Pineline	Filtered	Time (s)	Precision	Recall	$AUC_{\alpha s}^{F}$	AUC ^F	AUC ^F	AUC ^F	AUC_{-}^{E}	$AUC_{\alpha_{1\alpha}}^{E}$	AUC ^E	AUC^E	Filtered	Time (s)	Precision	Recall	AUC_{c}^{F} .	AUC ^F	anNet	AUC ^E	AUC_{os}^{E}	AUC_{010}^{E}	AUCE	AUC ^E
ALIKED+LightGlue	0.00	0.132	92.94	99.74	40.94	57.17	71.09	56.40	46.37	63.86	77.07	62.43	0.00	0.083	64.89	92.41	4.84	11.48	21.29	12.54	12.78	26.20	40.73	26.57
+MAGSAC↑ +MAGSAC↓ +ACNe	15.79 23.56 39.55	0.135 0.136 0.148	95.61 96.17 93.59	87.02 79.53 60.93	49.17 49.53 20.23	64.57 64.59 34.04	76.58 76.64 50.21	63.44 63.59 34.83	45.63 47.53 32.28	63.60 65.52 51.00	77.59 78.80 67.70	62.27 63.95 50.33	33.07 40.40 42.99	0.086 0.089 0.093	67.88 67.89	65.32 57.72 53.91	8.47 9.19 2.92	18.50 19.05 8.63	30.52 30.97	19.16 19.74	12.60 12.79 7.15	26.30 26.39	40.53 41.15 30.08	26.47 26.78
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	47.09 51.47	0.151 0.152	95.46 95.96	54.68 50.48	24.32 24.46	39.25 39.55	54.93 56.01	39.50 40.01	32.28 33.00 34.96	52.44 53.61	68.88 69.96	51.44 52.84	58.28 62.07	0.095 0.095	67.64 67.68	41.12 37.28	4.86 4.68	11.32 10.76	21.24 21.27	12.48 12.23	8.00 8.19	18.48 17.95	31.24 31.06	19.24 19.07
+AdaLAM $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.00 15.79 23.56	0.134 0.138 0.139	92.94 95.61 96.17	99.74 87.02 79.53	40.94 49.17 49.53	57.17 64.57 64.59	71.09 76.58 76.64	56.40 63.44 63.59	46.37 45.63 47.53	63.86 63.60 65.52	77.07 77.59 78.80	62.43 62.27 63.95	0.00 33.07 40.40	0.084 0.087 0.090	64.89 67.88 67.89	92.41 65.32 57.72	4.84 8.47 9.19	11.48 18.50 19.05	21.29 30.52 30.97	12.54 19.16 19.74	12.78 12.60 12.79	26.20 26.30 26.39	40.73 40.53 41.15	26.57 26.47 26.78
+CC +MAGSAC↑ +MAGSAC	17.27 29.40 35.75	2.526 2.530 2.532	86.12 88.14 88.64	82.93 72.86 66.74	29.11 34.56 35.18	43.20 48.96 49.19	57.39 61.61 61.74	43.23 48.38 48.70	38.42 38.95 39.98	55.37 56.38 56.93	68.71 69.48 69.93	54.16 54.94 55.61	34.63 54.84 59.28	1.406 1.408 1.410	53.58 54.68 54.68	59.78 43.62 38.85	3.83 5.62 5.42	9.71 11.59 11.64	18.55 20.59 20.50	10.70 12.60 12.52	8.49 8.90 8.52	18.23 19.02	28.85 29.43 29.05	18.52 19.12 18.58
+CLNet +MAGSAC† +MAGSACı	14.71 26.33	0.170 0.175	93.37 95.33	85.54 75.94	20.53 26.48	34.12 40.88	50.49 56.77	35.04 41.38	35.87 36.83	54.44 55.86 57.09	69.86 71.71	53.39 54.80	47.13 60.28	0.094 0.096	67.68 64.06	49.92 39.14	1.96 2.82	4.71 7.50	11.23 15.38	5.97 8.57	6.39 6.70	15.45 15.47	26.74 26.01	16.19 16.06
+ConvMatch +MAGSAC _↑	32.63 66.42 70.20	0.176 0.257 0.260	93.98 93.98	33.65 30.58	27.63 14.03 15.81	41.74 25.57 27.24	57.11 40.87 43.14	42.16 26.82 28.73	38.61 23.99 25.14	41.33 42.59	72.07 58.98 60.31	55.92 41.43 42.68	63.92 65.94 75.08	0.096 0.192 0.193	64.13 67.58 64.26	35.39 33.40 25.88	3.04 1.30 2.12	8.23 5.09 6.84	16.31 13.32 14.43	9.19 6.57 7.80	5.31 5.61	14.73 13.02 13.60	25.27 24.53 24.50	15.39 14.29 14.57
