

EDR Report

File Information	Value
VIN	5YJSA7E20KF000000
Retrieval Date	2018/01/01 00:00:00 (UTC)
Retrieval User Comments	
Retrieval Program Information	
EDR Report Information	Tesla EDR Reporting Service v19.32.1
Report Date	2019/10/10 10:17:23 (UTC)
Number Of Events	1
Time From Event 1 To 2 (seconds)	N/A
Ignition Cycle At Retrieval	492

Model S Data Limitations

General Data Limitations

This report represents data from a Tesla Event Data Recorder (EDR). The report was generated using EDR data that was uploaded to the Tesla EDR Report Service at <https://edr.tesla.com>. This service is periodically updated using the most current vehicle information available and report users should always ensure that the report was generated by the most recent version of the Report Service.

The Tesla EDR Retrieval Program and Tesla EDR Report Service are designed for vehicles configured for the North American market region only. Report elements found in this report may not have not been validated for vehicles configured for regions outside of North America.

The EDR is part of the vehicle's Restraints Control Module (RCM). When the EDR senses a crash or crash-like event, it may record a short period of data related to vehicle dynamics and safety systems. This recorded data may assist in understanding the crash or crash-like event. EDR data will only be recorded by a Tesla vehicle if the EDR senses a crash or crash-like event; no data is recorded by the EDR under normal driving conditions.

EDR data should only be used as part of a thorough and competent review of the human, vehicle, and environmental information associated with an event. The data recorded by the EDR has limitations including the number of items recorded, the time period of the recording, the data sampling interval, and the data range and resolution. Additionally, EDR data may be limited by sensor capabilities or the availability of 12 V DC power at the RCM. For these and other potential reasons, the EDR data may not capture an entire event, and the data elements captured may not fully represent all aspects of a given event.

Tesla has made all reasonable efforts to include sufficient information in this report's Data Limitations section to clarify terminology and data elements found in this document to assist the end user in understanding the recorded data. Tesla reserves the right to update, change or modify this information.

Event Data Recorder

An Event Data Recorder is defined as a device or function in a vehicle that records the vehicle's dynamic time-series data during the time period just prior to a crash event (e.g., vehicle speed vs. time) or during a crash event (e.g., delta-V vs. time), intended for retrieval after the crash event. For the purposes of this definition, the event data do not include audio and video data (49 CFR Part 563).

Data Synchronization

Pre-crash and crash data are recorded in discrete intervals and may be asynchronous.

Events

The Model S RCM can store up to two events: Event 1 and Event 2. The conditions for triggering the recording of an event differs depending on event type.

Time Zero

Time Zero, as indicated throughout the event record, is the point where the restraint control algorithm is activated in any sensing direction.

Recording duration

The end of an event is typically the moment at which the cumulative delta-V within a 20ms time period does not change by more than 0.8 km/h or the moment at which the crash detection algorithm of the RCM resets. Some events may lead to the recording of different duration data as provided for by 49 CFR Part 563.

Deployment events

A deployment event may be recorded when the RCM commands the deployment of a device (e.g. airbag, pretensioner, or High Voltage (HV) battery disconnect). Airbag deployment events are always locked in memory and are never overwritten. Pretensioner/HV disconnect only deployments may not be locked and may be overwritten.

Non-deployment events

A non-deployment event may be recorded when the RCM senses a physical occurrence triggering the recording of an event but does not command the deployment of a device (e.g. airbag, pretensioner, High Voltage (HV) battery disconnect). A non-deployment event is recorded if one of the two event memory locations is available (not locked). Non-deployment events are not locked in memory. A non-deployment event is overwritten by another non-deployment event or a deployment event.

Data polarity

Where applicable, the data in this report follows the polarity conventions found in SAE J1733 and J211. For example, forward longitudinal acceleration and resultant delta-V are positive and left-to-right lateral acceleration and resultant delta-V are positive. Positive roll angle is rotation about the vehicle's longitudinal axis using the right hand rule (clockwise vehicle roll when viewed from the rear of the vehicle). Positive steering wheel angle is clockwise rotation of the steering wheel (steering to the right from straight).

Signal Not Available (SNA)

Signal Not Available (SNA) indicates a data element which is not available due to a fault or network communication disruption with the sensor that supplies the data to the EDR.

Data Element Definitions

Vehicle Identification Number (VIN)

The Vehicle Identification Number (VIN) is stored in the RCM when it is installed at the Tesla Fremont Factory or by Tesla Service. The last 6 digits of the VIN can be anonymized by selecting the "Save without VIN sequence number" option in the Tesla EDR Retrieval Program.

Retrieval Date

The Retrieval Date is the calendar date and time when the data was retrieved from the RCM. This date and time is sourced from the computer that was used to retrieve the data. This is not the date and time of an event.

Retrieval User Comments

The Retrieval User Comments is an open field that can be used by the Tesla EDR Retrieval operator to record text comments at the time of retrieval.

Retrieval Program Information

The Retrieval Program Information is the version number of the Tesla EDR Retrieval Program that was used to retrieve the EDR data from the RCM.

EDR Report Information

The EDR Report Information identifies the version of the Tesla EDR Report Service.

Report Date

Report Date is the calendar date when the online Tesla EDR Report Service was used to generate the report. The source of this data element is the Tesla server.

Number Of Events

The Number Of Events represents the total number of events that are stored in the RCM memory. The maximum number of events that can be recorded is two.

Time From Event 1 to 2 (seconds)

The Time From Event 1 to 2 is the amount of time elapsed between the Time Zero of two linked events (if applicable). Linked events must occur within 5 seconds and in the same ignition cycle. Non-linked events will report "N/A" in the Time From Event 1 to 2 value. The value is reported to the nearest 0.5 seconds.

Ignition Cycle At Retrieval

The Ignition Cycle At Retrieval is the number of times that the RCM had been powered on as reported at the time that the Tesla EDR Retrieval Program was used to retrieve the data from the RCM. The maximum value for ignition cycles is over 4 billion.

Maximum Delta-V, Longitudinal/Lateral (km/h)

The Maximum Delta-V, Longitudinal/Lateral is the maximum magnitude of the recorded delta-V during the event. The value is reported to the nearest kilometer per hour. The range for Maximum Delta-V is -100 km/h to +100 km/h. The source of the data is the internal calculation (integration) of the sensor data inside of the RCM.

Time to Maximum Delta-V, Longitudinal/Lateral (ms)

The Time to Maximum Delta-V, Longitudinal/Lateral is the time from Time Zero to the maximum magnitude of the recorded delta-V during the event. The maximum value is 300 ms and the value is reported to the nearest millisecond.

Time to Maximum Delta-V, Resultant (ms)

The Time to Maximum Delta-V, Resultant is the time from Time Zero to the calculated maximum resultant of the longitudinal and lateral delta-V components. The maximum value is 300 ms and the value is reported to the nearest millisecond.

Ignition Cycle At Event

The Ignition Cycle At Event is the number of times that the RCM had been powered on as reported at Time Zero. The maximum value for ignition cycles is over 4 billion.

Ignition Cycle Runtime

Ignition Cycle Runtime is the total cumulated time from when the RCM was powered on to Time Zero for a given event. The maximum value of Ignition Cycle Runtime is over 70 million minutes and the resolution is 0.1 minutes.

Odometer At Event Time Zero

Odometer At Event Time Zero is the value of the vehicle's lifetime mileage accumulation at Time Zero. The maximum value for this data element is over 1 million kilometers and the resolution is 0.1 kilometers.

Airbag Warning Lamp Status

Airbag Warning Lamp Status indicates the commanded state of the warning lamp as "on" or "off" within approximately the last second before Time Zero.

ABS Warning Indicator Status

ABS Warning Indicator Status indicates the commanded state of the warning lamp as "on" or "off" within approximately the last second before Time Zero.

Vehicle Drive Mode

Vehicle Drive Mode is the status of the vehicle's powertrain setting within approximately the last second before Time Zero. Possible values for this data element include Park, Reverse, Neutral and Drive.

Driver/Passenger Safety Belt Status

The Driver/Passenger Safety Belt Status is the recorded status of the safety belt at the time of the event. This data element is recorded one second before Time Zero.

Occupant Classification In Front Passenger Seat

The Occupant Classification data element indicates the detected occupant type in the front passenger seat. Values include: Empty, Child, Small Adult, Large Adult.

Driver Seat Position

Driver Seat Position indicates the recorded seat track position of the driver seat. The possible values are Rearward and Forward.

Rear occupant seat status

The Model S may record data associated with the second row seat occupancy and seat belt status. The possible values for occupancy status include: Not Occupied or Occupied, or Not Available. The possible values for rear occupant seat belt status are Buckled, Not Buckled, or Not Available.

Driver Airbag Deployment 2nd Stage Disposal

This data element indicates if the driver airbag second stage was commanded to deploy (either for occupant restraint or propellant disposal purposes).

