

Technical Report No. 283
A SUMMARY OF FOURTEEN SITE YEARS
OF BELOWGROUND HERBAGE BIOMASS DATA
PART I

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GRASSLAND BIOME
U.S. International Biological Program

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ABSTRACT

Fourteen site years of US/IBP Grassland Biome biomass data are screened, corrected, and described in a time series fashion by both graphical and statistical means. Impossible values, i.e., negative biomass, were corrected and missing or deleted data were inserted to complete the data sets. Analyses were done at the treatment level by sampling data with all root core data for all replicates for the treatment being pooled to obtain treatment means and variances.

CHAPTER 1. INTRODUCTION AND OVERVIEW

The work reported herein is basically two-fold: (i) cleaning up the belowground herbage biomass data files and (ii) making a low resolution analysis in terms of the time series trace and associated confidence band of these data. The two efforts are closely related so no separation will be made throughout this report; rather the data for any particular step will be handled as a unit, including the cleanup problems and the time series analysis output. Due to earlier analytical work with the belowground herbage biomass data, it was evident that these data sets had a number of shortcomings that needed to be cleaned up before extensive and intensive use were made of the data. The variety of problems existing included things such as negative ash-free weights, blank data points, incorrect core diameters, etc.

This summary included 14 site years of belowground herbage biomass data which is the bulk of this type of data currently available within the Grassland Biome. These data sets cover the years 1970, 1971, and 1972. The sets from Dickinson, North Dakota, and Hays, Kansas, however, are available for 1970 only. The data sets from Jornada, Osage, Pantex, and Pawnee are available for all 3 years. Data from these sites which were active during this time span were not included; these were ALE, Bridger, and Cottonwood. The data set from ALE was not included due to uncertainty of the correctness of the data at this time. The data set from Bridger was not included because of the small amount of data available from that site. The data set from Cottonwood was not included because of an extensive problem with the crown material which was variously allocated to the belowground herbage biomass portion of the data, the litter portion of the data, and the aboveground herbage portion of the data. Using the 3 years of data for the Cottonwood Site, a scheme

has been developed which should yield estimates of total crown biomass upon which corrections to the data files can be based. The crown biomass would be subtracted from the aboveground herbage file and from the litter file and added to the belowground herbage biomass file.

The data cleanup methods were many and varied depending upon the problem encountered. For missing data points, the first line of attack was to check the data forms to determine whether a keypunch error was made. If the data were punched correctly, either a regression estimate was used or more commonly the mean for that replicate, sampling date, and depth was inserted into the blank. The same general approach was used for cases of negative ash-free weights. If for some sampling date an entire stratum of data was missing, such as crowns, these were left blank due to very poor information upon which to base estimates. Other cleanup problems were basically those of ascertaining what the data actually represented, e.g., dry weights or ash-free weights, actual core diameters, and a variety of other keypunching and coding errors.

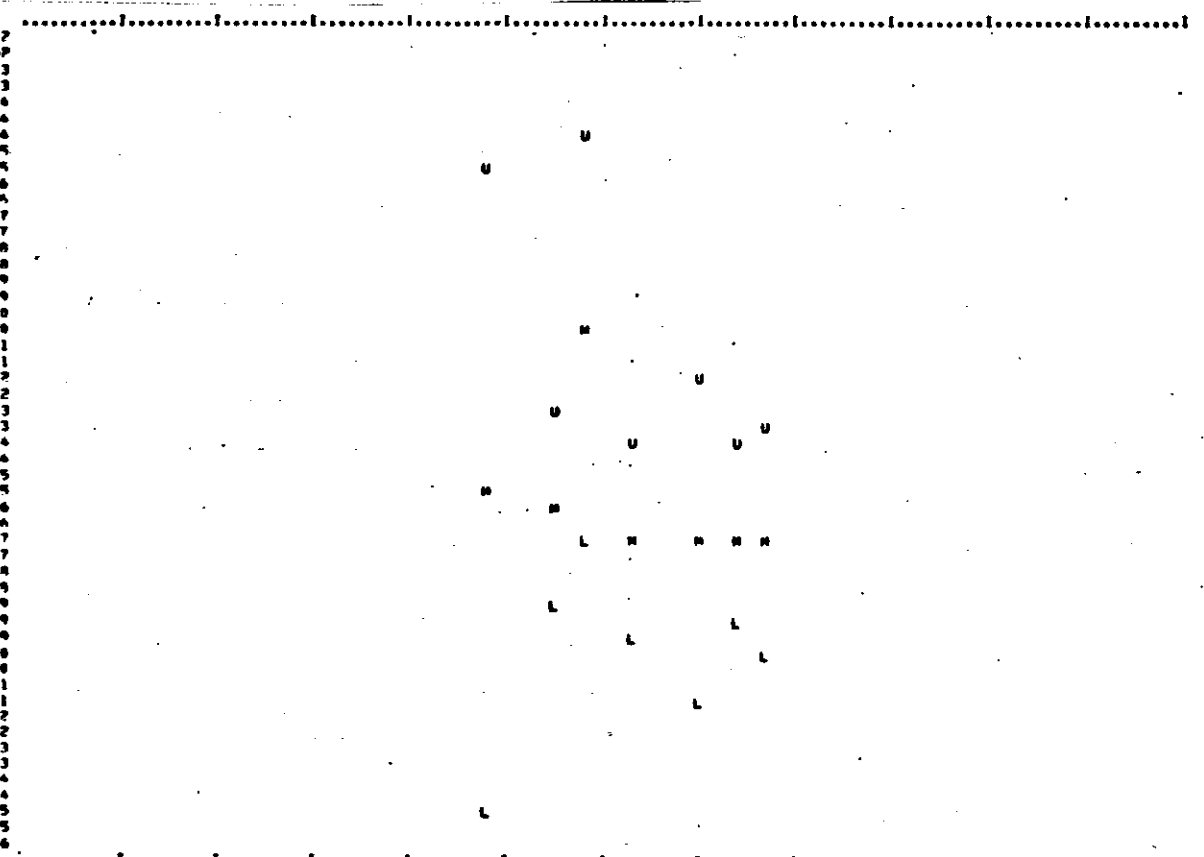
The following six chapters describe the sampling methods used at each of the sites and a time series trace, by treatment, of the belowground herbage biomass data which have been processed through the technical cleanup procedure indicated above. A sampling window of 5 days (but increased to as many as 8 days in special cases) was assumed for each treatment sampling date for purposes of the time trace plot analyses. That is to say, if the replicates were sampled more than 5 days apart, the two replicates were considered different sampling dates. The general rule of thumb used to determine inclusion of a time series trace plot was that the plot have a minimum of two sampling dates plotted. This precluded the inclusion of additional pages of plots that resulted from a single date which had been sampled several increments deeper

than the other dates for that treatment. A few exceptions to this rule will be noted. Particular problems and the particular solutions to these problems for each data set are included in Appendix C. A structural summary of the data files organized by this cleanup are included in Appendix B.

CHAPTER 2. BELOWGROUND HERBAGE BIOMASS DATA FROM THE
DICKINSON SITE, NORTH DAKOTA

The Dickinson Site was sampled seven times during the 1970 growing season. Each of the sampling dates included two replicates on each of two treatments with the exception of the first and the fifth sampling dates which included only one replicate for each of the treatments. Sampling was done uniformly throughout the season with depth increments of 0 to 5 cm, 5 to 10 cm, and 10 cm increments thereafter down to and including 100 cm. The root data were reported on an ash-free weight basis. The crown material for Dickinson was irretrievably lumped with the standing dead material and is therefore unavailable for Dickinson. Very few problems were encountered with this data set and the following plots represent data that are virtually identical to the original archival form of the data file.

1822.57
1793.89
1765.13
1736.43
1707.74
1679.04
1650.34
1621.64
1592.94
1564.24
1535.54
1506.84
1478.14
1449.44
1420.74
1392.04
1363.34
1334.64
1305.94
1277.24
1248.54
1219.84
1191.14
1162.44
1133.74
1105.04
1076.34
1047.64
1018.94
990.24
961.54
932.84
904.14
875.44
846.74
818.04
789.34
760.64
731.94
703.24
674.54
645.84
617.14
588.44
559.74
531.04
502.34
473.64
444.94
416.24
387.54



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	1011.51	212.10	2.74	438.84	1592.18
166	10	989.87	71.94	2.27	826.32	1153.43
176	10	1291.82	160.55	2.27	926.80	1656.83
190	12	933.89	77.25	2.21	762.64	1103.53
211	6	924.20	112.41	2.57	635.36	1213.24
222	12	943.15	75.27	2.21	777.09	1109.22
231	12	935.61	87.14	2.21	743.35	1127.86

2325.37
 2280.44
 2254.62
 2214.24
 2183.87
 2148.49
 2113.11
 2077.74
 2042.36
 2006.99
 1971.61
 1936.24
 1900.86
 1865.49
 1830.11
 1794.74
 1759.36
 1723.99
 1688.61
 1653.24
 1617.86
 1582.49
 1547.11
 1511.74
 1476.36
 1440.99
 1405.61
 1370.24
 1334.86
 1299.49
 1264.11
 1228.74
 1193.36
 1157.99
 1122.61
 1087.23
 1051.86
 1016.48
 981.11
 945.73
 910.36
 874.98
 839.61
 804.23
 768.86
 733.48
 698.11
 662.73
 627.36
 591.98
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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRY 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEC VALUE	LOWER LIMIT	UPPER LIMIT
146	5	1233.94	224.82	2.74	618.45	1849.43
166	10	1218.79	86.28	2.27	1014.63	1406.96
174	10	1665.72	197.18	2.27	1217.47	2113.97
190	12	1267.32	87.76	2.21	1073.60	1460.99
211	6	1146.55	119.83	2.57	848.59	1452.51
222	12	1159.13	89.28	2.21	962.31	1355.94
231	12	1222.83	108.15	2.21	1001.87	1443.80

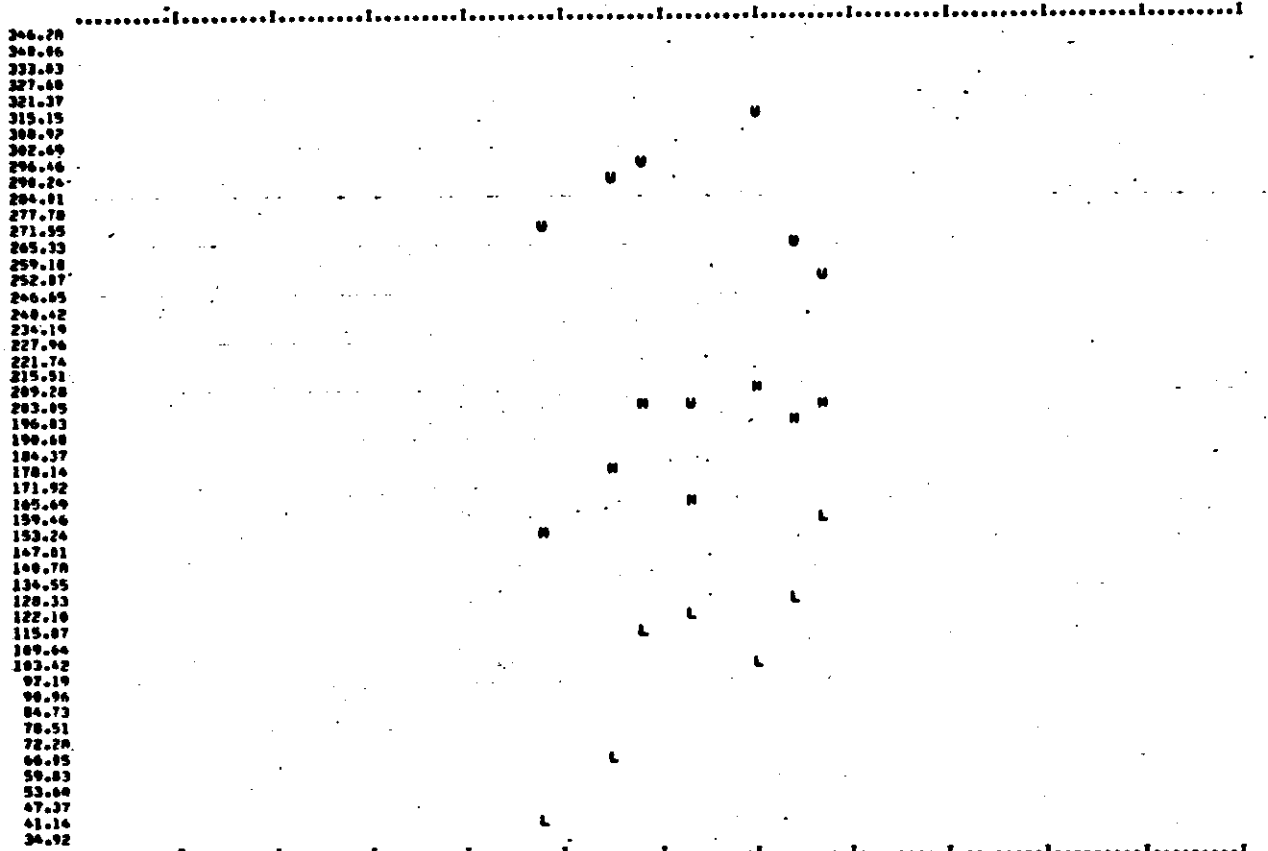
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 2549.24
 2503.80
 2458.36
 2412.93
 2367.49
 2322.05
 2276.62
 2231.18
 2185.74
 2140.31
 2094.87
 2049.43
 2004.00
 1958.56
 1913.12
 1867.69
 1822.25
 1776.81
 1731.38
 1685.94
 1640.50
 1595.07
 1549.63
 1504.19
 1458.76
 1413.32
 1367.88
 1322.44
 1277.01
 1231.57
 1186.14
 1140.70
 1095.26
 1049.83
 1004.39
 958.95
 913.52
 868.08
 822.64
 777.21

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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0-100 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRY 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	1456.37	216.54	2.74	863.56	2049.18
166	10	1495.63	84.62	2.27	1383.24	1688.01
176	10	2160.46	265.48	2.27	1565.06	2771.85
196	12	1685.43	100.61	2.21	1445.79	1925.87
211	6	1471.97	144.62	2.57	1100.24	1843.71
222	12	1526.29	116.89	2.21	1264.05	1776.35
221	12	1687.53	97.74	2.21	1471.89	1983.17



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 5- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
166	5	155.80	42.45	2.74	38.80	271.20
176	10	177.14	49.97	2.27	63.53	290.75
190	12	205.82	39.00	2.27	117.16	294.49
211	6	163.55	17.71	2.21	124.47	202.63
222	12	209.60	48.98	2.57	184.56	314.88
231	12	195.84	38.87	2.21	127.73	263.95
		204.05	21.71	2.21	156.75	252.35

365.25
 358.30
 351.35
 344.41
 337.46
 330.51
 323.56
 316.62
 309.67
 302.72
 295.78
 288.83
 281.88
 274.93
 267.99
 261.04
 254.09
 247.15
 240.20
 233.25
 226.30
 219.36
 212.41
 205.46
 198.51
 191.57
 184.62
 177.67
 170.73
 163.78
 156.83
 149.88
 142.94
 135.99
 129.04
 122.10
 115.15
 108.20
 101.25
 94.31
 87.36
 80.41
 73.47
 66.52
 59.57
 52.62
 45.68
 38.73
 31.78
 24.84
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AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/W SQ) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 1 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/W SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	134.87	19.77	2.74	86.73	189.00
166	10	137.89	22.36	2.27	87.06	188.72
176	10	234.51	42.98	2.27	136.98	332.04
196	12	199.42	18.91	2.21	157.89	241.35
211	6	119.10	38.68	2.57	19.88	218.32
222	12	124.55	21.99	2.21	76.23	172.88
231	12	168.59	14.47	2.21	136.66	200.51

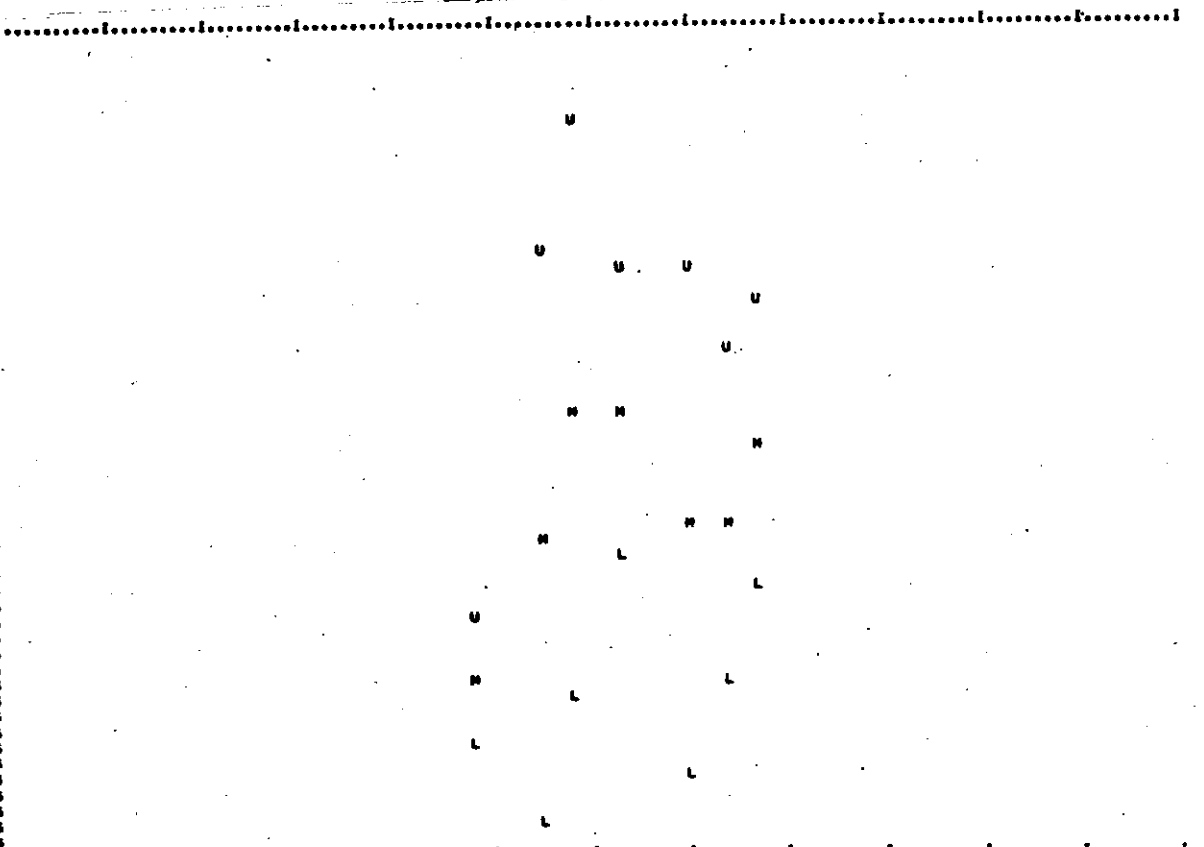
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211.25
207.65
204.04
200.43
196.83
193.22
189.61
186.00
182.40
178.79
175.18
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135.51
131.90
128.29
124.69
121.08
117.47
113.87
110.26
106.65
103.05
99.44
95.83
92.23
88.62
85.01
81.40
77.80
74.19
70.58
66.98
63.37
59.76
56.16
52.55
48.94
45.34
41.73
38.12
34.52

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1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
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X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 20-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TWT 1 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	YEC VALUE	LOWER LIMIT	UPPER LIMIT
144	5	87.56	17.98	2.74	38.35	136.78
164	10	83.03	17.03	2.27	44.32	121.75
176	10	139.40	28.46	2.27	92.87	185.92
198	12	134.62	27.52	2.21	73.91	195.33
211	6	103.16	11.00	2.57	73.34	132.99
222	12	91.42	17.31	2.21	53.23	129.61
231	12	117.84	7.72	2.21	100.00	134.00

175.00
172.00
169.25
166.00
162.00
159.00
156.00
153.25
150.00
146.00
143.00
140.00
137.25
134.00
130.00
127.00
124.00
121.25
118.00
114.00
111.00
108.25
105.00
102.00
98.00
95.00
92.00
89.25
86.00
82.00
79.00
76.00
73.25
70.00
66.00
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60.00
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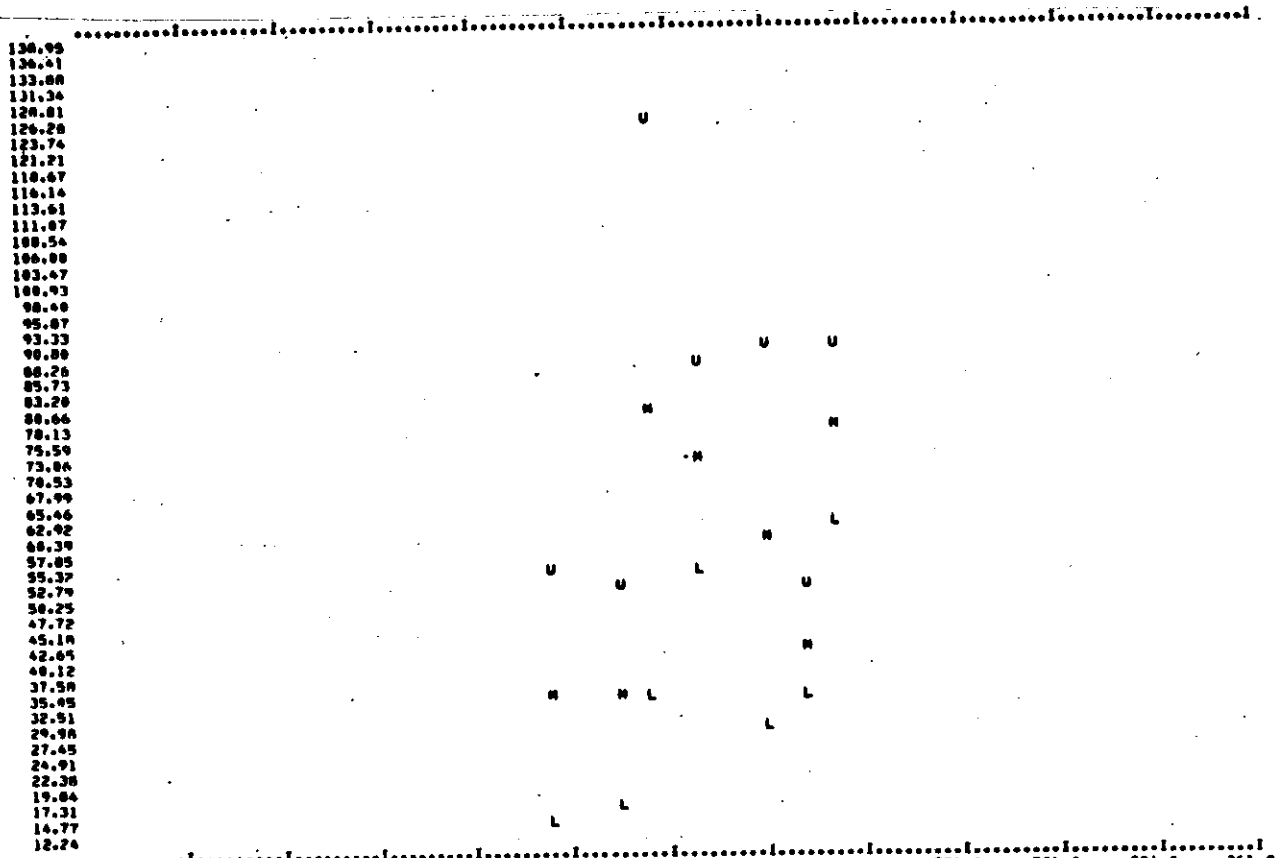


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 30-40 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRY 1 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

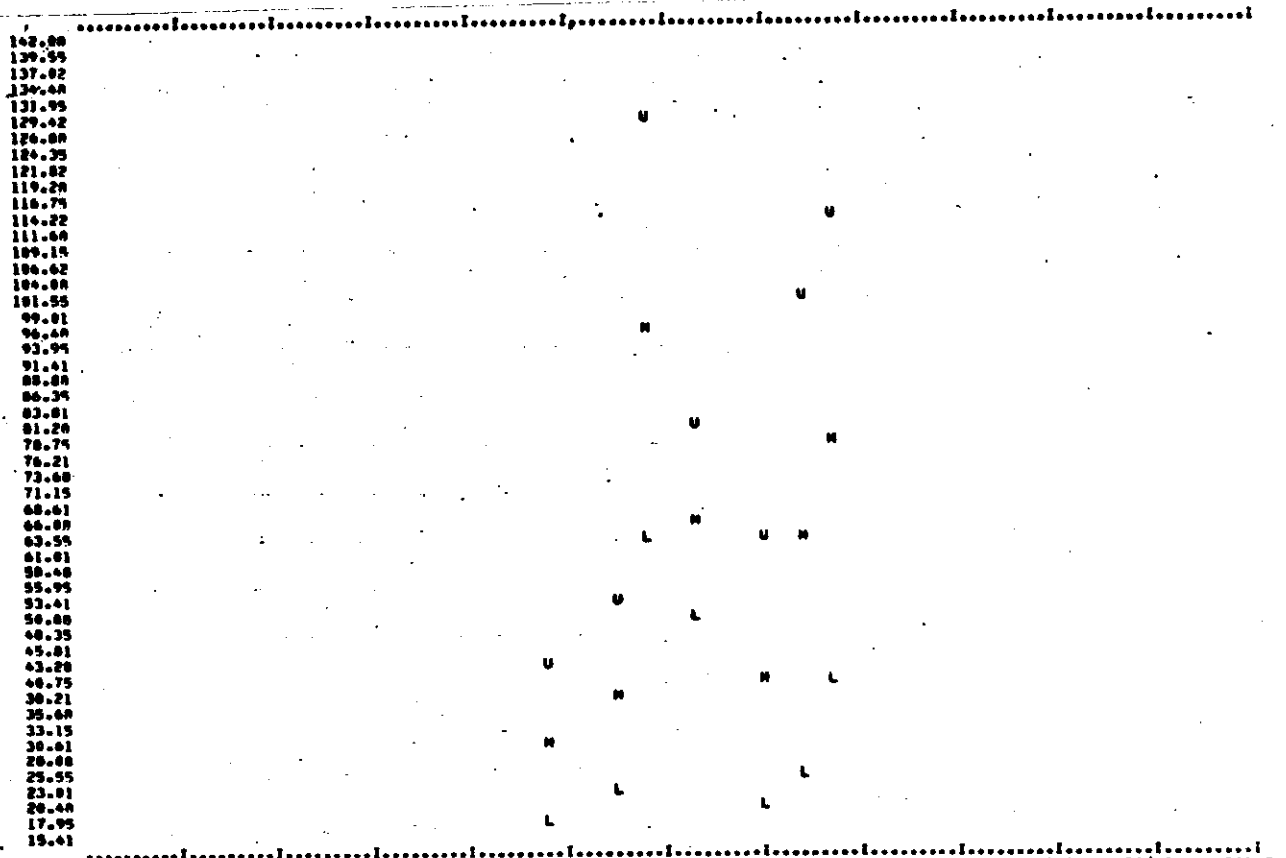
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	47.38	4.39	2.74	35.29	59.32
166	10	75.99	25.77	2.27	17.39	134.59
176	10	101.65	25.53	2.27	43.62	159.69
190	12	101.69	13.27	2.21	72.21	130.76
211	6	80.52	20.17	2.57	28.67	132.37
222	12	80.52	14.92	2.21	47.60	113.43
231	12	96.03	13.42	2.21	66.42	125.65



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/N SQ) FOR 40- 50 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 1 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/N SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	34.22	7.53	2.74	13.60	54.84
166	10	35.23	7.50	2.27	18.17	52.28
176	10	69.52	26.14	2.27	34.72	126.31
198	12	72.13	7.31	2.21	56.00	88.26
211	6	68.39	11.04	2.57	29.96	98.82
222	12	43.61	4.31	2.21	34.11	53.12
231	12	77.50	6.38	2.21	63.60	91.40



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 50- 60 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON- TRT 1 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
144	5	38.19	4.77	2.74	17.12	43.26
164	10	37.74	7.81	2.27	21.81	53.67
174	10	94.12	14.54	2.27	63.07	129.17
198	12	64.26	8.61	2.21	51.68	80.94
211	6	41.10	8.36	2.57	19.64	62.59
222	12	63.32	16.92	2.21	25.98	100.67
231	12	78.00	16.38	2.21	41.85	114.15

195.79
 152.76
 149.74
 146.72
 143.69
 140.67
 137.65
 134.62
 131.60
 128.58
 125.56
 122.53
 119.51
 116.49
 113.46
 110.44
 107.42
 104.40
 101.37
 98.35
 95.33
 92.30
 89.28
 86.26
 83.24
 80.21
 77.19
 74.17
 71.14
 68.12
 65.10
 62.07
 59.05
 56.03
 53.01
 49.99
 46.96
 43.94
 40.91
 37.89
 34.87
 31.85
 28.82
 25.80
 22.78
 19.75
 16.73
 13.71
 10.69
 7.66
 4.64

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AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 60-70 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TBT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
144	5	25.16	3.18	2.74	16.45	33.88
166	10	38.75	10.42	2.27	15.05	62.45
176	10	64.41	11.10	2.27	39.19	89.64
198	12	56.61	6.67	2.21	46.75	66.48
211	6	35.23	3.18	2.57	27.05	43.41
222	12	73.39	10.93	2.81	54.46	141.62
231	12	59.97	9.92	2.21	47.79	72.15

99.38
97.63
95.67
93.52
91.56
89.61
87.65
85.78
83.74
81.79
79.83
77.88
75.92
73.97
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25.09
23.13
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19.22
17.27
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13.36
11.40
9.45
7.49
5.53
3.58
1.62

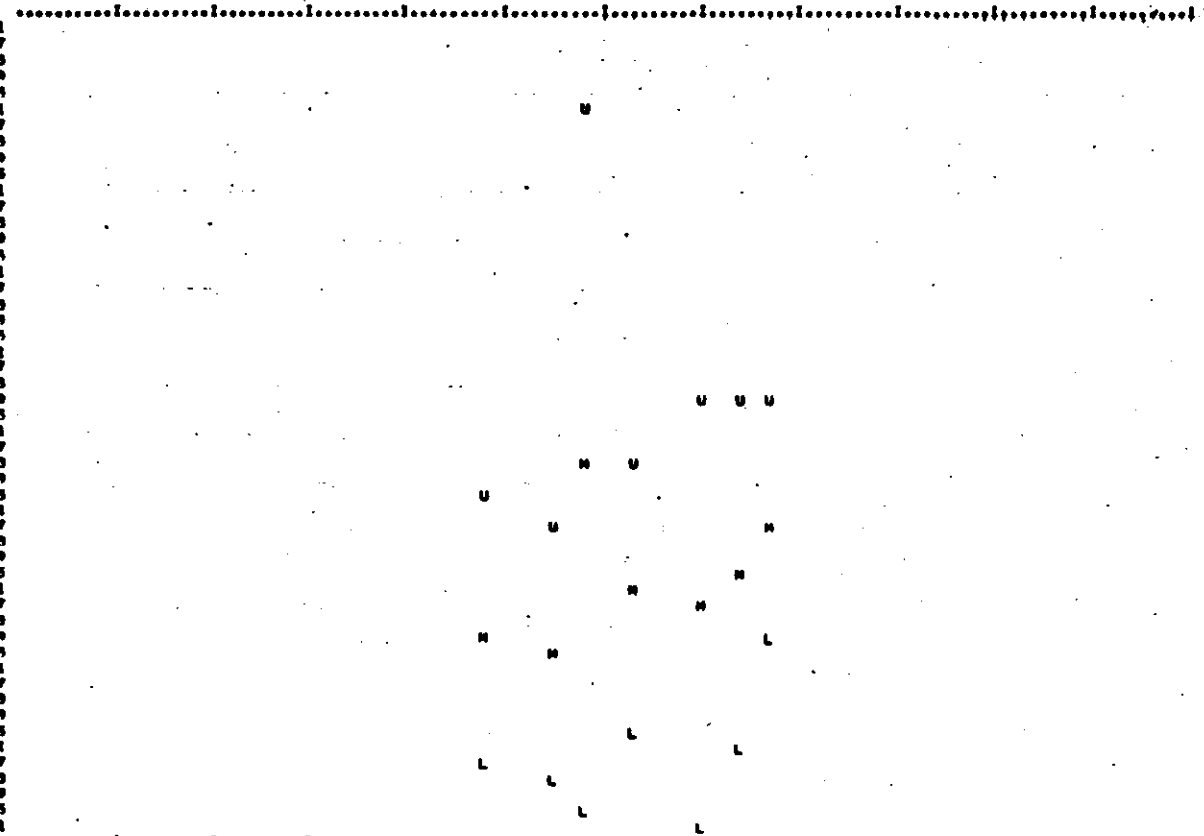
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 70-80 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 1 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	24.16	7.78	2.74	3.08	45.23
166	10	36.23	7.11	2.27	29.87	52.40
176	10	53.85	16.60	2.27	17.34	90.35
196	12	49.90	7.85	2.21	34.35	65.46
211	6	41.10	15.29	2.57	1.81	80.39
222	12	25.58	7.21	2.21	9.67	41.49
239	12	47.01	7.16	2.21	32.02	63.00

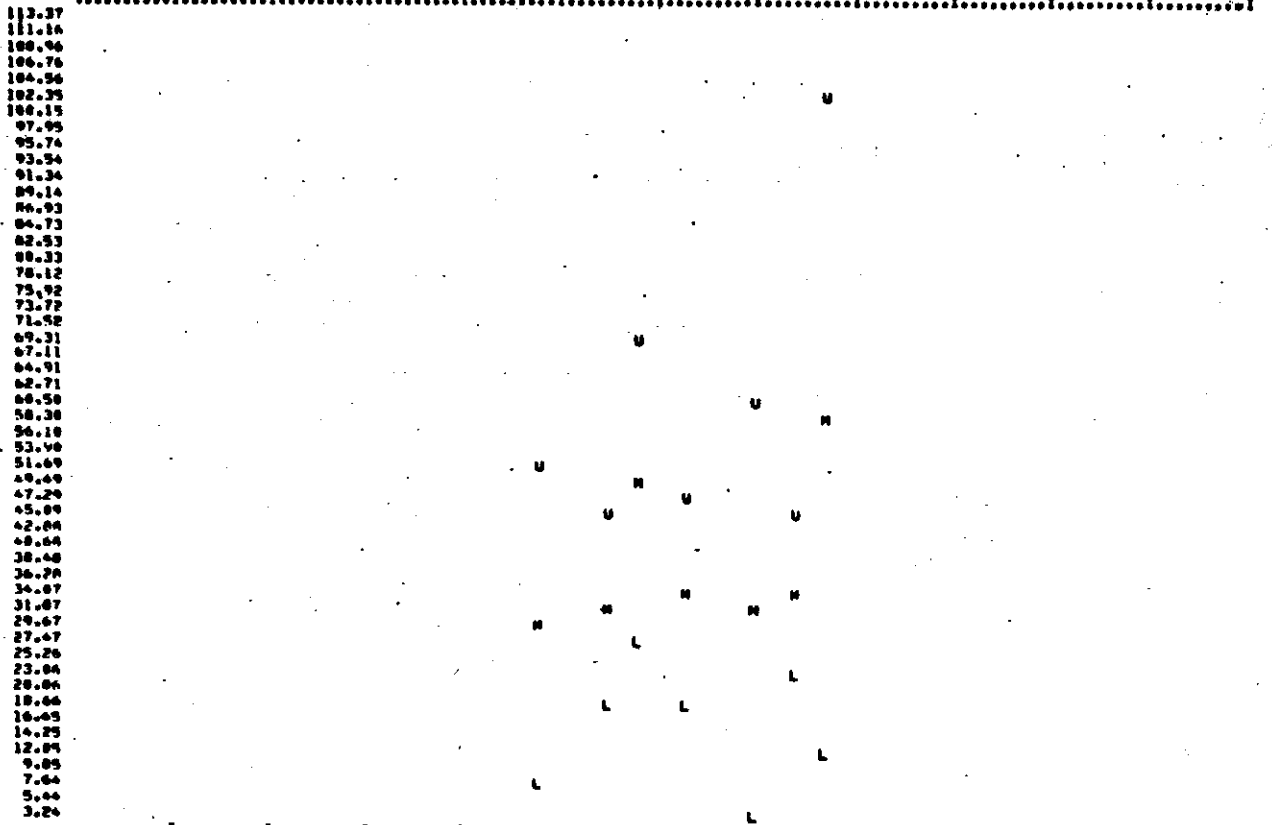
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 85.41
 83.07
 80.73
 78.39
 76.05
 73.71
 71.37
 69.03
 66.69
 64.35
 62.01
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 57.33
 54.99
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 50.31
 47.97
 45.63
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 40.95
 38.61
 36.27
 33.93
 31.59
 29.25
 26.91
 24.57
 22.23
 19.89
 17.55
 15.21
 12.87
 10.53
 8.19
 5.85
 3.51



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 80- 90 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRY 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	32.21	7.22	2.74	12.43	51.98
164	10	29.19	8.35	2.27	18.21	48.16
176	10	57.37	22.95	2.27	5.18	109.55
190	12	38.58	9.81	2.21	18.71	58.45
211	6	35.23	12.19	2.57	3.98	66.56
222	12	41.18	11.83	2.21	14.99	67.28
231	12	48.65	7.89	2.21	31.23	66.06



AXIS LABELS FOR THIS PLOT ARE -
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 90-100 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 1 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
166	5	29.19	8.18	2.74	6.88	51.57
184	10	31.78	5.57	2.27	19.85	44.36
176	10	48.81	9.31	2.27	27.65	69.98
190	12	33.13	6.83	2.21	18.07	48.19
211	6	31.87	11.88	2.57	3.60	68.15
222	12	33.55	4.93	2.21	22.67	44.43
231	12	57.45	28.67	2.21	11.85	103.86

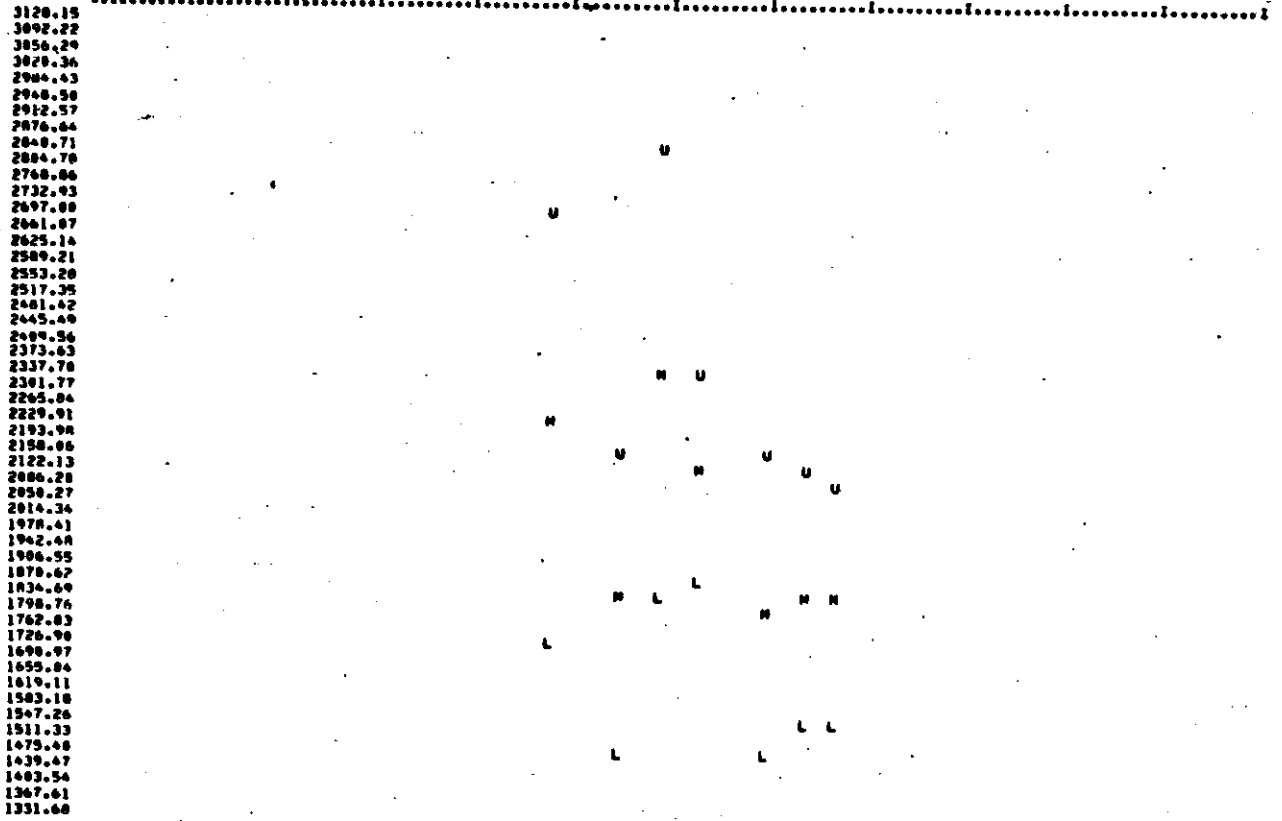
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2019.60
1987.77
1955.94
1924.11
1892.28
1860.45
1828.62
1796.79
1764.96
1733.13
1701.30
1669.47
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1573.98
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1414.83
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1319.34
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1255.68
1223.85
1192.02
1160.19
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1064.70
1032.87
1001.04
969.21
937.38

.....
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
.....

AXIS LABELS FOR THIS PLOT ARE -
X-AXIS=JULIAN DATE FOR 1978
Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 4 FOR 1978
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

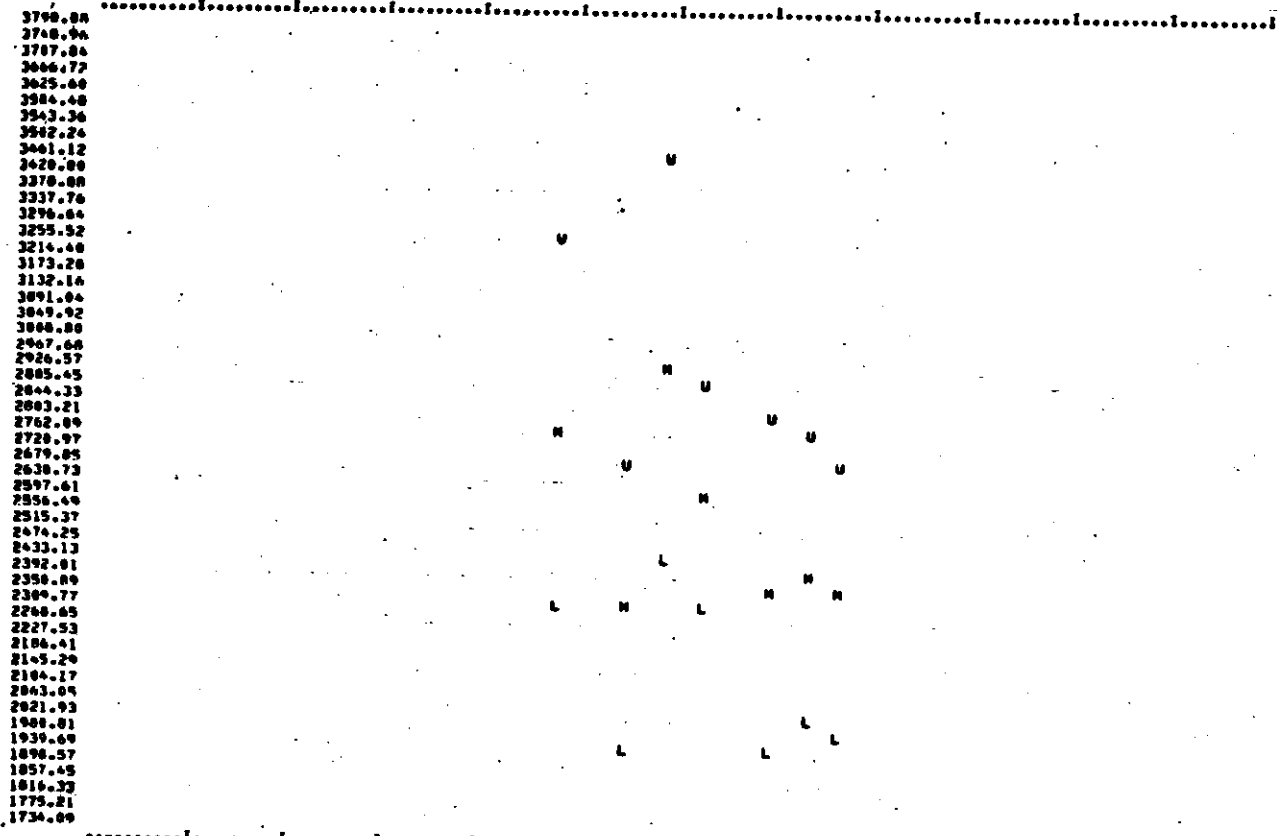
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	1829.72	145.86	2.74	1421.41	2228.03
166	10	1426.88	182.66	2.27	1193.29	1660.67
177	10	1871.84	188.23	2.27	1443.18	2298.99
198	12	1685.43	85.27	2.21	1497.38	1873.57
211	6	1422.49	148.21	2.57	1041.54	1803.44
222	12	1362.52	96.34	2.21	1163.19	1561.85
231	12	1442.62	121.51	2.21	1174.52	1710.71



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 8-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 4 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	2217.27	181.74	2.76		
166	10	1818.71	144.54	2.27	1719.72	2714.83
177	10	2333.02	224.65	2.27	1885.54	2151.08
196	12	2188.99	188.47	2.21	1822.26	2843.77
211	6	1815.82	138.48	2.57	1869.67	2346.32
222	12	1844.37	128.84	2.21	1679.64	2150.39
231	12	1818.79	124.18	2.21	1568.18	2128.64
					1544.88	2892.78



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-100 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 4 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	2778.04	171.25			
166	10	2300.01	164.52	2.74	2302.02	3239.65
177	10	2934.39	224.02	2.27	1926.77	2674.05
190	12	2594.02	136.00	2.27	2423.25	3465.53
211	6	2367.74	161.79	2.21	2293.23	2896.48
222	12	2405.06	169.53	2.57	1951.00	2783.60
231	12	2333.77	151.63	2.21	2031.01	2779.12
				2.21	1999.22	2660.32

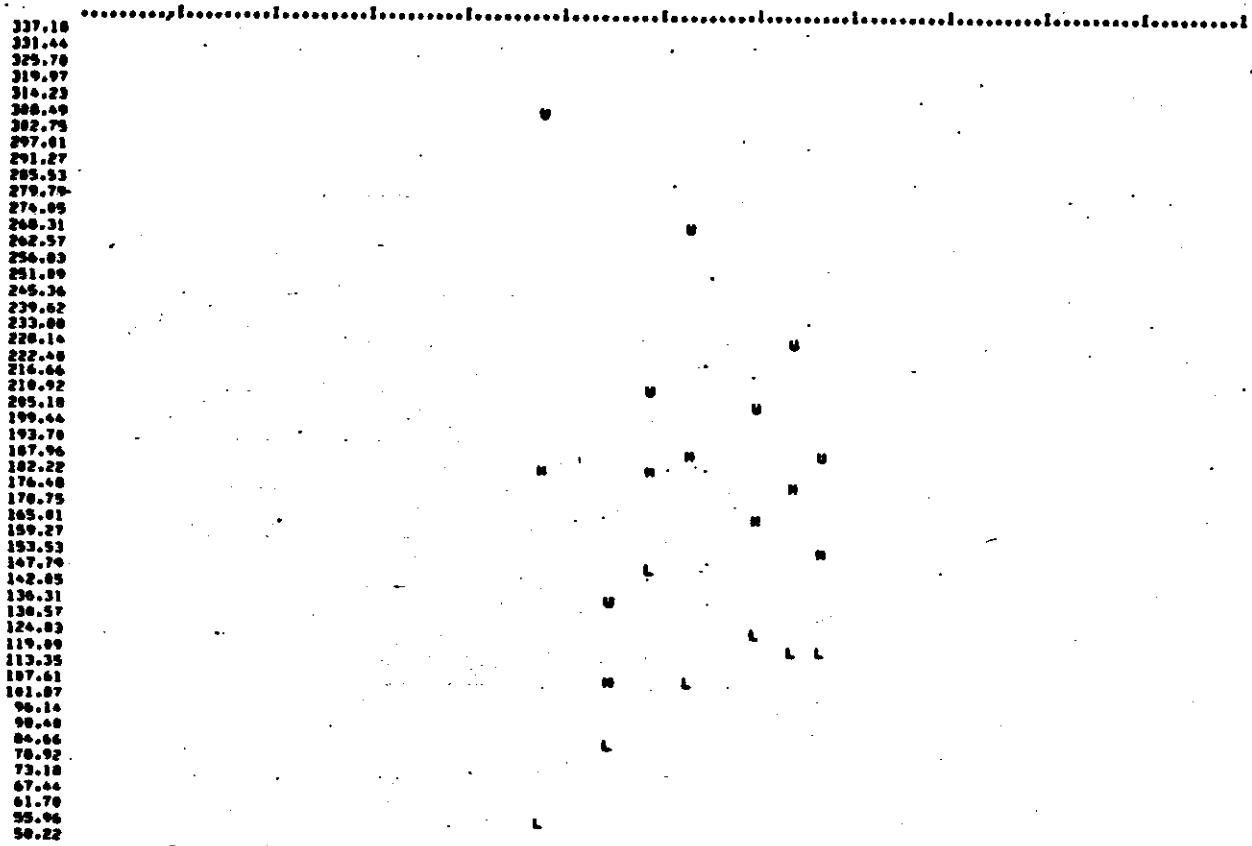
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 1934.83
 1905.82
 1876.81
 1847.80
 1818.79
 1789.78
 1760.77
 1731.76
 1702.75
 1673.74
 1644.73
 1615.72
 1586.71
 1557.70
 1528.69
 1499.68
 1470.67
 1441.66
 1412.65
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 1354.63
 1325.62
 1296.61
 1267.60
 1238.59
 1209.58
 1180.57
 1151.56
 1122.55
 1093.54
 1064.53
 1035.52
 1006.51
 977.50
 948.49
 919.48
 890.47
 861.46
 832.45
 803.44

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/N SQ) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICHINSON, TRT 4 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

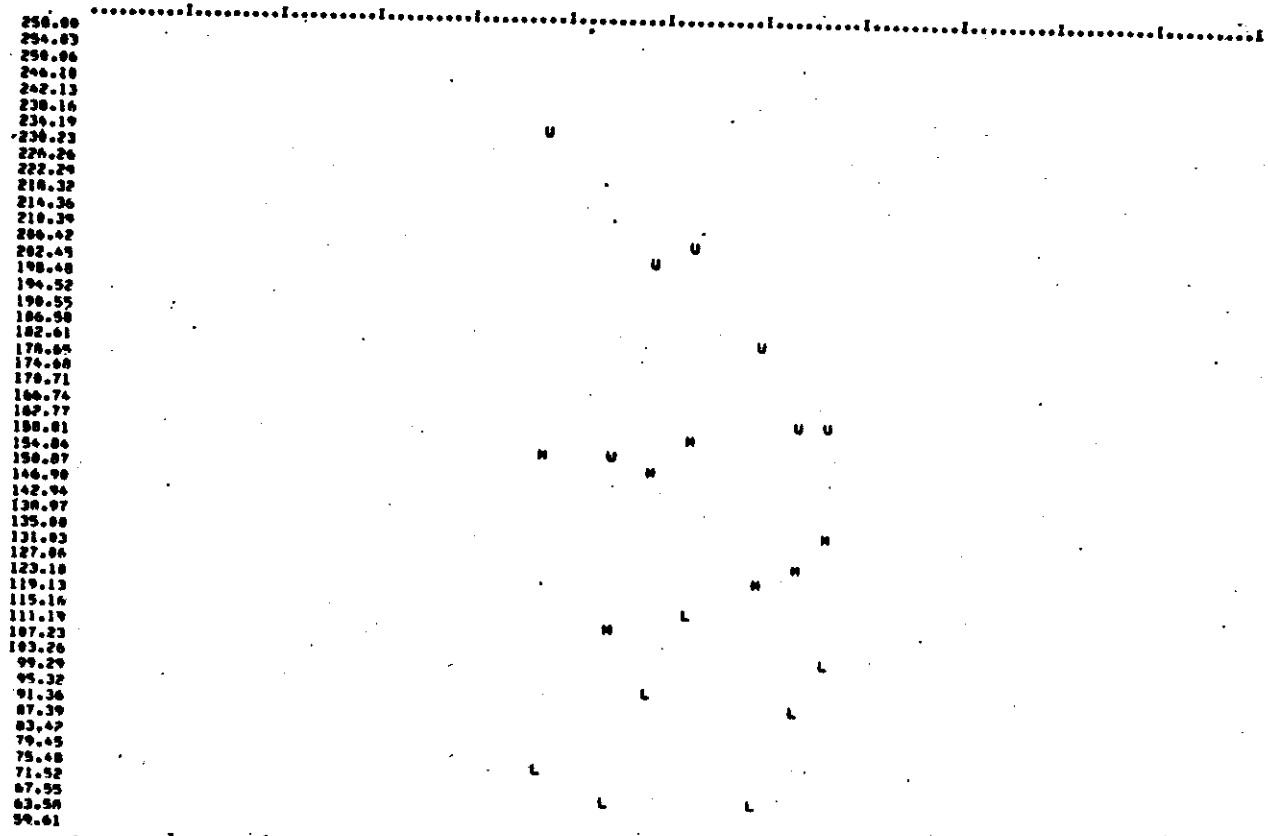
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/N SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	1587.22	148.58	2.74	1188.46	1993.97
166	10	1176.87	97.45	2.27	954.56	1397.64
177	18	1631.58	183.25	2.27	1214.87	2048.13
198	12	1423.75	83.91	2.21	1238.62	1608.88
211	6	1223.71	128.82	2.57	892.59	1554.83
222	12	1189.22	98.33	2.21	989.93	1388.52
231	12	1176.87	78.98	2.21	996.78	1344.96



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1979
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 20-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 4 FOR 1979
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ² SOY)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	181.17	45.79	2.74	95.68	386.53
166	10	189.71	11.00	2.27	82.70	136.72
177	10	181.17	13.50	2.27	150.47	211.87
198	12	189.13	36.95	2.21	187.62	278.65
211	6	164.39	15.84	2.57	123.67	205.11
222	12	173.62	25.44	2.21	117.49	229.75
231	12	155.58	15.62	2.21	121.13	199.04



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M² SO) FOR 30- 40 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TMT 4 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

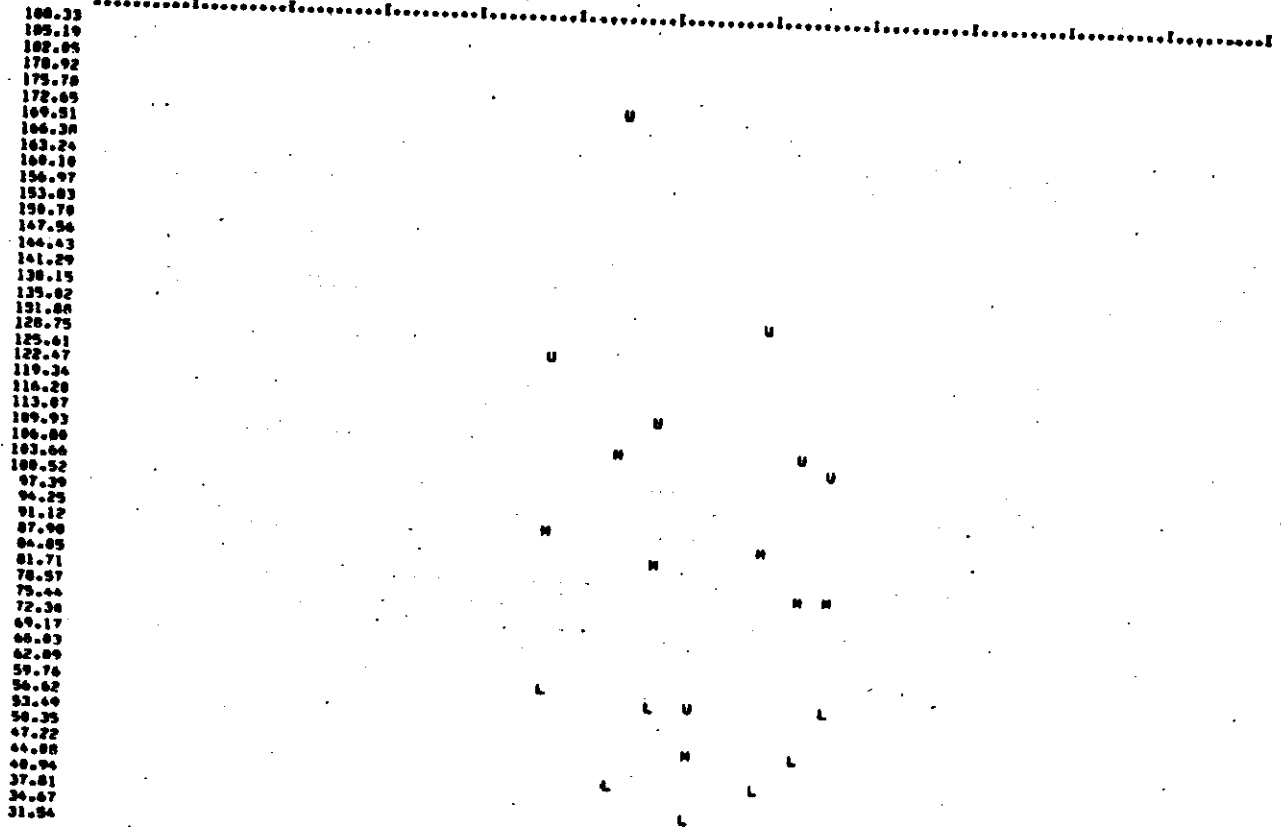
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ² SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	156.08	28.69			
166	10	110.71	19.56	2.74	77.46	234.55
177	10	150.47	23.78	2.27	66.24	155.19
190	12	160.62	20.69	2.27	96.50	204.36
211	6	124.97	22.74	2.21	115.18	206.86
222	12	127.97	16.66	2.57	66.51	183.43
231	12	133.36	13.55	2.21	96.31	163.82
				2.21	103.46	163.26

222.22
 220.29
 220.35
 220.02
 216.49
 212.36
 208.02
 204.69
 200.76
 196.03
 192.09
 188.96
 185.03
 181.09
 177.16
 173.23
 169.30
 165.36
 161.43
 157.50
 153.57
 149.63
 145.70
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 137.83
 133.90
 129.97
 126.04
 122.10
 118.17
 114.24
 110.31
 106.37
 102.44
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 94.57
 90.64
 86.71
 82.78
 78.84
 74.91
 70.98
 67.05
 63.11
 59.18
 55.25
 51.31
 47.38
 43.45
 39.52
 35.58

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE :
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 40-50 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 4 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

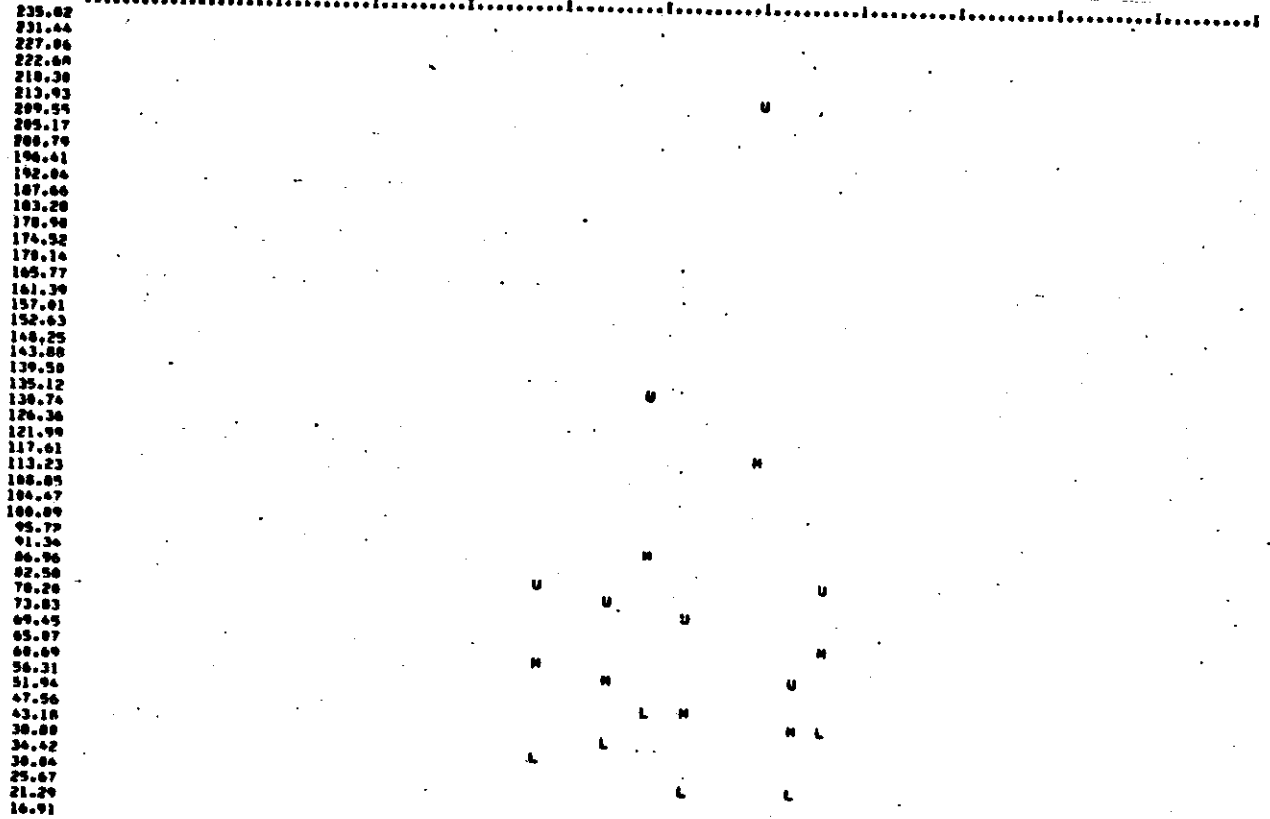
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	109.71	25.63			
166	10	78.00	9.41	2.74	39.54	179.07
177	10	117.76	17.40	2.27	56.61	99.39
190	12	104.00	16.31	2.27	78.01	157.51
211	6	114.07	14.05	2.21	68.01	139.99
222	12	130.29	33.91	2.57	75.09	192.24
231	12	106.94	16.40	2.21	61.48	211.11
				2.21	70.75	143.13



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 50- 60 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 4 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	91.59				
166	10	105.68	12.06	2.76	58.50	126.60
177	10	83.54	20.02	2.27	40.15	171.21
190	12	46.13	12.30	2.27	55.40	111.68
211	6	87.23	5.93	2.21	35.04	57.22
222	12	78.00	13.44	2.57	42.34	132.12
231	12	89.19	11.29	2.21	48.36	187.65
					55.10	185.82



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 60- 70 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 4 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	59.30	0.33			
160	10	58.30	0.82	2.74	36.50	62.10
177	10	90.50	19.73	2.27	49.15	76.60
190	12	49.07	10.84	2.27	45.72	135.45
211	6	116.50	30.85	2.21	25.15	72.90
222	12	41.52	0.35	2.57	10.79	214.30
231	12	63.74	0.39	2.21	27.50	55.53
					45.24	62.25

146.81
 144.74
 141.47
 134.29
 129.93
 121.66
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 105.11
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 43.70
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 33.89
 30.62
 27.35
 24.08
 20.81
 17.53
 14.26
 10.99
 7.72
 4.45

.....I
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
I
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 70- 80 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT 4 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TRE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	48.31	7.89			
166	10	48.26	5.28	2.74	26.70	69.92
177	10	56.36	10.50	2.27	20.44	52.08
190	12	63.74	10.63	2.27	32.32	86.41
211	6	55.36	9.19	2.21	41.61	85.08
222	12	70.84	33.49	2.57	31.74	78.97
231	12	54.19	5.61	2.21	4.94	152.74
				2.21	41.71	66.46

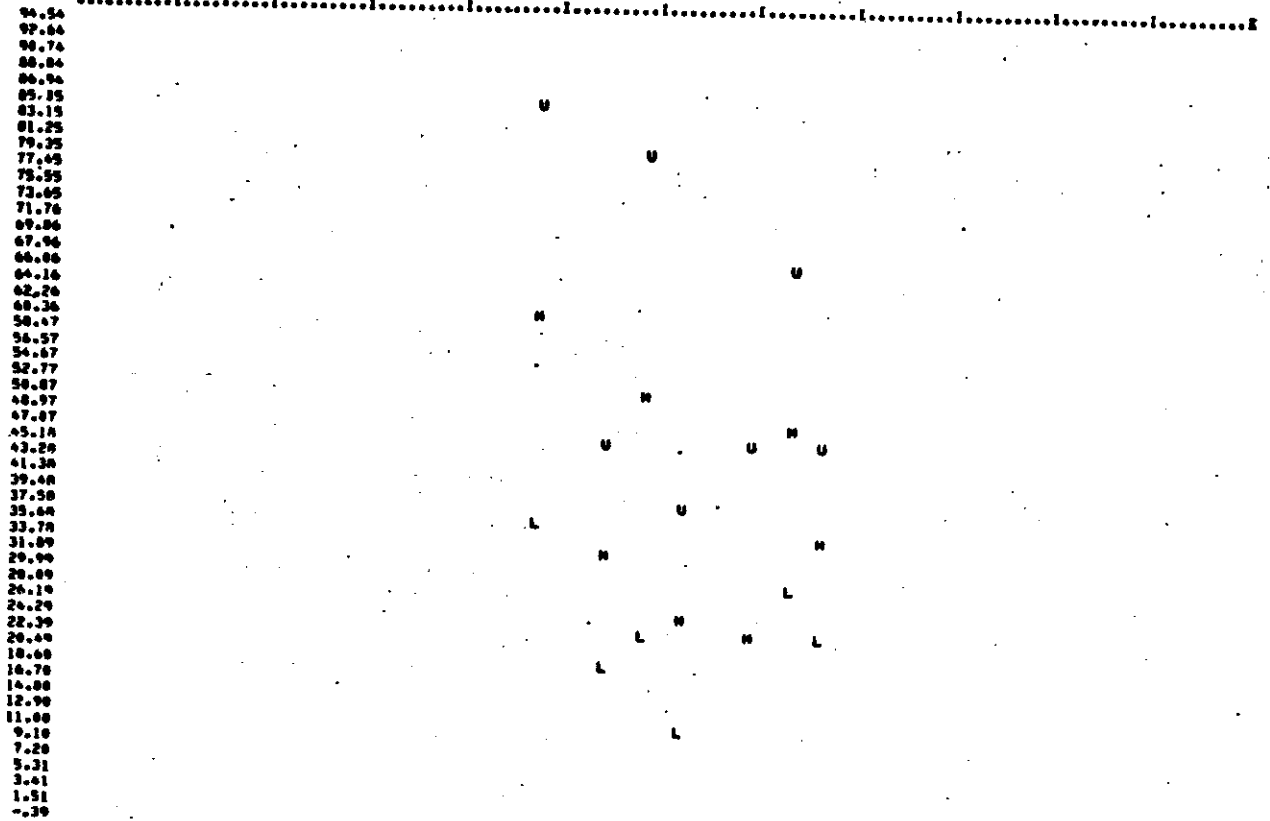
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 66.08
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 59.88
 58.33
 56.78
 55.23
 53.68
 52.13
 50.58
 49.03
 47.48
 45.93
 44.38
 42.83
 41.28
 39.73
 38.18
 36.63
 35.08
 33.53
 31.98
 30.43
 28.88
 27.33
 25.78
 24.23
 22.68
 21.13
 19.58
 18.03
 16.48
 14.93
 13.38

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 80- 90 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRT. 4 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	5	49.26	9.28	2.74	14.86	85.66
166	10	57.37	11.11	2.27	32.12	82.62
177	10	51.83	8.46	2.27	32.61	71.06
190	12	37.74	7.77	2.21	28.59	54.98
211	6	31.87	5.76	2.57	17.86	46.88
222	12	51.58	5.65	2.21	39.12	64.04
231	12	42.78	6.42	2.21	29.69	56.95



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 90-100 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DICKINSON, TRY 4 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

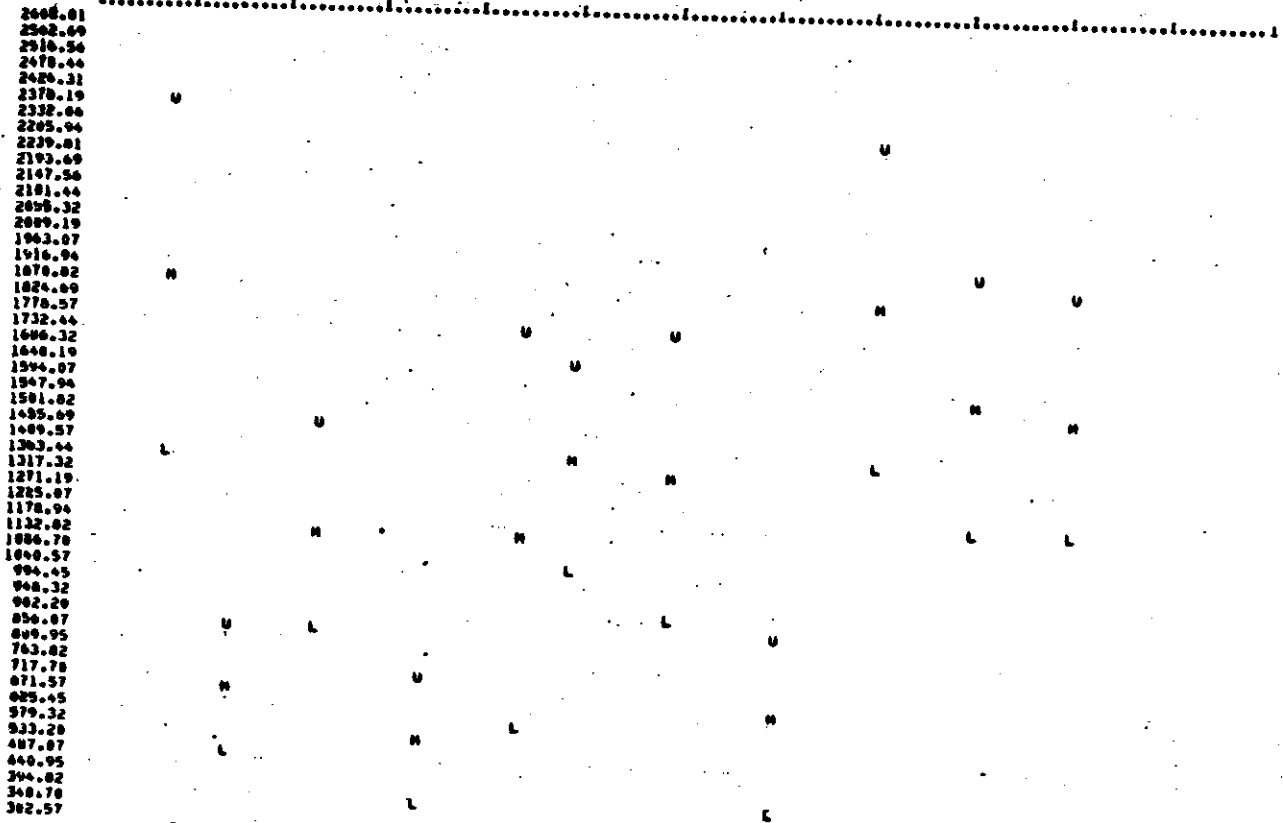
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	4	68.39	8.47			
166	19	31.70	6.16	3.02*	34.83	85.94
177	19	58.03	12.07	2.27	17.84	45.57
198	12	24.32	5.67	2.27	21.56	88.89
211	6	22.65	6.98	2.21	11.81	36.84
222	12	47.39	8.59	2.57	-0.39	49.72
231	12	33.97	5.15	2.21	28.43	66.35
				2.21	22.61	45.33

*Slightly lower than the table value.

