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Relations between ecological, sociological and economic factors affecting ranching in the North Western Transvaal.

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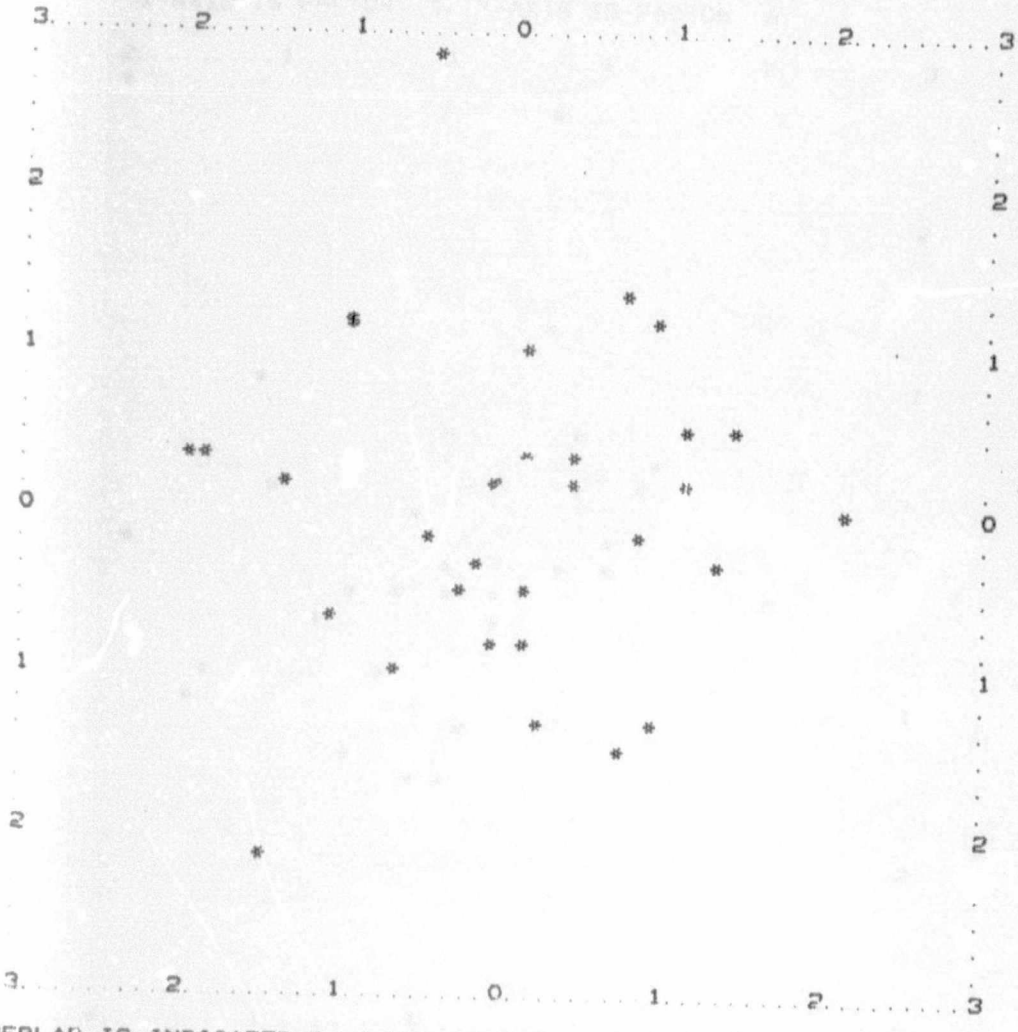
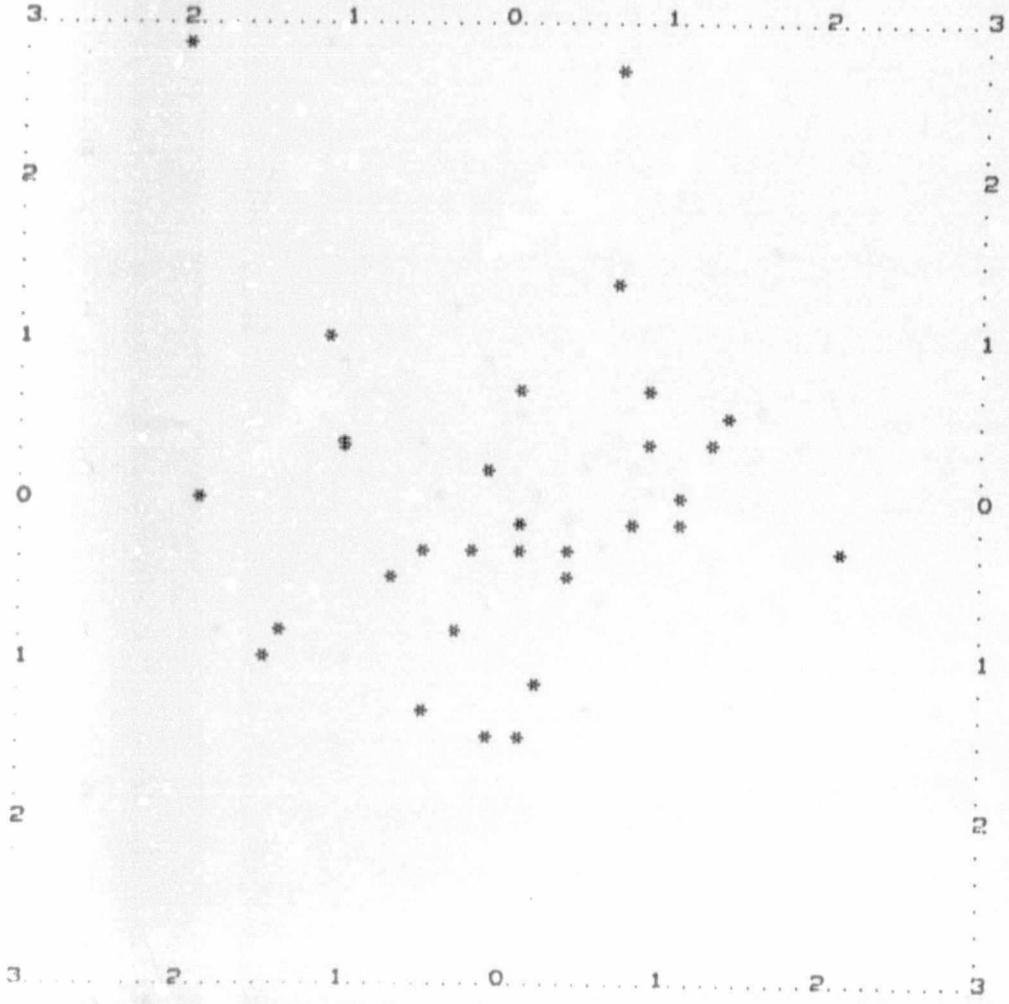
X-AXIS IS FACTOR 4, Y-AXIS IS FACTOR 5



