## Constraints (single) - Optimal, Noisy

$\overline{}$					$\delta_{HC}(L)$			$\delta_{\text{HCU}(L)}$			$\delta_{HC}(P)$			$\delta_{\text{HCU}}(P)$			$\delta_{HC}(S)$			$\delta_{HCU}(S)$		
#	r	% Obs	ΙΩΙ	\Gamma*	AGR ACC   Th			AGR ACC   \(\Gamma^h\)		AGR ACC   \Gamma^h			. F.			AGR ACC   \(\Gamma^h\)			AGR ACC   \(\Gamma^h\)			
#	11				_			_						_	ACC		_			_		
BLOCKS		10	1.25	8.0	0.42	91.7	10.61	0.42	91.7	10.61	0.41	88.9	8.22	0.41	88.9	8.22	0.44	88.9	8.58	0.44	88.9	8.58
		30	3.08	3.97	0.3	80.6	4.47	0.3	83.3	7.75	0.34	61.1	3.83	0.34	61.1	3.83	0.39	75.0	3.61	0.39	86.1	7.64
	20.3	50	4.42	2.5	0.34	69.4	3.11	0.33	80.6	5.72	0.32	50.0	3.53	0.32	52.8	3.89	0.43	77.8	3.67	0.34	94.4	9.42
m		70	6.67	1.94	0.56	77.8	2.25	0.52	88.9	4.53	0.47	80.6	3.67	0.46	83.3	4.03	0.68	91.7	2.36	0.47	94.4	5.64
		100	8.83	1.83	0.59	75.0	1.75	0.62	91.7	3.5	0.51	75.0	3.5	0.51	75.0	3.5	0.64	83.3	1.92	0.65	100.0	4.25
		10	1.63	2.71	0.84	95.8	3.17	0.84	95.8	3.17	0.4	97.9	7.06	0.4	97.9	7.06	0.61	79.2	3.48	0.61	79.2	3.48
GRID		30	4.0	1.21	0.91	100.0	1.42	0.86	100.0	1.77	0.25	100.0	6.81	0.25	100.0	6.81	0.68	89.6	1.81	0.63	95.8	2.77
9	7.5	50	6.19	1.13	0.88	95.8	1.35	0.86	97.9	1.54	0.23	93.8	6.63	0.23	93.8	6.63	0.76	87.5	1.48	0.74	93.8	2.02
IPC-		70	8.69	1.04	0.96	97.9	1.08	0.94	100.0	1.27	0.31	81.3	5.33	0.31	81.3	5.33	0.88	95.8	1.21	0.79	100.0	1.85
		100	11.88	1.0	0.97	100.0	1.06	0.97	100.0	1.06	0.25	56.3	4.13	0.25	56.3	4.13	1.0	100.0	1.0	0.94	100.0	1.5
	10.0	10	2.0	2.83	0.75	97.2	4.64	0.75	97.2	4.64	0.61	88.9	3.61	0.61	88.9	3.61	0.72	97.2	4.86	0.71	97.2	4.97
LOGISTICS		30	5.75	1.19	0.8	100.0	1.94	0.67	100.0	2.92	0.5	91.7	2.64	0.44	100.0	3.86	0.69	100.0	2.36	0.44	100.0	5.06
TSIE		50	9.42	1.06	0.88	97.2	1.31	0.84	100.0	1.58	0.64	94.4	1.92	0.61	100.0	2.53	0.85	100.0	1.58	0.64	100.0	2.69
100		70	13.25	1.03	0.97	100.0	1.08	0.89	100.0	1.33	0.7	100.0	1.72	0.68	100.0	2.08	0.94	100.0	1.14	0.7	100.0	2.14
		100	18.17	1.0	1.0	100.0	1.0	1.0	100.0	1.0	0.69	100.0	1.67	0.69	100.0	1.67	0.96	100.0	1.08	0.88	100.0	1.25
	6.0	10	2.0	2.53	0.74	97.2	3.56	0.74	97.2	3.56	0.6	100.0	4.42	0.6	100.0	4.42	0.69	100.0	4.08	0.67	100.0	4.19
MICONIC		30	5.42	1.22	0.62	94.4	2.08	0.6	94.4	2.36	0.51	100.0	2.83	0.26	100.0	4.86	0.51	100.0	2.83	0.26	100.0	5.25
