

## Visualyse Professional

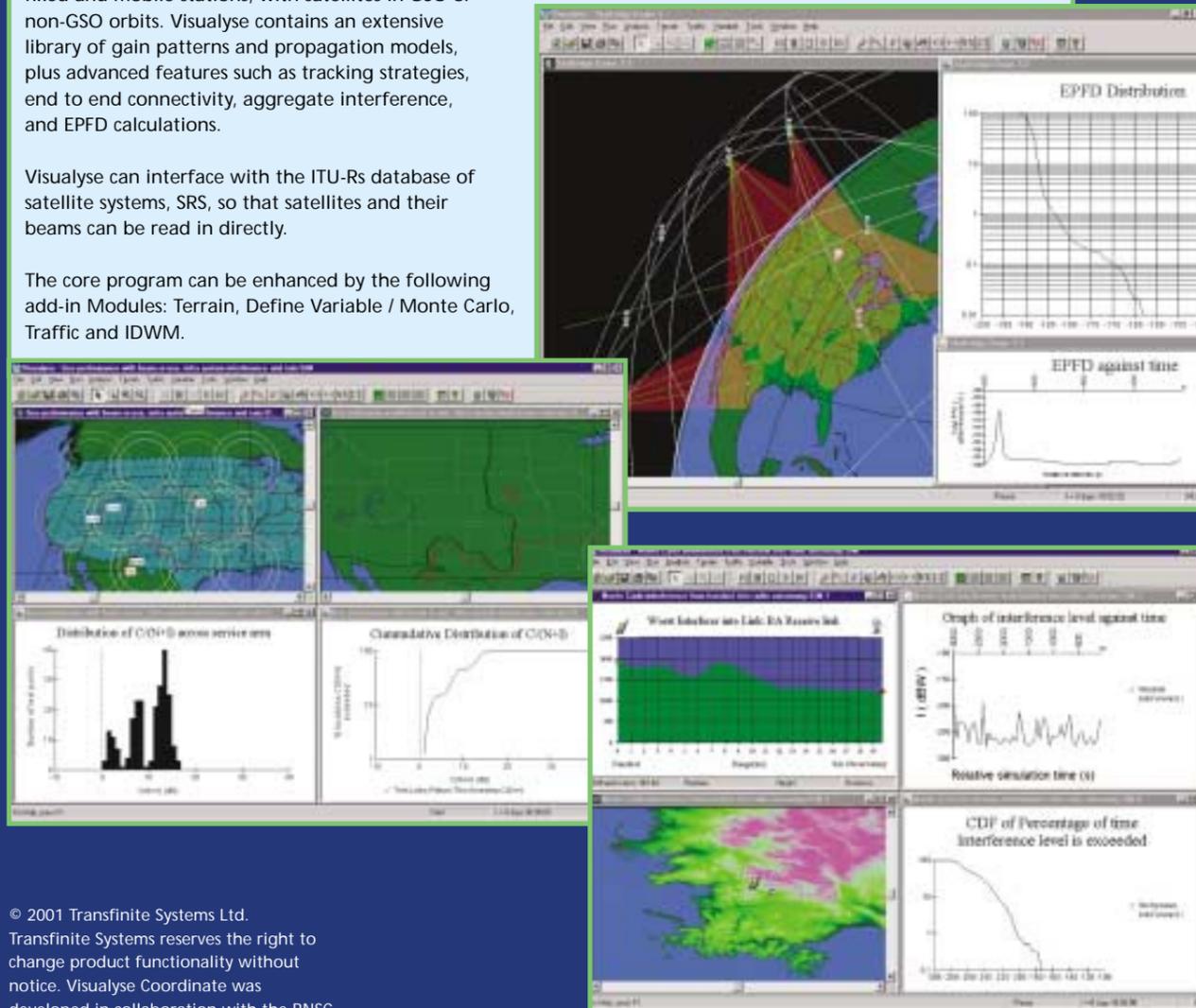
### Visualyse Professional - Simulation Study Tool of Choice at ITU-R

Visualyse Professional is a software package that can be used to model a wide range of radio communication systems. It is the leading study tool for analysis of interference at ITU-R meetings, where it has been approved by groups such as JRG 8D-9D.

Its flexibility means it can be used for terrestrial, aeronautical, maritime or satellite systems, considering both fixed and mobile stations, with satellites in GSO or non-GSO orbits. Visualyse contains an extensive library of gain patterns and propagation models, plus advanced features such as tracking strategies, end to end connectivity, aggregate interference, and EPFD calculations.

Visualyse can interface with the ITU-Rs database of satellite systems, SRS, so that satellites and their beams can be read in directly.

The core program can be enhanced by the following add-in Modules: Terrain, Define Variable / Monte Carlo, Traffic and IDWM.



