



**Automation and Data Summary Attachment 1 – Tesla EDR Report**

**Mountain View, CA**

**HWY18FH011**

(29 pages)

# EDR Report

File Information	Value
VIN	5YJXCAE2 [REDACTED]
Retrieval Date	2018/03/28 19:41:44 (UTC)
Retrieval User Comments	MX MM2
Retrieval Program Information	Tesla EDR Retrieval Program v17.32.1
EDR Report Information	Tesla EDR Reporting Service v18.10.1
Report Requested By	
Report Date	2018/03/28 20:04:47 (UTC)
Number Of Events	1
Time From Event 1 To 2 (seconds)	N/A
Ignition Cycle At Retrieval	1237

## Model X 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 X 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). Deployment events are always locked in memory and are never 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).

### Data Element Definitions

#### 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.

**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 Requested By**

Report Requested By is the name of the "My Tesla" user that generated the report using 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.

**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.

**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 X may record data associated with the second and third 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 and reported by the average of the four wheel speed signals. The minimum value for vehicle speed is 0 km/h and the maximum value greater than 200 km/h. The resolution of Vehicle Speed is to the nearest kilometer per hour.

#### 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 17,000 rpm (revolutions per minute). The resolution of Rear Motor Speed is to the nearest 1 rpm.

#### 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 0.1 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)	-92
Time To Maximum Delta-V, Longitudinal (ms)	275.0
Maximum Delta-V, Lateral (km/h)	-4
Time To Maximum Delta-V, Lateral (ms)	55.0
Time To Maximum Delta-V, Resultant (ms)	275.0
Ignition Cycle At Event	1236
Ignition Cycle Runtime (minutes)	29.7
Odometer At Event Time Zero (km)	9714.0
Airbag Warning Lamp Status	Off
ABS Warning Indicator Status	Off
Vehicle Drive Mode	Drive
Driver Safety Belt Status	Buckled
Passenger Safety Belt Status	Not Buckled
Occupant Classification Status In Front Passenger Seat	Empty
Driver Seat Track Position	Rearward
2nd Row Left Safety Belt Status	Not Buckled
2nd Row Left Seat Occupant	Not Occupied
2nd Row Center Safety Belt Status	Not Buckled
2nd Row Center Seat Occupant	Not Occupied
2nd Row Right Safety Belt Status	Buckled
2nd Row Right Seat Occupant	Not Occupied
3rd Row Left Safety Belt Status	Not Buckled
3rd Row Left Seat Occupant	Not Occupied
3rd Row Right Safety Belt Status	Not Buckled
3rd Row Right Seat Occupant	Not Occupied
Driver Airbag Deployment 2nd Stage Disposal	Yes
Right Front Passenger Airbag Deployment 2nd Stage Disposal	No
Complete File Recorded	Yes

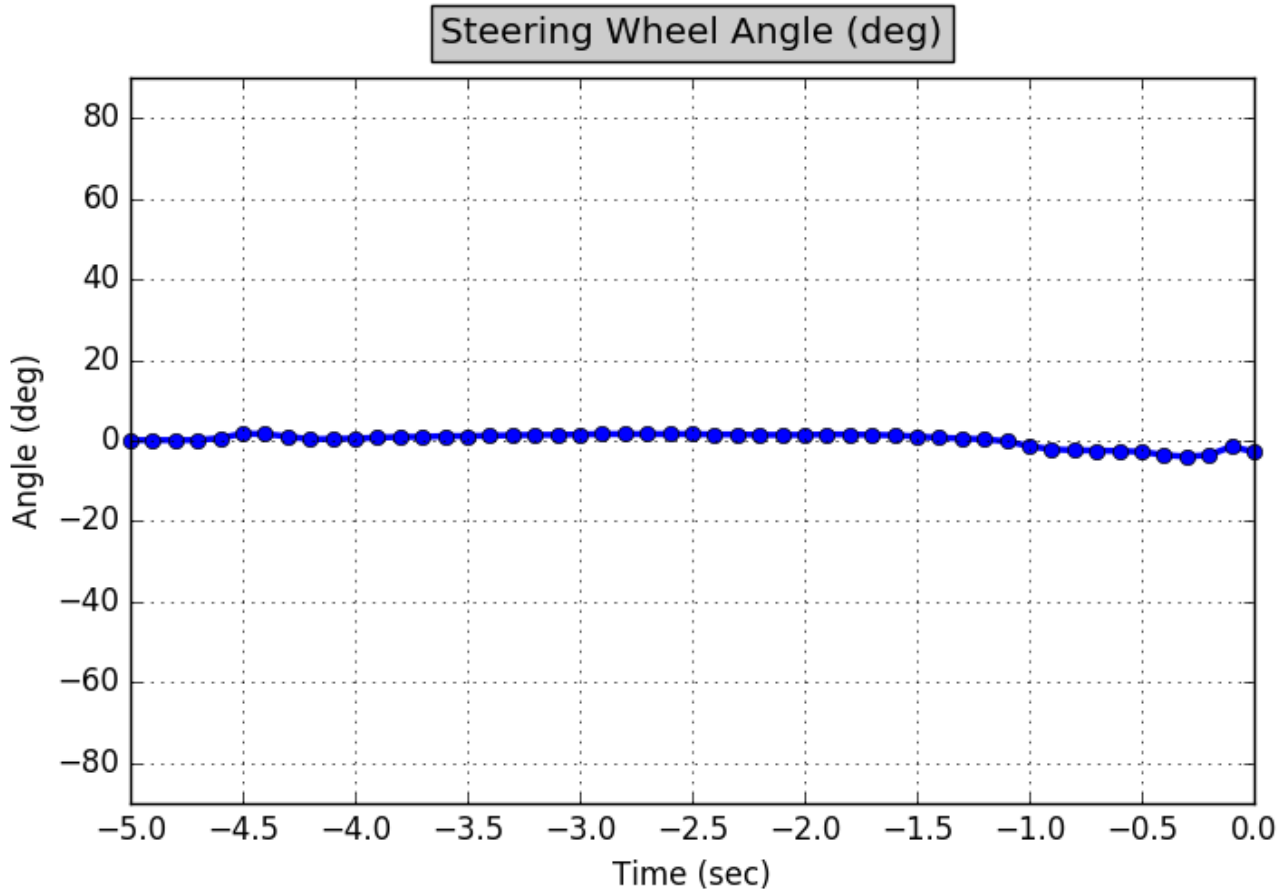
## Deployment Summary (Event 1)