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

CHAPTER 3. BELOWGROUND HERBAGE BIOMASS DATA
FROM HAYS SITE, KANSAS

The belowground herbage biomass was sampled on the Hays Site, Kansas, four times during the summer of 1970 on treatment 1, and five times for treatment 5, with two replicates being taken for each of the treatment sampling dates. The crown material for this site was irretrievably lumped into the 0 to 5 cm level. The increments sampled were the 0 to 5, 5 to 10, and 10 to 15 cm depths. All data were reported as oven-dry weights only with no corrections for ash; therefore, ash-free information is unavailable, although some attempt was apparently made to correct for this as contained in Hulett and Tomanek (1971). The core diameters reported in the original file for treatment 5 for the sampling date on 1 August 1970 had a decimal point error being reported as 34.6 rather than 3.46. This correction was made and is reflected in the following data plots and tabulations. This is the extent of the corrections made to this data file.

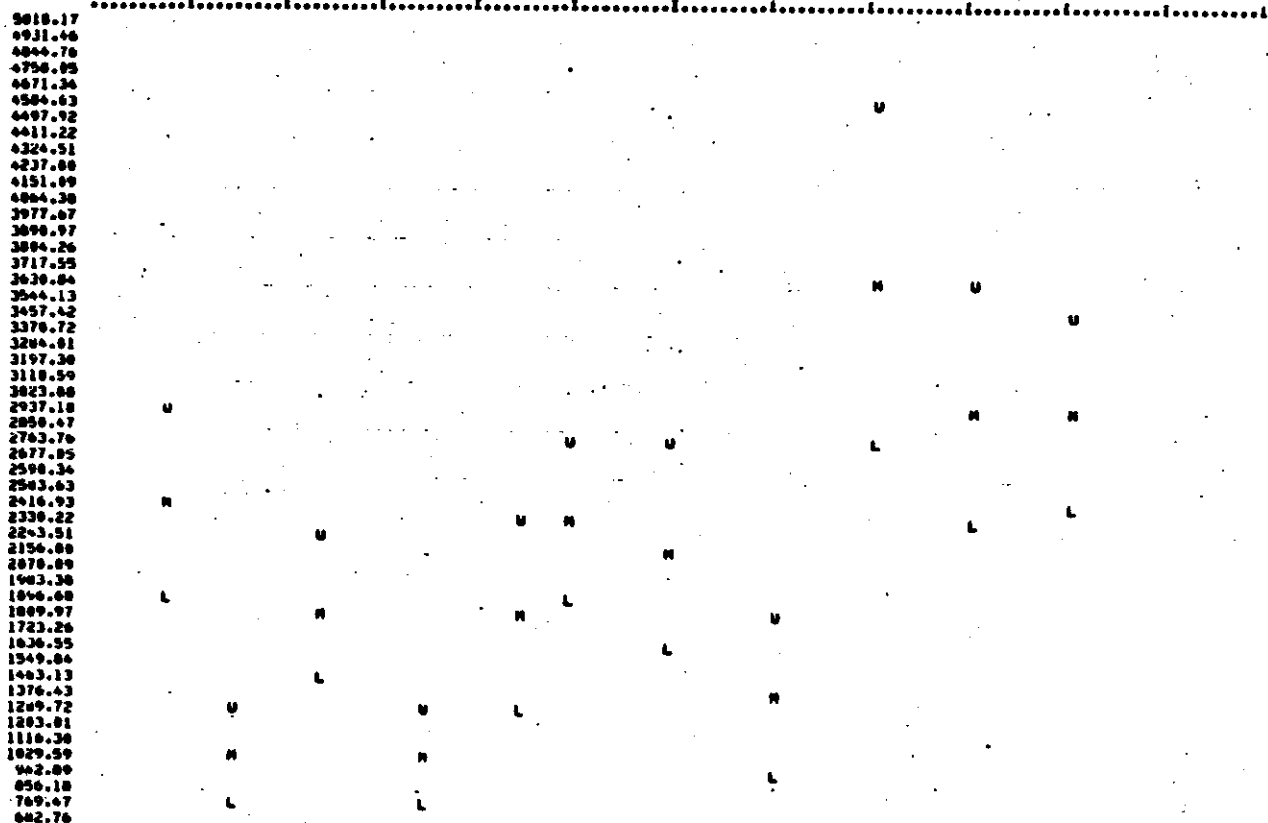


AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE CHOWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
26	10	1062.33	226.82			
44	10	689.27	79.87	2.27	1353.02	2371.65
74	10	1144.37	130.35	2.27	507.68	870.86
105	10	515.68	78.95	2.27	648.02	1440.73
135	10	1140.03	255.34	2.27	336.19	695.17
152	10	1349.40	130.40	2.27	565.51	1726.54
182	10	1305.51	182.00	2.27	1039.24	1659.00
213	10	614.95	111.55	2.27	889.92	1721.10
244	10	1833.87	204.17	2.27	361.34	868.55
274	10	1541.13	167.05	2.27	1309.69	2298.00
305	10	1521.17	152.32	2.27	1159.52	1922.74
				2.27	1174.07	1867.46

MAYS, TRT 1 FOR 1978

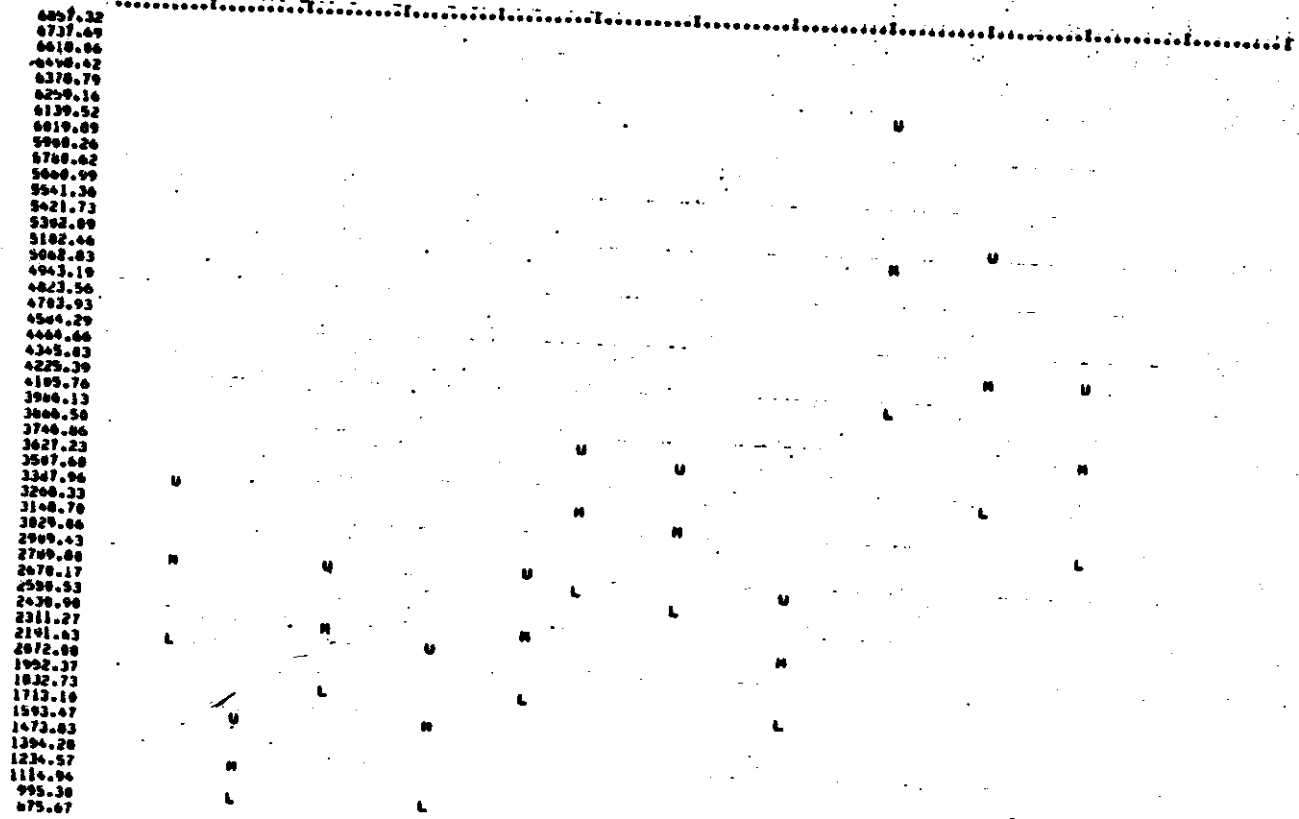


.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE MAYS, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

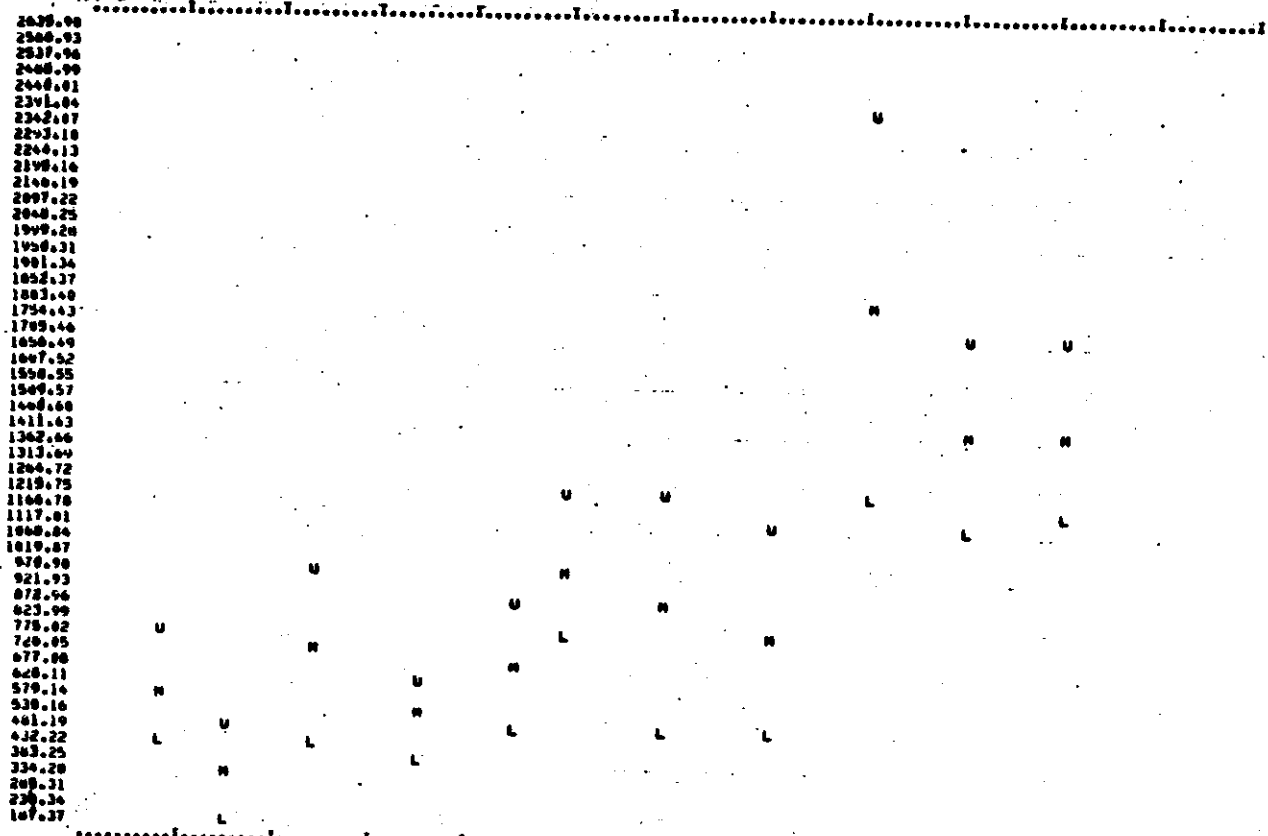
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEL VALUE	LOWER LIMIT	UPPER LIMIT
26	10	2667.84	230.22	2.27	1924.44	2971.25
46	10	1836.22	108.60	2.27	169.30	1283.13
74	10	1846.42	108.65	2.27	1435.71	2257.13
105	10	1822.56	118.69	2.27	758.02	1288.49
135	10	1813.71	239.54	2.27	1269.10	2358.31
152	10	2341.62	204.69	2.27	1876.26	2808.98
182	10	2169.58	243.45	2.27	1616.68	2723.07
213	10	1405.38	189.34	2.27	974.91	1835.85
244	10	3651.25	408.58	2.27	2740.52	4561.98
274	10	2462.68	283.85	2.27	2317.34	3488.01
305	10	2954.12	237.31	2.27	2414.59	3493.65



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 0-15 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL.
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL) DAYS, TRT 1 FOR 1978

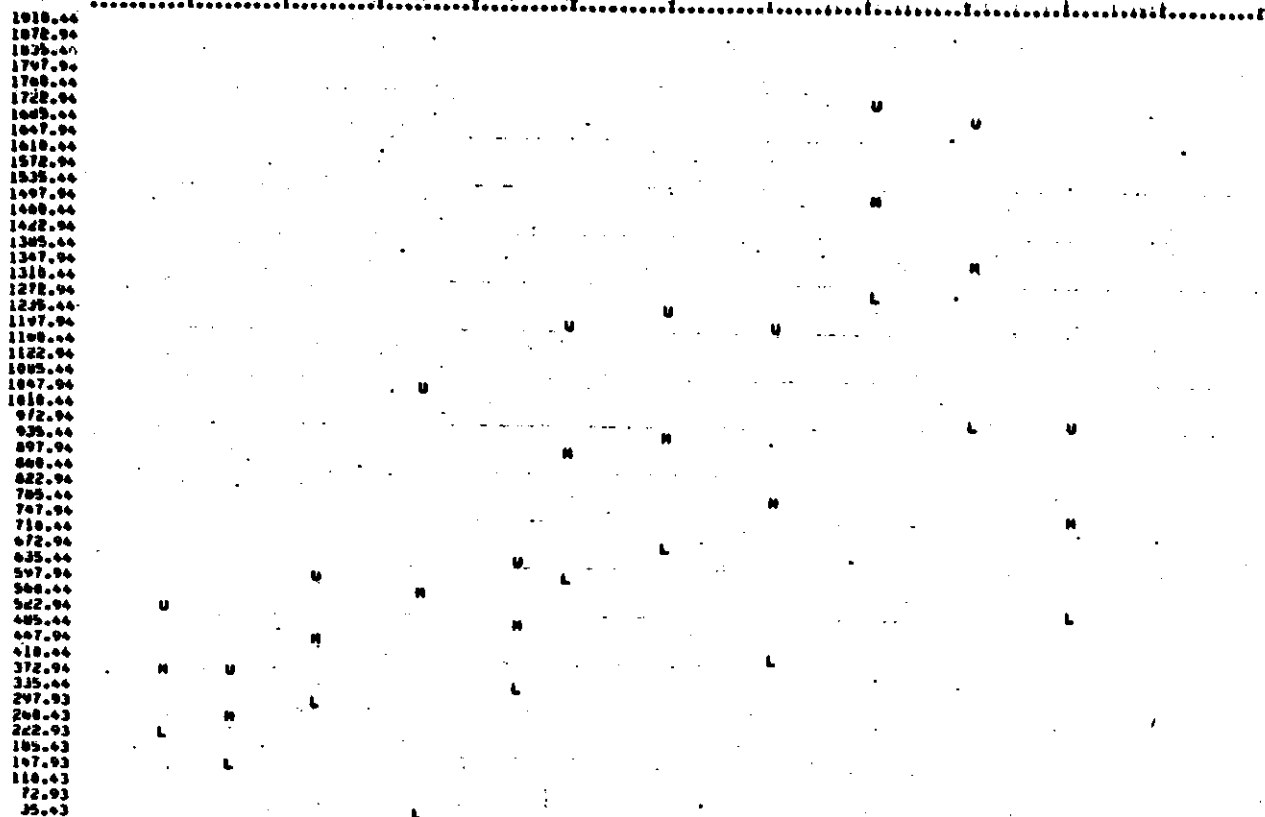
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
20	10	2010.73	256.70			
46	10	1207.56	130.70	2.27	2235.12	3402.34
74	10	2290.73	205.70	2.27	990.20	1504.92
105	10	1500.20	261.01	2.27	1022.00	2700.57
135	10	2302.74	213.47	2.27	972.97	2103.44
162	10	3230.20	246.70	2.27	1017.42	2700.00
192	10	3115.50	230.67	2.27	2677.23	3700.33
213	10	2190.00	221.45	2.27	2577.50	3653.07
244	10	5100.99	477.21	2.27	1095.41	2702.37
274	10	4304.70	422.90	2.27	4004.04	6233.93
305	10	3009.55	294.03	2.27	3343.11	5000.44
					3021.07	4300.03



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 9-10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL) NAYS, TRY 1 FOR 1978

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
26	10	585.51	72.84			
46	10	348.95	61.03	2.27	428.37	750.65
74	10	782.04	118.85	2.27	288.19	485.70
105	10	585.87	56.22	2.27	450.83	954.06
135	10	847.88	80.13	2.27	379.05	634.70
152	10	992.16	181.11	2.27	485.50	1849.86
182	10	864.86	183.56	2.27	762.29	1222.83
213	10	798.43	133.50	2.27	492.21	1255.92
244	10	1817.37	294.83	2.27	486.91	1843.96
274	10	1421.55	129.55	2.27	1238.48	2396.27
305	10	1432.96	116.44	2.27	1127.82	1718.06
				2.27	1168.12	1607.79



AXIS LABELS FOR THIS PLOT ARE =
X-Axis=JULIAN DATE FOR 1970
Y-Axis=BELOW GROUND BIOMASS (G/M SQ) FOR 10- 15 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL) HAYS, TRT 1 FOR 1970

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
26	10	378.89	66.46	2.27		
48	10	251.34	58.32	2.27	233.43	588.34
74	10	444.31	64.32	2.27	136.93	305.76
105	10	545.64	222.08	2.27	298.08	590.55
135	10	489.83	67.46	2.27	39.37	1951.92
162	10	896.67	134.56	2.27	335.65	642.41
213	10	946.81	122.11	2.27	598.74	1282.59
244	10	793.52	173.68	2.27	608.40	1223.62
274	10	1497.74	185.14	2.27	398.64	1104.39
305	10	1342.18	157.70	2.27	1256.71	1736.77
		735.42	98.29	2.27	983.57	1760.63
				2.27	511.96	958.89

2417.25
2378.54
2339.83
2301.13
2262.42
2223.71
2185.01
2146.30
2107.59
2068.89
2030.18
1991.47
1952.77
1914.06
1875.35
1836.65
1797.94
1759.23
1720.52
1681.82
1643.11
1604.40
1565.70
1526.99
1488.28
1449.58
1410.87
1372.16
1333.46
1294.75
1256.04
1217.33
1178.63
1139.92
1101.21
1062.51
1023.80
985.09
946.39
907.68
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481.90

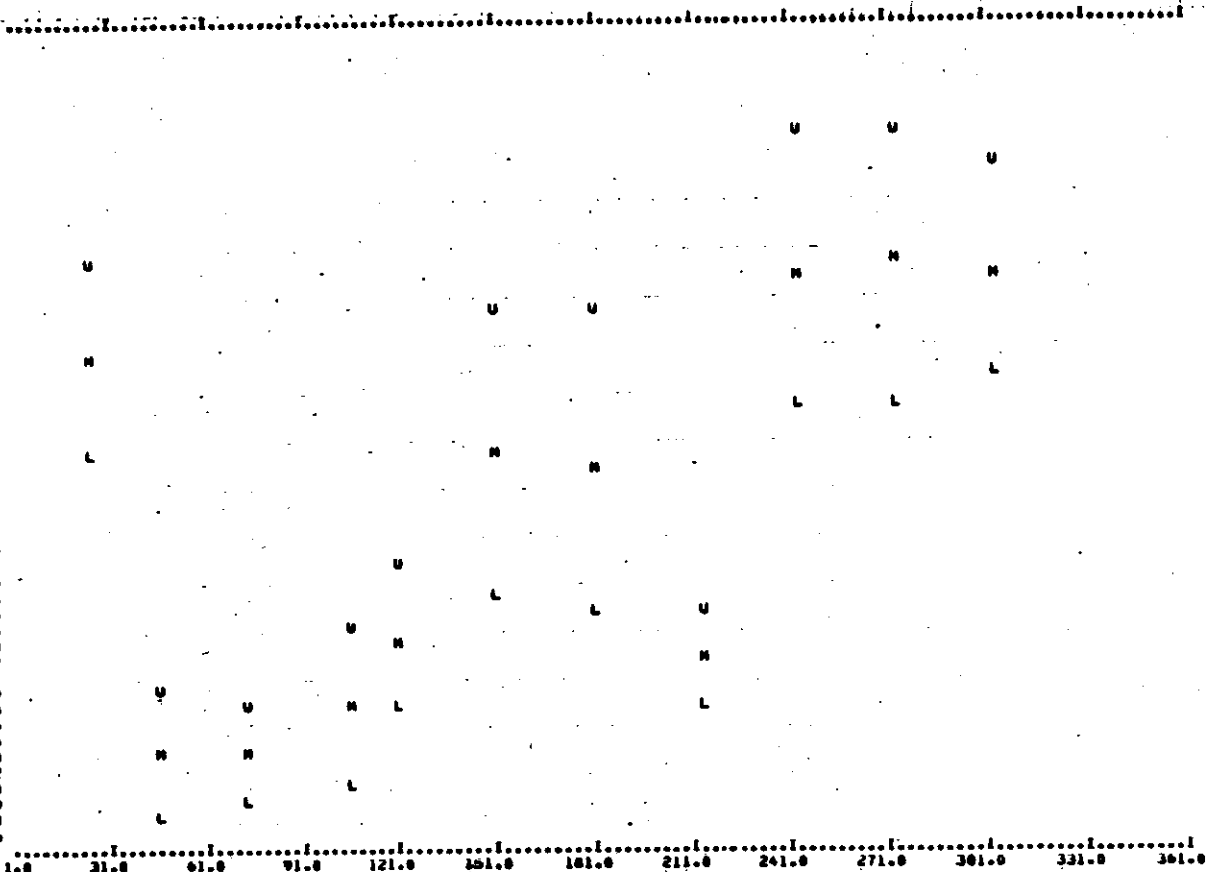
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE (MAYS, TRY 5 FOR 1970)
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
26	10	1827.88	182.58	2.27		
46	10	761.48	90.62	2.27	1458.26	2197.50
74	10	795.56	72.29	2.27	535.45	947.50
105	10	823.20	92.62	2.27	631.20	959.91
121	10	928.35	132.60	2.27	613.86	1033.32
152	10	1521.61	170.81	2.27	618.87	1221.43
182	10	1428.32	277.96	2.27	1135.88	1906.14
213	10	919.97	97.12	2.27	796.41	2060.28
244	10	1767.82	150.37	2.27	699.18	1140.77
274	10	1718.37	122.16	2.27	1455.95	2130.08
305	10	1719.38	98.48	2.27	1448.64	1996.09
				2.27	1495.49	1943.28

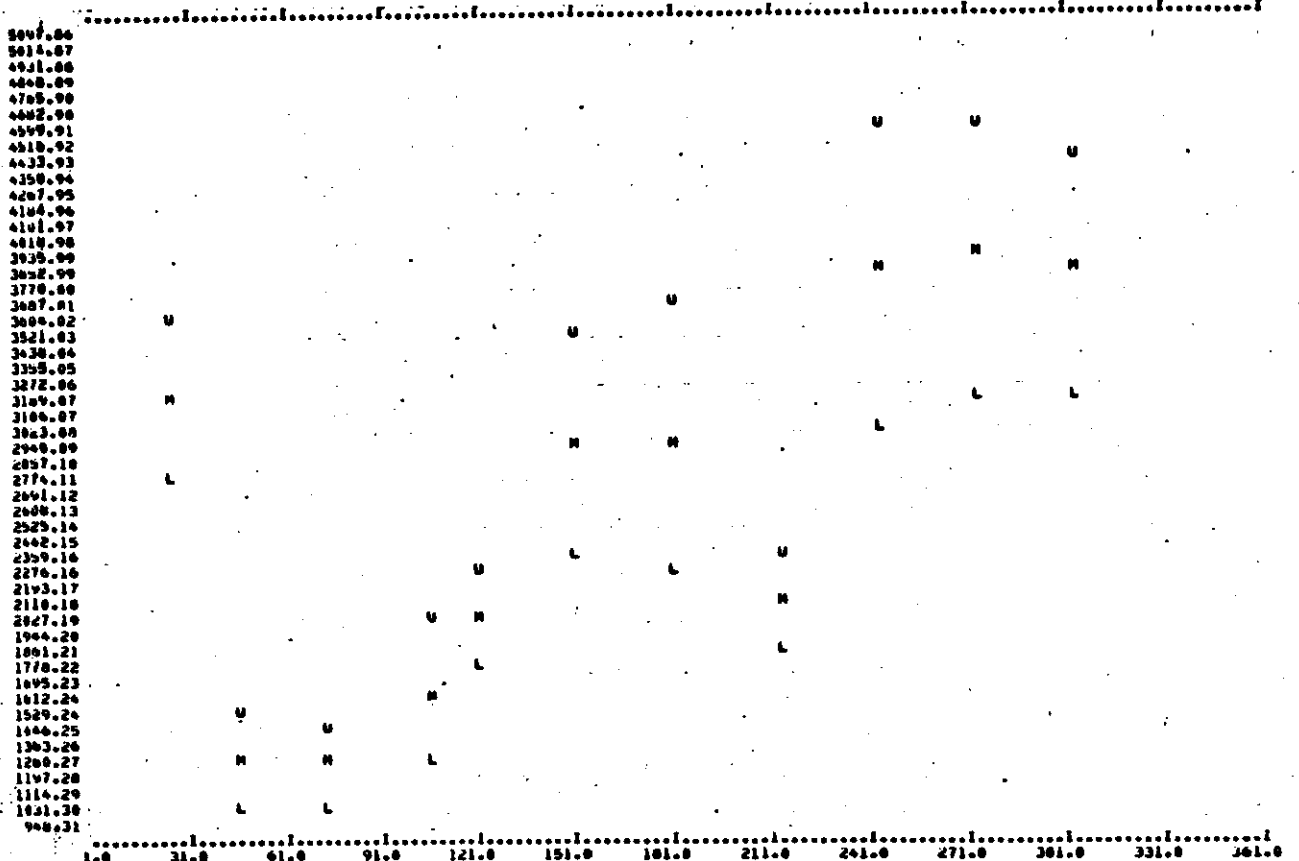
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 3894.15
 3799.14
 3724.13
 3699.11
 3594.10
 3549.88
 3484.87
 3399.85
 3334.84
 3249.82
 3204.81
 3139.80
 3073.98
 3008.97
 2943.95
 2878.94
 2813.93
 2748.91
 2683.89
 2618.88
 2553.87
 2488.85
 2423.84
 2358.82
 2293.81
 2228.79
 2163.78
 2098.76
 2033.75
 1968.74
 1903.72
 1838.71
 1773.69
 1708.68
 1643.66
 1578.65
 1513.63
 1448.62
 1383.61
 1318.59
 1253.58
 1188.56
 1123.55
 1058.53
 993.52
 928.50
 863.49
 798.48
 733.46



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE CHOWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE DAYS, TRT 5 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
26	10	2481.83	161.06	2.27	2314.28	3649.37
66	10	1855.82	185.94	2.27	814.96	1296.68
74	10	1879.59	81.12	2.27	895.67	1283.94
105	10	1258.99	155.84	2.27	898.64	1645.35
121	10	1524.88	126.88	2.27	1236.52	1813.09
152	10	2383.84	264.78	2.27	1701.85	2985.83
182	10	2266.66	262.84	2.27	1663.06	2850.27
213	10	1443.34	83.60	2.27	1253.28	1633.43
244	10	3048.29	255.85	2.27	2458.61	3621.48
274	10	3051.38	234.65	2.27	2517.82	3584.77
305	10	3038.72	198.48	2.27	2597.85	3483.59



AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 15 CM DEPTH

THESE DATA INCLUDE CHURN MATERIAL.
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE HAYS, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
20	10	3155.07	186.11	2.27	2746.39	3565.34
44	10	1286.06	102.27	2.27	1054.16	1519.28
74	10	1257.93	89.84	2.27	1053.67	1462.19
105	10	1644.06	175.15	2.27	1246.64	2043.08
121	10	2020.26	126.14	2.27	1741.47	2315.06
152	10	2935.06	254.85	2.27	2355.65	3514.67
182	10	2971.38	316.78	2.27	2264.73	3677.07
213	10	2136.78	111.92	2.27	1882.34	2391.22
244	10	3824.61	354.19	2.27	3014.80	4634.42
274	10	3913.84	315.54	2.27	3196.66	4631.22
305	10	3618.38	286.82	2.27	3108.82	4488.57

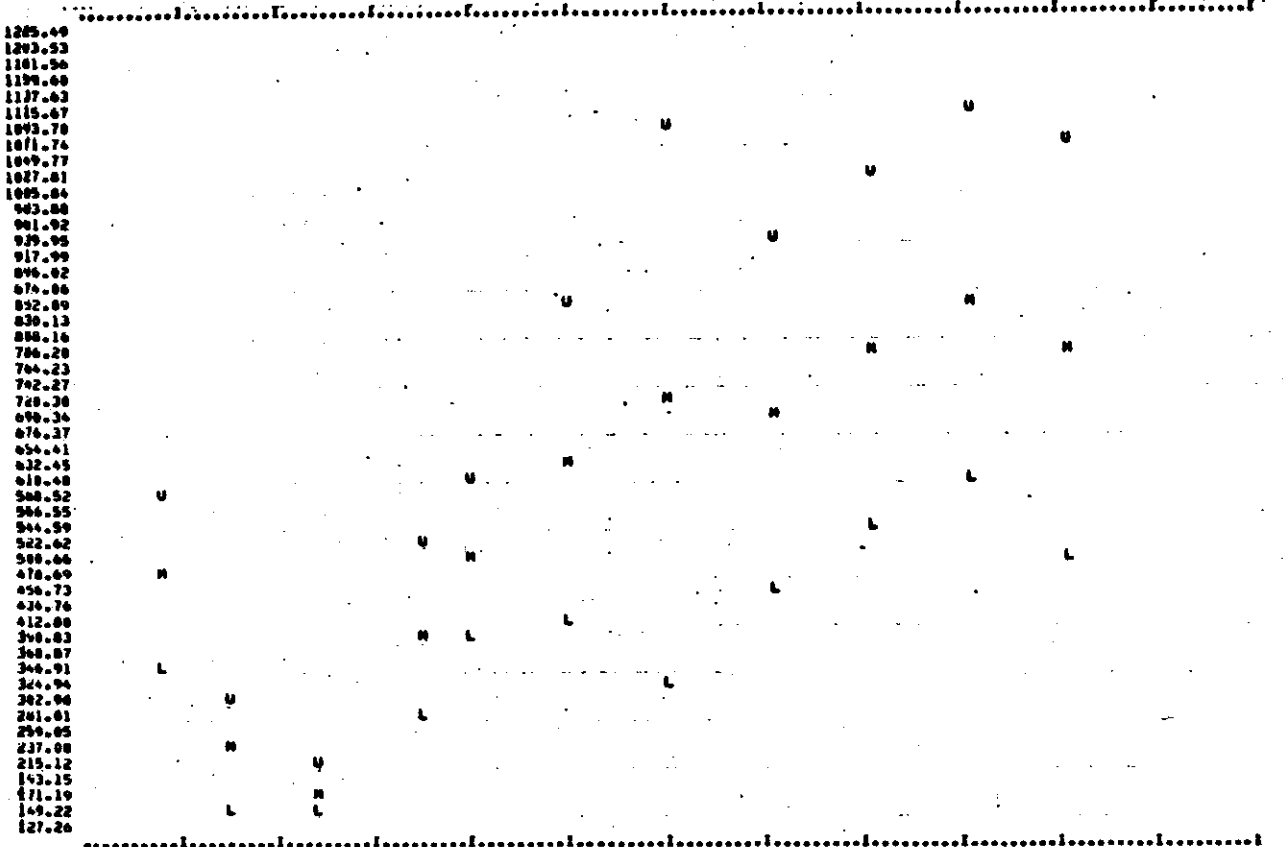
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1884.55
1771.23
1737.91
1766.59
1671.27
1637.96
1684.64
1571.32
1536.88
1594.68
1471.36
1448.85
1684.73
1371.41
1328.89
1384.77
1271.45
1236.14
1264.82
1171.59
1138.18
1184.86
1071.54
1038.23
1894.91
971.59
938.27
984.95
871.64
838.32
885.88
771.68
738.36
785.84
671.73
638.41
685.89
571.77
538.45
585.13
471.82
438.58
485.18
371.86
338.54
385.22
271.91
238.59
285.27
171.95

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
X-AXIS=JULIAN DATE FOR 1978
Y-AXIS=BELOW GROUND BIOMASS (G/M SOI) FOR 5- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE HAYS, TRY 5 FOR 1978
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SOI)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
26	10	853.95	75.83	2.27	681.54	1026.35
46	10	314.38	25.69	2.27	255.95	372.74
74	10	283.95	48.86	2.27	191.86	376.83
105	10	427.79	75.54	2.27	256.04	599.54
121	10	684.46	57.95	2.27	472.71	736.28
152	10	782.23	122.26	2.27	584.26	1080.19
182	10	832.34	112.16	2.27	577.35	1047.34
213	10	523.37	64.79	2.27	376.08	670.66
244	10	1242.48	118.69	2.27	972.83	1512.33
274	10	1332.43	148.61	2.27	995.87	1670.79
305	10	1311.34	166.88	2.27	1068.34	1554.34



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 341.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 10- 15 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE HAYS, TRY 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

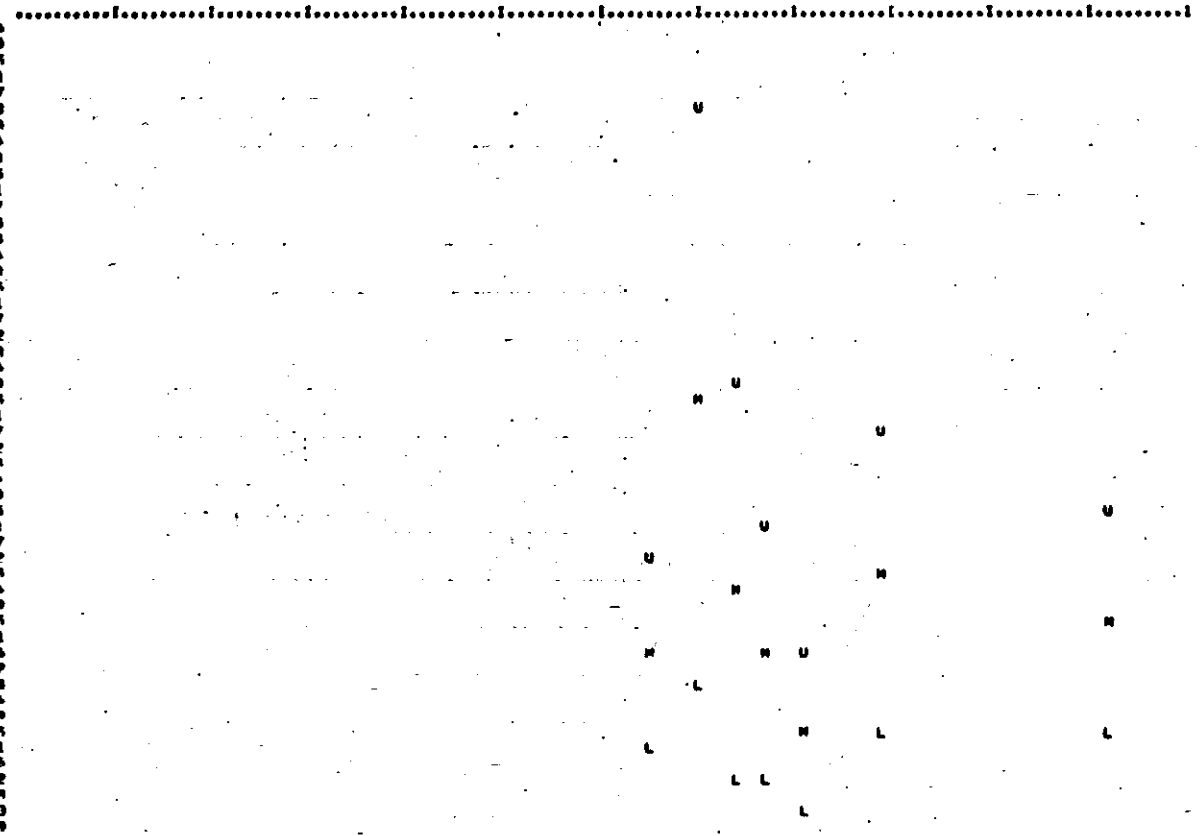
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
26	10	474.84	53.77	2.27	351.79	596.29
46	10	236.80	31.81	2.27	158.54	303.10
74	10	178.43	18.29	2.27	141.40	215.46
105	10	393.87	53.12	2.27	273.10	514.63
121	10	503.44	48.92	2.27	392.25	614.67
152	10	631.22	94.20	2.27	412.51	849.93
182	10	710.64	170.43	2.27	323.16	1098.12
213	10	693.44	106.45	2.27	451.42	935.45
244	10	784.32	106.76	2.27	541.60	1027.03
274	10	862.54	119.64	2.27	611.81	1114.08
305	10	787.58	122.28	2.27	589.56	1065.59

CHAPTER 4. BELOWGROUND HERBAGE BIOMASS DATA FROM
JORNADA SITE, NEW MEXICO

4.1 Data for 1970

The Jornada Site sampled two replicates each for treatments 1 and 5 on seven dates during the 1970 season. Sampling was generally done on a 0 to 10, 10 to 20, and 20 to 30 cm increment depth basis. On some occasions the 20 to 30 cm increment was either truncated or missing completely, due to the hard caliche layer on this site that occurs relatively near the surface. The caliche layer is not penetrated by root material, and also being very hard it was generally not penetrated with the cores. This sampling scheme resulted in a number of blanks in the data set which were assumed to represent real zeros if at the deeper depths. The crown material for this site was irretrievably lumped into the 0 to 10 cm level. All data were reported on an ash-free weight basis. Relatively few additional problems were encountered with this data set. A few ash-free weights were estimated because the ash-free weights reported were negative.

387.84
382.48
376.94
371.51
366.07
360.63
355.18
349.74
344.30
338.85
333.41
327.97
322.53
317.08
311.64
306.20
300.74
295.31
289.87
284.42
278.98
273.54
268.10
262.64
257.21
251.77
246.32
240.88
235.44
229.99
224.55
219.11
213.67
208.22
202.78
197.34
191.89
186.45
181.01
175.56
170.12
164.68
159.24
153.79
148.35
142.91
137.46
132.02
126.58
121.13
115.69
110.25



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA, TRT 1 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
195	20	96.22	16.13	2.88	62.67	129.77
211	20	181.86	47.10	2.88	83.86	279.86
222	20	119.59	32.19	2.88	52.61	166.57
232	20	96.88	29.93	2.88	53.34	140.42
244	20	86.57	12.96	2.88	39.66	93.49
269	20	129.91	25.48	2.88	68.67	173.75
336	20	105.70	18.96	2.88	66.26	145.14

425.22
418.78
412.34
405.91
399.47
393.04
386.60
380.16
373.73
367.29
360.85
354.42
347.98
341.55
335.11
328.67
322.24
315.80
309.36
302.93
296.49
290.06
283.62
277.18
270.75
264.31
257.87
251.44
245.00
238.57
232.13
225.69
219.26
212.82
206.38
199.95
193.51
187.07
180.64
174.20
167.77
161.33
154.89
148.46
142.02
135.58
129.15
122.71
116.28
109.84
103.40

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 30 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA, TRT 1 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
195	20	187.92	19.35	2.00	147.66	228.19
211 *	20	272.13	55.00	2.00	157.70	386.56
222	20	263.13	42.41	2.00	114.89	291.37
244 **	20	195.06	27.70	2.00	138.22	253.49
269	20	178.55	27.25	2.00	121.66	235.24
336	20	235.18	37.19	2.00	157.71	312.48
		193.65	26.59	2.00	138.33	248.97

*Sequence missing 4 cm of core length
**Sequence missing 12 cm of core length

92.10
90.66
89.22
87.78
86.34
84.90
83.47
82.03
80.59
79.15
77.71
76.27
74.84
73.40
71.96
70.52
69.08
67.64
66.21
64.77
63.33
61.89
60.45
59.01
57.58
56.14
54.70
53.26
51.82
50.38
48.95
47.51
46.07
44.63
43.19
41.75
40.32
38.88
37.44
36.00
34.56
33.12
31.68
30.24
28.81
27.37
25.93
24.49
23.06
21.62
20.18

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1978
Y-AXIS=BELOW GROUND BIONASS (G/M SQ) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIONASS SAMPLING ON SITE JORNADA. TRT 1 FOR 1978
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
195	20	47.61	7.99	2.00	39.99	64.24
211	20	55.77	7.13	2.00	48.94	70.60
222	20	51.47	13.96	2.00	22.42	89.52
232	20	63.38	9.78	2.00	43.93	83.72
244	20	53.81	9.79	2.00	32.64	73.39
269	20	65.83	7.98	2.00	48.42	81.63
336	20	53.24	6.75	2.00	39.20	67.27

94.27
92.53
90.84
89.14
87.45
85.76
84.06
82.37
80.68
78.98
77.29
75.59
73.89
72.21
70.51
68.82
67.13
65.43
63.74
62.05
60.35
58.66
56.97
55.27
53.58
51.88
50.19
48.50
46.80
45.11
43.42
41.72
40.03
38.34
36.64
34.95
33.26
31.56
29.87
28.18
26.48
24.79
23.09
21.40
19.71
18.01
16.32
14.63
12.93
11.24
9.55

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1978
Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 20- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA TRT 1 FOR 1978
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
195	20	44.89	5.49	2.00	32.67	55.51
211	* 20	34.50	5.47	2.00	23.12	45.88
222	** 20	32.07	10.32	2.00	10.61	53.54
232	20	35.60	2.95	2.00	29.45	41.75
244	*** 19	62.07	11.29	2.00	38.48	85.66
269	20	49.16	5.41	2.00	37.98	60.42
336	20	34.72	4.39	2.00	25.58	43.86

*Sequence is missing 1 cm of core length.
**Sequence is missing 3 cm of core length.
***Sequence is missing 1 cm of core length.

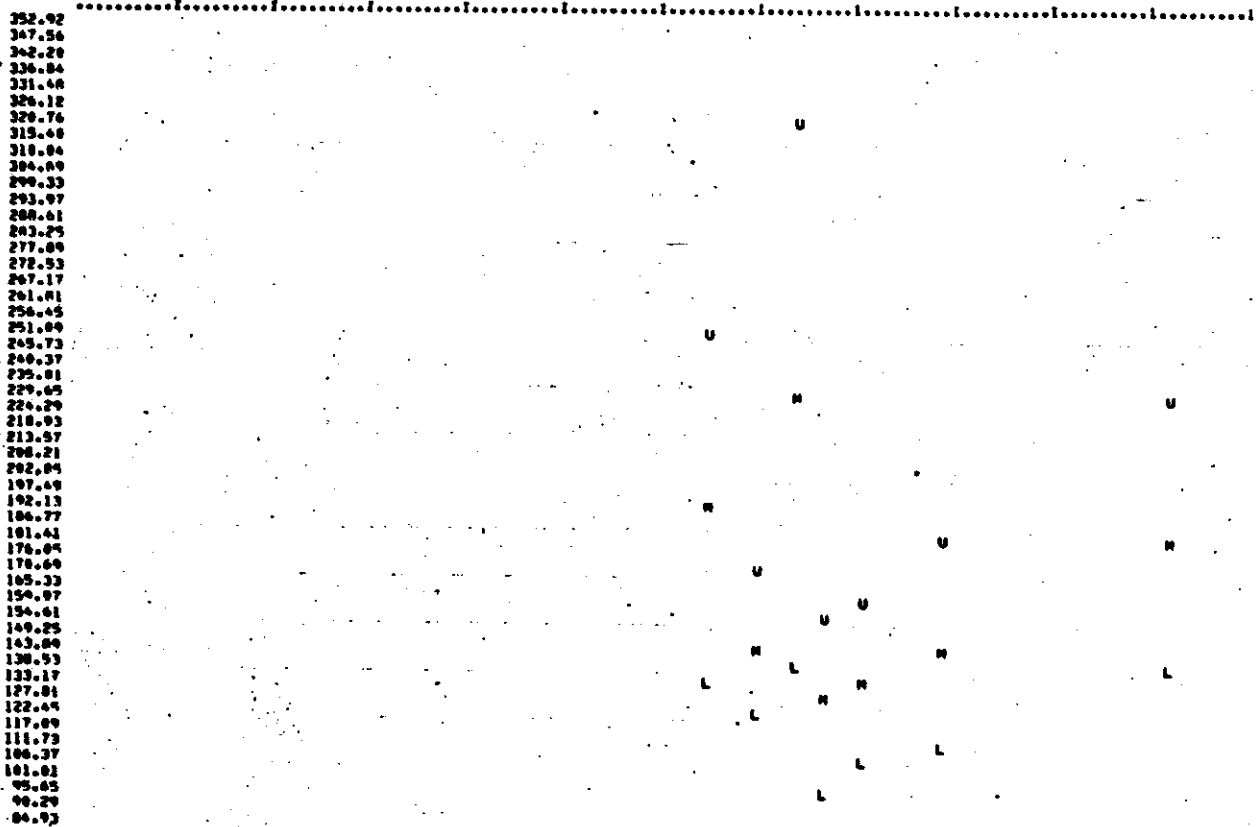
173.00
 170.24
 167.60
 164.72
 161.90
 159.20
 156.44
 153.68
 150.92
 148.16
 145.40
 142.64
 139.88
 137.12
 134.36
 131.60
 128.84
 126.08
 123.32
 120.56
 117.80
 115.04
 112.28
 109.52
 106.77
 104.01
 101.25
 98.49
 95.73
 92.97
 90.21
 87.45
 84.69
 81.93
 79.17
 76.41
 73.65
 70.89
 68.13
 65.37
 62.61
 59.85
 57.09
 54.33
 51.57
 48.81
 46.05
 43.29
 40.53
 37.77
 35.01

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
196	20	78.14	13.94	2.00	49.14	107.15
212	20	65.47	7.19	2.00	50.51	80.43
223	20	105.81	24.73	2.00	54.35	157.27
233	20	66.40	10.33	2.00	38.91	81.69
245	20	58.75	7.10	2.00	43.97	73.52
269	20	52.79	5.49	2.00	41.37	64.22
336	20	71.64	11.83	2.00	47.83	96.25



.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 8- 30 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA, TRY 5 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
190	20	190.00	26.59	2.00		
212	20	146.48	11.67	2.00	131.20	250.15
223 *	20	229.36	43.97	2.00	122.19	170.77
233	20	129.43	14.93	2.00	137.89	320.04
245 **	20	132.01	12.74	2.00	94.37	156.49
269 ***	20	146.15	16.64	2.00	106.30	159.32
336	20	102.03	21.48	2.00	111.52	188.77
				2.00	130.12	227.15

- *Sequence missing 8 cm of core length
- **Sequence missing 12 cm of core length
- ***Sequence missing 20 cm of core length

102.85
100.40
98.93
97.38
95.82
94.26
92.70
91.14
89.58
88.03
86.47
84.91
83.35
81.79
80.24
78.68
77.12
75.56
74.00
72.45
70.89
69.33
67.77
66.21
64.65
63.10
61.54
59.98
58.42
56.86
55.31
53.75
52.19
50.63
49.07
47.51
45.96
44.40
42.84
41.28
39.72
38.17
36.61
35.05
33.49
31.93
30.37
28.82
27.26
25.70
24.14

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SD) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SD)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
196	20	43.76	5.90	2.08	31.40	56.11
212	20	43.98	4.45	2.08	34.71	53.24
223	20	62.05	12.28	2.08	36.50	67.61
233	20	48.78	4.71	2.08	26.82	54.74
245	20	33.18	2.20	2.08	28.61	37.74
269	20	52.57	5.57	2.08	48.99	64.15
336	20	67.78	12.03	2.08	42.79	92.77

145.50
142.81
140.13
137.44
134.76
132.07
129.39
126.71
124.02
121.34
118.65
115.97
113.28
110.60
107.91
105.23
102.54
99.86
97.18
94.49
91.81
89.12
86.44
83.75
81.07
78.38
75.70
73.01
70.33
67.65
64.96
62.28
59.59
56.91
54.22
51.54
48.85
46.17
43.48
40.80
38.11
35.43
32.75
30.06
27.38
24.69
22.01
19.32
16.64
13.95
11.27

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20- 30 CM DEPTH.

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA, TRY 5 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

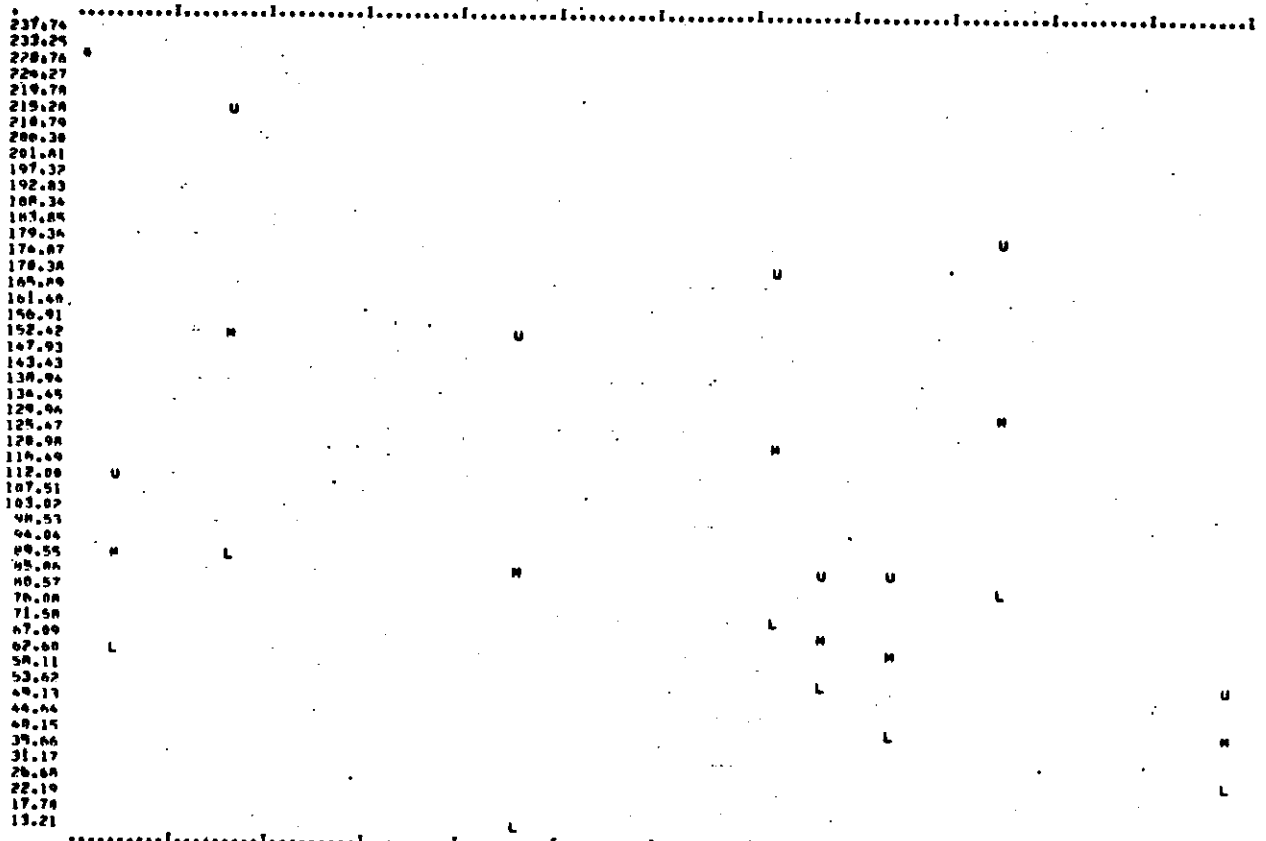
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
146	19	72.40	20.65	2.09	12.52	132.27
212 *	20	37.03	4.22	2.08	20.25	45.01
223 *	20	61.50	14.61	2.08	31.10	91.90
233 ***	20	24.25	2.57	2.08	18.90	29.59
245 ***	20	40.89	11.21	2.08	17.50	64.20
269 ***	19	42.93	7.12	2.09	20.05	57.01
336	20	43.21	6.94	2.08	20.76	57.65

- *Sequence missing 8 cm of core length.
- **Sequence missing 12 cm of core length.
- ***Sequence missing 10 cm of core length.

4.2 Data for 1971

The belowground herbage biomass sampling on the Jornada Site for the 1971 data season sampled two replicates each for treatment 1 and treatment 5 on eight separate sampling dates.

Sampling in 1971 was carried out essentially the same as the 1970 sampling season with depth increments of 0 to 10, 10 to 20, and 20 to 30 cm being used. The crowns were irretrievably lumped in the 0 to 10 cm level. All data were reported on an ash-free weight basis. Due to a confusion as to treatment definition, some of the data were reported as treatment 5, and some of the data were reported as treatment 6 in addition to the correctly identified treatment 1. Based on personal communication with Rex Pieper at the Grasslands Ecology Research Lab, it was determined that the treatment 6 data were in fact identical to treatment 5; therefore, all of the data which were recorded as treatment 6 originally were changed to treatment 5 so that in the final data file only treatments 1 and 5 appear. In the case where the full core length, i.e., the bottom segment, was not present, the total core (0-30 cm) was accounted for, with the assumption being made that the bottom segment was omitted due to the caliche layer as described in the discussion for the 1970 Jornada data set.

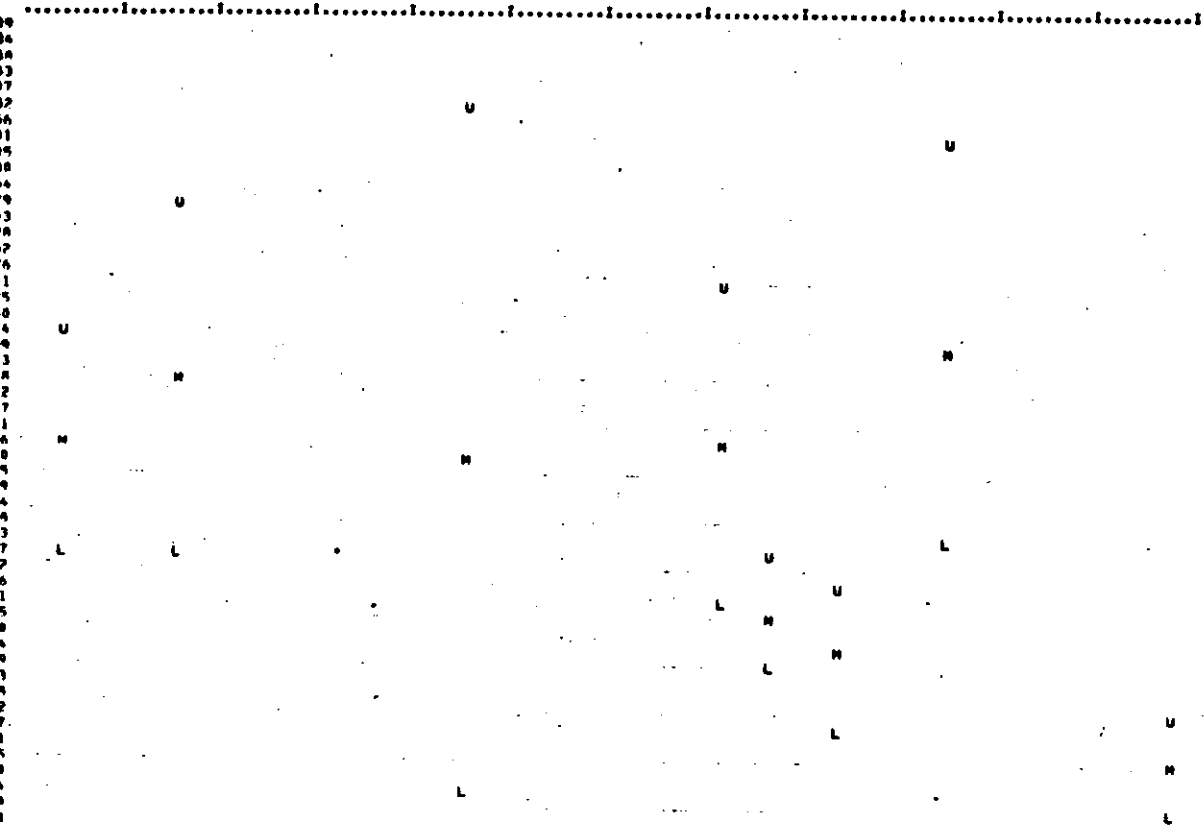


AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-10 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA, TRT 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
12	20	89.28	11.78	2.00	64.77	113.78
58	20	152.65	38.51	2.00	89.14	216.12
138	20	82.99	32.84	2.00	14.67	151.31
217	20	122.23	23.27	2.00	73.82	170.64
232	20	69.33	8.51	2.00	51.62	87.03
244	20	64.48	18.65	2.00	42.32	86.63
286	20	128.62	23.91	2.00	78.88	178.37
356	20	39.35	8.31	2.00	28.21	52.46

344.89
 340.34
 334.34
 328.83
 323.87
 317.32
 311.56
 305.41
 300.85
 294.38
 288.54
 282.79
 277.03
 271.28
 265.52
 259.76
 254.01
 248.25
 242.50
 236.74
 230.99
 225.23
 219.48
 213.72
 207.97
 202.21
 196.46
 190.70
 184.94
 179.19
 173.44
 167.68
 161.93
 156.17
 150.42
 144.66
 138.91
 133.15
 127.40
 121.64
 115.89
 110.13
 104.38
 98.62
 92.87
 87.11
 81.35
 75.60
 69.84
 64.09
 58.31

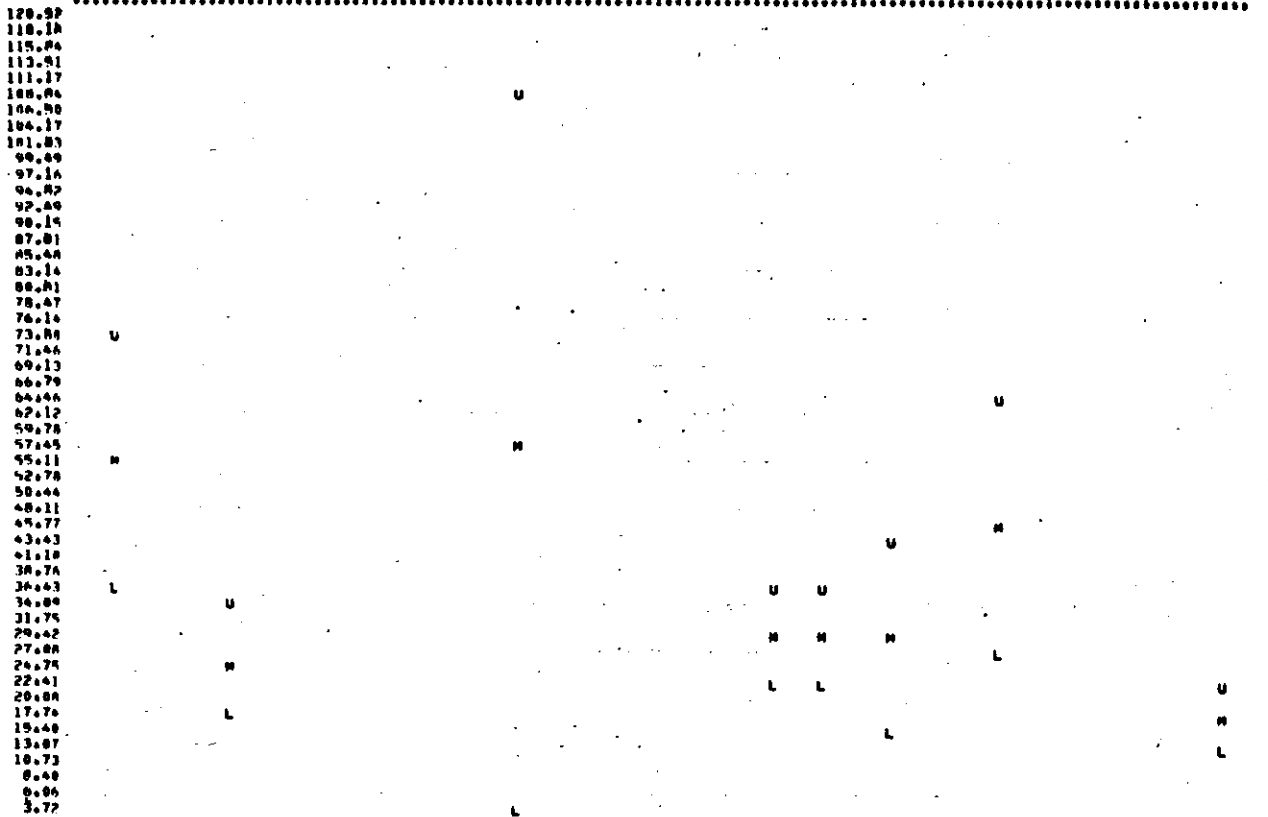


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 0- 30 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JOHNSDALE TRT 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
12	20	197.95	19.82			
50 *	20	220.99	30.70	2.00	156.71	239.19
130 **	20	191.45	59.21	2.00	157.12	204.85
217	20	194.58	27.46	2.00	66.27	314.63
232	20	134.58	10.22	2.00	140.33	256.48
254	20	119.37	12.85	2.00	113.31	155.05
288	20	233.00	35.84	2.00	93.84	145.89
356	20	81.67	8.10	2.00	100.80	306.00
					64.82	98.53

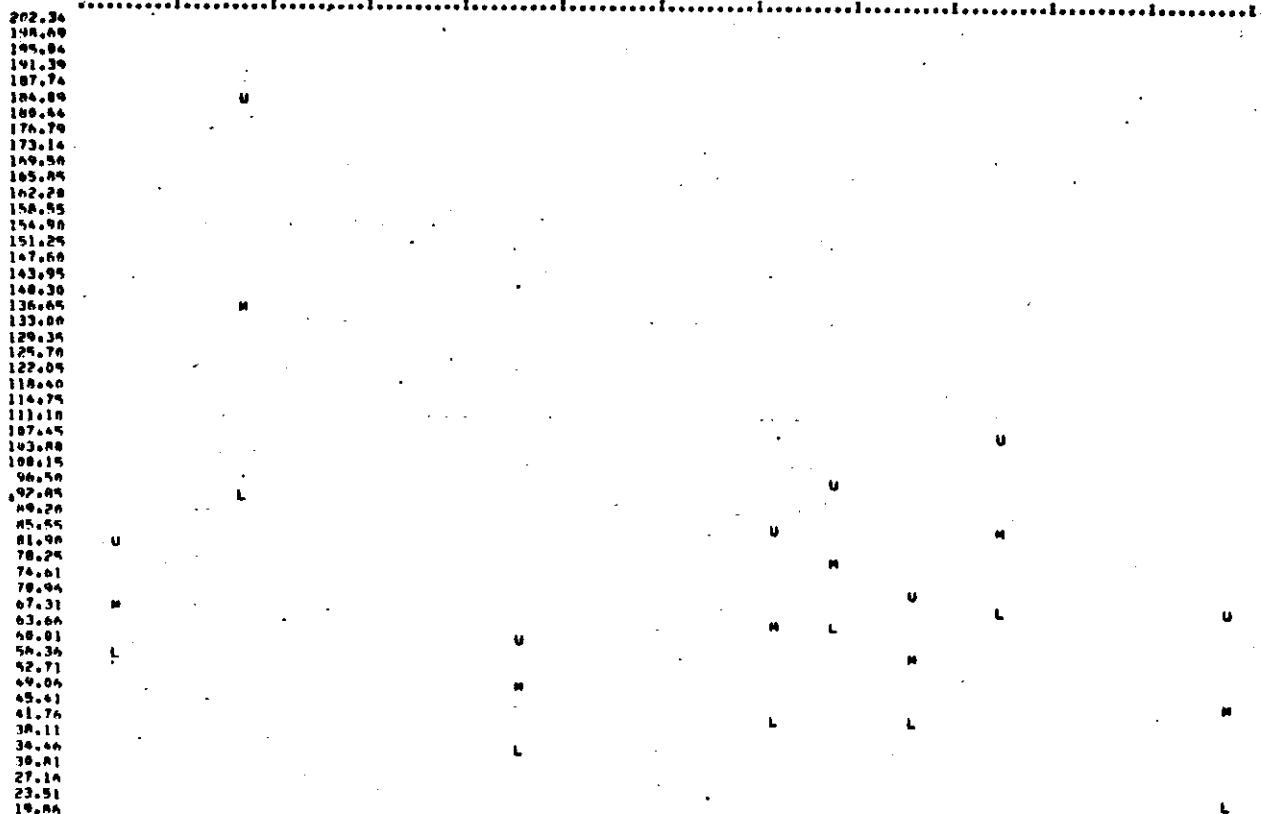
*Sequence missing 10 cm of core length
 **Sequence missing 10 cm of core length



.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA TRY 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

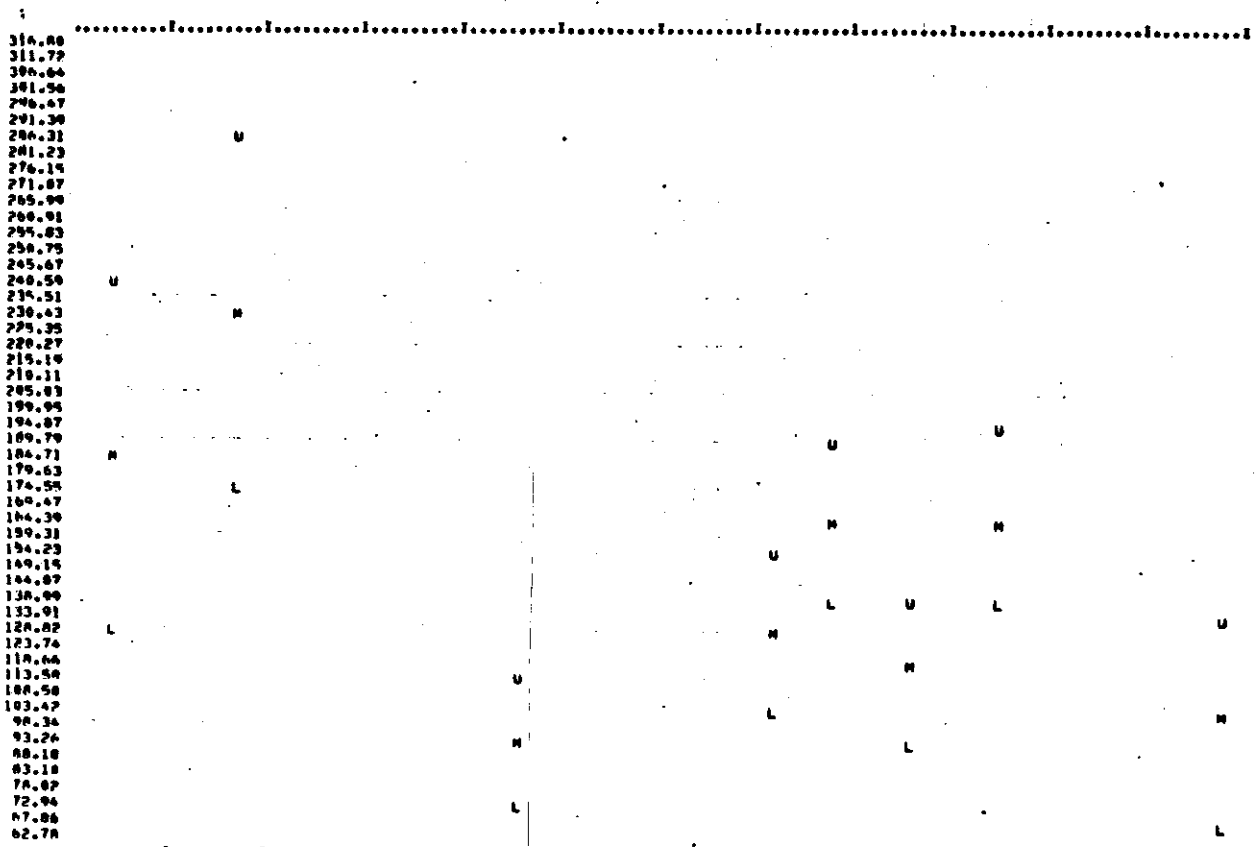
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
12	20	55.88	8.95	2.00	37.26	74.58
50	10	25.64	4.13	2.00	17.01	34.27
130	10	50.85	25.22	2.00	4.14	109.56
217	20	29.32	3.41	2.00	22.22	36.42
232	20	29.65	3.26	2.00	22.83	36.47
254	20	30.28	6.62	2.00	16.42	43.97
274	20	40.29	9.24	2.00	27.86	65.52
350	20	18.52	2.33	2.00	13.67	23.37



