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Flight Card

Launch date: Sun Jun 26 2016  
Launch site: Brothers, OR -- NXRS 2016  
Flyer's name: Wilson Allness  
Rocket name: Code Red XL  
Motor: M2400 research  
Expected alt: 11000 feet  
Dual deploy: Yes, main parachute set at 1000 feet

Comments: Perfect flight!

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Flight Results

Max GPS altitude: 10509 feet AGL  
Max Acc altitude: 10489 feet AGL  
Max GPS velocity: 838 feet/sec 571.4 mph 0.769 Mach  
Max Acc velocity: 831 feet/sec 566.6 mph 0.763 Mach

Max Acceleration: 5.9 G's 190.0 feet/sec/sec

Motor burn time: 5.5 sec  
Burnout altitude: 2428 feet AGL  
Burnout velocity: 831 feet/sec 0.751 Mach

Apogee Deployment Event  
Occurred: 28.1 sec after liftoff  
Fired: 1.25 sec late  
Altitude: 10485 feet  
Vert vel: -38 feet/sec  
Horz vel: 32 feet/sec

Ground speed at apogee: 33 feet/sec 22.5 mph  
Heading at apogee: 278° from true north

Distance to apogee: 986 feet 0.19 miles  
Bearing to apogee: 272° from true north

Descent rate on drogue: 100 feet/sec 68.4 mph  
Descent rate on main: 29 feet/sec 19.8 mph  
Touch down velocity: 20 feet/sec 13.6 mph

Main Parachute Deployment Event  
Deployed: 129.8 sec after liftoff  
Altitude: 863 feet AGL  
Vert vel: -88 feet/sec

Time to max velocity: 5.5 sec  
Time to apogee: 26.8 sec  
Time on drogue: 1 min 42.9 sec  
Time on main: 33.2 sec  
Total flight time: 2 min 43.0 sec

Lift off: 12:36:23.0 MDT 18:36:23.0 UTC  
Apogee: 12:36:50.0 MDT 18:36:50.0 UTC  
Touch down: 12:39:06.0 MDT 18:39:06.0 UTC

Launch pad coordinates: N 43° 47.7552' W 120° 39.0879'  
Landing site coordinates: N 43° 47.9615' W 120° 39.1466'

Distance to landing site: 1282 feet 0.24 miles  
Bearing to landing site: 348° from true north