Right Front Passenger Airbag Deployment 2nd Stage Disposal

This data element indicates if the passenger airbag second stage was commanded to deploy (either for occupant restraint or propellant disposal purposes).

Complete File Recorded

Complete File Recorded indicates whether or not the complete data set available to the EDR was successfully recorded.

Deployment Summary

The Deployment Summary table indicates which of the deployable safety devices (if any) were commanded to deploy and at what time (relative to the event Time Zero). The possible values for the status of each device is "Deployment Commanded" or "Deployment Not Commanded". The deployment commanded time is to the nearest millisecond.

Time Series Data

All time references are based on the event definition of Time Zero.

Vehicle Speed

Vehicle Speed is calculated using the four wheel speed signals as well as inertial acceleration measurements. This speed will be reported either in kilometers per hour or miles per hour, depending on vehicle configuration. The minimum value for vehicle speed is 0 and the maximum value is greater than 200 km/h (124 mph). The resolution of Vehicle Speed is to the nearest kilometer per hour or mile per hour, depending on vehicle configuration.

Accelerator Pedal (%)

Accelerator Pedal (%) is the percent of full application of the accelerator pedal. The resolution of Accelerator Pedal (%) is to the nearest percent.

Rear Motor Speed (rpm)

Rear Motor Speed is the rate of rotation of the rear drive motor. The maximum value for Rear Motor Speed is 17,900 rpm (revolutions per minute). The resolution of Rear Motor Speed is to the nearest 1 rpm. Positive RPM values indicate that the vehicle motor is rotating negatively about the vehicle's lateral (y) axis, which provides forward motive force.

Service Brake

Service Brake indicates the status of the driver's application of the brake pedal as reported by the brake booster. The possible values for Service Brake are "On" (pedal being applied by driver) and "Off" (pedal not being applied by driver).

Stability Control

Stability Control is the status of the Electronic Stability Control system (ESC). The possible values are "On" (meaning the ESC was enabled but not active), "Off" (meaning the ESC was turned off), and "Engaged" (meaning that the ESC was active).

ABS Activity

ABS Activity is the status of the Anti-lock Braking System (ABS). The possible values are "On" (meaning the ABS was active) and "Off" (meaning the ABS was not active). Active ABS status does not necessarily indicate that the ABS control unit was actively modulating braking at one or more wheels.

Steering Wheel Angle (deg)

Steering Wheel Angle represents the measured rotational angle of the steering wheel. The range of Steering Wheel Angle data is -819 deg to +819 deg. The resolution of steering wheel angle is to the nearest degree. Data is recorded for 5 seconds prior to Time Zero every 0.1 seconds.

Lateral/Longitudinal Pre-Crash Acceleration

Lateral and Longitudinal Pre-Crash Acceleration data is the measured physical acceleration of the vehicle as measured at the RCM during the 5 seconds prior to (and including) Time Zero.

Roll/Yaw Rate Pre-Crash Data

Roll and Yaw Rate Pre-Crash data is the measured angular velocity of the RCM for the 5 seconds prior to (and including) Time Zero. The resolution of this data element is to the nearest 0.1 degrees/second and the samples are recorded every 0.1 seconds.

Longitudinal/Lateral Delta-V data

Longitudinal and Lateral Time Series Delta-V Data indicates the change in velocity of the vehicle. The source of the data is the internal calculation (integration) of the sensor data inside of the RCM. The resolution of Delta-V data is to the nearest kilometer per hour and the data is reported every 10 ms after Time Zero (until the end of the event). The range for delta-V data is -100 km/h to +100 km/h.

Longitudinal/Lateral/Normal Time Series Acceleration data

Longitudinal and Lateral Time Series Acceleration Data indicates the measured physical acceleration of the vehicle. The source of the data is the accelerometers located inside the RCM. The resolution of acceleration data is 0.8 g and the data is reported every 0.5 ms after Time Zero (until the end of the event). The range of acceleration data is -96 g to +96 g.

Serial Numbers

Serial numbers are the sensor identification numbers that are stored in the RCM. These values are stored when the RCM is powered up (each ignition cycle).

Hexadecimal Data

The Hexadecimal Data found in this report represents the original, raw data and identifying information retrieved from the RCM accessed to ultimately generate this report. The binary data is represented in hexadecimal format as a matter of convenience. While it represents all the raw data retrieved from the subject RCM not all of that raw data may be used in a given report or application.

Event 1 Data Record

Data Element	Value
Maximum Delta-V, Longitudinal (km/h)	-10
Time To Maximum Delta-V, Longitudinal (ms)	170.0
Maximum Delta-V, Lateral (km/h)	-6
Time To Maximum Delta-V, Lateral (ms)	145.0
Time To Maximum Delta-V, Resultant (ms)	170.0
Ignition Cycle At Event	492
Ignition Cycle Runtime (minutes)	8.5
Odometer At Event Time Zero (km)	5922.8
Airbag Warning Lamp Status	Off
ABS Warning Indicator Status	Off
Driver Safety Belt Status	Buckled
Passenger Safety Belt Status	Not Buckled
Occupant Classification Status In Front Passenger Seat	Not Available
Driver Seat Track Position	Rearward
Vehicle Drive Mode	Drive
Driver Airbag Deployment 2nd Stage Disposal	No
Right Front Passenger Airbag Deployment 2nd Stage Disposal	No
Complete File Recorded	Yes

Deployment Summary (Event 1)

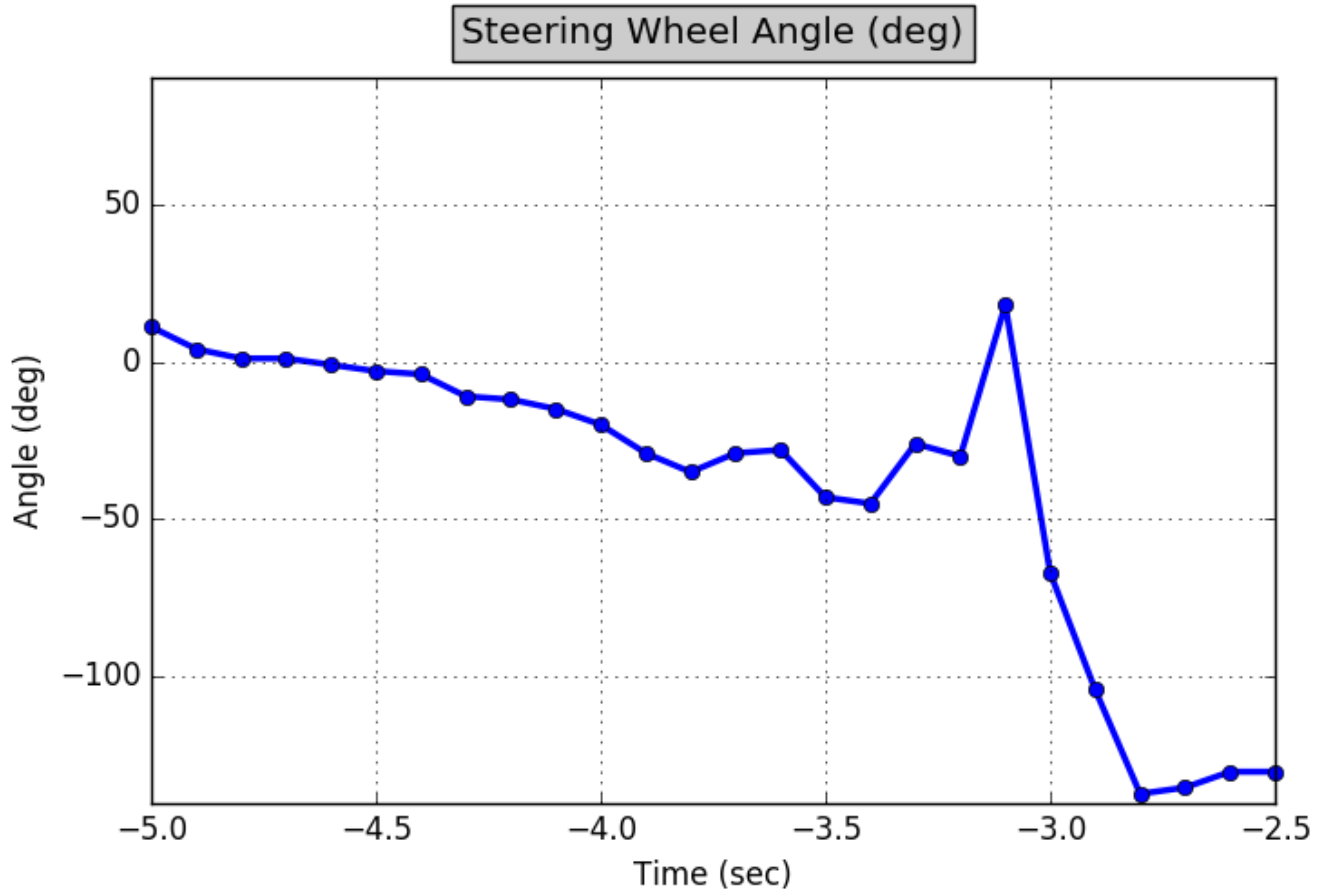
Device	Status	Deployment Command Time (ms)
Driver Front Airbag Stage 1	Deployment Commanded	21
Driver Front Airbag Stage 2	Deployment Commanded	171
Passenger Front Airbag Stage 1	Deployment Commanded	21
Passenger Front Airbag Stage 2	Deployment Commanded	171
Driver Side Seat Airbag	Deployment Not Commanded	
Inflatable Curtain Airbag Left	Deployment Commanded	161
1st Row Left Outboard Lap Pre-tensioner	Deployment Commanded	21
Passenger Side Seat Airbag	Deployment Not Commanded	
Inflatable Curtain Airbag Right	Deployment Commanded	161
1st Row Right Outboard Lap Pre-tensioner	Deployment Not Commanded	
Driver Knee Airbag	Deployment Not Commanded	
Front Passenger Knee Airbag	Deployment Not Commanded	
1st Row Left Retractor Pre-tensioner	Deployment Commanded	21
1st Row Right Retractor Pre-tensioner	Deployment Not Commanded	
HV Disconnect Pyro	Deployment Commanded	21