		50	8.42	1.06	0.79	97.2	1.47	0.61	97.2	2.31	0.69	100.0	1.81	0.4	100.0	3.72	0.69	100.0	1.81	0.26	100.0	5.08
M		70	11.92	1.0	0.85	97.2	1.28	0.77	97.2	1.5	0.8	100.0	1.47	0.45	100.0	3.17	0.8	100.0	1.47	0.31	100.0	4.22
		100	16.33	1.0	0.88	100.0	1.25	0.86	100.0	1.33	1.0	100.0	1.0	0.66	100.0	2.25	1.0	100.0	1.0	0.43	100.0	3.42
	6.0	10	1.67	2.28	0.57	75.0	2.92	0.57	75.0	2.92	0.54	91.7	4.31	0.54	91.7	4.31	0.51	94.4	4.64	0.51	100.0	4.94
S		30	3.67	1.31	0.7	88.9	1.92	0.7	91.7	2.22	0.6	94.4	2.58	0.45	97.2	4.14	0.48	91.7	3.19	0.34	97.2	4.67
ROVERS		50	5.75	1.19	0.83	91.7	1.42	0.83	94.4	1.67	0.75	94.4	1.75	0.53	94.4	2.86	0.64	100.0	2.44	0.4	100.0	4.33
8		70	8.17	1.0	0.81	94.4	1.31	0.78	94.4	1.47	0.82	94.4	1.36	0.7	100.0	2.22	0.72	88.9	1.61	0.32	94.4	4.19
		100	10.83	1.0	1.0	100.0	1.0	1.0	100.0	1.0	0.94	100.0	1.25	0.85	100.0	1.42	0.85	100.0	1.42	0.55	100.0	3.17
		10	1.42	3.53	-	-	-	0.8	91.7	3.81	-	-	-	0.79	97.2	4.53	-	-	-	0.71	88.9	4.28
HE	6.0	30	3.42	2.39	-	-	-	0.72	91.7	3.14	-	-	-	0.65	100.0	4.08	-	-	-	0.52	97.2	4.78
Ħ		50	5.75	1.58	-	-	-	0.71	97.2	2.75	-	-	-	0.71	94.4	2.72	-	-	-	0.38	88.9	4.08
SATELLITE		70	8.08	1.31	-	-	-	0.66	94.4	2.44	-	-	-	0.76	100.0	2.36	-	-	-	0.43	100.0	3.86
0,		100	10.75	1.25	-	-	-	0.79	91.7	1.67	-	-	-	0.78	91.7	1.83	-	-	-	0.52	91.7	2.75
		10	2.33	2.11	0.3	72.2	5.08	0.3	72.2	5.08	0.24	91.7	7.58	0.24	91.7	7.58	0.32	47.2	2.47	0.28	58.3	4.14
3		30	6.5	1.25	0.39	72.2	2.67	0.35	80.6	3.53	0.14	63.9	5.0	0.14	63.9	5.0	0.48	66.7	1.72	0.47	97.2	4.08
KOBAN	8.7	50	10.33	1.22	0.36	63.9	1.81	0.34	83.3	3.42	0.21	52.8	3.17	0.22	58.3	3.31	0.52	72.2	2.67	0.35	94.4	5.78
SOK	/	70	14.67	1.03	0.51	66.7	1.56	0.47	91.7	3.25	0.21	30.6	1.72	0.21	30.6	1.72	0.56	86.1	3.44	0.42	100.0	4.97
3		100	20.17	1.0	0.68	83.3	1.58	0.62	83.3	1.83	0.21	33.3	1.83	0.21	33.3	1.83	0.64	83.3	2.58	0.45	100.0	4.25
Avg		-		-	0.61	76.37	2.03	0.69	92.76	2.96	0.43	71.63	3.04	0.48	86.39	3.87	0.57	77.04	2.22	0.51	95.38	4.28
5					0.07	. 0.57	2.00	1 0.07	,2.70	2.70	0.43	. 1.03	5.04	0.40	30.37	2.01	0.57	77.04		0.51	0	7.20

Table 1: Results for each contraint set, for optimal observations. L for Landmarks, P for Post-hoc, and S for State equation.

