Pipeline	MegaDepth											ScanNet										
	Filtered	Precision	Recall	AUC$^F_{.5}$	AUC$^F_{10}$	AUC$^F_{20}$	AUC$^F_{\mathcal{L}}$	AUC$^E_{.5}$	AUC$^E_{10}$	AUC$^E_{20}$	AUC$^E_{\mathcal{L}}$	Filtered	Precision	Recall	AUC$^F_{.5}$	AUC$^F_{10}$	AUC$^F_{20}$	AUC$^F_{\mathcal{L}}$	AUC$^E_{.5}$	AUC$^E_{10}$	AUC$^E_{20}$	AUC$^E_{\mathcal{L}}$
DISK+LightGlue	0.00	92.21	**98.86**	43.86	59.45	72.01	58.44	49.87	67.23	79.79	65.63	0.00	62.69	**89.23**	4.92	10.89	20.58	12.13	**12.33**	24.72	37.48	24.84
+ACNe	46.11	92.84	54.29	21.96	36.45	53.08	37.16	34.54	54.81	71.48	53.61	48.62	64.69	45.93	3.41	7.47	15.18	8.69	6.73	15.31	26.78	16.27
+ACNe+MAGSAC↑	55.54	95.15	46.33	25.45	40.12	56.16	40.58	35.33	55.24	71.70	54.09	57.59	63.09	31.64	4.19	9.83	18.92	10.98	7.07	15.91	27.88	16.96
+ACNe+MAGSAC↓	61.28	95.85	40.82	26.11	40.96	56.70	41.26	36.14	56.26	72.48	54.96	61.62	63.18	27.45	3.98	9.63	19.02	10.88	7.67	16.59	27.88	17.38
+AdaLAM	0.00	92.21	**98.86**	43.86	59.45	72.01	58.44	49.87	67.23	79.79	65.63	0.00	62.69	**89.23**	4.92	10.89	20.58	12.13	**12.33**	24.72	37.48	24.84
+AdaLAM+MAGSAC↑	20.11	95.26	83.18	49.20	64.13	75.91	63.08	50.12	67.19	79.75	65.69	37.85	63.48	59.23	9.02	18.50	28.63	18.72	12.88	25.11	37.63	**25.21**
+AdaLAM+MAGSAC↓	30.99	95.98	72.72	49.21	64.01	76.01	63.08	50.66	68.03	80.32	66.34	46.35	63.60	50.67	**9.42**	18.50	28.81	18.91	12.52	24.66	36.81	24.67
+CC	15.50	85.91	84.75	32.48	46.83	60.69	46.67	41.23	58.50	71.69	57.14	23.47	52.13	66.31	4.15	9.52	17.27	10.31	9.68	19.32	29.74	19.58
+CC+MAGSAC↑	31.92	88.22	70.89	35.47	50.01	63.14	49.54	42.60	59.23	72.34	58.06	52.78	51.81	44.21	6.64	14.01	22.56	14.40	9.36	19.62	30.25	19.81
+CC+MAGSAC↓	41.12	89.09	62.01	35.12	49.60	62.93	49.21	43.42	60.59	73.67	59.22	58.84	52.00	38.29	6.93	13.63	21.96	14.17	9.48	19.24	29.22	19.31
+CLNet	13.41	92.77	86.92	22.39	36.71	53.11	37.40	38.14	57.38	73.22	56.24	35.36	65.26	57.67	2.26	5.39	11.44	6.36	9.02	18.51	29.56	19.03
+CLNet+MAGSAC↑	29.55	95.13	73.13	26.00	41.28	58.34	41.87	39.56	58.73	74.54	57.61	58.96	60.56	39.29	3.40	8.34	16.76	9.50	8.62	17.74	29.75	18.70
+CLNet+MAGSAC↓	38.98	95.84	64.06	26.49	41.29	57.06	41.61	40.43	59.25	74.85	58.18	64.49	60.67	33.74	2.98	7.60	16.00	8.86	7.76	17.00	29.08	17.94
+ConvMatch	65.31	92.82	35.13	14.37	26.48	41.51	27.45	24.76	43.31	61.97	43.34	65.51	**65.28**	31.83	1.85	5.96	13.57	7.13	6.62	15.43	26.02	16.02
