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PRELIMINARY COMPARISON OF WILA JAWIRA PROJECT CROP REMAINS: TIWANAKU, LUKURMATA, AND VALLEY SURVEY SITES

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Summary crop ubiquities for Wila Jawira dataset 1986-90

	Maize	Tubers	Lrg Cheno	Sml Cheno	Legumes
			ALL SAMPLES TOGETHER		
LKM 1986-87 n=136	13.2% (18)	2.2% (3)	47.1% (64)	82.4% (112)	0.7% (1)
TIW-AKE 1988-9 n=183	25.1% (44)	6.0% (11)	38.8% (71)	94.5% (173)	1.1% (2)
TIW-AK Sup.N. n=15	20.% (3)	46.7% (7)	26.7% (4)	100% (15)	0%
TIW Putuni n=4	50% (2)	0%	75% (3)	100% (4)	0%
TIW-AKE2 1990 n=20	40.0% (8)	5.0% (1)	95% (19)	100% (20)	5.0% (1)
TIW-C.J. 1990 n=13	76.9% (10)	15.4% (2)	84.6% (11)	100% (13)	0%
TIW-KK 1990 n=~~11~~ 35	34% 36.4% (4)	6% 9.1% (1)	77% 100% (11)	100% 100% (11)	0% 0%
TMV79 n=14	0%	7.1% (1)	57.1% (8)	92.9% (13)	0%
TMV558 n=13	7.7% (1)	0%	53.8% (7)	100% (13)	0%
ALLK n=11	0%	0%	27.7% (3)	100% (11)	0%
GUAQ n=14	14.3% (2)	0%	28.6% (4)	78.6% (11)	0%
IWAWE n=10	0%	0%	20% (2)	90% (9)	0%
OBSIDIANA n=12	0%	25% (3)	16.6% (2)	91.7% (11)	0%
PUKARA n=6	0%	0%	0%	16.7% (1)	0%
	(3) 3.5%	(4) 5%	(26) 32.5%	(69) 86.3%	0

(79) 29.3% | (23) 8.5% | (135) 50% | (260) 96.3% // (3) 1.1% TIW TOTAL n=271

150 flots
110 floated
73 w/ kf
did 35 — 48%

VALLEY TOTAL n=80

Sample sizes for flotation samples (in liters) 1986-1990:

	N	mean	s.d.	median	mode	range
Lukurmata 1986-87	136	1.5	0.76	1.6	0.3	0.3 to 4.4
Tiwanaku-AKE 1988-9	183	5.4	1.67	6.3	6.3	0.3 to 6.3
Tiwanaku-AK Sup.North.	15	4.9	1.40	5.7	5.7	1.9 to 6.3
Tiwanaku-Putuni 1989	4	6.3	0.0	6.3	6.3	all 6.3
Tiwanaku-AKE2 1990	20	7.2	0.87	7.2	8.0	5.0 to 8.0
Tiwanaku-Chiji Jawira	13	5.7	2.13	6.4	5.6	1.0 to 8.0
Tiwanaku-KK	11	7.0	1.49	7.2	5.0	5.0 to 9.6
TMV79	14	4.8	1.82	5.7	2.3	2.3 to 6.3
TMV558	13	3.4	1.70	5.7	6.3	2.3 to 6.3
ALLK	11	5.1	0.38	5.2	5.0	4.4 to 5.7
Guaqui	14	1.6	0.38	1.6	1.3	1.0 to 2.3
Iwawe	10	1.1	0.33	1.0	1.0	0.8 to 1.8
Obsidiana	12	1.8	0.42	2.0	2.1	1.3 to 2.3
Pukara	6	1.7	0.32	1.6	1.6	1.3 to 2.1

FEATURES

	Maize	Tubers	Lrg Cheno	Sml Cheno	Legumes
LKM 1986-87 n=65	16.9% (11)	1.5% (1)	55.4% (36)	87.7% (57)	0%
TIW-AKE 1988-9 n=44	43.2% (19)	13.6% (6)	52.3% (23)	95.5% (42)	4.6% (2)
TIW-AK Sup.N. n=15	20.0% (3)	46.7% (7)	26.7% (4)	100% (15)	0%
TIW Putuni n=3	66.7% (2)	0%	100% (3)	100% (3)	0%
TIW-AKE2 1990 n=4	75% (3)	0%	75% (3)	100% (4)	0%
TIW-C.J. 1990 n=9	66.7% (6)	11.1% (1)	88.9% (8)	100% (9)	0%
TIW-KK 1990 n=3	33.3% (1)	0%	100% (3)	100% (3)	0%
TMV79 n=4	0%	25% (1)	75% (3)	100% (4)	0%
TMV558 n=9	11.1% (1)	0%	44.4% (4)	100% (9)	0%
ALLK n=2	0%	0%	0%	100% (2)	0%
GUAQ n=9	11.1% (1)	0%	44.4% (4)	66.7% (6)	0%
IWAWE n=5	0%	0%	40.0% (2)	100% (5)	0%
OBSIDIANA n=9	0%	33.3% (3)	22.2% (2)	100% (9)	0%
PUKARA n=2	0%	0%	0%	50% (1)	0%

NON-FEATURES

	Maize	Tubers	Lrg Cheno	Sml Cheno	Legumes
LKM 1986-87 n=71	9.9% (7)	2.8% (2)	39.4% (28)	77.5% (55)	1.4% (1)
TIW-AKE 1988-9 n=139	18.0% (25)	3.6% (5)	34.5% (48)	94.2% (131)	0%
TIW-AK Sup.N. n=0					
TIW Putuni n=1	0%	0%	0%	100% (1)	0%
TIW-AKE2 1990 n=16	31.3% (5)	6.3% (1)	100% (16)	100% (16)	6.3% (1)
TIW-C.J. 1990 n=4	100% (4)	25% (1)	75.0% (3)	100% (4)	0%
TIW-KK 1990 n=8	37.5% (3)	12.5% (1)	100% (8)	100% (8)	0%
TMV79 n=10	0%	0%	50% (5)	90% (9)	0%
TMV558 n=4	0%	0%	75% (3)	100% (4)	0%
ALLK n=9	0%	0%	33.3% (3)	100% (9)	0%
GUAQ n=5	20.0% (1)	0%	0%	100% (5)	0%
IWAWE n=5	0%	0%	0%	80% (4)	0%
OBSIDIANA n=3	0%	0%	0%	66.7% (2)	0%
PUKARA n=4	0%	0%	0%	0%	0%

Summary crop densities for Wila Jawira dataset 1986-90
fragments/ liter of floted site matrix

ALL SAMPLES TOGETHER

	Maize	Tubers	Lrg Cheno	Sml Cheno	Legumes	
LKM 1986-87 n=136	0.24	0.03	2.82	59.36	<0.01	
TIW-AKE 1988-9 n=183	.34 0.29	.05 0.02	.76 0.31	15.76 11.00	<0.01 <0.01	TIW TOTAL
TIW-AK Sup.N. n=15	0.09	0.56	0.09	2.60	0.00	
TIW Putuni n=4	0.28	0.00	0.56	7.30	0.00	
TIW-AKE2 1990 n=20	1.10	0.02	1.30	28.00	<0.01	
TIW-C.J. 1990 n=~~13~~ 14	~~0.37~~ .34	~~0.04~~ .03	~~7.00~~ 6.49	~~78.00~~ 73.28	0.00	
TIW-KK 1990 n=~~11~~ 35	~~0.23~~ .25	0.01	~~0.55~~ .83	~~9.70~~ 17.27	0.00	
TMV79 n=14	0.00	0.03	0.07	370.00	0.00	
TMV558 n=13	0.03	0.00	0.68	10.00	0.00	
FORM ALLK n=11	0.00	0.00	0.13	30.40	0.00	
GUAQ n=14	0.90	0.00	0.73	9.36	0.00	
IWAWE n=10	0.00	0.00	0.29	4.04	0.00	
OBSIDIANA n=12	0.0	0.13	0.18	49.01	0.00	
PUKARA n=6	0.00	0.00	0.00	0.71	0.00	
	.16	.02	.33	80.10	0.0	VALLEY SITES TOTAL