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## Transfinite Systems Ltd

Transfinite Systems Ltd, based in the UK, are one of the leading suppliers of simulation tools and Consultancy services to the radiocommunication industry.

We can provide Consultancy services to analyse your system, considering aspects such as interference, capacity, and coverage. We can assist you in achieving goals such as coordination, system design, regulatory approval and development of regulations. Our Consultants have extensive experience of Regulatory issues, and can provide advice and representation at international meetings such as ITU-R and regional bodies including CEPT.

Contact our Consultants for more information and to discuss your requirements.



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Designed and produced by  
Paul Simmons & Associates



**Visualyse Coordinate**  
earth station coordination software



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To help show you the planned power of Visualyse Coordinate we've put together a sequence of screen shots to show how you would generate coordination contours and then move into detailed analysis.

## Defining Earth Stations

### General Parameters

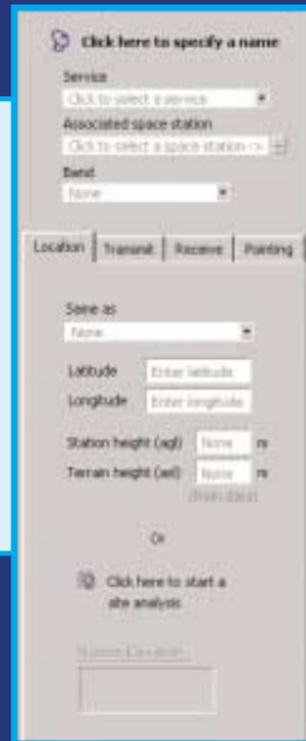
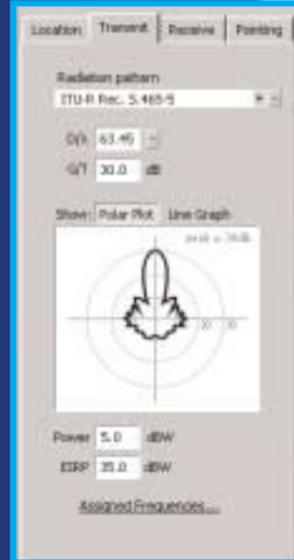
The Earth Station properties will be defined using an easy to use panel that combines all the relevant information, such as name, location, antenna, and pointing information.

### Antenna

The characteristics of antennas are very important, so Visualyse Coordinate will be able to model antennas easily and in detail, graphically showing gain patterns and providing tools to calculate  $D/\lambda$  and  $G/T$ .

### Horizon Elevation

You can enter the horizon elevation information directly or Visualyse Coordinate will calculate it for you from a terrain database.

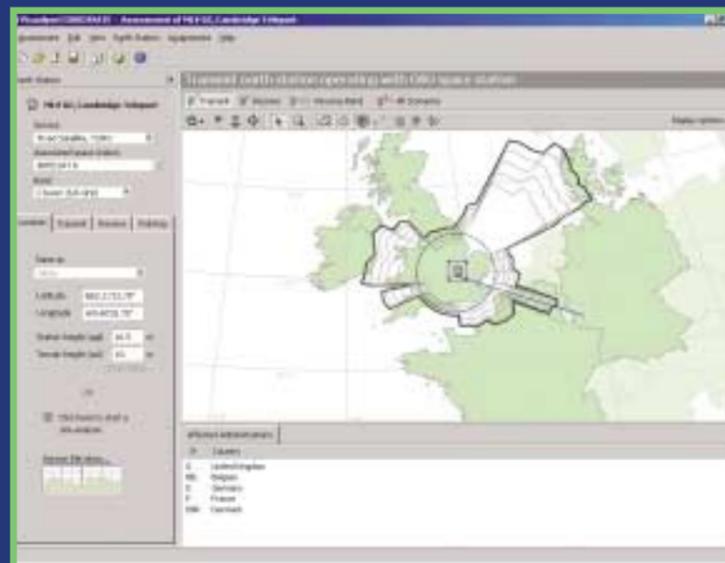


## Adding Assignments

The Earth Station could be operating on a number of frequencies. To help enter what could be a number of assignments, Visualyse Coordinate will have an advanced user interface dedicated to quick and easy configuration.



