.16 94.83	89.61 8. 73.42 7.				18.21	17.37	28.75	41.08	29.07 27.60	95.86 97.72	43.96 27.00	4.36 3.22	0.48		64 1. 91 2.	9 1.34	3.42			87.24 92.10		14.92 9.69	25.11 28.72	36.91 40.59		30.08 31.63	97.26 97.58	77.95 4 50.08 3	21 4.90 65 5.7	3 8.61 7 9.60	13.94	9.16	10.04	16.70	24.62 1	17.12	2.51	165 8.6	00 5.06	4.72	8.66	13.98	9.12
$+MAGSAC_{\downarrow}$	96.20	73.66 7.					16.19	28.24	40.26	28.23		26.96				07 2		3.16	6.49	3.61	94.11			27.96	40.06		30.48	97.71		47 5.7		15.02	10.14	9.71	16.28	23.72	16.57	3.02	48 8.1	88 5.79	4.59	8.46	13.76	8.94
+CC +MAGSAC+	43.30 59.28	88.22 88.	13 11.5 70 31.7	0 21:	6 35.48	22.78	40.40	58.24	72.72	57.12 56.70	44.18 76.00	58.68	74.80	1.60	1.71 11	09 5	0 7.92	17.28	29.67 30.01	18.29 18.34	18.88	75.06 84.47	96.56 43.38	37.88	51.71 57.54	59.03	61.29	n/a	n/a n/	n/a	n/a	n/a	n/a	n/a	n/a	n/a r	n/a n	ı/a n	a n/a	n/a	n/a	n/a	n/a	n/a
+MAGSAC _↓	64.27	95.75 61.	71 31.4	2 45.	60.42	45.94	40.28	58.31	73.49	57.36	79.11	65.11	37.20	4.40 1	1.01 20	52 11.	8 7.56	17.75	30.19	18.50	78.60	85.03	30.41	43.48	57.09	63.63	48.65	n/a	n/a n/	n/a	n/a	n/a	n/a	n/a	n/a	n/a r	n/a n	i/a 11,	a n/a	n/a	n/a	n/a	n/a	n/a
+CLNet +MAGSAC+	46.58 61.14	87.22 84. 94.55 66	85 1.6	4 4	7 13.39	6.50	35.36	54.49	71.23	53.69 54.08	70.26 79.49	62.57	52.58	0.50	1.91	20 2	7 6.35	16.33	29.00	17.24 17.06	31.70	76.53	86.03 42.18	28.22	41.82	48.50	51.14	54.46 65.27	88.22 81	60 4.2	9.42	18.91	10.85	41.23	59.06	73.19	57.83	1.04 :	159 6.0	3.2	15.03	27.23	42.40	28.22
+MAGSAC _↓	66.01	95.26 50.	00 21.6	9 35.	5 50.33	35.76	35.45	54.64	71.06	53.71	82.09	65.51	33.11	2.00	1.37 14	38 7.	8 6.73	16.03	28.05	16.94	78.99	84.89	29.78	43.01	56.05	61.99	47.71	69.33	94.51 58	20 22.5	4 35.60	50.78	36.31	41.57	59.26	73.34	58.06	8.47	69 25.3	33 16.50	15.04	27.26	42.48	28.26
+ConvMatch +MAGSAC+	57.31 68.56	86.27 74. 91.76 59	90 11.7	9 22:	5 35.94 9 49.97	23.32 36.07	34.81	52.73 53.48	67.85 68.78	51.80 52.50	65.30 77.95	63.01	65.15 42.85	1.84	5.49 15	91 8. 68 13	8 8.67 8 9.77	20.75	34.85	21.42	76.05 89.65	69.98 71.94	37.41	17.87 20.11	30.02	36.50 41.10	30.45 28.34	59.83	87.73 77 93.46 61	27 12.90 43 25.57	3 24.68 7 39.83	40.62	26.08	42.33	59.58	73.26 E	58.39 58.78	3.64 8 8.63 16	29 16.3	9.41	14.39	27.02	42.90	28.10 28.17
$+MAGSAC_{\downarrow}$	72.51	92.39 52.	28 22.8		0 50.06	36.31	35.66	53.63	68.68	52.66	80.77	66.58	37.29	5.03 1	2.60 24	34 13.	9 9.58	21.48	35.89	22.31	92.46	72.21	13.21	19.44	33.90	41.18	26.94	73.15	93.95 54	37 25.90	3 40.14	55.28	40.45	42.91	60.22	73.76	58.97	8.72 16	158 27.4	11 17.57	14.67	27.42	43.33	28.47
