

# FT30 – Advanced Driver Assistance Systems

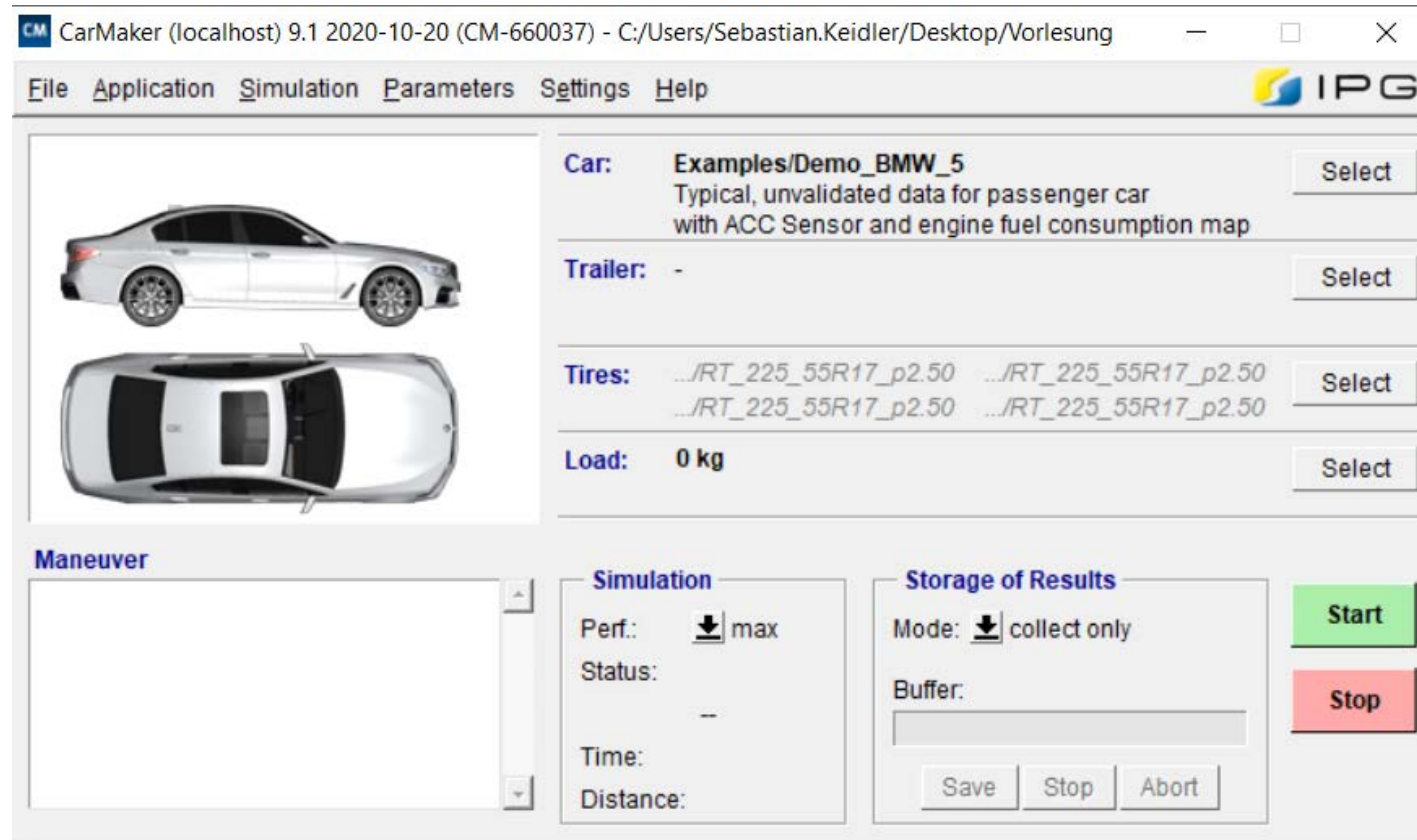
ADAS/AD for Lateral Guidance

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## Setup CarMaker

1. Setup car
2. Import road data
3. Configurate road and camera sensor
4. Define maneuver
5. Evaluate Data

## Select a Car



## Import kempton\_A7\_20190915\_v1-0\_SK.rd5

Parameters > Scenario / Road

The screenshot displays the CarMaker Scenario Editor interface. The main window shows a 3D perspective view of a road with a curve. The left sidebar contains various toolbars: 'Tools' (with icons for selection, deletion, and creation), 'Road' (with icons for road types), 'Accessories' (with icons for traffic lights, signs, etc.), 'Scenery' (with icons for buildings, trees, etc.), and 'Traffic' (with icons for vehicles). The 'Parameters' tab is selected, showing a list of parameters for the scenario. The 'Vehicle start position' section includes fields for 'Longitudinal offset' (10000 m), 'Lateral offset' (0 m), 'Orientation' (0 deg), and 'Active Route' (Route\_A7\_N\_Lai). The 'Localized Settings' section includes 'Country' (Germany), 'Country (Fallback)' (Germany), 'Driving side' (Right-hand traffic), and 'Speed limit definitions' (Urban road: 100 km/h, Country road: 100 km/h, Motorway: 300 km/h, Roundabout: 50 km/h, Ramp: 19.444444 km/h, Dirt-track: 13.888888 km/h, User defined: -1 km/h). The 'Unit' is set to km/h.

