	T213-	D	p	14		MegaDepth		477-77			17	750	p	n	111-5	477-5	ScanNet	17	170-5			17
Pipeline	Filtered	Precision	Recall	$AUC_{@5}^{F}$	$AUC_{@10}^{F}$	$AUC_{G20}^F$	$\mathrm{AUC}^F_{\mathcal{L}}$	$AUC_{@5}^{E}$	$AUC_{@10}^{E}$	$\mathrm{AUC}^E_{@20}$	$\mathrm{AUC}_{\mathbb{Z}}^E$	Filtered	Precision	Recall	$AUC_{05}^F$	$AUC_{@10}^{F}$	$AUC_{@20}^F$	$\mathrm{AUC}_{\mathbb{Z}}^F$	$AUC_{05}^{E}$	$AUC_{@10}^{E}$	$AUC_{@20}^{E}$	$\mathrm{AUC}_{\angle}^{E}$
ALIKED+LightGlue	0.00	92.94	99.74	40.94	57.17	71.09	56.40	46.37	63.86	77.07	62.43	0.00	64.89	92.41	4.84	11.48	21.29	12.54	12.78	26.20	40.73	26.57
+ACNe +ACNe+MAGSAC	39.55	93.59	60.93	20.23	34.04	50.21	34.83	32.28	51.00	67.70	50.33	42.99	66.91	53.91	2.92	8.63	18.42	9.99	7.15	17.18	30.08	18.14
	47.09 51.47	95.46 95.96	54.68 50.48	24.32	39.25	54.93 56.01	39.50	33.00 34.96	52.44 53.61	68.88	51.44 52.84	58.28 62.07	67.64 67.68	41.12 37.28	4.86	11.32	21.24	12.48	8.00 8.19	18.48	31.24	19.24
+Adalam +Adalam	0.00	95.96 92.94	50.48 99.74	24.46 40.94	39.55 57.17	56.01 71.09	40.01 56.40	34.96 46.37	53.61 63.86	69.96 77.07	52.84 62.43	0.00	64.89	37.28 92.41	4.68	10.76	21.27	12.23	8.19 12.78	17.95 26.20	31.06 40.73	26.57
+AdaLAM+MAGSAC†	15.79	95.61	87.02	49.17	64.57	76.58	63.44	45.63	63.60	77.59	62.43	33.07	67.88	65.32	8.47	18.50	30.52	19.16	12.78	26.20	40.73	26.47
$+AdaLAM+MAGSAC_{\downarrow}$	23.56	96.17	79.53	49.53	64.59	76.64	63.59	47.53	65.52	78.80	63.95	40.40	67.89	57.72	9.19	19.05	30.97	19.74	12.79	26.39	41.15	26.78
+CC	17.27	86.12	82.93	29.11	43.20	57.39	43.23	38.42	55.37	68.71	54.16	34.63	53.58	59.78	3.83	9.71	18.55	10.70	8.49	18.23	28.85	18.52
+CC+MAGSAC <sub>1</sub> +CC+MAGSAC <sub>1</sub>	29.40	88.14	72.86	34.56	48.96	61.61	48.38	38.95	56.38	69.48	54.94	54.84	54.68	43.62	5.62	11.59	20.59	12.60	8.90	19.02	29.43	19.12
+CLNet	35.75 14.71	88.64 93.37	66.74 85.54	35.18 20.53	49.19 34.12	61.74 50.49	48.70 35.04	39.98 35.87	56.93 54.44	69.93 69.86	55.61 53.39	59.28 47.13	54.68 67.68	38.85 49.92	5.42 1.96	11.64 4.71	20.50	12.52 5.97	8.52 6.39	18.18 15.45	29.05 26.74	18.58
+CLNet+MAGSAC+	26.33	95.33	75.94	26.48	40.88	56.77	41.38	36.83	55.86	71.71	54.80	60.28	64.06	39 14	2.82	7.50	15.38	8.57	6.39	15.45	26.74	16.19
+CLNet+MAGSAC <sub>↓</sub>	32.63	95.84	69.90	27.63	41.74	57.11	42.16	38.61	57.09	72.07	55.92	63.92	64.13	35.39	3.04	8.23	16.31	9.19	6.16	14.73	25.27	15.39
