

CRC LEME OPEN FILE REPORT 184

3D MODELLING OF THE CALLABONNA SUB-BASIN (SOUTHERN CURNAMONA REGION)

ABSTRACT

The aim of this project was to construct a 3D stratigraphic model of the Southern Callabonna Sub-basin using established grain size classes (granulometries) and incorporating data from 827 drillholes collected over the area in 1997 by Matthew Killick. This report describes the data and workflow used in the study with a specific focus on the application of Gocad (3D modelling software) as a central component of the modelling process. This report also serves as a supplement to the LEME Open File Report 183 'Geological Review of the Southern Curnamona Region (2006) by Ruperto and de Caritat. Methods used here are only an example of the tools available to 3D modellers and it must be noted the model outputs are wholly dependent on the quality of the input data. Ideal outcomes include a detailed understanding of regolith thickness, architecture and hydrogeological/hydrogeochemical processes in this important area of exploration interest.