CarMaker (localhost) 9.1 2020-10-20 (CM-660037) - C:/Users/Sebastian.Keidler/Desktop/Vorl

File Application Simulation **Parameters** Settings Help

**Car:** Examples/Demo\_BMW\_5  
Typical, unvalidated data for passenger car with ACC Sensor and engine fuel

**Trailer:** -

**Tires:** ..JRT\_225\_55R17\_p2.50 ..JRT\_225\_55R17\_p2.50 ..JRT\_225\_55R17\_p2.50

**Load:** 0 kg

**Simulation**

Perf.: max  
Status: --  
Time: --  
Distance: --

**Storage of Results**

Mode: coll  
Buffer: --  
Save

**Localized Settings**

Country: Germany  
Country (Fallback): Germany  
Driving side: Right-hand traffic

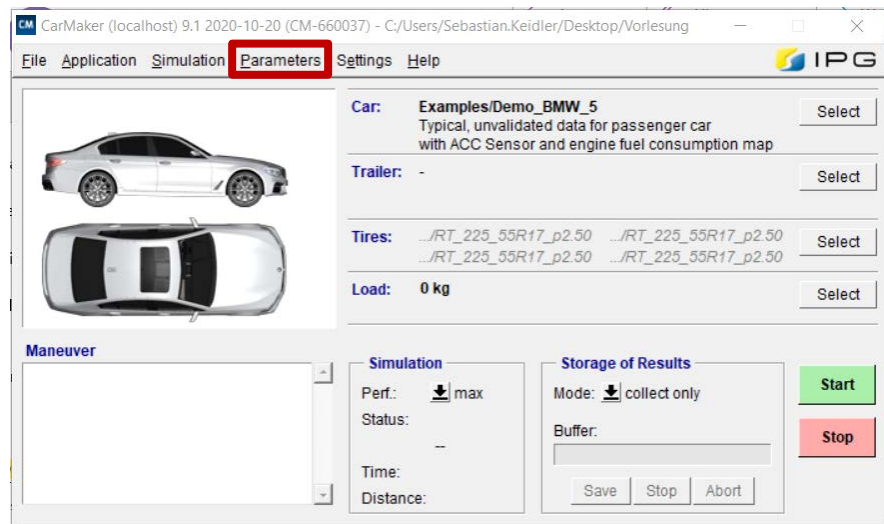
**Speed limit definitions**

|              |        |           |
|--------------|--------|-----------|
| Urban road   | [km/h] | 100       |
| Country road | [km/h] | 100       |
| Motorway     | [km/h] | 300       |
| Roundabout   | [km/h] | 50        |
| Ramp         | [km/h] | 19.444444 |
| Dirt-track   | [km/h] | 13.888888 |
| User defined | [km/h] | -1        |
| Unit         |        | km/h      |

