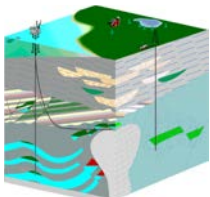


Product Description

KMS Technologies provides 3D modeling software for Controlled-Source Electromagnetics (CSEM), for surface (land and marine), surface-to-borehole, and borehole environments.

Electromagnetic methods are among the best to map changes in bulk resistivity influenced by reservoir fluids. CSEMuLator is capable to simulate these changes in a 3-dimensional space within a complex geologic setting. Among some of the most common applications for simulation are:

- Reservoir monitoring
 - Carbon sequestration
 - Enhanced Oil Recovery (EOR): Water/steam flooding
 - Fracture zone & plumes detection
- Geothermal exploration
 - Deep & shallow
- Carbon capture & storage
 - Time-lapse monitoring
 - Leakage
- Fracture mapping



Additional 3D products:

3D interpretation services
Land EM survey feasibility

Our 3D modeling software enables you to do the analysis you need. CSEMuLator can simulate complex scenarios with outstanding computing performance. As we move into the energy transition era, is critical to select the right methods for traditional exploration and production, and upcoming clean energy applications.

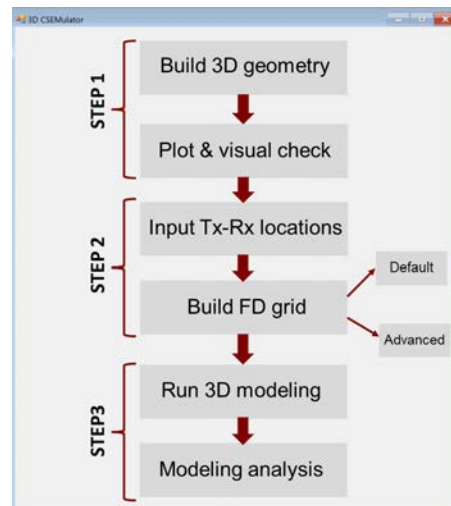
CSEMuLator has a user-friendly GUI and provides an easy workflow so even unexperienced users can execute complex 3D simulations in simple to follow steps.

KMS Technologies

KJT Enterprises Inc.
11999 Katy Freeway, Suite 160,
Houston, Texas 77079 USA

Tel: +1.713.532.8144

Email: info@KMSTechnologies.com
www.KMSTechnologies.com



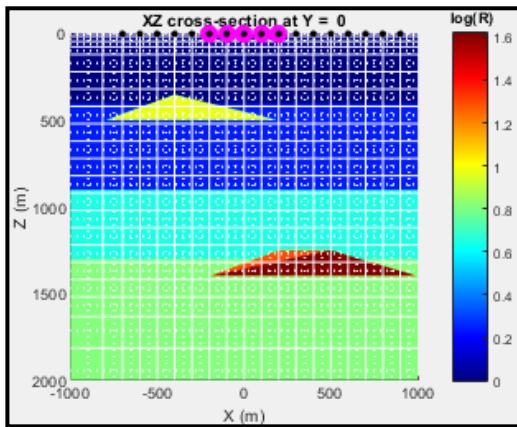
CSEMuLator 3D modeling workflow with easy-to-follow steps.

CSEMuLator is available for licensing, including technical support and training.

Product specifications

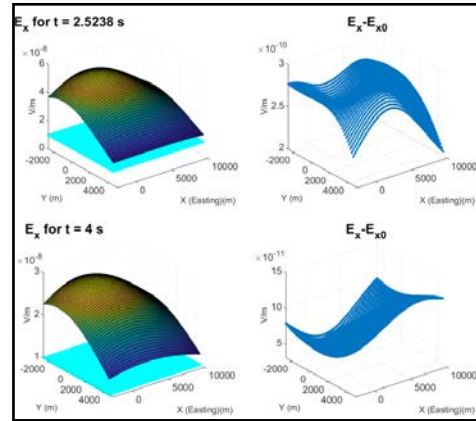
With CSEmulator you can generate complex resistivity models representing the geology, you can also create complex structures for the reservoirs using the unique prism approach implemented in the software for endless possibilities of scenarios to test. Our 3D modeling code supports electric anisotropic media modeling, as in many cases the sensitivity lays in the vertical resistivity.

Fast and reliable, CSEmulator is designed to compute, for any survey configuration, the electromagnetic (EM) field for frequency or time domain applications.



Example of an anisotropic reservoir model used for time-lapse waterflood simulation. Magenta & black dots are the transmitter and receiver locations, respectively.

CSEmulator is based on proprietary 3D EM finite-difference (FD) modeling software that has been rigorously tested, validated and benchmarked. It incorporates complex terrains, seafloor bathymetry, subsurface geology, arbitrary 3D anisotropic resistive media and much more. A best-in-class software proven to be more robust at much faster execution times than comparable products.

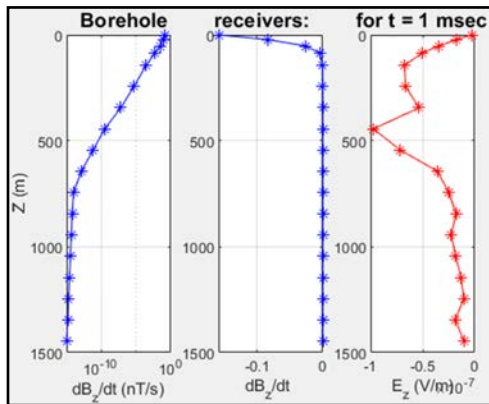


Simulated EM signals generated by CSEmulator; cyan surface represents the noise level. Top: Inline electric component, Bottom: Broadside electric component.

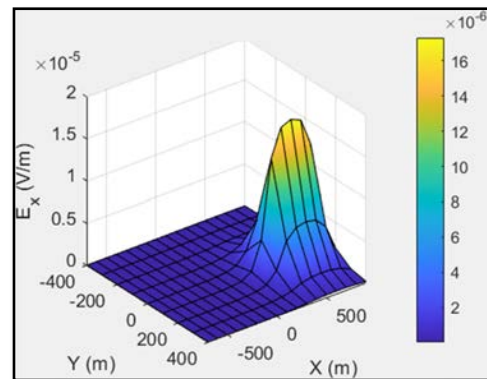
CSEmulator is a most have in your toolkit. It is not enough to select the right exploration and monitoring method it is also essential to anticipate the recorded signals to adjust and optimize your interpretation and integration workflows and decision process.

Product applications

As more emphasis is placed for industries to reduce their carbon footprint, it is important to select the best geophysical method for different applications such as Carbon Capture Utilization and Storage (CCUS) and/or Enhanced Oil Recovery (EOR). CSEmulator can help you assess if EM methods are the right tool. Whether is 3D modeling for geothermal exploration, reservoir monitoring with surface or borehole measurements, you can do it all in one platform.



Example of simulated signals in the borehole for reservoir monitoring.



Simulated signal difference for a surface CSEM receiver, before & after CO₂ injection.

CSEmulator can simulate time-lapse waterflood and CO₂ mobility as well as different scenarios for plumes and leakages. EM have been the preferred methods for geothermal exploration. Having a tool like CSEmulator will give your team a real advantage to move into the energy transition applications.

For other applications where CSEmulator can help, visit our website. For pricing give us a call or send us an email to info@kmstechnologies.com.