## Generating the contour



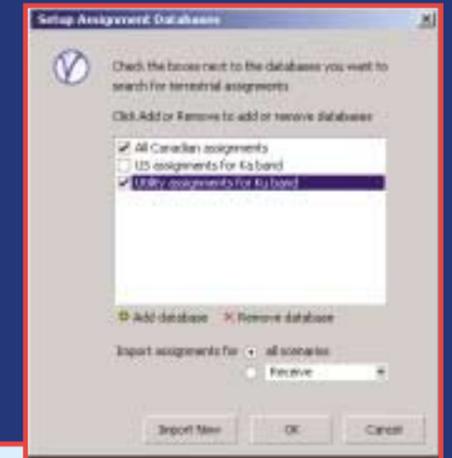
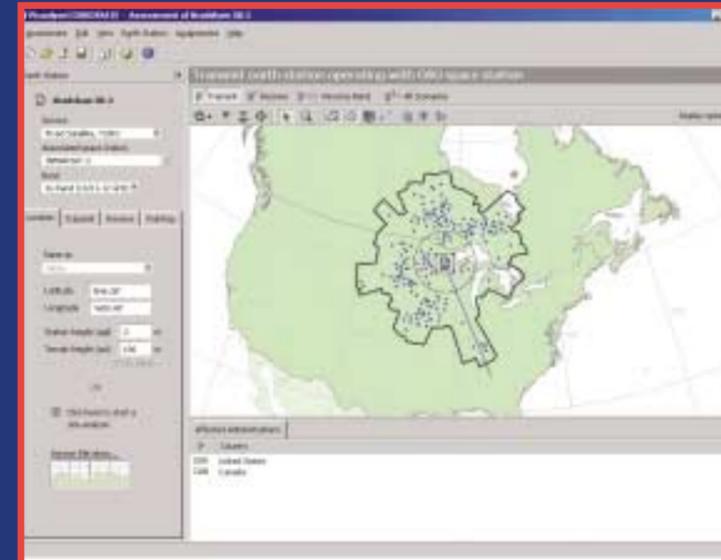
Having entered the information it is quick and easy to generate the Coordination Contour.

This picture shows the Mode-1 and Mode-2 coordination contours around an Earth Station, with the effected Administrations.

To the left are the parameters that define the Earth Station, including the horizon elevation plot.

From here detailed analysis can be undertaken using information about other stations that might be within the contour.

## Interference Analysis

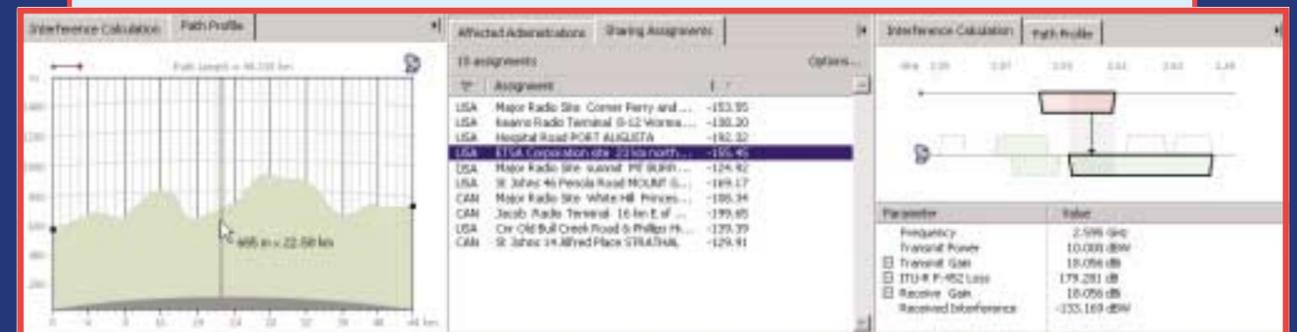


Given a set of terrestrial assignments, Visualyse Coordinate can identify which assignments share spectrum with the Earth Station. You can then go on and calculate point to point interference between the Earth Station and the sharing assignments.

### Database access

Its important to be able to access databases of other systems. Visualyse Coordinate will allow you to interface with existing databases. Visualyse Coordinate will also have its own database that you can use to manage your Earth Stations effectively.

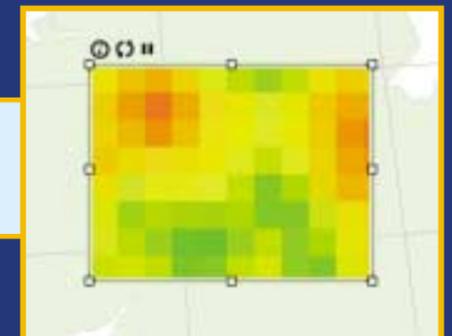
The affected stations can then be displayed on the map and compared against the contour. More detailed information about interference levels and assignments will be available in the interference calculation sections.



## Site Analysis

Where should you locate a new Teleport or Earth Stations?

Site analysis searches within a preferred area for the best location for sharing with existing services.



## What Next?

Visualyse Coordinate will be available from 3rd quarter 2001.

If you are interested in more information or to discuss your requirements contact us by email at [info@transfinite.com](mailto:info@transfinite.com) or via our web site at [www.transfinite.com](http://www.transfinite.com).