A Robust and Easy to Implement Method for IMU Calibration without External Equipments
Simulation Results

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15/09/2013

Table 1: Accelerometers Parameters. Set:1.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0049	0.0049	0.0481	0.0398	0.0275	0.0049
α_{zy}	-0.0055	-0.0055	0.0401	0.0334	0.0214	-0.0055
α_{zx}	0.0079	0.0079	0.0296	0.0248	0.0190	0.0079
s_x^a	0.9908	0.9908	0.0327	0.0265	0.0191	0.9908
s_y^a	1.0068	1.0068	0.0304	0.0258	0.0199	1.0068
s_z^a	1.0066	1.0066	0.0215	0.0178	0.0151	1.0066
b_x^a	0.0793	0.0793	0.1369	0.1163	0.0819	0.0792
b_y^a	-0.0024	-0.0024	0.2138	0.1760	0.1178	-0.0026
b_z^a	0.0636	0.0636	0.1332	0.0953	0.0919	0.0636

Table 2: Gyroscope Parameters. Set:1.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0112	0.0110	0.8547	0.6392	0.5920	0.0099
γ_{zy}	-0.0211	-0.0210	0.4419	0.3468	0.2669	-0.0207
γ_{xz}	0.0040	0.0039	1.0630	0.9080	0.5266	0.0030
γ_{zx}	-0.0010	-0.0011	0.4102	0.3386	0.2302	-0.0011
γ_{xy}	0.0270	0.0270	0.8154	0.6375	0.4944	0.0252
γ_{yx}	0.0151	0.0155	0.7250	0.7315	0.3958	0.0166
s_x^g	0.8786	0.8785	0.4121	0.3366	0.2299	0.8790
s_y^g	0.9703	0.9704	0.4059	0.3353	0.2237	0.9701
s_z^g	1.0460	1.0460	0.4216	0.3410	0.2397	1.0460

Table 3: Absolute errors along the axis. Set:1.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0842	0.0564	0.0635
Calibrated	0.0055	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1043	0.1097	0.0345
Calibrated	0.0035	0.0039	0.0042

Table 4: Accelerometer divergence error. Set:1.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0665	0.2133	0.0623	0.2098
	(0.0114)	(0.0226)	(0.0115)	(0.0240)
Calibrated	0.0056	0.0299	0.0056	0.0298
	(0.0009)	(0.0035)	(0.0009)	(0.0038)

Table 5: Gyroscope divergence error. Set:1.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	4.7125	9.2930	5.2859	8.5822
	(0.5494)	(0.5494)	(0.6029)	(0.6029)
Calibrated	0.2208	0.4469	0.5102	0.8597
	(0.0256)	(0.0256)	(0.0569)	(0.0569)

Table 6: Accelerometers Parameters. Set:2.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0090	0.0090	0.0435	0.0333	0.0293	0.0091
α_{zy}	0.0007	0.0007	0.0473	0.0381	0.0283	0.0007
α_{zx}	-0.0011	-0.0011	0.0332	0.0275	0.0178	-0.0011
s_x^a	1.0018	1.0018	0.0383	0.0292	0.0245	1.0018
s_y^a	0.9922	0.9922	0.0396	0.0328	0.0215	0.9922
s_z^a	1.0053	1.0053	0.0178	0.0149	0.0098	1.0053
b_x^a	0.0421	0.0420	0.2492	0.2117	0.1402	0.0422
b_y^a	-0.0669	-0.0669	0.2119	0.1581	0.1424	-0.0663
b_z^a	0.0117	0.0117	0.1603	0.1312	0.0908	0.0117

Table 7: Gyroscope Parameters. Set:2.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0132	0.0133	1.2840	0.9804	0.8185	0.0137
γ_{zy}	-0.0184	-0.0184	0.5051	0.3991	0.3006	-0.0180
γ_{xz}	0.0214	0.0214	1.0256	0.8295	0.5884	0.0208
γ_{zx}	-0.0011	-0.0013	0.3965	0.3704	0.2433	-0.0004
γ_{xy}	-0.0156	-0.0155	0.7690	0.6080	0.4584	-0.0150
γ_{yx}	-0.0146	-0.0141	0.8684	0.8123	0.5717	-0.0144
s_x^g	1.0057	1.0058	0.3431	0.2787	0.2123	1.0054
s_y^g	0.9559	0.9558	0.4566	0.3624	0.2838	0.9567
s_z^g	1.1279	1.1278	0.5235	0.4382	0.2782	1.1281

Table 8: Absolute errors along the axis. Set:2.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0535	0.0662	0.0337
Calibrated	0.0056	0.0055	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1691	0.0936	0.0777
Calibrated	0.0041	0.0039	0.0045

Table 9: Accelerometer divergence error. Set:2.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0496	0.1705	0.0509	0.1710
	(0.0088)	(0.0161)	(0.0089)	(0.0170)
Calibrated	0.0056	0.0303	0.0056	0.0315
	(0.0009)	(0.0035)	(0.0009)	(0.0037)

Table 10: Gyroscope divergence error. Set:2.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	3.3178	6.7043	4.5138	10.2833
	(0.3857)	(0.3857)	(0.5684)	(0.5684)
Calibrated	0.1949	0.3790	0.4897	0.7618
	(0.0222)	(0.0222)	(0.0533)	(0.0533)

Table 11: Accelerometers Parameters. Set:3.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0079	-0.0079	0.0498	0.0413	0.0269	-0.0079
α_{zy}	0.0060	0.0060	0.0406	0.0350	0.0218	0.0060
α_{zx}	0.0025	0.0025	0.0294	0.0243	0.0172	0.0025
s_x^a	1.0015	1.0015	0.0272	0.0218	0.0158	1.0015
s_y^a	0.9981	0.9981	0.0338	0.0271	0.0195	0.9981
s_z^a	0.9943	0.9943	0.0141	0.0110	0.0089	0.9942
b_x^a	-0.0814	-0.0815	0.2078	0.1599	0.1339	-0.0813
b_y^a	-0.0008	-0.0008	0.2201	0.1868	0.1141	-0.0005
b_z^a	-0.0502	-0.0502	0.1044	0.0870	0.0613	-0.0504

Table 12: Gyroscope Parameters. Set:3.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0210	0.0210	1.0876	0.8766	0.6232	0.0226
γ_{zy}	0.0153	0.0152	0.3836	0.2921	0.2460	0.0146
γ_{xz}	-0.0067	-0.0066	1.1163	0.9233	0.6173	-0.0057
γ_{zx}	0.0056	0.0056	0.4830	0.3779	0.2961	0.0056
γ_{xy}	-0.0054	-0.0053	1.0568	0.8927	0.5600	-0.0040
γ_{yx}	0.0007	0.0008	1.0288	0.7757	0.6638	0.0009
s_x^g	1.0224	1.0225	0.4607	0.3896	0.2386	1.0221
s_y^g	1.0611	1.0611	0.5186	0.4118	0.3058	1.0613
s_z^g	1.0766	1.0767	0.5172	0.4168	0.3249	1.0768

Table 13: Absolute errors along the axis. Set:3.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0838	0.0184	0.0513
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0140	0.1851	0.0417
Calibrated	0.0041	0.0043	0.0044

Table 14: Accelerometer divergence error. Set:3.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0586	0.1456	0.0516	0.1469
	(0.0091)	(0.0214)	(0.0099)	(0.0226)
Calibrated	0.0056	0.0304	0.0056	0.0289
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 15: Gyroscope divergence error. Set:3.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.6691	4.9887	1.6510	3.4419
	(0.3038)	(0.3038)	(0.1898)	(0.1898)
Calibrated	0.2013	0.4189	0.4124	0.7894
	(0.0234)	(0.0234)	(0.0480)	(0.0480)

Table 16: Accelerometers Parameters. Set:4.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0092	0.0092	0.0369	0.0288	0.0226	0.0093
α_{zy}	0.0031	0.0031	0.0332	0.0266	0.0196	0.0032
α_{zx}	-0.0030	-0.0030	0.0317	0.0287	0.0144	-0.0030
s_x^a	1.0019	1.0019	0.0273	0.0222	0.0160	1.0019
s_y^a	0.9913	0.9913	0.0284	0.0272	0.0122	0.9912
s_z^a	0.9908	0.9909	0.0130	0.0113	0.0066	0.9909
b_x^a	0.0843	0.0843	0.1757	0.1473	0.1108	0.0842
b_y^a	-0.0230	-0.0230	0.1672	0.1348	0.0957	-0.0232
b_z^a	-0.0116	-0.0116	0.1543	0.1245	0.0882	-0.0115

Table 17: Gyroscope Parameters. Set:4.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0101	0.0102	1.0770	0.8819	0.6020	0.0087
γ_{zy}	0.0119	0.0119	0.5266	0.4231	0.3047	0.0115
γ_{xz}	-0.0081	-0.0079	1.0815	0.8914	0.6074	-0.0070
γ_{zx}	-0.0067	-0.0067	0.3900	0.3047	0.2371	-0.0069
γ_{xy}	-0.0217	-0.0217	0.9063	0.7049	0.5545	-0.0218
γ_{yx}	-0.0093	-0.0094	0.7241	0.5631	0.4503	-0.0102
s_x^g	0.9687	0.9686	0.4887	0.3996	0.2845	0.9684
s_y^g	0.9329	0.9330	0.4562	0.3507	0.2868	0.9329
s_z^g	1.0251	1.0251	0.4990	0.3816	0.3146	1.0248

Table 18: Absolute errors along the axis. Set:4.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0857	0.0434	0.0594
Calibrated	0.0056	0.0055	0.0055

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1480	0.0528	0.1674
Calibrated	0.0039	0.0038	0.0041

Table 19: Accelerometer divergence error. Set:4.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0800	0.1760	0.0809	0.1808
	(0.0087)	(0.0225)	(0.0081)	(0.0221)
Calibrated	0.0056	0.0298	0.0056	0.0281
	(0.0009)	(0.0034)	(0.0009)	(0.0034)

Table 20: Gyroscope divergence error. Set:4.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.9044	5.5141	1.8310	3.4095
	(0.3346)	(0.3346)	(0.2123)	(0.2123)
Calibrated	0.1956	0.3991	0.7642	1.5918
	(0.0226)	(0.0226)	(0.0899)	(0.0899)

Table 21: Accelerometers Parameters. Set:5.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0048	0.0048	0.0391	0.0315	0.0236	0.0048
α_{zy}	0.0043	0.0043	0.0491	0.0404	0.0272	0.0043
α_{zx}	0.0072	0.0072	0.0334	0.0261	0.0223	0.0073
s_x^a	0.9916	0.9916	0.0304	0.0252	0.0173	0.9916
s_y^a	1.0012	1.0012	0.0308	0.0259	0.0173	1.0012
s_z^a	1.0080	1.0080	0.0159	0.0126	0.0094	1.0080
b_x^a	0.0557	0.0557	0.1401	0.1227	0.0719	0.0558
b_y^a	0.0156	0.0156	0.1654	0.1334	0.0965	0.0156
b_z^a	0.0721	0.0721	0.1284	0.0979	0.0812	0.0719

Table 22: Gyroscope Parameters. Set:5.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0030	-0.0032	1.0504	0.8764	0.5937	-0.0013
γ_{zy}	0.0042	0.0041	0.4047	0.3507	0.2226	0.0042
γ_{xz}	-0.0204	-0.0204	1.1076	0.8602	0.6791	-0.0194
γ_{zx}	-0.0034	-0.0034	0.3563	0.2710	0.2262	-0.0036
γ_{xy}	0.0038	0.0040	0.8504	0.6238	0.5989	0.0045
γ_{yx}	0.0076	0.0078	0.8601	0.6136	0.6096	0.0078
s_x^g	0.9118	0.9119	0.4352	0.3640	0.2425	0.9119
s_y^g	0.9025	0.9024	0.4205	0.3004	0.3288	0.9022
s_z^g	1.0688	1.0688	0.4578	0.3548	0.2888	1.0689

Table 23: Absolute errors along the axis. Set:5.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0657	0.0466	0.0718
Calibrated	0.0055	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0661	0.0319	0.0672
Calibrated	0.0037	0.0036	0.0043

Table 24: Accelerometer divergence error. Set:5.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0619	0.1941	0.0483	0.1883
	(0.0099)	(0.0239)	(0.0100)	(0.0242)
Calibrated	0.0056	0.0312	0.0057	0.0332
	(0.0009)	(0.0034)	(0.0009)	(0.0034)

Table 25: Gyroscope divergence error. Set:5.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	4.2736	8.7590	4.2971	8.5137
	(0.5009)	(0.5009)	(0.5031)	(0.5031)
Calibrated	0.1910	0.3971	0.3861	0.6755
	(0.0224)	(0.0224)	(0.0437)	(0.0437)