+ConvMatch+MAGSAC↑	70.64	94.47	30.53	17.55	29.58	45.30	30.81	26.77	44.22	61.66	44.22	78.18	60.76	22.40	2.50	7.69	15.84	8.67	5.61	14.34	26.18	15.38
+ConvMatch+MAGSAC↓	74.24	95.07	27.05	17.61	30.35	46.18	31.38	26.33	44.48	62.43	44.41	80.87	60.83	19.53	3.03	8.13	16.58	9.25	5.99	15.22	26.92	16.04
+DeMatch	64.86	92.64	35.37	13.43	25.30	40.83	26.52	25.10	44.35	61.85	43.77	67.61	64.61	29.68	1.43	4.33	10.37	5.37	4.16	11.06	20.69	11.97
+DeMatch+MAGSAC↑	70.47	94.49	30.52	16.37	29.53	45.17	30.36	25.58	44.63	62.32	44.18	79.02	60.75	21.02	1.70	4.86	11.14	5.90	4.41	10.97	20.58	11.53
+DeMatch+MAGSAC↓	74.15	95.09	26.98	15.90	29.57	45.17	30.31	24.81	44.11	62.30	43.92	81.59	60.78	18.30	1.47	4.95	11.43	5.95	5.23	12.12	22.18	13.18
+FC-GNN	9.94	**94.88**	96.52	**53.54**	**68.05**	**79.10**	**66.83**	49.27	66.88	80.07	65.40	20.84	66.53	72.23	7.64	16.04	26.57	16.75	12.19	24.45	**37.84**	24.83
+FC-GNN+MAGSAC↑	11.60	**97.18**	95.11	**54.95**	**69.15**	**80.37**	**68.16**	**52.36**	**69.70**	**81.64**	**67.90**	25.75	65.25	62.78	**9.70**	**19.81**	**30.73**	**20.06**	12.73	24.90	37.75	25.13
+FC-GNN+MAGSAC↓	13.18	**97.29**	93.56	**54.97**	**69.19**	**80.50**	**68.22**	51.72	68.87	80.84	**67.14**	38.91	65.30	59.57	**9.95**	**19.97**	**30.26**	**19.96**	12.70	**25.64**	**38.04**	**25.46**
+GMS	13.73	90.27	86.48	22.41	57.86	70.17	56.81	45.40	61.90	74.21	60.50	34.48	60.01	64.70	5.16	11.59	21.69	12.81	11.49	23.30	35.54	23.44
+GMS+MAGSAC↑	30.27	92.35	72.36	46.49	60.57	71.80	59.62	47.42	63.59	75.50	62.17	53.09	59.15	45.81	7.88	16.75	26.63	17.09	11.44	22.79	35.22	23.15
+GMS+MAGSAC↓	39.49	93.04	63.49	46.04	60.44	72.11	59.53	49.40	65.37	76.73	63.84	60.76	59.36	38.68	8.00	16.69	26.82	17.17	11.05	22.91	35.27	23.08
+MAGSAC↑	20.11	95.26	83.18	49.20	64.13	75.91	63.08	50.12	67.19	79.75	65.69	37.85	63.48	59.23	9.02	18.50	28.63	18.72	**12.88**	25.11	37.63	25.21
+MAGSAC↓	30.99	95.98	72.72	49.21	64.01	76.01	63.08	50.66	68.03	80.32	66.34	46.35	63.60	50.67	**9.42**	18.50	28.81	18.91	12.52	24.66	36.81	24.67
+MS²DG-Net	75.71	93.52	24.67	26.36	41.80	57.26	41.80	22.11	38.47	56.07	38.38	56.84	64.42	33.25	2.47	6.50	14.28	7.75	4.78	11.47	21.63	12.63
+MS²DG-Net+MAGSAC↑	79.63	95.07	21.38	26.14	42.08	57.83	42.25	22.58	40.14	57.89	40.30	73.42	63.14	22.59	4.36	9.21	16.78	10.12	5.70	12.59	22.34	13.54
