Pineline	Filtered	Precision	Recall	AUC^F	AUC ^F	Mega AUCF	Depth AUC ^F	AUC ^E .	AUCE	AUCE	AUC ^E	Time (s)	Filtered	Precision	Recall	AUC_{c}^{F} .	AUC_{a}^{F}	AUC_{020}^F	nNet AUC ^F	AUC_{-}^{E} .	AUC_{010}^{E}	AUC_{nm}^E	AUC ^E	Time (s)
DISK+LightGlue	0.00	92.21	99.86	43.86	59.45	72.01	58.44	49.87	67.23	79.79	65.63	0.263	0.00	62.85	89.23	4.92	10.89	20.58	12.13	12.33	24.72	37.48	24.84	0.239
+MAGSAC↑ +MAGSAC↓ +ACNe	20.11 30.99 46.11	95.26 95.98 92.84	83.18 72.72 54.29	49.20 49.21 21.96	64.13 64.01 36.45	75.91 76.01 53.08	63.08 63.08	50.12 50.66	67.19 68.03	79.75 80.32 71.48	65.69 66.34 53.61	0.271 0.274 0.291	37.85 46.35 48.62	63.48 63.60	59.23 50.67 45.93	9.02 9.42 3.41	18.50 18.50	28.63 28.81	18.72 18.91 8.69	12.88 12.52 6.73	25.11 24.66 15.31	37.63 36.81 26.78	25.21 24.67	0.244 0.248 0.250
$^{+{\rm MAGSAC}_\uparrow}_{+{\rm MAGSAC}_\downarrow}$	55.54 61.28	95.85 95.85	46.33 40.82	25.45 26.11	40.12 40.96	56.16 56.70	40.58 41.26	35.33 36.14	55.24 56.26	71.48 71.70 72.48	54.09 54.96	0.297 0.300	67.59 71.62	63.09 63.18	31.64 27.45	4.19 3.98	9.83 9.63	18.92 19.02	10.98 10.88	7.07 7.67	15.31 15.91 16.59	27.88 27.88	16.27 16.96 17.38	0.253 0.255
+AdaLAM $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.00 20.11 30.99	92.21 95.26 95.98	99.86 83.18 72.72	43.86 49.20 49.21	59.45 64.13 64.01	72.01 75.91 76.01	58.44 63.08 63.08	49.87 50.12 50.66	67.23 67.19 68.03	79.79 79.75 80.32	65.63 65.69 66.34	0.274 0.282 0.285	0.00 37.85 46.35	62.85 63.48 63.60	89.23 59.23 50.67	4.92 9.02 9.42	10.89 18.50 18.50	20.58 28.63 28.81	12.13 18.72 18.91	12.33 12.88 12.52	24.72 25.11 24.66	37.48 37.63 36.81	24.84 25.21 24.67	0.242 0.247 0.250
+CC $+MAGSAC_{\uparrow}$ $+MAGSAC_{\bot}$	15.50 31.92 41.12	85.91 88.42 89.09	84.75 70.89 62.01	32.48 35.47 35.12	46.83 50.01 49.60	60.69 63.14 62.93	46.67 49.54 49.21	41.23 42.60 43.42	58.50 59.23 60.59	71.69 72.34 73.67	57.14 58.06 59.22	6.944 6.953 6.957	23.47 52.78 58.84	52.13 51.81 52.00	66.31 44.24 38.29	4.15 6.64 6.93	9.52 14.01 13.63	17.27 22.56 21.96	10.31 14.40 14.17	9.68 9.36 9.48	19.32 19.82 19.24	29.74 30.25 29.22	19.58 19.81 19.31	3.059 3.063 3.066
