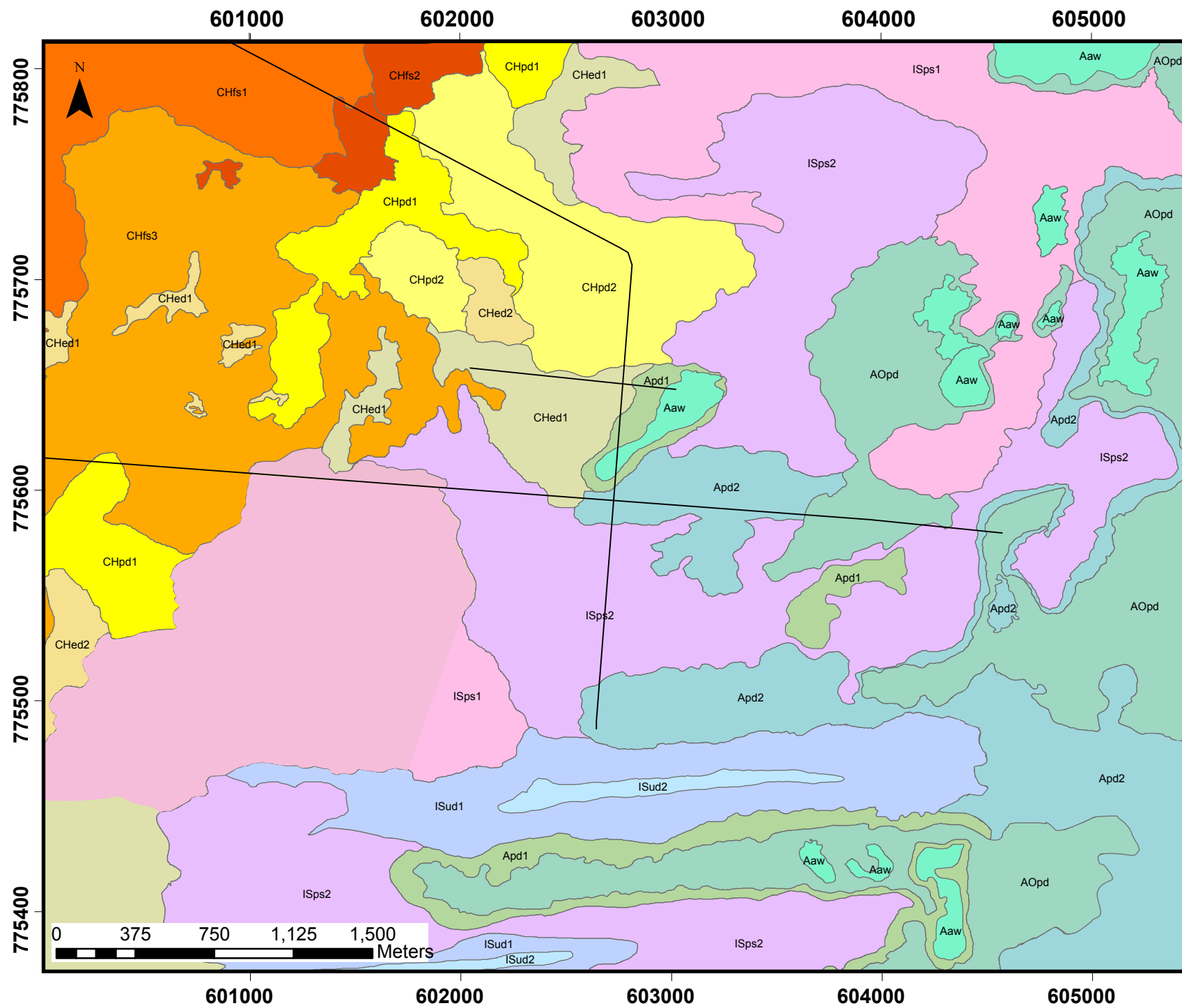


# Regolith-Landform Map of the Titania Au-Prospect, Northern Territory.

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## Regolith-Landform Units

### Colluvial Sediments

#### Colluvial Sheetwash Fans

- CHfs1** - Angular ferruginous saprolith pebbles (5-10 cm diameter) with moderately sorted red-brown quartz sand. Slightly concave sloping plains dominated by shallow overland flow processes. Hummock-grassland dominated by *Triodia pungens* with *Acacia* spp. (particularly *Acacia hilliana*), *Eucalyptus pachyphylla* and grasses. Abundant termitaria dominated by *Amitermes vitiosus*.
- CHfs2** - Moderately-sorted red-brown quartz sand with minor sub-angular to sub-rounded ferruginous saprolith pebbles (1-5 cm diameter). Plain dominated by shallow overland flow processes. Hummock-grassland dominated by *T. pungens* with *Acacia* spp. (particularly *A.hilliana*), *Eucalyptus pachyphylla* and grasses, and minor *Eucalyptus brevifolia* and *Corymbia opaca* trees. Abundant termitaria dominated by *Amitermes vitiosus*, with minor *Drepanotermes rubriceps*.
- CHfs3** - Well-sorted red-brown quartz sand with minor sub-angular to sub-rounded ferruginous saprolith coarse sand. Minor exposures of ferruginised quartzose lithic sediments. Plain dominated by shallow overland flow processes and minor drainage depressions. Hummock-grassland dominated by *Triodia pungens* with *Acacia* spp. (particularly *A.hilliana*), *Eucalyptus pachyphylla* and grasses, and minor *E. brevifolia* and *Corymbia opaca* trees in minor drainage depressions. . Abundant termitaria dominated by *A. vitiosus*.

#### Colluvial Sheetwash Depositional Plains

- CHpd1** - Well-sorted red-brown quartz sand and red-brown silt with very minor sub-angular to sub-rounded ferruginous saprolith medium to coarse sand. Low relief dominated by deposition by shallow overland flow. Hummock-grassland dominated by *Triodia pungens* with *Acacia* spp., *Eucalyptus pachyphylla* and grasses, with minor *Grevillea striata*. Abundant termitaria, dominated by *Amitermes vitiosus*.
- CHpd2** - Well-sorted red-brown quartz sand and red-brown silt with very minor sub-angular to sub-rounded ferruginous saprolith medium to coarse sand. Low relief dominated by deposition by shallow overland flow. Hummock-grassland dominated by *Triodia pungens* with *Acacia* spp., *Eucalyptus pachyphylla* and grasses, with minor *Grevillea striata*. Abundant termitaria, dominated by *Amitermes vitiosus*.

