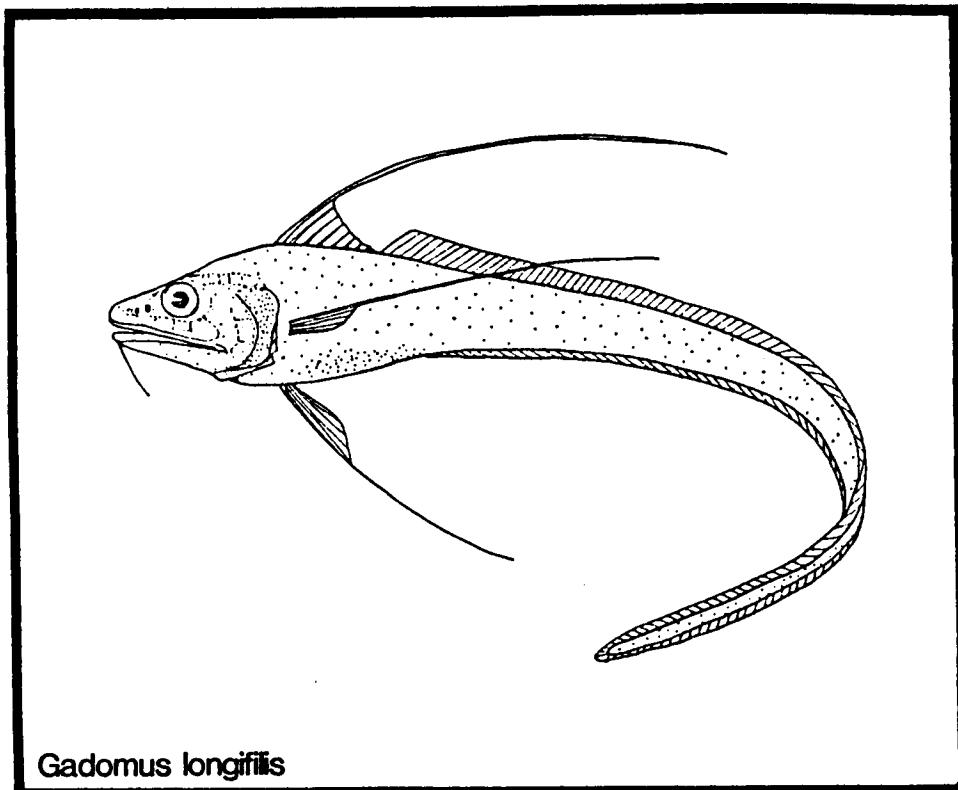


Northern Gulf of Mexico Continental Slope Study Final Report Year 4

Volume III: Appendices



Northern Gulf of Mexico Continental Slope Study Final Report Year 4

Volume III: Appendices

Editor

Benny J. Gallaway

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GUIDE TO APPENDICES

The Appendices for the Year 4 Final Report (this volume) consists of (1) results of significant analysis of variance (ANOVA) and orthogonal contrasts comparing the abundance levels of abundant (more than 90 specimens total) macrofauna species among stations sampled on each cruise (Appendix A); (2) a correlation matrix for the 22 environmental variables considered of importance and the same abundant macrofauna (Appendix B); and (3) figures showing the relative density of the same abundant macrofauna that exhibited significant differences in the ANOVAs on one or more cruises (Appendix C).

In the Appendices that follow, the abundant species of macrofauna (of which there were 61, including Vesicomya sp. a taxa of special interest) are referenced by either NODC code (Appendix A), species number (Appendix B) or by scientific name (Appendix C). Table 1 provides a cross-reference for species number, NODC code and the scientific name as well as the total count. Table 1 is a key reference for interpreting the Appendices.

Appendix A

As noted, an analysis of variance was run on station abundance levels for each of the 61 species listed in Table 1, for each cruise or cruise evaluation, resulting in 244 individual ANOVAs. The four basic ANOVAs were designed to:

- (1) Compare regional, seasonal and annual differences in macrofauna abundance among stations by depth (based on data from Cruise I-III, ANOVA I);
- (2) Examine variation across isobaths in the central Gulf (Cruise III, ANOVA II);
- (3) Examine variation along different isobaths in the eastern Gulf (Cruise IV, ANOVA III); and

Table 1. Species number and NODC codes for abundant macrofauna.

SPECIES NUMBER	NODC CODE	NAME	TOTAL COUNT
SP1	5001410803	LEVINSENIA UNCIATA	91
SP2	4303999997	NEMERTEA SP.D	93
SP3	6163080198	MACROSTYLUS SP.256	94
SP4	6163099493	PROCHELATOR SP.408	97
SP5	6111070199	HARBANSUS SP.A	98
SP6	5001700204	EUCHONE INCOLOR?	101
SP7	5001230798	EXOGONE SP.B	104
SP8	5502040699	YOLDIELLA SP.A	105
SP9	5514000096	EULAMELLIBRANCHIA SP.B	105
SP10	7815199998	SETOSELLINA ELEGANTULA	109
SP11	5001310124	LUMBRINERIS VERRILLI	113
SP12	5001410603	CIRROPHORUS LYRA	116
SP13	5001540499	DIPLOCIRRUS "SP.A"	116
SP14	5001431001	SPIOPHANES BOMBYX	118
SP15	6163099499	PROCHELATOR SP.202	118
SP16	6157029699	TANAELLA SP.1	119
SP17	6111070699	PSEUDOPHILOMEDES SP.A	127
SP18	4303029997	NEMERTEA SP.CL4	130
SP19	5001100499	PARAMPHINOME SP. A	130
SP20	6169420099	PHOXOCEPHALIDAE SP.1	143
SP21	6169400599	PARDISYNOPIA N.SP.1	145
SP22	6159010199	GNATHIA SP.201	149
SP23	5001690196	TEREBELLIDES ATLANTIS	153
SP24	6156030099	APSEUDIDAE A	154
SP25	5001230296	PIONOSYLLIS "SP. H"	161
SP26	5001540404	DIPLOCIRRUS CAPENSIS	168
SP27	5001690101	TEREBELLIDES STROEMI	173
SP28	6157020285	LEPTOGNATHIA SP.15	173
SP29	6157020099	MESOTANAIS SP.1	181
SP30	5001100401	PARAMPHINOME JEFFREYSII	188
SP31	5001500306	THARYX ANNULOSUS?	191
SP32	5001409899	LEITOSCOLOPLOS SP.A	196
SP33	6111070299	PHILOMEDES SP.A	203
SP34	5502020298	NUCULA SP.A	208
SP35	5001160101	PARALACYDONIA PARADOXA	211
SP36	5001240603	CERATOCEPHALE OCULATA	220
SP37	5507010299	CRENELLA SP.A	225
SP38	5001310302	LUMBRINERIDES DAYI	229
SP39	5001500307	THARYX MARIONI	231
SP40	6163040199	ISCHNOMESUS SP.208	231
SP41	5502040199	MALLETTIA SP.B	239
SP42	55154402	?VESICOMYA SP.	262
SP43	5001430502	PRIONOSPIO CIRRIFERA	272
SP44	5001299999	SARSONUPHIS HARTMANAE	276
SP45	6111070599	ANGULOROSTRUM SP.A	279
SP46	5001550198	FAUVELIOPSIS SP.B	283
SP47	7815220201	EUGINOMA CAVALIERI	289
SP48	6157010599	PSEUDOTANAIS SP.1	299
SP49	5514000099	EULAMELLIBRANCHIA SP.F	319
SP50	6111070399	EUPHILOMEDES SP.A	333
SP51	5001410801	LEVINSENIA GRACILIS	371
SP52	5001430594	PRIONOSPIO EHLSERI	380
SP53	5001630399	MALDANE "SP.A"	402
SP54	5001060199	PHOLOE "SP.C"	417
SP55	5001410201	ARICIDEA SUECICA	421
SP56	5001230799	EXOGONE "SP.A"	467
SP57	5001431004	SPIOPHANES BERKELEYORUM	505
SP58	5001580999	TACHYTRYPANE SP.A	571
SP59	5001439699	AUROSPIO DIBRANCHIATA	1190
SP60	5001220999	LITOCORSA ANTENNATA	1209
SP61	7804030197	?NOLELLA MONNIOTAE	1772

(4) Examine variation along different isobaths in the western Gulf (Cruise V, ANOVA IV).

Each ANOVA had an associated set of orthogonal contrasts which compared groups of stations to test for significant differences among regions, depths, seasons, etc. A detailed description of these can be found in Volume II, Chapter 4.

Appendix A is divided into four parts, corresponding to each of the ANOVAs I-IV as defined above. The results are further ordered by major taxonomic group, namely polychaetes, bivalves, myodocopan ostracods, tanadaceans, isopods, bryozoans, amphipods and nemerteans. Within these groups, species results are ordered by abundance from high to low. Only the results for significant ANOVAs are listed.

The order of species results for each of the four ANOVAs is shown by Table 2. From this table, it can be seen that Appendix A-1 contains 28 individual tables--i.e., a table for each species for which a probability level is given. The order of the tables within each Appendix A subdivision is exactly as shown by Table 2, which therefore provides a guide to contents. The results tables are computer generated with the species being treated identified by NODC code. Table 1 provides a cross-reference for scientific names and NODC codes.

A sample of an Appendix A table is provided with annotations as Figure 1. At the top of the page, the species being analyzed is given by NODC code. In this instance, from Table 1 we see that NODC code 5001580999 refers to Tachytrypane Sp. A. Next follows the basic ANOVA results indicated by "2" on Figure 1. Under "3" in Figure 1, the model source of variation is shown to be stations (STA) and the significance level is given.

The results of the designed contrasts are given in "4". A single contrast is enabled for every degree of freedom under the model source of variation (station). Both F values and the probability of a greater F value are given here for each contrast. Lastly, under "5" in Figure 1, the means for each station are provided, by code. A key to the codes used in each ANOVA is provided in Table 3.

Table 2. Species of common macrofauna exhibiting significant differences in abundance patterns among stations treated in the respective ANOVAs. The numbers represent the observed probability level. $P \leq 0.01$ was used as the significance level.

	Total Count	ANOVAS			
		1 (CR 1-3)	2 (CR 3)	3 (CR 4)	4 (CR 5)
Polychaeta (32)					
1. <u>Litocorsa antennata</u>	1209	0.0001	0.0001	0.0001	0.0001
2. <u>Aurospio dibranchiata</u>	1190	-	-	-	0.0081
3. <u>Tachytrypane sp. A</u>	571	0.0001	-	0.0005	0.0001
4. <u>Spiophanes berkeleyorum</u>	505	0.0016	0.0034	0.0086	0.0026
5. <u>Exogone sp. A</u>	467	-	0.0024	-	-
6. <u>Aricidea suecica</u>	421	-	0.0071	-	-
7. <u>Pholoe "sp. C"</u>	417	0.0020	0.0001	0.0001	0.0001
8. <u>Maldane "sp. A"</u>	402	0.0001	-	-	-
9. <u>Prionospio ehlersi</u>	380	0.0003	0.0001	0.0001	0.0001
10. <u>Levinsenia gracilis</u>	371	-	-	0.0002	0.0015
11. <u>Fauveliopsis sp. B</u>	283	-	-	-	-
12. <u>Sarsonuphis hartmanae</u>	276	0.0099	0.0007	-	-
13. <u>Prionospio cirrifera</u>	272	-	-	-	-
14. <u>Tharyx marioni</u>	231	-	-	-	-
15. <u>Lumbrinerides dayi</u>	229	0.0001	0.0098	-	-
16. <u>Ceratocephale oculata</u>	220	0.0018	-	0.0005	0.0017
17. <u>Paralacydonia paradoxa</u>	211	0.0001	-	0.0021	0.0001
18. <u>Leitoscoloplos sp. A</u>	196	0.0001	-	-	0.0048
19. <u>Tharyx annulosus?</u>	191	-	0.0022	0.0067	-
20. <u>Paramphipnoma jeffreysii</u>	188	-	-	-	-
21. <u>Terebellides stroemi</u>	173	-	-	-	-
22. <u>Diplocirrus capensis</u>	168	0.0100	0.0074	-	-
23. <u>Pionosyllis "sp. H"</u>	161	-	-	-	-
24. <u>Terebellides atlantis</u>	153	-	-	-	-
25. <u>Paramphipnoma sp. A</u>	130	-	-	-	-
26. <u>Spiophanes bombyx</u>	118	-	0.0008	-	-
27. <u>Diplocirrus "sp. A"</u>	116	-	-	0.0013	-
28. <u>Cirrophorus lyra</u>	116	-	-	-	-
29. <u>Lumbrineris verrilli</u>	113	-	-	-	-
30. <u>Exogone sp. B</u>	104	-	-	-	-
31. <u>Euchone incolor</u>	101	-	-	-	-
32. <u>Levinsenia uncinata</u>	91	-	-	-	-
Bivalvia (7)					
1. <u>Eulamellibranchia</u> sp. F	319	0.0033	0.0001	0.0001	0.0001
2. ? <u>Vesicomya</u> sp.	262	0.0001	0.0001	0.0001	-
3. <u>Malletia</u> sp. B	239	0.0005	0.0001	-	-
4. <u>Crenella</u> sp. A	225	0.0001	0.0001	0.0003	0.0001
5. <u>Nucula</u> sp. A	208	0.0027	-	0.0019	0.0002
6. <u>Eulamellibranchia</u> sp. B	105	-	-	0.0001	-
7. <u>Yoldiella</u> sp. A	105	0.0001	0.0001	-	-

Table 2 (cont'd)

	Total Count	ANOVAS			
		1 (CR 1-3)	2 (CR 3)	3 (CR 4)	4 (CR 5)
Myodocopan Ostracods (5)					
1. <u>Euphilomedes</u> sp. A	332	0.0001	-	0.0001	0.0026
2. <u>Angulorostrum</u> sp. A	279	0.0001	-	0.0001	0.0001
3. <u>Philomedes</u> sp. A	203	0.0001	-	0.0001	0.0001
4. <u>Pseudophilomedes</u> sp. A	127	-	-	0.0001	0.0040
5. <u>Harbansus</u> sp. A	98	0.0001	0.0005	0.0001	0.0005
Tanaidacea (5)					
1. <u>Pseudotanais</u> sp. 1	299	0.0021	-	0.0014	0.0001
2. <u>Mesotanais</u> sp. 1	181	0.0001	-	0.0001	0.0001
3. <u>Leptognathia</u> sp. 15	173	-	0.0021	-	0.0088
4. <u>Apseudidae</u> sp. A	154	0.0001	0.0001	0.0001	0.0001
5. <u>Tanaella</u> sp. 1	119	-	-	0.0010	0.0099
Isopoda (5)					
1. <u>Ischnomesus</u> sp. 208	231	0.0001	0.0008	0.0001	0.0001
2. <u>Gnathia</u> sp. 201	240	-	-	-	-
3. <u>Prochelator</u> sp. 202	118	0.0001	0.0001	-	-
4. <u>Prochelator</u> sp. 408	97	-	-	0.0020	-
5. <u>Macrostylus</u> sp. 256	94	0.0001	0.0015	-	0.0001
Bryozoa (3)					
1. ? <u>Nolella monniotae</u>	1772	-	-	0.0001	0.0014
2. <u>Euginoma cavillieri</u>	289	-	0.0001	0.0001	-
3. <u>Setosellina elegantula</u>	109	-	-	0.0004	-
Amphipoda (2)					
1. <u>Pardisynopia</u> sp. 1	145	-	-	0.0050	0.0017
2. <u>Phoxocephalidae</u> sp. 1	143	-	0.0001	-	-
Nemertea (2)					
1. <u>Nemertea</u> sp. CL4	130	-	-	-	-
2. <u>Nemertea</u> sp. D	193	-	-	0.0050	0.0001

SAS
CODE=5001580999

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT						R-SQUARE	C.V.
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F		
MODEL	24	63.87051671	2.66127153	5.78	0.0001	0.734943	83.8923
ERROR	50	23.03491196	0.46069824				COUNT MEAN
CORRECTED TOTAL	74	86.90542867				0.67874755	0.80807001

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	63.87051671	5.78	0.0001	24	63.87051671	5.78	0.0001

CONTRAST	DF	SS	F VALUE	PR > F
CEN AND WEST VS EAST	1	0.21925800	0.48	0.4935
E1 VS E2-E5	1	6.65658486	14.45	0.0004
E2&E3 VS E4&E5	1	1.62377345	3.52	0.0663
E2 VS E3	1	0.41911977	0.91	0.3448
E4 VS E5	1	0.00000000	0.00	1.0000
CENTRAL VS WESTERN	1	7.40520639	16.07	0.0002
W1 VS W2 - W5	1	0.18428090	0.42	0.5181
W2&W3 VS W4&W5	1	0.02859548	0.06	0.8043
W2 VS W3	1	0.33333333	0.72	0.3990
W4 VS W5	1	0.00000000	0.00	1.0000
CR1&3 CEN VS CR2 CEN	1	3.42065320	7.42	0.0088
CR2 C1 VS CR2 C2-C5	1	0.68965031	1.50	0.2269
CR2C2&C3 VS CR2C4&C5	1	11.22150398	24.36	0.0001
CR2 C2 VS CR2 C3	1	9.51133553	20.65	0.0001
CR2 C4 VS CR2 C5	1	1.94280904	4.22	0.0453
CR1 CEN VS CR3 CEN	1	4.05306295	8.80	0.0046
CR1 C1 VS CR1 C2-C5	1	3.33294425	7.23	0.0097
CR1C2&C3 VS CR1C4&C5	1	1.36916567	2.97	0.0909
CR1 C2 VS CR1 C3	1	10.35384588	22.47	0.0001
CR1 C4 VS CR1 C5	1	0.55719096	1.21	0.2767
CR3 C1 VS CR3 C2-C5	1	0.07677418	0.17	0.6848
CR3C2&C3VS CR3C4&C5	1	0.38387090	0.83	0.3657
CR3 C2 VS CR3 C3	1	0.07755767	0.17	0.6833
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000

GENERAL LINEAR MODELS PROCEDURE		
MEANS		
STA	N	COUNT
1C1	3	2.15429639
1C2	3	2.62727310
1C3	3	0.00000000
1C4	3	0.33333333
1C5	3	0.94280904
2C1	3	1.00000000
2C2	3	3.76212939
2C3	3	1.24401694
2C4	3	0.00000000
2C5	3	1.13807119
2E1	3	2.03325709
2E2	3	1.00000000
2E3	3	0.47140452
2E4	3	0.00000000
2E5	3	0.00000000
2W1	3	0.00000000
2W2	3	0.00000000
2W3	3	0.47140452
2W4	3	0.33333333
2W5	3	0.33333333
3C1	3	0.33333333
3C2	3	0.57735027
3C3	3	0.80473785
3C4	3	0.33333333
3C5	3	0.33333333

Figure 1. Format of ANOVA results: 1=NODC code for species name; 2=basic ANOVA table; 3=results of station comparisons; 4=results of orthogonal contrasts; and 5=station means.

Table 3. Station codes for ANOVAs 1-4.

ANOVA 1		ANOVA 2		ANOVA 3		ANOVA 4	
Code	Station	Code	Station	Code	Station	Code	Station
1C1	C1, Cruise I	A	C1	A	E1A	A	WC1
1C2	C2, Cruise I	B	C6	B	E1B	B	WC5
1C3	C3, Cruise I	C	C2	C	E1	C	WC2
1C4	C4, Cruise I	D	C3	D	E1C	D	WC4
1C5	C5, Cruise I	E	C7	E	E2A	E	WC6
2C1	C1, Cruise II	F	C8	F	E2	F	WC7
2C2	C2	"	G	G	E2	G	WC8
2C3	C3	"	H	C4	E2C	H	WC3
2C4	C4	"	I	C11	E2D	I	WC9
2C5	C5	"	J	C5	E2E	J	WC10
2E1	E1	"	K	C12	E3B	K	WC11
2E2	E2	"		L	E3	L	WC12
2E3	E3	"					
2E4	E4	"					
2E5	E5	"					
2W1	W1	"					
2W2	W2	"					
2W3	W3	"					
2W4	W4	"					
2W5	W5	"					

Appendix B

Appendix B is divided into two parts and provides a correlation matrix showing the relationship of the 22 physical/chemical environmental factors and the 61 abundant species of macrofauna as listed in Table 1 above. The reader will note that the species are identified by the "Species Number", which is cross-referenced to the scientific name in Table 1. Abbreviations are used to designate the environmental factors. A definition of these abbreviations, the unit of measure, and where the variable was measured is provided in Table 4.

The first part of Appendix B (B-1) provides the sample sizes and statistics for each of the variables that will be treated by correlation. The variable is listed first, followed by sample size (N), the mean of the observations, the standard deviation (STD DEV), the sum of the observations (SUM, by dividing SUM by N one can hand check the calculated mean values), and the minimum and maximum value for each variable. The unit of measure for the species is density (no/m²).

The second part of Appendix B (B-2) is the correlation table with each cell being a row and column designation of an 83 by 83 matrix. Three values are listed in each cell. The first value is the Pearson Correlation coefficient for the two variables (R), the second value is the probability level, and the third value represents the sample size (N).

Appendix C

Appendix C is comprised of figures showing the relative abundance patterns of the 46 species shown in Table 2 to have exhibited significant differences in abundance among stations on any or all of the four primary ANOVAs. The ordering of these figures is by major group (e.g., polychaetes) and abundance within group--exactly as shown by Table 2. The species name, major group, and region and season that the figure represents is shown within the border of each figure in the upper left corner. No further legend is given.

Table 4. Environmental variables measured in sediment and water on the northern Gulf of Mexico continental slope.

<u>Variable</u>	<u>Abbreviation</u>	<u>Unit of Measure</u>	<u>Where Measured</u>
HYDROCARBONS			
Planktonic-derived alkanes	PL1ALK	ppb	Sediments
Low-molecular-weight alkanes	PELOALK	"	"
Petroleum-derived alkanes	PLHIAALK	"	"
Terrigenous primary productivity	TERRI	"	"
Total extractable organic matter	TOTEOM	ppm	"
Aliphatic unresolved complex mixture	ALUCM	"	"
Carbon preference index	CPI	ratio	"
SEDIMENT GRAIN SIZE			
Sand	SAND	% by wt.	"
Silt	SILT	"	"
Clay	CLAY	"	"
OTHER CARBON MEASURES			
Organic carbon	ORCAR	"	"
Calcium carbonate	CACO3	"	"
Delta carbon-13	DELC13	ppt	"
WATER QUALITY			
Bottom water temperature	BOTTEM	°C	Water
Bottom water salinity	BOTSAL	ppt	"
Bottom water dissolved oxygen	BOTDO	ml/l	"
Bottom water transmissivity	BOTTRAN	percent	"
Bottom water particulate organic carbon	BOTPOC	µgC/l	"
Bottom water dissolved organic carbon	BOTDOC	µgC/l	"
Surface water transmissivity	SURTRAN	percent	"
Surface water particulate organic carbon	SURPOC	µgC/l	"
Surface water dissolved organic carbon	SURDOC	µgC/l	"

APPENDIX A
RESULTS OF ANOVAS

A-1

ANOVA 1, Cruises I-III

A-2

SAS

CODE=5001220999

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	24	172.97678407	7.20736600	35.43	0.0001	0.944461	61.8767
ERROR	50	10.17195582	0.20343912		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	74	183.14873989			0.45104226		0.72893768

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	172.97678407	35.43	0.0001	24	172.97678407	35.43	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE		
CEN AND WEST VS EAST	1	0.72982436	3.59	0.0640	MEANS		
E1 VS E2-E5	1	2.07853014	10.22	0.0024			
E2&E3 VS E4&E5	1	1.43262569	7.04	0.0106			
E2 VS E3	1	2.86525137	14.08	0.0005			
E4 VS E5	1	0.00000000	0.00	1.0000	1C1	3	0.00000000
CENTRAL VS WESTERN	1	36.68431533	180.32	0.0001	1C2	3	1.27614237
W1 VS W2 - W5	1	73.85376213	363.03	0.0001	1C3	3	0.00000000
W2&W3 VS W4&W5	1	12.56166888	61.75	0.0001	1C4	3	0.00000000
W2 VS W3	1	25.12333776	123.49	0.0001	1C5	3	0.00000000
W4 VS W5	1	0.00000000	0.00	1.0000	2C1	3	0.00000000
CR1&3 CEN VS CR2 CEN	1	0.15475781	0.76	0.3873	2C2	3	2.04875479
CR2 C1 VS CR2 C2-C5	1	0.62960943	3.09	0.0847	2C3	3	0.00000000
CR2C2&C3 VS CR2C4&C5	1	3.14804714	15.47	0.0003	2C4	3	0.00000000
CR2 C2 VS CR2 C3	1	6.29609428	30.95	0.0001	2C5	3	0.00000000
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000	2E1	3	1.27614237
CR1 CEN VS CR3 CEN	1	0.02721786	0.13	0.7161	2E2	3	1.38208812
CR1 C1 VS CR1 C2-C5	1	0.24428090	1.20	0.2784	2E3	3	0.00000000
CR1C2&C3 VS CR1C4&C5	1	1.22140452	6.00	0.0178	2E4	3	0.00000000
CR1 C2 VS CR1 C3	1	2.44280904	12.01	0.0011	2E5	3	0.00000000
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000	2W1	3	6.57042296
CR3 C1 VS CR3 C2-C5	1	0.37320508	1.83	0.1817	2W2	3	4.09254100
CR3C2&C3VS CR3C4&C5	1	1.86602540	9.17	0.0039	2W3	3	0.00000000
CR3 C2 VS CR3 C3	1	1.24401694	6.11	0.0168	2W4	3	0.00000000
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000	2W5	3	0.00000000
					3C1	3	0.00000000
					3C2	3	1.24401694
					3C3	3	0.33333333
					3C4	3	0.00000000
					3C5	3	0.00000000

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SAS
CODE=5001580999
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	63.87051671	2.66127153	5.78	0.0001	0.734943	83.8923	
ERROR	50	23.03491196	0.46069824		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	86.90542867			0.67874755		0.80907001	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	63.87051671	5.78	0.0001	24	63.87051671	5.78	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	0.21925800	0.48	0.4935				MEANS
E1 VS E2-E5	1	6.65658486	14.45	0.0004				
E2&E3 VS E4&E5	1	1.62377345	3.52	0.0663	STA	N	COUNT	
E2 VS E3	1	0.41911977	0.91	0.3448	1C1	3	2.15429639	
E4 VS E5	1	0.00000000	0.00	1.0000	1C2	3	2.62727310	
CENTRAL VS WESTERN	1	7.40520639	16.07	0.0002	1C3	3	0.00000000	
W1 VS W2 - W5	1	0.19428090	0.42	0.5191	1C4	3	0.33333333	
W2&W3 VS W4&W5	1	0.02859548	0.06	0.8043	1C5	3	0.94280904	
W2 VS W3	1	0.33333333	0.72	0.3990	2C1	3	1.00000000	
W4 VS W5	1	0.00000000	0.00	1.0000	2C2	3	3.76212939	
CR1&3 CEN VS CR2 CEN	1	3.42065320	7.42	0.0088	2C3	3	1.24401694	
CR2 C1 VS CR2 C2-C5	1	0.68965031	1.50	0.2269	2C4	3	0.00000000	
CR2C2&C3 VS CR2C4&C5	1	11.22150398	24.36	0.0001	2C5	3	1.13807119	
CR2 C2 VS CR2 C3	1	9.51133553	20.65	0.0001	2E1	3	2.03325709	
CR2 C4 VS CR2 C5	1	1.94280904	4.22	0.0453	2E2	3	1.00000000	
CR1 CEN VS CR3 CEN	1	4.05306295	8.80	0.0046	2E3	3	0.47140452	
CR1 C1 VS CR1 C2-C5	1	3.33294425	7.23	0.0097	2E4	3	0.00000000	
CR1C2&C3 VS CR1C4&C5	1	1.36916567	2.97	0.0909	2E5	3	0.00000000	
CR1 C2 VS CR1 C3	1	10.35384588	22.47	0.0001	2W1	3	0.00000000	
CR1 C4 VS CR1 C5	1	0.55719096	1.21	0.2767	2W2	3	0.00000000	
CR3 C1 VS CR3 C2-C5	1	0.07677418	0.17	0.6849	2W3	3	0.47140452	
CR3C2&C3VS CR3C4&C5	1	0.38387090	0.83	0.3657	2W4	3	0.33333333	
CR3 C2 VS CR3 C3	1	0.07755767	0.17	0.6833	2W5	3	0.33333333	
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000	3C1	3	0.33333333	
					3C2	3	0.57735027	
					3C3	3	0.80473785	
					3C4	3	0.33333333	
					3C5	3	0.33333333	

SAS

CODE=5001431004

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	30.71929703	1.27997071	2.68	0.0016	0.562482	76.4117	
ERROR	50	23.89455010	0.47789100		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	54.61384712			0.69129661		0.90469997	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	30.71929703	2.68	0.0016	24	30.71929703	2.68	0.0016
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
CEN AND WEST VS EAST	1	0.04779262	0.10	0.7531		MEANS		
E1 VS E2-E5	1	0.08488104	0.18	0.6752				
E2&E3 VS E4&E5	1	2.91421356	6.10	0.0170	STA	N	COUNT	
E2 VS E3	1	0.35017009	0.73	0.3961				
E4 VS E5	1	1.50000000	3.14	0.0825	1C1	3	0.00000000	
CENTRAL VS WESTERN	1	0.01823877	0.04	0.8459	1C2	3	0.66666667	
W1 VS W2 - W5	1	2.16232245	4.52	0.0384	1C3	3	0.80473785	
W2&W3 VS W4&W5	1	0.87267800	1.83	0.1827	1C4	3	1.04875479	
W2 VS W3	1	0.45390486	0.95	0.3345	1C5	3	0.47140452	
W4 VS W5	1	0.97140452	2.03	0.1602	2C1	3	0.33333333	
CR1&3 CEN VS CR2 CEN	1	2.08444450	4.36	0.0419	2C2	3	2.25060522	
CR2 C1 VS CR2 C2-C5	1	2.85917838	5.98	0.0180	2C3	3	2.20462337	
CR2C2&C3 VS CR2C4&C5	1	7.73391017	16.18	0.0002	2C4	3	0.91068360	
CR2 C2 VS CR2 C3	1	0.00317150	0.01	0.9354	2C5	3	0.33333333	
CR2 C4 VS CR2 C5	1	0.50000000	1.05	0.3113	2E1	3	0.80473785	
CR1 CEN VS CR3 CEN	1	0.68989376	1.44	0.2352	2E2	3	1.24401694	
CR1 C1 VS CR1 C2-C5	1	1.34241812	2.81	0.1000	2E3	3	1.72718018	
CR1C2&C3 VS CR1C4&C5	1	0.00178277	0.00	0.9515	2E4	3	1.00000000	
CR1 C2 VS CR1 C3	1	0.02859548	0.06	0.8078	2E5	3	0.00000000	
CR1 C4 VS CR1 C5	1	0.50000000	1.05	0.3113	2W1	3	1.62123444	
CR3 C1 VS CR3 C2-C5	1	0.20698408	0.43	0.5135	2W2	3	1.21676051	
CR3C2&C3VS CR3C4&C5	1	4.71763138	9.87	0.0028	2W3	3	0.66666667	
CR3 C2 VS CR3 C3	1	0.00901433	0.02	0.8913	2W4	3	0.80473785	
CR3 C4 VS CR3 C5	1	0.66666667	1.40	0.2431	2W5	3	0.00000000	
					3C1	3	0.66666667	
					3C2	3	1.54858377	
					3C3	3	1.62610506	
					3C4	3	0.66666667	
					3C5	3	0.00000000	

SAS
CODE=5001060199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	10.37521905	0.43230079	2.62	0.0020	0.557172	228.0277	
ERROR	50	8.24597980	0.16491960		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	18.62119885			0.40610294		0.17809365	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	10.37521905	2.62	0.0020	24	10.37521905	2.62	0.0020
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	1.41806579	8.60	0.0051	MEANS			
E1 VS E2-E5	1	0.32029416	1.94	0.1696	STA N COUNT			
E2&E3 VS E4&E5	1	1.73316325	10.51	0.0021	1C1	3	0.00000000	
E2 VS E3	1	3.46632650	21.02	0.0001	1C2	3	0.00000000	
E4 VS E5	1	0.00000000	0.00	1.0000	1C3	3	0.00000000	
CENTRAL VS WESTERN	1	0.55828997	3.39	0.0717	1C4	3	0.00000000	
W1 VS W2 - W5	1	0.28652514	1.74	0.1935	1C5	3	0.00000000	
W2&W3 VS W4&W5	1	1.43262569	8.69	0.0049	2C1	3	0.00000000	
W2 VS W3	1	0.28944917	1.76	0.1913	2C2	3	0.00000000	
W4 VS W5	1	0.00000000	0.00	1.0000	2C3	3	0.00000000	
CR1&3 CEN VS CR2 CEN	1	0.00381273	0.02	0.8798	2C4	3	0.00000000	
CR2 C1 VS CR2 C2-C5	1	0.01666667	0.10	0.7519	2C5	3	0.33333333	
CR2C2&C3 VS CR2C4&C5	1	0.08333333	0.51	0.4805	2E1	3	0.00000000	
CR2 C2 VS CR2 C3	1	0.16666667	1.01	0.3196	2E2	3	0.74535599	
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000	2E3	3	0.00000000	
CR1 CEN VS CR3 CEN	1	0.06666667	0.40	0.5278	2E4	3	1.52015931	
CR1 C1 VS CR1 C2-C5	1	0.00000000	0.00	1.0000	2E5	3	0.00000000	
CR1C2&C3 VS CR1C4&C5	1	0.00000000	0.00	1.0000	2W1	3	0.47140452	
CR1 C2 VS CR1 C3	1	0.00000000	0.00	1.0000	2W2	3	0.91068360	
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000	2W3	3	0.00000000	
CR3 C1 VS CR3 C2-C5	1	0.03333333	0.20	0.6550	2W4	3	0.00000000	
CR3C2&C3VS CR3C4&C5	1	0.16666667	1.01	0.3196	2W5	3	3C1	3
CR3 C2 VS CR3 C3	1	0.33333333	2.02	0.1613	3C2	3	0.00000000	
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000	3C3	3	0.47140452	
					3C4	3	0.00000000	
					3C5	3	0.00000000	

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SAS

CODE = 5001630399

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	24	72.93865997	3.03911083	5.14	0.0001	0.711489	183.7399
ERROR	50	29.57692098	0.59153842		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	74	102.51558095			0.76911535		0.41858927
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE
STA	24	72.93865997	5.14	0.0001	24	72.93865997	5.14
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE	
CEN AND WEST VS EAST	1	3.28531832	5.55	0.0224		MEANS	
E1 VS E2-E5	1	0.00000000	0.00	1.0000			
E2&E3 VS E4&E5	1	0.00000000	0.00	1.0000	STA	N	COUNT
E2 VS E3	1	0.00000000	0.00	1.0000			
E4 VS E5	1	0.00000000	0.00	1.0000	1C1	3	0.00000000
CENTRAL VS WESTERN	1	5.47553054	9.26	0.0037	1C2	3	0.00000000
W1 VS W2 - W5	1	0.00000000	0.00	1.0000	1C3	3	0.47140452
W2&W3 VS W4&W5	1	0.00000000	0.00	1.0000	1C4	3	4.08206272
W2 VS W3	1	0.00000000	0.00	1.0000	1C5	3	0.00000000
W4 VS W5	1	0.00000000	0.00	1.0000	2C1	3	0.47140452
CR1&3 CEN VS CR2 CEN	1	3.17679299	5.37	0.0246	2C2	3	0.00000000
CR2 C1 VS CR2 C2-C5	1	0.08382395	0.14	0.7082	2C3	3	0.00000000
CR2C2&C3 VS CR2C4&C5	1	0.97140452	1.64	0.2059	2C4	3	1.13807119
CR2 C2 VS CR2 C3	1	0.00000000	0.00	1.0000	2C5	3	0.00000000
CR2 C4 VS CR2 C5	1	1.94280904	3.28	0.0760	2E1	3	0.00000000
CR1 CEN VS CR3 CEN	1	0.01900261	0.03	0.8585	2E2	3	0.00000000
CR1 C1 VS CR1 C2-C5	1	3.11010958	5.26	0.0261	2E3	3	0.00000000
CR1C2&C3 VS CR1C4&C5	1	9.77763945	16.53	0.0002	2E4	3	0.00000000
CR1 C2 VS CR1 C3	1	0.33333333	0.56	0.4564	2F5	3	0.00000000
CR1 C4 VS CR1 C5	1	24.99485403	42.25	0.0001	2W1	3	0.00000000
CR3 C1 VS CR3 C2-C5	1	2.77580805	4.69	0.0351	2W2	3	0.00000000
CR3C2&C3VS CR3C4&C5	1	2.46728025	4.17	0.0464	2W3	3	0.00000000
CR3 C2 VS CR3 C3	1	0.50000000	0.85	0.3623	2W4	3	0.00000000
CR3 C4 VS CR3 C5	1	14.02495330	23.71	0.0001	2W5	3	0.00000000
					3C1	3	0.00000000
					3C2	3	0.91068360
					3C3	3	0.33333333
					3C4	3	3.05777188
					3C5	3	0.00000000