+CLNet +MAGSAC† +MAGSAC	13.41 29.55 38.98	92.77 95.13	86.92 73.13	22.39 26.00 26.49	36.71 41.28 41.29	53.11 58.34 57.06	37.40 41.87 41.61	38.14 39.56 40.43	57.38 58.73 59.25	73.22 74.54	56.24 57.61 58.18	0.440 0.450 0.455	35.36 58.96 64.49	65.26 60.56 60.67	57.67 39.29 33.74	2.26 3.40 2.98	5.39 8.34 7.60	11.44 16.76 16.00	6.36 9.50 8.86	9.02 8.62 7.76	18.51 17.74 17.00	29.56 29.75 29.08	19.03 18.70 17.94	0.274 0.279 0.282
+ConvMatch +MAGSAC↑ +MAGSAC⊥	65.31 70.64	92.82 94.47	35.13 30.53	14.37 17.55	26.48 29.58 30.35	41.51 45.30 46.18	27.45 30.81	24.76 26.77	43.31 44.22	61.97 61.66	43.34 44.22	0.385 0.390 0.392	65.51 78.18	65.28 60.76	31.83 22.40 19.53	1.85 2.50	5.96 7.69	13.57 15.84	7.13 8.67	6.62 5.61 5.99	15.43 14.34 15.22	26.02 26.18	16.02 15.38	0.352 0.355
+DeMatch +MAGSAC↑	74.24 64.86 70.47	92.64 94.49	27.05 35.37 30.52	17.61 13.43 16.37	25.30 29.53	40.83 45.17	31.38 26.52 30.36	26.33 25.10 25.58	44.48 44.35 44.63	62.43 61.85 62.32	44.41 43.77 44.18	0.466 0.472	80.87 67.61 79.02	60.83 64.61 60.75	29.68 21.02	3.03 1.43 1.70	8.13 4.33 4.86	16.58 10.37 11.14	9.25 5.37 5.90	4.16 4.41	11.06 10.97	26.92 20.69 20.78	16.04 11.97 12.06	0.357 0.416 0.421
$+MAGSAC_{\downarrow}$ +FC-GNN $+MAGSAC_{\uparrow}$	74.15 9.94 11.60	95.09 96.88 97.18	26.98 96.52 95.11	15.90 53.34 54.95	29.51 68.05 69.15	79.10 80.37	30.12 66.83 68.16	25.35 49.27 52.36	44.11 66.88 69.70	62.30 80.07 81.64	43.92 65.40 67.90	0.474 0.311 0.314	81.59 20.88 35.79	66.53 65.25	18.30 72.23 62.78	7.64 9.70	4.95 16.04 19.81	11.43 26.57 30.73	5.95 16.75 20.08	5.23 12.19 12.73	12.12 24.45 24.90	22.18 37.84 37.75	13.18 24.83 25.13	0.422 0.257 0.261
+MAGSAC↓ +GMS +MAGSAC↑	13.18 13.73 30.27	97.29 90.27 92.35	93.56 86.48 72.36	54.97 42.41 46.49	69.19 57.86 60.57	70.17 71.80	56.81 59.62	51.72 45.40 47.42	61.90 63.59	74.21 75.50	60.50 62.17	0.315 0.360 0.367	38.91 34.48 53.62	65.30 60.01 59.15	59.57 64.70 45.81	9.95 5.16 7.88	19.67 11.59 16.75	21.69 26.63	12.81 17.09	12.70 11.49 11.44	25.64 23.30 22.79	38.04 35.54 35.22	25.46 23.44 23.15	0.261 0.303 0.309
$+MAGSAC_{\downarrow}$ $+MS^2DG-Net$ $+MAGSAC_{\uparrow}$	39.49 75.71 79.63	93.04 93.52 95.40	63.49 24.67 21.38	46.04 26.36 26.84	60.44 41.80 42.08	72.11 57.26 57.83	59.53 41.80 42.25	49.40 22.11 22.58	65.37 38.47 40.44	76.73 56.07 57.89	63.84 38.88 40.30	0.370 0.337 0.340	60.76 56.84 73.42	59.36 64.42 63.14	38.68 33.25 22.59	8.00 2.47 4.36	16.69 6.50 9.21	26.82 14.28 16.78	7.75 10.12	11.05 4.78 5.70	22.91 11.47 12.59	35.27 21.63 22.34	23.08 12.63 13.54	0.312 0.287 0.290