Event Data (Event 1)

Time (sec)	Service Brake	Stability Control	ABS Activity
-5.0	Off	On	Off
-4.8	Off	On	Off
-4.6	Off	On	Off
-4.4	Off	On	Off
-4.2	Off	On	Off
-4.0	Off	On	Off
-3.8	Off	On	Off
-3.6	Off	On	Off
-3.4	Off	On	Off
-3.2	Off	On	Off
-3.0	Off	On	Off
-2.8	Off	On	Off
-2.6	On	On	Off
-2.4	On	On	Off
-2.2	On	On	Off
-2.0	On	On	Off
-1.8	On	On	Off
-1.6	Off	Engaged	Off
-1.4	Off	Engaged	Off
-1.2	Off	Engaged	Off
-1.0	Off	On	Off
-0.8	Off	On	Off
-0.6	Off	Engaged	Off
-0.4	Off	On	Off
-0.2	Off	Engaged	Off
0.0	Off	Engaged	Off

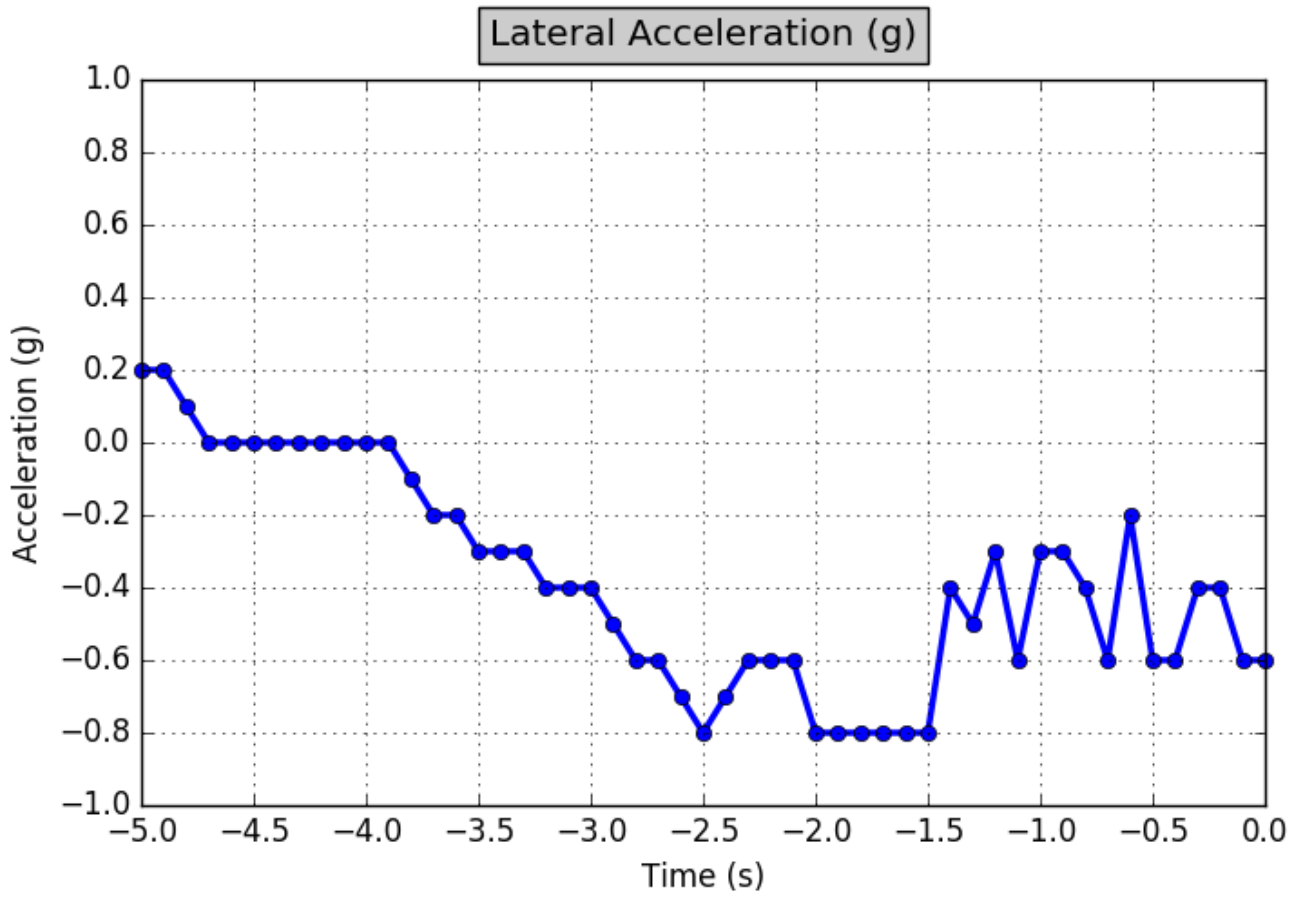
Time (sec)	Vehicle Speed (km/h)	Accelerator Pedal (%)	Rear Motor Speed (rpm)
-5.0	136.0	42.4	9576
-4.8	137.0	42.4	9632
-4.6	138.0	35.6	9710
-4.4	139.0	15.6	9704
-4.2	139.0	0.0	9679
-4.0	139.0	0.0	9693
-3.8	139.0	0.0	9635
-3.6	138.0	0.0	9553
-3.4	137.0	0.0	9481
-3.2	136.0	0.0	9426
-3.0	135.0	0.0	9332
-2.8	134.0	0.0	9271
-2.6	133.0	0.0	9201
-2.4	132.0	0.0	9114
-2.2	130.0	0.0	8840
-2.0	128.0	0.0	8732
-1.8	126.0	0.0	8592
-1.6	123.0	0.0	8441
-1.4	121.0	0.0	8202
-1.2	119.0	0.0	8063
-1.0	118.0	4.4	7965
-0.8	115.0	4.8	7858
-0.6	112.0	2.8	7649
-0.4	111.0	0.0	7626
-0.2	110.0	0.0	7571
0.0	108.0	0.0	7349

Steering Wheel Angle (Event 1)



