Parabarana, Northern Flinders Ranges, Australia

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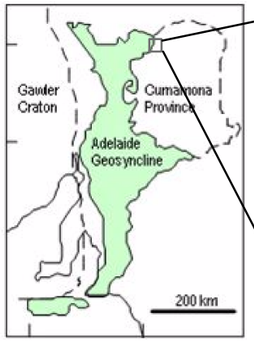
Meters
0 300 600 1,200

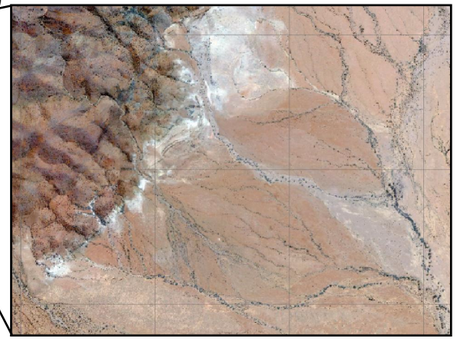
375000 376000 377000 378000 379000
6683000 6682000 6681000 6680000 6679000

SSel1 SSeh1 CHpd3 CHpd1 CHfs1 CHep2 CHep1 Aaf1 CHep3 Apd1 Aap1 CHed1

MGA 94, zone 54

i) ii) iii)





Regolith Landform Units

Aap1 (alluvial sediments / alluvial plain): orange-brown, fine to coarse-grained sands & silts, sub-angular to rounded quartz, silcrete, granite & lithic clasts & pebbles on a low relief (0-9 m) landform. Incised streams and small channels throughout. Vegetation is sparse, dominated by forbs & some chenopods.

Aap2 (alluvial sediments / alluvial plain): orange-brown, fine to coarse-grained sands & silts, sub-angular to rounded quartz, silcrete, granite & lithic clasts & pebbles on a low relief (0-9 m) landform. Ephemeral swamps & drainage depressions throughout. Vegetation is dense, dominated by woodland species.

Apd (alluvial sediments/depositional plain): orange-brown, fine to coarse-grained sands & silts, sub-angular to rounded quartz, silcrete, granite & lithic clasts & pebbles, hosted on a low relief (0-9 m) depositional landform. Vegetation is sparse.

Afa (alluvial sediments/alluvial fan): orange-brown, fine to coarse-grained sands & silts, on a low angle, elongated fan. Minor drainage depressions along the margins. Vegetation is dominated by chenopod shrubs & some woodland species.

Aed1 (alluvial sediments / erosional drainage): orange-brown, fine to coarse-grained sands & silts, rounded quartz & lithic pebbles, mionr exposures of silicified sandstone in shallow, incised drainage. Vegetation is dominated by forbs & chenopod shrubs.

Aed2 (alluvial sediments / erosional drainage): grey-brown, fine-grained sands, sub-angular to sub-rounded granite clasts in a shallow valley, erosional drainage. Vegetation is emu bush & some chenopod shrubs.

ACah1 (active channel sediments / active channel): grey-brown, fine to coarse-grained sands & silts, sub-rounded quartz & lithic pebbles, in broad, anastomising, ephemeral channels. Vegetation is dominated by Eucalyptus camaldulensis.

ACah2 (active channel sediments / active channel): grey-brown, fine to coarse-grained sands & silts, sub rounded quartz & lithic pebbles, sub-angular grainite clasts, exposures of highly polished granite in a gorge like channel. Vegetation is emu bush.

CHed (sheetflow sediments / erosional drainage): orange-brown, fine to coarse-grained sands & silts, sub-angular to rounded quartz, silcrete, granite & lithic clasts & pebbles, on an erosional landform with anastomising channels & streams. Vegetation is dominated by woodland species.

CHpd1 (sheet flow sediments / depositional plain): orange-brown, fine to coarse-grained, quartzose sands & silts, sub-angular to rounded quartz, silcrete, granite & lithic clasts & pebbles. Vegetation is sparse, dominated by chenopod shrubs, forbs & grasses

CHfs (sheetflow sediments / sheetflow fan): sub-angular to sub-rounded quartz, silcrete, sandstone & granite clasts, quartz & plagioclase pebbles, orange-brown sands & silts on a low angle broad fan. minor incised drainage throughout. Vegetaion is sparse dominated by chenopod shrublands.

CHpd3 (sheetflow sediments / depositional plain): sub-angular, sandstone, silcrete & granite clasts, sub-rounded quartz & plagioclase pebbles banded with orange-brown, fine to caorse-grained sands & silts on a low releif (0-9 m) depositional landform. Minor incised drainage. vegetation is sparse, dominated by forbs & grasses.

CHep1 (sheetflow sediments / erosional plain): orange-brown, fine-grained sands & silts banded with sub-rounded, quartz & lithic pebbles on a low relief (0-9 m) erosional landform. Vegetation is sparse, dominated by chenopod shrubs.

CHep2 (sheetflow sediments / erosional plain): sub-angular to sub-rounded quartz, silcrete, sandstone & granite clasts, quartz & plagioclase pebbles, banded with orange-brown sands & silts on a low relief (0-9 m) erosional landform. Vegetaion is sparse dominated by chenopod shrublands.

CHep3 (sheetflow sediments / erosional plain): sub-angular to sub-rounded quartz, silcrete, sandstone clasts& with minor granite clasts, banded with orange-brown sands & silts on a low angle broad fan. minor incised drainage throughout. Vegetaion is sparse dominated by chenopod shrublands.

SMer (Moderately weathered saprolite / erosional rise): slight to moderately weathered coarse-grained to pebbly sandstone, clast supported conglomerates & moderate to highly weathered, carbonaceous shales. Landforms are low to moderate relief, often high angled, erosional rises, often surrounded by incised drainage. Vegetaion is sparse, typically chenopod shrubs & forbs.

SSer (slightly weathered saprolite / erosional rise): slightly weathered, highly polished, granite, gneisses & quartz veins on steep, low to moderate (9-30 m) landforms. Vegetation is dominated by emu bush & chenopod shrubs.

SSel (slightly weathered saprolite / low hill): slightly weathered, highly polished, granite, gneisses & quartz veins on steep, moderate relief (30-60 m) landforms. Vegetation is dominated by emu bush & chenopod shrubs.

SSeh (slightly weathered saprolite / hill): slightly weathered, highly polished, granite, gneisses & quartz veins on steep, moderate to high relief (30-60 m) steep landforms. Vegetation is dominated by emu bush & chenopod shrubs.

i) Location of the study site, relative to South Australia

ii) Quickbird remotely sensed imagery used to compile the map (courtesy of Heathgate Resources)

iii) Parabarana field site