



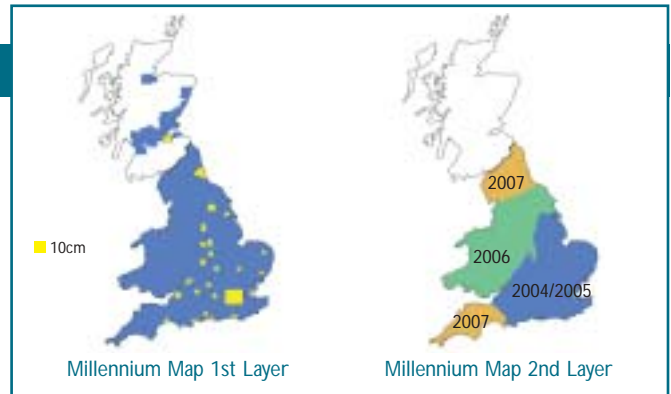
# Aerial Photography

## UK

From 1999-2002 Getmapping produced the Millennium Map - a map-accurate 25cm resolution aerial survey of the whole of England and Wales and parts of Scotland with main cities across the UK were captured at 10cm resolution. Scotland is due to be completed by the end of 2006.

The maintenance of the Millennium Map is being undertaken by the Getmapping Partnership (Getmapping, Geosense, Flight Images and SCS) using the state-of-the-art Vexcel Ultracam-D large format digital camera instead of traditional film based cameras.

The Vexcel camera produces a higher quality and cleaner image as there are no scanning artefacts. Shadow penetration is now possible as the data is collected in 12bit rather than 8bit, and in addition to the standard RGB channels there is also a Near Infra Red channel.



Geosense is leading the data processing work and flying has already begun on the second layer. All the imagery is fully orthorectified at a higher resolution of 15cm, with urban areas at 10cm or better, using GPS and NEXTMap Britain DTM.



## SOUTH AFRICA AND WORLDWIDE

Geosense have been acquiring and processing new and historical aerial photography for numerous governmental agencies and companies in South Africa and around the world. Our expert team of photogrammetrists have produced fully orthorectified seamless mosaics and high resolution digital terrain models to update maps

and for vegetation monitoring.

Geosense also provides a rapid response service to the Cape Metropolitan Council by producing orthorectified aerial photos taken from a helicopter for disaster management.

## PHOTOGRAMMETRY SERVICES

- Aerial Photography Acquisition
- Photogrammetric Scanning
- GPS Photo-Ground Control
- Digital Terrain Models
- Digital Elevation Models
- Contours
- Orthophotos
- Large Seamless Mosaics
- 3D Data and Visualisation
- Aerial Photo Interpretation
- Data Compression
- Digital and Hardcopy Output
- Web and Email Delivery Systems

Geosense is taking orders for new flying and existing photography. Contact us now for pricing, sales or for more information.

### Martin Tocher / Dave Horner - UK Office

Virginia Villas, High Street, Hartley Wintney, Hampshire, RG27 8NW, UK  
T +44 (0)1252 844225 F +44 (0)1252 843648 E info@geosense.co.uk W www.geosense.co.uk

### Matt Murphy - RSA Office

PO Box 1503, Sanlamhof, Bellville, 7532, Western Cape, South Africa  
T +27 (0)21 945 1072 F +27 (0)21 949 9894 E info@geosense.co.za W www.geosense.co.za



Historical images from aerial photography capture a moment in time providing an invaluable resource in monitoring change over the years. Past events or decisions have an impact on the way our city and landscapes appear today. Measuring and interrogating accurately processed historic imagery will help to predict and shape the future.

# Historical Aerial Photography

Geosense offer a unique 'search and process' service using our contacts from around the world to locate imagery of your area of interest in national and international libraries and archiving facilities. All imagery is supplied ortho or georectified, map accurate, seamless and in a format ready for your GIS or CAD system.

## South Africa

Geosense has produced for the Cape Metropolitan Council a seamless mosaic of orthorectified black and white historical aerial photography of the Metropolitan Area, flown between 1935-1943. The mosaic will be used to assist the Council in verifying structures and buildings that are older than 60 years, which, under the 1999 National Heritage Resources Act, require a permit before any proposed structural change can take place. Prior to this digital archive becoming available, the method for determining the Heritage rating was to carry out each survey on foot. The historical aerial photography, has, therefore, significantly helped in reducing the time for permits to be issued and in turn greatly reduced costs. The aerial photography will be kept as a digital historic archive to be used in other applications, including: for educational and reference purposes; visually verifying land claims from pre-Apartheid days; monitoring change both urban and environmental; and instigating effective conservation methods by mapping the unique indigenous Cape Floral Kingdom, which has dramatically declined

over the last 50 years due to the spread of alien vegetation. The dataset is also very useful for smaller district Towns where records have been lost, destroyed or are non-existent.

## United Kingdom

Geosense has access to aerial photographs dating back to the 1940s, including RAF, USAF and Luftwaffe data, both vertical and oblique, with resolutions up to 12.5cm in either black and white or colour. Aerial photography has already been used to: monitor the natural rate and impact of coastal erosion; investigate environmental changes caused by man-made structures; delineate areas

- Contaminated Land
- Site Assessment
- Pollution Monitoring
- Land Use Change
- Population Studies
- Land Regeneration
- Planning and Development
- Coastal Erosion and Accretion
- Nature and Habitat Conservation
- Agricultural Monitoring
- Forest Studies
- Boundary Disputes
- Historic Flood Mapping
- Insurance Risk Assessment
- Health Studies
- Protection of Archaeological Sites
- Educational Products
- GIS
- General Public Interest

of contaminated land; allocate land for regeneration; aid town planning; locate sites requiring nature and habitat conservation; preserve and protect sites of archaeological and scientific interest; and verify boundary claims.



Above: Contaminated Land - a time series of photographs showing the change in landuse. From top to bottom- 40s, 50s, 60s, 70s, 90s and 00s.



Left: Erosion of over 250m of the Suffolk coastline, UK between 1940 and 1999. © RAF and Getmapping plc

Right: District 6, Cape Town, South Africa - Now and Then 2002 and 1945. The Mosque in the top left is one of the few buildings to remain after all coloured people were forcibly removed under the Group Areas Act.



## Martin Tocher / Dave Horner - UK Office

Virginia Villas, High Street, Hartley Wintney, Hampshire, RG27 8NW, UK  
**T** +44 (0)1252 844225 **F** +44 (0)1252 843648 **E** info@geosense.co.uk **W** www.geosense.co.uk

## Matt Murphy - RSA Office

PO Box 1503, Sanlamhof, Bellville, 7532, Western Cape, South Africa  
**T** +27 (0)21 945 1072 **F** +27 (0)21 949 9894 **E** info@geosense.co.za **W** www.geosense.co.za

**GEOsense**