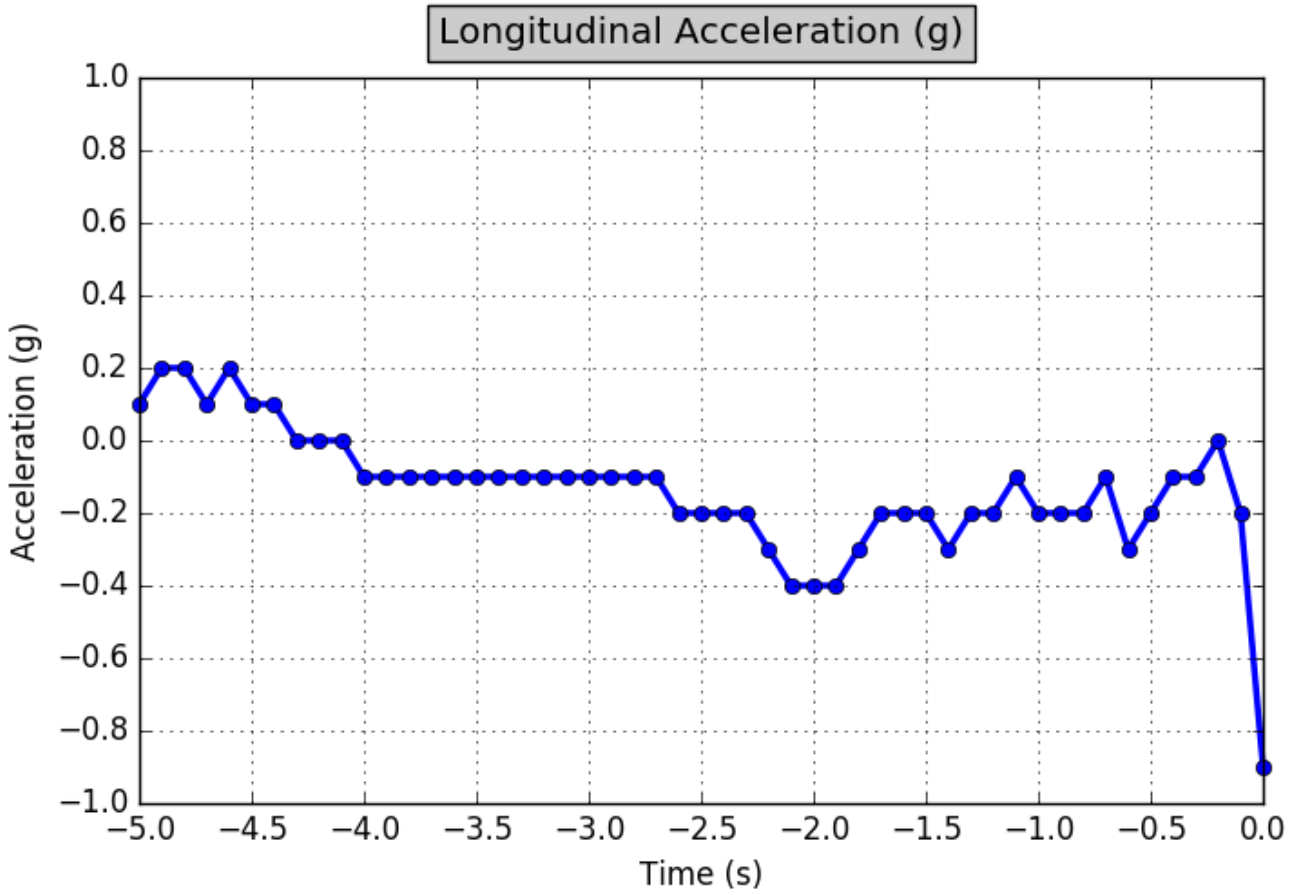
Time (sec)	Angle (deg)	Time (sec)	Angle (deg)
-5.0	11	-3.6	-28
-4.9	4	-3.5	-43
-4.8	1	-3.4	-45
-4.7	1	-3.3	-26
-4.6	-1	-3.2	-30
-4.5	-3	-3.1	18
-4.4	-4	-3.0	-67
-4.3	-11	-2.9	-104
-4.2	-12	-2.8	-137
-4.1	-15	-2.7	-135
-4.0	-20	-2.6	-130
-3.9	-29	-2.5	-130
-3.8	-35		
-3.7	-29		

Lateral Pre-Crash Acceleration (Event 1)



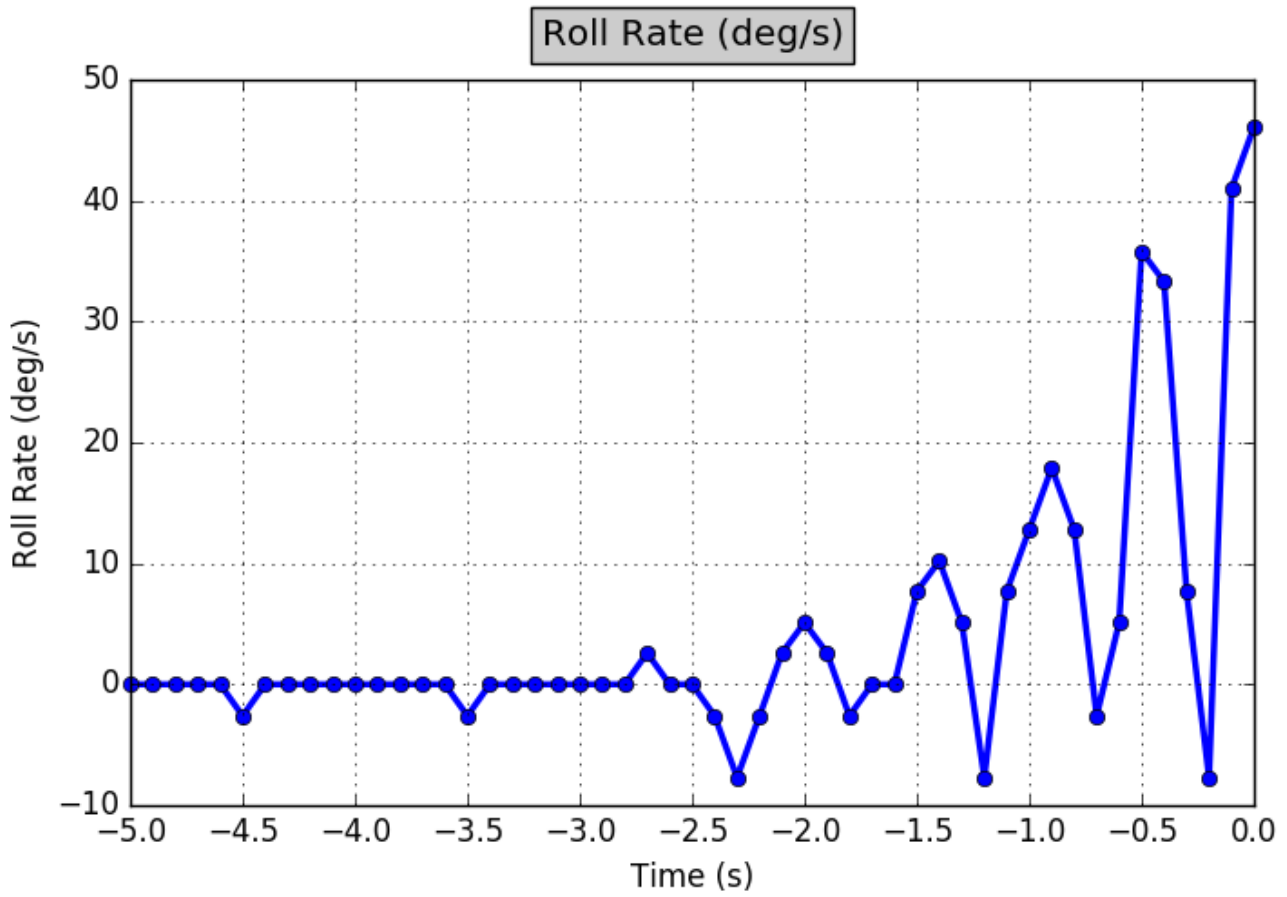
Time (s)	Acceleration (g)	Time (s)	Acceleration (g)	Time (s)	Acceleration (g)
-5.0	0.2	-3.2	-0.4	-1.4	-0.4
-4.9	0.2	-3.1	-0.4	-1.3	-0.5
-4.8	0.1	-3.0	-0.4	-1.2	-0.3
-4.7	0.0	-2.9	-0.5	-1.1	-0.6
-4.6	0.0	-2.8	-0.6	-1.0	-0.3
-4.5	0.0	-2.7	-0.6	-0.9	-0.3
-4.4	0.0	-2.6	-0.7	-0.8	-0.4
-4.3	0.0	-2.5	-0.8	-0.7	-0.6
-4.2	0.0	-2.4	-0.7	-0.6	-0.2
-4.1	0.0	-2.3	-0.6	-0.5	-0.6
-4.0	0.0	-2.2	-0.6	-0.4	-0.6
-3.9	0.0	-2.1	-0.6	-0.3	-0.4
-3.8	-0.1	-2.0	-0.8	-0.2	-0.4
-3.7	-0.2	-1.9	-0.8	-0.1	-0.6
-3.6	-0.2	-1.8	-0.8	0.0	-0.6
-3.5	-0.3	-1.7	-0.8		
-3.4	-0.3	-1.6	-0.8		
-3.3	-0.3	-1.5	-0.8		

Longitudinal Pre-Crash Acceleration (Event 1)