FEATURES (DENSITIES)

	Maize	Tubers	Lrg Cheno	Sml Cheno	Legumes
LKM 1986-87 n=65	0.43	0.03	4.98	73.91	0.00
TIW-AKE 1988-9 n=44	1.09	0.07	0.84	33.40	0.01
TIW-AK Sup.N. n=15	0.09	0.56	0.09	2.61	0.00
TIW Putuni n=3	0.37	0.00	0.74	8.73	0.00
TIW-AKE2 1990 n=4	5.36	0.00	2.05	49.29	0.00
TIW-C.J. 1990 n=9	0.43	0.02	9.51	97.66	0.00
TIW-KK 1990 n=3	1.57	0.00	1.75	26.13	0.00
TMV79 n=4	0.00	0.11	0.75	886.19	0.00
TMV558 n=9	0.05	0.00	0.86	11.21	0.00
ALLK n=2	0.00	0.00	0.00	3.10	0.00
GUAQ n=9	1.17	0.00	1.14	11.40	0.00
IWAWE n=5	0.00	0.00	0.33	4.73	0.00
OBSIDIANA n=9	0.00	0.17	0.24	65.14	0.00
PUKARA n=2	0.00	0.00	0.00	2.14	0.00

NON-FEATURES (DENSITIES)

	Maize	Tubers	Lrg Cheno	Sml Cheno	Legumes
LKM 1986-87 n=71	0.07	0.03	0.84	46.04	0.01
TIW-AKE 1988-9 n=139	0.04	0.01	0.14	4.34	0.00
TIW-AK Sup.N. n=0					
TIW Putuni n=1	0.00	0.00	0.00	3.17 (1)	0.00
TIW-AKE2 1990 n=16	0.09	0.02	1.11	22.97	0.01
TIW-C.J. 1990 n=4	0.22	0.07	1.33	25.22	0.00
TIW-KK 1990 n=8	0.13	0.03	1.07	20.38	0.00
TMV79 n=10	0.00	0.00	0.69	75.22	0.00
TMV558 n=4	0.00	0.00	0.25	7.68	0.00
ALLK n=9	0.00	0.00	0.16	3.03	0.00
GUAQ n=5	0.40	0.00	0.00	5.70	0.00
IWAWE n=5	0.00	0.00	0.25	3.36	0.00
OBSIDIANA n=3	0.00	0.00	0.00	0.63	0.00
PUKARA n=4	0.00	0.00	0.00	0.00	0.00

CORRELATION BETWEEN FLOT SAMPLE SIZE AND UBIQUITY, AND BETWEEN SAMPLE SIZE AND DENSITY

CORRELATION OF SAMPLE SIZE AND UBIQUITY

Maize	Rs=+0.71 (p=0.0046)
Tubers	Rs=+0.33 (p=0.2432)
Lrg Cheno	Rs=+0.71 (p=0.0041)
Sml Cheno	Rs=+0.81 (p=0.0004)
Legumes	Rs=+0.22 (p=0.4430)

CORRELATION BETWEEN SAMPLE SIZE AND DENSITIES

Maize	Rs=+0.46 (p=0.1010)
Tubers	Rs=+0.30 (p=0.3034)
Lrg Cheno	Rs=+0.23 (p=0.4223)
Sml Cheno	Rs=+0.27 (p=0.3535)
Legumes	Rs=+0.15 (p=0.6060)

SITE=LKM YEAR=86

UNIVARIATE

VARIABLE=ITEMS

Descriptive statistics of # of "ITEMS" per sample

LUKURMATA

1986-87

(x bag size = 1.5 ℓ)

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	47	SUM WGTS	47	100% MAX	1881	99%	1881	LOWEST	HIGHEST
MEAN	170.936	SUM	8034	75% Q3	182	95%	941.4	0	470
STD DEV	336.166	VARIANCE	113008	50% MED	34	90%	508	0	660
SKEWNESS	3.59114	KURTOSIS	15.1728	25% Q1	1	10%	0	0	696
USS	6571662	CSS	5198361	0% MIN	0	5%	0	0	1105
CV	196.662	STD MEAN	49.0349			1%	0	0	1881
T:MEAN=0	3.48601	PROB>|T|	0.00109052	RANGE	1881				
SGN RANK	370.5	PROB>|S|	0.0001	Q3-Q1	181				
NUM ¬= 0	38			MODE	0				

SITE=LKM YEAR=87

UNIVARIATE

VARIABLE=ITEMS

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	84	SUM WGTS	84	100% MAX	5095	99%	5095	LOWEST	HIGHEST
MEAN	649.798	SUM	54583	75% Q3	657.75	95%	3573.75	0	3087
STD DEV	1039.77	VARIANCE	1081124	50% MED	236	90%	2029	0	3736
SKEWNESS	2.57527	KURTOSIS	6.62008	25% Q1	55.5	10%	11	1	4069
USS	125201199	CSS	89733296	0% MIN	0	5%	2.5	2	4340
CV	160.015	STD MEAN	113.448			1%	0	4	5095
T:MEAN=0	5.7277	PROB>|T|	0.0001	RANGE	5095				
SGN RANK	1701.5	PROB>|S|	0.0001	Q3-Q1	602.25				
NUM ¬= 0	82			MODE	0				

SITE=TIW YEAR=88

UNIVARIATE

VARIABLE=ITEMS

Descriptive statistics of # of "ITEMS" per sample

TIWANAKU 1988-89

(X bag size = 5.4 f)

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	25	SUM WGTS	25	100% MAX	8813	99%	8813	LOWEST	HIGHEST
MEAN	420.92	SUM	10523	75% Q3	102	95%	6317.9	0	117
STD DEV	1751.8	VARIANCE	3068805	50% MED	31	90%	381.4	0	148
SKEWNESS	4.96869	KURTOSIS	24.7775	25% Q1	17.5	10%	1.8	3	305
USS	78080653	CSS	73651312	0% MIN	0	5%	0	4	496
CV	416.184	STD MEAN	350.36			1%	0	6	8813
T:MEAN=0	1.20139	PROB>|T|	0.241321	RANGE	8813				
SGN RANK	138	PROB>|S|	0.0001	Q3-Q1	84.5				
NUM ^= 0	23			MODE	0				

SITE=TIW YEAR=89

UNIVARIATE

VARIABLE=ITEMS

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	181	SUM WGTS	181	100% MAX	6463	99%	5324.02	LOWEST	HIGHEST
MEAN	375.337	SUM	67936	75% Q3	289	95%	2067	0	2858
STD DEV	818.812	VARIANCE	670454	50% MED	127	90%	942	0	3311
SKEWNESS	4.5589	KURTOSIS	24.8372	25% Q1	45	10%	13.2	1	3782
USS	146180578	CSS	120681682	0% MIN	0	5%	6	3	5074
CV	218.154	STD MEAN	60.8618			1%	0	4	6463
T:MEAN=0	6.16703	PROB>|T|	0.0001	RANGE	6463				
SGN RANK	8055	PROB>|S|	0.0001	Q3-Q1	244				
NUM ^= 0	179			MODE	6				

