| Africa | Asia | Australia | Europe | North America | South America |

Acraman

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Research

Meteorites

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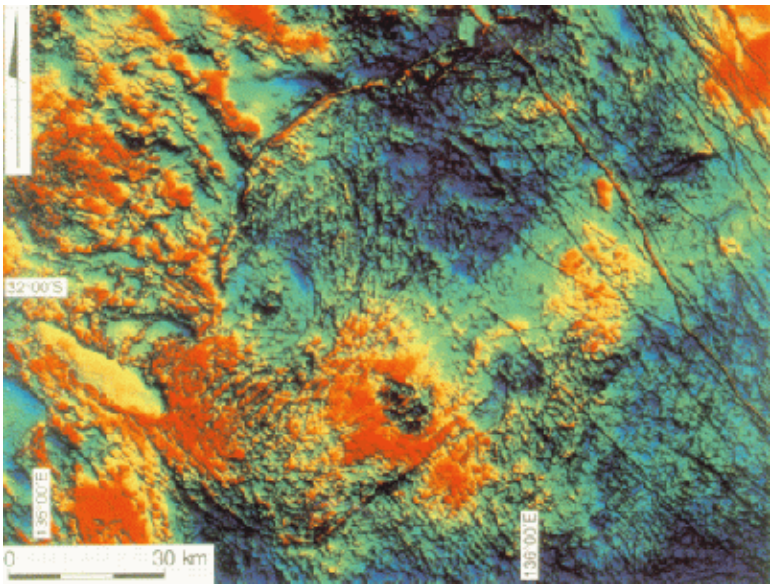
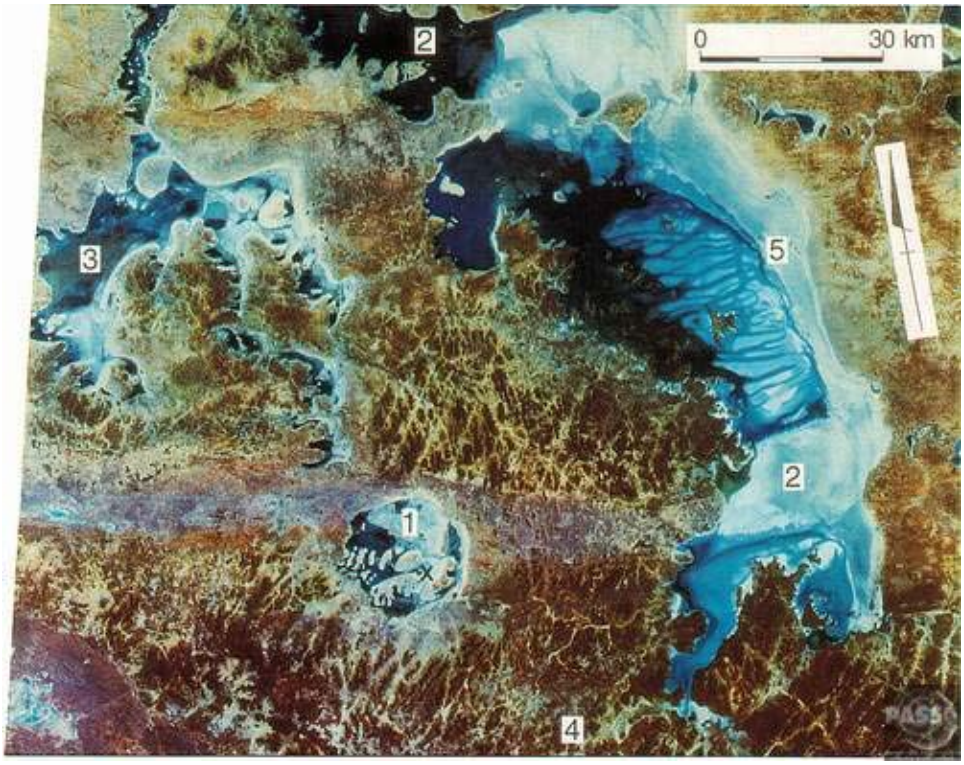
Crater Name	Location	Latitude	Longitude	Diameter (km)	Age (Ma)*	Exposed	Drilled	Target Rock **	Bolide Type***
Acraman	South Australia, Australia	S 32° 1'	E 135° 27'	90	~ 590	Y	N	C	Chondrite

