			MegaDepth				ScanNet					P	lanar		IMC PhotoTourism						
Pipeline	Filtered	Precision	Recall	$\mathrm{AUC}^F_{\measuredangle}$	$\mathrm{AUC}^E_{\measuredangle}$	Filtered	Precision	Recall	$\mathrm{AUC}^F_{\measuredangle}$	$\mathrm{AUC}^E_{\measuredangle}$	Filtered	Precision	Recall	$\mathrm{AUC}_{\square}^{H}$	Filtered	Precision	Recall	$\mathrm{AUC}^F_{\measuredangle}$	$\mathrm{AUC}^E_{\measuredangle}$	AUC_{\square}^F	$\mathrm{AUC}_{\square}^{E}$
$\begin{array}{l} DISK+LightGlue \\ +MAGSAC_{\uparrow} \\ +MAGSAC_{\downarrow} \end{array}$	0.00 20.27 31.13	92.27 95.36 96.11	99.93 83.11 72.68	58.22 63.27 63.14	64.79 64.97 65.32	0.00 37.07 45.54	63.40 64.24 64.38	89.67 60.05 51.60	12.05 18.98 18.77	24.96 25.26 24.59	0.00 55.05 67.08	72.89 77.58 78.21	86.47 43.73 31.03	59.26 49.87 47.28	0.00 17.92 28.09	93.58 95.93 96.55	99.59 84.44 74.66	56.11 63.70 63.75	71.98 72.37 72.33	29.97 36.04 36.19	40.91 41.46 41.47
+ACNe	46.64	92.95	53.85	37.56	53.13	48.36	65.26	46.54	8.74	17.02	58.26	74.01	36.20	41.33	51.14	94.36	49.15	46.17	63.76	21.19	32.01
$+MAGSAC\uparrow$	56.04	95.25	45.84	40.99	53.54	67.25	63.39	31.84	11.13	17.27	79.69	77.57	20.46	38.97	58.58	95.97	42.66	49.82	64.24	23.94	32.29
$+MAGSAC\downarrow$	61.72	95.96	40.39	41.43	54.23	71.26	63.50	27.71	10.86	17.98	84.91	78.11	14.99	37.27	63.33	96.52	38.07	50.01	64.24	23.91	32.22
$^{+\mathrm{AdaLAM}}_{+\mathrm{MAGSAC}_\uparrow} \\ ^{+\mathrm{MAGSAC}_\downarrow}$	0.00	92.27	99.93	58.22	64.79	0.00	63.40	89.67	12.05	24.96	0.00	72.89	86.47	59.26	0.00	93.58	99.59	56.11	71.98	29.97	40.91
	20.27	95.36	83.11	63.27	64.97	37.08	64.24	60.05	18.98	25.26	55.05	77.58	43.73	49.87	17.92	95.93	84.44	63.70	72.37	36.04	41.46
	31.13	96.11	72.68	63.14	65.32	45.54	64.38	51.60	18.77	24.59	67.08	78.21	31.03	47.28	28.09	96.55	74.66	63.75	72.33	36.19	41.47
$^{+\mathrm{CC}}_{+\mathrm{MAGSAC}_\uparrow}$ $^{+\mathrm{MAGSAC}_\downarrow}$	16.37	85.47	83.94	46.76	56.25	23.68	52.79	66.68	11.13	20.06	72.38	10.70	14.29	7.38	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	32.81	87.99	70.01	50.14	58.16	52.00	52.62	45.09	14.26	20.62	90.64	11.49	5.02	5.11	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	41.90	88.68	61.28	50.68	58.21	58.08	52.78	39.09	14.57	19.97	92.00	11.61	3.62	4.86	n/a	n/a	n/a	n/a	n/a	n/a	n/a
$^{+\text{CLNet}}_{+\text{MAGSAC}_{\uparrow}}$ $^{+\text{MAGSAC}_{\downarrow}}$	13.94	92.83	86.48	36.78	56.00	34.98	65.74	58.37	6.72	18.73	8.94	73.50	81.78	58.97	19.32	94.16	80.91	43.14	65.77	19.91	33.94
	30.14	95.26	72.61	41.92	56.95	57.80	61.43	40.60	9.59	18.47	57.48	77.55	41.87	49.59	32.37	95.85	69.56	48.26	66.06	23.15	33.93
	39.51	96.00	63.61	41.95	57.74	63.39	61.55	35.00	9.43	18.15	68.95	78.05	29.80	46.38	40.49	96.44	61.73	48.56	66.20	23.45	34.21