#### Colluvial Sheetwash Drainage Depressions

- CHed1** - Well-sorted, fine to medium quartz sand with rounded, ferruginised saprolith medium to coarse sand. Broad ephemeral drainage depression. Hummock-grassland dominated by *Triodia pungens* and *Acacia* spp. shrubs with *Corymbia opaca* trees along axes of drainage depressions. Abundant termitaria dominated by *Amitermes vitiosus*, scattered *Drepanotermes rubriceps* mounds.
- CHed2** - Well sorted, very fine to fine grained sands containing minor rounded, medium Fe-lag, with a significant proportion of silty clay sediments. Ephemeral drainage depression dominated by shallow overland flow. Hummocky grassland dominated by *Triodia pungens* with *Acacia* spp. shrubs such as *Acacia coriacea*, as well as *Melaleuca lasiandra*, *Grevillea striata*, and *Hakea macrocarpa* scattered across the unit. Abundant termitaria, including *Amitermes vitiosus* and *Nasutitermes triodiae* mounds.

### Alluvial Sediments

#### Alluvial Depositional Plains & Overbank Deposits

- Apd1** - Moderately to well sorted very fine to medium silty sand, and minor Fe-lag. Depositional plain formed by low-lying position in the landscape dominated by alluvial processes. Hummocky grassland of *Triodia pungens* and other grasses, with *Melaleuca glomerata* and scattered *Grevillea striata*. Abundant termitaria, dominated by *Nasutiterme triodiae*.
- Apd2** -Well sorted very fine sands to silty clays, minor well-rounded, polished fine-grained Fe lag, exposed regolith-carbonates also found within this unit. Depositional plain dominated by alluvial processes, within a northerly-flowing palaeochannel, areas of mudcracks common within this unit. Hummocky grassland with *Triodia pungens* and other grasses, and scattered *Melaleuca glomerata*. Abundant termitaria, dominated by *Nasutitermes triodiae*.
- Apd3** - Well sorted very fine sands to silty clays, minor fine-grained Fe lag. Depositional plain formed by low-lying position in the landscape, dominated by alluvial processes, with some influx of aeolian sediment. Hummocky grassland with *Triodia pungens* and other grasses, and scattered *Melaleuca glomerata*. Abundant termitaria, dominated by *Nasutitermes triodiae*.
- AOpd** - Well sorted silty-clays, with minor fine to medium, rounded quartzose sands forming overbank deposits. Depositional plain, formed by low-lying position in the landscape, dominated by alluvial processes. Hummocky grassland of *Triodia pungens* and scattered *Melaleuca glomerata*. Abundant termitaria, dominated by *Nasutitermes triodiae*.