Ground level: 4586 feet MSL

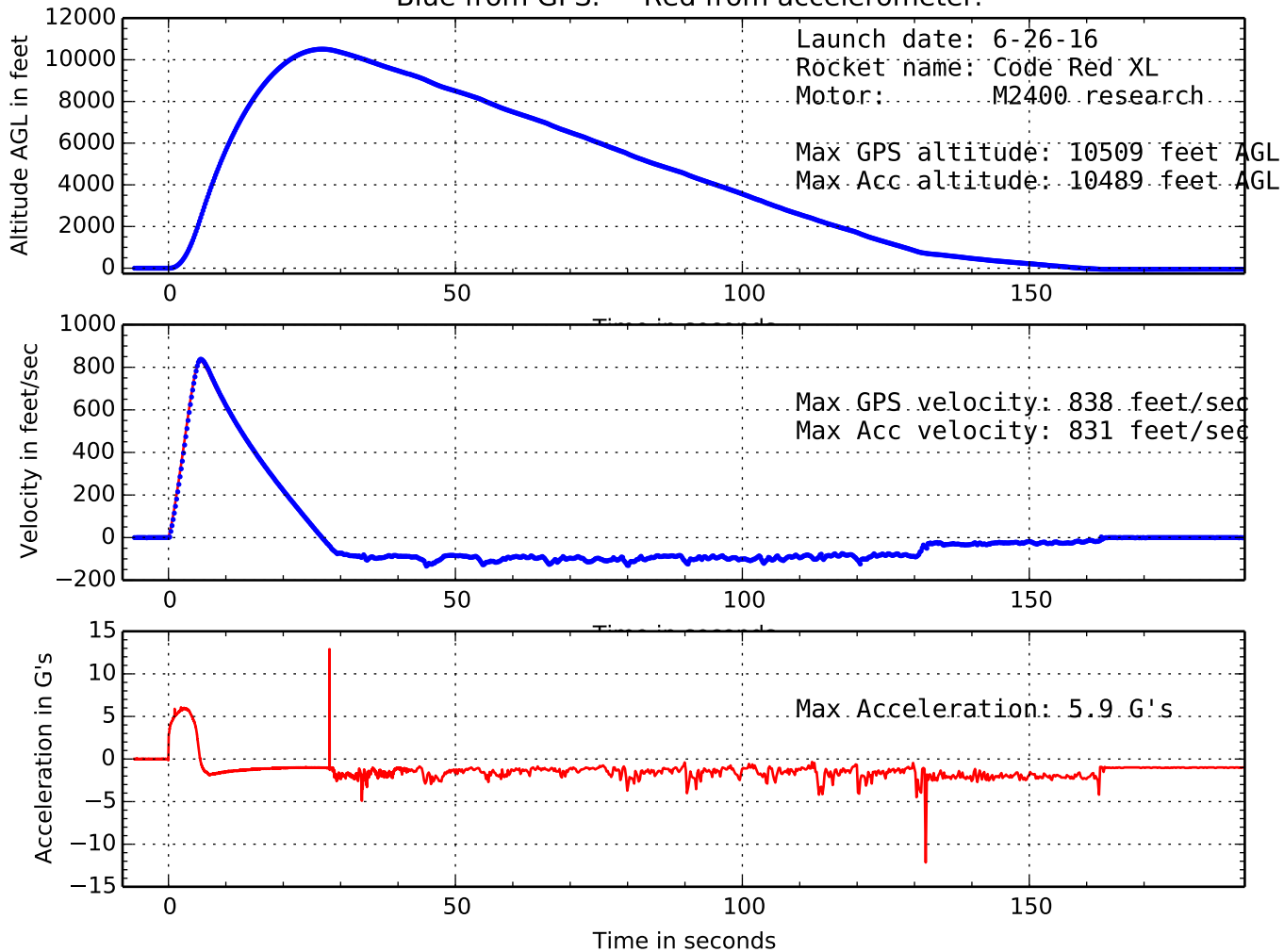
	Liftoff	Apogee	Landing
Battery:	3.99v	3.98v	3.97v
Temperature:	108°F	108°F	108°F

Transmitter: Mx110A0236 Firmware: 3.0.1.0

This data came from transmitter flash memory.

