

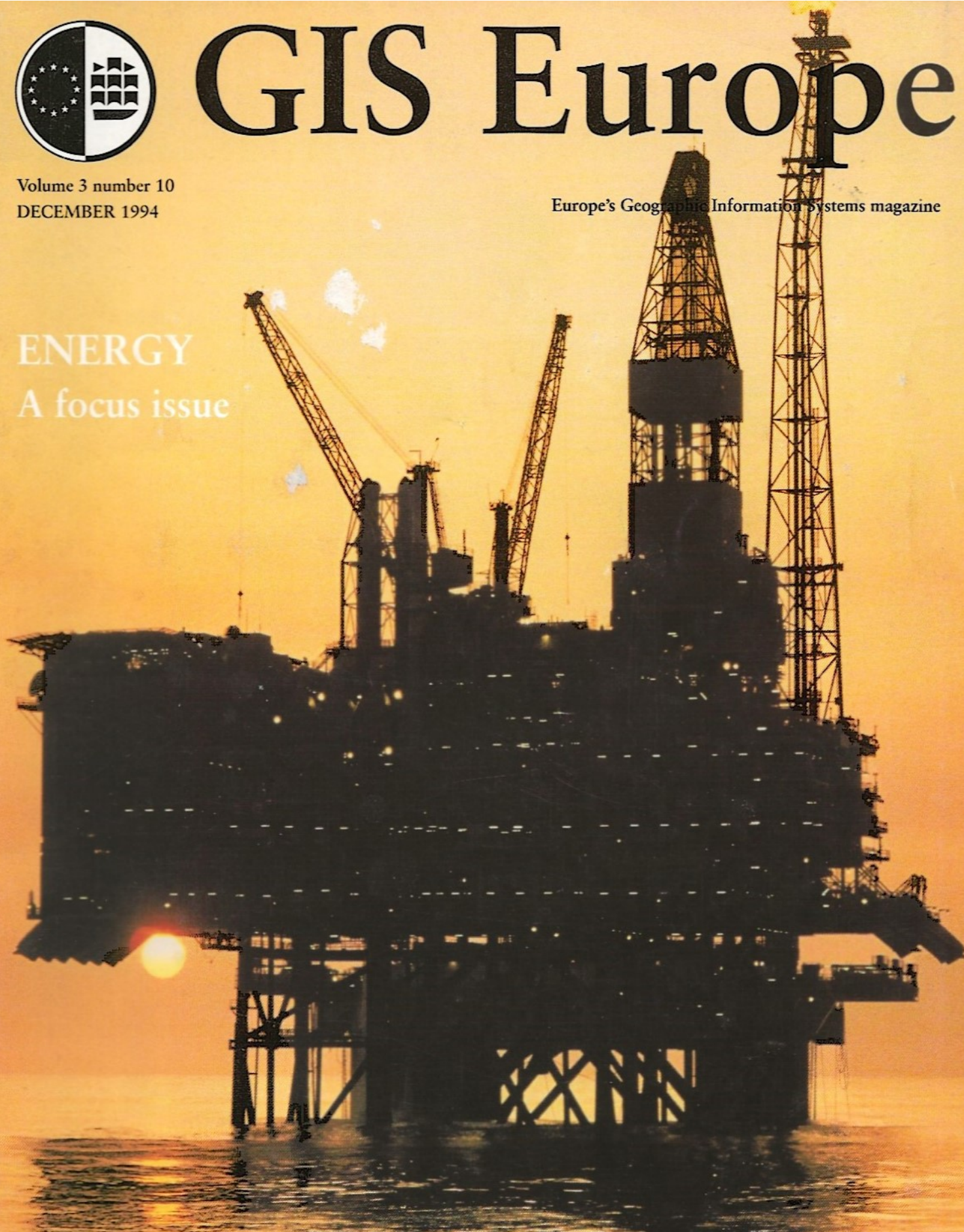


# GIS Europe

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ENERGY  
A focus issue



**DRAWING  
THE LINE**

Reviewing N. Ireland's  
parliamentary  
boundaries

**COMING CLEAN**  
Fighting pollution in  
the Czech Republic

**MAPPING  
THE OCEANS**  
Routing offshore  
pipelines with  
satellite technology

# UDT 94: Remote Sensing and GIS in Urban Waters

The Volga River, Russia, 12–16 September 1994

It is easy for GIS community 'insiders' to forget that GIS life is being spawned in many new application areas, often without the direct support of the industry. So it is refreshing to see an increase in small specialist conferences in which speakers discuss and evaluate the use of GIS. One such event was the Urban Drainage Technology (UDT) 94 conference on the use of remote sensing and GIS in urban waters, held—appropriately—on a boat travelling from Moscow along the Volga River.

