

DATA TITLE : DIXON

VARIABLE : LZN

824572

LOWER BOUND INCLUDED	PERCENT OF THE TOTAL SAMPLES					NUMBER OF SAMPLES IN THIS CATEGORY	PERCENTAGE OF THE TOTAL SAMPLES	CUMULATIVE PERCENT BELOW LOWER BOUND	LOWER BOUND
	15.0	30.0	45.0	60.0	75.0				
0.000						0	0.00	0.00	0.000
0.200						0	0.00	0.00	0.200
0.400						0	0.00	0.00	0.400
0.600						0	0.00	0.00	0.600
0.800						0	0.00	0.00	0.800
1.000						1	0.11	0.11	1.000
1.200						1	0.11	0.23	1.200
1.400						11	1.26	1.49	1.400
1.600						15	1.72	3.21	1.600
1.800						192	22.02	25.23	1.800
2.000						437	50.11	75.34	2.000
2.200						195	22.36	97.71	2.200
2.400						18	2.06	99.77	2.400
2.600						2	0.23	100.00	2.600

97% = 158.

VARIABLE: LZN

NUMBER OF OBSERVATIONS: 872

MINIMUM: 0.954

MAXIMUM: 2.453

MEAN: 1.894

STANDARD ERROR OF MEAN: 0.006

STANDARD DEVIATION: 0.166

COEFFICIENT OF VARIATION: 8.749

SKEWNESS: -0.644

KURTOSIS: 2.685

$m + 1SD = 1.894 + 0.166 = 2.06$

$m - 2SD = 1.894 - 2(0.166) = 1.562$

22 ILLEGAL CALCULATIONS WERE ATTEMPTED. IN EACH CASE THE SPECIAL VALUE WAS SUBSTITUTED FOR THE OUTPUT VARIABLE. THE FIRST TEN THAT WERE ENCOUNTERED ARE LISTED BELOW.

SAMPLE NO.	OUTPUT VARIABLE	FUNCTION NUMBER
DL1292	LZN	1
DL1292	LCU	2
DL1391	LCU	2
DL1747	LCU	2
DL1940	LZN	1
DL1940	LCU	2
DL1292	LZN	1
DL1292	LCU	2
DL1391	LCU	2
DL1747	LCU	2

\*\*\*\*\*

WE WILL NOW MAKE ANOTHER PASS THROUGH THE DATA.

A NEW SET OF TRANSFORMATIONS AND SELECTIONS WILL BE SPECIFIED.

\*\*\*\*\* THE FOLLOWING TRANSFORMATIONS WILL BE USED IN THIS RUN. \*\*\*\*\*

LAU = LOG(10) AU-PPB

\*\* THE FOLLOWING SELECTION CRITERIA WILL BE SATISFIED IN THIS RUN. \*\*

SAMPLES WITH AU-PPB BETWEEN 0.000 AND 500.000 AND LAU BETWEEN 0.000 AND 500.000 AND ZN BETWEEN 0.000 AND 500.000 AND CU BETWEEN 0.000 AND 500.000 AND AS BETWEEN 0.000 AND 500.000 AND AG BETWEEN 0.000 AND 500.000 WILL BE SELECTED.

DATA TITLE : DIXON

VARIABLE : LAU

LOWER BOUND INCLUDED	PERCENT OF THE TOTAL SAMPLES	NUMBER OF SAMPLES IN THIS CATEGORY	PERCENTAGE OF THE TOTAL SAMPLES	CUMULATIVE PERCENT BELOW LOWER BOUND	LOWER BOUND
0.000		0	0.00	0.00	0.000
0.200		76	8.72	8.72	0.200
0.400		0	0.00	8.72	0.400
0.600		587	67.32	76.03	0.600
0.800		0	0.00	76.03	0.800
1.000		191	21.90	97.94	1.000
1.200		13	1.49	99.43	1.200
1.400		1	0.11	99.54	1.400
1.600		3	0.34	99.89	1.600
1.800		1	0.11	100.00	1.800
2.000					2.000

