

## APPENDIX 1: STATIC AND DYNAMIC MAPS<sup>75</sup>

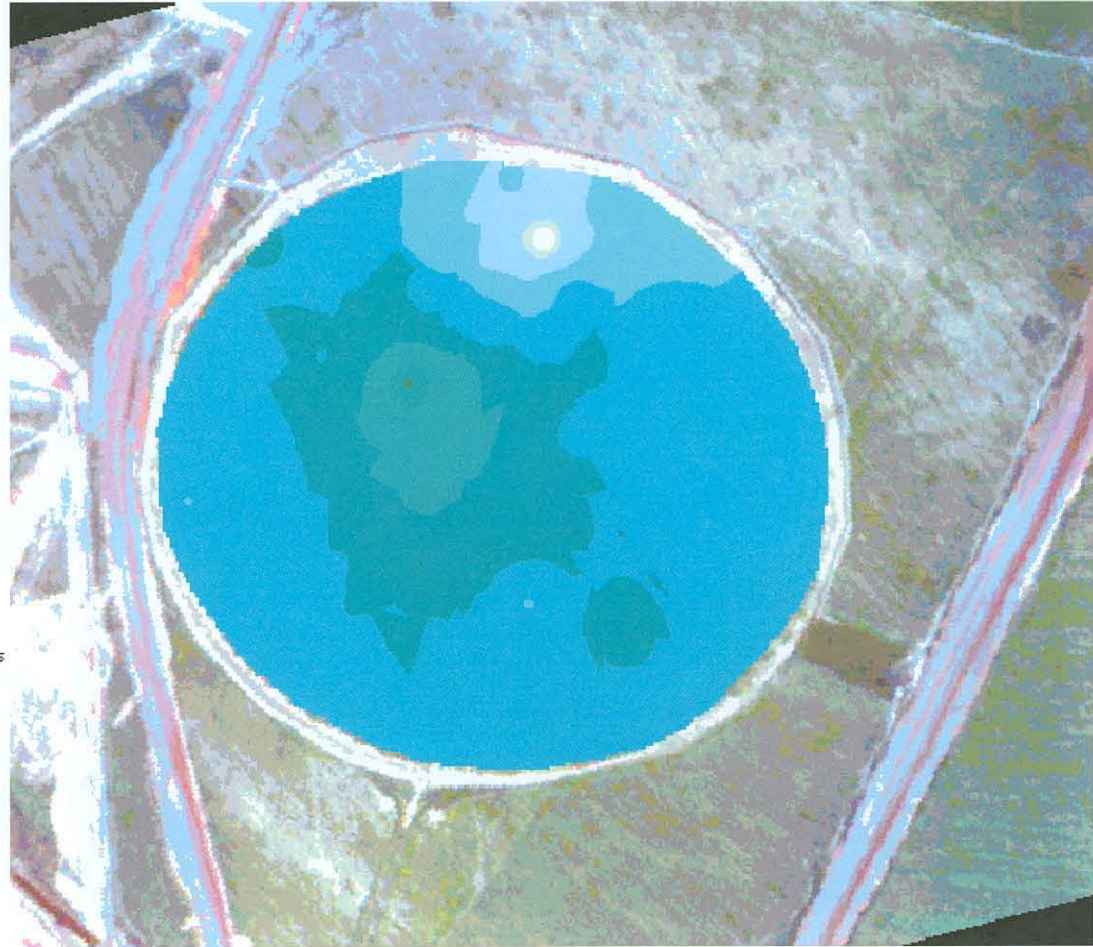
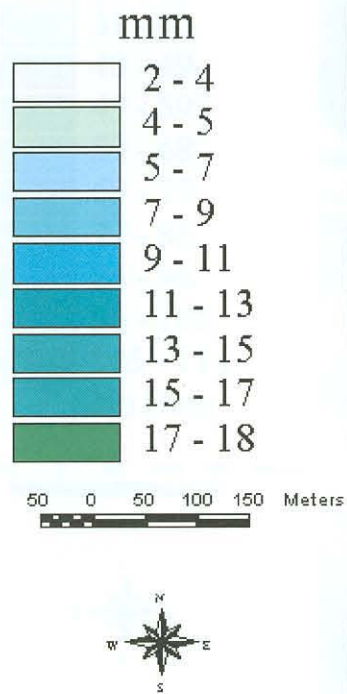
### Pivot Major

Static Maps	Unit	Page
Available Water Capacity map of the first 20 cm of soil	mm	95
Available Water Capacity map from 20 to the spoil/ impermeable layer	mm	96
Total Available Water Capacity map	mm	97
Depth to spoil map	mm	98
Depth of vadoze zone map	mm	99
Surface DEM map	m (a.s.l.)	100
Spoil DEM map	m (a.s.l.)	101
Dynamic Maps		
Multi-Spectral image 08/99 Flight		102
Multi-Spectral image 10/99 Flight		103
Transformed Vegetation Index (TVI) map 08/99 flight		104
Transformed Vegetation Index (TVI) map 10/99 flight		105
First Principal Component (PC1) map 08/99 flight		106
First Principal Component (PC1) map 10/99 flight		107
Wheat yield map 11/99	t ha <sup>-1</sup>	108
Wheat crop moisture map, yield 11/99	%	109
Ground cover map 08/99	%	110
Top dry matter map 08/99	g*m <sup>-2</sup>	111
LAI map 08/99	m <sup>2</sup> *m <sup>-2</sup>	112

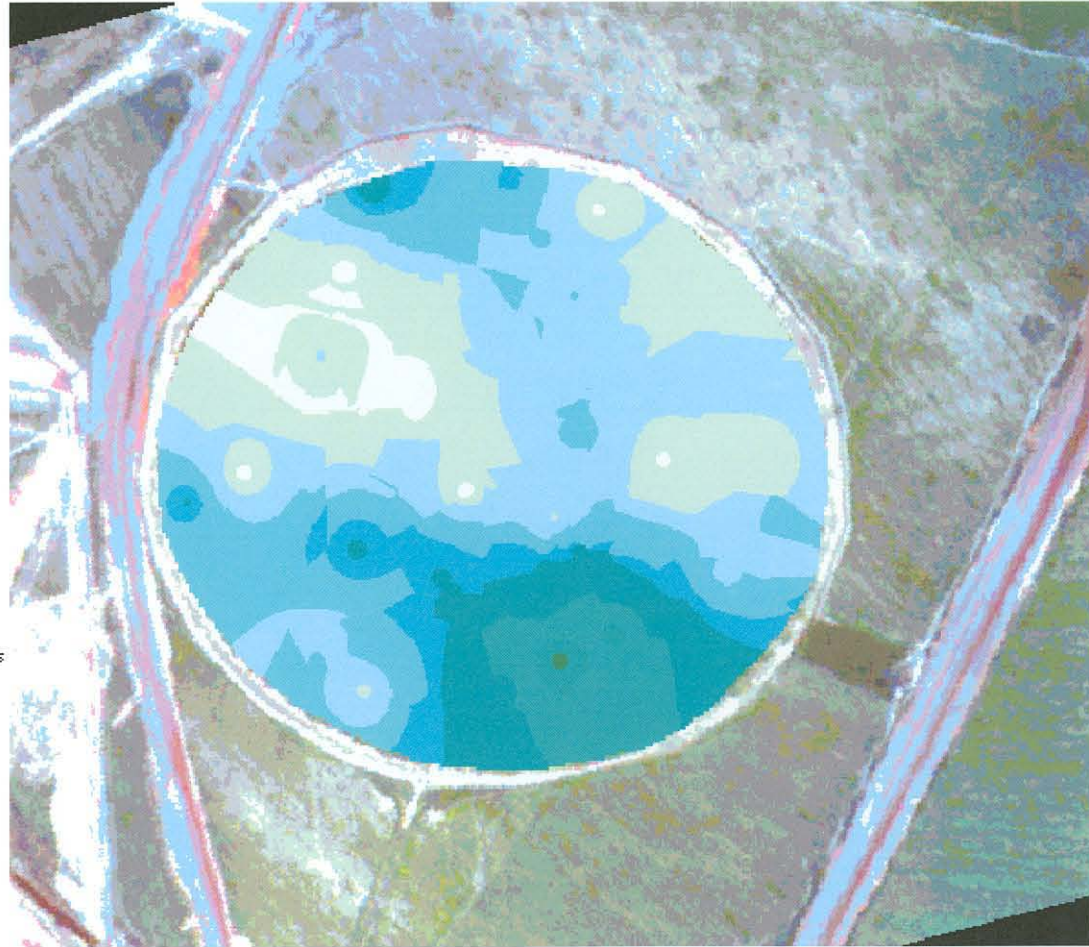
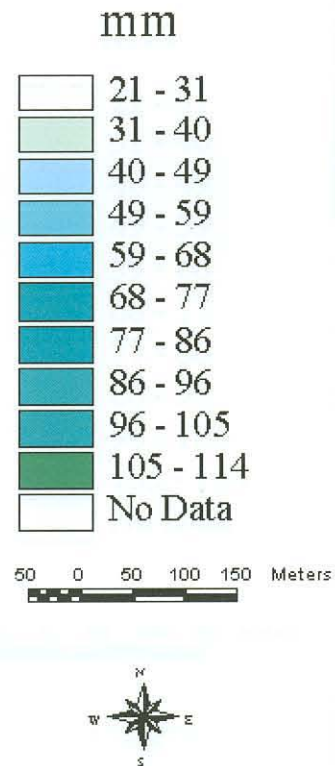
### Pivot Tweefontein

Static Maps	Unit	Page
Available Water Capacity map of the first 20 cm of soil	mm	113
Available Water Capacity map from 20 to the spoil/ impermeable layer	mm	114
Total Available Water Capacity map	mm	115
Depth to spoil map	mm	116
Depth of vadoze zone map	mm	117
Surface DEM map	m (a.s.l.)	118
Spoil DEM map	m (a.s.l.)	119
Dynamic Maps		
Multi-Spectral image 08/99 Flight		120
Multi-Spectral image 10/99 Flight		121
Transformed Vegetation Index (TVI) map 08/99 flight		122
Transformed Vegetation Index (TVI) map 10/99 flight		123
First Principal Component (PC1) map 08/99 flight		124
First Principal Component (PC1) map 10/99 flight		125
Wheat yield map 11/99	t ha <sup>-1</sup>	126
Wheat crop moisture map, yield 11/99	%	127
Ground cover map 08/99	%	128
Top dry matter map 08/99	g*m <sup>-2</sup>	129
LAI map 08/99	m <sup>2</sup> *m <sup>-2</sup>	130

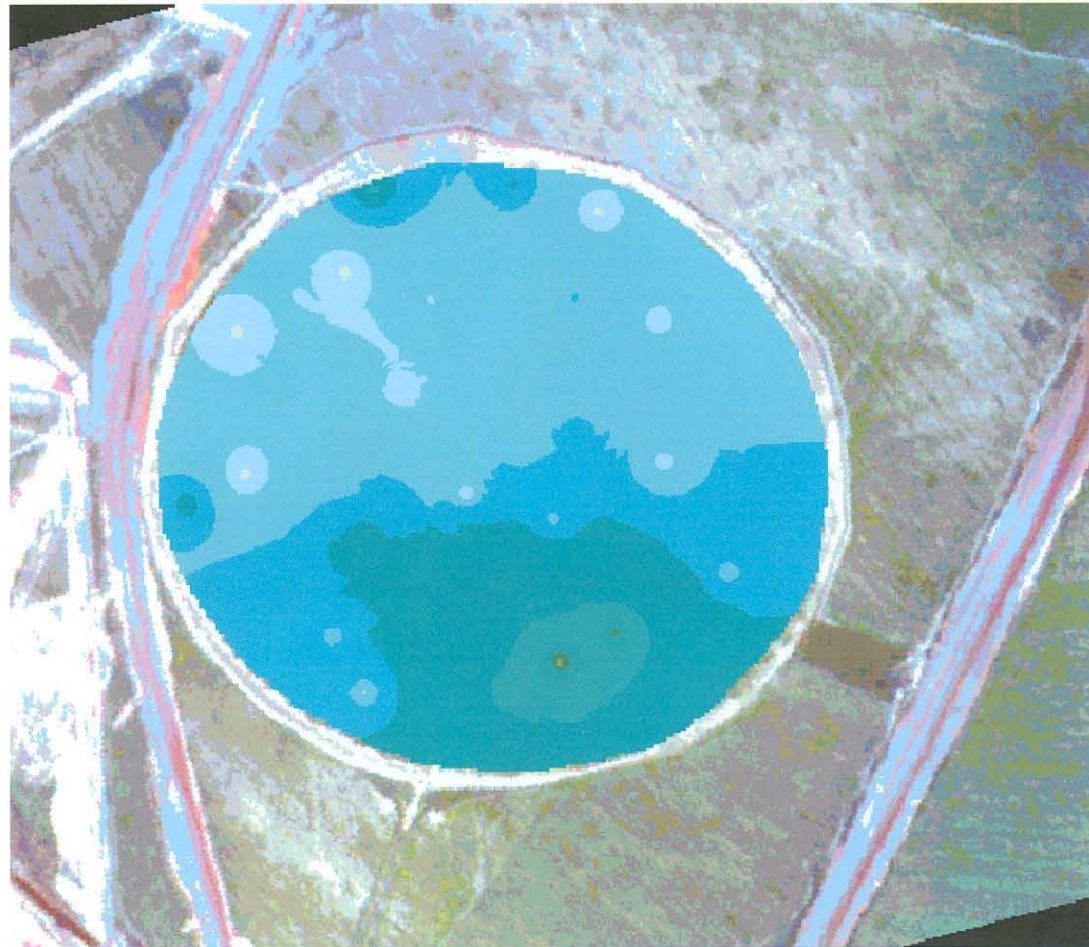
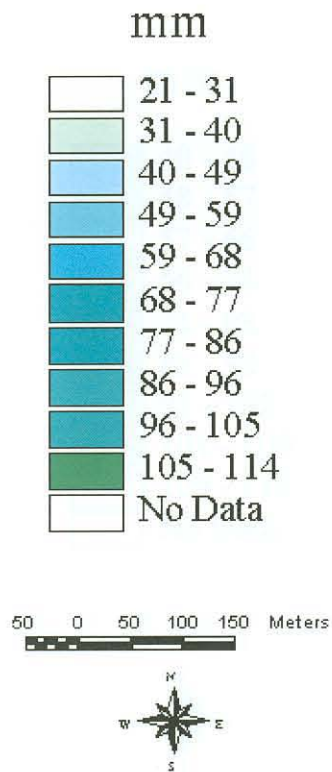
## Pivot Major: AWC 0 - 20 cm



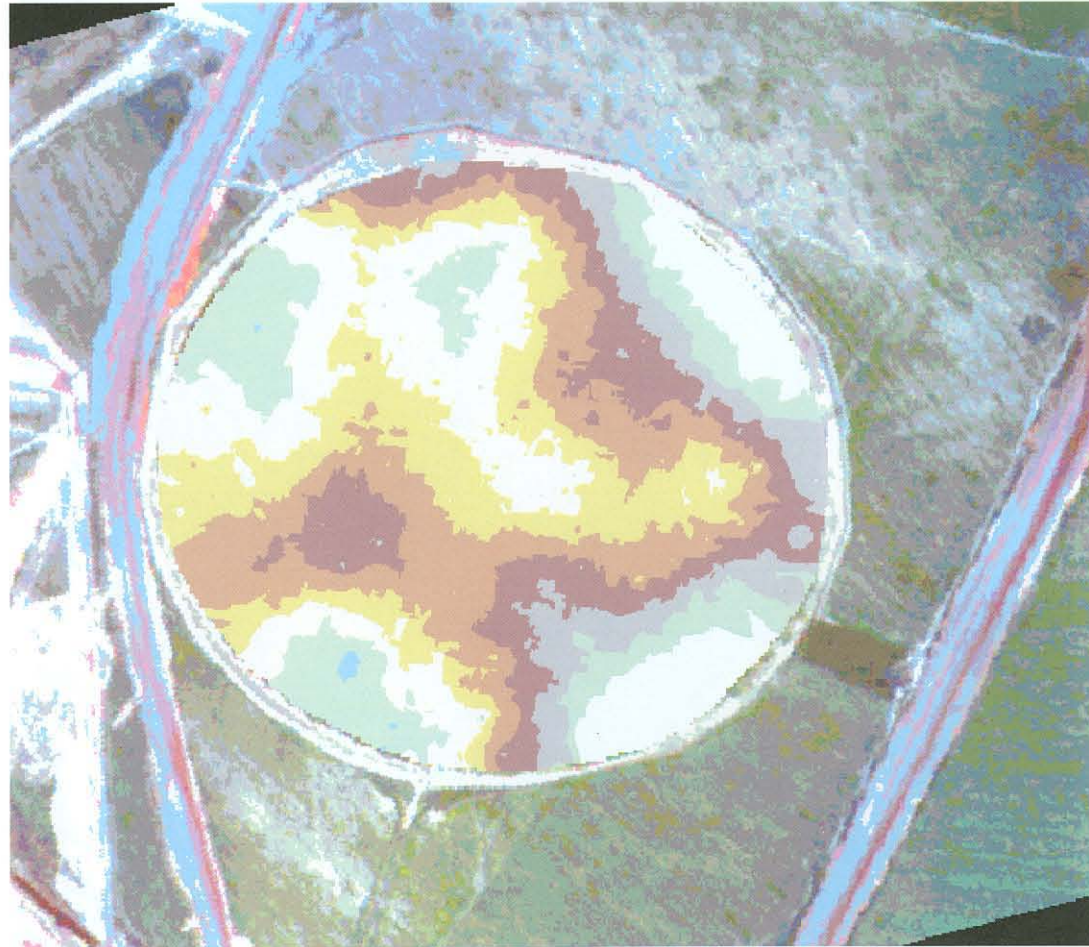
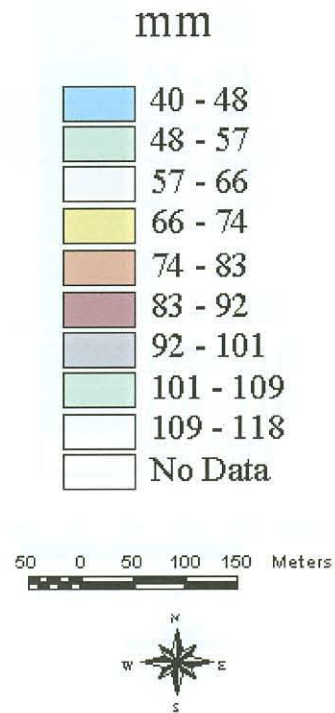
## Pivot Major: AWC 20cm - Spoil/impermeable layer