UNIVARIATE
VARIABLE=ITEMS

MOMENTS

N	11	SUM WGTS	11
MEAN	32.0909	SUM	353
STD DEV	15.8585	VARIANCE	251.491
SKEWNESS	0.870979	KURTOSIS	0.534478
USS	13843	CSS	2514.91
CV	49.4173	STD MEAN	4.78151
T:MEAN=0	6.71146	PROB>|T|	0.0001
SGN RANK	33	PROB>|S|	0.0038398
NUM ¬= 0	11		

QUANTILES(DEF=4)

100% MAX	65	99%	65
75% Q3	39	95%	65
50% MED	29	90%	62.4
25% Q1	21	10%	12
0% MIN	11	5%	11
		1%	11
RANGE	54		
Q3-Q1	18		
MODE	39		

EXTREMES

LOWEST	HIGHEST
11	30
16	39
21	39
23	52
28	65

(x̄ bag size = 5.1 ℓ)

SAS
SITE=GUAQ
UNIVARIATE
VARIABLE=ITEMS

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MOMENTS

N	14	SUM WGTS	14
MEAN	70.9286	SUM	993
STD DEV	116.173	VARIANCE	13496.1
SKEWNESS	2.18205	KURTOSIS	3.47934
USS	245881	CSS	175449
CV	163.788	STD MEAN	31.0484
T:MEAN=0	2.28445	PROB>|T|	0.0397897
SGN RANK	45.5	PROB>|S|	0.00166169
NUM ¬= 0	13		

QUANTILES(DEF=4)

100% MAX	351	99%	351
75% Q3	59.5	95%	351
50% MED	24	90%	341.5
25% Q1	9.75	10%	3.5
0% MIN	0	5%	0
		1%	0
RANGE	351		
Q3-Q1	49.75		
MODE	0		

EXTREMES

LOWEST	HIGHEST
0	43
7	58
9	64
10	332
19	351

(x̄ bag size = 1.6 ℓ)

SAS
SITE=IWAW
UNIVARIATE
VARIABLE=ITEMS

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MOMENTS

N	9	SUM WGTS	9
MEAN	27.2222	SUM	245
STD DEV	23.3333	VARIANCE	544.444
SKEWNESS	1.17611	KURTOSIS	2.3833
USS	11025	CSS	4355.56
CV	85.7143	STD MEAN	7.77778
T:MEAN=0	3.5	PROB>|T|	0.00807908
SGN RANK	18	PROB>|S|	0.0141474
NUM ¬= 0	8		

QUANTILES(DEF=4)

100% MAX	78	99%	78
75% Q3	36	95%	78
50% MED	22	90%	78
25% Q1	9	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	78		
Q3-Q1	27		
MODE	22		

EXTREMES

LOWEST	HIGHEST
0	22
1	33
17	35
22	37
22	78

(x̄ bag = 1.1 ℓ)

Descriptive Statistics of # OF "ITEMS" per Sample

SAS
SITE=OBS
UNIVARIATE
VARIABLE=ITEMS

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MOMENTS

N	12	SUM WGTS	12
MEAN	190.917	SUM	2291
STD DEV	225.84	VARIANCE	51003.5
SKEWNESS	1.66678	KURTOSIS	2.54167
USS	998429	CSS	561039
CV	118.292	STD MEAN	65.1943
T:MEAN=0	2.92843	PROB>|T|	0.013729
SGN RANK	33	PROB>|S|	0.00385729
NUM ¬= 0	11		

QUANTILES(DEF=4)

100% MAX	744	99%	744
75% Q3	233.75	95%	744
50% MED	137	90%	673.8
25% Q1	15.75	10%	0.6
0% MIN	0	5%	0
		1%	0
RANGE	744		
Q3-Q1	218		
MODE	0		

EXTREMES

LOWEST	HIGHEST
0	182
2	224
15	237
18	510
85	744

(x̄ bag = 1.8 ℓ)

1990-Juan's Stics

SAS
SITE=PUK
UNIVARIATE
VARIABLE=ITEMS

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MOMENTS

N	6	SUM WGTS	6
MEAN	6.33333	SUM	38
STD DEV	14.0523	VARIANCE	197.467
SKEWNESS	2.44277	KURTOSIS	5.97459
USS	1228	CSS	987.333
CV	221.878	STD MEAN	5.73682
T:MEAN=0	1.10398	PROB>|T|	0.319877
SGN RANK	5	PROB>|S|	0.088973
NUM ¬= 0	4		

QUANTILES(DEF=4)

100% MAX	35	99%	35
75% Q3	9.5	95%	35
50% MED	1	90%	35
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	35		
Q3-Q1	9.5		
MODE	1		

EXTREMES

LOWEST	HIGHEST
0	0
0	1
1	1
1	1
1	35

(x̄ bag size = 1.7 ℓ)

SAS

CUADRA=CJ Chiji Jawira ($\bar{x}$ bag size = 5.7 ℓ)

UNIVARIATE

VARIABLE=ITEMS

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	13	SUM WGTS	13	100% MAX	17396	99%	17396	LOWEST	HIGHEST
MEAN	2500.38	SUM	32505	75% Q3	1828.5	95%	17396	50	1063
STD DEV	4834.14	VARIANCE	23368948	50% MED	663	90%	13246	184	1517
SKEWNESS	2.89368	KURTOSIS	8.64915	25% Q1	348.5	10%	103.6	334	2140
USS	361702383	CSS	280427381	0% MIN	50	5%	50	363	7021
CV	193.336	STD MEAN	1340.75			1%	50	549	17396
T:MEAN=0	1.86491	PROB>|T|	0.0868253	RANGE	17346				
SGN RANK	45.5	PROB>|S|	0.00166169	Q3-Q1	1480				
NUM ^= 0	13			MODE	50				

CUADRA=AKE2 ($\bar{x}$ bag size = 7.2 ℓ)

UNIVARIATE

VARIABLE=ITEMS

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	21	SUM WGTS	21	100% MAX	7263	99%	7263	LOWEST	HIGHEST
MEAN	1139.33	SUM	23926	75% Q3	1337	95%	6834.8	98	1360
STD DEV	1561.78	VARIANCE	2439156	50% MED	617	90%	2773.8	131	1462
SKEWNESS	3.34688	KURTOSIS	12.6475	25% Q1	398	10%	134.8	150	1945
USS	76042802	CSS	48783113	0% MIN	98	5%	101.3	329	2981
CV	137.078	STD MEAN	340.808			1%	98	370	7263
T:MEAN=0	3.34303	PROB>|T|	0.0032397	RANGE	7165				
SGN RANK	115.5	PROB>|S|	0.0001	Q3-Q1	939				
NUM ^= 0	21			MODE	98				

CUADRA=KKJ ($\bar{x}$ bag size = 7.0 ℓ)

UNIVARIATE

VARIABLE=ITEMS

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	11	SUM WGTS	11	100% MAX	1712	99%	1712	LOWEST	HIGHEST
MEAN	585	SUM	6435	75% Q3	762	95%	1712	128	588
STD DEV	479.824	VARIANCE	230231	50% MED	391	90%	1602.2	180	623
SKEWNESS	1.53221	KURTOSIS	2.131	25% Q1	251	10%	138.4	251	762
USS	6066781	CSS	2302306	0% MIN	128	5%	128	294	1163
CV	82.0211	STD MEAN	144.672			1%	128	343	1712
T:MEAN=0	4.04362	PROB>|T|	0.00234751	RANGE	1584				
SGN RANK	33	PROB>|S|	0.00385729	Q3-Q1	511				
NUM ^= 0	11			MODE	128				

Descriptive Statistics of # of "ITEMS" per sample

1990 Tiwanaku samples by cuadra

SITE=TIW (all 1990 TIWANAKU samples together)

