Observation Filters - Optimal, Noisy

					δ_{HC}F0			δ_{HCU}F0			δ_{HC}F1			δ_{HCU}F1			δ_{HC}F2			δ_{HCU}F2		
#	$\lvert\Gamma\rvert$	% Obs	$\lvert\Omega\rvert$	$\lvert\Gamma^*\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$
BLOCKS	20.3	10	2.25	8.0	0.32	66.7	6.67	0.33	69.4	9.11	0.37	86.1	9.06	0.37	86.1	9.14	**0.4**	97.2	17.58	**0.4**	97.2	17.58
		30	4.08	3.97	0.37	75.0	3.44	0.39	88.9	7.64	0.38	80.6	3.58	0.39	83.3	4.5	**0.41**	97.2	7.08	**0.41**	97.2	7.44
		50	5.67	2.5	0.64	83.3	2.17	0.52	94.4	4.53	**0.66**	86.1	2.22	0.62	88.9	2.89	0.56	88.9	3.72	0.53	88.9	3.89
		70	8.42	1.94	0.79	91.7	1.67	0.58	94.4	2.86	**0.81**	94.4	1.78	0.67	94.4	2.47	0.76	97.2	2.19	0.7	97.2	2.56
		100	11.08	1.83	0.88	94.4	1.58	0.8	97.2	2.08	0.88	97.2	1.61	0.88	97.2	1.61	**0.91**	100.0	1.69	0.88	97.2	1.61
IPC-GRID	7.5	10	2.63	2.71	0.57	91.7	1.5	**0.61**	95.8	1.67	0.56	91.7	1.54	0.56	91.7	1.54	0.48	93.8	5.19	0.48	93.8	5.19
		30	5.19	1.21	**0.85**	91.7	1.17	0.83	93.8	1.25	**0.85**	93.8	1.17	**0.85**	93.8	1.17	0.7	91.7	1.46	0.7	91.7	1.46
		50	7.81	1.13	**0.89**	95.8	1.15	0.88	95.8	1.17	**0.89**	95.8	1.15	**0.89**	95.8	1.15	0.85	95.8	1.25	0.85	95.8	1.25
		70	10.75	1.04	**0.95**	100.0	1.15	**0.95**	100.0	1.15	**0.95**	100.0	1.15	**0.95**	100.0	1.15	0.93	100.0	1.15	0.93	100.0	1.15
		100	14.63	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0
LOGISTICS	10.0	10	3.0	2.83	0.58	94.4	2.72	0.58	94.4	2.78	**0.6**	100.0	3.03	**0.6**	100.0	3.03	0.43	100.0	7.08	0.43	100.0	7.08
		30	7.58	1.19	0.82	94.4	1.28	**0.84**	100.0	1.67	0.82	94.4	1.28	**0.84**	100.0	1.58	0.77	94.4	1.42	0.77	94.4	1.42
		50	11.42	1.06	**0.9**	97.2	1.11	0.88	100.0	1.28	**0.9**	97.2	1.11	0.89	100.0	1.25	**0.9**	97.2	1.08	**0.9**	97.2	1.08
		70	16.08	1.03	**0.97**	100.0	1.03	0.94	100.0	1.08	**0.97**	100.0	1.03	0.94	100.0	1.08	**0.97**	100.0	1.03	**0.97**	100.0	1.03
		100	22.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0
MICONIC	6.0	10	3.0	2.53	0.39	69.4	2.39	0.37	72.2	3.08	**0.52**	97.2	3.19	**0.52**	97.2	3.19	0.46	100.0	5.36	0.46	100.0	5.36
		30	6.83	1.22	0.57	80.6	1.44	0.43	83.3	2.22	**0.65**	94.4	1.58	0.63	94.4	1.72	0.53	100.0	2.44	0.53	100.0	2.44
		50	10.42	1.06	**0.93**	100.0	1.14	0.76	100.0	1.67	**0.93**	100.0	1.14	0.89	100.0	1.22	**0.93**	100.0	1.14	**0.93**	100.0	1.14