+MS²DG-Net+MAGSAC↓	82.12	96.07	18.94	27.32	42.23	57.89	42.48	25.43	43.07	60.30	42.93	75.87	63.35	20.25	3.84	8.61	16.26	9.57	4.52	11.86	21.23	12.54
+**NCC**	0.00	74.89	79.57	14.95	27.36	42.86	28.39	32.78	48.01	62.45	47.75	0.00	58.00	**89.85**	2.18	6.08	13.41	7.22	9.99	21.62	34.20	21.94
+**NCC**+MAGSAC↑	43.95	89.03	55.72	27.27	38.39	50.63	38.76	33.96	49.31	63.84	49.04	47.51	62.77	50.02	6.39	14.33	24.73	15.15	10.20	21.51	33.99	21.90
+**NCC**+MAGSAC↓	50.27	89.45	49.94	27.28	38.75	50.06	38.70	33.83	49.84	64.42	49.36	53.01	62.92	44.87	6.82	14.66	24.89	15.46	10.62	21.76	34.52	22.30
+NCMNet	12.23	92.70	88.11	22.43	37.05	53.82	37.77	38.55	57.78	73.14	56.49	31.06	64.68	61.91	2.51	7.05	14.90	8.36	8.00	18.14	30.22	18.79
+NCMNet+MAGSAC↑	28.56	94.86	74.11	27.16	42.15	58.38	42.57	39.69	59.30	74.88	57.96	55.94	59.92	42.37	4.08	9.34	18.01	10.47	8.15	18.25	30.57	18.99
+NCMNet+MAGSAC↓	38.11	95.61	64.96	27.90	42.29	57.94	42.71	38.84	57.85	74.08	56.92	61.96	60.07	36.32	4.35	10.25	18.71	11.10	8.92	19.12	31.02	19.69
+OANet	**80.86**	93.58	10.43	7.24	16.14	28.18	17.19	13.06	26.17	44.18	27.81	**86.78**	63.49	10.39	0.80	2.58	7.81	3.73	2.21	6.53	14.30	7.68
+OANet+MAGSAC↑	91.11	94.43	9.21	6.84	15.03	28.17	16.68	12.95	26.72	44.64	28.10	**92.58**	56.21	6.78	0.83	3.02	8.26	4.04	1.95	6.30	14.17	7.48
+OANet+MAGSAC↓	**92.04**	94.87	8.34	7.07	14.90	27.20	16.39	13.21	27.19	45.39	28.66	**93.35**	56.22	6.10	0.93	3.41	8.97	4.44	2.19	6.66	14.65	7.83
+**MOP**$_{0.5K}$+**MiHo**	0.40	92.28	98.71	44.78	60.34	72.93	59.35	49.02	66.40	79.16	64.96	20.18	60.75	78.86	4.90	10.90	20.87	12.22	11.99	24.51	37.44	24.64
+**MOP**$_{0.5K}$+**MiHo**+MAGSAC↑	20.25	95.26	83.14	49.56	64.36	76.04	63.32	49.92	66.77	79.50	65.40	44.26	62.61	55.50	8.89	18.04	28.20	18.38	12.51	24.92	37.36	25.00
+**MOP**$_{0.5K}$+**MiHo**+MAGSAC↓	31.16	96.03	72.69	49.09	63.80	75.70	62.86	50.51	67.94	80.34	66.26	52.52	62.74	47.13	9.20	18.55	28.85	18.87	12.14	24.46	37.01	24.54
+**MOP**$_{0.5K}$+**MiHo**+**NCC**	0.40	85.05	92.18	18.94	33.03	49.63	33.87	48.44	66.36	79.29	64.69	20.18	57.35	78.87	2.57	6.89	14.74	8.07	11.60	23.76	36.94	24.10
+**MOP**$_{0.5K}$+**MiHo**+**NCC**+MAGSAC↑	27.66	95.89	76.42	43.01	57.16	69.49	56.55	47.96	66.06	79.30	64.44	48.99	62.45	51.50	8.05	17.16	27.66	17.62	12.61	24.66	36.74	24.67