$+ ConvMatch \\ + MAGSAC_{\uparrow} \\ + MAGSAC_{\downarrow}$	64.76	92.87	35.72	26.96	43.06	65.35	65.33	31.80	7.07	15.88	60.31	73.93	34.98	40.48	63.16	94.19	37.06	37.72	55.75	15.87	26.00
	70.23	94.36	30.99	30.35	43.66	78.22	60.33	21.89	8.66	15.18	80.45	76.37	19.66	37.95	68.29	95.37	32.59	40.95	56.19	17.86	26.49
	73.90	94.99	27.45	30.86	43.69	80.88	60.39	19.08	8.83	15.97	85.48	76.85	14.38	36.79	71.82	95.88	29.18	41.23	56.22	18.11	26.33
$^{+\mathrm{DeMatch}}_{+\mathrm{MAGSAC}_{\uparrow}}$ $^{+\mathrm{MAGSAC}_{\downarrow}}$	64.91	92.73	35.35	26.59	42.63	67.46	64.84	29.57	4.92	12.31	66.10	73.56	29.01	35.74	65.10	94.16	35.05	35.01	53.39	14.14	24.11
	70.55	94.64	30.49	28.97	42.64	79.04	60.69	20.88	6.03	12.03	83.22	76.73	16.78	35.31	70.08	95.52	30.72	38.17	53.85	15.96	24.47
	74.23	95.26	26.96	28.99	42.35	81.60	60.74	18.18	6.22	13.01	87.53	77.11	12.15	34.26	73.43	96.03	27.48	38.69	53.67	16.27	24.10
$^{+\mathrm{FC-GNN}}_{+\mathrm{MAGSAC}_{\uparrow}}$ $^{+\mathrm{MAGSAC}_{\downarrow}}$	9.99	97.04	96.66	66.33	65.62	20.88	67.10	72.61	16.88	25.39	5.74	76.15	87.54	60.21	10.29	97.00	93.86	64.51	73.68	37.48	43.85
	11.58	97.33	95.29	67.81	67.28	35.09	66.01	63.56	20.99	25.58	33.10	77.90	68.97	56.37	12.25	97.30	92.25	67.51	73.63	39.73	43.49
	13.11	97.45	93.80	67.79	66.88	38.13	66.09	60.48	21.00	25.44	42.59	78.25	59.22	53.66	13.95	97.40	90.59	67.56	73.84	39.79	43.90
$+ GMS \\ + MAGSAC_{\uparrow} \\ + MAGSAC_{\downarrow}$	13.70	90.59	86.54	56.85	59.93	34.62	60.51	64.55	12.92	23.51	24.01	72.62	75.84	57.24	12.29	93.38	87.89	56.82	69.76	30.55	39.33
	30.39	92.74	72.30	59.24	61.80	53.51	59.67	45.99	16.95	22.86	62.32	76.83	40.13	49.28	26.91	95.19	75.15	61.05	70.21	33.89	39.80
	39.64	93.44	63.40	59.39	62.73	60.62	59.84	38.87	17.39	22.94	73.27	77.51	28.66	46.89	35.81	95.79	66.59	61.06	70.32	33.91	39.78
$+ \mathrm{MS^2DG\text{-}Net} \\ + \mathrm{MAGSAC}_\uparrow \\ + \mathrm{MAGSAC}_\downarrow$	75.84	93.65	24.65	41.98	38.84	57.11	65.05	33.56	7.72	12.83	63.61	74.41	23.80	36.96	74.52	94.62	25.55	42.68	51.13	19.61	23.09
	79.77	95.51	21.32	42.49	40.02	72.95	64.03	23.40	9.84	12.99	83.14	77.11	13.00	36.33	78.18	95.83	22.45	46.06	50.95	21.87	22.88
	82.24	96.18	18.91	42.64	41.11	75.35	64.17	21.07	9.55	12.75	86.40	77.67	9.65	35.76	80.51	96.35	20.20	46.24	51.48	22.06	23.14
$+ \begin{array}{c} + \text{NCMNet} \\ + \text{MAGSAC}_{\uparrow} \\ + \text{MAGSAC}_{\downarrow} \end{array}$	12.44	92.76	87.97	36.25	55.12	31.04	65.40	62.14	8.43	18.50	7.23	73.42	83.52	59.63	16.35	94.18	83.91	43.52	65.42	20.29	33.32
	28.92	95.08	73.87	41.26	57.18	54.86	61.57	43.66	10.58	18.56	56.98	77.51	42.81	49.99	29.96	95.87	72.06	48.52	65.71	23.33	33.62
	38.44	95.83	64.74	41.79	55.63	60.90	61.68	37.55	10.77	19.36	68.62	78.14	30.67	46.94	38.43	96.46	63.90	48.76	66.01	23.53	33.85