+DeMatch +MAGSAC ₊	51.71 64.47	87.83 80. 94.67 63.	18 9.8 28 21.5				34.20 34.55	53.24 53.75		52.43 52.97	65.89 78.37	61.71	62.60 41.41	1.37 4.10 1	1.99 13 1.58 21	01 6. 80 12.	6 7.82 6 8.35	18.89 19.80			61.52 82.03	76.10 83.60	52.04 26.97	24.73 32.00	38.97 48.71	46.92 56.89	40.66 41.14	58.34 68.48	87.40 77 93.66 61	96 11.3 97 24.7	6 22.43 1 38.84	38.17 54.02	23.99 39.19	42.43	60.05	74.00 E	58.83 58.66	3.37 7 8.70 16	.81 15.1 .44 27.1	55 8.91 14 17.41	14.87	27.67	43.42 43.44	28.65 28.71
$+MAGSAC_{\downarrow}$	68.90	95.29 55.					35.30	54.36		53.47	81.18			4.22 1	0.72 21	73 12	2 8.01			20.11	86.97	83.94	19.24	31.25	48.78		39.07	72.20	94.16 54	87 24.8			39.36	42.06	59.86	73.96		8.78	71 27.			27.41	43.11	28.45
+FC-GNN +MAGSAC+	50.48 53.48	94.36 84. 98.74 80.	27 14.1 97 45.3	7 24:		26.41	47.31 46.52	64.37 63.96	77.49 77.35	63.06		67.84	49.91 45.03			87 10. 32 18.	1 12.12		39.24		36.22 52.89		85.89 65.55	37.34 40.89	50.20 54.65	56.91 61.89	57.59 55.75	56.45 59.11	92.47 79 95.48 76	84 12.10 76 37.3	0 20.06 51.50	31.18	21.11		67.75 67.30	79.38	66.27 65.64 1	5.77 10 7.26 2	16.0	10.60	21.55	35.83 35.35	51.80 51.20	35.39 35.94
+MAGSAC _↓	54.82	98.96 78.	76 48.1	6 60.	73.36	-	47.06	63.97	77.16	62.73	77.10		42.76	8.36	7.93 30	.10 18.	0 11.70	24.90	39.15	25.25	61.49	85.02	53.93	40.73	54.47	61.65	52.69	60.24	95.65 74	71 37.9	52.12	68.47	51.86	50.91	67.11	78.99	65.67	7.54 2	.91 39.1	28.3	21.14	35.10	50.95	35.73
+GMS +MAGSAC+		81.82 67. 86.38 53.					35.72 36.95	51.47 52.12		50.61 51.27					1.18 £						50.28 76.67		56.97 29.42	33.04 37.87	46.20 49.18		47.11 42.74	64.39 72.42	84.36 57 86.59 46			20.36 44.14	12.32 32.80		47.97 48.23				.75 9.3 .85 24.1	5.35 50 16.55	9 13.09 3 13.38	23.39		24.11 24.42
+MAGSAC _↓	70.04	86.94 47.	51 31.3	-		10.12	37.85	53.13	65.44	52.14	87.09	55.67	21.95	3.22	7.92 14	74 8.	2 5.20	12.19	10000		83.45	76.57	21.17	37.82	49.11	54.53	40.66	75.52	86.98 41	87 21.7	8 32.68	44.41	32.96	33.56	48.09	60.49 4	47.38	-	08 24.6	16.70	13.34	23.36	35.79	24.16
+MS ² DG-Net +MAGSAC _†	66.10 77.25	78.94 54. 91.45 43.	24 0.0 00 22.6	0 0.	2 0.63 6 51.00	0.25 36.60	30.49	47.29 46.88	62.76 63.08	46.85	64.34 81.94	52.34 64.02	55.52 34.44	3.02	0.08 C	64 0. 79 9.	4 6.56 0 6.29	15.37 15.20	27.44 27.10		72.55 88.95	70.11 83.71	36.57 18.20	25.45	43.55	0.00 52.39	9.14 34.90	65.93 76.63	76.79 58 88.14 46	20 0.0 25 19.53	4 0.23 2 31.17	1.61	0.63 31.70	33.17 32.82	49.87	64.12 4 63.70 4	49.05 48.61	0.02 0 6.48 1:	13 0.1	36 0.34 75 13.70	11.03	21.44 21.28		22.63 22.48
