



Enhancements of multi-parameter radar data are excellent for delineating rock units based on variations in surface roughness and dielectric properties when vegetative cover is minimal. For example, rock units within the closure of Arkaroola syncline, Flinders Ranges, South Australia, have distinct roughness properties according to their lithology, weathering and erosional characteristics. A subset of three bands Cvv/Lhv/Phv displayed as an RGB image in provides an accurate representation of the distribution of the rock units in the accompanying geological map. The technique is more appropriate for sedimentary sequences rather than metamorphic complexes where results have shown a poor correlation between roughness and radar backscatter.

Geological reference

Pwp	Pound Quartzite	Pwn	Nuccaleena Formation	Pfn	Yankaninna Siltstone
Pww	Wonoka Formation	Phl	Elatina Formation	Pft	Tapley Hill Formation
Pwb	Bunyeroo Formation	Phu	Wundowie Limestone	Pyb	Bolla Bolla Formation
Pwu	Ulupa Formation	Pfb	Balcanoona Formation	Pbk	Skillogalee Formation