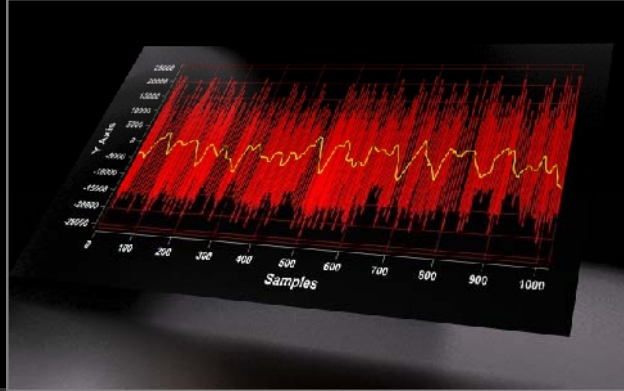
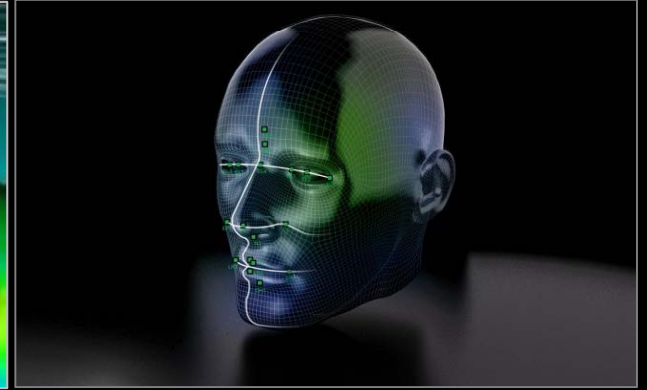
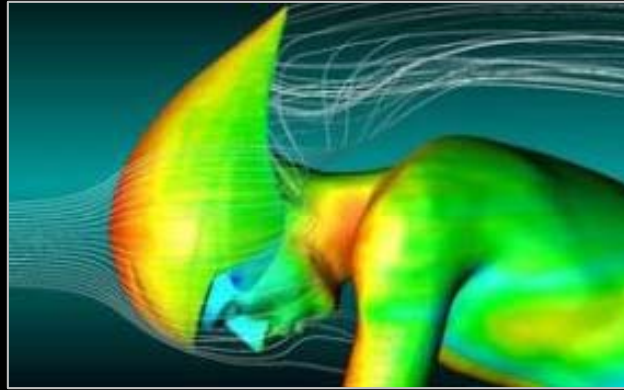
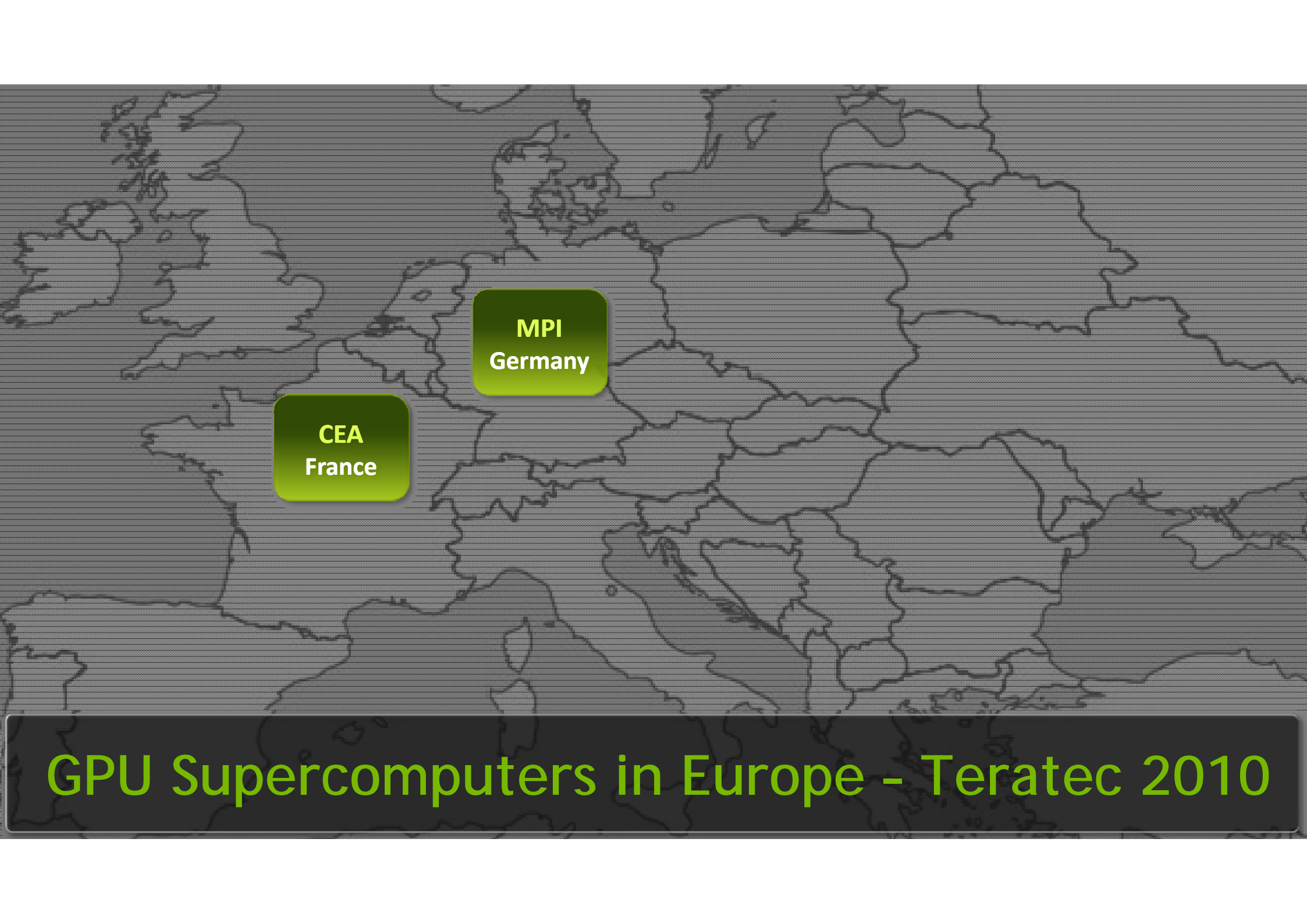