Device	Status	Deployment Command Time (ms)
Driver Front Airbag Stage 1	Deployment Commanded	4
Driver Front Airbag Stage 2	Deployment Commanded	9
Driver Knee Airbag	Deployment Commanded	4
Driver Retractor Pretensioner	Deployment Commanded	4
Driver Lap Pretensioner	Deployment Commanded	9
Driver Switchable Load Limiter	Deployment Commanded	4
Driver Side Seat Airbag	Deployment Commanded	9
Passenger Front Airbag Stage 1	Deployment Not Commanded	
Passenger Front Airbag Stage 2	Deployment Not Commanded	
Passenger Active Vent	Deployment Not Commanded	
Passenger Knee Airbag	Deployment Commanded	4
Passenger Retractor Pretensioner	Deployment Not Commanded	
Passenger Lap Pretensioner	Deployment Not Commanded	
Passenger Switchable Load Limiter	Deployment Not Commanded	
Passenger Side Seat Airbag	Deployment Commanded	9
Inflatable Curtain Airbag Left	Deployment Commanded	9
Inflatable Curtain Airbag Right	Deployment Commanded	9
Second Row Retractor Pretensioner Left	Deployment Not Commanded	
Second Row Left Curtain Airbag	Deployment Commanded	9
Second Row Side Seat Airbag Left	Deployment Commanded	9
Second Row Retractor Pretensioner Right	Deployment Commanded	4
Second Row Right Curtain Airbag	Deployment Commanded	9
Second Row Side Seat Airbag Right	Deployment Commanded	9
HV Battery Disconnect	Deployment Commanded	4

Event Data (Event 1)

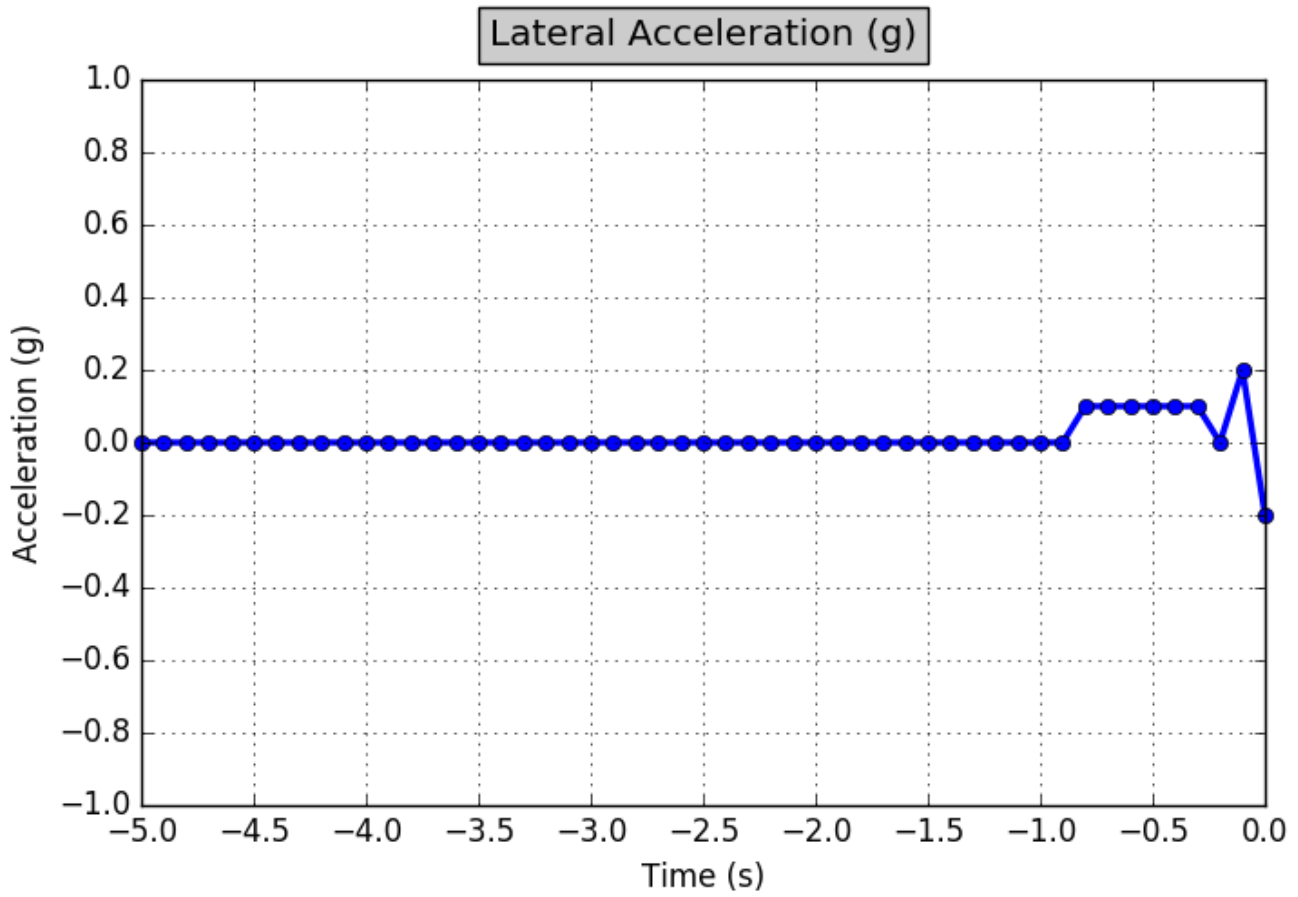
Time (sec)	Vehicle Speed (km/h)	Accelerator Pedal (%)	Rear Motor Speed (rpm)	Service Brake	Stability Control	ABS Activity
-5.0	102	0	6799	Off	On	Off
-4.5	101	0	6713	Off	On	Off
-4.0	100	0	6641	Off	On	Off
-3.5	100	0	6612	Off	On	Off
-3.0	100	0	6689	Off	On	Off
-2.5	101	0	6766	Off	On	Off
-2.0	104	0	6937	Off	On	Off
-1.5	107	0	7104	Off	On	Off
-1.0	109	0	7284	Off	On	Off
-0.5	112	0	7433	Off	On	Off
0.0	114	0	7584	Off	On	Off

Steering Wheel Angle (Event 1)