Constraints (single) - Suboptimal, Noisy

	_			constraints (single)								_											
No.   10						$\delta_{HC}(L)$			_	δ <sub>HCU</sub> (L)		$\delta_{HC}(P)$		$\delta_{HCU(P)}$			$\delta_{HC}(S)$			$\delta_{HCU(S)}$			
No.   Part   P	#	$ \Gamma $	% Obs	$ \Omega $	$ \Gamma^* $	AGR	ACC	$ \Gamma^{\mathbf{h}} $	AGR	ACC	$ \Gamma^{\mathbf{h}} $	AGR	ACC	$ \Gamma^{h} $	AGR	ACC	$ \Gamma^{\mathbf{h}} $	AGR	ACC	$ \Gamma^{\mathbf{h}} $	AGR	ACC	$ \Gamma^{\mathbf{h}} $
Part	BLOCKS		10	1.42	7.61	0.4	86.1	9.92	0.4	86.1	9.92	0.31	86.1	8.89	0.31	86.1	8.89	0.42	83.3	9.08	0.42	83.3	9.25
No.   18.3   225   0.44   0.67   2.0   0.56   10.00   4.08   0.49   0.67   2.25   0.47   75.0   3.33   0.58   75.0   10.2   0.58   10.00   3.67   10.00			30	3.83	3.58	0.36	80.6	4.92	0.28	86.1	9.0	0.33	63.9	4.72	0.33	66.7	4.97	0.4	75.0	4.31	0.31	94.4	9.56
No.   18.3   225   0.44   0.67   2.0   0.56   10.00   4.08   0.49   0.67   2.25   0.47   75.0   3.33   0.58   75.0   10.2   0.58   10.00   3.67   10.00		20.3	50	5.92	3.19	0.33	66.7	3.44	0.32	77.8	7.03	0.4	66.7	3.53	0.4	66.7	3.53	0.47	86.1	4.17	0.27	94.4	9.64
Fig.			70	8.5	2.53	0.38	69.4	2.83	0.36	86.1	5.36	0.44	66.7	2.72	0.42	66.7	2.97	0.48	72.2	2.33	0.32	100.0	9.39
Part			100	11.83	2.25	0.44	66.7	2.0	0.56	100.0	4.08	0.49	66.7	2.25	0.47	75.0	3.33	0.58	75.0	1.92	0.58	100.0	3.67
Part			10	2.06	1.58	0.69	95.8	2.75	0.65	95.8	3.25	0.25	97.9	7.15	0.25	97.9	7.15	0.5	85.4	3.4	0.47	87.5	4.02
Part	₽		30	5.56	1.4	0.86	100.0	1.33	0.77	100.0	2.31	0.22	91.7	6.81	0.22	91.7	6.81	0.69	89.6	1.77	0.61	93.8	3.25
Part	-GR	7.5	50	8.88	1.35	0.85	97.9	1.25	0.75	100.0	1.83	0.31	81.3	5.6	0.31	81.3	5.6	0.71	97.9	1.69	0.53	97.9	3.08
No.   Part   P	IPC		70	12.56	1.31	0.86	97.9	1.13	0.81	100.0	1.44	0.21	47.9	4.31	0.21	47.9	4.31	0.79	95.8	1.25	0.61	100.0	2.73
Part			100	17.25	1.5	0.91	100.0	1.06	0.82	100.0	1.25	0.07	6.3	1.88	0.07	6.3	1.88	0.85	93.8	1.06	0.69	93.8	1.69
No.   10   10   10   10   10   10   10   1		10.0	10	2.67	2.0	0.73	100.0	3.78	0.73	100.0	3.78	0.69	97.2	3.53	0.68	97.2	3.58	0.72	100.0	3.86	0.61	100.0	5.22
No.   10   10   10   10   10   10   10   1	OGISTICS		30	7.5	1.14	0.86	97.2	1.44	0.71	100.0	2.53	0.66	94.4	1.97	0.63	100.0	2.33	0.74	100.0	2.03	0.5	100.0	4.44
No.   10   10   10   10   10   10   10   1			50	11.92	1.06	0.88	100.0	1.33	0.7	100.0	2.11	0.69	100.0	1.75	0.68	100.0	1.92	0.79	100.0	1.72	0.47	100.0	4.22