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0-10 CM DEPTH

THESE DATA INCLUDE CHOWN MATERIAL
 THESE DATA REPESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA, TRY 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
13	20	60.78	5.56	2.00	57.21	60.34
51	20	130.43	21.00	2.00	92.92	163.95
130	20	47.61	6.76	2.00	33.55	61.68
217	20	63.60	9.80	2.00	43.20	83.99
236	20	79.25	7.82	2.00	62.98	95.52
254	20	55.45	6.55	2.00	41.91	69.19
286	20	86.96	9.63	2.00	66.93	106.99
356	20	44.31	10.69	2.00	22.07	66.55

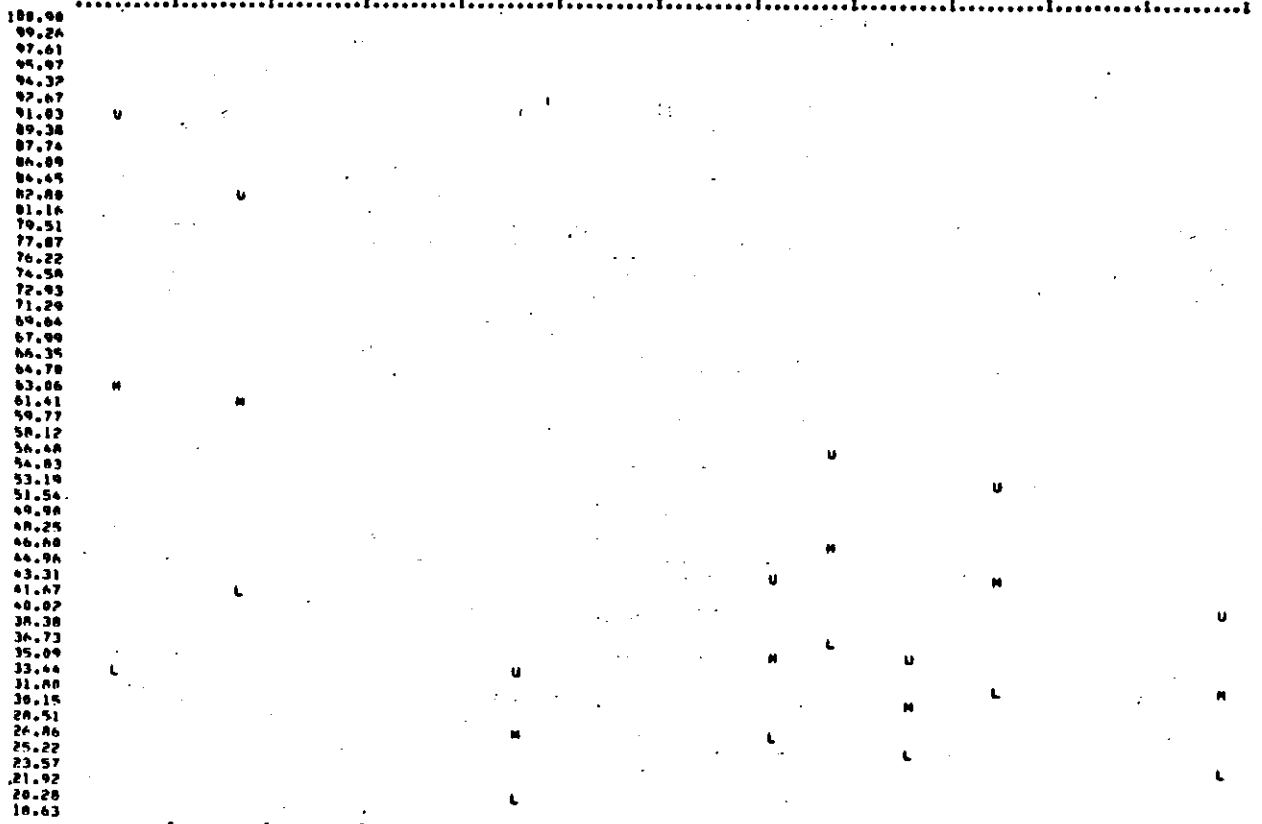


.....I
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-30 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA, TRY 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
13 *	20	186.49	26.81	2.00	138.72	242.26
51 **	20	238.91	27.44	2.00	173.82	280.00
138 ***	20	93.69	9.46	2.00	74.13	113.24
217	20	139.28	12.46	2.00	104.36	156.28
236	20	163.89	12.39	2.00	138.11	189.68
259	20	116.83	11.63	2.00	92.64	141.03
286	20	166.43	13.78	2.00	137.75	195.11
356	20	101.62	15.32	2.00	69.76	133.49

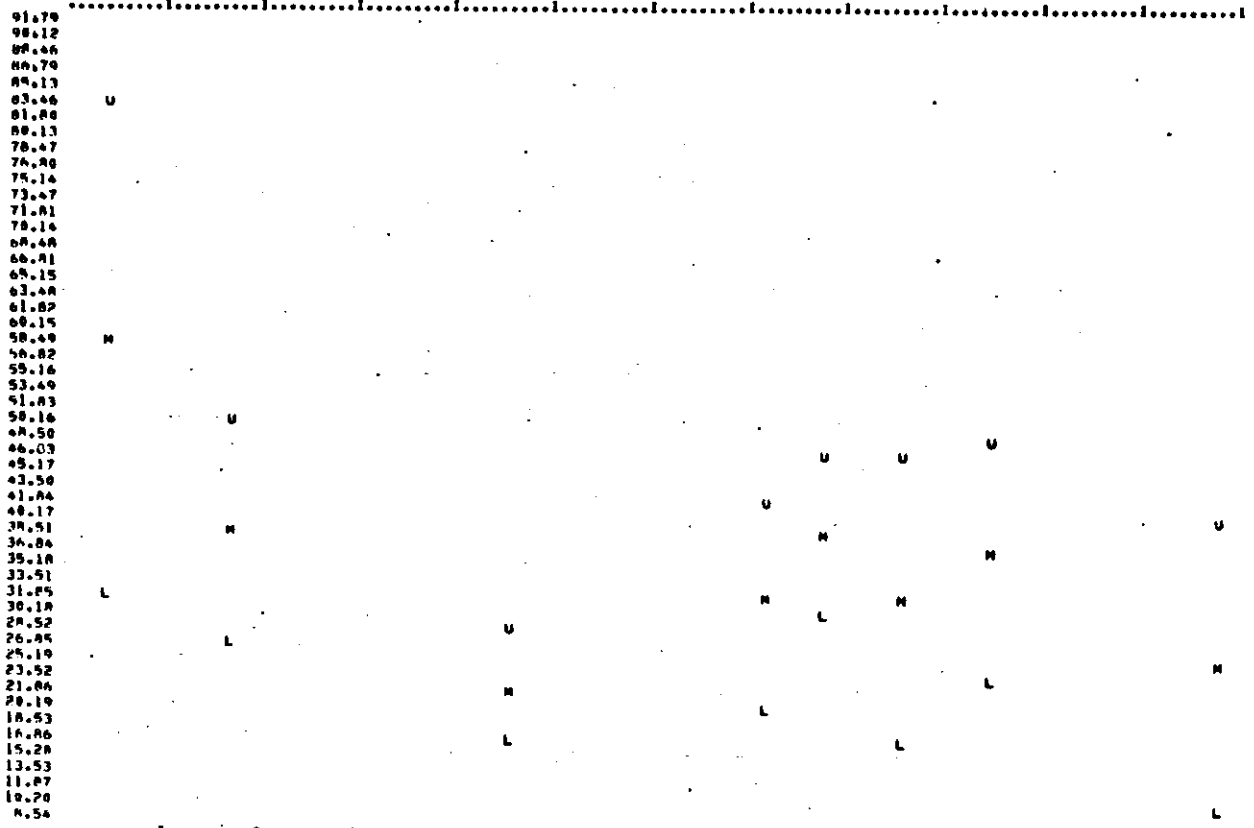
*Sequence missing 4 cm of core length
 **Sequence missing 40 cm of core length
 ***Sequence missing 30 cm of core length



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JORNADA, TRY 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
13	20	62.93	13.04	2.08	34.14	91.73
51	20	61.72	10.01	2.08	48.98	82.55
138	20	27.11	3.08	2.08	20.78	33.52
217	20	35.27	4.15	2.08	26.63	43.91
236	20	46.48	4.77	2.08	36.48	56.32
259	20	29.65	2.50	2.08	24.46	34.84
286	20	42.87	5.11	2.08	32.24	53.51
356	20	32.29	4.02	2.08	23.93	40.66



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JOHNADA, TRT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

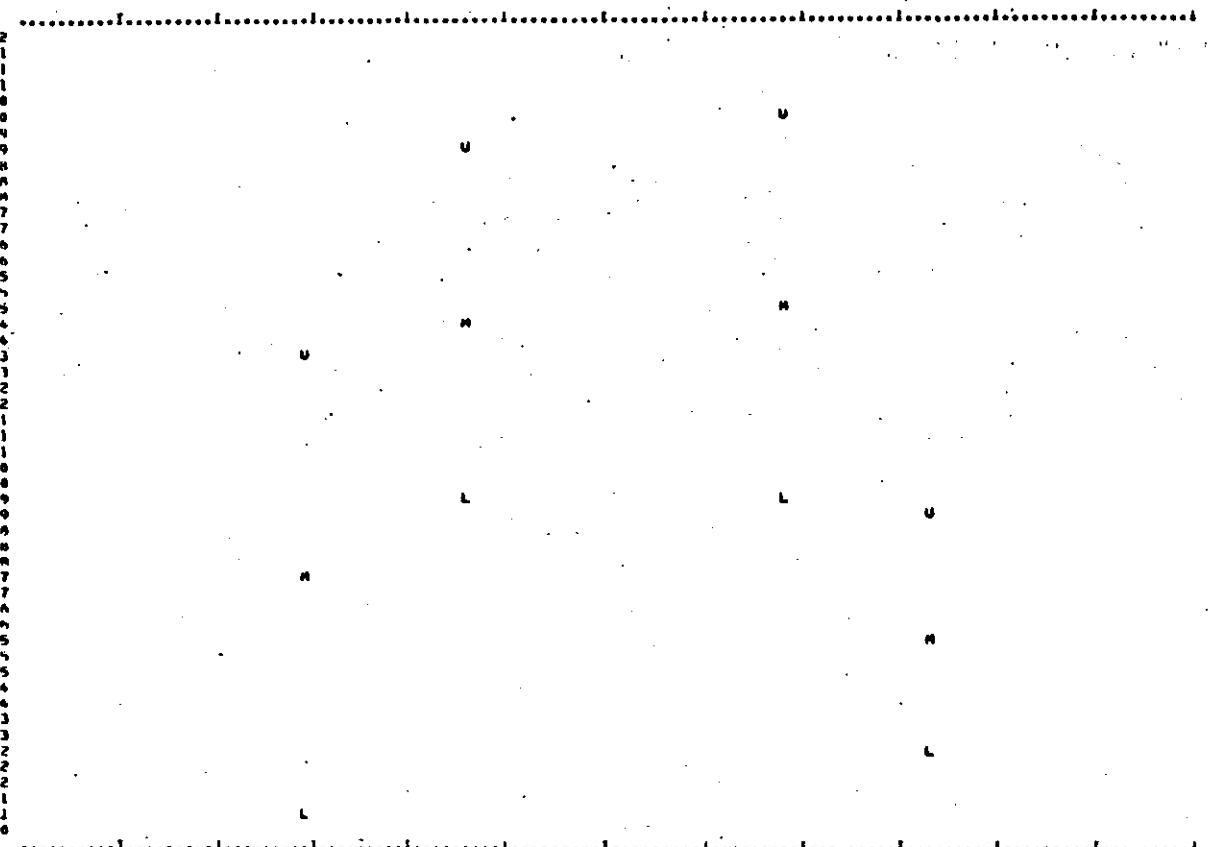
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
13*	19	57.66	12.33	2.09	31.68	83.64
51	16	38.44	5.19	2.13	27.48	49.48
130	17	22.30	2.84	2.11	16.30	28.30
217	20	31.41	5.11	2.00	20.79	42.04
236	20	30.25	4.10	2.00	29.72	40.77
259	20	31.43	7.02	2.00	17.03	40.24
286	28	36.59	5.89	2.00	24.33	48.85
356	20	25.82	7.47	2.00	9.49	40.95

*Sequence missing 4 cm of core length

4.3 Data for 1972

The belowground biomass for Jornada 1972 was sampled essentially the same as the sampling for 1970 and 1971. Two replicates each for treatments 1 and 5 were sampled on four sampling dates during the 1972 season. Depth increments of 0 to 10, 10 to 20, and 20 to 30 cm were used. The crowns were irretrievably lumped in with the 0 to 10 cm increment. All data were reported on an ash-free weight basis. Crowns are also found in the aboveground biomass file as species CRWN. This is somewhat redundant, but not exactly duplicate information, since the biomass reported with the belowground file is that which is found on the core only, while the biomass reported with the aboveground biomass file is material that is harvested from the quadrat plot. A few negative ash-free weights were detected in this file and replaced by the mean for that replicate, depth, and sampling date.

138.12
 135.81
 133.51
 131.21
 128.98
 126.60
 124.24
 121.99
 119.68
 117.38
 115.04
 112.77
 110.47
 108.16
 105.86
 103.55
 101.25
 98.95
 96.64
 94.36
 92.03
 89.71
 87.42
 85.12
 82.81
 80.51
 78.21
 75.90
 73.60
 71.29
 68.99
 66.69
 64.38
 62.08
 59.77
 57.47
 55.16
 52.86
 50.55
 48.25
 45.95
 43.64
 41.34
 39.03
 36.73
 34.42
 32.12
 29.82
 27.51
 25.21
 22.90



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW-GROUND BIOMASS (G/M²) FOR 0-10 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JUNNADA, INT 1 FOR 1972
 (CUMULATIVE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
89	20	59.19	16.22	2.00	25.95	92.93
138	20	96.86	12.45	2.00	70.77	122.95
236	20	97.87	13.31	2.00	78.19	125.56
291	20	51.25	8.66	2.00	33.37	69.14

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.....
237.05
243.29
249.52
255.76
261.99
268.23
274.47
280.70
286.94
293.17
299.41
305.64
311.88
318.11
324.35
330.58
336.82
343.05
349.29
355.52
361.76
367.99
374.23
380.46
386.70
392.93
399.17
405.41
411.64
417.88
424.11
430.35
436.58
442.82
449.05
455.29
461.52
467.76
473.99
480.23
486.46
492.70
498.93
505.17
511.41
517.64
523.88
530.11
536.35
542.58
548.82
555.05
561.29
567.52
573.76
579.99
586.23
592.46
598.70
604.93
611.17
617.41
623.64
629.88
636.11
642.35
648.58
654.82
661.05
667.29
673.52
679.76
685.99
692.23
698.46
704.70
710.93
717.17
723.41
729.64
735.88
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760.82
767.05
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791.99
800.00
.....

