

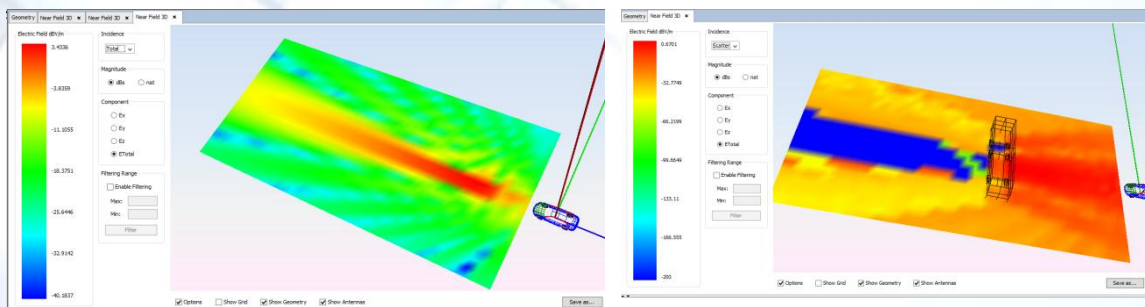
# Automotive Applications

Electromagnetic simulation is rapidly becoming a necessary component within many industry sectors such as the automotive industry.

This kind of software is very useful in applications such as vehicle-vehicle communications, security and safety.

The simulation tools available in *newFASANT suite* support a wide-range of automotive applications:

- ✓ dynamic simulations of realistic scenes involving multiple vehicles with changing speed and location
- ✓ analysis of collision avoidance radars
- ✓ analysis and design of radomes in order to placement the antennas in the vehicle, such as antennas located inside the light.
- ✓ analysis at mm band automotive radar systems.
- ✓ analysis of complex real-world simulations considering full periods of the FM-CW radar sequence.
- ✓ antenna design
- ✓ antenna placement analysis



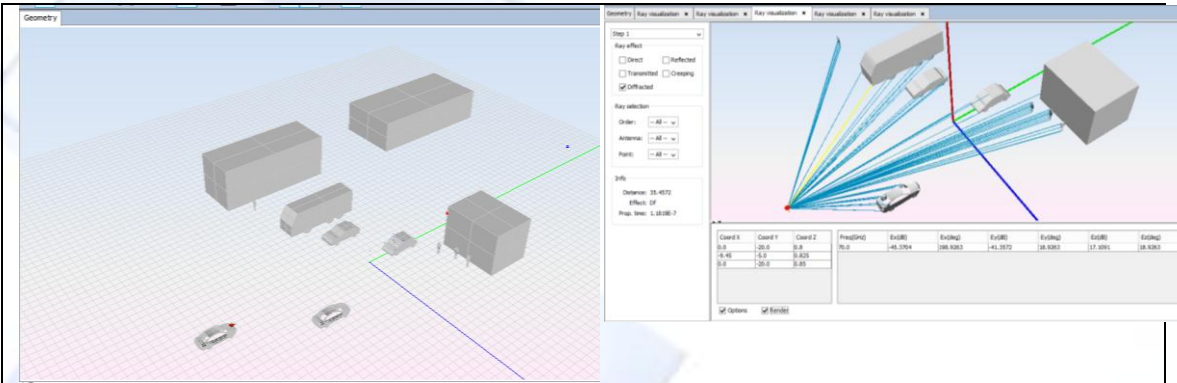
Coverage in the area considering when the radar antenna is located just in the center of the front of the car

In order to analyze this kind of problems, *newFASANT suite* is the **most efficient** due to perform **complex real-world simulations in several minutes** or hours while others software take weeks or even months.

MoM, GTD and GTD-PO are the main products that you can use to solve these kind of problems

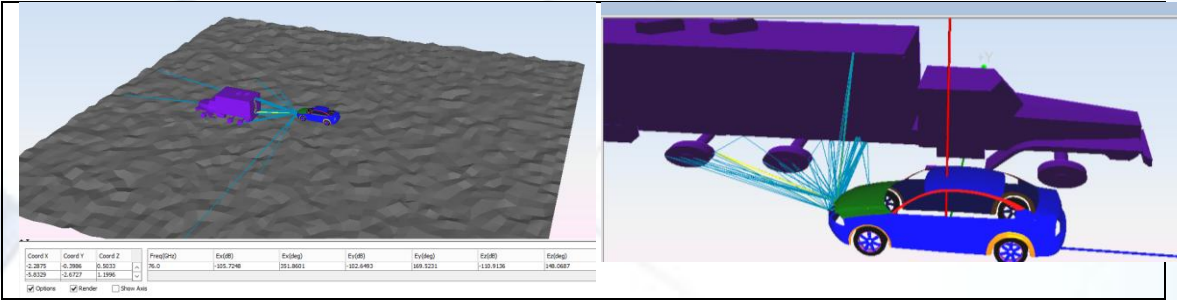
*newFASANT suite* is used by several of the **most important brands** in the **automotive industry**

*newFASANT* supports many widely used CAD package file formats.

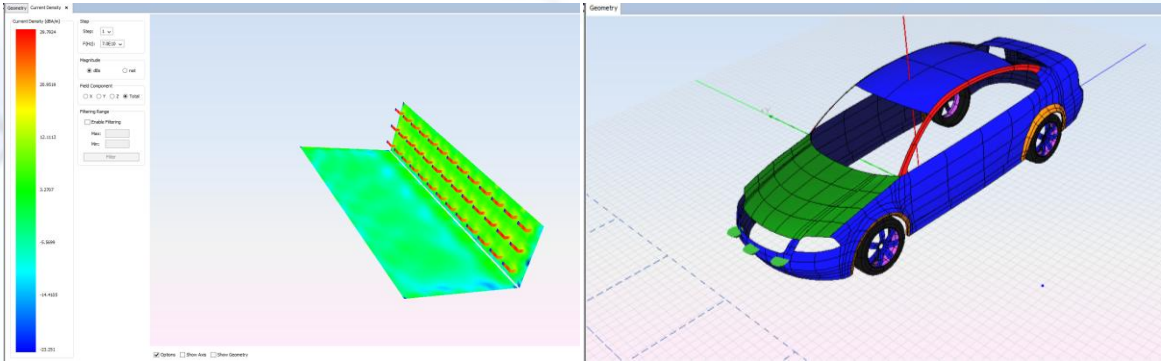


Complex urban scenario, considering several moving vehicles and pedestrians.

Analysis at 70 GHz. Full information of the EM field reflected for each object in the scene.



Ray-tracing considering a truck and car on rough ground



Analysis of the array at 70 GHz. and three radar antennas located on the car