SAS
CODE=5001430594
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	44.75849418	1.86493726	3.13	0.0003	0.600309	121.1794	
ERROR	50	29.80056736	0.59601135		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	74.55906153			0.77201771		0.63708648	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	44.75849418	3.13	0.0003	24	44.75849418	3.13	0.0003
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	3.58208604	6.01	0.0178				MEANS
E1 VS E2-E5	1	0.81666667	1.37	0.2473				
E2&E3 VS E4&E5	1	0.08333333	0.14	0.7100				
E2 VS E3	1	0.00000000	0.00	1.0000				
E4 VS E5	1	0.16666667	0.28	0.5993				
CENTRAL VS WESTERN	1	7.51598721	12.61	0.0008				
W1 VS W2 - W5	1	0.06666667	0.11	0.7394				
W2&W3 VS W4&W5	1	0.33333333	0.56	0.4581				
W2 VS W3	1	0.00000000	0.00	1.0000				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	0.09261784	0.16	0.6951				
CR2 C1 VS CR2 C2-C5	1	3.94889519	6.63	0.0131				
CR2C2&C3 VS CR2C4&C5	1	3.27747980	5.50	0.0230				
CR2 C2 VS CR2 C3	1	0.47351747	0.79	0.3770				
CR2 C4 VS CR2 C5	1	0.33333333	0.56	0.4581				
CR1 CEN VS CR3 CEN	1	1.50091356	2.52	0.1188				
CR1 C1 VS CR1 C2-C5	1	4.44242677	7.45	0.0087				
CR1C2&C3 VS CR1C4&C5	1	5.93936520	9.97	0.0027				
CR1 C2 VS CR1 C3	1	5.95647045	9.99	0.0027				
CR1 C4 VS CR1 C5	1	0.16666667	0.28	0.5993				
CR3 C1 VS CR3 C2-C5	1	0.18738949	0.31	0.5775				
CR3C2&C3VS CR3C4&C5	1	1.40835199	2.36	0.1306				
CR3 C2 VS CR3 C3	1	3.46632650	5.82	0.0196				
CR3 C4 VS CR3 C5	1	1.00000000	1.68	0.2012				

SAS

CODE = 5001299999

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

GENERAL LINEAR MODELS PROCEDURE							
DEPENDENT VARIABLE: COUNT							
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	24	18.22568718	0.75940363	4.13	0.0001	0.664733	94.0695
ERROR	50	9.19237871	0.18384757		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	74	27.41806590			0.42877450		0.45580601
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE
STA	24	18.22568718	4.13	0.0001	24	18.22568718	4.13
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE		
CEN AND WEST VS EAST	1	0.86801187	4.72	0.0346	MEANS		
E1 VS E2-E5	1	1.68823436	9.18	0.0039	STA	N	COUNT
E2&E3 VS E4&E5	1	2.28470066	12.43	0.0009			
E2 VS E3	1	0.45390486	2.47	0.1224	1C1	3	0.00000000
E4 VS E5	1	0.97140452	5.28	0.0257			
CENTRAL VS WESTERN	1	2.98835430	16.25	0.0002	1C2	3	0.00000000
W1 VS W2 - W5	1	0.16764791	0.91	0.3442			
W2&W3 VS W4&W5	1	0.00000000	0.00	1.0000	1C3	3	0.00000000
W2 VS W3	1	0.97140452	5.28	0.0257			
W4 VS W5	1	0.02859548	0.16	0.6950	1C4	3	0.38208812
CR1&3 CEN VS CR2 CEN	1	0.17337094	0.94	0.3362			
CR2 C1 VS CR2 C2-C5	1	0.48856181	2.66	0.1094	1C5	3	0.33333333
CR2C2&C3 VS CR2C4&C5	1	0.16666667	0.91	0.3456			
CR2 C2 VS CR2 C3	1	0.00000000	0.00	1.0000	2C1	3	0.80473785
CR2 C4 VS CR2 C5	1	0.33333333	1.81	0.1842			
CR1 CEN VS CR3 CEN	1	0.06666667	0.36	0.5498	2C2	3	1.55009385
CR1 C1 VS CR1 C2-C5	1	0.28652514	1.56	0.2177			
CR1C2&C3 VS CR1C4&C5	1	1.43262569	7.79	0.0074	2C3	3	1.00000000
CR1 C2 VS CR1 C3	1	0.00000000	0.00	1.0000			
CR1 C4 VS CR1 C5	1	2.86525137	15.58	0.0002	2C4	3	0.80473785
CR3 C1 VS CR3 C2-C5	1	0.12440169	0.68	0.4146			
CR3C2&C3VS CR3C4&C5	1	0.62200847	3.38	0.0718	2C5	3	0.00000000
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000			
CR3 C4 VS CR3 C5	1	1.24401694	6.77	0.0122	2W1	3	1.00000000
					2W2	3	1.13807119
					2W3	3	0.33333333
					2W4	3	0.80473785
					2W5	3	0.66666667
					3C1	3	0.00000000
					3C2	3	0.00000000
					3C3	3	0.00000000
					3C4	3	0.91068360
					3C5	3	0.00000000

SAS

CODE=5001240603

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	11.45919229	0.47746635	2.66	0.0018	0.560475	133.5773	
ERROR	50	8.98629496	0.17972590		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	20.44548725			0.42394091		0.31737491	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	11.45919229	2.66	0.0018	24	11.45919229	2.66	0.0018
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	1.37891871	7.67	0.0078	MEANS			
E1 VS E2-E5	1	0.17524531	0.98	0.3282				
E2&E3 VS E4&E5	1	1.62377345	9.03	0.0041				
E2 VS E3	1	0.05719096	0.32	0.5752	STA	N	COUNT	
E4 VS E5	1	0.16666667	0.93	0.3402	1C1	3	0.00000000	
CENTRAL VS WESTERN	1	0.27025734	1.50	0.2258	1C2	3	0.33333333	
W1 VS W2 - W5	1	0.06666667	0.37	0.5453	1C3	3	0.00000000	
W2&W3 VS W4&W5	1	0.00000000	0.00	1.0000	1C4	3	0.80473785	
W2 VS W3	1	0.16666667	0.93	0.3402	1C5	3	0.00000000	
W4 VS W5	1	0.16666667	0.93	0.3402	2C1	3	0.33333333	
CR1&3 CEN VS CR2 CEN	1	2.74113060	15.25	0.0003	2C2	3	1.04875479	
CR2 C1 VS CR2 C2-C5	1	0.34663265	1.93	0.1711	2C3	3	1.13807119	
CR2C2&C3 VS CR2C4&C5	1	1.73316325	9.64	0.0031	2C4	3	0.66666667	
CR2 C2 VS CR2 C3	1	0.01196613	0.07	0.7974	2C5	3	0.00000000	
CR2 C4 VS CR2 C5	1	0.66666667	3.71	0.0598	2E1	3	0.80473785	
CR1 CEN VS CR3 CEN	1	0.38856181	2.16	0.1477	2E2	3	1.00000000	
CR1 C1 VS CR1 C2-C5	1	0.19428090	1.08	0.3035	2E3	3	0.80473785	
CR1C2&C3 VS CR1C4&C5	1	0.16666667	0.93	0.3402	2E4	3	0.33333333	
CR1 C2 VS CR1 C3	1	0.16666667	0.93	0.3402	2E5	3	0.00000000	
CR1 C4 VS CR1 C5	1	0.97140452	5.40	0.0242	2W1	3	0.00000000	
CR3 C1 VS CR3 C2-C5	1	0.00000000	0.00	1.0000	2W2	3	0.33333333	
CR3C2&C3VS CR3C4&C5	1	0.00000000	0.00	1.0000	2W3	3	0.00000000	
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000	2W4	3	0.33333333	
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000	2W5	3	0.00000000	
					3C1	3	0.00000000	
					3C2	3	0.00000000	
					3C3	3	0.00000000	
					3C4	3	0.00000000	
					3C5	3	0.00000000	

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SAS

CODE = 5001160101

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	18.82568451	0.78440352	4.39	0.0001	0.678383	135.8969	
ERROR	50	8.92515131	0.17850303		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	27.75083581			0.42249618		0.31089471	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	18.82568451	4.39	0.0001	24	18.82568451	4.39	0.0001
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
CEN AND WEST VS EAST	1	0.59115082	3.31	0.0748		MEANS		
E1 VS E2-E5	1	0.06666667	0.37	0.5439				
E2&E3 VS E4&E5	1	0.33333333	1.87	0.1779				
E2 VS E3	1	0.00000000	0.00	1.0000				
E4 VS E5	1	0.00000000	0.00	1.0000				
CENTRAL VS WESTERN	1	0.98525136	5.52	0.0228				
W1 VS W2 - W5	1	1.06666667	5.98	0.0181				
W2&W3 VS W4&W5	1	0.00000000	0.00	1.0000				
W2 VS W3	1	0.00000000	0.00	1.0000				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	1.15110077	6.45	0.0143				
CR2 C1 VS CR2 C2-C5	1	0.38910841	2.18	0.1461				
CR2C2&C3 VS CR2C4&C5	1	6.50009012	36.41	0.0001				
CR2 C2 VS CR2 C3	1	1.07466845	6.02	0.0177				
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000				
CR1 CEN VS CR3 CEN	1	0.03333333	0.19	0.6675				
CR1 C1 VS CR1 C2-C5	1	0.00098124	0.01	0.9412				
CR1C2&C3 VS CR1C4&C5	1	1.50000000	8.40	0.0055				
CR1 C2 VS CR1 C3	1	3.00000000	16.81	0.0002				
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000				
CR3 C1 VS CR3 C2-C5	1	0.30000000	1.68	0.2008				
CR3C2&C3 VS CR3C4&C5	1	1.50000000	8.40	0.0055				
CR3 C2 VS CR3 C3	1	0.33333333	1.87	0.1779				
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000				
					2W5	3	0.00000000	
					3C1	3	0.00000000	
					3C2	3	0.94280904	
					3C3	3	0.47140452	
					3C4	3	0.00000000	
					3C5	3	0.00000000	

SAS
CODE=5001409899
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	5.86996441	0.24458185	7.52	0.0001	0.783047	220.0755	
ERROR	50	1.62634805	0.03252696		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	7.49631246			0.18035232		0.08195019	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	5.86996441	7.52	0.0001	24	5.86996441	7.52	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	0.18820014	5.79	0.0199				MEANS
E1 VS E2-E5	1	0.12440169	3.82	0.0561				
E2&E3 VS E4&E5	1	0.62200847	19.12	0.0001				
E2 VS E3	1	0.00000000	0.00	1.0000				
E4 VS E5	1	1.24401694	38.25	0.0001				
CENTRAL VS WESTERN	1	0.06476030	1.99	0.1644				
W1 VS W2 - W5	1	0.00000000	0.00	1.0000				
W2&W3 VS W4&W5	1	0.00000000	0.00	1.0000				
W2 VS W3	1	0.00000000	0.00	1.0000				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	0.51808241	15.93	0.0002				
CR2 C1 VS CR2 C2-C5	1	0.19428090	5.97	0.0181				
CR2C2&C3 VS CR2C4&C5	1	0.97140452	29.86	0.0001				
CR2 C2 VS CR2 C3	1	1.94280904	59.73	0.0001				
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000				
CR1 CEN VS CR3 CEN	1	0.00000000	0.00	1.0000				
CR1 C1 VS CR1 C2-C5	1	0.00000000	0.00	1.0000				
CR1C2&C3 VS CR1C4&C5	1	0.00000000	0.00	1.0000				
CR1 C2 VS CR1 C3	1	0.00000000	0.00	1.0000				
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000				
CR3 C1 VS CR3 C2-C5	1	0.00000000	0.00	1.0000				
CR3C2&C3VS CR3C4&C5	1	0.00000000	0.00	1.0000				
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000				
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000				

SAS

CODE = 5001540404

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	20.89318291	0.87054929	2.18	0.0100	0.511619	138.3272	
ERROR	50	19.94417145	0.39888343		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	40.83735437			0.63157219		0.45657831	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	20.89318291	2.18	0.0100	24	20.89318291	2.18	0.0100
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
CEN AND WEST VS EAST	1	0.07999291	0.20	0.6562		MEANS		
E1 VS E2-E5	1	0.13333333	0.33	0.5658				
E2&E3 VS E4&E5	1	0.11438192	0.29	0.5947	STA	N	COUNT	
E2 VS E3	1	0.00000000	0.00	1.0000	1C1	3	0.00000000	
E4 VS E5	1	1.33333333	3.34	0.0735	1C2	3	0.00000000	
CENTRAL VS WESTERN	1	0.90427173	2.27	0.1384	1C3	3	1.32270626	
W1 VS W2 - W5	1	0.19428090	0.49	0.4885	1C4	3	0.66666667	
W2&W3 VS W4&W5	1	0.97140452	2.44	0.1249	1C5	3	0.00000000	
W2 VS W3	1	1.94280904	4.87	0.0319	2C1	3	0.00000000	
W4 VS W5	1	0.00000000	0.00	1.0000	2C2	3	0.80473785	
CR1&3 CEN VS CR2 CEN	1	2.14707326	5.38	0.0245	2C3	3	2.07868933	
CR2 C1 VS CR2 C2-C5	1	2.52173087	6.32	0.0152	2C4	3	0.74535599	
CR2C2&C3 VS CR2C4&C5	1	2.08333333	5.22	0.0266	2C5	3	0.47140452	
CR2 C2 VS CR2 C3	1	2.43442853	6.10	0.0169	2E1	3	0.33333333	
CR2 C4 VS CR2 C5	1	0.11257411	0.28	0.5976	2E2	3	0.66666667	
CR1 CEN VS CR3 CEN	1	0.05092880	0.13	0.7224	2E3	3	0.66666667	
CR1 C1 VS CR1 C2-C5	1	0.59364070	1.49	0.2282	2E4	3	0.94280904	
CR1C2&C3 VS CR1C4&C5	1	0.32279096	0.81	0.3727	2E5	3	0.00000000	
CR1 C2 VS CR1 C3	1	2.62432778	6.58	0.0134	2W1	3	0.00000000	
CR1 C4 VS CR1 C5	1	0.66666667	1.67	0.2020	2W2	3	0.00000000	
CR3 C1 VS CR3 C2-C5	1	0.37320508	0.94	0.3381	2W3	3	1.13807119	
CR3C2&C3VS CR3C4&C5	1	0.62200847	1.56	0.2176	2W4	3	0.00000000	
CR3 C2 VS CR3 C3	1	0.50000000	1.25	0.2682	2W5	3	0.00000000	
CR3 C4 VS CR3 C5	1	0.16666667	0.42	0.5210	3C1	3	0.00000000	
					3C2	3	0.33333333	
					3C3	3	0.91068360	
					3C4	3	0.33333333	
					3C5	3	0.00000000	

SAS

CODE=5514000099

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	16.11131744	0.67130489	2.48	0.0033	0.543817	178.3453	
ERROR	50	13.51506226	0.27030125		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	29.62637970			0.51990503		0.29151604	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	16.11131744	2.48	0.0033	24	16.11131744	2.48	0.0033
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	0.78886541	2.92	0.0938				MEANS
E1 VS E2-E5	1	3.64965983	13.50	0.0006				
E2&E3 VS E4&E5	1	0.75000000	2.77	0.1020	STA	N	COUNT	
E2 VS E3	1	1.50000000	5.55	0.0225				
E4 VS E5	1	0.00000000	0.00	1.0000	1C1	3	1.00000000	
CENTRAL VS WESTERN	1	0.22856742	0.85	0.3622	1C2	3	0.66666667	
W1 VS W2 - W5	1	1.06666667	3.95	0.0525	1C3	3	0.00000000	
W2&W3 VS W4&W5	1	0.00000000	0.00	1.0000	1C4	3	0.00000000	
W2 VS W3	1	0.00000000	0.00	1.0000	1C5	3	0.00000000	
W4 VS W5	1	0.00000000	0.00	1.0000	2C1	3	1.00000000	
CR1&3 CEN VS CR2 CEN	1	0.51808241	1.92	0.1724	2C2	3	1.13807119	
CR2 C1 VS CR2 C2-C5	1	1.22859548	4.55	0.0379	2C3	3	0.00000000	
CR2C2&C3 VS CR2C4&C5	1	0.97140452	3.59	0.0638	2C4	3	0.00000000	
CR2 C2 VS CR2 C3	1	1.94280904	7.19	0.0099	2C5	3	0.00000000	
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000	2E1	3	1.48316325	
CR1 CEN VS CR3 CEN	1	0.53333333	1.97	0.1663	2E2	3	1.00000000	
CR1 C1 VS CR1 C2-C5	1	1.66666667	6.17	0.0164	2E3	3	0.00000000	
CR1C2&C3 VS CR1C4&C5	1	0.33333333	1.23	0.2721	2E4	3	0.00000000	
CR1 C2 VS CR1 C3	1	0.66666667	2.47	0.1226	2F5	3	0.00000000	
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000	2W1	3	0.66666667	
CR3 C1 VS CR3 C2-C5	1	0.01666667	0.06	0.8049	2W2	3	0.00000000	
CR3C2&C3VS CR3C4&C5	1	0.08333333	0.31	0.5812	2W3	3	0.00000000	
CR3 C2 VS CR3 C3	1	0.16666667	0.62	0.4360	2W4	3	0.00000000	
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000	2W5	3	0.00000000	
					3C1	3	0.00000000	
					3C2	3	0.33333333	
					3C3	3	0.00000000	
					3C4	3	0.00000000	
					3C5	3	0.00000000	

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SAS
CODE=55154402
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	87.70065791	3.65419408	3.90	0.0001	0.652001	107.2983	
ERROR	50	46.80928826	0.93618577		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	134.50994617			0.96756693		0.90175394	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	87.70065791	3.90	0.0001	24	87.70065791	3.90	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	1.00554401	1.07	0.3050			MEANS	
E1 VS E2-E5	1	2.40000000	2.56	0.1156				
E2&E3 VS E4&E5	1	0.00000000	0.00	1.0000				
E2 VS E3	1	0.66666667	0.71	0.4028				
E4 VS E5	1	10.66666667	11.39	0.0014				
CENTRAL VS WESTERN	1	5.21273108	5.57	0.0222				
W1 VS W2-W5	1	0.41666667	0.45	0.5078				
W2&W3 VS W4&W5	1	0.08333333	0.09	0.7667				
W2 VS W3	1	0.00000000	0.00	1.0000				
W4 VS W5	1	1.50000000	1.60	0.2115				
CR1&3 CEN VS CR2 CEN	1	1.44119065	1.54	0.2205				
CR2 C1 VS CR2 C2-C5	1	2.17140452	2.32	0.1341				
CR2C2&C3 VS CR2C4&C5	1	2.44280904	2.61	0.1125				
CR2 C2 VS CR2 C3	1	3.24754690	3.47	0.0684				
CR2 C4 VS CR2 C5	1	0.16666667	0.18	0.6749				
CR1 CEN VS CR3 CEN	1	0.98628001	1.05	0.3096				
CR1 C1 VS CR1 C2-C5	1	6.55277537	7.00	0.0109				
CR1C2&C3 VS CR1C4&C5	1	8.04983165	8.60	0.0051				
CR1 C2 VS CR1 C3	1	10.66666667	11.39	0.0014				
CR1 C4 VS CR1 C5	1	4.16666667	4.45	0.0399				
CR3 C1 VS CR3 C2-C5	1	3.45067648	3.69	0.0606				
CR3C2&C3 VS CR3C4&C5	1	17.25338240	18.43	0.0001				
CR3 C2 VS CR3 C3	1	5.15315247	5.50	0.0230				
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000				
					3C1	3	0.00000000	
					3C2	3	1.47140452	
					3C3	3	3.32489716	
					3C4	3	0.00000000	
					3C5	3	0.00000000	

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SAS
CODE=5502040199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	28.74915774	1.19788157	3.04	0.0005	0.593303	135.2908	
ERROR	50	19.70698529	0.39413971		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	48.45614303			0.62780547		0.46404158	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	28.74915774	3.04	0.0005	24	28.74915774	3.04	0.0005
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	3.18851252	8.09	0.0064				MEANS
E1 VS E2-E5	1	0.78289487	1.99	0.1649				
E2&E3 VS E4&E5	1	6.97117933	17.69	0.0001				
E2 VS E3	1	0.47161192	1.20	0.2793				
E4 VS E5	1	0.00000000	0.00	1.0000				
CENTRAL VS WESTERN	1	2.60566298	6.61	0.0132				
W1 VS W2 - W5	1	0.00000000	0.00	1.0000				
W2&W3 VS W4&W5	1	0.00000000	0.00	1.0000				
W2 VS W3	1	0.00000000	0.00	1.0000				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	2.52374539	6.40	0.0146				
CR2 C1 VS CR2 C2-C5	1	1.60996633	4.08	0.0486				
CR2C2&C3 VS CR2C4&C5	1	5.10702260	12.96	0.0007				
CR2 C2 VS CR2 C3	1	2.44280904	6.20	0.0162				
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000				
CR1 CEN VS CR3 CEN	1	0.01143819	0.03	0.8654				
CR1 C1 VS CR1 C2-C5	1	0.41666667	1.06	0.3088				
CR1C2&C3 VS CR1C4&C5	1	0.75000000	1.90	0.1739				
CR1 C2 VS CR1 C3	1	0.66666667	1.69	0.1994				
CR1 C4 VS CR1 C5	1	0.16666667	0.42	0.5185				
CR3 C1 VS CR3 C2-C5	1	0.11764791	0.30	0.5873				
CR3C2&C3VS CR3C4&C5	1	0.75000000	1.90	0.1739				
CR3 C2 VS CR3 C3	1	0.16666667	0.42	0.5185				
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000				

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SAS
CODE=5507010299
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	38.39269614	1.59969567	6.50	0.0001	0.757219	102.7498	
ERROR	50	12.30954341	0.24619087		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	50.70223955			0.49617625		0.48289776	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	38.39269614	6.50	0.0001	24	38.39269614	6.50	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	0.87667288	3.56	0.0650				
E1 VS E2-E5	1	0.26666667	1.08	0.3030				
E2&E3 VS E4&E5	1	0.00000000	0.00	1.0000				
E2 VS E3	1	0.00000000	0.00	1.0000				
E4 VS E5	1	0.66666667	2.71	0.1061				
CENTRAL VS WESTERN	1	2.27078067	9.22	0.0038				
W1 VS W2 - W5	1	0.15000000	0.61	0.4387				
W2&W3 VS W4&W5	1	0.08333333	0.34	0.5633				
W2 VS W3	1	0.16666667	0.68	0.4145				
W4 VS W5	1	0.66666667	2.71	0.1061				
CR1&3 CEN VS CR2 CEN	1	1.46028473	5.93	0.0185				
CR2 C1 VS CR2 C2-C5	1	3.06477603	12.45	0.0009				
CR2C2&C3 VS CR2C4&C5	1	0.62200847	2.53	0.1183				
CR2 C2 VS CR2 C3	1	1.94280904	7.89	0.0071				
CR2 C4 VS CR2 C5	1	11.06027053	44.93	0.0001				
CR1 CEN VS CR3 CEN	1	0.77712362	3.16	0.0817				
CR1 C1 VS CR1 C2-C5	1	0.48856181	1.98	0.1651				
CR1C2&C3 VS CR1C4&C5	1	0.02859548	0.12	0.7347				
CR1 C2 VS CR1 C3	1	0.97140452	3.95	0.0525				
CR1 C4 VS CR1 C5	1	1.50000000	6.09	0.0170				
CR3 C1 VS CR3 C2-C5	1	1.74852814	7.10	0.0103				
CR3C2&C3VS CR3C4&C5	1	0.41911977	1.70	0.1979				
CR3 C2 VS CR3 C3	1	6.49509379	26.38	0.0001				
CR3 C4 VS CR3 C5	1	2.66666667	10.83	0.0018				

A-18

SAS

CODE = 5502020298

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.	
MODEL	24	22.31437036	0.92976543	2.54	0.0027	0.549743	175.5580	
ERROR	50	18.27614237	0.36552285		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	40.59051274			0.60458486		0.34437903	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	22.31437036	2.54	0.0027	24	22.31437036	2.54	0.0027
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
CEN AND WEST VS EAST	1	2.29558730	6.28	0.0155		MEANS		
E1 VS E2-E5	1	0.48856181	1.34	0.2531				
E2&E3 VS E4&E5	1	4.58088023	12.53	0.0009				
E2 VS E3	1	6.85702260	18.76	0.0001				
E4 VS E5	1	0.16666667	0.46	0.5026				
CENTRAL VS WESTERN	1	0.02794132	0.08	0.7833				
W1 VS W2 - W5	1	0.32475469	0.89	0.3504				
W2&W3 VS W4&W5	1	1.62377345	4.44	0.0401				
W2 VS W3	1	0.97140452	2.66	0.1093				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	0.01111111	0.03	0.8623				
CR2 C1 VS CR2 C2-C5	1	0.26666667	0.73	0.3971				
CR2C2&C3 VS CR2C4&C5	1	0.33333333	0.91	0.3442				
CR2 C2 VS CR2 C3	1	0.16666667	0.46	0.5026				
CR2 C4 VS CR2 C5	1	1.50000000	4.10	0.0481				
CR1 CEN VS CR3 CEN	1	0.03333333	0.09	0.7639				
CR1 C1 VS CR1 C2-C5	1	0.15000000	0.41	0.5247				
CR1C2&C3 VS CR1C4&C5	1	0.75000000	2.05	0.1582				
CR1 C2 VS CR1 C3	1	0.16666667	0.46	0.5026				
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000				
CR3 C1 VS CR3 C2-C5	1	0.26666667	0.73	0.3971				
CR3C2&C3 VS CR3C4&C5	1	0.00000000	0.00	1.0000				
CR3 C2 VS CR3 C3	1	0.66666667	1.82	0.1829				
CR3 C4 VS CR3 C5	1	0.66666667	1.82	0.1829				
					2W5	3	0.00000000	
					3C1	3	0.00000000	
					3C2	3	0.66666667	
					3C3	3	0.00000000	
					3C4	3	0.66666667	
					3C5	3	0.00000000	

SAS
CODE=5502040699
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	46.11496017	1.92145667	5.29	0.0001	0.717544	169.2107	
ERROR	50	18.15284882	0.36305698		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	64.26780899			0.60254210		0.35608990	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	46.11496017	5.29	0.0001	24	46.11496017	5.29	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	0.01272069	0.04	0.8523			MEANS	
E1 VS E2-E5	1	0.54760677	1.51	0.2251				
E2&E3 VS E4&E5	1	2.73803387	7.54	0.0084				
E2 VS E3	1	0.00000000	0.00	1.0000				
E4 VS E5	1	5.47606774	15.08	0.0003				
CENTRAL VS WESTERN	1	2.44409824	6.73	0.0124				
W1 VS W2 - W5	1	0.00000000	0.00	1.0000				
W2&W3 VS W4&W5	1	0.00000000	0.00	1.0000				
W2 VS W3	1	0.00000000	0.00	1.0000				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	0.40338158	1.11	0.2969				
CR2 C1 VS CR2 C2-C5	1	1.35000000	3.72	0.0595				
CR2C2&C3 VS CR2C4&C5	1	6.75000000	18.59	0.0001				
CR2 C2 VS CR2 C3	1	0.00000000	0.00	1.0000				
CR2 C4 VS CR2 C5	1	4.16666667	11.48	0.0014				
CR1 CEN VS CR3 CEN	1	0.62145728	1.71	0.1967				
CR1 C1 VS CR1 C2-C5	1	0.24428090	0.67	0.4160				
CR1C2&C3 VS CR1C4&C5	1	1.22140452	3.36	0.0726				
CR1 C2 VS CR1 C3	1	0.00000000	0.00	1.0000				
CR1 C4 VS CR1 C5	1	2.44280904	6.73	0.0124				
CR3 C1 VS CR3 C2-C5	1	1.10602705	3.05	0.0871				
CR3C2&C3VS CR3C4&C5	1	5.53013527	15.23	0.0003				
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000				
CR3 C4 VS CR3 C5	1	11.06027053	30.46	0.0001				

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SAS
CODE=6111070399
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.	
MODEL	24	57.71945721	2.40497738	3.57	0.0001	0.631601	248.6624	
ERROR	50	33.66653134	0.67333063		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	91.38598855			0.82056726		0.32999244	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	57.71945721	3.57	0.0001	24	57.71945721	3.57	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	0.10480595	0.16	0.6949				
E1 VS E2-E5	1	0.24428090	0.36	0.5497				
E2&E3 VS E4&E5	1	1.22140452	1.81	0.1841				
E2 VS E3	1	2.44280904	3.63	0.0626				
E4 VS E5	1	0.00000000	0.00	1.0000				
CENTRAL VS WESTERN	1	0.92751329	1.38	0.2461				
W1 VS W2 - W5	1	0.06666667	0.10	0.7543				
W2&W3 VS W4&W5	1	0.33333333	0.50	0.4849				
W2 VS W3	1	0.66666667	0.99	0.3245				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	1.00597234	1.49	0.2273				
CR2 C1 VS CR2 C2-C5	1	1.49743197	2.22	0.1422				
CR2C2&C3 VS CR2C4&C5	1	7.48715983	11.12	0.0016				
CR2 C2 VS CR2 C3	1	14.97431966	22.24	0.0001				
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000				
CR1 CEN VS CR3 CEN	1	2.97189923	4.41	0.0407				
CR1 C1 VS CR1 C2-C5	1	1.48594961	2.21	0.1437				
CR1C2&C3 VS CR1C4&C5	1	7.42974807	11.03	0.0017				
CR1 C2 VS CR1 C3	1	14.85949613	22.07	0.0001				
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000				
CR3 C1 VS CR3 C2-C5	1	0.00000000	0.00	1.0000				
CR3C2&C3VS CR3C4&C5	1	0.00000000	0.00	1.0000				
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000				
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000				

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SAS
CODE=6111070599
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	29.35312368	1.22304682	3.81	0.0001	0.646328	112.1083	
ERROR	50	16.06210793	0.32124216		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	45.41523160			0.56678228		0.50556669	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	29.35312368	3.81	0.0001	24	29.35312368	3.81	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	9.67240069	30.11	0.0001				MEANS
E1 VS E2-E5	1	3.82225682	11.90	0.0011				
E2&E3 VS E4&E5	1	0.00000000	0.00	1.0000				
E2 VS E3	1	0.55719096	1.73	0.1938				
E4 VS E5	1	5.66176046	17.62	0.0001	1C1	3	0.66666667	
CENTRAL VS WESTERN	1	0.20647669	0.64	0.4265	1C2	3	0.00000000	
W1 VS W2 - W5	1	0.03333333	0.10	0.7487	1C3	3	0.33333333	
W2&W3 VS W4&W5	1	0.97140452	3.02	0.0882	1C4	3	0.33333333	
W2 VS W3	1	0.02859548	0.09	0.7667	1C5	3	0.00000000	
W4 VS W5	1	0.16666667	0.52	0.4747	2C1	3	0.00000000	
CR1&3 CEN VS CR2 CEN	1	0.76406703	2.38	0.1293	2C2	3	0.00000000	
CR2 C1 VS CR2 C2-C5	1	0.85115157	2.65	0.1099	2C3	3	0.80473785	
CR2C2&C3 VS CR2C4&C5	1	0.44769746	1.39	0.2434	2C4	3	1.57735027	
CR2 C2 VS CR2 C3	1	0.97140452	3.02	0.0882	2C5	3	0.00000000	
CR2 C4 VS CR2 C5	1	3.73205081	11.62	0.0013	2E1	3	2.23338986	
CR1 CEN VS CR3 CEN	1	0.13333333	0.42	0.5224	2E2	3	1.27614237	
CR1 C1 VS CR1 C2-C5	1	0.60000000	1.87	0.1778	2E3	3	0.66666667	
CR1C2&C3 VS CR1C4&C5	1	0.00000000	0.00	1.0000	2E4	3	1.94280904	
CR1 C2 VS CR1 C3	1	0.16666667	0.52	0.4747	2E5	3	0.00000000	
CR1 C4 VS CR1 C5	1	0.16666667	0.52	0.4747	2W1	3	0.33333333	
CR3 C1 VS CR3 C2-C5	1	0.06666667	0.21	0.6507	2W2	3	0.80473785	
CR3C2&C3VS CR3C4&C5	1	0.00000000	0.00	1.0000	2W3	3	0.66666667	
CR3 C2 VS CR3 C3	1	0.16666667	0.52	0.4747	2W4	3	0.33333333	
CR3 C4 VS CR3 C5	1	0.16666667	0.52	0.4747	2W5	3	0.00000000	
					3C1	3	0.00000000	
					3C2	3	0.00000000	
					3C3	3	0.33333333	
					3C4	3	0.33333333	
					3C5	3	0.00000000	

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SAS

CODE=6111070299

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	32.42477545	1.35103231	3.58	0.0001	0.632339	223.2905	
ERROR	50	18.85274737	0.37705495		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	51.27752282			0.61404800	*	0.27499964	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	32.42477545	3.58	0.0001	24	32.42477545	3.58	0.0001
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
CEN AND WEST VS EAST	1	0.37630017	1.00	0.3226			MEANS	
E1 VS E2-E5	1	0.06666667	0.18	0.6759				
E2&E3 VS E4&E5	1	0.33333333	0.88	0.3516				
E2 VS E3	1	0.66666667	1.77	0.1897				
E4 VS E5	1	0.00000000	0.00	1.0000				
CENTRAL VS WESTERN	1	0.44681753	1.19	0.2816				
W1 VS W2 - W5	1	0.09714045	0.26	0.6140				
W2&W3 VS W4&W5	1	0.48570226	1.29	0.2618				
W2 VS W3	1	0.97140452	2.58	0.1148				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	1.27058905	3.37	0.0724				
CR2 C1 VS CR2 C2-C5	1	1.34045258	3.56	0.0652				
CR2C2&C3 VS CR2C4&C5	1	6.70226288	17.78	0.0001				
CR2 C2 VS CR2 C3	1	8.09244657	21.46	0.0001				
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000				
CR1 CEN VS CR3 CEN	1	0.91617605	2.43	0.1254				
CR1 C1 VS CR1 C2-C5	1	0.64950938	1.72	0.1954				
CR1C2&C3 VS CR1C4&C5	1	3.24754690	8.61	0.0050				
CR1 C2 VS CR1 C3	1	6.49509379	17.23	0.0001				
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000				
CR3 C1 VS CR3 C2-C5	1	0.01666667	0.04	0.8343				
CR3C2&C3VS CR3C4&C5	1	0.08333333	0.22	0.6403				
CR3 C2 VS CR3 C3	1	0.16666667	0.44	0.5092				
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000				