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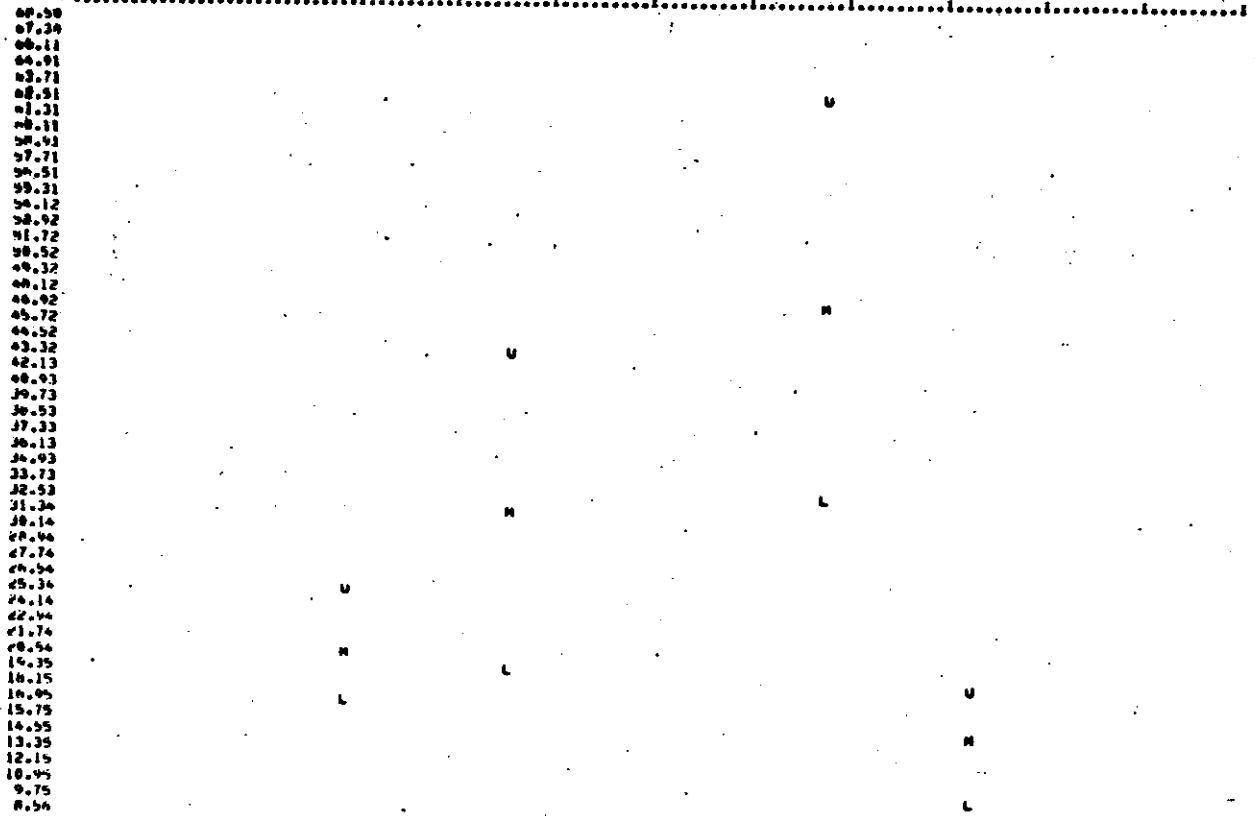
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.....
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
ARIS LABELS FOR THIS PLOT ARE *
X=ARIS=JULIAN DATE FOR 1972
Y=BIOMASS=GROUND BIOMASS (G/M2) FOR 0-30 CM DEPTH
.....

```

THESE DATA INCLUDE GROUND MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JUNNADA, INT 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

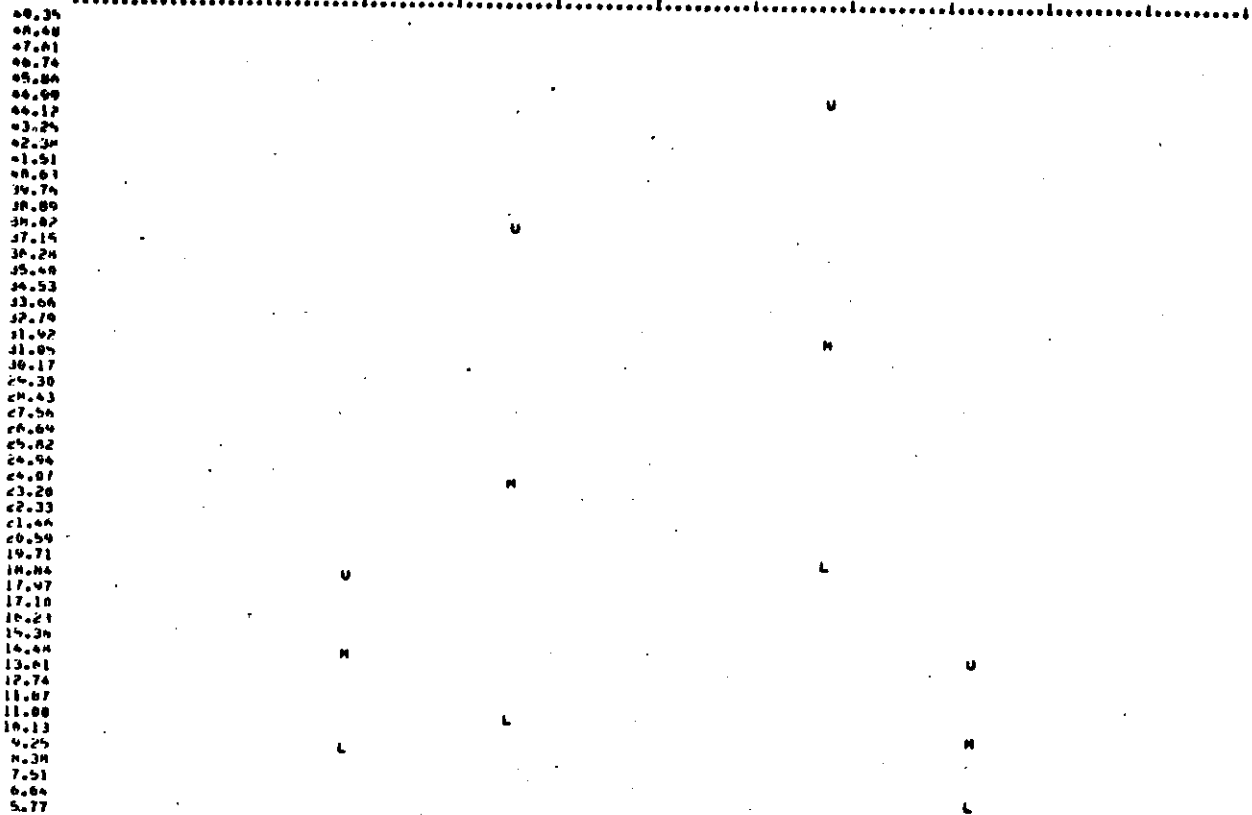
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
29	20	96.35	16.18	2.08	56.52	132.18
130	20	151.99	21.93	2.08	106.37	197.61
230	20	177.65	18.29	2.08	139.40	215.90
291	20	75.61	10.27	2.08	55.24	96.98



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW-GROUND BIOMASS (G/M²) FOR 10-20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JUNNADA, INT 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

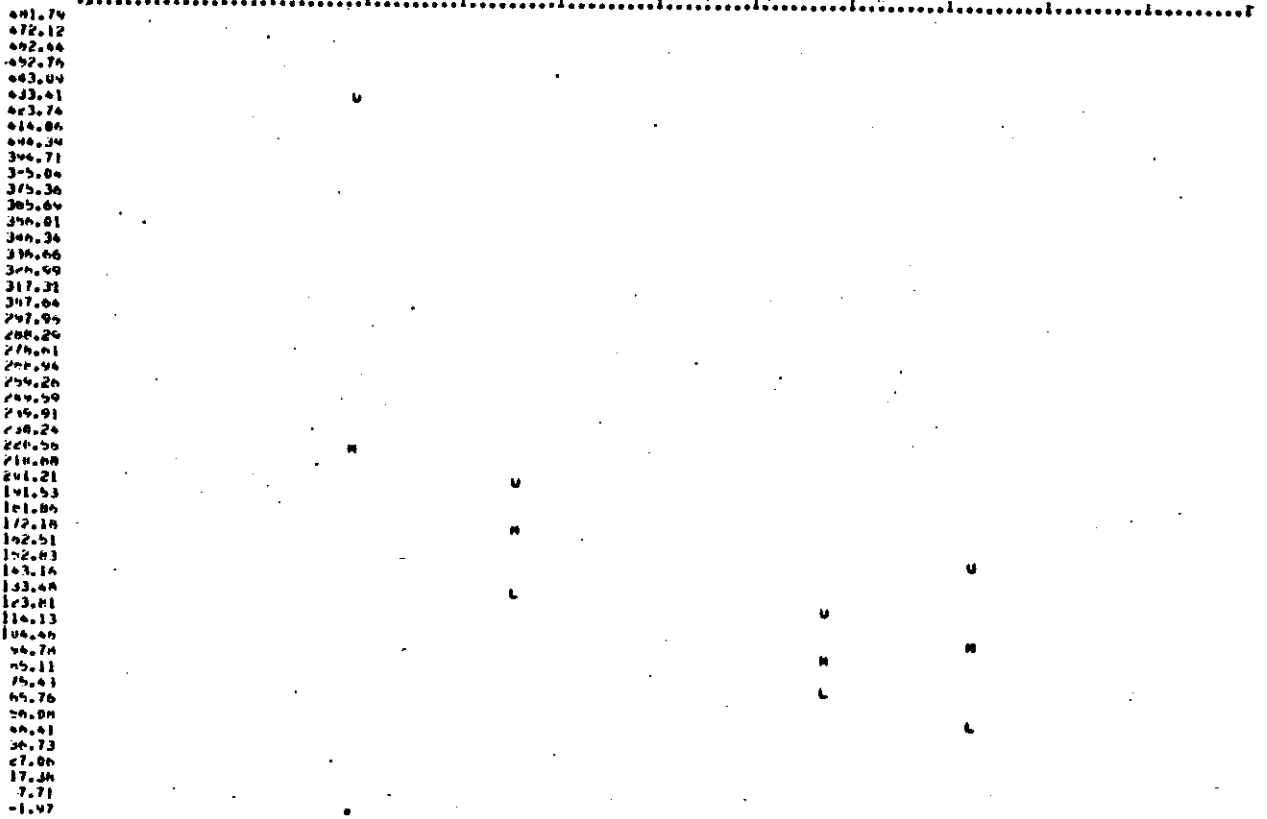
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
89	20	21.05	2.00	2.00	16.70	25.36
134	20	31.19	5.75	2.00	19.27	43.12
234	20	47.39	7.15	2.00	32.51	62.28
281	20	14.00	2.10	2.00	9.51	18.49



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 20-30 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JUNNAVA, THT 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEL VALUE	LOWER LIMIT	UPPER LIMIT
89	20	10.11	2.28	2.08	6.41	16.61
139	20	20.14	0.50	2.08	18.61	37.66
234	20	30.18	0.89	2.08	19.50	44.66
281	20	19.30	1.90	2.08	6.41	19.31



.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 301.0
 AXIS LABELS FOR THIS PLOT ARE X
 A=AXIS=JULIAN DATE FOR 1972
 Y=AXIS=RELATIVE GROUND BIOMASS (G/M²) FOR U=30 CM DEPTH

THESE DATA INCLUDE KNOWN MATERIAL

THESE DATA REPRESENT RELATIVE GROUND BIOMASS SAMPLING ON SITE JUNNAUA, INT 5 FOR 1972
 (CONFIDENCE LIMITS CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TRE VALUE	LOWER LIMIT	UPPER LIMIT
14	20	217.98	105.74	2.08		
130	20	100.30	10.57	2.08	-1.97	202.70
230	20	99.42	10.81	2.08	133.82	202.70
201	20	103.03	22.43	2.08	76.93	121.98
					57.12	190.50

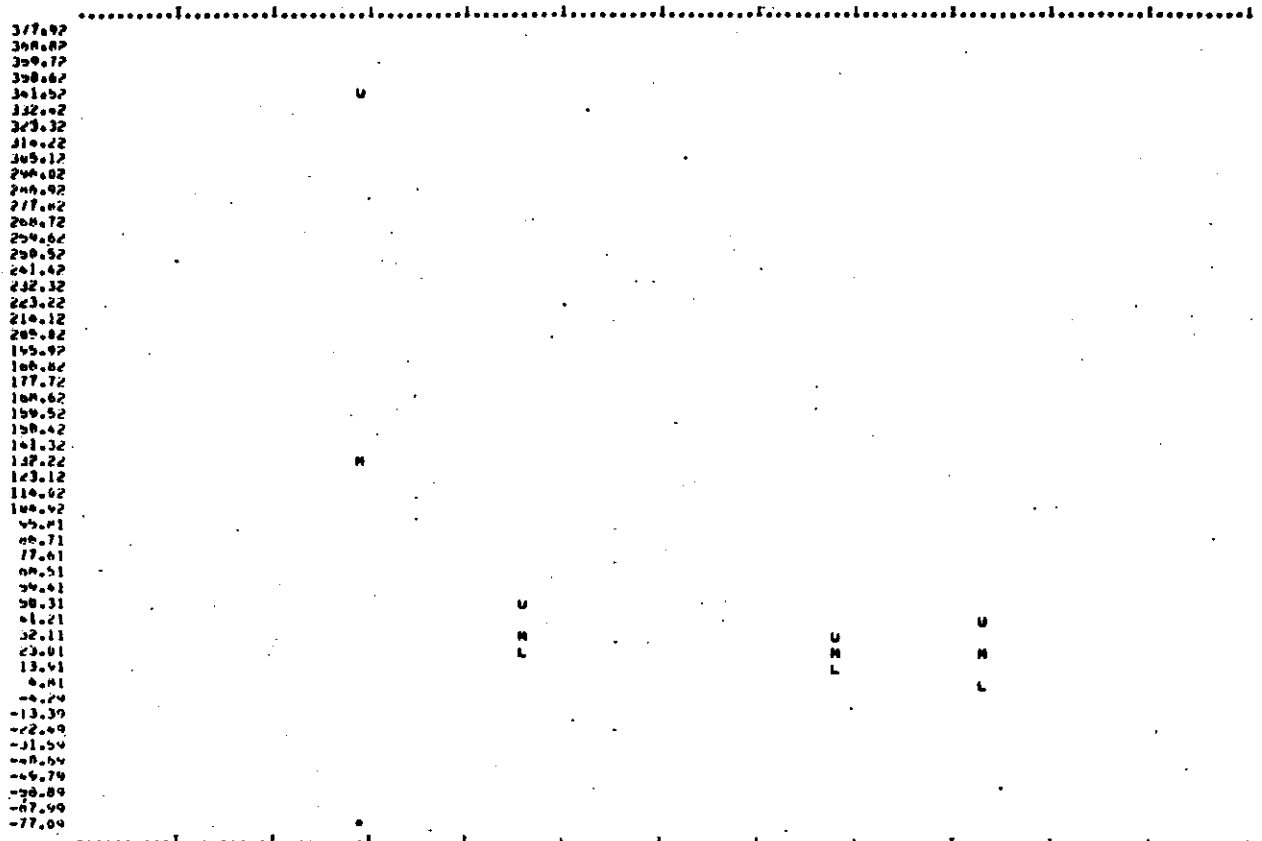
Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

121.59
 119.05
 117.71
 115.74
 113.04
 111.91
 109.97
 108.03
 106.18
 104.14
 102.22
 100.29
 98.35
 96.42
 94.44
 92.54
 90.61
 88.67
 86.73
 84.80
 82.84
 80.93
 78.99
 77.05
 75.12
 73.18
 71.24
 69.31
 67.37
 65.44
 63.50
 61.56
 59.63
 57.69
 55.75
 53.82
 51.88
 49.95
 48.01
 46.07
 44.14
 42.20
 40.26
 38.33
 36.39
 34.46
 32.52
 30.58
 28.65
 26.71
 24.77

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW-GROUND BIOMASS (G/M²) FOR 0-10 CM DEPTH

THESE DATA INCLUDE LUMPY MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JUNNADA, IRT 5 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TCC VALUE	LOWER LIMIT	UPPER LIMIT
89	20	63.49	17.28	2.08	27.53	99.45
124	20	61.28	9.28	2.08	71.99	110.53
236	20	60.29	9.45	2.08	48.64	79.94
281	20	68.88	18.41	2.08	29.71	108.30

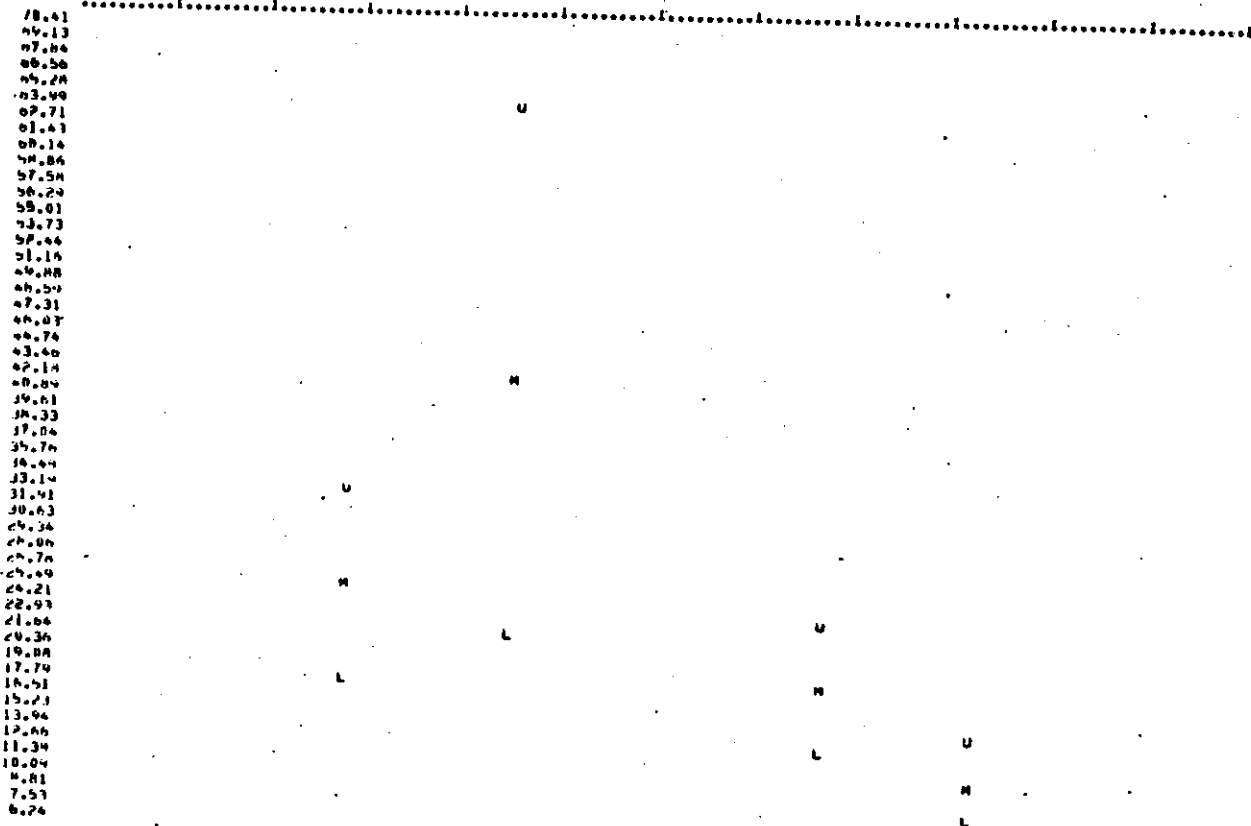


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X=AA15*JULIAN DATE FOR 1972
 Y=AA15*BELOW-GROUND BIOMASS (G/M SQ) FOR 10-20 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE JOHNAVA, THT 5 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
49	20	128.96	103.15	2.00	-77.00	303.57
138	20	34.39	6.51	2.00	20.00	47.94
230	20	21.27	3.20	2.00	14.01	27.94
291	20	25.57	7.84	2.00	9.25	41.89

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.



AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=RELATIVE GROUND BIOMASS (G/M²) FOR 20-30 CM DEPTH

THESE DATA INCLUDE ONLY MATERIAL ONLY
 THESE DATA REPRESENT RELATIVE-GROUND BIOMASS SAMPLING ON SITE JUNNANA, INT 3 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
89	20	29.40	3.97			
138	20	42.00	10.20	2.00	17.21	33.71
236	20	17.00	2.50	2.00	21.50	64.01
291	20	10.20	1.59	2.00	12.55	43.18
					0.94	13.57

CHAPTER 5. BELOWGROUND HERBAGE BIOMASS DATA FROM
OSAGE SITE, OKLAHOMA

5.1 Data for 1970

The belowground herbage biomass on the Osage Site was sampled on each of two replicates for treatments 1 and 5 on each of five sampling dates during the 1970 season. Two coring depths were used, shallow cores to 50 cm and deep cores to 90 cm. Generally, one or two deep cores were taken per replicate per sampling date. The shallow cores were segmented by the 0 to 5, 5 to 10, 10 to 20, and 20 to 50 cm depths. The deep cores were segmented by 0 to 5, 5 to 10, 10 to 20, 20 to 30, 30 to 50, 50 to 70, and 70 to 90 cm depths. Thus, direct comparability was available only down to the 20 cm level; for deeper depths, the 20 to 30 and 30 to 50 cm levels from the deep cores were lumped to correspond with the segments from the shallower cores. Crown material from this site was separated out and is included as the 0 to 0 cm depth. All data were reported on an ash-free weight basis.

A number of problems were encountered with the Osage 1970 data set, presenting such difficulties as incorrect core diameters and incorrectly punched replicate and quadrat numbers. Ash weights for a large number of random records were missing, because the material was used for calorimetric analysis, although the dry weights were included. The ash-free weights for these records were estimated from the dry weights based on regression equations of the ash-free weights on the dry weights of the other records for that treatment and depth over several dates. The regression equations used for these corrections can be found in Appendix C. Due to the incorrect core diameters and missing ash weights, the analysis resulting from this data set is somewhat different than the original analysis based on the archival form of the data. It was

also discovered that in general, the data represented two cores per quadrat while appearing as one core per quadrat, and therefore the original results were approximately twice as high as they should be. The data in the final file were reduced to a one core per quadrat basis.

1859.73
 1829.48
 1819.19
 998.92
 978.65
 968.38
 938.11
 917.84
 897.57
 877.30
 857.02
 836.75
 816.48
 796.21
 775.94
 755.67
 735.40
 715.13
 694.86
 674.59
 654.32
 634.05
 613.77
 593.50
 573.23
 552.96
 532.69
 512.42
 492.15
 471.88
 451.61
 431.34
 411.07
 390.80
 370.53
 350.25
 329.98
 309.71
 289.44
 269.17
 248.90
 228.63
 208.36
 188.09
 167.82
 147.55
 127.28
 107.01
 86.73
 66.46
 46.19

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1979
 Y-AXIS=BELOW GROUND BIOMASS (G/N SQ) FOR 0- 8 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE TRT 1 FOR 1979
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/N SQ)	STANDARD ERROR	TEC VALUE	LOWER LIMIT	UPPER LIMIT
168	10	342.99	79.27	2.27	162.76	523.21
197	10	239.56	49.64	2.27	135.79	363.33
229	10	175.42	54.58	2.27	51.32	299.52
272	10	554.57	179.82	2.27	145.74	963.39
328	10	386.37	129.24	2.27	101.64	671.11

1757.99
 1729.44
 1700.09
 1672.34
 1643.79
 1615.24
 1586.69
 1558.13
 1529.58
 1501.03
 1472.48
 1443.93
 1415.38
 1386.83
 1358.28
 1329.73
 1301.18
 1272.62
 1244.07
 1215.52
 1186.97
 1158.42
 1129.87
 1101.32
 1072.77
 1044.22
 1015.67
 987.11
 958.56
 930.01
 901.46
 872.91
 844.36
 815.81
 787.26
 758.71
 730.16
 701.60
 673.05
 644.50
 615.95
 587.40
 558.85
 530.30
 501.75
 473.20
 444.65
 416.09
 387.54
 358.99
 330.44

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0-10 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168	10	953.20	124.42	2.27	678.33	1230.08
197	10	862.66	119.53	2.27	590.91	1134.41
229	10	568.89	88.30	2.27	367.16	769.01
272	10	1059.66	249.82	2.27	583.14	1590.17
328	10	842.54	188.91	2.27	417.00	1267.48

1984.82
 1953.93
 1923.84
 1893.76
 1863.67
 1833.59
 1803.50
 1773.41
 1743.33
 1713.24
 1683.16
 1653.07
 1622.99
 1592.90
 1562.81
 1532.73
 1502.64
 1472.56
 1442.47
 1412.38
 1382.30
 1352.21
 1322.13
 1292.04
 1261.95
 1231.87
 1201.78
 1171.70
 1141.61
 1111.52
 1081.44
 1051.35
 1021.27
 991.18
 961.10
 931.01
 900.92
 870.84
 840.75
 810.67
 780.58
 750.49
 720.41
 690.32
 660.24
 630.15
 600.06
 570.00
 539.90
 509.81
 479.72

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M² SO) FOR 0-20 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE GSAGE, TRY 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ² SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160	10	1132.88	129.64	2.27	857.76	1408.40
197	10	1105.99	107.27	2.27	862.11	1349.87
229	10	800.73	117.75	2.27	533.02	1068.43
272	10	1230.83	248.79	2.27	672.41	1883.65
320	10	1072.35	163.81	2.27	656.28	1488.43

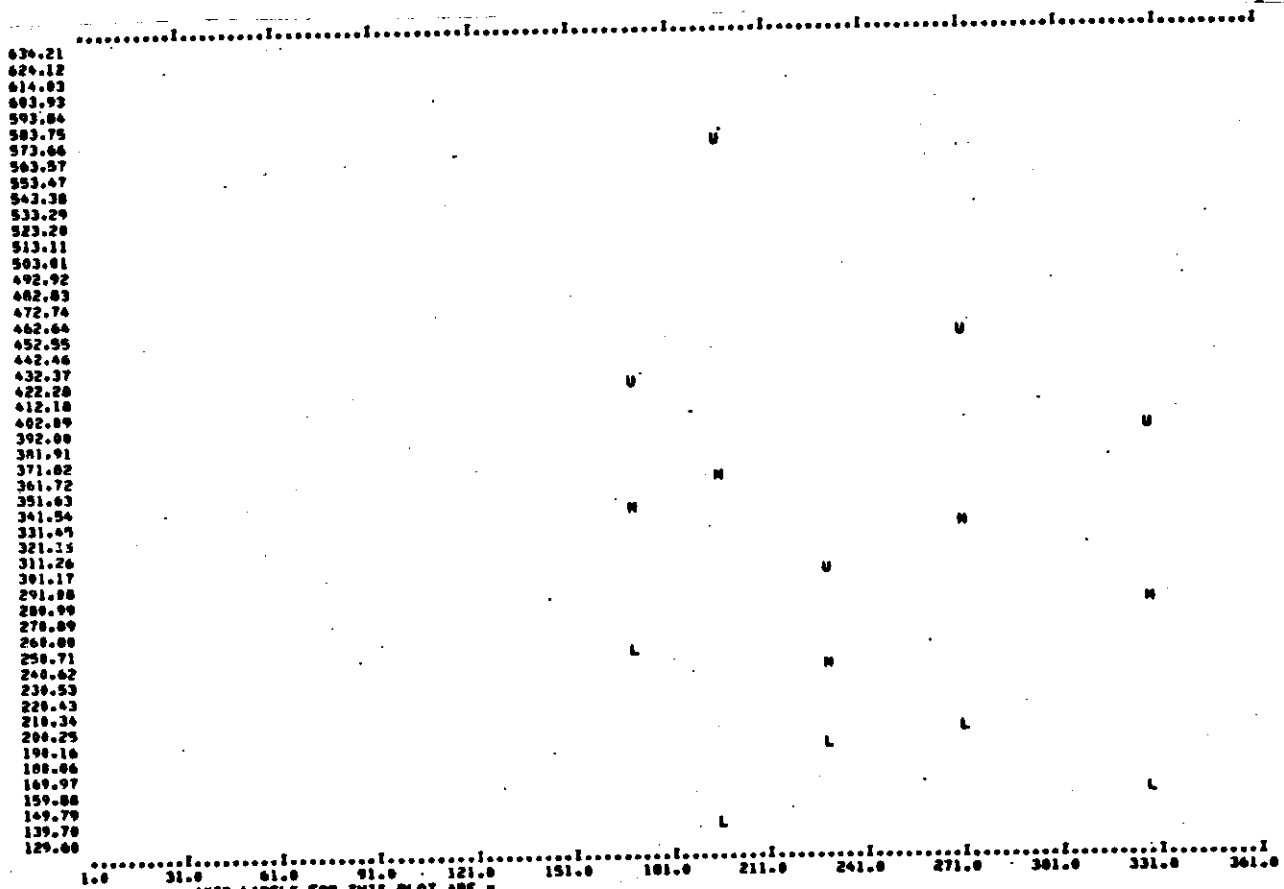
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2346.14
2313.84
2281.54
2249.23
2216.93
2184.63
2152.32
2120.02
2087.72
2055.42
2023.11
1990.81
1958.51
1926.20
1893.90
1861.60
1829.29
1796.99
1764.69
1732.39
1700.08
1667.78
1635.48
1603.17
1570.87
1538.57
1506.26
1473.96
1441.66
1409.36
1377.05
1344.75
1312.45
1280.14
1247.84
1215.54
1183.23
1150.93
1118.63
1086.33
1054.02
1021.72
989.42
957.11
924.81
892.51
860.20
827.90
795.60

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
X-AXIS=JULIAN DATE FOR 1978
Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0- 90 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1978
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
166	10	1462.18	145.85	2.27	1132.40	1791.96
197	10	1505.88	117.44	2.27	1238.89	1772.88
229	10	1184.98	132.35	2.27	984.08	1405.88
272	10	1599.88	268.26	2.27	1088.17	2191.59
328	10	1438.29	196.44	2.27	991.69	1884.89



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168	10	337.02	37.56	2.27	251.67	422.36
197	10	368.28	99.23	2.27	146.00	576.56
229	10	242.39	26.99	2.27	185.58	299.19
272	10	329.16	54.78	2.27	284.00	453.51
326	10	288.11	58.75	2.27	184.72	395.50

938.84
 917.83
 904.83
 891.82
 878.81
 865.81
 852.80
 839.80
 826.79
 813.79
 800.78
 787.77
 774.77
 761.76
 748.76
 735.75
 722.75
 709.74
 696.73
 683.73
 670.72
 657.72
 644.71
 631.70
 618.70
 605.69
 592.69
 579.68
 566.68
 553.67
 540.66
 527.66
 514.65
 501.65
 488.64
 475.64
 462.63
 449.62
 436.62
 423.61
 410.61
 397.60
 384.60
 371.59
 358.58
 345.58
 332.57
 319.57
 306.56
 293.55
 280.55

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168	10	610.21	51.91	2.27	492.20	728.22
197	10	623.10	98.14	2.27	399.99	844.22
229	10	392.66	34.95	2.27	313.20	472.13
272	10	496.89	67.67	2.27	342.25	649.93
328	10	436.17	63.53	2.27	311.72	600.61

1176.72
 1161.63
 1146.53
 1131.44
 1116.35
 1101.25
 1086.16
 1071.07
 1055.98
 1040.88
 1025.79
 1010.70
 995.60
 980.51
 965.42
 950.32
 935.23
 920.14
 905.04
 889.95
 874.86
 859.76
 844.67
 829.58
 814.49
 799.39
 784.30
 769.21
 754.11
 739.02
 723.93
 708.83
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 678.65
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 648.46
 633.37
 618.28
 603.18
 588.09
 573.00
 557.90
 542.81
 527.72
 512.62
 497.53
 482.44
 467.34
 452.25
 437.16
 422.07

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168	10	789.89	50.86	2.27	673.47	906.72
197	10	846.43	89.43	2.27	663.12	1069.75
229	10	623.39	48.77	2.27	446.96	781.64
272	10	683.46	75.55	2.27	511.69	855.23
328	10	685.98	75.19	2.27	515.02	856.93

1635.62
 1617.51
 1599.39
 1581.27
 1563.16
 1545.04
 1526.92
 1508.81
 1490.69
 1472.57
 1454.46
 1436.34
 1418.22
 1400.11
 1381.99
 1363.87
 1345.76
 1327.64
 1309.52
 1291.41
 1273.29
 1255.17
 1237.06
 1218.94
 1200.82
 1182.71
 1164.59
 1146.47
 1128.36
 1110.24
 1092.12
 1074.01
 1055.89
 1037.77
 1019.66
 1001.54
 983.42
 965.31
 947.19
 929.07
 910.96
 892.84
 874.72
 856.61
 838.49
 820.37
 802.26
 784.14
 766.02
 747.91
 729.79

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 90 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160 *	10	1119.19	81.55	2.27	933.79	1304.60
197 *	10	1266.32	97.83	2.27	1045.72	1486.93
229 *	10	1089.48	87.35	2.27	810.88	1208.07
272 *	10	1045.31	94.81	2.27	831.58	1259.05
328 **	10	1051.92	88.37	2.27	851.00	1252.84

*Sequence missing 280 cm of core length
 **Sequence missing 320 cm of core length

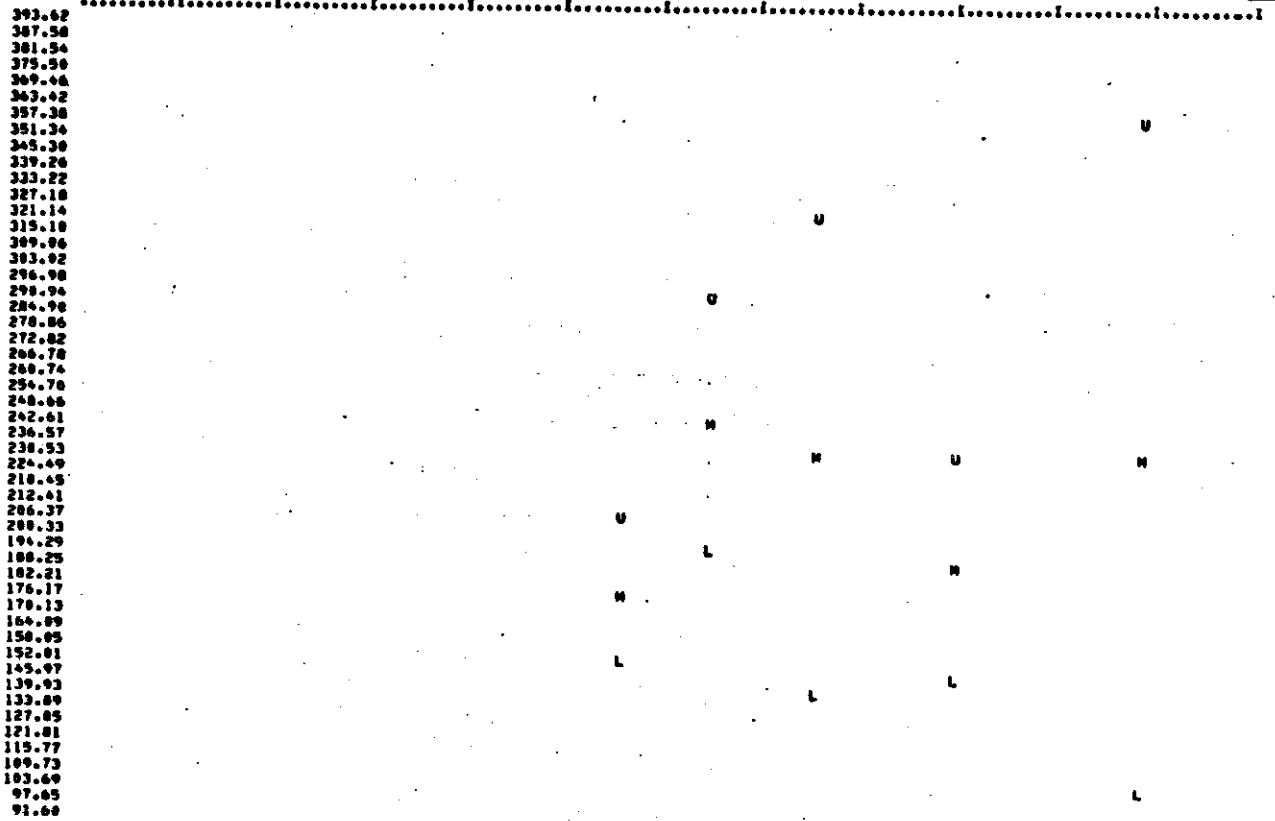
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 287.11
 282.10
 277.10
 272.09
 267.08
 262.07
 257.06
 252.05
 247.04
 242.03
 237.02
 232.01
 227.01
 222.00
 216.99
 211.98
 206.97
 201.96
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 191.94
 186.93
 181.92
 176.91
 171.91
 166.90
 161.89
 156.88
 151.87
 146.86
 141.85
 136.84
 131.83
 126.82
 121.81
 116.81
 111.80
 106.79

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/N SO) FOR 5- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE TRT 1 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

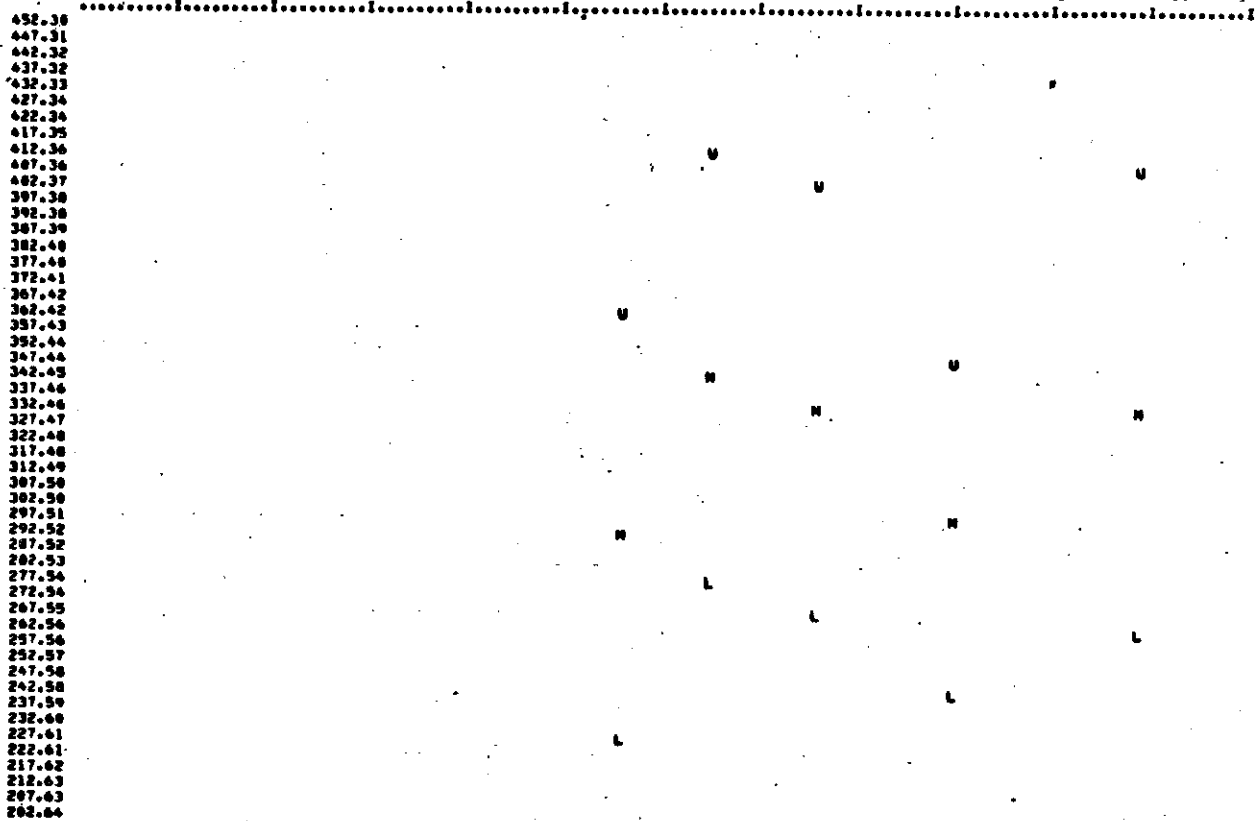
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/N SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160	10	273.28	22.68	2.27	221.63	324.76
197	10	262.92	19.28	2.27	229.08	297.54
229	10	156.27	13.91	2.27	118.65	181.90
272	10	166.94	16.43	2.27	129.58	204.30
328	10	176.95	19.25	2.27	141.38	216.73



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (LB/M SO) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1. FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (LB/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160	10	170.88	11.54	2.27	152.64	205.12
197	10	243.33	21.23	2.27	195.86	291.60
229	10	232.64	39.72	2.27	142.33	322.96
272	10	187.37	19.34	2.27	143.41	231.33
320	10	229.01	56.31	2.27	101.78	357.84



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/N 50) FOR 20- 50 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/N 50)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160	10	292.69	29.70	2.27		
197	10	343.30	29.06	2.27	225.15	360.22
229	10	334.02	29.11	2.27	275.42	411.10
272	10	295.20	23.43	2.27	260.62	401.01
320	10	334.02	31.46	2.27	241.95	348.46
				2.27	263.29	406.36

230.46
 227.40
 222.33
 217.27
 212.21
 207.14
 202.08
 197.02
 191.95
 186.89
 181.83
 176.76
 171.70
 166.64
 161.57
 156.51
 151.45
 146.38
 141.32
 136.26
 131.19
 126.13
 121.07
 116.00
 110.94
 105.88
 100.81
 95.75
 90.69
 85.62
 80.56
 75.49
 70.43
 65.37
 60.30
 55.24
 50.18
 45.11
 40.05
 34.99
 29.92
 24.86
 19.80
 14.73
 9.67
 4.61
 -0.46
 -5.52
 -10.58
 -15.65
 -20.71

.....I
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 50- 70 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRY 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168	3	74.40	27.25	3.58 *	-20.71	171.82
197	3	106.89	29.21	3.58 *	2.45	211.33
229	3	100.99	28.20	3.58 *	6.17	209.80
272	3	120.51	23.41	3.58 *	36.82	204.21
328	2	110.03	47.16	0.00 **	110.03	110.03

*Slightly lower than the table value

**Number of observations too small to compute TEE value

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

279.53
264.35
258.17
252.00
245.82
239.64
233.46
227.28
221.11
214.93
208.75
202.57
196.39
190.21
184.04
177.86
171.68
165.50
159.32
153.15
146.97
140.79
134.61
128.43
122.26
116.08
109.90
103.72
97.54
91.37
85.19
79.01
72.83
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48.12
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23.41
17.23
11.05
4.87
-1.30
-7.48
-13.66
-19.84
-26.02
-32.19
-38.37

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

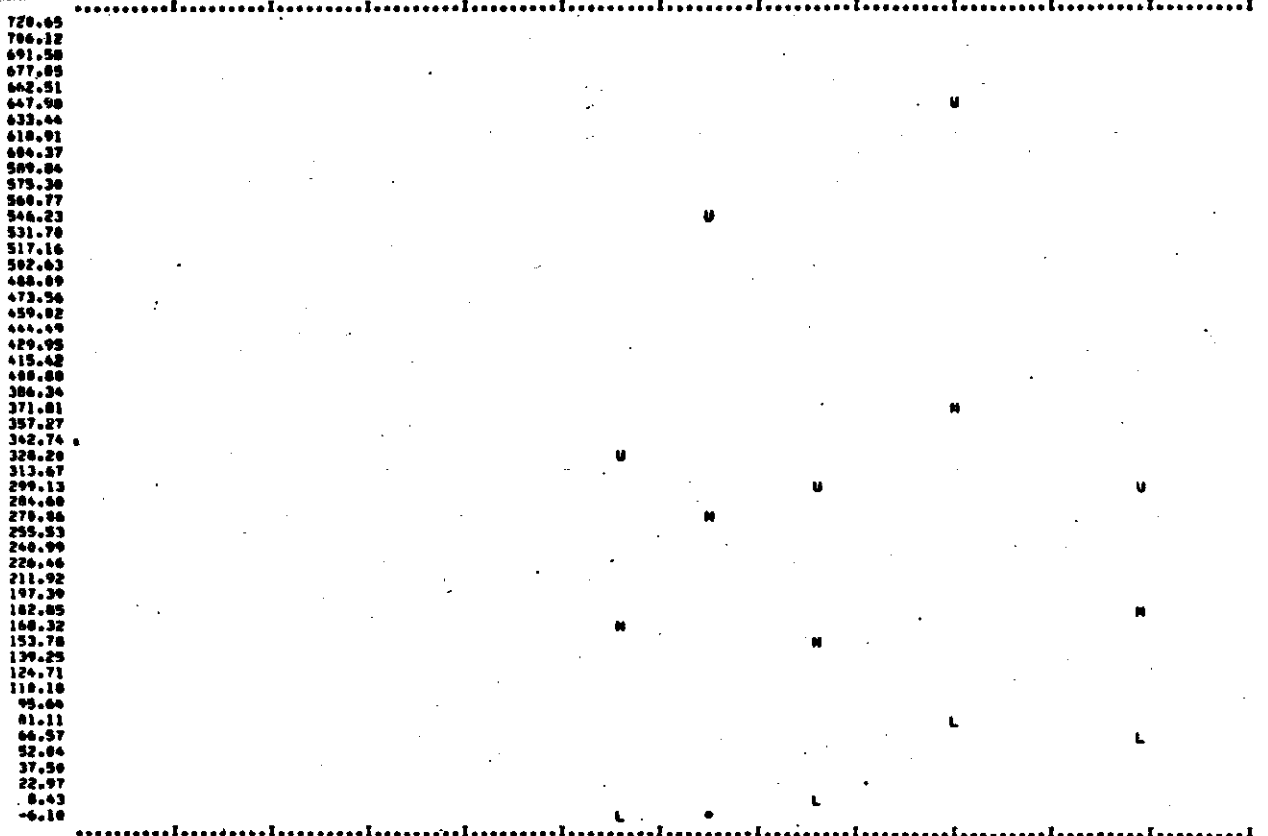
AXIS LABELS FOR THIS PLOT ARE -
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 70- 90 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160	3	50.30	17.31	3.50 **	-11.61	112.21
197	3	81.74	14.41	3.50 **	30.23	133.25
229	3	50.54	20.96	3.50 **	-19.39	130.40
272	3	101.65	40.30	3.50 **	-38.37	245.94
328	2	45.59	20.43	0.00 ***	45.59	45.59

*Slightly lower than the table value
**Number of observations too small to compute a TEE value

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

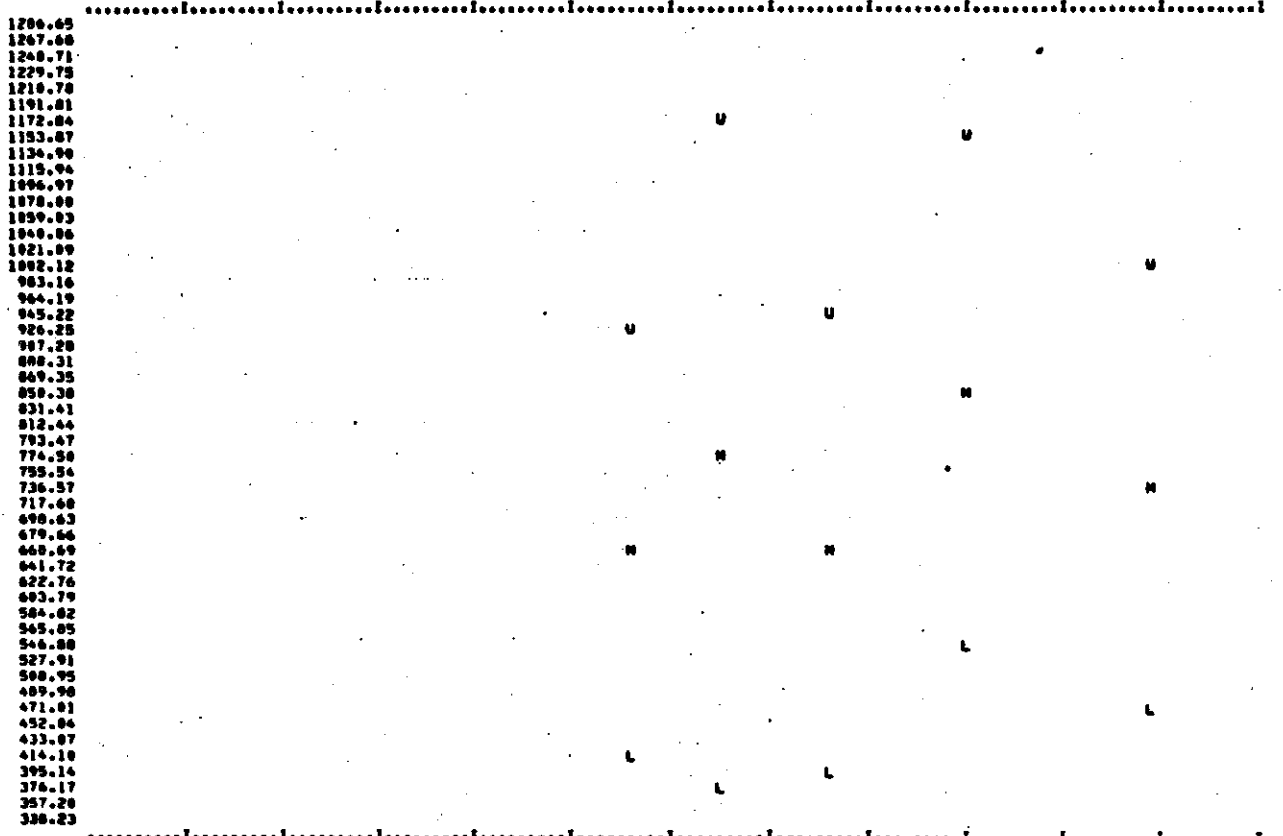


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 8 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRY 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160	10	164.42	74.68	2.27	-5.38	334.22
197	10	272.89	123.81	2.27	-6.10	552.55
229	10	149.33	64.93	2.27	1.72	296.94
272	10	305.94	127.28	2.27	76.74	655.14
320	10	184.23	46.63	2.27	73.66	294.88

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
166	10	667.12	109.05	2.27	417.36	916.87
197	10	772.75	174.59	2.27	379.81	1169.68
229	10	669.94	119.22	2.27	398.98	940.99
272	10	849.14	129.99	2.27	553.88	1144.48
328	10	732.82	118.67	2.27	463.02	1002.62

1456.38
 1437.12
 1417.87
 1398.61
 1379.36
 1360.10
 1340.85
 1321.59
 1302.34
 1283.08
 1263.83
 1244.57
 1225.32
 1206.06
 1186.81
 1167.55
 1148.30
 1129.04
 1109.79
 1090.53
 1071.28
 1052.02
 1032.77
 1013.51
 994.26
 975.00
 955.75
 936.49
 917.24
 897.98
 878.73
 859.47
 840.22
 820.96
 801.70
 782.45
 763.19
 743.94
 724.68
 705.43
 686.17
 666.92
 647.66
 628.41
 609.15
 589.90
 570.64
 551.39
 532.13
 512.88
 493.62

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 20 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168	10	828.88	112.48	2.27	572.53	1083.62
197	10	936.22	178.55	2.27	548.47	1323.98
229	10	862.23	121.36	2.27	566.30	1118.15
272	10	1089.67	128.78	2.27	787.88	1293.46
320	10	899.28	123.78	2.27	577.79	1140.61

1743.51
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 1700.38
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 1635.69
 1614.12
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 1484.73
 1463.16
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 1420.03
 1398.47
 1376.90
 1355.34
 1333.77
 1312.21
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 1225.94
 1204.38
 1182.81
 1161.25
 1139.68
 1118.12
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 924.03
 902.46
 880.90
 859.33
 837.77
 816.20
 794.64
 773.07
 751.50
 729.94
 708.37
 686.81
 665.24

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/W SQ) FOR 0- 90 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/W SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160	10	1120.45	131.29	2.27	821.97	1418.94
197	10	1220.68	156.77	2.27	872.10	1505.01
229	10	1140.12	140.11	2.27	829.50	1466.65
272	10	1230.06	140.51	2.27	919.21	1550.11
328	10	1089.01	153.00	2.27	739.16	1438.87

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592.06
583.78
575.49
567.21
558.93
550.64
542.36
534.07
525.79
517.51
509.22
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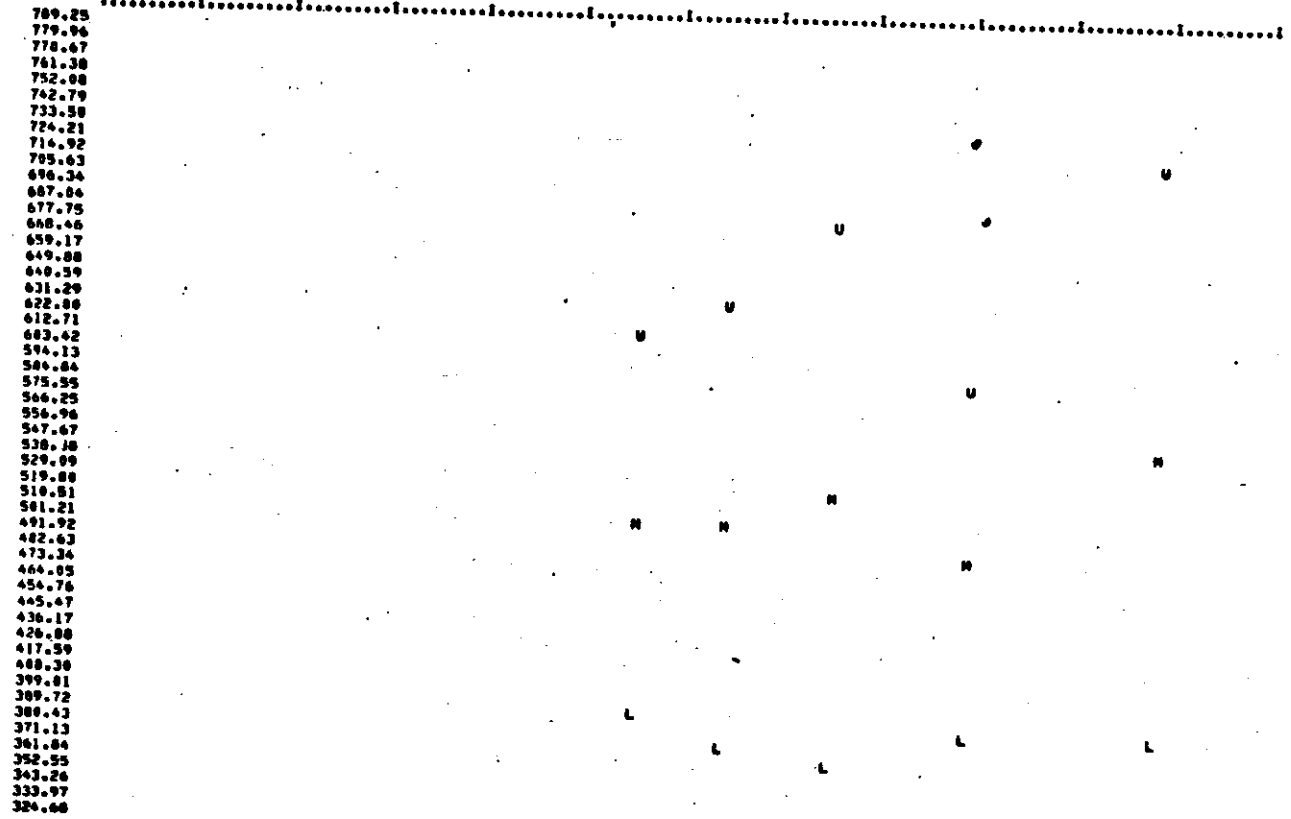
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.....|
1.0   31.0   61.0   91.0   121.0   151.0   181.0   211.0   241.0   271.0   301.0   331.0   361.0
AXIS LABELS FOR THIS PLOT ARE -
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 5 CM DEPTH

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THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRY 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

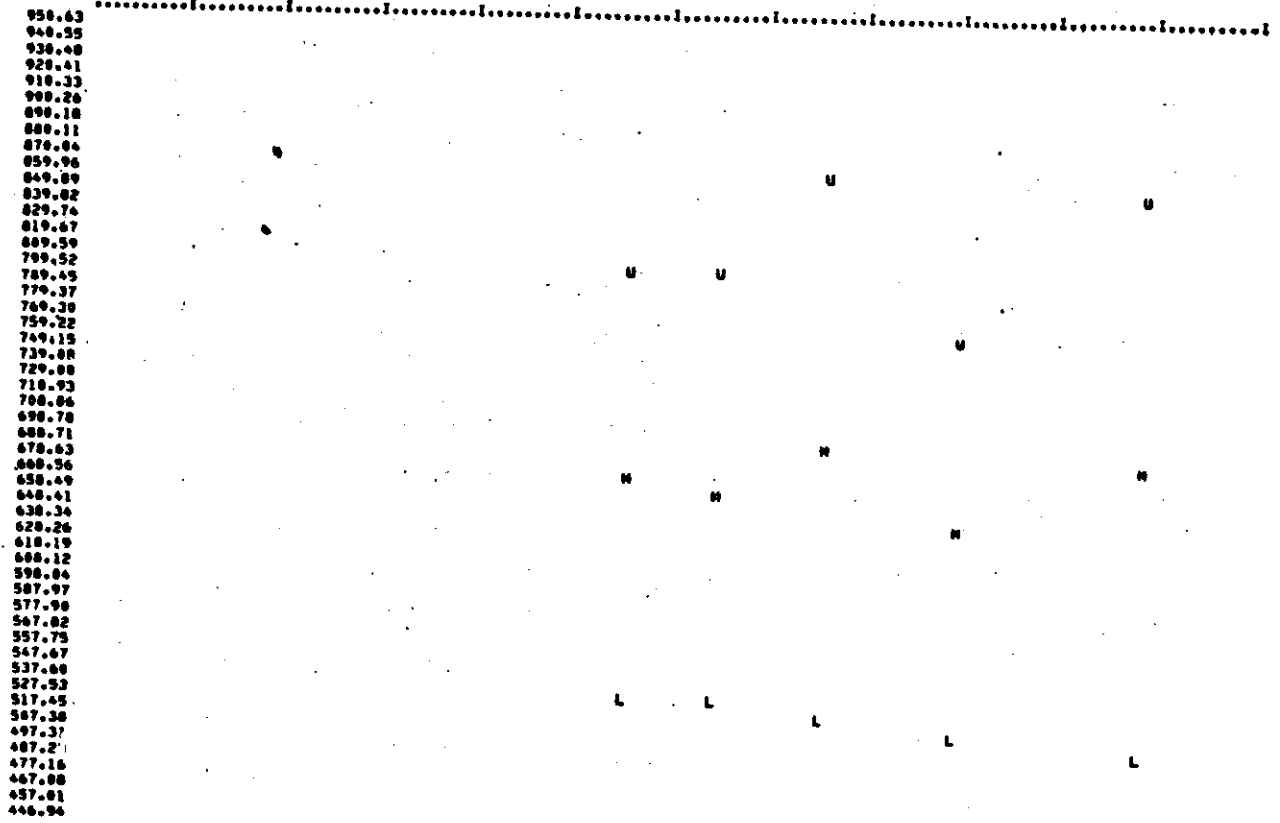
