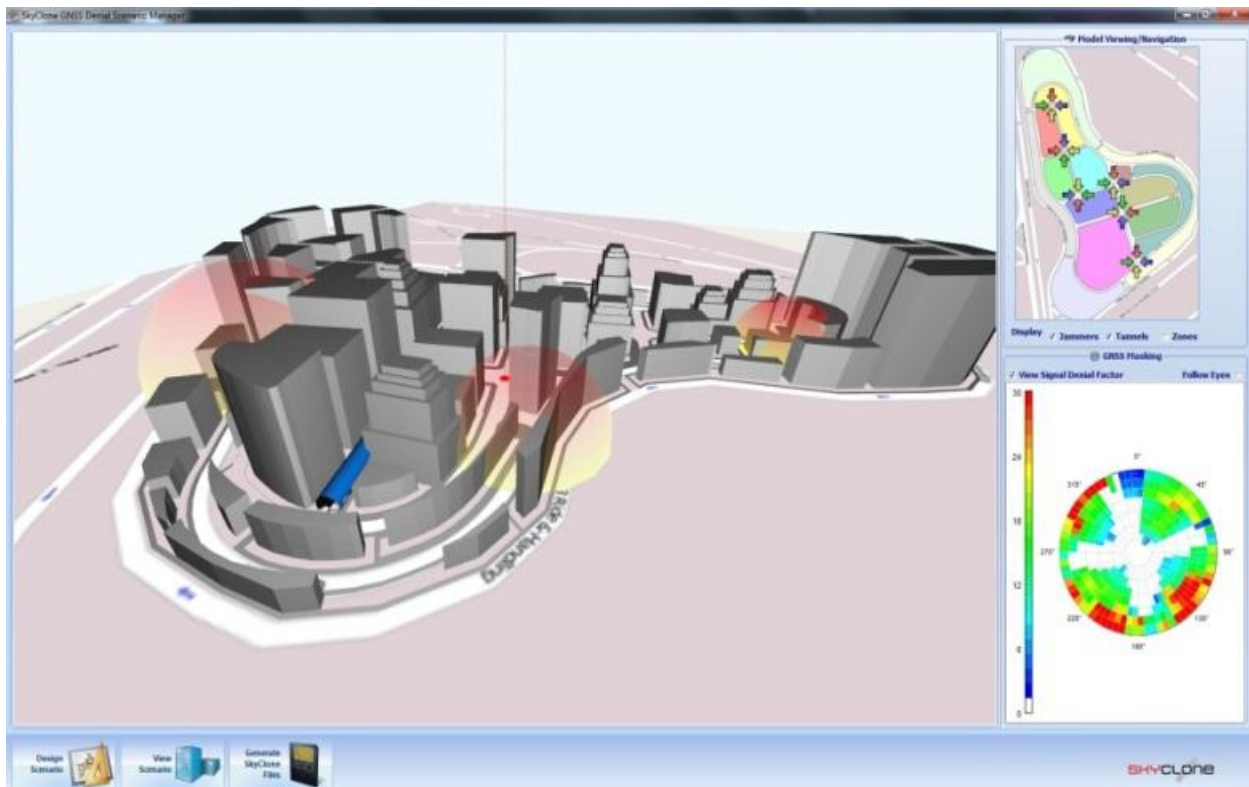
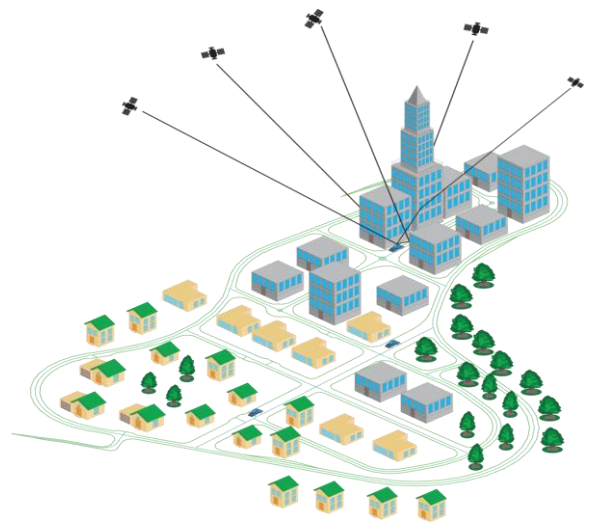




Satellite navigation (GNSS) is becoming increasingly popular for applications regarded as non-critical, such as in-car SatNav, as well as for those that concern safety and financial transactions. The performance of GNSS-based systems deteriorates when the direct signals from the satellites are blocked and when they are subjected to interference. As a result, the ability to simulate signal blockage via urban canyons and tunnels, and signal interference via jamming and spoofing has grown fundamental in testing applications.