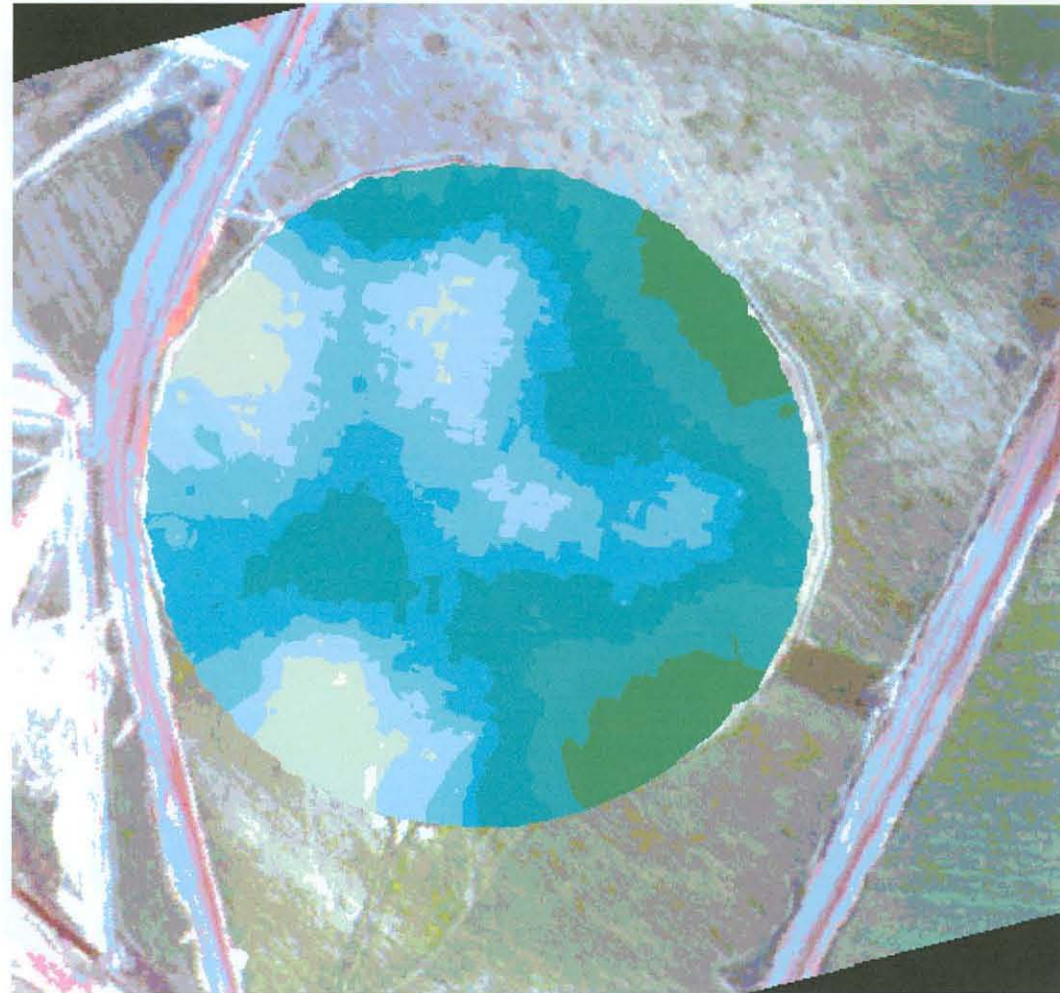
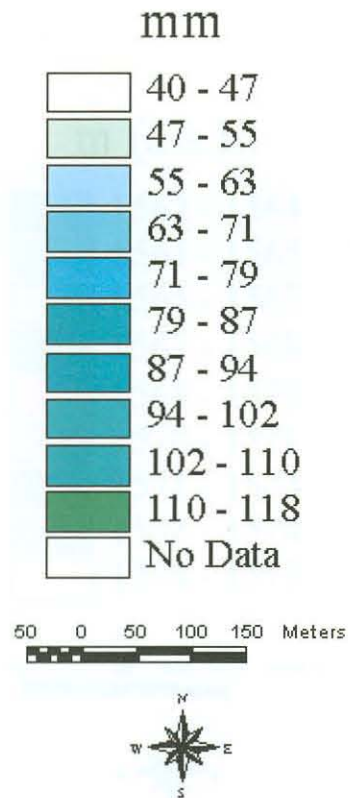
## Pivot Major: AWC total



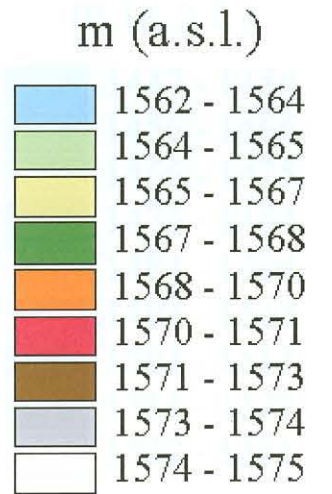
## Pivot Major: Depth to Spoil/Impermeable Layer



