

# Electronic tag data visualisation

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In 1981, CSIRO Marine and Atmospheric Research (CMAR) began development of a database to house data on conventional tagging of marine fishes.

Through CSIRO's Wealth from Oceans Flagship the tagging research has since expanded to incorporate the latest electronic tags, deployed on fish as well as marine mammals and birds.

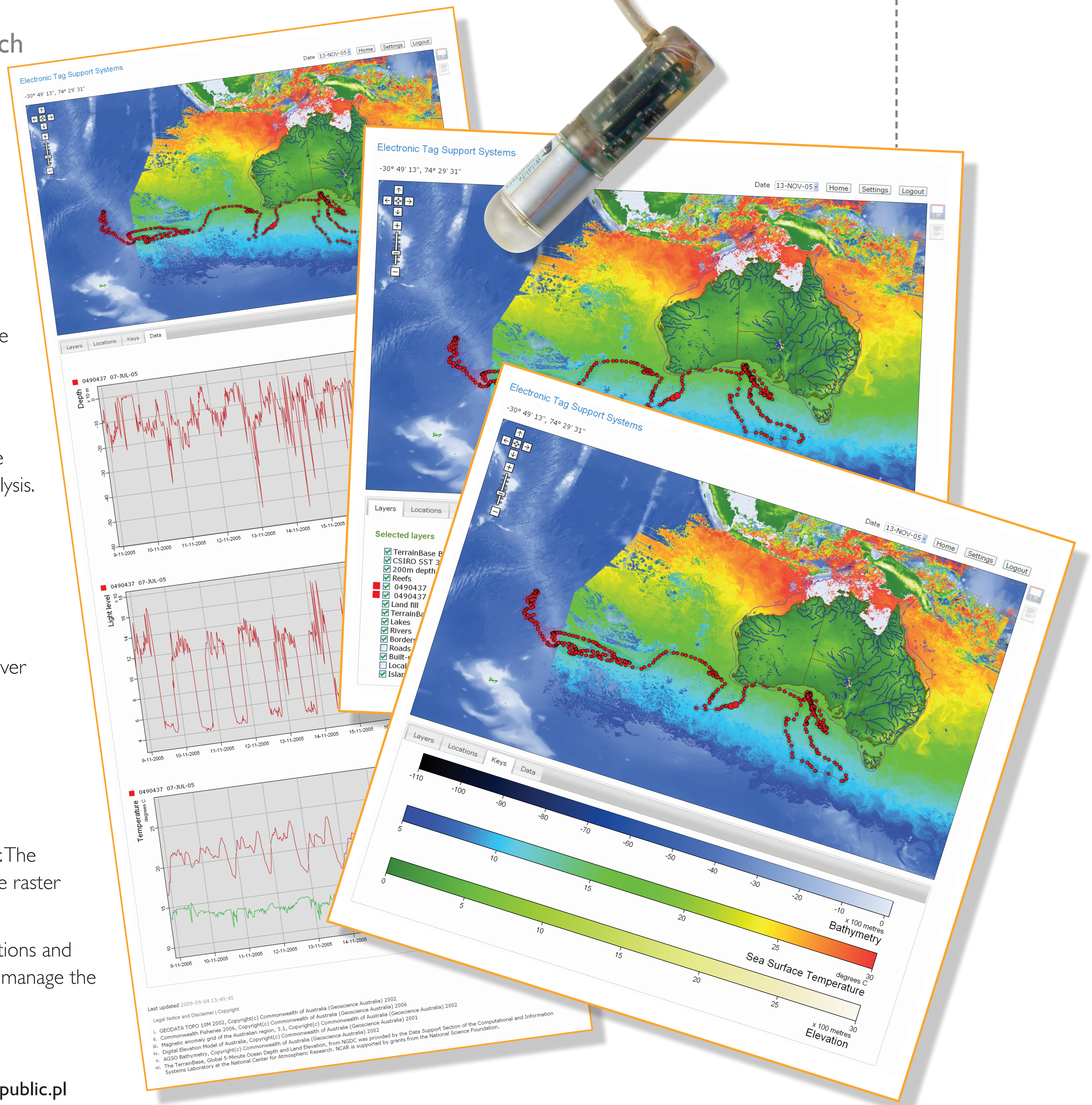
This vast increase in data generation has created a need for the centralisation of tag data to ensure they are widely accessible and secured against loss, and to reduce redundancy among projects. One criticism of this approach has been a difficulty in data access within and across sites.

The Electronic Tag Support Systems project has developed a web portal to the tagging database allowing users to browse through the electronic tag data and easily extract data of interest for further analysis. Tag tracks are displayed on an interactive map and archival data are displayed in interactive graphs.

## Implementation

The portal comprises a mixture of client side javascript, SVG and AJAX requests combined with server side perl script (using Mapserver mapscript) and HTML.

- Vector layer tiles are pre-generated as SVG files.
- Raster layer tiles are generated on request by CGI perl script.
- HTTP request headers are used to implement tile caching.
- netCDF raster data are coloured by a customised GDAL driver. The portal interface allows the user to choose how to colourise these raster layers.
- The jQuery javascript library is used to implement AJAX transactions and general user interface widgets. The jQuery SVG plugin is used to manage the SVG DOM.



A publicly accessible version of this portal can be found at:  
[http://www.marine.csiro.au/cgi-bin/tags/svgmapping/etss\\_access\\_svg\\_public.pl](http://www.marine.csiro.au/cgi-bin/tags/svgmapping/etss_access_svg_public.pl)