Table 26: Accelerometers Parameters. Set:6.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0063	0.0063	0.0394	0.0323	0.0294	0.0063
α_{zy}	-0.0037	-0.0037	0.0425	0.0338	0.0251	-0.0038
α_{zx}	-0.0058	-0.0058	0.0358	0.0290	0.0222	-0.0058
s_x^a	1.0050	1.0049	0.0314	0.0270	0.0178	1.0049
s_y^a	1.0008	1.0008	0.0265	0.0220	0.0161	1.0008
s_z^a	0.9974	0.9974	0.0166	0.0132	0.0100	0.9974
b_x^a	-0.0880	-0.0881	0.1913	0.1670	0.1064	-0.0883
b_y^a	0.0197	0.0196	0.1642	0.1324	0.1154	0.0194
b_z^a	-0.0468	-0.0469	0.1291	0.1032	0.0927	-0.0469

Table 27: Gyroscope Parameters. Set:6.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0205	0.0202	1.0773	0.8101	0.7628	0.0207
γ_{zy}	-0.0087	-0.0088	0.5269	0.4507	0.2821	-0.0090
γ_{xz}	-0.0116	-0.0119	1.2553	0.9688	0.8350	-0.0117
γ_{zx}	0.0035	0.0036	0.5552	0.4358	0.3481	0.0039
γ_{xy}	0.0134	0.0135	1.0932	0.8356	0.6988	0.0129
γ_{yx}	-0.0167	-0.0169	0.9170	0.7198	0.5913	-0.0181
s_x^g	0.9152	0.9153	0.4028	0.3184	0.2411	0.9156
s_y^g	1.0416	1.0416	0.5160	0.3912	0.3290	1.0414
s_z^g	1.0911	1.0911	0.4506	0.3530	0.2731	1.0908

Table 28: Absolute errors along the axis. Set:6.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0891	0.0400	0.0474
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1898	0.0181	0.0250
Calibrated	0.0037	0.0042	0.0044

Table 29: Accelerometer divergence error. Set:6.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0520	0.1700	0.0583	0.1811
	(0.0094)	(0.0232)	(0.0078)	(0.0236)
Calibrated	0.0056	0.0309	0.0056	0.0359
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 30: Gyroscope divergence error. Set:6.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	3.4613	6.4342	2.4309	5.3065
	(0.3941)	(0.3941)	(0.2899)	(0.2899)
Calibrated	0.2320	0.4452	0.6237	0.9436
	(0.0267)	(0.0267)	(0.0679)	(0.0679)

Table 31: Accelerometers Parameters. Set:7.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0079	0.0079	0.0530	0.0429	0.0303	0.0079
α_{zy}	-0.0001	-0.0001	0.0369	0.0282	0.0235	-0.0001
α_{zx}	0.0030	0.0030	0.0491	0.0361	0.0370	0.0031
s_x^a	0.9998	0.9998	0.0301	0.0262	0.0171	0.9998
s_y^a	1.0038	1.0038	0.0242	0.0191	0.0159	1.0038
s_z^a	0.9957	0.9957	0.0208	0.0172	0.0122	0.9958
b_x^a	0.0156	0.0156	0.2212	0.1923	0.1081	0.0157
b_y^a	-0.0722	-0.0723	0.2613	0.2228	0.1360	-0.0725
b_z^a	-0.0922	-0.0922	0.1649	0.1353	0.0911	-0.0920

Table 32: Gyroscope Parameters. Set:7.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0094	-0.0094	1.0216	0.7565	0.6752	-0.0106
γ_{zy}	-0.0089	-0.0091	0.4794	0.3847	0.3050	-0.0088
γ_{xz}	-0.0058	-0.0057	1.1022	0.8974	0.6221	-0.0055
γ_{zx}	0.0081	0.0079	0.5319	0.4547	0.2987	0.0086
γ_{xy}	0.0023	0.0023	0.9142	0.7315	0.5367	0.0025
γ_{yx}	-0.0052	-0.0052	0.8888	0.7268	0.4951	-0.0056
s_x^g	1.1075	1.1075	0.4948	0.4112	0.2650	1.1082
s_y^g	0.9519	0.9520	0.3758	0.3173	0.2014	0.9516
s_z^g	1.0063	1.0063	0.3650	0.2885	0.2171	1.0065

Table 33: Absolute errors along the axis. Set:7.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0343	0.0703	0.0905
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0340	0.1559	0.0468
Calibrated	0.0045	0.0038	0.0041

Table 34: Accelerometer divergence error. Set:7.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0673	0.1753	0.0570	0.1762
	(0.0095)	(0.0229)	(0.0091)	(0.0221)
Calibrated	0.0056	0.0303	0.0056	0.0292
	(0.0009)	(0.0035)	(0.0009)	(0.0034)

Table 35: Gyroscope divergence error. Set:7.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.6205	4.9794	2.6246	5.5671
	(0.2987)	(0.2987)	(0.3045)	(0.3045)
Calibrated	0.1969	0.3865	0.4143	0.7977
	(0.0225)	(0.0225)	(0.0476)	(0.0476)

Table 36: Accelerometers Parameters. Set:8.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0083	-0.0083	0.0489	0.0379	0.0306	-0.0083
α_{zy}	0.0013	0.0013	0.0388	0.0298	0.0245	0.0013
α_{zx}	-0.0004	-0.0003	0.0459	0.0364	0.0311	-0.0004
s_x^a	1.0021	1.0021	0.0287	0.0231	0.0167	1.0021
s_y^a	0.9999	0.9999	0.0264	0.0206	0.0165	0.9999
s_z^a	0.9980	0.9980	0.0195	0.0160	0.0111	0.9980
b_x^a	-0.0239	-0.0240	0.1724	0.1413	0.0977	-0.0238
b_y^a	0.0045	0.0044	0.1671	0.1399	0.1083	0.0041
b_z^a	0.0664	0.0665	0.1445	0.1196	0.0834	0.0663

Table 37: Gyroscope Parameters. Set:8.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0091	0.0091	1.0484	0.8182	0.6376	0.0108
γ_{zy}	-0.0087	-0.0088	0.3774	0.3082	0.2215	-0.0085
γ_{xz}	-0.0129	-0.0129	0.8826	0.7291	0.4797	-0.0119
γ_{zx}	0.0004	0.0003	0.4213	0.3585	0.2372	-0.0001
γ_{xy}	0.0050	0.0050	0.8867	0.7026	0.5272	0.0044
γ_{yx}	-0.0091	-0.0091	0.7914	0.6012	0.5072	-0.0080
s_x^g	1.0762	1.0763	0.4042	0.3274	0.2457	1.0763
s_y^g	1.0202	1.0202	0.4189	0.3385	0.2399	1.0203
s_z^g	0.9298	0.9298	0.4060	0.3034	0.2638	0.9306

Table 38: Absolute errors along the axis. Set:8.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0405	0.0070	0.0666
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0644	0.1495	0.0561
Calibrated	0.0043	0.0041	0.0038

Table 39: Accelerometer divergence error. Set:8.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0475	0.1146	0.0460	0.1199
	(0.0059)	(0.0157)	(0.0066)	(0.0166)
Calibrated	0.0056	0.0304	0.0056	0.0304
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 40: Gyroscope divergence error. Set:8.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	3.1554	5.8216	3.9192	6.9418
	(0.3582)	(0.3582)	(0.4425)	(0.4425)
Calibrated	0.1986	0.3811	0.4375	0.7848
	(0.0227)	(0.0227)	(0.0503)	(0.0503)

Table 41: Accelerometers Parameters. Set:9.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0003	0.0003	0.0538	0.0424	0.0341	0.0003
α_{zy}	-0.0070	-0.0070	0.0471	0.0374	0.0281	-0.0069
α_{zx}	-0.0009	-0.0009	0.0347	0.0288	0.0220	-0.0009
s_x^a	1.0007	1.0007	0.0298	0.0222	0.0196	1.0007
s_y^a	1.0008	1.0008	0.0294	0.0228	0.0188	1.0008
s_z^a	0.9962	0.9962	0.0170	0.0138	0.0097	0.9963
b_x^a	-0.0943	-0.0944	0.1745	0.1418	0.1448	-0.0943
b_y^a	-0.0163	-0.0163	0.1702	0.1439	0.0885	-0.0162
b_z^a	-0.0289	-0.0289	0.1261	0.0997	0.0793	-0.0289

Table 42: Gyroscope Parameters. Set:9.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0064	0.0066	0.9225	0.7466	0.5540	0.0060
γ_{zy}	0.0150	0.0150	0.3739	0.3014	0.2173	0.0154
γ_{xz}	0.0167	0.0169	1.1022	0.8639	0.6768	0.0178
γ_{zx}	-0.0029	-0.0030	0.3619	0.2997	0.1990	-0.0033
γ_{xy}	0.0179	0.0181	0.7742	0.6199	0.4826	0.0185
γ_{yx}	-0.0064	-0.0065	0.9051	0.6896	0.5728	-0.0068
s_x^g	1.0963	1.0961	0.4941	0.4070	0.2964	1.0954
s_y^g	1.0278	1.0278	0.4320	0.3491	0.2465	1.0280
s_z^g	1.0984	1.0984	0.3896	0.3279	0.2107	1.0981

Table 43: Absolute errors along the axis. Set:9.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0991	0.0161	0.0341
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0212	0.1664	0.1680
Calibrated	0.0044	0.0041	0.0044

Table 44: Accelerometer divergence error. Set:9.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0498	0.1559	0.0449	0.1443
	(0.0091)	(0.0219)	(0.0081)	(0.0207)
Calibrated	0.0056	0.0302	0.0056	0.0303
	(0.0009)	(0.0035)	(0.0009)	(0.0033)

Table 45: Gyroscope divergence error. Set:9.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	3.7624	7.1963	2.6585	5.5883
	(0.4357)	(0.4357)	(0.3081)	(0.3081)
Calibrated	0.2060	0.4148	0.4138	0.8199
	(0.0240)	(0.0240)	(0.0503)	(0.0503)

Table 46: Accelerometers Parameters. Set:10.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0031	-0.0031	0.0454	0.0396	0.0244	-0.0031
α_{zy}	-0.0042	-0.0042	0.0429	0.0330	0.0296	-0.0042
α_{zx}	-0.0020	-0.0020	0.0298	0.0242	0.0168	-0.0020
s_x^a	0.9951	0.9951	0.0255	0.0213	0.0148	0.9951
s_y^a	1.0021	1.0021	0.0263	0.0208	0.0168	1.0021
s_z^a	0.9996	0.9996	0.0164	0.0140	0.0098	0.9996
b_x^a	-0.0552	-0.0551	0.2118	0.1747	0.1223	-0.0552
b_y^a	-0.0151	-0.0151	0.1814	0.1411	0.1143	-0.0150
b_z^a	-0.0132	-0.0133	0.1180	0.1051	0.0752	-0.0133

Table 47: Gyroscope Parameters. Set:10.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0055	-0.0053	0.8564	0.6842	0.5662	-0.0050
γ_{zy}	-0.0058	-0.0059	0.3683	0.3064	0.2300	-0.0063
γ_{xz}	-0.0028	-0.0026	1.1448	0.9479	0.6525	-0.0026
γ_{zx}	-0.0198	-0.0200	0.4189	0.3387	0.2802	-0.0201
γ_{xy}	-0.0172	-0.0170	0.6838	0.5606	0.4347	-0.0168
γ_{yx}	0.0013	0.0015	0.8012	0.6374	0.4882	0.0018
s_x^g	1.0435	1.0436	0.4407	0.3339	0.2895	1.0438
s_y^g	0.9629	0.9630	0.3872	0.2864	0.2688	0.9629
s_z^g	0.9548	0.9549	0.3672	0.2843	0.2279	0.9548

Table 48: Absolute errors along the axis. Set:10.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0566	0.0191	0.0135
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0465	0.0106	0.0927
Calibrated	0.0042	0.0039	0.0039

Table 49: Accelerometer divergence error. Set:10.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0282	0.1333	0.0315	0.1366
	(0.0057)	(0.0146)	(0.0060)	(0.0142)
Calibrated	0.0056	0.0303	0.0056	0.0320
	(0.0009)	(0.0035)	(0.0009)	(0.0031)

Table 50: Gyroscope divergence error. Set:10.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.0656	3.9527	1.6217	3.2091
	(0.2366)	(0.2366)	(0.1852)	(0.1852)
Calibrated	0.2156	0.4053	0.6036	1.1191
	(0.0245)	(0.0245)	(0.0691)	(0.0691)