+ConvMatch	66.42	92.97	33.65	14.03	25.57	40.87	26.82	23.99	41.33	58.98	41.43	65.94	67.58	33.40	1.30	5.09	13.32	6.57	5.31	13.02	24.53	14.29
+ConvMatch+MAGSAC <sub>↑</sub> +ConvMatch+MAGSAC	70.20	93.98	30.58	15.81	27.24	43.14	28.73	25.14	42.59	60.31	42.68	75.08	64.26	25.88	2.12	6.84	14.43	7.80	5.61	13.60	24.50	14.57
+ConvMatch+MAGSAC <sub>↓</sub> +DeMatch	72.56	94.39	28.31	16.92	29.22	44.25	30.13	24.73	42.88	60.47	42.69	77.14	64.36	23.71	2.66	7.08	14.49	8.08	5.20	12.70	23.78	13.89
	64.54 68.46	93.35 94.63	35.59 32.34	11.90 14.62	23.61 26.23	38.97 40.49	24.82 27.11	23.41 23.73	41.14	59.07 60.44	41.21 42.04	67.90 76.04	66.19 63.79	30.66 24.27	1.07 1.76	3.25 4.65	9.02 10.48	4.45 5.63	3.62 3.13	10.00 9.25	19.32 19.70	10.98 10.69
+DeMatch+MAGSAC	70.94	95.04	29.96	15.03	26.64	40.10	27.26	23.03	40.93	58.79	40.92	78.03	63.86	22.26	1.92	4.98	10.62	5.84	3.79	9.91	19.28	10.99
+FC-GNN	13.95	96.81	90.52	50.53	65.54	77.46	64.51	48.95	66.80	79.35	65.03	32.14	69.95	65.87	7.23	15.99	26.74	16.65	12.24	25.16	38.74	25.38
$+FC-GNN+MAGSAC_{\uparrow}$	15.88	97.16	89.02	52.94	67.46	78.86	66.42	50.15	67.26	79.52	65.64	40.13	70.16	59.98	8.21	18.05	29.46	18.58	12.87	25.62	39.66	26.05
+FC-GNN+MAGSAC↓	17.51	97.29	87.42	53.12	67.71	79.10	66.64	49.01	66.53	79.32	64.95	42.72	70.20	57.23	8.60	18.22	29.63	18.82	12.80	25.66	39.30	25.92
+GMS +GMS+MAGSAC+	20.28	90.42	79.96	37.25	52.99	66.68	52.31	42.44	58.21	70.48	57.04	53.21	64.58	47.08	2.72	7.93	16.01	8.89	7.03	14.82	25.08	15.64
+GMS+MAGSAC <sub>1</sub>	31.13 36.96	91.45 91.91	70.87 65.28	45.01 44.31	58.84 58.97	70.17 70.63	58.01 57.97	42.47 42.27	58.99 58.69	71.53 71.39	57.67 57.45	63.30 66.96	61.66 61.74	37.05 33.31	4.05 4.03	9.85 10.24	18.36 18.73	10.76 11.00	6.95 7.41	14.95 15.58	25.40 25.91	15.77 16.30
+MAGSAC↑	15.79	95.61	87.02	49.17	64.57	76.58	63.44	45.63	63.60	77.59	62.27	33.07	67.88	65.32	8.47	18.50	30.52	19.16	12.60	26.30	40.53	26.47
+MAGSAC <sub>↓</sub>	23.56	96.17	79.53	49.53	64.59	76.64	63.59	47.53	65.52	78.80	63.95	40.40	67.89	57.72	9.19	19.05	30.97	19.74	12.79	26.39	41.15	26.78
+MS <sup>2</sup> DG-Net	70.93	93.79	29.20	22.27	36.25	53.20	37.24	23.05	38.06	54.36	38.49	59.22	67.53	35.79	2.26	5.53	13.03	6.94	4.46	10.71	19.77	11.65
+MS <sup>2</sup> DG-Net+MAGSAC <sub>↑</sub>	74.78	95.52	26.15	23.48	37.60	53.04	38.04	22.09	38.41	56.07	38.86	69.35	68.00	28.03	3.22	7.04	14.49	8.25	4.35	9.93	19.19	11.15