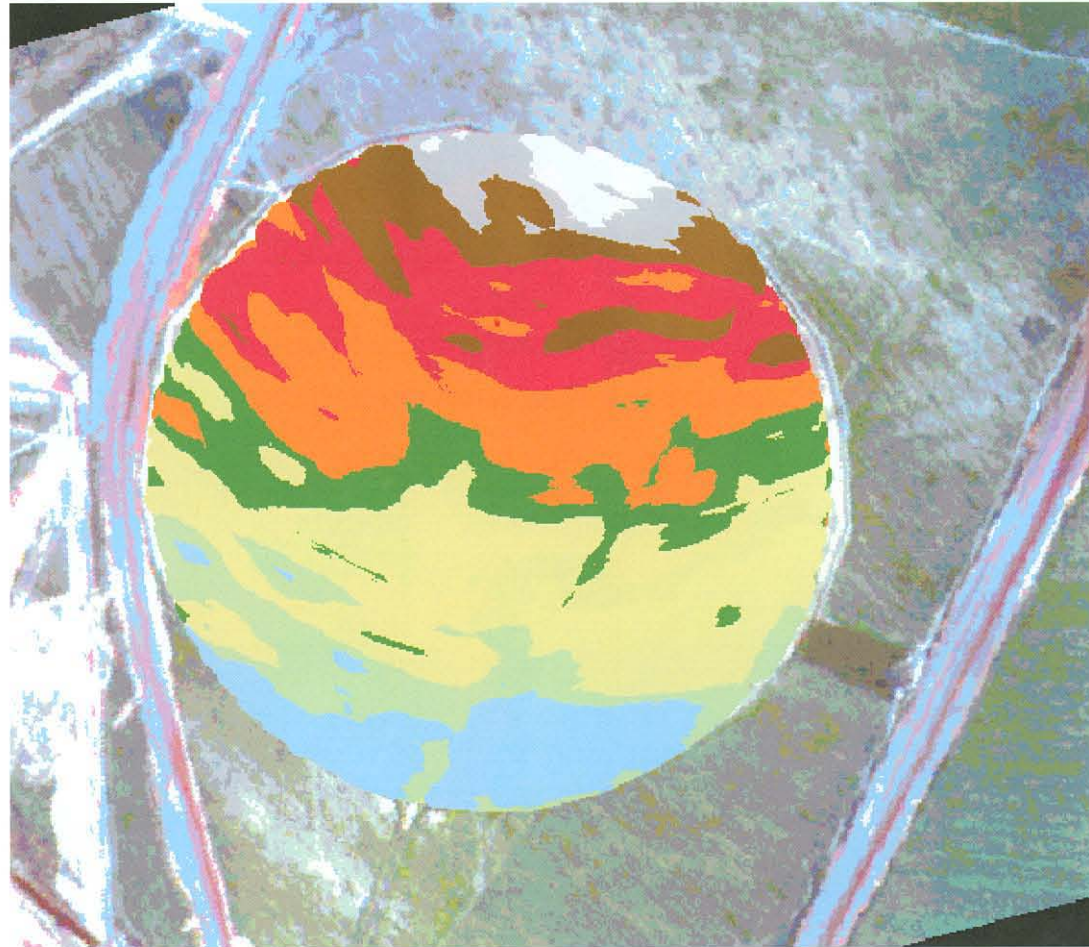
## Pivot Major: Depth to Vadoze Zone



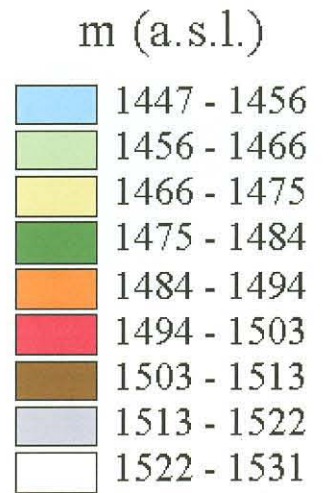
## Pivot Major: Surface DEM



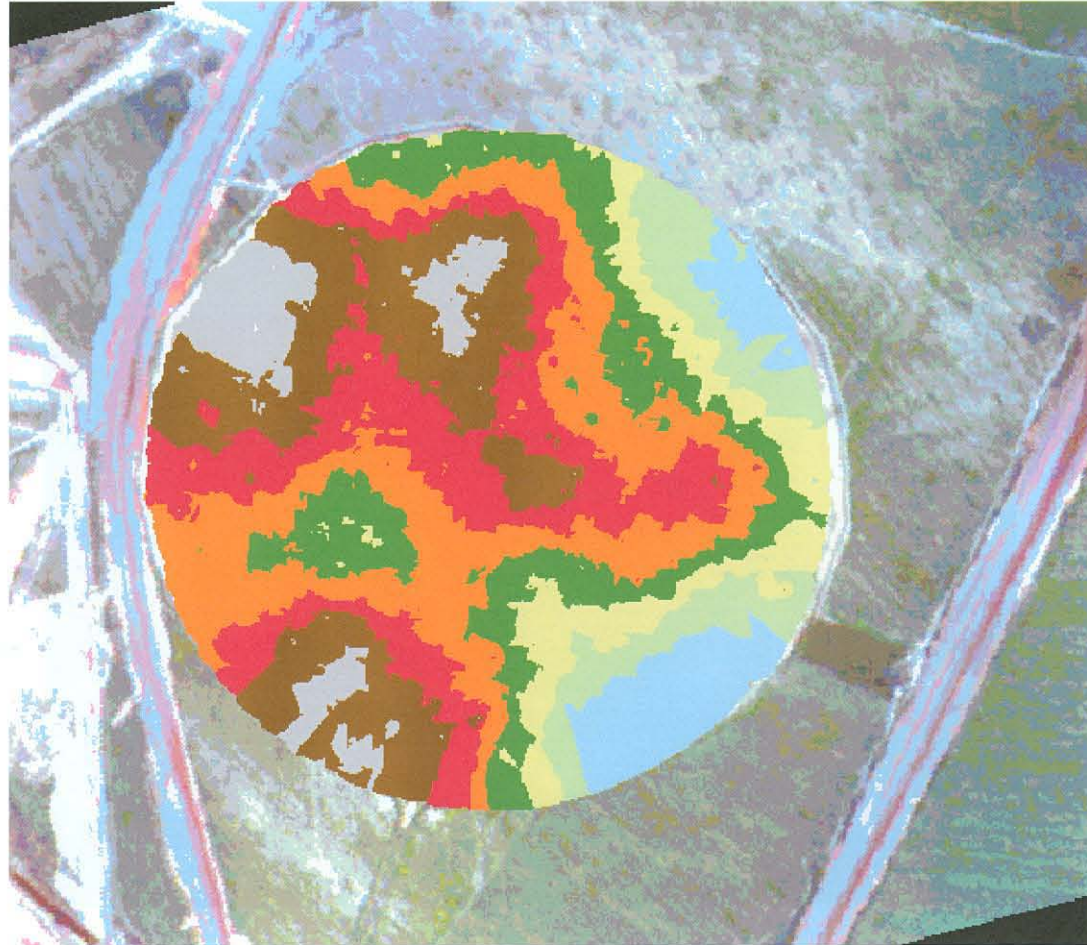
50 0 50 100 150 Meters



## Pivot Major: Spoil DEM



50 0 50 100 150 Meters



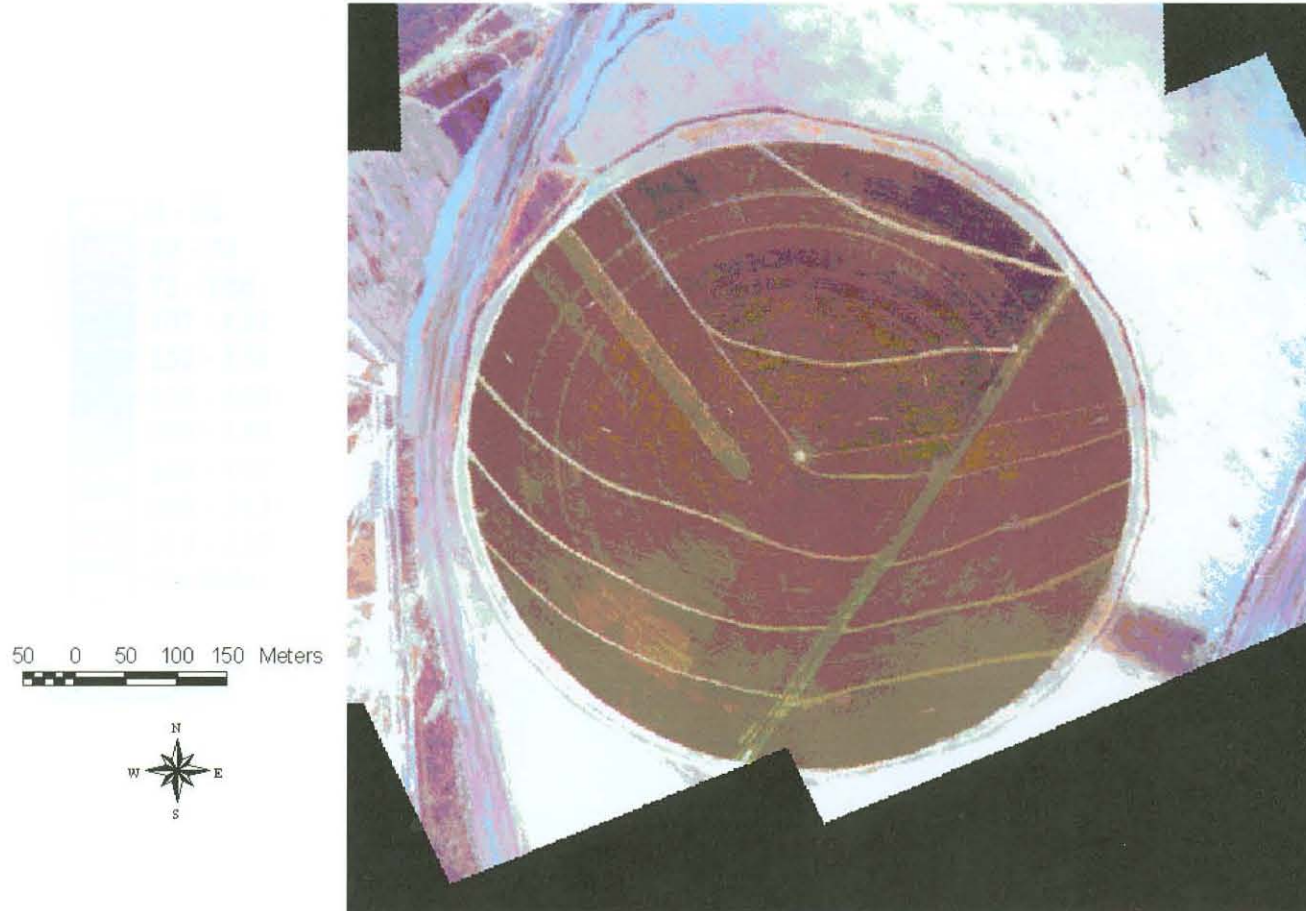


## Pivot Major: 08/99 Flight

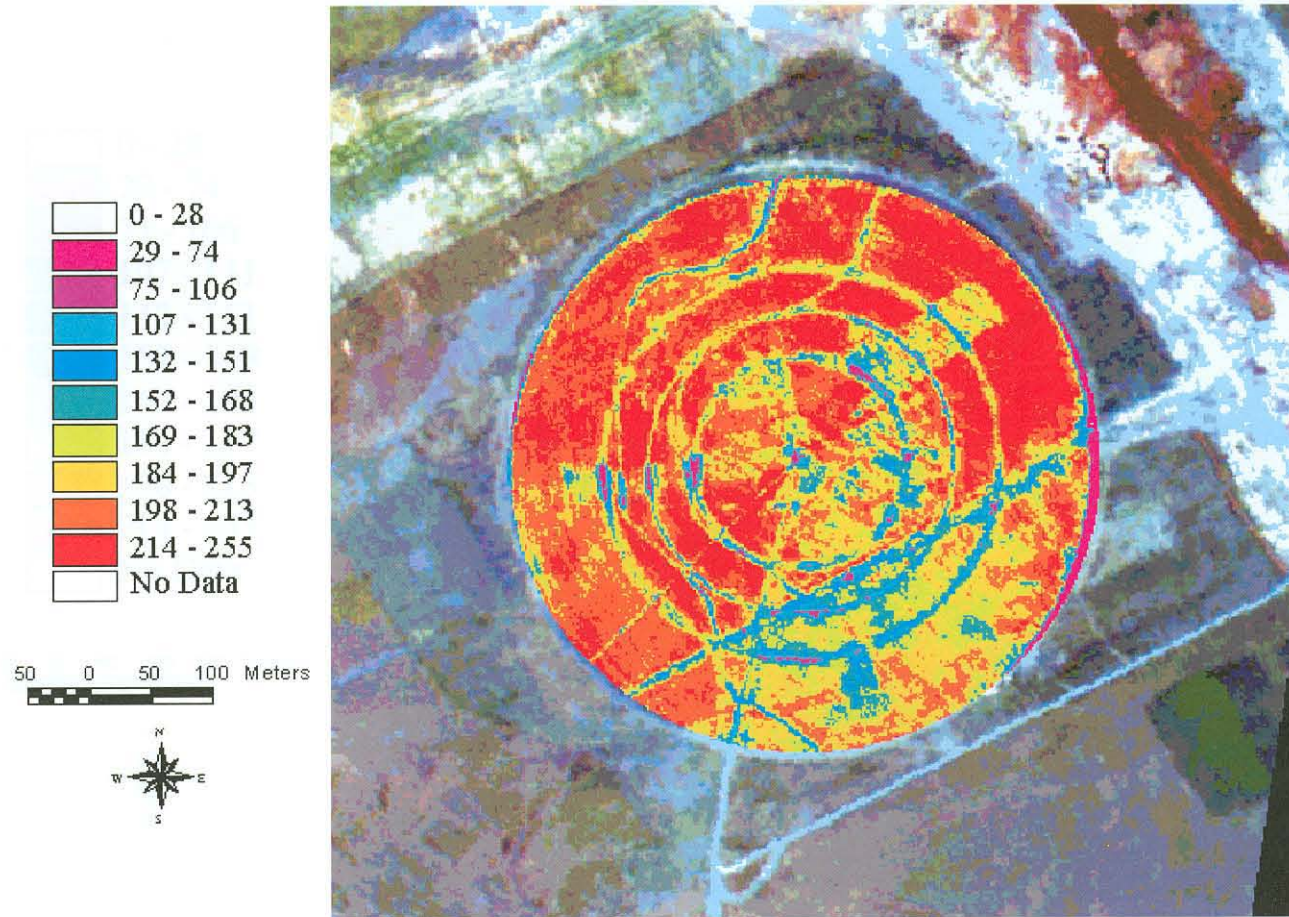
50 0 50 100 150 Meters



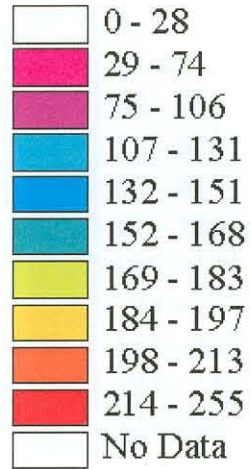
## Pivot Major: 10/99 Flight



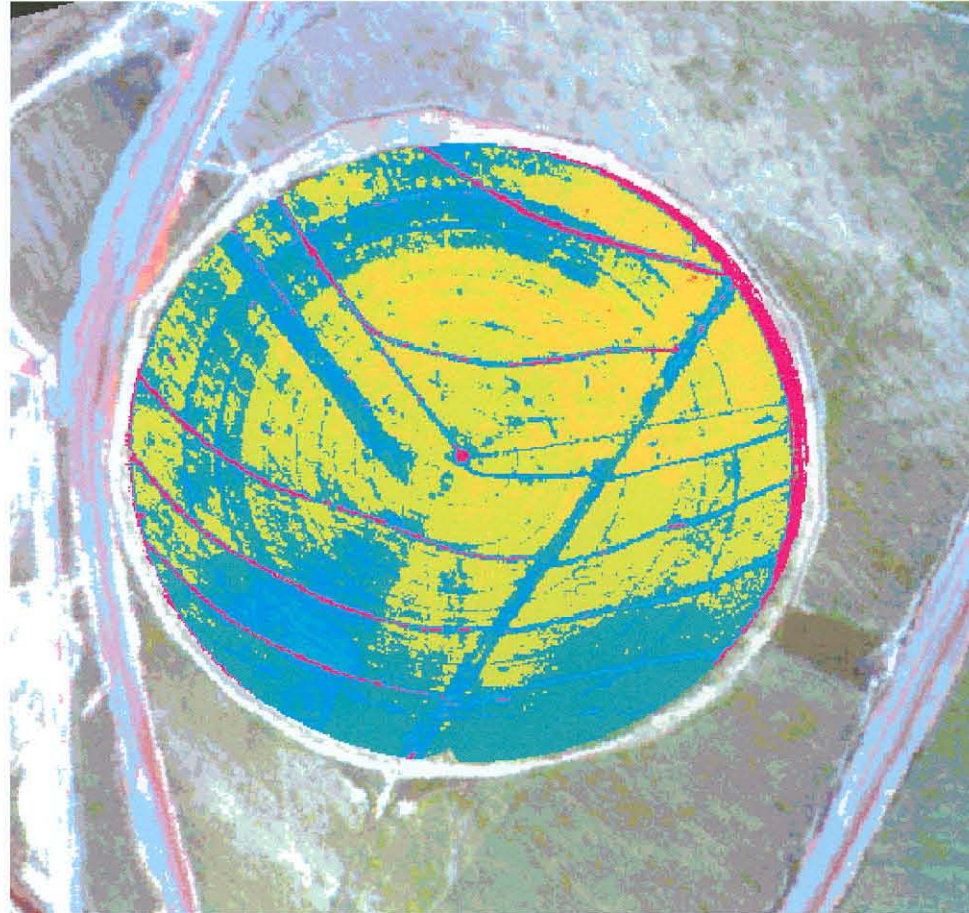
## Pivot Twefontein: TVI 08/99 Flight



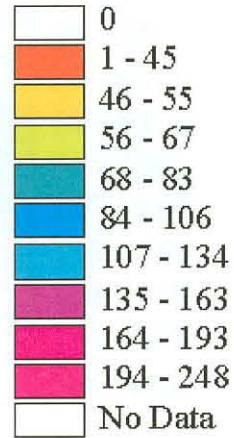
## Pivot Major: TVI 10/99 Flight



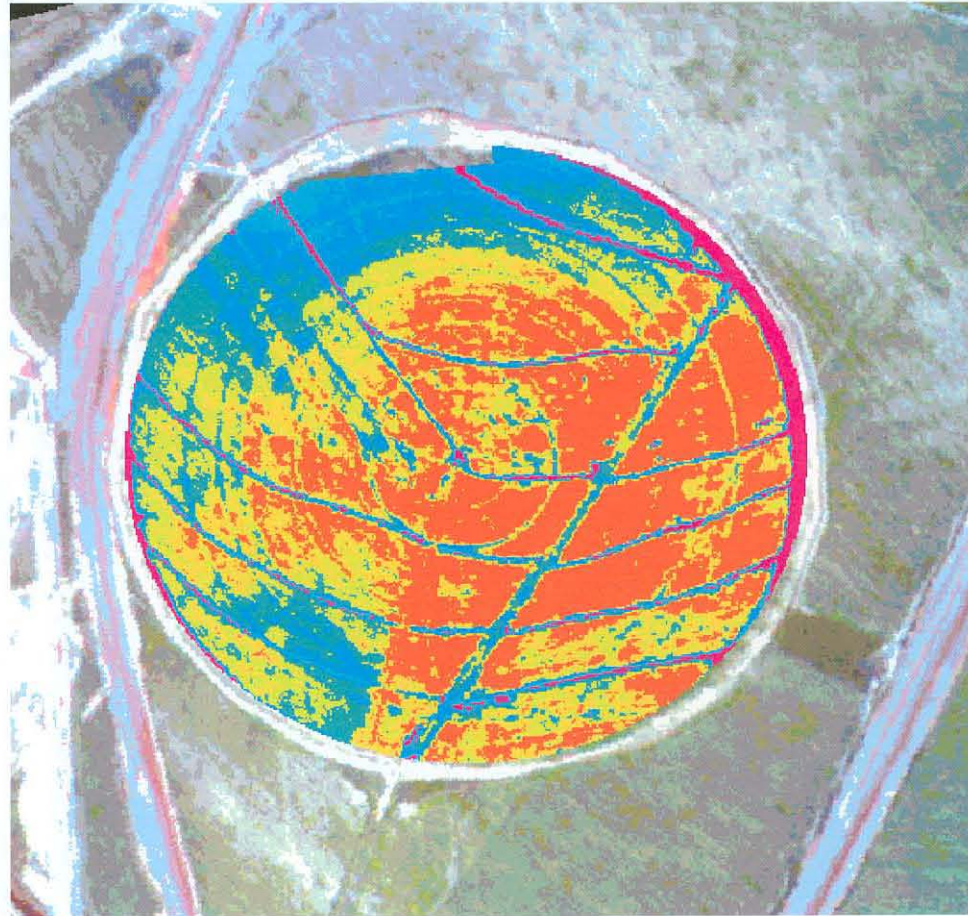
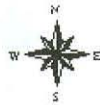
50 0 50 100 150 Meters



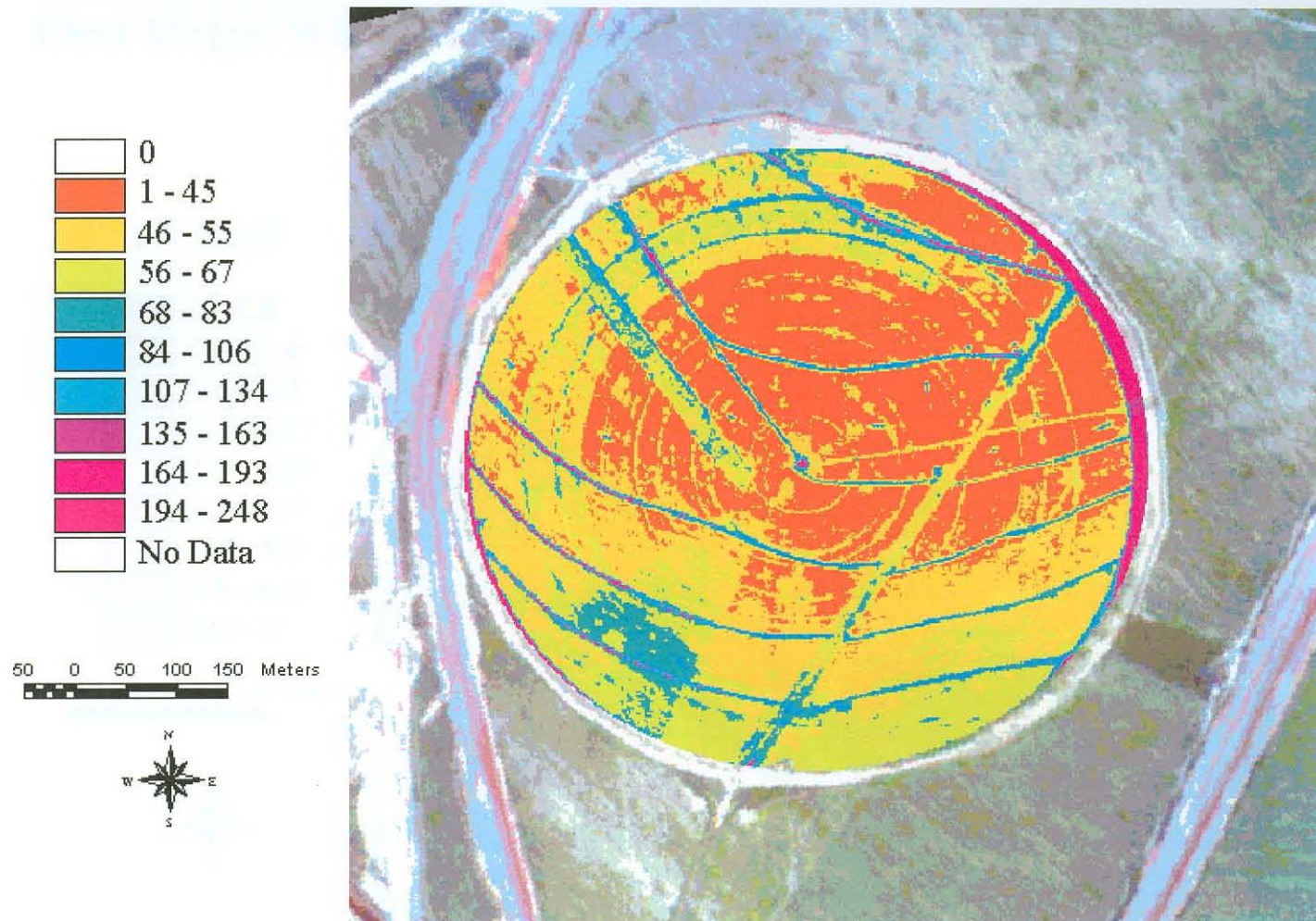
## Pivot Major: PC1 08/99 Flight



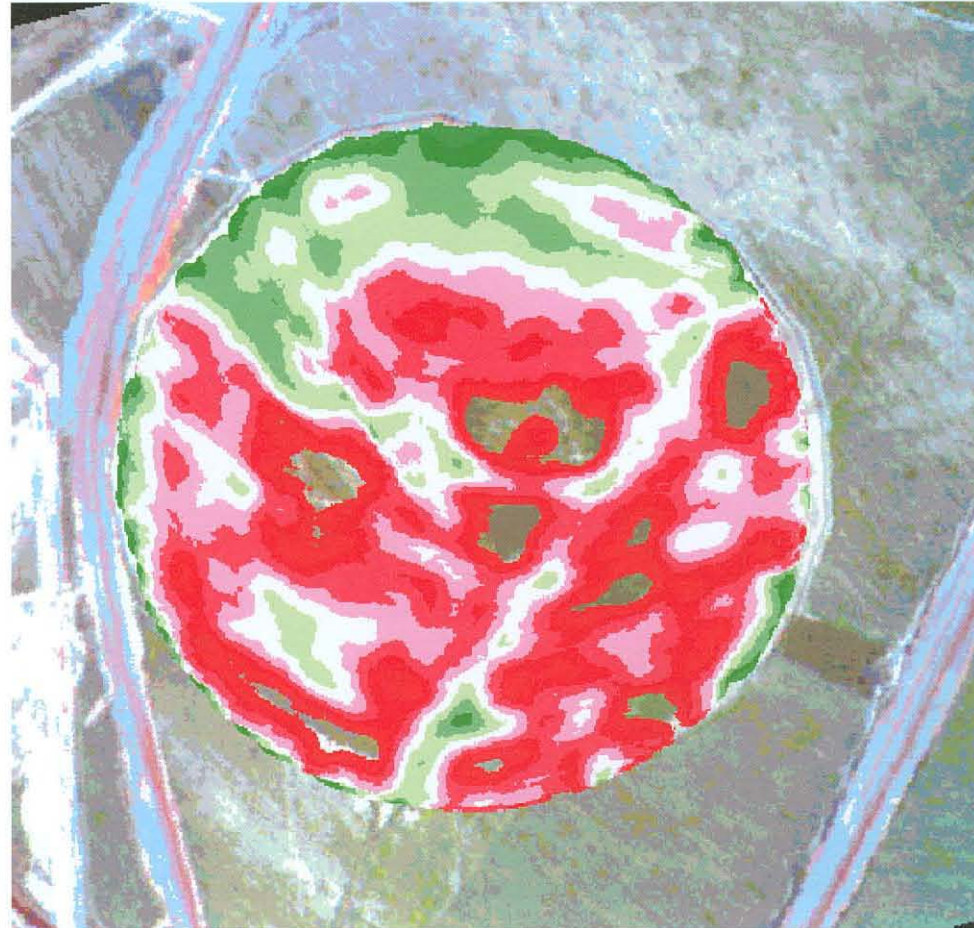
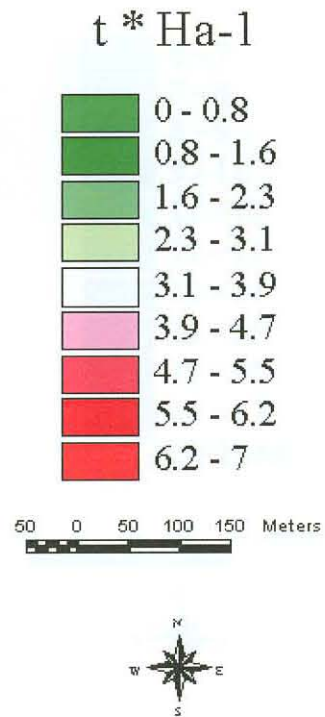
50 0 50 100 150 Meters



