# **Data Tables**

### Calibration

Table 1: Calibration measurements for simulation ID:  ${\tt 2014\hbox{-}06\hbox{-}30\_planar}$ 

	Actual	Mean	TM1	TM2
T1	1.00	1.01	1.02	0.99
T2	1.00	1.01	1.03	0.99
T3	1.00	1.02	1.02	1.01
T4	1.00	1.01	1.01	1.01
T5	1.00	1.00	1.01	0.99
T6	1.00	1.00	1.02	0.99
T7	1.00	1.00	1.00	1.00
T8	1.00	1.00	1.00	1.00

Table 2: Calibration measurements for simulation ID:  ${\tt 2014\hbox{-}06\hbox{-}30\_planar\_destiff}$ 

	Actual	Mean	TM1	TM2
T1	1.00	1.02	1.04	1.01
T2	1.00	1.03	1.04	1.01
T3	1.00	1.03	1.04	1.03
T4	1.00	1.03	1.03	1.02
T5	1.00	1.02	1.03	1.01
T6	1.00	1.02	1.03	1.01
T7	1.00	1.02	1.02	1.02
Т8	1.00	1.02	1.02	1.02

Table 3: Calibration measurements for simulation ID:  $2014-06-30\_planar\_destiff\_decapact$ 

	Actual	Mean	TM1	TM2
T1	1.00	0.99	1.00	0.98
T2	1.00	0.99	1.01	0.98
T3	1.00	1.00	1.00	0.99
T4	1.00	0.99	1.00	0.99
T5	1.00	0.99	1.00	0.97
T6	1.00	0.98	1.00	0.97
T7	1.00	0.98	0.99	0.98
Т8	1.00	0.99	0.99	0.99

Table 4: Calibration measurements for simulation ID: 2014-06-30\_planar\_destiff\_decapact\_tweak

	Actual	Mean	TM1	TM2
T1	1.00	0.99	1.00	0.98
T2	1.00	0.99	1.01	0.98
T3	1.00	1.00	1.00	0.99
T4	1.00	0.99	0.99	0.99
T5	1.00	0.99	1.00	0.97
T6	1.00	0.99	1.00	0.97
T7	1.00	0.98	0.99	0.98
T8	1.00	0.99	0.99	0.99

Table 5: Calibration measurements for simulation ID:  $2014-07-02\_3D$ 

	Actual	Mean	TM1	TM2
T1	1.00	0.99	1.01	0.98
T2	1.00	0.98	0.99	0.97
T3	1.00	0.99	0.97	1.00
T4	1.00	0.99	1.00	0.99
T5	1.00	0.99	1.00	0.98
T6	1.00	0.99	0.99	0.98
T7	1.00	1.01	0.99	1.02
Т8	1.00	0.98	0.99	0.97

Table 6: Calibration measurements for simulation ID:  $2014-07-02\_3D\_diag$ 

	Actual	Mean	TM1	TM2
T1	1.00	1.00	1.00	1.00
T2	1.00	0.99	0.98	1.00
T3	1.00	0.99	0.99	0.99
T4	1.00	0.99	1.00	0.99
T5	1.00	1.00	0.98	1.01
T6	1.00	0.99	0.99	0.99
T7	1.00	0.98	1.00	0.97
T8	1.00	1.00	0.99	1.01

Table 7: Calibration measurements for simulation ID:  ${\tt ModAl13D\_set1}$ 

	Actual	Mean	TM1	TM2
T1	1.00	1.07	1.07	1.06
T2	1.00	1.06	1.05	1.06
T3	1.00	1.06	1.07	1.06
T4	1.00	1.06	1.07	1.05
T5	1.00	1.07	1.05	1.09
T6	1.00	1.06	1.05	1.06
T7	1.00	1.05	1.06	1.04
T8	1.00	1.07	1.06	1.09

## Time delay

Table 8: Thruster time delays in seconds for simulation ID:  $2014-06-30_{\tt planar}$ 