+MAGSAC _↓ +NCMNet	79.99	92.06 38.	10 22.5	5 36.		- COLUMN	30.74	48.00	63.66	47.47	84.09	63.83	30.25	3.31	3.73 17	24 9.	6 6.72	15.72	27.63	16.69	91.89	84.14	13.58	24.01	44.00		33.60	79.27	88.61 41	18 19.8	3 31.56	44.91	32.10	32.81	49.17	63.52 4	48.50	6.58 13	192 22.6	00 13.83	11.23	21.35	34.88	22.49
+MAGSAC+	60.83	87.41 85. 94.64 67.	76 2.1 61 22.0	2 5. 5 35.	1 14.01 6 50.41	7.08 35.84	35.81 35.22	55.26 54.28	71.41 70.94	54.16 53.48	69.70 78.97	61.60 64.38	52.19 37.65	2.82	3.15 8 7.77 16	35 4. 48 9.	7 7.30 2 6.66	16.54	29.33 28.99		31.96 69.96		85.87 42.36	29.62 43.31	42.18 56.47	48.66 62.72	51.58	53.75 64.75	88.72 83 94.31 67	73 5.70 13 22.8	7 35.99	21.98 51.09	13.10 36.65	42.39 42.22	60.06 59.92	73.96 E	58.80 58.68	1.35 3 8.24 1	26 25.	26 3.98 10 16.20	15.39	27.40	43.17 42.61	28.82 28.37
+MAGSAC _↓ +OANet	65.73	95.34 50.	69 21.6	- 1001	- 0000	35.78	36.74	55.35	71.37	54.48	81.56	64.37	33.04	3.09	7.89 16	37 9.	2 6.77	16.42	28.76	17.32	79.05	84.62	29.90	42.98	56.45	62.79	48.03	68.88	94.81 50	50 23.1	36.36	51.35	36.96	42.21	59.81	73.85	58.62	8.47 1	64 25.3	34 16.48	15.57	27.67	42.62	28.62
+MAGSAC†	68.16 74.91	89.98 56. 94.58 47.		4 29.	2 45.18	30.25	31.55 31.15	49.81	67.06 67.11	49.57	81.07 86.20	59.83 61.84	35.22 26.14	2.66	7.62 16	83 6. 60 8.	8 5.17 6 6.00	13.09	25.28 26.06		81.87 90.61		28.75 15.81	11.50 22.97	20.23 38.35		21.35 31.11	72.65 77.50	90.84 55 94.11 46	55 10.3 50 18.1	2 19.84 5 31.05	32.79 45.96	20.98 31.72	35.31 35.19	53.37 53.32	68.83 E	52.50 52.41	2.42 6 5.54 11	.46 20.1	7.01 52 12.50	0 10.86	21.91		23.25 23.17
+MAGSAC _↓ +MOP	77.96 38.34	95.18 41.	75 16.5	4 29.	0 45.19	30.28	30.08	49.48	66.48	48.68	87.64	61.71	23.32	2.95	7.82 16	96 9.	4 5.72	14.36	26.02	15.37	93.08	83.96	11.62	23.03	38.18	46.76	29.90	79.98	94.55 41	79 18.4	3 31.28	46.27	31.99	35.43	53.35	68.73	52.50	5.58 11	.63 20.1	12.69	11.08	21.94	36.75	23.26
+MAGSAC+	57.18	93.60 72.		6 51.	3 64.60		44.58	62.30	75.78	60.89	74.24	64.17	46.86	7.52 1	5.13 27	38 17.		23.78	37.75	24.42	69.50		43.06	43.65	57.47	63.80	52.00	61.42	92.39 70	71 30.6	5 43.87	57.33	43.95	46.72	62.92	75.27	61.64 1	3.41 2	107 32.1	66 22.68	18.92	32.05	47.28	32.75
