

MIMAS (MANCHESTER INFORMATION AND ASSOCIATED SERVICES) PAST, PRESENT AND FUTURE

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Based at Manchester Computing, MIMAS¹ is one of the more recent manifestations of the national computing services that the University of Manchester has provided to the UK academic community over the last 25 years.

MIMAS offers the following services: online access to large and complex datasets, including census statistics, large government surveys, satellite images and digital map data; supporting software for the exploration, analysis and visualization of the data; documentation; training courses, and consultancy. In the last three years, the service has expanded considerably to include the Beilstein CrossFire chemistry information system, ISI Web of Science, COPAC and JSTOR. Access to certain datasets is restricted to those higher education institutions that have paid a site licence, but access to other datasets incurs no charge to the institution – although individual registration is required.

Many of the component parts of the MIMAS service are funded by the Joint Information Services Committee (JISC)². The JISC intends to develop and extend a distributed, national electronic resource (DNER) which will “be of benefit to a very wide range of user constituencies and will support academic research; postgraduate and undergraduate teaching and learning, especially in the field of open and distance learning; and provide better support for the management of information systems”. With the fairly recent introduction of bibliographic services and injection of electronic publishing expertise, the MIMAS team has a key role in the development of the DNER and in ensuring that UK academics have first-rate access to information for teaching and research.

A wide user-base, coming from many disciplines – social policy, health, economics, geography, ecology, archaeology, chemistry, history and many others – is making increasing use of the datasets, particularly for teaching, and the enormous potential for the development of integrated services, which link bibliographic services and datasets, is being recognised. Over 180 UK HE sites

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are registered to use MIMAS, and, recently, MIMAS has started to provide services to universities in Eire and Scandinavia.

MIDAS – as it began

MIDAS (Manchester Information, Data and Associated Services) grew out of the national high performance computing service run by the University of Manchester Regional Computer Centre, as it was then known. In the mid-1980s, thirty universities and polytechnics were registered to use this service and typically, users were from the physical sciences.

The first national online dataset service at Manchester was access to the 1981 Census. Following on from the success of that initiative, the dataset services grew – census-related datasets, macro-economic time series and a chemistry database were added. It was also used to store large datasets (such as the CURL database). However, the service emphasis was still on software and programming rather than data and information services. It was not until 1991, when Manchester acquired three strategically important recurrent government surveys (General Household Survey, Labour Force Survey and Family Expenditure Survey), that the idea of a service, which has as its primary focus the provision of online access to data and information resources, was identified.

The datasets made available in the early days were large and complex, and additional specialist support-staff were appointed to mount and validate the data, to construct user interfaces, to write documentation and train users. Additional software support in statistics and Geographic Information Systems (GIS) was needed, as well as general user support. With funding from the ESRC, the Census Dissemination Unit (CDU) was set up at Manchester Computing Centre in 1992 to provide a national dissemination and support service for the 1991 Census area statistics (LBS/SAS) and related datasets.

In 1993 Manchester Computing Centre was designated a National Datasets Centre (the others being at the Universities of Bath and Edinburgh), and soon afterwards a new machine (the Cray Superserver CS6400) was installed and the MIDAS service was launched. By 1994 the CS6400 was providing access to datasets and associated software to over 100 higher education

institutions. In part, the growth in the number of sites was due to the demand for access to the 1991 Census area statistics.

Over the next few years MIDAS was successful in obtaining addition services. These included the UK satellite data archive service (1996), the Beilstein CrossFire service (1997), the JSTOR mirror service (1998) and the COPAC service (1998). In 1999, prompted by a trademark conflict, MIDAS was relaunched as MIMAS.

The SuperJournal and COPAC projects introduced to MIMAS a team of people who have experience and skills in electronic publishing and library reference material. In 1998 a consortium of MIMAS and Swets & Zeitlinger won a three-year contract to provide the innovative NESLI Managing Agent, and in 1999 MIMAS won the competition to host the prestigious ISI Web of Science Service for UK HE. MIMAS staff are also involved in several electronic publishing projects, some of which span the academic and commercial sectors.