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SAS
CODE=6111070199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	14.17323891	0.59055162	3.41	0.0001	0.620547	214.8237	
ERROR	50	8.66666667	0.17333333		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	22.83990558			0.41633320		0.19380226	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	14.17323891	3.41	0.0001	24	14.17323891	3.41	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	0.30306485	1.75	0.1921				MEANS
E1 VS E2-E5	1	0.26666667	1.54	0.2206				
E2&E3 VS E4&E5	1	0.00000000	0.00	1.0000				
E2 VS E3	1	0.00000000	0.00	1.0000				
E4 VS E5	1	0.00000000	0.00	1.0000				
CENTRAL VS WESTERN	1	0.00501507	0.03	0.8656				
W1 VS W2 - W5	1	0.16498299	0.95	0.3340				
W2&W3 VS W4&W5	1	0.82491496	4.76	0.0339				
W2 VS W3	1	0.01683675	0.10	0.7566				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	0.12045273	0.69	0.4085				
CR2 C1 VS CR2 C2-C5	1	0.34663265	2.00	0.1635				
CR2C2&C3 VS CR2C4&C5	1	1.73316325	10.00	0.0027				
CR2 C2 VS CR2 C3	1	0.20034017	1.16	0.2875				
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000				
CR1 CEN VS CR3 CEN	1	1.13235209	6.53	0.0137				
CR1 C1 VS CR1 C2-C5	1	0.56617605	3.27	0.0767				
CR1C2&C3 VS CR1C4&C5	1	2.83088023	16.33	0.0002				
CR1 C2 VS CR1 C3	1	5.66176046	32.66	0.0001				
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000				
CR3 C1 VS CR3 C2-C5	1	0.00000000	0.00	1.0000				
CR3C2&C3VS CR3C4&C5	1	0.00000000	0.00	1.0000				
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000				
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000				
					3C1	3	0.00000000	
					3C2	3	0.00000000	
					3C3	3	0.00000000	
					3C4	3	0.00000000	
					3C5	3	0.00000000	

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GENERAL LINEAR MODELS PROCEDURE								
DEPENDENT VARIABLE: COUNT								
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	24.42627107	1.01776129	2.61	0.0021	0.556523	112.4026	
ERROR	50	19.46458759	0.38929175		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	43.89085865			0.62393249		0.55508728	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	24.42627107	2.61	0.0021	24	24.42627107	2.61	0.0021
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	2.36413076	6.07	0.0172	MEANS			
E1 VS E2-E5	1	0.06666667	0.17	0.6808	STA			
E2&E3 VS E4&E5	1	0.00000000	0.00	1.0000	N			
E2 VS E3	1	0.16666667	0.43	0.5159	COUNT			
E4 VS E5	1	0.16666667	0.43	0.5159	1C1	3	1.66666667	
CENTRAL VS WESTERN	1	0.89354029	2.30	0.1361	1C2	3	1.66666667	
W1 VS W2 - W5	1	2.74280904	7.05	0.0106	1C3	3	0.00000000	
W2&W3 VS W4&W5	1	3.88561808	9.98	0.0027	1C4	3	0.91068360	
W2 VS W3	1	0.16666667	0.43	0.5159	1C5	3	0.33333333	
W4 VS W5	1	0.00490621	0.01	0.9111	2C1	3	0.47140452	
CR1&3 CEN VS CR2 CEN	1	0.42263741	1.09	0.3024	2C2	3	1.00000000	
CR2 C1 VS CR2 C2-C5	1	0.21429774	0.55	0.4616	2C3	3	0.80473785	
CR2C2&C3 VS CR2C4&C5	1	0.20955989	0.54	0.4666	2C4	3	0.94280904	
CR2 C2 VS CR2 C3	1	0.05719096	0.15	0.7031	2C5	3	0.33333333	
CR2 C4 VS CR2 C5	1	0.55719096	1.43	0.2372	2E1	3	0.33333333	
CR1 CEN VS CR3 CEN	1	5.05763715	12.99	0.0007	2E2	3	0.33333333	
CR1 C1 VS CR1 C2-C5	1	2.11611132	5.44	0.0238	2E3	3	0.00000000	
CR1C2&C3 VS CR1C4&C5	1	0.13397460	0.34	0.5601	2E4	3	0.00000000	
CR1 C2 VS CR1 C3	1	4.16666667	10.70	0.0019	2E5	3	0.33333333	
CR1 C4 VS CR1 C5	1	0.50000000	1.28	0.2625	2W1	3	0.00000000	
CR3 C1 VS CR3 C2-C5	1	0.03333333	0.09	0.7710	2W2	3	0.33333333	
CR3C2&C3VS CR3C4&C5	1	0.16666667	0.43	0.5159	2W3	3	0.66666667	
CR3 C2 VS CR3 C3	1	0.33333333	0.86	0.3592	2W4	3	1.66666667	
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000	2W5	3	1.60947571	
					3C1	3	0.00000000	
					3C2	3	0.00000000	
					3C3	3	0.47140452	
					3C4	3	0.00000000	
					3C5	3	0.00000000	

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SAS

CODE = 6157020099

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	21.29547136	0.88731131	4.44	0.0001	0.680609	131.1786	
ERROR	50	9.99335488	0.19986710		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	31.28882624			0.44706498		10.34080637	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	21.29547136	4.44	0.0001	24	21.29547136	4.44	0.0001
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
CEN AND WEST VS EAST	1	0.08912542	0.45	0.5073			MEANS	
E1 VS E2-E5	1	0.02189870	0.11	0.7420				
E2&E3 VS E4&E5	1	2.20700308	11.04	0.0017		STA	N	COUNT
E2 VS E3	1	1.64982991	8.25	0.0060		1C1	3	0.00000000
E4 VS E5	1	0.00000000	0.00	1.0000		1C2	3	0.33333333
CENTRAL VS WESTERN	1	0.88001122	4.40	0.0409		1C3	3	1.00000000
W1 VS W2 - W5	1	0.15000000	0.75	0.3905		1C4	3	0.33333333
W2&W3 VS W4&W5	1	4.08333333	20.43	0.0001		1C5	3	0.00000000
W2 VS W3	1	4.16666667	20.85	0.0001		2C1	3	0.00000000
W4 VS W5	1	0.00000000	0.00	1.0000		2C2	3	0.80473785
CR1&3 CEN VS CR2 CEN	1	0.68093635	3.41	0.0708		2C3	3	1.33333333
CR2 C1 VS CR2 C2-C5	1	0.68570226	3.43	0.0699		2C4	3	0.00000000
CR2C2&C3 VS CR2C4&C5	1	3.42851130	17.15	0.0001		2C5	3	0.00000000
CR2 C2 VS CR2 C3	1	0.41911977	2.10	0.1538		2E1	3	0.33333333
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000		2E2	3	0.33333333
CR1 CEN VS CR3 CEN	1	0.83333333	4.17	0.0465		2E3	3	1.38208812
CR1 C1 VS CR1 C2-C5	1	0.41666667	2.08	0.1550		2E4	3	0.00000000
CR1C2&C3 VS CR1C4&C5	1	0.75000000	3.75	0.0584		2E5	3	0.00000000
CR1 C2 VS CR1 C3	1	0.66666667	3.34	0.0738		2W1	3	0.33333333
CR1 C4 VS CR1 C5	1	0.16666667	0.83	0.3655		2W2	3	2.00000000
CR3 C1 VS CR3 C2-C5	1	0.00000000	0.00	1.0000		2W3	3	0.33333333
CR3C2&C3 VS CR3C4&C5	1	0.00000000	0.00	1.0000		2W4	3	0.00000000
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000		2W5	3	0.00000000
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000		3C1	3	0.00000000
						3C2	3	0.00000000
						3C3	3	0.00000000
						3C4	3	0.00000000
						3C5	3	0.00000000

SAS
CODE=6156030099
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	37.23380251	1.55140844	8.17	0.0001	0.796752	149.9264	
ERROR	50	9.49818992	0.18996380		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	46.73199243			0.43584837		0.29070825	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	37.23380251	8.17	0.0001	24	37.23380251	8.17	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	1.58458661	8.34	0.0057			MEANS	
E1 VS E2-E5	1	0.00000000	0.00	1.0000				
E2&E3 VS E4&E5	1	0.00000000	0.00	1.0000				
E2 VS E3	1	0.00000000	0.00	1.0000				
E4 VS E5	1	0.00000000	0.00	1.0000				
CENTRAL VS WESTERN	1	0.36867568	1.94	0.1697				
W1 VS W2 - W5	1	0.72287638	3.81	0.0567				
W2&W3 VS W4&W5	1	0.16666667	0.88	0.3534				
W2 VS W3	1	0.33333333	1.75	0.1913				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	1.96323689	10.33	0.0023				
CR2 C1 VS CR2 C2-C5	1	1.85872824	9.78	0.0029				
CR2C2&C3 VS CR2C4&C5	1	9.29364118	48.92	0.0001				
CR2 C2 VS CR2 C3	1	12.21363040	64.29	0.0001				
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000				
CR1 CEN VS CR3 CEN	1	0.30000000	1.58	0.2147				
CR1 C1 VS CR1 C2-C5	1	0.48856181	2.57	0.1151				
CR1C2&C3 VS CR1C4&C5	1	2.44280904	12.86	0.0008				
CR1 C2 VS CR1 C3	1	4.88561808	25.72	0.0001				
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000				
CR3 C1 VS CR3 C2-C5	1	0.09714045	0.51	0.4779				
CR3C2&C3VS CR3C4&C5	1	0.01429774	0.08	0.7849				
CR3 C2 VS CR3 C3	1	0.33333333	1.75	0.1913				
CR3 C4 VS CR3 C5	1	0.16666667	0.88	0.3534				
					3C1	3	0.00000000	
					3C2	3	0.47140452	
					3C3	3	0.00000000	
					3C4	3	0.33333333	
					3C5	3	0.00000000	

SAS

CODE=6163040199

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	26.76632418	1.11526351	12.70	0.0001	0.859083	125.8697	
ERROR	50	4.39052429	0.08781049		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	31.15684847			0.29632834		10.23542472	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	26.76632418	12.70	0.0001	24	26.76632418	12.70	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
CEN AND WEST VS EAST	1	0.01830111	0.21	0.6500				MEANS
E1 VS E2-E5	1	0.26666667	3.04	0.0875				
E2&E3 VS E4&E5	1	1.33333333	15.18	0.0003				
E2 VS E3	1	2.66666667	30.37	0.0001				
E4 VS E5	1	0.00000000	0.00	1.0000				
CENTRAL VS WESTERN	1	2.07232964	23.60	0.0001				
W1 VS W2 - W5	1	1.13235209	12.90	0.0008				
W2&W3 VS W4&W5	1	5.66176046	64.48	0.0001				
W2 VS W3	1	11.32352092	128.95	0.0001				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	0.25904121	2.95	0.0921				
CR2 C1 VS CR2 C2-C5	1	0.19428090	2.21	0.1432				
CR2C2&C3 VS CR2C4&C5	1	0.97140452	11.06	0.0017				
CR2 C2 VS CR2 C3	1	0.33333333	3.80	0.0570				
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000				
CR1 CEN VS CR3 CEN	1	0.13333333	1.52	0.2236				
CR1 C1 VS CR1 C2-C5	1	0.06666667	0.76	0.3877				
CR1C2&C3 VS CR1C4&C5	1	0.33333333	3.80	0.0570				
CR1 C2 VS CR1 C3	1	0.00000000	0.00	1.0000				
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000				
CR3 C1 VS CR3 C2-C5	1	0.00000000	0.00	1.0000				2.74754690
CR3C2&C3VS CR3C4&C5	1	0.00000000	0.00	1.0000				
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000				
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000				

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SAS
CODE=6163099499
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	45.41330046	1.89222085	7.96	0.0001	0.792475	184.5365	
ERROR	50	11.89237258	0.23784745		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	57.30567304			0.48769606		10.26428167	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	45.41330046	7.96	0.0001	24	45.41330046	7.96	0.0001
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
CEN AND WEST VS EAST	1	0.73221920	3.08	0.0855				MEANS
E1 VS E2-E5	1	0.26666667	1.12	0.2948				
E2&E3 VS E4&E5	1	0.00000000	0.00	1.0000				
E2 VS E3	1	0.00000000	0.00	1.0000				
E4 VS E5	1	0.00000000	0.00	1.0000				
CENTRAL VS WESTERN	1	1.96797091	8.27	0.0059				
W1 VS W2 - W5	1	0.00000000	0.00	1.0000				
W2&W3 VS W4&W5	1	0.00000000	0.00	1.0000				
W2 VS W3	1	0.00000000	0.00	1.0000				
W4 VS W5	1	0.00000000	0.00	1.0000				
CR1&3 CEN VS CR2 CEN	1	1.05942974	4.45	0.0398				
CR2 C1 VS CR2 C2-C5	1	24.21177477	101.80	0.0001				
CR2C2&C3 VS CR2C4&C5	1	0.00000000	0.00	1.0000				
CR2 C2 VS CR2 C3	1	0.00000000	0.00	1.0000				
CR2 C4 VS CR2 C5	1	0.00000000	0.00	1.0000				
CR1 CEN VS CR3 CEN	1	1.13235209	4.76	0.0338				
CR1 C1 VS CR1 C2-C5	1	15.24288708	64.09	0.0001				
CR1C2&C3 VS CR1C4&C5	1	0.00000000	0.00	1.0000				
CR1 C2 VS CR1 C3	1	0.00000000	0.00	1.0000				
CR1 C4 VS CR1 C5	1	0.00000000	0.00	1.0000				
CR3 C1 VS CR3 C2-C5	1	0.80000000	3.36	0.0726				
CR3C2&C3VS CR3C4&C5	1	0.00000000	0.00	1.0000				
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000				
CR3 C4 VS CR3 C5	1	0.00000000	0.00	1.0000				
								3C1 3 0.57735027
								3C2 3 0.00000000
								3C3 3 0.00000000
								3C4 3 0.00000000
								3C5 3 0.00000000

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SAS
CODE=6163080198

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	24	32.62549477	1.35939562	7.79	0.0001	0.789004	120.5013	
ERROR	50	8.72475840	0.17449517		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	74	41.35025317			0.41772619		0.34665695	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	24	32.62549477	7.79	0.0001	24	32.62549477	7.79	0.0001
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
CEN AND WEST VS EAST	1	0.40327988	2.31	0.1348				MEANS
E1 VS E2-E5	1	0.15000000	0.86	0.3583				
E2&E3 VS E4&E5	1	0.75000000	4.30	0.0433				
E2 VS E3	1	0.00000000	0.00	1.0000				
E4 VS E5	1	0.16666667	0.96	0.3331				
CENTRAL VS WESTERN	1	0.67213313	3.85	0.0553				
W1 VS W2 - W5	1	0.15000000	0.86	0.3583				
W2&W3 VS W4&W5	1	0.75000000	4.30	0.0433				
W2 VS W3	1	0.00000000	0.00	1.0000				
W4 VS W5	1	0.16666667	0.96	0.3331				
CR1&3 CEN VS CR2 CEN	1	4.58649877	26.28	0.0001				
CR2 C1 VS CR2 C2-C5	1	3.01001934	17.25	0.0001				
CR2C2&C3 VS CR2C4&C5	1	15.05009669	86.25	0.0001				
CR2 C2 VS CR2 C3	1	0.00000000	0.00	1.0000				
CR2 C4 VS CR2 C5	1	0.89539492	5.13	0.0279				
CR1 CEN VS CR3 CEN	1	0.02721786	0.16	0.6946				
CR1 C1 VS CR1 C2-C5	1	0.23213672	1.33	0.2542				
CR1C2&C3 VS CR1C4&C5	1	1.16068360	6.65	0.0129				
CR1 C2 VS CR1 C3	1	0.00000000	0.00	1.0000				
CR1 C4 VS CR1 C5	1	2.32136721	13.30	0.0006				
CR3 C1 VS CR3 C2-C5	1	0.13333333	0.76	0.3862				
CR3C2&C3VS CR3C4&C5	1	0.66666667	3.82	0.0562				
CR3 C2 VS CR3 C3	1	0.00000000	0.00	1.0000				
CR3 C4 VS CR3 C5	1	1.33333333	7.64	0.0080				
					3C1	3	0.00000000	
					3C2	3	0.00000000	
					3C3	3	0.00000000	
					3C4	3	0.94280904	
					3C5	3	0.00000000	

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ANOVA 2, Cruise III

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SAS

CODE=5001220999

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	14.17429068	1.41742907	10.09	0.0001	0.647311	209.9330
ERROR	55	7.72289850	0.14041634		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	21.89718917			0.37472168	*	10.17849585

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	14.17429068	10.09	0.0001	10	14.17429068	10.09	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	3.67991895	26.21	0.0001			MEANS	
TRANS VS ARCBEN	1	3.98594204	28.39	0.0001				
MID VS BOURCHERY	1	0.08333333	0.59	0.4444		STA	N	COUNT
HOV.A VS HOV.B	1	6.42509635	45.76	0.0001				
UP ABY VS MESO ABY	1	0.00000000	0.00	1.0000		A	6	0.00000000
MESO C VS MESO B	1	0.00000000	0.00	1.0000		B	6	0.16666667
2000 VS SHALLOW	1	0.00000000	0.00	1.0000		C	6	1.63012107
C7&8 VS C9&4	1	0.00000000	0.00	1.0000		D	6	0.16666667
C7 VS C8	1	0.00000000	0.00	1.0000		E	6	0.00000000
C9 VS C4	1	0.00000000	0.00	1.0000		F	6	0.00000000
						G	6	0.00000000
						H	6	0.00000000
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000

SAS
CODE=5001431004

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	18.77699682	1.87769968	3.10	0.0034	0.360433	79.0987
ERROR	55	33.31865584	0.60579374		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	52.09565265			0.77832753		0.98399578

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	18.77699682	3.10	0.0034	10	18.77699682	3.10	0.0034

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	3.68315792	6.08	0.0168			MEANS	
TRANS VS ARCBEN	1	0.02453295	0.04	0.8413				
MID VS BOURCHERY	1	1.03106354	1.70	0.1975			STA	N
HOV.A VS HOV.B	1	0.39532023	0.65	0.4227				COUNT
UP ABY VS MESO ABY	1	10.89822060	17.99	0.0001			A	6
MESO C VS MESO B	1	0.00000000	0.00	1.0000			B	6
2000 VS SHALLOW	1	0.12209394	0.20	0.6552			C	6
C7&8 VS C9&4	1	1.14522006	1.89	0.1747			D	6
C7 VS C8	1	0.97140452	1.60	0.2107			E	6
C9 VS C4	1	0.50598306	0.84	0.3648			F	6
							G	6
							H	6
							I	6
							J	6
							K	6

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SAS
CODE=5001230799
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	17.04517113	1.70451711	3.25	0.0024	0.371276	84.8681	
ERROR	55	28.86456618	0.52481029		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	45.90973731			0.72443792		10.85360433	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	17.04517113	3.25	0.0024	10	17.04517113	3.25	0.0024
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
SHALLOW VS DEEP	1	4.74381212	9.04	0.0040				MEANS
TRANS VS ARCBEN	1	2.12787894	4.05	0.0490				
MID VS BOURCHERY	1	0.48570226	0.93	0.3403				
HOV.A VS HOV.B	1	0.36623281	0.70	0.4071				
UP ABY VS MESO ABY	1	0.58168216	1.11	0.2970	A	6	0.40236893	
MESO C VS MESO B	1	2.62629479	5.00	0.0294	B	6	0.00000000	
2000 VS SHALLOW	1	4.76841084	9.09	0.0039	C	6	0.97140452	
C7&8 VS C9&4	1	1.34378628	2.56	0.1153	D	6	0.62200847	
C7 VS C8	1	0.00000000	0.00	1.0000	E	6	1.09341299	
C9 VS C4	1	0.00137094	0.00	0.9594	F	6	1.09341299	
					G	6	1.57735027	
					H	6	1.55597321	
					I	6	0.33333333	
					J	6	1.33801394	
					K	6	0.40236893	

SAS
CODE=5001410201
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	19.56614421	1.95661442	2.80	0.0071	0.337211	135.9295	
ERROR	55	38.45730535	0.69922373		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	58.02344956			0.83619599		10.61516874	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	19.56614421	2.80	0.0071	10	19.56614421	2.80	0.0071
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	4.64145139	6.64	0.0127				
TRANS VS ARCBEN	1	7.62378819	10.90	0.0017				
MID VS BOURCHERY	1	0.00744680	0.01	0.9182				
HOV.A VS HOV.B	1	1.94280904	2.78	0.1012				
UP ABY VS MESO ABY	1	1.03358636	1.48	0.2293	A	6	1.55450295	
MESO C VS MESO B	1	0.33333333	0.48	0.4928	B	6	1.50468061	
2000 VS SHALLOW	1	1.98085544	2.83	0.0980	C	6	0.80473785	
C7&8 VS C9&4	1	0.26431218	0.38	0.5412	D	6	0.00000000	
C7 VS C8	1	1.64982991	2.36	0.1303	E	6	0.90824829	
C9 VS C4	1	0.08873157	0.13	0.7230	F	6	0.16666667	
					G	6	0.66135313	
					H	6	0.83333333	
					I	6	0.00000000	
					J	6	0.00000000	
					K	6	0.33333333	

SAS

CODE=5001060199

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	3.53757925	0.35375793	6.60	0.0001	0.545477	262.1525
ERROR	55	2.94771525	0.05359482		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	6.48529450			0.23150556	*	1 0.08830950

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	3.53757925	6.60	0.0001	10	3.53757925	6.60	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.48050855	8.97	0.0041				MEANS
TRANS VS ARCBEN	1	0.97140452	18.12	0.0001				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000		STA	N	COUNT
HOV.A VS HOV.B	1	1.94280904	36.25	0.0001				
UP ABY VS MESO ABY	1	0.00952381	0.18	0.6750		A	6	0.00000000
MESO C VS MESO B	1	0.00000000	0.00	1.0000		B	6	0.00000000
2000 VS SHALLOW	1	0.00833333	0.16	0.6949		C	6	0.00000000
C7&8 VS C9&4	1	0.04166667	0.78	0.3818		D	6	0.80473785
C7 VS C8	1	0.08333333	1.55	0.2177		E	6	0.16666667
C9 VS C4	1	0.00000000	0.00	1.0000		F	6	0.00000000
						G	6	0.00000000
						H	6	0.00000000
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000

SAS
CODE=5001430594
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	38.77867627	3.87786763	4.45	0.0001	0.446976	148.1213
ERROR	55	47.97919246	0.87234895		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	86.75786873			0.93399623		0.63056169

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	38.77867627	4.45	0.0001	10	38.77867627	4.45	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	23.35865632	26.78	0.0001	MEANS			
TRANS VS ARCBEN	1	8.25080607	9.46	0.0033				
MID VS BOURCHERY	1	4.58833024	5.26	0.0257	STA	N	COUNT	
HOV.A VS HOV.B	1	1.31651437	1.51	0.2245				
UP ABY VS MESO ABY	1	0.54948077	0.63	0.4308	A	6	1.38553217	
MESO C VS MESO B	1	0.00000000	0.00	1.0000	B	6	2.62223885	
2000 VS SHALLOW	1	0.48079567	0.55	0.4610	C	6	1.16244858	
C7&8 VS C9&4	1	0.18933093	0.22	0.6431	D	6	0.50000000	
C7 VS C8	1	0.04465820	0.05	0.8218	E	6	0.16666667	
C9 VS C4	1	0.00010370	0.00	0.9913	F	6	0.28867513	
					G	6	0.40236893	
					H	6	0.40824829	
					I	6	0.00000000	
					J	6	0.00000000	
					K	6	0.00000000	

SAS
CODE=5001299999
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	10.87576882	1.08757688	3.73	0.0007	0.404361	116.7506
ERROR	55	16.02041886	0.29128034		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	26.89618767			0.53970394		0.46227062

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	10.87576882	3.73	0.0007	10	10.87576882	3.73	0.0007

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	2.71610223	9.32	0.0035	MEANS			
TRANS VS ARCBEN	1	0.10477994	0.36	0.5511				
MID VS BOURCHERY	1	2.20700308	7.58	0.0080	STA	N	COUNT	
HOV.A VS HOV.B	1	1.05641693	3.63	0.0621				
UP ABY VS MESO ABY	1	1.60326304	5.50	0.0226	A	6	0.23570226	
MESO C VS MESO B	1	0.00000000	0.00	1.0000	B	6	1.09341299	
2000 VS SHALLOW	1	1.40285516	4.82	0.0324	C	6	1.09341299	
C7&8 VS C9&4	1	0.01938942	0.07	0.7974	D	6	0.50000000	
C7 VS C8	1	1.43262569	4.92	0.0307	E	6	0.16666667	
C9 VS C4	1	0.33333333	1.14	0.2894	F	6	0.85771073	
					G	6	0.40236893	
					H	6	0.73570226	
					I	6	0.00000000	
					J	6	0.00000000	
					K	6	0.00000000	

SAS
CODE=5001310302
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	5.10896721	0.51089672	2.67	0.0098	0.326781	170.0895	
ERROR	55	10.52527292	0.19136860		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	15.63424013			0.43745697	*	0.25719230	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	5.10896721	2.67	0.0098	10	5.10896721	2.67	0.0098
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	2.49471993	13.04	0.0007				MEANS
TRANS VS ARCBEN	1	0.00000000	0.00	1.0000				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000				
HOV.A VS HOV.B	1	0.00000000	0.00	1.0000				
UP ABY VS MESO ABY	1	0.00005385	0.00	0.9867				
MESO C VS MESO B	1	0.66666667	3.48	0.0673				
2000 VS SHALLOW	1	1.22943115	6.42	0.0141				
C7&8 VS C9&4	1	0.71631284	3.74	0.0582				
C7 VS C8	1	0.00000000	0.00	1.0000				
C9 VS C4	1	0.00178277	0.01	0.9235				
								STA N COUNT
								A 6 0.00000000
								B 6 0.00000000
								C 6 0.00000000
								D 6 0.00000000
								E 6 0.33333333
								F 6 0.33333333
								G 6 0.66666667
								H 6 0.69104406
								I 6 0.00000000
								J 6 0.63807119
								K 6 0.16666667

SAS
CODE=5001500306
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	7.19044239	0.71904424	3.28	0.0022	0.373704	146.2690	
ERROR	55	12.05054584	0.21910083		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	19.24098823			0.46808208		0.32001448	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	7.19044239	3.28	0.0022	10	7.19044239	3.28	0.0022
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.00094081	0.00	0.9480			MEANS	
TRANS VS ARCBEN	1	0.52820846	2.41	0.1262				
MID VS BOURCHERY	1	0.33333333	1.52	0.2227				
HOV.A VS HOV.B	1	2.57657624	11.76	0.0012				
UP ABY VS MESO ABY	1	1.75130059	7.99	0.0065				
MESO C VS MESO B	1	0.00000000	0.00	1.0000				
2000 VS SHALLOW	1	1.53238801	6.99	0.0106				
C7&8 VS C9&4	1	0.44497883	2.03	0.1598				
C7 VS C8	1	0.01429774	0.07	0.7993				
C9 VS C4	1	0.00841838	0.04	0.8453				
					STA	N	COUNT	
					A	6	0.33333333	
					B	6	0.00000000	
					C	6	0.00000000	
					D	6	0.92674632	
					E	6	0.66666667	
					F	6	0.3570226	
					G	6	0.45534180	
					H	6	0.40236893	
					I	6	0.00000000	
					J	6	0.00000000	
					K	6	0.00000000	

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SAS
CODE=5001540404
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	5.88064135	0.58806414	2.78	0.0074	0.335873	176.2574	
ERROR	55	11.62789611	0.21141629		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	17.50853746			0.45980028		0.26086867	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	5.88064135	2.78	0.0074	10	5.88064135	2.78	0.0074
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	0.11059176	0.52	0.4726			MEANS	
TRANS VS ARCBEN	1	2.38170111	11.27	0.0014				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000		STA	N	COUNT
HOV.A VS HOV.B	1	1.05641693	5.00	0.0295				
UP ABY VS MESO ABY	1	0.88814128	4.20	0.0452		A	6	0.00000000
MESO C VS MESO B	1	0.00000000	0.00	1.0000		B	6	0.00000000
2000 VS SHALLOW	1	0.77712362	3.68	0.0604		C	6	0.33333333
C7&8 VS C9&4	1	0.33333333	1.58	0.2145		D	6	0.92674632
C7 VS C8	1	0.16666667	0.79	0.3785		E	6	0.40236893
C9 VS C4	1	0.16666667	0.79	0.3785		F	6	0.63807119
						G	6	0.16666667
						H	6	0.40236893
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000

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SAS
CODE=5001431001
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	4.10902969	0.41090297	3.70	0.0008	0.401924	203.2233
ERROR	55	6.11438192	0.11117058		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	10.22341161			0.33342253		0.16406708

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	4.10902969	3.70	0.0008	10	4.10902969	3.70	0.0008

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.14276157	1.28	0.2620	MEANS			
TRANS VS ARCBEN	1	1.22140452	10.99	0.0016				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000	STA	N	COUNT	
HOV.A VS HOV.B	1	0.02859548	0.26	0.6141				
UP ABY VS MESO ABY	1	0.27917818	2.51	0.1188	A	6	0.00000000	
MESO C VS MESO B	1	0.00000000	0.00	1.0000	B	6	0.00000000	
2000 VS SHALLOW	1	0.24428090	2.20	0.1440	C	6	0.50000000	
C7&8 VS C9&4	1	1.22140452	10.99	0.0016	D	6	0.40236893	
C7 VS C8	1	0.97140452	8.74	0.0046	E	6	0.73570226	
C9 VS C4	1	0.00000000	0.00	1.0000	F	6	0.16666667	
					G	6	0.00000000	
					H	6	0.00000000	
					I	6	0.00000000	
					J	6	0.00000000	
					K	6	0.00000000	

SAS
CODE=5514000099
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	15.49509327	1.54950933	6.94	0.0001	0.557955	207.5349
ERROR	55	12.27614237	0.22320259		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	27.77123564			0.47244321		0.22764514

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	15.49509327	6.94	0.0001	10	15.49509327	6.94	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE				
SHALLOW VS DEEP	1	5.98547702	26.82	0.0001			MEANS		
TRANS VS ARCBEN	1	3.39345983	15.20	0.0003					
MID VS BOURCHERY	1	5.36615641	24.04	0.0001			STA	N	
HOV.A VS HOV.B	1	0.75000000	3.36	0.0722				COUNT	
UP ABY VS MESO ABY	1	0.00000000	0.00	1.0000			A	6	0.33333333
MESO C VS MESO B	1	0.00000000	0.00	1.0000			B	6	1.67076326
2000 VS SHALLOW	1	0.00000000	0.00	1.0000			C	6	0.50000000
C7&8 VS C9&4	1	0.00000000	0.00	1.0000			D	6	0.00000000
C7 VS C8	1	0.00000000	0.00	1.0000			E	6	0.00000000
C9 VS C4	1	0.00000000	0.00	1.0000			F	6	0.00000000
							G	6	0.00000000
							H	6	0.00000000
							I	6	0.00000000
							J	6	0.00000000
							K	6	0.00000000

SAS
CODE=55154402
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	73.65867618	7.36586762	8.33	0.0001	0.606640	117.6733	
ERROR	54	47.76215271	0.88448431		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	64	121.42082889			0.94047026		0.79922128	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	73.65867618	8.33	0.0001	10	73.65867618	8.33	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	4.38957848	4.96	0.0301				MEANS
TRANS VS ARCBEN	1	30.64776029	34.65	0.0001				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000	STA	N		COUNT
HOV.A VS HOV.B	1	12.59218857	14.24	0.0004				
UP ABY VS MESO ABY	1	5.47956261	6.20	0.0159	A	6	0.00000000	
MESO C VS MESO B	1	0.00000000	0.00	1.0000	B	6	0.00000000	
2000 VS SHALLOW	1	5.13708995	5.81	0.0194	C	6	1.23570226	
C7&8 VS C9&4	1	0.66666667	0.75	0.3891	D	6	3.28445705	
C7 VS C8	1	9.03798701	10.22	0.0023	E	6	1.73570226	
C9 VS C4	1	5.89991582	6.67	0.0125	F	6	0.00000000	
					G	6	1.90236893	
					H	6	0.50000000	
					I	6	0.00000000	
					J	6	0.00000000	
					K	5	0.00000000	

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SAS
CODE=5502040199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.
MODEL	10	16.79964716	1.67996472	4.52	0.0001	0.451118	191.5058
ERROR	55	20.44039332	0.37164351		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	37.24004048			0.60962572		0.31833284

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	16.79964716	4.52	0.0001	10	16.79964716	4.52	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	0.00333760	0.01	0.9248			MEANS
TRANS VS ARCBEN	1	0.01429774	0.04	0.8452			
MID VS BOURCHERY	1	0.97140452	2.61	0.1117			STA N COUNT
Hov.A VS Hov.B	1	0.00000000	0.00	1.0000			
UP ABY VS MESO ABY	1	1.76042409	4.74	0.0338	A	6	0.56903559
MESO C VS MESO B	1	0.00000000	0.00	1.0000	B	6	0.00000000
2000 VS SHALLOW	1	1.54037108	4.14	0.0466	C	6	0.33333333
C7&8 VS C9&4	1	7.70185541	20.72	0.0001	D	6	0.33333333
C7 VS C8	1	4.80795671	12.94	0.0007	E	6	1.76595902
C9 VS C4	1	0.00000000	0.00	1.0000	F	6	0.50000000
					G	6	0.00000000
					H	6	0.00000000
					I	6	0.00000000
					J	6	0.00000000
					K	6	0.00000000

547-A

SAS
CODE=5507010299
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	28.79389747	2.87938975	9.58	0.0001	0.635269	98.7790	
ERROR	55	16.53159096	0.30057438		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	45.32548844		.	0.54824664		0.55502342	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	28.79389747	9.58	0.0001	10	28.79389747	9.58	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.62029525	2.06	0.1565			MEANS	
TRANS VS ARCBEN	1	4.37132034	14.54	0.0003				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000		STA	N	COUNT
HOV.A VS HOV.B	1	8.74264069	29.09	0.0001				
UP ABY VS MESO ABY	1	6.63213629	22.06	0.0001		A	6	0.00000000
MESO C VS MESO B	1	0.00000000	0.00	1.0000		B	6	0.00000000
2000 VS SHALLOW	1	5.80311925	19.31	0.0001		C	6	0.00000000
C7&8 VS C9&4	1	0.35643647	1.19	0.2809		D	6	1.70710678
C7 VS C8	1	0.75000000	2.50	0.1199		E	6	0.97140452
C9 VS C4	1	1.51794919	5.05	0.0287		F	6	1.47140452
						G	6	0.62200847
						H	6	1.33333333
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000

A-46

SAS
CODE=5502040699
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	86.06818289	8.60681829	20.71	0.0001	0.790128	107.9393
ERROR	55	22.86129119	0.41565984		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	108.92947408			0.64471687		0.59729574

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	86.06818289	20.71	0.0001	10	86.06818289	20.71	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	13.45503165	32.37	0.0001	MEANS			
TRANS VS ARCBEN	1	0.00000000	0.00	1.0000				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000	STA	N	COUNT	
HOV.A VS HOV.B	1	0.00000000	0.00	1.0000				
UP ABY VS MESO ABY	1	14.80053482	35.61	0.0001	A	6	0.00000000	
MESO C VS MESO B	1	0.00000000	0.00	1.0000	B	6	0.00000000	
2000 VS SHALLOW	1	12.95046797	31.16	0.0001	C	6	0.00000000	
C7&8 VS C9&4	1	41.13799387	98.97	0.0001	D	6	0.00000000	
C7 VS C8	1	1.33333333	3.21	0.0788	E	6	0.00000000	
C9 VS C4	1	2.39082126	5.75	0.0199	F	6	0.66666667	
					G	6	2.50543565	
					H	6	3.39815084	
					I	6	0.00000000	
					J	6	0.00000000	
					K	6	0.00000000	

SAS
CODE=6111070199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	8.21572826	0.82157283	3.87	0.0005	0.413289	256.8736
ERROR	55	11.66318062	0.21205783		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	19.87890888			0.46049737		0.17927003

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	8.21572826	3.87	0.0005	10	8.21572826	3.87	0.0005

