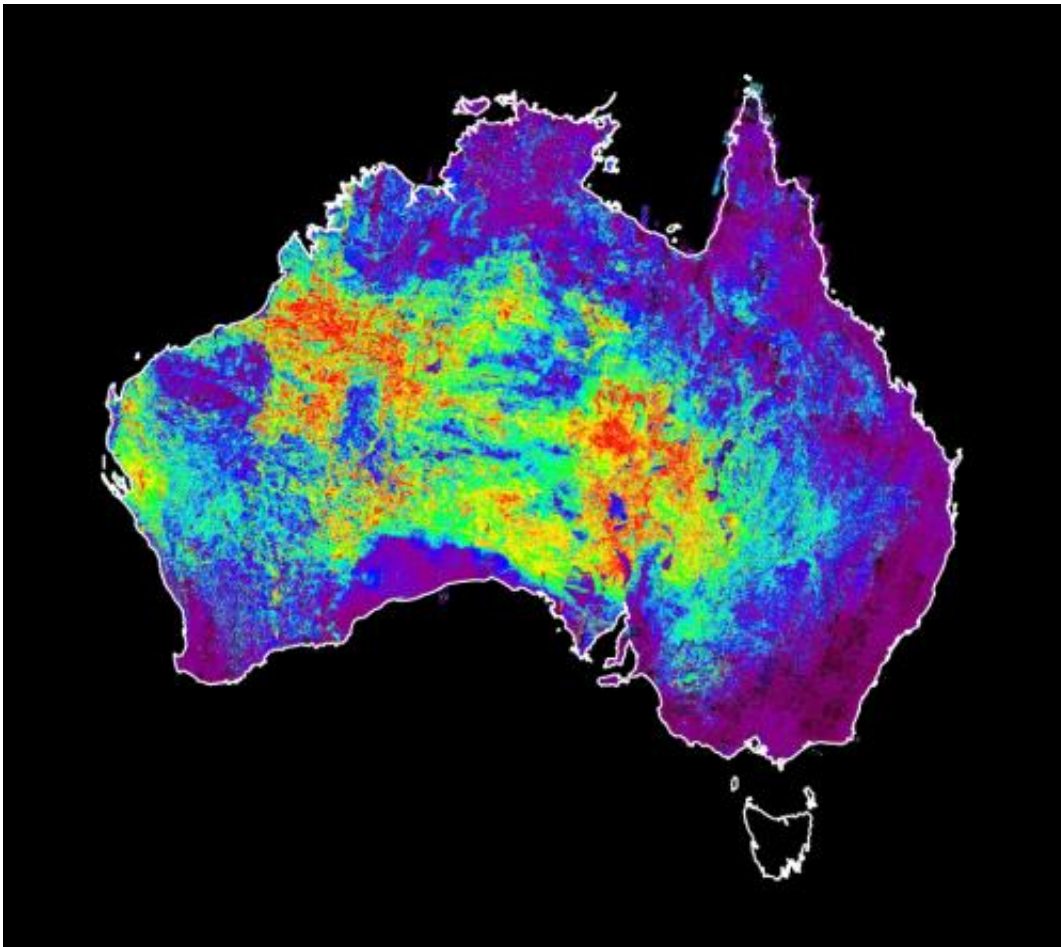


Australia creates world's first continental-scale mineral maps

August 8 2012



The world-first suite of mineral maps details the mineral composition of the surface of the continent.

(Phys.org) -- The world-first maps were generated from a ten-year

archive of raw Advanced Spaceborne Thermal Emission and Reflection (ASTER) data collected by NASA and the Japanese Government's Japan Space Systems.

CSIRO scientists have developed software that transformed the data into a continent-wide suite of mineral maps that show information about rock and soil mineral components and provide a Google-like zoom to view images from thousands of kilometres wide to just a few kilometres. They are already changing the way that geoscientists look for mineral deposits by providing more accurate and detailed information than ever before.

The ASTER maps represent a successful collaboration involving scientists from Japan, USA and Australia. Data access and software development has been coordinated by CSIRO through the Western Australian Centre of Excellence for 3D [Mineral](#) Mapping and involves Geoscience Australia, state and territory Geological Surveys, AuScope, iVEC, NCI, JSS, [NASA](#) and the USGS.

The maps were officially launched at a short ceremony featuring CSIRO Chief Executive, Dr Megan Clark and Geoscience Australia CEO, Dr Chris Pigram at the 34th International Geological Congress in Brisbane last night.

Following the launch, Professor Yasushi Yamaguchi, head of the Japanese ASTER science team said, "Congratulations on your successful launch of the ASTER geoscience maps of Australia. It is a very good example of the ASTER contribution to the geoscience community and I am very proud of being an ASTER science team member".

Dr Mike Abrams from NASA and head of the US ASTER science team added, "Congratulations on an impressive project. I do like your idea of producing global geoscience maps, similar to what you have created for

Australia”.

The Australian ASTER geoscience maps can be obtained from the [AuScope Discovery Portal](#), the [Western Australian Centre of Excellence for 3D Mineral Mapping](#) and [Geoscience Australia](#). State and territory coverage can also be acquired from the respective government geological surveys.

Provided by CSIRO

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