Table 51: Accelerometers Parameters. Set:11.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0063	0.0063	0.0488	0.0373	0.0307	0.0063
α_{zy}	0.0081	0.0081	0.0381	0.0319	0.0244	0.0081
α_{zx}	-0.0075	-0.0075	0.0350	0.0302	0.0185	-0.0075
s_x^a	1.0083	1.0083	0.0323	0.0276	0.0168	1.0082
s_y^a	1.0026	1.0026	0.0306	0.0233	0.0194	1.0027
s_z^a	0.9920	0.9919	0.0166	0.0134	0.0095	0.9919
b_x^a	-0.0443	-0.0444	0.2683	0.1975	0.1854	-0.0443
b_y^a	0.0094	0.0094	0.2481	0.2028	0.1379	0.0091
b_z^a	0.0915	0.0915	0.1597	0.1357	0.0819	0.0914

Table 52: Gyroscope Parameters. Set:11.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0277	0.0276	1.1665	0.9722	0.6226	0.0253
γ_{zy}	-0.0135	-0.0135	0.4095	0.3238	0.2448	-0.0135
γ_{xz}	0.0303	0.0303	1.0698	0.8720	0.6010	0.0283
γ_{zx}	0.0073	0.0073	0.3624	0.2674	0.2394	0.0072
γ_{xy}	-0.0006	-0.0005	0.8742	0.6848	0.5414	0.0000
γ_{yx}	0.0071	0.0074	0.8639	0.7423	0.4760	0.0084
s_x^g	0.9877	0.9878	0.3767	0.3323	0.2171	0.9874
s_y^g	0.9926	0.9925	0.3368	0.2815	0.1878	0.9928
s_z^g	1.0894	1.0894	0.5876	0.4755	0.3339	1.0887

Table 53: Absolute errors along the axis. Set:11.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0745	0.0484	0.0931
Calibrated	0.0056	0.0056	0.0055

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1409	0.1416	0.0700
Calibrated	0.0040	0.0040	0.0044

Table 54: Accelerometer divergence error. Set:11.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0715	0.2245	0.0630	0.2292
	(0.0112)	(0.0266)	(0.0119)	(0.0265)
Calibrated	0.0056	0.0301	0.0056	0.0314
	(0.0009)	(0.0035)	(0.0009)	(0.0034)

Table 55: Gyroscope divergence error. Set:11.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.3448	5.1280	5.3295	8.3971
	(0.2782)	(0.2782)	(0.6089)	(0.6089)
Calibrated	0.2174	0.4195	0.4021	0.7725
	(0.0251)	(0.0251)	(0.0472)	(0.0472)

Table 56: Accelerometers Parameters. Set:12.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0078	-0.0078	0.0734	0.0528	0.0502	-0.0078
α_{zy}	-0.0014	-0.0014	0.0363	0.0271	0.0247	-0.0014
α_{zx}	-0.0066	-0.0066	0.0459	0.0343	0.0299	-0.0065
s_x^a	1.0040	1.0040	0.0354	0.0285	0.0205	1.0040
s_y^a	1.0010	1.0010	0.0259	0.0203	0.0162	1.0010
s_z^a	0.9952	0.9952	0.0169	0.0142	0.0091	0.9952
b_x^a	-0.0313	-0.0313	0.2168	0.1805	0.1175	-0.0311
b_y^a	0.0817	0.0817	0.2525	0.1851	0.1712	0.0813
b_z^a	0.0488	0.0488	0.1485	0.1196	0.1006	0.0487

Table 57: Gyroscope Parameters. Set:12.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0017	0.0019	1.0983	0.9390	0.5912	0.0033
γ_{zy}	-0.0044	-0.0043	0.4809	0.3979	0.2854	-0.0044
γ_{xz}	0.0029	0.0028	1.0418	0.8439	0.5945	0.0039
γ_{zx}	0.0220	0.0222	0.3728	0.3234	0.2430	0.0227
γ_{xy}	-0.0099	-0.0099	0.8767	0.7102	0.5040	-0.0086
γ_{yx}	0.0062	0.0065	0.7450	0.5919	0.5040	0.0072
s_x^g	0.9991	0.9991	0.3879	0.3196	0.2152	0.9988
s_y^g	0.9384	0.9384	0.3665	0.2642	0.2509	0.9396
s_z^g	0.9481	0.9480	0.3192	0.2623	0.1847	0.9480

Table 58: Absolute errors along the axis. Set:12.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0446	0.0820	0.0492
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0603	0.0111	0.0143
Calibrated	0.0040	0.0038	0.0038

Table 59: Accelerometer divergence error. Set:12.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0583	0.1427	0.0614	0.1447
	(0.0098)	(0.0202)	(0.0094)	(0.0190)
Calibrated	0.0056	0.0309	0.0056	0.0305
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 60: Gyroscope divergence error. Set:12.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.6343	4.7777	1.4121	2.9174
	(0.3002)	(0.3002)	(0.1658)	(0.1658)
Calibrated	0.2071	0.4064	0.4293	0.7090
	(0.0241)	(0.0241)	(0.0485)	(0.0485)

Table 61: Accelerometers Parameters. Set:13.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0034	0.0034	0.0435	0.0359	0.0246	0.0034
α_{zy}	0.0023	0.0023	0.0379	0.0310	0.0213	0.0023
α_{zx}	0.0048	0.0048	0.0389	0.0306	0.0241	0.0048
s_x^a	1.0074	1.0074	0.0307	0.0237	0.0190	1.0074
s_y^a	0.9990	0.9990	0.0279	0.0224	0.0164	0.9990
s_z^a	0.9968	0.9968	0.0140	0.0113	0.0081	0.9968
b_x^a	-0.0428	-0.0428	0.1815	0.1442	0.1132	-0.0429
b_y^a	-0.0030	-0.0029	0.1714	0.1336	0.1065	-0.0030
b_z^a	0.0648	0.0647	0.1322	0.1049	0.0820	0.0647

Table 62: Gyroscope Parameters. Set:13.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0047	-0.0046	0.8365	0.6685	0.4907	-0.0062
γ_{zy}	-0.0121	-0.0122	0.4380	0.3410	0.2800	-0.0120
γ_{xz}	0.0075	0.0075	0.8287	0.6151	0.5463	0.0061
γ_{zx}	0.0082	0.0082	0.3503	0.3022	0.1691	0.0083
γ_{xy}	0.0062	0.0065	0.7889	0.6797	0.5080	0.0061
γ_{yx}	0.0071	0.0070	1.0252	0.7982	0.6270	0.0069
s_x^g	1.0527	1.0528	0.4507	0.3800	0.2415	1.0524
s_y^g	1.0077	1.0077	0.3901	0.3207	0.2179	1.0085
s_z^g	0.9635	0.9635	0.3434	0.2734	0.2043	0.9634

Table 63: Absolute errors along the axis. Set:13.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0491	0.0308	0.0646
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0084	0.2715	0.0190
Calibrated	0.0043	0.0040	0.0039

Table 64: Accelerometer divergence error. Set:13.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0518	0.1386	0.0537	0.1406
	(0.0070)	(0.0178)	(0.0068)	(0.0186)
Calibrated	0.0056	0.0300	0.0056	0.0281
	(0.0009)	(0.0034)	(0.0009)	(0.0033)

Table 65: Gyroscope divergence error. Set:13.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	1.8206	3.6623	1.6608	4.0667
	(0.2099)	(0.2099)	(0.2093)	(0.2093)
Calibrated	0.2473	0.4804	0.6983	1.3124
	(0.0287)	(0.0287)	(0.0807)	(0.0807)

Table 66: Accelerometers Parameters. Set:14.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0080	-0.0080	0.0413	0.0347	0.0231	-0.0079
α_{zy}	0.0055	0.0055	0.0351	0.0285	0.0214	0.0055
α_{zx}	-0.0089	-0.0089	0.0360	0.0327	0.0187	-0.0090
s_x^a	0.9953	0.9953	0.0192	0.0154	0.0113	0.9953
s_y^a	1.0027	1.0027	0.0270	0.0200	0.0180	1.0027
s_z^a	1.0028	1.0028	0.0185	0.0157	0.0093	1.0028
b_x^a	0.0024	0.0025	0.2357	0.1834	0.1443	0.0021
b_y^a	0.0406	0.0406	0.1700	0.1482	0.1056	0.0406
b_z^a	-0.0217	-0.0216	0.1389	0.1141	0.0782	-0.0215

Table 67: Gyroscope Parameters. Set:14.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0146	-0.0146	1.1094	0.8491	0.6963	-0.0170
γ_{zy}	-0.0040	-0.0040	0.4496	0.3625	0.2590	-0.0047
γ_{xz}	0.0020	0.0023	1.1858	0.9422	0.7375	0.0003
γ_{zx}	-0.0082	-0.0082	0.5335	0.3887	0.3608	-0.0082
γ_{xy}	-0.0033	-0.0031	1.0569	0.8522	0.6365	-0.0021
γ_{yx}	-0.0066	-0.0065	0.8908	0.8037	0.3625	-0.0053
s_x^g	0.9980	0.9980	0.4282	0.3563	0.2315	0.9979
s_y^g	1.0120	1.0121	0.4819	0.3404	0.3355	1.0121
s_z^g	0.8492	0.8492	0.2570	0.2186	0.1410	0.8489

Table 68: Absolute errors along the axis. Set:14.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0520	0.0621	0.0248
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0812	0.0070	0.0556
Calibrated	0.0040	0.0041	0.0034

Table 69: Accelerometer divergence error. Set:14.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0392	0.1238	0.0449	0.1238
	(0.0082)	(0.0182)	(0.0074)	(0.0182)
Calibrated	0.0056	0.0303	0.0056	0.0274
	(0.0009)	(0.0035)	(0.0009)	(0.0038)

Table 70: Gyroscope divergence error. Set:14.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	5.1606	9.9359	3.6666	9.0323
	(0.6070)	(0.6070)	(0.4511)	(0.4511)
Calibrated	0.1944	0.3724	0.3865	0.5906
	(0.0223)	(0.0223)	(0.0419)	(0.0419)

Table 71: Accelerometers Parameters. Set:15.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0013	-0.0013	0.0527	0.0363	0.0412	-0.0012
α_{zy}	0.0098	0.0098	0.0298	0.0234	0.0197	0.0098
α_{zx}	-0.0069	-0.0069	0.0417	0.0292	0.0292	-0.0069
s_x^a	1.0067	1.0067	0.0317	0.0238	0.0206	1.0066
s_y^a	0.9925	0.9925	0.0318	0.0260	0.0176	0.9924
s_z^a	1.0009	1.0009	0.0222	0.0186	0.0138	1.0010
b_x^a	-0.0693	-0.0693	0.2110	0.1589	0.1377	-0.0694
b_y^a	-0.0452	-0.0452	0.2373	0.1760	0.1557	-0.0456
b_z^a	0.0630	0.0630	0.1897	0.1521	0.1124	0.0632

Table 72: Gyroscope Parameters. Set:15.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0113	0.0111	1.1439	0.9312	0.6551	0.0097
γ_{zy}	-0.0038	-0.0038	0.4016	0.3231	0.2318	-0.0037
γ_{xz}	0.0079	0.0078	1.1188	0.8931	0.6557	0.0068
γ_{zx}	0.0121	0.0120	0.4188	0.3571	0.2283	0.0116
γ_{xy}	-0.0125	-0.0124	0.9918	0.8159	0.5460	-0.0135
γ_{yx}	0.0011	0.0007	1.0970	0.8451	0.7898	0.0000
s_x^g	1.0042	1.0042	0.4469	0.3521	0.2707	1.0048
s_y^g	1.0010	1.0010	0.4408	0.3730	0.2245	1.0008
s_z^g	1.1064	1.1064	0.4153	0.3580	0.2024	1.1061

Table 73: Absolute errors along the axis. Set:15.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0806	0.0620	0.0633
Calibrated	0.0056	0.0055	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0710	0.0290	0.1756
Calibrated	0.0040	0.0041	0.0045

Table 74: Accelerometer divergence error. Set:15.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0631	0.1902	0.0625	0.1826
	(0.0107)	(0.0260)	(0.0107)	(0.0261)
Calibrated	0.0056	0.0299	0.0056	0.0284
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 75: Gyroscope divergence error. Set:15.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.8736	6.2246	2.2077	5.8935
	(0.3416)	(0.3416)	(0.2783)	(0.2783)
Calibrated	0.2188	0.4303	0.4431	0.7284
	(0.0253)	(0.0253)	(0.0501)	(0.0501)