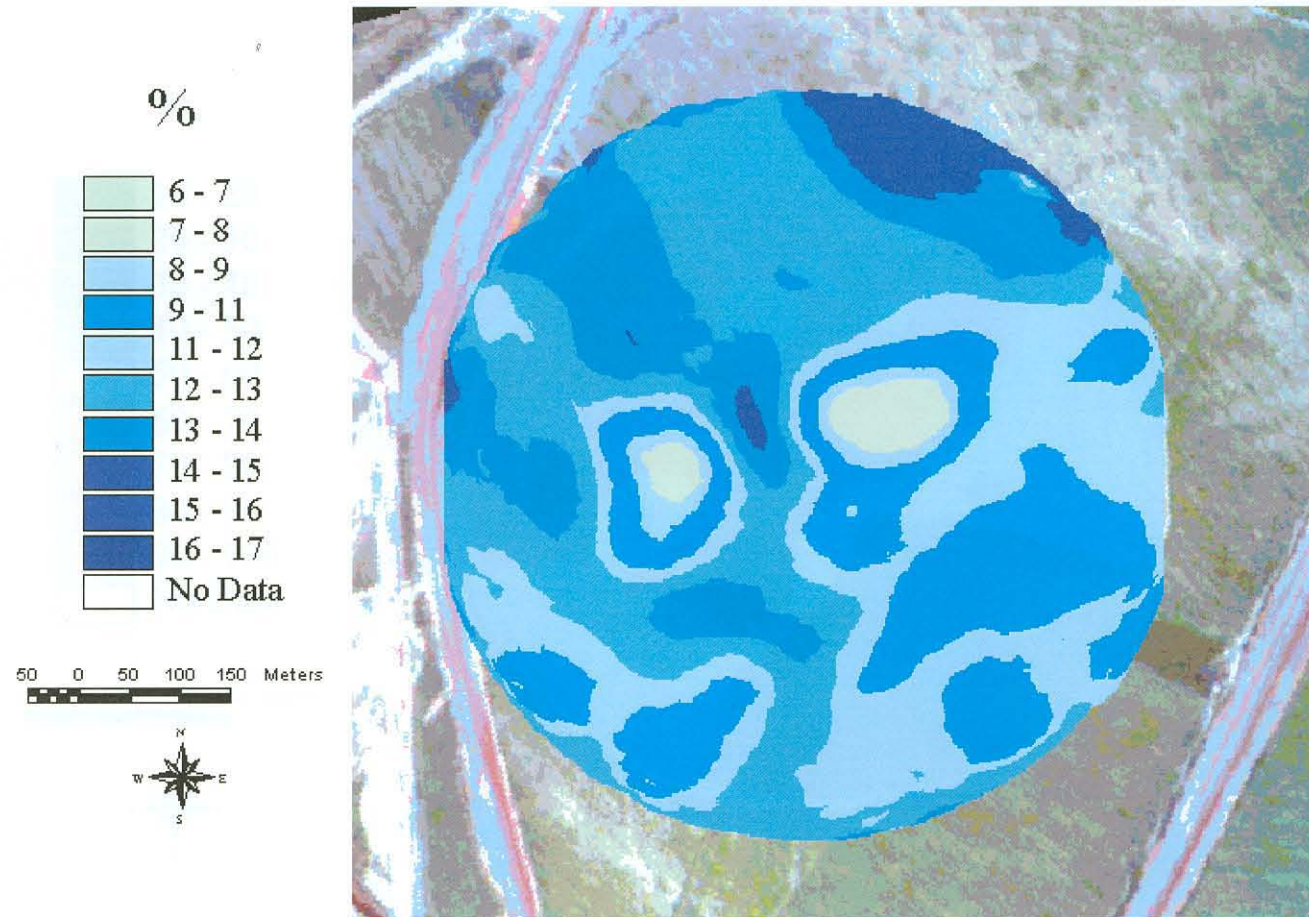
## Pivot Major: PC1 10/99 Flight



## Pivot Major: Wheat yield, harvest 11/99

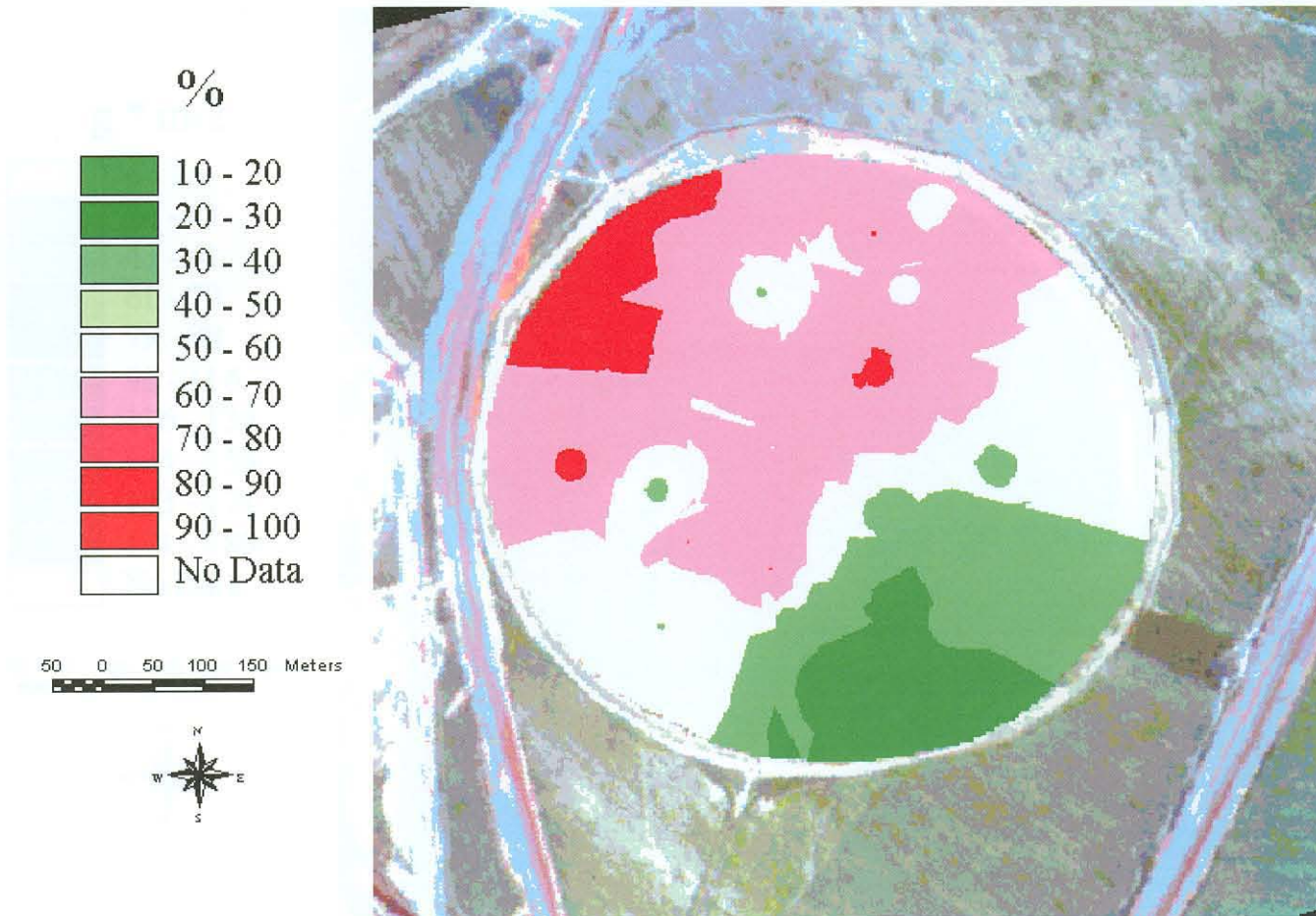


## Pivot Major: Wheat moisture % at harvest

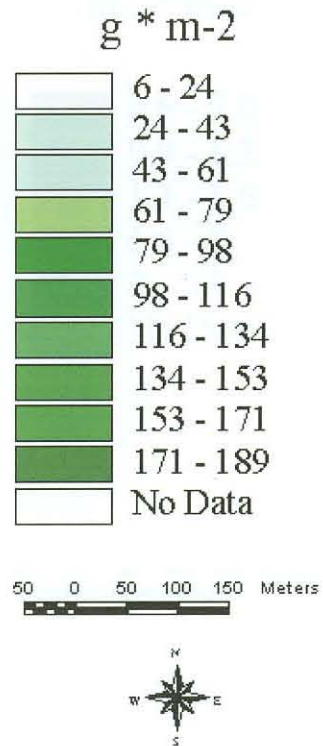




## Pivot Major: Ground Cover 08/99

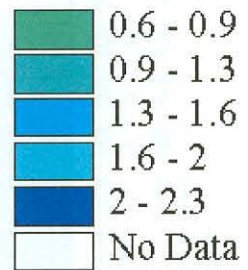


## Pivot Major: Top dry matter 08/99

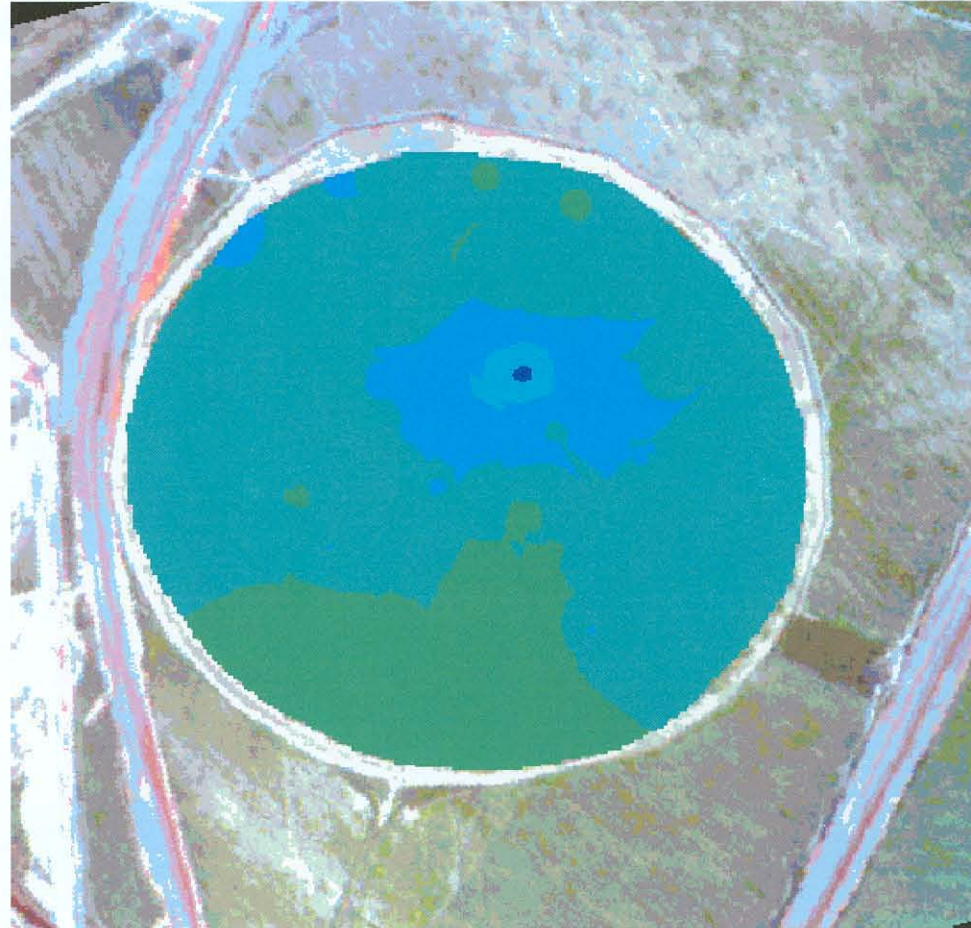


## Pivot Major: LAI 08/99

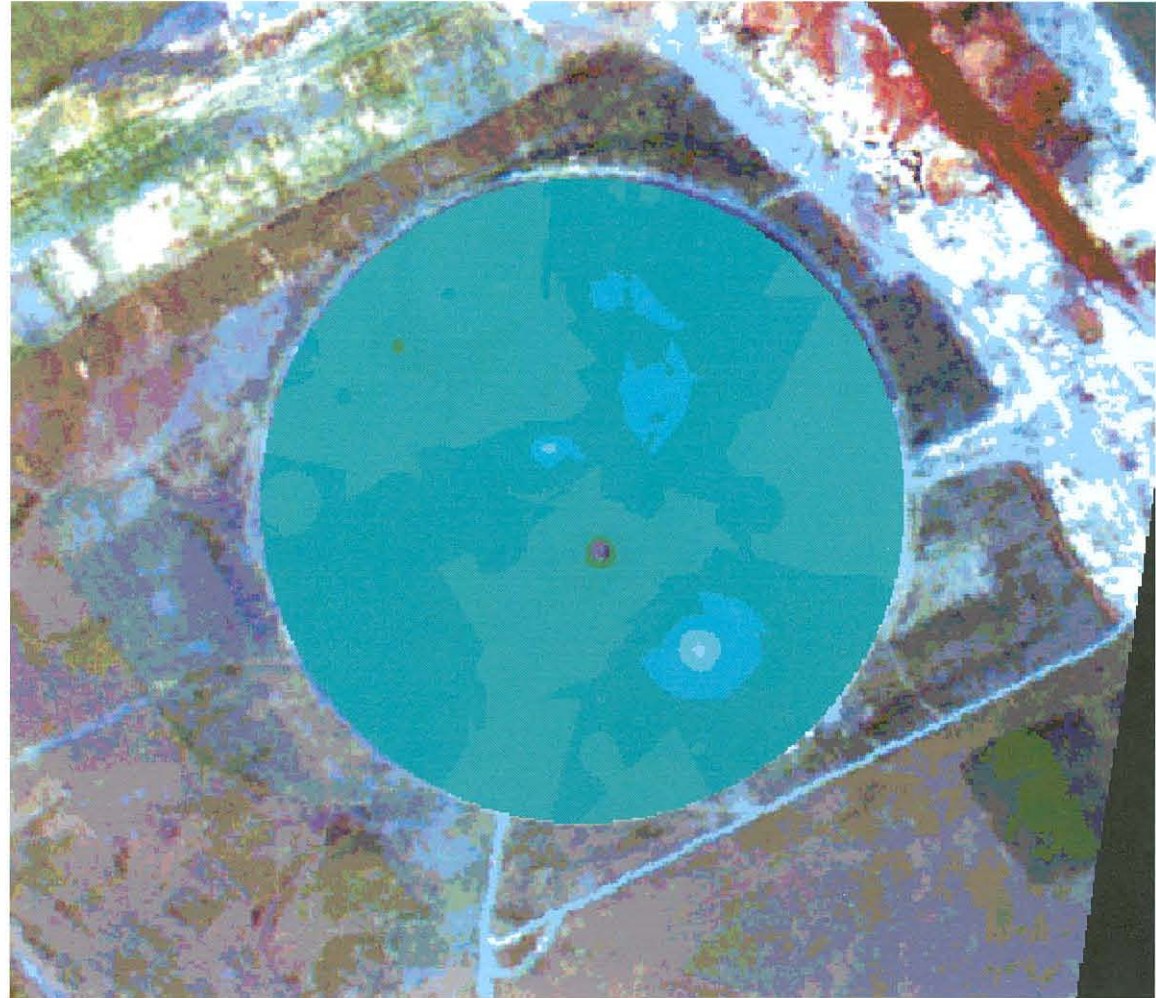
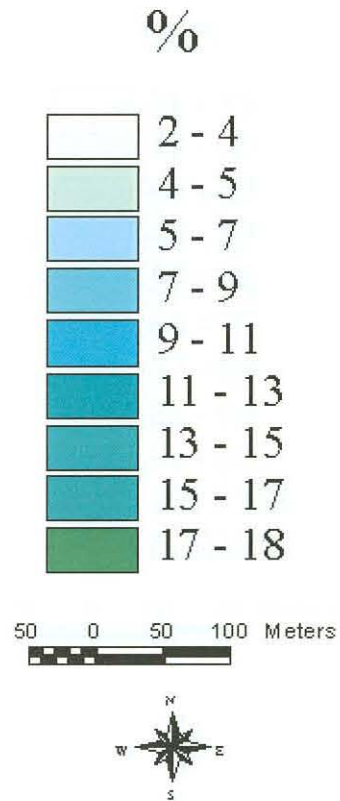
$m^2 * m^{-2}$