+MAGSAC↓ +NCC +MAGSAC₄	82.12 0.00 43.95	96.07 74.89 89.03	18.94 79.57 55.72	27.32 14.95 27.27	42.23 27.36	57.89 42.86 50.63	42.48 28.39 38.76	25.43 32.78 33.96	43.07 48.01 49.31	60.30 62.45 63.84	42.93 47.75 49.04	0.341 0.992 1.053	75.87 0.00 47.51	63.35 58.00 62.77	20.25 89.85	3.84 2.18 6.39	8.61 6.08 14.33	16.26 13.41 24.73	9.57 7.22 15.15	4.52 9.99 10.20	11.86 21.62 21.51	21.23 34.20 33.99	12.54 21.94 21.90	0.291 0.600 0.613
+MAGSAC ₄ +NCMNet +MAGSAC ₅	50.27 12.23	89.45 92.70	49.94 88.11	27.28 22.43	38.39 38.75 37.05	50.06 53.82	38.70 37.77	33.83 38.55	49.84 57.78	64.42 73.14	49.36 56.49	1.073 0.445	53.01 31.06	62.92 64.68	50.02 44.87 61.91	6.82 2.51	14.66 7.05	24.89 14.90	15.46 8.16	10.62 8.00	21.76 18.14	34.52 30.22	22.30 18.79	0.626
+MAGSAC _↓ +OANet	28.56 38.11 89.86	94.86 95.61 93.58	74.11 64.96	27.16 27.90 7.24	42.15 42.29 16.14	58.38 57.94 28.18	42.57 42.71 17.19	39.69 38.84 13.06	59.30 57.85 26.17	74.88 74.08 44.18	57.96 56.92 27.81	0.455 0.460 0.318	55.94 61.96 86.78	59.92 60.07 63.49	42.37 36.32 10.39	4.08 4.35 0.80	9.34 10.25 2.58	18.01 18.71 7.81	10.47 11.10 3.73	8.15 8.92 2.21	18.25 19.12 6.53	30.57 31.02 14.30	18.99 19.69 7.68	0.371 0.375 0.285
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	91.15 92.04	94.43 94.87	9.21 8.34	6.84 7.07	15.03 14.90	28.17 27.20	16.68 16.39	12.95 13.21	26.72 27.19	44.64 45.59	28.10 28.66	0.321 0.322	92.58 93.25	56.21 56.22	6.78 6.10	0.83 0.93	3.02 3.41	8.26 8.97	4.04	1.95 2.19	6.30 6.66	14.17 14.65	7.48 7.83	0.286 0.288
$+MOP_{0.5K}+MiHo$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\bot}$	0.40 20.25 31.16	92.28 95.26 96.03	99.71 83.14 72.69	44.78 49.56 49.09	60.34 64.36 63.80	72.93 76.04 75.70	59.35 63.32 62.86	49.02 49.92 50.51	66.40 66.77 67.94	79.16 79.50 80.34	64.86 65.40 66.26	1.874 1.882 1.885	20.18 44.26 52.52	60.75 62.61 62.74	78.86 55.50 47.13	4.90 8.89 9.20	10.90 18.04 18.55	20.87 28.20 28.85	12.22 18.38 18.87	11.99 12.51 12.14	24.51 24.92 24.46	37.44 37.56 37.01	24.64 25.00 24.54	1.243 1.248 1.251