UNIVARIATE
VARIABLE=ITEMS

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	45	SUM WGTS	45	100% MAX	17396	99%	17396	LOWEST	HIGHEST
MEAN	1397.02	SUM	62866	75% Q3	1238.5	95%	7190.4	50	2140
STD DEV	2844.4	VARIANCE	8090608	50% MED	603	90%	2476.4	98	2981
SKEWNESS	4.59656	KURTOSIS	23.7439	25% Q1	338.5	10%	142.4	128	7021
USS	443811966	CSS	355986767	0% MIN	50	5%	107	131	7263
CV	203.604	STD MEAN	424.018			1%	50	150	17396
T:MEAN=0	3.29472	PROB>|T|	0.00195268	RANGE	17346				
SGN RANK	517.5	PROB>|S|	0.0001	Q3-Q1	900				
NUM ^= 0	45			MODE	50				

SAS

SITE=TMV (558+79 together) = Jims survey sites

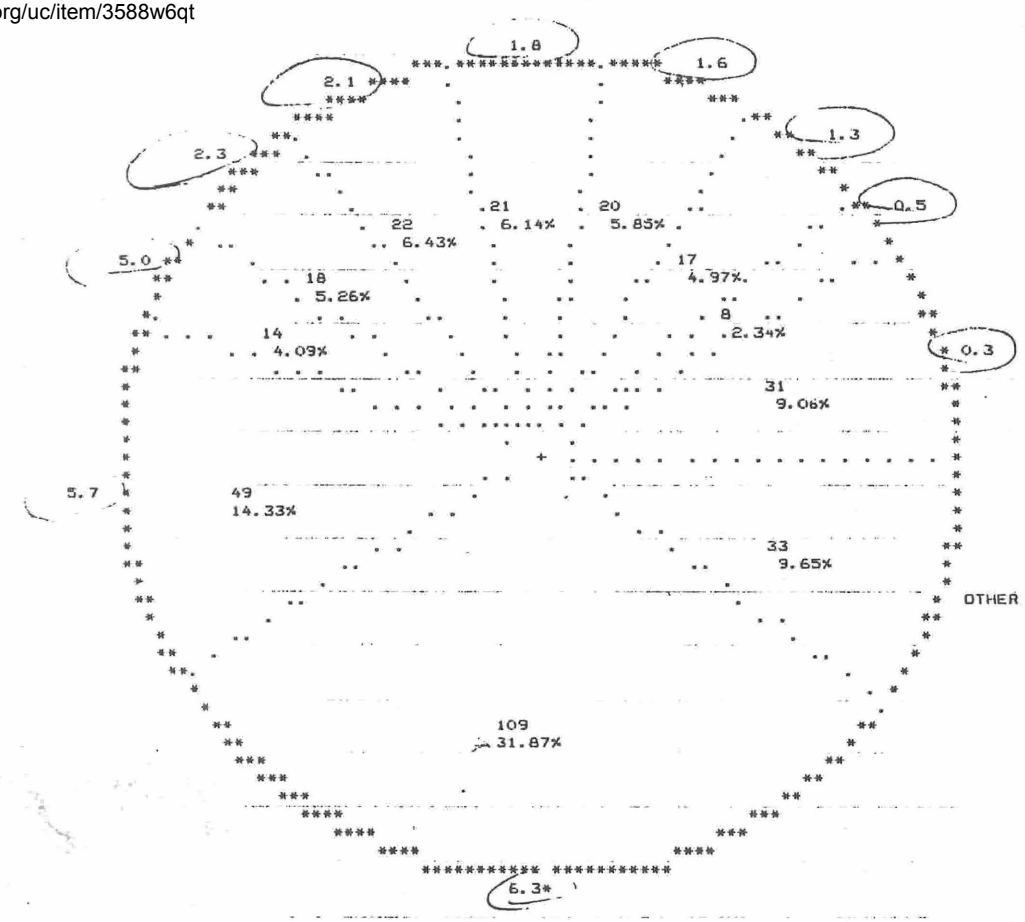
UNIVARIATE
VARIABLE=ITEMS

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	27	SUM WGTS	27	100% MAX	8101	99%	8101	LOWEST	HIGHEST
MEAN	609	SUM	16443	75% Q3	300	95%	6531.4	0	333
STD DEV	1690.8	VARIANCE	2858795	50% MED	123	90%	1369.8	7	388
SKEWNESS	3.98013	KURTOSIS	16.2717	25% Q1	55	10%	9.4	10	668
USS	84342457	CSS	74328670	0% MIN	0	5%	2.8	44	4177
CV	277.635	STD MEAN	325.394			1%	0	50	8101
T:MEAN=0	1.87158	PROB>|T|	0.0725563	RANGE	8101				
SGN RANK	175.5	PROB>|S|	0.0001	Q3-Q1	245				
NUM ^= 0	26			MODE	0				

Descriptive Statistics of # OF "ITEMS" PER SAMPLE

1990 - TIWANAKU & TMV 79+558 (together)

FREQ PIE CHART OF FLOIVOL



NOTE: THE PROCEDURE CHART USED 0.11 SECONDS AND 84K AND PRINTED PAGE 1.
NOTE: SAS USED 212K MEMORY.

NOTE: SAS INSTITUTE INC.
SAS CIRCLE
PO BOX 8000
CARY, N.C. 27512-8000

APPROXIMATE ACCULMULATED JOB COST, AT NORMAL UNIVERSITY RATES
CPU CHARGES @ $72.50 PER MINUTE..... $0.84
TAPE AND DISK IO CHARGES @ $0.84 PER 1000 IO'S..... $0.49