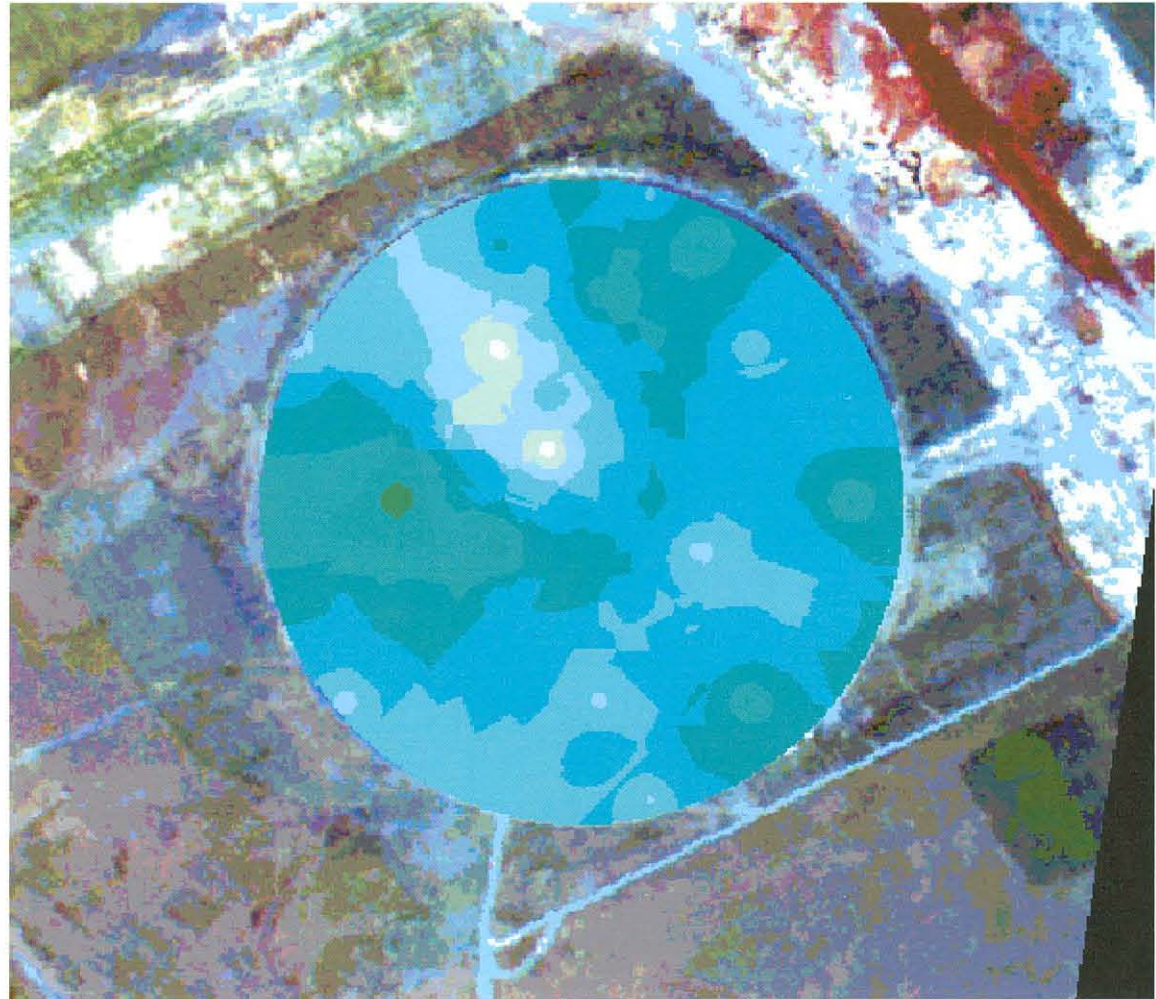
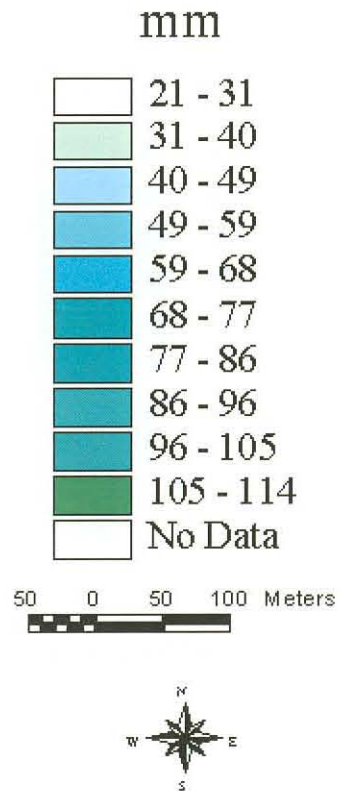
50 0 50 100 150 Meters



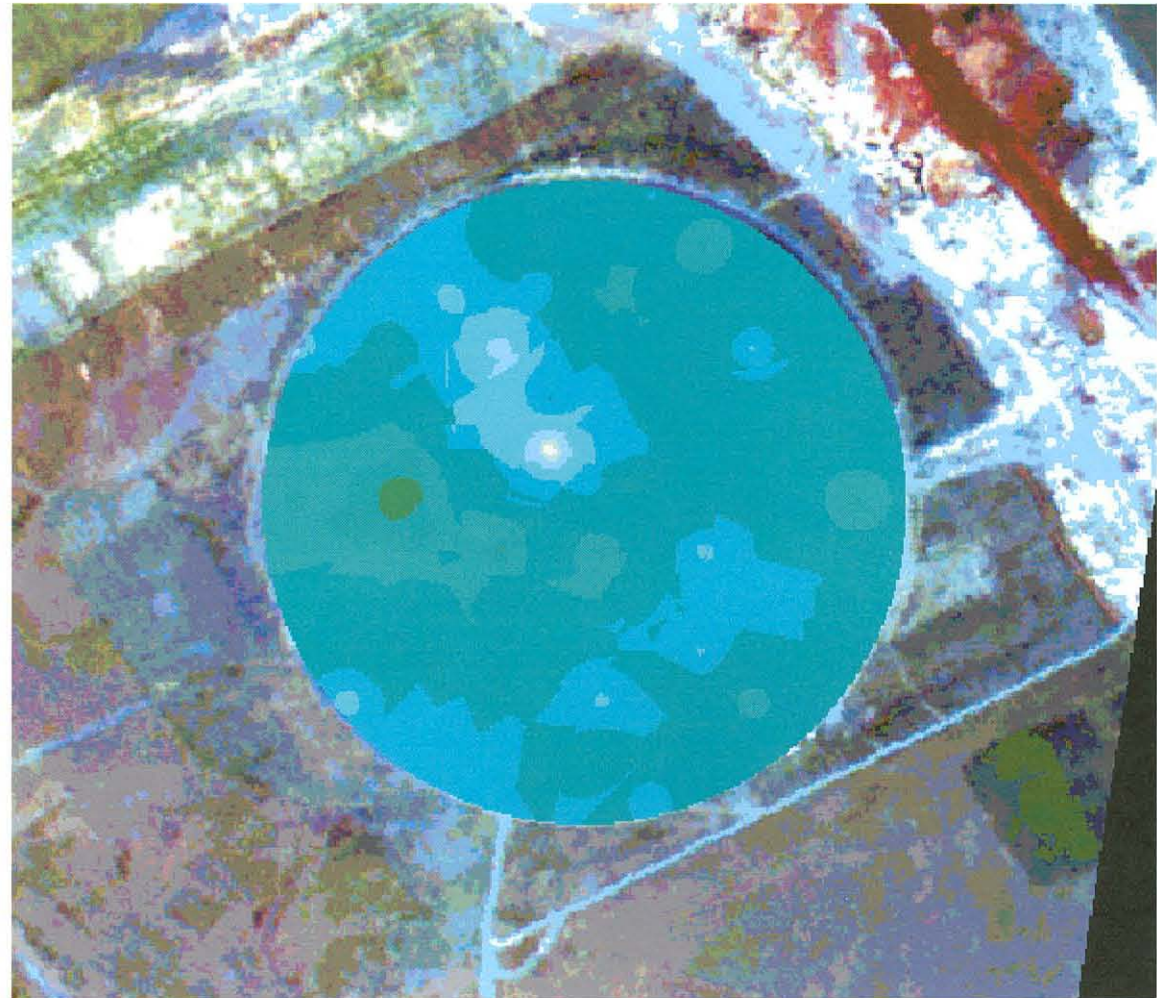
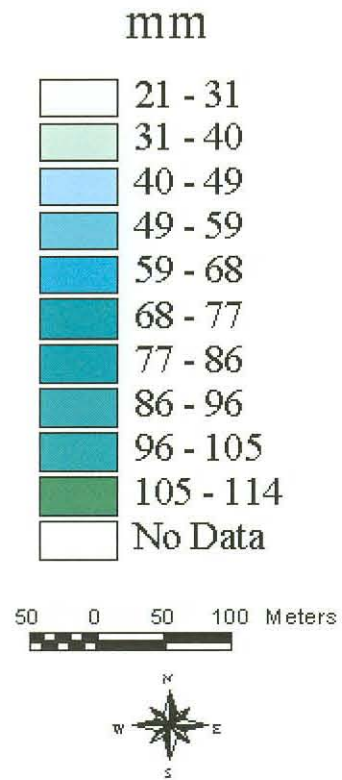
## Pivot Twееfontein: AWC 0-20 cm



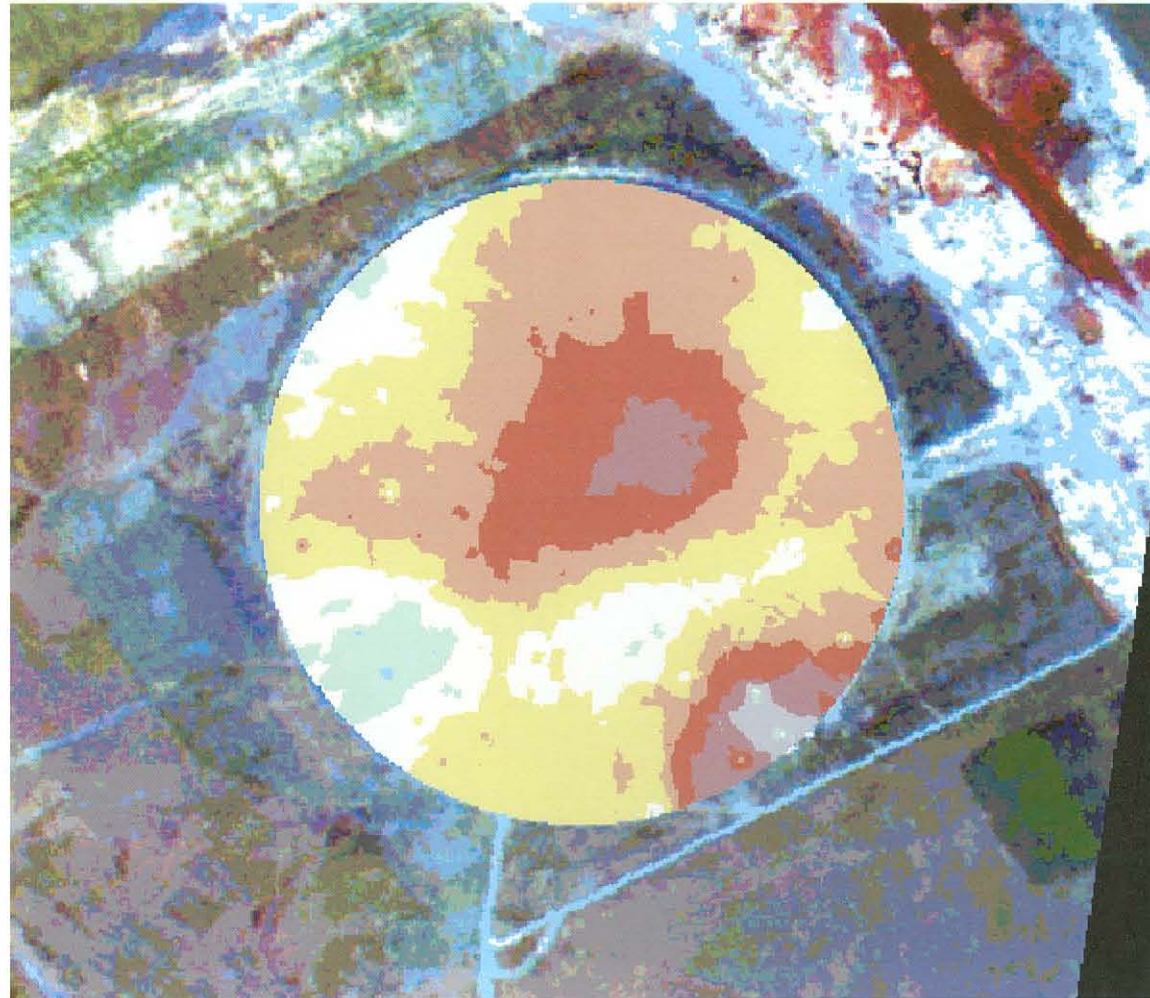
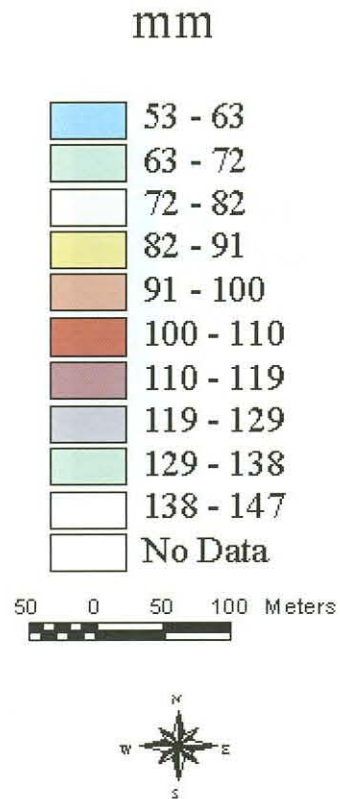
## Pivot Tweefontein: AWC 20cm - Spoil/impermeable layer