Table 76: Accelerometers Parameters. Set:16.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0095	-0.0096	0.0538	0.0464	0.0301	-0.0096
α_{zy}	-0.0063	-0.0063	0.0396	0.0326	0.0274	-0.0063
α_{zx}	0.0054	0.0054	0.0463	0.0358	0.0317	0.0054
s_x^a	1.0016	1.0016	0.0384	0.0287	0.0249	1.0016
s_y^a	1.0045	1.0045	0.0400	0.0309	0.0248	1.0045
s_z^a	0.9963	0.9963	0.0191	0.0177	0.0111	0.9963
b_x^a	-0.0164	-0.0165	0.1840	0.1571	0.1310	-0.0163
b_y^a	-0.0253	-0.0253	0.2513	0.2084	0.1354	-0.0256
b_z^a	0.0333	0.0333	0.1511	0.1181	0.0938	0.0335

Table 77: Gyroscope Parameters. Set:16.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0011	0.0010	0.9669	0.7867	0.5462	0.0008
γ_{zy}	-0.0127	-0.0127	0.3972	0.2872	0.2749	-0.0125
γ_{xz}	0.0222	0.0219	0.9603	0.7830	0.6169	0.0215
γ_{zx}	0.0097	0.0097	0.4479	0.3464	0.2802	0.0105
γ_{xy}	0.0099	0.0097	0.8236	0.6585	0.5039	0.0087
γ_{yx}	0.0032	0.0032	0.9215	0.7135	0.5710	0.0025
s_x^g	0.9074	0.9073	0.3841	0.3009	0.2851	0.9065
s_y^g	1.0448	1.0450	0.6478	0.5480	0.3687	1.0456
s_z^g	1.0906	1.0906	0.5359	0.4609	0.2599	1.0907

Table 78: Absolute errors along the axis. Set:16.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0603	0.0446	0.0333
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.2970	0.1152	0.0159
Calibrated	0.0037	0.0042	0.0044

Table 79: Accelerometer divergence error. Set:16.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0365	0.1494	0.0377	0.1604
	(0.0078)	(0.0169)	(0.0083)	(0.0176)
Calibrated	0.0056	0.0307	0.0056	0.0309
	(0.0009)	(0.0035)	(0.0009)	(0.0034)

Table 80: Gyroscope divergence error. Set:16.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	3.9884	7.4480	3.4699	6.2444
	(0.4596)	(0.4596)	(0.3865)	(0.3865)
Calibrated	0.2210	0.4482	0.5058	1.0264
	(0.0259)	(0.0259)	(0.0614)	(0.0614)

Table 81: Accelerometers Parameters. Set:17.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0047	0.0047	0.0459	0.0349	0.0290	0.0047
α_{zy}	0.0018	0.0017	0.0429	0.0333	0.0286	0.0018
α_{zx}	-0.0083	-0.0083	0.0458	0.0356	0.0280	-0.0083
s_x^a	1.0024	1.0024	0.0272	0.0232	0.0140	1.0024
s_y^a	0.9975	0.9975	0.0256	0.0216	0.0133	0.9975
s_z^a	1.0045	1.0045	0.0202	0.0160	0.0138	1.0045
b_x^a	-0.0806	-0.0806	0.1835	0.1427	0.1128	-0.0804
b_y^a	0.0048	0.0049	0.2486	0.1952	0.1516	0.0050
b_z^a	-0.0023	-0.0023	0.1342	0.1166	0.0774	-0.0022

Table 82: Gyroscope Parameters. Set:17.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0080	-0.0080	1.1469	0.8839	0.7127	-0.0068
γ_{zy}	-0.0106	-0.0106	0.4541	0.3542	0.2764	-0.0105
γ_{xz}	-0.0034	-0.0035	1.2874	1.1058	0.6270	-0.0016
γ_{zx}	-0.0076	-0.0077	0.4743	0.3851	0.2784	-0.0077
γ_{xy}	0.0114	0.0113	1.0904	0.8990	0.6100	0.0106
γ_{yx}	0.0227	0.0226	0.9464	0.7048	0.6214	0.0227
s_x^g	0.9767	0.9766	0.4063	0.3175	0.2499	0.9766
s_y^g	0.9541	0.9541	0.3437	0.2791	0.2066	0.9541
s_z^g	0.9312	0.9312	0.5037	0.3647	0.3428	0.9310

Table 83: Absolute errors along the axis. Set:17.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0822	0.0531	0.0284
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0135	0.1633	0.0772
Calibrated	0.0039	0.0038	0.0038

Table 84: Accelerometer divergence error. Set:17.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0480	0.1321	0.0649	0.1343
	(0.0090)	(0.0181)	(0.0096)	(0.0180)
Calibrated	0.0056	0.0305	0.0056	0.0306
	(0.0009)	(0.0035)	(0.0009)	(0.0036)

Table 85: Gyroscope divergence error. Set:17.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	3.3719	6.2887	3.9778	7.7049
	(0.3868)	(0.3868)	(0.4835)	(0.4835)
Calibrated	0.2023	0.3937	0.3950	0.6585
	(0.0233)	(0.0233)	(0.0451)	(0.0451)

Table 86: Accelerometers Parameters. Set:18.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0048	0.0048	0.0447	0.0349	0.0273	0.0048
α_{zy}	-0.0042	-0.0042	0.0326	0.0247	0.0210	-0.0043
α_{zx}	-0.0014	-0.0014	0.0446	0.0394	0.0206	-0.0014
s_x^a	0.9920	0.9920	0.0299	0.0237	0.0182	0.9920
s_y^a	1.0044	1.0044	0.0301	0.0224	0.0207	1.0044
s_z^a	1.0032	1.0032	0.0160	0.0131	0.0095	1.0032
b_x^a	0.0246	0.0246	0.2360	0.1812	0.1548	0.0244
b_y^a	0.0719	0.0719	0.2610	0.2098	0.1547	0.0721
b_z^a	-0.0275	-0.0275	0.1247	0.0944	0.0840	-0.0275

Table 87: Gyroscope Parameters. Set:18.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0101	-0.0101	1.2265	0.9913	0.6984	-0.0096
γ_{zy}	0.0054	0.0054	0.4703	0.3855	0.2663	0.0054
γ_{xz}	0.0005	0.0007	1.0587	0.9093	0.5371	0.0011
γ_{zx}	0.0011	0.0011	0.5135	0.4081	0.3027	0.0012
γ_{xy}	0.0047	0.0048	0.7294	0.5554	0.4692	0.0056
γ_{yx}	-0.0032	-0.0032	0.7816	0.6208	0.4611	-0.0040
s_x^g	1.0494	1.0494	0.4873	0.3713	0.3090	1.0493
s_y^g	1.0683	1.0683	0.4937	0.3876	0.2974	1.0685
s_z^g	1.0130	1.0129	0.4630	0.3593	0.2933	1.0132

Table 88: Absolute errors along the axis. Set:18.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0493	0.0721	0.0307
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0335	0.0396	0.0057
Calibrated	0.0042	0.0043	0.0041

Table 89: Accelerometer divergence error. Set:18.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0474	0.1472	0.0604	0.1457
	(0.0083)	(0.0167)	(0.0084)	(0.0160)
Calibrated	0.0056	0.0306	0.0056	0.0288
	(0.0009)	(0.0035)	(0.0009)	(0.0032)

Table 90: Gyroscope divergence error. Set:18.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.2461	4.8571	4.1734	7.1504
	(0.2635)	(0.2635)	(0.4625)	(0.4625)
Calibrated	0.2198	0.4505	0.4570	0.9140
	(0.0259)	(0.0259)	(0.0574)	(0.0574)

Table 91: Accelerometers Parameters. Set:19.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0082	0.0082	0.0541	0.0429	0.0333	0.0082
α_{zy}	0.0084	0.0084	0.0413	0.0351	0.0212	0.0084
α_{zx}	0.0032	0.0032	0.0344	0.0265	0.0214	0.0032
s_x^a	0.9987	0.9987	0.0268	0.0214	0.0169	0.9987
s_y^a	0.9903	0.9903	0.0245	0.0196	0.0166	0.9903
s_z^a	1.0063	1.0063	0.0176	0.0144	0.0114	1.0063
b_x^a	0.0346	0.0347	0.1509	0.1204	0.0962	0.0346
b_y^a	0.0180	0.0180	0.2629	0.1914	0.1770	0.0178
b_z^a	-0.0892	-0.0892	0.1200	0.1031	0.0668	-0.0891

Table 92: Gyroscope Parameters. Set:19.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0080	0.0080	1.0230	0.8057	0.6124	0.0100
γ_{zy}	0.0108	0.0107	0.3988	0.3517	0.1967	0.0102
γ_{xz}	0.0073	0.0074	0.9184	0.6801	0.6097	0.0092
γ_{zx}	-0.0038	-0.0038	0.5039	0.3661	0.3406	-0.0043
γ_{xy}	-0.0043	-0.0042	0.7688	0.6207	0.4555	-0.0048
γ_{yx}	-0.0087	-0.0090	0.9852	0.7576	0.6814	-0.0090
s_x^g	1.0007	1.0008	0.4791	0.3365	0.3425	1.0015
s_y^g	0.9904	0.9903	0.4943	0.3783	0.3209	0.9894
s_z^g	1.0842	1.0841	0.4768	0.3476	0.3414	1.0842

Table 93: Absolute errors along the axis. Set:19.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0678	0.0473	0.0899
Calibrated	0.0056	0.0055	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0121	0.0481	0.0178
Calibrated	0.0040	0.0040	0.0044

Table 94: Accelerometer divergence error. Set:19.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0705	0.1871	0.0790	0.1877
	(0.0107)	(0.0213)	(0.0115)	(0.0213)
Calibrated	0.0056	0.0304	0.0056	0.0301
	(0.0009)	(0.0035)	(0.0009)	(0.0034)

Table 95: Gyroscope divergence error. Set:19.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.3294	4.9647	1.5117	3.6261
	(0.2786)	(0.2786)	(0.1823)	(0.1823)
Calibrated	0.2018	0.4047	0.5516	1.0490
	(0.0234)	(0.0234)	(0.0643)	(0.0643)

Table 96: Accelerometers Parameters. Set:20.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0004	-0.0004	0.0449	0.0377	0.0236	-0.0005
α_{zy}	-0.0095	-0.0095	0.0383	0.0298	0.0246	-0.0095
α_{zx}	0.0040	0.0039	0.0365	0.0307	0.0209	0.0039
s_x^a	0.9983	0.9983	0.0277	0.0225	0.0157	0.9983
s_y^a	1.0073	1.0073	0.0321	0.0266	0.0173	1.0072
s_z^a	0.9913	0.9913	0.0181	0.0149	0.0101	0.9913
b_x^a	0.0264	0.0264	0.2503	0.1989	0.1475	0.0259
b_y^a	0.0330	0.0330	0.1347	0.1124	0.0734	0.0332
b_z^a	0.0623	0.0623	0.1501	0.1293	0.0839	0.0626

Table 97: Gyroscope Parameters. Set:20.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0041	0.0043	1.1720	0.9873	0.6469	0.0055
γ_{zy}	0.0041	0.0040	0.5104	0.4156	0.2966	0.0043
γ_{xz}	0.0015	0.0018	1.0563	0.8921	0.6226	0.0032
γ_{zx}	0.0192	0.0191	0.4181	0.3044	0.3020	0.0189
γ_{xy}	-0.0117	-0.0117	0.9806	0.7178	0.6549	-0.0116
γ_{yx}	0.0049	0.0047	0.6792	0.5599	0.4233	0.0050
s_x^g	1.0281	1.0282	0.4536	0.3531	0.2826	1.0290
s_y^g	0.9977	0.9976	0.4385	0.3376	0.3038	0.9969
s_z^g	0.9073	0.9072	0.3001	0.2304	0.1922	0.9077

Table 98: Absolute errors along the axis. Set:20.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0644	0.0483	0.0753
Calibrated	0.0056	0.0056	0.0055

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0509	0.0101	0.1051
Calibrated	0.0041	0.0040	0.0037

Table 99: Accelerometer divergence error. Set:20.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0600	0.2119	0.0670	0.2175
	(0.0094)	(0.0227)	(0.0104)	(0.0227)
Calibrated	0.0056	0.0307	0.0056	0.0299
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 100: Gyroscope divergence error. Set:20.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	3.5334	7.0138	2.1684	4.1918
	(0.4164)	(0.4164)	(0.2486)	(0.2486)
Calibrated	0.1999	0.4142	0.4637	0.7895
	(0.0233)	(0.0233)	(0.0509)	(0.0509)

Table 101: Accelerometers Parameters. Set:21.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0035	-0.0035	0.0427	0.0308	0.0290	-0.0035
α_{zy}	0.0093	0.0093	0.0332	0.0224	0.0243	0.0092
α_{zx}	-0.0063	-0.0063	0.0242	0.0208	0.0123	-0.0063
s_x^a	0.9913	0.9913	0.0313	0.0259	0.0174	0.9913
s_y^a	1.0097	1.0097	0.0288	0.0228	0.0177	1.0097
s_z^a	1.0052	1.0052	0.0157	0.0125	0.0102	1.0052
b_x^a	0.0767	0.0767	0.2091	0.1520	0.1417	0.0768
b_y^a	0.0782	0.0781	0.2143	0.1578	0.1423	0.0781
b_z^a	-0.0922	-0.0922	0.1449	0.1217	0.0754	-0.0924