LKM+TIW

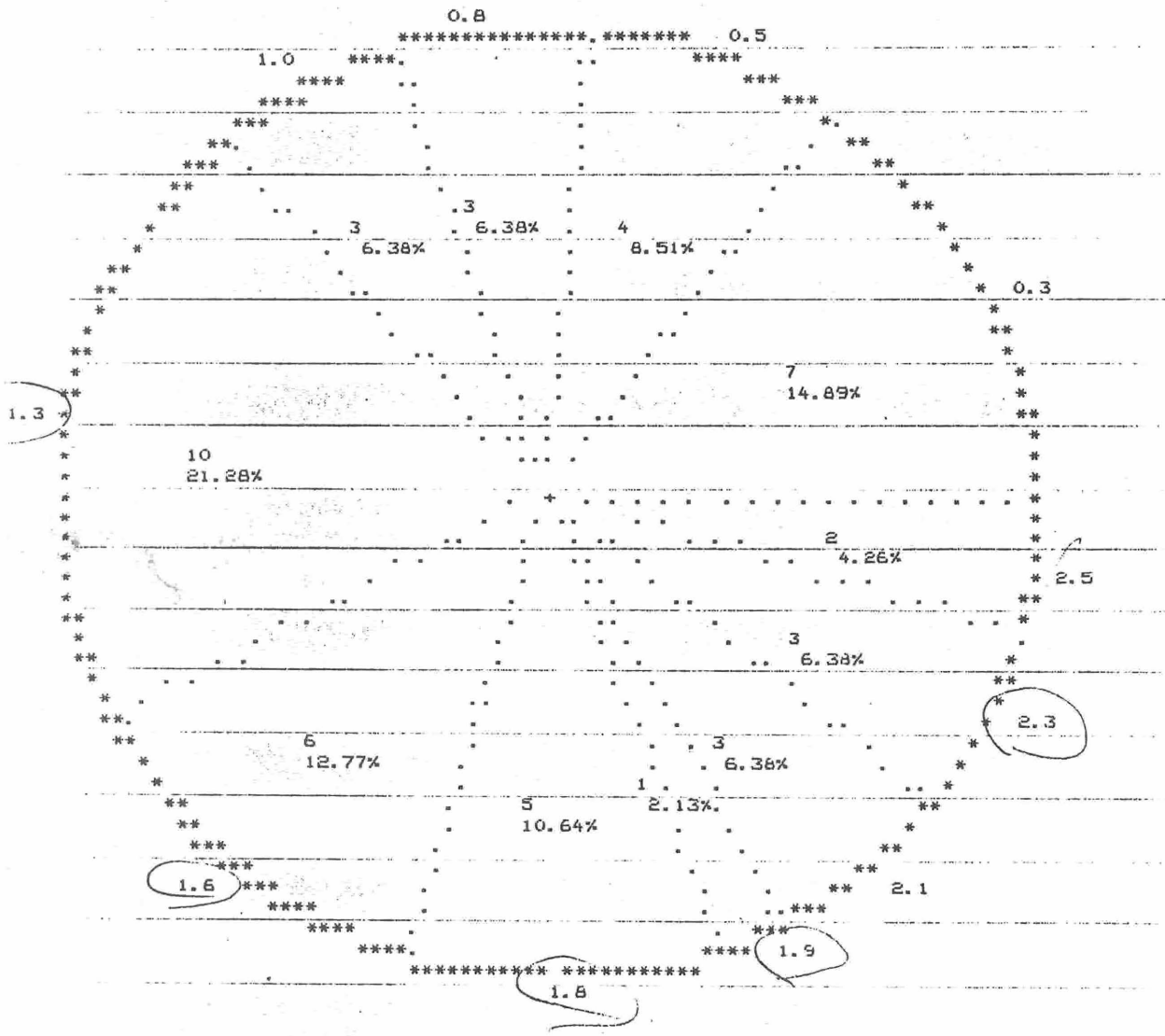
1986-89
all

BOLIVIAN 1
1987-89

3421

=86

PIE CHART OF FLOTVOL



Lukurmata
'86

BOLIVIA
1986
SAMPL

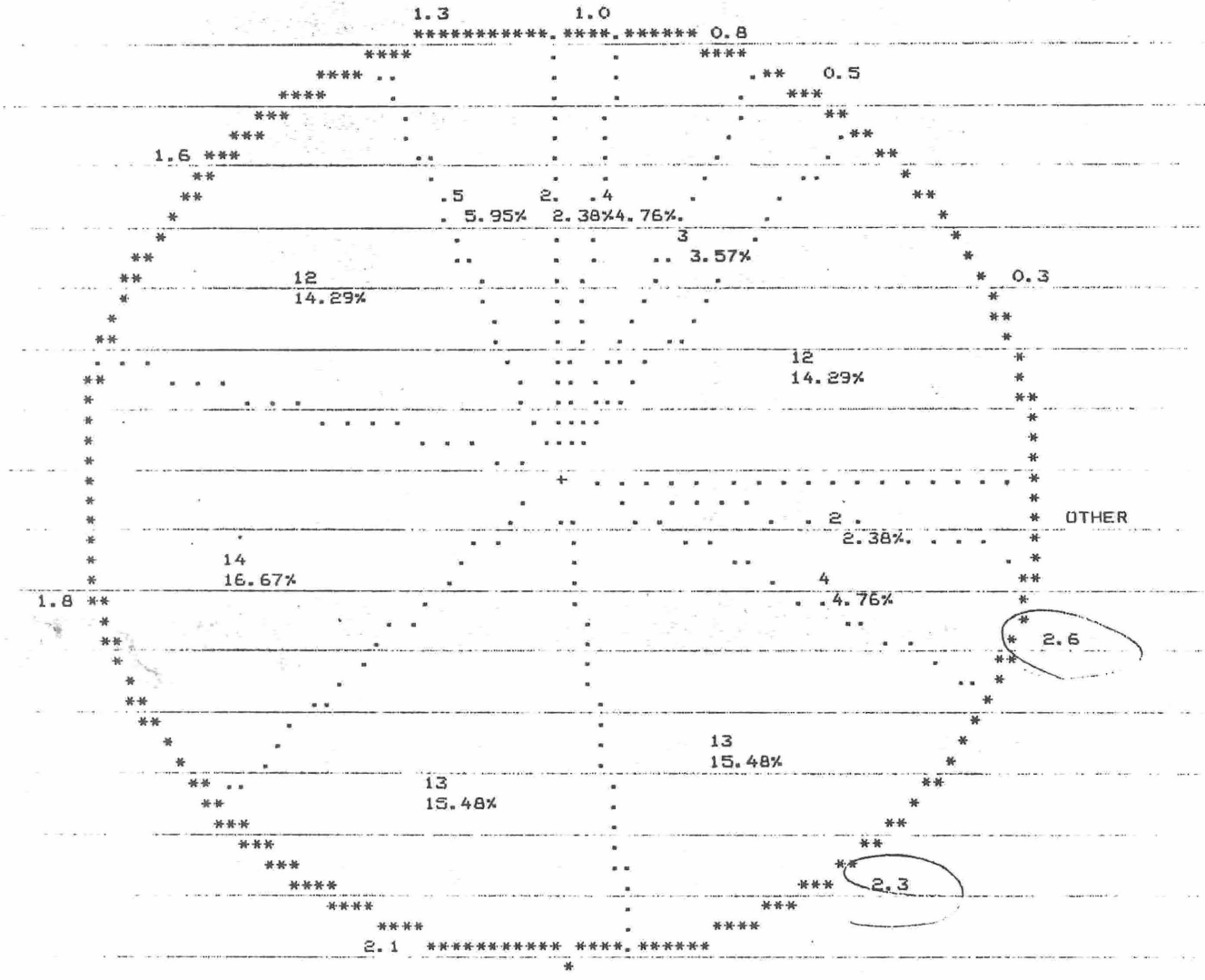
CL1

n=38

FREQ PIE CHART OF FLOTVOL

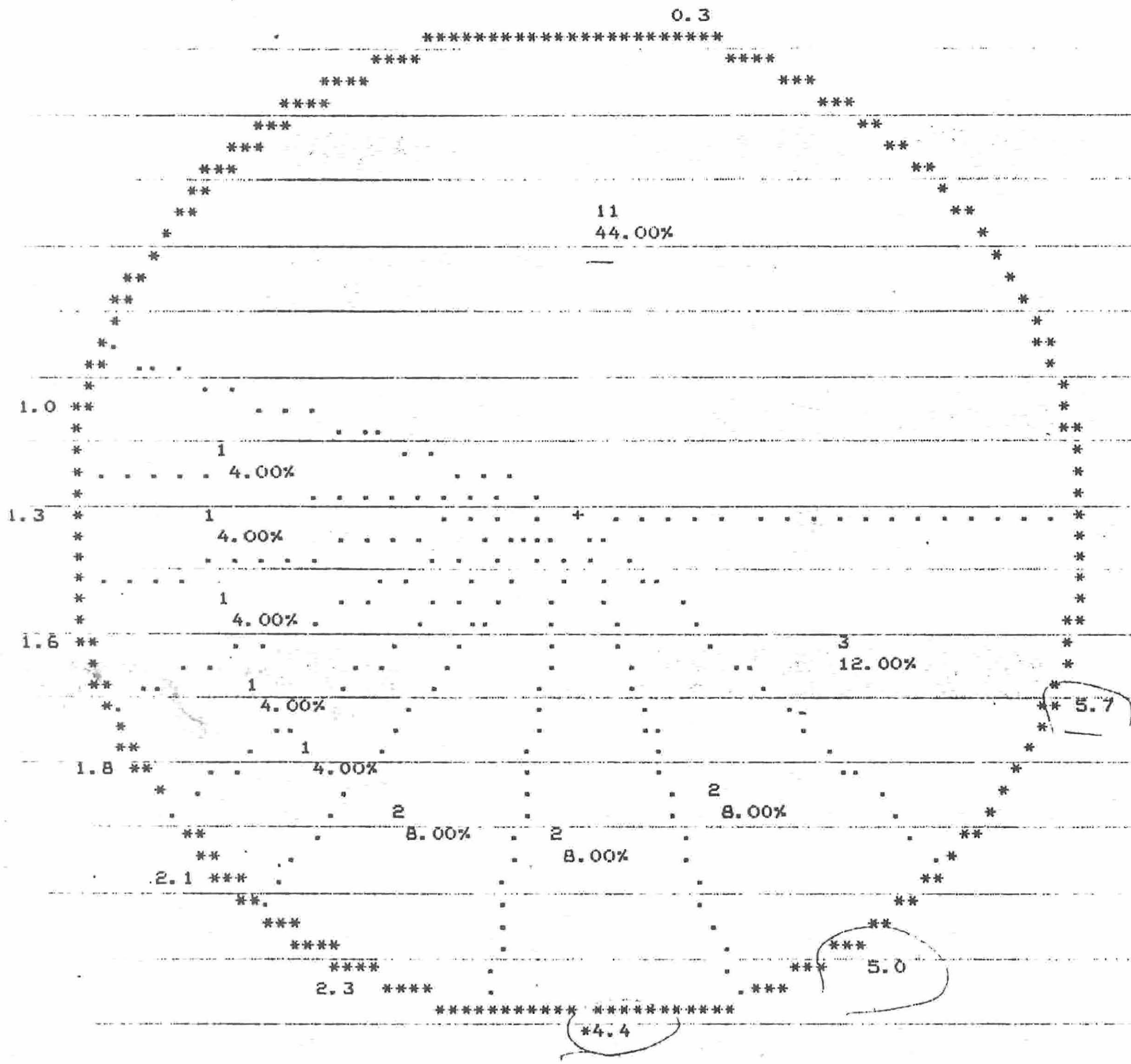
BOLIVIA
1987
(LKM)