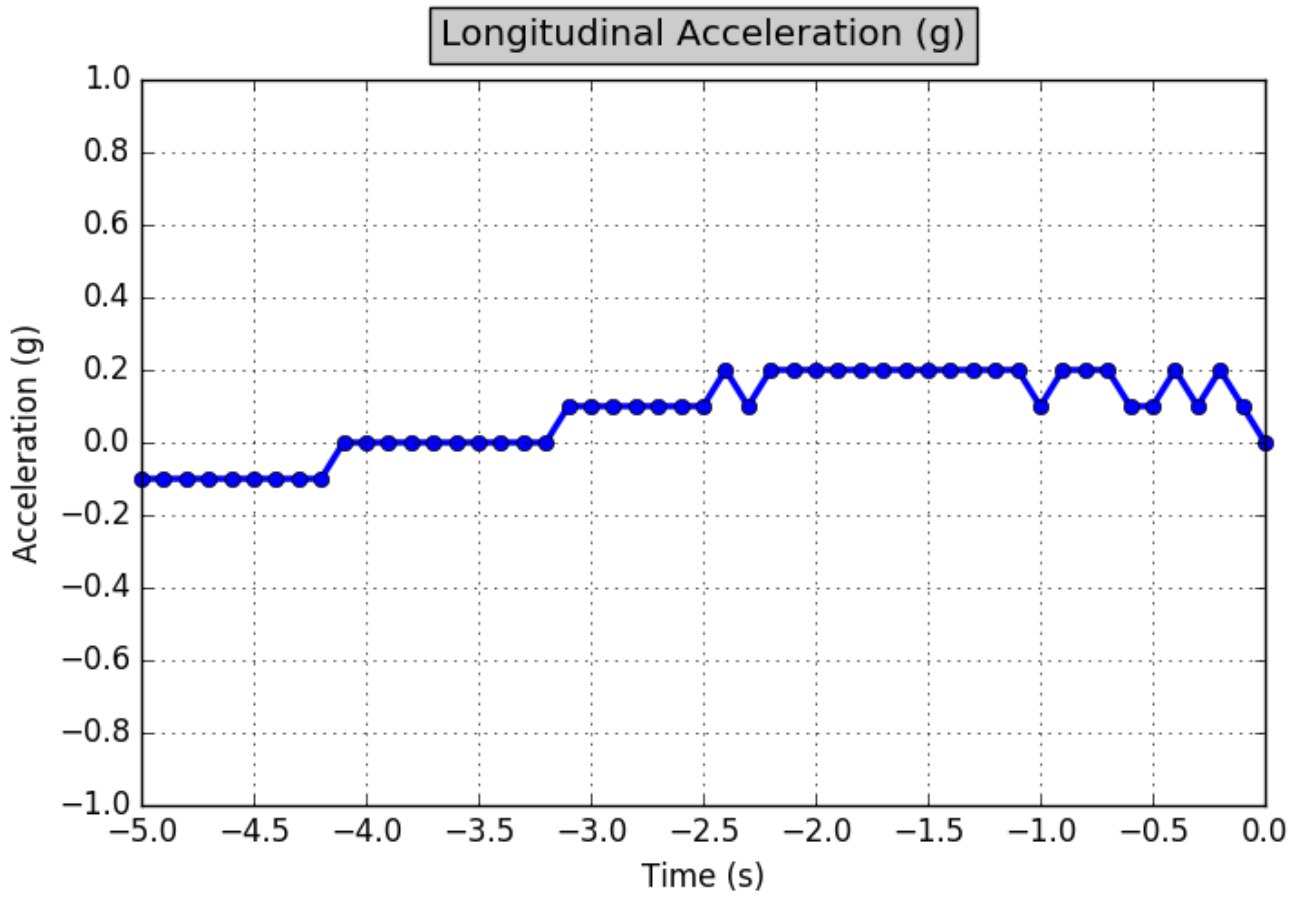
Time (sec)	Angle (deg)	Time (sec)	Angle (deg)	Time (sec)	Angle (deg)
-5.0	0.1	-3.2	1.4	-1.4	0.7
-4.9	0.1	-3.1	1.4	-1.3	0.5
-4.8	0.1	-3.0	1.5	-1.2	0.3
-4.7	0.1	-2.9	1.6	-1.1	-0.2
-4.6	0.6	-2.8	1.6	-1.0	-1.4
-4.5	1.7	-2.7	1.6	-0.9	-2.2
-4.4	1.6	-2.6	1.6	-0.8	-2.4
-4.3	1.0	-2.5	1.6	-0.7	-2.5
-4.2	0.3	-2.4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

Lateral Pre-Crash Acceleration (Event 1)



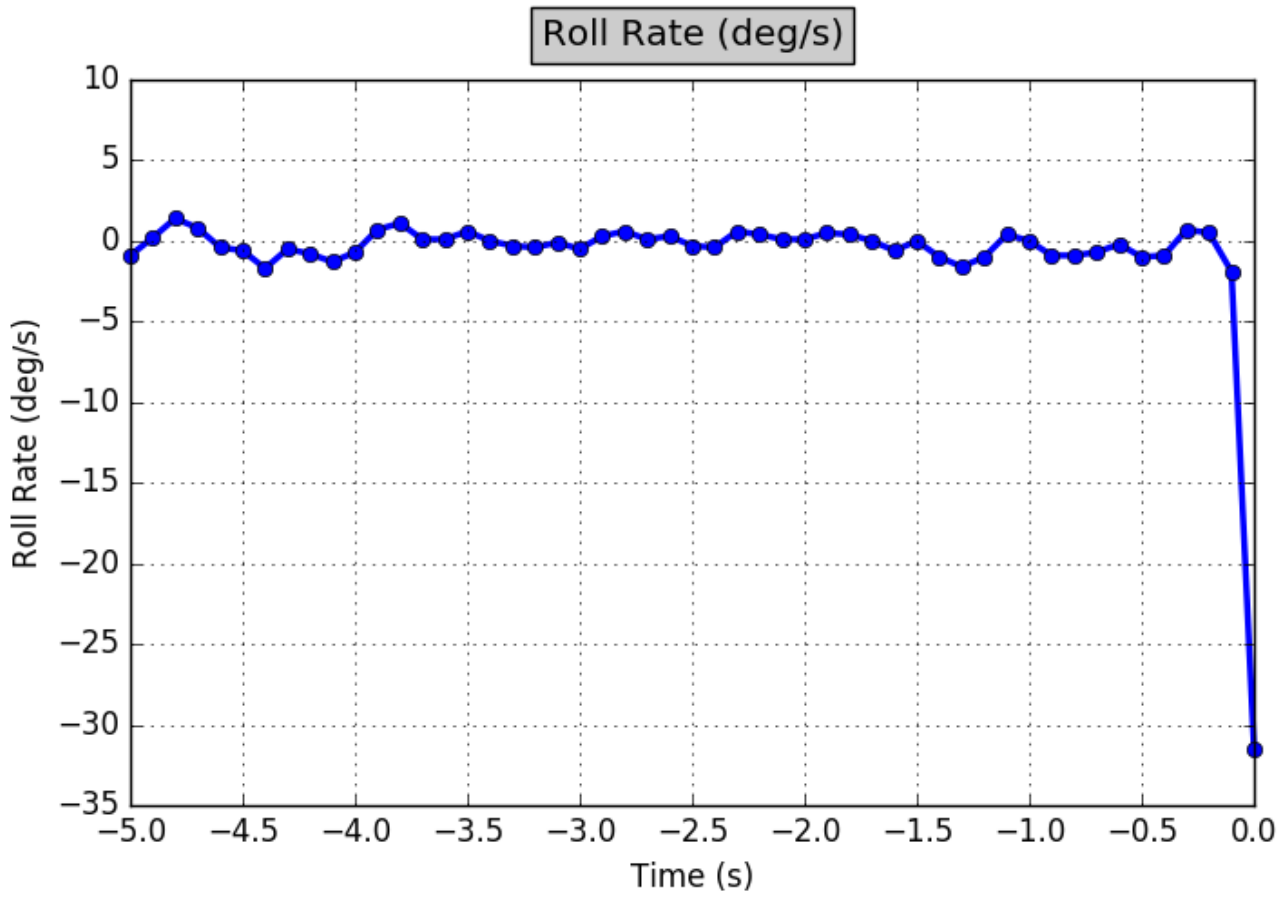
Time (s)	Acceleration (g)	Time (s)	Acceleration (g)	Time (s)	Acceleration (g)
-5.0	0.0	-3.2	0.0	-1.4	0.0
-4.9	0.0	-3.1	0.0	-1.3	0.0
-4.8	0.0	-3.0	0.0	-1.2	0.0
-4.7	0.0	-2.9	0.0	-1.1	0.0
-4.6	0.0	-2.8	0.0	-1.0	0.0
-4.5	0.0	-2.7	0.0	-0.9	0.0
-4.4	0.0	-2.6	0.0	-0.8	0.1
-4.3	0.0	-2.5	0.0	-0.7	0.1
-4.2	0.0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