Table 102: Gyroscope Parameters. Set:21.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0114	-0.0111	0.8904	0.7527	0.5205	-0.0109
γ_{zy}	0.0031	0.0033	0.3428	0.3267	0.1981	0.0040
γ_{xz}	0.0138	0.0138	0.7654	0.5931	0.4725	0.0145
γ_{zx}	0.0102	0.0101	0.3766	0.3192	0.2121	0.0100
γ_{xy}	0.0011	0.0013	1.1628	0.9090	0.7334	0.0045
γ_{yx}	-0.0039	-0.0036	0.7455	0.6744	0.3740	-0.0027
s_x^g	0.9997	0.9997	0.5085	0.3805	0.3318	1.0003
s_y^g	0.9516	0.9517	0.5010	0.3962	0.3025	0.9510
s_z^g	0.9853	0.9853	0.3987	0.3188	0.2360	0.9849

Table 103: Absolute errors along the axis. Set:21.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0876	0.0803	0.0920
Calibrated	0.0055	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1261	0.1415	0.1058
Calibrated	0.0040	0.0038	0.0040

Table 104: Accelerometer divergence error. Set:21.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0876	0.2322	0.0935	0.2418
	(0.0132)	(0.0314)	(0.0126)	(0.0334)
Calibrated	0.0056	0.0306	0.0057	0.0307
	(0.0009)	(0.0036)	(0.0009)	(0.0037)

Table 105: Gyroscope divergence error. Set:21.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	1.6019	3.1735	1.5927	3.1904
	(0.1854)	(0.1854)	(0.1769)	(0.1769)
Calibrated	0.2060	0.4011	0.5921	0.9823
	(0.0237)	(0.0237)	(0.0668)	(0.0668)

Table 106: Accelerometers Parameters. Set:22.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0018	-0.0018	0.0561	0.0466	0.0350	-0.0018
α_{zy}	0.0043	0.0043	0.0337	0.0277	0.0185	0.0043
α_{zx}	-0.0061	-0.0061	0.0339	0.0275	0.0193	-0.0061
s_x^a	1.0066	1.0066	0.0264	0.0225	0.0157	1.0066
s_y^a	1.0048	1.0048	0.0271	0.0237	0.0158	1.0048
s_z^a	0.9948	0.9948	0.0137	0.0123	0.0085	0.9948
b_x^a	0.0748	0.0748	0.1830	0.1489	0.1048	0.0750
b_y^a	-0.0041	-0.0041	0.2287	0.1793	0.1417	-0.0039
b_z^a	-0.0718	-0.0718	0.1187	0.1015	0.0650	-0.0720

Table 107: Gyroscope Parameters. Set:22.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0003	-0.0004	0.9968	0.7399	0.6665	-0.0004
γ_{zy}	-0.0010	-0.0011	0.3374	0.2905	0.1854	-0.0008
γ_{xz}	0.0147	0.0145	1.0529	0.8085	0.6861	0.0149
γ_{zx}	0.0055	0.0055	0.4619	0.3700	0.2687	0.0046
γ_{xy}	-0.0135	-0.0137	0.9766	0.7928	0.5716	-0.0134
γ_{yx}	-0.0305	-0.0303	0.9961	0.6992	0.7173	-0.0312
s_x^g	0.9876	0.9875	0.3694	0.2719	0.2567	0.9873
s_y^g	1.0056	1.0057	0.4110	0.3110	0.2788	1.0049
s_z^g	0.9967	0.9966	0.4812	0.4068	0.2536	0.9960

Table 108: Absolute errors along the axis. Set:22.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0758	0.0427	0.0767
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0280	0.0319	0.0926
Calibrated	0.0040	0.0041	0.0040

Table 109: Accelerometer divergence error. Set:22.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0645	0.1718	0.0638	0.1673
	(0.0098)	(0.0233)	(0.0087)	(0.0222)
Calibrated	0.0056	0.0304	0.0056	0.0295
	(0.0009)	(0.0035)	(0.0009)	(0.0034)

Table 110: Gyroscope divergence error. Set:22.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.6458	1.3399	0.5368	1.4108
	(0.0746)	(0.0746)	(0.0631)	(0.0631)
Calibrated	0.2028	0.4059	0.4979	0.8774
	(0.0237)	(0.0237)	(0.0581)	(0.0581)

Table 111: Accelerometers Parameters. Set:23.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0001	-0.0001	0.0521	0.0398	0.0336	-0.0002
α_{zy}	0.0061	0.0062	0.0414	0.0360	0.0259	0.0062
α_{zx}	0.0048	0.0048	0.0371	0.0318	0.0181	0.0048
s_x^a	0.9962	0.9962	0.0261	0.0220	0.0135	0.9962
s_y^a	1.0026	1.0026	0.0296	0.0246	0.0167	1.0026
s_z^a	1.0062	1.0062	0.0202	0.0179	0.0099	1.0062
b_x^a	0.0458	0.0458	0.1887	0.1491	0.1125	0.0458
b_y^a	0.0925	0.0926	0.1733	0.1490	0.0990	0.0924
b_z^a	0.0140	0.0140	0.1457	0.1196	0.0844	0.0139

Table 112: Gyroscope Parameters. Set:23.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0105	0.0106	1.0469	0.8457	0.6088	0.0091
γ_{zy}	-0.0041	-0.0041	0.3185	0.2365	0.2098	-0.0039
γ_{xz}	0.0049	0.0050	1.1172	0.8798	0.6690	0.0026
γ_{zx}	-0.0057	-0.0058	0.3874	0.3132	0.2365	-0.0054
γ_{xy}	-0.0052	-0.0051	0.9944	0.7207	0.6808	-0.0040
γ_{yx}	0.0114	0.0114	0.8620	0.7351	0.4292	0.0102
s_x^g	1.0325	1.0325	0.5281	0.3957	0.3451	1.0328
s_y^g	0.9544	0.9544	0.3372	0.2877	0.1677	0.9540
s_z^g	1.0195	1.0195	0.4097	0.3118	0.2606	1.0202

Table 113: Absolute errors along the axis. Set:23.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0543	0.0911	0.0410
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0692	0.0671	0.0236
Calibrated	0.0042	0.0038	0.0041

Table 114: Accelerometer divergence error. Set:23.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0597	0.1485	0.0601	0.1508
	(0.0105)	(0.0189)	(0.0105)	(0.0189)
Calibrated	0.0056	0.0305	0.0056	0.0293
	(0.0009)	(0.0035)	(0.0009)	(0.0036)

Table 115: Gyroscope divergence error. Set:23.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	1.4844	2.8941	1.3111	2.7847
	(0.1699)	(0.1699)	(0.1596)	(0.1596)
Calibrated	0.2404	0.4632	0.4978	0.9178
	(0.0277)	(0.0277)	(0.0589)	(0.0589)

Table 116: Accelerometers Parameters. Set:24.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0092	0.0092	0.0378	0.0318	0.0230	0.0092
α_{zy}	-0.0011	-0.0011	0.0386	0.0296	0.0241	-0.0011
α_{zx}	0.0065	0.0065	0.0367	0.0305	0.0212	0.0065
s_x^a	0.9986	0.9986	0.0276	0.0232	0.0163	0.9986
s_y^a	0.9955	0.9955	0.0324	0.0268	0.0208	0.9955
s_z^a	0.9992	0.9992	0.0159	0.0127	0.0105	0.9992
b_x^a	-0.0661	-0.0661	0.1707	0.1306	0.1083	-0.0663
b_y^a	-0.0792	-0.0793	0.1913	0.1571	0.1063	-0.0791
b_z^a	-0.0156	-0.0156	0.1271	0.1020	0.0743	-0.0159

Table 117: Gyroscope Parameters. Set:24.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0133	0.0132	1.0341	0.8469	0.5732	0.0136
γ_{zy}	0.0014	0.0015	0.5461	0.4353	0.3260	0.0005
γ_{xz}	-0.0019	-0.0018	0.9271	0.7691	0.5358	-0.0020
γ_{zx}	0.0048	0.0047	0.5214	0.4149	0.3171	0.0050
γ_{xy}	0.0059	0.0056	1.3140	1.1440	0.6616	0.0078
γ_{yx}	0.0198	0.0199	1.1172	0.9321	0.6019	0.0211
s_x^g	1.1257	1.1257	0.5815	0.4882	0.3036	1.1264
s_y^g	1.0315	1.0315	0.5423	0.4199	0.3342	1.0298
s_z^g	1.1051	1.1052	0.5073	0.3958	0.3369	1.1053

Table 118: Absolute errors along the axis. Set:24.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0702	0.0798	0.0158
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1395	0.0183	0.0226
Calibrated	0.0045	0.0042	0.0045

Table 119: Accelerometer divergence error. Set:24.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0464	0.2115	0.0477	0.2149
	(0.0098)	(0.0229)	(0.0104)	(0.0229)
Calibrated	0.0056	0.0304	0.0056	0.0329
	(0.0009)	(0.0034)	(0.0009)	(0.0037)

Table 120: Gyroscope divergence error. Set:24.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	4.5095	8.4888	3.6264	5.1379
	(0.5277)	(0.5277)	(0.3853)	(0.3853)
Calibrated	0.2151	0.4417	0.4647	0.9007
	(0.0249)	(0.0249)	(0.0527)	(0.0527)

Table 121: Accelerometers Parameters. Set:25.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0061	0.0062	0.0366	0.0413	0.0248	0.0061
α_{zy}	0.0081	0.0081	0.0347	0.0264	0.0221	0.0081
α_{zx}	-0.0085	-0.0085	0.0394	0.0294	0.0265	-0.0085
s_x^a	0.9901	0.9901	0.0269	0.0205	0.0175	0.9901
s_y^a	1.0012	1.0012	0.0239	0.0194	0.0139	1.0012
s_z^a	1.0058	1.0058	0.0152	0.0130	0.0081	1.0057
b_x^a	-0.0829	-0.0829	0.1975	0.1488	0.1303	-0.0827
b_y^a	0.0757	0.0757	0.2006	0.1497	0.1323	0.0759
b_z^a	-0.0757	-0.0758	0.1264	0.1013	0.0849	-0.0758

Table 122: Gyroscope Parameters. Set:25.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0105	0.0103	1.1047	0.9301	0.5836	0.0121
γ_{zy}	-0.0154	-0.0154	0.4243	0.3251	0.2660	-0.0156
γ_{xz}	0.0121	0.0120	1.0555	0.8475	0.6156	0.0141
γ_{zx}	0.0051	0.0050	0.3047	0.2471	0.1762	0.0049
γ_{xy}	0.0061	0.0062	0.8870	0.7720	0.4179	0.0055
γ_{yx}	0.0209	0.0211	0.7631	0.6499	0.4199	0.0217
s_x^g	1.0208	1.0208	0.3438	0.2664	0.2131	1.0204
s_y^g	0.9532	0.9532	0.4276	0.3202	0.2782	0.9531
s_z^g	1.0731	1.0732	0.4839	0.3949	0.2927	1.0726

Table 123: Absolute errors along the axis. Set:25.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0978	0.0763	0.0768
Calibrated	0.0055	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1338	0.1163	0.0561
Calibrated	0.0041	0.0038	0.0043

Table 124: Accelerometer divergence error. Set:25.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0816	0.2017	0.0984	0.2077
	(0.0139)	(0.0294)	(0.0128)	(0.0292)
Calibrated	0.0056	0.0305	0.0056	0.0332
	(0.0009)	(0.0034)	(0.0009)	(0.0034)

Table 125: Gyroscope divergence error. Set:25.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.6927	5.2613	2.3714	4.1508
	(0.3093)	(0.3093)	(0.2632)	(0.2632)
Calibrated	0.1995	0.3979	0.4823	0.9102
	(0.0231)	(0.0231)	(0.0584)	(0.0584)

Table 126: Accelerometers Parameters. Set:26.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0089	-0.0090	0.0512	0.0417	0.0294	-0.0090
α_{zy}	0.0037	0.0037	0.0429	0.0353	0.0246	0.0038
α_{zx}	0.0017	0.0017	0.0328	0.0268	0.0206	0.0016
s_x^a	0.9964	0.9964	0.0363	0.0279	0.0227	0.9964
s_y^a	0.9971	0.9971	0.0223	0.0181	0.0126	0.9971
s_z^a	1.0056	1.0056	0.0152	0.0119	0.0106	1.0055
b_x^a	-0.0357	-0.0357	0.1955	0.1615	0.1059	-0.0359
b_y^a	-0.0342	-0.0341	0.1980	0.1668	0.1188	-0.0341
b_z^a	0.0386	0.0386	0.1692	0.1269	0.1094	0.0386