+MAGSAC _↑	72.56 64.54 68.46	0.261 0.337 0.339	94.39 93.35 94.63	28.31 35.59 32.34	16.92 11.90 14.62	29.22 23.61 26.23	44.25 38.97 40.49	30.13 24.82 27.11	24.73 23.41 23.73	42.88 41.14 41.95	60.47 59.07 60.44	42.69 41.21 42.04	77.14 67.90 76.04	0.193 0.252 0.254	64.36 66.19 63.79	23.71 30.66 24.27	2.66 1.07 1.76	7.08 3.25 4.65	9.02 10.48	8.08 4.45 5.63	5.20 3.62 3.13	12.70 10.00 9.25	23.78 19.32 19.70	13.89 10.98 10.69
+MAGSAC↓ +FC-GNN	70.94	0.340	95.04 96.81	29.96	15.03 50.53	26.64 65.54	40.10	27.26	23.03	40.93 66.80	58.79	40.92 65.03	78.03	0.255	63.86	22.26	1.92 7.23	4.98	10.62	5.84 16.65	3.79	9.91	19.28 38.74	10.99 25.38
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	15.88 17.51	0.174 0.175	97.16 97.29	89.02 87.42	52.94 58.12	67.46 67.71	78.86 79.10	66.42 66.64	50.15 49.01	67.26 66.53	79.52 79.32	65.64 64.95	40.13 42.72	0.100 0.101	70.16 70.20	59.98 57.23	8.21 8.60	18.05 18.22	29.46 29.63	18.58 18.82	12.87 12.80	25.62 25.66	39.66 39.30	26.05 25.92
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	20.28 31.13 36.96	0.211 0.214 0.215	90.42 91.45 91.91	79.96 70.87 65.28	37.25 45.01 44.31	52.99 58.84 58.97	66.68 70.17 70.63	52.31 58.01 57.97	42.44 42.47 42.27	58.21 58.99 58.69	70.48 71.53 71.39	57.04 57.67 57.45	53.21 63.30 66.96	0.136 0.138 0.138	64.58 61.66 61.74	47.08 37.05 33.31	2.72 4.05 4.03	7.93 9.85 10.24	16.01 18.36 18.73	8.89 10.76 11.00	7.03 6.95 7.41	14.82 14.95 15.58	25.08 25.40 25.91	15.64 15.77 16.30
$+MS^2DG-Net$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	70.93 74.78 76.85	0.202 0.204 0.205	93.79 95.52 95.99	29.20 26.15 24.17	22.27 23.48 24.16	36.25 37.60 38.29	53.20 53.04 53.76	37.24 38.04 38.74	23.05 22.09 22.49	38.06 38.41 38.85	54.36 56.07 56.71	38.49 38.86 39.35	59.22 69.35 71.37	0.132 0.134 0.134	67.53 68.00 67.95	35.79 28.03 26.04	2.26 3.22 2.46	5.53 7.04 6.65	13.03 14.49 14.13	6.94 8.25 7.74	4.46 4.35 4.58	10.71 9.93 10.49	19.77 19.19 18.91	11.65 11.15 11.33
+NCC +MAGSAC† +MAGSAC	0.00 36.53 42.34	0.534 0.558 0.570	78.13 89.49 89.97	82.30 62.34 57.03	14.50 28.61 29.55	27.55 39.62 40.46	43.78 52.27 52.59	28.61 40.17 40.87	32.99 33.01 34.43	47.54 48.43 49.29	61.64 63.06 63.44	47.39 48.17 49.06	0.00 40.07 45.67	0.324 0.331 0.338	60.81 66.88 66.79	88.96 59.09 52.98	2.04 6.90 6.89	5.85 15.18 15.51	13.89 25.56	7.26 15.88 16.16	10.82 11.30 11.09	22.64 22.89 23.07	36.37 36.85 36.47	23.28 23.68 23.54
+NCMNet +MAGSAC _↑	13.27 25.16	0.292 0.296	93.43 95.36	87.04 77.16	22.55 27.54	36.29 42.24	52.45 57.59	37.10 42.46	36.29 36.33	55.67 54.95	70.99 71.06	54.32 54.11	44.35 58.17	0.208 0.210	67.62 64.38	52.84 41.39	2.04 3.30	5.44 8.08	26.07 12.04 15.82	6.50 9.06	7.04 6.65	15.88 14.77	27.77 26.02	16.90 15.81