No.   10   30   1.83   0.61   9.44   3.25   0.61   9.44   3.25   0.48   1000   4.36   0.42   1000   5.17   0.48   1000   4.36   0.39   1000   5.31			70	16.67	1.03	0.98	100.0	1.08	0.85	100.0	1.39	0.71	100.0	1.67	0.69	100.0	1.69	0.91	100.0	1.22	0.7	100.0	2.36
Part			100	23.17	1.0	1.0	100.0	1.0	0.96	100.0	1.08	0.69	100.0	1.67	0.69	100.0	1.67	0.96	100.0	1.08	0.76	100.0	1.67
Fig.	CONIC	6.0	10	3.0	1.83	0.61	94.4	3.25	0.61	94.4	3.33	0.48	100.0	4.36	0.42	100.0	5.17	0.48	100.0	4.36	0.39	100.0	5.31
Fig.			30	7.67	1.25	0.61	83.3	1.67	0.44	97.2	3.36	0.5	97.2	2.86	0.28	100.0	5.39	0.5	97.2	2.86	0.24	100.0	5.72
Fig.			50	12.25	1.03	0.74	86.1	1.31	0.53	94.4	2.5	0.78	100.0	1.61	0.25	100.0	4.89	0.78	100.0	1.61	0.22	100.0	5.33
The late of the	ž		70	17.33	1.0	0.81	88.9	1.25	0.63	94.4	2.08	0.76	97.2	1.5	0.37	100.0	3.75	0.75	97.2	1.53	0.21	100.0	5.25
Part			100	24.0	1.0	0.92	91.7	1.0	0.94	100.0	1.17	0.96	100.0	1.08	0.89	100.0	1.42	0.96	100.0	1.08	0.31	100.0	4.42
Fig.		6.0	10	1.83	2.39	0.72	94.4	3.33	0.72	94.4	3.33	0.59	97.2	4.53	0.59	97.2	4.53	0.54	97.2	4.75	0.5	97.2	5.06
Here Here Here Here Here Here Here Here	SS		30	4.5	1.39	0.75	88.9	1.64	0.66	91.7	2.33	0.64	88.9	2.25	0.47	97.2	4.17	0.56	86.1	2.64	0.37	97.2	4.78
Here Here Here Here Here Here Here Here	NE I		50	7.17	1.11	0.78	91.7	1.42	0.69	91.7	2.0	0.67	88.9	1.81	0.35	97.2	3.89	0.53	88.9	2.64	0.28	100.0	5.14
E   10   20   3.25   2   3.25   3   4.31   3   3   3   3   3   3   3   3   3	RC		70	10.0	1.06	0.9	100.0	1.36	0.75	100.0	1.97	0.82	100.0	1.58	0.55	100.0	2.86	0.74	97.2	1.81	0.33	100.0	4.75
## Representation   Fig. 1			100	13.67	1.0	1.0	100.0	1.0	0.94	100.0	1.25	1.0	100.0	1.0	0.9	100.0	1.33	0.9	100.0	1.33	0.61	100.0	2.92
100   12.75   12.5   -1   -2   -3   10.0   18.3   -3   -4   -4   -4   -4   -4   -4   -			10	2.0	3.25	-	-	-	0.72	91.7	4.19	-	-		0.73	100.0	4.72	-	-	-	0.65	100.0	5.14
100   12.75   12.5   -1   -2   -3   10.0   18.3   -3   -4   -4   -4   -4   -4   -4   -	E E		30	4.33	1.78	-	-	-	0.54	91.7	3.78	-	-	-	0.52	97.2	4.19	-	-	-	0.37	91.7	5.0
100   12.75   12.5   -1   -2   -3   10.0   18.3   -3   -4   -4   -4   -4   -4   -4   -	BLI	6.0	50	6.75	1.36	-	-	-	0.64	100.0	2.78	-	-	-	0.58	97.2	3.17	-	-	-	0.32	100.0	5.0
\$\begin{array}{c c c c c c c c c c c c c c c c c c c	SAT		70	9.42	1.33	-	-	-	0.68	97.2	2.61	-	-	-	0.6	100.0	3.19	-	-	-	0.41	100.0	4.31