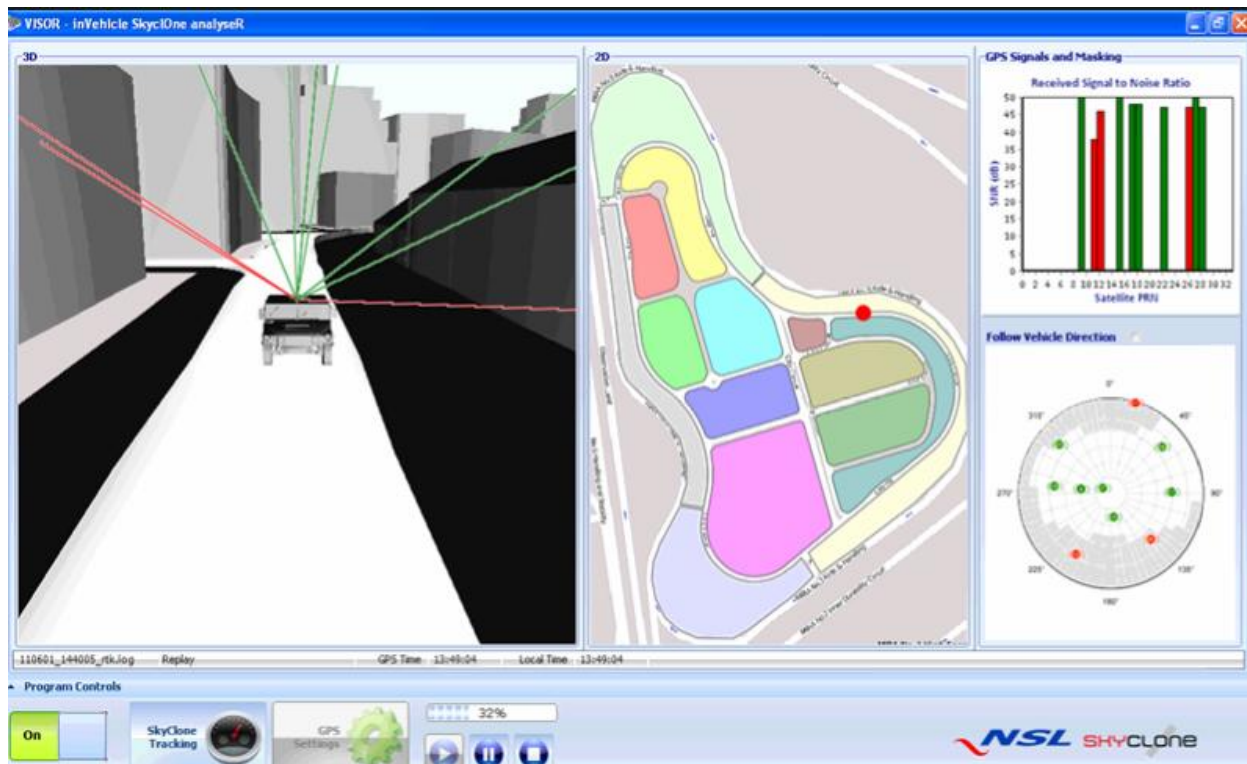


SkyClone delivers controllable and repeatable GNSS-denial for the testing of GNSS based devices and services.

By uniquely simulating operating conditions for testing GNSS-based devices and systems, the innovITS ADVANCE GNSS-denial system can host complex test scenarios and a diverse range of applications.

- Customise 3D city models with model creation, editing and importing tools
- Simulate signal obstruction, tunnels, attenuation and multipath
- Simulate RF interference and jamming
- Test factory fitted in vehicle GNSS based telematics systems, after-market solutions, portable nomadic devices, mobile phones and other user terminal equipment
- Replicates GPS and Galileo signals

- Respects existing Interface Control Documents for GNSS signals
- Provides realistic and consistent outputs for use with commercial GNSS receiver equipment
- Attenuate GNSS signal provided to vehicle on-board equipment or nomadic devices for location based services
- Simulate 'urban canyons' – vital for location-based systems operating in modern cities where satellite obscuration and multipath propagation compromise signal



SkyClone presents a number of opportunities for repeatable and controlled testing. We are always interested to learn of specific needs for testing and assessment. Future enhancements and extensions include:

- Additional GNSS vulnerabilities and threats
- Additional GNSS systems, signals and frequencies
- Additional GNSS services and augmentations

For more information on **SkyClone**, please contact:

Nottingham Scientific Limited

Loxley House
 Tottle Road
 Riverside Business Park
 Nottingham
 NG2 1RT

(t) 0115 9602960
enquiries@nsl.eu.com