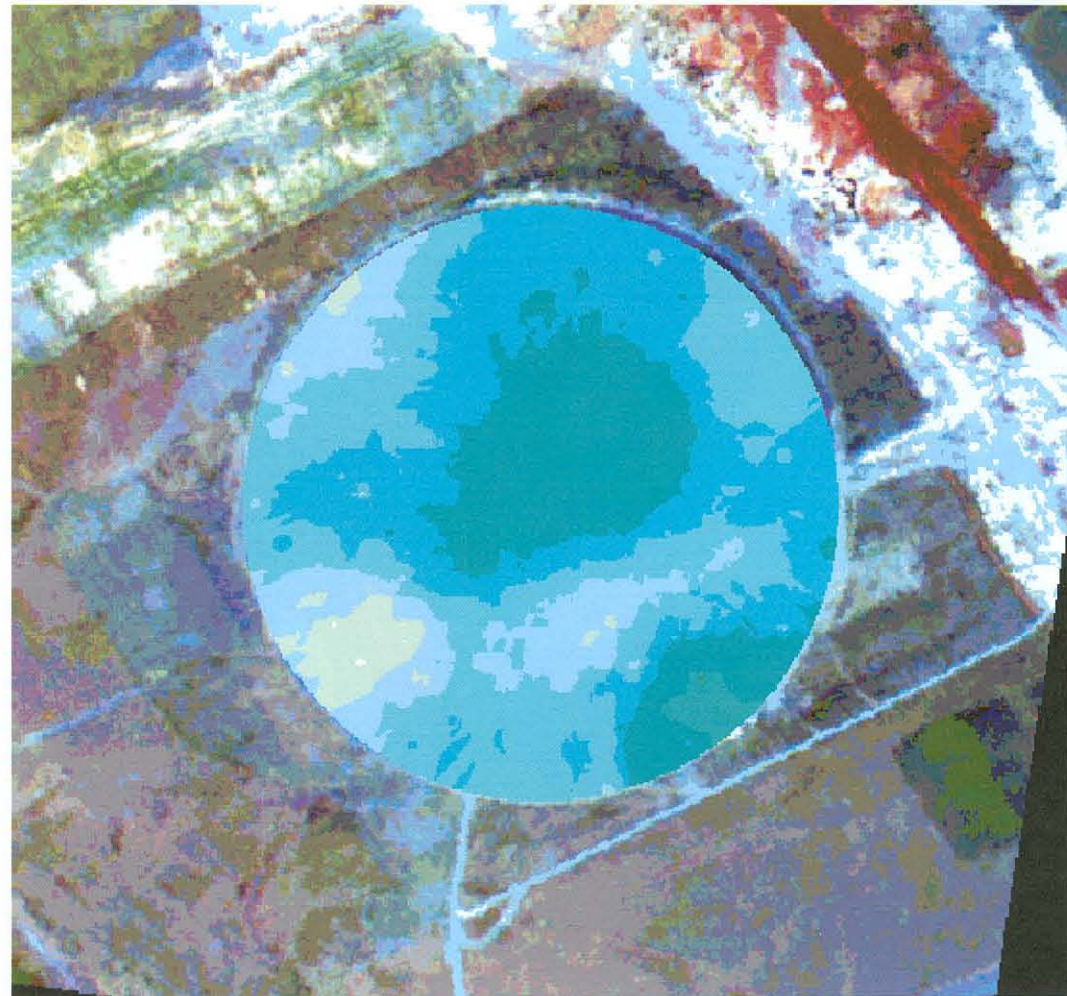
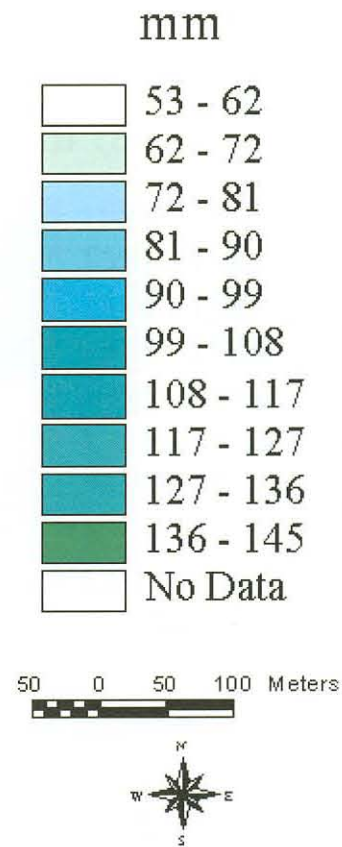
## Pivot Tweefontein: AWC Total



## Pivot Tweefontein: Depth to Spoil/Impermeable

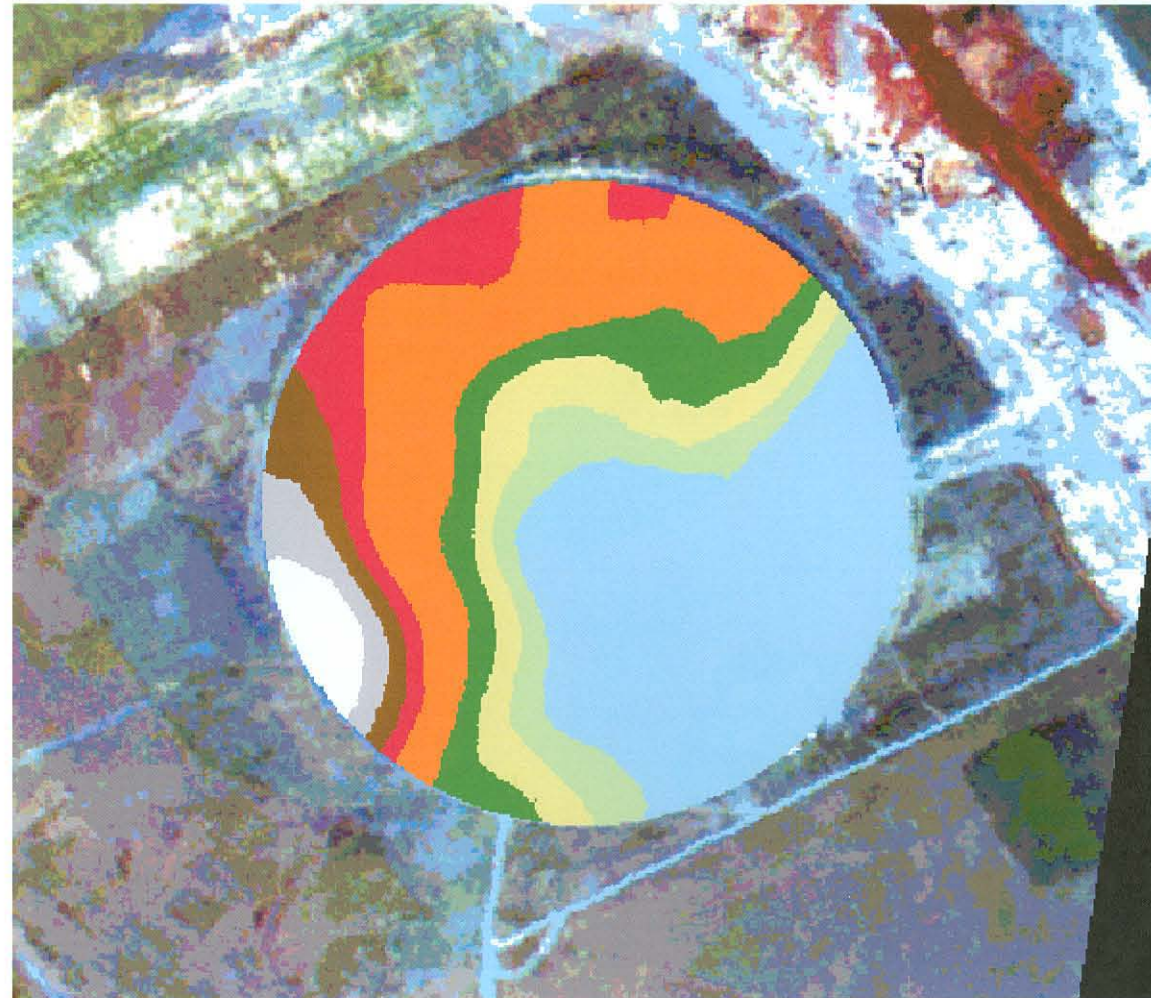
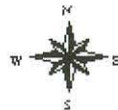
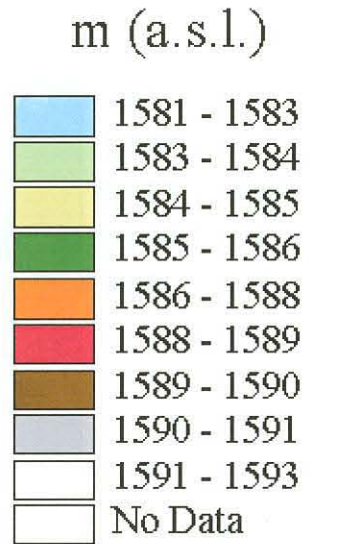


# Pivot Tweefontein: Depth to Vadoze Zone

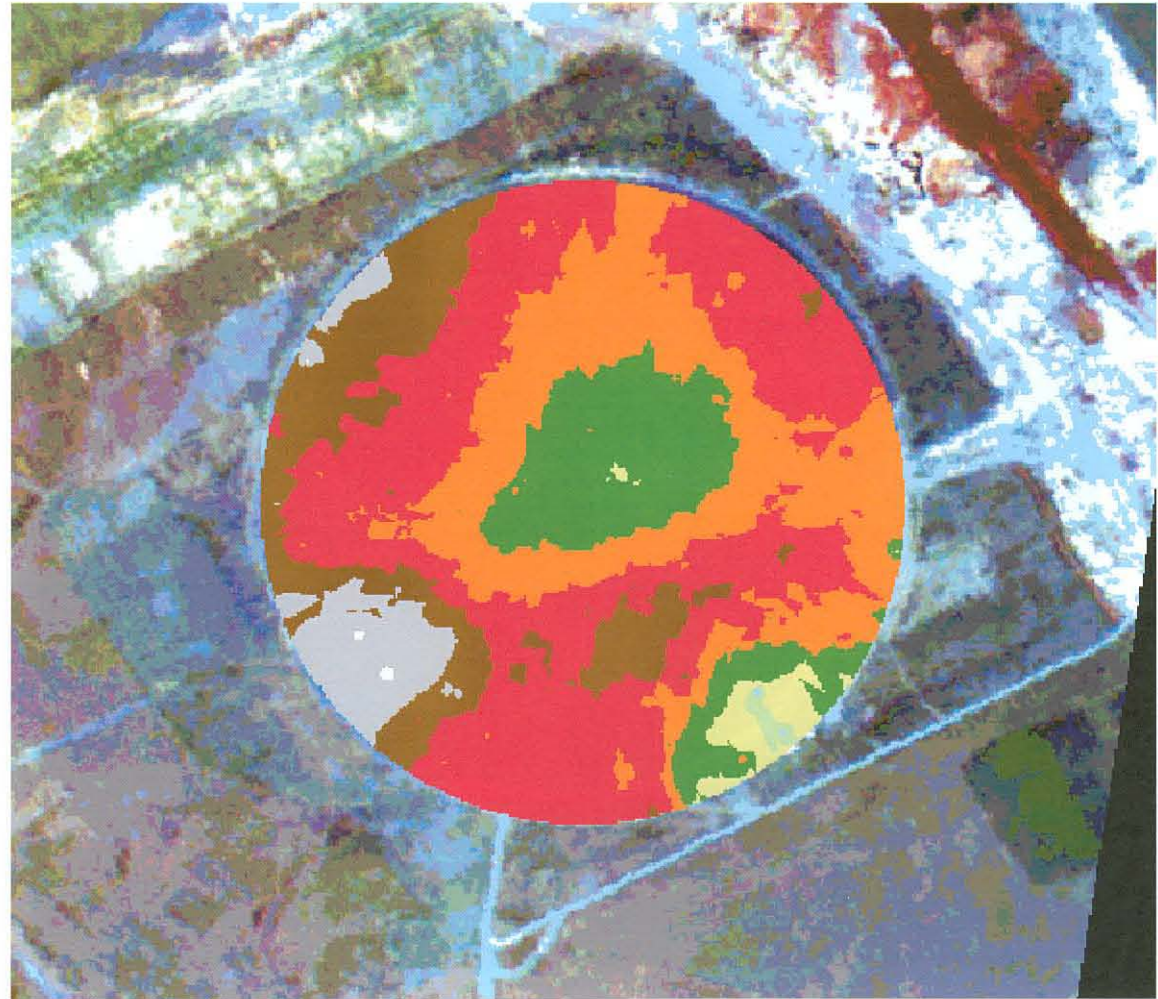
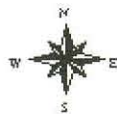
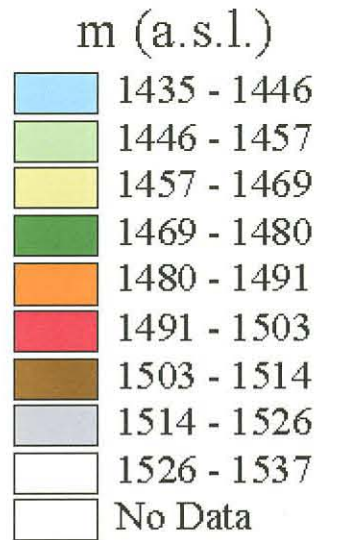




## Pivot Tweefontein: Surface DEM

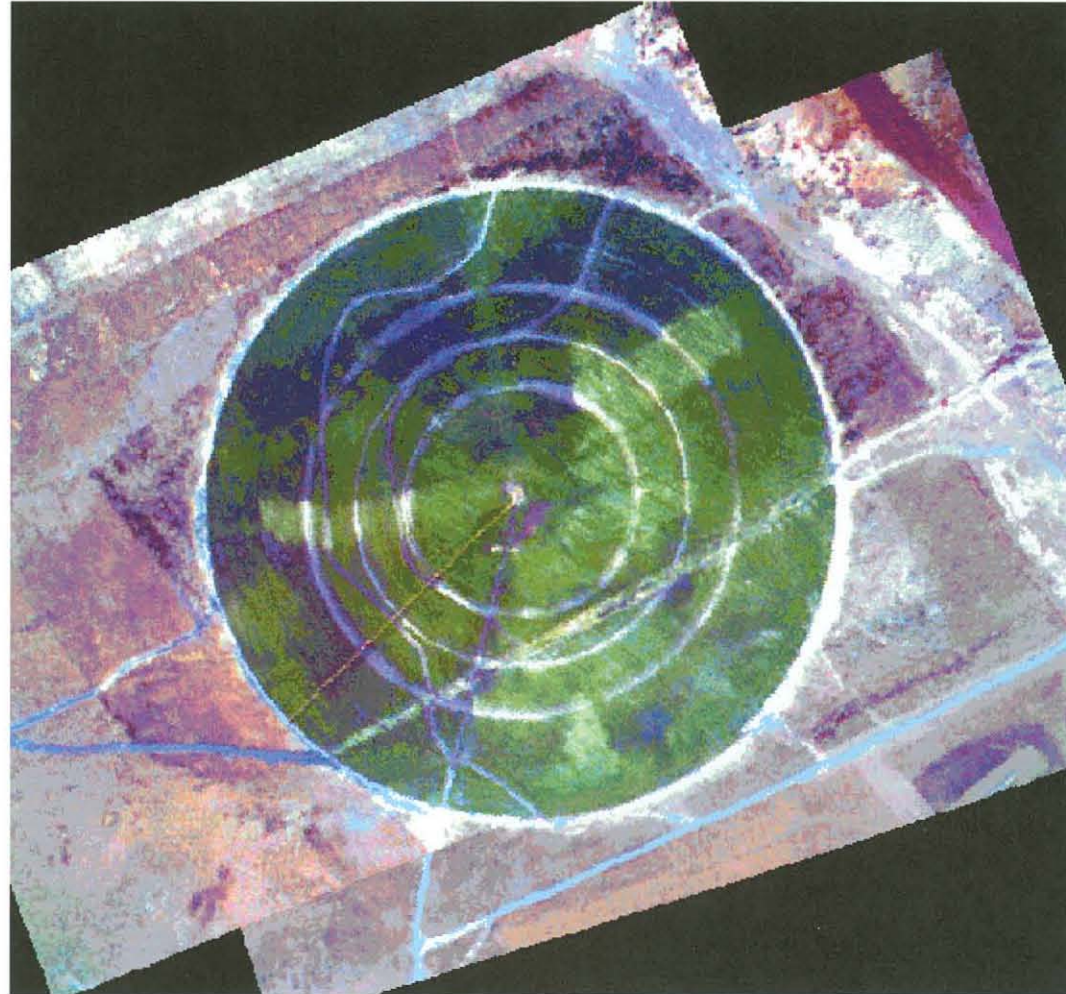
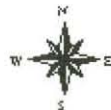


