SE-Workbench-GNSS: Global Navigation Satellite Systems package description

The SE-Workbench-GNSS is dedicated to experimented users to assess the propagation of GNSS signal in 3D constrained environments.
Import capabilities are provided through SE-FFT in order to work on existing 3D terrain databases or 3D objects (geometry & texture). A plug-in to 3DSmax™ and SketchUp™ is delivered.

Thanks to SE-Workbench-GNSS, users may build 3D virtual scene (the 3D modeler, SE-AGETIM-LIGHT, is provided), to build a GNSS system (satellites constellations and/or terrestrial beacons), and carry out simulations to get a completed evaluation of the reception of the signal.

SE-Workbench-GNSS computes both link and errors budgets in order to assess the received power (signal-to-noise ratio, composite power etc...) and localization errors due to the interaction of the signal with the environment (atmosphere, multipath fading effects and delays...).

Thanks to remote control facilities, SE-Workbench-GNSS may be controlled by an external client.

The package includes a 3D urban sample, a set of physical materials, the User Manuals, the format documentation and a full description of the implemented Physical Models.

This solution is delivered for (Windows™) (also compatible with Linux system) operating system in its English version. A USB dongle controls the license.

The SE-Workbench-GNSS solution can be covered by a support and maintenance contract.

SE-Workbench-GNSS

Synthetic environment modeling:	
Import capability:	**SE-FFT** Plug-in to SketchUpTM
Terrain Modeler:	SE-AGETIM-LIGHT
3D terrain:	*sample of urban environment*
Integration and signal rendering:	
Scenario edition, GNSS computation, and network communication:	**SE-NAV**
Documentation:	
Software:	User Manuals Methodological Guide
Physical Models:	Physical Models documentation Validation Dossier documentation
Network communication:	Protocol documentation