Longitudinal Pre-Crash Acceleration (Event 1)



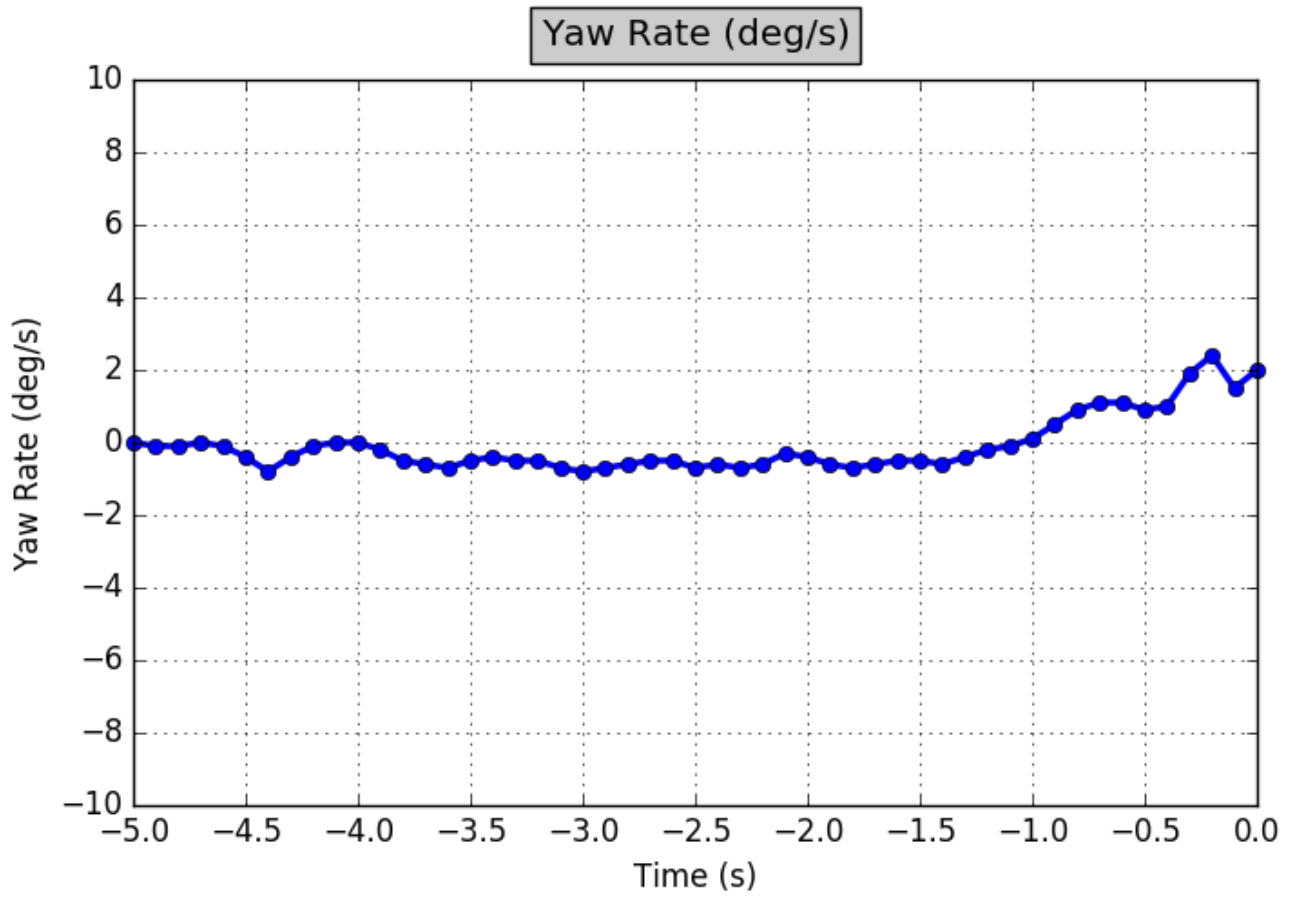
Time (s)	Acceleration (g)	Time (s)	Acceleration (g)	Time (s)	Acceleration (g)
-5.0	-0.1	-3.2	0.0	-1.4	0.2
-4.9	-0.1	-3.1	0.1	-1.3	0.2
-4.8	-0.1	-3.0	0.1	-1.2	0.2
-4.7	-0.1	-2.9	0.1	-1.1	0.2
-4.6	-0.1	-2.8	0.1	-1.0	0.1
-4.5	-0.1	-2.7	0.1	-0.9	0.2
-4.4	-0.1	-2.6	0.1	-0.8	0.2
-4.3	-0.1	-2.5	0.1	-0.7	0.2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

Roll Rate Pre-Crash Data (Event 1)