	Actual	Mean	A1	A2	A3	A4	A5	A6
T1	0.02	0.40	0.91	0.82	0.62	0.91	0.84	0.66
T2	0.02	0.39	0.83	0.80	0.70	0.83	0.78	0.74
Т3	0.02	0.39	0.78	0.73	0.86	0.78	0.66	0.88
T4	0.02	0.43	0.92	0.72	0.99	0.92	0.54	1.02
T5	0.02	0.46	0.77	0.95	1.05	0.78	0.92	1.07
T6	0.02	0.38	0.72	0.70	0.84	0.72	0.71	0.87
T7	0.02	0.38	0.83	0.78	0.67	0.83	0.74	0.70
Т8	0.02	0.42	0.91	0.74	0.81	0.90	0.81	0.84

Table 9: Thruster time delays in seconds for simulation ID:  ${\tt 2014-06-30\_planar\_destiff}$ 

	Actual	Mean	A1	A2	A3	A4	A5	A6
T1	0.02	0.34	0.84	0.66	0.54	0.84	0.63	0.58
T2	0.02	0.30	0.76	0.57	0.49	0.76	0.55	0.53
Т3	0.02	0.39	0.71	0.77	0.88	0.71	0.75	0.90
T4	0.02	0.34	0.75	0.58	0.72	0.75	0.57	0.74
T5	0.02	0.37	0.84	0.50	0.84	0.84	0.58	0.86
T6	0.02	0.37	0.72	0.75	0.80	0.72	0.69	0.82
T7	0.02	0.38	0.82	0.58	0.79	0.82	0.70	0.82
Т8	0.02	0.34	0.73	0.80	0.55	0.73	0.69	0.58

Table 10: Thruster time delays in seconds for simulation ID: 2014-06-30\_planar\_destiff\_decapact

	Actual	Mean	A1	A2	A3	A4	A5	A6
T1	0.02	0.19	0.34	0.30	0.50	0.34	0.28	0.47
T2	0.02	0.18	0.32	0.29	0.58	0.32	0.11	0.55
Т3	0.02	0.18	0.40	0.35	0.30	0.41	0.38	0.27
T4	0.02	0.16	0.38	0.33	0.29	0.38	0.29	0.27
T5	0.02	0.10	0.27	0.19	0.12	0.27	0.23	0.10
T6	0.02	0.16	0.45	0.29	0.23	0.45	0.31	0.20
T7	0.02	0.15	0.30	0.32	0.33	0.30	0.30	0.30
T8	0.02	0.19	0.42	0.43	0.35	0.43	0.34	0.32

Table 11: Thruster time delays in seconds for simulation ID: 2014-06-30\_planar\_destiff\_decapact\_tweak

	Actual	Mean	A1	A2	A3	A4	A5	A6
T1	0.02	0.14	0.26	0.17	0.45	0.26	0.08	0.41
T2	0.02	0.18	0.32	0.31	0.46	0.32	0.30	0.43
Т3	0.02	0.15	0.38	0.31	0.11	0.37	0.52	0.09
T4	0.02	0.14	0.23	0.37	0.25	0.23	0.42	0.23
T5	0.02	0.17	0.37	0.25	0.36	0.37	0.38	0.34
T6	0.02	0.15	0.39	0.33	0.19	0.39	0.30	0.17
T7	0.02	0.14	0.46	0.06	0.27	0.46	0.15	0.24
Т8	0.02	0.17	0.19	0.43	0.45	0.18	0.38	0.42

Table 12: Thruster time delays in seconds for simulation ID:  $2014-07-02\_3D$ 

	Actual	Mean	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
T1	0.02	0.33	0.19	0.37	0.25	0.91	0.31	0.36	0.19	0.53	0.05	0.38	0.08	0.27
T2	0.02	0.68	0.35	0.24	0.34	3.18	0.38	0.47	0.35	0.11	0.61	1.21	0.38	0.57
Т3	0.02	0.48	0.29	0.29	0.33	1.34	0.47	0.21	0.29	0.35	0.13	1.27	0.62	0.20
T4	0.02	0.43	0.22	0.38	0.41	1.30	0.10	0.41	0.22	0.36	0.74	0.49	0.18	0.42
T5	0.02	0.38	0.31	0.50	0.00	0.39	0.35	0.32	0.31	0.42	0.30	0.79	0.65	0.26
T6	0.02	1.75	0.26	0.23	0.61	14.63	0.38	0.06	0.26	0.24	0.28	3.47	0.47	0.17
T7	0.02	0.42	0.27	0.37	0.44	0.88	0.45	0.40	0.27	0.29	0.30	0.78	0.42	0.11
T8	0.02	0.41	0.23	0.50	0.81	0.28	0.00	0.36	0.24	0.35	0.43	1.43	0.11	0.22