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160	10	310.15	37.37	2.27	233.19	403.12
197	10	302.75	41.44	2.27	208.53	396.97
229	10	341.42	63.24	2.27	197.64	485.20
272	10	328.33	31.23	2.27	257.54	399.52
328	10	402.72	59.41	2.27	267.21	538.24



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIONASS (g/M SO) FOR 0- 10 CM DEPTH

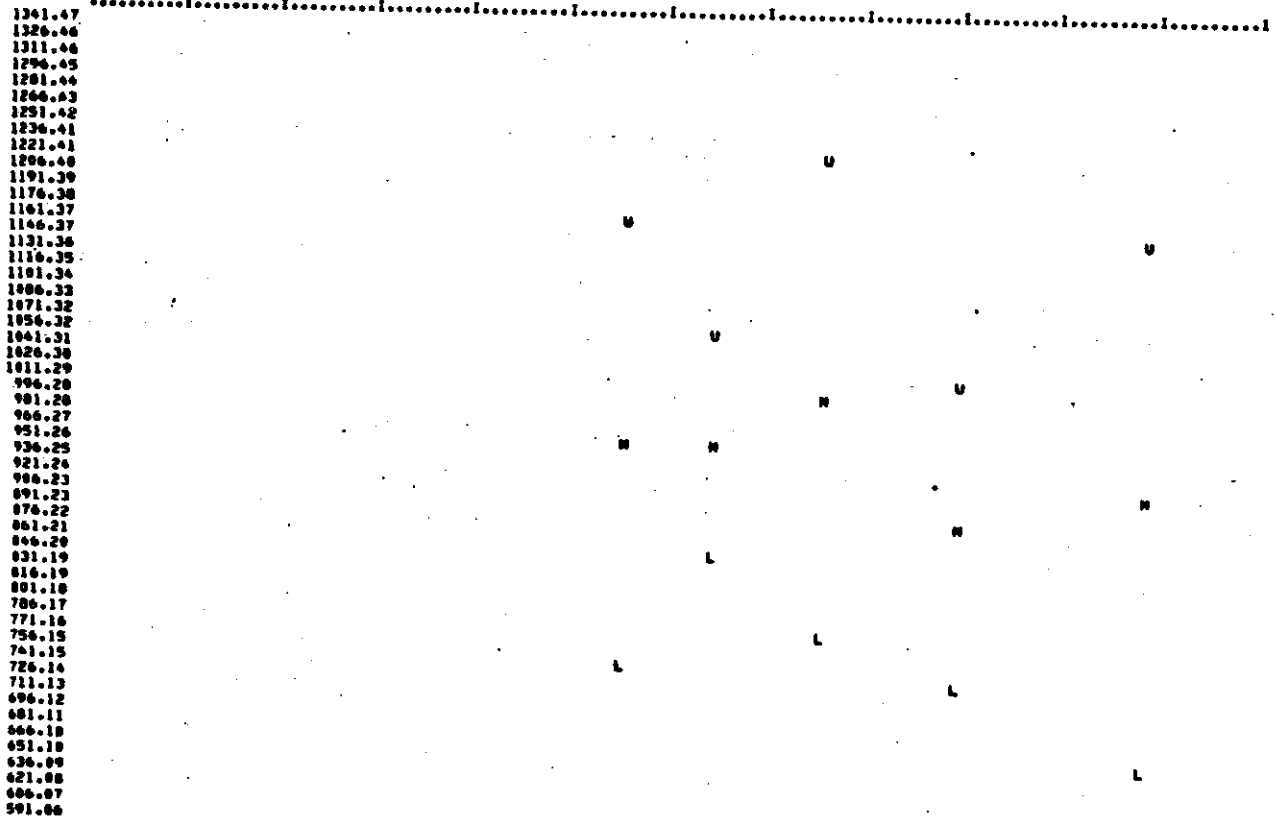
THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIONASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (g/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
160	10	502.69	47.94			
197	10	499.06	50.10	2.27	393.70	611.66
229	10	520.61	70.32	2.27	367.70	631.95
272	10	483.20	43.71	2.27	360.75	606.46
320	10	540.59	74.29	2.27	383.84	582.57
				2.27	379.60	717.50



AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIODASS (G/M SQ) FOR 0- 20 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIODASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168	10	663.66	66.45	2.27	526.22	801.10
197	10	663.34	58.37	2.27	530.63	796.05
229	10	692.89	73.35	2.27	521.58	864.21
272	10	634.73	53.93	2.27	512.12	757.35
328	10	674.97	78.46	2.27	496.68	853.35

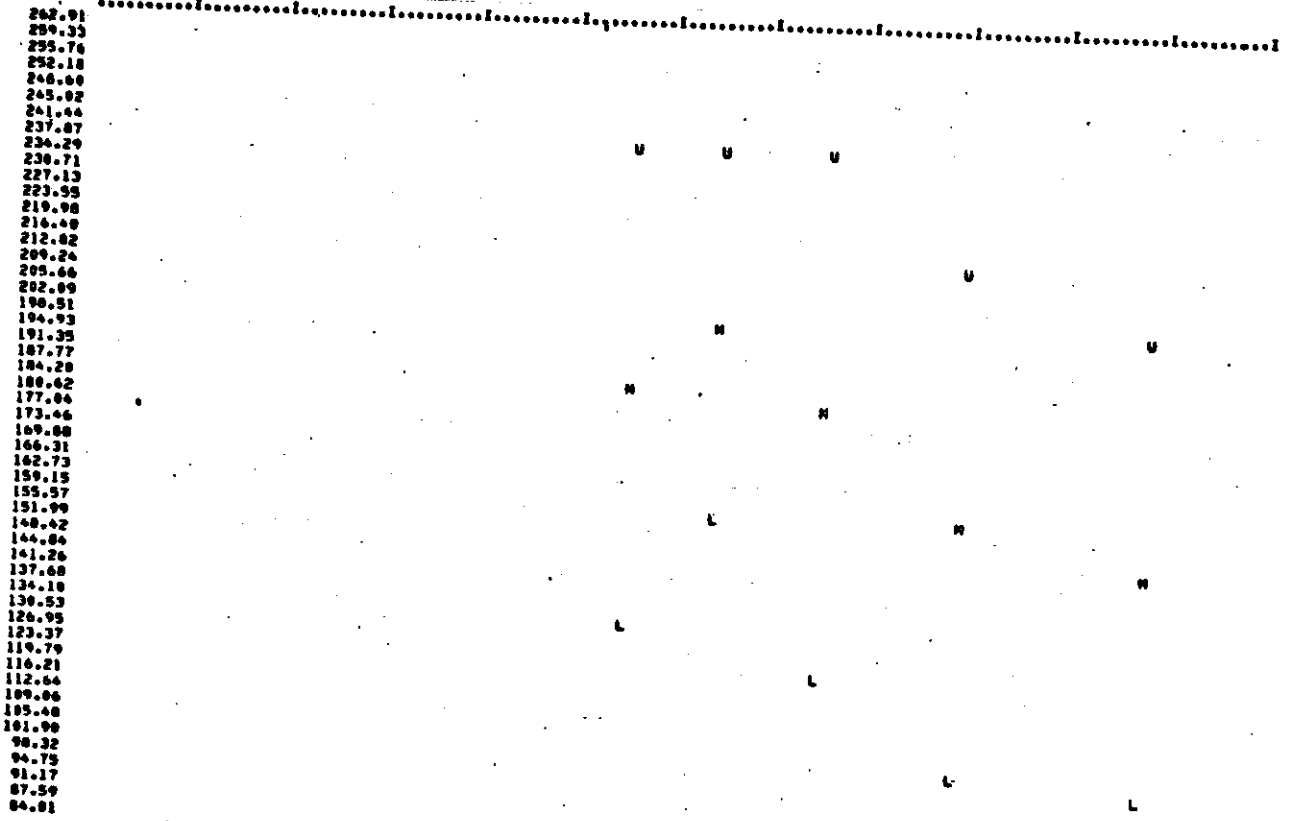


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BGM (G/M SO) FOR 0-90 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BGM SAMPLING ON SITE OSAGE TRT 5 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168*	10	956.03	92.42			
197*	10	959.72	46.21	2.27	745.92	1166.15
229*	10	990.79	97.89	2.27	850.65	1060.78
272**	10	872.72	61.72	2.27	770.85	1219.52
320**	10	900.79	109.10	2.27	732.91	1013.03
				2.27	656.74	1152.84

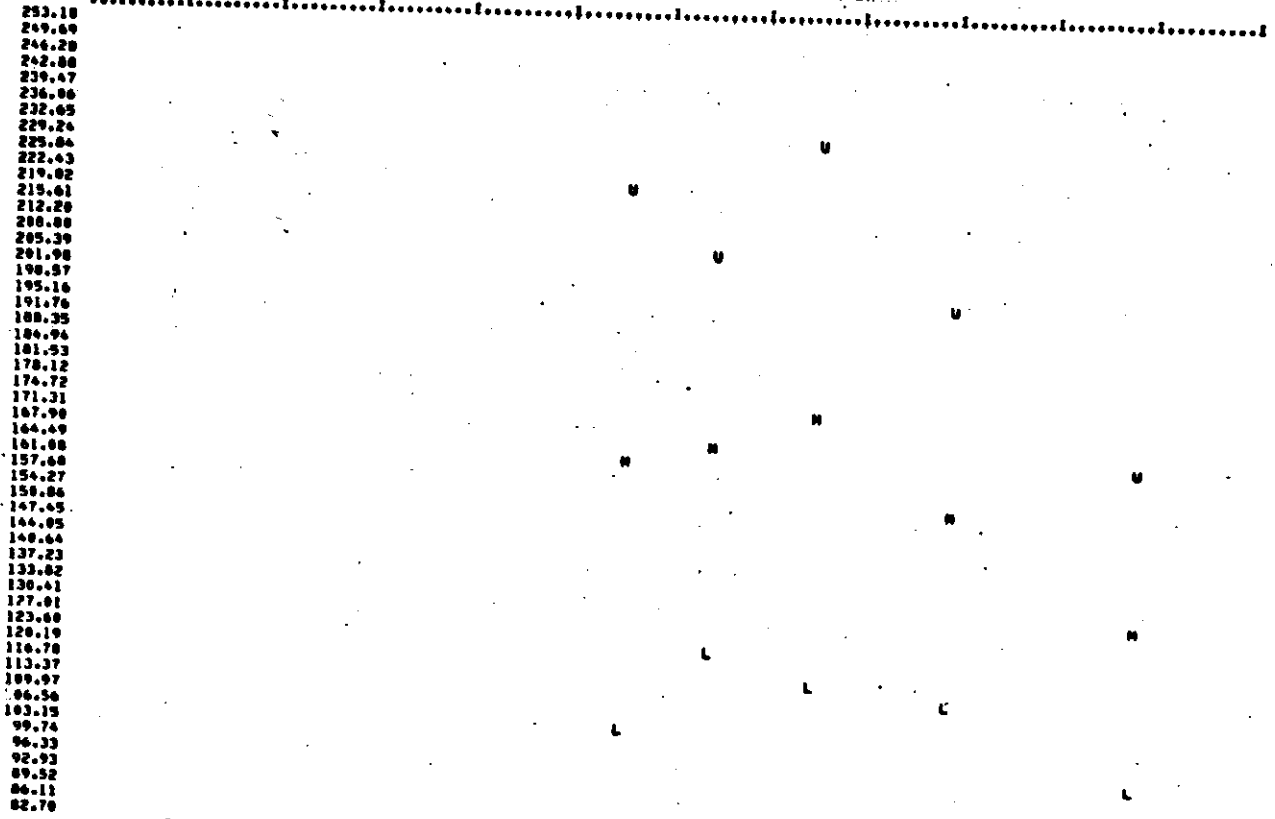
*Sequence missing 320 cm of core length
 **Sequence missing 280 cm of core length



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 5- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRY 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

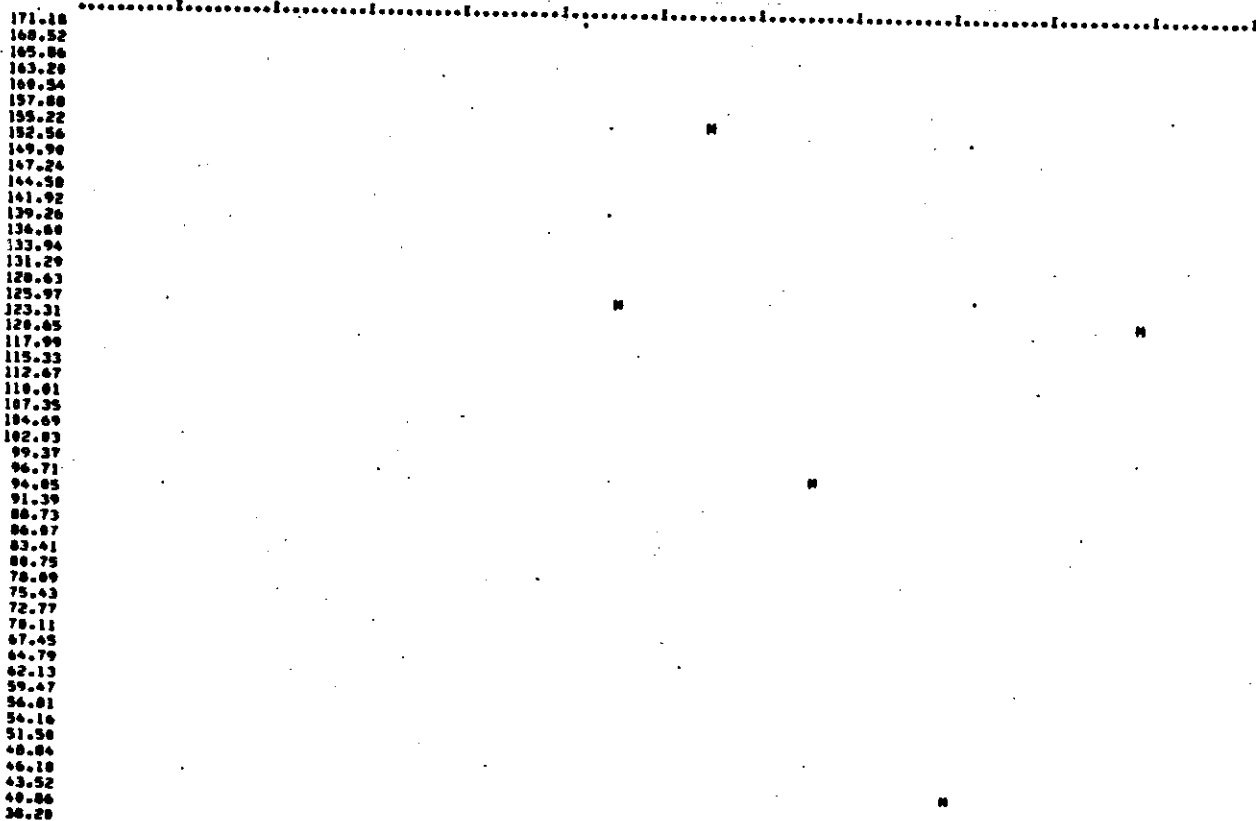
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168	10	184.54	23.32			
197	10	197.12	18.43	2.27	131.52	237.56
229	10	179.20	25.98	2.27	155.22	239.01
272	10	154.68	24.93	2.27	128.13	238.26
328	10	105.87	23.18	2.27	97.99	211.36
					93.35	198.40



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
168	10	160.96	24.93			
197	10	163.48	18.93	2.27	144.28	217.64
229	10	172.28	25.43	2.27	120.43	206.52
272	10	151.53	18.84	2.27	114.47	230.09
328	10	126.30	15.17	2.27	109.14	193.92
					91.09	168.87

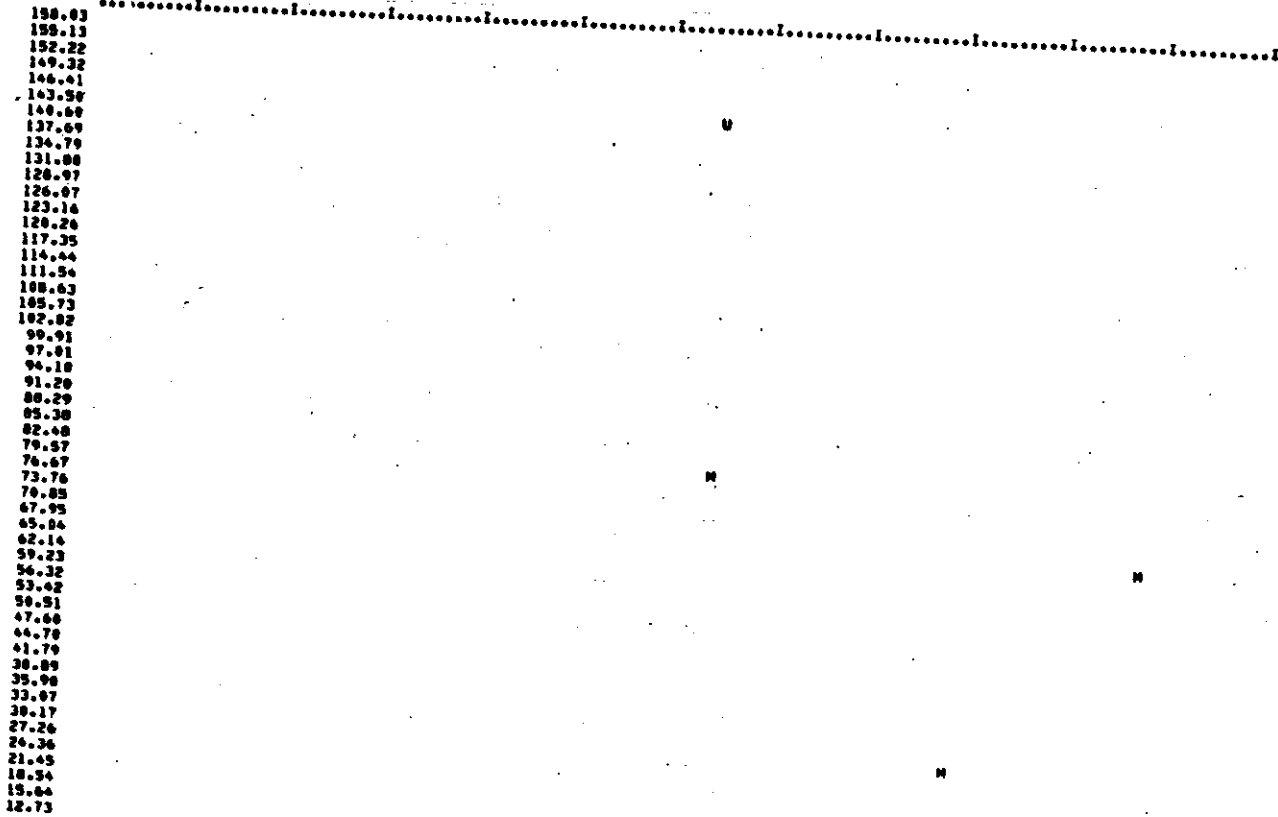


AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 50- 70 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON-SITE OSAGE, TRY 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE ² VALUE	LOWER LIMIT	UPPER LIMIT
180	2	125.75	59.73	0.00	125.75	125.75
197	2	155.62	36.15	0.00	155.62	155.62
229	2	97.46	31.44	0.00	97.46	97.46
272	2	42.44	29.67	0.00	42.44	42.44
328	2	122.61	25.15	0.00	122.61	122.61

*Number of observations too small to compute a TEE value



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 70- 90 CM DEPTH

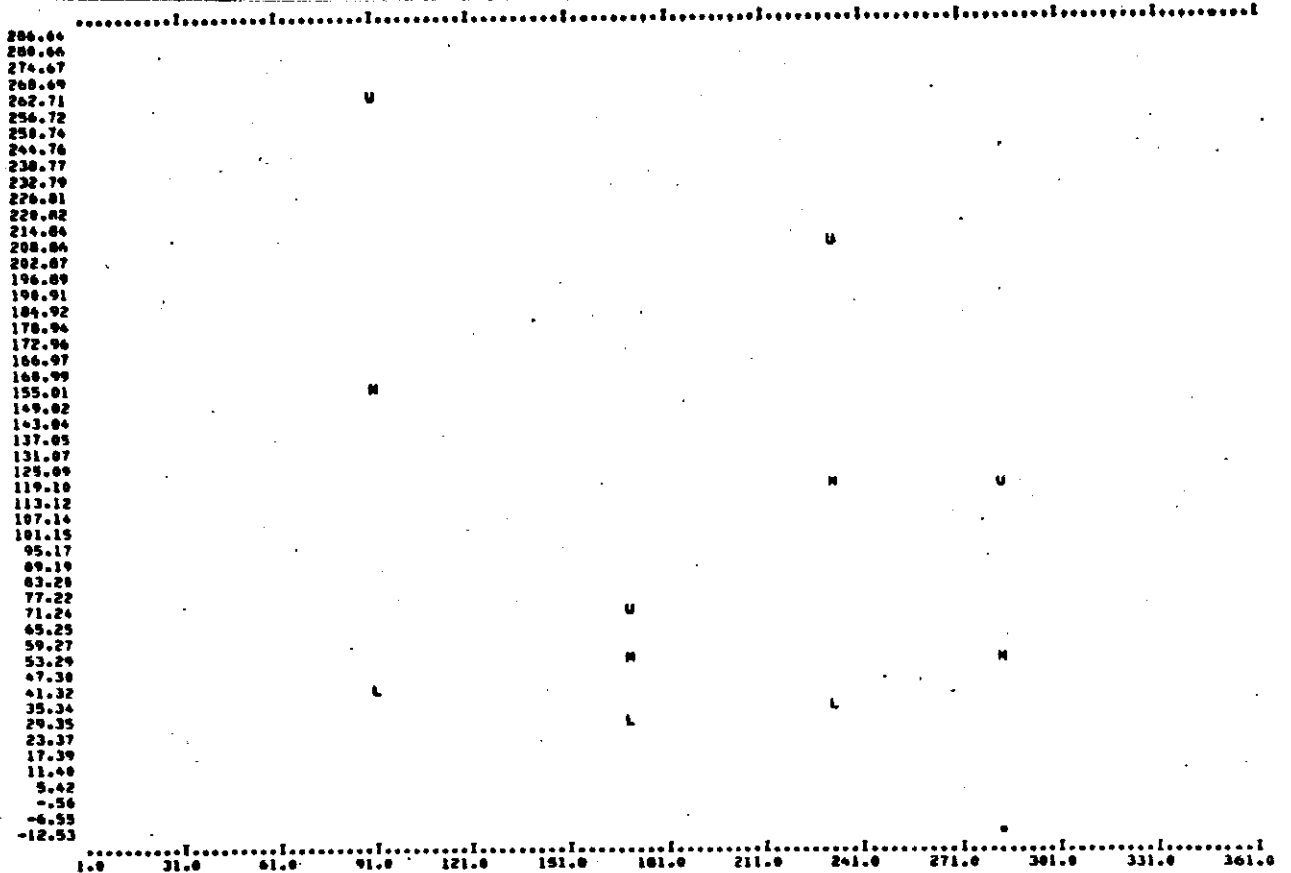
THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRY 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
197	3	79.64	17.91			
229	2	14.15	1.57	3.50 *	15.62	143.67
272	2	28.29	6.29	6.88 **	14.15	14.15
328	2	64.45	7.86	6.88 **	28.29	28.29
				6.88 **	64.45	64.45

*Slightly lower than the table value
 **Number of observations too small to compute a TEE value

5.2 Data for 1971

The belowground herbage biomass on the Osage Site was sampled on each of two replicates for treatments 1 and 5 on each of four sampling dates during the 1971 season. Depth increments used were 0 to 5, 5 to 10, 10 to 20, and 20 to 50 cm levels. The crown material was separated and reported as a 0 to 0 cm level with dry weights and ash weights available. All data were reported on an ash-free weight basis. Problems with the 1971 Osage data set were similar to those found with the 1970 data set. Notably, the core diameter was incorrect when there were four cores per quadrat recorded in this data set, but there appeared to be only one core per quadrat; therefore, the original results indicated a level of biomass four times as large as it should be, and the quadrat size was incorrect.



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0- 0 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRY 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	152.06	42.22	2.57	43.53	260.58
109	6	91.45	7.48	2.57	32.23	70.66
231	6	120.93	36.43	2.57	32.43	209.43
283	6	53.44	26.21	2.57	-12.53	120.81

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

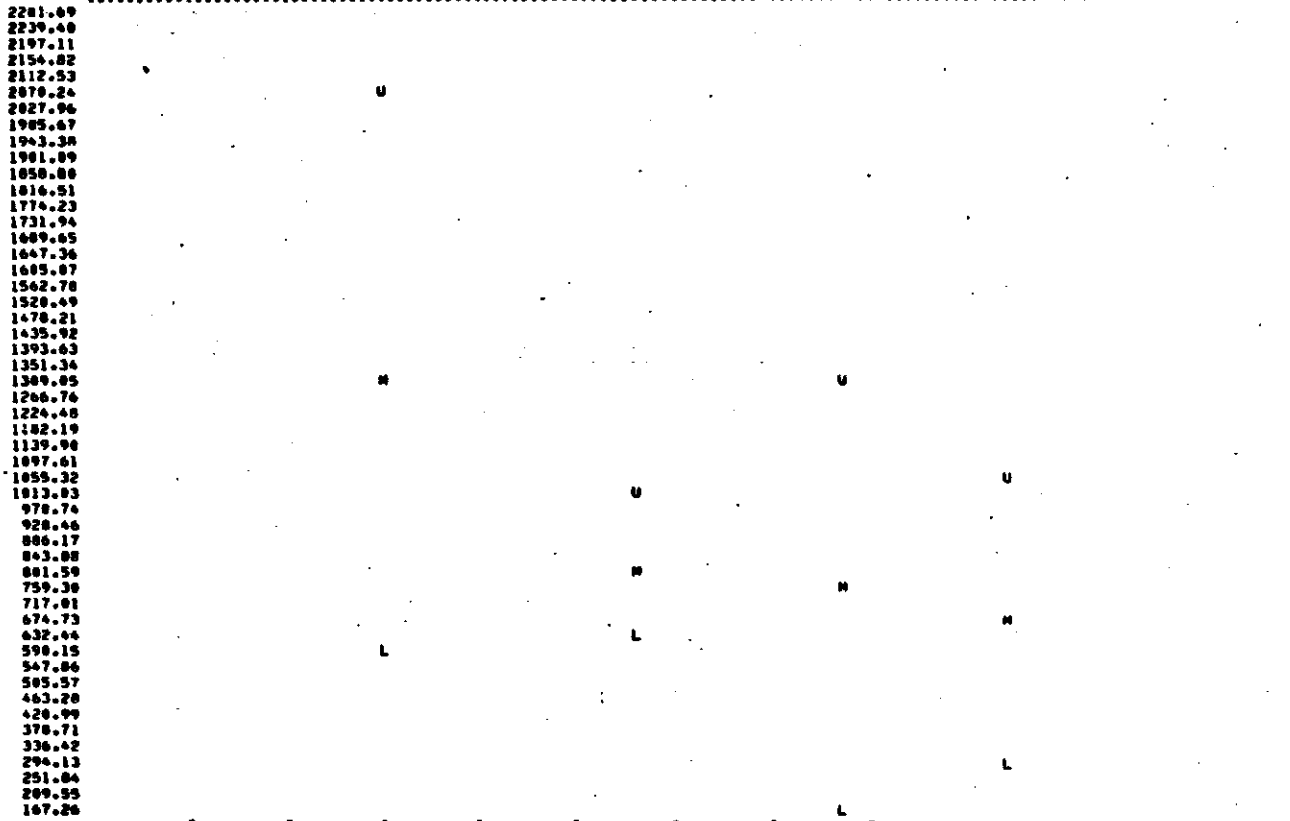
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 1719.12
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 1649.32
 1614.42
 1579.51
 1544.61
 1509.71
 1474.80
 1439.90
 1405.00
 1370.09
 1335.19
 1300.29
 1265.39
 1230.48
 1195.58
 1160.68
 1125.77
 1090.87
 1055.97
 1021.06
 986.16
 951.26
 916.36
 881.45
 846.55
 811.65
 776.74
 741.84
 706.94
 672.03
 637.13
 602.23
 567.33
 532.42
 497.52
 462.62
 427.71
 392.81
 357.91
 323.01
 288.10
 253.20
 218.30
 183.39
 148.49
 113.59

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	1063.13	243.79	2.57	436.58	1689.76
169	6	663.55	78.18	2.57	483.18	843.93
231	6	428.45	195.48	2.57	126.21	1138.68
283	6	518.52	147.54	2.57	139.29	897.75



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 20 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	1328.57	290.11	2.57	542.40	2074.26
169	6	810.47	78.95	2.57	628.12	992.83
231	6	756.92	222.18	2.57	185.85	1328.00
293	6	682.62	146.91	2.57	305.83	1060.22

2918.89
 2859.81
 2809.54
 2759.27
 2708.99
 2658.72
 2608.44
 2558.17
 2507.90
 2457.62
 2407.35
 2357.08
 2306.80
 2256.53
 2206.26
 2155.99
 2105.71
 2055.43
 2005.16
 1954.89
 1904.61
 1854.34
 1804.07
 1753.79
 1703.52
 1653.24
 1602.97
 1552.70
 1502.42
 1452.15
 1401.88
 1351.60
 1301.33
 1251.06
 1200.78
 1150.51
 1100.23
 1049.96
 999.69
 949.41
 899.14
 848.87
 798.59
 748.32
 698.04
 647.77
 597.50
 547.22
 496.95
 446.68
 396.40

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M 50) FOR 0- 50 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M 50)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
96	6	1769.96	346.64	2.57	894.39	2645.53
169	6	932.14	185.93	2.57	659.85	1204.43
231	6	1021.63	210.32	2.57	460.47	1582.79
283	6	826.32	147.79	2.57	448.45	1288.28

1705.80
 1673.35
 1640.89
 1608.43
 1575.97
 1543.52
 1511.06
 1478.60
 1446.14
 1413.69
 1381.23
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 1283.86
 1251.40
 1218.94
 1186.48
 1154.03
 1121.57
 1089.11
 1056.65
 1024.20
 991.74
 959.28
 926.82
 894.37
 861.91
 829.45
 796.99
 764.54
 732.08
 699.62
 667.16
 634.71
 602.25
 569.79
 537.33
 504.88
 472.42
 439.96
 407.50
 375.05
 342.59
 310.13
 277.67
 245.22
 212.76
 180.30
 147.84
 115.39
 82.93

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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
99	6	911.07	248.86	2.57	271.42	1550.73
169	6	612.10	63.76	2.57	448.22	775.98
231	6	507.51	161.00	2.57	92.14	922.89
283	6	465.07	126.27	2.57	140.53	789.62

2129.17
 2089.36
 2049.51
 2009.66
 1969.81
 1930.92
 1890.19
 1850.35
 1810.52
 1770.69
 1730.86
 1691.03
 1651.20
 1611.37
 1571.54
 1531.71
 1491.88
 1452.05
 1412.22
 1372.39
 1332.56
 1292.73
 1252.90
 1213.07
 1173.24
 1133.41
 1093.58
 1053.75
 1013.92
 974.09
 934.26
 894.43
 854.60
 814.77
 774.94
 735.11
 695.28
 655.44
 615.61
 575.78
 535.95
 496.12
 456.29
 416.46
 376.63
 336.80
 296.97
 257.14
 217.31
 177.48
 137.65

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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRY 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	1174.52	295.33	2.57	417.43	1935.61
169	6	759.82	65.68	2.57	598.41	927.63
231	6	635.99	187.93	2.57	152.94	1119.04
283	6	629.18	126.27	2.57	384.62	953.74

2772.24
 2724.45
 2676.66
 2628.87
 2581.08
 2533.29
 2485.50
 2437.71
 2389.92
 2342.13
 2294.34
 2246.55
 2198.76
 2150.96
 2103.17
 2055.38
 2007.59
 1959.80
 1912.01
 1864.22
 1816.43
 1768.64
 1720.85
 1673.06
 1625.27
 1577.48
 1529.69
 1481.90
 1434.11
 1386.32
 1338.53
 1290.74
 1242.95
 1195.16
 1147.37
 1099.58
 1051.79
 1004.00
 956.21
 908.42
 860.63
 812.84
 765.05
 717.26
 669.47
 621.68
 573.89
 526.10
 478.31
 430.52
 382.73

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/N SQ) FOR 0- 50 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRY 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/N SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
98	6	1617.91	351.05	2.57	715.60	2520.22
169	6	888.58	193.44	2.57	614.82	1166.55
231	6	988.78	184.98	2.57	425.25	1374.15
283	6	766.88	132.39	2.57	426.58	1107.18

1398.26
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 1308.99
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 1254.81
 1227.72
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 1092.26
 1065.17
 1038.08
 1010.99
 983.90
 956.81
 929.71
 902.62
 875.53
 848.44
 821.35
 794.26
 767.17
 740.08
 712.99
 685.90
 658.80
 631.71
 604.62
 577.53
 550.44
 523.35
 496.26
 469.17
 442.08
 414.99
 387.89
 360.80
 333.71
 306.62
 279.53
 252.44
 225.35
 198.26
 171.17
 144.07
 116.98
 89.89
 62.80
 35.71

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE (OSAGE, TRY 1) FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	692.16	222.43	2.97	129.45	1263.87
169	6	498.29	72.66	2.97	311.52	685.07
231	6	419.78	133.99	2.97	75.36	764.19
293	6	331.46	113.52	2.97	39.68	623.23

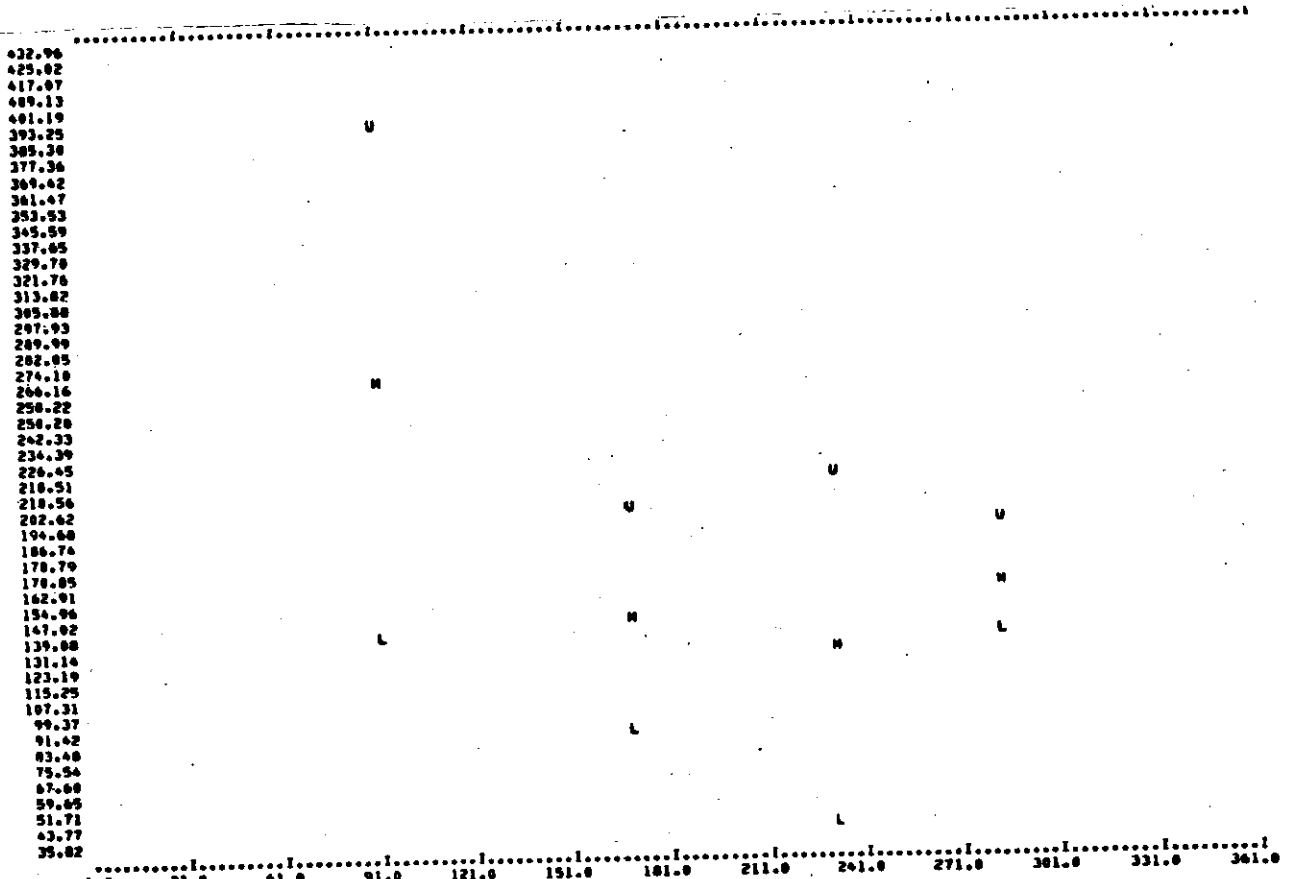
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 269.78
 262.81
 255.83
 248.86
 241.89
 234.91
 227.94
 220.97
 213.99
 207.02
 200.05
 193.07
 186.10
 179.13
 172.15
 165.18
 158.21
 151.23
 144.26
 137.29
 130.32
 123.34
 116.37
 109.40
 102.42
 95.45
 88.48
 81.50
 74.53
 67.56
 60.58
 53.61
 46.64
 39.66
 32.69
 25.72
 18.74
 11.77

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 5- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
98	6	218.91	42.31	2.57	118.16	327.66
169	6	113.81	14.94	2.57	75.40	152.21
231	6	87.82	29.88	2.57	13.00	162.55
283	6	133.81	26.79	2.57	64.75	202.48



THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE TRT I FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (0/M SQ)	STANDARD ERROR	TCC VALUE	LOWER LIMIT	UPPER LIMIT
98	6	265.44	49.86	2.57	137.28	393.68
169	6	144.92	21.49	2.57	91.67	262.17
231	6	120.48	34.58	2.57	39.88	217.15
283	6	164.11	18.83	2.57	136.26	191.95

752.93
737.59
722.26
706.93
691.59
676.26
660.93
645.59
630.26
614.93
599.59
584.26
568.93
553.59
538.26
522.93
507.59
492.26
476.93
461.59
446.26
430.93
415.59
400.26
384.93
369.59
354.26
338.93
323.59
308.26
292.93
277.59
262.26
246.93
231.59
216.26
200.93
185.59
170.26
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1.59
-13.74

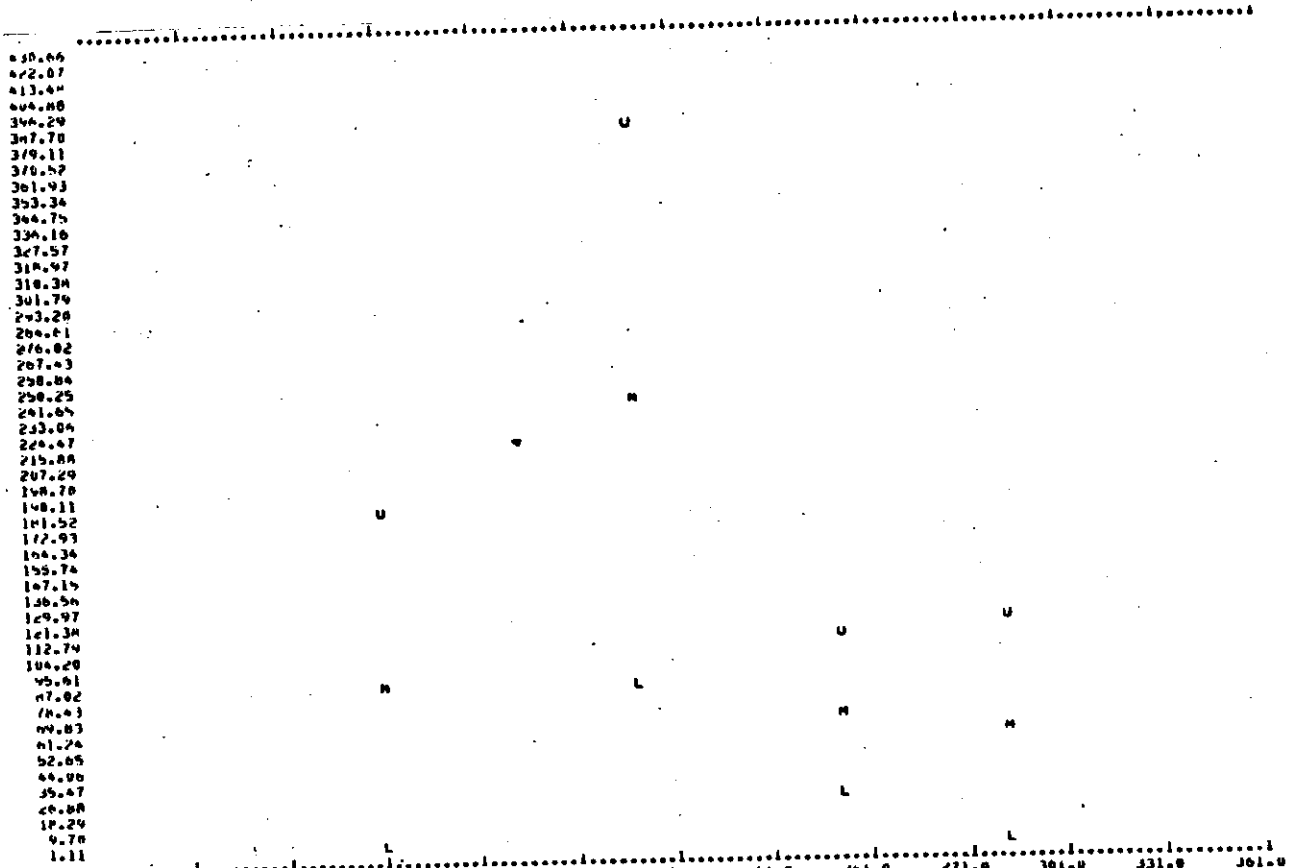
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1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1971
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20- 50 CM DEPTH.

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 1 FOR 1971
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
98	6	441.39	94.57	2.57	198.38	684.48
169	6	121.67	53.27	2.57	-13.74	258.60
231	6	264.71	62.21	2.57	184.88	424.61
263	6	137.78	41.88	2.57	38.26	245.14

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

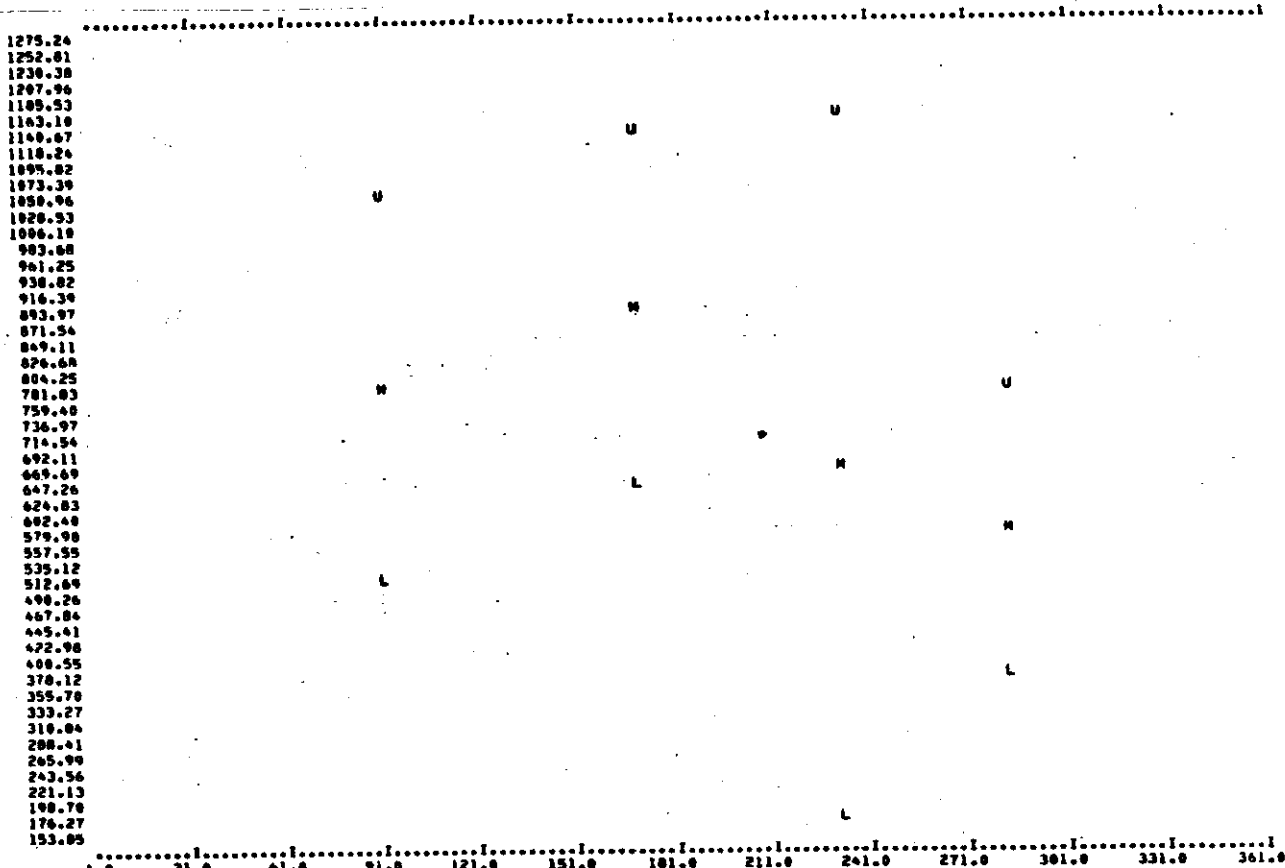


1.0 11.0 21.0 31.0 41.0 51.0 61.0 71.0 81.0 91.0 101.0 111.0 121.0 131.0 141.0 151.0 161.0 171.0 181.0 191.0 201.0 211.0 221.0 231.0 241.0 251.0 261.0 271.0 281.0 291.0 301.0 311.0 321.0 331.0 341.0 351.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M² SOI) FOR U- U CM DEPTH

THESE DATA INCLUDE CHURN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE: TNT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ² SOI)	STANDARD ERROR	TOT. VALUE	LOWER LIMIT	UPPER LIMIT
90	3	40.29	32.53	2.74	1.23	170.35
164	6	237.99	59.73	4.57	84.46	391.51
231	6	89.06	15.64	2.57	29.26	100.00
293	6	61.62	22.73	2.57	3.26	120.93



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	786.27	106.70	2.57	512.01	1060.52
169	6	894.31	98.59	2.57	640.98	1147.71
231	6	645.12	192.26	2.57	179.94	1159.31
283	6	577.83	77.93	2.57	377.52	776.14

1541.67
 1515.30
 1488.93
 1462.57
 1436.20
 1409.84
 1383.47
 1357.11
 1330.74
 1304.38
 1278.01
 1251.65
 1225.28
 1198.91
 1172.55
 1146.18
 1119.82
 1093.45
 1067.09
 1040.72
 1014.36
 987.99
 961.63
 935.26
 908.89
 882.53
 856.16
 829.80
 803.43
 777.07
 750.70
 724.34
 697.97
 671.61
 645.24
 618.87
 592.51
 566.14
 539.78
 513.41
 487.05
 460.68
 434.32
 407.95
 381.59
 355.22
 328.85
 302.49
 276.12
 249.76
 223.39

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 20 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE TRT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	1043.53	139.27	2.57	685.55	1481.51
169	6	1119.82	99.76	2.57	863.42	1376.23
231	6	728.87	183.89	2.57	248.21	1193.53
283	6	682.73	82.54	2.57	478.56	894.98

2406.23
 2425.20
 2384.16
 2343.13
 2302.09
 2261.06
 2220.02
 2178.99
 2137.95
 2096.92
 2055.88
 2014.85
 1973.81
 1932.78
 1891.74
 1850.71
 1809.67
 1768.64
 1727.60
 1686.57
 1645.53
 1604.50
 1563.46
 1522.43
 1481.39
 1440.36
 1399.32
 1358.29
 1317.25
 1276.22
 1235.18
 1194.15
 1153.11
 1112.08
 1071.04
 1030.01
 988.97
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 906.90
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 742.76
 701.73
 660.69
 619.66
 578.62
 537.59
 496.55
 455.52
 414.48

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 50 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRY 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

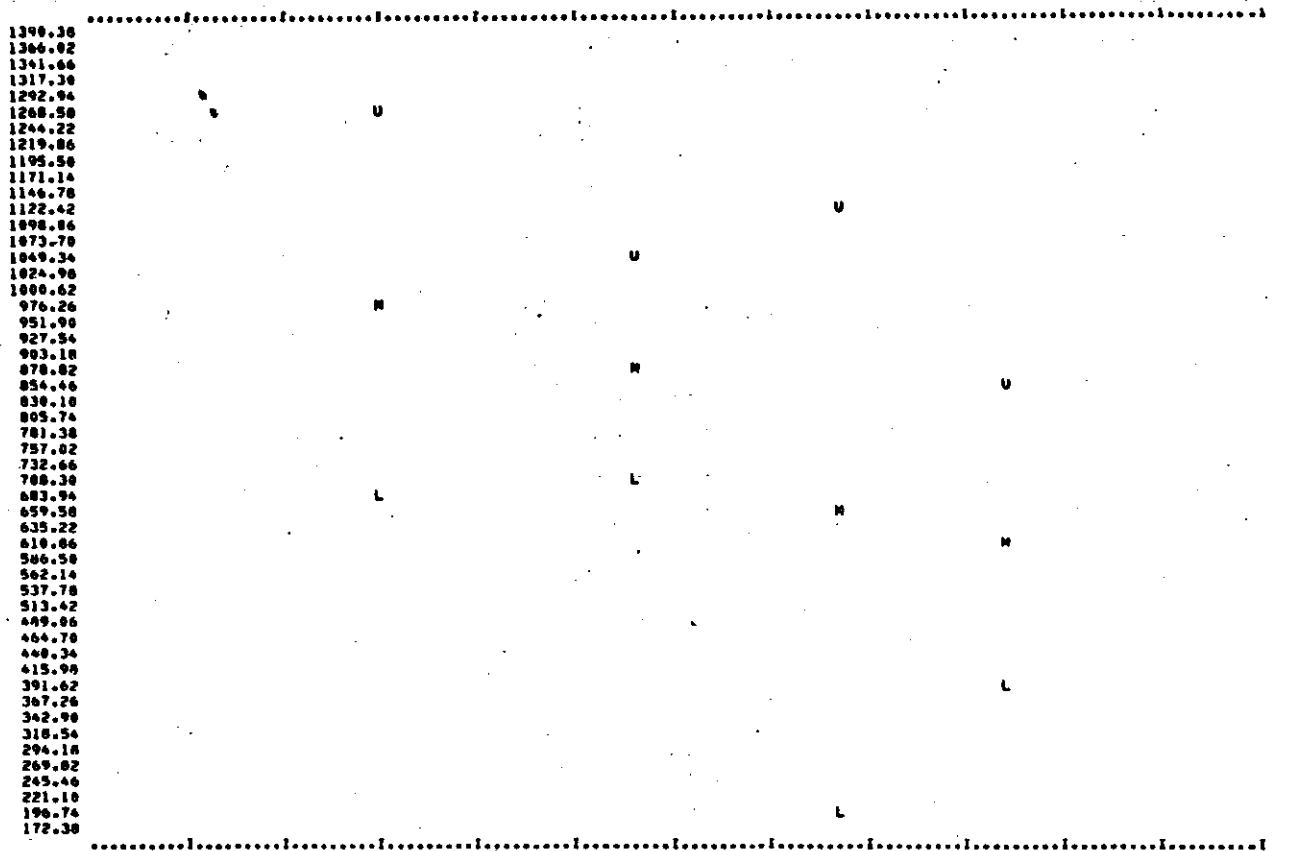
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	1546.75	278.50			
160	6	1234.60	113.61	2.57	942.67	1526.68
231	6	912.75	175.94	2.57	468.53	1364.97
283	6	634.60	87.81	2.57	608.99	1060.37

1105.99
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 405.94
 384.27
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 340.93
 319.27
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 275.93
 254.27
 232.60
 210.93
 189.27
 167.60
 145.93
 124.26
 102.60

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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
99	6	711.02	93.70	2.57	470.16	951.06
169	6	650.32	54.01	2.57	517.50	795.14
231	6	590.87	107.55	2.57	114.00	1078.13
293	6	516.21	84.22	2.57	299.75	732.60

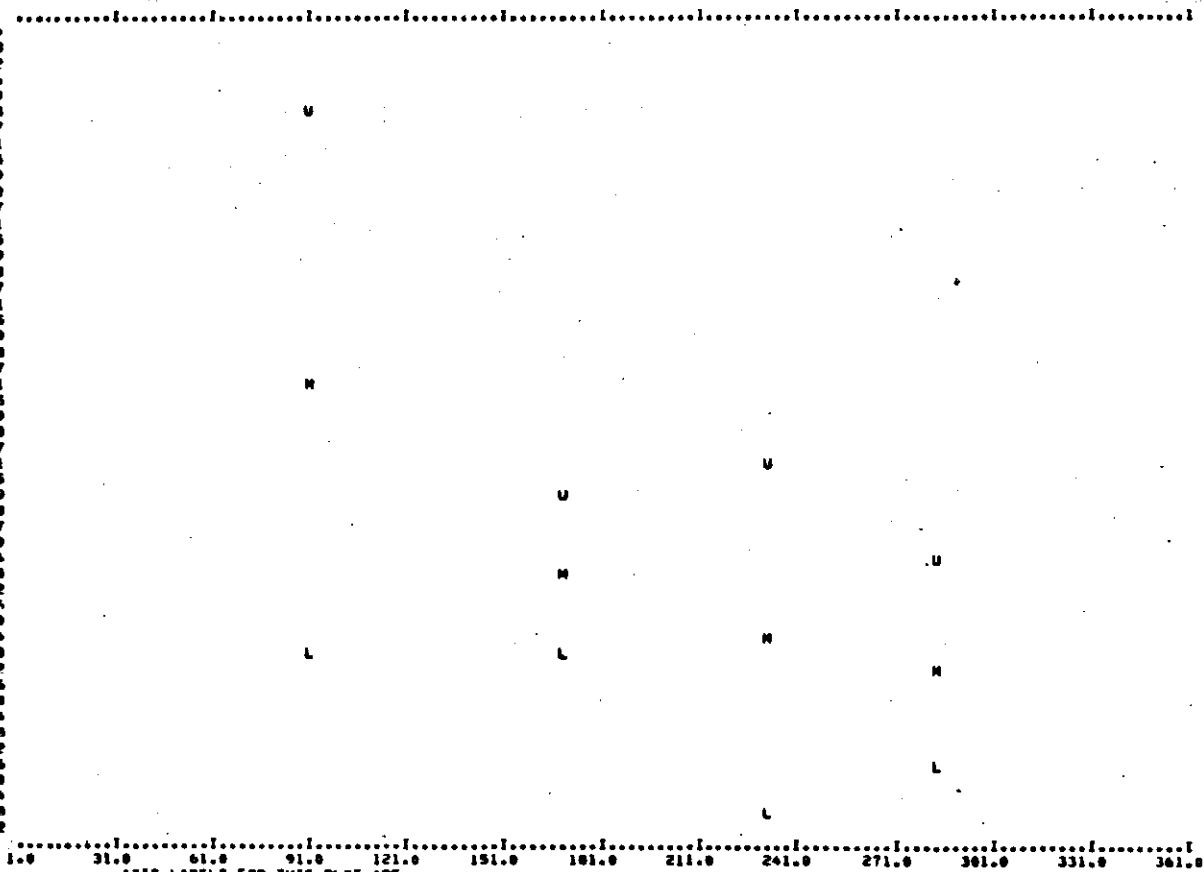


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (g/M SQ) FOR 0- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (g/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
98	6	968.29	115.84	2.57	672.68	1263.98
169	6	881.84	65.82	2.57	712.66	1051.01
231	6	651.82	179.88	2.57	191.53	1112.18
283	6	621.11	98.98	2.57	387.25	854.97

2343.14
 2303.50
 2264.82
 2224.46
 2184.89
 2145.33
 2105.77
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 2026.65
 1987.09
 1947.53
 1907.97
 1868.41
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 1710.17
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 1631.05
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 1472.81
 1433.25
 1393.69
 1354.13
 1314.57
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 1235.45
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 1077.20
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 918.96
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 839.84
 800.28
 760.72
 721.16
 681.60
 642.04
 602.48
 562.92
 523.36
 483.80
 444.24
 404.68
 365.12



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 50 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	1471.51	256.24	2.57	812.90	2130.12
169	6	996.69	81.83	2.57	788.42	1204.96
231	6	843.69	178.41	2.57	485.69	1281.78
283	6	773.86	99.32	2.57	517.77	1026.35

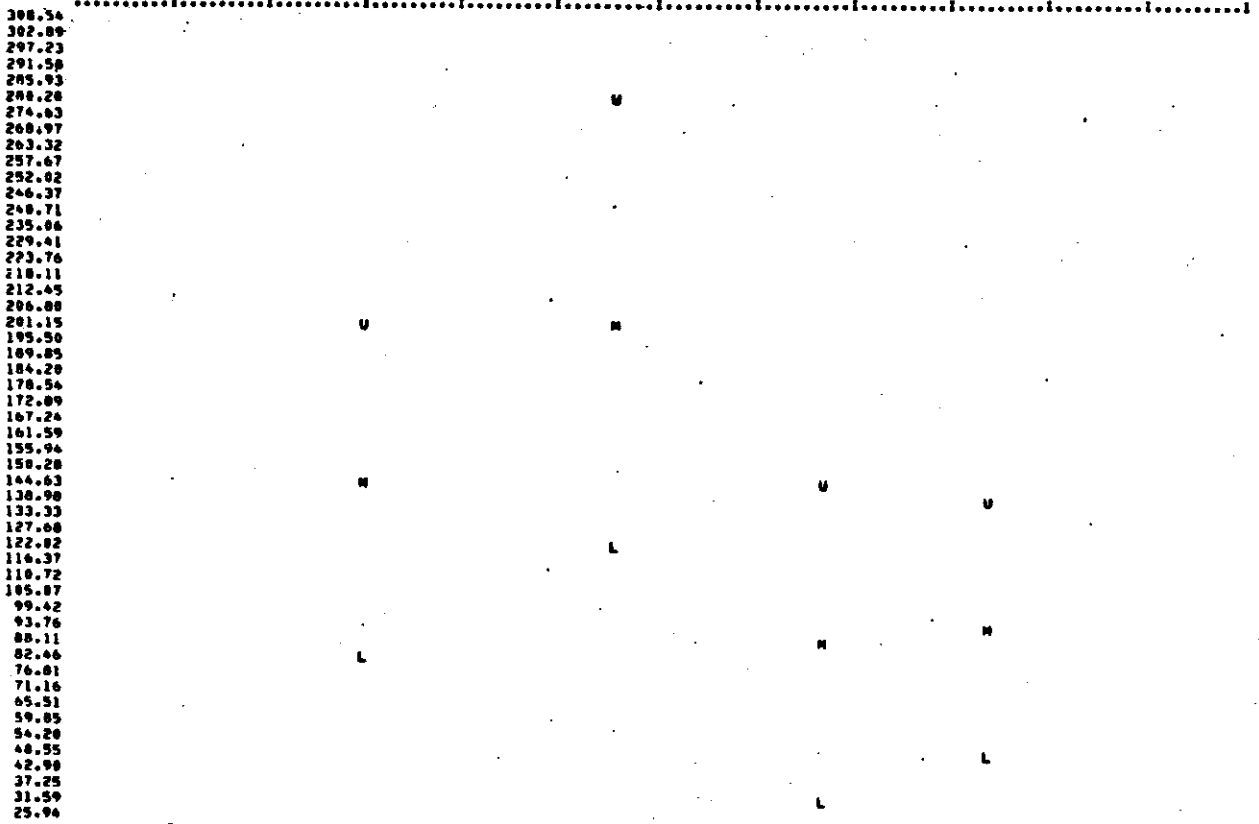
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 929.25
 909.53
 889.81
 870.09
 850.36
 830.64
 810.92
 791.20
 771.48
 751.76
 732.04
 712.32
 692.59
 672.87
 653.15
 632.43
 613.71
 593.99
 574.27
 554.54
 534.82
 515.10
 495.38
 475.66
 455.94
 436.22
 416.49
 396.77
 377.05
 357.33
 337.61
 317.89
 298.17
 278.44
 258.72
 239.00
 219.28
 199.56
 179.84
 160.12
 140.40
 120.67
 100.95
 81.23
 61.51

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

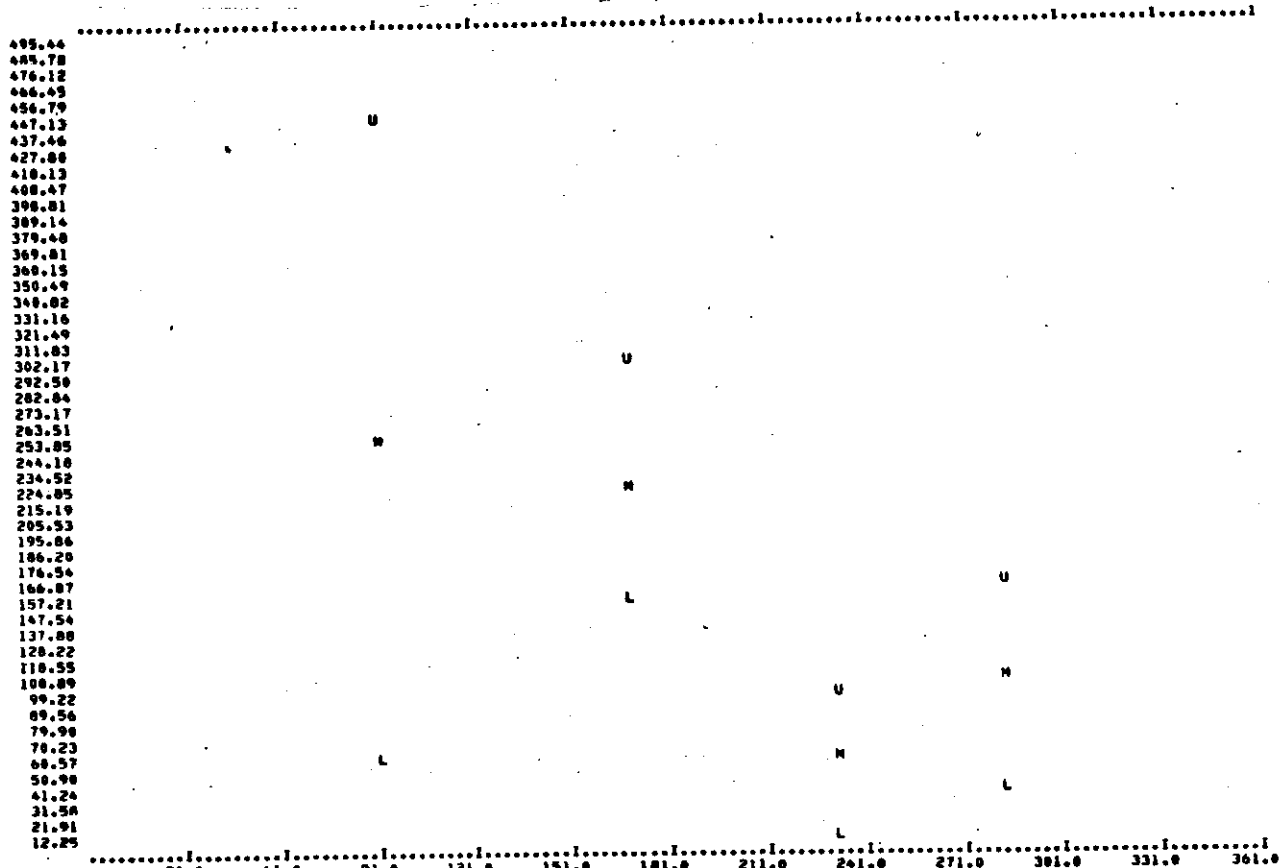
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
98	6	567.46	81.24	2.57	358.44	776.28
169	6	454.91	45.28	2.57	338.72	571.09
231	6	518.34	171.96	2.57	68.34	952.34
283	6	428.54	97.48	2.57	169.99	671.09



AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 5- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY.
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

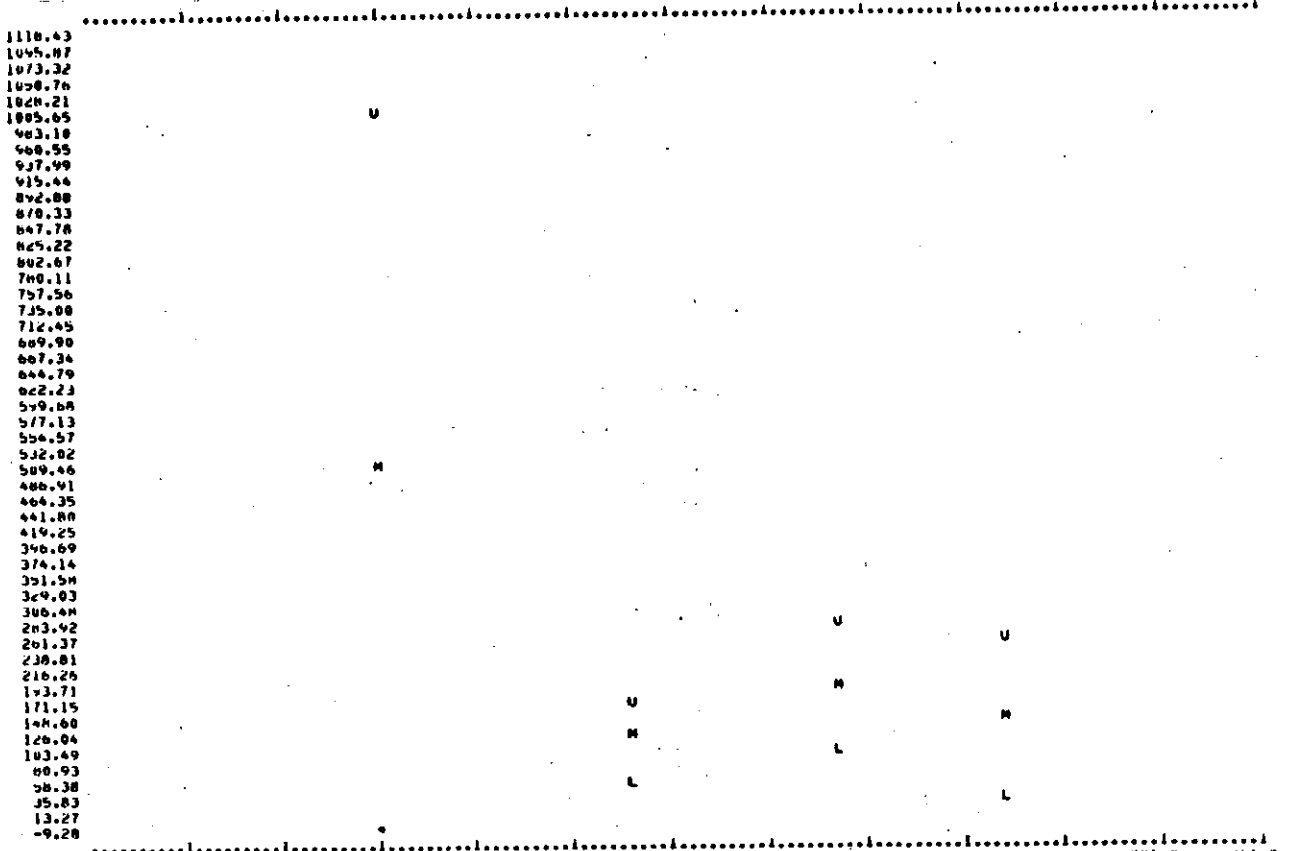
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
98	6	143.57	23.12	2.57	84.15	202.98
169	6	201.41	30.76	2.57	122.34	280.49
231	6	85.72	22.14	2.57	28.82	142.62
283	6	95.68	17.95	2.57	49.55	141.88



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
90	6	257.27	75.14	2.57	64.13	450.40
169	6	225.52	28.45	2.57	152.40	298.63
231	6	55.75	16.40	2.57	13.61	97.89
283	6	184.90	23.38	2.57	44.82	164.98



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SOI FOR 20-50 CM DEPTH)

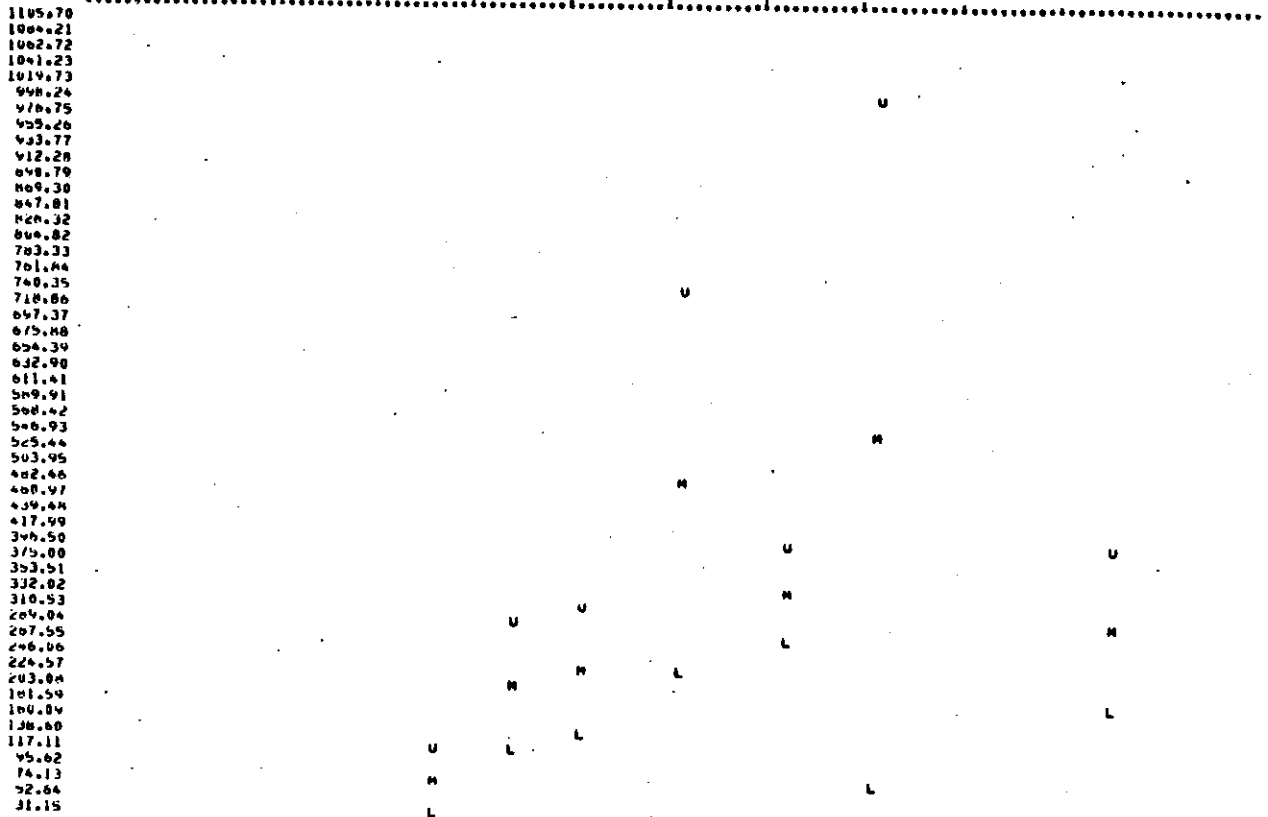
THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE: THT 5 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SOI)	STANDARD ERROR	TET VALUE	LOWER LIMIT	UPPER LIMIT
90	0	503.22	199.79	2.57	-9.28	1016.75
169	0	114.85	18.41	2.57	87.52	162.18
231	0	191.88	37.28	2.57	96.05	287.70
283	0	151.95	41.12	2.57	48.25	257.09

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

5.3 Data for 1972

The belowground herbage biomass was sampled on each of two replicates for treatments 1 and 5 on four different sampling dates at the Osage Site for the 1972 season. Crown material was recorded with the aboveground herbage data for these four dates and an additional three dates. Therefore, seven dates are available for crowns. Depth increments in 1972 were the same as those in 1971, being 0 to 5, 5 to 10, 10 to 20, and 20 to 50 cm levels. The root data are reported on an ash-free weight basis. The crown materials are available only from the aboveground herbage sampling file, where they were reported as species CRWN and are ash free as are the belowground herbage data. These CRWN data were incorporated into the belowground herbage file as the 0 to 0 cm level and generally correspond with the dates for which the belowground herbage was sampled but are not directly comparable in that rather than coming from root cores they came from the area of the clipped plot. To minimize errors during data transfer from one file to the other, the weights given in the aboveground herbage biomass file were used directly in the belowground herbage biomass file with the core diameter adjusted to produce the corrected biomass density when calculated, based on the sample weights given and the core diameter. Similar problems were encountered in the 1972 data with respect to the core diameter and the number of cores reported per quadrat. For 1972, there were generally three cores reported per quadrat; therefore, early analysis indicated a standing crop of roots that was three times as great as it should be; this has been corrected in the new version of the data.