		70	14.83	1.0	0.94	97.2	1.08	0.78	100.0	1.53	**0.95**	100.0	1.14	0.92	100.0	1.22	**0.95**	100.0	1.14	**0.95**	100.0	1.14
		100	20.0	1.0	0.94	97.2	1.06	0.93	97.2	1.11	0.97	100.0	1.06	0.97	100.0	1.06	**0.99**	100.0	1.03	0.93	94.4	0.97
ROVERS	6.0	10	2.67	2.28	0.44	80.6	2.58	0.44	86.1	2.78	**0.46**	88.9	2.94	**0.46**	88.9	2.94	0.4	100.0	5.42	0.4	100.0	5.42
		30	4.67	1.31	0.7	83.3	1.36	0.68	91.7	1.69	**0.72**	83.3	1.36	**0.72**	83.3	1.36	0.5	97.2	2.81	0.5	97.2	2.81
		50	7.42	1.19	0.8	91.7	1.33	0.79	94.4	1.47	**0.82**	97.2	1.36	0.8	97.2	1.44	0.67	94.4	1.81	0.67	94.4	1.81
		70	10.17	1.0	**0.93**	97.2	1.08	0.89	97.2	1.17	0.92	97.2	1.11	0.92	97.2	1.11	0.9	97.2	1.14	0.9	97.2	1.14
		100	13.5	1.0	**0.97**	100.0	1.06	**0.97**	100.0	1.06	0.96	97.2	1.03	0.96	97.2	1.03	0.93	97.2	1.08	0.93	97.2	1.08
SATELLITE	6.0	10	2.42	3.53	0.53	75.0	3.31	0.51	77.8	3.64	**0.64**	97.2	4.36	**0.64**	97.2	4.36	0.59	100.0	5.89	0.59	100.0	5.89
		30	4.42	2.39	0.5	77.8	2.33	**0.54**	83.3	3.08	0.48	94.4	2.81	0.48	94.4	2.81	0.45	100.0	4.53	0.45	100.0	4.53
		50	7.17	1.58	0.67	88.9	1.89	0.57	91.7	2.53	**0.69**	91.7	1.89	0.66	91.7	2.08	0.55	91.7	2.61	0.55	91.7	2.61
		70	10.08	1.31	0.87	94.4	1.31	0.71	94.4	2.17	0.87	94.4	1.31	0.82	94.4	1.47	**0.91**	100.0	1.33	**0.91**	100.0	1.33
		100	13.17	1.25	0.92	97.2	1.31	0.88	97.2	1.39	**0.97**	97.2	1.19	**0.97**	97.2	1.19	0.94	97.2	1.14	0.92	94.4	1.11
SOKOBAN	8.7	10	3.33	2.11	0.27	58.3	2.78	0.29	83.3	4.36	0.29	47.2	1.64	**0.33**	58.3	1.94	0.26	63.9	3.64	0.26	63.9	3.64
		30	8.17	1.25	0.56	77.8	2.17	0.41	97.2	4.42	0.69	83.3	1.5	0.47	88.9	3.03	**0.73**	88.9	1.44	0.64	91.7	2.17
		50	12.67	1.22	0.61	94.4	2.97	0.47	97.2	4.11	0.68	94.4	2.58	0.53	97.2	3.31	**0.82**	97.2	1.19	0.65	97.2	1.86
		70	18.0	1.03	0.6	94.4	3.75	0.5	94.4	4.42	0.77	94.4	2.36	0.65	97.2	2.94	**0.94**	97.2	1.06	0.83	100.0	1.42
		100	24.67	1.0	0.66	100.0	3.89	0.55	100.0	4.28	0.71	94.4	2.89	0.64	97.2	3.25	**0.85**	94.4	1.83	0.77	97.2	2.14
Avg					0.72	89.48	1.97	0.67	93.23	2.64	**0.75**	93.19	2.0	0.73	94.3	2.21	0.73	96.29	2.91	0.71	96.21	2.99

Table 1: Results for each filtering k, with optimal observations. F0 for no filter, F1 for $k = 1$ and F2 for $k = 2$.