+MS <sup>2</sup> DG-Net+MAGSAC↓ +NCC	76.85	95.99	24.17	24.16	38.29	53.76	38.74	22.49	38.85	56.71	39.35	71.37	67.95	26.04	2.46	6.65	14.13	7.74	4.58	10.49	18.91	11.33
+NCC+MAGSAC <sub>0</sub>	0.00 36.53	78.13 89.49	82.30 62.34	14.50 28.61	27.55 39.62	43.78 52.27	28.61 40.17	32.99 33.01	47.54 48.43	61.64	47.39 48.17	0.00 40.07	60.81 66.88	<b>88.96</b> 59.09	2.04 6.90	5.85 15.18	13.89 25.56	7.26 15.88	10.82 11.30	22.64 22.89	36.37 36.85	23.28 23.68
+NCC+MAGSAC↓	42.34	89.97	57.03	29.55	40.46	52.59	40.17	34.43	49.29	63.44	49.06	45.67	66.79	52.98	6.89	15.51	26.07	16.16	11.09	23.07	36.47	23.54
+NCMNet	13.27	93.43	87.04	22.55	36.29	52.45	37.10	36.29	55.67	70.99	54.32	44.35	67.62	52.84	2.04	5.44	12.04	6.50	7.04	15.88	27.77	16.90
+NCMNet+MAGSAC†	25.16	95.36	77.16	27.54	42.24	57.59	42.46	36.33	54.95	71.06	54.11	58.17	64.38	41.39	3.30	8.08	15.82	9.06	6.65	14.77	26.02	15.81
+NCMNet+MAGSAC <sub>↓</sub> +OANet	31.60	95.88	71.02	27.80	43.13	58.86	43.26	37.89	56.77	72.35	55.67	62.13	64.43	37.28	3.29	7.71	15.29	8.76	6.81	16.02	27.08	16.64
	89.75 90.64	94.33	10.37 9.65	4.01	9.55 10.71	20.89 21.60	11.48	9.65	21.59 23.42	37.77	23.01 24.48	87.99 92.61	66.18 53.41	10.56 7.23	0.66	1.80 1.82	5.90 5.72	2.79 2.74	1.14	4.07 4.05	10.80	5.34 5.28
+OANet+MAGSAC <sub>1</sub>	91.12	94.67	9.65	5.38	11.71	23.26	13.45	10.90	23.42	39.12	23.49	92.61	53.41	6.90	0.70	1.82	5.62	2.74	1.63	4.05	11.27	5.28
+MOP <sub>0.5K</sub> +MiHo	0.70	92.93	99.16	41.18	57.72	71.80	56.90	47.15	64.50	77.64	63.10	11.51	64.79	86.99	5.47	12.78	22.88	13.71	12.77	25.91	40.00	26.23
$+MOP_{0.5K}+MiHo+MAGSAC_{\uparrow}$	15.97	95.57	86.80	49.20	64.37	76.52	63.36	46.59	64.01	77.60	62.74	37.60	67.67	63.07	8.59	18.30	30.14	19.01	12.78	26.29	40.21	26.43
$+MOP_{0.5K}+MiHo+MAGSAC_{\downarrow}$	23.70	96.11	79.37	49.46	64.40	76.50	63.45	47.43	65.49	78.82	63.91	44.80	67.76	55.71	8.88	18.77	30.47	19.37	12.76	26.30	40.71	26.59
$+MOP_{0.5K}+MiHo+NCC$ $+MOP_{0.5K}+MiHo+NCC+MAGSAC_{\uparrow}$	0.70	88.01	94.38	19.13	33.82	50.22	34.39	47.25	65.20	78.72	63.73	11.51	62.26	85.56	2.71	7.19	16.57	8.82	13.43	27.30	41.13	27.29
	21.49 25.56	96.19 96.54	82.20 78.29	44.23 44.67	58.33 59.50	71.32	57.96 59.02	47.98 48.01	65.59 65.75	78.87 78.73	64.15	39.76 44.81	67.26 67.41	61.56 56.43	8.93 8.46	19.02	30.44	19.46	12.80	26.06 26.24	39.77 40.23	26.21 26.49
