

Lightning effects simulated with efield®

Lightning is a major threat to any complex system containing sensitive electronic equipment. Simulations are preferably performed in the time domain. Field penetration into the interior of an aircraft and the corresponding induced wire currents are examples of studies that can be performed with efield®.

efield® simulation of a lightning strike on SAAB 2000

Simulation of a lightning strike on SAAB 2000. One billion cells were used in the FDTD model.

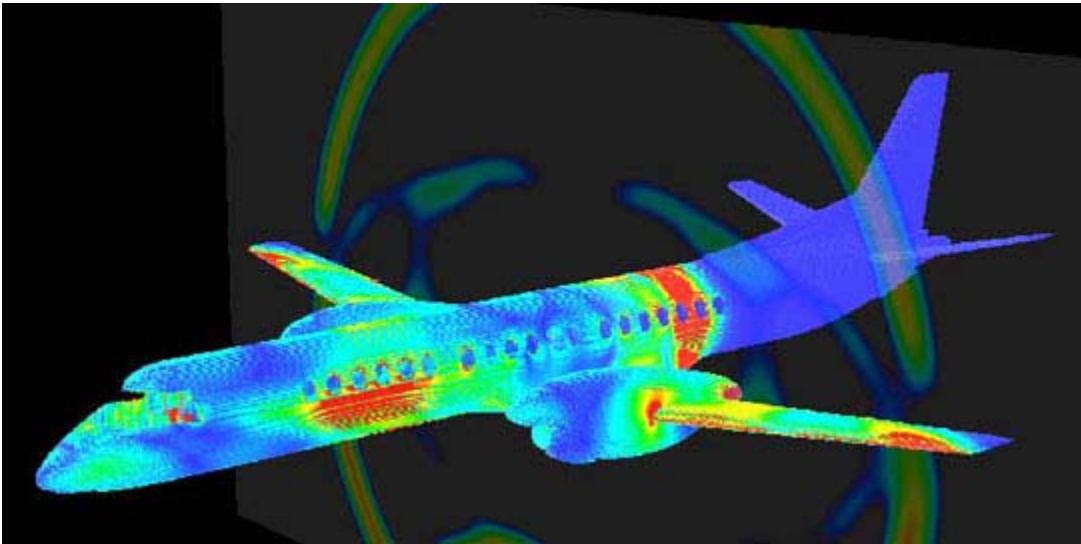


Figure 1: Surface currents and fields of a SAAB 2000 aircraft

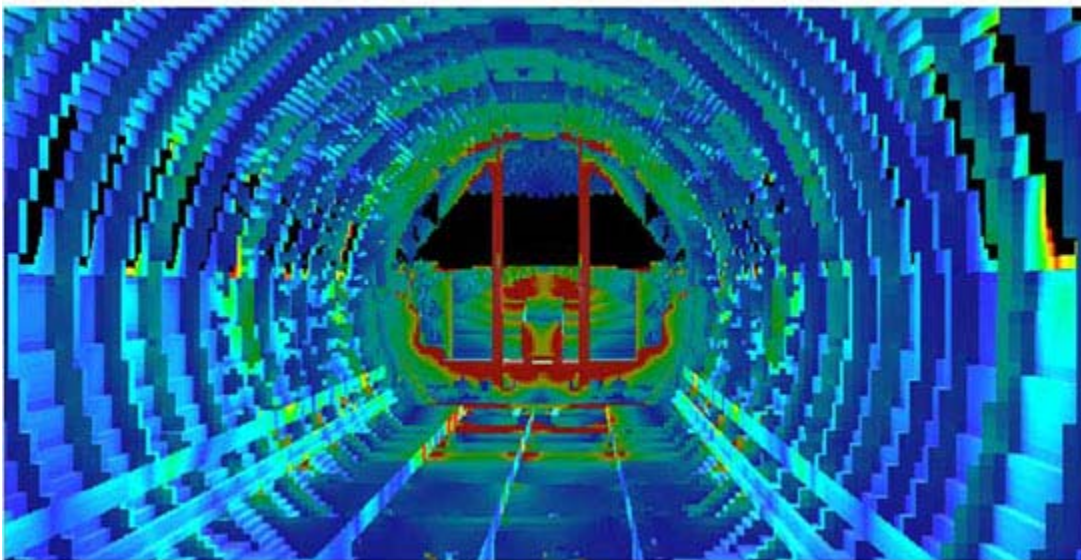


Figure 2: Surface currents inside a SAAB 2000 aircraft

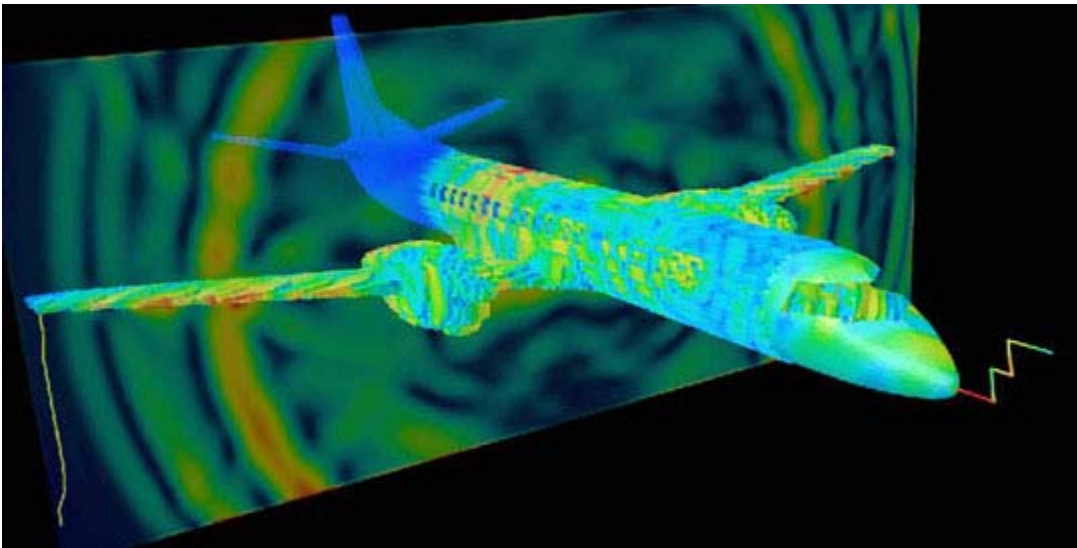


Figure 3: Lightning simulation of a SAAB 2000 using Efield[®]