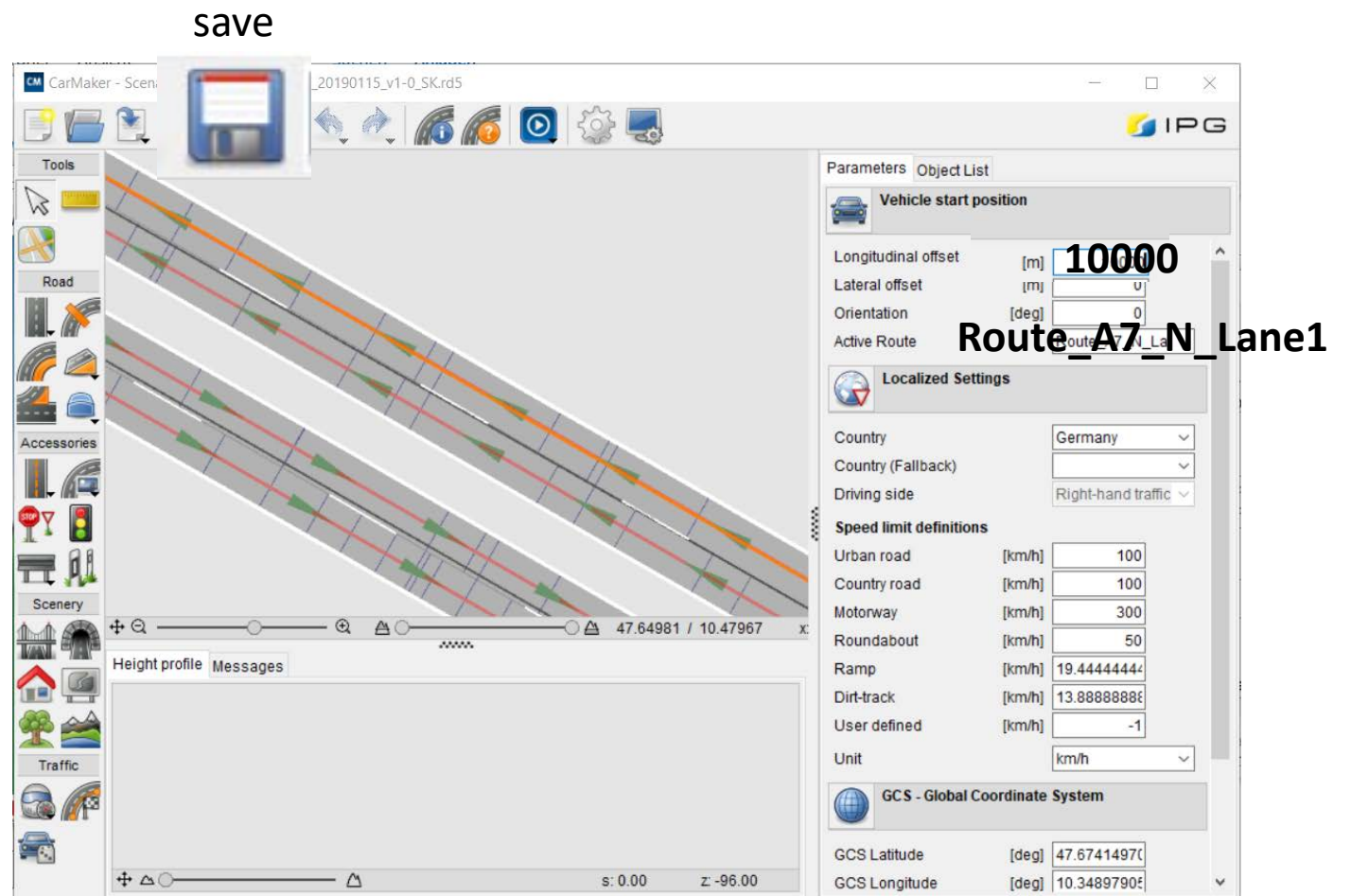
kempton\_A7\_20190915\_v1-0\_SK.rd5

## Select Active Route in Scenario Editor