$^{+\mathrm{OANet}}_{+\mathrm{MAGSAC}_{\uparrow}}$ $^{+\mathrm{MAGSAC}_{\downarrow}}$	89.94	93.79	10.34	17.22	27.62	86.70	64.39	10.77	3.81	8.30	87.82	73.24	8.37	28.32	89.48	94.59	10.55	21.23	38.68	7.97	15.67
	91.19	94.70	9.18	17.00	28.09	92.60	56.01	6.66	4.30	8.03	94.31	75.29	5.24	28.24	90.80	95.24	9.41	22.47	38.97	8.58	15.65
	92.08	95.14	8.32	17.57	28.49	93.26	56.02	5.99	4.62	8.37	95.59	75.80	3.93	27.35	91.68	95.64	8.55	22.91	39.35	8.74	15.98
$+ \mathbf{MOP} \\ + \mathbf{MAGSAC}_{\uparrow} \\ + \mathbf{MAGSAC}_{\downarrow}$	0.67	92.39	99.53	59.10	64.04	23.90	59.81	75.39	12.79	23.88	15.86	72.70	83.65	58.88	1.22	93.58	98.82	57.86	72.06	31.26	41.10
	20.47	95.32	82.93	63.12	64.90	46.66	61.53	53.21	18.53	24.80	59.48	77.47	43.51	49.85	18.38	95.81	84.05	63.41	72.21	35.97	41.19
	31.34	96.11	72.54	62.62	66.11	54.79	61.63	44.92	18.84	24.08	71.42	78.07	30.82	47.28	28.51	96.43	74.29	63.52	72.16	36.11	41.39
+MOP+MiHo	0.34	92.33	99.78	58.81	64.81	19.62	61.40	79.44	12.27	24.67	15.81	72.66	83.65	58.91	0.85	93.60	99.08	57.33	72.02	30.81	40.93
+MAGSAC↑	20.37	95.35	83.08	63.27	65.01	43.65	63.27	56.15	18.88	25.47	59.53	77.45	43.40	49.94	18.18	95.88	84.21	63.51	72.29	36.03	41.40
+MAGSAC↓	31.24	96.14	72.66	63.06	65.35	51.89	63.43	47.76	18.83	24.71	71.40	78.07	30.87	47.24	28.34	96.51	74.45	63.60	72.28	36.19	41.42
$+ \begin{aligned} & + \mathbf{MOP + MiHo + NCC} \\ & + \mathbf{MAGSAC}_{\uparrow} \\ & + \mathbf{MAGSAC}_{\downarrow} \end{aligned}$	0.34	85.06	92.27	33.73	63.47	19.62	57.84	78.37	8.10	24.44	15.81	71.29	82.96	57.77	0.85	84.03	88.71	29.40	70.53	11.65	39.76
	27.72	96.00	76.50	56.43	64.13	48.65	62.98	51.51	18.08	24.72	41.60	77.40	63.04	54.90	33.19	95.90	69.01	54.43	70.17	28.90	39.76
	32.47	96.46	71.94	57.63	64.05	53.54	63.09	46.69	18.47	24.57	50.10	77.75	54.01	52.43	38.04	96.33	64.36	54.94	69.91	29.42	39.37
$\begin{array}{l} +\mathbf{MOP} + \mathbf{NCC} \\ + \mathbf{MAGSAC}_{\uparrow} \\ + \mathbf{MAGSAC}_{\downarrow} \end{array}$	0.67 28.17 32.85	84.83 95.86 96.34	91.69 75.93 71.49	31.72 55.66 56.19	62.89 63.23 63.49		56.30 61.35 61.49	74.04 48.99 44.29	8.34 18.28 18.62	24.43 24.71 24.93	15.86 42.05 50.37	70.91 77.38 77.77	82.44 62.50 53.79	57.25 55.05 52.53	1.22 33.48 38.28	83.64 95.73 96.15	88.09 68.69 64.10	28.41 53.64 54.24	70.30 69.84 69.58	11.65 28.66 29.10	39.92 39.24 39.29
+MCC	0.00	74.62	79.29	28.14	47.16	0.00	58.52	88.72	7.57	21.92	0.00	53.62	61.61	49.80	0.00	74.40	77.94	24.47	56.05	9.38	29.18
$+$ MAGSAC \uparrow	44.48	89.05	55.27	38.65	48.06	46.90	63.42	50.70	16.12	21.90	70.33	77.47	28.05	44.66	50.91	90.88	48.39	38.25	56.50	18.57	29.66
$+$ MAGSAC \downarrow	50.78	89.54	49.54	38.94	48.55	52.41	63.58	45.28	16.08	22.30	76.42	77.97	21.64	43.09	57.22	91.41	42.56	38.28	56.22	18.73	29.60