Table 13: Thruster time delays in seconds for simulation ID:  $2014-07-02\_3D\_diag$ 

	Actual	Mean	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
T1	0.02	0.56	0.11	0.28	0.25	3.50	0.01	0.42	0.12	0.25	0.08	1.09	0.22	0.36
T2	0.02	0.44	0.24	0.37	0.27	1.04	0.36	0.65	0.24	0.35	0.36	0.29	0.47	0.63
T3	0.02	0.57	0.46	0.37	0.41	2.15	0.46	0.23	0.46	0.38	0.51	0.61	0.51	0.27
T4	0.02	0.47	0.32	0.39	0.28	0.99	0.35	0.34	0.32	0.44	0.69	0.96	0.18	0.43
T5	0.02	0.41	0.28	0.36	0.22	0.45	0.34	0.23	0.28	0.28	0.26	1.73	0.44	0.02
T6	0.02	0.54	0.30	0.24	0.16	1.26	0.58	0.12	0.29	0.24	0.28	2.43	0.45	0.07
T7	0.02	0.46	0.18	0.13	0.12	1.56	0.59	0.27	0.18	0.22	0.29	1.15	0.59	0.28
T8	0.02	0.77	0.17	0.39	0.72	0.24	0.39	0.24	0.17	0.29	0.45	5.57	0.22	0.34

Table 14: Thruster time delays in seconds for simulation ID:  ${\tt ModAll3D\_set1}$ 

	Actual	Mean	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
T1	0.02	0.52	0.32	0.27	0.18	3.60	0.15	0.41	0.32	0.28	0.09	0.34	0.10	0.16
T2	0.02	0.59	0.14	0.41	0.12	2.12	0.49	0.35	0.14	0.84	0.35	1.33	0.54	0.25
T3	0.02	0.87	0.49	1.05	0.56	2.30	0.37	0.14	0.50	1.86	1.38	0.93	0.69	0.15
T4	0.02	1.68	1.78	0.18	0.56	3.92	3.63	0.72	1.82	0.74	1.80	3.38	1.33	0.30
T5	0.02	0.39	0.14	0.08	0.04	2.99	0.65	0.02	0.15	0.18	0.13	0.04	0.20	0.06
T6	0.02	0.41	0.01	0.21	0.19	1.37	0.09	0.20	0.01	0.09	0.14	2.03	0.21	0.35
T7	0.02	0.36	0.08	0.39	0.03	0.90	0.43	0.27	0.09	0.28	0.19	0.81	0.53	0.26
T8	0.02	0.83	0.11	0.41	0.25	1.11	0.11	0.13	0.11	0.25	0.25	6.93	0.14	0.12

## Thruster pitch

Table 15: Error in mrad in thruster pitch  $(\alpha)$  for simulation ID: 2014-07-02\_3D

	Actual	TM1	TM2
T1	-13.59	-49.33	22.15
T2	-8.48	-11.98	-4.98
Т3	10.45	27.75	-6.85
T4	3.32	15.09	-8.45
T5	-3.86	6.90	-14.63
T6	-15.49	19.22	-50.19
T7	12.23	5.55	18.92
T8	16.06	-12.30	44.43

Table 16: Error in mrad in thruster pitch  $(\alpha)$  for simulation ID: 2014-07-02\_3D\_diag

	Actual	TM1	TM2
T1	-1.86	5.92	-9.63
T2	-7.25	-2.94	-11.56
Т3	-2.08	13.00	-17.16
T4	0.10	9.08	-8.89
T5	-3.40	-3.65	-3.15
T6	0.43	-19.72	20.58
T7	-0.00	-13.07	13.07
T8	-4.03	-8.18	0.12