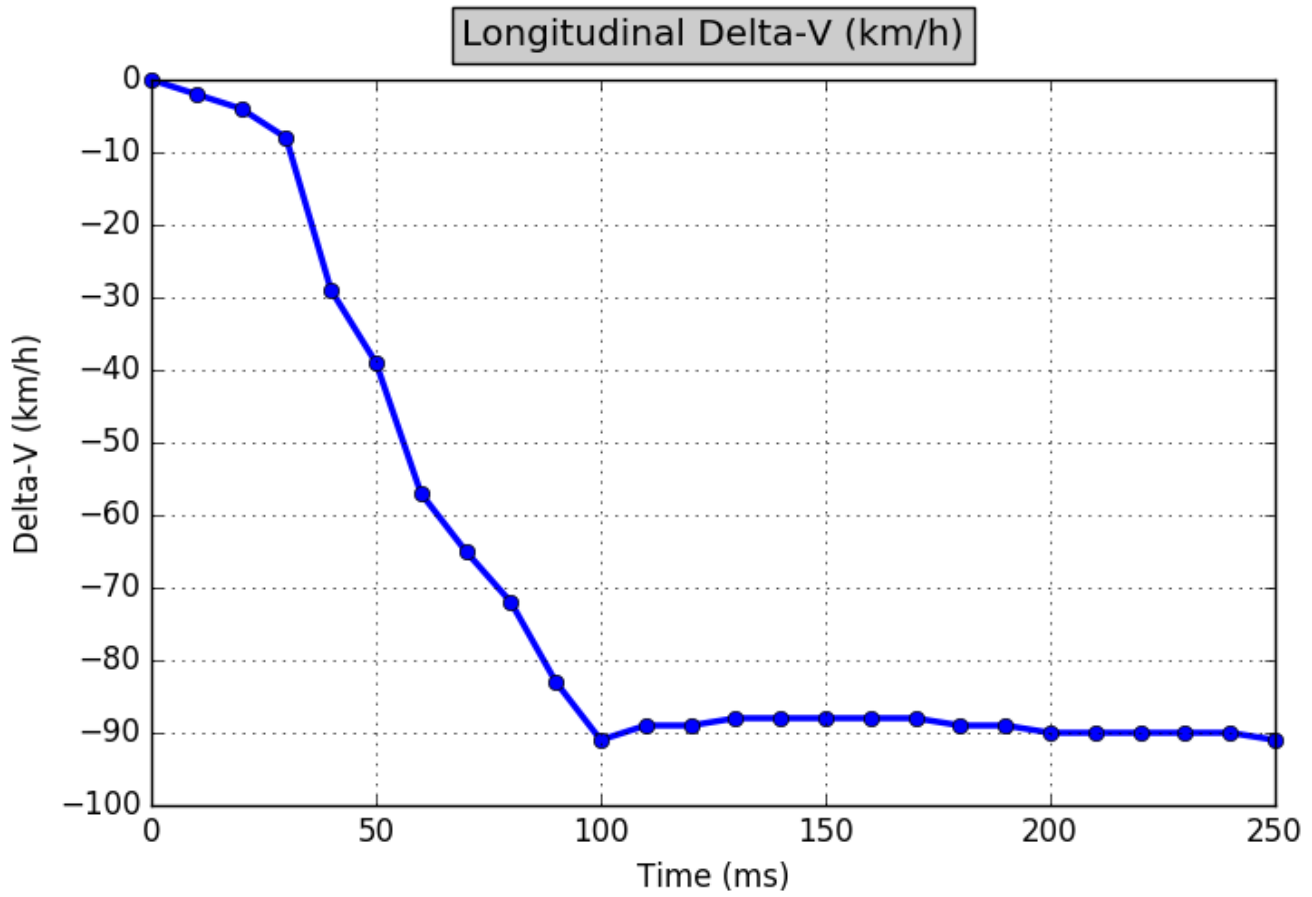
Time (s)	Roll Rate (deg/s)	Time (s)	Roll Rate (deg/s)	Time (s)	Roll Rate (deg/s)
-5.0	-0.9	-3.2	-0.4	-1.4	-1.0
-4.9	0.2	-3.1	-0.1	-1.3	-1.6
-4.8	1.4	-3.0	-0.5	-1.2	-1.0
-4.7	0.8	-2.9	0.3	-1.1	0.4
-4.6	-0.4	-2.8	0.6	-1.0	0.0
-4.5	-0.6	-2.7	0.1	-0.9	-0.9
-4.4	-1.7	-2.6	0.3	-0.8	-0.9
-4.3	-0.5	-2.5	-0.3	-0.7	-0.7
-4.2	-0.8	-2.4	-0.4	-0.6	-0.2
-4.1	-1.3	-2.3	0.6	-0.5	-1.0
-4.0	-0.7	-2.2	0.4	-0.4	-0.9
-3.9	0.7	-2.1	0.1	-0.3	0.7
-3.8	1.1	-2.0	0.1	-0.2	0.5
-3.7	0.1	-1.9	0.5	-0.1	-1.9
-3.6	0.1	-1.8	0.4	0.0	-31.5
-3.5	0.6	-1.7	0.0		
-3.4	0.0	-1.6	-0.6		
-3.3	-0.3	-1.5	0.0		

Yaw Rate Pre-Crash Data (Event 1)



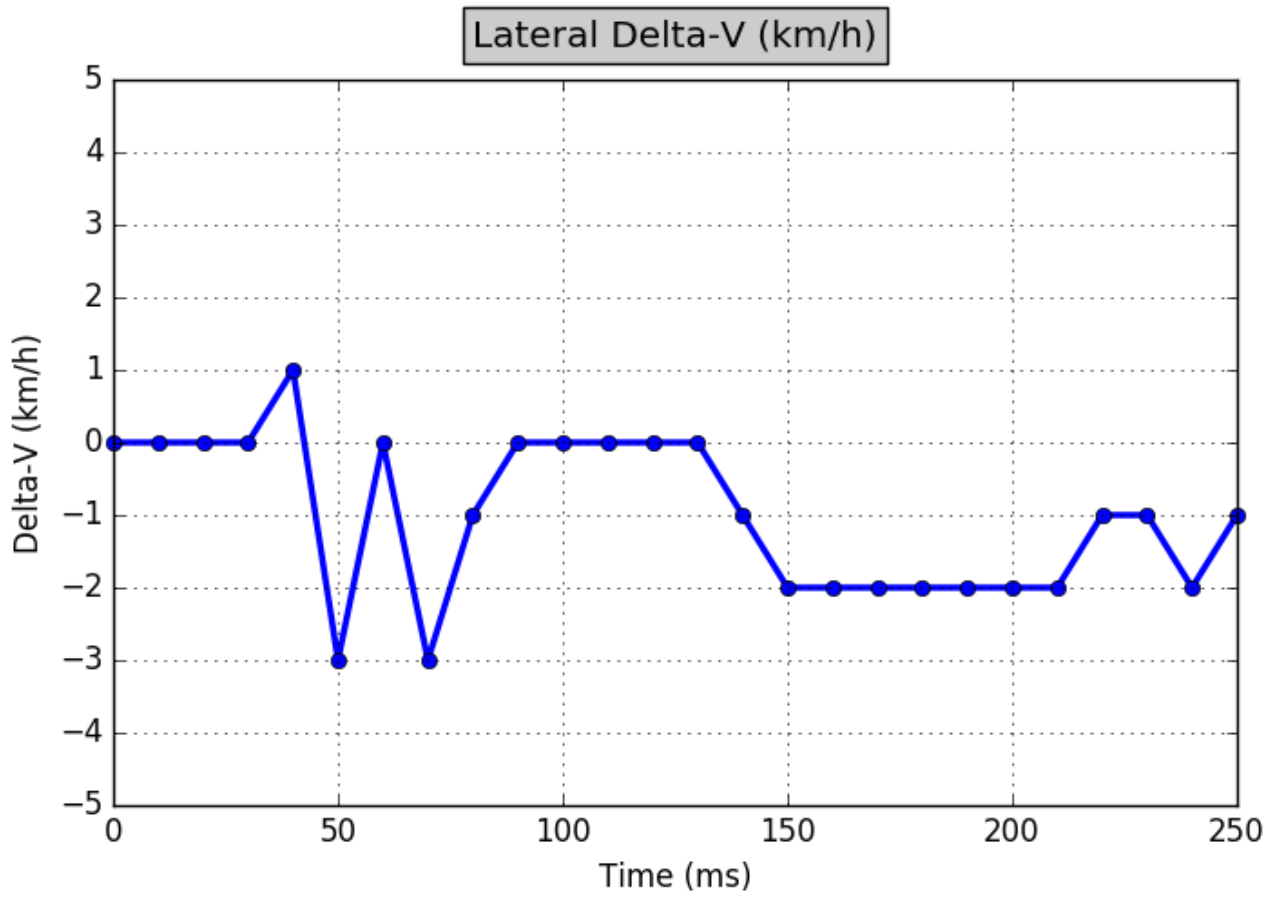
Time (s)	Yaw Rate (deg/s)	Time (s)	Yaw Rate (deg/s)	Time (s)	Yaw Rate (deg/s)
-5.0	0.0	-3.2	-0.5	-1.4	-0.6
-4.9	-0.1	-3.1	-0.7	-1.3	-0.4
-4.8	-0.1	-3.0	-0.8	-1.2	-0.2
-4.7	0.0	-2.9	-0.7	-1.1	-0.1
-4.6	-0.1	-2.8	-0.6	-1.0	0.1
-4.5	-0.4	-2.7	-0.5	-0.9	0.5
-4.4	-0.8	-2.6	-0.5	-0.8	0.9
-4.3	-0.4	-2.5	-0.7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