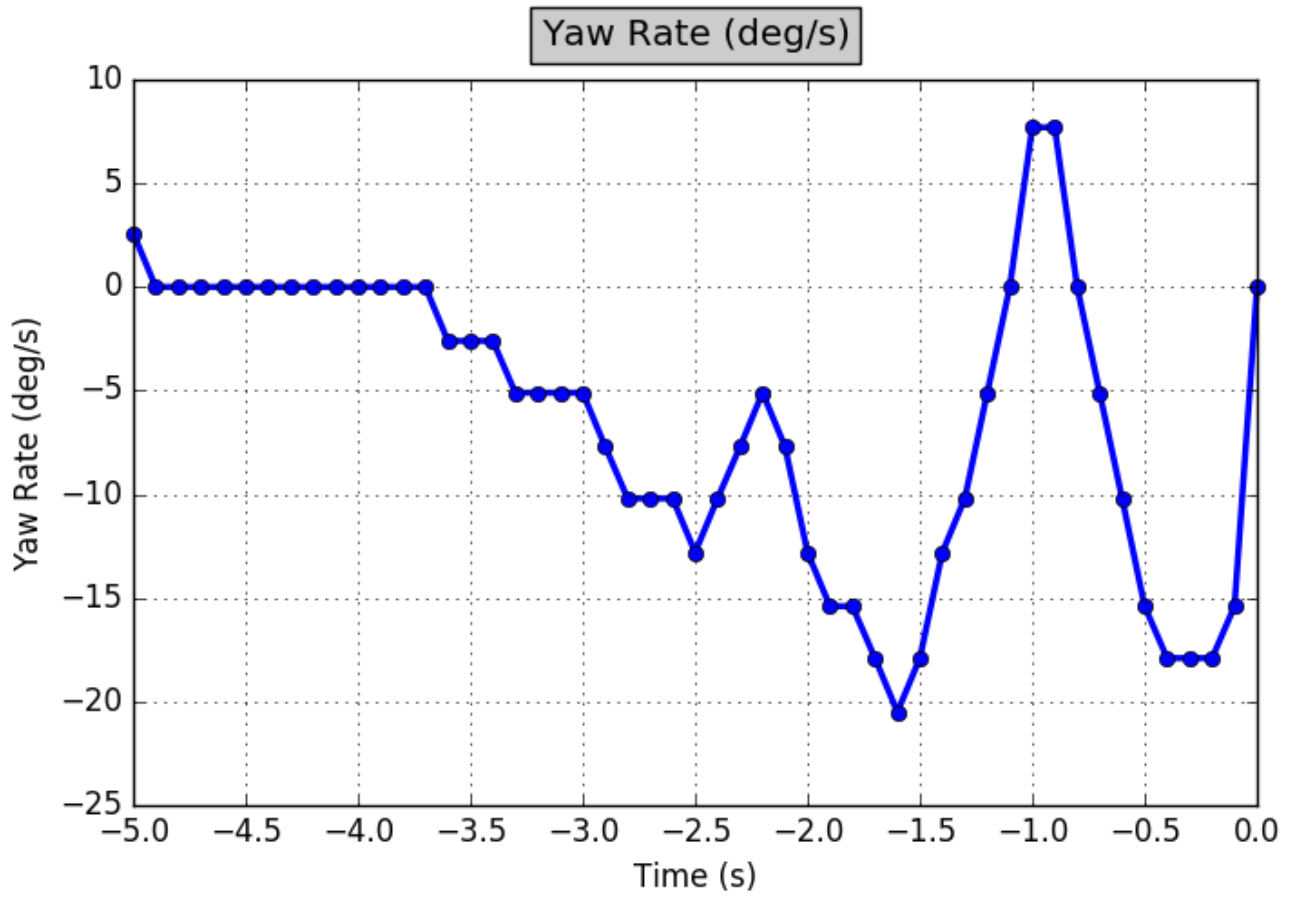
Time (s)	Acceleration (g)	Time (s)	Acceleration (g)	Time (s)	Acceleration (g)
-5.0	0.1	-3.2	-0.1	-1.4	-0.3
-4.9	0.2	-3.1	-0.1	-1.3	-0.2
-4.8	0.2	-3.0	-0.1	-1.2	-0.2
-4.7	0.1	-2.9	-0.1	-1.1	-0.1
-4.6	0.2	-2.8	-0.1	-1.0	-0.2
-4.5	0.1	-2.7	-0.1	-0.9	-0.2
-4.4	0.1	-2.6	-0.2	-0.8	-0.2
-4.3	0.0	-2.5	-0.2	-0.7	-0.1
-4.2	0.0	-2.4	-0.2	-0.6	-0.3
-4.1	0.0	-2.3	-0.2	-0.5	-0.2
-4.0	-0.1	-2.2	-0.3	-0.4	-0.1
-3.9	-0.1	-2.1	-0.4	-0.3	-0.1
-3.8	-0.1	-2.0	-0.4	-0.2	0.0
-3.7	-0.1	-1.9	-0.4	-0.1	-0.2
-3.6	-0.1	-1.8	-0.3	0.0	-0.9
-3.5	-0.1	-1.7	-0.2		
-3.4	-0.1	-1.6	-0.2		
-3.3	-0.1	-1.5	-0.2		

Roll Rate Pre-Crash Data (Event 1)



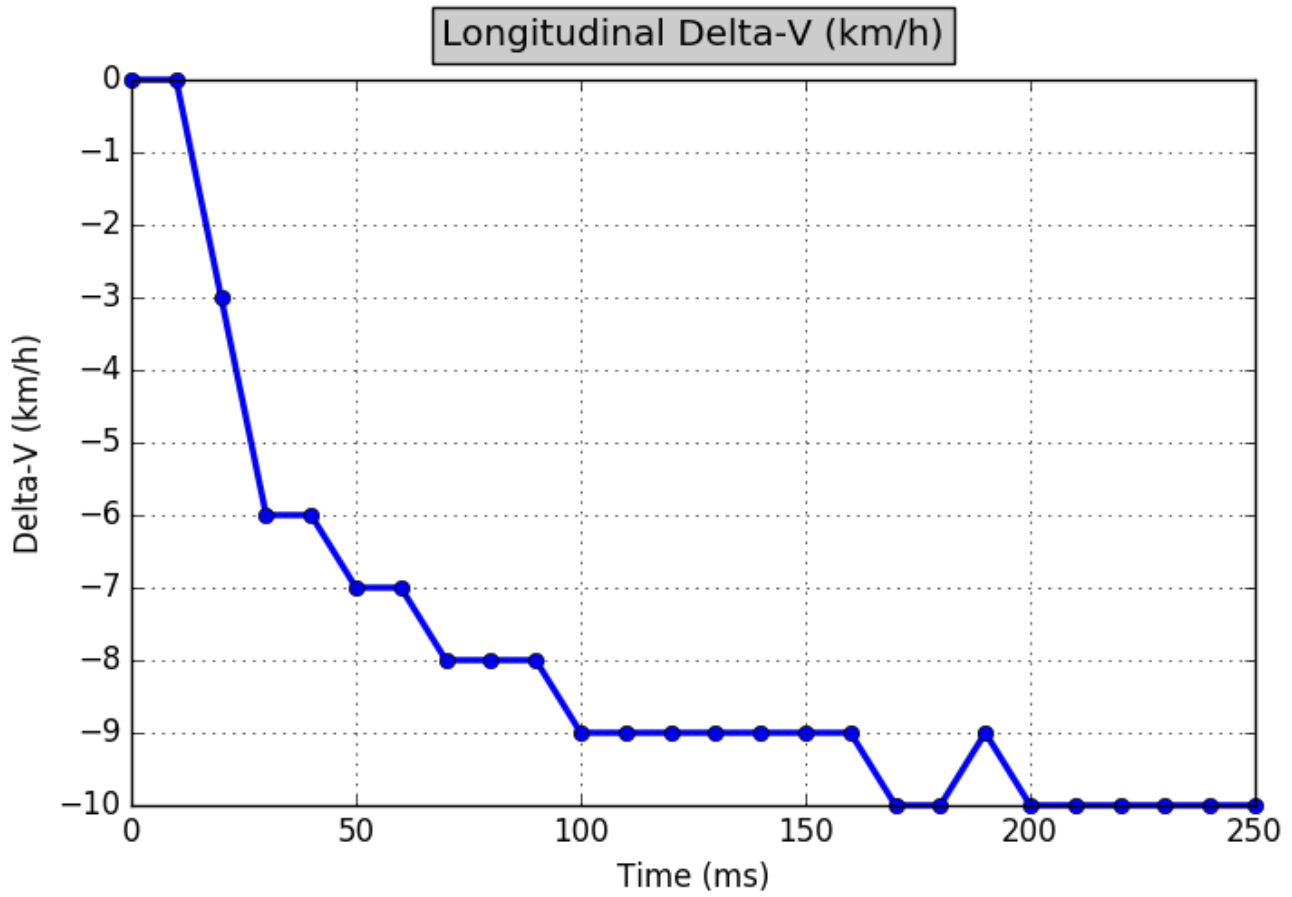
Time (s)	Roll Rate (deg/s)	Time (s)	Roll Rate (deg/s)	Time (s)	Roll Rate (deg/s)
-5.0	0.0	-3.2	0.0	-1.4	10.2
-4.9	0.0	-3.1	0.0	-1.3	5.1
-4.8	0.0	-3.0	0.0	-1.2	-7.7
-4.7	0.0	-2.9	0.0	-1.1	7.7
-4.6	0.0	-2.8	0.0	-1.0	12.8
-4.5	-2.6	-2.7	2.6	-0.9	17.9
-4.4	0.0	-2.6	0.0	-0.8	12.8
-4.3	0.0	-2.5	0.0	-0.7	-2.6
-4.2	0.0	-2.4	-2.6	-0.6	5.1
-4.1	0.0	-2.3	-7.7	-0.5	35.8
-4.0	0.0	-2.2	-2.6	-0.4	33.3
-3.9	0.0	-2.1	2.6	-0.3	7.7
-3.8	0.0	-2.0	5.1	-0.2	-7.7
-3.7	0.0	-1.9	2.6	-0.1	41.0
-3.6	0.0	-1.8	-2.6	0.0	46.1
-3.5	-2.6	-1.7	0.0		
-3.4	0.0	-1.6	0.0		
-3.3	0.0	-1.5	7.7		

