

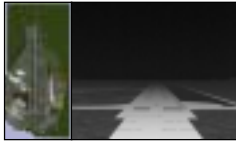
# Main projects



## Sight Effectiveness Enhancement

Study of an optronic sensor system dedicated to infrared enhanced vision both for aircraft and automotive

- Better perception in fog/night
- Data fusion band I & III



Aircraft simulation



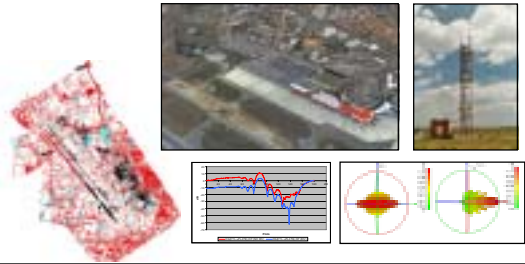
Automotive simulation



## SIRENA

External EMC simulation for radio electric systems in the close environment of the airport

- Development of software and methods, adapted to EM field computation for large areas including terrain and complex objects, for wavelengths from several hundreds of MHz, up to several GHz



## AASM Synthetic Image Generator

Set of modelling and rendering tools that enables to simulate IR environment for AASM missile application

- Help for image processing algorithms definition
- 3D virtual mock-ups delivery



Mistral training simulator for observing and shooting

- 3D virtual mock-ups delivery
- Real time band II and III infrared visualisation

Virtual mock-up



Visible

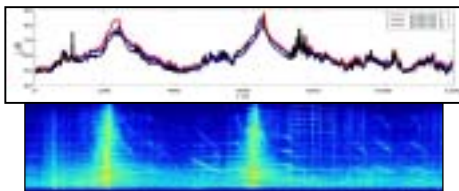
Band III fog



## CHORALE ACOUSTIC

Comprehensive workbench including physical modelling tools for material acoustic characterisation, atmospheric tools and ray tracing acoustic rendering engine

- Enables to simulate acoustic detection of target in free space
- Validation in collaboration with ISL
- Virtual mock-up of ETBS military terrain delivery
- Comparison with on site acoustic measurements



Acoustic simulation results



ETBS military terrain



## AGBDES

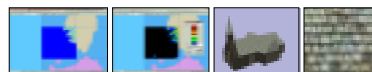
Environmental database management for simulation purpose

- Environmental data quality increase
- Qualification of data production process
- Static interoperability development
- SIFFrance format qualification
- Visual control of features
- Automatic and interactive data correction
- Data Exchange between SIFF, SEDRIS, VMAP, DTED, DFAD and TN
- Data versions management

Source data level



Generic data level



Visual Controls