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW-GROUND BIOMASS (G/M DSI) FOR 0- 8 CM DEPTH

THESE DATA INCLUDE CHURN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE TRT 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M DSI)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	10	71.95	10.43	2.27	34.61	109.30
136	10	195.81	30.92	2.27	107.33	284.29
159	6	228.34	31.00	2.57	148.51	308.18
187	6	479.40	47.90	2.57	227.59	731.20
221	6	332.00	21.20	2.57	277.40	386.67
246	6	500.20	100.00	2.57	75.34	1005.18
319	6	294.85	42.33	2.57	186.05	403.65

1000.00
 1007.71
 1015.42
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 1030.84
 1038.55
 1046.26
 1053.97
 1061.68
 1069.39
 1077.10
 1084.81
 1092.52
 1100.23
 1107.94
 1115.65
 1123.36
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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELWU GROUND BIOMASS (G/M SW) FOR 0-20 CM DEPTH
 THESE DATA INCLUDE MOUI MATERIAL ONLY

THESE DATA REPRESENT BELWU-GROUND BIOMASS SAMPLING ON SITE USAGE: THT 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SW)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	6	543.06	17.35	2.57	498.96	588.16
187	6	724.83	101.57	2.57	463.56	985.75
221	6	435.73	53.99	2.57	297.18	574.28
319	6	505.84	67.22	2.57	281.06	730.02

1345.83
 1315.36
 1294.88
 1274.41
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 1212.98
 1192.50
 1172.03
 1151.55
 1131.08
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 721.57
 701.10
 680.62
 660.15
 639.67
 619.20
 598.72
 578.25
 557.77
 537.30
 516.82
 496.35
 475.87
 455.40
 434.92
 414.45
 393.97
 373.50
 353.02
 332.55

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW-GROUND BIOMASS (G/M²) FOR 0-30 CM DEPTH
 THESE DATA INCLUDE MOIST MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE: TNT 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TET VALUE	LOWER LIMIT	UPPER LIMIT
136	6	602.99	22.91	2.57	625.33	740.55
167	6	903.00	120.00	2.57	570.00	1233.01
221 *	6	540.91	30.05	2.57	398.15	649.67
314 *	6	613.00	95.00	2.57	389.49	826.21

*Sequence missing 30 cm of core length

803.94
 828.84
 813.75
 798.64
 783.53
 768.42
 753.31
 738.20
 723.08
 707.97
 692.86
 677.75
 662.64
 647.53
 632.42
 617.30
 602.19
 587.08
 571.97
 556.86
 541.75
 526.64
 511.52
 496.41
 481.30
 466.19
 451.08
 435.97
 420.86
 405.74
 390.63
 375.52
 360.41
 345.30
 330.19
 315.08
 299.96
 284.85
 269.74
 254.63
 239.52
 224.41
 209.29
 194.18
 179.07
 163.96
 148.85
 133.74
 118.63
 103.51
 88.40

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE :

X-AXIS=JULIAN DATE FOR 1972

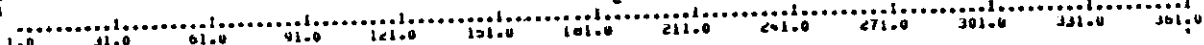
Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE HOOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE: TRY 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	0	340.50	30.82	2.57	245.94	435.22
187	0	472.02	116.63	2.57	177.99	767.25
221	0	230.55	41.42	2.57	124.08	337.01
319	0	245.32	57.23	2.57	98.23	392.42

340.43
 316.72
 310.00
 323.24
 316.57
 304.05
 303.14
 296.42
 209.70
 262.09
 276.27
 269.55
 262.86
 259.12
 249.40
 242.09
 235.97
 229.25
 222.56
 219.02
 204.10
 202.37
 195.07
 188.95
 182.24
 175.52
 168.81
 162.09
 155.37
 148.66
 141.94
 135.22
 128.51
 121.79
 115.07
 108.36
 101.64
 94.92
 88.21
 81.49
 74.77
 68.06
 61.34
 54.63
 47.91
 41.19
 34.48
 27.76
 21.04
 14.33
 7.61



AXIS LABELS FOR THIS PLOT ARE:
 X-Axis=JULIAN DATE FOR 1972
 Y-Axis=BELOW-GROUND BIOMASS (G/M SQ) FOR 5-10 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE: INT 1 FOR 1972 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	0	90.40	9.15	2.57	67.35	114.36
187	0	100.33	99.09	2.57	8.40	312.21
221	6	111.50	11.41	2.57	82.17	140.83
319	0	140.01	22.22	2.57	87.45	201.78

306.44
 359.36
 352.22
 345.04
 337.96
 330.81
 323.66
 316.54
 309.41
 302.27
 295.14
 288.00
 280.87
 273.73
 266.60
 259.46
 252.33
 245.19
 238.06
 230.92
 223.79
 216.65
 209.51
 202.38
 195.24
 188.11
 180.97
 173.84
 166.70
 159.57
 152.43
 145.30
 138.16
 131.03
 123.89
 116.75
 109.62
 102.48
 95.35
 88.21
 81.08
 73.94
 66.81
 59.67
 52.54
 45.40
 38.27
 31.13
 23.99
 16.86

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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE X
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=DELTA GROUND BIOMASS (G/M²) FOR 20-50 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT DELTA-GROUND BIOMASS SAMPLING ON SITE USAGE: TRT 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	5	139.38	15.94	2.57	98.40	180.35
187	6	179.20	22.43	2.57	126.73	239.68
221	6	113.18	24.78	2.57	49.48	178.87
319	5	129.03	7.28	2.74	109.72	149.38

457.58
 444.88
 439.82
 430.99
 422.15
 413.31
 404.47
 395.64
 386.80
 377.96
 369.12
 360.28
 351.44
 342.61
 333.77
 324.93
 316.09
 307.26
 298.42
 289.58
 280.74
 271.91
 263.07
 254.23
 245.39
 236.55
 227.72
 218.88
 210.04
 201.20
 192.36
 183.53
 174.69
 165.85
 157.01
 148.17
 139.34
 130.50
 121.66
 112.82
 103.99
 95.15
 86.31
 77.47
 68.63
 59.80
 50.96
 42.12
 33.28
 24.44
 15.61

.....1
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X=RAIS=JULIAN DATE FOR 1972
 Y=RAIS=BELOW-GROUND BIOMASS (G/M²) FOR 0- 0 CM DEPTH

THESE DATA INCLUDE CHURN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE: TRT 5 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	10	36.17	7.44	2.27	17.36	51.00
136	10	79.76	16.52	2.27	42.20	117.32
158	10	115.19	15.83	2.27	79.21	151.17
187	10	202.40	41.19	2.27	108.74	376.05
221	10	159.37	23.46	2.27	106.03	212.71
246	10	308.82	50.62	2.27	185.73	415.91
319	10	185.89	45.79	2.27	81.80	289.98

1307.00
 1303.04
 1330.47
 1313.90
 1209.33
 1204.76
 1200.20
 1215.03
 1151.06
 1100.64
 1111.92
 1117.36
 1042.79
 1004.22
 1003.65
 1019.08
 994.52
 909.94
 805.38
 800.61
 800.24
 771.08
 807.11
 822.54
 797.97
 773.41
 748.84
 724.27
 699.70
 675.13
 650.57
 626.00
 601.43
 576.86
 552.29
 527.73
 503.16
 478.59
 454.02
 429.45
 404.89
 380.32
 355.75
 331.18
 306.61
 282.05
 257.48
 232.91
 208.34
 183.77
 159.21

.....1
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW-GROUND BIOMASS (G/M²) FOR 0-20 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE OSAGE, TRT 5 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
130	6	436.15	100.80	2.57	176.90	695.40
167	6	588.94	90.00	2.57	336.88	801.00
221	6	794.65	101.01	2.57	527.84	1201.46
319	6	604.97	110.90	2.57	384.38	905.44

1444.14
 1445.05
 1446.33
 1445.01
 1340.89
 1300.16
 1341.00
 1316.72
 1242.00
 1207.28
 1202.54
 1217.04
 1123.12
 1102.40
 1107.04
 1110.44
 1044.24
 1004.51
 1044.74
 1004.07
 945.35
 970.03
 945.41
 921.14
 850.47
 811.74
 847.03
 822.31
 797.59
 772.84
 744.14
 723.42
 644.70
 613.44
 649.26
 624.54
 594.47
 575.10
 550.34
 525.06
 508.94
 478.21
 451.49
 426.77
 402.05
 377.33
 352.01
 327.84
 303.17
 278.45

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

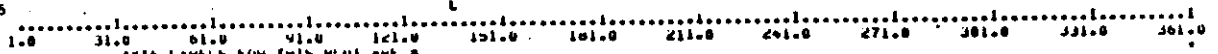
AXIS LABELS FOR THIS PLOT ARE =
 X=AXIS=JULIAN DATE FOR 1972
 Y=AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-50 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE: TNT 5 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	0	571.25	141.07	2.57	389.39	833.07
147	0	843.75	98.99	2.57	440.81	948.05
221	0	870.00	194.04	2.57	375.20	1370.81
314	0	759.20	104.94	2.57	529.64	1008.88

1003.01
 1002.55
 1001.35
 1000.02
 999.05
 998.09
 997.72
 996.76
 995.88
 994.83
 993.67
 992.90
 991.96
 990.97
 989.01
 988.06
 987.08
 987.11
 986.15
 985.19
 984.22
 983.26
 982.29
 981.33
 980.36
 979.40
 978.43
 977.47
 976.50
 975.54
 974.58
 973.61
 972.65
 971.68
 970.72
 969.75
 968.79
 967.82
 966.86
 965.89
 964.93
 963.97
 963.00
 962.04
 961.07
 960.11
 959.14
 958.18
 957.21
 956.25



AXIS LABELS FOR THIS PLOT ARE :

X-AXIS=JULIAN DATE FOR 1972

Y-AXIS=BELOW GROUND BIOMASS (G/M SOI) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE MOOI MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE THT 5 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SOI)	STANDARD ERROR	TCC VALUE	LOWER LIMIT	UPPER LIMIT
136	6	240.26	71.69	2.57	62.50	430.03
167	6	308.87	97.01	2.57	119.53	618.22
221	6	389.75	163.16	2.57	165.53	1009.07
319	6	379.16	108.70	2.57	99.59	658.69

324.11
 316.74
 309.37
 301.99
 294.62
 287.25
 279.88
 272.51
 265.13
 257.76
 250.39
 243.02
 235.65
 228.28
 220.90
 213.53
 206.16
 198.79
 191.42
 184.04
 176.67
 169.30
 161.93
 154.56
 147.19
 139.81
 132.44
 125.07
 117.70
 110.32
 102.95
 95.58
 88.21
 80.84
 73.46
 66.09
 58.72
 51.35
 43.98
 36.61
 29.23
 21.86
 14.49
 7.12
 -0.25
 -7.63
 -15.00
 -22.37
 -29.74
 -37.11
 -44.49

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 5- 10 CM DEPTH

(THESE DATA INCLUDE HOVI MATERIAL ONLY)

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE, TRI 5 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	6	122.61	60.93	2.57	-44.49	294.65
187	6	133.09	21.08	2.57	77.35	188.83
221	6	100.99	23.80	2.57	47.81	170.16
314	6	88.93	17.22	2.57	43.77	132.28

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

173.56
 165.00
 185.00
 181.00
 177.72
 173.77
 164.81
 165.09
 161.89
 157.93
 153.58
 150.02
 146.06
 142.10
 138.14
 134.18
 130.23
 126.27
 122.31
 118.35
 114.40
 110.44
 106.48
 102.52
 98.56
 94.60
 90.64
 86.69
 82.73
 78.77
 74.81
 70.85
 66.90
 62.94
 58.98
 55.02
 51.07
 47.11
 43.15
 39.19
 35.23
 31.27
 27.32
 23.36
 19.40
 15.44
 11.48
 7.51
 3.57
 -0.39

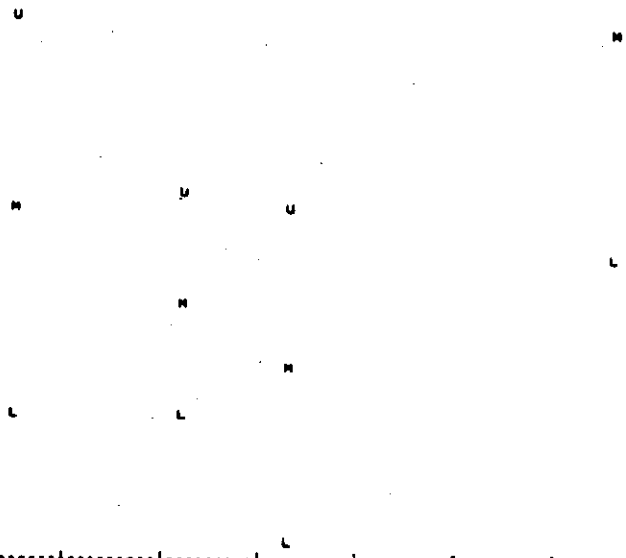
.....1
 100 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=DELTA GROUND BIOMASS (G/M SO) FOR 10-20 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT DELTA-GROUND BIOMASS SAMPLING ON SITE OSAUL, THT 5 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	6	67.28	26.34	2.57	-0.39	136.99
187	6	86.98	12.72	2.57	56.28	119.68
221	6	100.92	7.98	2.57	80.42	121.42
319	6	137.89	16.24	2.57	96.05	179.56

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

289.28
283.89
278.42
272.95
267.48
262.02
256.55
251.09
245.62
240.15
234.69
229.22
223.75
218.28
212.82
207.35
201.88
196.42
190.95
185.48
180.01
174.55
169.08
163.61
158.15
152.68
147.21
141.74
136.28
130.81
125.34
119.88
114.41
108.94
103.47
98.01
92.54
87.07
81.61
76.14
70.67
65.21
59.74
54.27
48.80
43.34
37.87
32.40
26.94
21.47



.....
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1972
Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 20-30 CM DEPTH
THESE DATA INCLUDE MOIST MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE USAGE: INT 5 FOR 1972
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	6	135.86	20.63	2.57	88.64	203.08
187	6	104.79	14.70	2.57	88.85	142.73
221	6	81.33	22.31	2.57	23.85	138.86
314	6	194.29	20.69	2.57	120.55	268.02

CHAPTER 6. BELOWGROUND HERBAGE BIOMASS DATA
FROM PANTEX SITE, TEXAS

6.1 Data for 1970

The belowground herbage biomass on the Pantex Site was sampled on each of two replicates for treatments 1, 3, and 5 during the 1970 season. Treatment 1 was sampled only twice, while treatments 3 and 5 were sampled three times during this season. Depth increments utilized in the sampling were 0 to 5, 5 to 10, 10 to 20, 20 to 30, 30 to 40, 40 to 50, 50 to 60, and 60 to 70 cm with a few segments from the last two depths missing. There were many zeros encountered for the sampling date at the end of June, especially at the deeper depths. The crown material was reported as *dry weight only* and was incorporated in the file at the 0 to 0 cm level. The root material was reported on an ash-free weight basis. Some records indicated negative ash-free weights; these records were replaced with estimates which were the mean for the same replicate, depth, and sampling date.

236.86
 230.77
 226.64
 222.59
 218.51
 214.42
 210.33
 206.24
 202.16
 198.07
 193.98
 189.89
 185.81
 181.72
 177.63
 173.54
 169.46
 165.37
 161.28
 157.19
 153.11
 149.02
 144.93
 140.84
 136.76
 132.67
 128.58
 124.49
 120.40
 116.32
 112.23
 108.14
 104.05
 99.97
 95.88
 91.79
 87.70
 83.62
 79.53
 75.44
 71.35
 67.27
 63.18
 59.09
 55.00
 50.92
 46.83
 42.74
 38.65
 34.57
 30.48

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 8 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	113.52	36.10	2.21	33.87	193.18
208	12	133.36	36.32	2.21	53.22	213.51

719.93
 718.00
 708.00
 698.15
 688.23
 679.30
 668.38
 659.45
 649.53
 639.60
 628.68
 618.75
 608.83
 598.90
 588.98
 579.06
 569.13
 559.21
 549.29
 539.36
 529.43
 519.51
 509.58
 499.66
 489.73
 479.81
 469.88
 459.96
 449.03
 439.11
 429.18
 419.26
 409.33
 399.41
 389.48
 379.56
 369.63
 359.71
 349.78
 339.86
 329.93
 319.01
 309.08
 299.16
 289.23
 279.31
 269.38
 259.46
 249.53
 239.61
 229.68

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	382.46	60.78	2.21	248.54	516.38
208	12	469.44	83.86	2.21	284.41	654.48

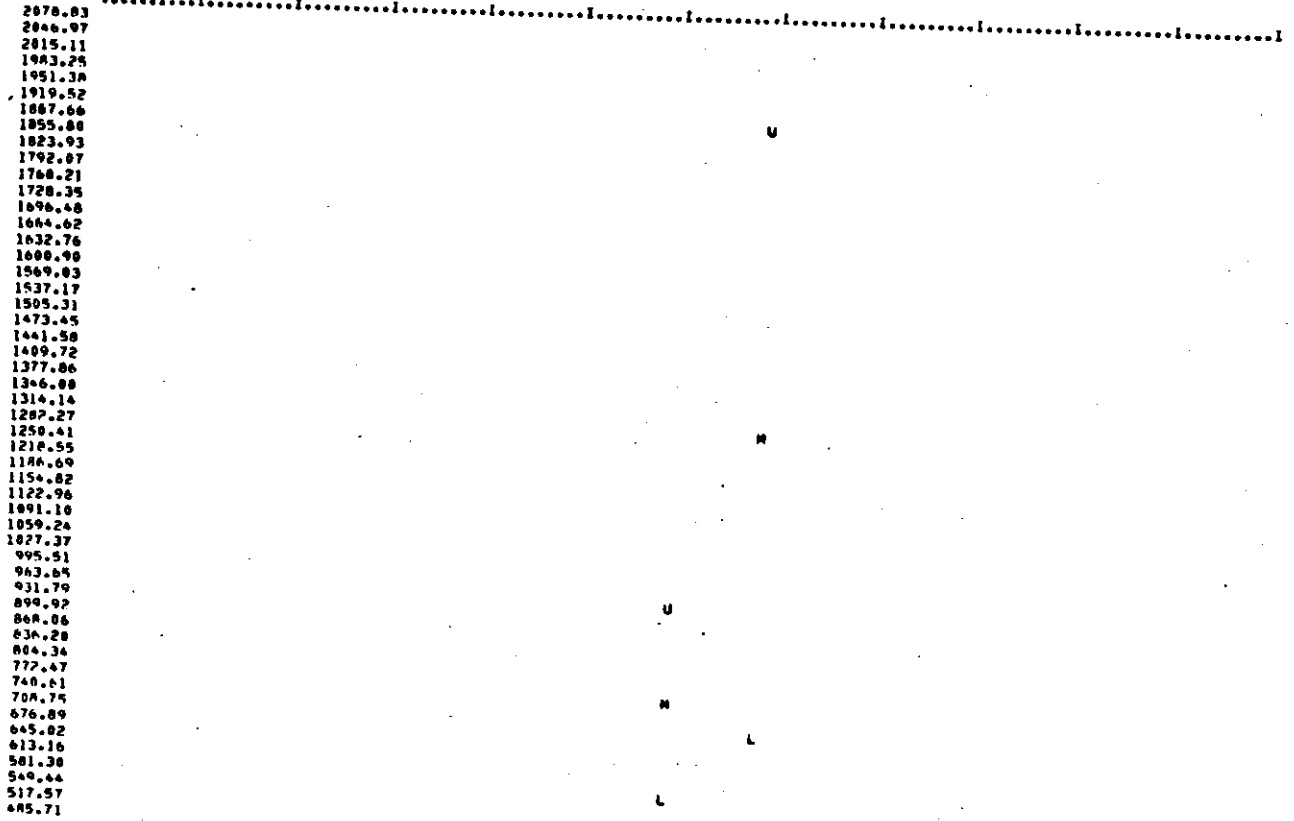
1055.36
1041.15
1026.94
1012.73
998.52
984.31
970.10
955.89
941.68
927.47
913.27
899.06
884.85
870.64
856.43
842.22
828.01
813.80
799.59
785.38
771.17
756.96
742.75
728.54
714.33
700.12
685.91
671.70
657.49
643.28
629.07
614.86
600.65
586.44
572.23
558.02
543.81
529.60
515.39
501.18
486.97
472.76
458.55
444.34
430.13
415.92
401.71
387.50
373.29
359.08
344.87

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 30 CM DEPTH
THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 1 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	558.62	79.51	2.21	383.19	734.05
200	12	732.95	102.64	2.21	506.47	959.42



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE :
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-70 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRY 1 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	736.36	89.14	2.21	539.68	933.05
208	12	1278.96	276.87	2.21	668.06	1889.85

370.55
 361.96
 353.33
 344.71
 336.10
 327.48
 318.87
 310.26
 301.65
 293.04
 284.43
 275.81
 267.20
 258.58
 249.97
 241.36
 232.74
 224.13
 215.52
 206.90
 198.29
 189.68
 181.06
 172.45
 163.84
 155.23
 146.61
 138.00
 129.39
 120.77
 112.16
 103.55
 94.93
 86.32
 77.71
 69.09
 60.48
 51.87
 43.25
 34.64
 26.03
 17.42
 8.80
 0.19
 191.58
 182.96
 174.35
 165.74
 157.12
 148.51
 139.90

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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	244.87	46.53	2.21	155.44	334.30
208	12	347.38	77.04	2.21	176.07	518.68

226.70
 223.41
 220.12
 216.83
 213.54
 210.25
 206.96
 203.67
 200.38
 197.09
 193.80
 190.51
 187.22
 183.92
 180.63
 177.34
 174.05
 170.76
 167.47
 164.18
 160.89
 157.60
 154.31
 151.02
 147.73
 144.44
 141.15
 137.86
 134.57
 131.28
 127.99
 124.70
 121.41
 118.12
 114.83
 111.53
 108.24
 104.95
 101.66
 98.37
 95.08
 91.79
 88.50
 85.21
 81.92
 78.63
 75.34
 72.05
 68.76
 65.47
 62.18

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 5- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRI 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	137.59	31.05	2.21	69.09	206.09
208	12	122.07	17.60	2.21	83.23	160.90

174.96
 172.72
 170.47
 168.23
 165.99
 163.75
 161.51
 159.26
 157.02
 154.78
 152.54
 150.30
 148.05
 145.81
 143.57
 141.33
 139.08
 136.84
 134.60
 132.36
 130.12
 127.87
 125.63
 123.39
 121.15
 118.90
 116.66
 114.42
 112.18
 109.94
 107.69
 105.45
 103.21
 100.97
 98.72
 96.48
 94.24
 92.00
 89.76
 87.51
 85.27
 83.03
 80.79
 78.54
 76.30
 74.06
 71.82
 69.58
 67.33
 65.09
 62.85

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	114.44	20.22	2.21	69.83	159.05
208	12	189.82	12.92	2.21	81.32	138.32

276.12
 271.29
 266.47
 261.64
 256.81
 251.99
 247.16
 242.34
 237.51
 232.68
 227.86
 223.03
 218.20
 213.38
 208.55
 203.72
 198.90
 194.07
 189.24
 184.42
 179.59
 174.77
 169.94
 165.11
 160.29
 155.46
 150.63
 145.81
 140.98
 136.15
 131.33
 126.50
 121.68
 116.85
 112.02
 107.20
 102.37
 97.54
 92.72
 87.89
 83.06
 78.24
 73.41
 68.59
 63.76
 58.93
 54.11
 49.28
 44.45
 39.63
 34.80

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L

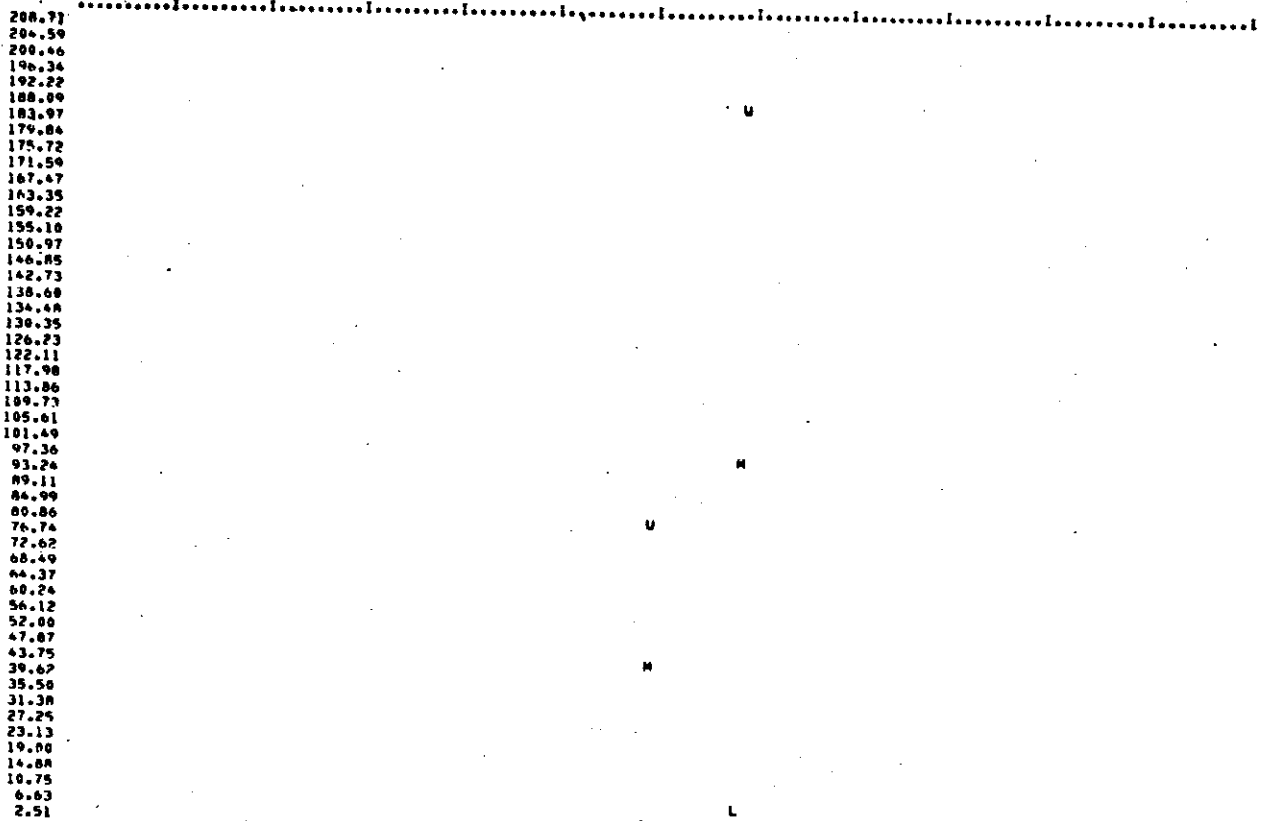
L

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	61.72	18.45	2.21	38.67	84.78
208	12	153.68	44.12	2.21	56.34	251.02

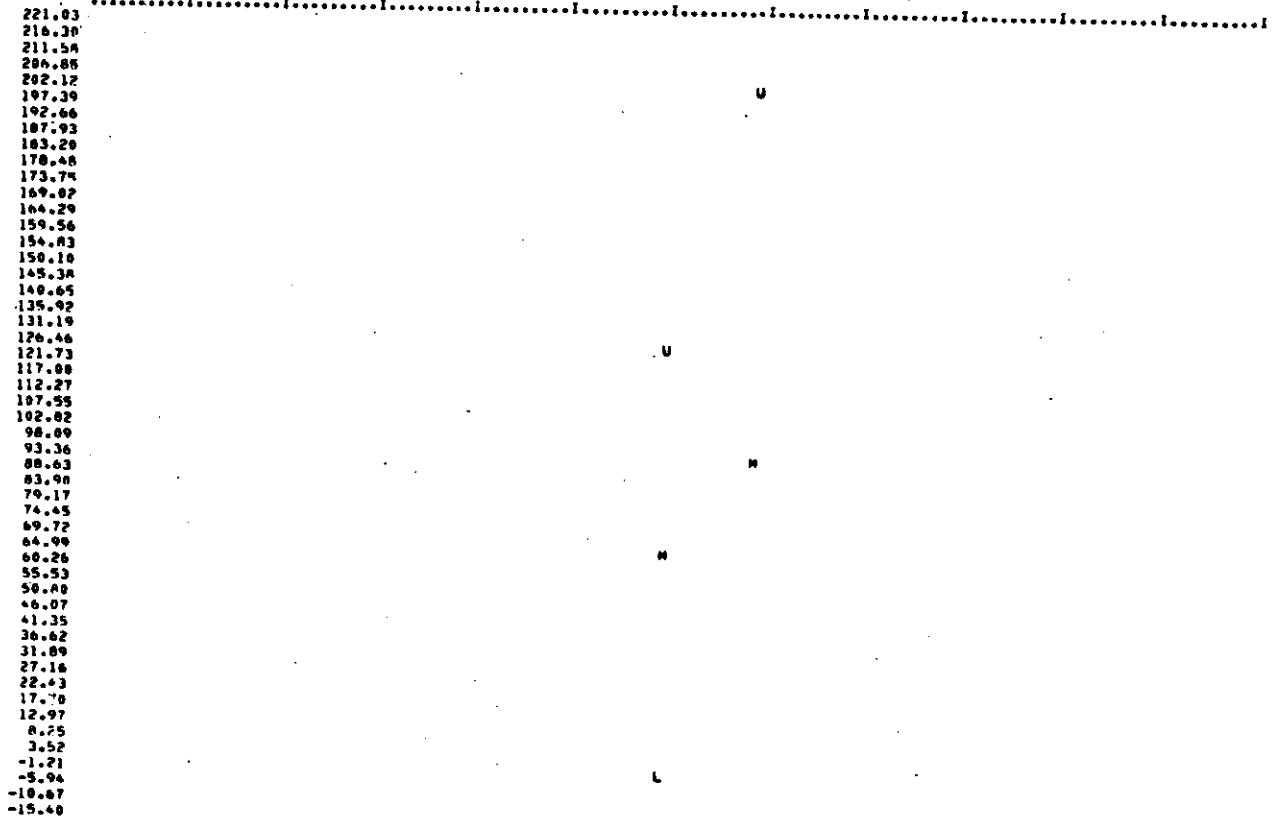


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 30- 40 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	42.04	17.79	2.21	2.79	81.30
208	12	98.86	41.19	2.21	7.98	189.74



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

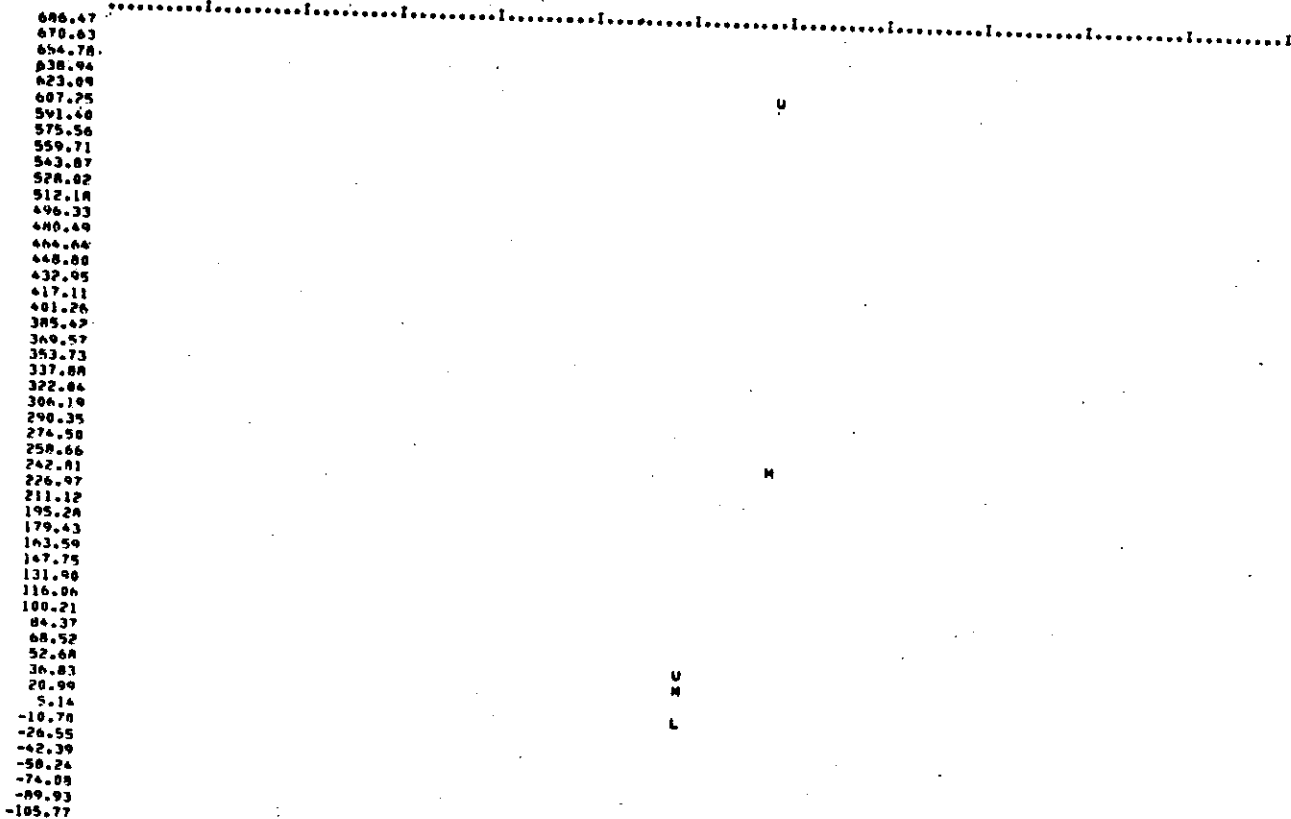
AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 40- 50 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTER, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
101	12	63.51	29.33	2.21	-1.21	120.23
200	12	91.92	49.41	2.21	-15.40	200.94

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.



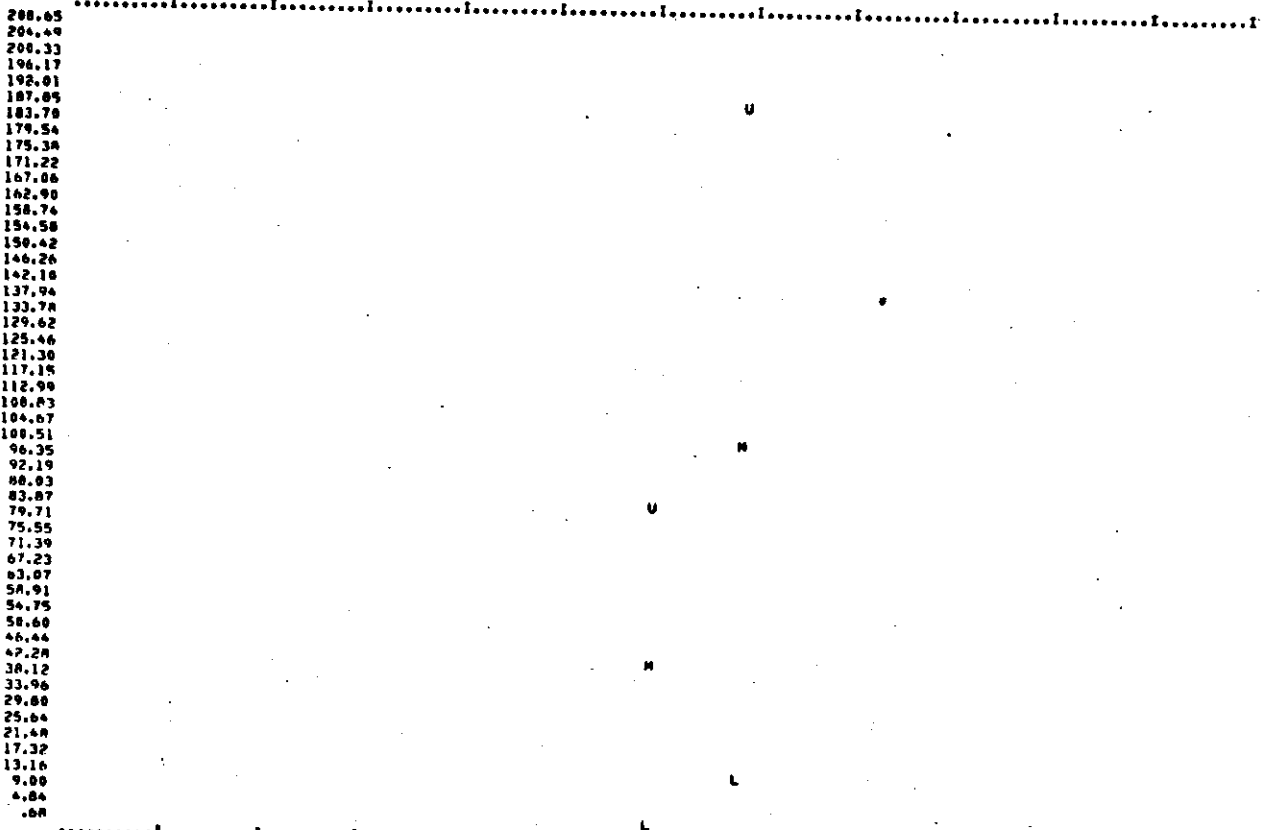
AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 50- 60 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	29.84	9.30	2.21	9.31	50.36
208	12	253.27	168.05	2.21	-105.77	624.06

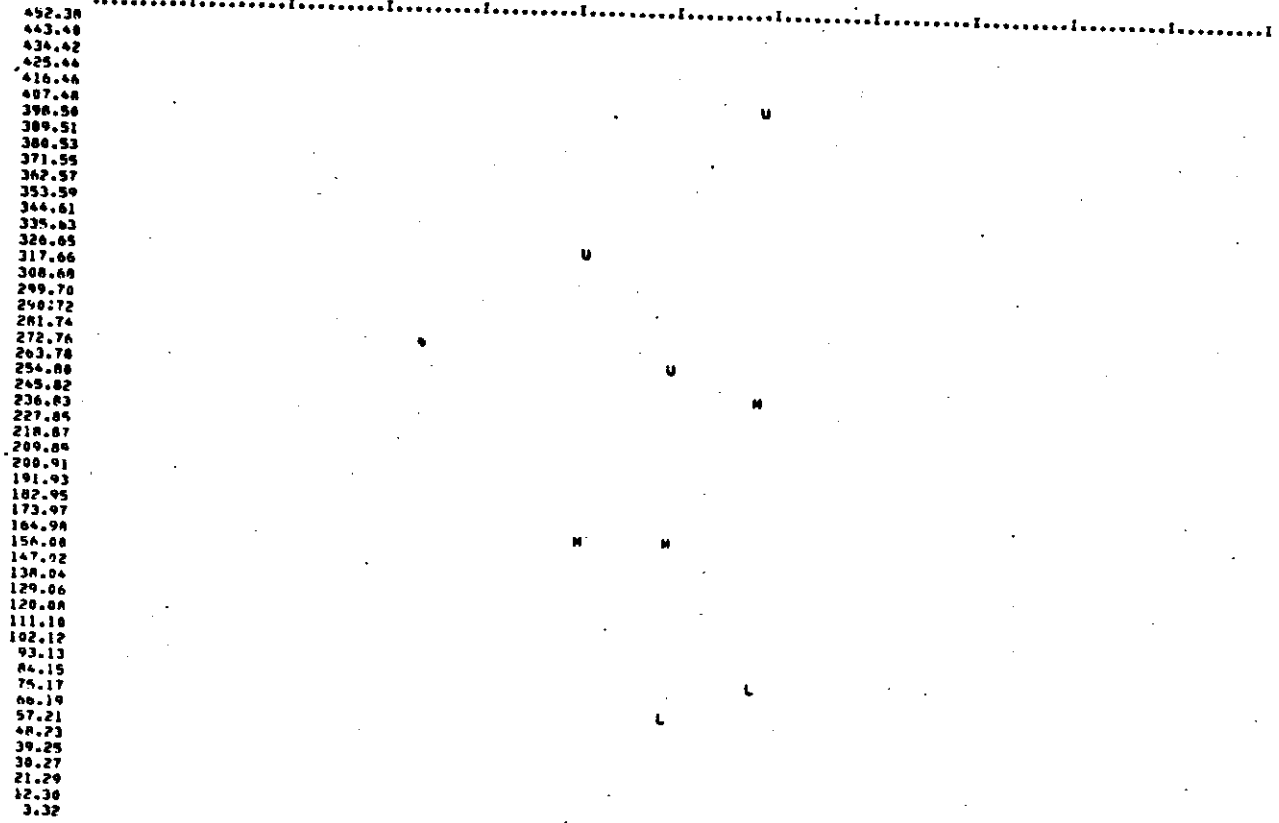
Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.



AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1970
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 60- 70 CM DEPTH
THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 1 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
181	12	42.35	18.85	2.21	7.76	83.95
288	12	101.97	39.76	2.21	14.25	189.68

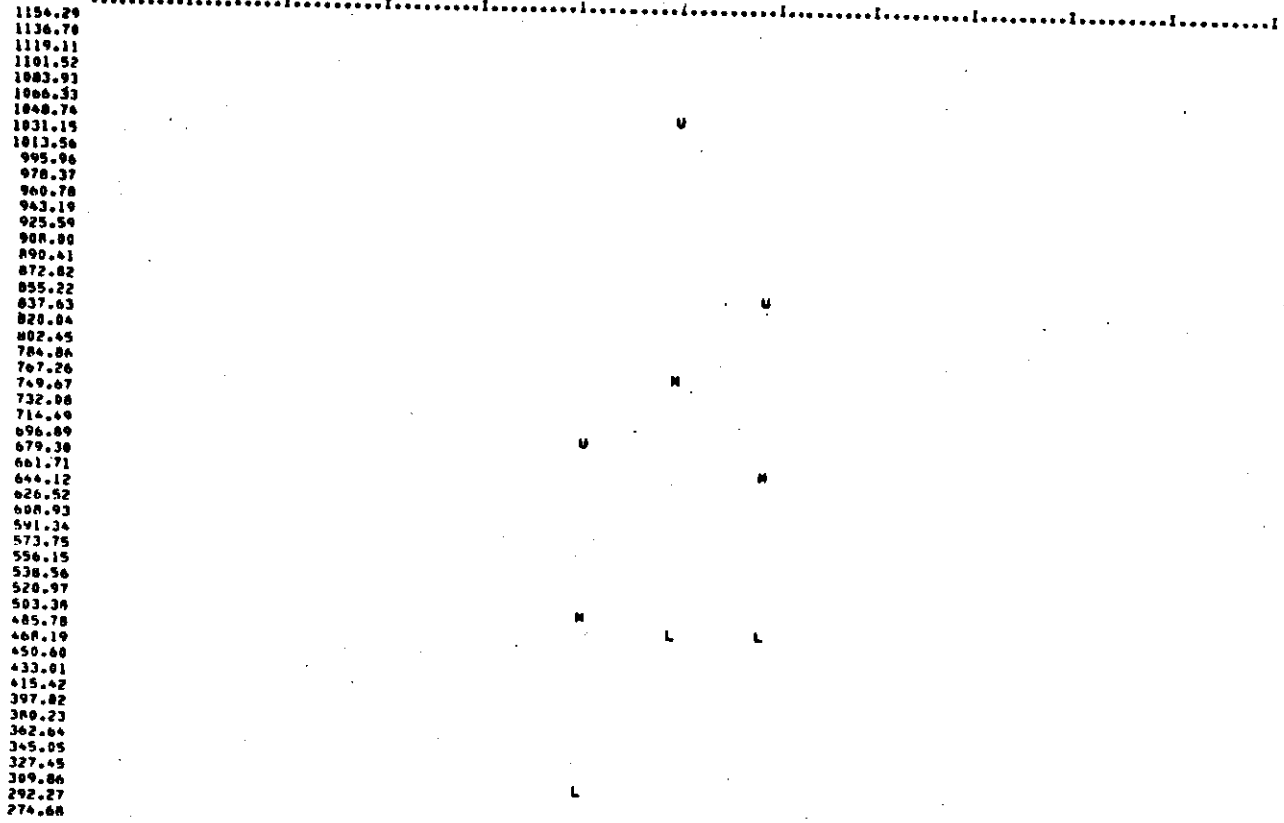


AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 0 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	164.04	72.67			
181	12	166.98	44.26	2.21	3.69	324.39
208	12	249.14	73.48	2.21	69.31	264.65
					87.02	411.26

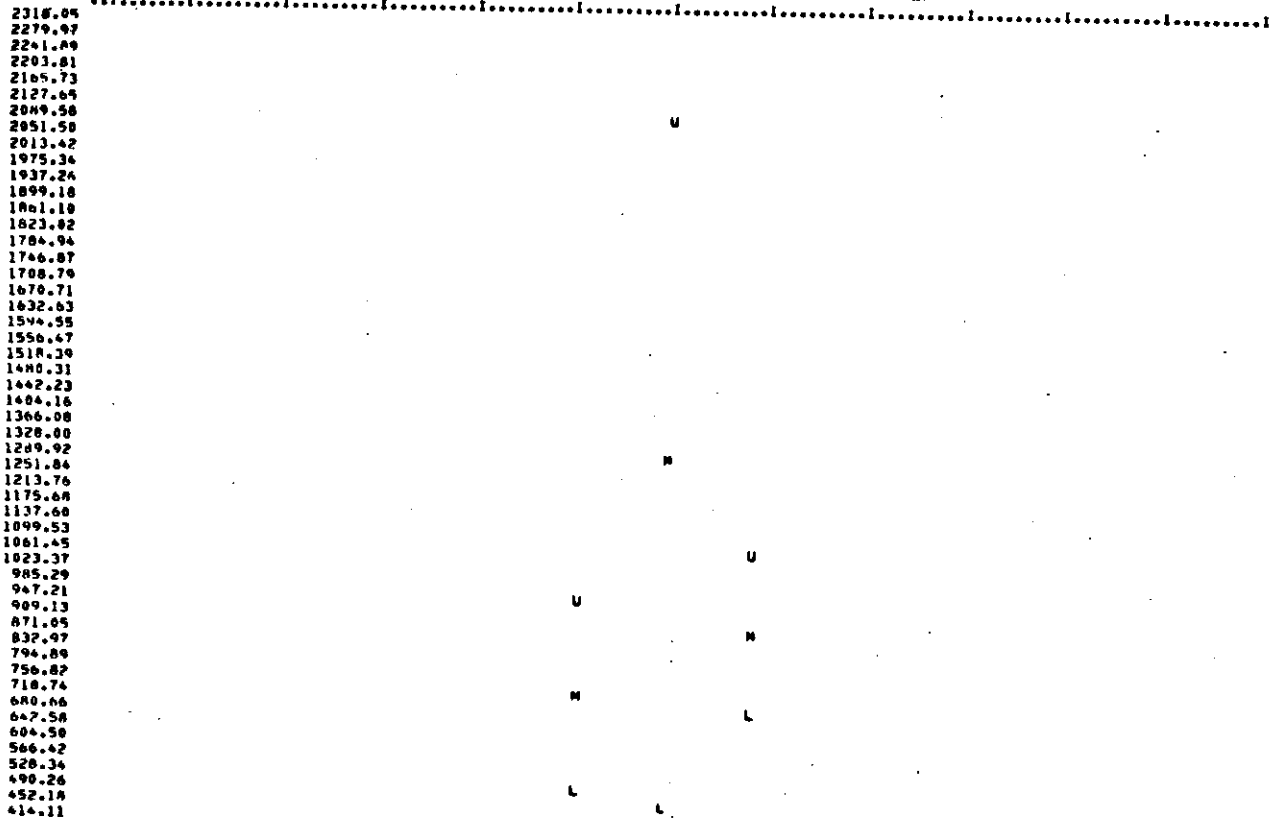


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	497.66	87.23	2.21	305.20	690.13
181	12	769.51	126.84	2.21	489.65	1049.36
208	12	668.88	83.72	2.21	483.36	852.78



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIONASS (G/M SQ) FOR 0-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIONASS SAMPLING ON SITE PANTEX, TRT 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	732.44	104.95	2.21	500.09	963.99
181	12	1283.72	373.28	2.21	468.12	2107.32
208	12	863.78	81.57	2.21	683.81	1043.76

2627.89
 2587.54
 2547.18
 2506.83
 2466.44
 2426.13
 2385.78
 2345.43
 2305.07
 2264.72
 2224.37
 2184.02
 2143.67
 2103.32
 2062.96
 2022.61
 1982.26
 1941.91
 1901.56