## Pivot Tweefontein: Spoil DEM

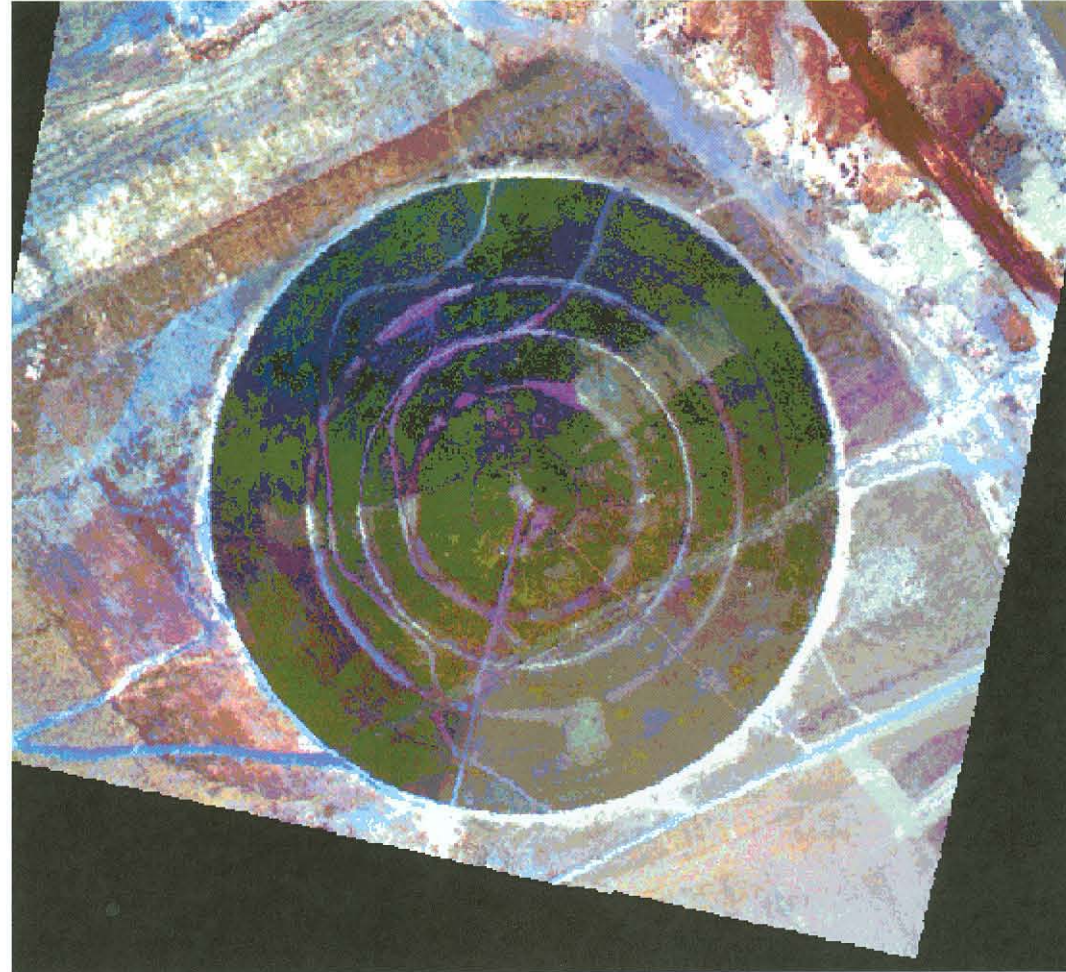


## Pivot Tweefontein: 08/99 Flight

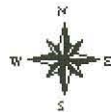
50 0 50 100 Meters



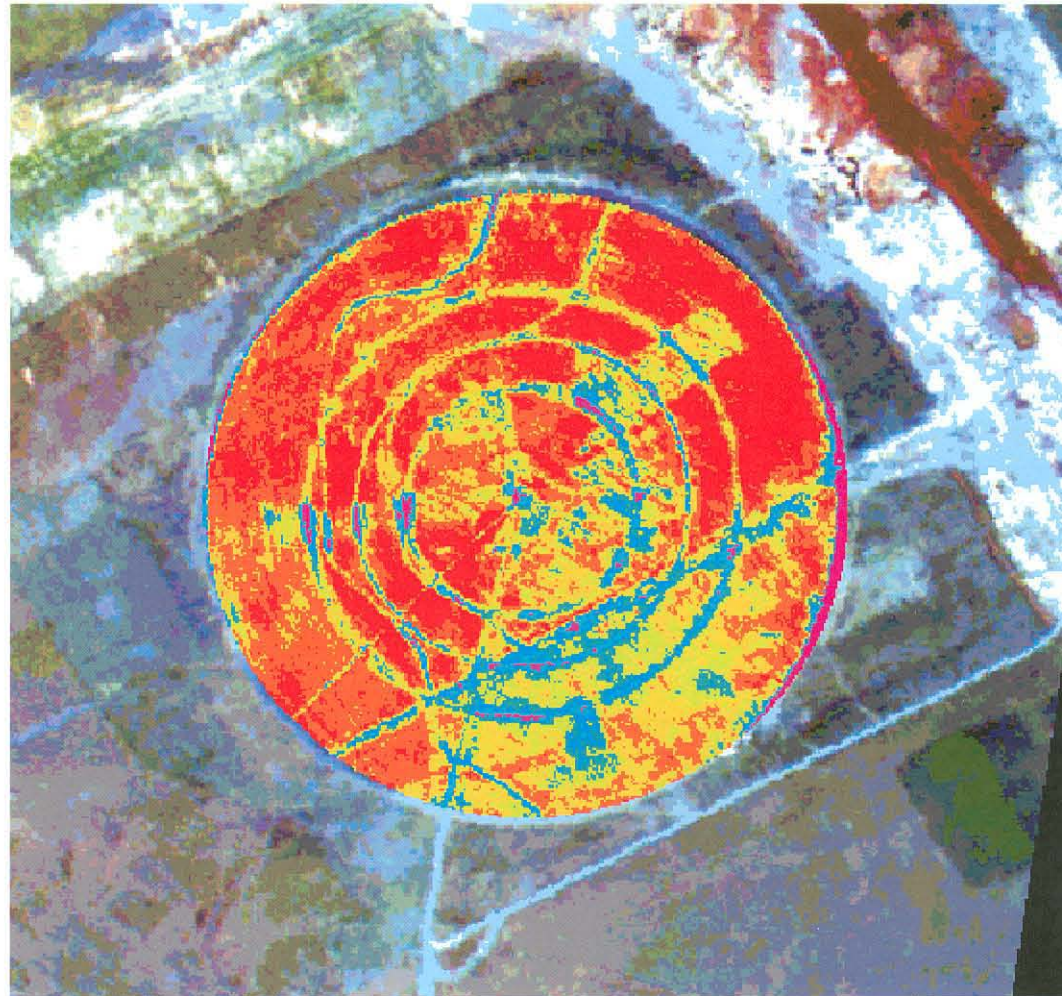
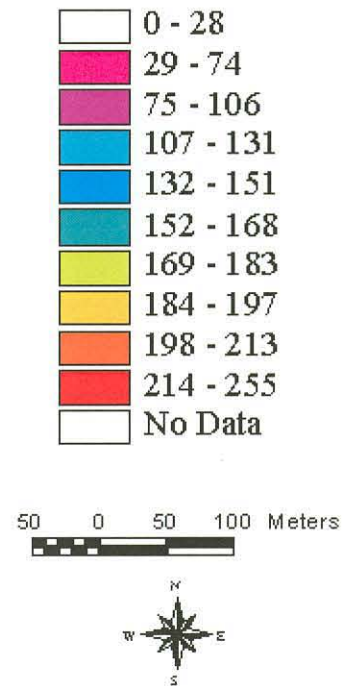
## Pivot Tweefontein: 10/99 Flight



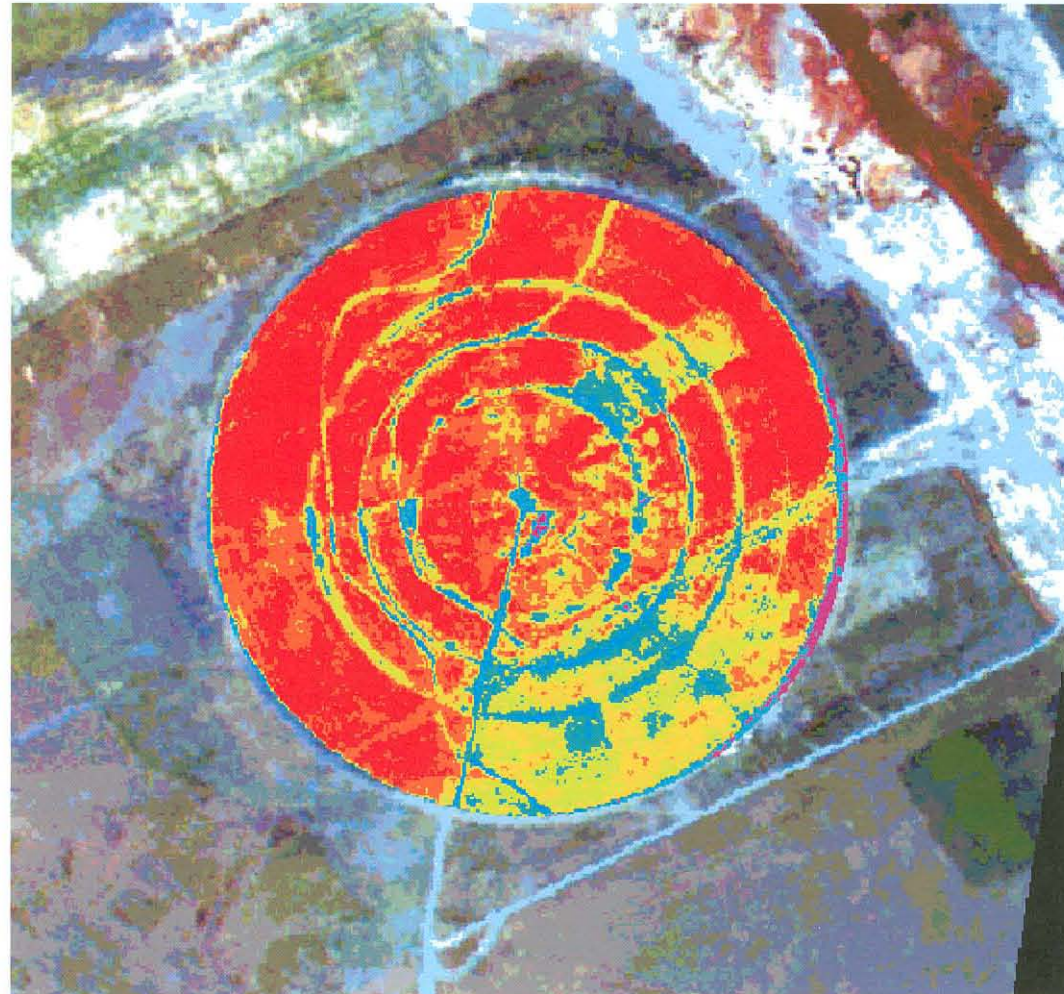
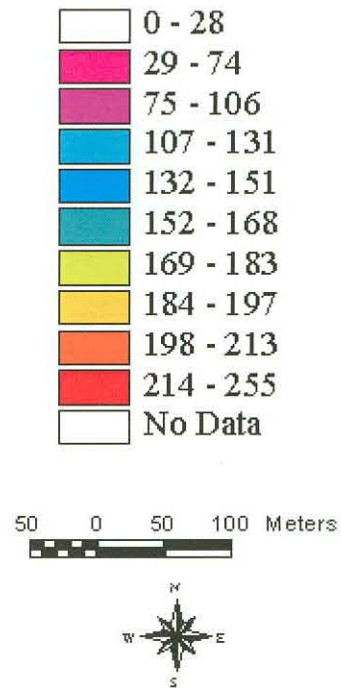
50 0 50 100 Meters

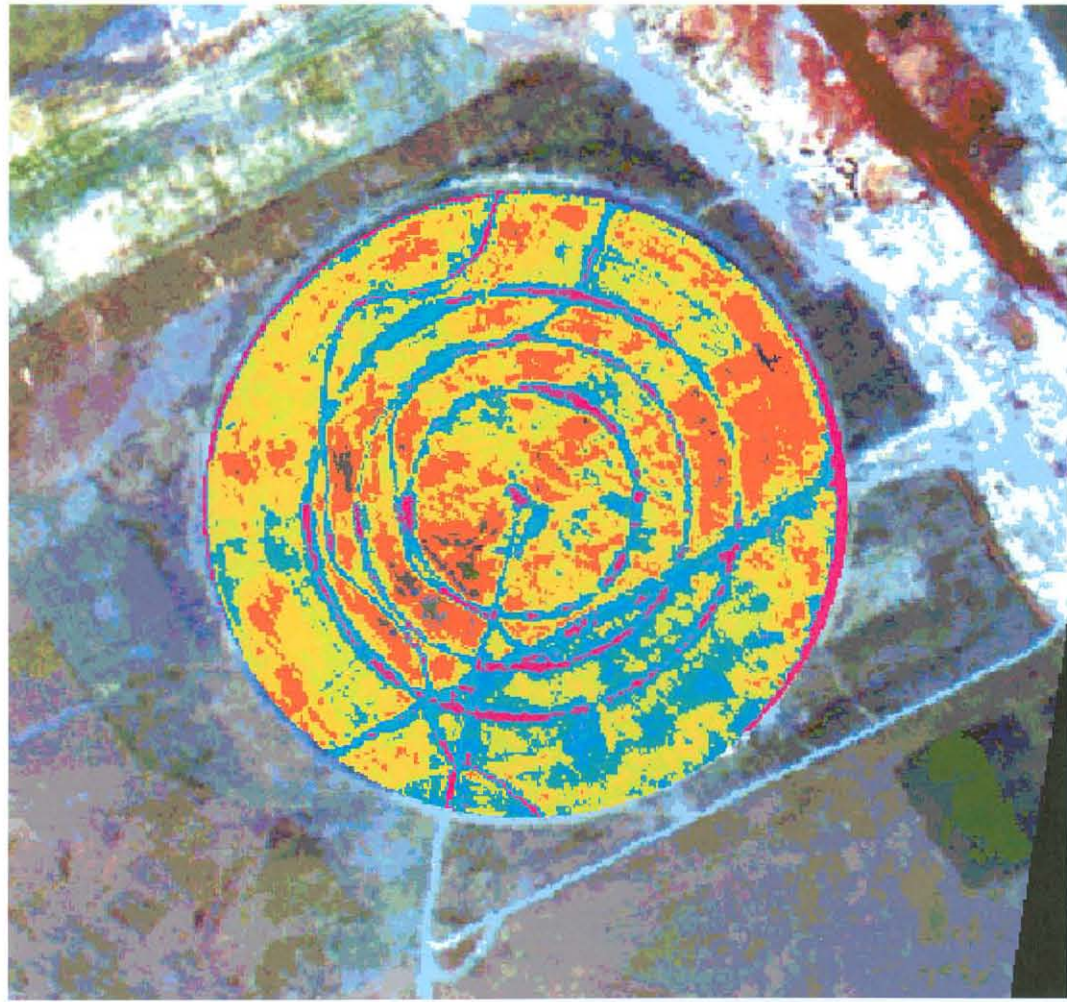
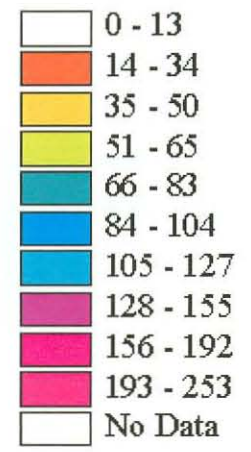