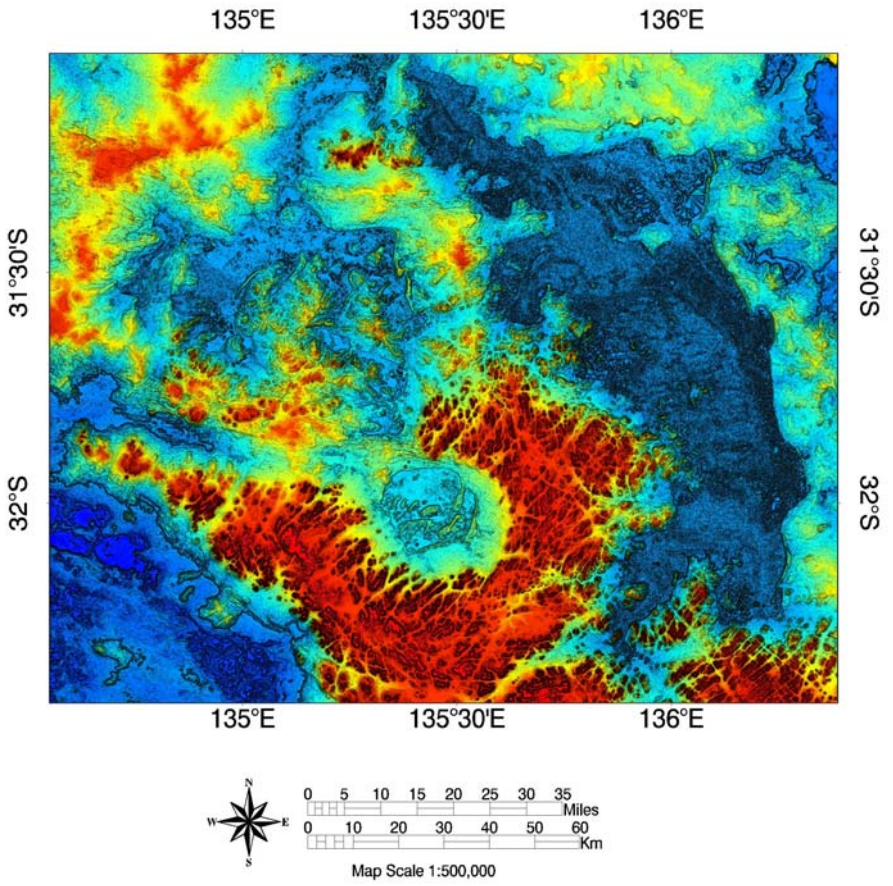
Landsat image



Aeromagnetic image of the Acraman area of the Gawler Craton, covering the Landsat scene (see image below). ER Mapper file: total magnetic intensity, pseudocolor (Gaussian equalisation histogram stretch), sun angle from the northeast. From Williams, Schmidt and Boyd (1996).



Landsat scene covering most of the Acraman impact structure in the Mesoproterozoic Gawler Range Volcanics, showing: 1, Lake Acraman within the Acraman depression; 2, Lake Gairdner; 3, Lake Everard; 4, the Yardea corridor at 85-90 km diameter. Surface water (darker blue) in Lake Gairdner helps define an arcuate trend (5) at ~150 km diameter that continues westward to Lake Everard. X marks the location of a central dipolar magnetic anomaly in the southeastern part of Lake Acraman. Landsat scene 15 February 1973, scene center S31-30 E135-51. From Williams, Schmidt and Boyd (1996).