The MIMAS Dataset Portfolio today

The Surveys

The surveys service is run in collaboration with the Data Archive³ at the University of Essex. Nine major surveys are available online at MIMAS, including longitudinal studies such as the British Household Panel Study and National Child Development Study, and additional surveys such as the Family Resources Survey and the Health Survey for England. The government surveys are huge and frequently updated.

Spatial Data

Spatial data includes Landsat and SPOT satellite images covering the UK, and Bartholomew Digital Maps covering London, Britain, Europe and the rest of the world at various scales (updated annually). A major recent task has been the quality assurance of the SPOT satellite image data for the UK.

Macro-economic Time Series

Time series data, hosted by MIMAS and aimed primarily at economists includes the ONS macro-economic time series databank covering all aspects of the UK economy, the OECD Main Economic Indicators for 24 countries, and several

IMF databanks. The ONS databank, which is used extensively in teaching, is updated monthly, the others (excepting the IMF IFS) annually. Some data go back to 1948.

For the OECD, IMF and UNIDO databanks, it is now possible to browse and extract data using a graphical user interface. The ONS databank has a web interface.

Scientific Data

In 1997, the Beilstein CrossFire chemical information system was launched. It is supported by staff from MIMAS, from the John Rylands University Library of Manchester and from the Joule Library at UMIST. There are currently over 5,000 users of this service, some of whom are at universities in Eire, Denmark, Sweden and Finland.

Census Data

With additional funding from ESRC, the Census Dissemination Unit's major development recently has been the creation of the web interface to the 1991 Census area statistics (Casweb). The primary aim of Casweb, which uses a map-based interface, is to make it easier to access the 1991 Census area statistics, particularly in teaching programmes. Planning for the 2001 Census has been and continues to be an important activity.

Bibliographic and Electronic Journal Services

Since 1987 the Consortium of University Research Libraries database, containing catalogue records, had been mounted at Manchester Computing and from 1992 had been made available to library staff to check bibliographic references and to identify locations for inter-library loans. The COPAC (CURL OPAC) Project began in November 1995 and the COPAC service, available since April 1996, has now been established as a JISC-funded service to provide public, unified access to the online catalogues of the CURL libraries

JSTOR⁴ is a non-profit US organisation providing electronic access via the web to digitised archives of 117 scholarly journals in 15 subject fields. So far, 39 universities in the UK and seven in Eire have site licences for the JSTOR UK Mirror service at MIMAS, which is the result of a long-term collaboration between the JISC and JSTOR.

In 1998 the JISC decided to replace the long-established BIDS ISI Database service by ISI's new Web of Science interface to its citation databases, and subsequently appointed MIMAS as the service provider. The service started in September 1999 and already has over 110 subscribed institutions. The two services will run in parallel for an overlap period until July 2000.

Since 1998 MIMAS has provided the user-support, technical expertise and the web gateway for NESLI, which currently provides over 55 UK universities with access to more than 2,500 full-text electronic journals.

Future developments at MIMAS

Under development at MIMAS are projects to integrate the datasets into the DNER by creating metadata for them and making them more accessible from a variety of routes.

The datasets will continue to be updated and new ones added to the portfolio. In addition, new projects and services will enhance the service, provide expertise in developing techniques for the analysis and visualization of data, and thus maintain a service that not only suits the needs of its users but also exceeds expectations.

In the words of the mission statement, MIMAS aims:

- to provide the UK academic community with the widest possible access to strategic datasets and key bibliographic information;
- to promote effective use of these resources in research, learning and teaching;
- to provide computing facilities for the storage, access, visualization, manipulation, and analysis of large and complex datasets;
- to provide a range of high quality support services, including documentation, training, statistical and software advice, and
- to work in close collaboration with other organisations to promote the secondary analysis of datasets.

References

1. <http://www.mimas.ac.uk/>
2. <http://www.jisc.ac.uk/>
3. <http://dawwww.essex.ac.uk/>
4. <http://www.jstor.org/>