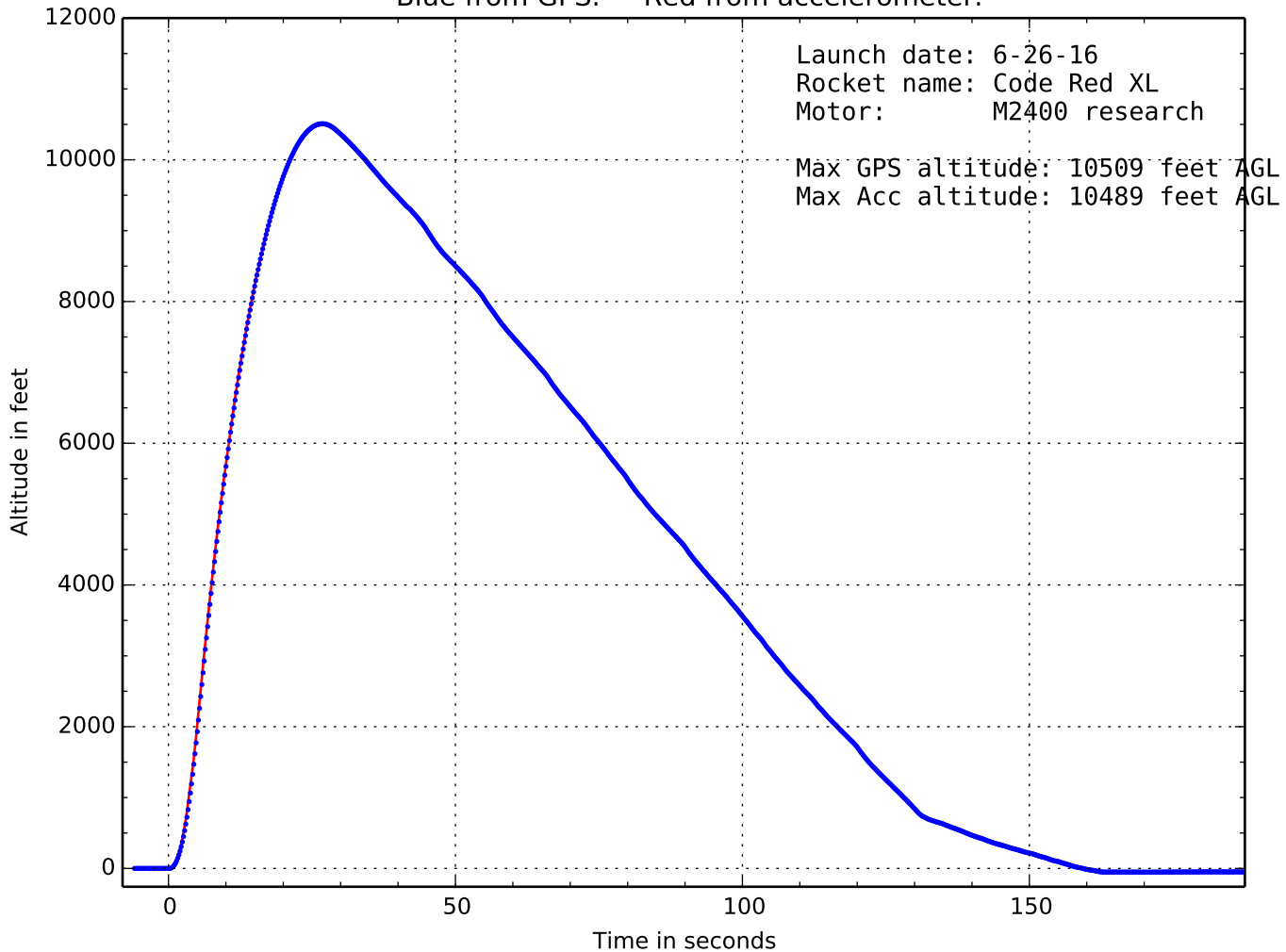
# Altitude, Velocity, and Acceleration

Blue from GPS. Red from accelerometer.