97% - 15

VARIABLE:	LAU
NUMBER OF OBSERVATIONS:	872
MINIMUM:	0.398
MAXIMUM:	1.978
MEAN:	0.759
STANDARD ERROR OF MEAN:	0.007
STANDARD DEVIATION:	0.201
COEFFICIENT OF VARIATION:	26.449
SKEWNESS:	1.055
KURTOSIS:	3.059

$$\bar{X} + 1SD = 9.1$$

$$\bar{X} + 2SD = 14.5$$

4 ILLEGAL CALCULATIONS WERE ATTEMPTED. IN EACH CASE THE SPECIAL VALUE WAS SUBSTITUTED FOR THE OUTPUT VARIABLE. THEY ARE LISTED BELOW.

SAMPLE NO.	OUTPUT VARIABLE	FUNCTION NUMBER
DL1292	LAU	1
DL1940	LAU	1
DL1292	LAU	1
DL1940	LAU	1

\*\*\*\*\*

WE WILL NOW MAKE ANOTHER PASS THROUGH THE DATA.

THE SAME TRANSFORMATIONS AND SELECTIONS AS LAST RUN WILL BE USED IN THIS RUN.

DATA TITLE : DIXON

VARIABLE : AU-PPB

LOWER BOUND INCLUDED	PERCENT OF THE TOTAL SAMPLES					NUMBER OF SAMPLES IN THIS CATEGORY	PERCENTAGE OF THE TOTAL SAMPLES	CUMULATIVE PERCENT BELOW LOWER BOUND	LOWER BOUND
	15.0	30.0	45.0	60.0	75.0				
0.000+	-----+-----+-----+-----+-----+							0.00	0.000
*****						76	8.72		
5.000+	*****							8.72	5.000
*****						587	67.32		
10.000+	*****							76.03	10.000
*****						163	18.69		
15.000+	*****							94.72	15.000
***						28	3.21		
20.000+	***							97.94	20.000
II						8	0.92		
25.000+	II							98.85	25.000
II						5	0.57		
30.000+	II							99.43	30.000
II						1	0.11		
35.000+	II							99.54	35.000
!						0	0.00		
40.000+	!							99.54	40.000
II						1	0.11		
45.000+	II							99.66	45.000
II						1	0.11		
50.000+	II							99.77	50.000
II						1	0.11		
55.000+	II							99.89	55.000
!						0	0.00		
60.000+	!							99.89	60.000
!						0	0.00		
65.000+	!							99.89	65.000
!						0	0.00		
70.000+	!							99.89	70.000
!						0	0.00		
75.000+	!							99.89	75.000
!						0	0.00		
80.000+	!							99.89	80.000
!						0	0.00		
85.000+	!							99.89	85.000
!						0	0.00		
90.000+	!							99.89	90.000
!						0	0.00		
95.000+	!							99.89	95.000
II						1	0.11		
100.000+	II							100.00	100.000
!	-----+-----+-----+-----+-----+								
	15.0	30.0	45.0	60.0	75.0				

97% = 15

VARIABLE: AU-PPB

NUMBER OF OBSERVATIONS: 872

MINIMUM: 2.500

MAXIMUM: 95.000

MEAN: 6.560

STANDARD ERROR OF MEAN: 0.173

STANDARD DEVIATION: 5.094

COEFFICIENT OF VARIATION: 77.661

SKEWNESS: 8.221

KURTOSIS: 115.349

$\bar{x} + 1SD = 11.65$

$\bar{x} + 2SD = 16.7$

8 ILLEGAL CALCULATIONS WERE ATTEMPTED. IN EACH CASE THE SPECIAL VALUE WAS SUBSTITUTED FOR THE OUTPUT VARIABLE. THEY ARE LISTED BELOW.