Parameters > Scenario / Road

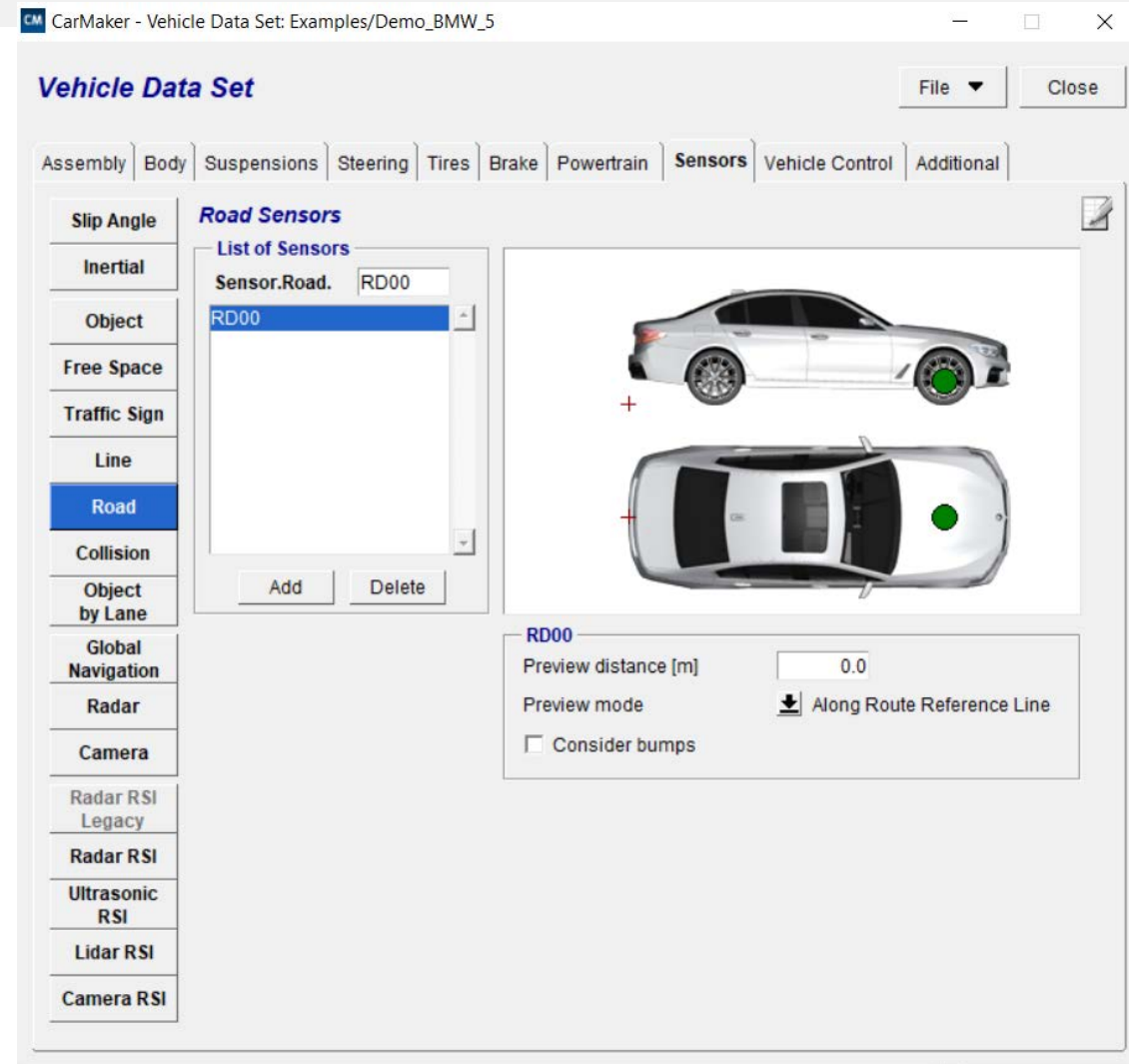
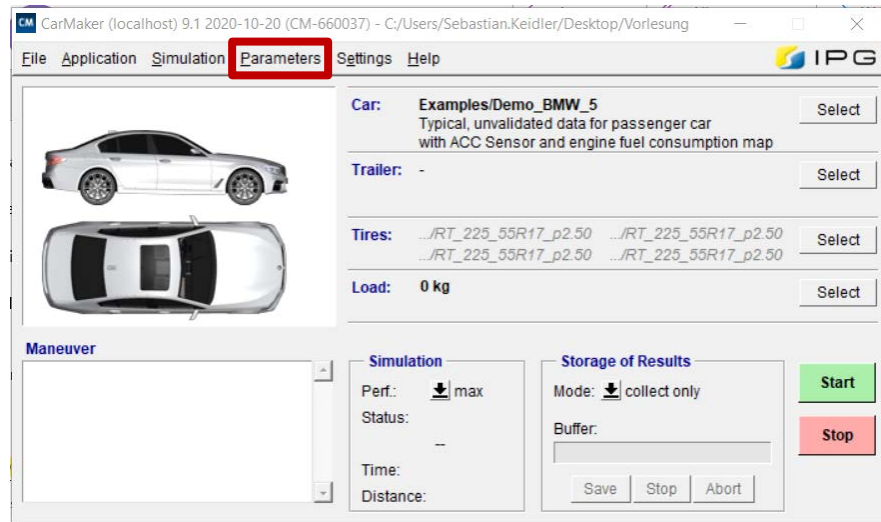