+MOP <sub>1.0K</sub> +MiHo	0.64	92.99	99.29	41.02	57.51	71.67	56.73	46.99	64.55	77.62	63.05	11.42	64.76	86.89	5.23	12.71	22.69	13.54	12.99	26.24	39.99	26.49
$+MOP_{1.0K}+MiHo+MAGSAC_{\uparrow}$	15.94	95.65	86.91	49.29	64.42	76.44	63.38	46.27	63.76	77.44	62.49	37.55	67.70	63.16	8.47	18.39	30.31	19.06	12.69	26.31	40.63	26.54
$+MOP_{1.0K}+MiHo+MAGSAC_{\downarrow}$	23.66	96.19	79.50	49.60	64.41	76.41	63.47	47.39	65.43	78.80	63.87	44.73	67.79	55.87	9.15	18.88	30.28	19.44	12.46	25.94	40.26	26.22
+MOP <sub>1.0K</sub> +MiHo+NCC	0.64	88.12	94.60	19.22	33.88	50.27	34.46	47.92	65.66	78.92	64.17	11.42	62.32	85.76	2.44	6.66	16.11	8.40	13.48	27.66	41.72	27.62
$+MOP_{1.0K}+MiHo+NCC+MAGSAC_{\uparrow}$ $+MOP_{1.0K}+MiHo+NCC+MAGSAC_{\downarrow}$	21.44 25.52	96.30 96.68	82.41 78.51	44.61 45.15	58.44 59.58	71.13 72.75	58.06 59.16	47.79 48.13	65.53 66.22	78.87 78.80	64.06 64.38	39.86 44.87	67.23 67.37	61.01 55.87	8.53 8.91	18.66 19.84	30.04 31.36	19.08 20.03	12.53 12.96	25.91 26.52	39.79 40.52	26.08 26.67
+MOP <sub>1.5K</sub> +MiHo	0.61	96.68	99.29	45.15	57.50	72.75	56.71	48.13	64.64	78.80 77.80	63.20	11.15	64.71	87.10	5.20	12.73	22.68	13.54	12.96	26.52	40.52	26.67
$+MOP_{1.5K}+MiHo+MAGSAC+$	15.91	95.63	86.92	49.13	64.36	76.47	63.32	46.06	63.58	77.45	62.36	37.50	67.59	62.98	8.40	18.41	30.29	19.03	12.27	26.01	40.36	26.21
$+MOP_{1.5K}+MiHo+MAGSAC_{\downarrow}$	23.66	96.17	79.47	49.54	64.48	76.53	63.51	47.27	65.28	78.78	63.78	44.61	67.63	55.68	8.98	18.68	30.05	19.24	12.60	25.75	40.07	26.14
$+MOP_{1.5K}+MiHo+NCC$	0.61	88.07	94.59	19.14	33.86	50.26	34.42	47.10	65.00	78.48	63.53	11.15	62.23	85.75	2.54	6.87	15.98	8.46	13.75	27.89	42.04	27.89
+MOP <sub>1.5K</sub> +MiHo+NCC+MAGSAC <sub>↑</sub> +MOP <sub>1.5K</sub> +MiHo+NCC+MAGSAC <sub>↓</sub>	21.41	96.28	82.41	44.68	58.90	71.67	58.41	48.03	66.16	79.40	64.53	39.76	67.16	61.07	8.80	18.81	30.19	19.27	12.29	25.76	39.70	25.92
+MOP <sub>1.5K</sub> +MiHo+NCC+MAGSAC <sub>↓</sub> +MOP <sub>2.0K</sub> +MiHo	25.51 0.62	96.64 92.97	78.49	45.30 41.13	59.80 57.44	72.95 71.59	59.35 56.72	47.19 46.87	65.42 64.46	78.20 77.53	63.60 62.95	44.73 11.16	67.19 64.72	55.75 87.07	8.74 5.30	19.38 12.75	30.69 22.75	19.61	13.24 12.55	26.54 25.67	40.74 39.61	26.84 25.94
$+MOP_{2.0K}+MiHo+MAGSAC_{\uparrow}$	15.89	95.64	99.29 86.95	49.21	64.34	71.59	63.35	46.87	63.80	77.53	62.56	37.51	67.62	62.98	5.30 8.54	18.58	30.64	19.25	12.55	25.96	40.42	26.18
