Forming an Alliance

REVIEWED BY PHILIPPE WANIEZ

Alliance joins the growing roll call of desktop GIS products. But, its ability to integrate raster and vector data is what makes this French package so distinctive.

Alliance, developed by Icare International, Labège, France, analyses data for planning or land management and reduces the limitations associated with raster/vector integration. Operating under Windows 3.1, Alliance is an integrated software, as simple to operate as a word-processing package. The program opens with an overview of the state of a GIS project; files are arranged according to operations in progress, attribute or descriptive object classes and permanent or temporary maps.

Data types

Maps are either permanent (installed on the database) or temporary (the result of ongoing analysis); raster or vector. Vector data can be captured via a digitizer using an integrated module or imported from ARC/INFO or DXF files. Images can be imported using formats such as bitmap, TIFF, Jpeg and Multiscope.

Alliance can extract attribute or descriptive information from ASCII, Excel, DBase, Paradox, Oracle or Access files as well as databases such as INSEE.

Visualization and selection

Alliance can simultaneously visualize a raster plan and several vector plans, using different scales. The user chooses from a broad range of representational elements: symbols, colours, frames, lines and fonts. It is also possible to create new symbols or colours.

The user can select vector objects using a range of tools. An object is selected by clicking directly on it. Alternatively, groups of objects in a square, a circle or a buffer of variable size can be chosen.

Interrogation

Alliance uses an SQL query system to select vector objects which match one or more attributes. Users can also construct queries using a dialogue box.

The buffer function is used to carry out topological queries. The user defines an area around a point, line or area object. The objects included in this buffer, either partially or totally, are selected by this operation.
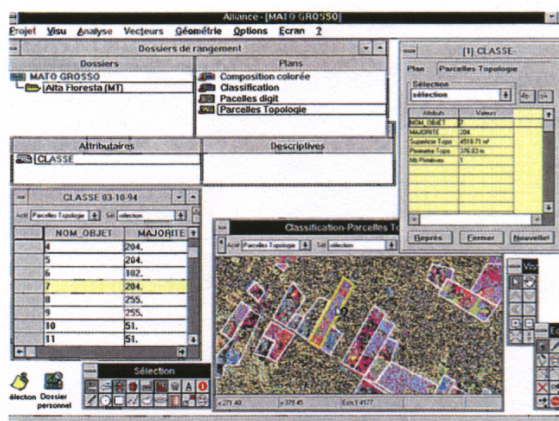
Particularly powerful is the Topology function, which enables users to overlay vector maps. Every new object resulting from the overlay retains the attributes of the original object.

Integration

Alliance is innovative in the way that it can integrate data from a raster map into a vector map. Any area of a vector map can have values derived from the corresponding raster data assigned to it. Those values can be the result of calculation; for example, the average, median or majority of the pixel values.

Good value, but.....

Alliance is simple to operate and takes only a few days to learn for a user familiar with GIS. Its price rivals other systems available under Windows and as such represents very good value. However, it could be improved by extending the range of topological queries available, an enhancement which is planned for the next version. The addition of interactive statistical tools to examine the characteristics of attributes of selected objects would also be helpful.

Deforestation in the Brazilian Amazon (Alta Floresta and Mato Grosso region). The parcel limits (vector mode) were overlaid onto the extract from the classified multispectral Spot image (raster mode).

Alliance is available in French and English. Contact Icare International, Tel: +33 61 39 03 13; Fax: +33 61 39 25 34

The product is distributed in the UK by AP³ Ltd, Suffolk. (Tel: +44 787 378242; Fax: +44 787 374017) and will be available to educational users via the UK Combined Higher Education Software Team (CHEST). Icare International is seeking other European distributors.

System requirements
- IBM 486 or compatible
- 8Mb RAM
- VGA screen
- Peripherals supported by Windows 3.1, MS-DOS 5.0

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