Longitudinal Delta-V (Event 1)



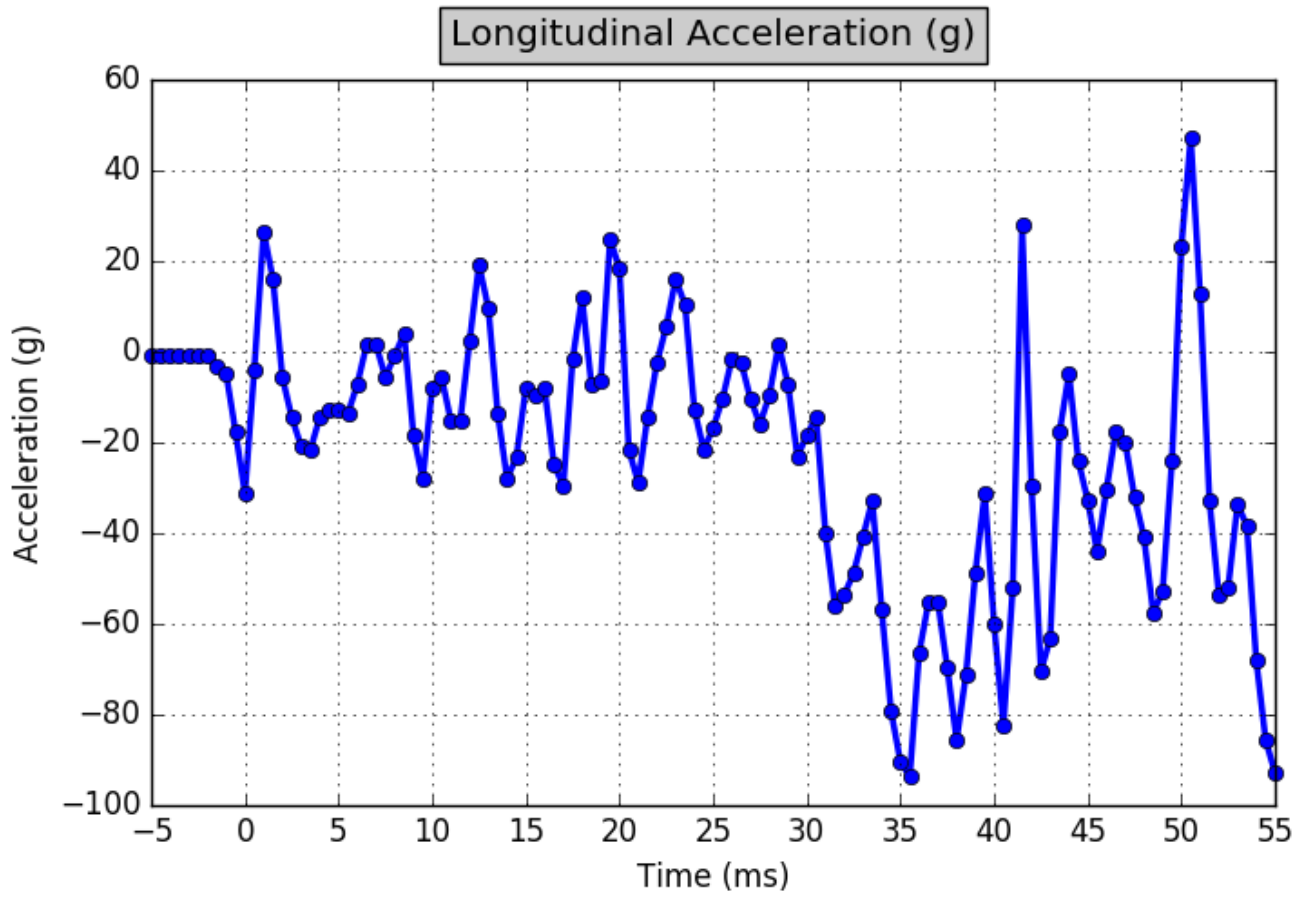
Time (ms)	Delta-V (km/h)	Time (ms)	Delta-V (km/h)
0	0	140	-88
10	-2	150	-88
20	-4	160	-88
30	-8	170	-88
40	-29	180	-89
50	-39	190	-89
60	-57	200	-90
70	-65	210	-90
80	-72	220	-90
90	-83	230	-90
100	-91	240	-90
110	-89	250	-91
120	-89		
130	-88		

Lateral Delta-V (Event 1)



Time (ms)	Delta-V (km/h)	Time (ms)	Delta-V (km/h)
0	0	140	-1
10	0	150	-2
20	0	160	-2
30	0	170	-2
40	1	180	-2
50	-3	190	-2
60	0	200	-2
70	-3	210	-2
80	-1	220	-1
90	0	230	-1
100	0	240	-2
110	0	250	-1
120	0		
130	0		

