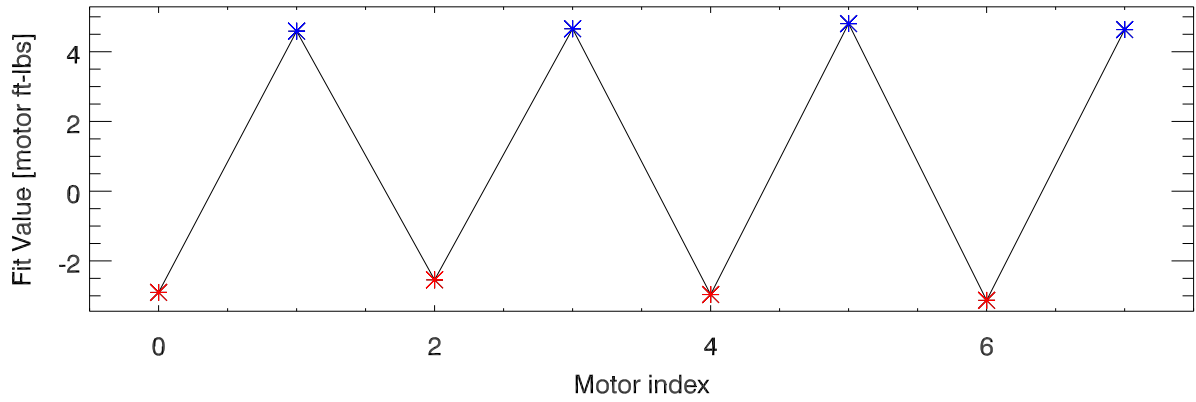
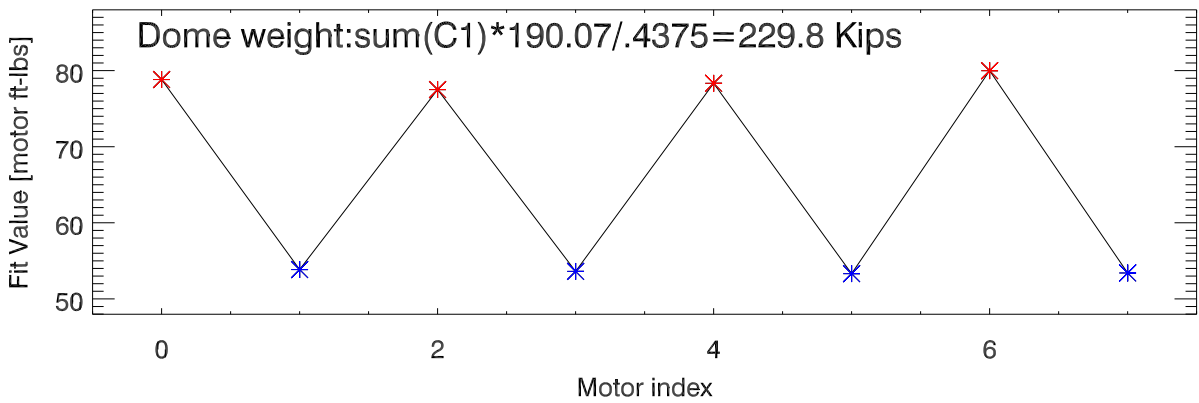