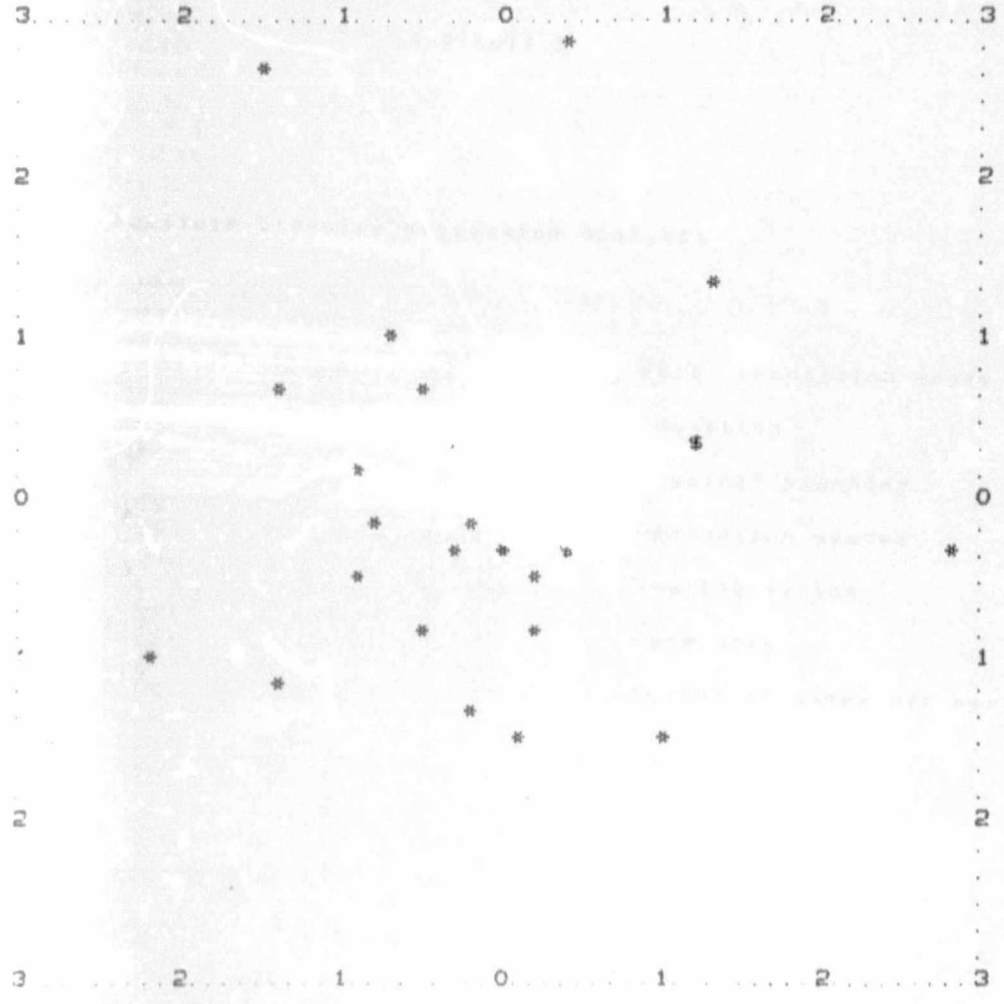
OVERLAP IS INDICATED BY A DOLLAR SIGN. SCALE IS FROM -3 TO +3.
FACTOR SCORES GREATER THAN 3 ARE PLOTTED AS 3.
FACTOR SCORES LESS THAN -3 ARE PLOTTED AS -3.