$+MOP_{2.0K}+MiHo+MAGSAC_{\downarrow}$	23.66	96.18	79.49	49.57	64.41	76.42	63.47	47.70	65.51	78.83	64.01	44.58	67.65	55.69	8.88	18.78	30.46	19.37	12.42	25.74	40.15	26.10
+MOP <sub>2.0K</sub> +MiHo+NCC	0.62	88.05	94.50	19.29	33.83	50.16	34.43	47.22	65.07	78.47	63.59	11.16	62.24	85.77	2.57	6.98	15.95	8.50	13.41	27.43	42.00	27.61
$+MOP_{2.0K}+MiHo+NCC+MAGSAC_{\uparrow}$ $+MOP_{2.0K}+MiHo+NCC+MAGSAC_{\downarrow}$	21.46	96.24	82.26	44.62	58.78	71.65	58.35	47.90	65.97	79.25	64.37	39.75	67.17	61.07	8.54	18.42	29.64	18.87	12.31	25.63	39.27	25.74
+MOP <sub>2.0K</sub> +MiHo+NCC+MAGSAC <sub>↓</sub> +MOP <sub>0.5K</sub>	25.51	96.60 93.00	78.37	44.82 41.48	59.14 57.73	72.40 71.62	58.78 56.94	47.73 46.61	65.75 64.08	78.32 77.63	63.93 62.77	44.76 18.41	67.18 64.26	55.79 81.42	9.08 5.45	19.57 12.76	30.79 22.86	19.81 13.69	13.37	26.82 25.29	40.51 39.13	26.90 25.57
+MOP <sub>0.5K</sub> +MAGSAC <sub>↑</sub>	16.33	95.57	98.87 86.61	48.29	63.74	71.62	62.67	46.60	64.16	77.63	62.77	41.35	66.73	59.98	8.08	18.18	29.91	18.72	12.29	26.02	40.30	26.12
$+MOP_{0.5K}+MAGSAC_{\downarrow}$	24.06	96.11	79.18	48.91	64.18	76.18	63.09	47.29	64.91	78.38	63.53	48.22	66.68	52.76	8.49	18.24	29.46	18.73	12.71	25.78	39.80	26.09
$+MOP_{0.5K}+NCC$	1.30	87.81	93.70	18.33	32.66	49.00	33.33	47.92	64.83	78.33	63.69	18.41	61.64	79.73	2.38	6.85	15.08	8.10	13.30	26.52	40.00	26.60
$+MOP_{0.5K}+NCC+MAGSAC_{\uparrow}$	22.12	96.03	81.54	42.49	57.10	70.23	56.61	47.71	65.82	79.07	64.20	43.35	66.26	58.46	7.95	17.21	28.10	17.75	12.80	25.98	39.75	26.17
$+MOP_{0.5K}+NCC+MAGSAC_{\downarrow}$ $+MOP_{1.0K}$	26.28	96.39	77.57	44.15	58.23	71.00	57.79	47.34	65.34	78.93	63.87	48.00	66.25	53.62	8.35	17.63	28.46	18.15	12.38	25.74	39.37	25.83
$+MOP_{1.0K}$ $+MOP_{1.0K}+MAGSAC_{\uparrow}$	1.23	92.99	98.92	41.47	57.56	71.51	56.85	46.47 46.66	63.71	77.13	62.44	17.88 41.22	64.28	81.88	5.27	12.66	23.07	13.67	12.18	25.42	39.22	25.61
$+MOP_{1.0K}+MAGSAC_{\downarrow}$ $+MOP_{1.0K}+MAGSAC_{\downarrow}$	16.26 24.01	95.58 96.14	86.70 79.25	48.28 48.67	63.65 64.00	76.07 76.15	62.67	46.66 47.22	63.98 65.44	77.74 78.75	62.79 63.80	41.22	66.72 66.76	60.06 52.92	8.33 8.47	17.95 18.20	29.62 29.75	18.63	11.75	25.60 25.88	39.71 39.79	25.69 26.22
$+MOP_{1.0K}+NCC$	1.23	87.78	93.73	18.57	32.74	48.58	33.30	47.64	65.02	78.35	63.67	17.88	61.66	80.22	2.28	6.58	14.24	7.70	12.95	25.90	39.46	26.11
