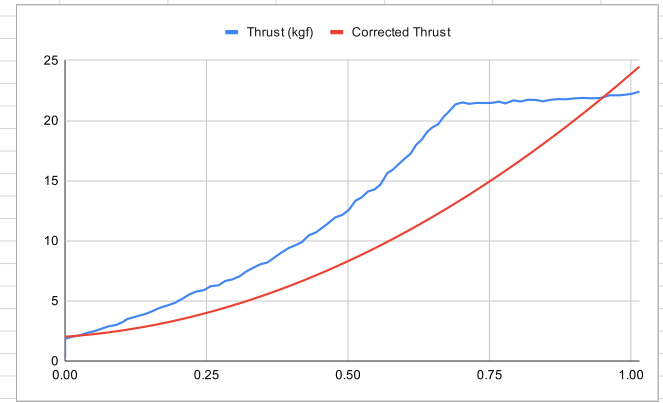


Instructions: Load data into first 4 columns in a copy of this sheet then adjust parameters to match your settings. Adjust MOT_THST_EXPO until you minimise the difference between normalised thrust and corrected thrust

Parameters	Value	Derived Values
MOT_PWM_MIN	1140	Data Rows
MOT_PWM_MAX	1940	PWM at MOT_SPIN_MIN
MOT_THST_EXPO	0.85	PWM at MOT_SPIN_MAX
MOT_SPIN_ARM	0.1	Thrust at MOT_SPIN_MIN
MOT_SPIN_MIN	0.15	Thrust at MOT_SPIN_MAX
MOT_SPIN_MAX	0.95	

ESC signal (µs)	Thrust (kgf)	Voltage (V)	Current (A)	Normalized Throttle	Normalized Thrust	Corrected Thrust	Rescaled Thrust
1142	0.274	48.7	0.18	0	0	2.018	0
1150	0.348	48.7	0.22	0	0	2.018	0
1158	0.408	48.7	0.27	0	0	2.018	0
1167	0.506	48.7	0.33	0	0	2.018	0
1175	0.596	48.7	0.4	0	0	2.018	0
1184	0.676	48.7	0.47	0	0	2.018	0
1192	0.798	48.7	0.57	0	0	2.018	0
1200	0.904	48.7	0.67	0	0	2.018	0
1209	1.038	48.7	0.76	0	0	2.018	0
1217	1.144	48.66	0.88	0	0	2.018	0
1226	1.284	48.64	1	0	0	2.018	0
1234	1.406	48.6	1.1	0	0	2.018	0
1242	1.55	48.6	1.31	0	0	2.018	0
1251	1.71	48.6	1.5	0	0	2.018	0
1259	1.844	48.6	1.64	0	0	2.018	0
1268	2.018	48.58	1.55	0.01246919918	0.002002538666	2.061799526	0
1276	2.116	48.54	2.03	0.02491786448	0.004265444646	2.111293805	22.97533039
1284	2.312	48.5	2.22	0.03734599589	0.006787414282	2.166454325	43.31546415
1293	2.474	48.5	2.58	0.05135074435	0.009943975757	2.235494638	45.85690987
1301	2.676	48.5	2.81	0.06379940965	0.01302972142	2.302986067	50.4999285
1310	2.896	48.48	3.1	0.07777207392	0.01680703225	2.385603409	52.2400378
1318	2.992	48.4	3.32	0.09006673511	0.02040522452	2.464303071	47.73287345
1326	3.26	48.4	3.69	0.1024897331	0.02430198353	2.549532984	51.10693941
1335	3.482	45.54	4.34	0.1095835472	0.02664480283	2.600775128	54.9450491
1343	3.742	48.34	4.51	0.1287288244	0.03339476737	2.748410352	51.6248543
1352	3.92	48.3	4.95	0.1425693018	0.03866250023	2.863626205	49.19495606
1360	4.16	48.3	5.29	0.1549666324	0.04365745346	2.972875822	49.06378705
1368	4.422	48.28	5.83	0.1672946612	0.04888357729	3.087181603	49.17807029
1377	4.62	48.2	6.22	0.1809355749	0.05496736618	3.220246233	47.33717805
1385	4.824	48.2	6.83	0.1933072382	0.06075862082	3.346912554	46.18274678
1394	5.174	48.16	7.51	0.2070533881	0.06749844791	3.494326053	46.75663068
1402	5.528	48.1	7.25	0.2191414271	0.07369073438	3.629763742	47.63149709
1410	5.772	48.1	8.5	0.231487423	0.0802715764	3.773699919	46.7662424
1419	5.892	48.06	9.2	0.2451726129	0.08786906055	3.939872092	44.08832842
1427	6.22	48	10.1	0.2571868583	0.09480134682	4.091495058	44.3242648
1436	6.294	47.98	10.65	0.2709342916	0.1030347255	4.271575517	41.50057156
1444	6.65	47.9	11.56	0.2827772074	0.1103850878	4.43234264	41.96218976
1452	6.782	47.88	12.02	0.2949486653	0.1181878077	4.60300373	40.30872637
1461	7.042	47.8	12.8	0.3082584702	0.1270085623	4.795931275	39.55638823
1469	7.444	47.74	14.28	0.3201251283	0.1351268524	4.973494515	40.15486119
1478	7.774	47.66	15.22	0.3333508727	0.1444570146	5.177563823	39.84576323
1486	8.05	47.64	15.91	0.3454389117	0.1532446722	5.369767471	39.36189045
1494	8.192	47.6	16.54	0.3573665298	0.1621591906	5.564745816	38.07369769
1503	8.622	47.5	18.29	0.3703317505	0.1721235272	5.782685787	38.3677938
1511	9.026	47.48	19.17	0.3823626797	0.1816254379	5.990511579	38.58490352
1520	9.398	47.36	21.22	0.3950718686	0.1919302944	6.2158994	38.4514598