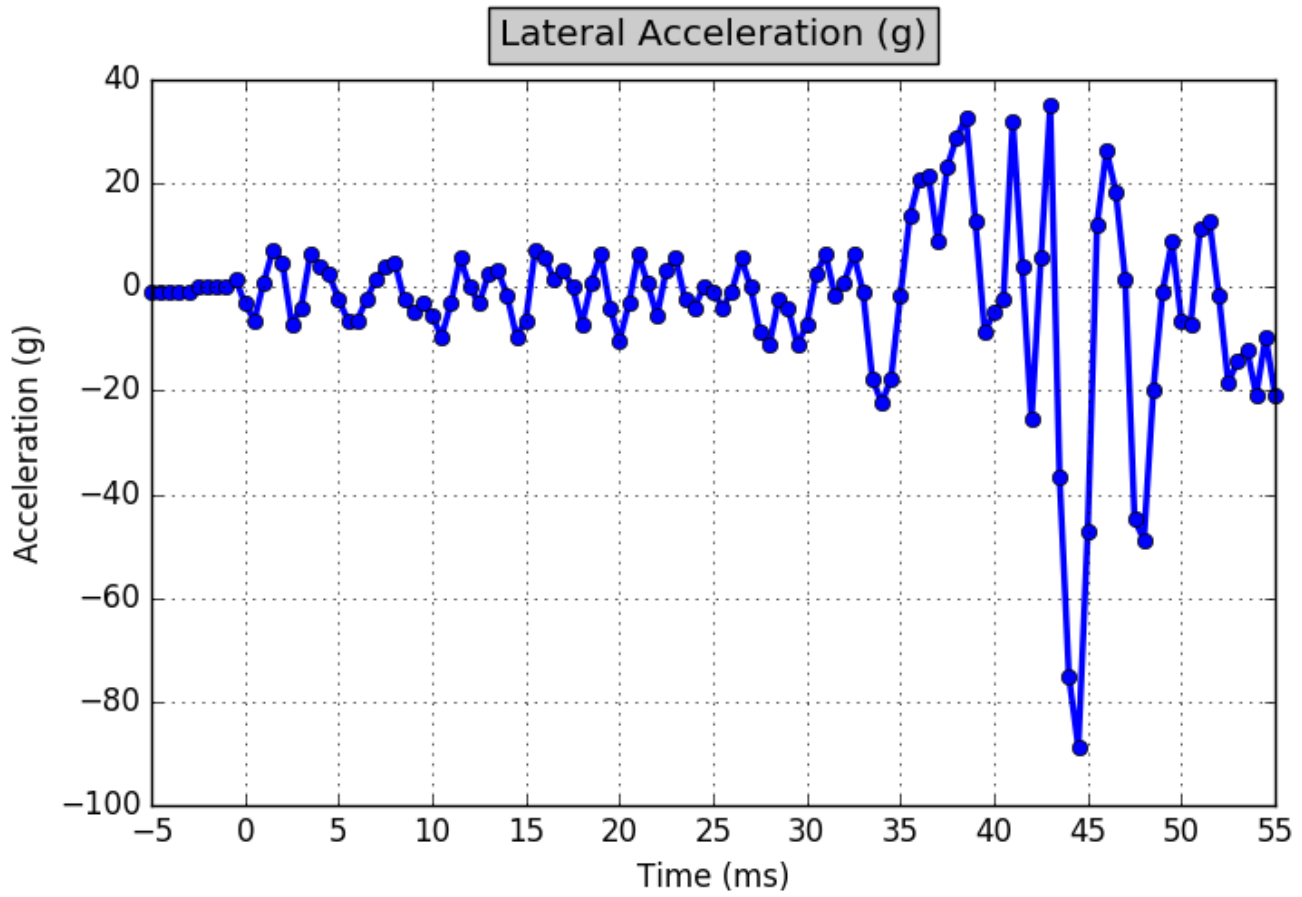
Longitudinal Acceleration (Event 1)



Longitudinal Acceleration Values (Event 1)

Time (ms)	Acceleration (g)	Time (ms)	Acceleration (g)
-5.0	-0.8	25.5	-10.4
-4.5	-0.8	26.0	-1.6
-4.0	-0.8	26.5	-2.4
-3.5	-0.8	27.0	-10.4
-3.0	-0.8	27.5	-16.0
-2.5	-0.8	28.0	-9.6
-2.0	-0.8	28.5	1.6
-1.5	-3.2	29.0	-7.2
-1.0	-4.8	29.5	-23.2
-0.5	-17.6	30.0	-18.4
0.0	-31.2	30.5	-14.4
0.5	-4.0	31.0	-40.0
1.0	26.4	31.5	-56.0
1.5	16.0	32.0	-53.6
2.0	-5.6	32.5	-48.8
2.5	-14.4	33.0	-40.8
3.0	-20.8	33.5	-32.8
3.5	-21.6	34.0	-56.8
4.0	-14.4	34.5	-79.2
4.5	-12.8	35.0	-90.4
5.0	-12.8	35.5	-93.6
5.5	-13.6	36.0	-66.4
6.0	-7.2	36.5	-55.2
6.5	1.6	37.0	-55.2
7.0	1.6	37.5	-69.6
7.5	-5.6	38.0	-85.6
8.0	-0.8	38.5	-71.2
8.5	4.0	39.0	-48.8
9.0	-18.4	39.5	-31.2
9.5	-28.0	40.0	-60.0
10.0	-8.0	40.5	-82.4
10.5	-5.6	41.0	-52.0
11.0	-15.2	41.5	28.0
11.5	-15.2	42.0	-29.6
12.0	2.4	42.5	-70.4
12.5	19.2	43.0	-63.2
13.0	9.6	43.5	-17.6
13.5	-13.6	44.0	-4.8
14.0	-28.0	44.5	-24.0
14.5	-23.2	45.0	-32.8
15.0	-8.0	45.5	-44.0
15.5	-9.6	46.0	-30.4
16.0	-8.0	46.5	-17.6
16.5	-24.8	47.0	-20.0
17.0	-29.6	47.5	-32.0
17.5	-1.6	48.0	-40.8
18.0	12.0	48.5	-57.6
18.5	-7.2	49.0	-52.8
19.0	-6.4	49.5	-24.0
19.5	24.8	50.0	23.2
20.0	18.4	50.5	47.2
20.5	-21.6	51.0	12.8
21.0	-28.8	51.5	-32.8
21.5	-14.4	52.0	-53.6
22.0	-2.4	52.5	-52.0
22.5	5.6	53.0	-33.6
23.0	16.0	53.5	-38.4
23.5	10.4	54.0	-68.0
24.0	-12.8	54.5	-85.6
24.5	-21.6	55.0	-92.8
25.0	-16.8		

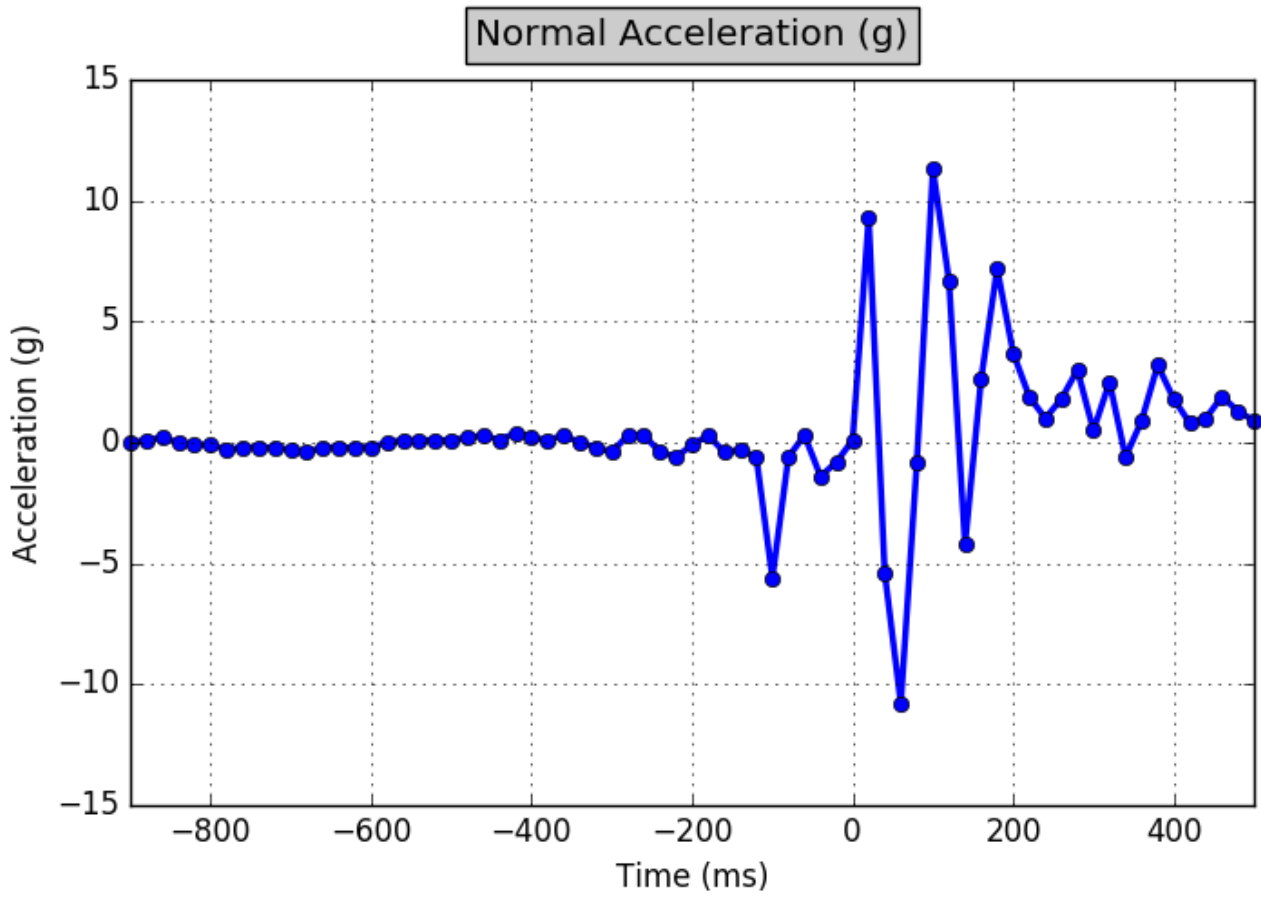
Lateral Acceleration (Event 1)