+MOP _{0.5K} +MiHo+NCC +MAGSAC _↑ +MAGSAC _↓	0.40 27.66 32.42	85.05 95.89 96.34	92.18 76.42 71.86	18.94 43.01 43.46	33.03 57.16 58.06	49.63 69.49 70.90	33.87 56.55 57.47	48.44 47.96 49.61	66.36 66.06 67.65	79.29 79.30 80.18	64.69 64.44 65.81	2.608 2.617 2.620	20.18 48.99 53.93	57.35 62.45 62.57	78.87 51.50 46.42	2.57 8.05 8.69	6.89 17.16 18.04	14.74 27.66 28.19	8.07 17.62 18.31	11.60 12.61 12.37	23.76 24.66 24.29	36.94 36.74 36.95	24.10 24.67 24.54	1.539 1.545 1.550
+MOP _{1.0K} +MiHo +MAGSAC↑ +MAGSAC⊥	0.37 20.23 31.13	92.30 95.28	99.80 83.18 72.71	44.83 49.52 49.01	60.34 64.32 63.79	72.94 76.07 75.80	59.37 63.30 62.87	49.40 49.75 50.34	66.62 66.89 68.00	79.31 79.52 80.50	65.11 65.39 66.28	2.876 2.884 2.887	20.00 44.14 52.43	60.88 62.71 62.83	79.04 55.62 47.15	4.99 8.82 9.32	10.82 18.08 18.73	20.80 28.26 29.04	12.20 18.39 19.03	11.93 12.35 12.05	24.48 25.13 24.76	37.29 37.73 37.10	24.57 25.07 24.66	1.969 1.973 1.977
+MOP _{1.0K} +MiHo+NCC +MAGSAC _↑ +MAGSAC _↓	0.37 27.63 32.39	85.06 95.89 96.33	92.22 76.48 71.90	19.02 42.31 43.28	33.01 56.57 57.69	49.63 69.14 70.46	33.89 56.00 57.14	47.84 47.68 49.08	65.94 65.83	79.00 79.13	64.26 64.21	3.611 3.620 3.623	20.00 48.89 53.83	57.43 62.49 62.59	78.89 51.53 46.37	2.75 7.85 8.69	6.91 17.14	14.89 27.26 27.65	8.18 17.42 18.02	11.46 12.33 11.60	23.56 24.64 23.58	36.80 36.84 36.26	23.94 24.60 23.81	2.266 2.272 2.277
+MOP _{1.5K} +MiHo +MAGSAC _↑ +MAGSAC ₁	0.39 20.26 31.13	92.27 95.26 96.04	99.72 83.11 72.71	44.75 49.31 48.92	60.34 64.05 63.77	72.86 75.78 75.79	59.32 63.05 62.82	49.32 49.55 50.09	66.67 66.60	79.39 79.33	65.12 65.16	3.688 3.696 3.699	19.82 44.00 52.32	60.98 62.88 63.00	79.35 55.96 47.42	4.89 9.10 9.22	10.78	20.67 28.55	12.12 18.67 18.93	11.47 12.58 12.40	24.35 24.96 25.18	37.49 37.80	24.44 25.11	2.602 2.607 2.610
+MOP _{1.5K} +MiHo+NCC +MAGSAC _↑ +MAGSAC.	0.39 27.63	85.05 95.89	92.19 76.47	19.06 42.61 43.53	32.95 56.99	49.65 69.45	33.89 56.35	48.05 47.63	66.00 65.97	78.98 79.30	64.34 64.30	4.424 4.432	19.82 48.79	57.50 62.57	78.92 51.58	2.75 7.65	6.92 17.14	14.66 27.48	8.11 17.42	11.98 12.70	23.56 24.88	36.40 37.37	23.98 24.98	2.901 2.906
+MOP _{2.0K} +MiHo +MAGSAC _↑ +MAGSAC _↓	32.36 0.40 20.25	92.27 95.25	99.72 83.13	44.49 49.38	60.07 64.09	72.67 75.85	57.64 59.08 63.11	49.36 49.58	66.73 66.69	79.40 79.40	65.16 65.22	4.421 4.428	53.64 19.81 43.97	62.73 60.96 62.79	79.29 55.83	8.51 4.93 8.78	10.74 18.08	20.57 28.25	12.08 18.37	11.62 12.79	24.20 24.32 25.26	37.20 37.90	24.38 25.32	2.911 3.157 3.161