n = 87



R=88

Q PIE CHART OF FLOTVOL



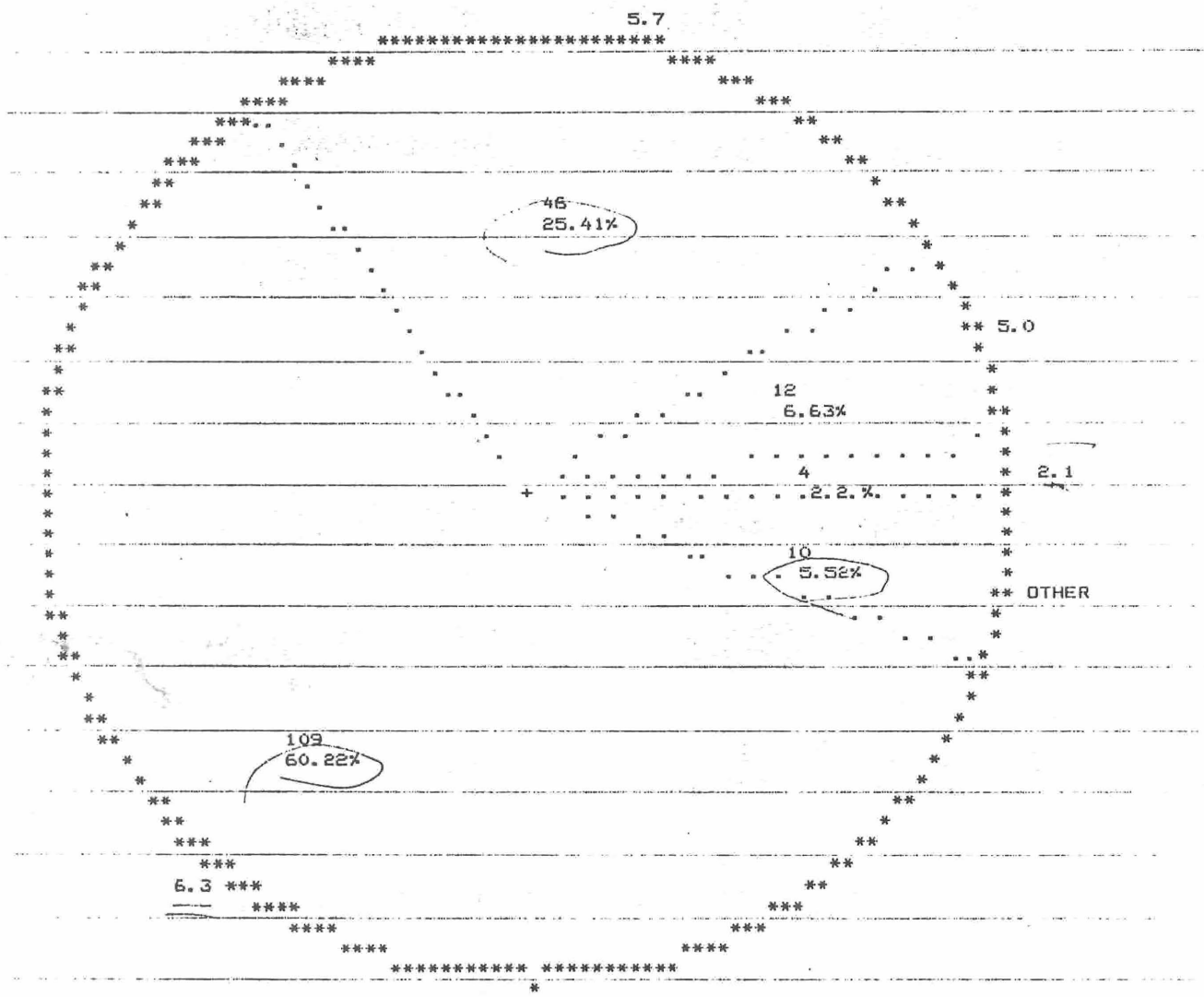
1988
TIWANAKU

n=25

Jim's
AKE

Q PIE CHART OF FLOTVOL

1989 AK-E
TIWANAKU
n=179
John,
Martin +
Linda

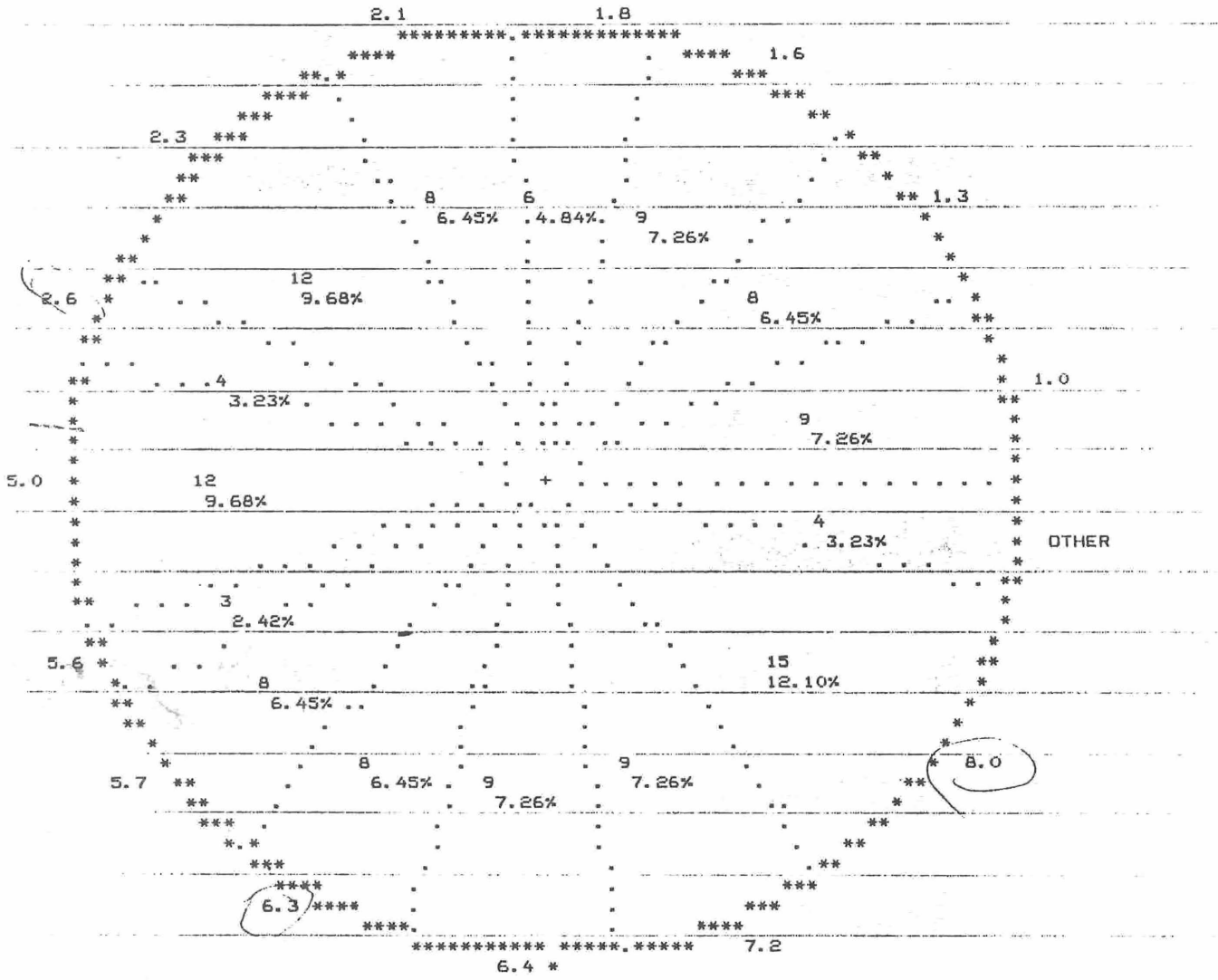


E: THE PROCEDURE CHART USED 0.32 SECONDS AND 84K AND PRINTED PAGES 1 TO 4.

E: SAS INSTITUTE INC.
SAS CIRCLE
PO BOX 8000
CARY, N.C. 27512-8000

ROXIMATE ACCULMULATED JOB COST, AT NORMAL UNIVERSITY RATES
CHARGES @ $72.50 PER MINUTE..... $2.05