SAMPLE NO.	OUTPUT VARIABLE	FUNCTION NUMBER
DL1292	LAU	1
DL1940	LAU	1
DL1292	LAU	1
DL1940	LAU	1
DL1292	LAU	1
DL1940	LAU	1
DL1292	LAU	1
DL1940	LAU	1

```

**** * * * * *
* * * * *
* * * * *
* * * * *
**** * * * * *

```

A PROGRAM IN THE Q'GAS SYSTEM TO CALCULATE  
UNIVARIATE STATISTICS AND MAKE HISTOGRAMS  
VERSION 4.P.125 DEC 1982

DATA TITLE: DIXON

THE FOLLOWING VARIABLES ARE IN THE DATA SET:

LAT DEP HOR TEX CHAR COLOUR AG AS CU PB  
ZN AU-PFB

\*\* THE FOLLOWING SELECTION CRITERIA WILL BE SATISFIED IN THIS RUN. \*\*

SAMPLES WITH  
AS BETWEEN 0.000 AND 500.000  
AND  
AG BETWEEN 0.000 AND 500.000  
AND  
CU BETWEEN 0.000 AND 500.000  
WILL BE SELECTED.

DATA TITLE : DIXON

VARIABLE : AS

LOWER BOUND INCLUDED	PERCENT OF THE TOTAL SAMPLES	NUMBER OF SAMPLES IN THIS CATEGORY	PERCENTAGE OF THE TOTAL SAMPLES	CUMULATIVE PERCENT BELOW LOWER BOUND	LOWER BOUND
0.000+	*****	568	65.14	0.00	0.000
5.000+	*****	113	12.96	65.14	5.000
10.000+	*****	105	12.04	78.10	10.000
15.000+	****	47	5.39	90.14	15.000
20.000+	***	22	2.52	95.53	20.000
25.000+	!!	8	0.92	98.05	25.000
30.000+	!!	3	0.34	98.97	30.000
35.000+	!!	1	0.11	99.31	35.000
40.000+	!!	4	0.46	99.43	40.000
45.000+	!!	1	0.11	99.89	45.000
50.000+	!			100.00	50.000

$97.5 = 20$

VARIABLE: AS  
NUMBER OF OBSERVATIONS: 872  
MINIMUM: 0.000  
MAXIMUM: 49.000  
MEAN: 4.776  
STANDARD ERROR OF MEAN: 0.241  
STANDARD DEVIATION: 7.109  
COEFFICIENT OF VARIATION: 148.831  
SKEWNESS: 2.056  
KURTOSIS: 5.578

$\bar{x} + 1SD = 11.8$   
 $\bar{x} + 2SD = 19$

\*\*\*\*\*  
WE WILL NOW MAKE ANOTHER PASS THROUGH THE DATA.  
THE SAME TRANSFORMATIONS AND SELECTIONS AS LAST RUN WILL BE USED IN THIS RUN.

DATA TITLE : DIXON

VARIABLE : AG

LOWER BOUND INCLUDED	PERCENT OF THE TOTAL SAMPLES	NUMBER OF SAMPLES IN THIS CATEGORY	PERCENTAGE OF THE TOTAL SAMPLES	CUMULATIVE PERCENT BELOW LOWER BOUND	LOWER BOUND
0.000+				0.00	0.000
0.200+		2	0.23	0.23	0.200
0.400+		12	1.38	1.61	0.400
0.600+		80	9.17	10.78	0.600
0.800+		235	26.95	37.73	0.800
1.000+		279	32.00	69.72	1.000
1.200+		159	18.23	87.96	1.200
1.400+		53	6.08	94.04	1.400
1.600+		18	2.06	96.10	1.600
1.800+		8	0.92	97.02	1.800
2.000+		7	0.80	97.82	2.000
2.200+		10	1.15	98.97	2.200
2.400+		3	0.34	99.31	2.400
2.600+		0	0.00	99.31	2.600
2.800+		3	0.34	99.66	2.800
3.000+		1	0.11	99.77	3.000
3.200+		0	0.00	99.77	3.200
3.400+		0	0.00	99.77	3.400
3.600+		0	0.00	99.77	3.600
3.800+		0	0.00	99.77	3.800
4.000+		2	0.23	100.00	4.000

