

### Previous Methods - Optimal

#	[Γ]	% Obs	Ω	Γ*	$\delta_{\text{HC}}$			$\delta_{\text{HC}U}$			RG 2009			POM 2017 $h_{gc}$			POM 2017 $h_{gc0.3}$		
					AGR	ACC	[Γ <sup>h</sup> ]	AGR	ACC	[Γ <sup>h</sup> ]	AGR	ACC	[Γ <sup>h</sup> ]	AGR	ACC	[Γ <sup>h</sup> ]	AGR	ACC	[Γ <sup>h</sup> ]
BLOCKS	20.1	10	1.25	7.9	0.44	86.1	7.53	0.44	86.1	7.56	<b>0.47</b>	91.7	9.83	0.08	16.7	1.44	0.38	100.0	18.14
		30	3.08	3.91	<b>0.46</b>	77.8	2.5	0.44	86.1	4.67	0.45	91.7	5.56	0.21	38.9	1.17	0.24	100.0	15.25
		50	4.42	2.48	0.59	88.9	3.03	0.52	88.9	3.86	<b>0.62</b>	97.2	3.69	0.33	58.3	1.25	0.25	97.2	12.17
		70	6.67	1.94	<b>0.85</b>	97.2	1.83	0.76	97.2	2.42	0.81	100.0	2.22	0.51	72.2	1.14	0.25	100.0	9.22
		100	8.83	1.83	<b>0.92</b>	100.0	1.67	<b>0.92</b>	100.0	1.67	0.9	100.0	2.08	0.59	100.0	1.67	0.51	100.0	6.42
IPC-GRID	7.5	10	1.63	2.71	0.87	93.8	2.67	0.88	95.8	2.69	<b>0.91</b>	100.0	3.23	0.47	75.0	2.35	0.49	100.0	6.25
		30	4.0	1.21	0.93	95.8	1.15	0.94	97.9	1.17	<b>0.99</b>	100.0	1.25	0.85	97.9	1.52	0.64	100.0	3.17
		50	6.19	1.13	0.96	97.9	1.08	0.96	97.9	1.08	<b>1.0</b>	100.0	1.13	0.86	100.0	1.44	0.77	100.0	2.15
		70	8.69	1.04	0.97	97.9	1.06	0.97	97.9	1.06	<b>1.0</b>	100.0	1.04	0.97	97.9	1.02	0.93	97.9	1.15
		100	11.88	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0
LOGISTICS	10.0	10	2.0	2.83	<b>0.9</b>	100.0	3.53	<b>0.9</b>	100.0	3.53	0.87	100.0	3.78	0.43	58.3	2.11	0.31	100.0	9.53
		30	5.75	1.19	<b>0.92</b>	100.0	1.47	<b>0.92</b>	100.0	1.47	0.86	100.0	1.75	0.78	86.1	1.33	0.24	100.0	6.58
		50	9.42	1.06	<b>0.96</b>	100.0	1.17	<b>0.96</b>	100.0	1.17	0.93	100.0	1.25	0.9	94.4	1.17	0.39	100.0	4.36
		70	13.25	1.03	0.99	100.0	1.06	0.99	100.0	1.06	0.99	100.0	1.06	<b>1.0</b>	100.0	1.03	0.62	100.0	2.19
		100	18.17	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	0.72	100.0	1.67
MICRONIC	6.0	10	2.0	2.53	<b>0.89</b>	100.0	2.97	<b>0.89</b>	100.0	2.97	0.76	100.0	3.53	0.39	52.8	1.69	0.42	100.0	6.0
		30	5.42	1.22	<b>0.95</b>	100.0	1.36	<b>0.95</b>	100.0	1.36	0.65	100.0	2.17	0.83	88.9	1.19	0.22	100.0	5.69
		50	8.42	1.06	<b>0.97</b>	100.0	1.11	<b>0.97</b>	100.0	1.11	0.84	100.0	1.42	0.92	94.4	1.06	0.25	100.0	4.69
		70	11.92	1.0	0.98	100.0	1.06	0.98	100.0	1.06	0.91	100.0	1.19	<b>0.99</b>	100.0	1.03	0.31	100.0	3.94
		100	16.33	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	0.47	100.0	3.0
ROVERS	6.0	10	1.67	2.28	<b>0.83</b>	97.2	2.75	<b>0.83</b>	97.2	2.75	0.76	100.0	3.42	0.49	52.8	1.22	0.44	100.0	5.28
		30	3.67	1.31	<b>0.94</b>	100.0	1.44	<b>0.94</b>	100.0	1.44	0.88	100.0	1.69	0.76	83.3	1.19	0.37	100.0	3.89
		50	5.75	1.19	<b>0.92</b>	88.9	1.08	<b>0.92</b>	88.9	1.08	0.91	100.0	1.42	0.79	88.9	1.14	0.39	100.0	3.67
		70	8.17	1.0	<b>0.99</b>	100.0	1.03	<b>0.99</b>	100.0	1.03	0.97	100.0	1.08	0.93	97.2	1.11	0.37	100.0	3.44
		100	10.83	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	0.39	100.0	3.0
SATELLITE	6.0	10	1.42	3.53	0.85	94.4	3.81	0.85	94.4	3.81	<b>0.86</b>	97.2	3.89	0.5	58.3	2.11	0.59	100.0	5.94
		30	3.42	2.39	<b>0.86</b>	91.7	2.44	<b>0.86</b>	91.7	2.44	0.72	94.4	3.44	0.64	83.3	2.03	0.44	100.0	5.39
		50	5.75	1.58	<b>0.93</b>	97.2	1.53	0.91	97.2	1.58	0.79	94.4	2.25	0.73	88.9	1.28	0.35	100.0	4.81
		70	8.08	1.31	<b>0.94</b>	100.0	1.28	<b>0.94</b>	100.0	1.28	0.81	97.2	2.06	0.89	100.0	1.19	0.37	100.0	4.06
		100	10.75	1.25	<b>0.96</b>	100.0	1.17	<b>0.96</b>	100.0	1.17	0.88	100.0	1.75	0.88	100.0	1.17	0.5	100.0	3.33
SOKOBAN	8.5	10	2.33	2.11	0.39	52.8	2.08	0.38	61.1	2.94	<b>0.4</b>	80.6	4.86	0.28	52.8	2.14	0.26	97.2	7.0
		30	6.5	1.25	<b>0.75</b>	80.6	1.25	0.64	91.7	2.06	0.56	86.1	2.53	0.57	69.4	1.22	0.23	94.4	5.17
		50	10.33	1.22	<b>0.92</b>	100.0	1.19	0.83	100.0	1.39	0.61	86.1	2.14	0.61	69.4	1.42	0.28	100.0	5.08
		70	14.67	1.03	<b>0.99</b>	100.0	1.0	0.94	100.0	1.08	0.64	83.3	1.53	0.85	91.7	1.17	0.36	100.0	3.64
		100	20.17	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	0.67	75.0	1.17	<b>1.0</b>	100.0	1.0	0.42	100.0	2.75
Avg					<b>0.88</b>	95.38	1.81	0.87	96.29	1.97	0.81	96.43	2.38	0.71	81.94	1.34	0.43	99.62	5.4