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	0.23345883	1.10	0.2987	MEANS		
TRANS VS ARCBEN	1	0.00714887	0.03	0.8550			
MID VS BOURCHERY	1	0.16666667	0.79	0.3792	STA	N	COUNT
HOV.A VS HOV.B	1	0.08333333	0.39	0.5333			
UP ABY VS MESO ABY	1	0.84467953	3.98	0.0509	A	6	0.00000000
MESO C VS MESO B	1	0.00000000	0.00	1.0000	B	6	0.23570226
2000 VS SHALLOW	1	0.73909459	3.49	0.0672	C	6	0.00000000
C7&B VS C9&4	1	3.69547293	17.43	0.0001	D	6	0.16666667
C7 VS C8	1	2.44587351	11.53	0.0013	E	6	1.23626809
C9 VS C4	1	0.00000000	0.00	1.0000	F	6	0.33333333
					G	6	0.00000000
					H	6	0.00000000
					I	6	0.00000000
					J	6	0.00000000
					K	6	0.00000000

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SAS

CODE=6157020285

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	6.02224015	0.60222401	3.29	0.0021	0.373943	157.2116
ERROR	55	10.08246388	0.18331753		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	16.10470403			0.42815596		0.27234381

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	6.02224015	3.29	0.0021	10	6.02224015	3.29	0.0021

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.00558948	0.03	0.8620	MEANS			
TRANS VS ARCBEN	1	1.94280904	10.60	0.0019				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000	STA	N	COUNT	
HOV_A VS HOV_B	1	0.66666667	3.64	0.0617				
UP ABY VS MESO ABY	1	0.55681294	3.04	0.0870	A	6	0.00000000	
MESO C VS MESO B	1	0.08333333	0.45	0.5030	B	6	0.00000000	
2000 VS SHALLOW	1	0.85788901	4.68	0.0349	C	6	0.33333333	
C7&8 VS C9&4	1	1.57402357	8.59	0.0049	D	6	0.80473785	
C7 VS C8	1	0.00178277	0.01	0.9218	E	6	0.69104406	
C9 VS C4	1	0.33333333	1.82	0.1830	F	6	0.66666667	
					G	6	0.00000000	
					H	6	0.33333333	
					I	6	0.00000000	
					J	6	0.16666667	
					K	6	0.00000000	

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SAS
CODE=6156030099
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	3.53757925	0.35375793	6.60	0.0001	0.545477	262.1525	
ERROR	55	2.94771525	0.05359482		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	6.48529450			0.23150556		0.08830950	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	3.53757925	6.60	0.0001	10	3.53757925	6.60	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.48050855	8.97	0.0041				MEANS
TRANS VS ARCBEN	1	0.97140452	18.12	0.0001				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000	STA	N	COUNT	
HOV.A VS HOV.B	1	1.94280904	36.25	0.0001				
UP ABY VS MESO ABY	1	0.00952381	0.18	0.6750	A	6	0.00000000	
MESO C VS MESO B	1	0.00000000	0.00	1.0000	B	6	0.00000000	
2000 VS SHALLOW	1	0.00833333	0.16	0.6949	C	6	0.80473785	
C7&8 VS C9&4	1	0.04166667	0.78	0.3818	D	6	0.00000000	
C7 VS C8	1	0.00000000	0.00	1.0000	E	6	0.00000000	
C9 VS C4	1	0.08333333	1.55	0.2177	F	6	0.00000000	
					G	6	0.00000000	
					H	6	0.16666667	
					I	6	0.00000000	
					J	6	0.00000000	
					K	6	0.00000000	

SAS
CODE=6163040199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	3.03566408	0.30356641	3.70	0.0008	0.402201	345.9607	
ERROR	55	4.51196613	0.08203575		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	7.54763021			0.28641883		0.08278942	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	3.03566408	3.70	0.0008	10	3.03566408	3.70	0.0008
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	0.25849703	3.15	0.0814		MEANS		
TRANS VS ARCBEN	1	0.00000000	0.00	1.0000				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000				
HOV.A VS HOV.B	1	0.00000000	0.00	1.0000				
UP ABY VS MESO ABY	1	0.28434673	3.47	0.0680				
MESO C VS MESO B	1	0.00000000	0.00	1.0000				
2000 VS SHALLOW	1	0.24880339	3.03	0.0872				
C7&8 VS C9&4	1	1.24401694	15.16	0.0003				
C7 VS C8	1	1.00000000	12.19	0.0010				
C9 VS C4	1	0.00000000	0.00	1.0000				
						STA	N	COUNT
						A	6	0.00000000
						B	6	0.00000000
						C	6	0.00000000
						D	6	0.00000000
						E	6	0.74401694
						F	6	0.16666667
						G	6	0.00000000
						H	6	0.00000000
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000

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SAS
CODE=6163099499
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.	
MODEL	10	21.20202889	2.12020289	8.25	0.0001	0.600141	190.4900	
ERROR	55	14.12635728	0.25684286		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	35.32838617			0.50679666		0.26604892	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	21.20202889	8.25	0.0001	10	21.20202889	8.25	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	8.17532420	31.83	0.0001			MEANS	
TRANS VS ARCBEN	1	12.84693802	50.02	0.0001				
MID VS BOURCHERY	1	0.17976667	0.70	0.4064		STA	N	COUNT
HOV.A VS HOV.B	1	0.00000000	0.00	1.0000				
UP ABY VS MESO ABY	1	0.00000000	0.00	1.0000		A	6	1.34087398
MESO C VS MESO B	1	0.00000000	0.00	1.0000		B	6	1.58566414
2000 VS SHALLOW	1	0.00000000	0.00	1.0000		C	6	0.00000000
C7&8 VS C9&4	1	0.00000000	0.00	1.0000		D	6	0.00000000
C7 VS C8	1	0.00000000	0.00	1.0000		E	6	0.00000000
C9 VS C4	1	0.00000000	0.00	1.0000		F	6	0.00000000
						G	6	0.00000000
						H	6	0.00000000
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000

A-52

SAS
CODE=6163080198
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	10	9.12628982	0.91262898	3.43	0.0015	0.384416	231.9620
ERROR	55	14.61438192	0.26571603		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	65	23.74067174			0.51547651		0.22222457

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	9.12628982	3.43	0.0015	10	9.12628982	3.43	0.0015

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE					
SHALLOW VS DEEP	1	1.86247329	7.01	0.0106	MEANS					
TRANS VS ARCBEN	1	0.00000000	0.00	1.0000	STA	N	COUNT			
MID VS BOURCHERY	1	0.00000000	0.00	1.0000						
HOV.A VS HOV.B	1	0.00000000	0.00	1.0000						
UP ABY VS MESO ABY	1	0.67493399	2.54	0.1167				A	6	0.00000000
MESO C VS MESO B	1	0.26028706	0.98	0.3266				B	6	0.00000000
2000 VS SHALLOW	1	0.54285113	2.04	0.1586				C	6	0.00000000
C7&8 VS C9&4	1	1.53574435	5.78	0.0196				D	6	0.00000000
C7 VS C8	1	0.08333333	0.31	0.5777				E	6	0.00000000
C9 VS C4	1	4.16666667	15.68	0.0002				F	6	0.16666667
								G	6	0.00000000
					H	6	1.17851130			
					I	6	0.00000000			
					J	6	0.40236893			
					K	6	0.69692343			

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SAS
CODE=7815220201
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	10	24.04655045	2.40465504	4.98	0.0001	0.475036	160.4964	
ERROR	55	26.57388271	0.48316150		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	50.62043315			0.69509820		0.43309259	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	24.04655045	4.98	0.0001	10	24.04655045	4.98	0.0001
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	2.34146156	4.85	0.0319			MEANS	
TRANS VS ARCBEN	1	0.81188672	1.68	0.2003				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000		STA	N	COUNT
HOV.A VS HOV.B	1	0.48570226	1.01	0.3204				
UP ABY VS MESO ABY	1	5.56365667	11.52	0.0013		A	6	0.00000000
MESO C VS MESO B	1	0.00000000	0.00	1.0000		B	6	0.00000000
2000 VS SHALLOW	1	12.54348029	25.96	0.0001		C	6	0.16666667
C7&8 VS C9&4	1	0.93933803	1.94	0.1688		D	6	0.56903559
C7 VS C8	1	0.97140452	2.01	0.1619		E	6	0.00000000
C9 VS C4	1	0.38962039	0.81	0.3731		F	6	0.56903559
						G	6	0.50000000
						H	6	0.86037961
						I	6	2.09890107
						J	6	0.00000000
						K	6	0.00000000

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SAS
CODE=6169420099
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.	
MODEL	10	23.77958284	2.37795828	5.41	0.0001	0.495901	162.0379	
ERROR	55	24.17269192	0.43950349		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	65	47.95227476			0.66295059		0.40913296	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	10	23.77958284	5.41	0.0001	10	23.77958284	5.41	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.75912251	1.73	0.1942			MEANS	
TRANS VS ARCBEN	1	1.71425565	3.90	0.0533				
MID VS BOURCHERY	1	0.00000000	0.00	1.0000		STA	N	COUNT
HOV.A VS HOV.B	1	0.01429774	0.03	0.8575				
UP ABY VS MESO ABY	1	4.03703684	9.19	0.0037		A	6	0.00000000
MESO C VS MESO B	1	0.00000000	0.00	1.0000		B	6	0.00000000
2000 VS SHALLOW	1	3.53240724	8.04	0.0064		C	6	0.50000000
C7&8 VS C9&4	1	7.88922086	17.95	0.0001		D	6	0.56903559
C7 VS C8	1	5.66657534	12.89	0.0007		E	6	2.11837440
C9 VS C4	1	0.16666667	0.38	0.5406		F	6	0.74401694
						G	6	0.40236893
						H	6	0.16666667
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000

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A-3
ANOVA 3, Cruise IV

SAS

CODE = 5001220999

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	66.56615165	4.43774344	9.88	0.0001	0.649467	63.0342	
ERROR	80	35.92743085	0.44909289		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	102.49358250			0.67014393		11.06314401	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	66.56615165	9.88	0.0001	15	66.56615165	9.88	0.0001
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	34.15139271	76.05	0.0001			MEANS	
SED	1	0.16330063	0.36	0.5482				
CENTRAL VS DISTAL	1	2.64215023	5.88	0.0175		STA	N	COUNT
DISTAL VS DISTAL	1	0.10272380	0.23	0.6338				
DEEP VS SHALLOW	1	3.38174736	7.53	0.0075		A	6	2.23908534
SHALLOW VS DEEPER	1	17.39962458	38.74	0.0001		B	6	2.22697811
CORE VS DISTAL	1	0.10200078	0.23	0.6350		C	6	1.50676547
CLOSE VS FAR	1	0.78359808	1.74	0.1903		D	6	2.41202207
CLOSE VS CLOSE	1	0.51916086	1.16	0.2855		E	6	1.00000000
EXTREME VS EXTREME	1	0.84313576	1.88	0.1745		F	6	0.84408252
D VS E	1	5.00871597	11.15	0.0013		G	6	1.26007966
SOUTH VS NORTH	1	1.24182086	2.77	0.1002		H	6	1.49468646
CLOSE VS CLOSE	1	0.11566892	0.26	0.6132		I	6	0.81305253
NORTH VS SOUTH	1	0.02777778	0.06	0.8042		J	6	2.10517172
C VS D	1	0.08333333	0.19	0.6678		K	6	0.56903559
						L	6	0.37267800
						M	6	0.00000000
						N	6	0.16666667
						O	6	0.00000000
						P	6	0.00000000

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SAS
CODE=5001580999
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT								
SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	26.77728042	1.78515203	3.13	0.0005	0.369798	76.9042	
ERROR	80	45.63319498	0.57041494		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	72.41047540			0.75525819	'	0.98207648	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	26.77728042	3.13	0.0005	15	26.77728042	3.13	0.0005
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	12.45923126	21.84	0.0001			MEANS	
SED	1	0.33006732	0.58	0.4491				
CENTRAL VS DISTAL	1	1.10994380	1.95	0.1669				
DISTAL VS DISTAL	1	0.16856690	0.30	0.5882				
DEEP VS SHALLOW	1	3.92206743	6.88	0.0105			A	6 1.40293475
SHALLOW VS DEEPER	1	2.14658874	3.76	0.0559			B	6 1.61669493
CORE VS DISTAL	1	0.18069729	0.32	0.5751			C	6 2.02494322
CLOSE VS FAR	1	0.21119529	0.37	0.5446			D	6 1.37965281
CLOSE VS CLOSE	1	1.25344405	2.20	0.1422			E	6 1.03025676
EXTREME VS EXTREME	1	0.07620717	0.13	0.7157			F	6 0.83333333
D VS E	1	2.87954911	5.05	0.0274			G	6 1.47971920
SOUTH VS NORTH	1	1.55733265	2.73	0.1024			H	6 0.92674632
CLOSE VS CLOSE	1	0.01429774	0.03	0.8746			I	6 1.38208812
NORTH VS SOUTH	1	0.19392973	0.34	0.5615			J	6 0.40236893
C VS D	1	0.27416194	0.48	0.4901			K	6 0.40236893
							L	6 0.33333333
							M	6 0.91068360
							N	6 0.60838026
							O	6 0.97971920
							P	6 0.00000000

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SAS
CODE=5001431004
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	17.67584108	1.17838941	2.31	0.0086	0.302588	78.3764	
ERROR	80	40.73969630	0.50924620		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	58.41553739			0.71361488		0.91049702	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	17.67584108	2.31	0.0086	15	17.67584108	2.31	0.0086
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
SHALLOW VS DEEP	1	1.52106267	2.99	0.0878				MEANS
SED	1	0.58669322	1.15	0.2863				
CENTRAL VS DISTAL	1	0.02444902	0.05	0.8271				STA N COUNT
DISTAL VS DISTAL	1	0.46142857	0.91	0.3440				
DEEP VS SHALLOW	1	2.94840813	5.79	0.0184		A	6	0.85771073
SHALLOW VS DEEPER	1	4.02802701	7.91	0.0062		B	6	1.44094036
CORE VS DISTAL	1	0.47036804	0.92	0.3394		C	6	1.16666667
CLOSE VS FAR	1	1.32258768	2.60	0.1110		D	6	1.04875479
CLOSE VS CLOSE	1	1.52036508	2.99	0.0879		E	6	1.14638586
EXTREME VS EXTREME	1	0.16728438	0.33	0.5682		F	6	1.40293475
D VS E	1	0.00001027	0.00	0.9964		G	6	0.69104406
SOUTH VS NORTH	1	0.62679243	1.23	0.2706		H	6	1.62200847
CLOSE VS CLOSE	1	2.44280904	4.80	0.0314		I	6	0.94280904
NORTH VS SOUTH	1	0.55555556	1.09	0.2994		J	6	0.94095855
C VS D	1	1.00000000	1.96	0.1650		K	6	0.90236893
						L	6	0.00000000
						M	6	0.91068360
						N	6	0.33333333
						O	6	0.99468646
						P	6	0.16666667

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SAS
CODE=5001060199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	15	34.76331486	2.31755432	4.53	0.0001	0.459545	45.0859
ERROR	80	40.88394635	0.51104933		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	75.64726121			0.71487714		1.58558854

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	34.76331486	4.53	0.0001	15	34.76331486	4.53	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	1.23118418	2.41	0.1246	MEANS			
SED	1	5.38449860	10.54	0.0017				
CENTRAL VS DISTAL	1	0.35213993	0.69	0.4090	STA	N	COUNT	
DISTAL VS DISTAL	1	0.19539618	0.38	0.5381	A	6	0.56903559	
DEEP VS SHALLOW	1	17.84099290	34.91	0.0001	B	6	1.69160989	
SHALLOW VS DEEPER	1	1.33786266	2.62	0.1096	C	6	1.86071187	
CORE VS DISTAL	1	0.05175759	0.10	0.7511	D	6	1.43640005	
CLOSE VS FAR	1	0.00027034	0.00	0.9817	E	6	1.28445705	
CLOSE VS CLOSE	1	0.53733423	1.05	0.3083	F	6	2.18329521	
EXTREME VS EXTREME	1	3.33415633	6.52	0.0125	G	6	1.76007966	
D VS E	1	1.23973841	2.43	0.1233	H	6	1.96346646	
SOUTH VS NORTH	1	1.03697567	2.03	0.1582	I	6	1.87601955	
CLOSE VS CLOSE	1	2.14416608	4.20	0.0438	J	6	2.51886178	
NORTH VS SOUTH	1	0.00002823	0.00	0.9941	K	6	0.99468646	
C VS D	1	0.07681351	0.15	0.6993	L	6	1.84009881	
					M	6	1.71600548	
					N	6	1.87601955	
					O	6	1.79866928	
					P	6	0.00000000	

SAS
CODE=5001430594
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	14.44783798	0.96318920	4.90	0.0001	0.478851	155.2545	
ERROR	80	15.72404600	0.19655058		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	30.17188398			0.44334025		0.28555713	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	14.44783798	4.90	0.0001	15	14.44783798	4.90	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	5.71884914	29.10	0.0001				MEANS
SED	1	5.06630003	25.78	0.0001				
CENTRAL VS DISTAL	1	1.17743835	5.99	0.0166				STA N COUNT
DISTAL VS DISTAL	1	0.82491496	4.20	0.0438				
DEEP VS SHALLOW	1	0.13693920	0.70	0.4064		A	6	1.50409659
SHALLOW VS DEEPER	1	0.03290007	0.17	0.6835		B	6	0.52437739
CORE VS DISTAL	1	0.54125782	2.75	0.1009		C	6	0.80473785
CLOSE VS FAR	1	0.02777778	0.14	0.7080		D	6	0.00000000
CLOSE VS CLOSE	1	0.08333333	0.42	0.5168		E	6	0.33333333
EXTREME VS EXTREME	1	0.00953183	0.05	0.8263		F	6	0.00000000
D VS E	1	0.02859548	0.15	0.7039		G	6	0.16666667
SOUTH VS NORTH	1	0.02222222	0.11	0.7376		H	6	0.00000000
CLOSE VS CLOSE	1	0.33333333	1.70	0.1966		I	6	0.23570226
NORTH VS SOUTH	1	0.44444444	2.26	0.1366		J	6	0.33333333
C VS D	1	0.00000000	0.00	1.0000		K	6	0.00000000
						L	6	0.33333333
						M	6	0.00000000
						N	6	0.00000000
						O	6	0.33333333
						P	6	0.00000000

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SAS
CODE=5001410801
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	23.91166449	1.59411097	3.42	0.0002	0.390733	73.5083	
ERROR	80	37.28533492	0.46606669		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	61.19699941			0.68269077		1 0.92872561	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	23.91166449	3.42	0.0002	15	23.91166449	3.42	0.0002
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	5.40788087	11.60	0.0010			MEANS	
SED	1	1.07921323	2.32	0.1320				
CENTRAL VS DISTAL	1	0.01492783	0.03	0.8584		STA	N	COUNT
DISTAL VS DISTAL	1	0.00598306	0.01	0.9101				
DEEP VS SHALLOW	1	2.55705071	5.49	0.0217	A	6	1.70710678	
SHALLOW VS DEEPER	1	9.25935265	19.87	0.0001	B	6	1.26007966	
CORE VS DISTAL	1	1.05089651	2.25	0.1371	C	6	1.17666081	
CLOSE VS FAR	1	0.76873368	1.65	0.2027	D	6	1.21542146	
CLOSE VS CLOSE	1	0.00013277	0.00	0.9866	E	6	0.40236893	
EXTREME VS EXTREME	1	3.42857867	7.36	0.0082	F	6	1.50409659	
D VS E	1	0.11656017	0.25	0.6184	G	6	1.51074918	
SOUTH VS NORTH	1	0.00174974	0.00	0.9513	H	6	1.06903559	
CLOSE VS CLOSE	1	0.10949350	0.23	0.6292	I	6	1.22963369	
NORTH VS SOUTH	1	0.02777778	0.06	0.8078	J	6	1.42674632	
C VS D	1	0.08333333	0.18	0.6735	K	6	0.33333333	
					L	6	0.52437739	
					M	6	0.33333333	
					N	6	0.50000000	
					O	6	0.50000000	
					P	6	0.16666667	

SAS
CODE=5001240603
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	19.26688943	1.28445930	2.49	0.0046	0.318638	89.6357	
ERROR	80	41.19955845	0.51499448		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	60.46644788			0.71763116		10.80060883	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	19.26688943	2.49	0.0046	15	19.26688943	2.49	0.0046
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	13.80970157	26.82	0.0001			MEANS	
SED	1	2.87832190	5.59	0.0205				
CENTRAL VS DISTAL	1	0.88394844	1.72	0.1939		STA	N	COUNT
DISTAL VS DISTAL	1	0.09688711	0.19	0.6656				
DEEP VS SHALLOW	1	0.40354557	0.78	0.3787		A	6	0.85771073
SHALLOW VS DEEPER	1	0.08102817	0.16	0.6927		B	6	1.72432015
CORE VS DISTAL	1	0.02525513	0.05	0.8253		C	6	1.34408252
CLOSE VS FAR	1	0.28827251	0.56	0.4566		D	6	1.90403021
CLOSE VS CLOSE	1	0.02859548	0.06	0.8143		E	6	0.74401694
EXTREME VS EXTREME	1	0.05954426	0.12	0.7347		F	6	0.47140452
D VS E	1	0.33333333	0.65	0.4235		G	6	0.56903559
SOUTH VS NORTH	1	0.14980378	0.29	0.5912		H	6	0.78867513
CLOSE VS CLOSE	1	0.08333333	0.16	0.6886		I	6	0.45534180
NORTH VS SOUTH	1	0.10066064	0.20	0.6596		J	6	0.78867513
C VS D	1	0.04465820	0.09	0.7692		K	6	0.73570226
						L	6	0.56903559
						M	6	0.50000000
						N	6	0.62200847
						O	6	0.40236893
						P	6	0.33333333

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SAS
CODE=5001160101
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.	
MODEL	15	13.74580296	0.91638686	2.72	0.0021	0.337814	150.3185	
ERROR	80	26.94458495	0.33680731		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	40.69038791			0.58035102		10.38608090	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	13.74580296	2.72	0.0021	15	13.74580296	2.72	0.0021
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	2.93299480	8.71	0.0042				MEANS
SED	1	0.05555556	0.16	0.6857				
CENTRAL VS DISTAL	1	0.11111111	0.33	0.5673				
DISTAL VS DISTAL	1	0.00000000	0.00	1.0000				
DEEP VS SHALLOW	1	1.55235820	4.61	0.0348	A	6	0.16666667	
SHALLOW VS DEEPER	1	7.31142476	21.71	0.0001	B	6	0.00000000	
CORE VS DISTAL	1	0.11274004	0.33	0.5645	C	6	0.16666667	
CLOSE VS FAR	1	0.39730727	1.18	0.2807	D	6	0.00000000	
CLOSE VS CLOSE	1	0.56783421	1.69	0.1979	E	6	1.09341299	
EXTREME VS EXTREME	1	0.36849902	1.09	0.2987	F	6	0.66666667	
D VS E	1	0.00264465	0.01	0.9296	G	6	1.10172766	
SOUTH VS NORTH	1	0.13888889	0.41	0.5226	H	6	0.56903559	
CLOSE VS CLOSE	1	0.08333333	0.25	0.6203	I	6	0.80473785	
NORTH VS SOUTH	1	0.02777778	0.08	0.7747	J	6	0.77504692	
C VS D	1	0.08333333	0.25	0.6203	K	6	0.00000000	
					L	6	0.16666667	
					M	6	0.16666667	
					N	6	0.33333333	
					O	6	0.16666667	
					P	6	0.00000000	

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SAS
CODE=5001500306
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	13.27118773	0.88474585	2.39	0.0067	0.309297	119.0505	
ERROR	80	29.63634884	0.37045436		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	42.90753657			0.60864962		10.51125319	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	13.27118773	2.39	0.0067	15	13.27118773	2.39	0.0067
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
SHALLOW VS DEEP	1	1.81108430	4.89	0.0299				MEANS
SED	1	0.09105621	0.25	0.6214				
CENTRAL VS DISTAL	1	0.04824153	0.13	0.7192				STA N COUNT
DISTAL VS DISTAL	1	0.38387090	1.04	0.3118				
DEEP VS SHALLOW	1	0.23179622	0.63	0.4313	A	6	0.16666667	
SHALLOW VS DEEPER	1	0.07043678	0.19	0.6640	B	6	0.16666667	
CORE VS DISTAL	1	0.77807946	2.10	0.1512	C	6	0.23570226	
CLOSE VS FAR	1	3.77450697	10.19	0.0020	D	6	0.52437739	
CLOSE VS CLOSE	1	0.33333333	0.90	0.3457	E	6	0.33333333	
EXTREME VS EXTREME	1	1.83194234	4.95	0.0290	F	6	0.33333333	
D VS E	1	1.80719096	4.88	0.0301	G	6	0.00000000	
SOUTH VS NORTH	1	0.80869220	2.18	0.1435	H	6	1.13807119	
CLOSE VS CLOSE	1	0.50000000	1.35	0.2488	I	6	0.62200847	
NORTH VS SOUTH	1	0.56515059	1.53	0.2204	J	6	1.39815084	
C VS D	1	0.23580596	0.64	0.4273	K	6	0.57491496	
					L	6	0.16666667	
					M	6	0.97140452	
					N	6	0.69104406	
					O	6	0.45534180	
					P	6	0.40236893	

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SAS
CODE=5001540499

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	15.40392274	1.02692818	2.86	0.0013	0.348998	107.4541	
ERROR	80	28.73361259	0.35917016		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	44.13753533			0.59930807		1.1 O.55773411	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	15.40392274	2.86	0.0013	15	15.40392274	2.86	0.0013
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
SHALLOW VS DEEP	1	1.37304828	3.82	0.0541				MEANS
SED	1	2.43566017	6.78	0.0110				
CENTRAL VS DISTAL	1	0.25000000	0.70	0.4066	STA	N	COUNT	
DISTAL VS DISTAL	1	0.08333333	0.23	0.6313				
DEEP VS SHALLOW	1	1.38570921	3.86	0.0530	A	6	0.90236893	
SHALLOW VS DEEPER	1	0.82282832	2.29	0.1341	B	6	0.33333333	
CORE VS DISTAL	1	0.09545377	0.27	0.6076	C	6	0.00000000	
CLOSE VS FAR	1	0.29062995	0.81	0.3711	D	6	0.16666667	
CLOSE VS CLOSE	1	0.16666667	0.46	0.4977	E	6	0.66666667	
EXTREME VS EXTREME	1	0.21724081	0.60	0.4390	F	6	0.92674632	
D VS E	1	1.55837679	4.34	0.0404	G	6	0.69104406	
SOUTH VS NORTH	1	0.33607961	0.94	0.3363	H	6	0.53934466	
CLOSE VS CLOSE	1	2.08333333	5.80	0.0183	I	6	0.53934466	
NORTH VS SOUTH	1	3.60297662	10.03	0.0022	J	6	1.26007966	
C VS D	1	0.70258587	1.96	0.1658	K	6	0.00000000	
					L	6	0.83333333	
					M	6	0.70710678	
					N	6	1.19104406	
					O	6	0.00000000	
					P	6	0.16666667	

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SAS
CODE=5514000099

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	42.95048344	2.86336556	7.89	0.0001	0.596749	70.5240	
ERROR	80	29.02361215	0.36279515		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	71.97409560			0.60232479		1 0.85407055	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	42.95048344	7.89	0.0001	15	42.95048344	7.89	0.0001
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
SHALLOW VS DEEP	1	23.36806713	64.41	0.0001				MEANS
SED	1	0.15094156	0.42	0.5208				
CENTRAL VS DISTAL	1	0.04107536	0.11	0.7374				STA N COUNT
DISTAL VS DISTAL	1	1.17988662	3.25	0.0751				
DEEP VS SHALLOW	1	2.12081128	5.85	0.0179	A	6	1.84597817	
SHALLOW VS DEEPER	1	9.52234351	26.25	0.0001	B	6	1.94261983	
CORE VS DISTAL	1	3.99287209	11.01	0.0014	C	6	1.73038872	
CLOSE VS FAR	1	0.10831685	0.30	0.5863	D	6	1.31548704	
CLOSE VS CLOSE	1	0.52525513	1.45	0.2324	E	6	0.45534180	
EXTREME VS EXTREME	1	0.28944917	0.80	0.3744	F	6	1.56481751	
D VS E	1	1.24401694	3.43	0.0678	G	6	1.14638586	
SOUTH VS NORTH	1	0.29544986	0.81	0.3695	H	6	1.19104406	
CLOSE VS CLOSE	1	0.08333333	0.23	0.6331	I	6	0.40236893	
NORTH VS SOUTH	1	0.02024624	0.06	0.8139	J	6	1.04631948	
C VS D	1	0.00841838	0.02	0.8793	K	6	0.16666667	
					L	6	0.00000000	
					M	6	0.28867513	
					N	6	0.23570226	
					O	6	0.33333333	
					P	6	0.00000000	

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SAS
CODE=55154402
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	18.76498822	1.25099921	4.31	0.0001	0.446712	124.5014	
ERROR	80	23.24194692	0.29052434		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	42.00693514			0.53900310		0.43292928	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	18.76498822	4.31	0.0001	15	18.76498822	4.31	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	5.99768829	20.64	0.0001			MEANS	
SED	1	0.00000000	0.00	1.0000				
CENTRAL VS DISTAL	1	0.00000000	0.00	1.0000		STA	N	COUNT
DISTAL VS DISTAL	1	0.00000000	0.00	1.0000				
DEEP VS SHALLOW	1	2.18097756	7.51	0.0076		A	6	0.00000000
SHALLOW VS DEEPER	1	2.74461474	9.45	0.0029		B	6	0.00000000
CORE VS DISTAL	1	3.98383532	13.71	0.0004		C	6	0.00000000
CLOSE VS FAR	1	0.11111111	0.38	0.5381		D	6	0.00000000
CLOSE VS CLOSE	1	0.33333333	1.15	0.2873		E	6	0.00000000
EXTREME VS EXTREME	1	3.34165638	11.50	0.0011		F	6	0.16666667
D VS E	1	0.02049991	0.07	0.7912		G	6	0.50000000
SOUTH VS NORTH	1	1.70643449	5.87	0.0176		H	6	0.16666667
CLOSE VS CLOSE	1	0.04465820	0.15	0.6961		I	6	0.87267800
NORTH VS SOUTH	1	1.29215994	4.45	0.0381		J	6	0.95534180
C VS D	1	0.00245310	0.01	0.9270		K	6	0.50000000
						L	6	0.62200847
						M	6	0.87267800
						N	6	0.84408252
						O	6	1.42674632
						P	6	0.00000000

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SAS
CODE=5507010299
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	19.21896334	1.28126422	3.31	0.0003	0.383010	130.4820	
ERROR	80	30.95983331	0.38699792		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	50.17879665			0.62209157		0.47676430	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	19.21896334	3.31	0.0003	15	19.21896334	3.31	0.0003
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	7.27373445	18.80	0.0001			MEANS	
SED	1	0.00000000	0.00	1.0000				
CENTRAL VS DISTAL	1	0.00000000	0.00	1.0000		STA	N	COUNT
DISTAL VS DISTAL	1	0.00000000	0.00	1.0000				
DEEP VS SHALLOW	1	2.64499435	6.83	0.0107		A	6	0.00000000
SHALLOW VS DEEPER	1	2.51513692	6.50	0.0127		B	6	0.00000000
CORE VS DISTAL	1	0.37773320	0.98	0.3262		C	6	0.00000000
CLOSE VS FAR	1	0.00572870	0.01	0.9035		D	6	0.00000000
CLOSE VS CLOSE	1	0.54353599	1.40	0.2395		E	6	0.81305253
EXTREME VS EXTREME	1	0.23346430	0.60	0.4396		F	6	0.99468646
D VS E	1	2.39790143	6.20	0.0149		G	6	0.56903559
SOUTH VS NORTH	1	1.05460029	2.73	0.1027		H	6	0.74401694
CLOSE VS CLOSE	1	0.08333333	0.22	0.6439		I	6	0.60762522
NORTH VS SOUTH	1	1.95482578	5.05	0.0274		J	6	1.50166128
C VS D	1	0.13397460	0.35	0.5579		K	6	0.33333333
						L	6	0.16666667
						M	6	0.97140452
						N	6	0.76007966
						O	6	0.16666667
						P	6	0.00000000

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SAS

CODE = 5502020298

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	16.82102569	1.12140171	2.75	0.0019	0.340421	87.0702	
ERROR	80	32.59139292	0.40739241		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	49.41241862			0.63827299	11	0.73305569	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	16.82102569	2.75	0.0019	15	16.82102569	2.75	0.0019
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	0.16063381	0.39	0.5318			MEANS	
SED	1	1.96446665	4.82	0.0310				
CENTRAL VS DISTAL	1	2.40279093	5.90	0.0174		STA	N	COUNT
DISTAL VS DISTAL	1	0.11438192	0.28	0.5977				
DEEP VS SHALLOW	1	3.74762192	9.20	0.0033		A	6	0.16666667
SHALLOW VS DEEPER	1	6.39709724	15.70	0.0002		B	6	0.66666667
CORE VS DISTAL	1	0.09286516	0.23	0.6343		C	6	1.34408252
CLOSE VS FAR	1	0.05555556	0.14	0.7129		D	6	0.47140452
CLOSE VS CLOSE	1	0.55719096	1.37	0.2457		E	6	0.33333333
EXTREME VS EXTREME	1	0.60239699	1.48	0.2276		F	6	0.23570226
D VS E	1	0.08333333	0.20	0.6523		G	6	0.66666667
SOUTH VS NORTH	1	0.04006803	0.10	0.7546		H	6	0.56903559
CLOSE VS CLOSE	1	0.55719096	1.37	0.2457		I	6	0.63807119
NORTH VS SOUTH	1	0.01683675	0.04	0.8394		J	6	0.80473785
C VS D	1	0.02859548	0.07	0.7917		K	6	1.42674632
						L	6	0.99578192
						M	6	1.10947571
						N	6	1.20710678
						O	6	1.09341299
						P	6	0.00000000

SAS
CODE=5514000096
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	5.30790043	0.35386003	21.15	0.0001	0.798644	213.0305	
ERROR	80	1.33823954	0.01672799		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	6.64613997			0.12933675		0.06071278	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	5.30790043	21.15	0.0001	15	5.30790043	21.15	0.0001
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
SHALLOW VS DEEP	1	0.11795334	7.05	0.0096				MEANS
SED	1	0.00000000	0.00	1.0000				
CENTRAL VS DISTAL	1	0.00000000	0.00	1.0000				STA
DISTAL VS DISTAL	1	0.00000000	0.00	1.0000				N
DEEP VS SHALLOW	1	5.18994709	310.26	0.0001				COUNT
SHALLOW VS DEEPER	1	0.00000000	0.00	1.0000				
CORE VS DISTAL	1	0.00000000	0.00	1.0000				
CLOSE VS FAR	1	0.00000000	0.00	1.0000				
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000				
EXTREME VS EXTREME	1	0.00000000	0.00	1.0000				
D VS E	1	0.00000000	0.00	1.0000				
SOUTH VS NORTH	1	0.00000000	0.00	1.0000				
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000				
NORTH VS SOUTH	1	0.00000000	0.00	1.0000				
C VS D	1	0.00000000	0.00	1.0000				
					L	6	0.00000000	
					M	6	0.00000000	
					N	6	0.00000000	
					O	6	0.00000000	
					P	6	0.97140452	

SAS
CODE=6111070399
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	15	25.80125765	1.72008384	4.24	0.0001	0.443119	162.2893
ERROR	80	32.42521530	0.40531519		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	58.22647295			0.63664369		10.39228932

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	25.80125765	4.24	0.0001	15	25.80125765	4.24	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	4.92450902	12.15	0.0008			MEANS	
SED	1	0.00000000	0.00	1.0000				
CENTRAL VS DISTAL	1	0.00000000	0.00	1.0000		STA	N	COUNT
DISTAL VS DISTAL	1	0.00000000	0.00	1.0000				
DEEP VS SHALLOW	1	1.79073055	4.42	0.0387		A	6	0.00000000
SHALLOW VS DEEPER	1	9.86261236	24.33	0.0001		B	6	0.00000000
CORE VS DISTAL	1	0.00880945	0.02	0.8832		C	6	0.00000000
CLOSE VS FAR	1	1.84282974	4.55	0.0361		D	6	0.00000000
CLOSE VS CLOSE	1	0.51592730	1.27	0.2626		E	6	1.77804806
EXTREME VS EXTREME	1	6.33403793	15.63	0.0002		F	6	0.92674632
D VS E	1	0.00464401	0.01	0.9150		G	6	1.34144593
SOUTH VS NORTH	1	0.21160173	0.52	0.4721		H	6	0.45534180
CLOSE VS CLOSE	1	0.08333333	0.21	0.6515		I	6	0.50000000
NORTH VS SOUTH	1	0.05555556	0.14	0.7122		J	6	0.53934466
C VS D	1	0.16666667	0.41	0.5232		K	6	0.33333333
						L	6	0.16666667
						M	6	0.00000000
						N	6	0.23570226
						O	6	0.00000000
						P	6	0.00000000

