

Terria: Federated spatial data exploration



There is a growing amount of spatial data being used and made available by many governments and companies worldwide. This data is often placed on custom maps in specialized websites. This involves a high cost of website development, poor reuse of the spatial data and lost opportunities for innovation using the data.

Terria™ has addressed this by releasing its software and services for federated spatial data exploration. Terria™ maps use the TerriaJS™ software and provide access to large numbers of spatial data services directly from the original data custodian and allow users to search, explore, share and add to maps. Terria maps are being used for policy development, decision support and easy-to-use open data websites. New Terria maps can be quickly developed building on existing spatial data services or new cloud-based data services can be rapidly set up.

Terria™ Maps

TerriaJS™ powers a growing number of web maps including the official Australian government map (<http://nationalmap.gov.au>), the Australian Renewable Energy mapping Infrastructure (<http://aremi.nicta.com.au>), the UNEPFI Global Risk Map (<http://globalriskmap.nicta.com.au>) and others.

Features

Features of Terria™ maps include:

- Available to users of all major browsers (Chrome, Firefox, Safari, Internet Explorer 9 and later)
- 3D or 2D views (3D views available on Chrome, Firefox, Safari and Internet Explorer 11)
- Support for Open Geospatial Consortium (OGC) standards such as WMS, WFS, etc
- Interoperability with wide range of GIS back-end services (including ESRI ArcGIS Server, MapInfo, Google Map Engine, Geoserver and others.)
- Support for spreadsheet data (in CSV files) with points, region codes (such as postal codes, country codes, etc) and time-based data
- User searching of data catalogues
- Integration with CKAN for automated access to open data catalogues
- User can add their own data sets by dragging and dropping on to the browser
- Sharing of map views by email or web.

Spatial analytics

Terria™ maps can optionally include Terria's Spatial Predictive Analytics services operating on the available data. Information about these services is available in a separate brochure.

www.terria.io

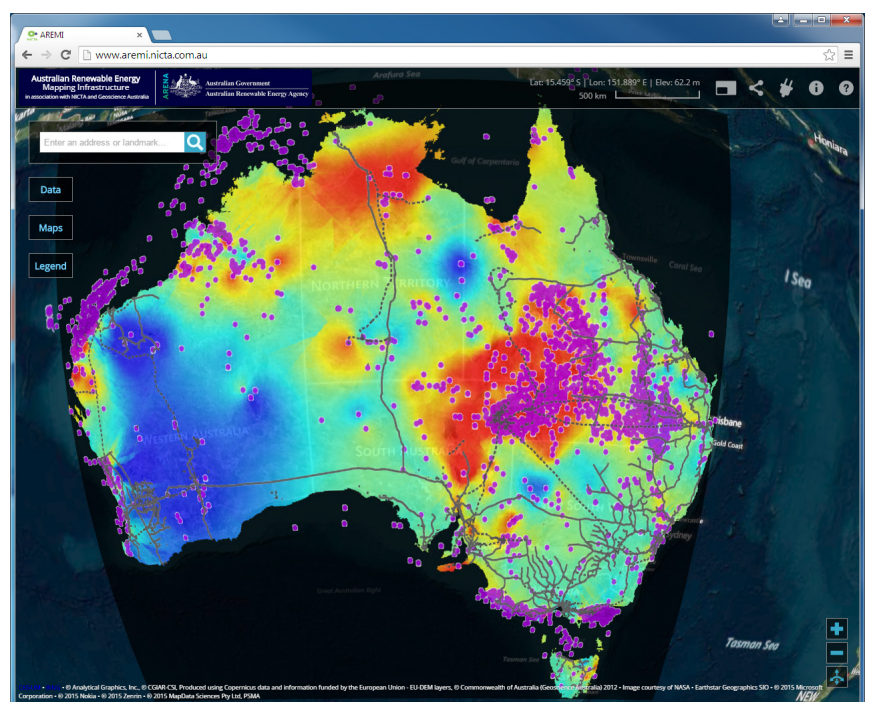


Figure 1: The Australian Renewable Energy Mapping Infrastructure powered by Terria™



Figure 2: The Australian National Map powered by Terria™

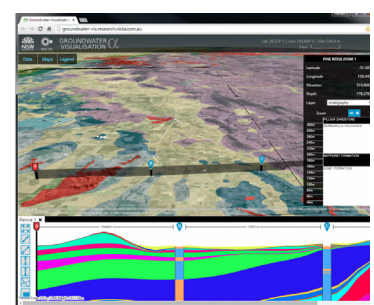


Figure 3: Groundwater visualization system powered by Terria™

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Leading the Way

NICTA is Australia's Information and Communications Technology (ICT) Research Centre of Excellence, driving innovation through high quality research, research training, commercialisation and contract research.

NICTA has the largest concentration of ICT researchers in Australia. Our research focuses on use-inspired basic research that benefits industry, the community and the national interest.

NICTA has strong research capability in:

- Software Systems
- Mobile Systems
- Machine Learning
- Computer Vision
- Optimisation.

Our Business Teams are the market focus of our research capabilities:

- Broadband and the Digital Economy
- Infrastructure, Transport and Logistics
- Security
- Environment.

NICTA researchers work on Business Team projects supported by:

- An Engineering and Technology Development Team
- IP, Legal and other professional support.

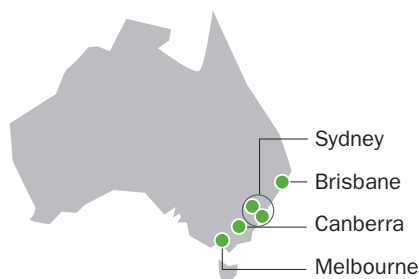
Our work as a world-class research institute and Centre of Excellence in science and innovation brings together many of Australia's and the world's top ICT researchers. NICTA provides them with the facilities and support they require, making imagination to impact a reality.

NICTA's unique approach fosters and develops ICT research. We work closely with both industry and other research institutions to solve problems and make breakthroughs in ICT with real impact. NICTA's focus on use-inspired research means our projects have direct relevance to the challenges faced by business, government and individuals around the world. The result is breakthrough technologies that provide commercial opportunities and have a positive impact on Australia's export earnings.

Terria is a NICTA company specialising in software for web-based spatial data analytics and visualisation. Our federated spatial data exploration technology enables compelling spatial data websites such as the Australian National Map, the Australian Renewable Energy Mapping Infrastructure and the UNEPFI Global Risk Map.

Our spatial predictive analytics technology provides a range of advanced spatial detailing, summarisation and prediction techniques. We provide a web-based platform which combines our federated spatial data discovery technology with our analytics technology to provide advanced spatial data analytics for a large number of industries including environment, energy, finance, and demographics.

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