+**MOP**$_{0.5K}$+**MiHo**+**NCC**+MAGSAC↓	32.42	96.34	71.86	43.46	58.06	70.90	57.47	49.61	67.65	80.18	65.81	53.93	62.57	46.42	8.69	18.04	28.19	18.31	12.37	24.29	36.54	24.54
+**MOP**$_{1.0K}$+**MiHo**	0.37	92.30	**99.80**	44.83	60.34	72.94	59.37	49.40	66.62	79.31	65.11	20.00	60.88	79.04	4.99	10.82	20.80	12.20	11.93	24.48	37.29	24.57
+**MOP**$_{1.0K}$+**MiHo**+MAGSAC↑	20.23	95.28	83.18	49.52	64.32	76.07	63.30	49.75	66.89	79.52	65.39	44.14	62.71	55.62	9.32	**18.73**	**29.04**	19.03	12.35	24.76	37.19	24.66
+**MOP**$_{1.0K}$+**MiHo**+**NCC**	0.37	95.06	92.29	19.02	33.01	49.63	33.99	47.84	65.94	79.00	64.26	20.00	57.43	78.89	2.75	6.91	14.89	8.18	11.46	23.56	36.80	23.94
+**MOP**$_{1.0K}$+**MiHo**+**NCC**+MAGSAC↑	27.63	95.89	76.48	42.31	56.57	69.14	56.00	47.68	65.83	79.13	64.21	48.89	62.49	51.53	7.85	17.14	27.26	17.42	12.33	24.64	36.81	24.60
+**MOP**$_{1.0K}$+**MiHo**+**NCC**+MAGSAC↓	32.39	96.33	71.90	43.28	57.69	70.46	57.14	49.08	67.31	80.02	65.47	53.83	62.59	46.37	8.69	17.73	27.65	18.02	11.60	23.58	36.26	23.81
+**MOP**$_{1.5K}$+**MiHo**	0.39	92.27	**99.72**	44.75	60.34	72.86	59.32	49.32	66.67	79.39	65.12	19.82	60.98	79.35	4.89	10.78	20.67	12.12	11.47	24.35	37.49	24.44
+**MOP**$_{1.5K}$+**MiHo**+MAGSAC↑	20.26	95.26	83.11	49.31	64.05	75.78	63.05	49.55	66.60	79.33	65.16	44.00	62.88	55.96	9.10	18.36	28.55	18.67	12.64	24.96	37.80	25.11
+**MOP**$_{1.5K}$+**MiHo**+MAGSAC↓	31.13	96.04	72.71	48.92	63.77	75.79	62.82	50.09	67.75	80.35	66.06	52.32	63.00	47.42	9.22	18.58	28.67	18.93	12.40	**25.18**	36.40	25.09
+**MOP**$_{1.5K}$+**MiHo**+**NCC**	0.39	85.05	92.19	19.06	32.95	49.65	33.89	48.05	66.00	78.98	64.34	19.82	57.50	78.92	2.75	6.92	14.66	8.11	11.98	23.56	36.40	23.98
+**MOP**$_{1.5K}$+**MiHo**+**NCC**+MAGSAC↑	27.63	95.89	76.47	42.61	56.99	69.45	56.35	47.63	65.97	79.30	64.30	48.79	62.57	51.58	7.65	17.14	27.48	17.42	12.70	24.88	37.37	24.98
+**MOP**$_{1.5K}$+**MiHo**+**NCC**+MAGSAC↓	32.36	96.33	71.91	43.53	58.31	71.07	57.64	48.30	66.69	79.62	64.87	53.64	62.73	46.79	8.51	17.70	27.66	17.96	12.35	24.20	36.35	24.47
+**MOP**$_{2.0K}$+**MiHo**	0.40	92.27	**99.72**	44.49	60.07	72.67	59.08	49.36	66.72	79.40	65.22	19.81	60.96	79.29	4.93	10.74	20.57	12.06	11.62	24.32	37.20	24.38
+**MOP**$_{2.0K}$+**MiHo**+MAGSAC↑	20.25	95.25	83.13	49.38	64.09	75.85	63.11	49.58	66.69	79.40	65.22	43.97	62.79	55.83	8.78	18.08	28.68	18.73	12.39	**25.26**	**37.90**	**25.32**