SAS
CODE=6111070599
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.
MODEL	15	31.69425851	2.11295057	5.35	0.0001	0.500587	79.0728
ERROR	80	31.61991072	0.39524888		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	63.31416923			0.62868822		0.79507488

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	31.69425851	5.35	0.0001	15	31.69425851	5.35	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	23.27343848	58.88	0.0001	MEANS			
SED	1	2.60413179	6.59	0.0121				
CENTRAL VS DISTAL	1	0.00000370	0.00	0.9976	STA	N	COUNT	
DISTAL VS DISTAL	1	1.53224427	3.88	0.0524	A	6	1.07735027	
DEEP VS SHALLOW	1	1.70783752	4.32	0.0409	B	6	1.48105825	
SHALLOW VS DEEPER	1	0.31144234	0.79	0.3774	C	6	1.83742992	
CORE VS DISTAL	1	0.47754190	1.21	0.2750	D	6	2.19572467	
CLOSE VS FAR	1	0.55356120	1.40	0.2401	E	6	0.56903559	
CLOSE VS CLOSE	1	0.08333333	0.21	0.6474	F	6	0.56903559	
EXTREME VS EXTREME	1	0.32380151	0.82	0.3681	G	6	0.40236893	
D VS E	1	0.16666667	0.42	0.5180	H	6	0.85771073	
SOUTH VS NORTH	1	0.19196994	0.49	0.4879	I	6	0.16666667	
CLOSE VS CLOSE	1	0.20955989	0.53	0.4686	J	6	0.40236893	
NORTH VS SOUTH	1	0.23013051	0.58	0.4477	K	6	0.40236893	
C VS D	1	0.02859548	0.07	0.7886	L	6	0.66666667	
					M	6	0.66666667	
					N	6	0.56903559	
					O	6	0.85771073	
					P	6	0.00000000	

SAS
CODE=6111070299
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	61.20259144	4.08017276	18.69	0.0001	0.777975	73.9467	
ERROR	80	17.46650246	0.21833128		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	78.66909390			0.46725933		1 O.63188628	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	61.20259144	18.69	0.0001	15	61.20259144	18.69	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	7.67151915	35.14	0.0001			MEANS	
SED	1	0.16190075	0.74	0.3917				
CENTRAL VS DISTAL	1	0.32380151	1.48	0.2269		STA	N	COUNT
DISTAL VS DISTAL	1	0.16666667	0.76	0.3849				
DEEP VS SHALLOW	1	4.13788391	18.95	0.0001		A	6	0.00000000
SHALLOW VS DEEPER	1	41.37883908	189.52	0.0001		B	6	0.16666667
CORE VS DISTAL	1	0.43988130	2.01	0.1597		C	6	0.00000000
CLOSE VS FAR	1	2.60439543	11.93	0.0009		D	6	0.40236893
CLOSE VS CLOSE	1	2.86406658	13.12	0.0005		E	6	2.01906386
EXTREME VS EXTREME	1	0.91202765	4.18	0.0443		F	6	2.23716146
D VS E	1	0.54160940	2.48	0.1192		G	6	1.26007966
SOUTH VS NORTH	1	0.00000000	0.00	1.0000		H	6	0.94171359
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000		I	6	1.75401108
NORTH VS SOUTH	1	0.00000000	0.00	1.0000		J	6	1.32911525
C VS D	1	0.00000000	0.00	1.0000		K	6	0.00000000
						L	6	0.00000000
						M	6	0.00000000
						N	6	0.00000000
						O	6	0.00000000
						P	6	0.00000000

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SAS
CODE=6111070699

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	26.89880508	1.79325367	4.76	0.0001	0.471802	107.9905	
ERROR	80	30.11412987	0.37642662		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	57.01293494			0.61353616		0.56813900	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	26.89880508	4.76	0.0001	15	26.89880508	4.76	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.00652872	0.02	0.8956			MEANS	
SED	1	0.18358513	0.49	0.4870				
CENTRAL VS DISTAL	1	1.22311600	3.25	0.0752			STA	N
DISTAL VS DISTAL	1	1.00000000	2.66	0.1071				COUNT
DEEP VS SHALLOW	1	2.14831413	5.71	0.0193			A	6
SHALLOW VS DEEPER	1	19.25265154	51.15	0.0001			B	6
CORE VS DISTAL	1	0.00259942	0.01	0.9340			C	6
CLOSE VS FAR	1	0.50942762	1.35	0.2482			D	6
CLOSE VS CLOSE	1	1.79858377	4.78	0.0317			E	6
EXTREME VS EXTREME	1	0.01759219	0.05	0.8294			F	6
D VS E	1	0.62200847	1.65	0.2023			G	6
SOUTH VS NORTH	1	0.02222222	0.06	0.8087			H	6
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000			I	6
NORTH VS SOUTH	1	0.02777778	0.07	0.7866			J	6
C VS D	1	0.08333333	0.22	0.6393			K	6
							L	6
							M	6
							N	6
							O	6
							P	6

A-75

SAS
CODE=6111070199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	15	10.58510188	0.70567346	5.87	0.0001	0.523867	253.6566
ERROR	80	9.62061219	0.12025765		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	20.20571407			0.34678185		10.13671312

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	10.58510188	5.87	0.0001	15	10.58510188	5.87	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE				
SHALLOW VS DEEP	1	1.08984473	9.06	0.0035	MEANS				
SED	1	0.82566527	6.87	0.0105					
CENTRAL VS DISTAL	1	6.60532219	54.93	0.0001	STA	N	COUNT		
DISTAL VS DISTAL	1	0.00000000	0.00	1.0000			A	6	0.00000000
DEEP VS SHALLOW	1	0.03701226	0.31	0.5806			B	6	0.00000000
SHALLOW VS DEEPER	1	0.53297652	4.43	0.0384			C	6	1.28504107
CORE VS DISTAL	1	0.00000000	0.00	1.0000			D	6	0.00000000
CLOSE VS FAR	1	0.00000000	0.00	1.0000			E	6	0.00000000
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000			F	6	0.00000000
EXTREME VS EXTREME	1	0.00000000	0.00	1.0000			G	6	0.00000000
D VS E	1	0.00000000	0.00	1.0000			H	6	0.00000000
SOUTH VS NORTH	1	0.65141574	5.42	0.0225			I	6	0.00000000
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000			J	6	0.00000000
NORTH VS SOUTH	1	0.35716290	2.97	0.0887			K	6	0.00000000
C VS D	1	0.48570226	4.04	0.0478			L	6	0.00000000
							M	6	0.00000000
							N	6	0.40236893
							O	6	0.50000000
							P	6	0.00000000

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SAS
CODE=6157010599
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	34.40213370	2.29347558	2.82	0.0014	0.346258	88.5269	
ERROR	80	64.95202878	0.81190036		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	99.35416248			0.90105514		1.01783179	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	34.40213370	2.82	0.0014	15	34.40213370	2.82	0.0014
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	14.99322059	18.47	0.0001			MEANS	
SED	1	0.22222222	0.27	0.6023				
CENTRAL VS DISTAL	1	1.77777778	2.19	0.1429		STA	N	COUNT
DISTAL VS DISTAL	1	0.33333333	0.41	0.5235				
DEEP VS SHALLOW	1	7.62516665	9.39	0.0030		A	6	0.16666667
SHALLOW VS DEEPER	1	3.87207118	4.77	0.0319		B	6	0.00000000
CORE VS DISTAL	1	0.11512354	0.14	0.7075		C	6	0.83333333
CLOSE VS FAR	1	1.36936014	1.69	0.1978		D	6	0.33333333
CLOSE VS CLOSE	1	0.05719096	0.07	0.7914		E	6	2.03025676
EXTREME VS EXTREME	1	2.44838498	3.02	0.0863		F	6	1.49578192
D VS E	1	0.03877884	0.05	0.8276		G	6	1.35771073
SOUTH VS NORTH	1	0.40271122	0.50	0.4833		H	6	2.01184464
CLOSE VS CLOSE	1	0.20955989	0.26	0.6128		I	6	1.30473785
NORTH VS SOUTH	1	0.93544960	1.15	0.2863		J	6	1.19104406
C VS D	1	0.00178277	0.00	0.9627		K	6	1.06903559
						L	6	0.80473785
						M	6	1.02437739
						N	6	1.00000000
						O	6	1.49578192
						P	6	0.16666667

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SAS
CODE=6157020099
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	41.55179600	2.77011973	5.19	0.0001	0.493428	83.6480	
ERROR	80	42.65858993	0.53323237		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	84.21038592			0.73022762		0.87297692	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	41.55179600	5.19	0.0001	15	41.55179600	5.19	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.49228157	0.92	0.3395			MEANS	
SED	1	0.39590420	0.74	0.3914				
CENTRAL VS DISTAL	1	0.22621686	0.42	0.5167		STA	N	COUNT
DISTAL VS DISTAL	1	0.23580596	0.44	0.5080				
DEEP VS SHALLOW	1	5.47188488	10.26	0.0020		A	6	0.97140452
SHALLOW VS DEEPER	1	14.10271791	26.45	0.0001		B	6	0.45534180
CORE VS DISTAL	1	3.34283454	6.27	0.0143		C	6	0.83333333
CLOSE VS FAR	1	3.58036623	6.71	0.0114		D	6	0.73570226
CLOSE VS CLOSE	1	0.13708024	0.26	0.6135		E	6	0.66666667
EXTREME VS EXTREME	1	1.80655781	3.39	0.0694		F	6	2.14638586
D VS E	1	8.44117181	15.83	0.0002		G	6	1.93262569
SOUTH VS NORTH	1	0.49760677	0.93	0.3369		H	6	1.09341299
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000		I	6	0.50000000
NORTH VS SOUTH	1	0.08333333	0.16	0.6937		J	6	2.17741585
C VS D	1	2.73803387	5.13	0.0262		K	6	0.33333333
						L	6	0.33333333
						M	6	0.16666667
						N	6	1.12200847
						O	6	0.50000000
						P	6	0.00000000

SAS
CODE=6156030099

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.
MODEL	15	7.82291667	0.52152778	3.85	0.0001	0.419319	235.5136
ERROR	80	10.83333333	0.13541667		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	18.65625000			0.36799004		10.15625000

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	7.82291667	3.85	0.0001	15	7.82291667	3.85	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	0.78125000	5.77	0.0186	MEANS			
SED	1	0.00000000	0.00	1.0000	STA	N	COUNT	
CENTRAL VS DISTAL	1	0.00000000	0.00	1.0000				
DISTAL VS DISTAL	1	0.00000000	0.00	1.0000				
DEEP VS SHALLOW	1	0.28409091	2.10	0.1514	A	6	0.00000000	
SHALLOW VS DEEPER	1	2.06868687	15.28	0.0002	B	6	0.00000000	
CORE VS DISTAL	1	0.11111111	0.82	0.3678	C	6	0.00000000	
CLOSE VS FAR	1	1.00000000	7.38	0.0081	D	6	0.00000000	
CLOSE VS CLOSE	1	0.33333333	2.46	0.1206	E	6	1.00000000	
EXTREME VS EXTREME	1	2.77777778	20.51	0.0001	F	6	0.33333333	
D VS E	1	0.33333333	2.46	0.1206	G	6	0.66666667	
SOUTH VS NORTH	1	0.02222222	0.16	0.6865	H	6	0.00000000	
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000	I	6	0.00000000	
NORTH VS SOUTH	1	0.02777778	0.21	0.6518	J	6	0.33333333	
C VS D	1	0.08333333	0.62	0.4351	K	6	0.00000000	
					L	6	0.00000000	
					M	6	0.16666667	
					N	6	0.00000000	
					O	6	0.00000000	
					P	6	0.00000000	

SAS
CODE=6157029699
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	21.00980893	1.40065393	2.94	0.0010	0.355066	199.3363	
ERROR	80	38.16170394	0.47702130		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	59.17151287			0.69066729		17 10.34648339	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	21.00980893	2.94	0.0010	15	21.00980893	2.94	0.0010
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	2.21593449	4.65	0.0341			MEANS	
SED	1	0.05555556	0.12	0.7338				
CENTRAL VS DISTAL	1	0.11111111	0.23	0.6307		STA	N	COUNT
DISTAL VS DISTAL	1	0.33333333	0.70	0.4057				
DEEP VS SHALLOW	1	1.23401263	2.59	0.1117		A	6	0.00000000
SHALLOW VS DEEPER	1	3.17696855	6.66	0.0117		B	6	0.00000000
CORE VS DISTAL	1	2.47222079	5.18	0.0255		C	6	0.00000000
CLOSE VS FAR	1	0.54125782	1.13	0.2900		D	6	0.33333333
CLOSE VS CLOSE	1	0.20955989	0.44	0.5094		E	6	1.97469866
EXTREME VS EXTREME	1	9.70985477	20.36	0.0001		F	6	0.40236893
D VS E	1	0.08333333	0.17	0.6771		G	6	0.66666667
SOUTH VS NORTH	1	0.20000000	0.42	0.5192		H	6	0.16666667
CLOSE VS CLOSE	1	0.33333333	0.70	0.4057		I	6	0.50000000
NORTH VS SOUTH	1	0.00000000	0.00	1.0000		J	6	0.33333333
C VS D	1	0.33333333	0.70	0.4057		K	6	0.50000000
						L	6	0.16666667
						M	6	0.33333333
						N	6	0.00000000
						O	6	0.16666667
						P	6	0.00000000

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I
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SAS
CODE=6163040199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.	
MODEL	15	18.15581911	1.21038794	5.28	0.0001	0.497694	119.0291	
ERROR	80	18.32403399	0.22905042		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	36.47985311			0.47859213		0.40207984	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	18.15581911	5.28	0.0001	15	18.15581911	5.28	0.0001
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
SHALLOW VS DEEP	1	5.17338230	22.59	0.0001				MEANS
SED	1	0.00000000	0.00	1.0000				
CENTRAL VS DISTAL	1	0.00000000	0.00	1.0000				STA N COUNT
DISTAL VS DISTAL	1	0.00000000	0.00	1.0000				
DEEP VS SHALLOW	1	1.88122993	8.21	0.0053		A	6	0.00000000
SHALLOW VS DEEPER	1	0.92400161	4.03	0.0480		B	6	0.00000000
CORE VS DISTAL	1	0.33615039	1.47	0.2293		C	6	0.00000000
CLOSE VS FAR	1	0.33333333	1.46	0.2312		D	6	0.00000000
CLOSE VS CLOSE	1	0.33333333	1.46	0.2312		E	6	0.40236893
EXTREME VS EXTREME	1	1.34874109	5.89	0.0175		F	6	0.66666667
D VS E	1	2.79999537	12.22	0.0008		G	6	0.33333333
SOUTH VS NORTH	1	0.15269601	0.67	0.4166		H	6	0.78867513
CLOSE VS CLOSE	1	0.20955989	0.91	0.3417		I	6	0.50000000
NORTH VS SOUTH	1	2.37295575	10.36	0.0019		J	6	1.46609098
C VS D	1	2.29044011	10.00	0.0022		K	6	0.50000000
						L	6	0.23570226
						M	6	1.20710678
						N	6	0.33333333
						O	6	0.00000000
						P	6	0.00000000

A-81

SAS
CODE=6163099493
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	15	17.00454806	1.13363654	3.43	0.0002	0.391519	109.2552
ERROR	80	26.42765516	0.33034569		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	43.43220322			0.57475707		10.52606833

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	17.00454806	3.43	0.0002	15	17.00454806	3.43	0.0002

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	6.98311548	21.14	0.0001	MEANS			
SED	1	0.02777778	0.08	0.7726				
CENTRAL VS DISTAL	1	0.05555556	0.17	0.6828	STA	N	COUNT	
DISTAL VS DISTAL	1	0.16666667	0.50	0.4796				
DEEP VS SHALLOW	1	3.04250718	9.21	0.0032	A	6	0.00000000	
SHALLOW VS DEEPER	1	3.13869372	9.50	0.0028	B	6	0.23570226	
CORE VS DISTAL	1	0.03347335	0.10	0.7511	C	6	0.00000000	
CLOSE VS FAR	1	0.33333333	1.01	0.3182	D	6	0.00000000	
CLOSE VS CLOSE	1	1.53548358	4.65	0.0341	E	6	0.78867513	
EXTREME VS EXTREME	1	0.04931688	0.15	0.7002	F	6	1.28445705	
D VS E	1	0.52250850	1.58	0.2122	G	6	0.56903559	
SOUTH VS NORTH	1	0.38899348	1.18	0.2811	H	6	1.21542146	
CLOSE VS CLOSE	1	0.25000000	0.76	0.3869	I	6	0.69104406	
NORTH VS SOUTH	1	0.27941318	0.85	0.3605	J	6	1.10838026	
C VS D	1	0.00000000	0.00	1.0000	K	6	0.50000000	
					L	6	0.78867513	
					M	6	0.50000000	
					N	6	0.50000000	
					O	6	0.23570226	
					P	6	0.00000000	

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SAS

CODE=7804030197

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	15	406.21626581	27.08108439	9.44	0.0001	0.638993	57.4541
ERROR	80	229.49672623	2.86870908		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	635.71299203			1.69372639		2.94796365

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	406.21626581	9.44	0.0001	15	406.21626581	9.44	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	14.67519364	5.12	0.0264	MEANS		
SED	1	35.41779380	12.35	0.0007			
CENTRAL VS DISTAL	1	11.86287241	4.14	0.0453	STA	N	COUNT
DISTAL VS DISTAL	1	4.59321780	1.60	0.2094			
DEEP VS SHALLOW	1	47.79742574	16.66	0.0001	A	6	0.16666667
SHALLOW VS DEEPER	1	79.77187478	27.81	0.0001	B	6	4.16485395
CORE VS DISTAL	1	6.51442941	2.27	0.1358	C	6	1.82404532
CLOSE VS FAR	1	0.85704645	0.30	0.5862	D	6	2.92748877
CLOSE VS CLOSE	1	12.35426800	4.31	0.0412	E	6	0.69692343
EXTREME VS EXTREME	1	39.04871323	13.61	0.0004	F	6	7.23498689
D VS E	1	24.48742588	8.54	0.0045	G	6	5.20567929
SOUTH VS NORTH	1	3.92798683	1.37	0.2454	H	6	5.75744907
CLOSE VS CLOSE	1	17.08102411	5.95	0.0169	I	6	2.39286960
NORTH VS SOUTH	1	7.66757231	2.67	0.1060	J	6	5.24987421
C VS D	1	9.48485355	3.31	0.0728	K	6	3.85127609
					L	6	1.46513387
					M	6	2.34712948
					N	6	0.56903559
					O	6	2.84260161
					P	6	0.47140452

SAS

CODE = 7815220201

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	15	52.14025069	3.47601671	6.02	0.0001	0.530063	116.8393	
ERROR	80	46.22588021	0.57782350		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	95	98.36613090			0.76014703	11	0.65059163	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	52.14025069	6.02	0.0001	15	52.14025069	6.02	0.0001
CONTRAST	DF	SS	F VALUE	PR > F		GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	37.63071050	65.12	0.0001			MEANS	
SED	1	3.00615121	5.20	0.0252				
CENTRAL VS DISTAL	1	0.56750159	0.98	0.3247		STA	N	COUNT
DISTAL VS DISTAL	1	0.83441016	1.44	0.2330				
DEEP VS SHALLOW	1	0.54713464	0.95	0.3334		A	6	1.12200847
SHALLOW VS DEEPER	1	2.23524853	3.87	0.0527		B	6	1.55009385
CORE VS DISTAL	1	1.99476945	3.45	0.0668		C	6	2.19045070
CLOSE VS FAR	1	0.05954426	0.10	0.7490		D	6	2.07748054
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000		E	6	0.91068360
EXTREME VS EXTREME	1	0.33139687	0.57	0.4511		F	6	0.28867513
D VS E	1	4.65527861	8.06	0.0057		G	6	0.28867513
SOUTH VS NORTH	1	0.25904121	0.45	0.5051		H	6	0.16666667
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000		I	6	0.00000000
NORTH VS SOUTH	1	0.01906365	0.03	0.8563		J	6	1.24569641
C VS D	1	0.00000000	0.00	1.0000		K	6	0.00000000
						L	6	0.00000000
						M	6	0.16666667
						N	6	0.16666667
						O	6	0.23570226
						P	6	0.00000000

SAS
CODE=7815199998
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	15	13.31479961	0.88765331	3.18	0.0004	0.373219	169.6385
ERROR	80	22.36081438	0.27951018		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	35.67561399			0.52868722		0.31165529

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	13.31479961	3.18	0.0004	15	13.31479961	3.18	0.0004

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE		
SHALLOW VS DEEP	1	0.03105665	0.11	0.7398	MEANS		
SED	1	0.62945150	2.25	0.1374			
CENTRAL VS DISTAL	1	0.38689453	1.38	0.2429	STA	N	COUNT
DISTAL VS DISTAL	1	1.16068360	4.15	0.0449			
DEEP VS SHALLOW	1	0.67882620	2.43	0.1231	A	6	0.00000000
SHALLOW VS DEEPER	1	8.29041785	29.66	0.0001	B	6	0.16666667
CORE VS DISTAL	1	0.05555556	0.20	0.6569	C	6	0.16666667
CLOSE VS FAR	1	0.00000000	0.00	1.0000	D	6	0.78867513
CLOSE VS CLOSE	1	0.00000000	0.00	1.0000	E	6	0.00000000
EXTREME VS EXTREME	1	0.02777778	0.10	0.7534	F	6	0.00000000
D VS E	1	0.08333333	0.30	0.5866	G	6	0.00000000
SOUTH VS NORTH	1	1.03397153	3.70	0.0580	H	6	0.00000000
CLOSE VS CLOSE	1	0.59949975	2.14	0.1470	I	6	0.16666667
NORTH VS SOUTH	1	0.03709217	0.13	0.7166	J	6	0.00000000
C VS D	1	0.32801694	1.17	0.2819	K	6	0.28867513
					L	6	0.73570226
					M	6	1.02437739
					N	6	0.69371294
					O	6	0.95534180
					P	6	0.00000000

SAS
CODE=6169400599
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	15	13.69781315	0.91318754	2.47	0.0050	0.316752	133.9685
ERROR	80	29.54677498	0.36933469		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	43.24458813			0.60772912		11 10:45363591

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	13.69781315	2.47	0.0050	15	13.69781315	2.47	0.0050

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	6.58513729	17.83	0.0001			MEANS	
SED	1	0.00000000	0.00	1.0000				
CENTRAL VS DISTAL	1	0.00000000	0.00	1.0000				
DISTAL VS DISTAL	1	0.00000000	0.00	1.0000				
DEEP VS SHALLOW	1	1.25674545	3.40	0.0688			A	6 0.00000000
SHALLOW VS DEEPER	1	0.00711461	0.02	0.8900			B	6 0.00000000
CORE VS DISTAL	1	0.42096787	1.14	0.2889			C	6 0.00000000
CLOSE VS FAR	1	0.18573032	0.50	0.4803			D	6 0.00000000
CLOSE VS CLOSE	1	0.16666667	0.45	0.5037			E	6 1.04044011
EXTREME VS EXTREME	1	0.69627140	1.89	0.1736			F	6 0.73570226
D VS E	1	0.58533269	1.58	0.2117			G	6 0.50000000
SOUTH VS NORTH	1	1.34078605	3.63	0.0603			H	6 0.40236893
CLOSE VS CLOSE	1	0.20955989	0.57	0.4535			I	6 0.84408252
NORTH VS SOUTH	1	0.03649783	0.10	0.7541			J	6 0.40236893
C VS D	1	2.20700308	5.98	0.0167			K	6 0.76007966
							L	6 1.02437739
							M	6 0.85771073
							N	6 0.00000000
							O	6 0.52437739
							P	6 0.16666667

SAS

CODE=4303999997

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	15	8.68905136	0.57927009	2.47	0.0050	0.316458	153.6261
ERROR	80	18.76819218	0.23460240		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	95	27.45724353			0.48435772		0.31528354

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	15	8.68905136	2.47	0.0050	15	8.68905136	2.47	0.0050

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHALLOW VS DEEP	1	1.72162881	7.34	0.0083	MEANS			
SED	1	0.05555556	0.24	0.6279	STA	N	COUNT	
CENTRAL VS DISTAL	1	0.11111111	0.47	0.4933				
DISTAL VS DISTAL	1	0.33333333	1.42	0.2368				
DEEP VS SHALLOW	1	0.33411926	1.42	0.2362				
SHALLOW VS DEEPER	1	0.01432299	0.06	0.8055				
CORE VS DISTAL	1	1.26277022	5.38	0.0229				
CLOSE VS FAR	1	0.94362674	4.02	0.0483				
CLOSE VS CLOSE	1	0.08333333	0.36	0.5529				
EXTREME VS EXTREME	1	0.43883812	1.87	0.1752				
D VS E	1	0.02172517	0.09	0.7617				
SOUTH VS NORTH	1	0.07546317	0.32	0.5722				
CLOSE VS CLOSE	1	1.62377345	6.92	0.0102				
NORTH VS SOUTH	1	1.99002823	8.48	0.0046				
C VS D	1	0.08333333	0.36	0.5529				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	0.00000000	0.00000000	0.00000000	0.33333333	0.33333333	0.00000000	0.16666667	0.56903559	0.62200847	0.70710678	0.73570226	0.00000000	0.78867513	0.62200847	0.00000000	0.16666667

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ANOVA 4, Cruise V

SAS
CODE=5001220999
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	280.25020429	25.47729130	21.28	0.0001	0.795970	48.8721	
ERROR	60	71.83618307	1.19726972		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	352.08638736			1.09419821		12.23890354	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	280.25020429	21.28	0.0001	11	280.25020429	21.28	0.0001
CONTRAST	DF	SS	F VALUE	PR > F		MEANS		
SHELF VS SLOPE	1	49.82388890	41.61	0.0001		STA	N	COUNT
SILTCLAY VS SANDCLAY	1	24.19862176	20.21	0.0001				
INTER VS DEEP	1	52.27875127	43.66	0.0001		A	6	2.67895554
HIGH VS LOW	1	0.00000000	0.00	1.0000		B	6	5.51906244
DISTANCE	1	0.11111111	0.09	0.7617		C	6	3.77428040
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000		D	6	3.70244059
SEEP VS NOSEEP	1	0.36983840	0.31	0.5804		E	6	2.99473836
SEEP VS SEEP	1	3.89480935	3.25	0.0763		F	6	4.13415478
WEST VS EAST	1	0.10008772	0.08	0.7735		G	6	3.89654371
FINE SCALE DIFF	1	0.01548287	0.01	0.9098		H	6	0.16666667
MAJOR A VS B	1	149.45761290	124.83	0.0001		I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000
						L	6	0.00000000

SAS
CODE=5001439699
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	39.79864665	3.61805879	2.64	0.0081	0.325944	77.3917
ERROR	60	82.30404526	1.37173409		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	122.10269191			1.17121052		1.51335402

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	39.79864665	2.64	0.0081	11	39.79864665	2.64	0.0081

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	21.07394391	15.36	0.0002	MEANS			
SILTCLAY VS SANDCLAY	1	0.63984878	0.47	0.4973				
INTER VS DEEP	1	3.01342742	2.20	0.1435	STA	N	COUNT	
HIGH VS LOW	1	1.25344405	0.91	0.3430				
DISTANCE	1	0.45505439	0.33	0.5668	A	6	2.95400579	
FINE SCALE DISTANCE	1	1.50000000	1.09	0.2999	B	6	2.49218015	
SEEP VS NOSEEP	1	6.00417884	4.38	0.0407	C	6	0.81061722	
SEEP VS SEEP	1	0.00018397	0.00	0.9908	D	6	1.69371294	
WEST VS EAST	1	0.02234979	0.02	0.8989	E	6	2.14435289	
FINE SCALE DIFF	1	2.33957418	1.71	0.1965	F	6	2.13652198	
MAJOR A VS B	1	3.49664133	2.55	0.1156	G	6	1.17741585	
					H	6	1.25987758	
					I	6	1.27614237	
					J	6	0.56903559	
					K	6	0.50000000	
					L	6	1.14638586	

SAS
CODE=5001580999
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	66.82037708	6.07457973	9.65	0.0001	0.638778	78.0711
ERROR	60	37.78623429	0.62977057		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	104.60661137			0.79358085		1.01648488

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	66.82037708	9.65	0.0001	11	66.82037708	9.65	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	0.77484567	1.23	0.2718	MEANS			
SILTCLAY VS SANDCLAY	1	2.44280904	3.88	0.0535				
INTER VS DEEP	1	14.39262498	22.85	0.0001	STA	N	COUNT	
HIGH VS LOW	1	0.08333333	0.13	0.7173				
DISTANCE	1	0.00081770	0.00	0.9714	A	6	1.23570226	
FINE SCALE DISTANCE	1	0.08333333	0.13	0.7173	B	6	0.33333333	
SEEP VS NOSEEP	1	5.78100402	9.18	0.0036	C	6	1.99693176	
SEEP VS SEEP	1	0.12708823	0.20	0.6549	D	6	1.55463415	
WEST VS EAST	1	10.03327575	15.93	0.0002	E	6	1.30473785	
FINE SCALE DIFF	1	0.58688152	0.93	0.3382	F	6	1.51055997	
MAJOR A VS B	1	32.51436349	51.63	0.0001	G	6	3.35955028	
					H	6	0.23570226	
					I	6	0.16666667	
					J	6	0.33333333	
					K	6	0.16666667	
					L	6	0.00000000	

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SAS
CODE=5001431004
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	20.99061725	1.90823793	3.05	0.0026	0.358891	111.0113	
ERROR	60	37.49686894	0.62494782		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	58.48748619			0.79053641		0.71212235	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	20.99061725	3.05	0.0026	11	20.99061725	3.05	0.0026
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	1.11614876	1.79	0.1865			MEANS	
SILTCLAY VS SANDCLAY	1	2.88742589	4.62	0.0356				
INTER VS DEEP	1	3.59818346	5.76	0.0195		STA	N	COUNT
HIGH VS LOW	1	0.33333333	0.53	0.4680				
DISTANCE	1	0.95984970	1.54	0.2201		A	6	0.50000000
FINE SCALE DISTANCE	1	0.77515143	1.24	0.2698		B	6	1.48105825
SEEP VS NOSEEP	1	0.16957023	0.27	0.6044		C	6	0.23570226
SEEP VS SEEP	1	0.12732200	0.20	0.6534		D	6	1.41202266
WEST VS EAST	1	0.98037497	1.57	0.2153		E	6	1.03934466
FINE SCALE DIFF	1	4.15118904	6.64	0.0124		F	6	1.24535599
MAJOR A VS B	1	5.89206842	9.43	0.0032		G	6	1.31893189
						H	6	0.00000000
						I	6	0.74401694
						J	6	0.23570226
						K	6	0.00000000
						L	6	0.33333333

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SAS
CODE=5001060199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.
MODEL	11	33.24545290	3.02231390	23.03	0.0001	0.808497	61.6283
ERROR	60	7.87460276	0.13124338		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	41.12005566			0.36227528		10.58783908

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	33.24545290	23.03	0.0001	11	33.24545290	23.03	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	4.97598887	37.91	0.0001	MEANS			
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	7.46398330	56.87	0.0001	STA	N	COUNT	
HIGH VS LOW	1	0.00000000	0.00	1.0000				
DISTANCE	1	1.77010866	13.49	0.0005	A	6	0.00000000	
FINE SCALE DISTANCE	1	7.69659453	58.64	0.0001	B	6	0.00000000	
SEEP VS NOSEEP	1	0.24360132	1.86	0.1782	C	6	1.40537007	
SEEP VS SEEP	1	5.66176046	43.14	0.0001	D	6	1.04044011	
WEST VS EAST	1	4.46255843	34.00	0.0001	E	6	1.37377345	
FINE SCALE DIFF	1	0.39952161	3.04	0.0861	F	6	0.00000000	
MAJOR A VS B	1	0.57133572	4.35	0.0412	G	6	0.16666667	
					H	6	1.46609098	
					I	6	1.60172766	
					J	6	0.00000000	
					K	6	0.00000000	
					L	6	0.00000000	

SAS
CODE=5001430594
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	15.68659292	1.42605390	4.47	0.0001	0.450343	143.4340	
ERROR	60	19.14595684	0.31909928		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	34.83254976			0.56488873		0.39383179	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	15.68659292	4.47	0.0001	11	15.68659292	4.47	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	2.23349005	7.00	0.0104			MEANS	
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	2.27290638	7.12	0.0098		STA	N	COUNT
HIGH VS LOW	1	0.08333333	0.26	0.6112				
DISTANCE	1	0.95508379	2.99	0.0888		A	6	0.00000000
FINE SCALE DISTANCE	1	0.28944917	0.91	0.3447		B	6	0.00000000
SEEP VS NOSEEP	1	0.02820127	0.09	0.7673		C	6	0.16666667
SEEP VS SEEP	1	3.14804714	9.87	0.0026		D	6	0.62200847
WEST VS EAST	1	4.33728481	13.59	0.0005		E	6	0.16666667
FINE SCALE DIFF	1	0.62200847	1.95	0.1678		F	6	1.19104406
MAJOR A VS B	1	1.71678851	5.38	0.0238		G	6	1.43564502
						H	6	0.00000000
						I	6	0.33333333
						J	6	0.64395055
						K	6	0.16666667
						L	6	0.00000000

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SAS
CODE=5001410801
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	17.29645954	1.57240541	3.28	0.0015	0.375223	73.5401
ERROR	60	28.79996130	0.47999935		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	46.09642084			0.69281986		10.94209857

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	17.29645954	3.28	0.0015	11	17.29645954	3.28	0.0015

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE		
SHELF VS SLOPE	1	2.88334448	6.01	0.0172			MEANS
SILTCLAY VS SANDCLAY	1	0.07026231	0.15	0.7034			
INTER VS DEEP	1	8.09792514	16.87	0.0001			STA N COUNT
HIGH VS LOW	1	0.16666667	0.35	0.5579			
DISTANCE	1	1.95176377	4.07	0.0482	A	6	1.31305253
FINE SCALE DISTANCE	1	0.70967255	1.48	0.2288	B	6	1.46609098
SEEP VS NOSEEP	1	0.13786467	0.29	0.5940	C	6	0.95534180
SEEP VS SEEP	1	0.58243303	1.21	0.2751	D	6	1.50166128
WEST VS EAST	1	1.73958134	3.62	0.0617	E	6	1.36736446
FINE SCALE DIFF	1	0.89539492	1.87	0.1771	F	6	0.92674632
MAJOR A VS B	1	0.06155068	0.13	0.7215	G	6	0.56903559
					H	6	0.52437739
					I	6	0.97971920
					J	6	1.46609098
					K	6	0.23570226
					L	6	0.00000000

SAS
CODE=5001240603
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	9.03300379	0.82118216	3.21	0.0017	0.370722	112.1300
ERROR	60	15.33297067	0.25554951		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	24.36597446			0.50551905		10.45083296

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	9.03300379	3.21	0.0017	11	9.03300379	3.21	0.0017