Tesla

GPU Computing





CEA
France

MPI
Germany

GPU Supercomputers in Europe - Teratec 2010



GPU Supercomputers in Europe - Teratec 2011

Tesla GPUs Supercharge

The Fastest Supercomputers in

China

India

Italy

Japan (until last week 😊)

Russia

Spain

Widespread Adoption of GPUs

Oil and gas

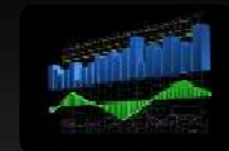
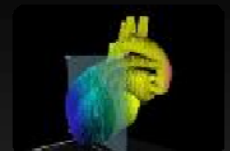
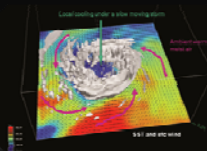
Edu/Research

Government

Life Sciences

Finance

Manufacturing



Seismic Processing
Reservoir Sim

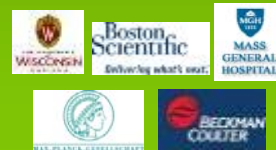
Astrophysics
Molecular
Dynamics
Weather / Climate

Signal Processing
Satellite Imaging
Video Analytics

Bio-chemistry
Bio-informatics
Material Science
Genomics

Risk Analytics
Monte Carlo
Options Pricing
Insurance

Structural
Mechanics
Computational
Fluid Dynamics
Electromagnetics



Manufacturing

Realtime Fluid Simulation



Start simulation

Export simulation

Stop simulation

Scenario: full car

Complexity: simple

Driving speed (km/h): 50

Architecture: CPU

Simulation time: n/a

Driving speed: n/a

Total force: n/a

Performance: n/a

Timesteps per second: n/a

Min value (blue): n/a

Max value (red): n/a



CUDA Architecture Roadmap