$+MOP_{2.0K}+MiHo+NCC$ $+MAGSAC_{\uparrow}$	31.13 0.40 27.62	96.04 85.05 95.87	72.73 92.18 76.47	49.12 19.02 42.65	63.89 32.75 56.78	75.88 49.54 69.12	62.96 33.77 56.18	50.34 48.13 47.44	67.96 65.98 65.86	79.00 79.21	64.37 64.17	4.431 5.178 5.187	52.23 19.81 48.80	62.95 57.44 62.52	47.40 78.79 51.46	9.11 2.66 7.56	18.40 6.84 16.72	28.68 14.63 26.78	8.04 17.02	12.39 11.89 12.33	25.11 23.72 24.34	36.66 36.48	24.09 24.38	3.164 3.487 3.493
$+MAGSAC_{\downarrow}$ $+MOP_{0.5K}$ $+MAGSAC_{\uparrow}$	32.38 0.78 20.38	96.32 92.31 95.18	71.91 99.41 82.98	43.75 45.11 49.46	58.33 60.55 63.94	71.01 73.18 75.94	57.70 59.61 63.11	48.98 48.98 50.35	67.09 66.34 67.10	79.78 79.07 79.67	65.28 64.79 65.70	5.190 3.276 3.284	53.70 24.27 47.08	62.61 59.39 61.14	46.61 75.01 52.95	5.13 8.72	17.49 11.06 17.71	27.32 21.17 27.82	17.75 12.45 18.08	12.32 11.32 12.70	23.92 23.94 24.62	36.48 37.08 37.07	24.24 24.11 24.80	3.497 2.111 2.115
+MAGSAC _{\downarrow} +MOP _{0.5K} +NCC +MAGSAC _{\uparrow}	31.25 0.78 28.18	95.95 84.83 95.72	72.57 91.61 75.80	49.28 17.60 42.05	63.85 30.72 55.91	75.89 45.99 67.93	63.01 31.44 55.29	50.80 46.80 48.84	67.91 64.81 66.03	77.94 78.62	66.38 63.18 64.50	3.287 4.010 4.019	55.21 24.27 51.50	61.28 55.92 60.82	74.60 48.94	9.17 2.63 8.16	7.10 16.98	28.40 14.40 27.22	8.04 17.45	13.09 11.84 12.48	25.07 24.04 24.21	37.06 36.45 36.67	25.07 24.11 24.45	2.118 2.398 2.404
$+MAGSAC_{\downarrow}$ $+MOP_{1.0K}$ $+MAGSAC_{\uparrow}$	33.00 0.76 20.42	96.15 92.30 95.20	71.19 99.44 82.96	42.08 45.24 49.48	56.14 60.88 64.04	73.47 76.01	55.41 59.86 63.18	48.38 48.91 49.54	65.68 66.29 66.41	78.50 79.01 79.17	64.19 64.74 65.04	4.970 4.977	56.22 23.96 46.87	60.93 59.47 61.15	44.13 75.26 52.96	7.85 5.26 8.41	17.00 11.34 17.43	27.01 21.40 27.38	17.28 12.66 17.74	11.90 11.26 12.12	24.49 23.94 24.02	37.29 36.93 36.71	24.56 24.05 24.28	2.408 3.400 3.405
+MAGSAC ₁ +MOP _{1.0K} +NCC +MAGSAC ₁	31.25 0.76 28.18	95.96 84.82 95.69	72.59 91.63 75.79	49.33 17.61 41.31	63.80 30.98 55.58	75.91 46.68 68.13	63.01 31.76 55.01	50.62 46.45 47.75	67.78 64.52 65.55	80.29 77.82 78.56	66.23 62.93 63.96	4.980 5.704 5.713	54.97 23.96 51.27	61.31 56.02 60.93	44.78 74.80 49.10	8.62 2.81 7.99	17.76 7.02 17.07	27.91 14.24 27.18	18.09 8.02 17.41	12.37 11.83 11.71	24.50 23.79 23.61	36.88 36.49 35.94	24.59 24.04 23.75	3.408 3.689 3.694