Observation Filters - Suboptimal, Noisy

					δ_{HC}F0			δ_{HCU}F0			δ_{HC}F1			δ_{HCU}F1			δ_{HC}F2			δ_{HCU}F2		
#	$\lvert\Gamma\rvert$	% Obs	$\lvert\Omega\rvert$	$\lvert\Gamma^*\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$
BLOCKS	20.3	10	2.42	7.61	0.38	69.4	6.58	**0.42**	88.9	12.72	0.41	75.0	7.33	0.4	77.8	7.92	0.41	97.2	16.11	0.41	97.2	16.11
		30	4.92	3.58	0.36	63.9	3.47	0.34	91.7	11.33	0.4	72.2	3.67	0.38	91.7	7.83	**0.42**	83.3	5.31	0.4	88.9	6.31
		50	7.33	3.19	**0.53**	83.3	2.64	0.33	97.2	7.64	**0.53**	83.3	2.67	0.43	94.4	5.39	0.5	86.1	3.03	0.47	91.7	4.14
		70	10.67	2.53	**0.67**	88.9	2.22	0.45	100.0	5.56	**0.67**	88.9	2.22	0.52	94.4	4.0	**0.67**	88.9	2.22	0.57	91.7	2.83
		100	14.42	2.25	0.78	91.7	1.53	0.7	97.2	2.17	0.78	91.7	1.53	0.74	91.7	1.61	**0.82**	97.2	1.64	0.75	94.4	1.69
IPC-GRID	7.5	10	3.06	1.58	0.62	89.6	2.1	0.53	93.8	2.96	**0.63**	91.7	2.21	0.57	91.7	2.58	0.55	93.8	3.25	0.55	93.8	3.25
		30	7.13	1.4	0.68	89.6	1.44	0.55	93.8	2.08	0.68	89.6	1.44	0.56	93.8	2.0	**0.69**	89.6	1.42	0.63	93.8	1.69
		50	10.94	1.35	0.84	95.8	1.06	0.79	97.9	1.48	0.84	97.9	1.1	0.79	97.9	1.48	**0.85**	97.9	1.08	0.82	97.9	1.35
		70	15.56	1.31	**0.89**	100.0	1.06	0.87	100.0	1.15	**0.89**	100.0	1.06	0.87	100.0	1.15	**0.89**	100.0	1.06	0.86	100.0	1.13
		100	21.13	1.5	**0.94**	100.0	1.0	**0.94**	100.0	1.0	**0.94**	100.0	1.0	**0.94**	100.0	1.0	**0.94**	100.0	1.0	**0.94**	100.0	1.0
LOGISTICS	10.0	10	3.67	2.0	0.55	88.9	2.36	0.51	88.9	2.94	**0.57**	97.2	2.69	0.56	97.2	2.92	0.46	100.0	5.17	0.46	100.0	5.17
		30	9.33	1.14	**0.8**	100.0	1.33	0.7	100.0	1.94	**0.8**	100.0	1.33	0.7	100.0	1.89	0.75	100.0	1.72	0.67	100.0	1.94
		50	14.58	1.06	**0.91**	100.0	1.22	0.7	100.0	2.08	**0.91**	100.0	1.22	0.7	100.0	2.08	**0.91**	100.0	1.22	0.77	100.0	1.86
		70	20.17	1.03	**0.96**	100.0	1.06	0.84	100.0	1.36	**0.96**	100.0	1.06	0.84	100.0	1.36	**0.96**	100.0	1.06	0.85	100.0	1.33
		100	28.17	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0	**1.0**	100.0	1.0
MICONIC	6.0	10	4.0	1.83	0.43	80.6	2.11	0.41	83.3	2.89	**0.55**	97.2	2.47	**0.55**	97.2	2.47	0.36	100.0	4.61	0.36	100.0	4.61
		30	9.67	1.25	0.75	88.9	1.36	0.36	100.0	3.69	**0.78**	94.4	1.42	0.52	97.2	2.58	0.77	94.4	1.47	0.66	97.2	2.0