Table 1: Results for each method, with optimal observations.

### Previous Methods - Suboptimal

#	[Γ]	% Obs	Ω	Γ*	δ <sub>HC</sub>			δ <sub>HC</sub> U			RG 2009			POM 2017 <i>h<sub>gc</sub></i>			POM 2017 <i>h<sub>gc0.3</sub></i>		
					AGR	ACC	[Γ <sup>h</sup> ]	AGR	ACC	[Γ <sup>h</sup> ]	AGR	ACC	[Γ <sup>h</sup> ]	AGR	ACC	[Γ <sup>h</sup> ]	AGR	ACC	[Γ <sup>h</sup> ]
BLOCKS	20.1	10	1.42	7.49	0.41	86.1	6.86	0.42	88.9	7.42	<b>0.46</b>	97.2	10.61	0.06	19.4	1.19	0.34	100.0	17.53
		30	3.83	3.55	0.49	77.8	3.17	0.35	86.1	6.92	<b>0.54</b>	100.0	4.86	0.28	55.6	1.17	0.26	100.0	13.47
		50	5.92	3.18	0.55	86.1	3.08	0.42	94.4	5.61	<b>0.62</b>	97.2	2.72	0.39	72.2	1.08	0.27	100.0	9.89
		70	8.5	2.53	<b>0.71</b>	91.7	2.06	0.56	94.4	3.06	0.68	100.0	2.44	0.51	94.4	1.33	0.26	100.0	8.61
		100	11.83	2.25	<b>0.84</b>	100.0	1.67	<b>0.84</b>	100.0	1.67	0.8	100.0	2.08	0.51	100.0	1.67	0.28	100.0	6.42
IPC-GRID	7.5	10	2.06	1.58	0.77	91.7	1.81	0.75	97.9	2.4	<b>0.81</b>	100.0	2.73	0.64	87.5	2.23	0.42	100.0	5.6
		30	5.56	1.4	0.82	93.8	1.13	0.77	97.9	1.6	<b>0.9</b>	100.0	1.27	0.81	95.8	1.35	0.67	95.8	2.23
		50	8.88	1.35	0.84	93.8	1.13	0.84	100.0	1.56	<b>0.92</b>	100.0	1.1	0.87	100.0	1.08	0.86	100.0	1.21
		70	12.56	1.31	0.89	100.0	1.1	0.85	100.0	1.23	<b>0.93</b>	100.0	1.02	0.92	100.0	1.0	0.92	100.0	1.0
		100	17.25	1.5	<b>0.94</b>	100.0	1.0	<b>0.94</b>	100.0	1.0	<b>0.94</b>	100.0	1.0	<b>0.94</b>	100.0	1.0	<b>0.94</b>	100.0	1.0
LOGISTICS	10.0	10	2.67	2.0	<b>0.88</b>	100.0	2.44	0.85	100.0	2.72	0.72	91.7	3.11	0.56	66.7	2.08	0.21	100.0	9.75
		30	7.5	1.14	<b>0.91</b>	100.0	1.33	0.75	100.0	2.14	0.87	97.2	1.36	0.85	91.7	1.22	0.26	100.0	6.0
		50	11.92	1.06	0.88	97.2	1.25	0.86	100.0	1.47	0.91	100.0	1.25	<b>0.93</b>	97.2	1.03	0.39	100.0	3.69
		70	16.67	1.03	0.97	100.0	1.08	0.92	100.0	1.19	<b>0.99</b>	100.0	1.06	<b>0.99</b>	100.0	1.0	0.66	100.0	2.0
		100	23.17	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	0.72	100.0	1.67
MICRONIC	6.0	10	3.0	1.83	<b>0.76</b>	100.0	2.67	0.74	100.0	3.0	0.65	100.0	3.42	0.54	55.6	1.36	0.31	100.0	6.0