+MAGSAC↓ +OANet +MAGSAC↑	31.60 89.75 90.64	0.297 0.185 0.187	95.88 94.33 94.67	71.02 10.37 9.65	27.80 4.01 4.69	9.55 10.71	58.86 20.89 21.60	43.26 11.48 12.34	9.65 10.90	56.77 21.59 23.42	72.35 37.77 39.12	55.67 23.01 24.48	62.13 87.99 92.61	0.211 0.126 0.127	64.43 66.18 53.41	37.28 10.56 7.23	3.29 0.66 0.70	7.71 1.80 1.82	5.90 5.72	8.76 2.79 2.74	6.81 1.14 1.35	4.07 4.05	27.08 10.80 10.44	16.64 5.34 5.28
+MAGSAC↓ +MOP _{0.5K} +MiHo	91.12	0.187	94.92	9.18	5.38	11.71	23.26	13.45	10.22	21.80	38.44	23.49	92.91	0.127	53.36	6.90	0.58	1.49	5.62	2.57	1.63	4.55 25.91	11.27	5.82
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.70 15.97 23.70	1.548 1.551 1.552	92.93 95.57 96.11	86.80 79.37	41.18 49.20 49.46	57.72 64.37 64.40	71.80 76.52 76.50	56.90 63.36 63.45	46.59 47.43	64.01 65.49	77.60 78.82	62.74 63.91	11.51 37.60 44.80	1.215 1.218 1.220	64.79 67.67 67.76	63.07 55.71	5.47 8.59 8.88	12.78 18.30 18.77	22.88 30.14 30.47	13.71 19.01 19.37	12.77 12.78 12.76	26.29 26.30	40.21 40.71	26.23 26.43 26.59
$+MOP_{0.5K}+MiHo+NCC$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.70 21.49 25.56	1.914 1.918 1.919	88.01 96.19 96.54	94.38 82.20 78.29	19.13 44.23 44.67	33.82 58.33 59.50	50.22 71.32 72.90	34.39 57.96 59.02	47.25 47.98 48.01	65.20 65.59 65.75	78.72 78.87 78.73	63.73 64.15 64.16	11.51 39.76 44.81	1.395 1.398 1.401	62.26 67.26 67.41	85.56 61.56 56.43	2.71 8.93 8.46	7.19 19.02 18.91	16.57 30.44 30.38	8.82 19.46 19.25	13.43 12.80 12.99	27.30 26.06 26.24	41.13 39.77 40.23	27.29 26.21 26.49
$+MOP_{1.0K}+MiHo$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\perp}$	0.64 15.94 23.66	2.546 2.550 2.551	92.99 95.65 96.19	99.29 86.91 79.50	41.02 49.29 49.60	57.51 64.42 64.41	71.67 76.44 76.41	56.73 63.38 63.47	46.99 46.27 47.39	64.55 63.76 65.43	77.62 77.44 78.80	63.05 62.49 63.87	11.42 37.55 44.73	2.111 2.114 2.116	64.76 67.70 67.79	86.89 63.16 55.87	5.23 8.47 9.15	12.71 18.39 18.88	22.69 30.31 30.28	13.54 19.06 19.44	12.96 12.69 12.46	26.11 26.31 25.94	39.99 40.63 40.26	26.35 26.54 26.22
+MOP _{1.0K} +MiHo+NCC +MAGSAC _↑ +MAGSAC _↓	0.64 21.44 25.52	2.914 2.917 2.918	88.12 96.30 96.68	94.60 82.41 78.51	19.22 44.61 45.15	33.88 58.44 59.58	50.27 71.13 72.75	34.46 58.06 59.16	47.92 47.79 48.13	65.66 65.53 66.22	78.92 78.87 78.80	64.17 64.06	11.42 39.86 44.87	2.291 2.295 2.298	62.32 67.23 67.37	85.76 61.01 55.87	2.44 8.53 8.91	6.66 18.66 19.84	16.11 30.04 31.36	8.40 19.08 20.03	13.48 12.53 12.96	27.66 25.91 26.52	41.72 39.79 40.52	27.62 26.08 26.67
+MOP _{1.5K} +MiHo +MAGSAC _↑ +MAGSAC ₁	0.61 15.91 23.66	3.413 3.416 3.417	92.96 95.63	99.29 86.92	41.08 49.13 49.54	57.50 64.36 64.48	71.55 76.47	56.71 63.32	47.15 46.06	64.64 63.58	77.80 77.45	63.20 62.36	11.15 37.50 44.61	2.881 2.884 2.886	64.71 67.59 67.63	87.10 62.98	5.20 8.40	12.73 18.41	22.68 30.29	13.54 19.03 19.24	12.94 12.27 12.60	26.16 26.01	40.00 40.36	26.37 26.21 26.14