 1861.20
 1820.85
 1780.50
 1740.15
 1699.80
 1659.45
 1619.09
 1578.74
 1538.39
 1498.04
 1457.69
 1417.34
 1376.98
 1336.63
 1296.28
 1255.93
 1215.58
 1175.23
 1134.87
 1094.52
 1054.17
 1013.82
 973.47
 933.12
 892.76
 852.41
 812.06
 771.71
 731.36
 691.01
 650.65
 610.30

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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

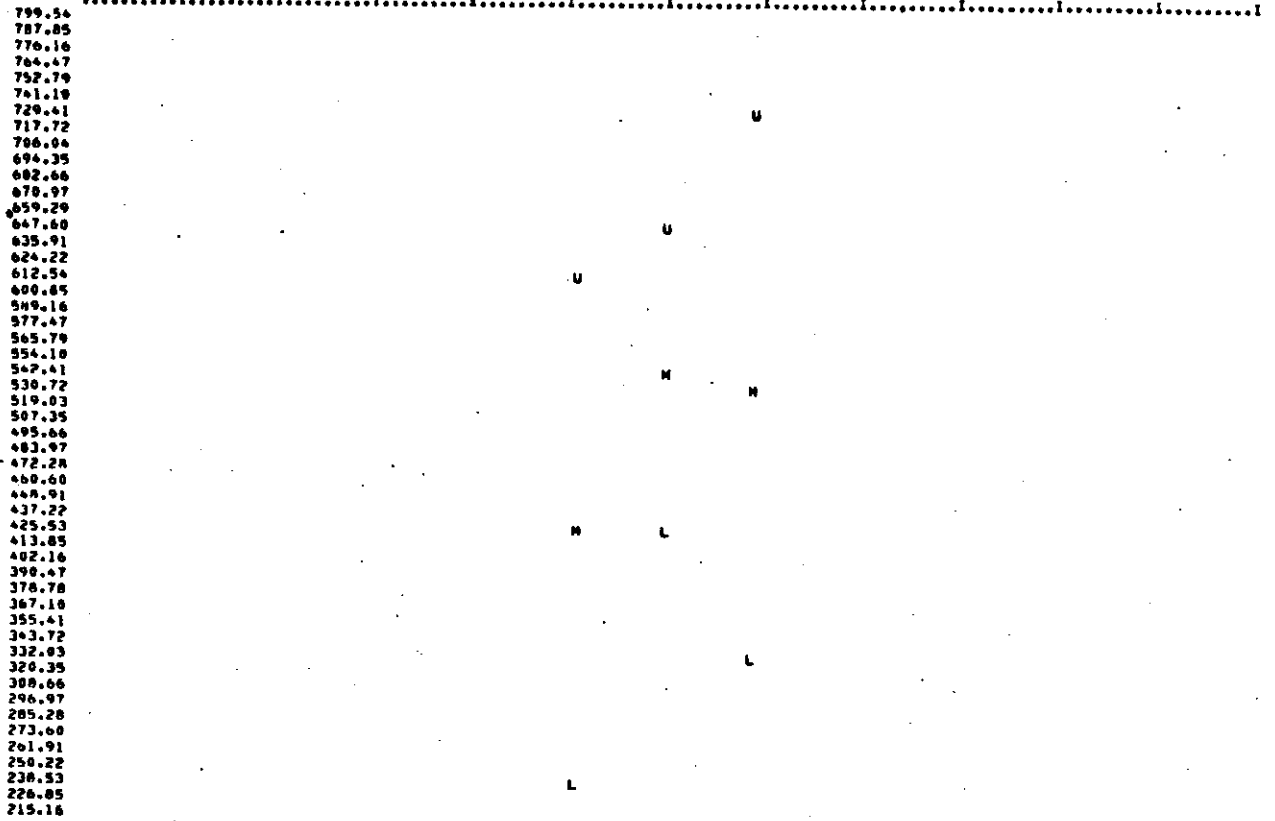
 ARIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 76 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153 *	12	1865.36	136.34	2.21	764.54	1366.17
181	12	1533.55	387.71	2.21	678.11	2388.99
208	12	1522.85	188.09	2.21	1284.35	1761.34

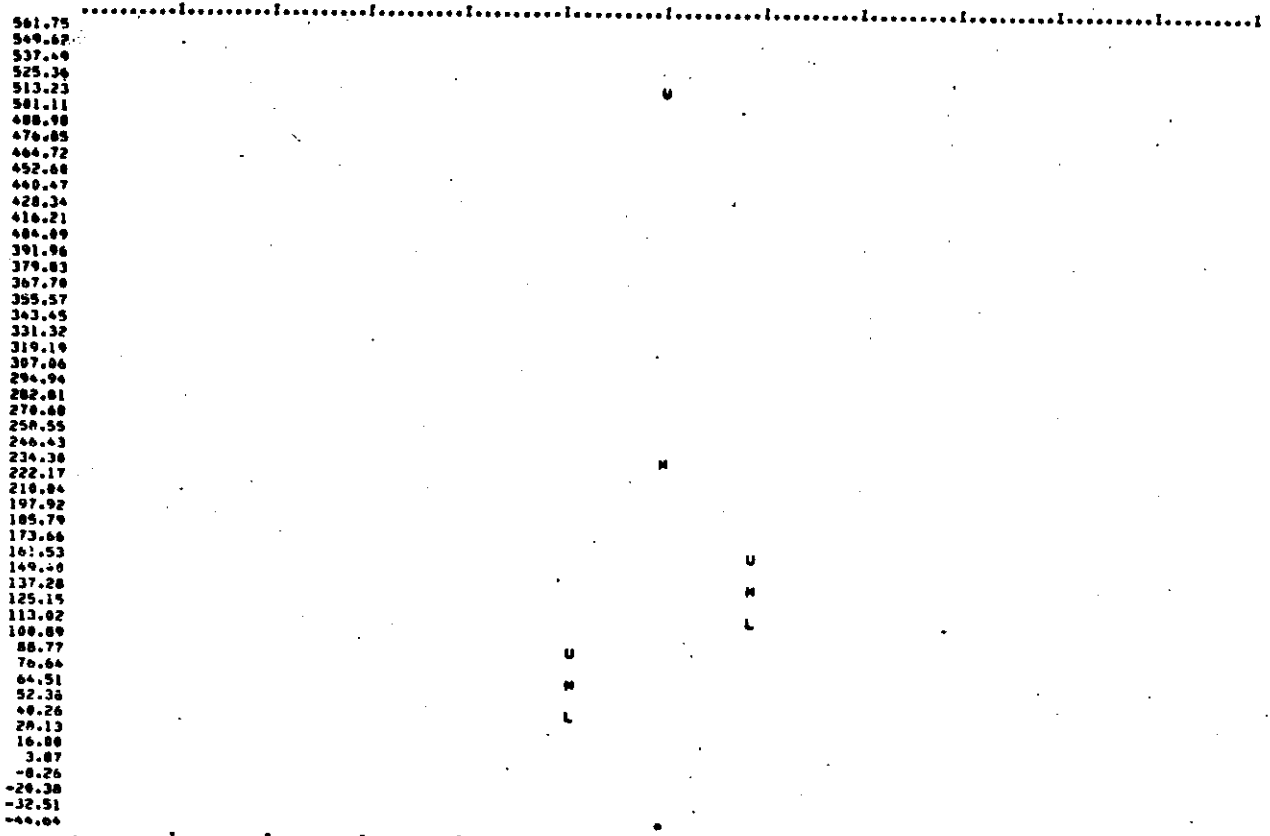
*Sequence missing 50 cm of core length



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 5 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	420.20	85.76	2.21	239.06	617.50
181	12	530.97	51.12	2.21	426.18	651.75
208	12	531.76	88.42	2.21	330.66	726.85



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 5- 10 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	69.38	10.65	2.21	45.89	92.88
181	12	238.54	126.97	2.21	-44.64	510.68
288	12	136.32	12.82	2.21	108.04	164.60

1025.96
 1001.90
 977.05
 953.00
 929.75
 905.70
 881.65
 857.60
 833.55
 809.50
 785.45
 761.40
 737.35
 713.30
 689.25
 665.20
 641.14
 617.09
 593.04
 568.99
 544.94
 520.89
 496.84
 472.79
 448.74
 424.69
 400.64
 376.59
 352.54
 328.49
 304.44
 280.39
 256.33
 232.28
 208.23
 184.18
 160.13
 136.08
 112.03
 87.98
 63.93
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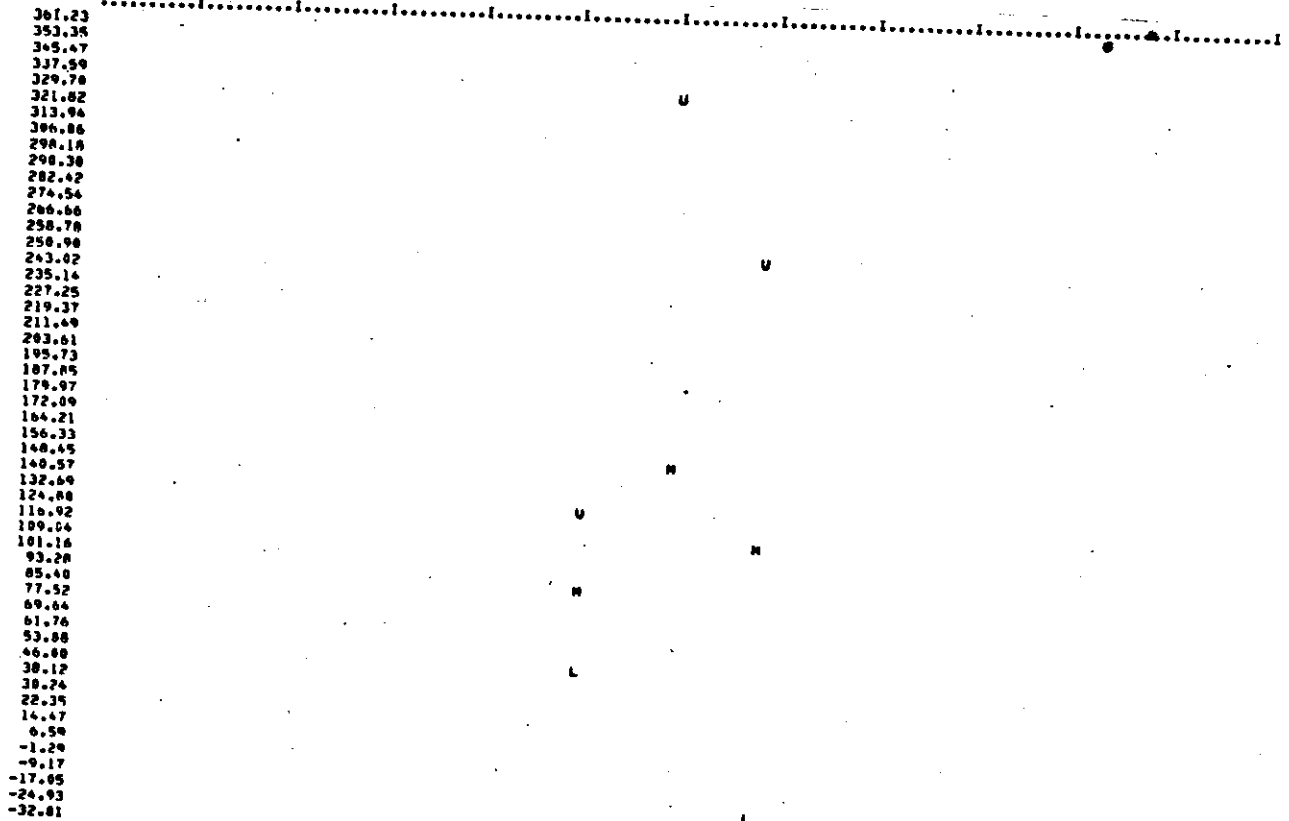
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 10- 20 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	147.95	39.69	2.21	60.37	235.52
181	12	368.24	253.82	2.21	-176.58	932.69
208	12	84.42	12.68	2.21	56.63	112.21

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

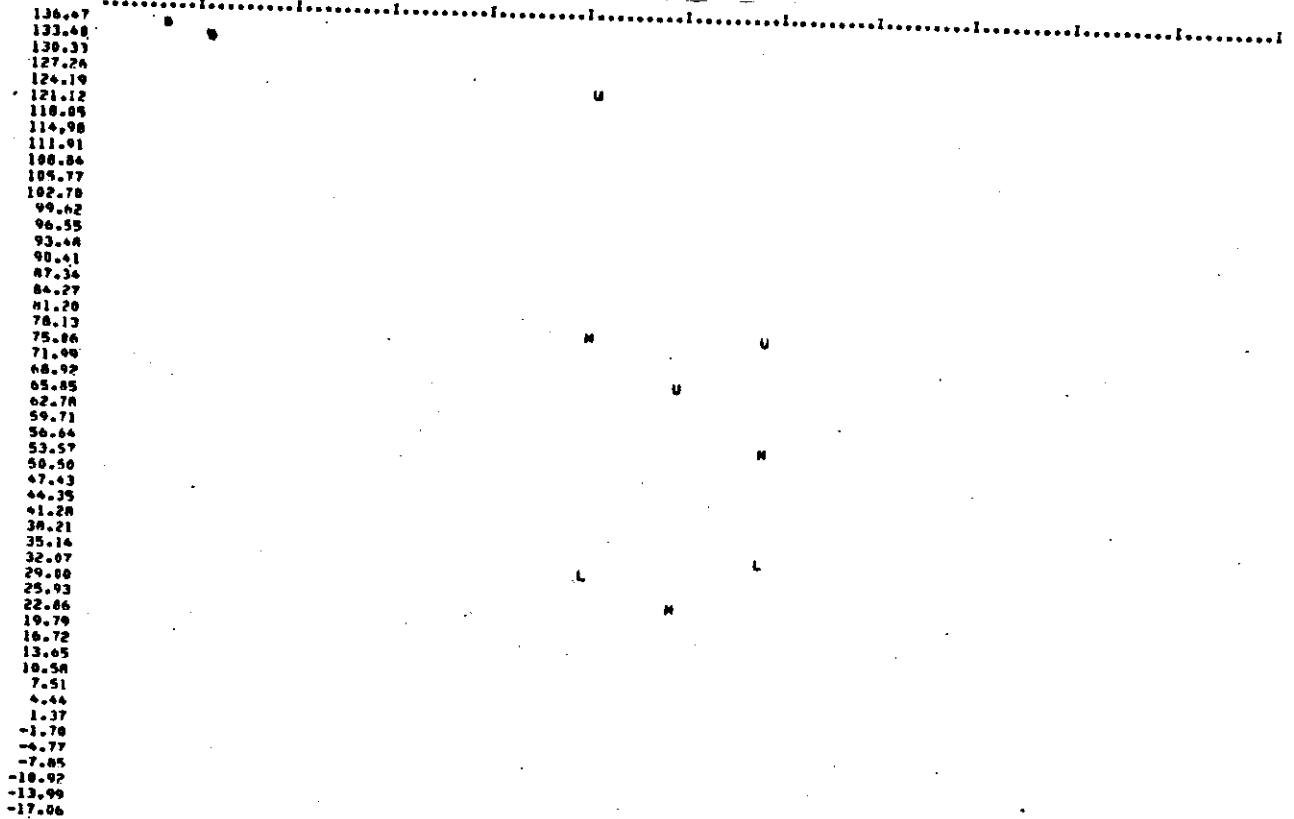


AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20- 30 CM DEPTH
 *THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRY 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	86.83	17.23	2.21		
181	12	145.97	32.68	2.21	48.82	124.85
208	12	111.20	61.83	2.21	-32.81	328.39
					-25.13	247.78

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.



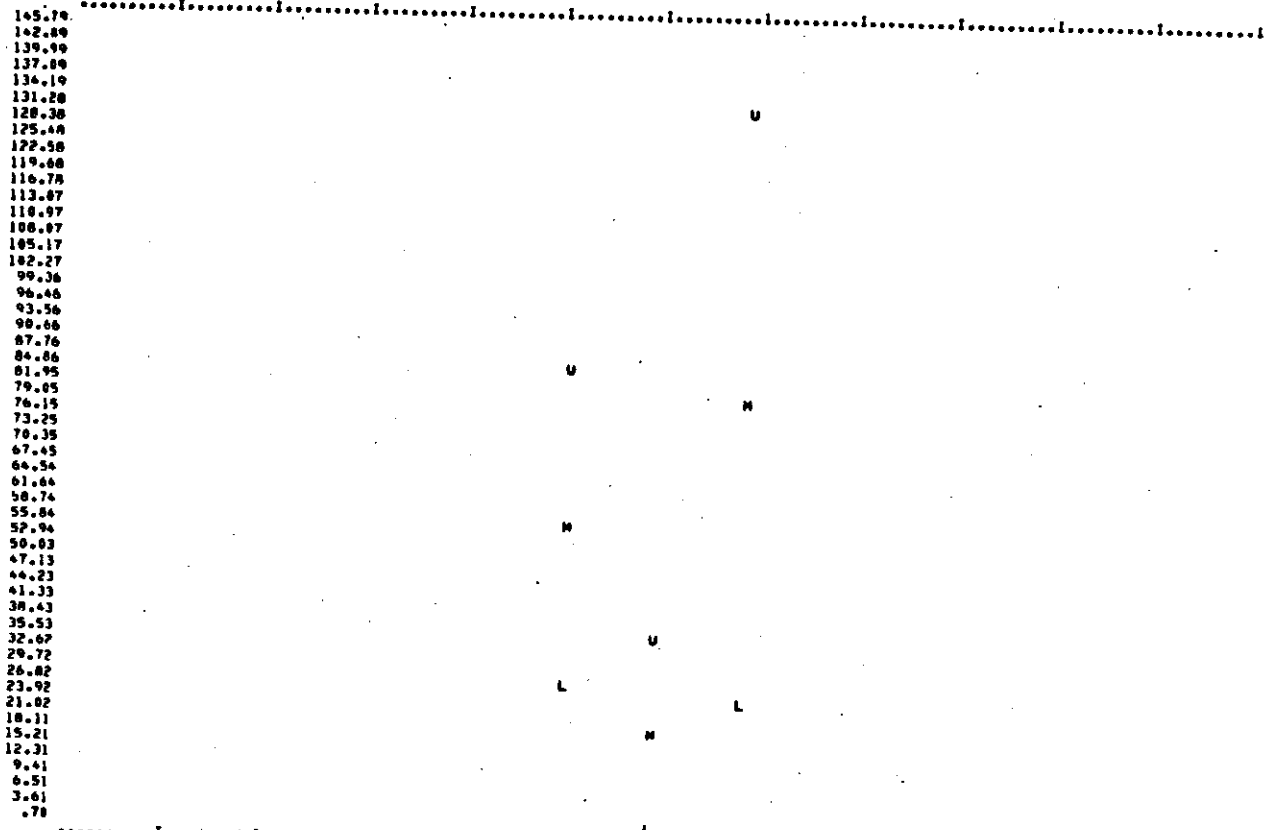
AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 30- 40 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	78.27	28.78	2.21	32.47	124.07
181	12	25.74	28.26	2.21	-17.06	70.44
208	12	55.92	9.67	2.21	34.59	77.24

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.

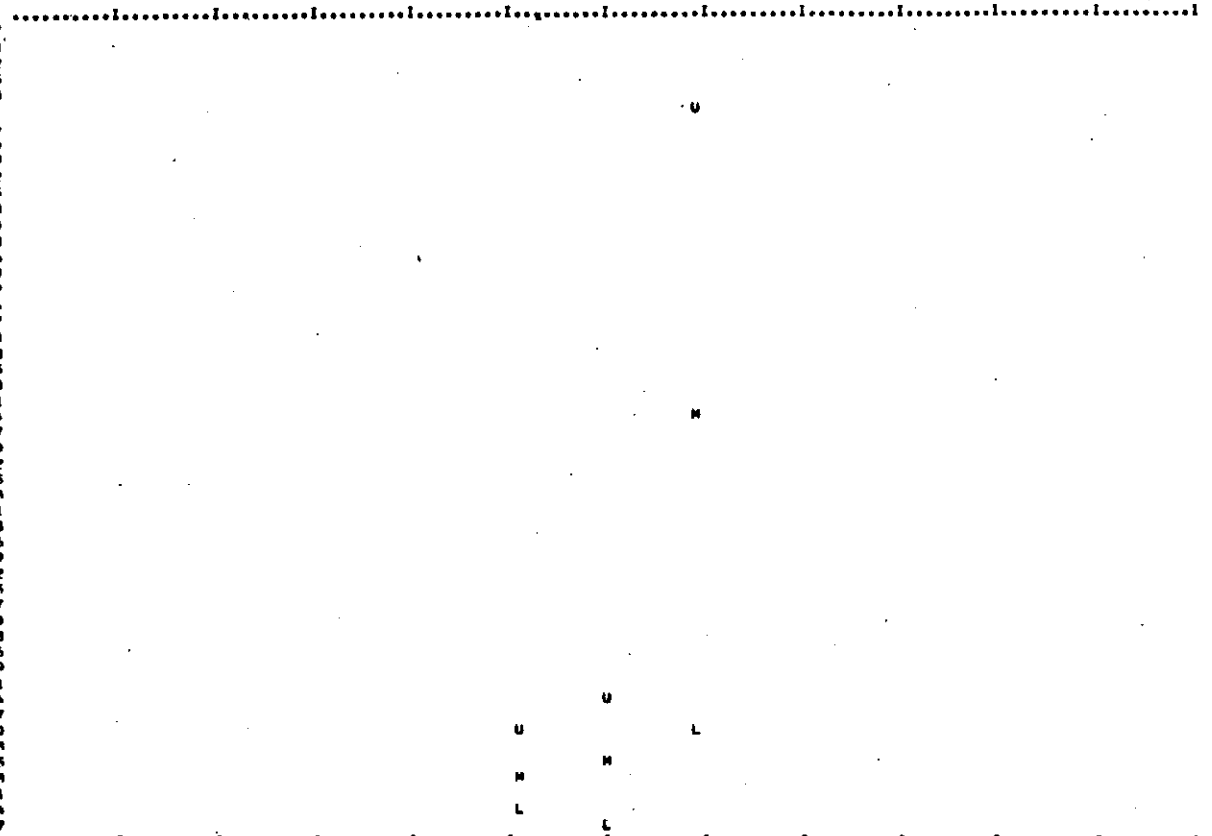


AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 00- 50 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRY 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	56.02	13.38	2.21	26.68	85.36
181	12	18.87	8.11	2.21	.78	36.57
208	12	78.96	24.29	2.21	25.34	132.54

423.27
 414.98
 406.52
 398.15
 389.78
 381.41
 373.04
 364.66
 356.29
 347.92
 339.55
 331.18
 322.80
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 138.62
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 121.87
 113.50
 105.13
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 88.39
 80.01
 71.64
 63.27
 54.90
 46.53
 38.15
 29.78
 21.41
 13.04
 4.67

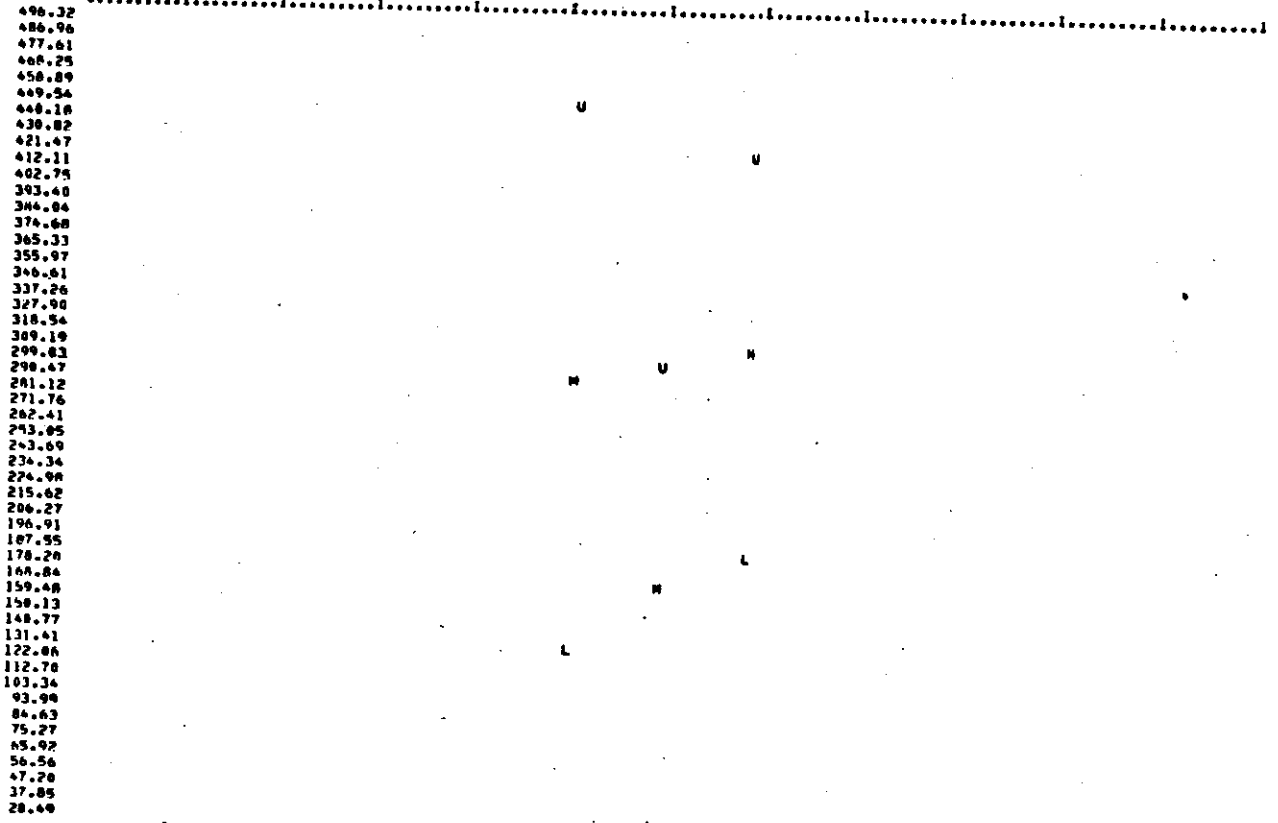


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 50- 60 CM DEPTH
 THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	11	31.48	8.84	2.24	11.71	51.26
181	12	39.05	15.38	2.21	5.18	72.91
208	12	219.18	75.09	2.21	53.42	384.79

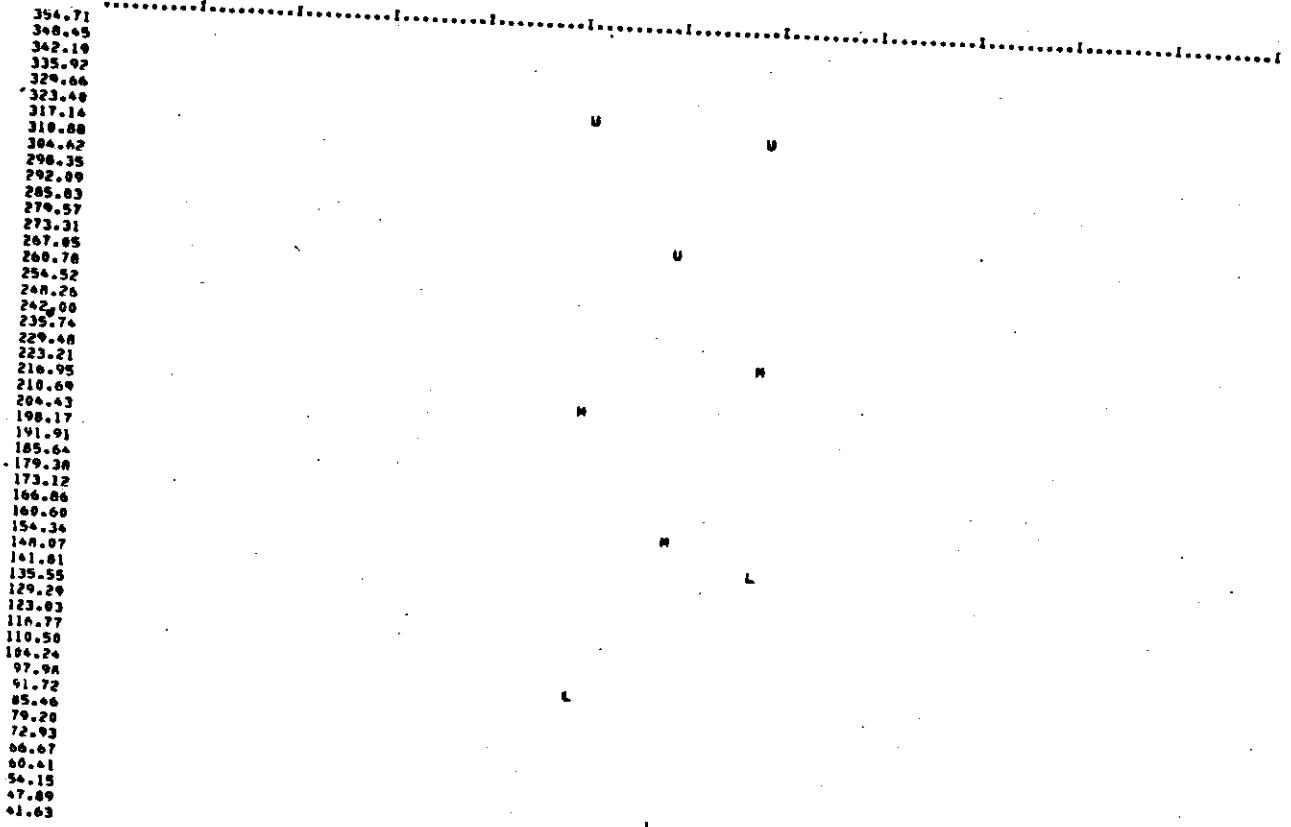


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 60-70 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRY 3 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	7	291.03	65.14			
181	12	166.37	41.96	2.40	130.85	451.20
208	12	305.10	53.33	2.21	31.66	301.08
				2.21	107.44	422.76



AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 0- 8 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	210.70	50.65	2.21	98.94	322.46
181	12	168.55	51.80	2.21	46.25	274.85
208	12	231.46	39.04	2.21	145.32	317.59

1178.50
 1160.65
 1142.79
 1124.94
 1107.08
 1089.23
 1071.37
 1053.51
 1035.66
 1017.80
 999.95
 982.09
 964.24
 946.38
 928.52
 910.67
 892.81
 874.96
 857.10
 839.25
 821.39
 803.54
 785.68
 767.82
 749.97
 732.11
 714.26
 696.40
 678.55
 660.69
 642.84
 624.98
 607.12
 589.27
 571.41
 553.56
 535.70
 517.85
 499.99
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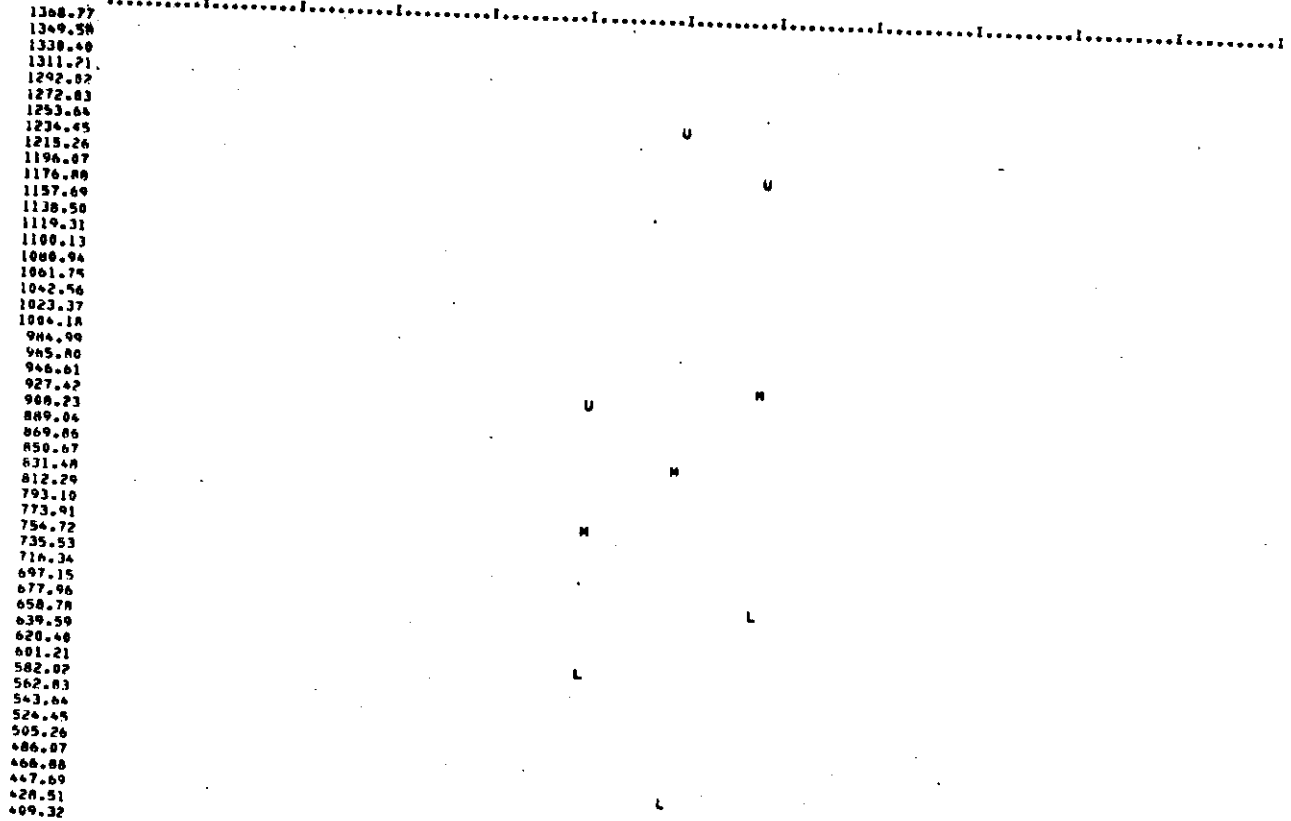
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	486.10	62.87	2.21		
181	12	694.42	178.84	2.21	347.38	624.82
208	12	652.36	63.33	2.21	317.47	1071.37
					512.63	792.09



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	767.73	72.20	2.21	608.26	927.20
181	12	849.57	176.92	2.21	454.80	1244.34
208	12	937.36	114.20	2.21	685.41	1189.36

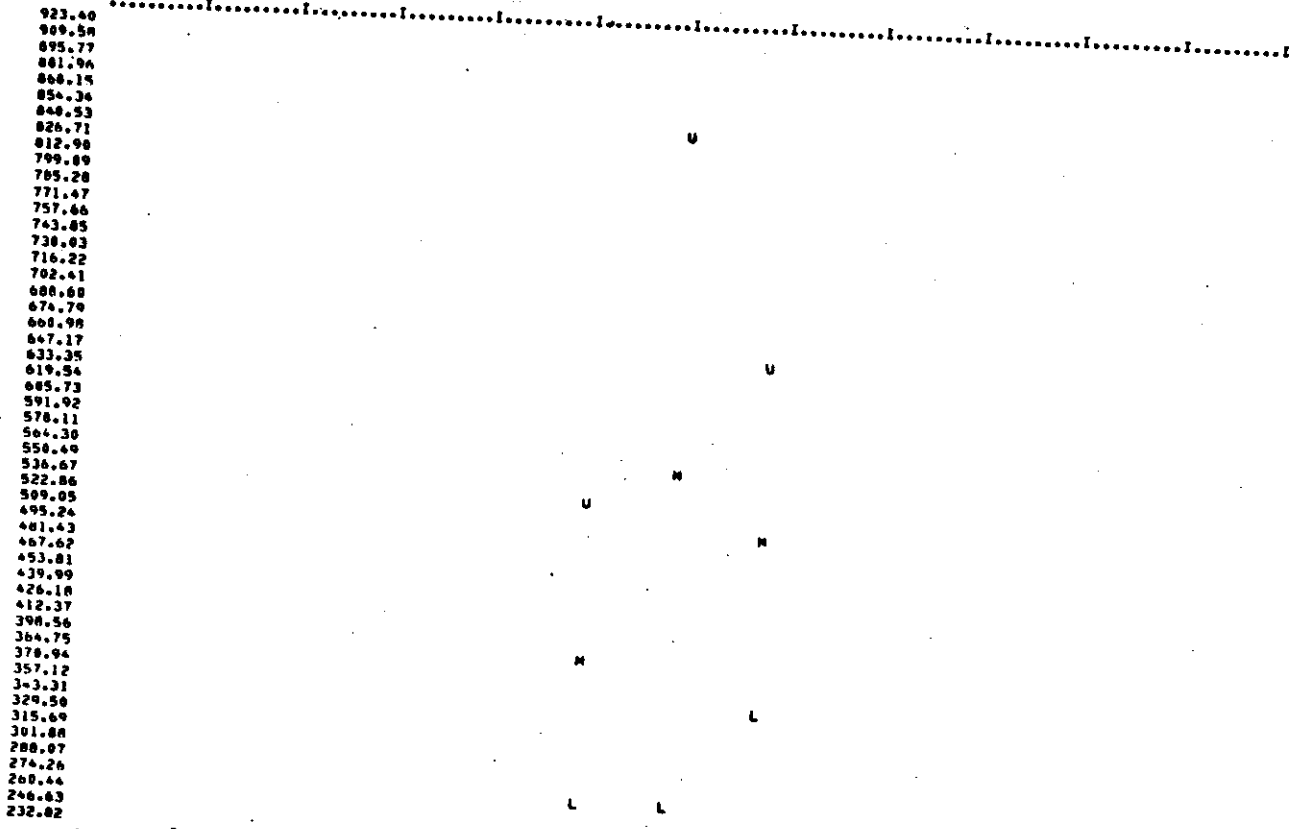
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 2594.85
 2552.59
 2510.37
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 2425.88
 2383.53
 2341.27
 2299.01
 2256.74
 2214.48
 2172.22
 2129.95
 2087.69
 2045.43
 2003.17
 1960.90
 1918.64
 1876.38
 1834.11
 1791.85
 1749.59
 1707.32
 1665.06
 1622.80
 1580.54
 1538.27
 1496.01
 1453.75
 1411.48
 1369.22
 1326.96
 1284.69
 1242.43
 1200.17
 1157.90
 1115.64
 1073.38
 1031.12
 988.85
 946.59
 904.33
 862.06
 819.80
 777.54
 735.27
 693.01
 650.75
 608.48
 566.22

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-70 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	1438.33	135.60	2.21	1131.05	1729.62
181	12	1849.94	190.72	2.21	629.14	1470.75
208	12	1779.86	297.65	2.21	1122.32	2435.79

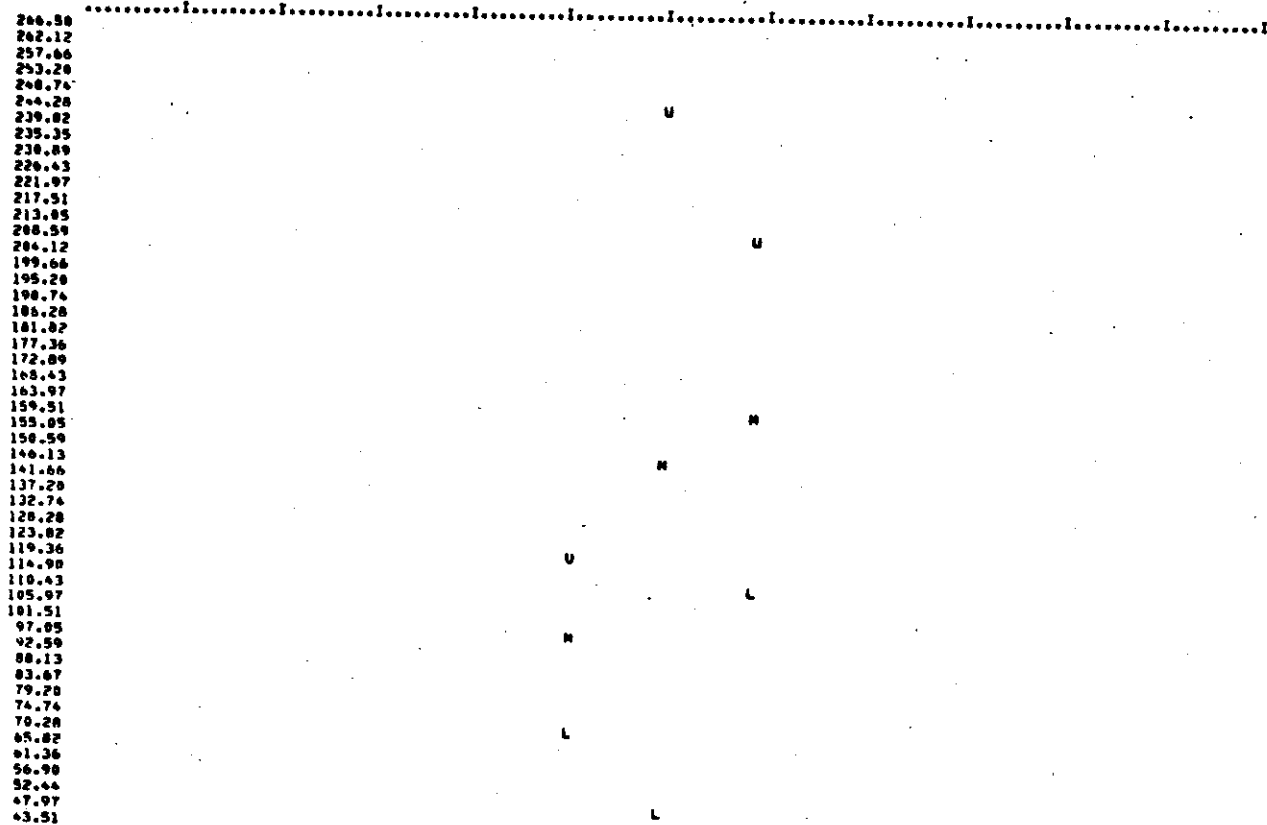


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1978
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 5 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 5 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	391.09	56.98	2.21	265.37	516.81
181	12	549.07	131.61	2.21	258.69	839.45
208	12	492.10	67.60	2.21	342.95	641.26



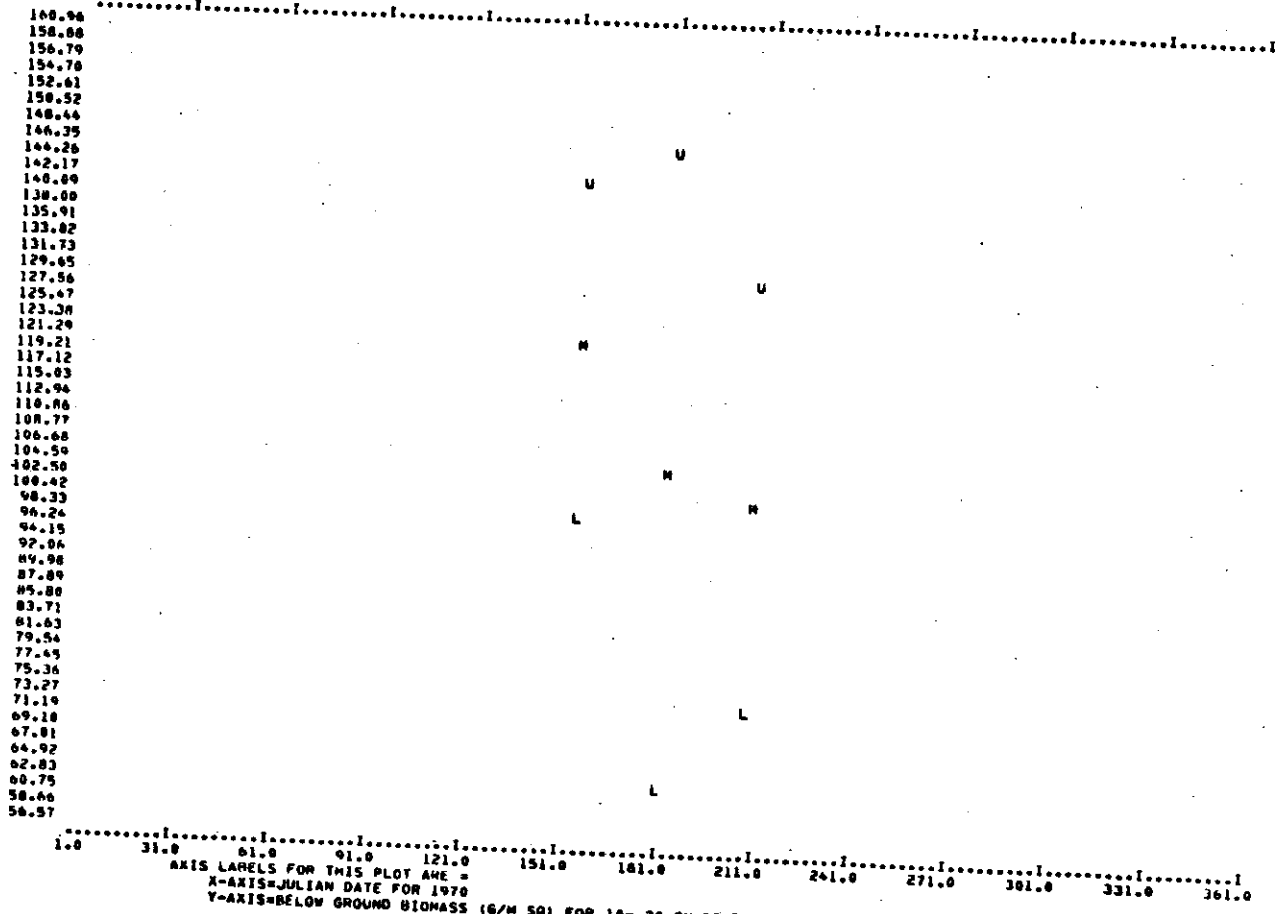
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIONASS (G/M SQ) FOR 5- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

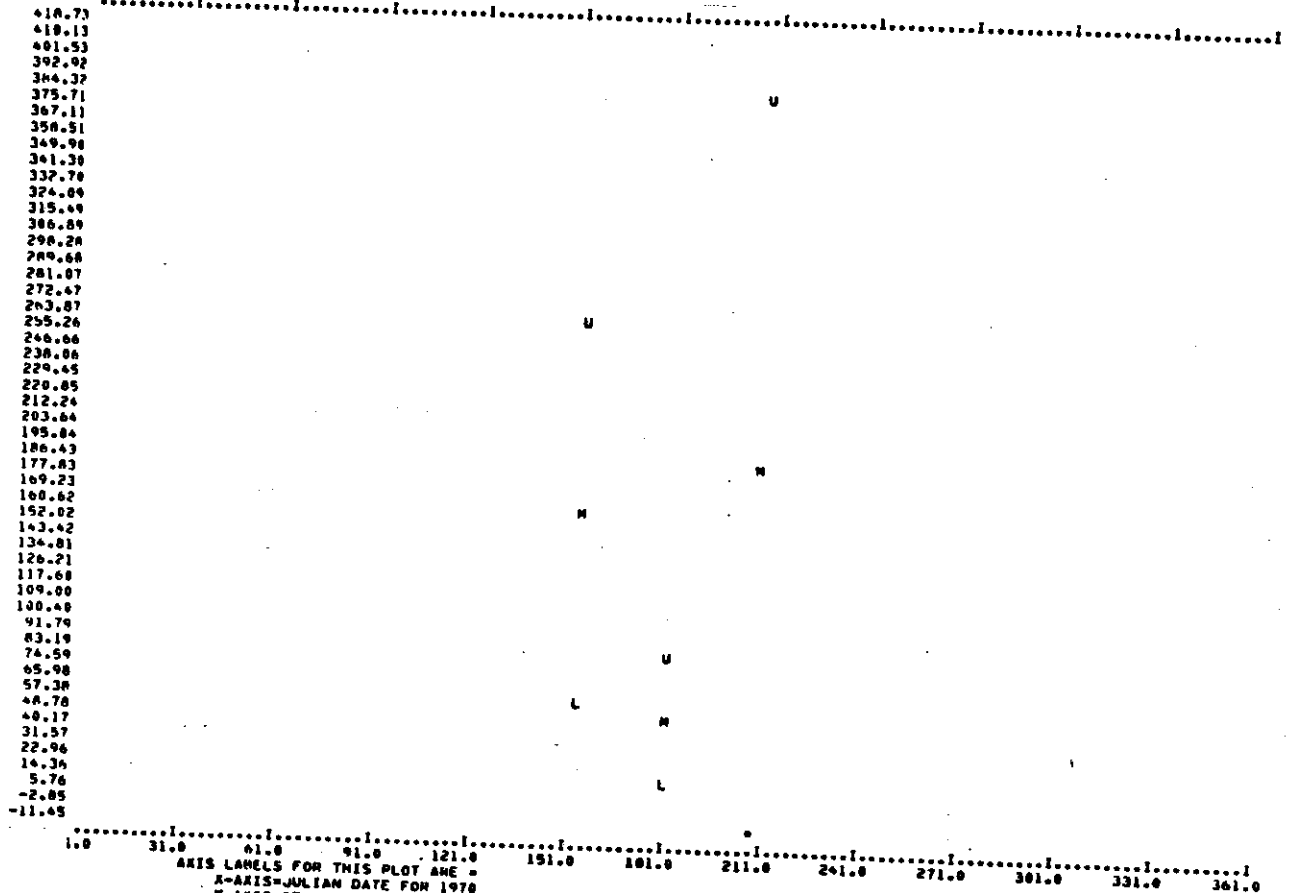
THESE DATA REPRESENT BELOW-GROUND BIONASS SAMPLING ON SITE PANTEX- TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	95.01	10.00	2.21		
101	12	145.35	43.90	2.21	70.97	119.05
200	12	166.20	22.21	2.21	48.35	242.35
					111.26	209.25



THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	129.36	9.64	2.21		
181	12	184.59	18.92	2.21	99.07	141.60
208	12	181.05	12.89	2.21	62.86	146.33
					72.61	129.56

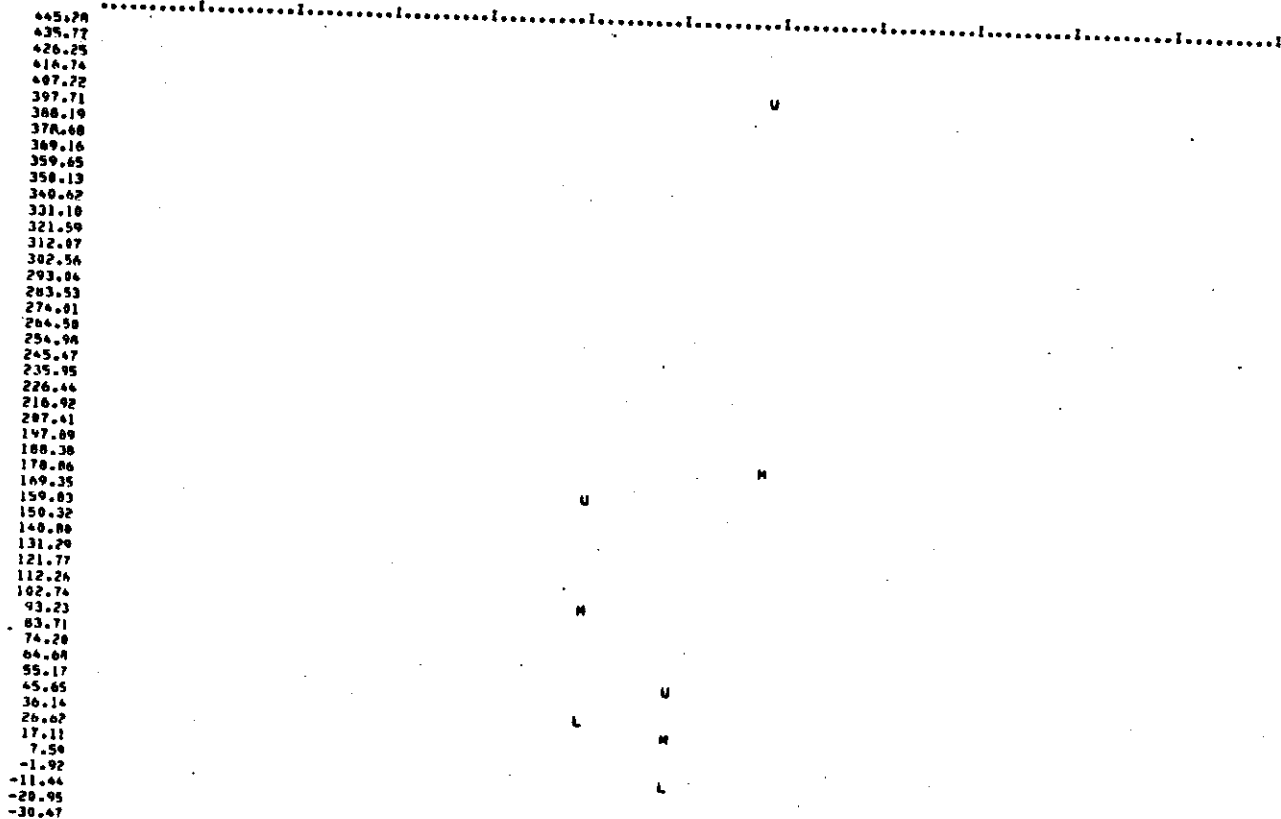


THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 5 FOR 1978
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	161.29	46.34	2.21	59.05	263.53
181	12	58.88	14.48	2.21	18.68	82.51
200	12	183.97	89.15	2.21	-11.45	386.67

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.



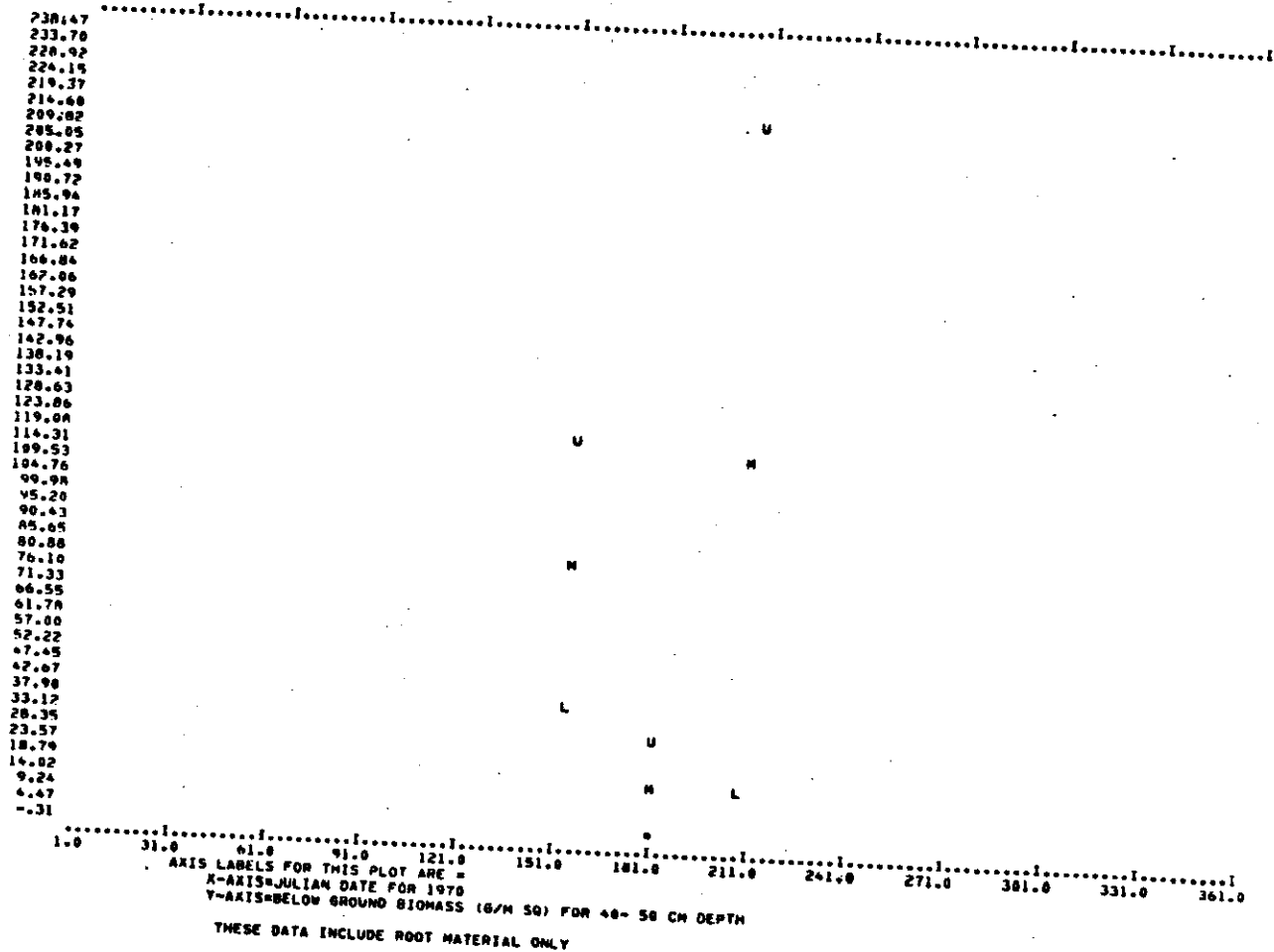
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 30-40 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

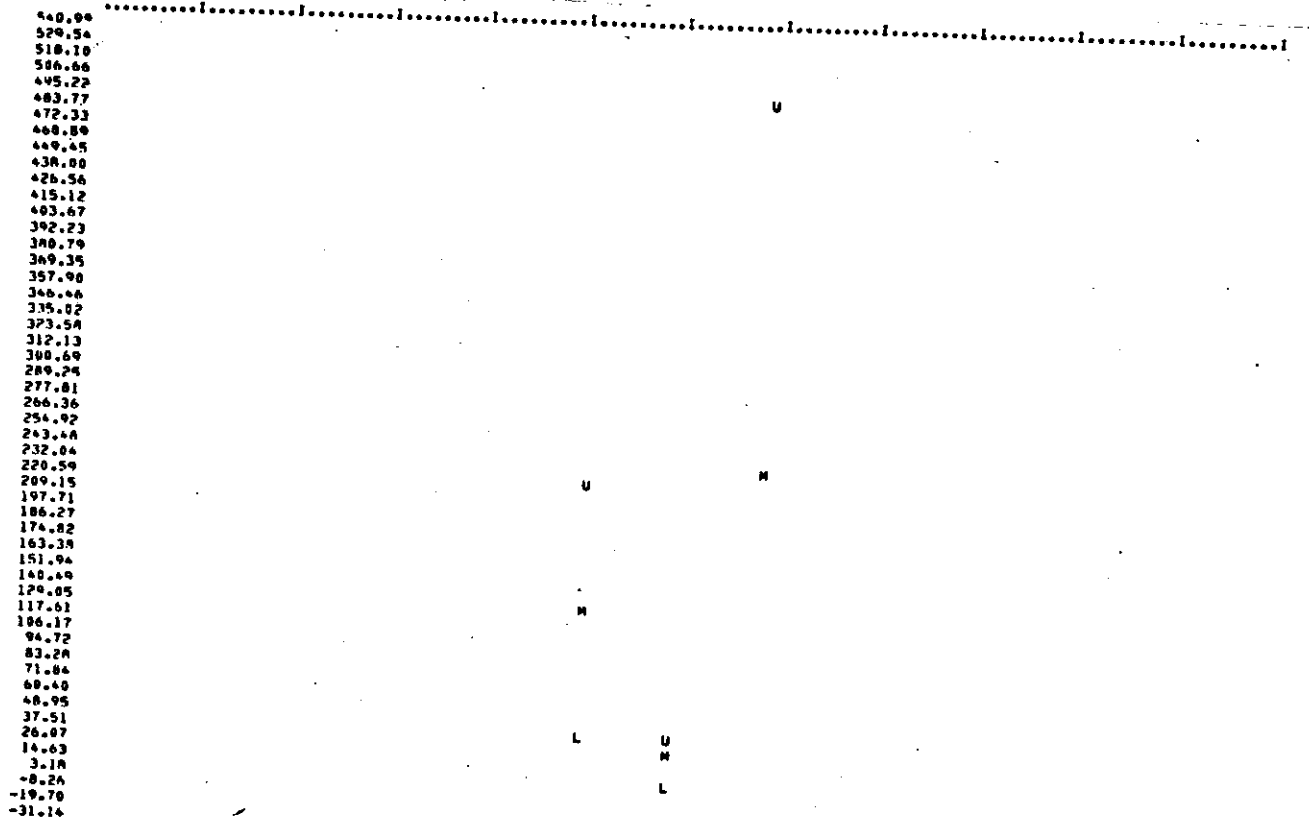
JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	105.77	30.84			
181	12	27.99	11.43	2.21	37.72	173.83
208	12	185.47	99.41	2.21	2.78	53.21
					-38.47	404.60



THESE DATA REPRESENT BELOW-GROUND BIONASS SAMPLING ON SITE PAMTEX, TRT 5 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	79.79	17.99	2.21	48.10	119.48
181	12	13.58	6.31	2.21	-3.31	27.51
208	12	115.12	46.88	2.21	13.45	216.80

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.



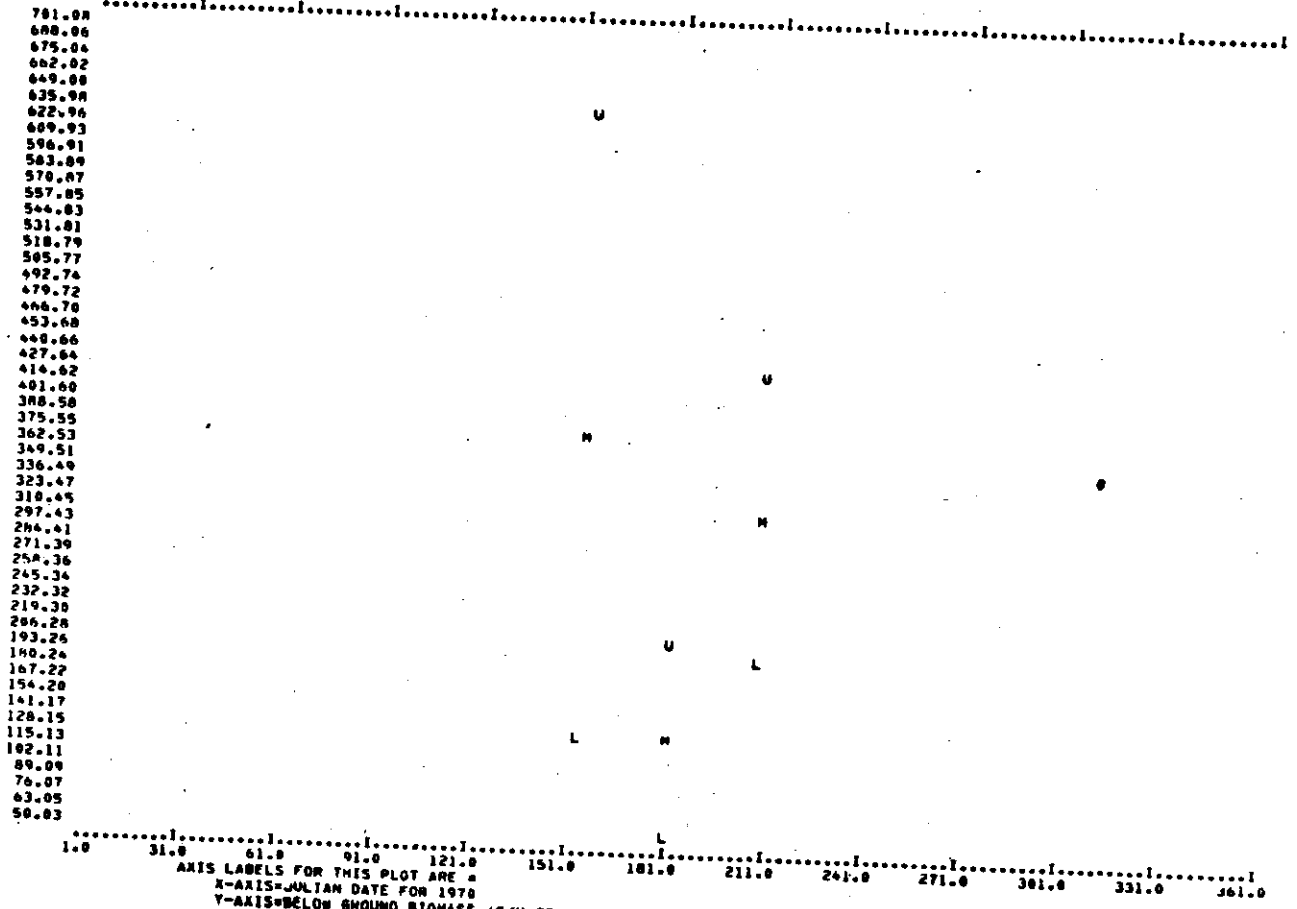
AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1970
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 50- 60 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 5 FOR 1970
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	12	129.82	40.30	2.21	46.18	217.95
181	12	24.69	7.24	2.21	8.71	40.66
208	12	228.88	110.29	2.21	-31.14	491.81

Note: Asterisks appearing in graph indicate a lower confidence limit which has a negative value.



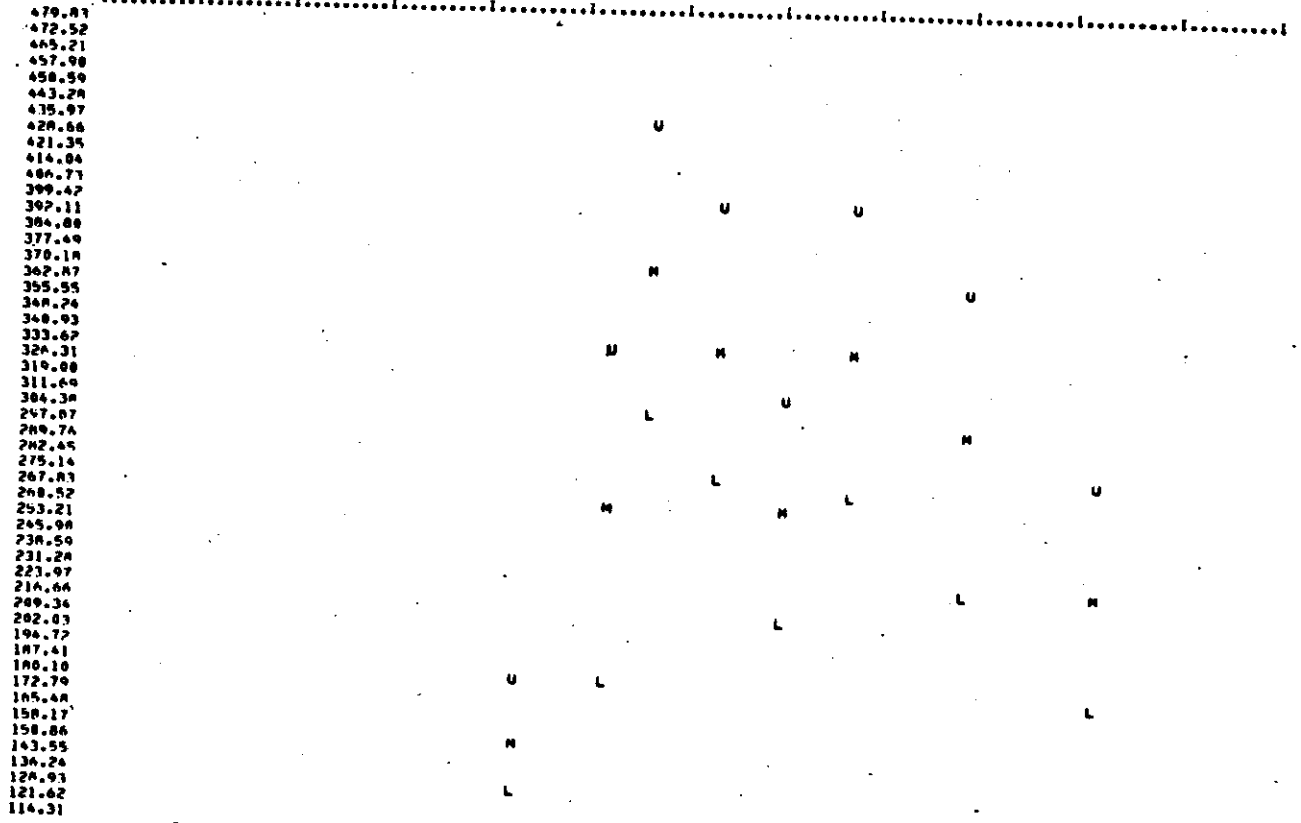
THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 5 FOR 1970
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
153	11	379.66	115.22	2.24	121.97	637.35
181	12	136.11	35.59	2.21	55.58	212.64
208	12	312.48	52.93	2.21	195.68	429.27

6.2 Data for 1971

Sampling at the Pantex Site for 1971 was generally done on two strata. One stratum was considered to be primarily a blue grama area and the other stratum was considered to be primarily a prickly pear cactus area. The data for these two strata are presented separately in the following analysis. The belowground herbage biomass was sampled on each of two replicates on each of two strata for treatments 1 and 3 on four dates at the Pantex Site for the 1971 season. Depth increments utilized were the 0 to 10, 10 to 20, and 20 to 30 cm levels. The root data were reported on an ash-free weight basis. The crown material was harvested from a 0.5-m^2 plot and reported with the aboveground herbage biomass sampling. The crown material from the aboveground herbage biomass data file, which represents only dry weights of crowns, was sampled more frequently than were the roots. They are incorporated in the file of belowground herbage biomass data at the 0 to 0 cm level and have the core diameters adjusted to give the correct biomass density.

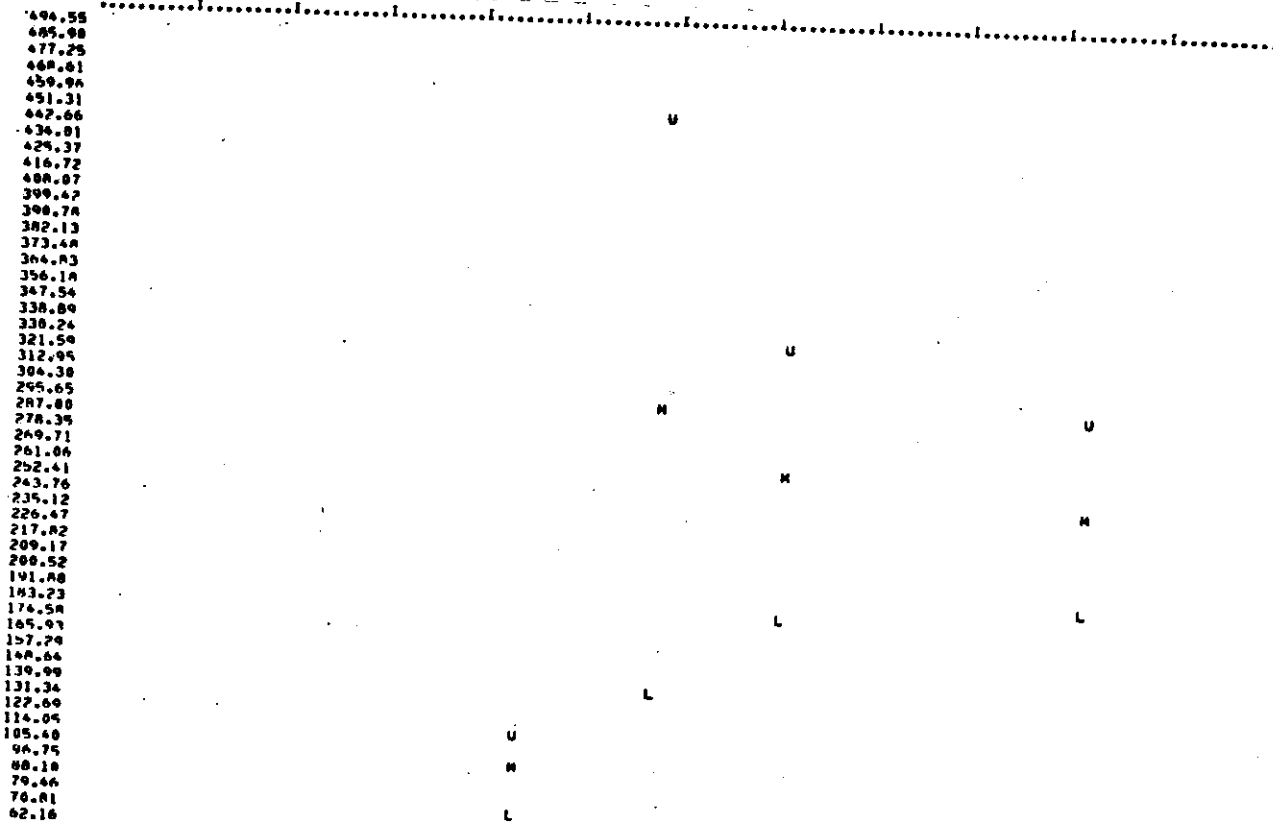


AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 8 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
134	12	153.31	11.92			
159	12	257.55	36.12	2.21	127.01	179.62
172	12	371.45	29.35	2.21	177.86	337.23
194	12	335.74	27.77	2.21	306.69	436.21
214	12	257.69	23.14	2.21	274.47	397.02
235	12	332.78	38.21	2.21	285.94	388.24
271	12	295.22	38.93	2.21	266.05	399.34
310	12	223.58	22.74	2.21	226.49	343.46
					173.32	273.68

*Blue grama stratum



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT J * FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	93.13	10.91			
179	12	292.01	71.06	2.21	69.07	117.20
210	12	257.54	34.24	2.21	136.04	449.59
310	12	246.33	23.00	2.21	182.01	333.08
					195.41	297.24

*Blue grama stratum

657.03
645.48
633.77
622.14
610.51
598.88
587.25
575.63
564.00
552.37
540.74
529.11
517.48
505.85
494.22
482.60
470.97
459.34
447.71
436.08
424.45
412.82
401.19
389.57
377.94
366.31
354.68
343.05
331.42
319.79
308.17
296.54
284.91
273.28
261.65
250.02
238.39
226.76
215.14
203.51
191.88
180.25
168.62
156.99
145.36
133.74
122.11
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87.22
75.59

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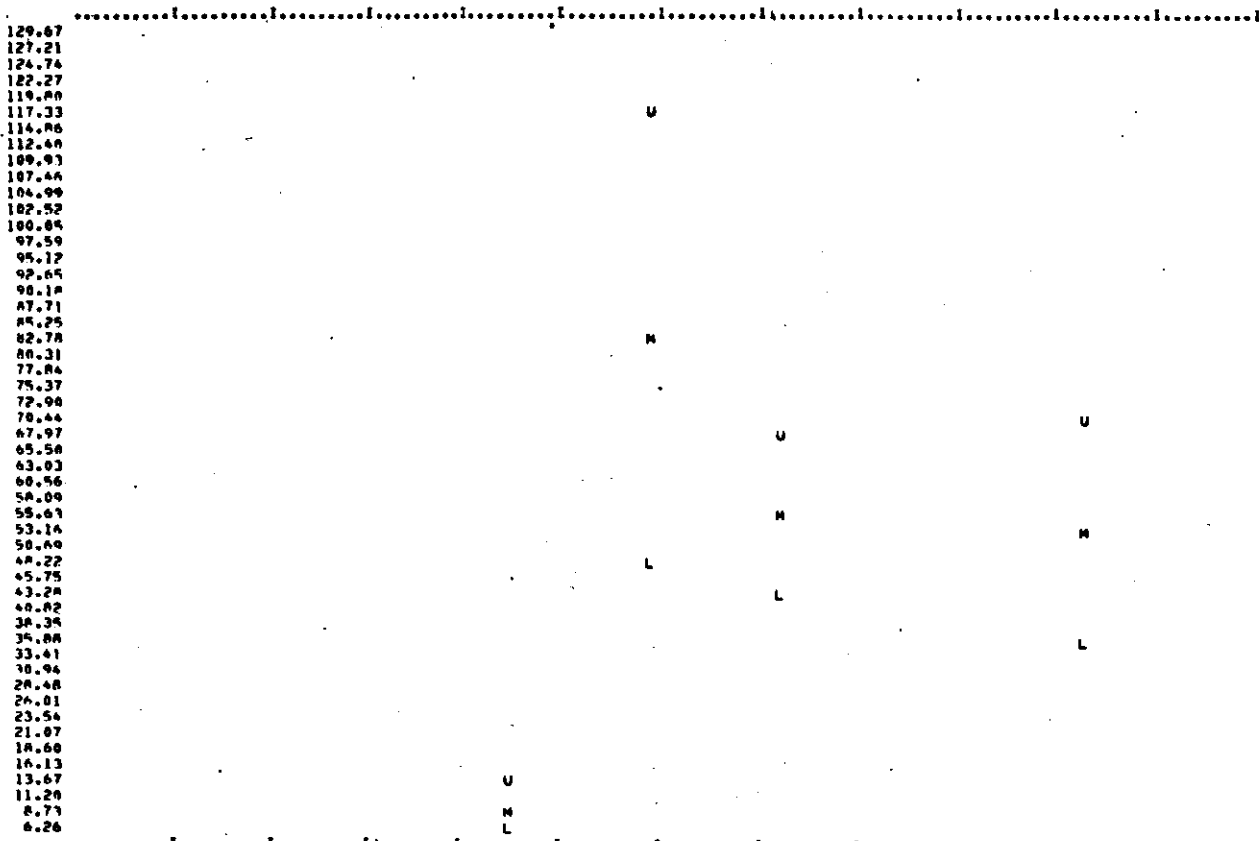
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

ARIS LAMPLS FOR THIS PLOT ARE =
X=ARIS=JULIAN DATE FOR 1971
Y=ARIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTELX, TRT 1 FOR 1971
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	109.85	11.72	2.21	83.99	135.71
179	12	425.63	77.81	2.21	253.96	597.30
210	12	361.52	39.74	2.21	273.83	449.20
310	12	335.87	27.84	2.21	274.44	397.29

*Blue grama stratum



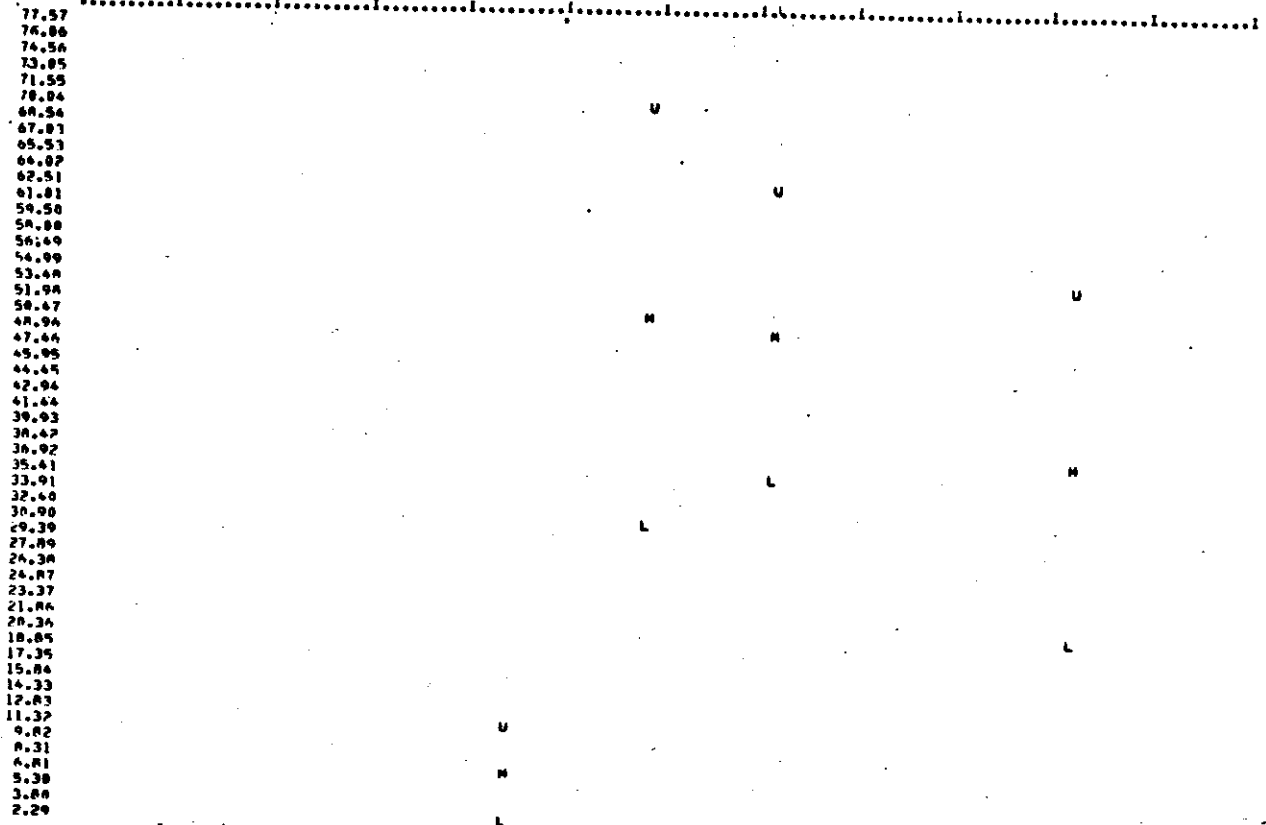
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 10-20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 1* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	9.92	1.34	2.21	6.96	12.88
179	12	82.48	16.05	2.21	47.07	117.89
218	12	55.66	5.10	2.21	44.41	66.91
310	12	52.63	7.74	2.21	35.54	69.71

*Blue grama stratum

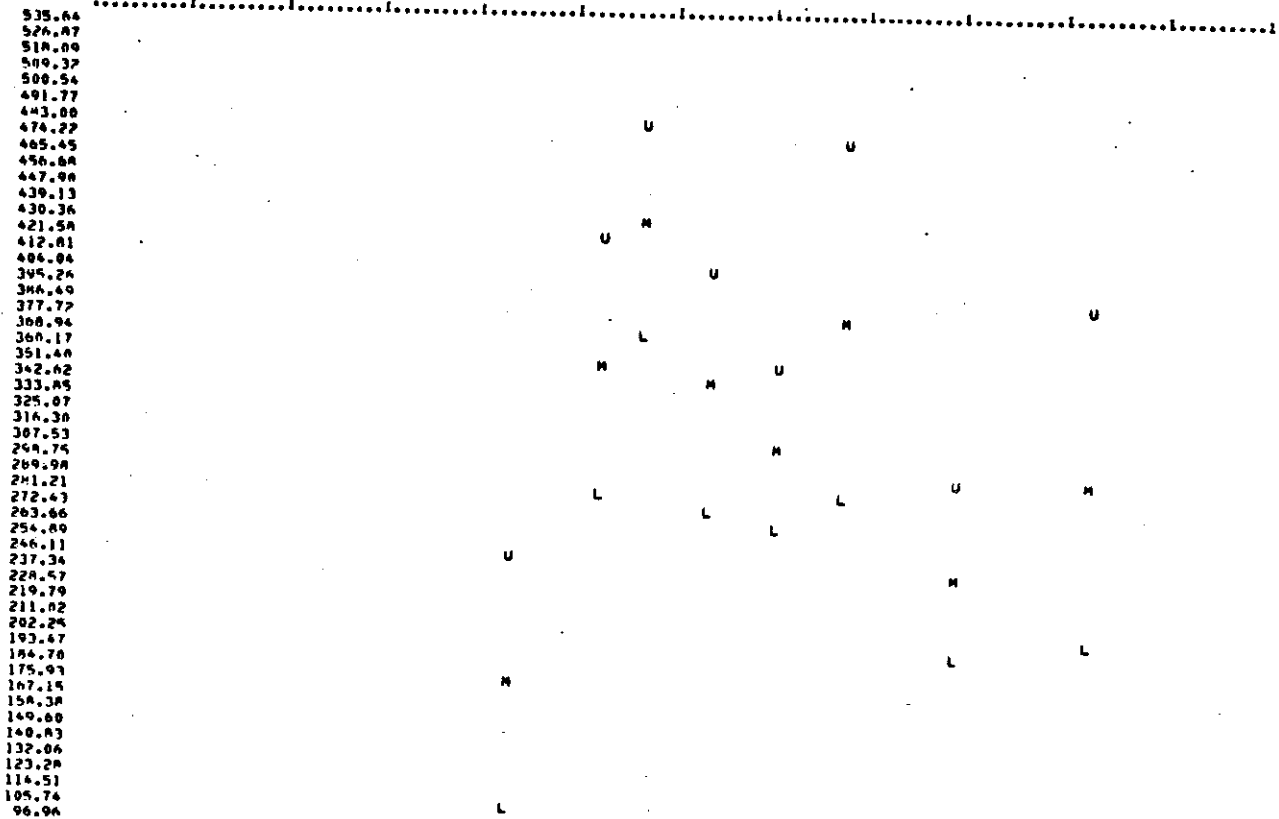


AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 20- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX. TRT 1** FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	6.80	1.93	2.21	2.54	11.05
179	12	50.33	9.15	2.21	30.15	70.52
218	12	48.31	6.11	2.21	34.83	61.80
318	12	30.91	7.50	2.21	20.24	53.59

*Blue grama stratum

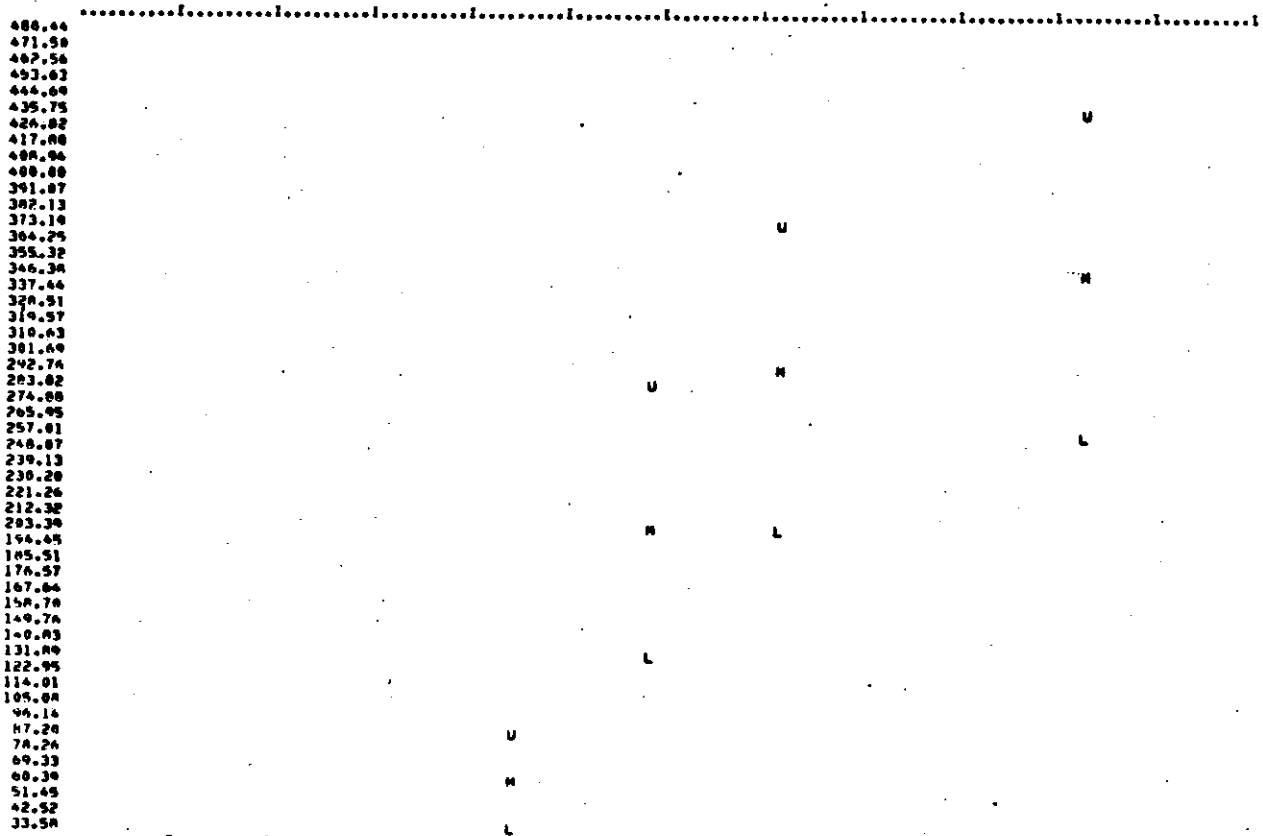


AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 0- 0 CM DEPTH

THESE DATA INCLUDE CHOWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTERA TRY (★ FOR 1971)
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ² SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
134	12	177.41	31.58	2.21	107.74	247.07
159	12	358.41	31.27	2.21	281.43	419.39
172	12	424.72	25.94	2.21	372.49	486.94
194	12	348.74	29.88	2.21	274.81	406.67
214	12	306.89	21.10	2.21	260.33	353.45
235	12	379.89	43.86	2.21	282.98	476.67
271	12	248.57	21.36	2.21	193.45	287.69
310	12	292.86	48.75	2.21	202.75	382.56

*Cactus stratum



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTER, TRT 1* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	62.46	11.40	2.21	37.31	87.60
179	12	207.58	35.10	2.21	130.13	285.02
210	12	288.77	39.88	2.21	202.55	374.99
310	12	345.37	41.42	2.21	253.97	436.76

*Cactus stratum

428.47
 616.75
 695.83
 593.31
 581.68
 569.88
 558.16
 546.44
 534.73
 523.01
 511.29
 499.57
 487.86
 476.14
 464.42
 452.70
 440.98
 429.27
 417.55
 405.83
 394.11
 382.40
 370.68
 358.96
 347.24
 335.53
 323.81
 312.09
 300.37
 288.66
 276.94
 265.22
 253.50
 241.79
 230.07
 218.35
 206.63
 194.91
 183.20
 171.48
 159.76
 148.04
 136.33
 124.61
 112.89
 101.17
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 66.02
 54.30
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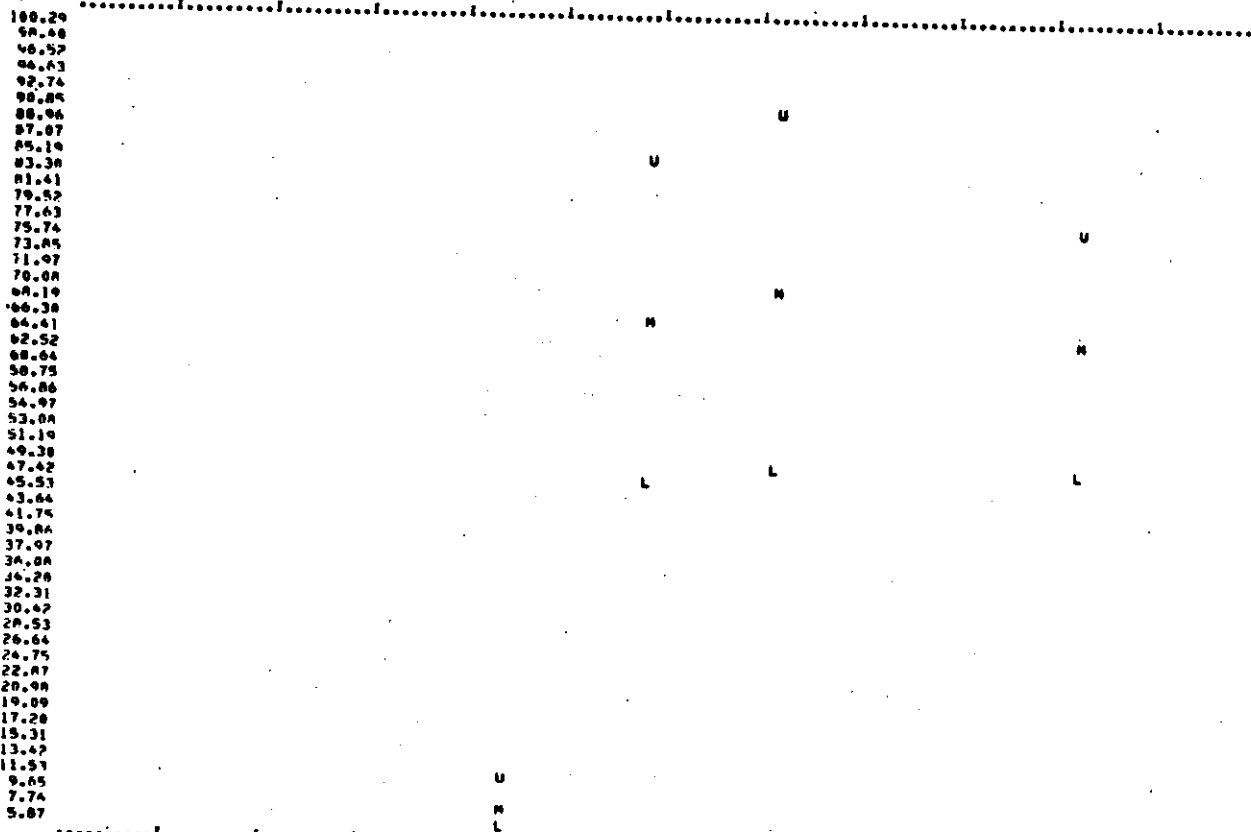
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AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 1 * FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	74.21	12.19	2.21	47.32	101.11
179	12	327.18	43.69	2.21	230.76	423.57
218	12	418.07	47.75	2.21	310.71	521.44
318	12	458.11	51.31	2.21	344.89	571.33

*Cactus stratum

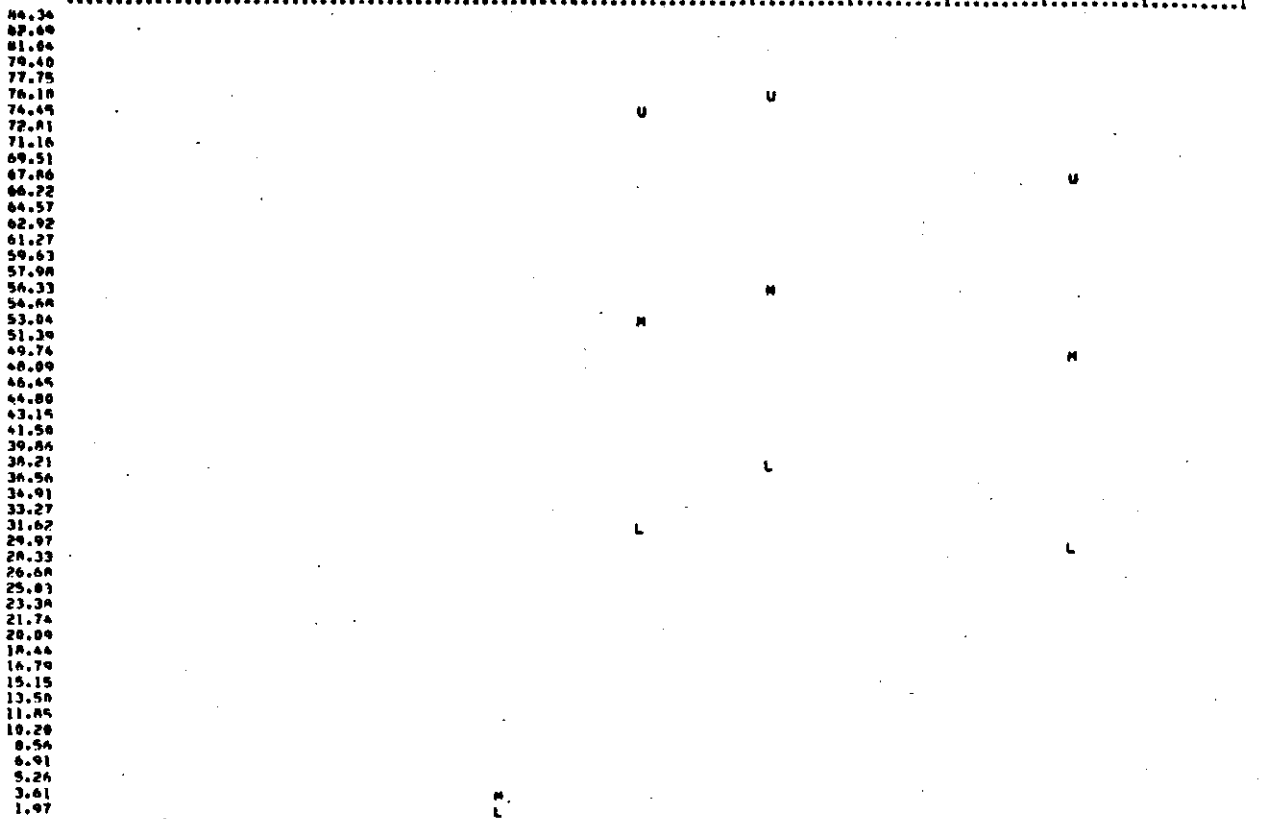


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1² FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	8.63	.96	2.21	6.52	10.75
179	12	66.50	8.43	2.21	47.98	85.09
218	12	70.17	9.52	2.21	49.17	91.18
310	12	63.59	6.67	2.21	48.87	78.31

*Cactus stratum

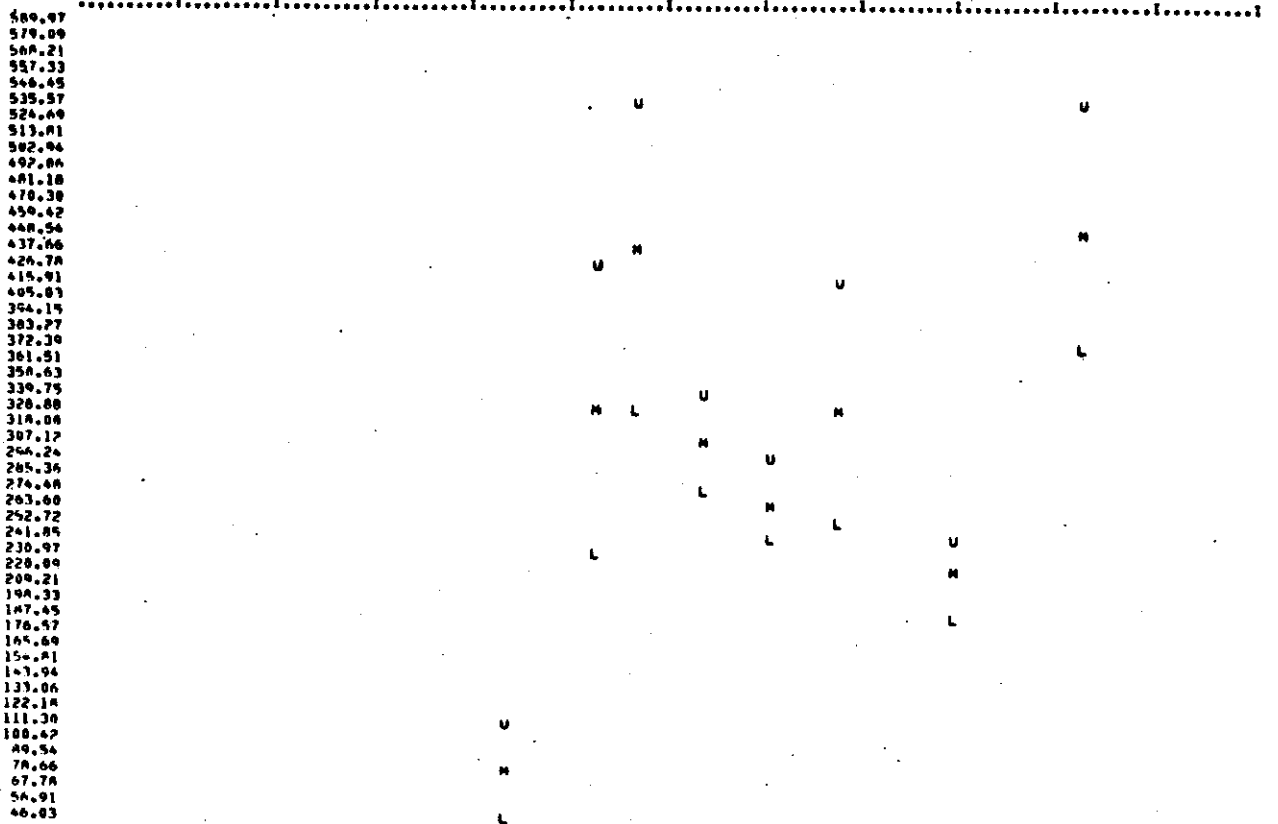


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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 20-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	3.12	.43	2.21	2.18	4.06
179	12	53.09	9.78	2.21	31.52	74.66
218	12	57.13	8.86	2.21	37.59	76.67
310	12	49.16	8.45	2.21	38.52	67.79

*Cactus stratum

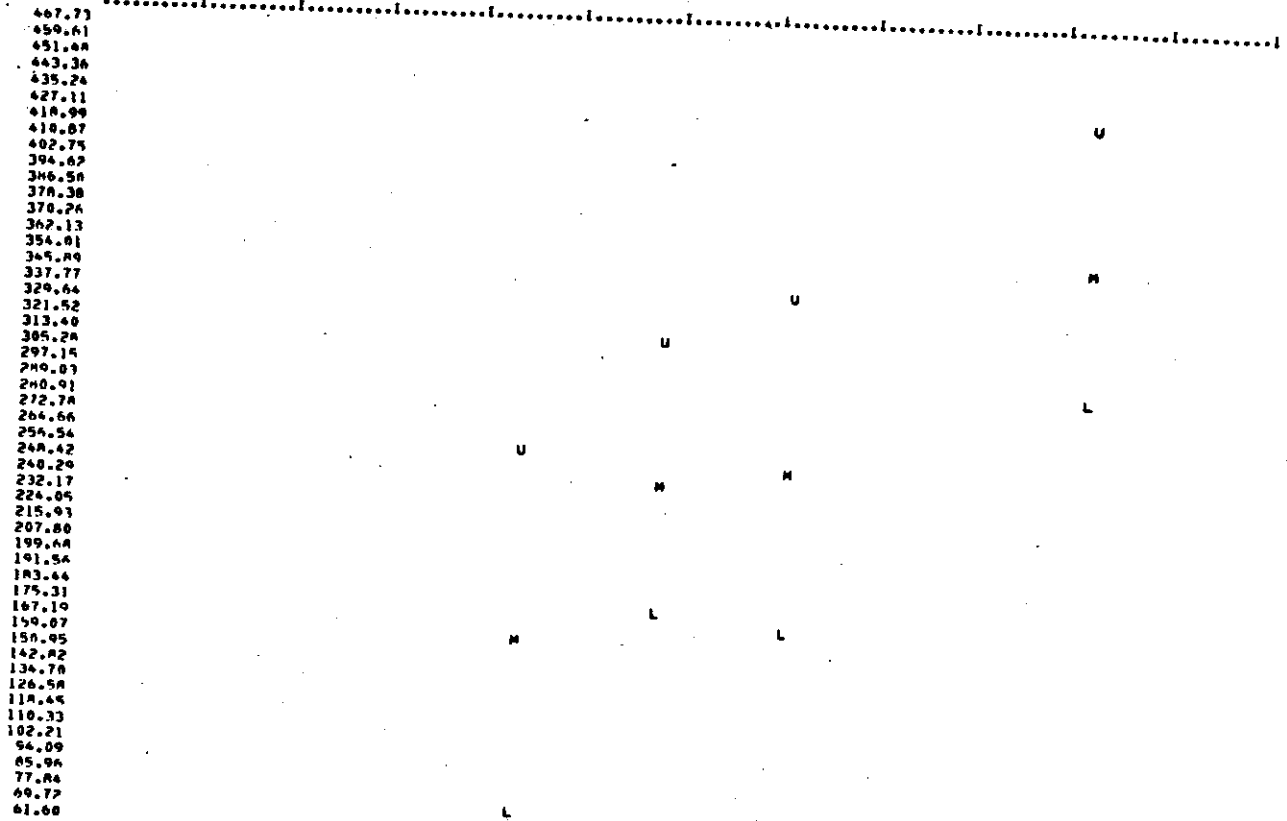


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 8 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 3* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
134	12	81.86	13.92	2.21	51.14	112.59
149	12	326.25	44.82	2.21	227.37	425.13
172	12	433.84	45.77	2.21	332.86	534.83
194	12	304.89	13.48	2.21	275.16	334.62
214	12	265.86	12.55	2.21	237.36	292.76
235	12	334.27	37.14	2.21	252.32	416.22
271	12	214.78	13.12	2.21	185.83	243.73
310	12	453.46	37.56	2.21	376.58	536.33

*Blue grama stratum

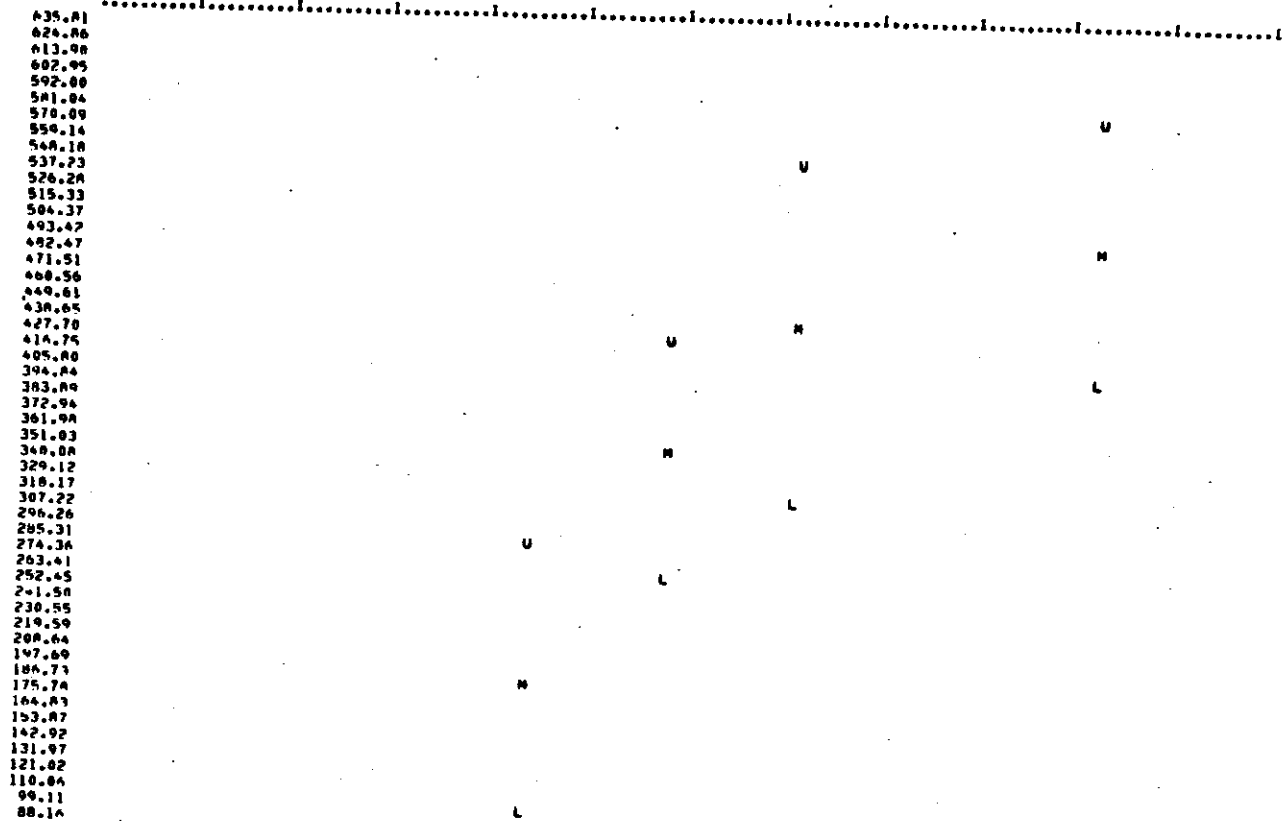


AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 3* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	160.73				
170	12	241.01	41.83	2.21	60.44	253.03
210	12	251.85	31.01	2.21	172.58	309.44
310	12	357.43	38.40	2.21	167.12	336.57
			30.72	2.21	289.65	425.21

*Blue grama stratum

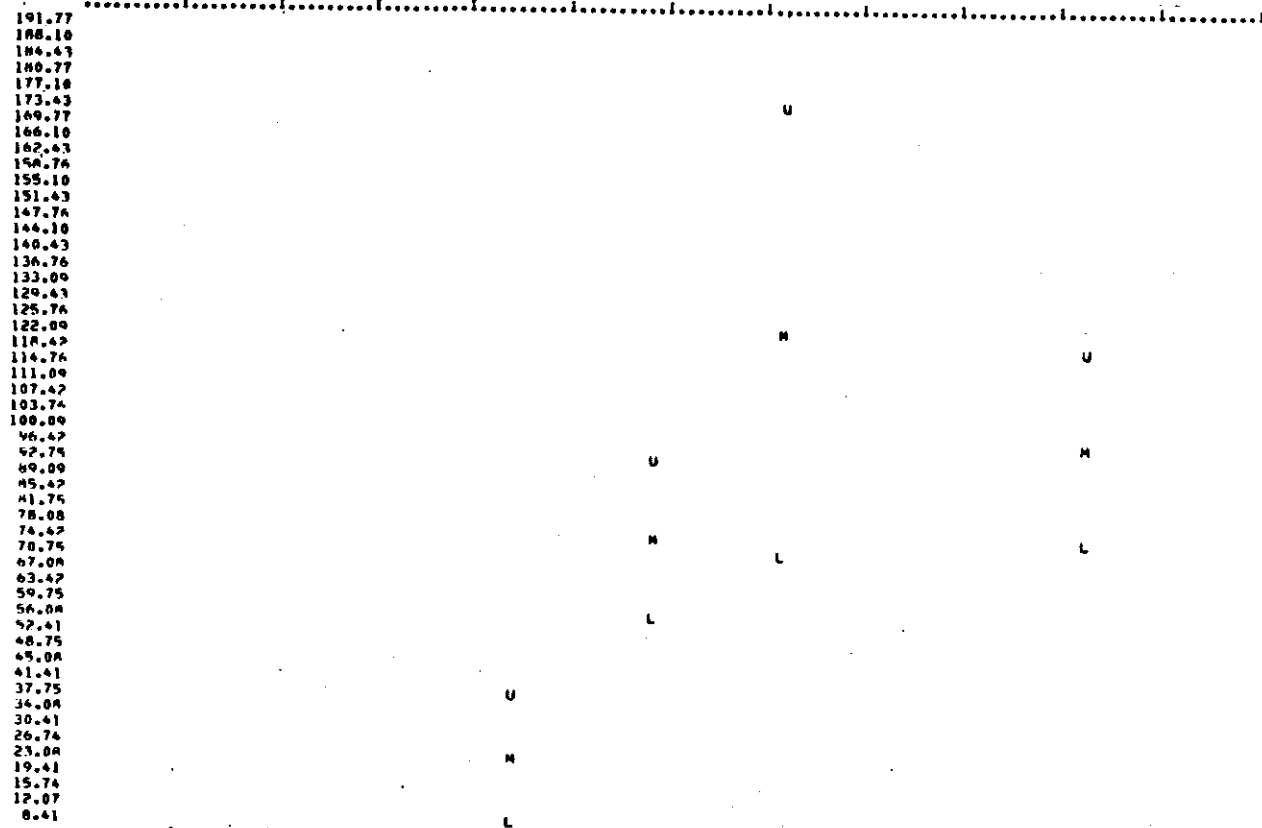


AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT. 3 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	191.04	42.19			
179	12	346.82	36.11	2.21	97.95	284.14
218	12	435.73	53.32	2.21	262.74	430.90
310	12	492.10	38.93	2.21	318.09	553.37
					486.20	578.01

*Blue grama stratum

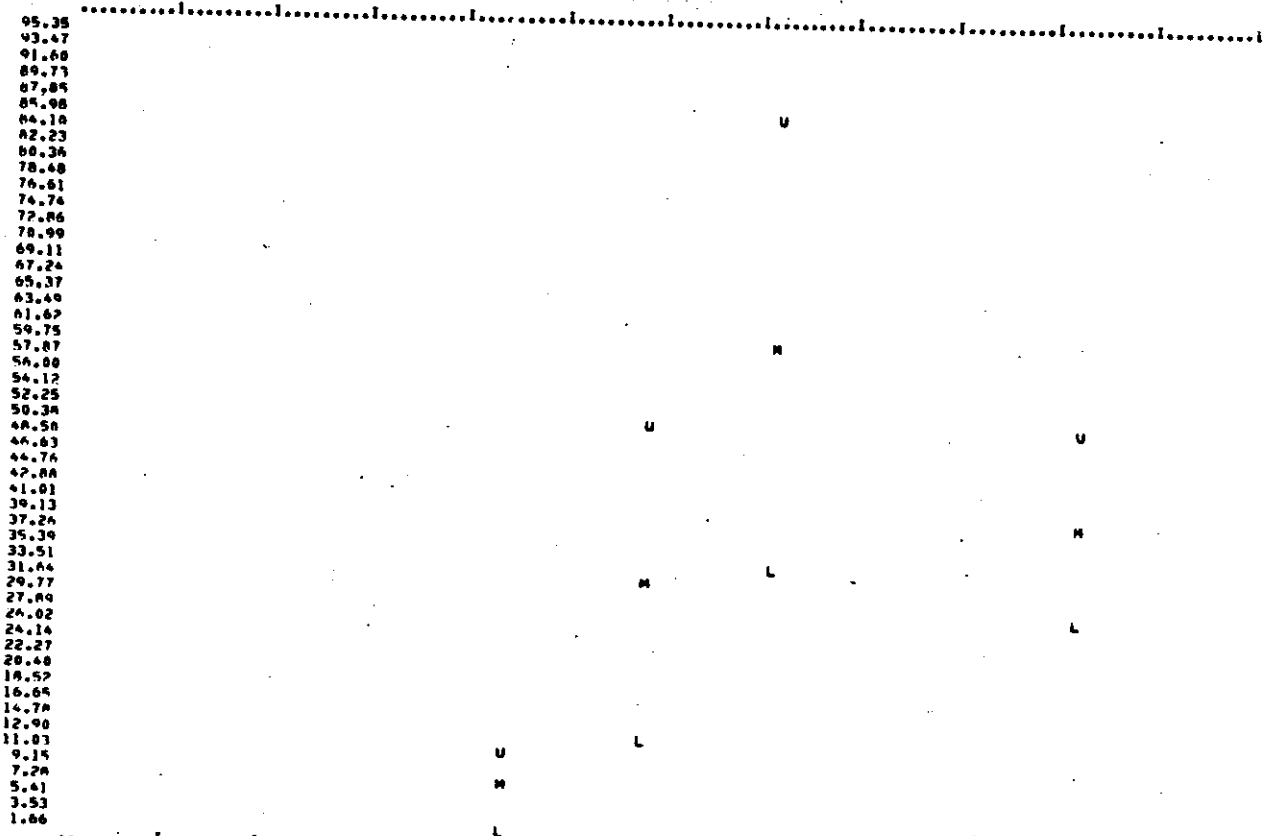


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3 * FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	23.51	6.42	2.21	9.34	37.68
179	12	73.85	8.06	2.21	56.07	91.62
218	12	123.44	23.07	2.21	72.55	174.34
310	12	96.30	9.21	2.21	75.97	116.63

*Blue grama stratum



AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 20-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTLA, TRT 3 FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	6.88	2.25	2.21		
179	12	31.96	8.50	2.21	1.84	11.75
218	12	68.44	11.89	2.21	13.22	50.71
318	12	38.37	5.00	2.21	34.19	46.68
					27.21	49.54

*Blue grama stratum

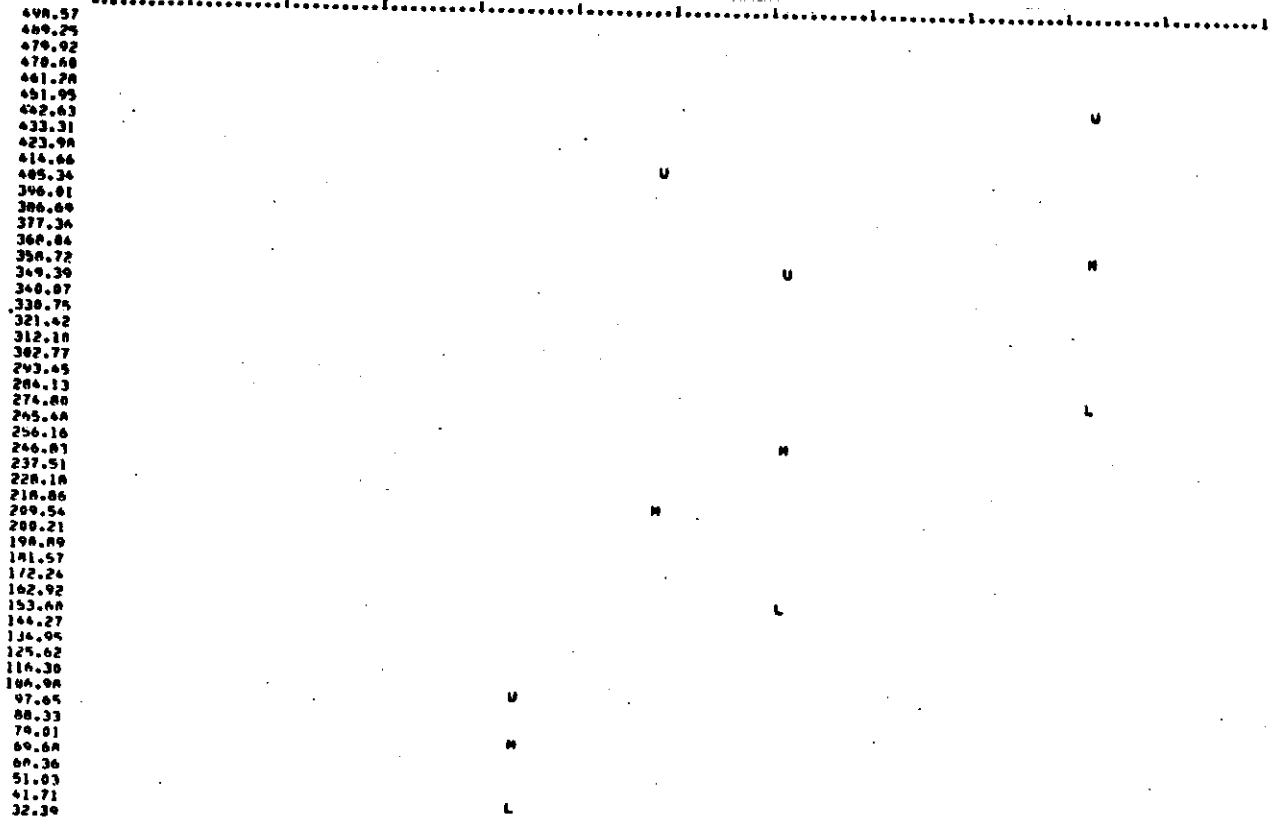
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542.98
533.34
523.71
514.08
504.45
494.82
485.18
475.55
465.92
456.29
446.66
437.02
427.39
417.76
408.13
398.50
388.86
379.23
369.60
359.97
350.34
340.70
331.07
321.44
311.81
302.18
292.55
282.91
273.28
263.65
254.02
244.39
234.75
225.12
215.49
205.86
196.23
186.59
176.96
167.33
157.70
148.07
138.43
128.80
119.17
109.54
99.91
90.27

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 8 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
134	12	149.56	22.32	2.21	100.30	198.82
159	12	412.19	48.81	2.21	304.51	519.88
172	12	351.42	48.49	2.21	244.44	458.40
194	12	317.53	26.77	2.21	258.46	376.60
214	12	343.45	17.33	2.21	305.21	381.69
235	12	264.40	50.67	2.21	152.60	376.20
271	12	273.79	26.99	2.21	214.25	333.34
310	12	367.83	49.39	2.21	258.86	476.80

*Cactus stratum

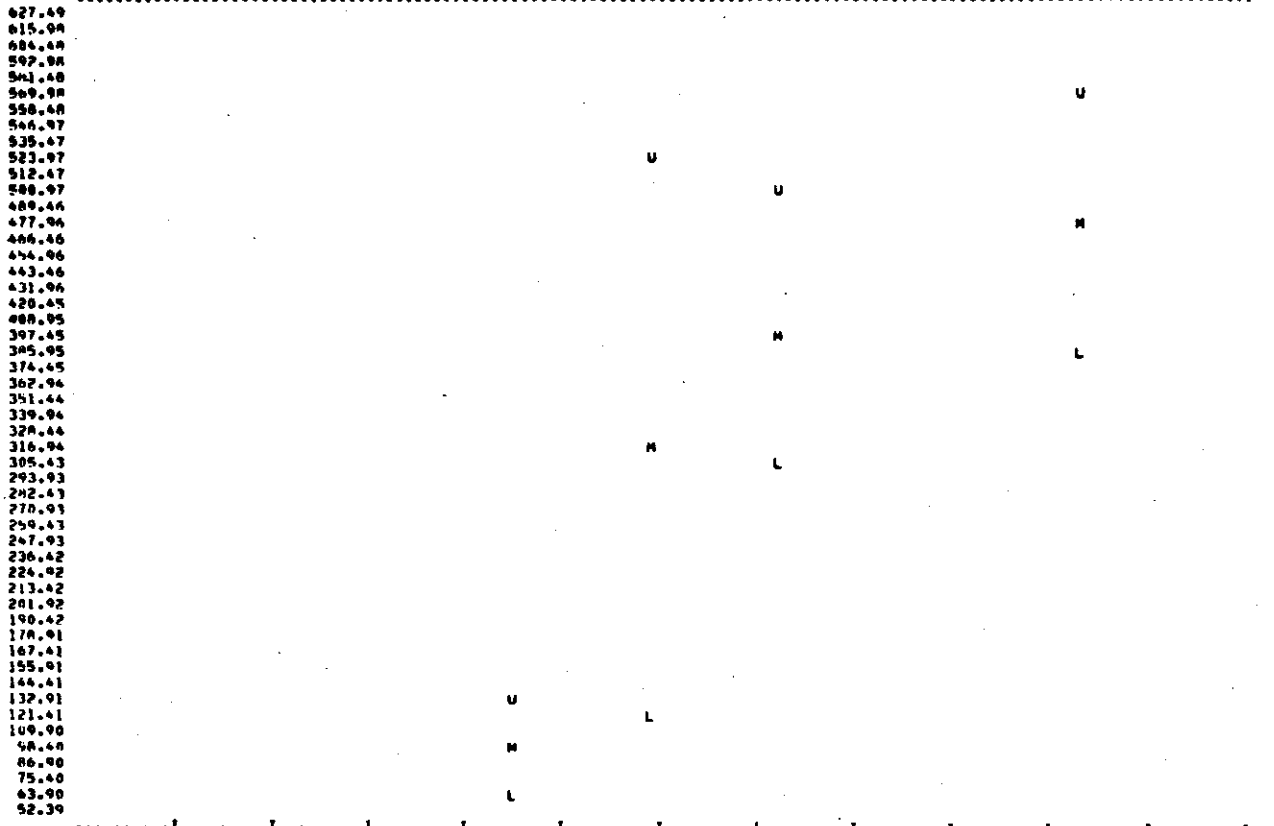


1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 3* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	T&E VALUE	LOWER LIMIT	UPPER LIMIT
136	12	76.79	15.53			
170	12	223.19	44.85	2.21	42.53	111.04
218	12	257.36	44.05	2.21	35.99	410.40
310	12	366.56	39.29	2.21	160.17	354.55
				2.21	279.00	453.25

*Cactus stratum



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	95.71	16.99	2.21	58.22	133.20
179	12	322.02	49.24	2.21	125.12	518.92
218	12	482.38	44.85	2.21	383.34	581.25
318	12	475.84	42.88	2.21	381.24	570.44

*Cactus stratum

138.94
 136.27
 133.50
 130.92
 128.26
 125.57
 122.89
 120.22
 117.54
 114.87
 112.19
 109.51
 106.84
 104.16
 101.49
 98.81
 96.14
 93.46
 90.79
 88.11
 85.44
 82.76
 80.09
 77.41
 74.74
 72.06
 69.39
 66.71
 64.04
 61.36
 58.69
 56.01
 53.33
 50.66
 47.98
 45.31
 42.63
 39.96
 37.28
 34.61
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 21.23
 18.56
 15.88
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 10.53
 7.86
 5.18

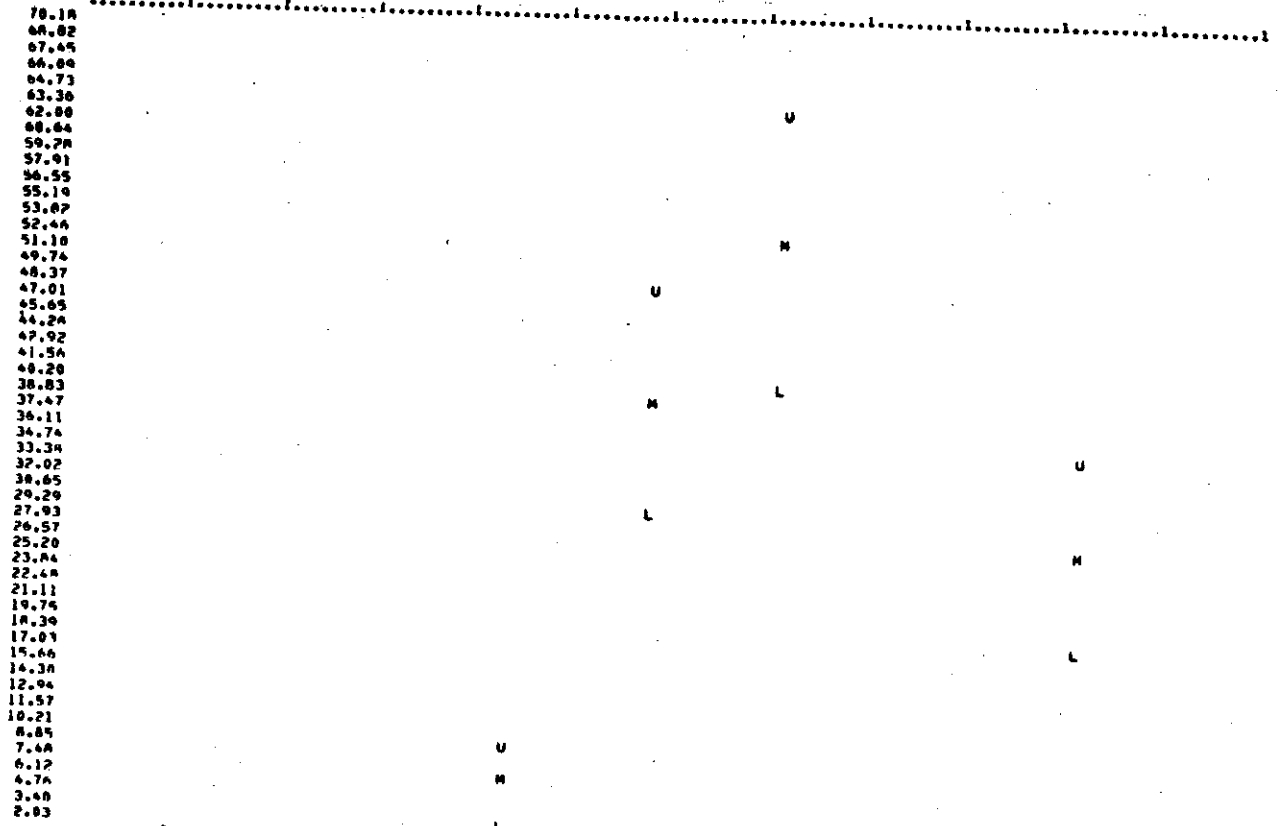
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	13.41	3.47	2.21	5.76	21.06
179	12	59.89	9.91	2.21	40.80	79.77
218	12	92.77	15.20	2.21	59.22	126.31
310	12	82.60	8.22	2.21	64.46	100.73

*Cactus stratum



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1971
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20-30 CM DEPTH

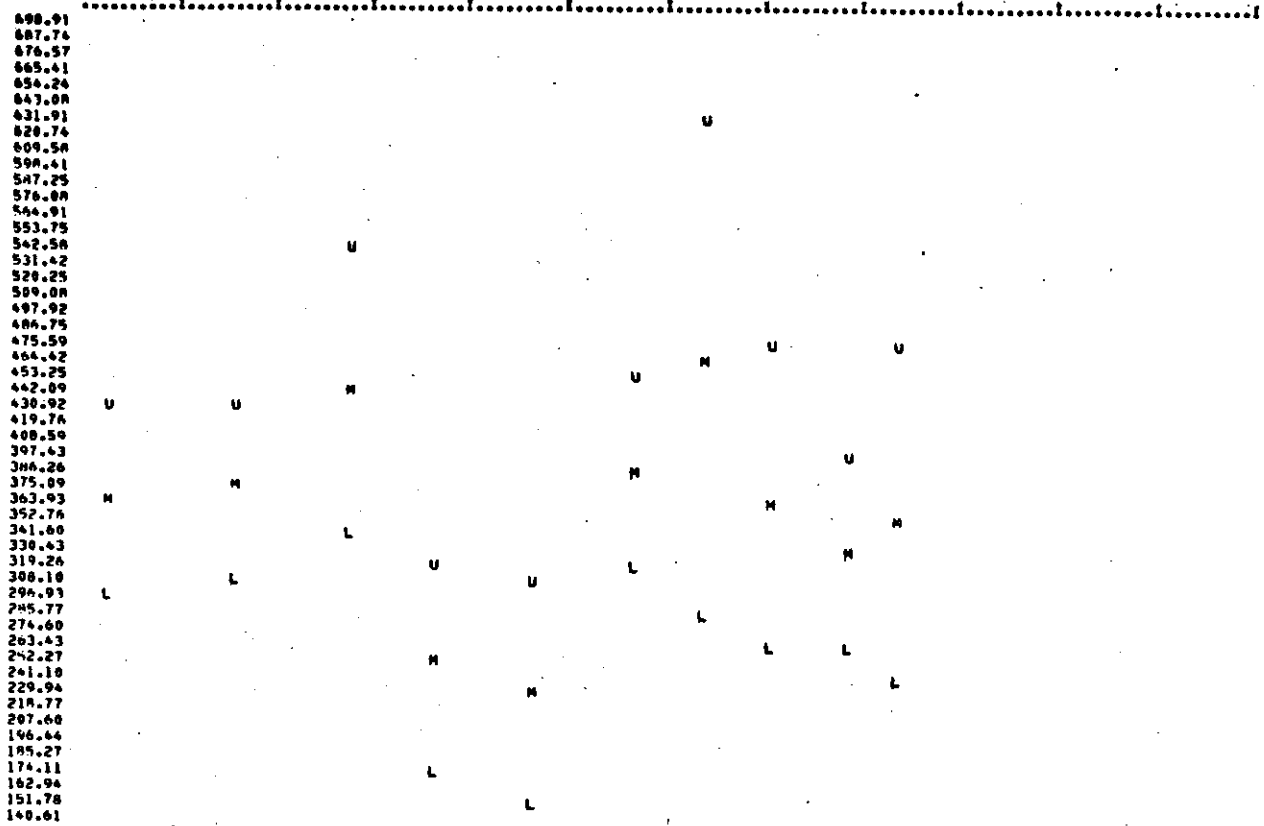
THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 3* FOR 1971
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
136	12	5.51	1.47	2.21		
170	12	38.94	4.38	2.21	2.26	8.76
210	12	52.17	5.27	2.21	29.28	48.60