Table 127: Gyroscope Parameters. Set:26.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0052	0.0052	1.2034	0.9968	0.6483	0.0047
γ_{zy}	0.0072	0.0073	0.4942	0.4412	0.2486	0.0078
γ_{xz}	-0.0035	-0.0036	1.0228	0.8326	0.6014	-0.0047
γ_{zx}	0.0077	0.0077	0.4483	0.3709	0.2424	0.0083
γ_{xy}	-0.0031	-0.0031	0.7605	0.6158	0.4356	-0.0020
γ_{yx}	0.0183	0.0181	0.6625	0.5100	0.4726	0.0166
s_x^g	1.0144	1.0144	0.4726	0.3695	0.2921	1.0154
s_y^g	0.9458	0.9458	0.3923	0.3162	0.2248	0.9455
s_z^g	1.0654	1.0654	0.3478	0.2914	0.1886	1.0652

Table 128: Absolute errors along the axis. Set:26.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0559	0.0330	0.0432
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1218	0.0634	0.0687
Calibrated	0.0041	0.0038	0.0043

Table 129: Accelerometer divergence error. Set:26.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0457	0.1241	0.0401	0.1193
	(0.0072)	(0.0163)	(0.0070)	(0.0163)
Calibrated	0.0056	0.0306	0.0056	0.0324
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 130: Gyroscope divergence error. Set:26.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.4129	4.6731	2.1799	4.0968
	(0.2756)	(0.2756)	(0.2440)	(0.2440)
Calibrated	0.1916	0.3985	0.3722	0.8582
	(0.0225)	(0.0225)	(0.0466)	(0.0466)

Table 131: Accelerometers Parameters. Set:27.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0033	-0.0033	0.0498	0.0405	0.0347	-0.0034
α_{zy}	0.0027	0.0027	0.0415	0.0343	0.0225	0.0027
α_{zx}	0.0041	0.0041	0.0435	0.0359	0.0245	0.0041
s_x^a	0.9943	0.9943	0.0351	0.0280	0.0207	0.9943
s_y^a	0.9927	0.9927	0.0223	0.0174	0.0143	0.9927
s_z^a	0.9902	0.9902	0.0176	0.0142	0.0100	0.9902
b_x^a	-0.0454	-0.0454	0.2330	0.1959	0.1222	-0.0456
b_y^a	-0.0045	-0.0045	0.1652	0.1325	0.0955	-0.0043
b_z^a	-0.0681	-0.0681	0.1585	0.1301	0.0974	-0.0679

Table 132: Gyroscope Parameters. Set:27.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0076	0.0078	0.8857	0.7392	0.5039	0.0074
γ_{zy}	-0.0225	-0.0225	0.3849	0.2930	0.2437	-0.0223
γ_{xz}	-0.0072	-0.0072	0.9679	0.7467	0.6001	-0.0087
γ_{zx}	-0.0037	-0.0039	0.5437	0.4477	0.3714	-0.0041
γ_{xy}	-0.0008	-0.0006	0.9715	0.7782	0.6016	0.0002
γ_{yx}	0.0132	0.0132	0.9880	0.7786	0.5925	0.0131
s_x^g	0.8426	0.8426	0.3740	0.2880	0.2338	0.8430
s_y^g	1.0810	1.0810	0.6691	0.5523	0.3635	1.0799
s_z^g	0.9794	0.9795	0.3844	0.3081	0.2242	0.9797

Table 133: Absolute errors along the axis. Set:27.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0487	0.0408	0.0797
Calibrated	0.0056	0.0056	0.0055

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0214	0.0511	0.1197
Calibrated	0.0034	0.0044	0.0039

Table 134: Accelerometer divergence error. Set:27.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0831	0.2081	0.0740	0.2070
	(0.0072)	(0.0144)	(0.0072)	(0.0144)
Calibrated	0.0055	0.0308	0.0056	0.0277
	(0.0009)	(0.0035)	(0.0009)	(0.0036)

Table 135: Gyroscope divergence error. Set:27.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	5.0179	9.5334	3.7387	7.0757
	(0.5838)	(0.5838)	(0.4107)	(0.4107)
Calibrated	0.2059	0.4150	0.4858	0.8593
	(0.0238)	(0.0238)	(0.0560)	(0.0560)

Table 136: Accelerometers Parameters. Set:28.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0002	-0.0002	0.0509	0.0430	0.0260	-0.0003
α_{zy}	-0.0007	-0.0007	0.0447	0.0372	0.0240	-0.0007
α_{zx}	0.0018	0.0018	0.0391	0.0336	0.0221	0.0018
s_x^a	1.0048	1.0048	0.0288	0.0235	0.0188	1.0048
s_y^a	1.0009	1.0009	0.0329	0.0258	0.0203	1.0009
s_z^a	0.9912	0.9912	0.0133	0.0102	0.0083	0.9913
b_x^a	-0.0119	-0.0119	0.1772	0.1448	0.1094	-0.0119
b_y^a	-0.0924	-0.0924	0.1793	0.1578	0.0839	-0.0926
b_z^a	-0.0571	-0.0571	0.1387	0.1094	0.0850	-0.0568

Table 137: Gyroscope Parameters. Set:28.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0066	0.0063	1.2781	1.0586	0.7384	0.0064
γ_{zy}	-0.0077	-0.0078	0.3797	0.2909	0.2416	-0.0080
γ_{xz}	-0.0037	-0.0040	1.1441	0.9701	0.6409	-0.0029
γ_{zx}	-0.0181	-0.0181	0.4926	0.4097	0.2632	-0.0177
γ_{xy}	-0.0103	-0.0104	0.7653	0.6398	0.4034	-0.0110
γ_{yx}	-0.0060	-0.0060	1.1162	0.8723	0.6774	-0.0073
s_x^g	0.9691	0.9691	0.3702	0.2966	0.2272	0.9692
s_y^g	1.0498	1.0498	0.4276	0.3404	0.2580	1.0498
s_z^g	1.0213	1.0214	0.4249	0.3573	0.2419	1.0209

Table 138: Absolute errors along the axis. Set:28.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0227	0.0920	0.0657
Calibrated	0.0056	0.0056	0.0055

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0439	0.0530	0.0668
Calibrated	0.0039	0.0042	0.0041

Table 139: Accelerometer divergence error. Set:28.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0636	0.1904	0.0593	0.1968
	(0.0095)	(0.0216)	(0.0097)	(0.0204)
Calibrated	0.0056	0.0304	0.0056	0.0313
	(0.0009)	(0.0035)	(0.0009)	(0.0034)

Table 140: Gyroscope divergence error. Set:28.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	1.5196	3.0763	1.2998	2.7181
	(0.1754)	(0.1754)	(0.1495)	(0.1495)
Calibrated	0.2288	0.4400	0.5425	0.7555
	(0.0264)	(0.0264)	(0.0581)	(0.0581)

Table 141: Accelerometers Parameters. Set:29.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0025	0.0025	0.0397	0.0313	0.0240	0.0025
α_{zy}	-0.0055	-0.0055	0.0366	0.0312	0.0186	-0.0055
α_{zx}	-0.0085	-0.0085	0.0373	0.0325	0.0248	-0.0085
s_x^a	0.9910	0.9910	0.0249	0.0191	0.0162	0.9910
s_y^a	1.0029	1.0029	0.0303	0.0252	0.0162	1.0029
s_z^a	0.9946	0.9946	0.0178	0.0137	0.0112	0.9946
b_x^a	-0.0980	-0.0980	0.2069	0.1594	0.1292	-0.0979
b_y^a	-0.0798	-0.0798	0.2030	0.1645	0.1150	-0.0798
b_z^a	-0.0164	-0.0164	0.1187	0.0932	0.0715	-0.0163

Table 142: Gyroscope Parameters. Set:29.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0041	0.0039	0.8667	0.7439	0.4800	0.0035
γ_{zy}	0.0019	0.0019	0.4707	0.3716	0.2807	0.0025
γ_{xz}	-0.0132	-0.0134	0.8245	0.6714	0.5160	-0.0142
γ_{zx}	-0.0207	-0.0207	0.3886	0.3113	0.2257	-0.0202
γ_{xy}	-0.0064	-0.0061	0.9470	0.7524	0.6016	-0.0064
γ_{yx}	0.0036	0.0034	0.8194	0.6491	0.5276	0.0028
s_x^g	1.0375	1.0375	0.4508	0.3596	0.2655	1.0379
s_y^g	0.9914	0.9914	0.4881	0.3942	0.2793	0.9911
s_z^g	1.1327	1.1328	0.4357	0.3281	0.2809	1.1321

Table 143: Absolute errors along the axis. Set:29.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0997	0.0817	0.0358
Calibrated	0.0055	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0844	0.0792	0.1434
Calibrated	0.0042	0.0040	0.0046

Table 144: Accelerometer divergence error. Set:29.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0697	0.2319	0.0723	0.2327
	(0.0132)	(0.0229)	(0.0132)	(0.0234)
Calibrated	0.0056	0.0301	0.0056	0.0313
	(0.0009)	(0.0035)	(0.0009)	(0.0036)

Table 145: Gyroscope divergence error. Set:29.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	4.0474	7.6566	1.5950	3.0013
	(0.4677)	(0.4677)	(0.1756)	(0.1756)
Calibrated	0.2104	0.4302	0.4212	0.8540
	(0.0246)	(0.0246)	(0.0482)	(0.0482)

Table 146: Accelerometers Parameters. Set:30.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0008	-0.0008	0.0438	0.0354	0.0251	-0.0008
α_{zy}	-0.0010	-0.0010	0.0425	0.0328	0.0263	-0.0009
α_{zx}	0.0049	0.0049	0.0489	0.0402	0.0280	0.0049
s_x^a	0.9906	0.9906	0.0320	0.0269	0.0169	0.9905
s_y^a	1.0036	1.0036	0.0358	0.0279	0.0232	1.0036
s_z^a	0.9995	0.9995	0.0199	0.0160	0.0117	0.9994
b_x^a	0.0597	0.0596	0.1919	0.1395	0.1320	0.0596
b_y^a	-0.0623	-0.0624	0.2688	0.1595	0.2158	-0.0621
b_z^a	-0.0111	-0.0111	0.1322	0.1028	0.0829	-0.0110

Table 147: Gyroscope Parameters. Set:30.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0039	-0.0039	1.1540	0.8536	0.7606	-0.0057
γ_{zy}	-0.0075	-0.0075	0.4684	0.3620	0.2903	-0.0076
γ_{xz}	-0.0069	-0.0068	0.9364	0.7983	0.4826	-0.0080
γ_{zx}	0.0014	0.0014	0.4461	0.3601	0.2646	0.0015
γ_{xy}	-0.0037	-0.0038	0.9976	0.8146	0.5595	-0.0019
γ_{yx}	-0.0112	-0.0112	1.0776	0.7772	0.7351	-0.0124
s_x^g	1.0043	1.0043	0.5953	0.4166	0.4231	1.0044
s_y^g	1.0900	1.0900	0.4095	0.3124	0.2592	1.0901
s_z^g	0.9489	0.9490	0.4805	0.3915	0.2917	0.9488

Table 148: Absolute errors along the axis. Set:30.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0616	0.0638	0.0118
Calibrated	0.0055	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0517	0.0477	0.0236
Calibrated	0.0041	0.0044	0.0038

Table 149: Accelerometer divergence error. Set:30.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0413	0.1809	0.0323	0.1587
	(0.0085)	(0.0189)	(0.0076)	(0.0194)
Calibrated	0.0056	0.0305	0.0056	0.0280
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 150: Gyroscope divergence error. Set:30.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.7685	5.6163	2.4984	5.6994
	(0.3194)	(0.3194)	(0.3014)	(0.3014)
Calibrated	0.1904	0.3834	0.5293	0.8903
	(0.0218)	(0.0218)	(0.0583)	(0.0583)

Table 151: Accelerometers Parameters. Set:31.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0030	-0.0030	0.0551	0.0433	0.0380	-0.0030
α_{zy}	0.0085	0.0085	0.0384	0.0376	0.0220	0.0086
α_{zx}	-0.0048	-0.0048	0.0341	0.0263	0.0212	-0.0048
s_x^a	0.9916	0.9916	0.0352	0.0292	0.0192	0.9915
s_y^a	0.9982	0.9982	0.0393	0.0309	0.0236	0.9982
s_z^a	0.9989	0.9989	0.0166	0.0137	0.0096	0.9989
b_x^a	-0.0495	-0.0495	0.1968	0.1528	0.1212	-0.0494
b_y^a	0.0411	0.0410	0.1613	0.1172	0.1133	0.0411
b_z^a	0.0250	0.0250	0.1354	0.1048	0.0852	0.0250