		50	15.25	1.03	**0.86**	94.4	1.14	0.45	100.0	3.19	**0.86**	94.4	1.14	0.57	100.0	2.36	**0.86**	94.4	1.14	0.68	97.2	1.78
		70	21.25	1.0	0.9	94.4	1.08	0.45	97.2	3.03	0.9	94.4	1.08	0.57	97.2	2.36	**0.92**	94.4	1.06	0.74	94.4	1.64
		100	29.25	1.0	**0.97**	100.0	1.08	0.78	100.0	1.61	**0.97**	100.0	1.08	0.87	100.0	1.36	**0.97**	100.0	1.08	0.88	94.4	1.11
ROVERS	6.0	10	2.83	2.39	0.46	72.2	2.31	0.45	75.0	2.5	**0.51**	86.1	2.94	**0.51**	86.1	2.94	0.46	97.2	5.22	0.46	97.2	5.22
		30	5.75	1.39	**0.65**	91.7	1.56	0.53	94.4	2.28	**0.65**	91.7	1.56	0.58	91.7	1.89	0.56	94.4	2.19	0.55	94.4	2.25
		50	9.0	1.11	**0.87**	97.2	1.19	0.77	97.2	1.5	0.85	97.2	1.22	0.8	97.2	1.42	0.82	94.4	1.25	0.79	94.4	1.31
		70	12.42	1.06	0.93	100.0	1.11	0.86	100.0	1.39	**0.94**	100.0	1.14	0.88	100.0	1.33	0.91	97.2	1.14	0.89	100.0	1.25
		100	16.92	1.0	**0.97**	100.0	1.06	0.96	100.0	1.08	**0.97**	100.0	1.06	**0.97**	100.0	1.06	**0.97**	100.0	1.06	0.89	91.7	0.97
SATELLITE	6.0	10	3.0	3.25	0.49	83.3	3.08	0.47	86.1	3.78	0.5	91.7	3.89	0.5	91.7	3.89	**0.52**	100.0	5.14	**0.52**	100.0	5.14
		30	5.33	1.78	0.54	77.8	2.17	0.47	86.1	3.69	**0.6**	91.7	2.47	0.59	94.4	2.81	0.51	97.2	3.33	0.51	97.2	3.33
		50	8.75	1.36	0.78	88.9	1.42	0.56	94.4	2.69	**0.82**	94.4	1.42	0.73	94.4	2.08	0.79	97.2	1.58	0.76	97.2	1.72
		70	11.75	1.33	0.86	97.2	1.47	0.64	100.0	2.83	0.89	97.2	1.39	0.71	97.2	2.22	**0.91**	100.0	1.42	0.85	100.0	1.64
		100	15.75	1.25	0.92	94.4	1.19	0.88	94.4	1.28	0.92	94.4	1.19	0.89	91.7	1.17	**0.93**	94.4	1.17	0.88	88.9	1.11
SOKOBAN	8.7	10	4.33	1.83	0.31	58.3	2.47	**0.34**	80.6	4.81	0.33	47.2	1.64	0.29	58.3	2.94	0.3	52.8	2.22	0.31	55.6	2.44
		30	11.0	1.28	0.48	75.0	2.81	0.29	97.2	5.36	0.53	72.2	1.94	0.35	97.2	4.89	**0.61**	80.6	1.56	0.48	94.4	3.47
		50	17.08	1.33	0.5	94.4	4.22	0.32	94.4	5.89	0.61	88.9	2.67	0.37	91.7	4.75	**0.71**	86.1	1.39	0.45	94.4	3.78
		70	23.58	1.36	0.54	100.0	4.44	0.36	100.0	5.92	0.68	97.2	3.08	0.49	100.0	4.47	**0.72**	94.4	2.28	0.58	100.0	3.72
		100	32.67	1.33	0.35	94.4	5.97	0.34	97.2	6.56	0.42	94.4	5.19	0.44	97.2	5.81	0.62	91.7	2.89	**0.64**	91.7	3.36
Avg					0.7	89.84	2.1	0.58	95.06	3.53	**0.72**	91.78	2.04	0.63	94.6	2.83	**0.72**	94.15	2.56	0.66	95.14	2.93

Table 2: Results for each filtering k, with suboptimal observations. F0 for no filter, F1 for $k = 1$ and F2 for $k = 2$.