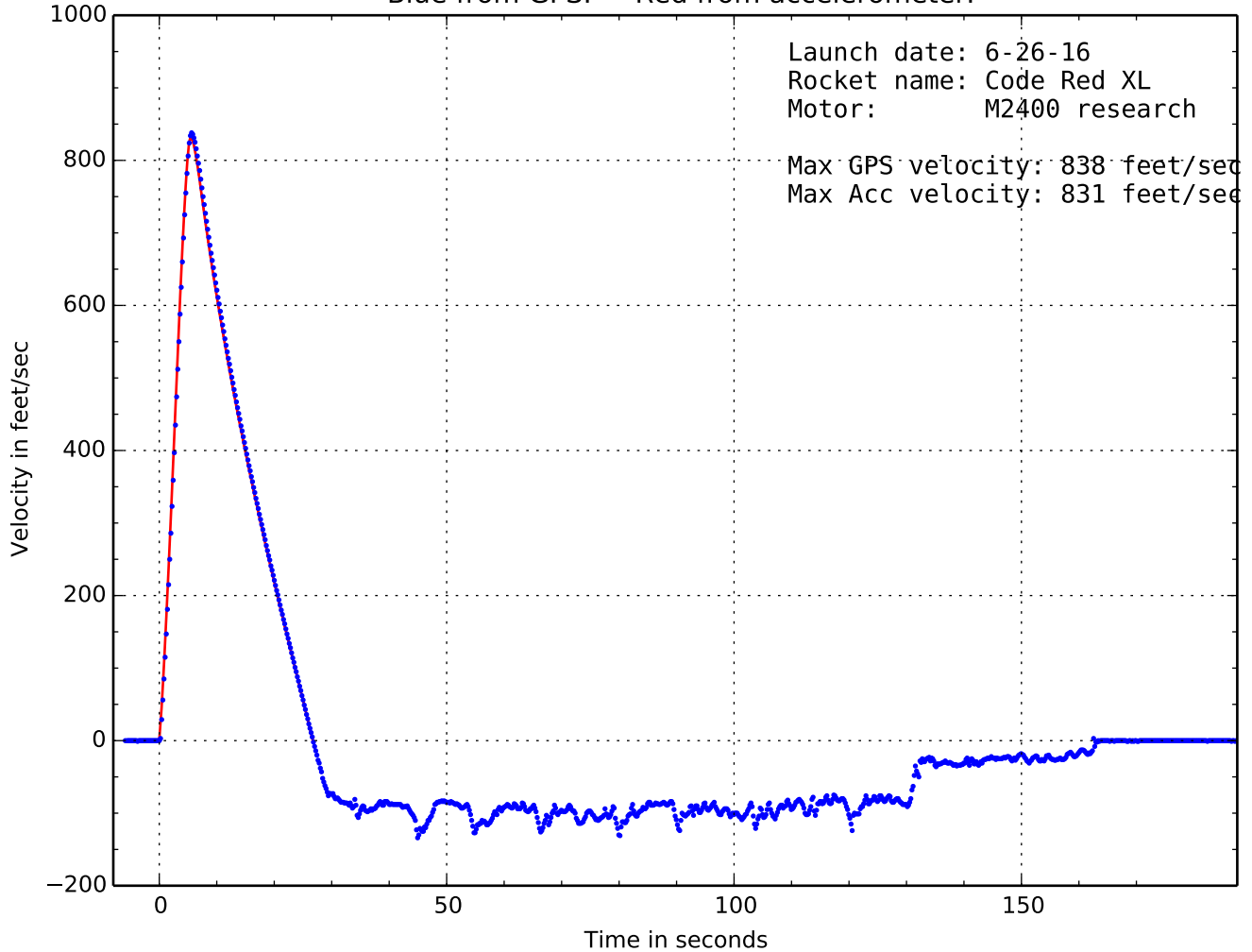
# Altitude AGL

Blue from GPS. Red from accelerometer.