310	12	26.68	3.53	2.21	40.54	63.80
					18.90	34.46

*Cactus stratum

6.3 Data for 1972

The belowground herbage biomass sampling on the Pantex Site for 1972 was again sampled on both the blue grama and the prickly pear cactus stratum. This sampling was done on each of two replicates for treatments 1 and 3 on four separate sampling dates for the 1972 season. The sampling was done at the 0 to 10, 10 to 20, 20 to 30, 30 to 40, 40 to 50, and 50 to 60 cm increment levels. The root data were reported on an ash-free weight basis. The crown materials was harvested from a 0.5-m² plot and reported with the aboveground herbage biomass data with the sampling being done on six dates in addition to those on which the belowground sampling was done. The crown data are reported as dry weights only and the core diameter was adjusted to give the correct biomass density.

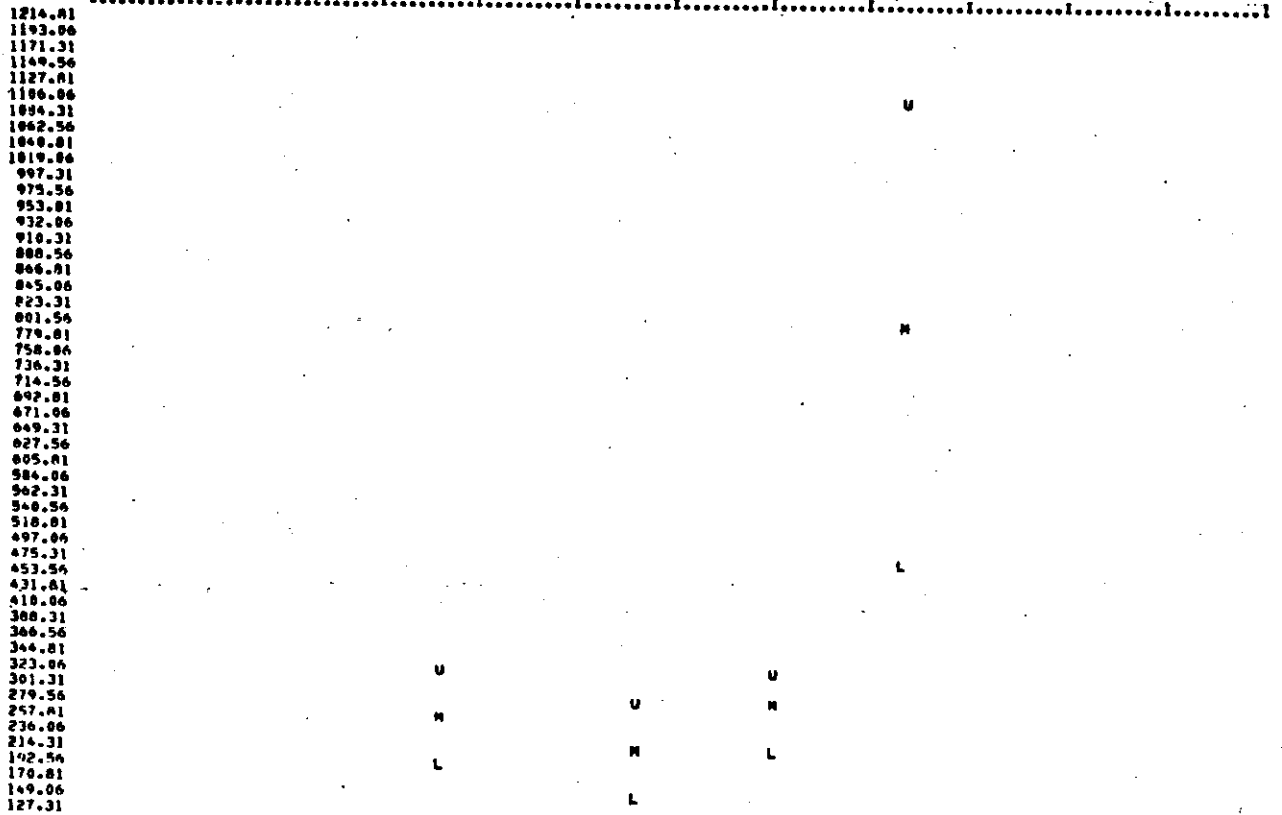


AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 0 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1⁺ FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
10	12	363.89	29.60	2.21		
49	12	370.35	29.22	2.21	297.77	420.41
85	12	443.18	65.46	2.21	305.87	434.83
113	12	248.04	32.33	2.21	342.88	543.48
143	12	233.14	34.85	2.21	176.79	319.38
172	12	387.68	31.23	2.21	156.23	310.04
192	12	459.78	79.58	2.21	318.78	456.58
213	12	367.88	48.84	2.21	284.20	635.37
237	11	328.39	29.73	2.24	260.11	475.65
253	10	356.94	53.23	2.27	261.88	394.89
					235.92	477.96

*Blue grama stratum



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1⁺ FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	255.34	26.96			
172	12	211.80	31.88	2.21	195.84	314.83
213	12	273.34	23.08	2.21	141.46	282.15
253	12	791.37	141.86	2.21	222.59	324.09
				2.21	478.36	1104.37

*Blue grama stratum

1481.90
 1458.11
 1434.31
 1410.52
 1386.72
 1362.93
 1339.13
 1315.34
 1291.54
 1267.75
 1243.95
 1220.16
 1196.37
 1172.57
 1148.78
 1124.98
 1101.19
 1077.39
 1053.60
 1029.80
 1006.01
 982.21
 958.42
 934.62
 910.83
 887.03
 863.24
 839.45
 815.65
 791.86
 768.06
 744.27
 720.47
 696.68
 672.88
 649.09
 625.29
 601.50
 577.70
 553.91
 530.11
 506.32
 482.53
 458.73
 434.94
 411.14
 387.35
 363.55
 339.76
 315.96
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1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX. TRT 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	456.49	35.22	2.21	378.78	534.20
172	12	432.06	48.69	2.21	324.63	539.48
213	12	472.84	45.64	2.21	372.14	573.53
253	12	1025.58	145.76	2.21	783.98	1347.18

*Blue grama stratum

1481.98
 1458.96
 1436.02
 1413.08
 1390.14
 1367.20
 1344.26
 1321.32
 1298.39
 1275.45
 1252.51
 1229.57
 1206.63
 1183.69
 1160.75
 1137.81
 1114.87
 1091.93
 1068.99
 1046.05
 1023.11
 1000.17
 977.23
 954.29
 931.35
 908.41
 885.47
 862.53
 839.59
 816.66
 793.72
 770.78
 747.84
 724.90
 701.96
 679.02
 656.08
 633.14
 610.20
 587.26
 564.32
 541.38
 518.44
 495.50
 472.56
 449.62
 426.68
 403.74
 380.80
 357.86
 334.93

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1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 0- 60 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	** 12	652.06	30.33	2.21	560.29	737.42
172	*** 12	485.49	50.60	2.21	373.72	597.27
213	*** 12	472.84	45.64	2.21	372.14	573.53
253	*** 12	1025.50	145.76	2.21	703.98	1347.18

*Blue grama stratum

**Sequence missing 240 cm of core length

***Sequence missing 360 cm of core length

216.21
213.24
210.26
207.29
204.31
201.34
198.36
195.39
192.41
189.43
186.46
183.48
180.51
177.53
174.56
171.58
168.60
165.63
162.65
159.68
156.70
153.73
150.75
147.77
144.80
141.82
138.85
135.87
132.90
129.92
126.94
123.97
120.99
118.02
115.04
112.07
109.09
106.12
103.14
100.16
97.19
94.21
91.24
88.26
85.28
82.31
79.33
76.36
73.38
70.41
67.43

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1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
.....

AXIS LABELS FOR THIS PLOT ARE =
X-AXIS=JULIAN DATE FOR 1972
Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRY 1 ** FOR 1972
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	112.79	7.36	2.21	96.56	129.02
172	12	141.26	24.32	2.21	87.60	194.93
213	12	115.36	18.33	2.21	74.92	155.80
253	12	153.20	19.65	2.21	109.85	196.56

*Blue grama stratum

131.81
 130.95
 126.28
 124.52
 124.75
 122.99
 121.22
 119.46
 117.70
 115.93
 114.17
 112.40
 110.64
 108.87
 107.11
 105.35
 103.58
 101.82
 100.05
 98.29
 96.52
 94.76
 93.00
 91.23
 89.47
 87.70
 85.94
 84.17
 82.41
 80.65
 78.88
 77.12
 75.35
 73.59
 71.82
 70.06
 68.30
 66.53
 64.77
 63.00
 61.24
 59.47
 57.71
 55.94
 54.18
 52.42
 50.65
 48.89
 47.12
 45.36
 43.59

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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 1 * FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	88.36	4.83			
172	12	78.99	8.71	2.21	66.66	110.06
213	12	84.13	16.18	2.21	59.78	98.29
253	12	81.01	6.87	2.21	48.44	119.03
					65.85	96.17

*Blue grama stratum

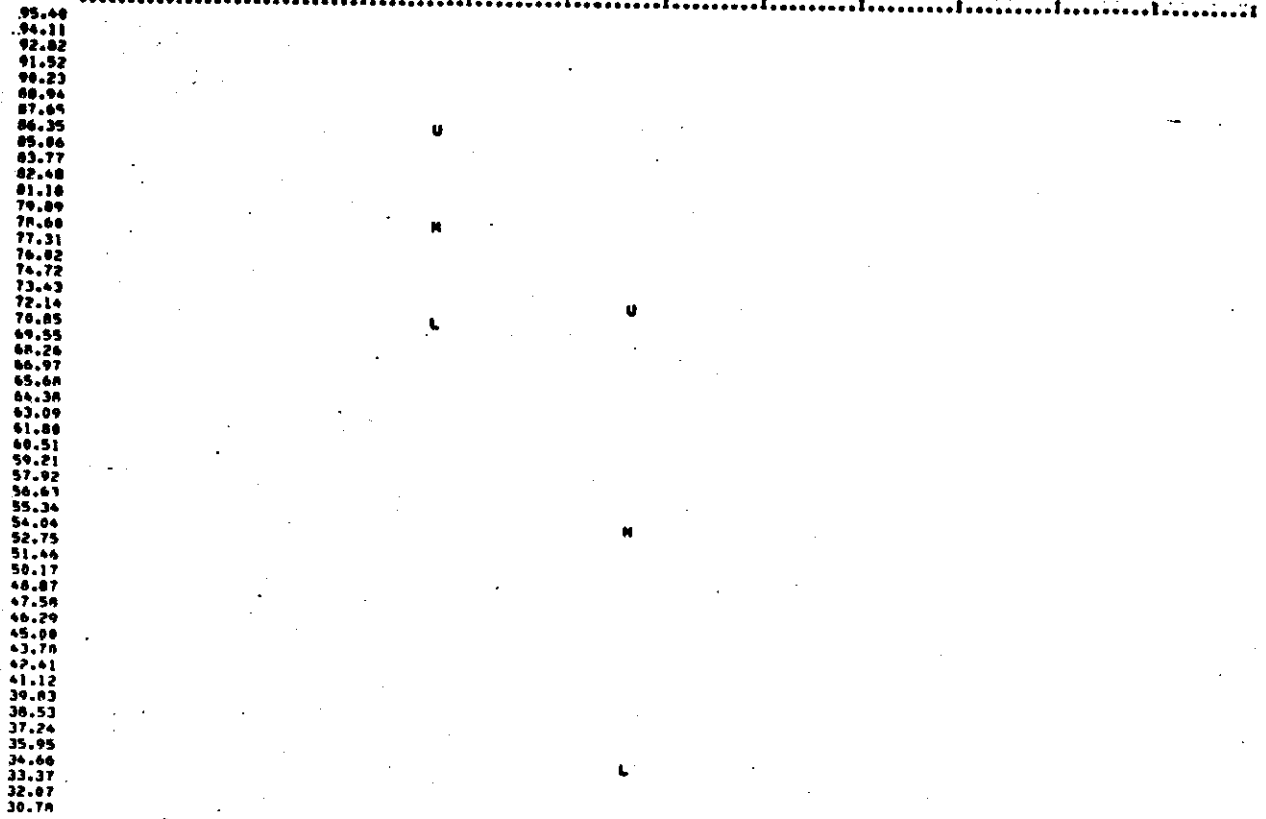
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 127.15
 125.03
 122.92
 120.80
 118.69
 116.57
 114.46
 112.34
 110.22
 108.11
 105.99
 103.88
 101.76
 99.65
 97.53
 95.42
 93.30
 91.19
 89.07
 86.96
 84.84
 82.72
 80.61
 78.49
 76.38
 74.26
 72.15
 70.03
 67.92
 65.80
 63.69
 61.57
 59.46
 57.34
 55.22
 53.11
 50.99
 48.88
 46.76
 44.65
 42.53
 40.42
 38.30
 36.19
 34.07
 31.95
 29.84
 27.72
 25.61
 23.49

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	34.54	3.82	2.21	26.10	42.97
172	12	70.30	8.51	2.21	51.57	89.14
213	12	50.33	6.52	2.21	35.95	64.71
253	12	87.81	13.46	2.21	58.10	117.51

*Blue grama stratum



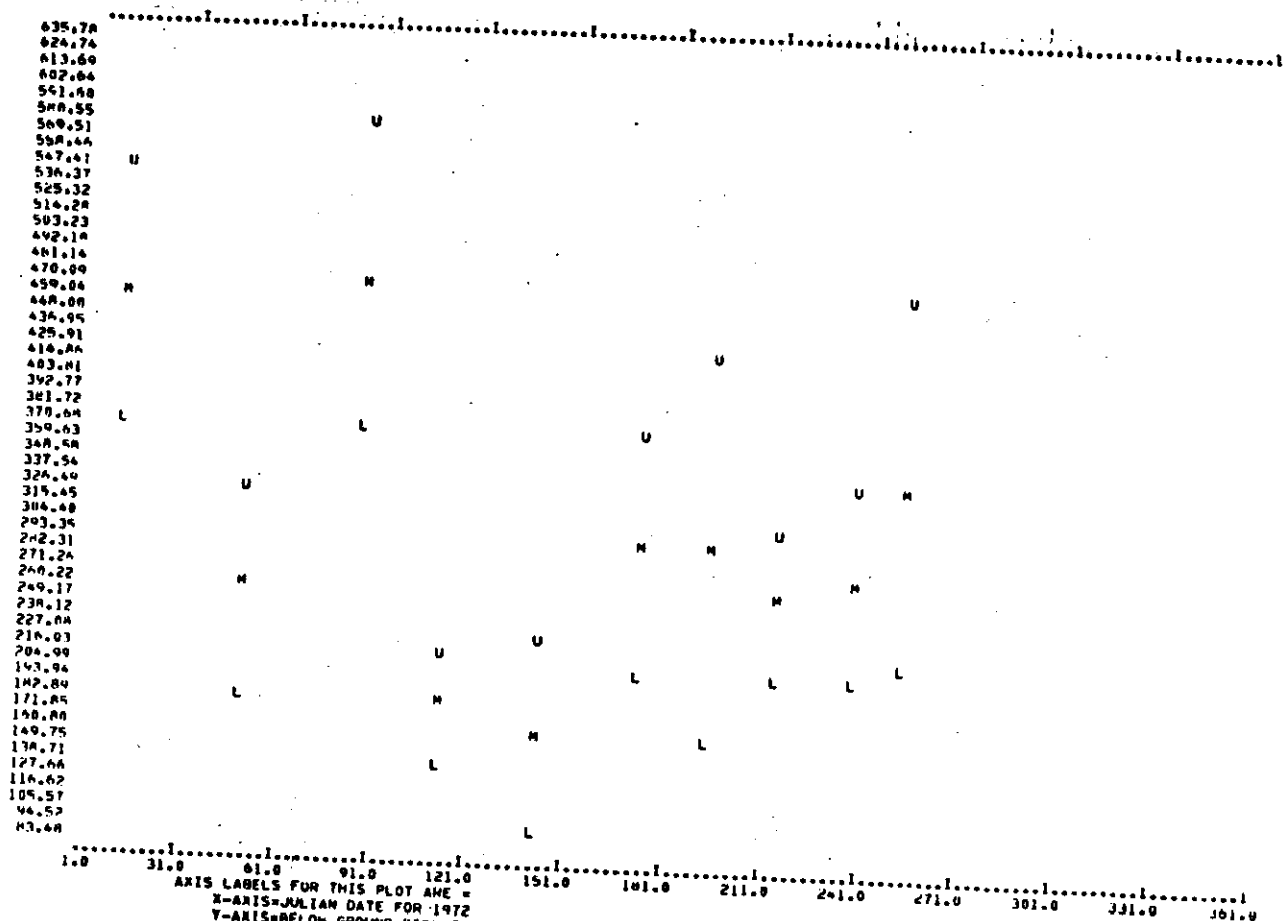
.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 30- 40 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 1 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	78.62	3.67	2.21	78.52	86.73
172	12	53.44	6.72	2.21	34.28	72.67

*Blue grama stratum



AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 0 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, THT 1 * JUN 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
10	12	457.37	39.39			
49	12	257.83	32.06			
85	12	475.43	46.48	2.21	370.47	544.27
113	12	179.01	18.87	2.21	187.18	320.56
143	12	157.55	29.37	2.21	372.87	577.98
172	12	298.33	36.56	2.21	137.38	220.65
192	12	292.74	59.58	2.21	42.75	222.36
213	12	256.24	21.74	2.21	209.67	370.99
237	11	271.11	27.74	2.21	161.28	424.21
253	11	341.16	56.67	2.24	210.27	306.26
				2.24	209.06	333.15
					214.44	467.92

*Cactus stratum

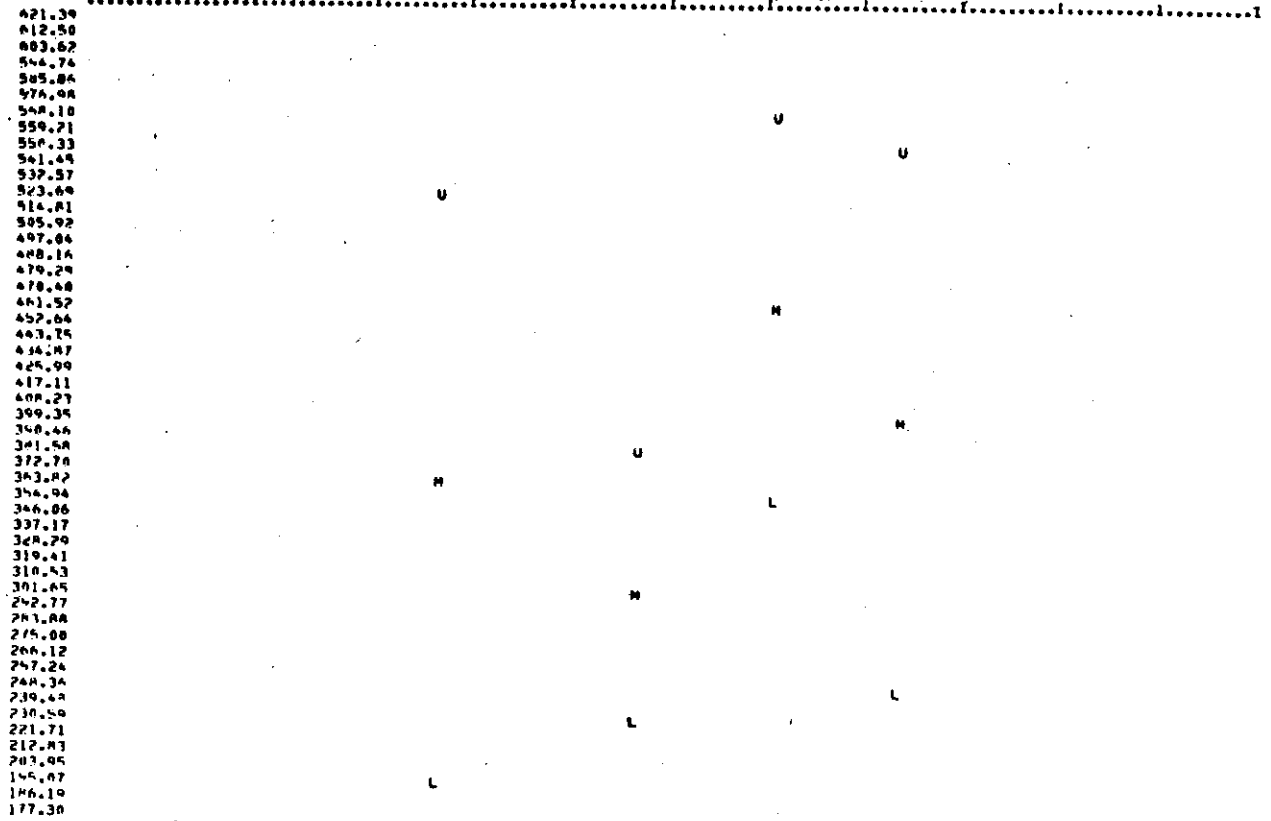
409.01
403.41
397.21
391.01
384.82
378.62
372.42
366.22
360.02
353.82
347.62
341.42
335.22
329.02
322.83
316.63
310.43
304.23
298.03
291.83
285.63
279.43
273.23
267.03
260.84
254.64
248.44
242.24
236.04
229.84
223.64
217.44
211.24
205.04
198.84
192.64
186.44
180.24
174.04
167.84
161.64
155.44
149.24
143.04
136.84
130.64
124.44
118.24
112.04
105.84
99.64

.....
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
.....
AXIS LABELS FOR THIS PLOT ARE *
X-AXIS=JULIAN DATE FOR 1972
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE WANTEK TRT 1* FUM 1972
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	223.01	50.89	2.21	110.74	335.28
172	12	192.33	28.53	2.21	129.38	255.28
213	12	275.55	43.84	2.21	178.72	372.37
253	12	257.91	46.28	2.21	155.48	359.84

*Cactus stratum



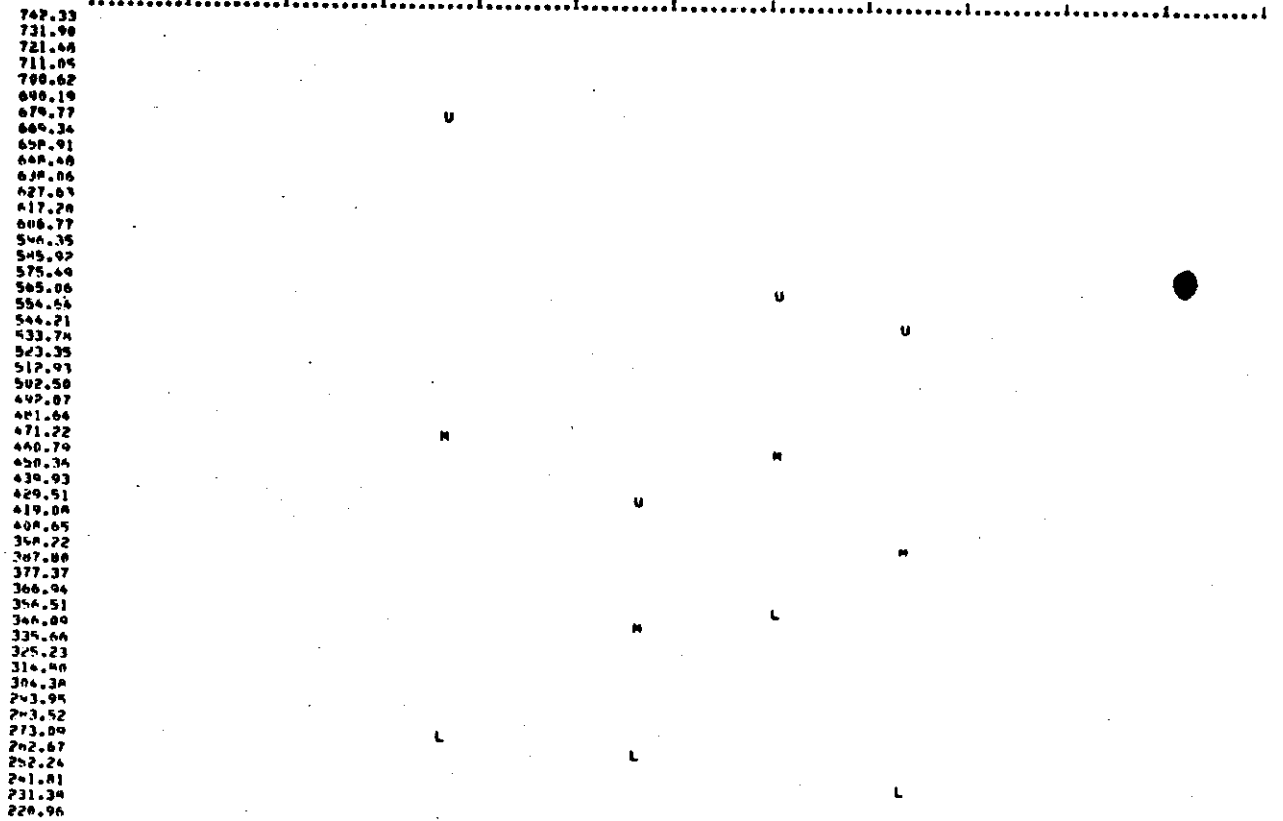
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE MANTEX, TRT 1 * JUN 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	369.41	74.06	2.21	197.01	523.02
172	12	395.49	35.10	2.21	226.04	362.94
213	12	459.79	47.64	2.21	354.69	504.90
253	12	395.87	68.15	2.21	245.51	506.23

*Cactus stratum



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE -
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M 50) FOR 0- 60 CM DEPTH

THFSP DATA INCLUDE ROOT MATERIAL ONLY

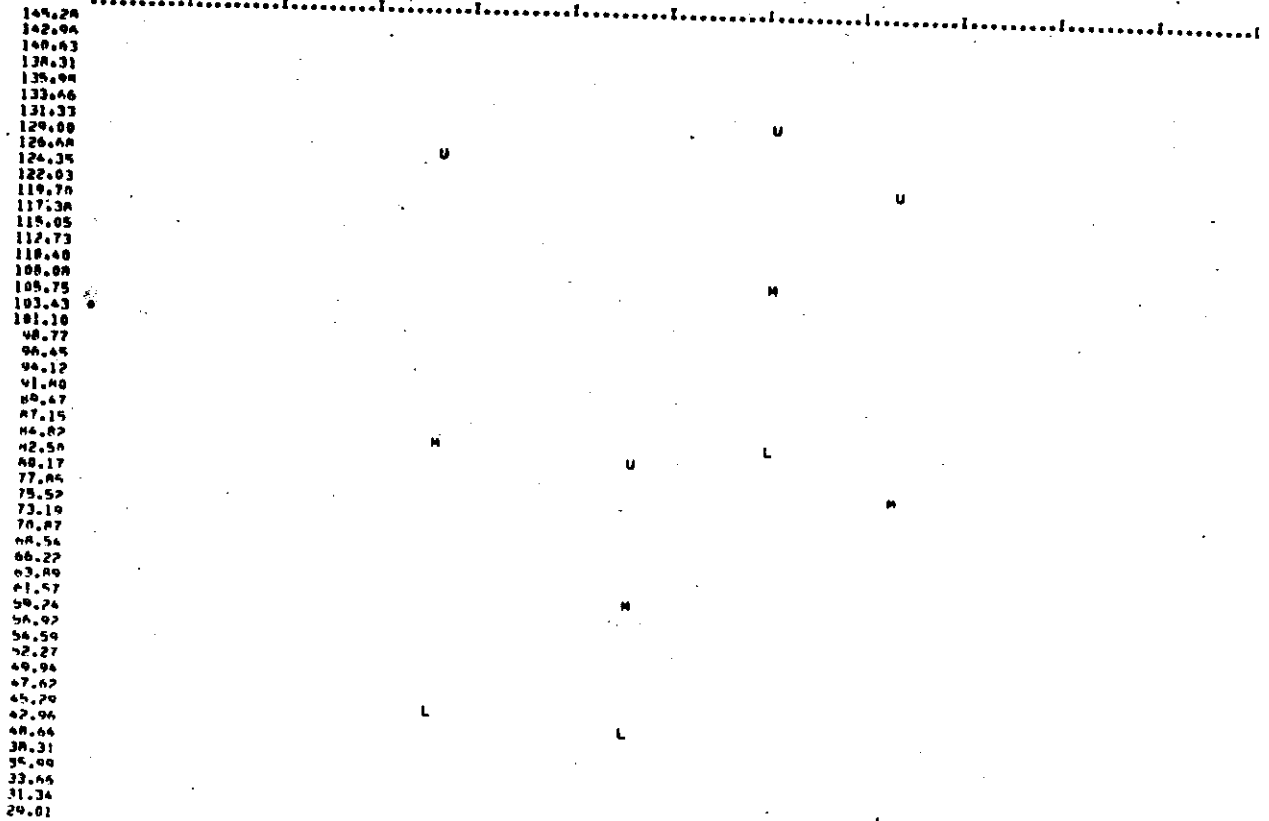
THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, THT 1* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M 50)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113 ***	12	473.75	91.34			
172 **	12	346.09	36.13	2.21	272.66	619.52
213 ***	12	459.79	47.64	2.21	260.36	659.22
253 ***	12	395.87	68.15	2.21	260.36	531.38

*Cactus stratum

**Sequence missing 240 cm of core length

***Sequence missing 360 cm of core length



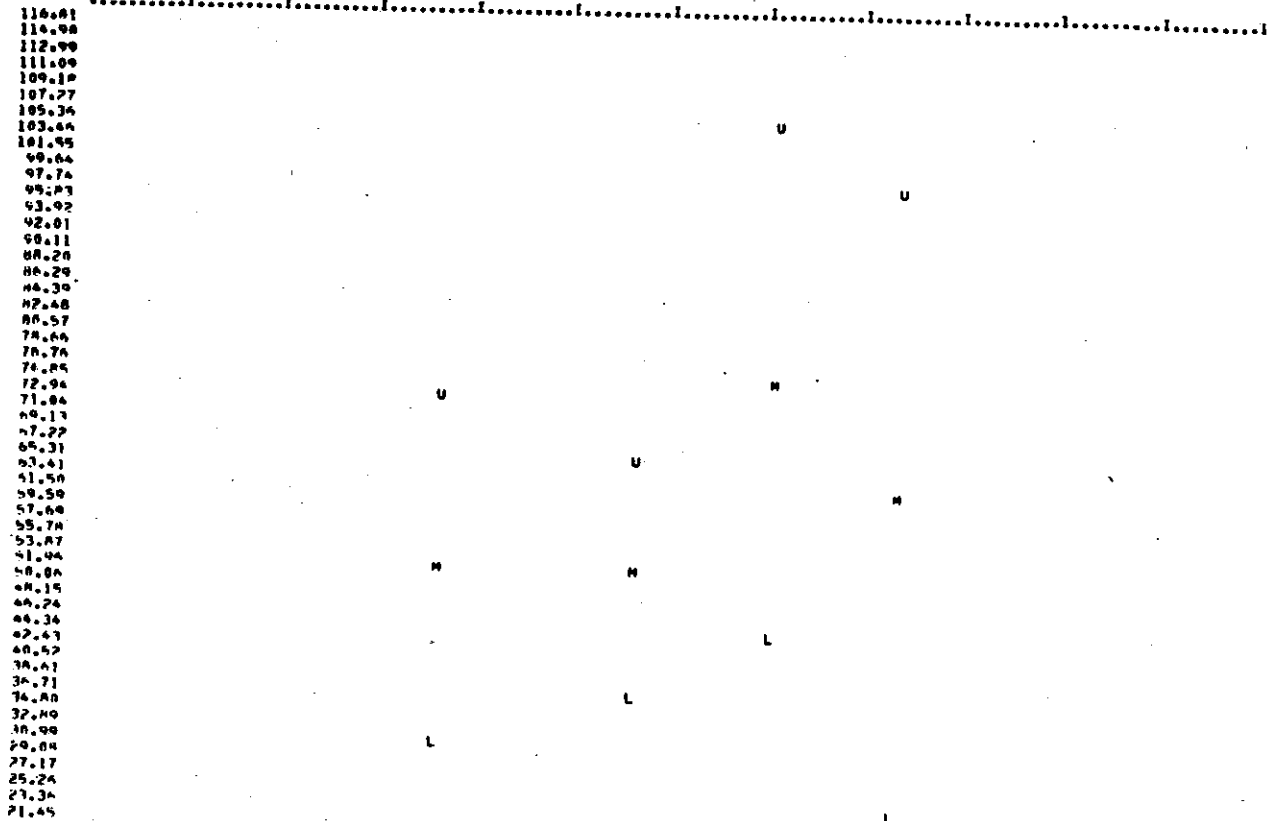
AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTLA. TRT #* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	85.97	18.35			
172	12	62.09	9.05	2.21	45.49	120.45
213	12	108.56	18.66	2.21	42.12	62.06
253	12	77.15	20.36	2.21	85.05	132.08
				2.21	32.24	122.07

*Cactus stratum



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 20- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE MANTEL, THT 14 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	51.44	9.67			
172	12	51.07	6.84	2.21	30.11	72.76
213	12	75.68	13.83	2.21	35.98	86.15
253	12	60.80	16.76	2.21	45.18	106.19
				2.21	23.83	97.71

*Cactus stratum

69.77
 68.87
 67.57
 66.44
 65.34
 64.26
 63.18
 62.08
 60.94
 59.85
 58.75
 57.65
 56.55
 55.44
 54.34
 53.24
 52.14
 51.04
 49.93
 48.83
 47.71
 46.61
 45.51
 44.42
 43.32
 42.22
 41.12
 40.01
 38.91
 37.81
 36.71
 35.61
 34.50
 33.48
 32.38
 31.28
 30.18
 29.09
 27.99
 26.89
 25.79
 24.50
 23.44
 22.34
 21.24
 20.14
 19.04
 17.97
 16.87
 15.77
 14.67

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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 30- 40 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY.

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEA. TRT 1* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	39.86	10.88	2.21	16.30	63.43
172	12	40.69	3.54	2.21	32.67	48.93

*Cactus stratum

75.89
 74.07
 72.90
 71.84
 70.91
 69.90
 68.87
 67.84
 66.81
 65.74
 64.74
 63.73
 62.74
 61.67
 60.64
 59.61
 58.59
 57.55
 56.52
 55.44
 54.44
 53.43
 52.40
 51.37
 50.34
 49.31
 48.28
 47.24
 46.22
 45.19
 44.14
 43.13
 42.11
 41.08
 40.05
 39.02
 37.99
 36.96
 35.93
 34.90
 33.87
 32.84
 31.81
 30.74
 29.74
 28.72
 27.69
 26.64
 25.63
 24.60
 23.57

.....
 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 40- 50 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE MANTEX INT 1* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	47.21	9.53	2.21	26.14	68.23

*Cactus stratum

40.78
 40.24
 36.70
 36.16
 36.63
 36.00
 37.55
 37.07
 36.44
 35.96
 35.41
 34.97
 36.33
 33.70
 33.24
 37.72
 32.14
 31.05
 31.11
 30.57
 30.03
 29.48
 28.94
 28.42
 27.80
 27.35
 26.81
 26.27
 25.74
 25.20
 24.66
 24.13
 23.50
 23.05
 22.51
 21.98
 21.44
 20.90
 20.37
 19.83
 19.29
 18.74
 18.22
 17.68
 17.14
 16.61
 16.07
 15.51
 15.00
 14.44
 13.92

1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

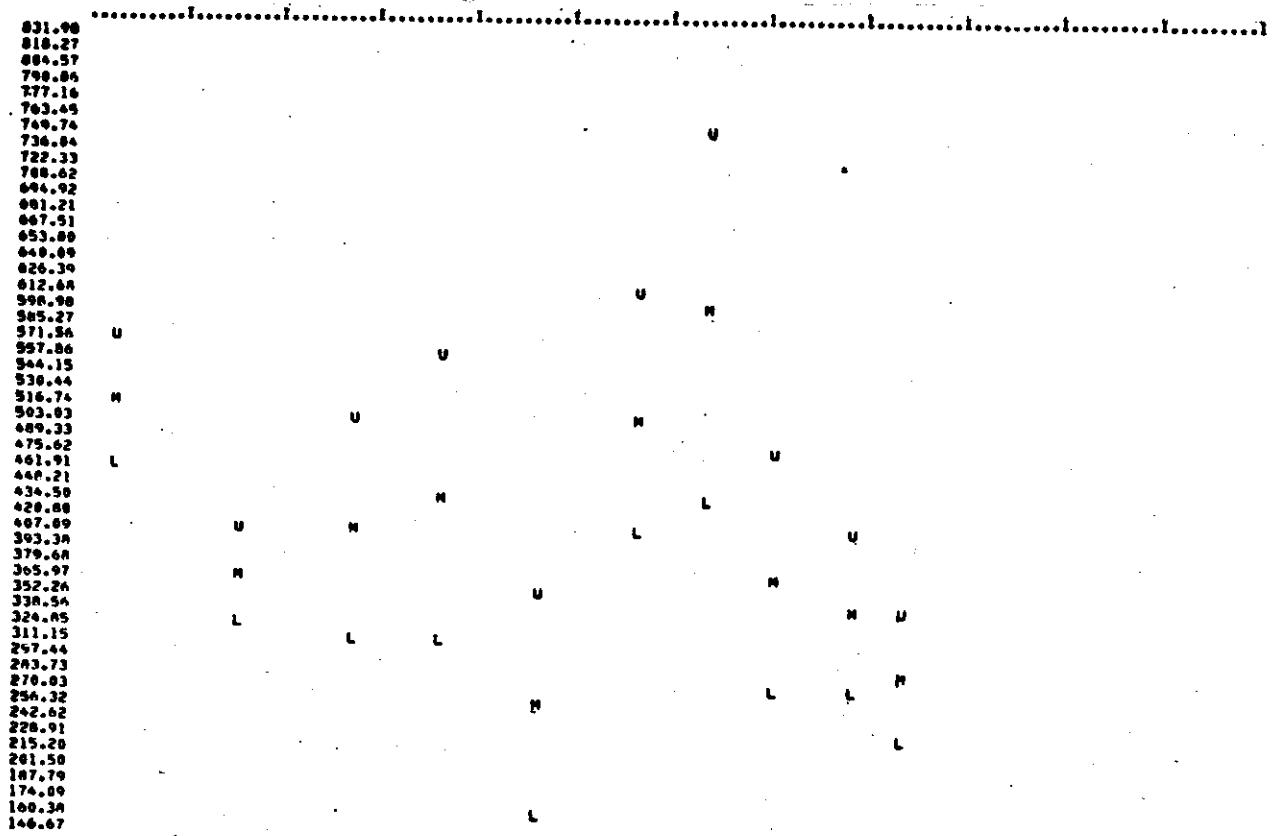
AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M² 50) FOR 50-60 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 1* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ² 50)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	26.27	4.98	2.21	15.47	37.07

*Cactus stratum

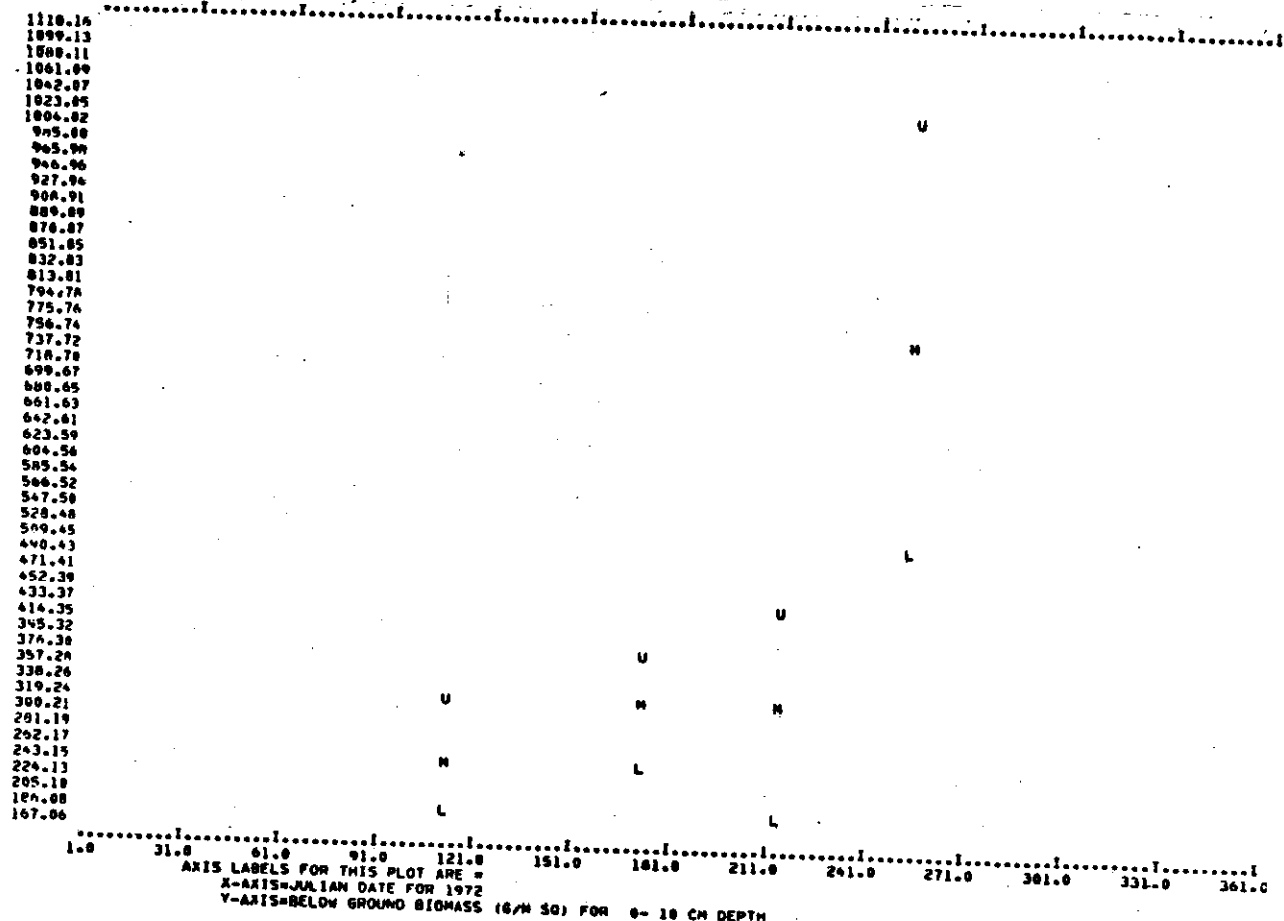


AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 8 CM DEPTH

THESE DATA INCLUDE CROWN MATERIAL
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 3 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
10	12	514.89	26.83			
49	12	367.93	29.17	2.21	455.71	574.08
85	12	411.53	44.38	2.21	323.42	412.44
113	12	440.20	55.45	2.21	313.60	509.45
143	12	258.26	43.19	2.21	317.85	562.55
172	12	588.06	47.45	2.21	162.97	353.56
192	12	592.14	74.42	2.21	103.36	612.75
213	12	371.17	46.14	2.21	427.93	756.35
237	12	338.47	28.87	2.21	269.36	472.99
253	12	287.85	26.00	2.21	274.76	402.17
					230.49	345.21

*Blue grama stratum

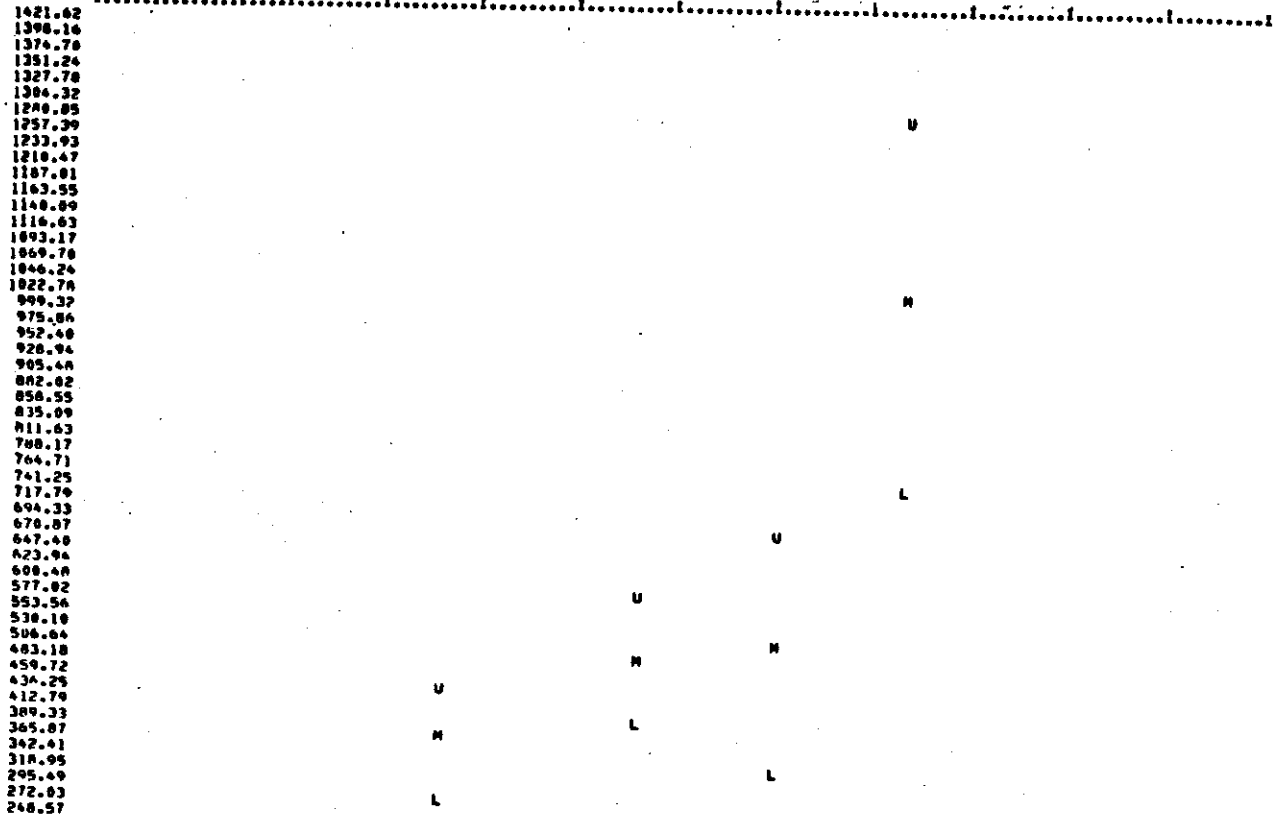


1110.16
 1099.13
 1080.11
 1061.00
 1042.07
 1023.05
 1004.02
 985.00
 965.99
 946.96
 927.94
 908.91
 889.89
 870.87
 851.85
 832.83
 813.81
 794.78
 775.76
 756.74
 737.72
 718.70
 699.67
 680.65
 661.63
 642.61
 623.59
 604.56
 585.54
 566.52
 547.50
 528.48
 509.45
 490.43
 471.41
 452.39
 433.37
 414.35
 395.32
 376.30
 357.28
 338.26
 319.24
 300.21
 281.19
 262.17
 243.15
 224.13
 205.10
 186.08
 167.06

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTER, TRT 3 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	250.20				
172	12	313.39	29.27	2.21	185.62	314.77
213	12	312.47	31.09	2.21	244.79	381.90
253	12	765.10	54.86	2.21	187.02	437.91
			113.94	2.21	513.69	1016.51

*Blue grama stratum



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

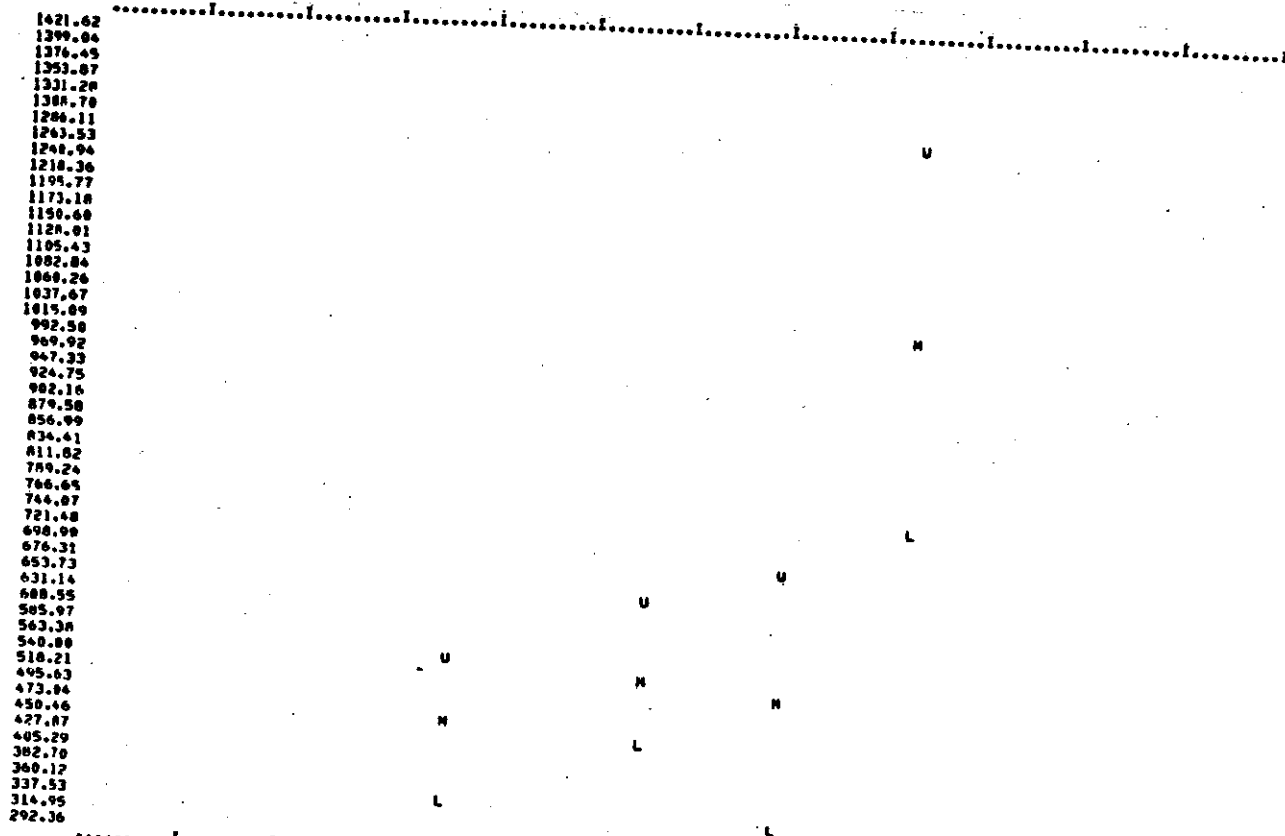
AXIS LABELS FOR THIS PLOT ARE
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	356.00	36.10	2.21		
172	12	478.35	42.92	2.21	276.10	435.03
213	12	495.43	77.31	2.21	383.64	573.05
253	12	1020.07	123.42	2.21	324.85	666.01
					747.76	1292.38

*Blue grama stratum

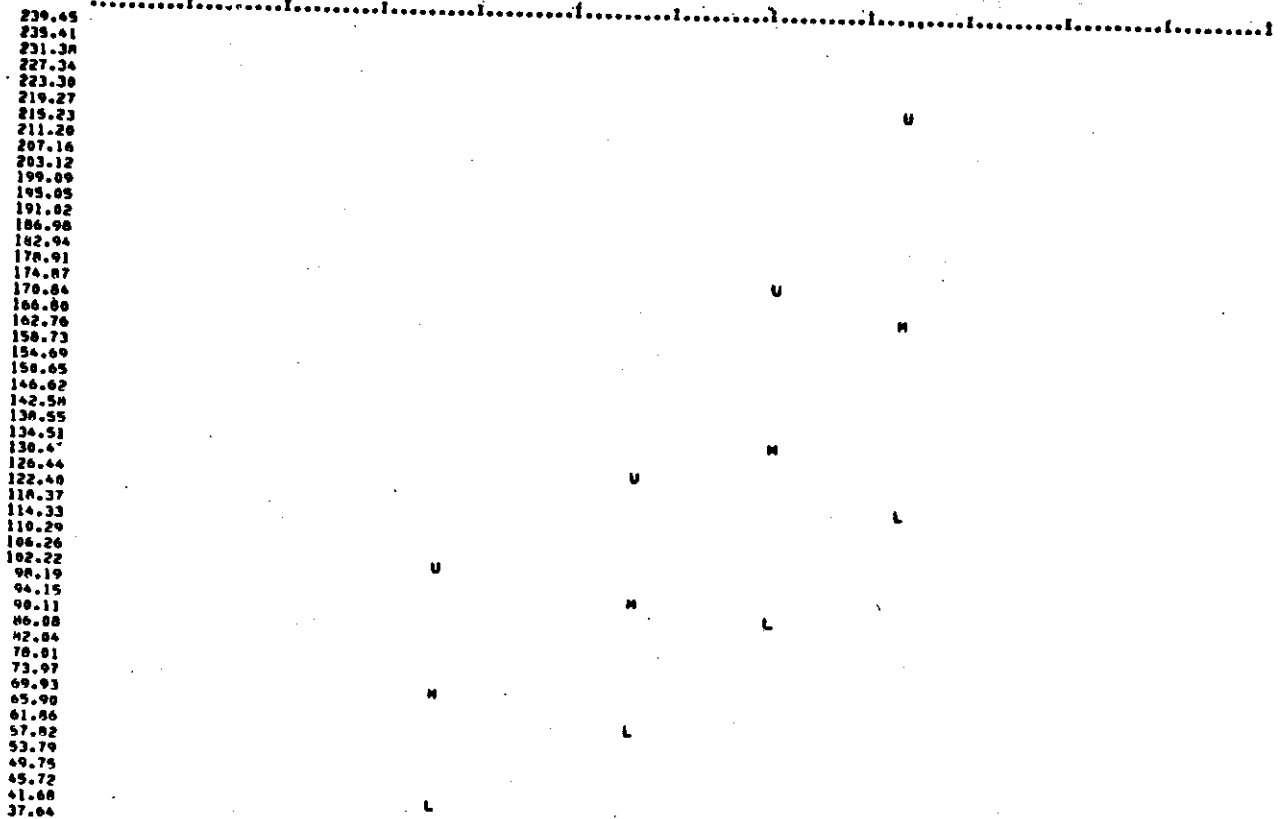


AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 60 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRY 3 *FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113.0**	12	442.36	44.47			
172.0**	12	528.50	46.92	2.21	344.23	548.46
213.0**	12	495.43	77.31	2.21	424.98	632.01
253.0***	12	1028.07	123.42	2.21	324.85	666.01
					747.76	1292.38

*Blue grama stratum
 **Sequence missing 240 cm of core length
 ***Sequence missing 360 cm of core length



1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	71.27	13.35	2.21	41.83	100.72
172	12	86.68	14.97	2.21	61.57	127.64
213	12	132.63	19.83	2.21	88.87	176.39
253	12	167.16	22.90	2.21	116.65	217.68

*Blue grama stratum

66.34
65.33
64.32
63.30
62.29
61.28
60.27
59.25
58.24
57.23
56.22
55.20
54.19
53.18
52.17
51.15
50.14
49.13
48.12
47.10
46.09
45.08
44.07
43.05
42.04
41.03
40.02
39.00
37.99
36.98
35.97
34.95
33.94
32.93
31.92
30.90
29.89
28.88
27.87
26.85
25.84
24.83
23.82
22.80
21.79
20.78
19.77
18.75
17.74
16.73
15.72

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149 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
.....

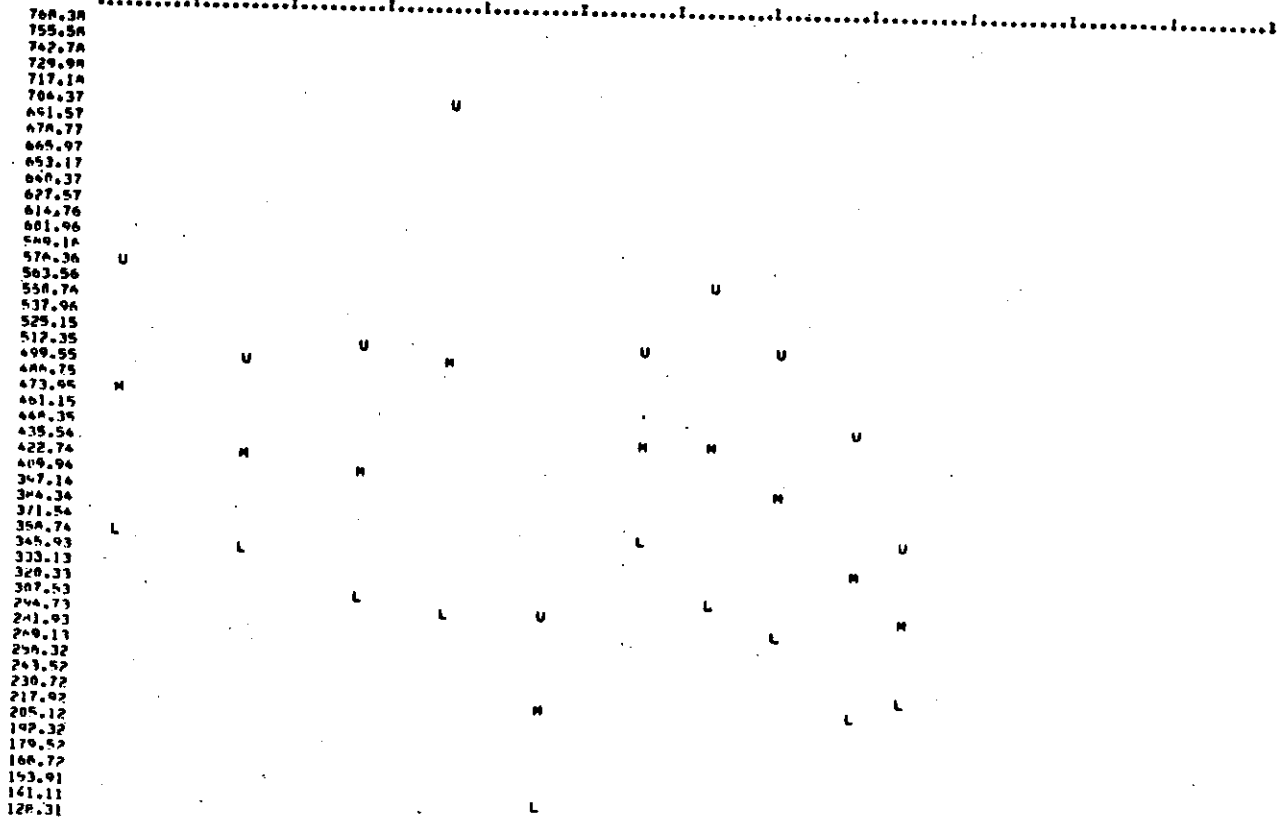
AXIS LABELS FOR THIS PLOT ARE *
X-AXIS=JULIAN DATE FOR 1972
Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 30- 40 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX TRT 3* FOR 1972
(CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	39.49	5.91	2.21	17.46	43.53
172	12	50.15	4.61	2.21	39.99	60.31

*Blue grama stratum



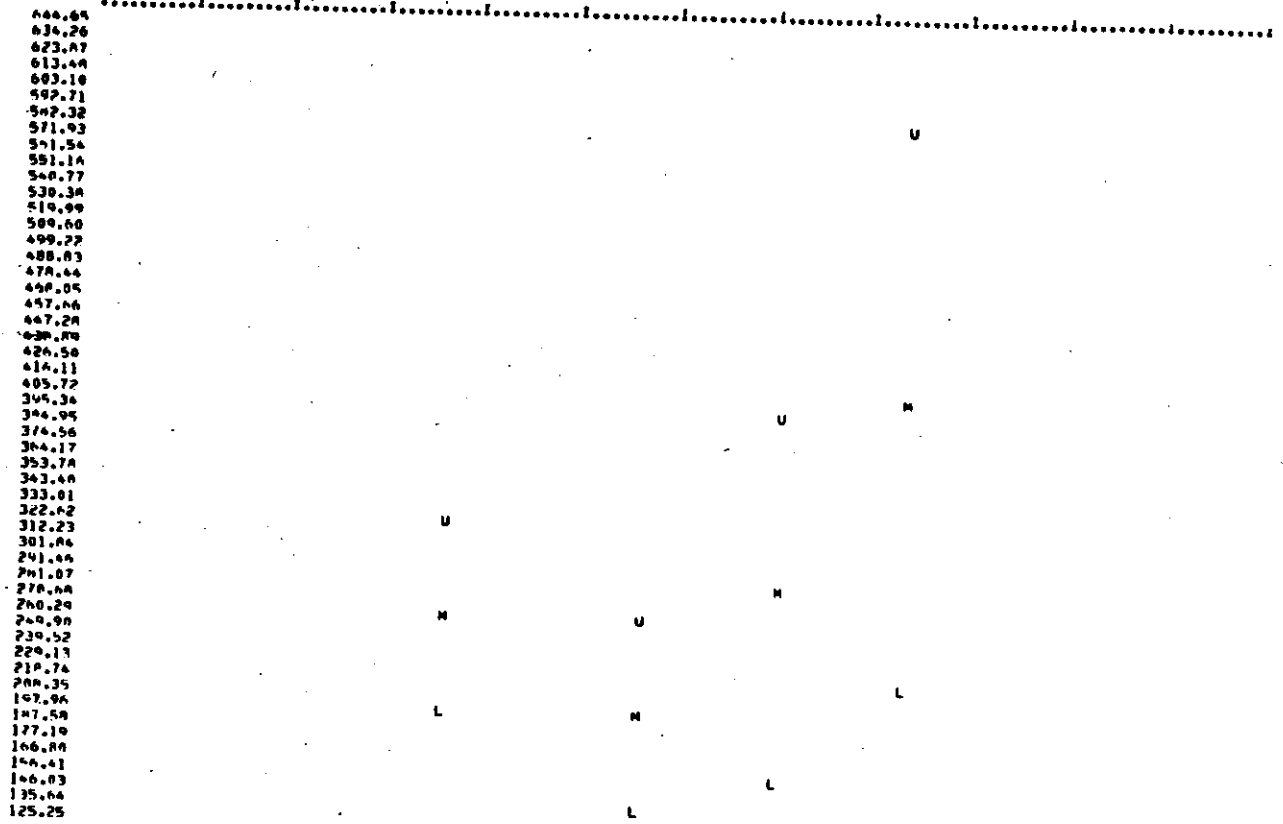
AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 0 CM DEPTH

THESE DATA INCLUDE CHOWN MATERIAL

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEL, TMT 3rd FOW 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEL VALUE	LOWER LIMIT	UPPER LIMIT
10	12	469.60	50.30			
49	12	423.23	34.34	2.21	358.63	500.57
85	12	413.02	46.24	2.21	347.46	499.00
113	12	499.53	90.19	2.21	311.40	515.04
143	12	220.23	35.20	2.21	308.54	698.53
172	12	436.44	34.51	2.21	142.57	297.90
192	12	433.17	59.20	2.21	360.30	510.58
213	12	401.06	51.58	2.21	302.54	503.00
237	12	338.17	51.08	2.21	287.26	514.06
253	12	295.63	26.08	2.21	216.15	444.20
				2.21	236.76	354.49

*Cactus stratum

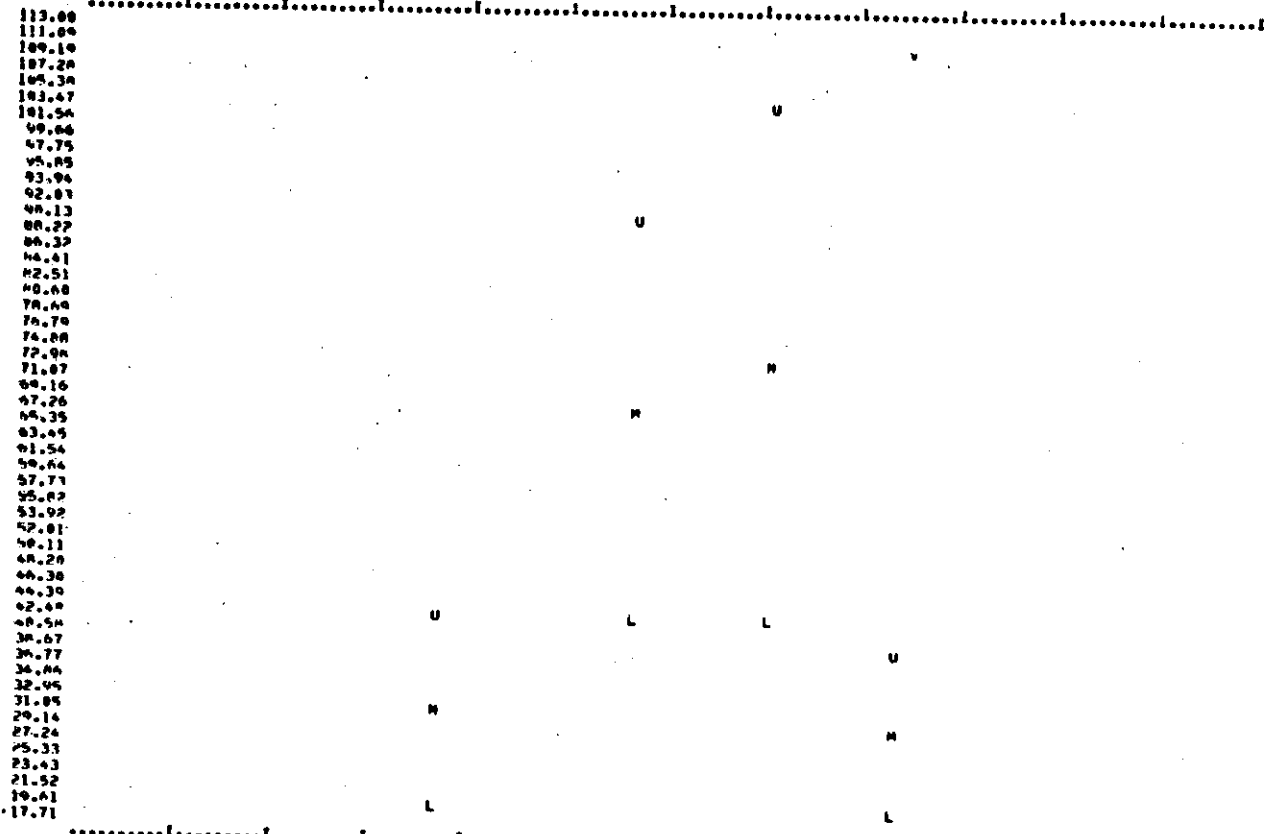


AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 0-10 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY.
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX INT 3* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	259.38	29.37			
172	12	198.39	26.84	2.21	146.57	249.19
213	12	278.67	55.00	2.21	139.17	257.62
253	12	401.93	83.45	2.21	157.41	480.82
					217.82	588.88

*Cactus stratum



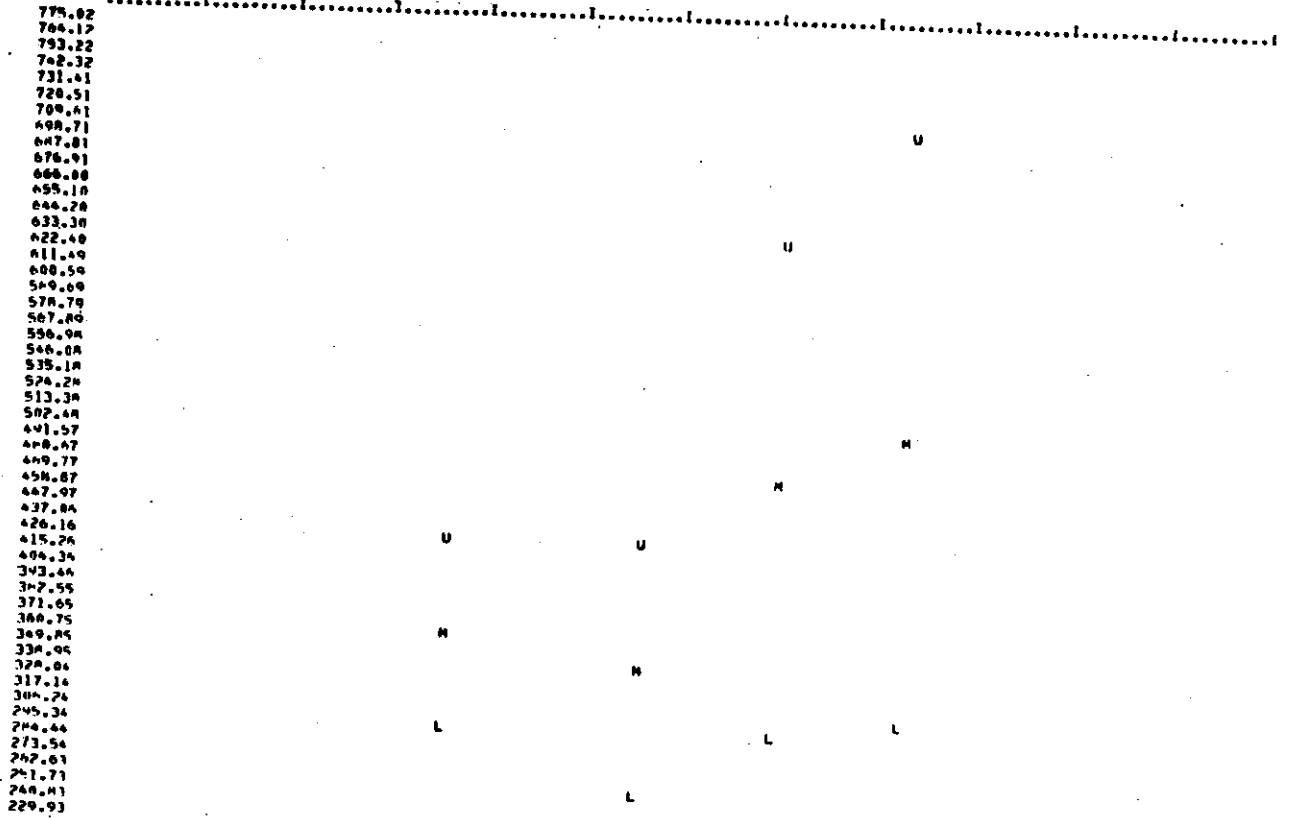
AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SO) FOR 20-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANILA TRT 3rd FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SO)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	31.60	5.00	2.21	20.39	42.80
172	12	66.31	10.37	2.21	43.44	89.19
213	12	72.30	13.76	2.21	42.83	102.73
253	12	29.02	4.24	2.21	19.60	38.37

*Cactus stratum



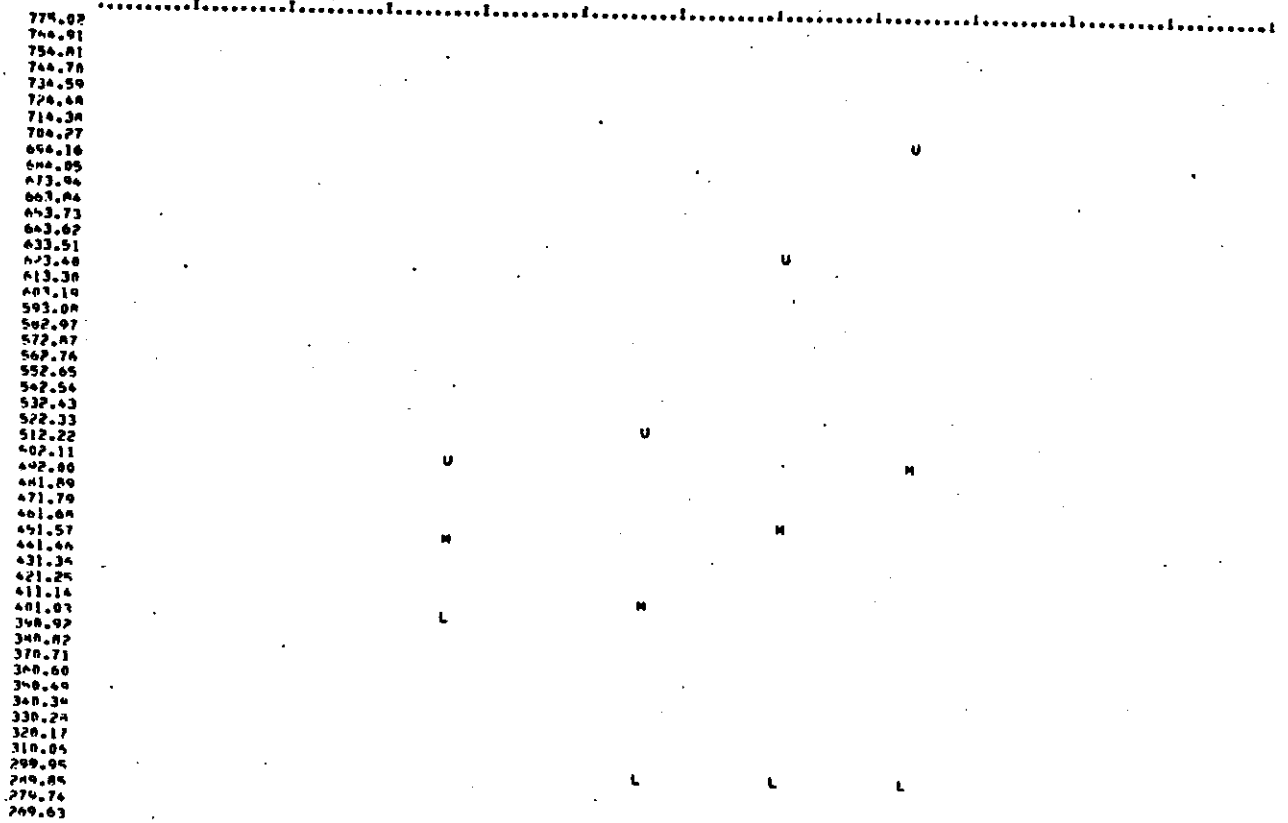
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0-30 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TRT 3 FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	360.96	28.16	2.21	298.83	423.10
172	12	341.49	38.99	2.21	255.48	427.51
213	12	465.12	75.02	2.21	299.59	630.65
253	12	503.88	90.90	2.21	303.20	704.57

*Cactus stratum



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0

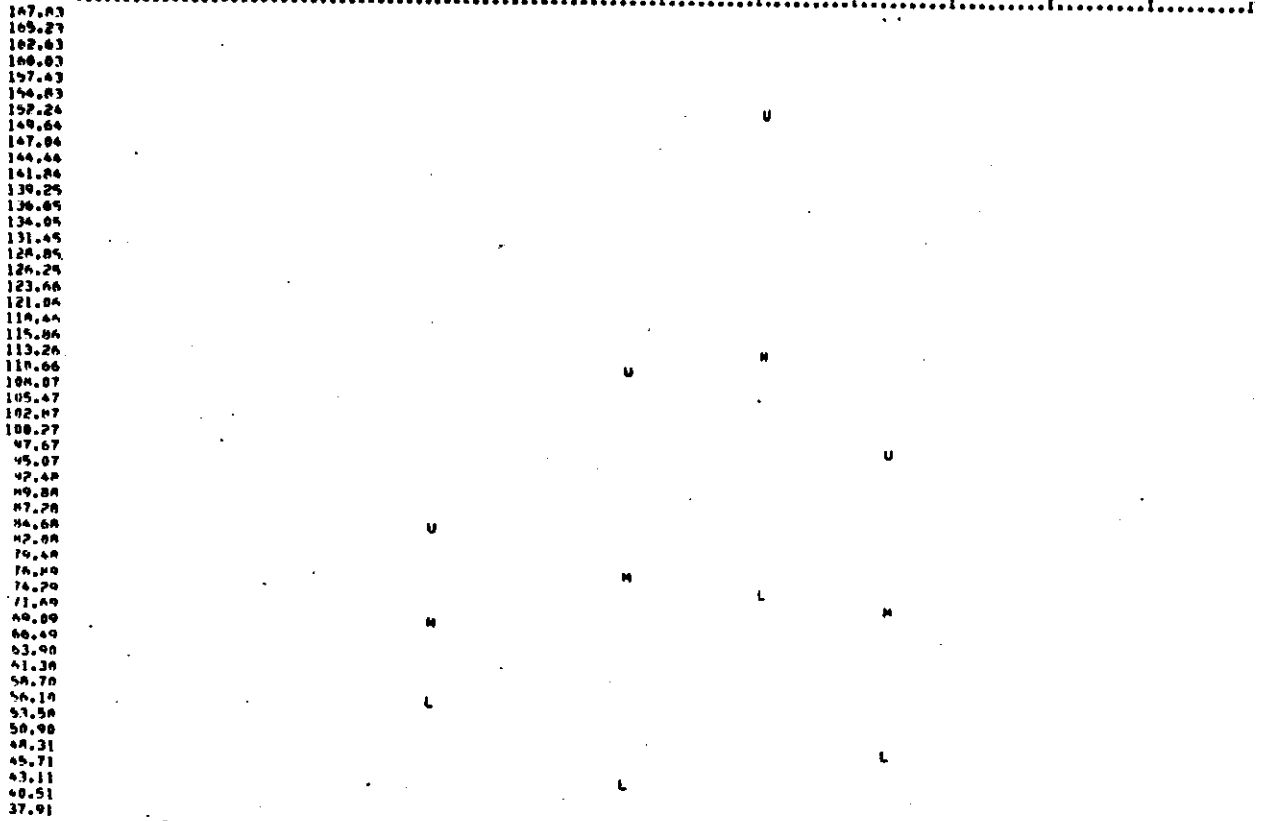
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 0- 80 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTLA, THT 3 * FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12					
172 ***	12	452.81	23.45			
213 ****	12	412.77	58.77	2.21	481.87	504.55
253 ****	12	465.12	75.02	2.21	388.74	524.74
		503.88	90.96	2.21	299.59	630.65
				2.21	383.26	744.57

*Cactus stratum
 **Sequence missing 240 cm of core length
 ***Sequence missing 360 cm of core length

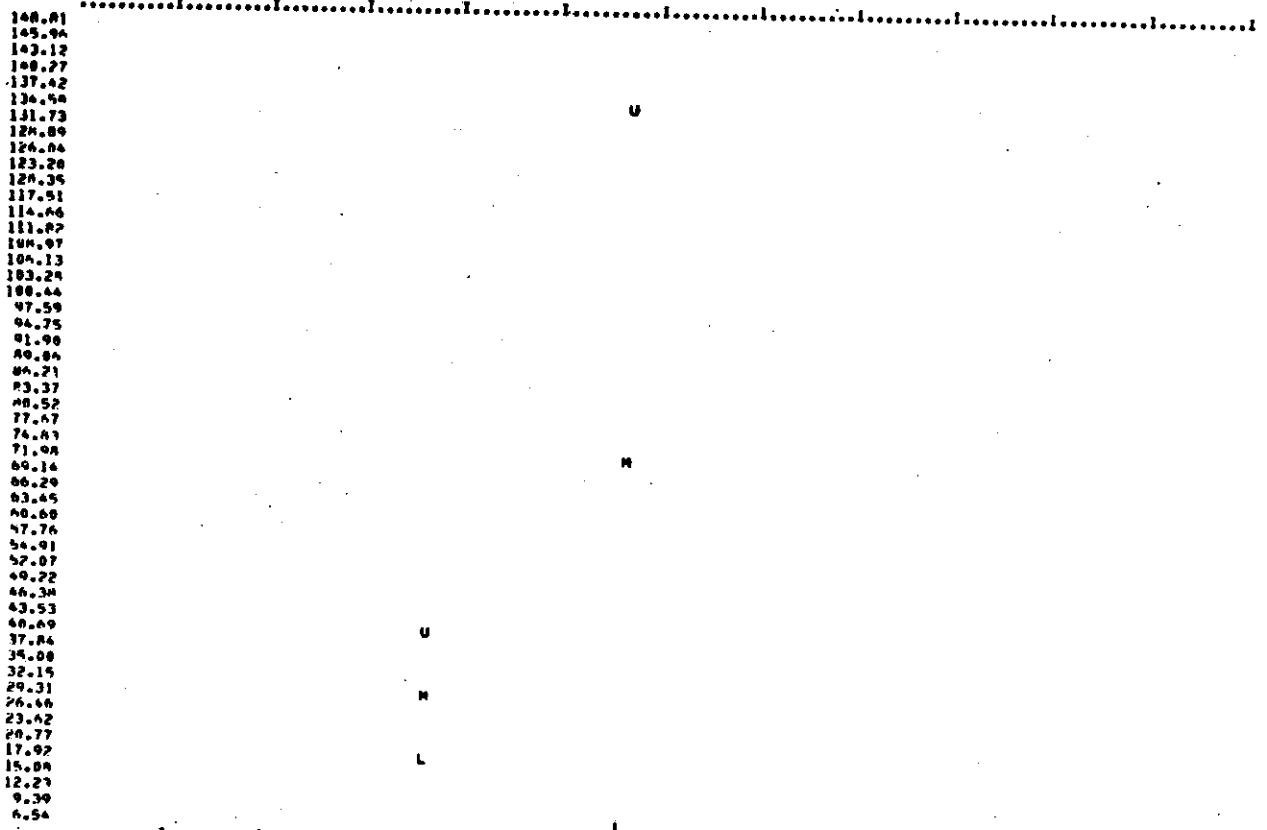


AXIS LABELS FOR THIS PLOT ARE:
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M²) FOR 10- 20 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY
 THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TX, * FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ²)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	69.99	6.37	2.21		
172	12	76.79	15.71	2.21	55.93	84.06
213	12	114.08	17.65	2.21	42.12	111.45
253	12	72.93	11.44	2.21	75.58	152.57
					47.68	98.18

*Cactus stratum



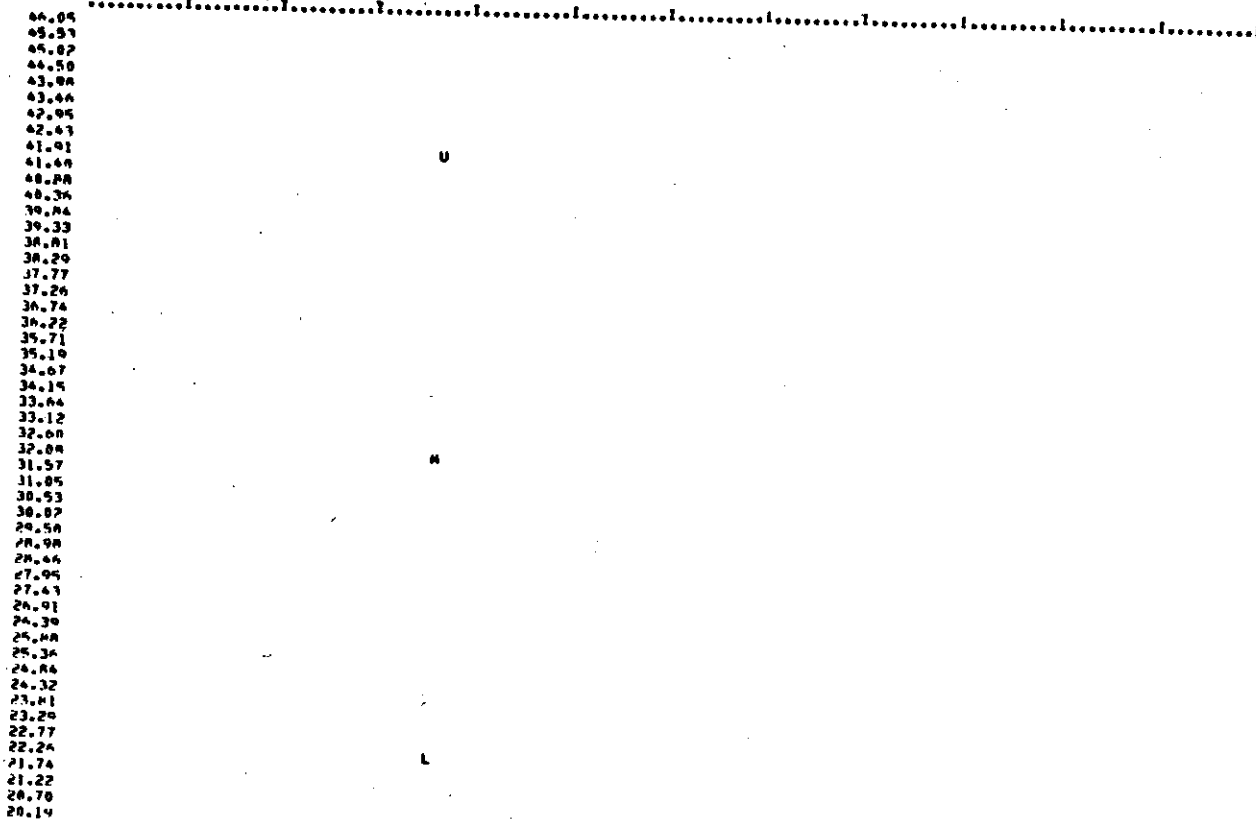
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M 50) FOR 30- 40 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX, TNT 3* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M 50)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
113	12	29.58	4.68	2.21	19.25	39.98
172	12	71.27	29.81	2.21	7.27	135.28

*Cactus stratum



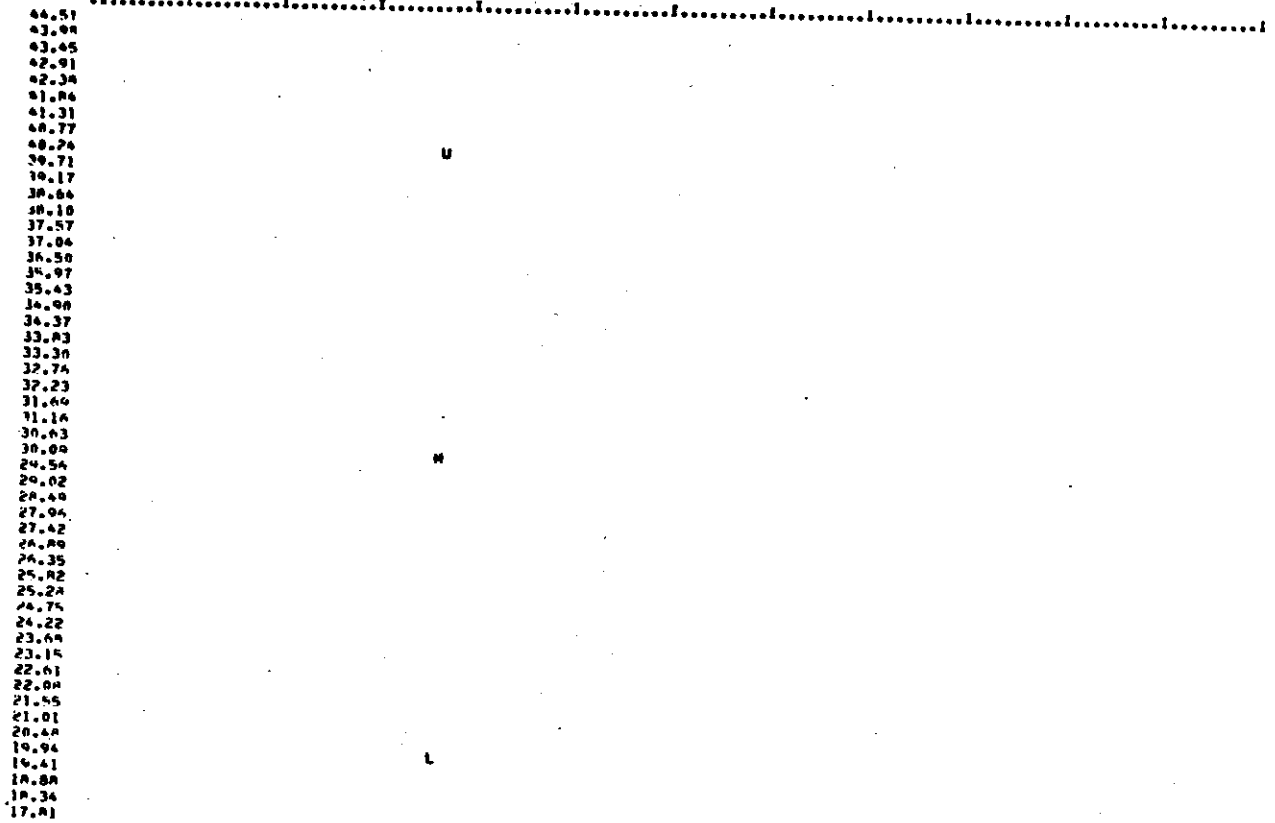
1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE =
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M SQ) FOR 40- 50 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTEX. INT J* FOR 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M SQ)	STANDARD ERROR	TEE VALUE	LOWER LIMIT	UPPER LIMIT
133	12	32.15	6.68	2.21	22.63	41.86

*Cactus stratum



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 1.0 31.0 61.0 91.0 121.0 151.0 181.0 211.0 241.0 271.0 301.0 331.0 361.0
 AXIS LABELS FOR THIS PLOT ARE *
 X-AXIS=JULIAN DATE FOR 1972
 Y-AXIS=BELOW GROUND BIOMASS (G/M² SO) FOR 50- 60 CM DEPTH

THESE DATA INCLUDE ROOT MATERIAL ONLY

THESE DATA REPRESENT BELOW-GROUND BIOMASS SAMPLING ON SITE PANTLA. THT J 74 ON 1972
 (CONFIDENCE BAND CALCULATED AT THE 95 PERCENT LEVEL)

JULIAN DATE	NUMBER OF VALUES/MEAN	TREATMENT MEAN (G/M ² SO)	STANDARD ERROR	TEL VALUE	LOWER LIMIT	UPPER LIMIT
113	12	30.13	4.69	2.21	19.74	40.47

*Cactus stratum