Yaw Rate Pre-Crash Data (Event 1)



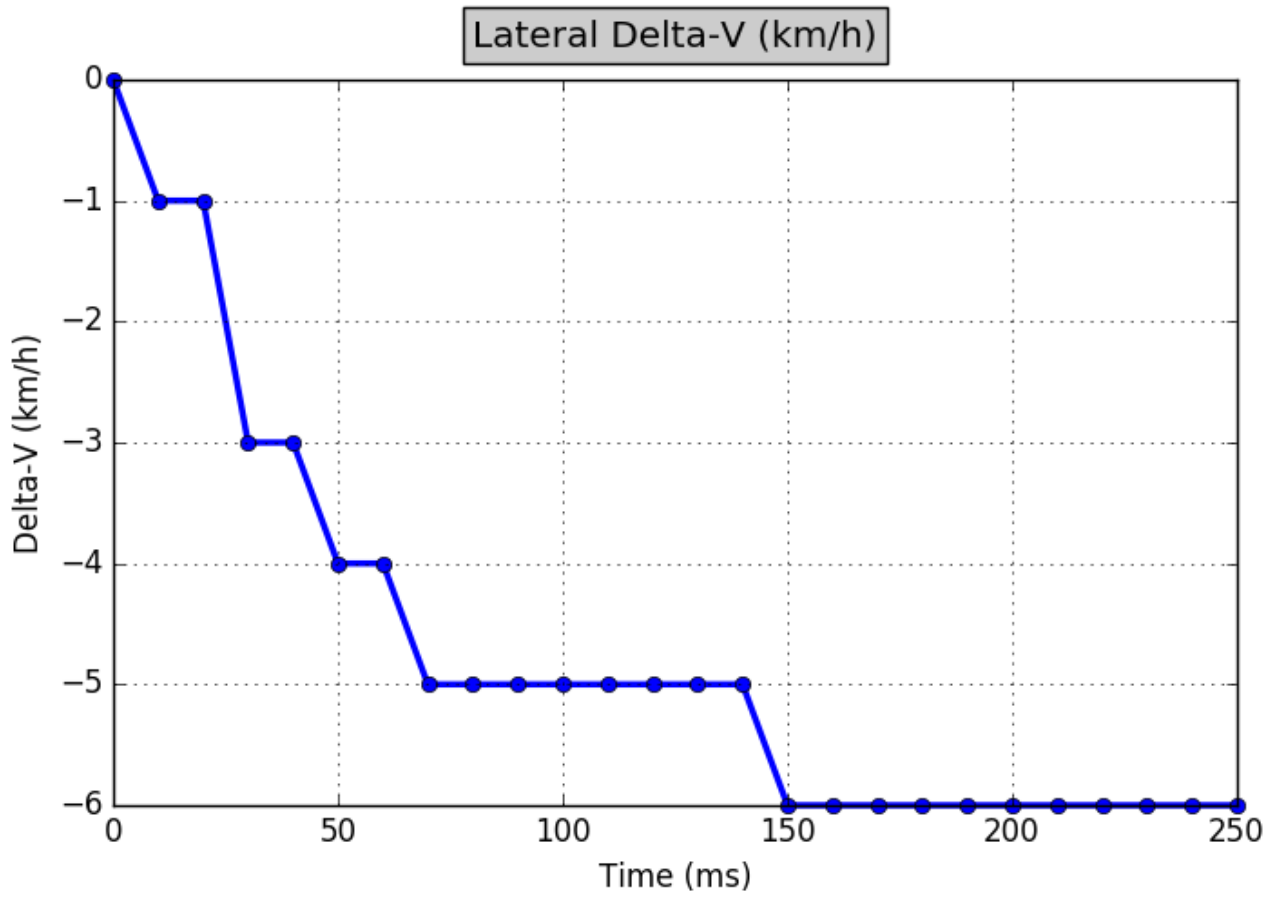
Time (s)	Yaw Rate (deg/s)	Time (s)	Yaw Rate (deg/s)	Time (s)	Yaw Rate (deg/s)
-5.0	2.6	-3.2	-5.1	-1.4	-12.8
-4.9	0.0	-3.1	-5.1	-1.3	-10.2
-4.8	0.0	-3.0	-5.1	-1.2	-5.1
-4.7	0.0	-2.9	-7.7	-1.1	0.0
-4.6	0.0	-2.8	-10.2	-1.0	7.7
-4.5	0.0	-2.7	-10.2	-0.9	7.7
-4.4	0.0	-2.6	-10.2	-0.8	0.0
-4.3	0.0	-2.5	-12.8	-0.7	-5.1
-4.2	0.0	-2.4	-10.2	-0.6	-10.2
-4.1	0.0	-2.3	-7.7	-0.5	-15.4
-4.0	0.0	-2.2	-5.1	-0.4	-17.9
-3.9	0.0	-2.1	-7.7	-0.3	-17.9
-3.8	0.0	-2.0	-12.8	-0.2	-17.9
-3.7	0.0	-1.9	-15.4	-0.1	-15.4
-3.6	-2.6	-1.8	-15.4	0.0	0.0
-3.5	-2.6	-1.7	-17.9		
-3.4	-2.6	-1.6	-20.5		
-3.3	-5.1	-1.5	-17.9		

Longitudinal Delta-V (Event 1)



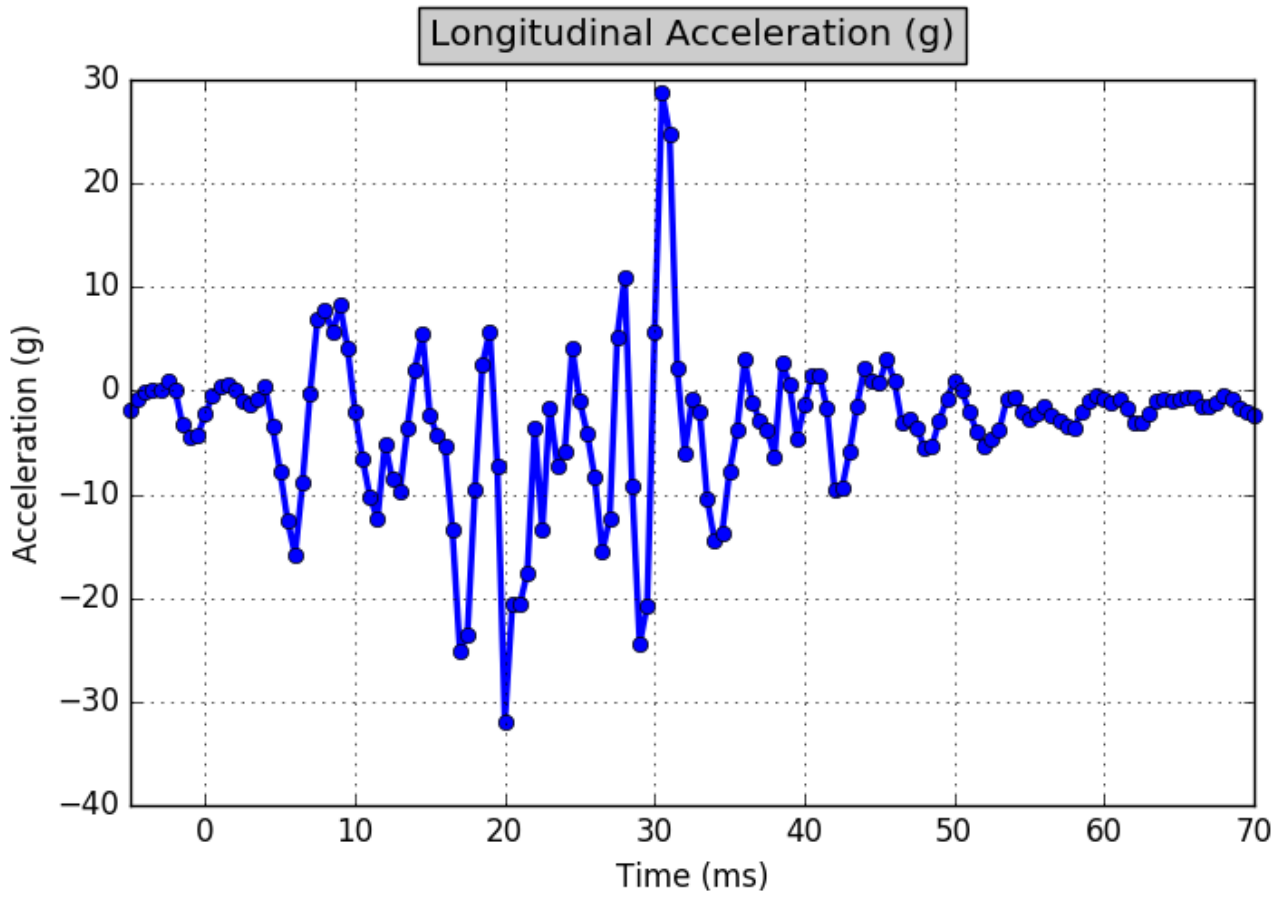
Time (ms)	Delta-V (km/h)	Time (ms)	Delta-V (km/h)
0	0	140	-9
10	0	150	-9
20	-3	160	-9
30	-6	170	-10
40	-6	180	-10
50	-7	190	-9
60	-7	200	-10
70	-8	210	-10
80	-8	220	-10
90	-8	230	-10
100	-9	240	-10
110	-9	250	-10
120	-9		
130	-9		