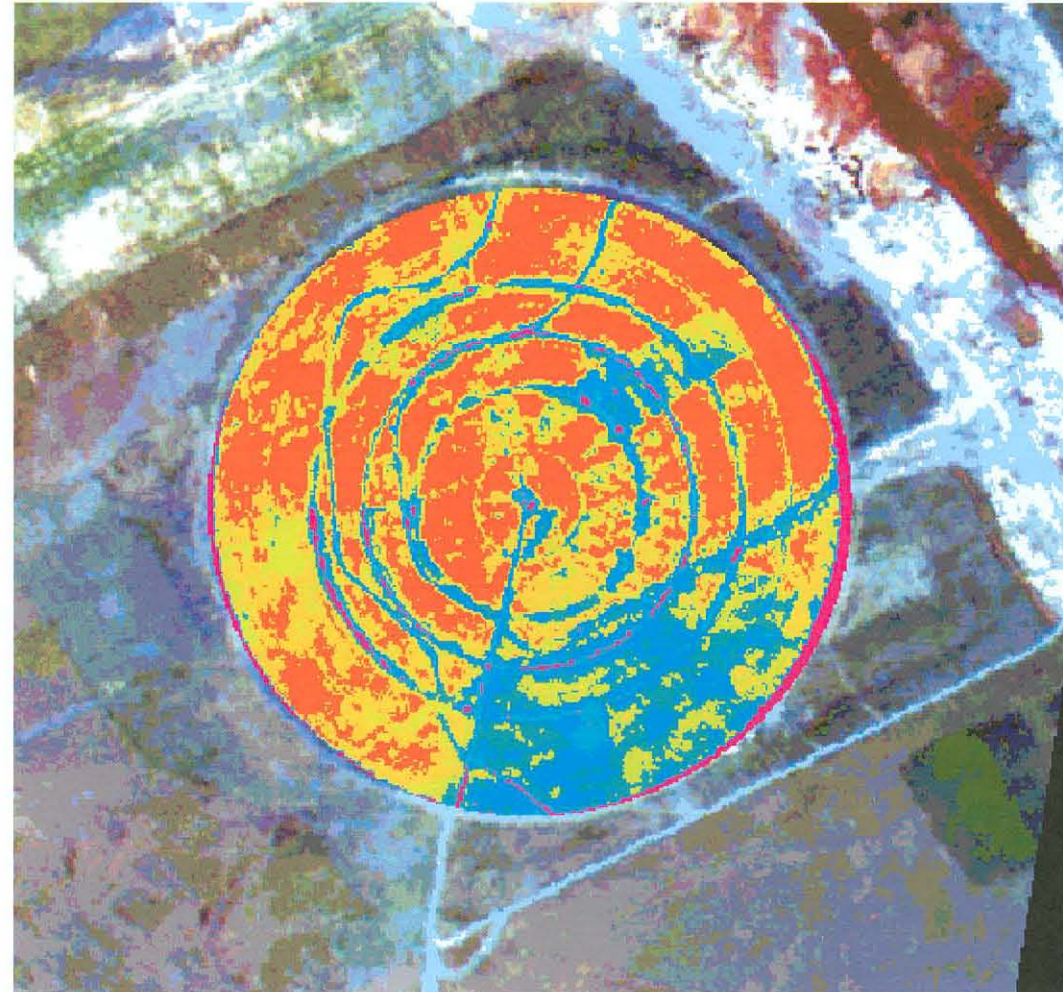
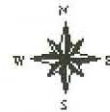
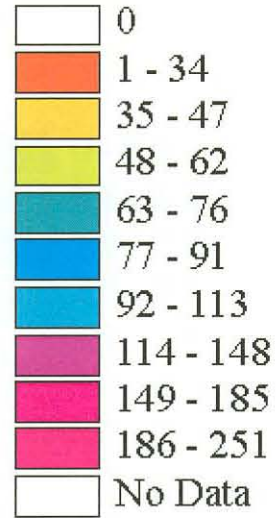
## Pivot Tweefontein: TVI 08/99 Flight



## Pivot Tweefontein: TVI 10/99 Flight

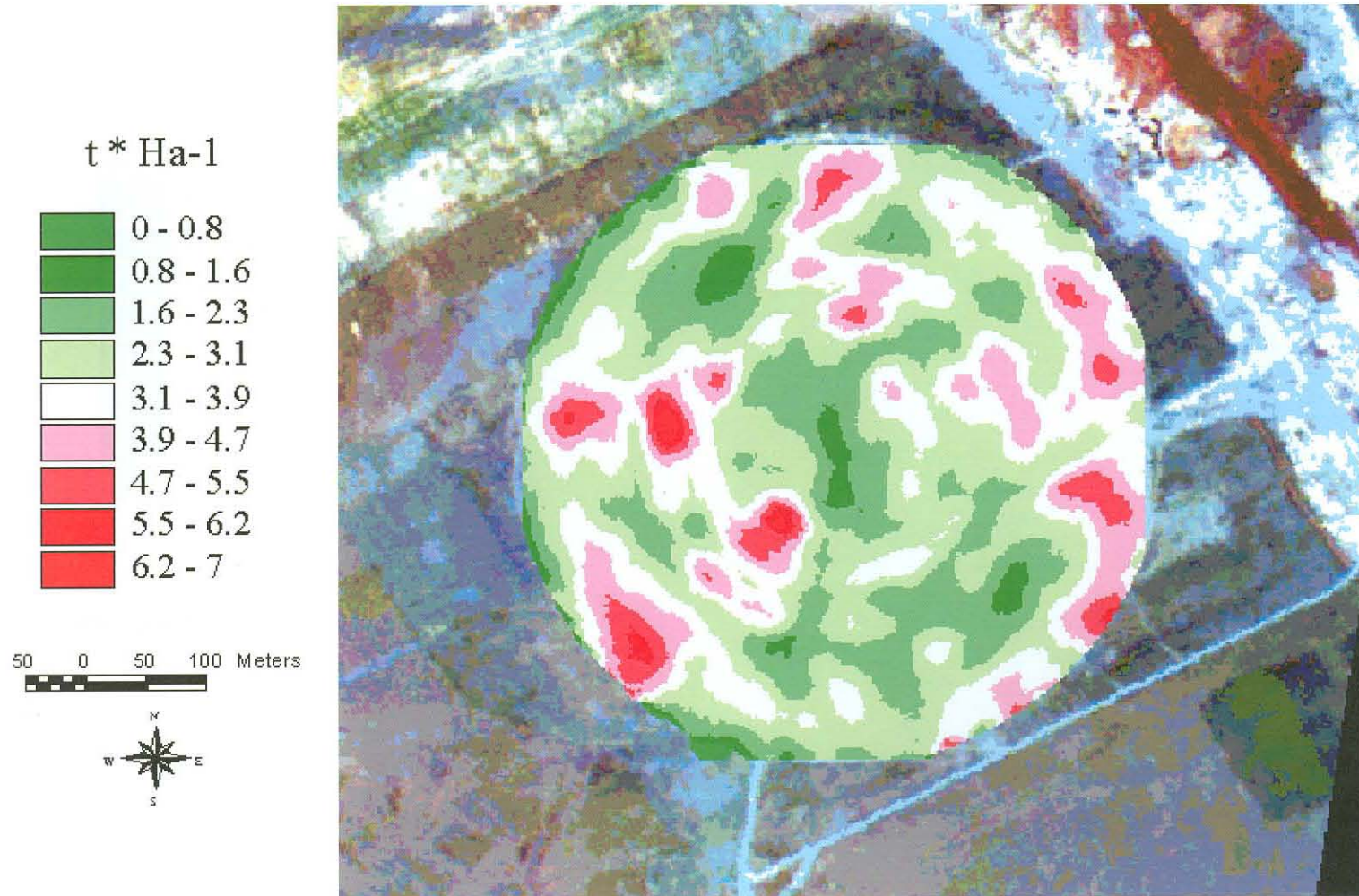




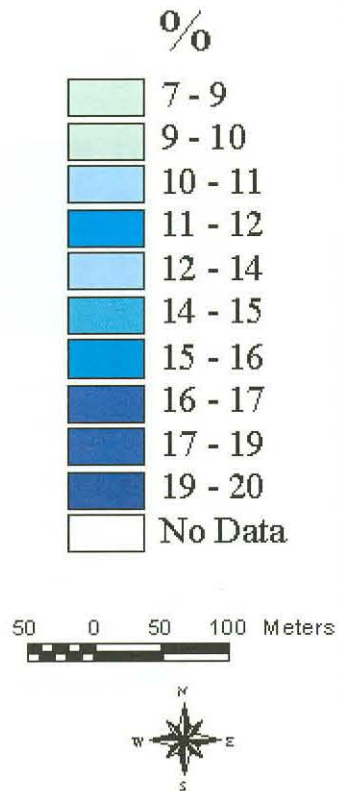




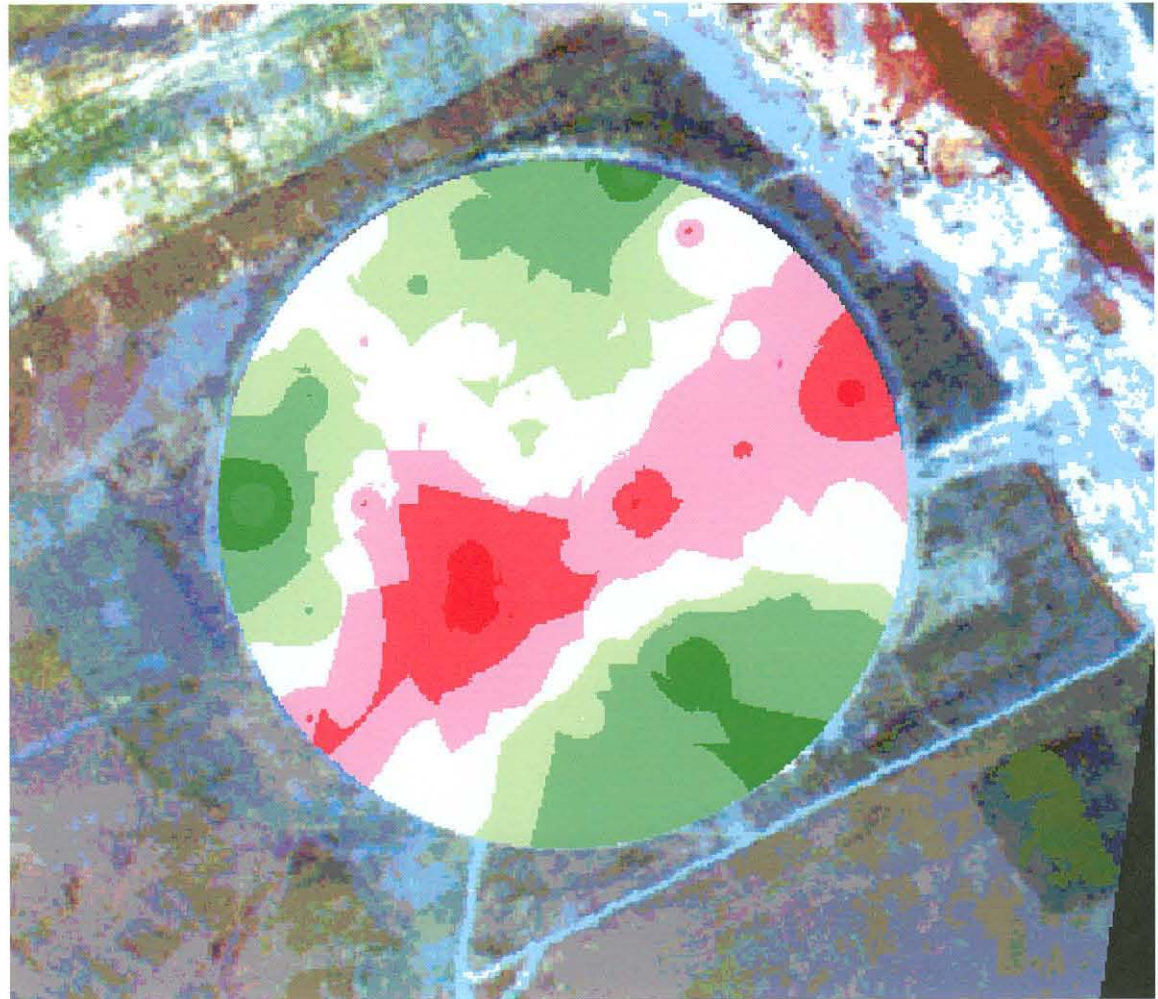
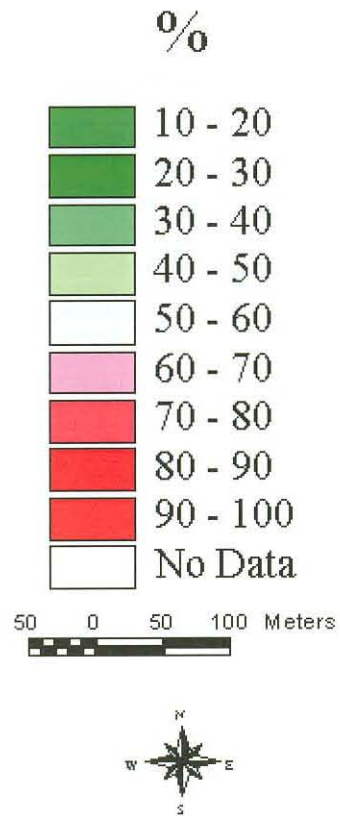
## Pivot Twееfontein: Wheat yield, harvest 11/99



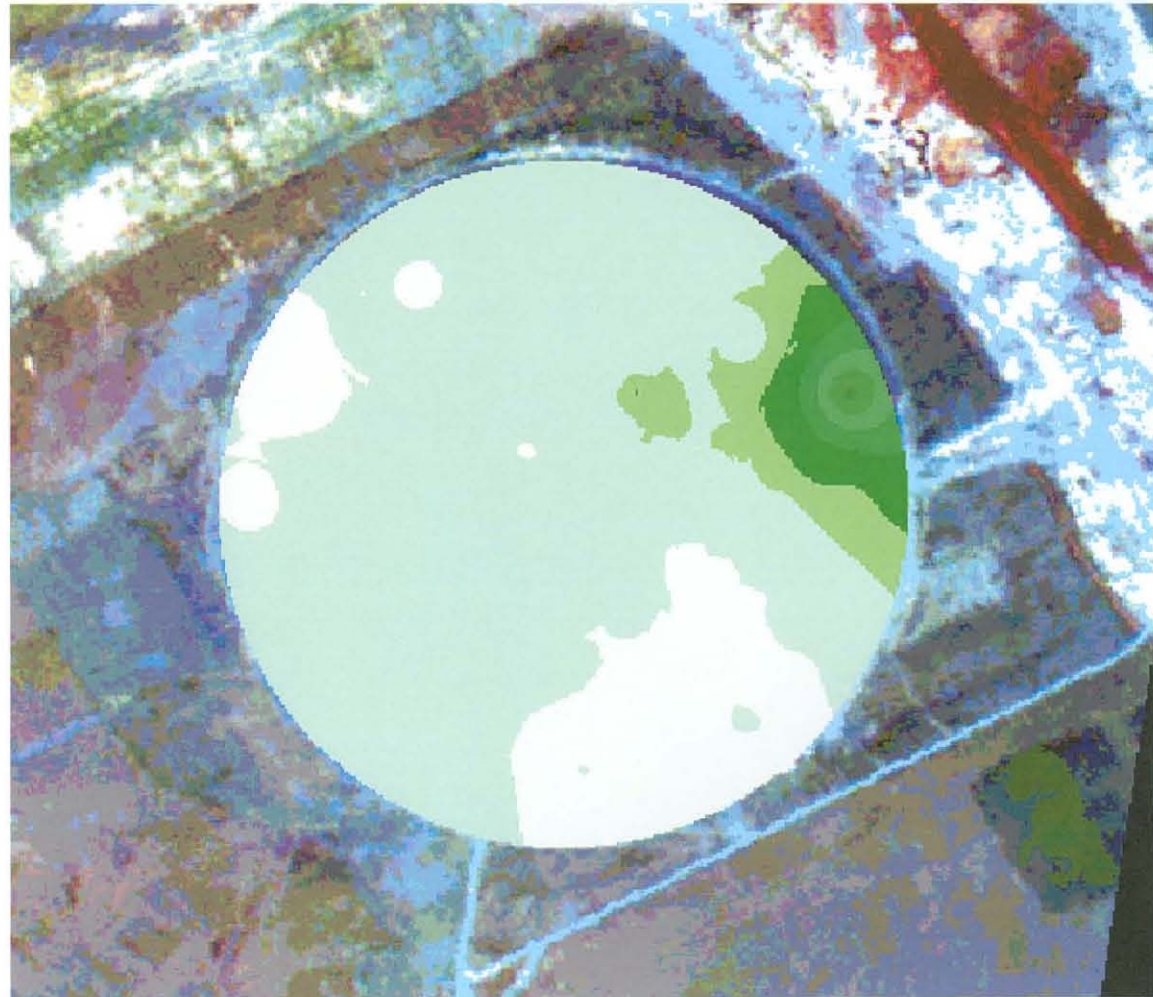
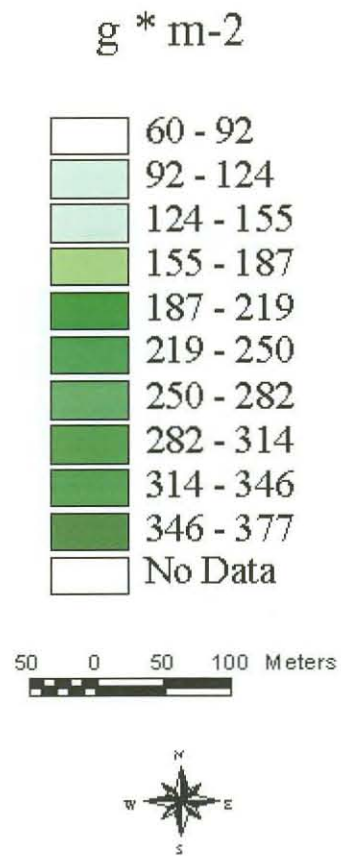
# Pivot Tweefontein: Wheat moisture % at harvest



# Pivot Tweefontein: Ground cover 08/99



# Pivot Tweefontein: Dry matter



# Pivot Tweefontein: LAI 08/99