X-AXIS IS FACTOR 4, Y-AXIS IS FACTOR 6



FACTOR SCORES

X-AXIS IS FACTOR 5, Y-AXIS IS FACTOR 6



OVERLAP IS INDICATED BY A DOLLAR SIGN SCALE IS FROM -3 TO +3.
FACTOR SCORES GREATER THAN 3 ARE PLOTTED AS 3.
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CPU TIME USED IN PRECEDING PROBLEM 14.133 SECONDS
CUMULATIVE CPU TIME USED 14.133 SECONDS

APPENDIX 3

Multiple Stepwise Regression Analysis

Y variate (X18)	=	Veld composition score
X5	=	Education
X7	=	Physical planning
X8	=	Production system
X9	=	Grazing system
X1	=	Farm size
X17	=	Number of camps per herd

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GENSTAT V     RELEASE 4.04B
COPYRIGHT 1984 LAWES AGRICULTURAL TRUST (ROTHAMSTED EXPERIMENTAL STATION)

  1   'REFE' GRC_DG_WILD
  2   'UNIT' $41
  3   'READ/P' X(1...18) $F,14X,5,3(3),10(2),5,2,3,4,/
  4   'REGR' X(1...18)
  5   'Y' X(18)
  6   'FIT' X(3)
  7   'ADD' X(7)
  8   'ADD' X(8)
  9   'ADD' X(9)
 10   'ADD' X(1)
 11   'RUN'
```

IDENTIFIER	MINIMUM	MEAN	MAXIMUM	VALUES	MISSING	
X(1)	190	2049	9900	41	0	SKEW
X(2)	26.00	49.41	80.00	41	0	
X(3)	8.00	11.10	18.00	41	1	
X(4)	2.00	20.13	45.00	41	1	
X(5)	1.000	2.026	3.000	41	2	
X(6)	1.000	2.263	3.000	41	3	
X(7)	1.000	2.342	3.000	41	3	
X(8)	1.000	2.158	3.000	41	3	
X(9)	1.000	2.158	3.000	41	3	
X(10)	1.000	2.000	3.000	41	3	
X(11)	1.000	2.105	3.000	41	3	
X(12)	1.000	2.342	3.000	41	3	
X(13)	1.000	2.270	3.000	41	4	
X(14)	1.000	2.639	8.000	41	5	SKEW
X(15)	28.0	282.7	1300.0	41	7	SKEW
X(16)	1.000	1.769	3.000	41	2	
X(17)	2.000	5.486	12.000	41	6	
X(18)	281.0	440.4	761.0	41	0	

6. .....

***** REGRESSION ANALYSIS *****

Y-VARIATE: X(18) VCS

*** REGRESSION COEFFICIENTS ***

	ESTIMATE	S.E.	T
CONSTANT	270.8	73.4	3.69
X(3)	14.49	6.33	2.29 *

*** ANALYSIS OF VARIANCE ***

	DF	SS	MS
REGRESSN	1	40905	40905
RESIDUAL	29	226300	7803
TOTAL	30	267206	8907
CHANGE	-1	-40905	40905

PERCENTAGE VARIANCE ACCOUNTED FOR 12.4

7.....

***** REGRESSION ANALYSIS *****

Y-VARIATE: X(18)

*** REGRESSION COEFFICIENTS ***

	ESTIMATE	S.E.	T
CONSTANT	217.7	81.7	2.66
X(3)	11.77	6.53	1.80
X(7)	34.3	24.6	1.39

*** ANALYSIS OF VARIANCE ***

	DF	SS	MS
REGRESSN	2	55521	27761
RESIDUAL	28	211685	7560
TOTAL	30	267206	8907
CHANGE	-1	-14616	14616

PERCENTAGE VARIANCE ACCOUNTED FOR 15.1

8.....

***** REGRESSION ANALYSIS *****

Y-VARIATE: X(18)

*** REGRESSION COEFFICIENTS ***

	ESTIMATE	S.E.	T
CONSTANT	188.7	82.3	2.29
X(3)	9.04	6.64	1.36
X(7)	32.4	24.1	1.34
X(8)	29.4	19.6	1.50

*** ANALYSIS OF VARIANCE ***

	DF	SS	MS
REGRESSN	3	71830	23943
RESIDUAL	27	195376	7236
TOTAL	30	267206	8907
CHANGE	-1	-16309	16309

PERCENTAGE VARIANCE ACCOUNTED FOR 18.8

9.....

***** REGRESSION ANALYSIS *****

Y-VARIATE: X(18)

*** REGRESSION COEFFICIENTS ***

	ESTIMATE	S.E.	T
CONSTANT	155.2	85.5	1.81
X(3)	15.03	8.09	1.86
X(7)	51.2	28.1	1.82
X(8)	30.6	19.4	1.58
X(9)	-38.0	29.9	-1.27

*** ANALYSIS OF VARIANCE ***

	DF	SS	MS
REGRESSN	4	83222	20805
RESIDUAL	26	183984	7076
TOTAL	30	267206	8907
CHANGE	-1	-11391	11391

PERCENTAGE VARIANCE ACCOUNTED FOR 20.6

10.....

***** REGRESSION ANALYSIS *****

Y-VARIATE: X(18)

*** REGRESSION COEFFICIENTS ***

	ESTIMATE	S.E.	T
CONSTANT	148.4	89.0	1.67
X(3)	15.31	8.27	1.85
X(7)	47.7	30.2	1.58
X(8)	32.0	20.1	1.60
X(9)	-38.9	30.5	-1.27
X(1)	0.0057	0.0158	0.36

*** ANALYSIS OF VARIANCE ***

	DF	SS	MS
REGRESSN	5	84185	16837
RESIDUAL	25	183021	7321
TOTAL	30	267206	8907
CHANGE	-1	-964	964

PERCENTAGE VARIANCE ACCOUNTED FOR 17.8

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GENSTAT V     RELEASE 4.048
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Y-VARIATE: X(18)

*** REGRESSION COEFFICIENTS ***

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*** ANALYSIS OF VARIANCE ***

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