$+MAGSAC_{\downarrow}$ $+MOP_{1.5K}$ $+MAGSAC_{\uparrow}$	32.94 0.77	96.18 92.30	71.29 99.41	42.84 44.83	57.03 60.49	69.24 73.14	56.37 59.49	46.95 47.90	65.06 65.54	78.32 78.59	63.45	5.715 6.294	56.06 23.88	61.03 59.47	44.09 75.34	8.01 5.42	17.01 11.55	26.98 21.44	17.33 12.80	12.49 11.69	24.23 24.29	36.73 37.17	24.48 24.38	3.699 4.431
+MAGSAC _↓ +MOP _{1.5K} +NCC	20.38 31.27 0.77	95.19 95.96 84.82	82.99 72.56 91.61	49.50 49.20 17.60	64.28 63.64 31.20	76.12 75.58 46.77	63.30 62.81 31.86	49.87 51.13 47.15	66.78 68.33 64.80	79.46 80.78 77.87	65.37 66.75	6.302 6.305 7.029	46.82 54.94 23.88	61.20 61.32 56.01	53.13 44.84 74.91	8.79 8.83 2.93	17.62 18.06 7.12	27.79 28.29 14.43	18.07 18.39 8.16	12.93 11.98 11.97	24.65 24.19 24.02	36.80 36.77 36.76	24.79 24.31 24.25	4.436 4.439 4.719
+MAGSAC _↑ +MAGSAC _↓	28.23 32.93	95.71 96.19	75.75 71.30	41.58 43.03	55.87 57.64	68.53 69.52	55.33 56.73	46.56 47.73	65.50 65.14	78.48 78.33	63.51 63.73	7.038 7.040	51.23 55.95	60.97 61.10	49.22 44.32	7.72 7.96	16.95 17.31	27.32 27.79	17.33 17.69	11.43 12.17	23.72 25.01	36.53 37.66	23.89 24.95	4.725 4.729
$\begin{aligned} &+ \mathbf{MOP_{2.0K}} \\ &+ \mathbf{MAGSAC_{\uparrow}} \\ &+ \mathbf{MAGSAC_{\downarrow}} \end{aligned}$	0.77 20.38 31.26	92.30 95.18 95.97	99.42 82.98 72.56	44.61 49.33 48.71	60.37 64.00 63.34	73.11 75.84 75.48	59.36 63.06 62.51	47.86 49.84 50.79	65.89 66.82 68.24	78.83 79.55 80.66	64.19 65.40 66.57	7.470 7.478 7.481	23.91 46.86 54.93	59.49 61.23 61.28	75.30 53.11 44.81	5.39 8.65 8.85	11.50 17.50 18.06	21.27 27.77 28.11	12.72 17.97 18.34	11.55 12.87 11.74	24.15 24.91 23.83	37.04 36.99 36.37	24.25 24.93 23.98	5.369 5.373 5.376
$+MOP_{2.0K}+NCC$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.77 28.22 32.93	84.82 95.70 96.18	91.62 75.75 71.29	17.76 41.14 42.00	31.19 55.55 56.72	46.67 68.22 68.92	31.87 54.97 55.88	46.99 46.41 47.38	64.86 64.90 65.34	77.90 78.33 78.59	63.25 63.21 63.77	8.227 8.236 8.238	23.91 51.27 55.95	56.01 60.94 61.08	74.73 49.02 44.28	3.05 8.18 8.05	7.22 17.29 17.43	14.42 27.92 27.74	8.23 17.80 17.74	11.77 12.02 12.52	24.13 24.16 24.81	36.87 36.73 37.54	24.26 24.30 24.96	5.689 5.695 5.699