FQ PIE CHART OF FLOIVOL



including Jim, Juan etc.

ALL BOLIVIAN DATA 1990 ONLY

~124 SAMPLES

E: THE PROCEDURE CHART USED 0.10 SECONDS AND 84K AND PRINTED PAGE 1.
E: SAS USED 212K MEMORY.

E: SAS INSTITUTE INC.
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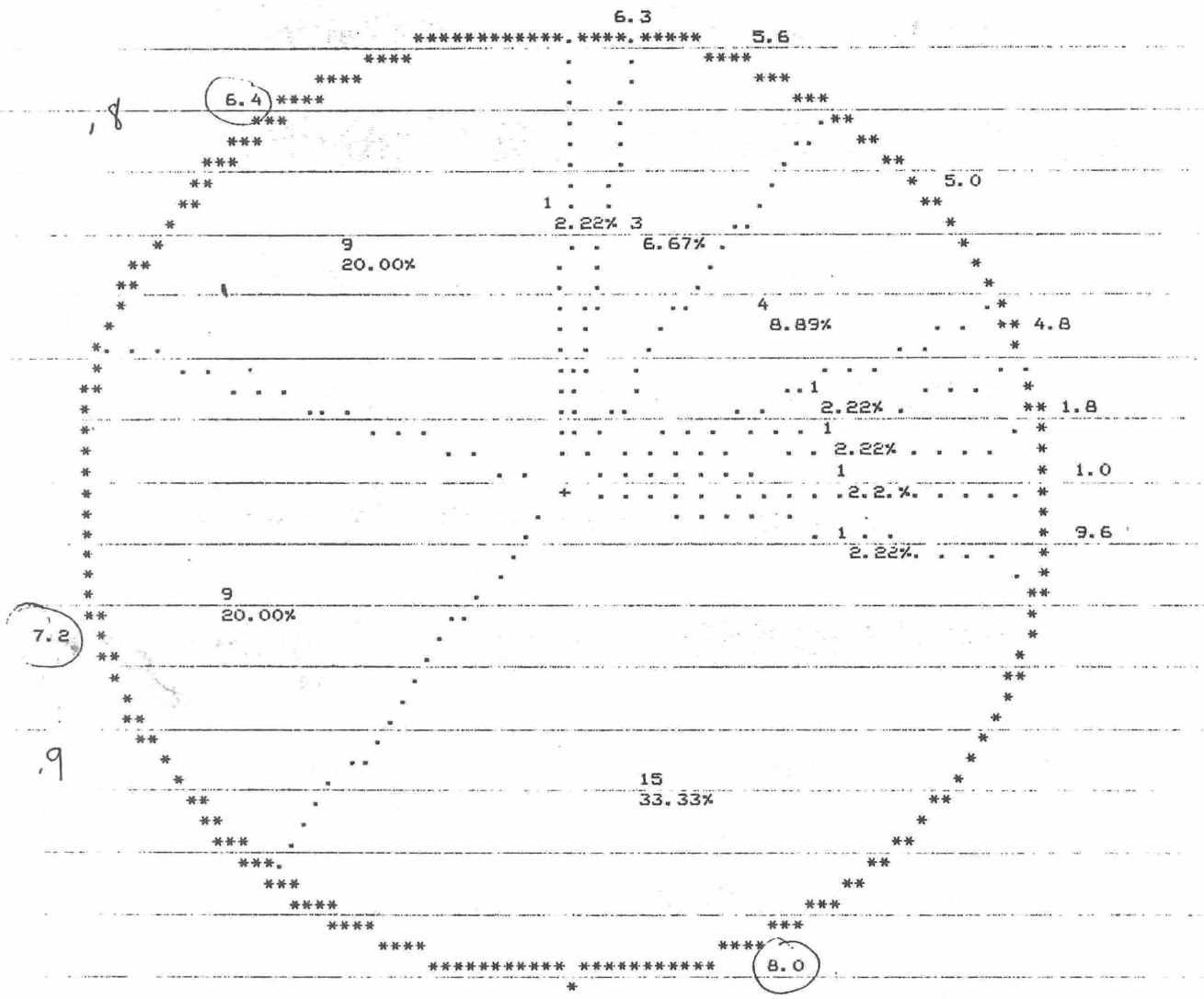
PO BOX 8000
CARY, N.C. 27512-8000

ROXIMATE ACCULMULATED JOB COST, AT NORMAL UNIVERSITY RATES
! CHARGES @ $72.50 PER MINUTE..... $0.84
E AND DISK IO CHARGES @ $0.84 PER 1000 IO'S..... $0.48