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	0.00226450	0.01	0.9253	MEANS			
SILTCLAY VS SANDCLAY	1	2.57657624	10.08	0.0024				
INTER VS DEEP	1	3.01492845	11.80	0.0011	STA	N	COUNT	
HIGH VS LOW	1	0.00000000	0.00	1.0000	A	6	0.92674632	
DISTANCE	1	0.05555556	0.22	0.6427	B	6	0.00000000	
FINE SCALE DISTANCE	1	0.97140452	3.80	0.0559	C	6	0.40236893	
SEEP VS NOSEEP	1	0.29142136	1.14	0.2899	D	6	0.97140452	
SEEP VS SEEP	1	0.01429774	0.06	0.8138	E	6	0.80473785	
WEST VS EAST	1	0.50000000	1.96	0.1670	F	6	0.73570226	
FINE SCALE DIFF	1	0.97140452	3.80	0.0559	G	6	0.33333333	
MAJOR A VS B	1	0.63515091	2.49	0.1202	H	6	0.33333333	
					I	6	0.73570226	
					J	6	0.16666667	
					K	6	0.00000000	
					L	6	0.00000000	

SAS
CODE=5001160101
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	25.07658715	2.27968974	8.49	0.0001	0.608937	90.0740
ERROR	60	16.10433455	0.26840558		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	41.18092169			0.51807874		10.57517000

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	25.07658715	8.49	0.0001	11	25.07658715	8.49	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	2.01405864	7.50	0.0081	MEANS			
SILTCLAY VS SANDCLAY	1	0.01429774	0.05	0.8183				
INTER VS DEEP	1	3.50368979	13.05	0.0006	STA	N	COUNT	
HIGH VS LOW	1	0.33333333	1.24	0.2695	A	6	0.23570226	
DISTANCE	1	4.01640315	14.96	0.0003	B	6	0.16666667	
FINE SCALE DISTANCE	1	0.54633727	2.04	0.1588	C	6	1.59929235	
SEEP VS NOSEEP	1	13.85940132	51.64	0.0001	D	6	1.19935874	
SEEP VS SEEP	1	0.00000000	0.00	1.0000	E	6	0.00000000	
WEST VS EAST	1	0.00510809	0.02	0.8907	F	6	0.00000000	
FINE SCALE DIFF	1	0.47984069	1.79	0.1862	G	6	1.36359009	
MAJOR A VS B	1	0.30411713	1.13	0.2914	H	6	0.00000000	
					I	6	0.78867513	
					J	6	1.21542146	
					K	6	0.00000000	
					L	6	0.33333333	

SAS
CODE=5001409899
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	5.05867563	0.45987960	2.83	0.0048	0.341700	312.7624	
ERROR	60	9.74577240	0.16242954		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	14.80444804			0.40302548		0.12885996	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	5.05867563	2.83	0.0048	11	5.05867563	2.83	0.0048
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	0.52080153	3.21	0.0784			MEANS	
SILTCLAY VS SANDCLAY	1	0.08333333	0.51	0.4766				
INTER VS DEEP	1	0.12373724	0.76	0.3862		STA	N	COUNT
HIGH VS LOW	1	0.00000000	0.00	1.0000				
DISTANCE	1	0.00000000	0.00	1.0000		A	6	0.23570226
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000		B	6	0.40236893
SEEP VS NOSEEP	1	1.48484692	9.14	0.0037		C	6	0.00000000
SEEP VS SEEP	1	2.47474487	15.24	0.0002		D	6	0.00000000
WEST VS EAST	1	0.00000000	0.00	1.0000		E	6	0.90824829
FINE SCALE DIFF	1	0.00000000	0.00	1.0000		F	6	0.00000000
MAJOR A VS B	1	0.37121173	2.29	0.1358		G	6	0.00000000
						H	6	0.00000000
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000
						L	6	0.00000000

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SAS
CODE=5514000099
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	28.92367625	2.62942511	4.19	0.0001	0.434235	92.0315	
ERROR	60	37.68470788	0.62807846		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	66.60838412			0.79251402		0.86113310	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	28.92367625	4.19	0.0001	11	28.92367625	4.19	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	0.55644363	0.89	0.3504			MEANS	
SILTCLAY VS SANDCLAY	1	0.82491496	1.31	0.2563				
INTER VS DEEP	1	12.16210437	19.36	0.0001		STA	N	COUNT
HIGH VS LOW	1	0.00000000	0.00	1.0000		A	6	0.92674632
DISTANCE	1	0.67436317	1.07	0.3043		B	6	0.40236893
FINE SCALE DISTANCE	1	1.66068360	2.64	0.1092		C	6	2.06219299
SEEP VS NOSEEP	1	9.76666751	15.55	0.0002		D	6	1.09341299
SEEP VS SEEP	1	0.33333333	0.53	0.4691		E	6	0.62200847
WEST VS EAST	1	0.06417015	0.10	0.7504		F	6	0.28867513
FINE SCALE DIFF	1	2.81560405	4.48	0.0384		G	6	1.70446213
MAJOR A VS B	1	0.06539147	0.10	0.7481		H	6	1.35164215
						I	6	1.31305253
						J	6	0.56903559
						K	6	0.00000000
						L	6	0.00000000

A-99

SAS
CODE=5507010299
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	18.31211554	1.66473778	6.54	0.0001	0.545428	102.5159	
ERROR	60	15.26171773	0.25436196		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	33.57383327			0.50434310		10.49196554	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	18.31211554	6.54	0.0001	11	18.31211554	6.54	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	3.48523335	13.70	0.0005			MEANS	
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	0.05767912	0.23	0.6357		STA	N	COUNT
HIGH VS LOW	1	0.08333333	0.33	0.5692				
DISTANCE	1	0.01906365	0.07	0.7852		A	6	0.00000000
FINE SCALE DISTANCE	1	0.66666667	2.62	0.1107		B	6	0.00000000
SEEP VS NOSEEP	1	0.01940801	0.08	0.7833		C	6	1.67210231
SEEP VS SEEP	1	3.77670901	14.85	0.0003		D	6	0.16666667
WEST VS EAST	1	3.38107137	13.29	0.0006		E	6	1.12200847
FINE SCALE DIFF	1	6.79900947	26.73	0.0001		F	6	0.00000000
MAJOR A VS B	1	0.02394157	0.09	0.7601		G	6	0.00000000
						H	6	0.50000000
						I	6	0.80473785
						J	6	0.33333333
						K	6	0.73570226
						L	6	0.56903559

A-100

SAS
CODE=5502020298
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	12.27006602	1.11546055	4.10	0.0002	0.429261	103.1041
ERROR	60	16.31407480	0.27190125		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	28.58414082			0.52144151		10.50574284
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE
STA	11	12.27006602	4.10	0.0002	11	12.27006602	4.10
CONTRAST	DF	SS	F VALUE	PR > F			GENERAL LINEAR MODELS PROCEDURE
SHELF VS SLOPE	1	0.15388079	0.57	0.4548			MEANS
SILTCLAY VS SANDCLAY	1	1.94280904	7.15	0.0097			
INTER VS DEEP	1	0.87773290	3.23	0.0774	STA	N	COUNT
HIGH VS LOW	1	0.02859548	0.11	0.7468	A	6	0.80473785
DISTANCE	1	1.99002823	7.32	0.0089	B	6	0.00000000
FINE SCALE DISTANCE	1	0.08333333	0.31	0.5819	C	6	1.24401694
SEEP VS NOSEEP	1	6.37606027	23.45	0.0001	D	6	0.92674632
SEEP VS SEEP	1	0.08333333	0.31	0.5819	E	6	0.16666667
WEST VS EAST	1	0.13397460	0.49	0.4854	F	6	0.00000000
FINE SCALE DIFF	1	0.30198193	1.11	0.2962	G	6	0.90236893
MAJOR A VS B	1	0.29833612	1.10	0.2991	H	6	0.95534180
					I	6	0.16666667
					J	6	0.33333333
					K	6	0.23570226
					L	6	0.33333333

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SAS
CODE=6111070399
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	27.03389806	2.45762710	3.06	0.0026	0.359299	191.5917	
ERROR	60	48.20682397	0.80344707		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	75.24072203			0.89635209		10.46784491	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	27.03389806	3.06	0.0026	11	27.03389806	3.06	0.0026
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	3.15185559	3.92	0.0522				MEANS
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	4.72778339	5.88	0.0183		STA	N	COUNT
HIGH VS LOW	1	0.00000000	0.00	1.0000		A	6	0.00000000
DISTANCE	1	0.00000000	0.00	1.0000		B	6	0.00000000
FINE SCALE DISTANCE	1	0.33333333	0.41	0.5220		C	6	0.33333333
SEEP VS NOSEEP	1	0.14410228	0.18	0.6734		D	6	0.62200847
SEEP VS SEEP	1	1.58727810	1.98	0.1650		E	6	0.74401694
WEST VS EAST	1	8.59316192	10.70	0.0018		F	6	1.47140452
FINE SCALE DIFF	1	0.25000000	0.31	0.5790		G	6	1.94337567
MAJOR A VS B	1	8.24638345	10.26	0.0022		H	6	0.16666667
						I	6	0.00000000
						J	6	0.33333333
						K	6	0.00000000
						L	6	0.00000000

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SAS

CODE=6111070599

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	27.88030765	2.53457342	7.42	0.0001	0.576337	106.6432
ERROR	60	20.49469422	0.34157824		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	48.37500187			0.58444695		10.54803941

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	27.88030765	7.42	0.0001	11	27.88030765	7.42	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	6.80760130	19.93	0.0001			MEANS	
SILTCLAY VS SANDCLAY	1	18.32071533	53.64	0.0001				
INTER VS DEEP	1	0.04189271	0.12	0.7274		STA	N	COUNT
HIGH VS LOW	1	0.04465820	0.13	0.7189				
DISTANCE	1	0.40713484	1.19	0.2793		A	6	0.00000000
FINE SCALE DISTANCE	1	0.08333333	0.24	0.6232		B	6	2.47121531
SEEP VS NOSEEP	1	1.36187269	3.99	0.0504		C	6	0.16666667
SEEP VS SEEP	1	0.00000000	0.00	1.0000		D	6	0.00000000
WEST VS EAST	1	0.09286516	0.27	0.6040		E	6	0.56903559
FINE SCALE DIFF	1	0.08333333	0.24	0.6232		F	6	0.56903559
MAJOR A VS B	1	0.63690075	1.86	0.1772		G	6	0.23570226
						H	6	0.33333333
						I	6	0.73570226
						J	6	0.56903559
						K	6	0.40236893
						L	6	0.52437739

SAS

CODE=6111070299

GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	16.14775574	1.46797779	8.10	0.0001	0.597650	147.6827
ERROR	60	10.87100177	0.18118336		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	27.01875751			0.42565639		10.28822355

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	16.14775574	8.10	0.0001	11	16.14775574	8.10	0.0001

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	1.19624850	6.60	0.0127	MEANS			
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	1.79437275	9.90	0.0026	STA	N	COUNT	
HIGH VS LOW	1	0.00000000	0.00	1.0000				
DISTANCE	1	0.00000000	0.00	1.0000	A	6	0.00000000	
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000	B	6	0.00000000	
SEEP VS NOSEEP	1	0.36577464	2.02	0.1605	C	6	0.23570226	
SEEP VS SEEP	1	5.23204312	28.88	0.0001	D	6	0.50000000	
WEST VS EAST	1	1.96663861	10.85	0.0017	E	6	1.48727803	
FINE SCALE DIFF	1	0.20955989	1.16	0.2865	F	6	0.16666667	
MAJOR A VS B	1	5.38311824	29.71	0.0001	G	6	1.06903559	
					H	6	0.00000000	
					I	6	0.00000000	
					J	6	0.00000000	
					K	6	0.00000000	
					L	6	0.00000000	

SAS
CODE=6111070699
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	10.20166378	0.92742398	2.90	0.0040	0.346821	224.2383	
ERROR	60	19.21312084	0.32021868		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	29.41478462			0.56587868		0.25235599	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	10.20166378	2.90	0.0040	11	10.20166378	2.90	0.0040
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	0.91704308	2.86	0.0958			MEANS	
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	1.37556461	4.30	0.0425		STA	N	COUNT
HIGH VS LOW	1	0.00000000	0.00	1.0000		A	6	0.00000000
DISTANCE	1	0.00000000	0.00	1.0000		B	6	0.00000000
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000		C	6	0.63807119
SEEP VS NOSEEP	1	0.89395017	2.79	0.1000		D	6	0.52437739
SEEP VS SEEP	1	1.86506929	5.82	0.0189		E	6	0.78847306
WEST VS EAST	1	0.98456394	3.07	0.0846		F	6	0.00000000
FINE SCALE DIFF	1	0.03877884	0.12	0.7291		G	6	1.07735027
MAJOR A VS B	1	4.12669384	12.89	0.0007		H	6	0.00000000
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000
						L	6	0.00000000

A-105

SAS
CODE=6111070199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	8.48800565	0.77163688	3.71	0.0005	0.404546	222.8656
ERROR	60	12.49356228	0.20822604		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	20.98156793			0.45631791		10.20475026

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	8.48800565	3.71	0.0005	11	8.48800565	3.71	0.0005

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	0.60368641	2.90	0.0938			MEANS	
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	0.39544552	1.90	0.1733				
HIGH VS LOW	1	0.08333333	0.40	0.5294				
DISTANCE	1	0.00000000	0.00	1.0000				
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000				
SEEP VS NOSEEP	1	1.00108224	4.81	0.0322				
SEEP VS SEEP	1	3.18428696	15.29	0.0002				
WEST VS EAST	1	0.85885875	4.12	0.0467				
FINE SCALE DIFF	1	0.00077403	0.00	0.9516				
MAJOR A VS B	1	2.36053840	11.34	0.0013				

A-106

SAS
CODE=6157010599
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	33.70685126	3.06425921	5.68	0.0001	0.509997	77.9998	
ERROR	60	32.38545260	0.53975754		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	66.09230385			0.73468193		10.94190273	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	33.70685126	5.68	0.0001	11	33.70685126	5.68	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	10.61483634	19.67	0.0001			MEANS	
SILTCLAY VS SANDCLAY	1	0.08333333	0.15	0.6958				
INTER VS DEEP	1	5.91414649	10.96	0.0016		STA	N	COUNT
HIGH VS LOW	1	0.75000000	1.39	0.2431		A	6	0.00000000
DISTANCE	1	0.27941318	0.52	0.4746		B	6	0.16666667
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000		C	6	0.97140452
SEEP VS NOSEEP	1	1.28582416	2.38	0.1280		D	6	1.52437739
SEEP VS SEEP	1	1.25344405	2.32	0.1328		E	6	2.21542146
WEST VS EAST	1	1.77010866	3.28	0.0752		F	6	1.56903559
FINE SCALE DIFF	1	0.91733700	1.70	0.1973		G	6	1.91311811
MAJOR A VS B	1	10.83840804	20.08	0.0001		H	6	0.83333333
						I	6	0.56903559
						J	6	0.56903559
						K	6	0.73570226
						L	6	0.23570226

A-107

SAS
CODE=6157020099
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.	
MODEL	11	18.01878306	1.63807119	5.49	0.0001	0.501717	148.4648	
ERROR	60	17.89543050	0.29825718		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	35.91421356			0.54612927		0.36785113	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	18.01878306	5.49	0.0001	11	18.01878306	5.49	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	0.10000000	0.34	0.5647			MEANS	
SILTCLAY VS SANDCLAY	1	2.44280904	8.19	0.0058				
INTER VS DEEP	1	1.84995791	6.20	0.0155				
HIGH VS LOW	1	0.00000000	0.00	1.0000				
DISTANCE	1	0.00000000	0.00	1.0000	A	6	0.90236893	
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000	B	6	0.00000000	
SEEP VS NOSEEP	1	0.05000000	0.17	0.6837	C	6	0.00000000	
SEEP VS SEEP	1	2.08333333	6.99	0.0105	D	6	1.40236893	
WEST VS EAST	1	0.04289322	0.14	0.7059	E	6	1.06903559	
FINE SCALE DIFF	1	5.89991582	19.78	0.0001	F	6	0.23570226	
MAJOR A VS B	1	5.54987373	18.61	0.0001	G	6	0.80473785	
					H	6	0.00000000	
					I	6	0.00000000	
					J	6	0.00000000	
					K	6	0.00000000	
					L	6	0.00000000	

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SAS
CODE=6157020285
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	11	6.98406686	0.63491517	2.61	0.0088	0.323433	183.0014
ERROR	60	14.60947571	0.24349126		ROOT MSE		COUNT MEAN
CORRECTED TOTAL	71	21.59354257			0.49344834		0.26964186

SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	6.98406686	2.61	0.0088	11	6.98406686	2.61	0.0088

CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	1.04697691	4.30	0.0424	MEANS			
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000	STA	N	COUNT	
INTER VS DEEP	1	0.24428090	1.00	0.3205	A	6	0.00000000	
HIGH VS LOW	1	2.44280904	10.03	0.0024	B	6	0.00000000	
DISTANCE	1	0.25000000	1.03	0.3150	C	6	0.00000000	
FINE SCALE DISTANCE	1	0.08333333	0.34	0.5607	D	6	0.16666667	
SEEP VS NOSEEP	1	2.00555556	8.24	0.0057	E	6	0.83333333	
SEEP VS SEEP	1	0.75000000	3.08	0.0844	F	6	0.33333333	
WEST VS EAST	1	0.02777778	0.11	0.7367	G	6	0.00000000	
FINE SCALE DIFF	1	0.08333333	0.34	0.5607	H	6	0.50000000	
MAJOR A VS B	1	0.05000000	0.21	0.6521	I	6	0.33333333	
					J	6	0.16666667	
					K	6	0.90236893	
					L	6	0.00000000	

SAS
CODE=6156030099
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	81.61973009	7.41997546	17.20	0.0001	0.759185	85.4287	
ERROR	60	25.88991259	0.43149854		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	107.50964268			0.65688549		10.76892872	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	81.61973009	17.20	0.0001	11	81.61973009	17.20	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	8.51401975	19.73	0.0001			MEANS	
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	12.77102962	29.60	0.0001		STA	N	COUNT
HIGH VS LOW	1	0.00000000	0.00	1.0000		A	6	0.00000000
DISTANCE	1	1.00000000	2.32	0.1332		B	6	0.00000000
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000		C	6	0.33333333
SEEP VS NOSEEP	1	0.34740305	0.81	0.3732		D	6	1.69104406
SEEP VS SEEP	1	1.14499487	2.65	0.1086		E	6	1.30473785
WEST VS EAST	1	24.27163221	56.25	0.0001		F	6	1.92252824
FINE SCALE DIFF	1	5.53013527	12.82	0.0007		G	6	3.47550111
MAJOR A VS B	1	28.04051533	64.98	0.0001		H	6	0.50000000
						I	6	0.00000000
						J	6	0.00000000
						K	6	0.00000000
						L	6	0.00000000

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SAS
CODE=6157029699
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	7.75511487	0.70501044	2.56	0.0099	0.319474	150.7288	
ERROR	60	16.51948353	0.27532473		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	24.27459841			0.52471395		0.34811799	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	7.75511487	2.56	0.0099	11	7.75511487	2.56	0.0099
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	0.05824777	0.21	0.6472			MEANS	
SILTCLAY VS SANDCLAY	1	0.97140452	3.53	0.0652				
INTER VS DEEP	1	1.95306121	7.09	0.0099		STA	N	COUNT
HIGH VS LOW	1	0.00000000	0.00	1.0000		A	6	0.00000000
DISTANCE	1	0.11111111	0.40	0.5277		B	6	0.56903559
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000		C	6	0.00000000
SEEP VS NOSEEP	1	0.18046434	0.66	0.4214		D	6	0.16666667
SEEP VS SEEP	1	0.08333333	0.30	0.5843		E	6	0.50000000
WEST VS EAST	1	4.20288478	15.27	0.0002		F	6	0.66666667
FINE SCALE DIFF	1	0.08333333	0.30	0.5843		G	6	1.10838026
MAJOR A VS B	1	0.11127447	0.40	0.5274		H	6	0.50000000
						I	6	0.33333333
						J	6	0.33333333
						K	6	0.00000000
						L	6	0.00000000

A-111

SAS
CODE=6163040199
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	14.24242776	1.29476616	4.54	0.0001	0.454199	127.4546	
ERROR	60	17.11480097	0.28524668		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	31.35722873			0.53408490		0.41903943	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	14.24242776	4.54	0.0001	11	14.24242776	4.54	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	2.52855425	8.86	0.0042			MEANS	
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	2.63987975	9.25	0.0035		STA	N	COUNT
HIGH VS LOW	1	0.08333333	0.29	0.5909				
DISTANCE	1	0.00000000	0.00	1.0000		A	6	0.00000000
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000		B	6	0.00000000
SEEP VS NOSEEP	1	0.43818124	1.54	0.2200		C	6	0.50000000
SEEP VS SEEP	1	0.28944917	1.01	0.3178		D	6	1.44171359
WEST VS EAST	1	0.00000120	0.00	0.9984		E	6	0.56903559
FINE SCALE DIFF	1	2.66047346	9.33	0.0034		F	6	0.87965281
MAJOR A VS B	1	5.60255535	19.64	0.0001		G	6	0.97140452
						H	6	0.16666667
						I	6	0.16666667
						J	6	0.16666667
						K	6	0.16666667
						L	6	0.00000000

A-112

SAS
CODE=6163080198
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	10.06507398	0.91500673	30.96	0.0001	0.850225	135.3241	
ERROR	60	1.77306280	0.02955105		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	11.83813678			0.17190418		10.12703145	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	10.06507398	30.96	0.0001	11	10.06507398	30.96	0.0001
CONTRAST	DF	SS	F VALUE	PR > F				GENERAL LINEAR MODELS PROCEDURE
SHELF VS SLOPE	1	0.23237264	7.86	0.0068				MEANS
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	5.57694346	188.72	0.0001		STA	N	COUNT
HIGH VS LOW	1	4.25575787	144.01	0.0001		A	6	0.00000000
DISTANCE	1	0.00000000	0.00	1.0000		B	6	0.00000000
FINE SCALE DISTANCE	1	0.00000000	0.00	1.0000		C	6	0.00000000
SEEP VS NOSEEP	1	0.00000000	0.00	1.0000		D	6	0.00000000
SEEP VS SEEP	1	0.00000000	0.00	1.0000		E	6	0.00000000
WEST VS EAST	1	0.00000000	0.00	1.0000		F	6	0.00000000
FINE SCALE DIFF	1	0.00000000	0.00	1.0000		G	6	0.00000000
MAJOR A VS B	1	0.00000000	0.00	1.0000		H	6	0.00000000
						I	6	0.00000000
						J	6	0.00000000
						K	6	1.35771073
						L	6	0.16666667

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SAS
CODE=7804030197
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C. V.	
MODEL	11	83.18566297	7.56233300	3.28	0.0014	0.375665	144.3995	
ERROR	60	138.25038079	2.30417301		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	221.43604376			1.51795027		1.05121594	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	83.18566297	3.28	0.0014	11	83.18566297	3.28	0.0014
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	17.94969074	7.79	0.0070			MEANS	
SILTCLAY VS SANDCLAY	1	31.81796190	13.81	0.0004				
INTER VS DEEP	1	8.31618077	3.61	0.0628		STA	N	COUNT
HIGH VS LOW	1	0.08333333	0.04	0.8493				
DISTANCE	1	0.01237789	0.01	0.9418		A	6	0.53934466
FINE SCALE DISTANCE	1	0.28513811	0.12	0.7262		B	6	3.79602814
SEEP VS NOSEEP	1	22.59607954	9.81	0.0027		C	6	0.50000000
SEEP VS SEEP	1	1.08396742	0.47	0.4954		D	6	0.23570226
WEST VS EAST	1	0.54125782	0.23	0.6297		E	6	1.71622085
FINE SCALE DIFF	1	0.20955989	0.09	0.7640		F	6	2.31732191
MAJOR A VS B	1	0.29011557	0.13	0.7240		G	6	0.00000000
						H	6	1.07735027
						I	6	0.97883056
						J	6	1.28712593
						K	6	0.00000000
						L	6	0.16666667

A-114

SAS
CODE=6169400599
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	9.01702951	0.81972996	3.22	0.0017	0.371327	130.7448	
ERROR	60	15.26621028	0.25443684		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	24.28323980			0.50441733		0.38580292	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	9.01702951	3.22	0.0017	11	9.01702951	3.22	0.0017
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	2.14335204	8.42	0.0052			MEANS	
SILTCLAY VS SANDCLAY	1	0.00000000	0.00	1.0000				
INTER VS DEEP	1	1.02792397	4.04	0.0489		STA	N	COUNT
HIGH VS LOW	1	0.01429774	0.06	0.8134		A	6	0.00000000
DISTANCE	1	0.03339003	0.13	0.7184		B	6	0.00000000
FINE SCALE DISTANCE	1	1.73316325	6.81	0.0114		C	6	0.16666667
SEEP VS NOSEEP	1	0.92139445	3.62	0.0618		D	6	0.95534180
SEEP VS SEEP	1	0.97140452	3.82	0.0554		E	6	0.56903559
WEST VS EAST	1	0.23762431	0.93	0.3377		F	6	0.00000000
FINE SCALE DIFF	1	1.86602540	7.33	0.0088		G	6	0.80473785
MAJOR A VS B	1	0.06845379	0.27	0.6059		H	6	0.63807119
						I	6	0.16666667
						J	6	0.92674632
						K	6	0.23570226
						L	6	0.16666667

A-115

SAS
CODE=4303999997
GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: COUNT

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.	
MODEL	11	9.47675563	0.86152324	4.62	0.0001	0.458502	135.3520	
ERROR	60	11.19218257	0.18653638		ROOT MSE		COUNT MEAN	
CORRECTED TOTAL	71	20.66893820			0.43189857		0.31909294	
SOURCE	DF	TYPE I SS	F VALUE	PR > F	DF	TYPE III SS	F VALUE	PR > F
STA	11	9.47675563	4.62	0.0001	11	9.47675563	4.62	0.0001
CONTRAST	DF	SS	F VALUE	PR > F	GENERAL LINEAR MODELS PROCEDURE			
SHELF VS SLOPE	1	2.82720748	15.16	0.0003				MEANS
SILTCLAY VS SANDCLAY	1	4.25575787	22.81	0.0001				
INTER VS DEEP	1	0.01286797	0.07	0.7937		STA	N	COUNT
HIGH VS LOW	1	0.48570226	2.60	0.1119				
DISTANCE	1	0.64760301	3.47	0.0673		A	6	0.16666667
FINE SCALE DISTANCE	1	0.33333333	1.79	0.1863		B	6	1.35771073
SEEP VS NOSEEP	1	0.27222222	1.46	0.2318		C	6	0.16666667
SEEP VS SEEP	1	0.08333333	0.45	0.5065		D	6	0.16666667
WEST VS EAST	1	0.44444444	2.38	0.1280		E	6	0.00000000
FINE SCALE DIFF	1	0.00000000	0.00	1.0000		F	6	0.16666667
MAJOR A VS B	1	0.11428371	0.61	0.4369		G	6	0.50000000
						H	6	0.56903559
						I	6	0.33333333
						J	6	0.00000000
						K	6	0.00000000
						L	6	0.40236893

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**APPENDIX B
CORRELATION**

B-1

Simple Statistics for Response Variables

B-2

SAS

VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
PL1ALK	59	97.47966102	79.12441486	5751.30000000	6.90000000	425.20000000
PELOALK	59	82.54745763	67.76365966	4870.30000000	11.00000000	324.70000000
PEHIALK	59	166.79152542	218.29349216	9840.70000000	14.40000000	1374.80000000
TERRI	59	473.50677966	512.17724467	27936.90000000	23.40000000	3068.30000000
TOTEOM	59	18.40847458	15.87951715	1086.10000000	4.00000000	94.20000000
ALUMC	59	9.91016949	12.75156103	584.70000000	0.50000000	81.40000000
CPI	59	12.74406780	15.04848854	751.90000000	1.16000000	45.30000000
SAND	59	12.48644068	10.02184610	736.70000000	0.60000000	37.10000000
SILT	59	23.02372881	4.90229851	1358.40000000	15.70000000	38.10000000
CLAY	59	64.49152542	11.56210052	3805.00000000	31.90000000	81.30000000
ORCAR	59	0.74474576	0.20926271	43.94000000	0.17000000	1.26000000
CACO	59	38.61016949	19.47534865	2278.00000000	8.00000000	80.00000000
DELC13	59	-20.94406780	1.19802585	-1235.70000000	-25.20000000	-17.50000000
BOTTEM	59	6.56694915	2.29275414	387.45000000	4.22000000	11.63000000
BOTSAL	59	34.99830508	0.18087605	2064.90000000	34.24600000	35.43100000
BOTDO	59	3.86084746	1.11050360	227.79000000	2.63000000	8.08000000
BOTTRAN	59	4.26491525	0.12596350	251.63000000	4.08000000	4.47000000
BOTPOC	59	18.47457627	8.07797331	1090.00000000	4.00000000	41.00000000
BOTDOC	43	0.83279070	0.23301671	35.81000000	0.55000000	1.41000000
SURTRAN	59	4.13101695	0.14548012	243.73000000	3.96000000	4.43000000
SURPOC	59	39.59322034	12.72943730	2336.00000000	17.00000000	83.00000000
SURDOC	43	1.22279070	0.26412773	52.58000000	0.83000000	2.62000000
SP1	59	6.35593220	8.20589089	375.00000000	0.00000000	38.00000000
SP2	59	5.84745763	7.62214007	345.00000000	0.00000000	42.00000000
SP3	59	5.86440678	14.22171437	346.00000000	0.00000000	63.00000000
SP4	59	5.88135593	10.18634100	347.00000000	0.00000000	42.00000000
SP5	59	6.13559322	13.21631388	362.00000000	0.00000000	56.00000000
SP6	59	7.35593220	12.12401821	434.00000000	0.00000000	49.00000000
SP7	59	6.83050847	9.21982972	403.00000000	0.00000000	42.00000000
SP8	59	6.25423729	20.35850514	369.00000000	0.00000000	102.00000000
SP9	59	6.57627119	13.91749506	388.00000000	0.00000000	88.00000000
SP10	59	6.91525424	11.34002392	408.00000000	0.00000000	39.00000000
SP11	59	7.32203390	8.55497572	432.00000000	0.00000000	35.00000000
SP12	59	7.30508475	7.62765892	431.00000000	0.00000000	35.00000000
SP13	59	7.47457627	9.82143316	441.00000000	0.00000000	42.00000000
SP14	59	7.64406780	8.66376264	451.00000000	0.00000000	28.00000000
SP15	59	6.81355932	27.47379603	402.00000000	0.00000000	172.00000000
SP16	59	7.40677966	12.84807599	437.00000000	0.00000000	81.00000000
SP17	59	7.79661017	15.23469233	460.00000000	0.00000000	56.00000000
SP18	59	8.33898305	7.50082793	492.00000000	0.00000000	32.00000000
SP19	59	8.96610169	12.37205709	529.00000000	0.00000000	67.00000000
SP20	59	8.66101695	20.18416089	511.00000000	0.00000000	144.00000000
SP21	59	9.05084746	10.15470628	534.00000000	0.00000000	35.00000000
SP22	59	7.54237288	52.92914002	445.00000000	0.00000000	407.00000000
SP23	59	10.49152542	25.59591352	619.00000000	0.00000000	164.00000000
SP24	59	9.27118644	23.02609502	547.00000000	0.00000000	116.00000000
SP25	59	10.18644068	17.83398014	601.00000000	0.00000000	81.00000000
SP26	59	11.08474576	13.46039931	654.00000000	0.00000000	80.00000000
SP27	59	10.37288136	19.80238431	612.00000000	0.00000000	103.00000000
SP28	59	10.74576271	12.67850913	634.00000000	0.00000000	49.00000000
SP29	59	11.66101695	16.22642605	688.00000000	0.00000000	63.00000000
SP30	59	11.45762712	14.41182708	676.00000000	0.00000000	73.00000000
SP31	59	12.69491525	12.44193997	749.00000000	0.00000000	49.00000000
SP32	59	11.84745763	20.51728755	699.00000000	0.00000000	74.00000000
SP33	59	12.27118644	26.07669756	724.00000000	0.00000000	116.00000000

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VARIABLE	N	MEAN	STD DEV	SUM	MINIMUM	MAXIMUM
SP34	59	13.28813559	13.65845809	784.00000000	0.00000000	56.00000000
SP35	59	13.10169492	19.83352692	773.00000000	0.00000000	84.00000000
SP36	59	14.08474576	15.88350710	831.00000000	0.00000000	84.00000000
SP37	59	13.57627119	17.55700409	801.00000000	0.00000000	63.00000000
SP38	59	15.25423729	14.34740541	900.00000000	0.00000000	56.00000000
SP39	59	14.62711864	13.92702447	863.00000000	0.00000000	62.00000000
SP40	59	14.57627119	49.03876137	860.00000000	0.00000000	368.00000000
SP41	59	15.08474576	17.16581219	890.00000000	0.00000000	60.00000000
SP42	59	16.27118644	18.57773093	960.00000000	0.00000000	84.00000000
SP43	59	19.27118644	43.48714852	1137.00000000	0.00000000	239.00000000
SP44	59	18.08474576	16.41623265	1067.00000000	0.00000000	153.00000000
SP45	59	18.32203390	26.06255120	1081.00000000	0.00000000	133.00000000
SP46	59	18.33898305	16.42497065	1082.00000000	0.00000000	63.00000000
SP47	59	17.55932203	28.77754823	1036.00000000	0.00000000	130.00000000
SP48	59	18.67796610	16.76145072	1102.00000000	0.00000000	67.00000000
SP49	59	19.72881356	26.95003711	1164.00000000	0.00000000	109.00000000
SP50	59	19.74576271	46.85987668	1165.00000000	0.00000000	235.00000000
SP51	59	23.57627119	20.70415866	1391.00000000	0.00000000	77.00000000
SP52	59	23.33898305	48.45104539	1377.00000000	0.00000000	236.00000000
SP53	59	22.96610169	74.84304637	1355.00000000	0.00000000	383.00000000
SP54	59	25.98305085	35.41891737	1533.00000000	0.00000000	140.00000000
SP55	59	26.10169492	32.26917763	1540.00000000	0.00000000	202.00000000
SP56	59	30.64406780	24.33300775	1808.00000000	0.00000000	93.00000000
SP57	59	33.18644068	26.92548759	1958.00000000	0.00000000	122.00000000
SP58	59	35.67796610	46.92049059	2105.00000000	0.00000000	270.00000000
SP59	59	79.83050847	74.97198386	4710.00000000	0.00000000	358.00000000
SP60	59	83.30508475	170.25936141	4915.00000000	0.00000000	912.00000000
SP61	59	105.44067797	223.96361090	6221.00000000	0.00000000	1140.00000000