#### Alluvial Drainage Depressions & Swamps

- Aed** - Well sorted fine sands, within an ephemeral drainage depression. Alluvial processes dominate the unit. Hummocky grassland consisting of *Triodia pungens* plus *Melaleuca glomerata* and scattered *Grevillea striata*. Abundant termitaria, dominated by *Nasutitermes triodiae*.
- Aaw** - Very fine to fine well sorted sands, with 30 to 40 % silt and clay. Ephemeral swamp, dominated by alluvial processes. Hummocky-grassland dominated by *Triodia pungens* with some grasses, scattered *Melaleuca glomerata* also. Abundant termitaria, dominated by *Nasutitermes triodiae*.

### Aeolian Sediments

#### Aeolian Sandplains

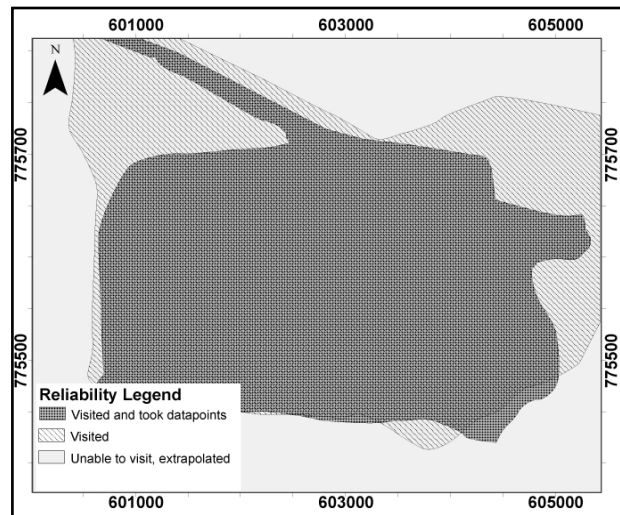
- ISps1** - Well sorted, fine-grained sands, with minor Fe-lag. Sandplain dominated by aeolian processes. Hummocky grassland with *Triodia pungens*, plus *Melaleuca lasiandra* scattered *Grevillea striata*, *Acacia longifolia*, *A. coriacea*, and *A. wickhamii* subsp. *Viscidula*. Termitaria are common, dominated by *Nasutitermes triodiae*; *Drepanotermes rubriceps* sparse.
- ISps2** -Well sorted, fine-grained sands, with minor Fe-lag and silty-clay sediments. Sandplain dominated by aeolian processes. of an alluvial component, due to its proximity to areas annually flooded. Hummocky grassland with *Triodia pungens*, plus *Melaleuca lasiandra*, scattered *Grevillea striata*, *A. longifolia*, *A. coriacea*, and *A. wickhamii* subsp. *Viscidula*. Termitaria are common, dominated by *Nasutitermes triodiae*; *Drepanotermes rubriceps* sparse.

#### Aeolian Dunes

- ISud1** - Well sorted, fine-grained sands. Semi-mobile dune, dominated by aeolian processes. Grassland of *Triodia pungens* and other grasses, plus *Grevillea eriostachya* and *Acacia* spp. Termitaria rare, scattered *Drepanotermes rubriceps*.
- ISud2** - Well sorted, fine-grained sands. Semi-mobile dune, dominated by aeolian processes. Grassland of *Triodia pungens* and other grasses, and *Grevillea eriostachya*. Sparse termitaria.



Google Earth Image of the Titania Au-Prospect and surrounds (the red box indicates the extent of the reliability diagram).



Reliability diagram for the Titania Au-Prospect regolith-landform map.

— Access Road

This map was compiled using ArcGIS, and is in the GDA94 z52 UTM projection. A Google-Earth image and reliability diagram of the mapping area is provided, left.