+**MOP**$_{2.0K}$+**MiHo**+MAGSAC↓	31.13	96.04	72.73	49.12	63.89	75.88	62.96	50.34	67.96	80.52	66.27	52.23	62.95	47.40	9.11	18.40	28.68	18.73	12.39	25.17	37.50	25.00
+**MOP**$_{2.0K}$+**MiHo**+**NCC**	0.40	85.05	92.18	19.02	32.75	49.54	33.77	48.13	65.98	79.00	64.37	19.81	57.44	78.79	2.66	6.84	14.63	8.04	11.89	23.72	36.46	24.24
+**MOP**$_{2.0K}$+**MiHo**+**NCC**+MAGSAC↑	27.62	95.87	76.47	42.65	56.78	69.12	56.18	47.44	65.86	79.21	64.17	48.80	62.52	51.46	7.56	16.72	26.78	17.02	12.33	24.34	36.48	24.38
+**MOP**$_{2.0K}$+**MiHo**+**NCC**+MAGSAC↓	32.38	96.32	71.91	43.75	58.33	71.01	57.70	48.98	67.09	79.78	65.28	53.70	62.61	46.61	8.44	17.49	27.32	17.75	12.32	23.92	36.48	24.24
+**MOP**$_{0.5K}$	0.78	92.31	**99.41**	45.11	60.55	73.18	59.61	48.98	66.34	79.07	64.79	22.78	59.39	75.01	5.13	11.06	21.17	12.45	11.32	23.54	37.08	24.11
+**MOP**$_{0.5K}$+MAGSAC↑	20.38	95.18	82.98	49.46	63.94	75.94	63.11	50.35	67.10	79.77	65.70	47.08	61.14	52.95	8.72	17.71	27.82	18.08	12.70	24.62	37.07	24.62
+**MOP**$_{0.5K}$+MAGSAC↓	31.25	95.95	72.57	49.28	63.85	75.89	63.01	50.80	67.91	80.44	66.28	55.21	61.28	44.68	9.17	18.27	28.40	18.61	**13.09**	25.07	37.06	25.07
+**MOP**$_{0.5K}$+**NCC**	0.78	84.83	91.61	17.60	30.72	45.99	31.44	46.80	64.81	77.94	63.18	22.63	54.57	75.80	2.63	7.10	14.40	8.04	11.04	23.84	36.45	24.11
+**MOP**$_{0.5K}$+**NCC**+MAGSAC↑	28.18	95.72	75.80	42.05	55.91	68.41	55.29	48.84	66.03	79.52	64.50	51.50	60.82	48.94	8.16	16.98	27.22	17.45	12.48	24.01	36.67	24.15
+**MOP**$_{0.5K}$+**NCC**+MAGSAC↓	33.00	96.15	71.19	42.08	56.14	68.01	55.11	48.38	65.68	78.50	64.19	56.22	60.93	44.13	7.85	17.00	27.01	17.28	11.90	24.29	37.29	24.56
+**MOP**$_{1.0K}$	0.76	92.30	**99.44**	45.24	60.68	73.47	59.86	48.91	66.29	79.01	64.74	23.96	59.47	75.26	5.26	11.34	21.40	12.66	11.26	23.94	36.93	24.05
+**MOP**$_{1.0K}$+MAGSAC↑	20.42	95.20	82.96	49.48	64.04	76.01	63.18	49.54	66.41	79.17	65.04	46.87	61.15	52.96	8.41	17.43	27.38	17.74	12.12	24.02	36.71	24.28
+**MOP**$_{1.0K}$+MAGSAC↓	31.25	95.96	72.59	49.33	63.80	75.91	63.01	50.62	67.78	80.29	66.23	54.97	61.31	44.78	8.62	17.76	27.91	18.09	12.37	24.50	36.68	24.59
+**MOP**$_{1.0K}$+**NCC**	0.76	84.82	91.63	17.61	30.98	46.68	31.76	46.45	64.52	77.82	62.93	23.96	56.02	74.80	2.81	7.02	14.24	8.02	11.83	23.70	36.49	24.04