Longitudinal offset [m] 10000  
Active route: Route\_A7\_N\_Lane1  
save



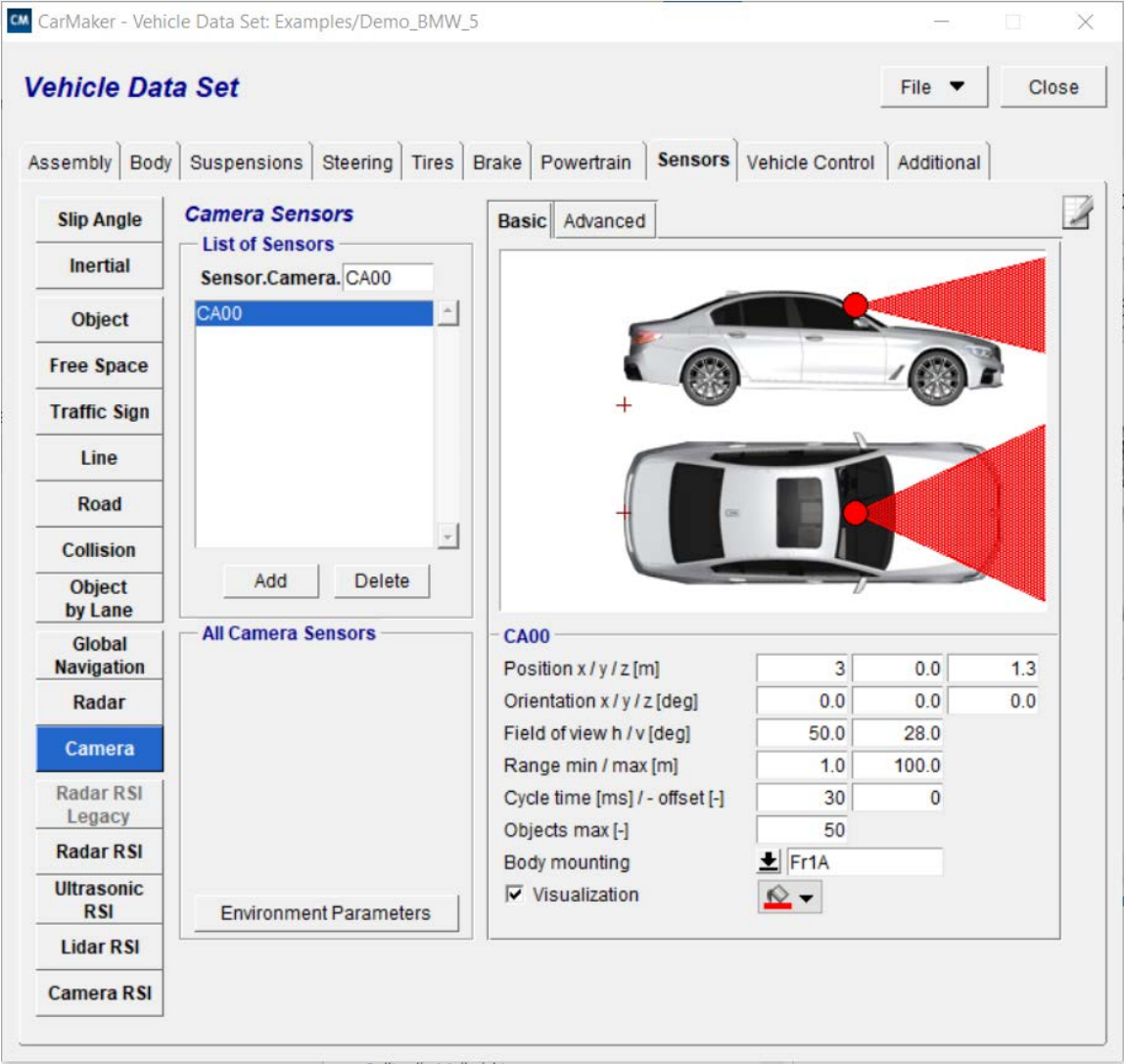
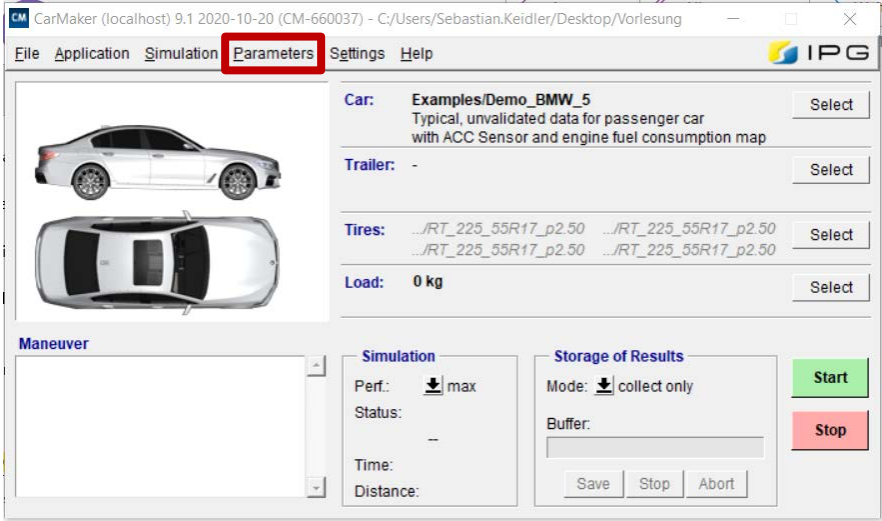
## Configure Road Sensor