Lateral Delta-V (Event 1)



Time (ms)	Delta-V (km/h)	Time (ms)	Delta-V (km/h)
0	0	140	-5
10	-1	150	-6
20	-1	160	-6
30	-3	170	-6
40	-3	180	-6
50	-4	190	-6
60	-4	200	-6
70	-5	210	-6
80	-5	220	-6
90	-5	230	-6
100	-5	240	-6
110	-5	250	-6
120	-5		
130	-5		

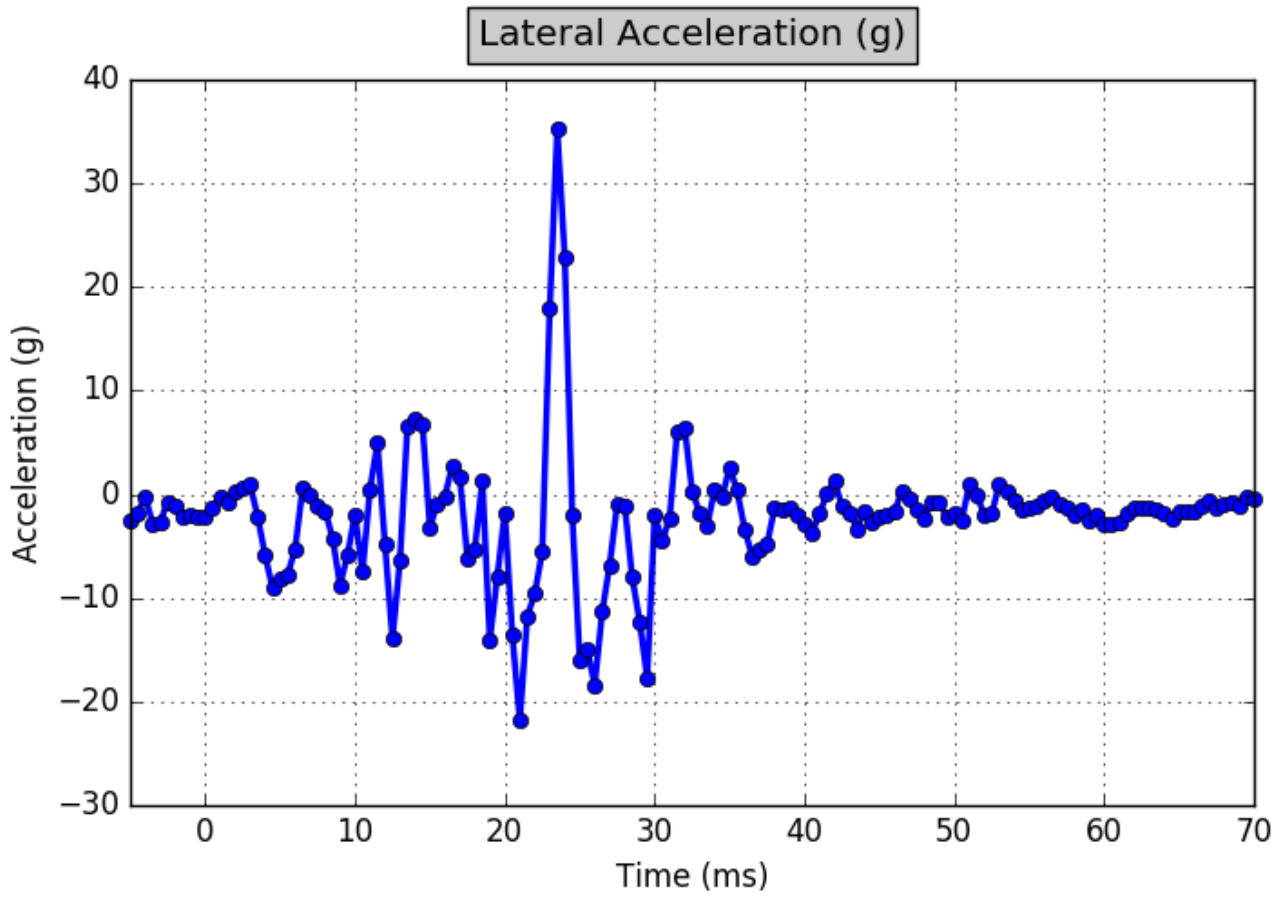
Longitudinal Acceleration (Event 1)



Longitudinal Acceleration Values (Event 1)

Time (ms)	Acceleration (g)	Time (ms)	Acceleration (g)	Time (ms)	Acceleration (g)
-5.0	-1.875	20.5	-20.625	46.0	0.875
-4.5	-0.75	21.0	-20.625	46.5	-3.125
-4.0	-0.125	21.5	-17.5625	47.0	-2.75
-3.5	0.0	22.0	-3.5625	47.5	-3.5625
-3.0	0.0	22.5	-13.4375	48.0	-5.5
-2.5	0.875	23.0	-1.625	48.5	-5.375
-2.0	0.0	23.5	-7.1875	49.0	-2.875
-1.5	-3.3125	24.0	-5.875	49.5	-0.8125
-1.0	-4.5	24.5	4.0625	50.0	0.9375
-0.5	-4.375	25.0	-1.0	50.5	0.0
0.0	-2.25	25.5	-4.125	51.0	-2.0625
0.5	-0.5	26.0	-8.375	51.5	-3.9375
1.0	0.375	26.5	-15.5625	52.0	-5.375
1.5	0.5625	27.0	-12.3125	52.5	-4.625
2.0	0.125	27.5	5.1875	53.0	-3.8125
2.5	-0.9375	28.0	11.0	53.5	-0.8125
3.0	-1.3125	28.5	-9.1875	54.0	-0.5625
3.5	-0.75	29.0	-24.4375	54.5	-2.0625
4.0	0.4375	29.5	-20.6875	55.0	-2.6875
4.5	-3.4375	30.0	5.75	55.5	-2.125
5.0	-7.75	30.5	28.75	56.0	-1.5
5.5	-12.5	31.0	24.75	56.5	-2.375
6.0	-15.8125	31.5	2.25	57.0	-2.8125
6.5	-8.875	32.0	-6.0	57.5	-3.375
7.0	-0.25	32.5	-0.875	58.0	-3.5625
7.5	6.9375	33.0	-1.9375	58.5	-2.0625
8.0	7.75	33.5	-10.375	59.0	-0.9375
8.5	5.625	34.0	-14.5	59.5	-0.4375
9.0	8.25	34.5	-13.75	60.0	-0.875
9.5	4.1875	35.0	-7.75	60.5	-1.0625
10.0	-2.0	35.5	-3.75	61.0	-0.875
10.5	-6.5625	36.0	3.0	61.5	-1.75
11.0	-10.25	36.5	-1.0625	62.0	-3.0625
11.5	-12.375	37.0	-2.8125	62.5	-3.0
12.0	-5.125	37.5	-3.75	63.0	-2.25
12.5	-8.5625	38.0	-6.3125	63.5	-1.0
13.0	-9.6875	38.5	2.6875	64.0	-0.875
13.5	-3.5625	39.0	0.625	64.5	-1.0
14.0	2.0625	39.5	-4.6875	65.0	-0.875
14.5	5.5625	40.0	-1.375	65.5	-0.625
15.0	-2.375	40.5	1.4375	66.0	-0.6875
15.5	-4.375	41.0	1.5	66.5	-1.5
16.0	-5.3125	41.5	-1.75	67.0	-1.5
16.5	-13.4375	42.0	-9.5	67.5	-1.125
17.0	-25.125	42.5	-9.4375	68.0	-0.4375
17.5	-23.625	43.0	-5.875	68.5	-0.875
18.0	-9.625	43.5	-1.4375	69.0	-1.625
18.5	2.5	44.0	2.25	69.5	-2.0
19.0	5.75	44.5	1.0	70.0	-2.4375
19.5	-7.3125	45.0	0.75		
20.0	-31.9375	45.5	3.125		