## Growing influence

The meeting, which took place in conjunction with a NATO-sponsored workshop on environmental regeneration, highlights the growing influence of GIS across the broad spectrum of Informa-

tion Technology. The speakers, essentially from an academic background, discussed the latest research into the use of remote-sensing data for urban hydrology problems, such as drainage design and geocological evaluation. They also reviewed potential applications for GIS software integrated with hydrologic models, a theme which was often repeated. Issues such as flood risk mapping and the creation of urban drainage information systems were explored.

## Sound grasp

That such a group of specialists should have thought it worthwhile spending so much time discussing the implications for GIS in their own area of study speaks volumes for the potential of the technology in this specific area. The presenters often had a sound grasp of the basics of the technology and were well versed in the use of systems such as GRASS, Idrisi and SPANS—software well suited to this type of modelling.

## But . . .

However, the quality and accuracy of the geographic data used in the projects attracted little discussion. This is not surprising as such specialists have little experience of geographic information. In the example of modelling basin characteristics much was made of the comparison between the different models applied but little was said about the basic DEM used. I suspect that many inaccuracies are introduced or ignored due to a lack of understanding of the limitations of geographic data.

As always when remote sensing is on the agenda, several papers concentrated on the latest systems and their capabilities. A main theme was the increased range of sensors and the greater resolution of the data. Few of the projects used truly geometrically corrected images, a problem for many when integrating GIS and remote sensing.

## Real problems

As the event addressed the *real* problems that this sector of engineering faces in adopting GIS it was not *just* an academic review. The principle issues were the cost of data collection, the return on the use of GIS when simple map analysis yields many of the required results at a fraction of the cost and the need for greater education. Urban hydrology studies are often carried out by small consultancies which do not have the staff, time or resources to investigate the potential advantages for GIS. It was pointed out that software needs to become more intuitive for these specialists with tailored interfaces. Whether this is likely—or even desirable—remains an issue for the broader GIS supply community.

## Collaboration needed

The growth in this sort of conference and workshop, which brings scientists and academics together from around the globe, needs to find a way of feeding into the broader GIS community. This is important if GIS solutions are to become increasingly usable and applicable to a wider audience. □

**Call-for-Papers**  
**Bouyoucos Conference**  
 Mission Inn, Riverside,  
 California, USA  
 May 1-3, 1995

Application of GIS to the  
 Modeling of Non-Point  
 Source Pollutants in the  
 Vadose Zone

Oral & poster papers, and computer demos are invited that describe remote sensing techniques, emerging information technologies, geostatistical techniques, numerical analysis techniques, and applications of GIS used in modeling the movement of non-point source pollutants in the vadose zone. Presentation proposal/abstract deadline extended to **February 15 1995**

**CONTACT:** Dennis Corwin, U.S. Salinity Lab, 4500 Glenwood Dr, Riverside, CA 92501, USA. Tel: +1 909 369 4819; Fax: +1 909 369 4818.

If you would like to find out more about the conference or obtain the proceedings, contact one of the event organizers: Dr John Elgy, Civil Engineering Department, Aston University, Aston Triangle, Birmingham B4 7ET, UK. Tel: +44 21 359 3611; Fax: +44 21 333 3389; Email: jelgy@aston.ac.uk. Or, Professor V. Dragalov, IRTCUW-Russia, c/o Russian Mendeleev Institute of Chemical Technology, 12190 Moscow, Russia, Tel: +7 095 496 5837; Fax: +7 501 882 6834

SEPPE CASSETTARI is managing director of Longman GeoInformation, 307 Cambridge Science Park, Milton Road, Cambridge CB4 4ZD, UK. Tel: +44 223 423030; Fax: +44 223 425787