		30	7.67	1.25	<b>0.89</b>	100.0	1.47	0.65	100.0	2.5	0.66	100.0	2.17	0.86	91.7	1.08	0.23	100.0	5.58
		50	12.25	1.03	<b>0.98</b>	100.0	1.08	0.82	100.0	1.5	0.91	100.0	1.25	0.97	97.2	1.03	0.24	100.0	4.56
		70	17.33	1.0	0.99	100.0	1.03	0.9	100.0	1.31	0.94	100.0	1.11	<b>1.0</b>	100.0	1.0	0.31	100.0	3.94
		100	24.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	0.47	100.0	3.0
ROVERS	6.0	10	1.83	2.39	<b>0.83</b>	88.9	2.89	<b>0.83</b>	88.9	2.89	0.82	100.0	3.42	0.45	55.6	1.31	0.48	100.0	5.14
		30	4.5	1.39	<b>0.88</b>	88.9	1.39	0.81	88.9	1.75	0.8	100.0	2.06	0.7	80.6	1.14	0.34	100.0	4.5
		50	7.17	1.11	<b>0.93</b>	94.4	1.14	0.86	94.4	1.33	0.89	100.0	1.36	0.8	88.9	1.19	0.34	100.0	3.92
		70	10.0	1.06	0.94	94.4	1.08	0.92	97.2	1.22	<b>0.98</b>	100.0	1.11	0.87	94.4	1.11	0.38	100.0	3.3
		100	13.67	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	<b>1.0</b>	100.0	1.0	0.39	100.0	3.0
SATELLITE	6.0	10	2.0	3.25	<b>0.9</b>	97.2	3.44	<b>0.9</b>	97.2	3.44	0.73	97.2	4.47	0.58	75.0	2.5	0.57	100.0	5.72
		30	4.33	1.78	0.8	94.4	2.22	0.84	94.4	2.33	0.68	91.7	2.97	0.6	80.6	1.53	0.34	100.0	4.42
		50	6.75	1.36	<b>0.92</b>	94.4	1.22	0.85	94.4	1.72	0.7	97.2	2.53	0.76	91.7	1.19	0.33	100.0	5.92
		70	9.42	1.33	<b>0.94</b>	100.0	1.36	<b>0.94</b>	100.0	1.36	0.78	97.2	2.06	0.85	97.2	1.14	0.41	100.0	4.14
		100	12.75	1.25	<b>0.96</b>	100.0	1.17	<b>0.96</b>	100.0	1.17	0.88	100.0	1.75	0.88	100.0	1.17	0.5	100.0	3.33
SOORAN	8.5	10	3.33	1.83	<b>0.52</b>	61.1	1.78	0.44	72.2	3.17	0.29	63.9	4.56	0.35	63.9	2.47	0.24	100.0	6.86
		30	8.67	1.28	<b>0.77</b>	83.3	1.08	0.62	97.2	2.67	0.43	75.0	2.92	0.56	75.0	1.72	0.24	97.2	5.5
		50	13.75	1.33	<b>0.79</b>	91.7	1.17	0.66	100.0	2.58	0.53	72.2	1.83	0.58	75.0	1.39	0.25	97.2	5.14
		70	19.33	1.36	0.8	97.2	1.03	<b>0.85</b>	100.0	1.39	0.54	61.1	1.28	<b>0.63</b>	86.1	1.25	0.3	100.0	4.11
		100	27.0	1.33	<b>0.83</b>	100.0	1.0	<b>0.83</b>	100.0	1.0	0.58	88.3	1.33	<b>0.83</b>	100.0	1.0	0.38	100.0	2.75
Avg					<b>0.84</b>	94.4	1.73	0.78	96.71	2.27	0.77	94.21	2.32	0.72	85.4	1.32	0.42	99.72	5.1