B-2
Correlation Matrix

SAS

PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

	PL1ALK	PELOALK	PEHIALK	TERRI	TOTEOM	ALUMC	CPI	SAND	SILT	CLAY	ORCAR	CACO	DELC13
PL1ALK	1.00000 0.0000 59	0.96930 0.0001 59	0.69736 0.0001 59	0.65160 0.0001 59	0.36373 0.0046 59	0.48402 0.0001 59	0.25873 0.0479 59	-0.06047 0.6491 59	0.23488 0.0733 59	-0.04719 0.7227 59	0.11244 0.3965 59	-0.32189 0.0129 59	-0.32737 0.0114 59
PELOALK	0.96930 0.0001 59	1.00000 0.0000 59	0.69217 0.0001 59	0.69484 0.0001 59	0.29763 0.0221 59	0.47096 0.0002 59	0.31023 0.0168 59	-0.09949 0.4534 59	0.18660 0.1570 59	0.00709 0.9575 59	0.08207 0.5366 59	-0.34297 0.0078 59	-0.33250 0.0101 59
PEHIALK	0.69736 0.0001 59	0.69217 0.0001 59	1.00000 0.0000 59	0.82769 0.0001 59	0.31154 0.0163 59	0.53516 0.0001 59	0.07705 0.5619 59	-0.26675 0.0411 59	0.23872 0.0686 59	0.12995 0.3266 59	0.07029 0.5968 59	-0.35266 0.0062 59	-0.43833 0.0005 59
TERRI	0.65160 0.0001 59	0.69484 0.0001 59	0.82769 0.0001 59	1.00000 0.0000 59	0.24503 0.0614 59	0.72924 0.0001 59	0.36389 0.0046 59	-0.27734 0.0335 59	0.01751 0.8953 59	0.23290 0.0759 59	-0.06567 0.6212 59	-0.35944 0.0052 59	-0.39032 0.0022 59
TOTEOM	0.36373 0.0046 59	0.29763 0.0221 59	0.31154 0.0163 59	0.24503 0.0614 59	1.00000 0.0000 59	0.54800 0.0001 59	0.07850 0.5545 59	-0.19679 0.1352 59	-0.12593 0.3419 59	0.22398 0.0881 59	0.15152 0.2520 59	-0.44230 0.0005 59	-0.40916 0.0013 59
B-6 ALUMC	0.48402 0.0001 59	0.47096 0.0002 59	0.53516 0.0001 59	0.72924 0.0001 59	0.54800 0.0001 59	1.00000 0.0000 59	0.09436 0.4771 59	-0.15815 0.2316 59	-0.08998 0.4980 59	0.17523 0.1844 59	0.01500 0.9102 59	-0.26145 0.0455 59	-0.27454 0.0354 59
CPI	0.25873 0.0479 59	0.31023 0.0168 59	0.07705 0.5619 59	0.36389 0.0046 59	0.07850 0.5545 59	0.09436 0.4771 59	1.00000 0.0000 59	0.21990 0.0942 59	-0.31304 0.0158 59	-0.05798 0.6627 59	-0.55091 0.0001 59	0.08334 0.5303 59	-0.14145 0.2852 59
SAND	-0.06047 0.6491 59	-0.09949 0.4534 59	-0.26675 0.0411 59	-0.27734 0.0335 59	-0.19679 0.1352 59	-0.15815 0.2316 59	0.21990 0.0942 59	1.00000 0.0000 59	0.09338 0.4818 59	-0.90655 0.0001 59	-0.52629 0.0001 59	0.75406 0.0001 59	0.29324 0.0242 59
SILT	0.23488 0.0733 59	0.18660 0.1570 59	0.23872 0.0686 59	0.01751 0.8953 59	-0.12593 0.3419 59	-0.08998 0.4980 59	-0.31304 0.0158 59	0.09338 0.4818 59	1.00000 0.0000 59	-0.50490 0.0001 59	0.25671 0.0497 59	0.12749 0.3359 59	0.11517 0.3851 59
CLAY	-0.04719 0.7227 59	0.00709 0.9575 59	0.12995 0.3266 59	0.23290 0.0759 59	0.22398 0.0881 59	0.17523 0.1844 59	-0.05798 0.6627 59	-0.90655 0.0001 59	-0.50490 0.0001 59	1.00000 0.0000 59	0.34751 0.0070 59	-0.70787 0.0001 59	-0.30319 0.0196 59
ORCAR	0.11244 0.3965 59	0.08207 0.5366 59	0.07029 0.5968 59	-0.06567 0.6212 59	0.15152 0.2520 59	0.01500 0.9102 59	-0.55091 0.0001 59	-0.52629 0.0001 59	0.25671 0.0497 59	0.34751 0.0070 59	1.00000 0.0000 59	-0.57357 0.0001 59	-0.08175 0.5382 59
CACO	-0.32189 0.0129 59	-0.34297 0.0078 59	-0.35266 0.0062 59	-0.35944 0.0052 59	-0.44230 0.0005 59	-0.26145 0.0455 59	0.08334 0.5303 59	0.75406 0.0001 59	0.12749 0.3359 59	-0.70787 0.0001 59	-0.57357 0.0001 59	1.00000 0.0000 59	0.57082 0.0001 59
DELC13	-0.32737 0.0114 59	-0.33250 0.0101 59	-0.43833 0.0005 59	-0.39032 0.0022 59	-0.40916 0.0013 59	-0.27454 0.0354 59	-0.14145 0.2852 59	-0.29324 0.0242 59	0.11517 0.3851 59	-0.30319 0.0196 59	-0.08175 0.5382 59	0.57082 0.0001 59	1.00000 0.0000 59

SAS

PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

	PL1ALK	PELOALK	PEHTALK	TERRI	TOTEOM	ALUMC	CPI	SAND	SILT	CLAY	ORCAR	CACO	DELC13
BOTTEM	-0.11218 0.3976 59	-0.13010 0.3260 59	-0.28486 0.0288 59	-0.30022 0.0209 59	0.20850 0.1130 59	-0.01072 0.9358 59	-0.10340 0.4358 59	0.19861 0.1316 59	0.07990 0.5475 59	-0.20585 0.1178 59	0.23260 0.0763 59	-0.01095 0.9344 59	0.09336 0.4819 59
BOTSAL	0.06222 0.6397 59	0.08231 0.5354 59	0.01002 0.9399 59	-0.01605 0.9040 59	0.32729 0.0114 59	0.16259 0.2186 59	-0.16913 0.2003 59	-0.09469 0.4756 59	-0.03062 0.8179 59	0.09518 0.4733 59	0.19063 0.1481 59	-0.28217 0.0304 59	-0.14437 0.2753 59
BOTDO	0.01181 0.9293 59	0.01630 0.9025 59	0.15357 0.2455 59	0.08590 0.5177 59	-0.22173 0.0914 59	-0.16647 0.2076 59	0.05863 0.6591 59	-0.02310 0.8621 59	0.02280 0.8639 59	0.01022 0.9388 59	-0.21442 0.1029 59	0.08845 0.5053 59	-0.03159 0.8122 59
BOTTRAN	0.17611 0.1821 59	0.19276 0.1436 59	0.06780 0.6099 59	0.31456 0.0152 59	-0.01255 0.9249 59	0.06159 0.6431 59	0.88313 0.0001 59	0.32328 0.0125 59	-0.35906 0.0052 59	-0.12817 0.3333 59	-0.62117 0.0001 59	0.23000 0.0797 59	-0.03167 0.8118 59
BOTPOC	-0.12614 0.3411 59	-0.14700 0.2665 59	-0.02223 0.8673 59	-0.11819 0.3726 59	0.13677 0.3016 59	0.07455 0.5747 59	-0.06113 0.6456 59	0.19674 0.1353 59	-0.07439 0.5755 59	-0.13924 0.2929 59	-0.27011 0.0385 59	0.25489 0.0514 59	-0.06835 0.6070 59
BOTDOC	0.07568 0.6296 43	0.11079 0.4794 43	0.12957 0.4076 43	0.10370 0.5081 43	-0.07927 0.6134 43	-0.00715 0.9637 43	0.12674 0.4180 43	-0.16993 0.2760 43	-0.05903 0.7069 43	0.18437 0.2366 43	0.11204 0.4744 43	-0.10031 0.5221 43	-0.24824 0.1085 43
SURTRAN	0.21172 0.1075 59	0.23008 0.0796 59	0.12220 0.3565 59	0.32004 0.0135 59	0.03953 0.7663 59	0.08325 0.5307 59	0.86883 0.0001 59	0.35881 0.0053 59	-0.24370 0.0629 59	-0.20781 0.1143 59	-0.62546 0.0001 59	0.17858 0.1760 59	-0.17206 0.1925 59
SURPOC	-0.09227 0.4870 59	-0.10950 0.4090 59	-0.11138 0.4010 59	-0.08423 0.5259 59	0.20505 0.1193 59	0.04804 0.7179 59	0.06461 0.6269 59	-0.00668 0.9600 59	-0.07687 0.5628 59	0.03822 0.7738 59	-0.04004 0.7633 59	0.02557 0.8476 59	0.04651 0.7265 59
SURDOC	-0.12978 0.4068 43	-0.13071 0.4035 43	-0.06840 0.6630 43	-0.16928 0.2778 43	0.07010 0.6551 43	-0.03078 0.8447 43	-0.39615 0.0085 43	-0.35309 0.0202 43	-0.03402 0.8286 43	0.34392 0.0239 43	0.40688 0.0068 43	-0.34064 0.0254 43	-0.11721 0.4541 43
SP1	-0.05830 0.6610 59	-0.01712 0.8976 59	-0.12149 0.3593 59	-0.01588 0.9050 59	-0.18358 0.1640 59	-0.23543 0.0727 59	0.24316 0.0635 59	0.00182 0.9891 59	0.05542 0.6768 59	-0.02519 0.8498 59	0.02239 0.8663 59	-0.07282 0.5836 59	-0.01048 0.9372 59
SP2	-0.15390 0.2445 59	-0.16660 0.2073 59	-0.17583 0.1828 59	-0.23788 0.0696 59	0.00542 0.9675 59	-0.10594 0.4245 59	-0.19315 0.1427 59	0.12377 0.3503 59	-0.09242 0.4863 59	-0.06814 0.6081 59	-0.08061 0.5439 59	0.09825 0.4591 59	0.23678 0.0710 59
SP3	0.36730 0.0042 59	0.40645 0.0014 59	0.28066 0.0313 59	0.43779 0.0005 59	0.01153 0.9310 59	0.28486 0.0288 59	0.19531 0.1382 59	-0.08957 0.4999 59	0.14585 0.2703 59	0.01573 0.9059 59	-0.06953 0.6008 59	-0.10058 0.4485 59	-0.08789 0.5080 59
SP4	-0.28692 0.0276 59	-0.30414 0.0191 59	-0.28753 0.0272 59	-0.35887 0.0053 59	-0.12921 0.3294 59	-0.23193 0.0771 59	-0.30748 0.0178 59	0.06133 0.6445 59	0.02802 0.8331 59	-0.06512 0.6241 59	0.10518 0.4279 59	0.30889 0.4279 59	0.28792 0.0270 59

SAS

PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO: RHO=0 / NUMBER OF OBSERVATIONS

	PL1ALK	PELOALK	PEHIALK	TERRI	TOTEOM	ALUMC	CPI	SAND	SILT	CLAY	ORCAR	CACO	DELC13	
SP5	0.16761 0.2045 59	0.23917 0.0681 59	-0.00940 0.9437 59	-0.02302 0.8626 59	-0.01269 0.9240 59	-0.06841 0.6067 59	0.04096 0.7581 59	-0.07306 0.5824 59	-0.05298 0.6902 59	0.08572 0.5186 59	0.09758 0.4622 59	-0.12675 0.3388 59	-0.09490 0.4746 59	
SP6	-0.20530 0.1188 59	-0.21400 0.1036 59	-0.20985 0.1107 59	-0.26518 0.0424 59	-0.23931 0.0679 59	-0.22861 0.0816 59	0.03072 0.8173 59	0.52695 0.0001 59	0.35057 0.0065 59	-0.60548 0.0001 59	-0.20910 0.1120 59	0.49906 0.0001 59	0.38676 0.0025 59	
SP7	-0.05363 0.6867 59	-0.00039 0.9977 59	-0.17391 0.1877 59	-0.14460 0.2745 59	-0.12157 0.3590 59	-0.15202 0.2504 59	0.01399 0.9162 59	0.27324 0.0363 59	0.14291 0.2802 59	-0.29755 0.0221 59	-0.10404 0.4329 59	0.16952 0.1993 59	0.07798 0.5572 59	
SP8	0.10442 0.4312 59	0.11463 0.3873 59	-0.00433 0.9740 59	0.10595 0.4245 59	0.04257 0.7489 59	0.02236 0.8665 59	0.12748 0.3360 59	-0.03307 0.8037 59	0.00098 0.9942 59	0.02820 0.8321 59	-0.10377 0.4341 59	-0.07162 0.5899 59	-0.06471 0.6263 59	
SP9	0.54596 0.0001 59	0.53130 0.0001 59	0.68884 0.0001 59	0.41685 0.0010 59	0.13117 0.3220 59	0.06884 0.6044 59	0.06421 0.6290 59	-0.16798 0.2035 59	0.30986 0.0169 59	0.01415 0.9153 59	-0.03547 0.7897 59	-0.19215 0.1448 59	-0.19523 0.1384 59	
B _∞	SP10	-0.12259 0.3550 59	-0.11295 0.3944 59	-0.12400 0.3194 59	-0.08773 0.5088 59	-0.15244 0.2491 59	-0.07872 0.5534 59	-0.11440 0.3883 59	0.00010 0.9994 59	0.02026 0.8790 59	-0.00876 0.9475 59	-0.02133 0.8726 59	0.10066 0.4481 59	0.35621 0.0056 59
SP11	-0.10533 0.4272 59	-0.07426 0.5762 59	-0.23194 0.0771 59	-0.21159 0.1077 59	-0.16370 0.2154 59	-0.17655 0.1810 59	-0.08241 0.5349 59	0.08510 0.5216 59	0.16570 0.2098 59	-0.14414 0.2761 59	0.30655 0.0182 59	0.07484 0.5732 59	0.12337 0.3519 59	
SP12	-0.20102 0.1268 59	-0.18015 0.1721 59	-0.21386 0.1039 59	-0.20789 0.1141 59	-0.21148 0.1079 59	-0.19555 0.1377 59	-0.24116 0.0658 59	-0.11935 0.3679 59	-0.19187 0.1454 59	0.18474 0.1613 59	0.08819 0.5066 59	-0.00504 0.9698 59	-0.03397 0.7984 59	
SP13	-0.42035 0.0009 59	-0.43823 0.0005 59	-0.31628 0.0147 59	-0.36346 0.0047 59	-0.21969 0.0946 59	-0.24232 0.0644 59	-0.29766 0.0220 59	0.14666 0.2677 59	0.04531 0.7333 59	-0.14645 0.2684 59	0.03311 0.8034 59	0.36405 0.0046 59	0.52434 0.0001 59	
SP14	-0.13008 0.3261 59	-0.10398 0.4332 59	-0.23745 0.0702 59	-0.27692 0.0337 59	-0.13337 0.3139 59	-0.17399 0.1875 59	-0.06361 0.6322 59	0.17234 0.1918 59	-0.13360 0.3131 59	-0.09287 0.4842 59	-0.16177 0.2209 59	0.23827 0.0692 59	-0.01233 0.9261 59	
SP15	0.08603 0.5171 59	0.09805 0.4600 59	0.02197 0.8688 59	0.15335 0.2462 59	0.14258 0.2814 59	0.04680 0.7249 59	0.23135 0.0779 59	-0.26224 0.0448 59	-0.11765 0.3748 59	0.27748 0.0334 59	0.26574 0.0419 59	-0.32943 0.0108 59	-0.16075 0.2239 59	
SP16	-0.03322 0.8027 59	-0.01240 0.9257 59	-0.13603 0.3043 59	-0.17072 0.1961 59	-0.03507 0.7920 59	-0.14059 0.2882 59	-0.13680 0.3015 59	-0.05977 0.6529 59	-0.06996 0.5985 59	0.08138 0.5400 59	0.15055 0.2551 59	-0.04089 0.7585 59	0.02628 0.8434 59	
SP17	-0.19301 0.1430 59	-0.20616 0.1167 59	-0.26172 0.0452 59	-0.34141 0.0081 59	-0.21828 0.0967 59	-0.25095 0.0552 59	-0.30154 0.0203 59	0.17586 -0.1828 59	0.07433 0.5758 59	-0.18403 0.1629 59	0.10306 0.4373 59	0.31546 0.0149 59	0.16840 0.2023 59	

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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

	PL1ALK	PELDAALK	PEHIALK	TERRI	TOTECOM	ALUMC	CPI	SAND	SILT	CLAY	ORCAR	CACO	DELC13	
SP18	-0.19518 0.1385 59	-0.15278 0.2480 59	-0.24580 0.0606 59	-0.26869 0.0396 59	-0.18489 0.1610 59	-0.16411 0.2142 59	-0.09319 0.4827 59	0.33802 0.0088 59	0.03311 0.8034 59	-0.30720 0.0179 59	-0.18624 0.1579 59	0.36553 0.0044 59	0.16823 0.2028 59	
SP19	0.06325 0.6341 59	0.09065 0.4947 59	-0.02513 0.8501 59	0.01424 0.9148 59	0.06287 0.6362 59	0.07757 0.5592 59	0.00539 0.9677 59	0.09974 0.4523 59	-0.02856 0.8300 59	-0.07440 0.5754 59	0.08044 0.5447 59	-0.15236 0.2493 59	0.05550 0.6763 59	
SP20	-0.02161 0.8709 59	0.07903 0.5519 59	0.04552 0.7321 59	-0.06674 0.6155 59	-0.09955 0.4532 59	-0.11112 0.4021 59	-0.11552 0.3836 59	-0.18076 0.1707 59	-0.11727 0.3764 59	0.20634 0.1169 59	0.10272 0.4388 59	-0.11494 0.3860 59	-0.07999 0.5470 59	
SP21	-0.24414 0.0624 59	-0.22260 0.0902 59	-0.24798 0.0583 59	-0.21910 0.0955 59	-0.23823 0.0692 59	-0.24178 0.0651 59	-0.09855 0.4577 59	-0.03491 0.7929 59	-0.07851 0.5545 59	0.06341 0.6333 59	0.02212 0.8680 59	0.19944 0.1299 59	0.31368 0.0156 59	
SP22	0.01348 0.9193 59	0.02939 0.8251 59	0.06776 0.6101 59	0.15183 0.2510 59	0.35290 0.0061 59	0.20901 0.1121 59	0.16279 0.2180 59	-0.13589 0.3048 59	-0.18629 0.1577 59	0.19675 0.1353 59	0.02451 0.8538 59	-0.13377 0.3124 59	-0.07705 0.5619 59	
B-9	SP23	0.13703 0.3007 59	0.22919 0.0808 59	-0.01972 0.8822 59	0.10881 0.4120 59	-0.07183 0.5888 59	-0.08175 0.5382 59	0.29699 0.0224 59	-0.03636 0.7846 59	0.00959 0.9425 59	0.02738 0.8369 59	0.10353 0.4352 59	-0.14645 0.2684 59	-0.03043 0.8190 59
SP24	0.13942 0.2923 59	0.15195 0.2506 59	-0.06507 0.6244 59	-0.03550 0.7895 59	0.27131 0.0377 59	0.10491 0.4291 59	0.07253 0.5851 59	-0.14297 0.2800 59	-0.20624 0.1171 59	0.21131 0.1081 59	0.09845 0.4582 59	-0.19272 0.1436 59	-0.13931 0.2927 59	
SP25	-0.15030 0.2559 59	-0.16358 0.2157 59	-0.25655 0.0498 59	-0.32665 0.0116 59	-0.07513 0.5717 59	-0.17571 0.1831 59	-0.24112 0.0658 59	0.08504 0.5219 59	-0.05665 0.6700 59	-0.04978 0.7081 59	0.18243 0.1667 59	0.07829 0.5556 59	0.24410 0.0624 59	
SP26	-0.02433 0.8549 59	0.04760 0.7203 59	-0.12146 0.3595 59	0.04326 0.7449 59	-0.11015 0.4063 59	-0.08930 0.5012 59	0.27516 0.0349 59	-0.04714 0.7229 59	-0.08281 0.5330 59	0.07585 0.5680 59	-0.02720 0.8380 59	-0.02121 0.8733 59	0.20798 0.1140 59	
SP27	0.04659 0.7260 59	0.09167 0.4899 59	0.03211 0.8092 59	0.15934 0.2280 59	0.00765 0.9541 59	0.10811 0.4150 59	0.31628 0.0147 59	-0.21000 0.1104 59	-0.28724 0.0274 59	0.30380 0.0193 59	-0.15093 0.2539 59	-0.16268 0.2183 59	-0.12938 0.3287 59	
SP28	-0.19255 0.1440 59	-0.14924 0.2592 59	-0.11676 0.3785 59	-0.06257 0.6378 59	-0.24542 0.0610 59	-0.03252 0.8068 59	-0.03660 0.7831 59	0.10021 0.4502 59	0.12973 0.3274 59	-0.14199 0.2834 59	-0.12483 0.3462 59	0.30674 0.0181 59	0.35045 0.0065 59	
SP29	-0.29090 0.0254 59	-0.27968 0.0319 59	-0.28229 0.0303 59	-0.29838 0.0217 59	-0.23469 0.0736 59	-0.24724 0.0590 59	-0.06953 0.6008 59	0.21469 0.1025 59	0.09038 0.4960 59	-0.22452 0.0873 59	-0.07822 0.5559 59	0.32574 0.0118 59	0.18618 0.1580 59	
SP30	0.05852 0.6597 59	0.12759 0.3356 59	0.05855 0.6596 59	0.22616 0.0850 59	0.20341 0.1223 59	0.28586 0.0282 59	0.14222 0.2826 59	-0.22109 0.924 59	-0.15851 0.2305 59	0.25873 0.0479 59	0.08862 0.5045 59	-0.24962 0.0566 59	0.01008 0.9396 59	

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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

	PL1ALK	PEI0ALK	PEH1ALK	TERRI	TOTECOM	ALUMC	CPI	SAND	SILT	CLAY	ORCAR	CACO	DELC13
B-10	SP31	0.04368 0.7425 59	0.08460 0.5241 59	-0.13429 0.3106 59	-0.00682 0.9591 59	-0.13864 0.2950 59	-0.01899 0.8865 59	0.05515 0.6783 59	0.14728 0.2656 59	0.08317 0.5311 59	-0.16298 0.2174 59	-0.07353 0.5799 59	0.19300 0.1431 59
	SP32	-0.33503 0.0095 59	-0.32814 0.0112 59	-0.31330 0.0157 59	-0.38603 0.0025 59	-0.36872 0.0041 59	-0.33360 0.0098 59	-0.32850 0.0111 59	0.29948 0.0212 59	0.22027 0.0937 59	-0.35306 0.0061 59	-0.06444 0.6278 59	0.49895 0.0001 59
	SP33	-0.06353 0.6326 59	-0.04084 0.7588 59	-0.18063 0.1710 59	-0.18295 0.1655 59	-0.14753 0.2648 59	-0.18224 0.1671 59	-0.06297 0.6357 59	0.07367 0.5792 59	-0.09449 0.4766 59	-0.02386 0.8576 59	0.07297 0.5829 59	0.17506 0.1848 59
	SP34	-0.40331 0.0015 59	-0.39200 0.0021 59	-0.32379 0.0124 59	-0.34190 0.0080 59	-0.23375 0.0748 59	-0.27709 0.0336 59	-0.22275 0.0899 59	0.04527 0.7335 59	0.17780 0.1779 59	-0.11477 0.3867 59	0.01061 0.9364 59	0.27171 0.0374 59
	SP35	-0.04996 0.7071 59	0.03854 0.7719 59	-0.08946 0.5005 59	-0.09276 0.4847 59	-0.07705 0.5619 59	-0.13633 0.3032 59	0.02730 0.8374 59	-0.25898 0.0476 59	-0.22833 0.0820 59	0.32123 0.0131 59	0.19093 0.1475 59	-0.21123 0.1083 59
	SP36	-0.20109 0.1267 59	-0.16086 0.2236 59	-0.32091 0.0132 59	-0.35283 0.0061 59	-0.21320 0.1050 59	-0.26973 0.0388 59	-0.14676 0.2674 59	0.35286 0.0061 59	0.42192 0.0009 59	-0.48480 0.0001 59	0.02924 0.8260 59	0.36750 0.0042 59
	SP37	-0.07467 0.5741 59	-0.02593 0.8455 59	-0.09373 0.4801 59	-0.02717 0.8382 59	-0.15856 0.2303 59	-0.06784 0.6097 59	-0.05038 0.7047 59	-0.10477 0.4297 59	-0.10627 0.4231 59	0.13576 0.3053 59	-0.07087 0.5938 59	0.01140 0.9317 59
	SP38	-0.28731 0.0274 59	-0.32364 0.0124 59	-0.17740 0.1789 59	-0.29178 0.0249 59	-0.25774 0.0487 59	-0.28316 0.0298 59	-0.17575 0.1830 59	0.34849 0.0068 59	0.19940 0.1300 59	-0.38677 0.0025 59	-0.19646 0.1359 59	0.55123 0.0001 59
	SP39	0.10814 0.4149 59	0.09916 0.4549 59	0.02792 0.8338 59	0.16341 0.2162 59	0.00568 0.9659 59	0.19978 0.1292 59	0.35768 0.0054 59	0.04320 0.7453 59	-0.30230 0.0200 59	0.09062 0.4949 59	-0.33984 0.0085 59	0.05674 0.6695 59
	SP40	0.20849 0.1130 59	0.27448 0.0354 59	-0.03309 0.8035 59	0.03804 0.7749 59	0.02159 0.8711 59	-0.02671 0.8409 59	0.21280 0.1056 59	-0.02328 0.8611 59	-0.11626 0.3805 59	0.06943 0.6013 59	0.02671 0.8408 59	-0.06681 0.6151 59
	SP41	-0.22087 0.0927 59	-0.15648 0.2366 59	-0.23677 0.0710 59	-0.24715 0.0591 59	-0.33647 0.0092 59	-0.25938 0.0473 59	-0.07685 0.5625 59	0.22880 0.0813 59	0.21826 0.0968 59	-0.29087 0.0254 59	0.04860 0.7147 59	0.38019 0.0030 59
	SP42	-0.04831 0.7163 59	-0.02869 0.8292 59	-0.08292 0.5324 59	-0.01750 0.8953 59	-0.15076 0.2544 59	-0.06014 0.6509 59	0.11497 0.3859 59	-0.15540 0.2399 59	-0.11038 0.4052 59	0.18137 0.1692 59	-0.04633 0.7275 59	-0.00639 0.9617 59
	SP43	0.12385 0.3500 59	0.10294 0.4378 59	0.08154 0.5393 59	0.17496 0.1850 59	0.31156 0.0163 59	0.28115 0.0310 59	0.44741 0.0004 59	0.22508 0.9865 59	-0.31531 0.0150 59	-0.06146 0.6438 59	-0.36414 0.0046 59	0.01983 0.8815 59
													-0.18996 0.1496 59

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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER H0: RHO=0 / NUMBER OF OBSERVATIONS

	PL1ALK	PELOALK	PEHIALK	TERRI	TOTEOM	ALUMC	CPI	SAND	SILT	CLAY	ORCAR	CACO	DELC13
SP44	-0.29294 0.0243 59	-0.33138 0.0104 59	-0.30273 0.0198 59	-0.31881 0.0139 59	-0.04285 0.7472 59	-0.04141 0.7555 59	-0.26626 0.0415 59	0.16465 0.2127 59	-0.06363 0.6321 59	-0.11583 0.3823 59	0.20586 0.1178 59	0.16163 0.2213 59	0.19692 0.1350 59
SP45	-0.02222 0.8673 59	-0.01477 0.9116 59	-0.24229 0.0645 59	-0.28101 0.0311 59	-0.15482 0.2417 59	-0.13801 0.2972 59	-0.10411 0.4326 59	0.51838 0.0001 59	0.21609 0.1002 59	-0.54105 0.0001 59	-0.07789 0.5576 59	0.37563 0.0034 59	0.32128 0.0131 59
SP46	-0.24705 0.0592 59	-0.22888 0.0812 59	-0.30545 0.0186 59	-0.27041 0.0383 59	-0.27314 0.0363 59	-0.17458 0.1860 59	-0.15177 0.2512 59	0.43659 0.0005 59	0.21233 0.1064 59	-0.46855 0.0002 59	-0.13200 0.3190 59	0.51807 0.0001 59	0.41881 0.0010 59
SP47	-0.13777 0.2981 59	-0.11433 0.3886 59	-0.09743 0.4629 59	-0.19623 0.1364 59	-0.05796 0.6628 59	-0.15210 0.2501 59	-0.27868 0.0326 59	0.17060 0.1964 59	0.34205 0.0080 59	-0.29299 0.0243 59	0.13168 0.3201 59	0.14254 0.2815 59	0.01233 0.9262 59
SP48	-0.17572 0.1831 59	-0.19289 0.1433 59	-0.21777 0.0975 59	-0.20683 0.1160 59	-0.00141 0.9915 59	-0.06488 0.6254 59	-0.16091 0.2234 59	-0.03549 0.7896 59	-0.26471 0.0428 59	0.14283 0.2805 59	0.04680 0.7249 59	0.11001 0.4069 59	0.15220 0.2498 59
SP49	-0.30884 0.0173 59	-0.30634 0.0183 59	-0.30932 0.0171 59	-0.37513 0.0034 59	-0.04716 0.7228 59	-0.19596 0.1369 59	-0.30362 0.0194 59	0.01208 0.9277 59	0.18468 0.1614 59	-0.08884 0.5034 59	0.30329 0.0195 59	0.05204 0.6955 59	0.24457 0.0619 59
SP50	-0.02601 0.8450 59	-0.00546 0.9672 59	-0.11475 0.3868 59	-0.09208 0.4879 59	0.04056 0.7604 59	-0.02221 0.8674 59	0.00160 0.9904 59	-0.11757 0.3752 59	-0.20193 0.1251 59	0.18746 0.1551 59	0.07357 0.5798 59	-0.08870 0.5041 59	-0.08871 0.5040 59
SP51	-0.22022 0.0937 59	-0.23326 0.0754 59	-0.36344 0.0047 59	-0.39166 0.0022 59	-0.12182 0.3580 59	-0.22480 0.0869 59	-0.25963 0.0471 59	0.01276 0.9236 59	0.09815 0.4596 59	-0.05254 0.6927 59	0.34855 0.0068 59	0.06077 0.6475 59	0.18538 0.1598 59
SP52	0.06001 0.6516 59	0.08780 0.5084 59	-0.03100 0.8157 59	0.12246 0.3555 59	0.17764 0.1783 59	0.07815 0.5563 59	0.23382 0.0747 59	-0.33577 0.0093 59	-0.18587 0.1587 59	0.37001 0.0039 59	0.33429 0.0097 59	-0.38436 0.0027 59	-0.17817 0.1770 59
SP53	-0.04139 0.7556 59	-0.03066 0.8177 59	0.03978 0.7649 59	0.09208 0.4879 59	-0.01376 0.9176 59	0.05069 0.7030 59	-0.03189 0.8105 59	-0.07499 0.5724 59	-0.05550 0.6763 59	0.08850 0.5051 59	-0.12705 0.3376 59	-0.06402 0.6300 59	-0.15748 0.2336 59
SP54	-0.42330 0.0008 59	-0.42632 0.0008 59	-0.38045 0.0030 59	-0.45954 0.0093 59	-0.33604 0.0040 59	-0.36901 0.0076 59	-0.34440 0.0693 59	0.23817 0.0721 59	0.23590 0.0721 59	-0.30657 0.0182 59	0.09580 0.4704 59	0.48093 0.0001 59	0.49988 0.0001 59
SP55	-0.06691 0.6146 59	-0.03501 0.7923 59	-0.04504 0.7348 59	0.08420 0.5260 59	0.21980 0.0944 59	0.14765 0.2644 59	0.29853 0.0216 59	-0.15736 0.2339 59	-0.25769 0.0488 59	0.24608 0.0603 59	-0.02009 0.8800 59	-0.10312 0.4370 59	-0.08172 0.5384 59
SP56	0.19888 0.1310 59	0.23232 0.0766 59	0.05348 0.6875 59	0.07185 0.5887 59	-0.04265 0.7484 59	-0.15926 0.2283 59	0.22681 0.0841 59	0.03860 -0.7716 59	0.24872 0.0575 59	-0.13902 0.2937 59	-0.07971 0.5484 59	0.11139 0.4009 59	0.05730 0.6664 59

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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

	PL1ALK	PELOALK	PEHIALK	TERRI	TOTEOM	ALUMC	CPI	SAND	SILT	CLAY	ORCAR	CACO	DELC13	
SP57	0.05701 0.6680 59	0.12508 0.3452 59	-0.15232 0.2494 59	-0.12593 0.3419 59	-0.01391 0.9167 59	-0.12750 0.3359 59	0.14363 0.2778 59	0.10687 0.4205 59	-0.03224 0.8084 59	-0.07898 0.5521 59	0.10844 0.4136 59	-0.12386 0.3500 59	-0.18045 0.1714 59	
SP58	0.01581 0.9054 59	0.05425 0.6832 59	-0.08093 0.5423 59	-0.07939 0.5501 59	0.08102 0.5419 59	-0.04198 0.7522 59	0.04036 0.7615 59	-0.10279 0.4385 59	0.05656 0.6705 59	0.06506 0.6244 59	0.14852 0.2616 59	-0.07105 0.5928 59	0.00447 0.9732 59	
SP59	-0.14649 0.2682 59	-0.18183 0.1681 59	-0.28449 0.0290 59	-0.40577 0.0014 59	0.02440 0.8544 59	-0.12711 0.3374 59	-0.24273 0.0640 59	0.50670 0.0001 59	0.27742 0.0334 59	-0.55698 0.0001 59	0.02769 0.8351 59	0.31710 0.0144 59	0.23787 0.0697 59	
SP60	0.07712 0.5615 59	0.01207 0.9277 59	-0.09164 0.4900 59	-0.17511 0.1846 59	0.39557 0.0019 59	0.18488 0.1610 59	-0.12718 0.3371 59	0.25564 0.0507 59	-0.17941 0.1739 59	-0.14559 0.2712 59	0.04794 0.7184 59	-0.11318 0.3934 59	-0.12156 0.3591 59	
SP61	-0.28936 0.0262 59	-0.30285 0.0197 59	-0.26488 0.0426 59	-0.35003 0.0066 59	-0.19853 0.1317 59	-0.21131 0.1081 59	-0.33458 0.0096 59	0.25367 0.0525 59	0.13989 0.2906 59	-0.27926 0.0322 59	-0.00897 0.9462 59	0.36749 0.0042 59	0.20411 0.1210 59	
B-12		BOTTEM	BOTSAL	BOTDO	BOTTRAN	BOTPOC	BOTDOC	SURTRAN	SURPOC	SURDOC	SP1	SP2	SP3	SP4
	PL1ALK	-0.11218 0.3976 59	0.06222 0.6397 59	0.01181 0.9293 59	0.17611 0.1821 59	-0.12614 0.3411 59	0.07568 0.6296 43	0.21172 0.1075 59	-0.09227 0.4870 59	-0.12978 0.4068 43	-0.05830 0.6610 59	-0.15390 0.2445 59	0.36730 0.0042 59	-0.28692 0.0276 59
	PELOALK	-0.13010 0.3260 59	0.08231 0.5354 59	0.01630 0.9025 59	0.19276 0.1436 59	-0.14700 0.2665 59	0.11079 0.4794 43	0.23008 0.0796 59	-0.10950 0.4090 59	-0.13071 0.4035 43	-0.01712 0.8976 59	-0.16660 0.2073 59	0.40645 0.0014 59	-0.30444 0.0191 59
	PEHIALK	-0.28486 0.0288 59	0.01002 0.9399 59	0.15357 0.2455 59	0.06780 0.6099 59	-0.02223 0.8673 59	0.12957 0.4076 43	0.12220 0.3565 59	-0.11138 0.4010 59	-0.06840 0.6630 43	-0.12149 0.3593 59	-0.17583 0.1828 59	0.28066 0.0313 59	-0.28753 0.0272 59
	TERRI	-0.30022 0.0209 59	-0.01605 0.9040 59	0.08590 0.5177 59	0.31456 0.0152 59	-0.11819 0.3726 59	0.10370 0.5081 43	0.32004 0.0135 59	-0.08423 0.5259 59	-0.16928 0.2778 43	-0.01588 0.9050 59	-0.23788 0.0696 59	0.43779 0.0005 59	-0.35887 0.0053 59
	TOTEOM	0.20850 0.1130 59	0.32729 0.0114 59	-0.22173 0.0914 59	-0.01255 0.9249 59	0.13677 0.3016 59	-0.07927 0.6134 43	0.03953 0.7663 59	0.20505 0.1193 59	0.07010 0.6551 43	-0.18358 0.1640 59	0.00542 0.9675 59	0.01153 0.9310 59	-0.12921 0.3294 59
	ALUMC	-0.01072 0.9358 59	0.16259 0.2186 59	-0.16647 0.2076 59	0.06159 0.6431 59	0.07455 0.5747 59	-0.00715 0.9637 43	0.08325 0.5307 59	0.04804 0.7179 59	-0.03078 0.8447 43	-0.23543 0.0727 59	-0.10594 0.4245 59	0.28486 0.0288 59	-0.23193 0.0771 59
	CPI	-0.10340 0.4358 59	-0.16913 0.2003 59	0.05863 0.6591 59	0.88313 0.0001 59	-0.06113 0.6456 59	0.12674 0.4180 43	0.86883 0.0001 59	0.06461 0.6269 59	-0.39615 0.0085 59	0.24316 0.0635 43	-0.19315 0.1427 59	0.19531 0.1382 59	-0.30748 0.0178 59
	SAND	0.19861 0.1316 59	-0.09469 0.4756 59	-0.02310 0.8621 59	0.32328 0.0125 59	0.19674 0.1353 59	-0.16993 0.2760 43	0.35881 0.0053 59	-0.00668 0.9600 59	-0.35309 0.0202 43	0.00182 0.9891 59	0.12377 0.3503 59	-0.08957 0.4999 59	0.06133 0.6445 59