Parameters > Car



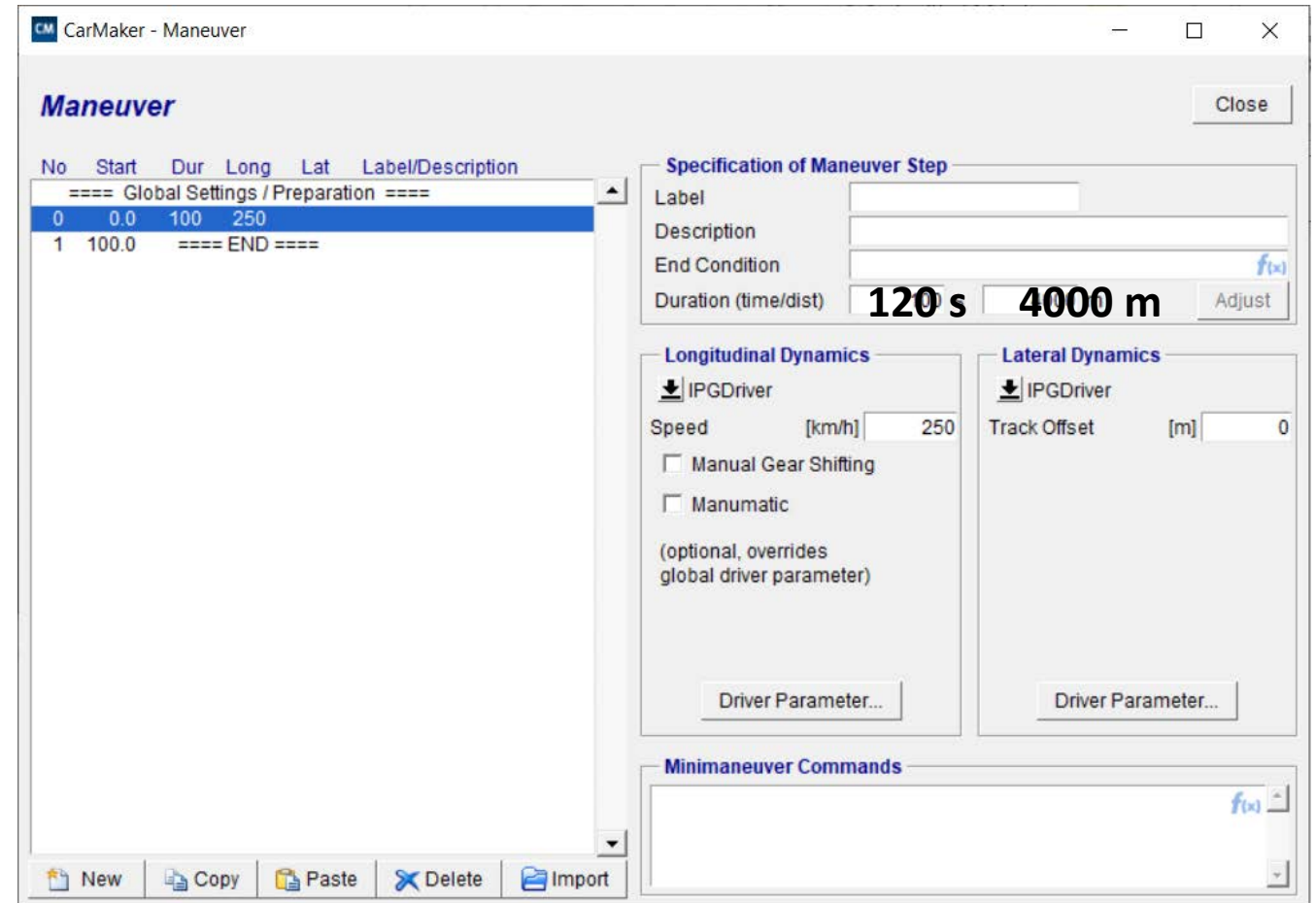
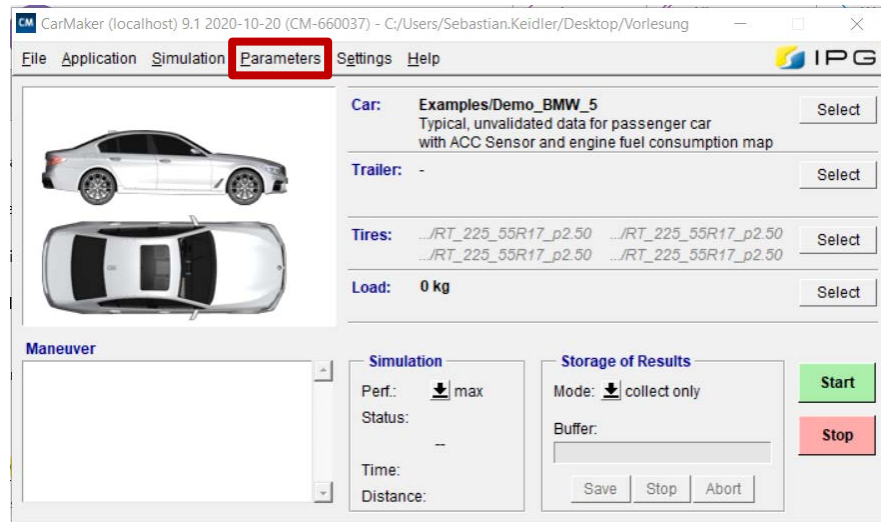
## Configure Road Sensor