Table 17: Error in mrad in thruster pitch  $(\alpha)$  for simulation ID: ModAll3D\_set1

	Actual	TM1	TM2
T1	1.37	10.17	-7.44
T2	-13.96	-11.64	-16.27
Т3	-9.31	4.62	-23.25
T4	3.90	13.54	-5.73
T5	-0.41	-1.27	0.45
T6	-6.65	-25.36	12.07
T7	-7.97	-19.44	3.50
T8	-0.81	-5.97	4.35

### Thruster azimuth

Table 18: Error in mrad in thruster azimuth ( $\beta$ ) for simulation ID: 2014-06-30\_planar

	Actual	TM1	TM2
T1	9.88	28.35	-8.59
T2	10.46	27.34	-6.42
Т3	-9.67	-13.12	-6.23
T4	-9.52	-10.55	-8.49
T5	-0.69	14.88	-16.26
T6	-1.01	12.71	-14.74
T7	-3.66	-4.93	-2.39
T8	-4.01	-3.14	-4.89

Table 19: Error in mrad in thruster azimuth ( $\beta$ ) for simulation ID: 2014-06-30\_planar\_destiff

	Actual	TM1	TM2
T1	14.85	34.38	-4.67
T2	17.68	35.71	-0.35
Т3	-16.00	-20.66	-11.34
T4	-14.36	-16.48	-12.25
T5	4.75	19.12	-9.63
T6	5.22	17.55	-7.12
T7	-10.00	-9.94	-10.05
T8	-8.56	-6.49	-10.63

Table 20: Error in mrad in thruster azimuth  $(\beta)$  for simulation ID: 2014-06-30\_planar\_destiff\_decapact

	Actual	TM1	TM2
T1	3.17	20.51	-14.17
T2	5.17	20.80	-10.46
Т3	-3.13	-5.23	-1.02
T4	-2.74	-2.58	-2.89
T5	-6.11	10.70	-22.92
T6	-6.72	8.49	-21.94
T7	4.96	2.29	7.63
T8	2.76	2.44	3.08

Table 21: Error in mrad in thruster azimuth ( $\beta$ ) for simulation ID: 2014-06-30\_planar\_destiff\_decapact\_tweak

	Actual	TM1	TM2
T1	4.17	21.51	-13.17
T2	4.61	20.26	-11.04
T3	-2.64	-4.76	-0.53
T4	-3.74	-3.61	-3.88
T5	-7.32	9.51	-24.16
T6	-7.14	8.06	-22.34
T7	1.10	-1.61	3.80
T8	3.23	2.92	3.53

Table 22: Error in mrad in thruster azimuth ( $\beta$ ) for simulation ID: 2014-07-02\_3D

	Actual	TM1	TM2
T1	-22.85	-14.76	-30.94
T2	-21.44	-10.58	-32.31
Т3	-31.74	-44.46	-19.03
T4	-10.10	-13.67	-6.53
T5	-12.39	-5.44	-19.34
T6	-50.10	-5.76	-94.45
T7	-24.85	-9.58	-40.12
Т8	-7.53	-14.51	-0.55

Table 23: Error in mrad in thruster azimuth ( $\beta$ ) for simulation ID: 2014-07-02\_3D\_diag

	Actual	TM1	TM2
T1	11.39	10.39	12.38
T2	9.87	-1.87	21.62
Т3	-21.57	-30.07	-13.07
T4	-7.47	-9.48	-5.46
T5	6.81	0.70	12.91
T6	24.39	9.49	39.30
T7	-21.56	-23.56	-19.56
T8	-11.53	-8.84	-14.23

Table 24: Error in mrad in thruster azimuth ( $\beta$ ) for simulation ID: ModAll3D\_set1

	Actual	TM1	TM2
T1	14.27	16.50	12.03
T2	18.86	10.99	26.73
Т3	-31.63	-43.25	-20.01
T4	-11.35	-16.49	-6.20
T5	10.51	1.29	19.72
T6	34.03	15.73	52.34
T7	-32.27	-30.70	-33.85
T8	-15.48	-9.74	-21.22