+MOP _{1.5K} +MiHo+NCC +MAGSAC _↑	0.61 21.41	3.780 3.784	88.07 96.28	94.59 82.41	19.14 44.68	33.86 58.90	50.26 71.67	34.42 58.41	47.27 47.10 48.03	65.28 65.00 66.16	78.48 79.40	63.53 64.53	11.15 39.76	3.065 3.068	62.23 67.16	85.75 61.07	8.98 2.54 8.80	6.87 18.81	15.98 30.19	8.46 19.27	13.75 12.29	27.89 25.76	42.04 39.70	27.89 25.92
$+MAGSAC_{\downarrow}$ $+MOP_{2.0K}+MiHo$ $+MAGSAC_{\uparrow}$	25.51 0.62 15.89	3.785 4.141 4.145	96.64 92.97 95.64	78.49 99.29 86.95	45.30 41.13 49.21	59.80 57.44 64.34	72.95 71.59 76.49	59.35 56.72 63.35	47.19 46.87 46.28	65.42 64.46 63.80	78.20 77.53 77.61	63.60 62.95 62.56	44.73 11.16 37.51	3.683 3.686	67.19 64.72 67.62	55.75 87.07 62.98	5.30 8.54	19.38 12.75 18.58	30.69 22.75 30.64	19.61 13.60 19.25	13.24 12.55 12.17	26.54 25.67 25.96	39.61 40.42	26.84 25.94 26.18
+MAGSAC _↓ +MOP _{2.0K} +MiHo+NCC +MAGSAC _↑	23.66 0.62 21.46	4.146 4.560 4.564	96.18 88.05	79.49 94.50 82.26	49.57 19.29 44.62	64.41 33.83 58.78	76.42 50.16 71.65	63.47 34.43 58.35	47.70 47.22 47.90	65.51 65.07 65.97	78.83 78.47	64.01	44.58 11.16 39.75	3.688 3.919 3.923	67.65 62.24 67.17	55.69 85.77 61.07	8.88 2.57 8.54	18.78 6.98	30.46 15.95 29.64	19.37 8.50	12.42 13.41 12.31	25.74 27.43	40.15 42.00	26.10 27.61 25.74
+MAGSAC _↓ +MOP _{n + K}	25.51	4.564 4.565 2.553	96.24 96.60 93.00	78.37	44.62 44.82 41.48	58.78 59.14 57.73	72.40	58.78	47.73	65.75 64.08	78.32	63.93	44.76	3.923 3.926	67.18	55.79	9.08 5.45	18.42 19.57	29.64 30.79 22.86	18.87 19.81	12.31	25.63 26.82 25.29	40.51	26.90
+MAGSAC↑ +MAGSAC↓	1.30 16.33 24.06	2.557 2.558	93.00 95.57 96.11	98.87 86.61 79.18	48.29 48.91	63.74 64.18	71.62 75.97 76.18	56.94 62.67 63.09	46.61 46.60 47.29	64.16 64.91	77.91 78.38	62.77 62.89 63.53	18.41 41.35 48.22	1.658 1.660	64.26 66.73 66.68	81.42 59.98 52.76	8.08 8.49	18.18 18.24	29.91 29.46	18.72 18.73	12.02 12.71	26.02 25.78	39.13 40.30 39.80	25.57 26.12 26.09
$+MOP_{0.5K}+NCC$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	1.30 22.12 26.28	2.919 2.923 2.923	96.03 96.39	93.70 81.54 77.57	18.33 42.49 44.15	32.66 57.10 58.23	49.00 70.23 71.00	33.33 56.61 57.79	47.92 47.71 47.34	64.83 65.82 65.34	78.33 79.07 78.93	63.69 64.20 63.87	18.41 43.35 48.00	1.826 1.828 1.831	61.64 66.26 66.25	79.73 58.46 53.62	2.38 7.95 8.35	6.85 17.21 17.63	15.08 28.10 28.46	8.10 17.75 18.15	13.30 12.80 12.38	26.52 25.98 25.74	40.00 39.75 39.37	26.60 26.17 25.83