Parameters > Car



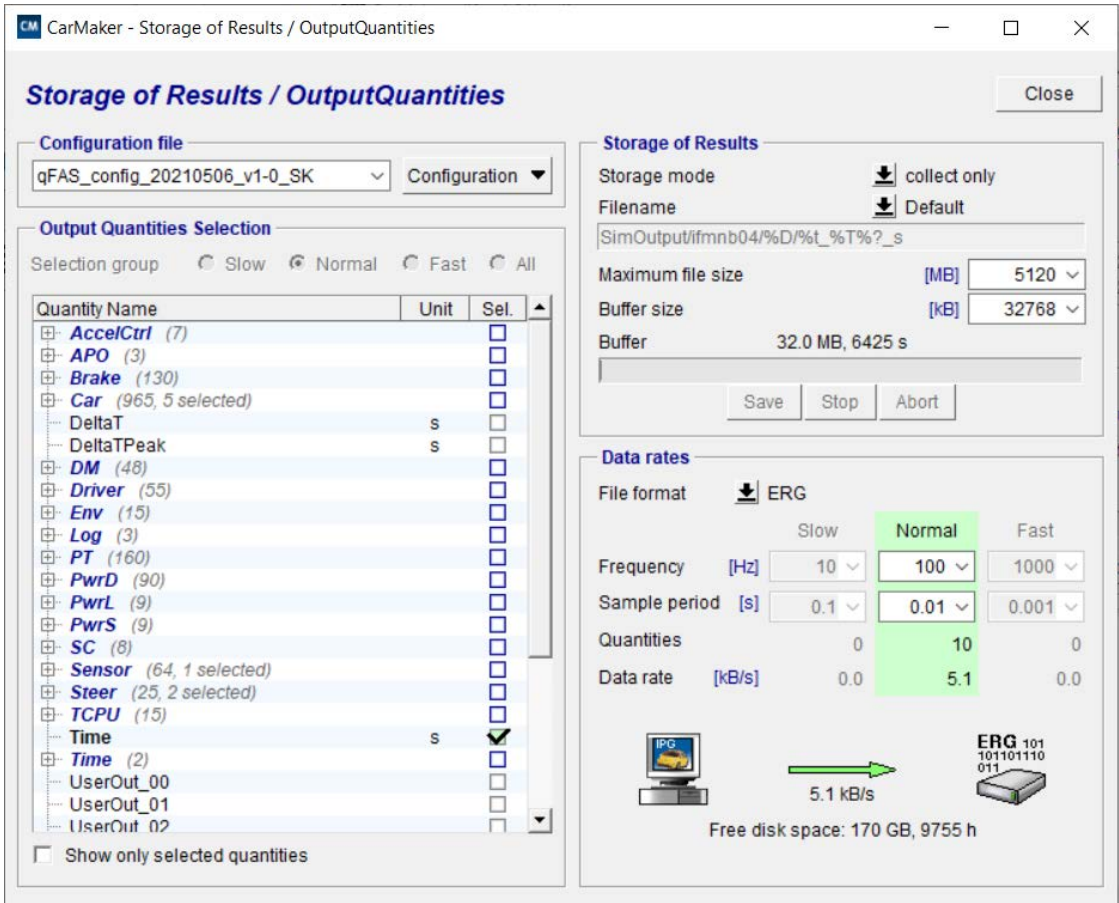
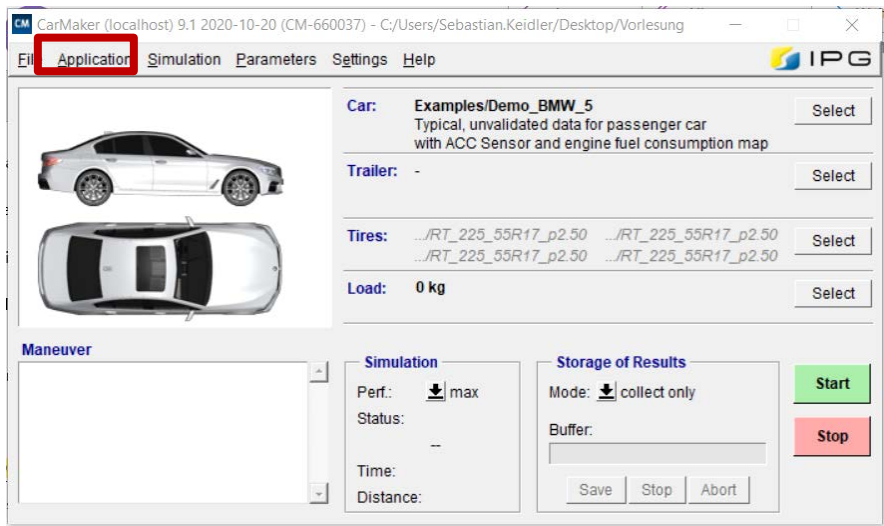
## Define Maneuver

Parameters > Maneuver



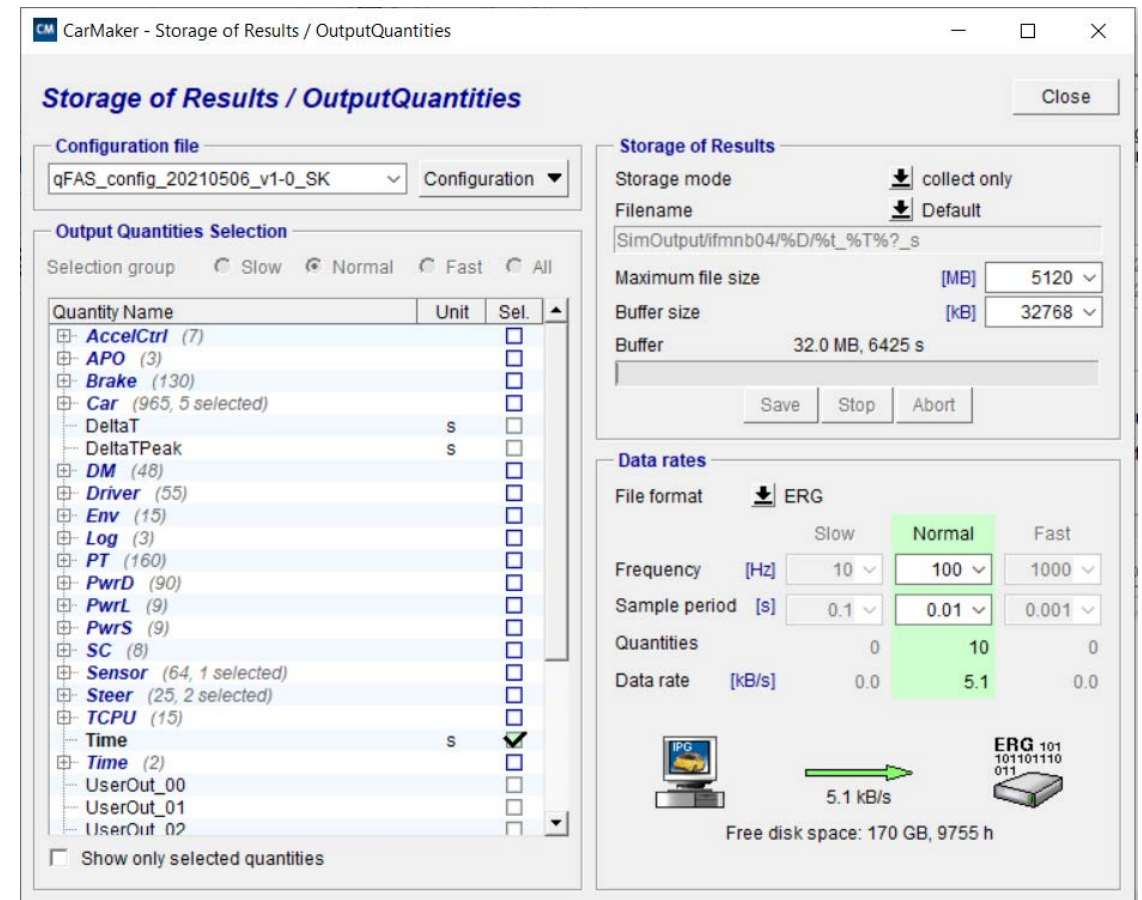
Load configuration file qFAS\_config\_20210506\_v1-0\_SK