Table 152: Gyroscope Parameters. Set:31.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0153	0.0153	0.9742	0.7533	0.6019	0.0158
γ_{zy}	0.0009	0.0010	0.3635	0.3216	0.2101	0.0013
γ_{xz}	-0.0160	-0.0163	1.0226	0.7978	0.6774	-0.0151
γ_{zx}	0.0044	0.0043	0.4261	0.3235	0.2723	0.0047
γ_{xy}	0.0048	0.0047	0.9000	0.6972	0.5632	0.0036
γ_{yx}	-0.0118	-0.0120	1.0583	0.8005	0.6931	-0.0115
s_x^g	1.0025	1.0025	0.4098	0.3171	0.2675	1.0024
s_y^g	1.0729	1.0730	0.3991	0.3034	0.2555	1.0728
s_z^g	0.8980	0.8981	0.4208	0.3525	0.2512	0.8985

Table 153: Absolute errors along the axis. Set:31.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0731	0.0433	0.0249
Calibrated	0.0055	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1357	0.0262	0.0230
Calibrated	0.0041	0.0043	0.0036

Table 154: Accelerometer divergence error. Set:31.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0429	0.1870	0.0419	0.1884
	(0.0087)	(0.0173)	(0.0093)	(0.0166)
Calibrated	0.0056	0.0302	0.0056	0.0297
	(0.0009)	(0.0035)	(0.0009)	(0.0032)

Table 155: Gyroscope divergence error. Set:31.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	4.0279	7.7603	3.5654	6.4268
	(0.4706)	(0.4706)	(0.4139)	(0.4139)
Calibrated	0.2151	0.3986	0.5198	0.6998
	(0.0245)	(0.0245)	(0.0557)	(0.0557)

Table 156: Accelerometers Parameters. Set:32.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0078	-0.0078	0.0452	0.0362	0.0270	-0.0078
α_{zy}	-0.0026	-0.0026	0.0382	0.0295	0.0240	-0.0026
α_{zx}	0.0030	0.0030	0.0369	0.0290	0.0222	0.0030
s_x^a	1.0058	1.0058	0.0343	0.0279	0.0195	1.0058
s_y^a	1.0050	1.0050	0.0318	0.0254	0.0202	1.0050
s_z^a	1.0003	1.0002	0.0174	0.0152	0.0094	1.0002
b_x^a	0.0859	0.0859	0.2604	0.2175	0.1374	0.0858
b_y^a	-0.0307	-0.0307	0.1823	0.1431	0.1141	-0.0310
b_z^a	-0.0739	-0.0739	0.1205	0.0988	0.0680	-0.0741

Table 157: Gyroscope Parameters. Set:32.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0088	0.0087	0.8812	0.7267	0.4966	0.0079
γ_{zy}	0.0039	0.0039	0.4605	0.3774	0.2561	0.0029
γ_{xz}	0.0078	0.0076	1.0429	0.7607	0.7380	0.0078
γ_{zx}	-0.0206	-0.0208	0.5360	0.4264	0.3353	-0.0207
γ_{xy}	0.0033	0.0033	1.0328	0.7882	0.6532	0.0034
γ_{yx}	0.0064	0.0062	0.8490	0.6139	0.5917	0.0060
s_x^g	1.0408	1.0408	0.4856	0.3614	0.3205	1.0406
s_y^g	1.0586	1.0585	0.4867	0.3761	0.3160	1.0587
s_z^g	0.9759	0.9759	0.3629	0.2724	0.2349	0.9756

Table 158: Absolute errors along the axis. Set:32.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0857	0.0377	0.0738
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0321	0.0234	0.0638
Calibrated	0.0042	0.0043	0.0039

Table 159: Accelerometer divergence error. Set:32.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0677	0.1929	0.0690	0.2058
	(0.0103)	(0.0222)	(0.0099)	(0.0214)
Calibrated	0.0056	0.0305	0.0057	0.0317
	(0.0009)	(0.0035)	(0.0009)	(0.0033)

Table 160: Gyroscope divergence error. Set:32.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.3257	4.6280	3.2758	6.0329
	(0.2683)	(0.2683)	(0.3610)	(0.3610)
Calibrated	0.1980	0.4044	0.4274	0.7623
	(0.0231)	(0.0231)	(0.0514)	(0.0514)

Table 161: Accelerometers Parameters. Set:33.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0011	0.0011	0.0476	0.0396	0.0314	0.0011
α_{zy}	-0.0022	-0.0022	0.0420	0.0320	0.0283	-0.0021
α_{zx}	0.0045	0.0045	0.0372	0.0302	0.0219	0.0045
s_x^a	0.9961	0.9961	0.0328	0.0266	0.0199	0.9961
s_y^a	0.9907	0.9907	0.0299	0.0219	0.0201	0.9907
s_z^a	1.0075	1.0075	0.0149	0.0124	0.0084	1.0075
b_x^a	0.0973	0.0973	0.1726	0.1325	0.1078	0.0971
b_y^a	-0.0515	-0.0514	0.1772	0.1611	0.0941	-0.0516
b_z^a	-0.0657	-0.0658	0.1375	0.1130	0.0796	-0.0660

Table 162: Gyroscope Parameters. Set:33.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0284	-0.0284	0.9858	0.7796	0.5897	-0.0265
γ_{zy}	0.0172	0.0172	0.4425	0.3536	0.2578	0.0168
γ_{xz}	0.0026	0.0026	1.1296	0.8747	0.6966	0.0040
γ_{zx}	-0.0082	-0.0081	0.3941	0.3248	0.2425	-0.0078
γ_{xy}	-0.0092	-0.0089	1.1060	0.8485	0.7618	-0.0094
γ_{yx}	-0.0029	-0.0030	0.9282	0.7652	0.5156	-0.0026
s_x^g	0.9674	0.9674	0.3980	0.2996	0.2570	0.9674
s_y^g	1.0278	1.0278	0.4440	0.3192	0.3038	1.0278
s_z^g	1.0220	1.0219	0.3767	0.3058	0.2354	1.0220

Table 163: Absolute errors along the axis. Set:33.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0969	0.0616	0.0686
Calibrated	0.0056	0.0055	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0236	0.1358	0.0414
Calibrated	0.0039	0.0041	0.0041

Table 164: Accelerometer divergence error. Set:33.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0735	0.1992	0.0698	0.1894
	(0.0120)	(0.0238)	(0.0127)	(0.0262)
Calibrated	0.0056	0.0306	0.0056	0.0293
	(0.0009)	(0.0035)	(0.0009)	(0.0037)

Table 165: Gyroscope divergence error. Set:33.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	1.3861	2.6209	1.1732	2.2190
	(0.1565)	(0.1565)	(0.1307)	(0.1307)
Calibrated	0.1735	0.3489	0.3232	0.5290
	(0.0201)	(0.0201)	(0.0364)	(0.0364)

Table 166: Accelerometers Parameters. Set:34.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0011	-0.0011	0.0531	0.0361	0.0390	-0.0011
α_{zy}	-0.0037	-0.0037	0.0333	0.0252	0.0216	-0.0037
α_{zx}	0.0018	0.0018	0.0384	0.0287	0.0259	0.0018
s_x^a	1.0054	1.0054	0.0274	0.0204	0.0184	1.0054
s_y^a	1.0090	1.0090	0.0314	0.0240	0.0207	1.0090
s_z^a	0.9995	0.9995	0.0158	0.0116	0.0104	0.9995
b_x^a	0.0117	0.0118	0.1682	0.1366	0.1114	0.0116
b_y^a	0.0828	0.0827	0.1917	0.1579	0.1072	0.0824
b_z^a	0.0898	0.0898	0.1084	0.0852	0.0657	0.0898

Table 167: Gyroscope Parameters. Set:34.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0046	-0.0047	0.9721	0.7647	0.5844	-0.0040
γ_{zy}	0.0215	0.0214	0.3351	0.2926	0.1861	0.0209
γ_{xz}	0.0090	0.0089	1.0139	0.7761	0.6390	0.0087
γ_{zx}	0.0231	0.0232	0.3919	0.3210	0.2383	0.0234
γ_{xy}	0.0075	0.0075	0.9926	0.8063	0.5599	0.0086
γ_{yx}	-0.0017	-0.0016	0.8715	0.6830	0.5359	-0.0009
s_x^g	1.0385	1.0384	0.4522	0.3679	0.2590	1.0385
s_y^g	1.0165	1.0166	0.4761	0.3816	0.2796	1.0169
s_z^g	0.9000	0.8999	0.4127	0.3582	0.2073	0.8997

Table 168: Absolute errors along the axis. Set:34.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0342	0.0830	0.0898
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0091	0.0404	0.1536
Calibrated	0.0042	0.0041	0.0037

Table 169: Accelerometer divergence error. Set:34.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0775	0.1992	0.0797	0.2004
	(0.0099)	(0.0234)	(0.0102)	(0.0231)
Calibrated	0.0056	0.0302	0.0056	0.0290
	(0.0009)	(0.0036)	(0.0009)	(0.0034)

Table 170: Gyroscope divergence error. Set:34.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	3.6097	7.1905	1.4108	3.0595
	(0.4215)	(0.4215)	(0.1617)	(0.1617)
Calibrated	0.2221	0.4257	0.5596	1.0181
	(0.0254)	(0.0254)	(0.0657)	(0.0657)

Table 171: Accelerometers Parameters. Set:35.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0019	0.0019	0.0410	0.0312	0.0263	0.0018
α_{zy}	-0.0034	-0.0034	0.0337	0.0295	0.0173	-0.0033
α_{zx}	0.0057	0.0057	0.0368	0.0314	0.0192	0.0057
s_x^a	1.0068	1.0068	0.0315	0.0251	0.0229	1.0068
s_y^a	1.0021	1.0021	0.0313	0.0253	0.0179	1.0021
s_z^a	0.9984	0.9984	0.0123	0.0114	0.0077	0.9984
b_x^a	0.0078	0.0077	0.2297	0.1853	0.1453	0.0079
b_y^a	0.0577	0.0577	0.1874	0.1561	0.1026	0.0578
b_z^a	-0.0743	-0.0743	0.1688	0.1297	0.1057	-0.0742

Table 172: Gyroscope Parameters. Set:35.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0089	-0.0089	0.9037	0.7031	0.5543	-0.0078
γ_{zy}	-0.0066	-0.0066	0.4632	0.3903	0.2457	-0.0060
γ_{xz}	-0.0048	-0.0047	1.1766	0.8744	0.7791	-0.0011
γ_{zx}	0.0008	0.0009	0.5385	0.4031	0.3525	0.0024
γ_{xy}	-0.0027	-0.0028	0.8090	0.5779	0.5721	-0.0043
γ_{yx}	-0.0249	-0.0246	0.7870	0.5875	0.5649	-0.0249
s_x^g	1.0593	1.0592	0.5096	0.4134	0.2993	1.0587
s_y^g	0.8935	0.8936	0.4518	0.3759	0.2731	0.8941
s_z^g	1.1181	1.1179	0.5057	0.4281	0.3042	1.1178

Table 173: Absolute errors along the axis. Set:35.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0362	0.0572	0.0745
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1496	0.1138	0.0369
Calibrated	0.0043	0.0036	0.0045

Table 174: Accelerometer divergence error. Set:35.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0578	0.1479	0.0641	0.1479
	(0.0086)	(0.0167)	(0.0085)	(0.0173)
Calibrated	0.0056	0.0302	0.0056	0.0304
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 175: Gyroscope divergence error. Set:35.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	3.9533	7.8574	2.9644	5.8992
	(0.4559)	(0.4559)	(0.3358)	(0.3358)
Calibrated	0.2245	0.4169	0.6265	1.1813
	(0.0255)	(0.0255)	(0.0728)	(0.0728)

Table 176: Accelerometers Parameters. Set:36.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0086	0.0086	0.0503	0.0384	0.0339	0.0086
α_{zy}	-0.0051	-0.0051	0.0383	0.0307	0.0224	-0.0051
α_{zx}	0.0012	0.0012	0.0370	0.0305	0.0216	0.0012
s_x^a	0.9984	0.9984	0.0354	0.0265	0.0231	0.9984
s_y^a	1.0017	1.0017	0.0221	0.0202	0.0145	1.0017
s_z^a	0.9902	0.9902	0.0147	0.0113	0.0092	0.9902
b_x^a	-0.0279	-0.0278	0.2138	0.1749	0.1310	-0.0276
b_y^a	-0.0976	-0.0976	0.1824	0.1530	0.1021	-0.0975
b_z^a	-0.0897	-0.0897	0.1546	0.1241	0.0895	-0.0895