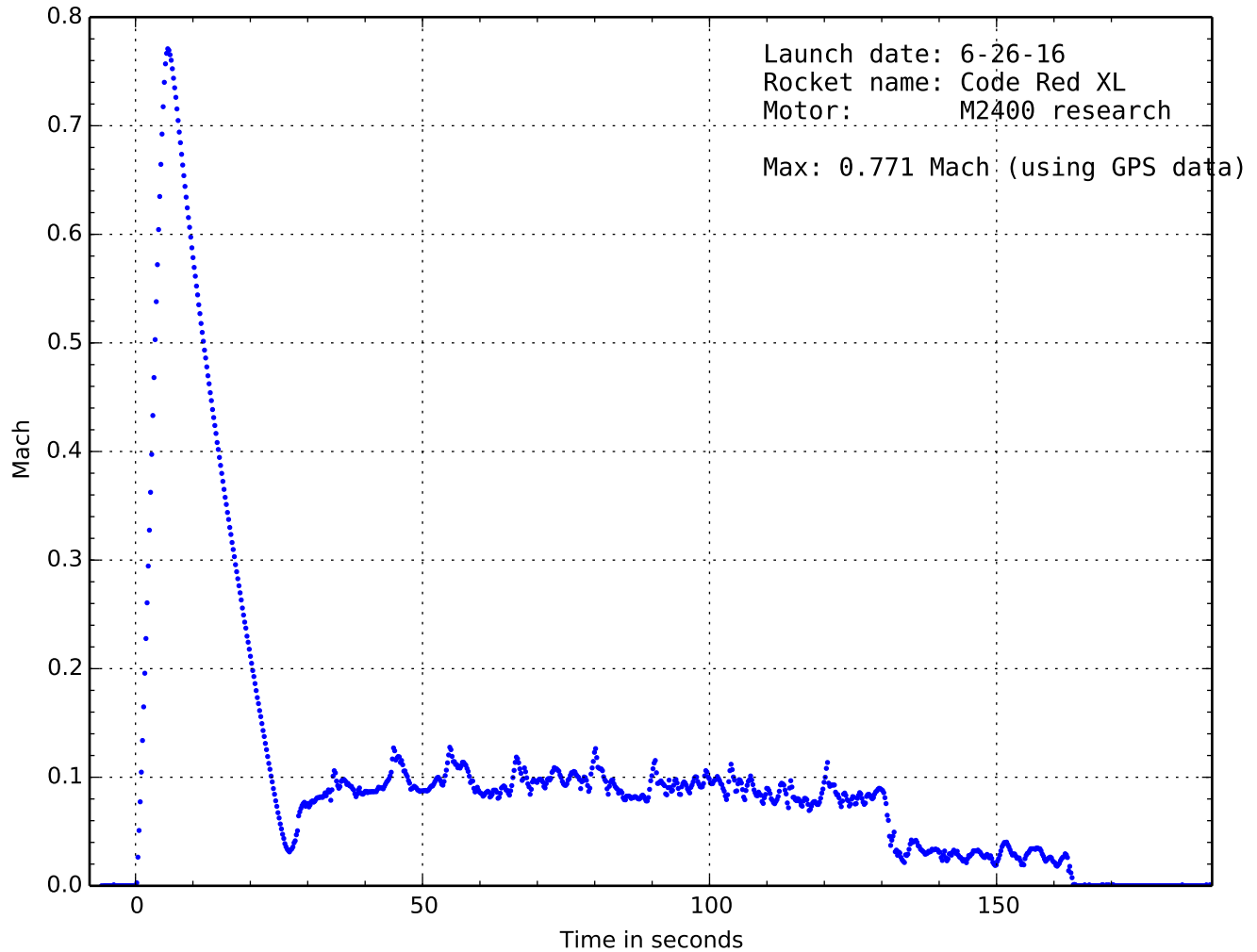


# Vertical Velocity

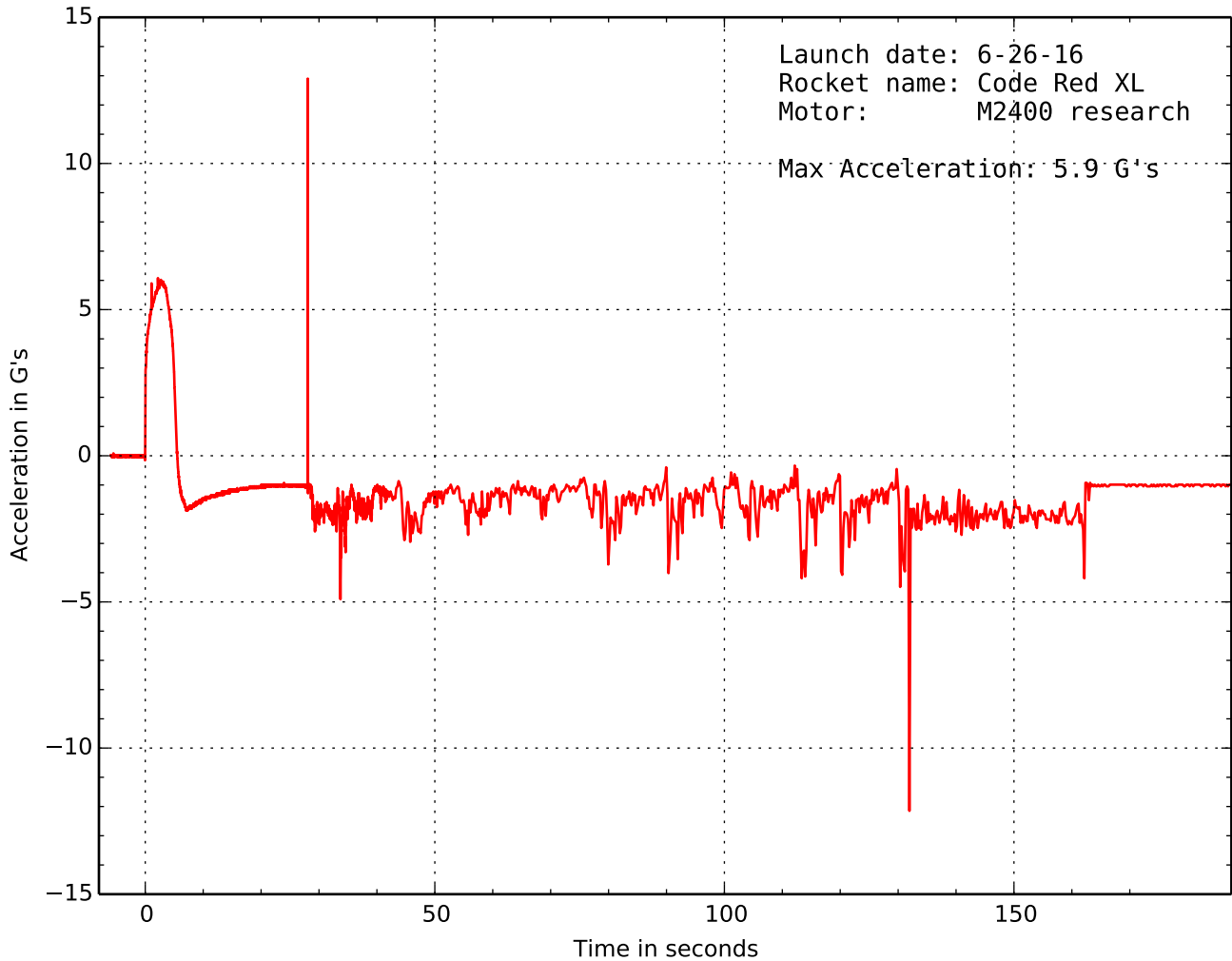
Blue from GPS. Red from accelerometer.