97% = 1.8

VARIABLE: AG

NUMBER OF OBSERVATIONS: 872

MINIMUM: 0.000

MAXIMUM: 3.900

MEAN: 0.869

STANDARD ERROR OF MEAN: 0.012

STANDARD DEVIATION: 0.360

COEFFICIENT OF VARIATION: 41.404

SKEWNESS: 2.680

KURTOSIS: 14.546

$\bar{x} + 1SD = 1.22$   
 $\bar{x} + 2SD = 1.58$

\*\*\*\*\*

WE WILL NOW MAKE ANOTHER PASS THROUGH THE DATA.

THE SAME TRANSFORMATIONS AND SELECTIONS AS LAST RUN WILL BE USED IN THIS RUN.

DATA TITLE : DIXON

VARIABLE : CU

LOWER BOUND INCLUDED	PERCENT OF THE TOTAL SAMPLES	NUMBER OF SAMPLES IN THIS CATEGORY	PERCENTAGE OF THE TOTAL SAMPLES	CUMULATIVE PERCENT BELOW LOWER BOUND	LOWER BOUND
0.000	-----+-----+-----+-----+-----+			0.00	0.000
10.000	*****	418	47.94	47.94	10.000
20.000	*****	303	34.75	82.68	20.000
30.000	*****	94	10.78	93.46	30.000
40.000	***	29	3.33	96.79	40.000
50.000	**	11	1.26	98.05	50.000
60.000	I	8	0.92	98.97	60.000
70.000	I	6	0.69	99.66	70.000
80.000	I	1	0.11	99.77	80.000
90.000	I	1	0.11	99.89	90.000
100.000	I	0	0.00	99.89	100.000
110.000	I	0	0.00	99.89	110.000
120.000	I	0	0.00	99.89	120.000
130.000	I	0	0.00	99.89	130.000
140.000	I	1	0.11	100.00	140.000

PERCENT OF THE TOTAL SAMPLES

*97.5 = 50*

VARIABLE: CU

NUMBER OF OBSERVATIONS: 872

MINIMUM: 0.000

MAXIMUM: 139.000

MEAN: 13.055

STANDARD ERROR OF MEAN: 0.385

STANDARD DEVIATION: 11.376

COEFFICIENT OF VARIATION: 87.140

SKEWNESS: 3.554

KURTOSIS: 23.163

$$\bar{y} + 1SD = 24.4$$

$$\bar{x} + 2SP = 35.7$$

\*\*\*\*\*

WE WILL NOW MAKE ANOTHER PASS THROUGH THE DATA.

THE SAME TRANSFORMATIONS AND SELECTIONS AS LAST RUN WILL BE USED IN THIS RUN.

DATA TITLE : DIXON

VARIABLE : PB

LOWER BOUND INCLUDED	PERCENT OF THE TOTAL SAMPLES					NUMBER OF SAMPLES IN THIS CATEGORY	PERCENTAGE OF THE TOTAL SAMPLES	CUMULATIVE PERCENT BELOW LOWER BOUND	LOWER BOUND
	15.0	30.0	45.0	60.0	75.0				
0.000	-----+-----+-----+-----+-----+							0.00	0.000
!*****!						486	55.73		
!*****!								55.73	20.000
20.000+	!*****!					371	42.55		
!*****!								98.28	40.000
40.000+						13	1.49		
!I								99.77	60.000
!I						1	0.11		
60.000+								99.89	80.000
!I						0	0.00		
!I								99.89	100.000
80.000+						0	0.00		
!I								99.89	120.000
!I						0	0.00		
100.000+								99.89	140.000
!I						0	0.00		
!I								99.89	160.000
120.000+						0	0.00		
!I								99.89	180.000
!I						0	0.00		
140.000+								99.89	200.000
!I						0	0.00		
!I								99.89	220.000
160.000+						1	0.11		
!I								100.00	240.000
!I									
200.000+									
!I									
!I									
220.000+									
!I									
!I									
240.000+									
!I									
!I									
	15.0	30.0	45.0	60.0	75.0				