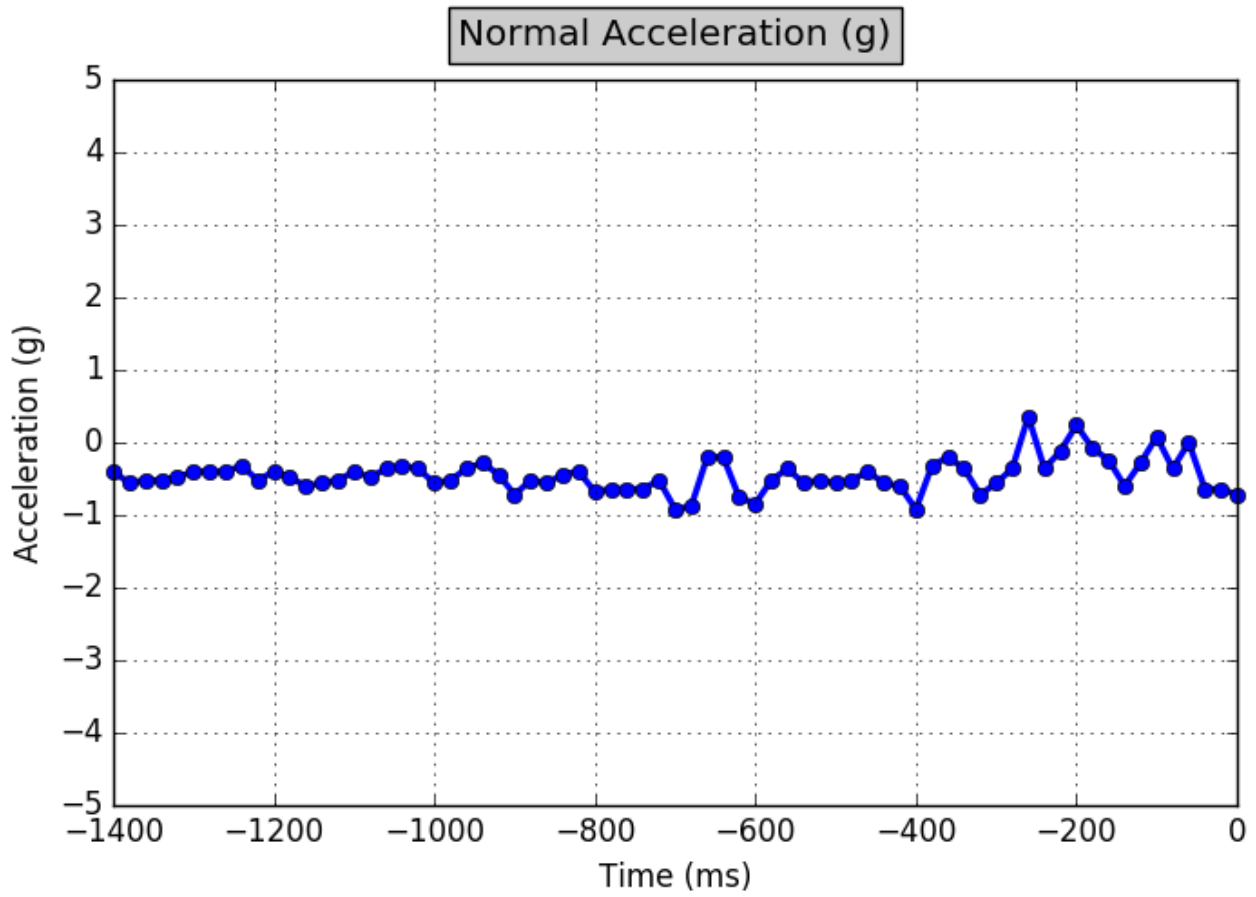
Lateral Acceleration (Event 1)



Lateral Acceleration Values (Event 1)

Time (ms)	Acceleration (g)	Time (ms)	Acceleration (g)	Time (ms)	Acceleration (g)
-5.0	-2.5625	20.5	-13.5625	46.0	-1.625
-4.5	-1.75	21.0	-21.8125	46.5	0.25
-4.0	-0.25	21.5	-11.75	47.0	-0.4375
-3.5	-2.8125	22.0	-9.5625	47.5	-1.4375
-3.0	-2.6875	22.5	-5.5	48.0	-2.3125
-2.5	-0.6875	23.0	17.9375	48.5	-0.6875
-2.0	-1.1875	23.5	35.25	49.0	-0.6875
-1.5	-2.25	24.0	22.875	49.5	-2.25
-1.0	-2.0	24.5	-2.0	50.0	-1.75
-0.5	-2.25	25.0	-15.9375	50.5	-2.4375
0.0	-2.125	25.5	-15.0	51.0	0.9375
0.5	-1.375	26.0	-18.375	51.5	-0.125
1.0	-0.1875	26.5	-11.3125	52.0	-1.9375
1.5	-0.6875	27.0	-6.8125	52.5	-1.875
2.0	0.25	27.5	-0.9375	53.0	1.0625
2.5	0.5625	28.0	-1.0625	53.5	0.25
3.0	0.9375	28.5	-8.0	54.0	-0.5625
3.5	-2.125	29.0	-12.25	54.5	-1.5
4.0	-5.875	29.5	-17.75	55.0	-1.375
4.5	-9.0625	30.0	-2.0625	55.5	-1.0625
5.0	-8.1875	30.5	-4.5	56.0	-0.5625
5.5	-7.75	31.0	-2.3125	56.5	-0.25
6.0	-5.3125	31.5	6.0	57.0	-0.875
6.5	0.5625	32.0	6.4375	57.5	-1.3125
7.0	-0.0625	32.5	0.3125	58.0	-1.9375
7.5	-1.1875	33.0	-1.75	58.5	-1.5
8.0	-1.5625	33.5	-3.0625	59.0	-2.4375
8.5	-4.1875	34.0	0.4375	59.5	-2.0
9.0	-8.75	34.5	-0.3125	60.0	-2.8125
9.5	-5.875	35.0	2.625	60.5	-2.9375
10.0	-1.9375	35.5	0.375	61.0	-2.6875
10.5	-7.5	36.0	-3.3125	61.5	-1.875
11.0	0.5	36.5	-5.9375	62.0	-1.375
11.5	4.9375	37.0	-5.375	62.5	-1.3125
12.0	-4.8125	37.5	-4.8125	63.0	-1.3125
12.5	-13.9375	38.0	-1.375	63.5	-1.5
13.0	-6.4375	38.5	-1.5	64.0	-1.75
13.5	6.625	39.0	-1.3125	64.5	-2.375
14.0	7.25	39.5	-2.0625	65.0	-1.5625
14.5	6.8125	40.0	-2.8125	65.5	-1.6875
15.0	-3.1875	40.5	-3.75	66.0	-1.5625
15.5	-0.875	41.0	-1.875	66.5	-1.0625
16.0	-0.1875	41.5	0.0625	67.0	-0.5625
16.5	2.8125	42.0	1.3125	67.5	-1.3125
17.0	1.625	42.5	-1.125	68.0	-1.0
17.5	-6.125	43.0	-1.75	68.5	-0.75
18.0	-5.25	43.5	-3.3125	69.0	-1.1875
18.5	1.3125	44.0	-1.625	69.5	-0.3125
19.0	-14.0625	44.5	-2.625	70.0	-0.5
19.5	-7.9375	45.0	-2.25		
20.0	-1.75	45.5	-1.9375		

Normal Acceleration (Event 1)



Normal Acceleration Values (Event 1)

Time (ms)	Acceleration (g)	Time (ms)	Acceleration (g)
-1400	-0.4	-680	-0.88
-1380	-0.56	-660	-0.2
-1360	-0.52	-640	-0.2
-1340	-0.52	-620	-0.76
-1320	-0.48	-600	-0.84
-1300	-0.4	-580	-0.52
-1280	-0.4	-560	-0.36
-1260	-0.4	-540	-0.56
-1240	-0.32	-520	-0.52
-1220	-0.52	-500	-0.56
-1200	-0.4	-480	-0.52
-1180	-0.48	-460	-0.4
-1160	-0.6	-440	-0.56
-1140	-0.56	-420	-0.6
-1120	-0.52	-400	-0.92
-1100	-0.4	-380	-0.32
-1080	-0.48	-360	-0.2
-1060	-0.36	-340	-0.36
-1040	-0.32	-320	-0.72
-1020	-0.36	-300	-0.56
-1000	-0.56	-280	-0.36
-980	-0.52	-260	0.36
-960	-0.36	-240	-0.36
-940	-0.28	-220	-0.12
-920	-0.44	-200	0.24
-900	-0.72	-180	-0.08
-880	-0.52	-160	-0.24
-860	-0.56	-140	-0.6
-840	-0.44	-120	-0.28
-820	-0.4	-100	0.08
-800	-0.68	-80	-0.36
-780	-0.64	-60	0.0
-760	-0.64	-40	-0.64
-740	-0.64	-20	-0.64
-720	-0.52	0	-0.72
-700	-0.92		

Serial Numbers

Not Available

5820 Continued

0532 FF
0560 FF
0588 FF
0616 FF
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