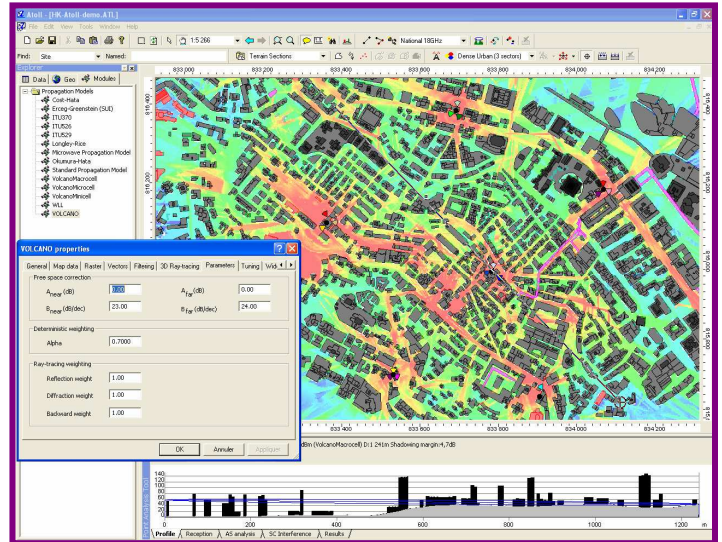


## ■ VOLCANO For ATOLL

### Technology

- Multiple wireless technologies compliancy (2G, 3G, 4G, WiMAX, Mobile TV, GSM-R...)
- Innovative Vertical Plane, 3D urban and street-level models
- Multiple environment compliancy (rural to dense urban)
- Outdoor to Indoor simulations
- Indoor to Outdoor simulations
- Automatic Model Tuning
- Performance Analysis Toolkit
- Capability to customize simulations outdoor only, indoor only...
- Simulations along 2D linear vectors (polylines) considering angles of incidence
- Simulations for receivers above ground and/or above clutter
- Advanced simulations (Power Delay Profile, Delay spread, Orthogonality factor...)



*Hong-Kong 3G Mobile Network dimensioning using Volcano 3D urban model within ATOLL*

### Operational

- State-of-the-art technology successfully used with operational large scale networks (several thousands of cells, several tens of users)
- Optimized calculation offering best trade-off between computation time and accuracy
- Automatic Tuner providing reliable models faster than standard methods and using less measurements

### GIS

- BIL and Planet Raster data
- Planet, Mapinfo and Shape Vector data
- Support of multi-resolution projects (2D raster/3D raster/3D vector)

### Software

- OS: Windows NT/2000/2003/XP
- Citrix/Terminal Server supported
- Multi-threading and Multi-processor supported
- Standalone, Server and Server-commutable (with a nomadic use capability)

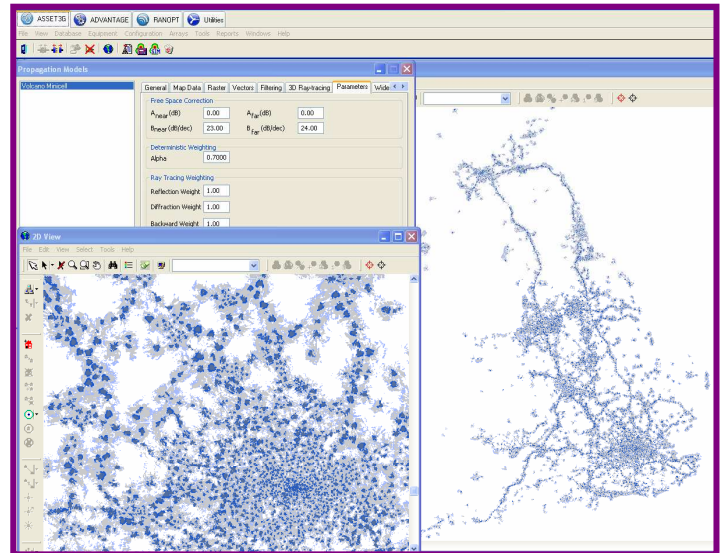
### Portability

- Easy migration of Volcano models from one platform to another (planning, optimisation & analysis).
- Import/export feature for easy migration of all or part of model parameters from one project/platform to another.

## ■ VOLCANO For ENTERPRISE

### Technology

- Multiple wireless technologies compliancy (2G, 3G, 4G, WiMAX, Mobile TV, GSM-R...)
- Innovative Vertical Plane, 3D urban and street-level models
- Multiple environment compliancy (rural to dense urban)
- Outdoor to Indoor simulations
- Indoor to Outdoor simulations
- Automatic Model Tuning
- Capability to customize simulations (outdoor only, indoor only...)
- Simulations along 2D linear vectors (polylines) considering angles of incidence
- Simulations for receivers above ground and/or above clutter
- Advanced simulations (Power Delay Profile, Delay spread, Orthogonality factor...)



*National UK 3G Mobile Network coverage using Volcano model within ENTERPRISE*

### Operational

- State-of-the-art technology successfully used with operational large scale networks (several thousands of cells, several tens of users)
- Optimized calculation offering best trade-off between computation time and accuracy
- Automatic Tuner providing reliable models faster than standard methods and using less measurements

### GIS

- Asset Raster data
- Asset, Mapinfo Vector data
- Support of multi-resolution projects (2D raster/3D raster/3D vector)

### Software

- OS: Windows NT/2000/2003/XP
- Citrix/Terminal Server supported
- Standalone, Server and Server-commutable (with a nomadic use capability)

### Portability

- Easy migration of Volcano models from one platform to another planning, optimisation & analysis)
- Import/export feature for easy migration of all or part of model parameters from one project/platform to another