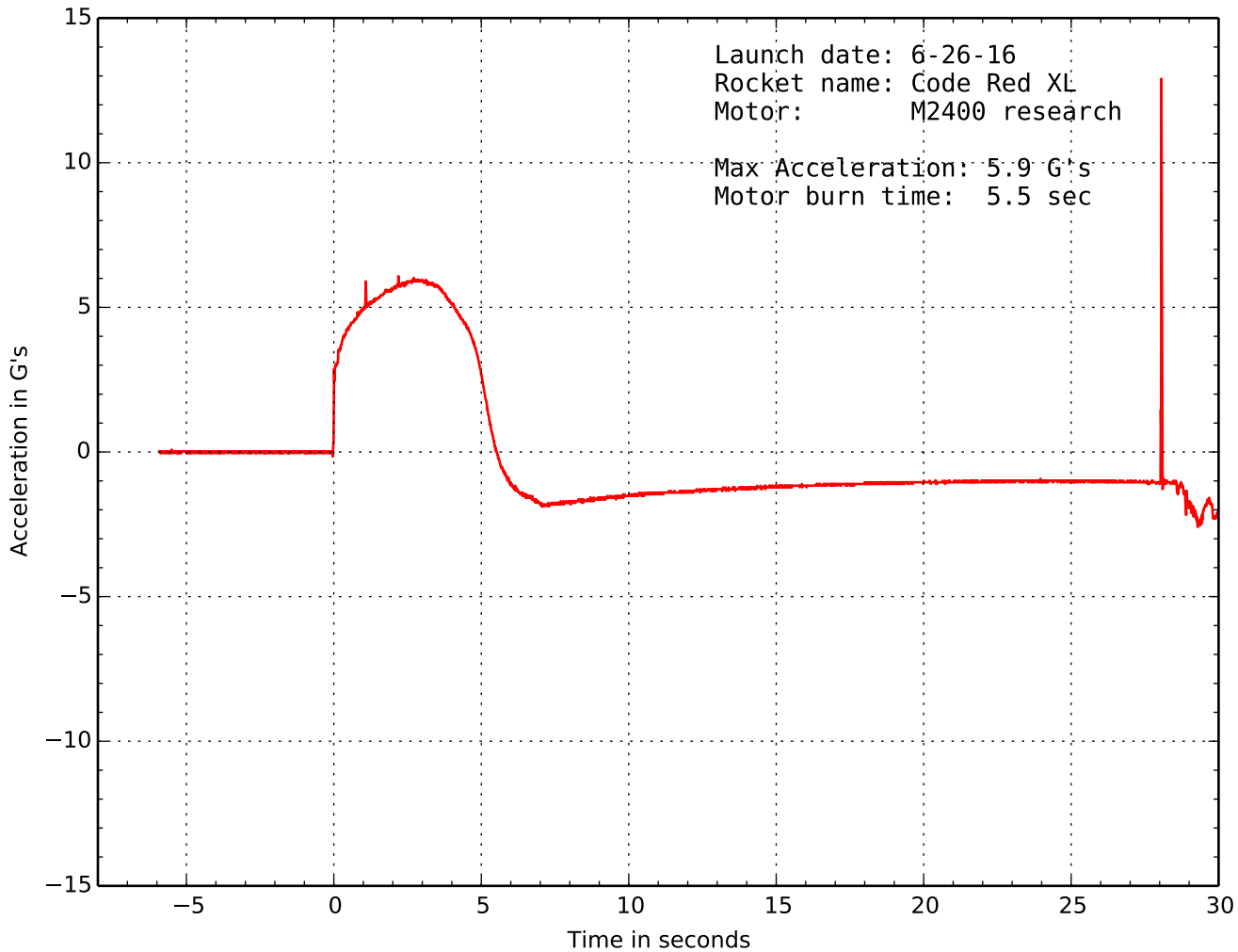
# 3D Velocity in Mach



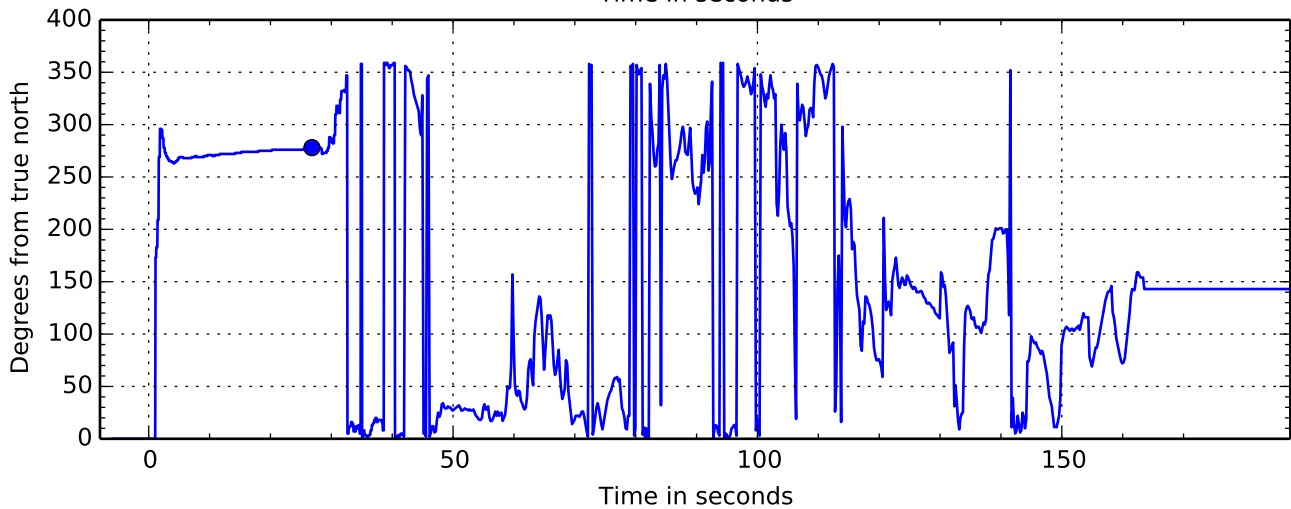
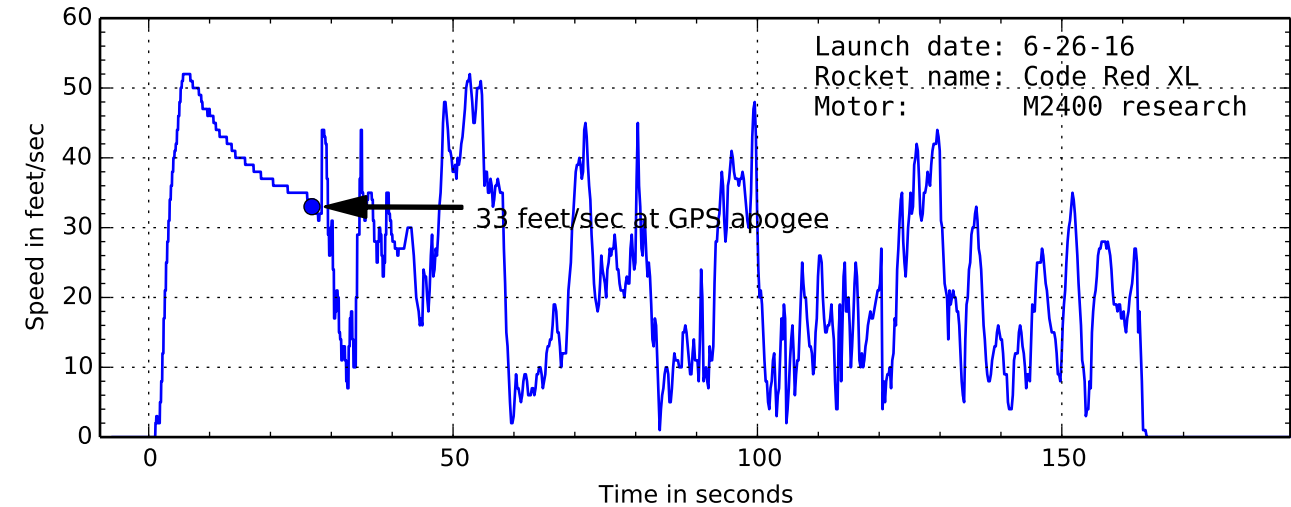
# Acceleration -- Full Flight



# Acceleration -- Boost Phase



# Ground Speed and Heading





# Number of Satellites and GPS Status