E         8         7         50         1.38         1.28         0.37         72.2         2.53         0.28         8.61         5.11         0.13         41.7         2.97         0.13         4.17         2.97         0.13         4.17         2.97         0.13         4.17         2.97         0.13         4.17         2.97         0.13         4.17         2.97         0.13         4.17         2.97         0.13         4.17         2.97         0.13         4.17         2.97         0.13         4.17         0.17         4.97         0.13         4.17         0.19         4.97         0.13         4.97         0.13         0.47         6.39         2.12         2.14         0.16         3.04         5.92         2.92         0.18         4.97         0.18         4.97         0.18         4.97         0.18         4.83         3.97         0.25         9.44         6.31         4.97         0.18         4.83         3.97         0.25         9.44         6.17         2.97         0.13         4.18         0.24         0.13         4.81         4.97         0.18         4.83         3.97         0.25         9.44         6.33         1.97         0.18         0.18	1		100	12.75	1.25	-	-	-	0.81	100.0	1.83	-	-	-	0.75	100.0	2.08	-	-	-	0.42	100.0	4.08
100 27.0 1.33 0.74 83.3 1.17 0.61 100.0 3.0 0.13 16.7 1.75 0.15 16.7 1.83 0.47 83.3 4.67 0.3 91.7 6.17			10	3.33	1.83	0.27	58.3	3.81	0.27	61.1	4.06	0.24	91.7	6.78	0.24	91.7	6.78	0.37	47.2	1.94	0.36	72.2	3.97
100 27.0 1.33 0.74 83.3 1.17 0.61 100.0 3.0 0.13 16.7 1.75 0.15 16.7 1.83 0.47 83.3 4.67 0.3 91.7 6.17	N N		30	8.67	1.28	0.37	72.2	2.53	0.28	86.1	5.11	0.13	41.7	2.97	0.13	41.7	2.97	0.58	72.2	2.19	0.35	97.2	5.56
100 27.0 1.33 0.74 83.3 1.17 0.61 100.0 3.0 0.13 16.7 1.75 0.15 16.7 1.83 0.47 83.3 4.67 0.3 91.7 6.17	l g	8.7	50	13.75	1.33	0.4	55.6	1.61	0.38	91.7	4.67	0.16	19.4	1.39	0.16	30.6	1.78	0.54	63.9	2.0	0.32	83.3	4.83
	SOR		70	19.33	1.36	0.43	63.9	1.72	0.37	80.6	3.89	0.17	22.2	1.44	0.16	22.2	1.61	0.44	83.3	3.97	0.25	94.4	6.53
Avg 0.59 74.6 1.92 0.63 94.01 3.3 0.41 66.51 2.72 0.44 82.06 3.72 0.55 76.23 2.29 0.43 96.29 4.96			100	27.0	1.33	0.74	83.3	1.17	0.61	100.0	3.0	0.13	16.7	1.75	0.15	16.7	1.83	0.47	83.3	4.67	0.3	91.7	6.17
	Avg					0.59	74.6	1.92	0.63	94.01	3.3	0.41	66.51	2.72	0.44	82.06	3.72	0.55	76.23	2.29	0.43	96.29	4.96

Table 2: Results for each contraint set, for suboptimal observations. L for Landmarks, P for Post-hoc, and S for State equation.