1528	9.62	47.28	21.81	0.4065400411	0.2014645904	6.424433521	37.73367809
1536	9.89	47.24	23.07	0.4183213552	0.2114920461	6.643754032	37.22125794
1545	10.468	47.14	25.09	0.4310478696	0.2225891065	6.886468936	37.962325
1553	10.676	47.08	26.4	0.4425834189	0.2328855831	7.111673474	37.17705443
1562	11.114	46.98	27.95	0.4552091889	0.2444144732	7.363833357	37.21547207
1570	11.51	46.86	30.36	0.4660741786	0.2545524958	7.585572188	37.28896851
1578	11.942	46.78	31.53	0.4772856776	0.265224227	7.818984293	37.41739626
1587	12.158	46.72	33.53	0.490164271	0.2777465014	8.092871478	36.50811063
1595	12.554	46.62	35.39	0.5010812372	0.2885822309	8.329870554	36.5095244
1604	13.34	46.5	38.25	0.5132186858	0.3008672094	8.598567605	37.6312195
1612	13.6	46.38	39.76	0.523798768	0.3117801921	8.837256362	37.14796608
1620	14.092	46.3	42.11	0.5347792608	0.3233074182	9.089379851	37.34526126
1629	14.272	46.18	44.37	0.5467280544	0.3368040388	9.368830097	36.4611186
1637	14.674	46.06	47.11	0.5571297485	0.3474039854	9.616419969	36.43020959
1646	15.626	45.96	50.48	0.5691914784	0.36076082	9.908560656	37.72028237
1654	15.9	45.78	53.58	0.5787127823	0.3714791291	10.14299151	37.36952876
1662	16.368	45.68	56.65	0.5891735113	0.3834326391	10.40443868	37.42508732
1671	16.852	45.54	59.14	0.6005178388	0.3966060993	10.6925686	37.40234965
1679	17.206	45.36	63.28	0.609786961	0.4075321613	10.93154343	37.26822431
1688	17.992	45.18	67.79	0.6204132444	0.4202376914	11.20943879	38.01182123
1696	18.392	45.02	71.91	0.6297715606	0.4315861198	11.45765161	37.93912558
1704	19.044	44.88	76.63	0.6393326489	0.4433341979	11.71460558	38.40443639
1713	19.422	44.62	83.2	0.6485132187	0.4547609684	11.9645319	38.27065472
1721	19.676	44.54	86.33	0.6587827259	0.4677128868	12.24781626	37.75393088
1730	20.34	44.38	91.33	0.6692312628	0.4810746001	12.54006365	38.08556926
1738	20.748	44.22	97.35	0.6781686345	0.4926510875	12.79326459	38.01879358
1746	21.34	44.22	99.78	0.6895187372	0.5075484861	13.11910049	38.0692693
1755	21.504	44.2	100.6	0.7019699692	0.5241430574	13.48205695	37.17687323
1763	21.384	44.24	101.37	0.7139604723	0.5403726934	13.83703155	35.83822839
1772	21.468	44.28	102.4	0.7273921971	0.5588433267	14.24102124	34.80403016
1780	21.45	44.36	100.87	0.7400924025	0.5765901099	14.62917888	33.70158396
1788	21.46	44.4	100.66	0.7521560575	0.5937013332	15.00343556	32.74710517
1797	21.564	44.5	100.76	0.7666998203	0.6146592954	15.46182811	31.79973059
1805	21.42	44.48	101.15	0.7777720739	0.6308558002	15.81607806	30.75504734
1814	21.678	44.56	100.81	0.7920379877	0.652031246	16.27922741	30.15192925
1822	21.576	44.62	100.46	0.8045572382	0.6708990828	16.69190474	29.15192538
1830	21.722	44.68	101.27	0.8171072895	0.6900807676	17.1144655	28.55317946
1839	21.712	44.72	99.94	0.8307520534	0.7112394361	17.57422895	27.6896907
1847	21.594	44.82	99.9	0.8441138347	0.7322660163	18.03412231	26.73345419
1856	21.726	44.88	99.01	0.8582032854	0.7547664401	18.52625158	26.11138884
1864	21.778	44.96	98.22	0.8712731006	0.7759402586	18.98936534	25.46587805
1872	21.764	45.04	99.36	0.8843839836	0.7974723734	19.46031575	24.76073236
1881	21.842	45.18	98.19	0.9001790298	0.8238007973	20.03617104	24.06406994
1889	21.878	45.32	98.09	0.9146008727	0.8482106738	20.57006386	23.41399444
1898	21.848	45.44	97.53	0.9301437372	0.8749138266	21.15411522	22.66508929
1906	21.872	45.64	95.03	0.9459522587	0.9024946632	21.75736327	21.99902205
1914	22.1	45.86	95.82	0.9622831109	0.9314329343	22.39030114	21.56032846
1923	22.094	46.06	93.82	0.9797799025	0.9629403441	23.07943121	20.84864356
1931	22.204	46.44	93.62	0.9997831109	0.9995987951	23.88122485	20.19410197
1940	22.4	46.5	93.1	1.014502053	1.027007562	24.48070939	19.84600772