x0:m11  
 x1:m12  
 x2:m21  
 x3:m22  
 x4:m31  
 x5:m32  
 x6:m41  
 x7:m42

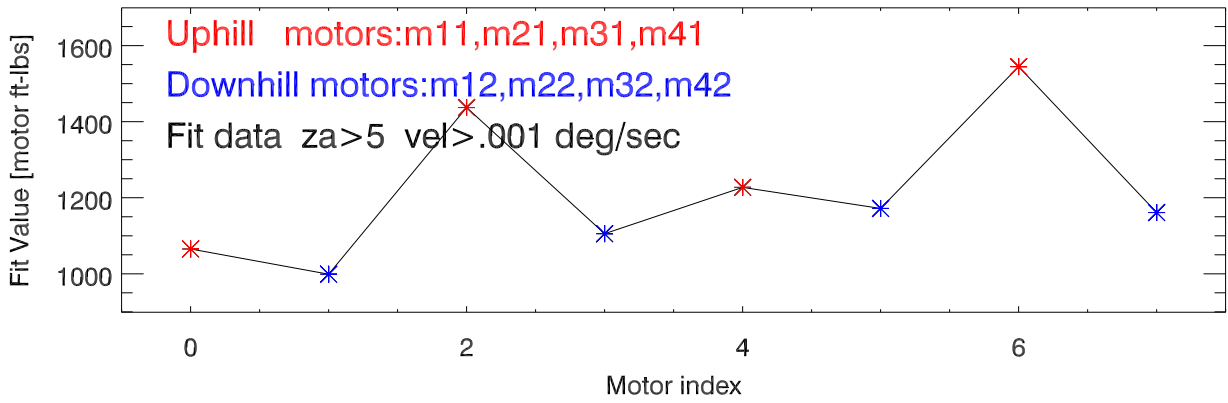
jul12:GrTorques. Fit:C0 + C1\*sinza + C2\*vel \* C3\*accel. (c0:Constant)



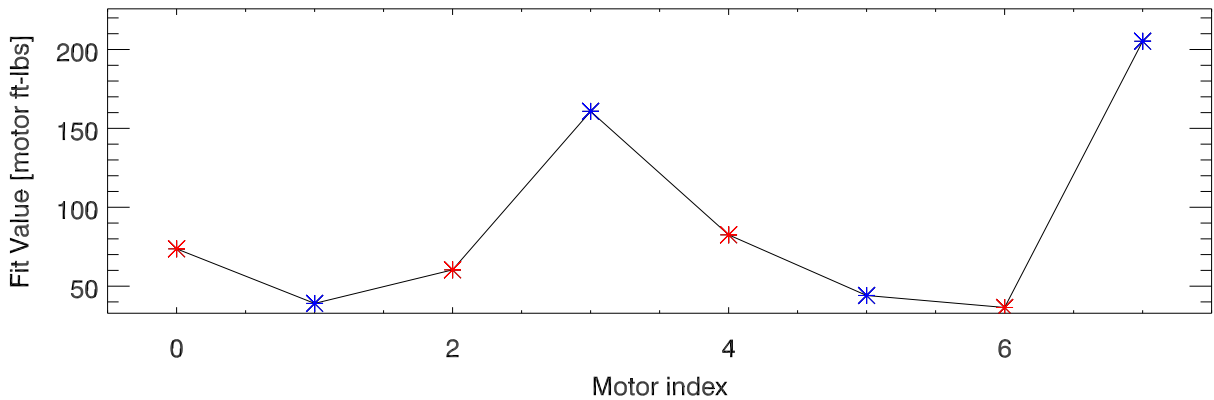
(c1\*sinza:Gravity)