+MAGSAC _↓ +MOP+MiHo	62.56 33.27	94.27 64.	33 37.5	-		0.000	44.39	61.60	75.20	60.40	77.90	64.28	40.36	7.37 1	1.78 2	62 16.	8 12.00	24.36	38.10	24.83	78.72	84.71	30.16	43.14	38.37	63.77	48.57	40.04	92.94 62 77.67 93	58 31.3	1 44.70	58.06	44.69	46.52	62.77	75.19 €	61.50 1	3.44 2	138 33.1	10 22.97	18.65	31.83	47.07	32.52
+MAGSAC†	56.65		35.5	4 50.	64.17	49.97		62.67	76.08	61.83	72.00		50.51	7.44	5.21 28	28 17.					60.55			44.07	57.41		52.23	60.41		39 31.0	7 44.12	57.22	44.14	48.39	63.92	76.49	62.65	3.41 2	.63 4.:		19.36	33.10	48.81	33.36
+MAGSAC _↓ +MOP+MiHo+NCC	62.18	94.68 65. 80.15 66 .	50 36.4				44.02	61.28		60.26	75.88 40.56	63.95 50.18	43.44	7.38 1	5.41 28	54 17.	5 11.88	24.95		25.30	78.65 24.30		31.35	43.10	38.87	45.40	48.30	65.28 40.04	92.35 63 77.40 94	9 32.00	3 45.15 5 2.93		45.12	47.40	63.83 68.47	76.37 6	62.53 1		.57 4.			32.65	47.82	33.29
+MAGSAC+ +MAGSAC	51.30		05 39.8	5 53.	7 66.74	53.45	47.93	65.32	78.47	63.91	68.69	65.17			3.58	.00 19.	7 13.65	27.62	42.10	27.85	47.43	85.08	78.33	41.97	56.99	63.70	60.25	57.08		57 32.0	6 45.07	57.83	44.99	51.24	67.20	78.92 €		4.33 23	:02 33.4	23.61	1 21.20	35.33	51.17	35.90
+MAGSAC; +MOP+NCC	54.20 38.34	95.46 80. 84.51 95	34 41.1			54.75 8.24	47.69	65.18	78.46	63.77			52.50 74.81	8.32	3.98 81	37 19.	4 18.77	27.15	41.98	27.60	55.55 26.64	79.54	66.94	42.29	57.02	63.65	61.16	59.71 46.48	93.07 74 83.71 89	90 33.1	7 46.13 9 7.61	58.79 16.23	46.03	50.93	66.83	78.62 6	65.46 1	-	21 6.5			35.15	50.79	35.69
+MAGSAC†	51.89	94.45 83.	19 39.2	4 523	9 65.44	52.52			76.81	61.98	70.95	64.92	53.70		3.04 25		8 13.68	26.94		27.16	48.10		74.70	41.97	56.68	63.58	59.23	58.21	93.07 77	51 32.58	9 45.61	58.38	45.53	50.14	66.05	77.79		4.58 23	149 33.1	38 23.98	8 20.90	34.64	50.18	35.24
+MAGSAC _↓ +NCC	54.75 0.00	94.89 78. 54.90 100.	53 40.6				46.94	64.47	77.45	62.95		65.06 35.09			0.19	98 0	0 11.00	26.04		26.44	56.51 0.00	_	63.01	0.98	57.06	4.42		0.00	93.47 73	23 33.6	2 0.23		0.56	49.96	65.79	77.43 6			126 1.:			34.38	48.89	35.03
+MAGSAC+ +MAGSAC			83 31.7	6 44.	1 56.42				76.23	61.25		61.24	54.00	7.20 1	5.52 28	58 17.	3 11.95	24.91	39.30	25.39	58.94			42.51		61.02	55.71	57.90		93 25.6	37.49	49.96	37.70	47.55	63.48	76.07	62.36	0.60 17	.96 27.4					
+MAGSAC _↓	56.68	93.49 74.	68 33.1	5 463	4 59.19	46.39	44.59	62.55	76.40	61.18	72.41	61.25	47.54	7.42 1	7.01 28	85 17.	6 12.23	25.18	39.45	25.62	68.01	84.64	46.78	42.62	56.56	63.14	52.28	60.97	89.17 60	90 26.8	8 39.04	51.40	39.11	46.85	62.86	75.58 €	61.76 1	1.28 18	199 28.6	19.63	19.52	32.34	47.36	33.07