

Flight Results for Rocket Rally 2013

	Flight #1	Flight #2	Flight #3	Flight #4	Flight #5
Owners	Nicole B & Ann S	Amber & Nicole M	Maggie & Haley	Kelsey, Brittany & Elyse	Jonathan
Rocket Name	Miss Gnomer	Hello Kitty	Snapchat	One Direction	Newgrounds
Rocket Type	Sumo	Arcas	Arcas	G-Force	G-Force
Rocket Mass	1034g	604g	628g	1030g	1026g
Motor Used	G76-4G	G77-7R	G64-7W	G64-4W	G76-4G
Estimated Cd	0.26	0.6	0.67	0.5	0.4747
Estimated Altitude	895 ft	1396 ft	1481 ft	800 ft	851 ft
Apogee Altitude	808 ft	1535 ft	1334 ft	790 ft	884 ft
Top Speed	138mph	255 mph	198 mph	124 mph	154 mph
Burn Time burn	1.4 s	3.0 s	1.9 s	1.9 s	1.2 s
Peak Acceleration PAcc	13.7	10.5	11	7.7	11.8
Avg Accerleration AAcc	4.6	-3.5	4.8	3	5.6
Coast to Apogee C2AP	4.6 s	8.7 s	6.8 s	6.7 s	5.3 s
Apogee to Eject AP2E	0.4 s	-1.1 s	-0.9 s	-1.3 s	-0.9 s
Ejection Altitude EAlt	759 ft	1486 ft	1285 ft	786 ft	819 ft
Descent Speed dESc	11 mph	13 mph	12 mph	12 mph	10 mph
Flight Duration durA	51.9 s	81.7 s	77.1 s	49.2 s	60.5 s
Notes			Used Rocketcam		

	Flight #6	Flight #7	Flight #8	Flight #9	Flight #10
Owners	Madi & Nick	Lisa & Cassie	Indy, Ross & Payton	Chris & Jordan	Matt & Casey
Rocket Name	Golden Rocket	Aca-Arcas!	The Chive	Energizer	Sonic-Hedgehog
Rocket Type	G-Force	Arcas	Sumo	Astrobee	Arcas
Rocket Mass	1021g	609g	990g	832g	616g
Motor Used	G64-4W	G53-5FJ	G76-4G	G75-7M	G80-10T
Estimate Cd	0.65	0.55	0.32	0.684	0.48
Estimated Altitude	780 ft	1295 ft	896 ft	1280 ft	2040 ft
Apogee Altitude	826 ft	1098 ft	907 ft	1312 ft	-
Top Speed	133 mph	199 mph	145 mph	202 mph	-
Burn Time burn	1.8 s	1.4 s	1.3 s	1.4 s	-
Peak Acceleration PAcc	7.8	11.2	12.5	9.5	-
Avg Accerleration AAcc	3.4	6.3	5.3	6.4	-
Coast to Apogee C2AP	6.3 s	6.5 s	2.9 s	7.7 s	-
Apogee to Eject AP2E	-0.1 s	-1.2 s	-0.3 s	0.5 s	-
Ejection Altitude EAlt	804 ft	1061 ft	668 ft	1309 ft	-
Descent Speed dESc	10 mph	12 mph	11 mph	10 mph	-
Flight Duration durA	59.7 s	65.3 s	44.4 s	92.6 s	-
Notes			Sumo winner, but not sure of accuracy	Astrobee altitude winner	Did not turn on the altimeter

	Flight #11	Flight #12	Flight #13	Flight #14	Flight #15
Owners	Seth & Harry	Alexx & Kristen	Brendon & Jon	Brandon & Chris	Bailey & Alex
Rocket Name	Star Wars	I <3 Boobies	Bomp Pop	Asteroids	Arizona Iced Tea
Rocket Type	G-Force	Arcas	Arcas	Astrobee	Astrobee
Rocket Mass	1029g	595g	607g	821g	820g
Motor Used	G64-4W	G53-7FJ	G64-7W	G80-7T/G76-4G	G75-7M
Estimated Cd	0.58	0.61	0.58	0.67	0.66
Estimated Altitude	893 ft	1107 ft	1560 ft	1500 ft	1034 ft
Apogee Altitude	885 ft	1317 ft	1598 ft	1251 ft	1202 ft
Top Speed	135 mph	203 mph	235 mph	194 mph	204 mph
Burn Time burn	1.7 s	1.5 s	1.8 s	1.4 s	1.4 s
Peak Acceleration PAcc	7.4	11.8	19.1	17.2	14.4
Avg Accerleration AAcc	3.5	6.4	5.9	6.5	6.7
Coast to Apogee C2AP	5.8 s	7.7 s	8.5 s	6.5 s	7.2 s
Apogee to Eject AP2E	-0.3 s	-0.9 s	-1.0 s	-2.3 s	1.2 s
Ejection Altitude EALt	790 ft	1292 ft	1578 ft	1160 ft	1184 ft
Descent Speed dESc	11 mph	11 mph	12 mph	10 mph	11 mph
Flight Duration durA	54.6 s	83.3 s	92.3 s	83.9 s	81.8 s
Notes	G-Force altitude and prediction winner		Arcas altitude winner	G80 would not ignite, switched to G76	

	Flight #16	Flight #17	Flight #18	Flight #19	Flight #20
Owners					
Rocket Name					
Rocket Type					
Rocket Mass					
Motor Used					
Estimate Cd					
Estimated Altitude					
Apogee Altitude					
Top Speed					
Burn Time burn					
Peak Acceleration PAcc					
Avg Accerleration AAcc					
Coast to Apogee C2AP					
Apogee to Eject AP2E					
Ejection Altitude EALt					
Descent Speed dESc					
Flight Duration durA					
Notes					