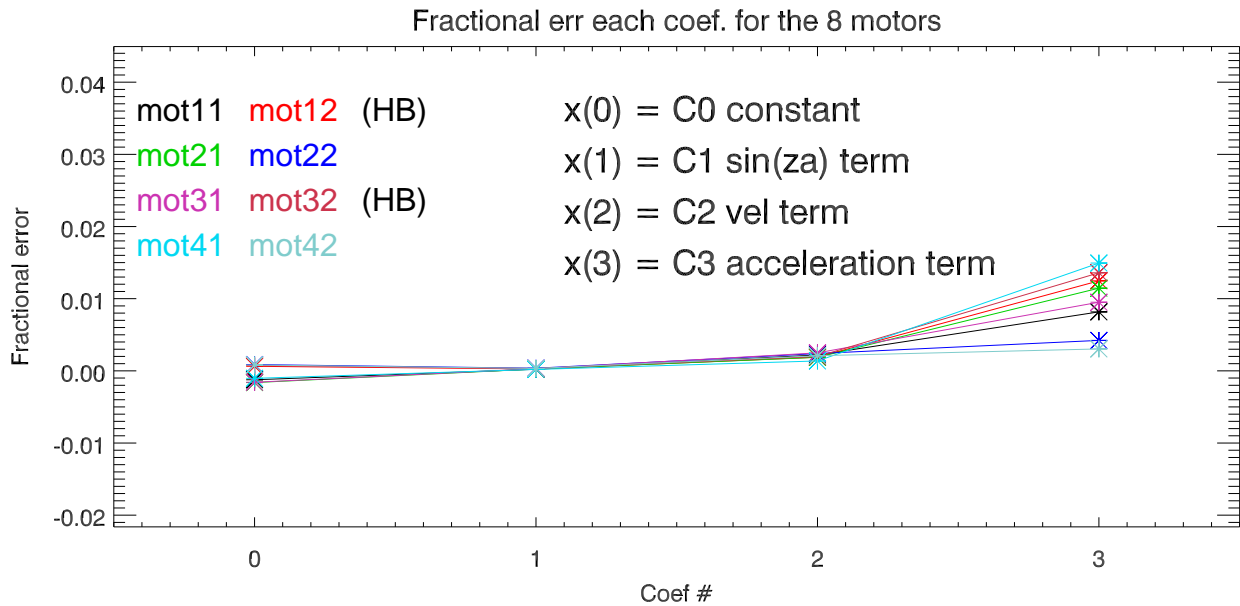
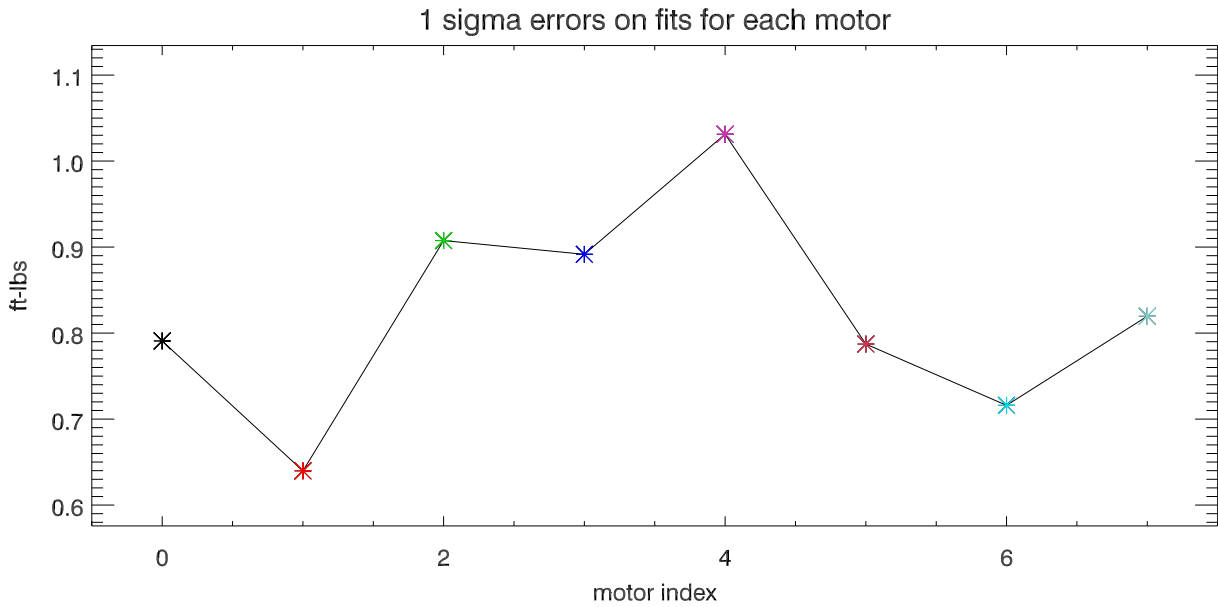


(c2\*vel (deg/sec):Friction)



(c3\*accel(deg/sec ^ 2):Acceleration)





Fit =  $C_0 + C_1 \sin(za) + C_2 \cdot \text{vel}(\text{deg}/\text{sec}) + C_3 \cdot \text{accel}(\text{deg}/\text{sec}^2)$   
 MaxVel = (.0147 deg/sec)    maxAccel = (.025 deg/sec<sup>2</sup>)

Fit values (ft-lbs) for each motor

motor	C0	C1	C2	C3
m11	-2.90	78.82	1065.31	73.66
m12	4.59	53.85	998.90	39.04
m21	-2.54	77.51	1437.20	60.31
m22	4.66	53.61	1105.52	160.81
m31	-2.96	78.33	1227.37	82.50
m32	4.81	53.31	1171.94	44.12
m41	-3.13	79.99	1544.75	36.48
m42	4.63	53.41	1161.14	205.23