$+MOP_{1.0K}$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\bot}$	1.23 16.26 24.01	4.284 4.288 4.289	92.99 95.58 96.14	98.92 86.70 79.25	41.47 48.28 48.67	57.56 63.65 64.00	71.51 76.07 76.15	56.85 62.67 62.94	46.47 46.66 47.22	63.71 63.98 65.44	77.13 77.74 78.75	62.44 62.79 63.80	17.88 41.22 48.07	2.973 2.975 2.977	64.28 66.72 66.76	81.88 60.06 52.92	5.27 8.33 8.47	12.66 17.95 18.20	23.07 29.62 29.75	13.67 18.63 18.81	12.18 11.75 12.98	25.42 25.60 25.88	39.22 39.71 39.79	25.61 25.69 26.22
+MOP _{1.0K} +NCC +MAGSAC _↑ +MAGSAC _↓	1.23 22.10 26.30	4.650 4.654	87.78 96.00	93.73 81.51 77.52	18.57 42.75	32.74 57.06 58.56	48.58 70.37	33.30 56.73 58.10	47.64 48.89	65.02 66.84	78.35 79.78	63.67 65.17	17.88 43.14	3.145 3.148	61.66 66.40	80.22 58.71	2.28 8.01	6.58 17.41 17.22	14.24 28.31	7.70 17.91	12.95 11.97	25.90 24.71 25.15	39.46 38.92	26.11 25.20
+MOP _{1.5K} +MAGSAC _↑	1.26 16.28	4.655 5.570 5.573	96.37 93.00 95.59	77.52 98.91 86.67	44.46 41.60 48.65	58.56 57.65 64.04	71.29 71.50 76.27	58.10 56.92 62.99	46.41 47.15 46.07	64.31 64.05 63.62	78.16 77.27 77.46	62.96 62.82 62.38	47.90 17.69 41.05	3.151 4.052 4.054	66.32 64.31 66.70	53.70 82.16 60.31	7.98 5.35 8.11	17.22 12.90 17.85	28.54 23.28 29.46	17.92 13.84 18.47	11.50 12.25 12.00	25.15 25.77 25.02	39.37 39.55 38.89	25.34 25.86 25.30
$+MAGSAC_{\downarrow}$ $+MOP_{1.5K}+NCC$ $+MAGSAC_{\uparrow}$	24.04 1.26 22.15	5.574 5.935 5.939	96.14 87.79 95.99	79.23 93.73 81.48	49.08 18.50 42.42	64.32 32.51 57.16	76.14 48.49 70.65	63.18 33.17 56.74	47.16 47.40 47.55	64.78 65.18 65.86	78.18 78.58 79.13	63.38 63.72 64.18	47.96 17.69 43.03	4.056 4.225 4.228	66.77 61.72 66.46	53.18 80.53 59.09	8.30 2.56 7.93	18.02 6.92 17.83	29.74 15.16 29.30	8.22 18.35	12.37 13.84 12.31	25.25 26.82 25.92	39.15 40.15 39.89	25.59 26.94 26.04
$+MAGSAC_{\downarrow}$ $+MOP_{2.0K}$ $+MAGSAC_{\circ}$	26.34 1.24 16.25	5.939 6.791 6.794	96.34 92.99 95.50	77.47 98.92 86.71	43.73 41.59 48.64	57.60 57.84 63.98	70.50 71.66 76.26	57.27 57.03	45.66 47.62 45.64	64.55 64.44 63.56	78.62 77.40	62.94 63.15 62.19	47.82 17.71 41.14	4.230 4.989 4.992	66.48 64.28 66.69	54.12 82.06 60.19	7.98 5.06 7.88	17.59 12.59 17.52	28.94 23.06	18.17 13.57 18.21	12.39 11.96 12.03	26.10 25.53 24.93	39.91 39.68 39.12	26.13 25.72 25.36
+MAGSAC↓ +MOP _{2.0K} +NCC	24.01 1.24	6.795 7.207	95.59 96.14 87.79	79.26 93.72	49.08 18.51	63.98 64.35 32.55	76.26 76.31 48.55	62.96 63.25 33.20	45.64 47.58 46.52	63.56 65.18 64.72	77.39 78.44 78.31	62.19 63.73 63.18	47.98 17.71	4.994 5.210	66.81 61.70	53.10 80.44	7.88 8.27 2.43	17.52 17.83 6.62	29.23 29.48 14.85	18.53 7.96	12.18 13.81	24.93 25.43 26.63	39.12 39.31 40.03	25.64 26.82
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	22.12 26.34	7.211 7.212	95.99 96.38	81.47 77.47	42.66 43.94	57.13 57.62	70.47 70.35	56.75 57.30	46.80 46.63	65.61 65.07	79.08 78.95	63.83 63.55	43.08 47.79	5.213 5.216	66.38 66.37	58.77 53.80	7.90 7.96	17.71 17.62	29.26 29.12	18.29 18.23	12.04 12.31	25.46 25.95	39.56 39.64	25.69 25.97