+**MOP**$_{1.0K}$+**NCC**+MAGSAC↑	28.18	95.69	75.79	41.31	55.58	68.13	55.01	47.75	65.55	78.56	63.96	51.21	60.93	49.10	7.99	17.07	27.18	17.41	11.71	23.61	35.94	23.75
+**MOP**$_{1.0K}$+**NCC**+MAGSAC↓	32.94	96.18	71.29	42.84	57.03	69.24	56.37	46.95	65.06	78.32	63.45	56.06	61.03	44.09	8.01	17.01	26.98	17.33	12.49	24.23	36.73	24.48
+**MOP**$_{1.5K}$	0.77	92.30	**99.41**	44.83	60.49	73.14	59.49	47.90	65.54	78.46	64.06	23.88	59.47	75.34	5.42	11.55	21.14	12.80	11.69	24.29	37.17	24.38
+**MOP**$_{1.5K}$+MAGSAC↑	20.38	95.19	82.99	49.50	64.28	76.12	63.33	49.89	66.78	79.06	65.37	46.62	61.20	53.13	8.59	17.62	27.79	18.07	**13.93**	24.65	36.94	24.74
+**MOP**$_{1.5K}$+MAGSAC↓	31.27	95.96	72.56	49.20	63.64	75.58	62.81	**51.13**	**68.23**	**80.75**	**66.75**	54.94	61.32	44.84	8.83	18.06	28.29	18.42	11.94	24.19	36.88	24.59
+**MOP**$_{1.5K}$+**NCC**	0.77	84.82	91.61	17.60	31.20	46.77	31.86	47.15	64.80	77.87	63.27	23.88	56.01	74.91	2.93	7.12	14.43	8.16	11.97	24.02	36.76	24.25
+**MOP**$_{1.5K}$+**NCC**+MAGSAC↑	28.23	95.71	75.75	41.58	55.87	68.53	55.33	46.56	65.50	78.48	63.51	51.23	60.97	49.22	7.72	16.95	27.32	17.33	11.43	23.72	36.53	23.89
+**MOP**$_{1.5K}$+**NCC**+MAGSAC↓	32.93	96.19	71.30	43.03	57.64	69.52	56.73	47.73	65.11	78.33	63.73	55.95	61.10	44.32	7.96	17.31	27.79	17.69	12.17	25.01	37.66	24.67
+**MOP**$_{2.0K}$	0.77	92.30	**99.42**	44.61	60.37	73.11	59.36	47.86	65.89	78.83	64.19	23.91	59.49	75.30	5.39	11.50	21.27	12.72	11.55	24.15	37.04	24.15
+**MOP**$_{2.0K}$+MAGSAC↑	20.38	95.18	82.98	49.33	64.00	75.84	63.06	49.84	66.82	79.55	65.40	46.86	61.23	53.11	8.65	17.50	27.77	17.97	**12.87**	24.91	36.99	24.93
+**MOP**$_{2.0K}$+MAGSAC↓	31.26	95.97	72.56	48.71	63.34	75.48	62.51	50.78	**68.24**	80.66	66.57	54.93	61.28	44.81	8.83	18.06	28.29	18.39	11.94	23.89	36.37	24.31
+**MOP**$_{2.0K}$+**NCC**	0.77	84.82	91.62	17.76	31.19	46.80	31.87	46.99	64.86	77.90	63.25	23.91	56.01	74.73	3.05	7.22	14.42	8.23	11.77	24.13	36.64	24.25
+**MOP**$_{2.0K}$+**NCC**+MAGSAC↑	28.22	95.70	75.75	41.14	55.55	68.22	54.97	46.41	64.90	78.33	63.73	51.27	60.94	49.02	8.18	17.29	27.92	17.80	12.02	24.16	36.73	24.68
+**MOP**$_{2.0K}$+**NCC**+MAGSAC↓	32.93	96.18	71.29	42.00	56.72	68.68	55.87	47.38	65.34	78.59	63.77	55.95	61.08	44.28	8.13	17.74	27.90	18.01	12.52	24.81	37.54	24.96