DEM Image Provided by Dr. Carlos Roberto de Souza Filho

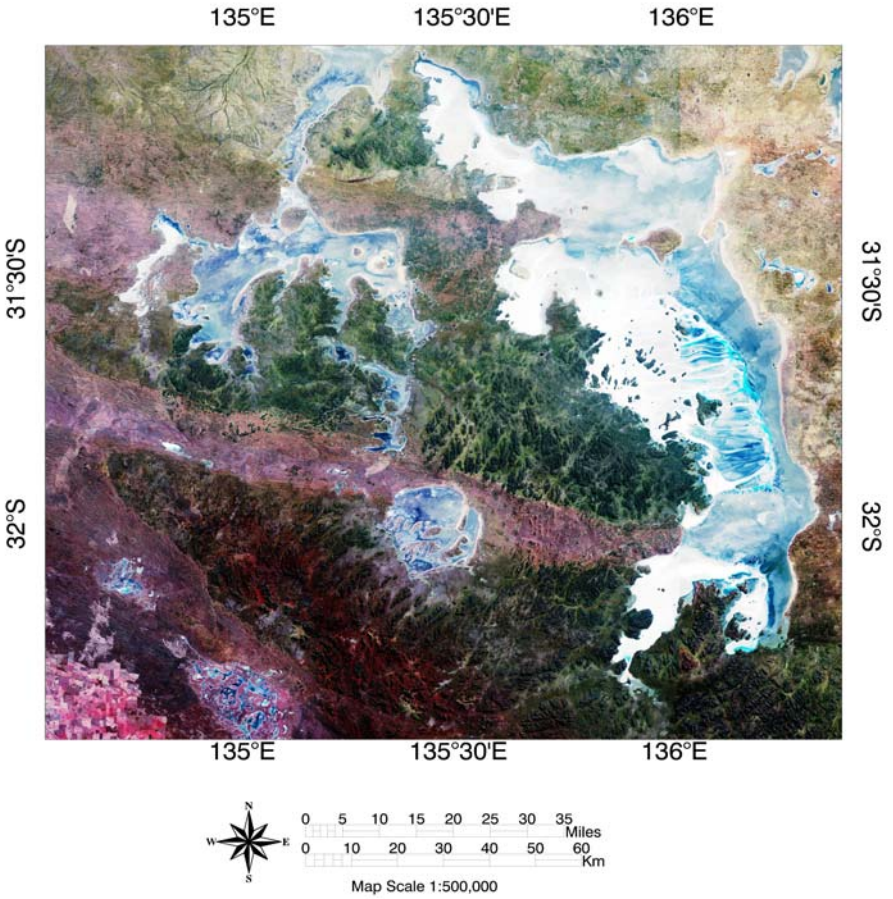


Image Provided by Dr. Carlos Roberto de Souza Filho

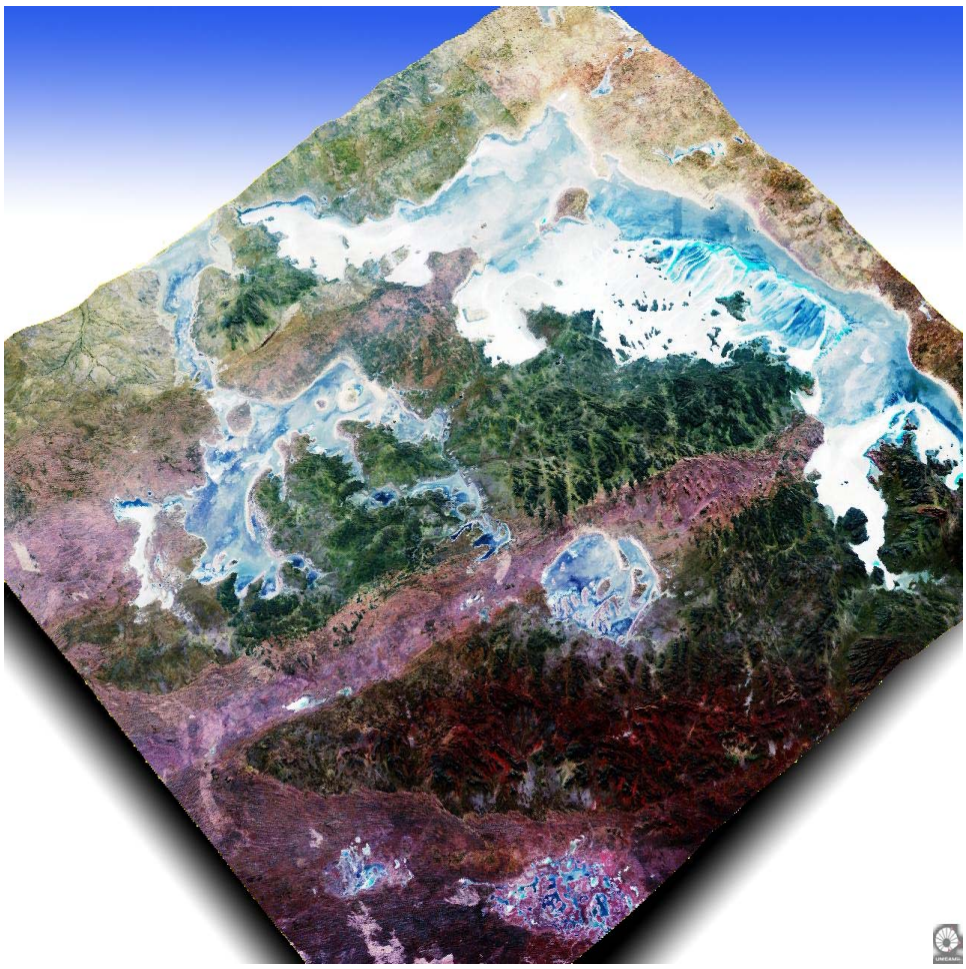


Image Provided by Dr. Carlos Roberto de Souza Filho

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* pre-1977 K-Ar, Ar-Ar and Rb-Sr ages recalculated using the decay constants of Steiger and Jager (1977) Ages in millions of years (Ma) before present.

** Abbreviations: C - Crystalline Target; M - Mixed Target (i.e.sedimentary strata overlying crystalline basement); S - sedimentary target (i.e. no crystalline rocks affected by the impact event). From Osinski. G. R., Spray J. G., and Grieve R. A. F. 2007. Impact melting in sedimentary target rocks: A synthesis. In *The Sedimentary Record of Meteorite Impacts, Geological Society of America Special Paper.* Editors: Evans K. Horton W., King D., Morrow J., and Warme J. Geological Society of America: Boulder, in press.

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