

The Australian Soil Resource Information System (ASRIS)

ASRIS collates and maintains the best available, nationally consistent soil and land resource information for Australia. It provides a scientific information infrastructure for assessing and monitoring the condition of Australia's soil and land resources.

Using ASRIS

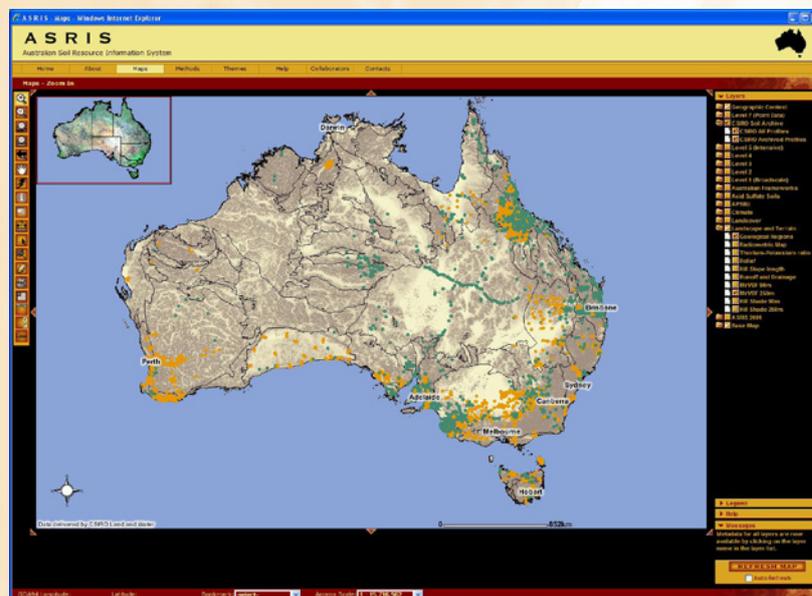
ASRIS contains a set of spatial and temporal databases that maintain national soil and land information in a consistent and usable format.

Commonly requested data and information are displayed through an online geographic information system using coloured maps, photographs, satellite images, tables and graphs (www.asris.csiro.au).

The ASRIS mapping website supports a broad range of users including natural resource managers, educational institutions, planners, researchers, and

community groups. Users can zoom into a region of interest, turn data sets on and off, produce customised maps and print the results. ASRIS works best with a broadband connection and complies with standards for online geographic information so is compatible with many of the rapidly expanding data sources available via the Internet.

Complex analysis and integration of ASRIS and other data for national assessments is done collaboratively by CSIRO and other partners.



The ASRIS web mapping interface showing data relating to landforms, geological regions and the location of analysed specimens.

Partners

Australian Government, state and territory agencies co-operate through the Australian Collaborative Land Evaluation Program (ACLEP) (www.clw.csiro.au/aclep) to maintain and improve ASRIS. ACLEP is a partnership between CSIRO; the Australian Government Department of Agriculture,

Fisheries and Forestry; and the state and territory agencies responsible for land resource assessment.



Australian Government
 Department of Agriculture,
 Fisheries and Forestry

Who needs ASRIS?

ASRIS is designed to meet the needs of anyone with an interest in soil and land resource management. Data is used for a range of purposes such as:

- land suitability assessment for agricultural or urban development
- predicting variability in crop yields
- determining erosion hazard
- measuring and monitoring soil carbon sequestration
- modelling water availability and quality
- habitat extent and biodiversity assessment.

ASRIS is particularly useful for regional, multi-state, national and international assessments. ASRIS is updated at regular intervals as new soil information and ancillary datasets become available.

More detailed soil information for specific locations may be available from relevant state and territory agencies. Contact them through the National Committee on Soil and Terrain (www.clw.csiro.au/aclep).

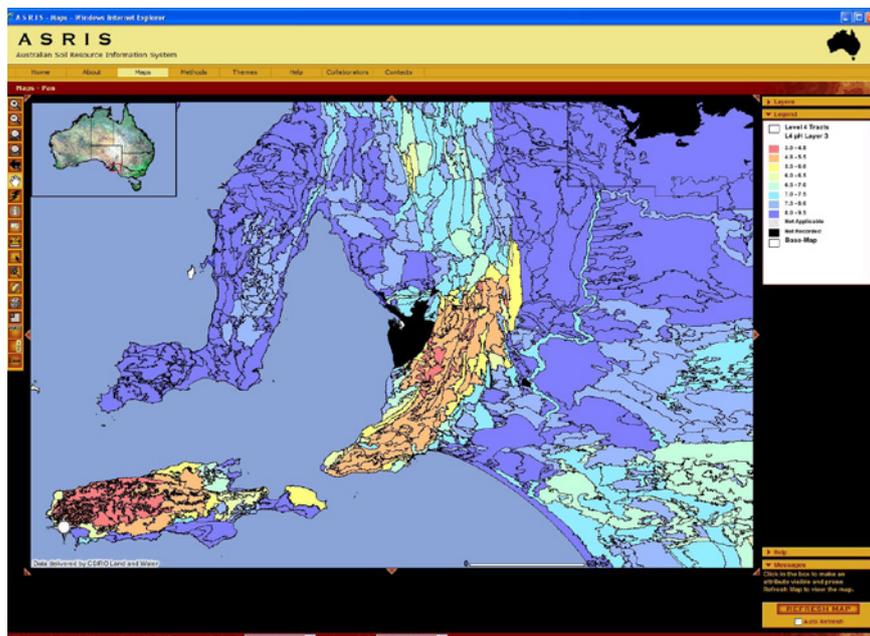
Technical information

ASRIS uses a seven level hierarchy of mapping units. The upper two levels provide general descriptions of landforms, regolith and soil types.

Lower levels provide detailed data in regions where field survey and mapping has been undertaken. A consistent set of land qualities is described for individual map units. ASRIS data is reported for functional depth layers and relates to important soil attributes, including for example:

- acidity (pH)
- soil carbon
- available water storage
- salinity
- and erodibility.

The lowest level is a soil profile data base with fully characterised sites that are representative of significant environments. Many of the related soil specimens are maintained for future research in the CSIRO National Soil Archive (www.clw.csiro.au/aclep/archive).



ASRIS map of sub-soil pH in South Australia.



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