Table 177: Gyroscope Parameters. Set:36.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0095	0.0096	1.1805	0.9281	0.7110	0.0096
γ_{zy}	-0.0070	-0.0071	0.4698	0.3877	0.2692	-0.0068
γ_{xz}	-0.0093	-0.0093	1.0278	0.8045	0.6219	-0.0095
γ_{zx}	-0.0089	-0.0088	0.5684	0.4582	0.3378	-0.0086
γ_{xy}	-0.0128	-0.0128	0.8377	0.6454	0.5206	-0.0124
γ_{yx}	-0.0048	-0.0052	0.9615	0.7427	0.7169	-0.0063
s_x^g	0.9460	0.9460	0.3917	0.3071	0.2388	0.9460
s_y^g	0.9197	0.9197	0.3470	0.2546	0.2312	0.9199
s_z^g	0.8902	0.8901	0.3534	0.2561	0.2439	0.8902

Table 178: Absolute errors along the axis. Set:36.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0540	0.0975	0.0922
Calibrated	0.0056	0.0056	0.0055

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0459	0.1294	0.1595
Calibrated	0.0038	0.0037	0.0036

Table 179: Accelerometer divergence error. Set:36.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0821	0.2567	0.0832	0.2589
	(0.0119)	(0.0251)	(0.0106)	(0.0229)
Calibrated	0.0056	0.0301	0.0056	0.0295
	(0.0009)	(0.0035)	(0.0009)	(0.0033)

Table 180: Gyroscope divergence error. Set:36.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	4.6618	8.9101	4.2431	8.9847
	(0.5363)	(0.5363)	(0.4810)	(0.4810)
Calibrated	0.2172	0.4385	0.4080	0.7939
	(0.0252)	(0.0252)	(0.0455)	(0.0455)

Table 181: Accelerometers Parameters. Set:37.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0083	-0.0083	0.0422	0.0361	0.0256	-0.0083
α_{zy}	0.0036	0.0036	0.0350	0.0286	0.0209	0.0036
α_{zx}	-0.0046	-0.0045	0.0358	0.0352	0.0204	-0.0045
s_x^a	1.0028	1.0027	0.0216	0.0200	0.0157	1.0027
s_y^a	1.0028	1.0028	0.0331	0.0259	0.0200	1.0028
s_z^a	1.0013	1.0012	0.0176	0.0145	0.0099	1.0013
b_x^a	-0.0362	-0.0362	0.1739	0.1444	0.0945	-0.0361
b_y^a	0.0138	0.0138	0.2293	0.1820	0.1476	0.0137
b_z^a	0.0636	0.0636	0.1148	0.0902	0.0695	0.0636

Table 182: Gyroscope Parameters. Set:37.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0007	0.0006	0.9574	0.8124	0.5005	0.0007
γ_{zy}	-0.0045	-0.0046	0.4141	0.3191	0.2838	-0.0043
γ_{xz}	-0.0004	-0.0006	0.8319	0.6931	0.5030	0.0006
γ_{zx}	0.0250	0.0250	0.4917	0.3903	0.2902	0.0250
γ_{xy}	0.0235	0.0234	0.9932	0.7306	0.6678	0.0234
γ_{yx}	0.0053	0.0054	0.9943	0.8491	0.5024	0.0041
s_x^g	0.9370	0.9370	0.4797	0.4021	0.2507	0.9363
s_y^g	0.9861	0.9861	0.5303	0.4205	0.3135	0.9867
s_z^g	1.0252	1.0252	0.4456	0.3642	0.2481	1.0246

Table 183: Absolute errors along the axis. Set:37.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0512	0.0323	0.0629
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.2280	0.0352	0.0684
Calibrated	0.0038	0.0040	0.0041

Table 184: Accelerometer divergence error. Set:37.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0521	0.1282	0.0587	0.1313
	(0.0073)	(0.0171)	(0.0070)	(0.0177)
Calibrated	0.0056	0.0299	0.0056	0.0313
	(0.0009)	(0.0035)	(0.0009)	(0.0035)

Table 185: Gyroscope divergence error. Set:37.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.3483	4.5988	1.3721	2.7931
	(0.2678)	(0.2678)	(0.1541)	(0.1541)
Calibrated	0.1925	0.3779	0.4468	0.6280
	(0.0219)	(0.0219)	(0.0486)	(0.0486)

Table 186: Accelerometers Parameters. Set:38.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0028	0.0028	0.0491	0.0371	0.0319	0.0027
α_{zy}	-0.0062	-0.0062	0.0509	0.0405	0.0299	-0.0061
α_{zx}	-0.0085	-0.0085	0.0404	0.0326	0.0235	-0.0085
s_x^a	1.0067	1.0067	0.0359	0.0275	0.0232	1.0067
s_y^a	1.0026	1.0026	0.0233	0.0201	0.0115	1.0026
s_z^a	1.0033	1.0033	0.0177	0.0141	0.0106	1.0032
b_x^a	0.0565	0.0564	0.2053	0.1777	0.1047	0.0564
b_y^a	-0.0023	-0.0023	0.2281	0.1881	0.1252	-0.0024
b_z^a	-0.0857	-0.0857	0.1390	0.1090	0.0839	-0.0858

Table 187: Gyroscope Parameters. Set:38.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0139	0.0137	1.0875	0.9051	0.6158	0.0157
γ_{zy}	0.0036	0.0037	0.3838	0.3240	0.2235	0.0043
γ_{xz}	0.0045	0.0044	1.1328	0.9443	0.6134	0.0064
γ_{zx}	0.0041	0.0043	0.5293	0.4210	0.3562	0.0043
γ_{xy}	-0.0100	-0.0099	0.7898	0.6937	0.3708	-0.0092
γ_{yx}	0.0022	0.0018	0.8744	0.7801	0.5504	0.0006
s_x^g	1.0157	1.0155	0.5422	0.4453	0.3381	1.0162
s_y^g	1.1078	1.1080	0.5593	0.4221	0.3867	1.1071
s_z^g	1.0188	1.0189	0.3839	0.3105	0.2239	1.0186

Table 188: Absolute errors along the axis. Set:38.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0659	0.0546	0.0867
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1081	0.0575	0.0447
Calibrated	0.0041	0.0045	0.0041

Table 189: Accelerometer divergence error. Set:38.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0671	0.2149	0.0642	0.2187
	(0.0104)	(0.0191)	(0.0103)	(0.0180)
Calibrated	0.0056	0.0310	0.0056	0.0309
	(0.0009)	(0.0035)	(0.0009)	(0.0034)

Table 190: Gyroscope divergence error. Set:38.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	2.5998	5.2951	2.5762	4.5290
	(0.3004)	(0.3004)	(0.2881)	(0.2881)
Calibrated	0.1992	0.3863	0.4807	0.8591
	(0.0229)	(0.0229)	(0.0536)	(0.0536)

Table 191: Accelerometers Parameters. Set:39.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	-0.0047	-0.0047	0.0508	0.0365	0.0347	-0.0049
α_{zy}	-0.0004	-0.0004	0.0519	0.0395	0.0337	-0.0005
α_{zx}	0.0079	0.0079	0.0400	0.0365	0.0230	0.0078
s_x^a	1.0007	1.0007	0.0262	0.0195	0.0175	1.0007
s_y^a	1.0100	1.0099	0.0314	0.0262	0.0195	1.0099
s_z^a	1.0061	1.0061	0.0166	0.0130	0.0105	1.0061
b_x^a	0.0634	0.0634	0.2309	0.1748	0.1480	0.0642
b_y^a	0.0418	0.0419	0.1784	0.1511	0.1102	0.0418
b_z^a	-0.0547	-0.0547	0.1252	0.0962	0.0845	-0.0547

Table 192: Gyroscope Parameters. Set:39.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	-0.0029	-0.0029	0.9066	0.7655	0.4694	-0.0022
γ_{zy}	-0.0011	-0.0010	0.3936	0.3562	0.1995	-0.0018
γ_{xz}	0.0135	0.0133	1.2258	0.9633	0.7662	0.0137
γ_{zx}	-0.0112	-0.0113	0.5068	0.4224	0.2909	-0.0115
γ_{xy}	-0.0105	-0.0103	0.9690	0.7605	0.6182	-0.0108
γ_{yx}	-0.0043	-0.0043	0.9845	0.8052	0.5477	-0.0034
s_x^g	0.9519	0.9518	0.3670	0.3344	0.1817	0.9517
s_y^g	1.0203	1.0204	0.4846	0.3949	0.2842	1.0214
s_z^g	0.9813	0.9811	0.3392	0.3195	0.2432	0.9812

Table 193: Absolute errors along the axis. Set:39.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0620	0.0709	0.0572
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.1061	0.1363	0.0539
Calibrated	0.0038	0.0042	0.0040

Table 194: Accelerometer divergence error. Set:39.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0653	0.2296	0.0425	0.1984
	(0.0093)	(0.0206)	(0.0083)	(0.0200)
Calibrated	0.0056	0.0306	0.0057	0.0335
	(0.0009)	(0.0035)	(0.0009)	(0.0036)

Table 195: Gyroscope divergence error. Set:39.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	1.6254	3.1699	1.7049	4.0045
	(0.1868)	(0.1868)	(0.2069)	(0.2069)
Calibrated	0.2078	0.4031	0.3894	0.7845
	(0.0240)	(0.0240)	(0.0473)	(0.0473)

Table 196: Accelerometers Parameters. Set:40.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
α_{yz}	0.0076	0.0076	0.0524	0.0421	0.0319	0.0076
α_{zy}	-0.0006	-0.0006	0.0298	0.0225	0.0202	-0.0007
α_{zx}	-0.0087	-0.0087	0.0395	0.0311	0.0257	-0.0087
s_x^a	0.9953	0.9953	0.0279	0.0234	0.0149	0.9953
s_y^a	0.9998	0.9998	0.0288	0.0229	0.0176	0.9998
s_z^a	1.0064	1.0064	0.0168	0.0146	0.0087	1.0064
b_x^a	-0.0916	-0.0915	0.2031	0.1595	0.1246	-0.0917
b_y^a	-0.0035	-0.0034	0.2151	0.1752	0.1217	-0.0038
b_z^a	0.0911	0.0911	0.1213	0.1024	0.0625	0.0910

Table 197: Gyroscope Parameters. Set:40.

	Real	Mean Value	RSM x10^{-3}	Mean Erorr x10^{-3}	RSM x10^{-3}	Worst case
γ_{yz}	0.0057	0.0060	1.0793	0.9111	0.6358	0.0070
γ_{zy}	-0.0052	-0.0053	0.3601	0.2897	0.2224	-0.0056
γ_{xz}	0.0023	0.0025	1.0071	0.8327	0.5732	0.0034
γ_{zx}	0.0021	0.0021	0.4203	0.3235	0.2657	0.0015
γ_{xy}	-0.0049	-0.0049	0.8937	0.6516	0.5998	-0.0043
γ_{yx}	-0.0113	-0.0113	0.9404	0.6581	0.6623	-0.0118
s_x^g	1.0447	1.0446	0.5963	0.4694	0.3793	1.0448
s_y^g	1.0073	1.0073	0.4437	0.3436	0.2739	1.0069
s_z^g	0.9688	0.9688	0.3895	0.2928	0.2511	0.9681

Table 198: Absolute errors along the axis. Set:40.

(a) Accelerometer

	x-axis m/s^2	y-axis m/s^2	z-axis m/s^2
Uncalibrated	0.0896	0.0548	0.0916
Calibrated	0.0056	0.0056	0.0056

(b) Gyroscope

	x-axis (rad/s)	y-axis (rad/s)	z-axis (rad/s)
Uncalibrated	0.0705	0.0740	0.0166
Calibrated	0.0042	0.0041	0.0039

Table 199: Accelerometer divergence error. Set:40.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	0.0714	0.2112	0.0752	0.2082
	(0.0123)	(0.0259)	(0.0113)	(0.0224)
Calibrated	0.0056	0.0302	0.0057	0.0276
	(0.0009)	(0.0035)	(0.0009)	(0.0032)

Table 200: Gyroscope divergence error. Set:40.

	Average error m/s^2(rad)	Max observed error $m/s^2(rad)$	Worst case average error $m/s^2(rad)$	Worst case max error $m/s^2(rad)$
Uncalibrated	1.3953	2.7501	1.5055	3.2460
	(0.1601)	(0.1601)	(0.1767)	(0.1767)
Calibrated	0.2336	0.4322	0.7081	1.2468
	(0.0264)	(0.0264)	(0.0820)	(0.0820)