Lateral Acceleration Values (Event 1)

Time (ms)	Acceleration (g)	Time (ms)	Acceleration (g)
-5.0	-0.8	25.5	-4.0
-4.5	-0.8	26.0	-0.8
-4.0	-0.8	26.5	5.6
-3.5	-0.8	27.0	0.0
-3.0	-0.8	27.5	-8.8
-2.5	0.0	28.0	-11.2
-2.0	0.0	28.5	-2.4
-1.5	0.0	29.0	-4.0
-1.0	0.0	29.5	-11.2
-0.5	1.6	30.0	-7.2
0.0	-3.2	30.5	2.4
0.5	-6.4	31.0	6.4
1.0	0.8	31.5	-1.6
1.5	7.2	32.0	0.8
2.0	4.8	32.5	6.4
2.5	-7.2	33.0	-0.8
3.0	-4.0	33.5	-17.6
3.5	6.4	34.0	-22.4
4.0	4.0	34.5	-17.6
4.5	2.4	35.0	-1.6
5.0	-2.4	35.5	13.6
5.5	-6.4	36.0	20.8
6.0	-6.4	36.5	21.6
6.5	-2.4	37.0	8.8
7.0	1.6	37.5	23.2
7.5	4.0	38.0	28.8
8.0	4.8	38.5	32.8
8.5	-2.4	39.0	12.8
9.0	-4.8	39.5	-8.8
9.5	-3.2	40.0	-4.8
10.0	-5.6	40.5	-2.4
10.5	-9.6	41.0	32.0
11.0	-3.2	41.5	4.0
11.5	5.6	42.0	-25.6
12.0	0.0	42.5	5.6
12.5	-3.2	43.0	35.2
13.0	2.4	43.5	-36.8
13.5	3.2	44.0	-75.2
14.0	-1.6	44.5	-88.8
14.5	-9.6	45.0	-47.2
15.0	-6.4	45.5	12.0
15.5	7.2	46.0	26.4
16.0	5.6	46.5	18.4
16.5	1.6	47.0	1.6
17.0	3.2	47.5	-44.8
17.5	0.0	48.0	-48.8
18.0	-7.2	48.5	-20.0
18.5	0.8	49.0	-0.8
19.0	6.4	49.5	8.8
19.5	-4.0	50.0	-6.4
20.0	-10.4	50.5	-7.2
20.5	-3.2	51.0	11.2
21.0	6.4	51.5	12.8
21.5	0.8	52.0	-1.6
22.0	-5.6	52.5	-18.4
22.5	3.2	53.0	-14.4
23.0	5.6	53.5	-12.0
23.5	-2.4	54.0	-20.8
24.0	-4.0	54.5	-9.6
24.5	0.0	55.0	-20.8
25.0	-0.8		

Normal Acceleration (Event 1)



Normal Acceleration Values (Event 1)

Time (ms)	Acceleration (g)	Time (ms)	Acceleration (g)
-900	0.0	-180	0.3
-880	0.1	-160	-0.4
-860	0.2	-140	-0.3
-840	0.0	-120	-0.6
-820	-0.1	-100	-5.6
-800	-0.1	-80	-0.6
-780	-0.3	-60	0.3
-760	-0.2	-40	-1.4
-740	-0.2	-20	-0.8
-720	-0.2	0	0.1
-700	-0.3	20	9.3
-680	-0.4	40	-5.4
-660	-0.2	60	-10.8
-640	-0.2	80	-0.8
-620	-0.2	100	11.3
-600	-0.2	120	6.7
-580	0.0	140	-4.2
-560	0.1	160	2.6
-540	0.1	180	7.2
-520	0.1	200	3.7
-500	0.1	220	1.9
-480	0.2	240	1.0
-460	0.3	260	1.8
-440	0.1	280	3.0
-420	0.4	300	0.5
-400	0.2	320	2.5
-380	0.1	340	-0.6
-360	0.3	360	0.9
-340	0.0	380	3.2
-320	-0.2	400	1.8
-300	-0.4	420	0.8
-280	0.3	440	1.0
-260	0.3	460	1.9
-240	-0.4	480	1.3
-220	-0.6	500	0.9
-200	-0.1		

## Serial Numbers

Sensor Number	Sensor Type	Serial Number
1	RCM Serial Number	11AA09786000
2	Left Front Crash Sensor	C927C143191A
3	Right Front Crash Sensor	C92864455D1A
4	Left Side Impact Crash Sensor (B-Pillar)	B126B8783840
5	Right Side Impact Crash Sensor (B-Pillar)	A5270C095311
6	Left Side Impact Crash Sensor (C-Pillar)	9D26B878271E
7	Right Side Impact Crash Sensor (C-Pillar)	A5270C09521D
8	Left Side Impact Crash Sensor (D-Pillar)	B32635164420
9	Left Side Door Pressure Sensor	9D22CA582129
10	Right Side Door Pressure Sensor	C11FD752210C

Hexadecimal Data

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OF07      73 18 33 DC
OF04      6C 3C 8B 70
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F014      31 30 33 36 37 36 37 2D 30 30 2D 41 FF FF FF FF FF FF FF FF
F190      35 59 4A 58 43 41 45 32 38 48 46 30 36 30 33 30 35
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5818
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5818 Continued

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5817

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