SITE=TIW

FREQ PIE CHART OF FLOTVOL



all of 1990 TIW

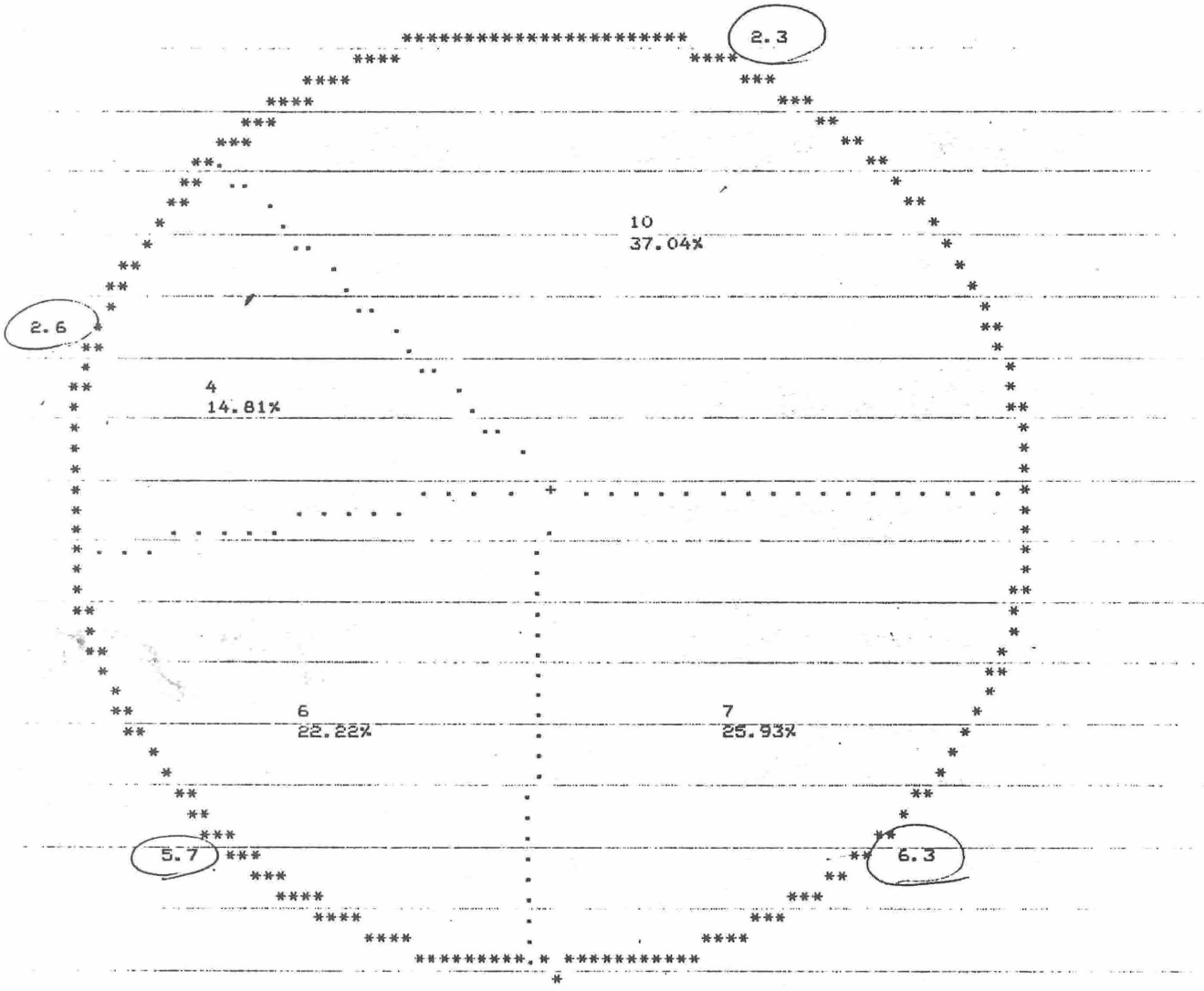
CJ, KK, + ACE-2

.8

.9

1.0

IE=TMV
=0 PIE CHART OF FLOTVOL



TMV 79+
TMV 552

BAG 51
IN LITT

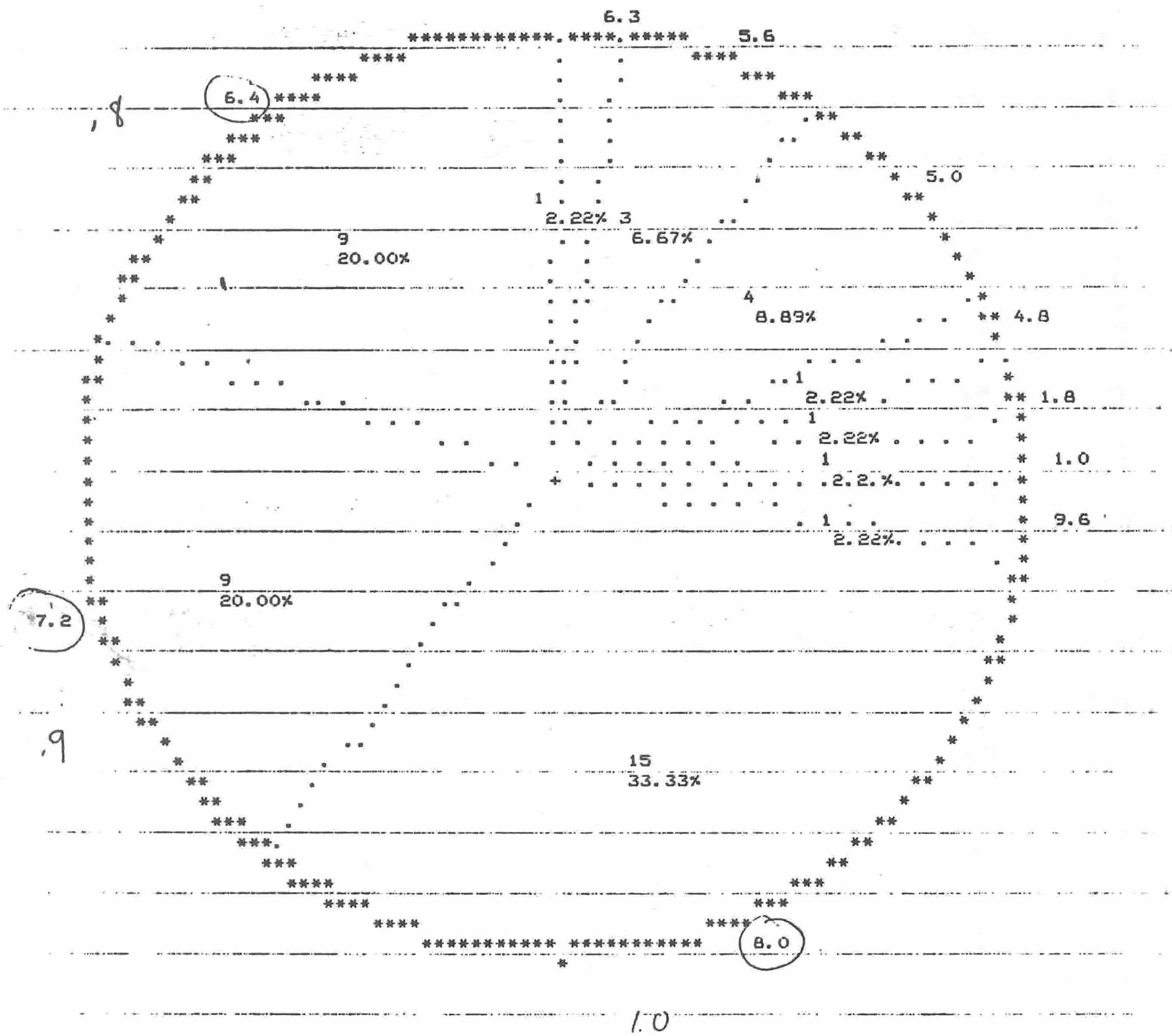
Jim's

TE: THE PROCEDURE CHART USED 0.50 SECONDS AND 84K AND PRINTED PAGES 1 TO 7.

TE: SAS INSTITUTE INC.
SAS CIRCLE
PO BOX 8000
CARY, N.C. 27512-8000

PROXIMATE ACCULMULATED JOB COST, AT NORMAL UNIVERSITY RATES
J CHARGES @ $72.50 PER MINUTE..... $2.05

FREQ PIE CHART OF FLOTVOL



all of 1990
TIW

CJ,
KK, +
AKE-2