Application > OutputQuantities



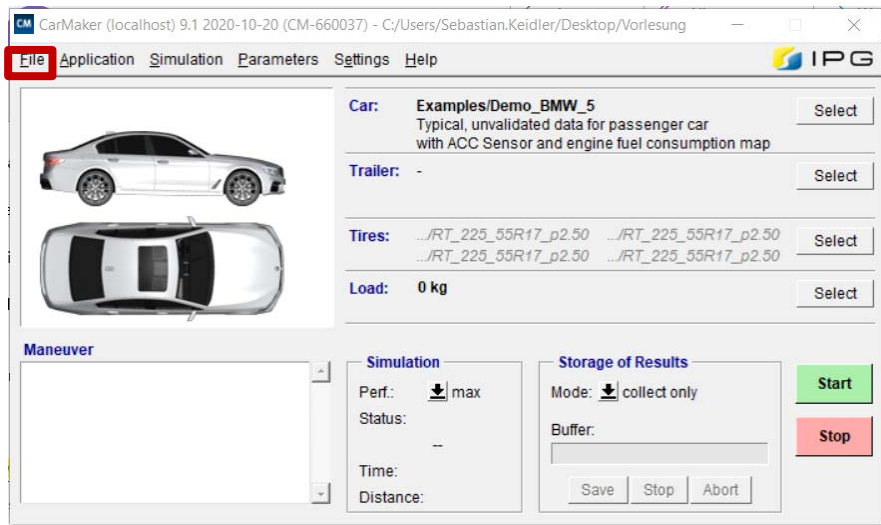
## Select this channels

1. Data.Time.data
2. Data.Car.Distance.data
3. Data.Steer.WhlTrq.data
4. Data.Car.YawRate.data
5. Data.Car.ay.data
6. Data.Car.Road.Path.DevDist.data
7. Data.Car.v.data
8. Data.Sensor.Road.RD00.Route.CurveXY.data

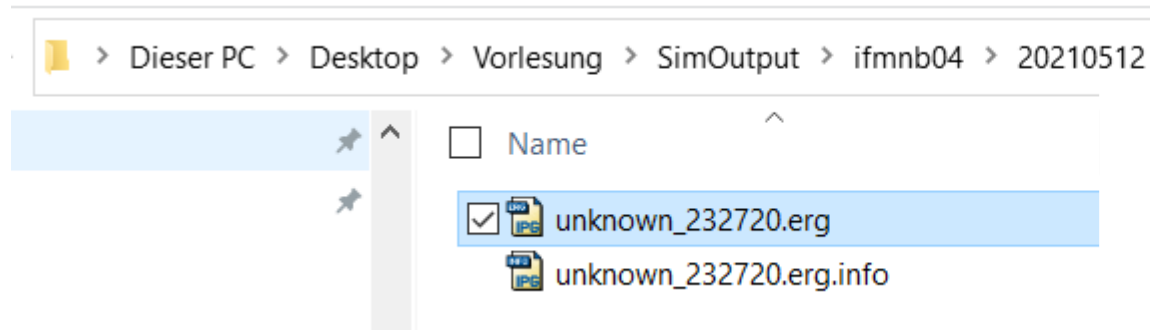


## Open IPGMovie

File > IPGMovie



## Save IPG .erg measurement data



Save

SimOutput > ... (.erg 633 KB)



## Ready to use in MxEval