$+MOP_{1.0K}+NCC+MAGSAC_{\uparrow}$	22.10	96.00	81.51	42.75	57.06	70.37	56.73	48.89	66.84	79.78	65.17	43.14	66.40	58.71	8.01	17.41	28.31	17.91	11.97	24.71	38.92	25.20
$+MOP_{1.0K}+NCC+MAGSAC_{\downarrow}$	26.30	96.37	77.52	44.46	58.56	71.29	58.10	46.41	64.31	78.16	62.96	47.90	66.32	53.70	7.98	17.22	28.54	17.92	11.50	25.15	39.37	25.34
+MOP <sub>1.5K</sub>	1.26	93.00	98.91	41.60	57.65	71.50	56.92	47.15	64.05	77.27	62.82	17.69	64.31	82.16	5.35	12.90	23.28	13.84	12.25	25.77	39.55	25.86
$+MOP_{1.5K}+MAGSAC_{\uparrow}$ $+MOP_{1.5K}+MAGSAC_{\downarrow}$	16.28	95.59	86.67	48.65	64.04	76.27	62.99	46.07	63.62	77.46	62.38	41.05	66.70	60.31	8.11	17.85	29.46	18.47	12.00	25.02	38.89	25.30
+MOP <sub>1.5K</sub> +MAGSAC <sub>↓</sub> +MOP <sub>1.5K</sub> +NCC	24.04 1.26	96.14 87.79	79.23	49.08 18.50	64.32 32.51	76.14 48.49	63.18 33.17	47.16 47.40	64.78 65.18	78.18 78.58	63.38 63.72	47.96 17.69	66.77 61.72	53.18 80.53	8.30 2.56	18.02 6.92	29.74 15.16	18.69 8.22	12.37 13.84	25.25 26.82	39.15 40.15	25.59 26.94
$+MOP_{1.5K}+NCC+MAGSAC_{\uparrow}$	22.15	95.99	81.48	42.42	57.16	70.65	56.74	47.40	65.86	79.13	64.18	43.03	66.46	59.09	7.93	17.83	29.30	18.35	12.31	25.92	39.89	26.94
$+MOP_{1.5K}+NCC+MAGSAC_{\perp}$	26.34	96.34	77.47	43.73	57.60	70.50	57.27	45.66	64.55	78.62	62.94	47.82	66.48	54.12	7.98	17.59	28.94	18.17	12.39	26.10	39.91	26.13
$+MOP_{2.0K}$	1.24	92.99	98.92	41.59	57.84	71.66	57.03	47.62	64.44	77.40	63.15	17.71	64.28	82.06	5.06	12.59	23.06	13.57	11.96	25.53	39.68	25.72
$+MOP_{2.0K}+MAGSAC_{\uparrow}$	16.25	95.59	86.71	48.64	63.98	76.26	62.96	45.64	63.56	77.39	62.19	41.14	66.69	60.19	7.88	17.52	29.23	18.21	12.03	24.93	39.12	25.36
	24.01	96.14	79.26	49.08	64.35	76.31	63.25	47.58	65.18	78.44	63.73	47.98	66.81	53.10	8.27	17.83	29.48	18.53	12.18	25.43	39.31	25.64
+MOP <sub>2.0K</sub> +NCC	1.24	87.79	93.72	18.51	32.55	48.55	33.20	46.52	64.72	78.31	63.18	17.71	61.70	80.44	2.43	6.62	14.85	7.96	13.81	26.63	40.03	26.82
$+MOP_{2.0K}+NCC+MAGSAC_{\uparrow}$ $+MOP_{2.0K}+NCC+MAGSAC_{\downarrow}$	22.12	95.99	81.47	42.66	57.13	70.47	56.75	46.80	65.61	79.08 78.95	63.83 63.55	43.08	66.38	58.77	7.90	17.71	29.26	18.29	12.04	25.46 25.95	39.56	25.69
TIMOT 2.0K TINCOTALAGOAC	26.34	96.38	77.47	43.94	57.62	70.35	57.30	46.63	65.07	78.95	63.55	47.79	66.37	53.80	7.96	17.62	29.12	18.23	12.31	25.95	39.64	25.97