97 = 40

VARIABLE:	PB
NUMBER OF OBSERVATIONS:	872
MINIMUM:	0.000
MAXIMUM:	239.000
MEAN:	19.522
STANDARD ERROR OF MEAN:	0.359
STANDARD DEVIATION:	10.592
COEFFICIENT OF VARIATION:	54.257
SKEWNESS:	10.619
KURTOSIS:	210.326

$$\bar{x} + 1SD = 30$$

$$\bar{x} + 2SD = 40$$

\*\*\*\*\*

WE WILL NOW MAKE ANOTHER PASS THROUGH THE DATA.

A NEW SET OF TRANSFORMATIONS AND SELECTIONS WILL BE SPECIFIED.

\*\*\*\*\* THE FOLLOWING TRANSFORMATIONS WILL BE USED IN THIS RUN. \*\*\*\*\*

LCU = LOG(10) CU

DATA TITLE : DIXON

VARIABLE : LCU

LOWER BOUND INCLUDED	PERCENT OF THE TOTAL SAMPLES	NUMBER OF SAMPLES IN THIS CATEGORY	PERCENTAGE OF THE TOTAL SAMPLES	CUMULATIVE PERCENT BELOW LOWER BOUND	LOWER BOUND
0.000+	-----+-----+-----+-----+-----			0.00	0.000
0.200+	!*	9	1.03	1.03	0.200
0.400+	!***	18	2.07	3.10	0.400
0.600+	!****	34	3.91	7.01	0.600
0.800+	!*****	159	18.28	25.29	0.800
1.000+	!*****	196	22.53	47.82	1.000
1.200+	!*****	227	26.09	73.91	1.200
1.400+	!*****	151	17.36	91.26	1.400
1.600+	!*****	48	5.52	96.78	1.600
1.800+	!***	22	2.53	99.31	1.800
2.000+	!I	5	0.57	99.89	2.000
2.200+	!I	1	0.11	100.00	2.200

97% = 40

VARIABLE:	LCU
NUMBER OF OBSERVATIONS:	870
MINIMUM:	0.000
MAXIMUM:	2.143
MEAN:	1.003
STANDARD ERROR OF MEAN:	0.011
STANDARD DEVIATION:	0.314
COEFFICIENT OF VARIATION:	31.355
SKEWNESS:	-0.092
KURTOSIS:	0.719

$\bar{x} + 1.5D = 20.7$   
 $\bar{x} + 1.5D = \underline{\underline{42.75}}$

8 ILLEGAL CALCULATIONS WERE ATTEMPTED. IN EACH CASE THE SPECIAL VALUE WAS SUBSTITUTED FOR THE OUTPUT VARIABLE. THEY ARE LISTED BELOW.

SAMPLE NO.	OUTPUT VARIABLE	FUNCTION NUMBER
DL1292	LCU	1
DL1391	LCU	1
DL1747	LCU	1
DL1940	LCU	1
DL1292	LCU	1
DL1391	LCU	1
DL1747	LCU	1
DL1940	LCU	1



Soils — DIXON LAKE GRAD

DISTRIB

97%

X+1SD

X+2SD

Zn  
LZn.

N

~~X=78~~  
X=78

158

115

168

Au

Log

15

11.6

16.7

LAu

N

15

9.1

14.5

As

Log.

20

11.8

19.

Ag

N.

18

1.2

1.6

Cu

Log

50

24

36

LCu

N.

40

20.7

43.

Pb

Log

40

30

40