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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

	BOTTEM	BOTSAL	BOTDO	BOTTRAN	BOTPOC	BOTDOC	SURTRAN	SURPOC	SURDOC	SP1	SP2	SP3	SP4	
SILT	0.07990 0.5475 59	-0.03062 0.8179 59	0.02280 0.8639 59	-0.35906 0.0052 59	-0.07439 0.5755 59	-0.05903 0.7069 43	-0.24370 0.0629 59	-0.07687 0.5628 59	-0.03402 0.8286 43	0.05542 0.6768 59	-0.09242 0.4863 59	0.14585 0.2703 59	0.02802 0.8331 59	
CLAY	-0.20585 0.1178 59	0.09518 0.4733 59	0.01022 0.9388 59	-0.12817 0.3333 59	-0.13924 0.2929 59	0.18437 0.2366 43	-0.20781 0.1143 59	0.03822 0.7738 59	0.34392 0.0239 43	-0.02519 0.8498 59	-0.06814 0.6081 59	0.01573 0.9059 59	-0.06512 0.6241 59	
ORCAR	0.23260 0.0763 59	0.19063 0.1481 59	-0.21442 0.1029 59	-0.62117 0.0001 59	-0.27011 0.0385 59	0.11204 0.4744 43	-0.62546 0.0001 59	-0.04004 0.7633 59	0.40688 0.0068 43	0.02239 0.8663 59	-0.08061 0.5439 59	-0.06953 0.6008 59	0.10518 0.4279 59	
CACO	-0.01095 0.9344 59	-0.28217 0.0304 59	0.08845 0.5053 59	0.23000 0.0797 59	0.25489 0.0514 59	-0.10031 0.5221 43	0.17858 0.1760 59	0.02557 0.8476 59	-0.34064 0.0254 43	-0.07282 0.5836 59	0.09825 0.4591 59	-0.10058 0.4485 59	0.30889 0.0173 59	
DELC13	0.09336 0.4819 59	-0.14437 0.2753 59	-0.03159 0.8122 59	-0.03167 0.8118 59	-0.06835 0.6070 59	-0.24824 0.1085 43	-0.17206 0.1925 59	0.04651 0.7265 59	-0.11721 0.4541 43	-0.01048 0.9372 59	0.23678 0.0710 59	-0.08789 0.5080 59	0.28792 0.0270 59	
B-13	BOTTEM	1.00000 0.0000 59	0.55186 0.0001 59	-0.66165 0.0001 59	-0.28928 0.0263 59	0.15018 0.2562 59	0.03113 0.8429 43	-0.19511 0.1386 59	0.38467 0.0026 59	0.28073 0.0682 43	0.08588 0.5178 59	0.13402 0.3115 59	-0.41456 0.0011 59	0.00678 0.9593 59
	BOTSAL	0.55186 0.0001 59	1.00000 0.0000 59	-0.31454 0.0153 59	-0.34454 0.0075 59	0.05790 0.6632 59	-0.00096 0.9951 43	-0.19744 0.1339 59	0.07241 0.5858 59	0.15972 0.3063 43	-0.12855 0.3319 59	0.16003 0.2260 59	-0.08028 0.5456 59	-0.21346 0.1045 59
	BOTDO	-0.66165 0.0001 59	-0.31454 0.0153 59	1.00000 0.0000 59	0.13002 0.3264 59	-0.23347 0.0751 59	0.03500 0.8237 43	0.12695 0.3380 59	-0.40225 0.0016 59	0.26344 0.0878 43	-0.02191 0.8692 59	0.00800 0.9520 59	0.27643 0.0341 59	-0.14651 0.2682 59
	BOTTRAN	-0.28928 0.0263 59	-0.34454 0.0075 59	0.13002 0.3264 59	1.00000 0.0000 59	-0.00403 0.9759 59	-0.04396 0.7795 43	0.90934 0.0001 59	-0.03067 0.8176 59	-0.49010 0.0009 43	0.16842 0.2023 59	-0.15149 0.2521 59	0.21462 0.1026 59	-0.14950 0.2584 59
	BOTPOC	0.15018 0.2562 59	0.05790 0.6632 59	-0.23347 0.0751 59	-0.00403 0.9759 59	1.00000 0.0000 59	-0.26190 0.0898 43	0.08453 0.5244 59	0.57267 0.0001 59	-0.02443 0.8764 43	-0.23070 0.0788 59	0.05916 0.6563 59	-0.09818 0.4594 59	0.23013 0.0795 59
	BOTDOC	0.03113 0.8429 43	-0.00096 0.9951 43	0.03500 0.8237 43	-0.04396 0.7795 43	-0.26190 0.0898 43	1.00000 0.0000 43	-0.00898 0.9544 43	-0.13083 0.4030 43	-0.03634 0.8170 43	-0.10807 0.4903 43	-0.27257 0.0770 43	-0.03808 0.8084 43	-0.29701 0.0531 43
	SURTRAN	-0.19511 0.1386 59	-0.19744 0.1339 59	0.12695 0.3380 59	0.90934 0.0001 59	0.08453 0.5244 59	-0.00898 0.9544 43	1.00000 0.0000 59	-0.07947 0.5496 59	-0.46144 0.0018 43	0.09978 0.4521 59	-0.19422 0.1405 59	0.28623 0.0280 59	-0.32766 0.0113 59
	SURPOC	0.38467 0.0026 59	0.07241 0.5858 59	-0.40225 0.0016 59	-0.03067 0.8176 59	0.57267 0.0001 59	-0.13083 0.4030 43	-0.07947 0.5496 59	1.00000 0.0000 59	0.13006 0.4058 43	-0.04398 0.7408 59	0.05319 0.6891 59	-0.15821 0.2314 59	0.25545 0.0509 59

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	BOTTEM	BOTSAL	BOTDO	BUTTRAN	BOTPOC	BOTDOC	SURTRAN	SURPOC	SURDOC	SP1	SP2	SP3	SP4	
SURDOC	0.28073 0.0682 43	0.15972 0.3063 43	0.26344 0.0878 43	-0.49010 0.0009 43	-0.02443 0.8764 43	-0.03634 0.8170 43	-0.46144 0.0018 43	0.13006 0.4058 43	1.00000 0.0000 43	-0.09381 0.5496 43	0.09402 0.5487 43	-0.15140 0.3325 43	0.12757 0.4150 43	
SP 1	0.08588 0.5178 59	-0.12855 0.3319 59	-0.02191 0.8692 59	0.16842 0.2023 59	-0.23070 0.0788 59	-0.10807 0.4903 43	0.09978 0.4521 59	-0.04398 0.7408 59	-0.09381 0.5496 43	1.00000 0.0000 59	0.04003 0.7634 59	-0.06577 0.6207 59	-0.04713 0.7230 59	
SP2	0.13402 0.3115 59	0.16003 0.2260 59	0.00800 0.9520 59	-0.15149 0.2521 59	0.05916 0.6563 59	-0.27257 0.0770 43	-0.19422 0.1405 59	0.05319 0.6891 59	0.09402 0.5487 43	0.04003 0.7634 59	1.00000 0.0000 59	-0.06891 0.6041 59	0.21339 0.1046 59	
SP3	-0.41456 0.0011 59	-0.08028 0.5456 59	0.27643 0.0341 59	0.21462 0.1026 59	-0.09818 0.4594 59	-0.03808 0.8084 43	0.28623 0.0280 59	-0.15821 0.2314 59	-0.15140 0.3325 43	-0.06577 0.6207 59	-0.06891 0.6041 59	1.00000 0.0000 59	-0.23219 0.0768 59	
SP4	0.00678 0.9593 59	-0.21346 0.1045 59	-0.14651 0.2682 59	-0.14950 0.2584 59	0.23013 0.0795 59	-0.29701 0.0531 43	-0.32766 0.0113 59	0.25545 0.0509 59	0.12757 0.4150 43	-0.04713 0.7230 59	0.21339 0.1046 59	-0.23219 0.0768 59	1.00000 0.0000 59	
SP5	0.03918 0.7683 59	0.00511 0.9694 59	-0.13294 0.3155 59	-0.03852 0.7721 59	-0.07555 0.5696 59	0.09430 0.5475 43	0.00961 0.9424 59	0.00156 0.9906 59	-0.05722 0.7155 43	0.14803 0.2632 59	-0.18292 0.1655 59	-0.18813 0.1536 59	-0.07134 0.5913 59	
B-14	SP6	0.26176 0.0452 59	-0.08172 0.5384 59	-0.06373 0.6316 59	0.08227 0.5356 59	0.03962 0.7658 59	-0.14020 0.3699 43	0.12970 0.3275 59	0.05681 0.6691 59	-0.16749 0.2830 43	-0.00667 0.9600 59	0.07691 0.5626 59	-0.08071 0.5434 59	0.06540 0.6226 59
	SP7	0.06991 0.5988 59	0.09613 0.4689 59	-0.04480 0.7362 59	-0.01664 0.9005 59	0.08560 0.5192 43	-0.13133 0.4012 59	0.00334 0.9799 59	-0.00765 0.9541 59	-0.27016 0.0798 43	-0.05958 0.6540 59	0.02759 0.8356 59	-0.05001 0.7068 59	0.23642 0.0714 59
	SP8	-0.30484 0.0189 59	-0.06163 0.6429 59	0.25088 0.0553 59	0.12550 0.3436 59	-0.11680 0.3783 59	-0.06058 0.6996 43	0.13916 0.2932 59	-0.08455 0.5243 59	-0.22260 0.1514 43	-0.02243 0.8661 59	-0.05608 0.6731 59	0.56572 0.0001 59	-0.17636 0.1815 59
	SP9	-0.42268 0.0009 59	-0.09174 0.4895 59	0.37791 0.0032 59	0.04055 0.7604 59	-0.10768 0.4169 59	0.18339 0.2391 43	0.12429 0.3483 59	-0.17130 0.1945 59	-0.16920 0.2781 43	-0.07384 0.5784 59	-0.11585 0.3822 59	0.33089 0.0105 59	-0.27752 0.0333 59
	SP10	-0.19493 0.1390 59	-0.02104 0.8743 59	0.21082 0.1090 59	0.00331 0.9801 59	-0.16801 0.2034 59	-0.29076 0.0586 43	-0.05063 0.7033 59	-0.21738 0.0982 59	-0.10570 0.4999 43	0.11391 0.3903 59	0.07425 0.5762 59	0.13698 0.3009 59	-0.03890 0.7699 59
	SP11	0.45838 0.0003 59	0.03409 0.7977 59	-0.41735 0.0010 59	-0.17413 0.1872 59	0.09106 0.4928 59	0.26218 0.0894 43	-0.16651 0.2075 59	0.23285 0.0759 59	0.10013 0.5229 43	0.07521 0.5713 59	-0.16370 0.2154 59	-0.09685 0.4656 59	0.26794 0.0402 59
	SP12	-0.10898 0.4113 59	-0.15051 0.2552 59	-0.09963 0.4528 59	-0.17511 0.1847 59	0.05106 0.7010 59	0.11068 0.4799 43	-0.21874 0.0960 59	0.00556 0.9667 59	-0.05134 0.7437 43	-0.15657 0.2363 59	-0.07926 0.5507 59	-0.13948 0.2921 59	0.35552 0.0057 59

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	BOTTEM	BOTSAL	BOTDO	BOTTRAN	BOTPOC	BOTDOC	SURTRAN	SURPOC	SURDOC	SP1	SP2	SP3	SP4	
SP13	0.06800 0.6088 59	-0.17795 0.1775 59	-0.14998 0.2569 59	-0.09752 0.4625 59	0.16510 0.2114 59	-0.51834 0.0004 43	-0.23963 0.0676 59	0.25063 0.0555 59	-0.03846 0.8065 43	0.03595 0.7869 59	0.40012 0.0017 59	-0.21876 0.0960 59	0.68682 0.0001 59	
SP14	-0.01515 0.9093 59	-0.18974 0.1500 59	-0.00448 0.9731 59	0.00985 0.9410 59	0.14682 0.2672 59	-0.04772 0.7612 43	-0.06496 0.6250 59	0.05151 0.6984 59	0.00719 0.9635 43	0.04425 0.7393 59	0.25399 0.0522 59	-0.35610 0.0056 59	0.45804 0.0003 59	
SP15	0.36785 0.0042 59	0.28307 0.0298 59	-0.24373 0.0629 59	0.04840 0.7159 59	-0.31524 0.0150 59	0.39411 0.0089 43	0.02843 0.8307 59	-0.01304 0.9219 59	0.08613 0.5829 43	0.35905 0.0052 59	-0.05440 0.6824 59	-0.10403 0.4330 59	-0.14566 0.2710 59	
SP16	0.00210 0.9874 59	-0.10215 0.4414 59	-0.08724 0.5112 59	-0.10470 0.4300 59	0.05193 0.6961 59	-0.21108 0.1742 43	-0.18250 0.1665 59	0.12427 0.3484 59	0.01350 0.9315 43	-0.08938 0.5008 59	0.15188 0.2508 59	-0.15472 0.2420 59	0.30430 0.0191 59	
SP17	0.18316 0.1650 59	-0.03468 0.7943 59	-0.30547 0.0186 59	-0.18796 0.1540 59	0.33311 0.0099 59	-0.22658 0.1440 43	-0.28105 0.0311 59	0.37697 0.0033 59	0.15885 0.3090 43	-0.10905 0.4110 59	0.11376 0.3910 59	-0.19684 0.1351 59	0.69478 0.0001 59	
B-15	SP18	0.20985 0.1107 59	0.16100 0.2232 59	-0.24465 0.0618 59	-0.07588 0.5679 59	0.43209 0.0006 59	-0.13077 0.4032 43	-0.01881 0.8876 59	0.19035 0.1487 59	-0.14654 0.3484 43	-0.11684 0.3782 59	0.25363 0.0526 59	-0.15957 0.2273 59	0.21536 0.1014 59
	SP19	0.32236 0.0128 59	0.20921 0.1118 59	-0.22552 0.0859 59	-0.00564 0.9662 59	0.12731 0.3366 59	-0.34559 0.0232 43	0.05558 0.6759 59	0.02334 0.8607 59	0.05195 0.7408 43	0.10983 0.4076 59	0.01585 0.9052 59	0.05916 0.6563 59	-0.14792 0.2635 59
	SP20	-0.10114 0.4459 59	-0.08462 0.5240 59	0.02254 0.8655 59	-0.12933 0.3289 59	-0.22043 0.0934 59	0.27755 0.0715 43	-0.16358 0.2157 59	-0.21065 0.1093 59	-0.04362 0.7812 43	0.02937 0.8253 59	0.02196 0.8689 59	-0.15549 0.2396 59	0.03502 0.7923 59
	SP21	-0.20491 0.1195 59	-0.34704 0.0071 59	0.02527 0.8493 59	0.03916 0.7684 59	-0.02510 0.8503 59	-0.23161 0.1351 43	-0.16950 0.1994 59	0.04485 0.7359 59	0.01555 0.9211 43	-0.11278 0.3951 59	0.11259 0.3959 59	-0.16542 0.2105 59	0.51860 0.0001 59
	SP22	0.28841 0.0267 59	0.31440 0.0153 59	-0.12864 0.3316 59	0.04513 0.7343 59	-0.08090 0.5425 59	0.22100 0.1544 43	0.05709 0.6676 59	0.18223 0.1672 59	0.05214 0.7398 43	-0.09441 0.4769 59	-0.04300 0.7464 59	-0.05593 0.6740 59	-0.07416 0.5767 59
	SP23	-0.07233 0.5861 59	-0.18354 0.1641 59	-0.01378 0.9175 59	0.18747 0.1551 59	-0.26423 0.0431 59	0.06127 0.6963 43	0.08636 0.5155 59	-0.06161 0.6430 59	-0.04042 0.7969 43	0.30460 0.0190 59	-0.10787 0.4161 59	-0.09028 0.4965 59	0.07065 0.5949 59
	SP24	0.12021 0.3645 59	0.01560 0.9067 59	-0.19911 0.1306 59	0.02414 0.8560 59	0.07002 0.5982 59	-0.13459 0.3895 43	-0.07904 0.5518 59	0.17885 0.1753 59	0.14873 0.3412 43	-0.16522 0.2111 59	-0.03581 0.7877 59	-0.15415 0.2437 59	0.21192 0.1071 59
	SP25	0.27784 0.0331 59	0.02907 0.8270 59	-0.24155 0.0653 59	-0.19421 0.1405 59	0.24963 0.0566 59	-0.33599 0.0276 43	-0.25805 0.0485 59	0.24064 0.0664 59	0.22388 0.0485 43	-0.10532 0.1490 59	0.42398 0.4273 59	-0.22627 0.0008 59	0.44999 0.0003 59

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	BOTTEM	BOTSAL	BOTDO	BOTTRAN	BOTPOC	BOTDOC	SURTRAN	SURPOC	SURDOC	SP1	SP2	SP3	SP4	
SP26	-0.22255 0.0902 59	-0.26132 0.0456 59	0.05963 0.6537 59	0.24106 0.0659 59	-0.16877 0.2013 59	-0.17603 0.2588 43	0.15122 0.2529 59	0.04347 0.7437 59	-0.14379 0.3576 43	0.31410 0.0154 59	0.03088 0.8164 59	0.00565 0.9662 59	0.05968 0.6534 59	
SP27	-0.04772 0.7197 59	-0.11878 0.3703 59	0.06409 0.6296 59	0.17212 0.1924 59	-0.00792 0.9526 59	0.32968 0.0309 43	0.15116 0.2531 59	0.28980 0.0260 59	0.11962 0.4448 59	-0.13060 0.3242 43	-0.04154 0.7548 59	-0.11706 0.3773 59	-0.09747 0.4627 59	
SP28	-0.17778 0.1779 59	-0.17344 0.1890 59	0.18299 0.1654 59	0.00231 0.9862 59	-0.10974 0.4080 59	-0.00638 0.9676 43	-0.03407 0.7978 59	-0.05225 0.6943 59	-0.20155 0.1949 43	0.04414 0.7399 59	0.15285 0.2478 59	-0.16571 0.2097 59	0.22418 0.0878 59	
SP29	0.17427 0.1868 59	-0.10199 0.4421 59	-0.20953 0.1112 59	0.02504 0.8507 59	0.24696 0.0593 59	-0.21249 0.1713 43	-0.07011 0.5977 59	0.33972 0.0085 59	-0.07242 0.6444 43	0.01737 0.8961 59	0.04669 0.7255 59	-0.26887 0.0395 59	0.57868 0.0001 59	
SP30	0.49139 0.0001 59	0.45075 0.0003 59	-0.36120 0.0049 59	-0.07354 0.5799 59	0.10177 0.4431 59	-0.04404 0.7791 43	-0.04471 0.7367 59	0.33269 0.0100 59	0.14052 0.3688 43	0.15212 0.2501 59	0.18523 0.1602 59	-0.06186 0.6416 59	-0.16452 0.2131 59	
B-16	SP31	-0.15766 0.2331 59	-0.14365 0.2777 59	0.00172 0.9897 59	0.15906 0.2289 59	-0.24453 0.0620 59	-0.17391 0.2647 43	0.00532 0.9681 59	-0.21721 0.0984 59	-0.30619 0.0458 43	0.16894 0.2009 59	0.30675 0.0181 59	0.05277 0.6914 59	0.25356 0.0527 59
	SP32	0.05117 0.7003 59	-0.08534 0.5204 59	-0.01800 0.8923 59	-0.19931 0.1302 59	0.13235 0.3177 59	-0.24129 0.1190 43	-0.33255 0.0101 59	0.16526 0.2110 59	0.03796 0.8091 43	0.01180 0.9293 59	0.28473 0.0288 59	-0.21190 0.1071 59	0.70814 0.0001 59
	SP33	0.07158 0.5901 59	-0.18076 0.1707 59	-0.20355 0.1220 59	0.00862 0.9484 59	0.21980 0.0944 59	-0.07427 0.6360 43	-0.15723 0.2343 59	0.35520 0.0058 59	0.12616 0.4201 43	-0.13784 0.2978 59	0.01149 0.9312 59	-0.18437 0.1621 59	0.68406 0.0001 59
	SP34	-0.00515 0.9691 59	-0.08059 0.5440 59	0.14533 0.2721 59	-0.11127 0.4015 59	-0.14550 0.2715 59	-0.29485 0.0549 43	-0.18688 0.1564 59	-0.11107 0.4023 59	-0.03401 0.8286 43	0.03583 0.7876 59	0.16969 0.1989 59	-0.20891 0.1123 59	0.21835 0.0966 59
	SP35	0.07158 0.5901 59	-0.09621 0.4685 59	-0.23879 0.0685 59	0.01125 0.9326 59	-0.03248 0.8071 59	0.05273 0.7370 43	-0.15874 0.2298 59	0.20053 0.1278 59	0.09308 0.5527 43	0.04946 0.7099 59	0.00227 0.9864 59	-0.25044 0.0557 59	0.27366 0.0360 59
	SP36	0.44101 0.0005 59	0.20088 0.1271 59	-0.34519 0.0074 59	-0.24228 0.0645 59	0.14172 0.2843 59	-0.18981 0.2228 43	-0.20321 0.1227 59	0.22189 0.0912 59	-0.08337 0.5951 43	0.12345 0.3516 59	-0.05800 0.6626 59	-0.26213 0.0449 59	0.20434 0.1206 59
	SP37	-0.30313 0.0196 59	-0.23550 0.0726 59	0.04357 0.7432 59	0.02575 0.8465 59	0.01214 0.9273 59	-0.05257 0.7378 43	-0.08252 0.5344 59	0.00539 0.9677 59	-0.13553 0.3862 43	0.07849 0.5546 59	0.15115 0.2531 59	0.11260 0.3958 59	0.32557 0.0119 59
	SP38	-0.07559 0.5693 59	-0.12858 0.3318 59	0.00958 0.9426 59	0.05787 0.6633 59	0.27281 0.0366 59	-0.30543 0.0464 43	0.01276 0.9236 59	0.02078 0.8759 59	-0.20740 0.1820 43	-0.06932 0.6019 59	0.21084 0.1090 59	0.00347 0.9792 59	0.56400 0.0001 59

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	BOTTEM	BOTSAL	BOTDO	BOTTRAN	BOTPOC	BOTDOC	SURTRAN	SURPOC	SURDOC	SP1	SP2	SP3	SP4	
SP39	-0.02184 0.8696 59	0.10288 0.4381 59	0.07676 0.5634 59	0.28293 0.0299 59	0.11424 0.3889 59	0.26762 0.0827 43	0.31062 0.0166 59	0.25471 0.0516 59	-0.10947 0.4847 43	-0.29285 0.0244 59	0.06215 0.6401 59	0.05554 0.6761 59	-0.28373 0.0294 59	
SP40	-0.00164 0.9902 59	-0.10672 0.4211 59	-0.10902 0.4111 59	0.17236 0.1918 59	-0.06521 0.6237 59	-0.04442 0.7773 43	0.09074 0.4943 59	-0.06900 0.6036 59	-0.10009 0.5231 43	-0.01389 0.9169 59	-0.04612 0.7287 59	-0.11905 0.3692 59	0.28313 0.0298 59	
SP41	0.15449 0.2427 59	-0.16859 0.2018 59	-0.11807 0.3731 59	-0.07515 0.5716 59	-0.02429 0.8551 59	0.13873 0.3750 43	-0.16083 0.2237 59	0.10076 0.4476 59	-0.12437 0.4268 43	0.24960 0.0566 59	0.21371 0.1041 59	-0.31508 0.0151 59	0.38333 0.0027 59	
SP42	-0.31873 0.0139 59	-0.30556 0.0186 59	0.25118 0.0550 59	0.13388 0.3121 59	-0.23639 0.0715 59	0.12505 0.4243 43	0.09157 0.4904 59	-0.14519 0.2725 59	0.00031 0.9984 43	0.01428 0.9145 59	-0.02393 0.8572 59	-0.06955 0.6007 59	-0.00857 0.9486 59	
SP43	0.25312 0.0531 59	0.13157 0.3205 59	-0.20970 0.1109 59	0.45164 0.0003 59	0.10937 0.4096 59	0.10095 0.5195 43	0.44622 0.0004 59	0.29715 0.0223 59	-0.17188 0.2704 43	-0.16904 0.2006 59	0.01089 0.9347 59	-0.14042 0.2888 59	-0.14265 0.2811 59	
SP44	0.30898 0.0173 59	-0.01153 0.9309 59	-0.29739 0.0222 59	-0.16421 0.2139 59	0.14895 0.2602 59	-0.20488 0.1875 43	-0.23943 0.0678 59	0.19983 0.1291 59	0.22516 0.1466 43	-0.13654 0.3025 59	0.11337 0.3926 59	-0.28914 0.0263 59	0.48630 0.0001 59	
B-17	SP45	0.43117 0.0007 59	0.12750 0.3359 59	-0.29795 0.0219 59	-0.16408 0.2143 59	0.13791 0.2976 59	-0.24694 0.1104 43	-0.06439 0.6280 59	0.09561 0.4713 59	-0.12312 0.4315 43	0.01751 0.8953 59	0.27694 0.0337 59	-0.09314 0.4829 59	-0.09655 0.4669 59
	SP46	0.16994 0.1982 59	0.04716 0.7228 59	-0.10461 0.4304 59	-0.08765 0.5092 59	0.14340 0.2786 59	-0.43360 0.0037 43	-0.09380 0.4798 59	0.08157 0.5391 59	-0.10302 0.5109 43	0.04207 0.7517 59	0.31910 0.0138 59	-0.02704 0.8389 59	0.24839 0.0578 59
	SP47	0.20934 0.1115 59	0.18834 0.1531 59	-0.19674 0.1353 59	-0.33276 0.0100 59	0.22742 0.0832 59	-0.25353 0.1009 43	-0.24435 0.0622 59	0.24434 0.0622 59	-0.02971 0.8500 43	-0.08643 0.5151 59	-0.12702 0.3377 59	-0.07783 0.5579 59	-0.00012 0.9993 59
	SP48	-0.10602 0.4242 59	-0.16514 0.2113 59	-0.07789 0.5576 59	-0.00920 0.9449 59	0.26066 0.0462 59	-0.16799 0.2816 43	-0.20505 0.1192 59	0.25028 0.0559 59	0.05904 0.7069 43	-0.13591 0.3047 59	0.08706 0.5121 59	-0.13508 0.3077 59	0.60102 0.0001 59
	SP49	0.57198 0.0001 59	0.18171 0.1684 59	-0.50922 0.0001 59	-0.34745 0.0070 59	0.23891 0.0684 59	-0.17041 0.2746 43	-0.32121 0.0131 59	0.37480 0.0034 59	0.27815 0.0709 43	0.03685 0.7817 59	-0.03109 0.8152 59	-0.30509 0.0188 59	0.27597 0.0344 59
	SP50	0.09400 0.4789 59	-0.09382 0.4797 59	0.11864 0.3708 59	-0.04874 0.7139 59	0.01818 0.8913 59	-0.04008 0.7986 43	-0.15603 0.2380 59	0.20987 0.1106 59	0.59412 0.0001 43	-0.16786 0.2038 59	-0.03023 0.8202 59	-0.17489 0.1852 59	0.17389 0.1878 59
	SP51	0.61116 0.0001 59	0.17995 0.1726 59	-0.57895 0.0001 59	-0.35592 0.0057 59	0.22317 0.0893 59	-0.02878 0.8547 43	-0.34279 0.0079 59	0.33729 0.0090 59	0.27673 0.0724 43	0.09254 0.4857 59	0.05377 0.4857 59	-0.33068 0.6858 59	0.32366 0.0105 59

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	BOTTEM	BOTSAL	BOTDO	ROTRAN	BOTPOC	BOTDOC	SURTRAN	SURPOC	SURDOC	SP1	SP2	SP3	SP4	
SP52	0.41600 0.0011 59	0.25043 0.0557 59	-0.28761 0.0272 59	-0.01231 0.9263 59	-0.30024 0.0209 59	0.42831 0.0042 43	-0.03471 0.7941 59	0.11345 0.3923 59	0.20027 0.1979 59	0.22801 0.0824 59	-0.14286 0.2804 59	-0.15699 0.2350 59	-0.15433 0.2432 59	
SP53	-0.26132 0.0456 59	-0.04065 0.7598 59	0.21872 0.0961 59	-0.09084 0.4938 59	-0.16341 0.2162 59	0.04122 0.7930 43	-0.06247 0.6384 59	-0.19615 0.1365 59	-0.20151 0.1950 43	-0.02783 0.8343 59	-0.00578 0.9653 59	0.07077 0.5943 59	-0.17661 0.1809 59	
SP54	0.09484 0.4749 59	-0.19863 0.1315 59	-0.10058 0.4485 59	-0.19305 0.1429 59	0.15797 0.2321 59	-0.30072 0.0501 43	-0.31841 0.0140 59	0.21291 0.1054 59	-0.00617 0.9687 43	0.08177 0.5381 59	0.22486 0.0869 59	-0.29430 0.0237 59	0.76218 0.0001 59	
SP55	0.32083 0.0132 59	0.19147 0.1463 59	-0.14122 0.2860 59	0.10066 0.4481 59	-0.19802 0.1327 59	0.45784 0.0020 43	0.10112 0.4460 59	0.21530 0.1015 59	0.04472 0.7758 43	-0.05659 0.6703 59	0.02271 0.8645 59	-0.10483 0.4295 59	-0.12816 0.3334 59	
SP56	-0.36015 0.0051 59	-0.39478 0.0020 59	0.30016 0.0209 59	0.23239 0.0765 59	-0.08903 0.5025 59	-0.16297 0.2964 43	0.19234 0.1444 59	-0.12655 0.3395 59	-0.17878 0.2514 43	0.08958 0.4998 59	-0.07736 0.5603 59	0.34827 0.0069 59	0.19244 0.1442 59	
B-18	SP57	0.25025 0.0559 59	0.07465 0.5742 59	-0.18857 0.1526 59	0.00872 0.9477 59	-0.18416 0.1626 59	0.07386 0.6378 43	-0.01347 0.9193 59	-0.03559 0.7890 59	0.03155 0.8408 43	0.21733 0.0982 59	0.10205 0.4419 59	-0.29692 0.0224 59	0.15340 0.2461 59
	SP58	0.35202 0.0063 59	0.07925 0.5507 59	-0.34856 0.0068 59	-0.08167 0.5386 59	0.13533 0.3068 59	-0.05524 0.7250 43	-0.11038 0.4053 59	0.27367 0.0360 59	0.11559 0.4605 43	-0.01739 0.8960 59	-0.07988 0.5476 59	-0.14215 0.2828 59	0.09523 0.4731 59
	SP59	0.54416 0.0001 59	0.20560 0.1182 59	-0.35170 0.0063 59	-0.19073 0.1479 59	0.10610 0.4238 59	-0.27677 0.0724 43	-0.15645 0.2367 59	0.09450 0.4765 59	-0.10284 0.5117 43	0.10082 0.4474 59	0.24247 0.0643 59	-0.32797 0.0112 59	0.22635 0.0847 59
	SP60	0.53481 0.0001 59	0.46596 0.0002 59	-0.38174 0.0029 59	-0.09198 0.4884 59	0.24462 0.0619 59	-0.28634 0.0627 43	-0.02755 0.8359 59	0.14694 0.2668 59	0.12324 0.4311 59	-0.14293 0.2802 43	0.35546 0.0057 59	-0.20444 0.1204 59	0.00834 0.9500 59
	SP61	0.15196 0.2506 59	-0.00543 0.9674 59	-0.14056 0.2883 59	-0.24867 0.0575 59	0.27619 0.0342 59	-0.30724 0.0451 43	-0.33230 0.0101 59	0.26447 0.0430 59	0.14902 0.3402 43	-0.06745 0.6117 59	0.28604 0.0281 59	-0.19239 0.1443 59	0.73308 0.0001 59
	SP5	SP6	SP7	SP8	SP9	SP10	SP11	SP12	SP13	SP14	SP15	SP16	SP17	
	PL1ALK	0.16761 0.2045 59	-0.20530 0.1188 59	-0.05363 0.6867 59	0.10442 0.4312 59	0.54596 0.0001 59	-0.12259 0.3550 59	-0.10533 0.4272 59	-0.20102 0.1268 59	-0.42035 0.0009 59	-0.13008 0.3261 59	0.08603 0.5171 59	-0.03322 0.8027 59	-0.19301 0.1430 59
	PELOALK	0.23917 0.0681 59	-0.21400 0.1036 59	-0.00039 0.9977 59	0.11463 0.3873 59	0.53130 0.0001 59	-0.11295 0.3944 59	-0.07426 0.5762 59	-0.18015 0.1721 59	-0.43823 0.0005 59	-0.10398 0.4332 59	0.09805 0.4600 59	-0.01240 0.9257 59	-0.20646 0.1167 59
	PEHIALK	-0.00940 0.9437 59	-0.20985 0.1107 59	-0.17391 0.1877 59	-0.00433 0.9740 59	0.68884 0.0001 59	-0.12400 0.3494 59	-0.23194 0.0771 59	-0.21386 0.1039 59	-0.31628 0.0147 59	-0.23745 0.0702 59	0.02197 0.8688 59	-0.13603 0.3043 59	-0.26172 0.0452 59

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	SP5	SP6	SP7	SP8	SP9	SP10	SP11	SP12	SP13	SP14	SP15	SP16	SP17
TERRI	-0.02302 0.8626 59	-0.26518 0.0424 59	-0.14460 0.2745 59	0.10595 0.4245 59	0.41685 0.0010 59	-0.08773 0.5088 59	-0.21159 0.1077 59	-0.20789 0.1141 59	-0.36346 0.0047 59	-0.27692 0.0337 59	0.15335 0.2462 59	-0.17072 0.1961 59	-0.34141 0.0081 59
TOTEOM	-0.01269 0.9240 59	-0.23931 0.0679 59	-0.12157 0.3590 59	0.04257 0.7489 59	0.13117 0.3220 59	-0.15244 0.2491 59	-0.16370 0.2154 59	-0.21148 0.1079 59	-0.21969 0.0946 59	-0.13337 0.3139 59	0.14258 0.2814 59	-0.03507 0.7920 59	-0.21828 0.0967 59
ALUMC	-0.06841 0.6067 59	-0.22861 0.0816 59	-0.15202 0.2504 59	0.02236 0.8665 59	0.06884 0.6044 59	-0.07872 0.5534 59	-0.17655 0.1810 59	-0.19555 0.1377 59	-0.24232 0.0644 59	-0.17399 0.1875 59	0.04680 0.7249 59	-0.14059 0.2882 59	-0.25095 0.0552 59
CPI	0.04096 0.7581 59	0.03072 0.8173 59	0.01399 0.9162 59	0.12748 0.3360 59	0.06421 0.6290 59	-0.11440 0.3883 59	-0.08241 0.5349 59	-0.24116 0.0658 59	-0.29766 0.0220 59	-0.06361 0.6322 59	0.23135 0.0779 59	-0.13680 0.3015 59	-0.30154 0.0203 59
SAND	-0.07306 0.5824 59	0.52695 0.0001 59	0.27324 0.0363 59	-0.03307 0.8037 59	-0.16798 0.2035 59	0.00010 0.9994 59	0.08510 0.5216 59	-0.11935 0.3679 59	0.14666 0.2677 59	0.17234 0.1918 59	-0.26224 0.0448 59	-0.05977 0.6529 59	0.17586 0.1828 59
SILT	-0.05298 0.6902 59	0.35057 0.0065 59	0.14291 0.2802 59	0.00098 0.9942 59	0.30986 0.0169 59	0.02026 0.8790 59	0.16570 0.2098 59	-0.19187 0.1454 59	0.04531 0.7333 59	-0.13360 0.3131 59	-0.11765 0.3748 59	-0.06996 0.5985 59	0.07433 0.5758 59
CLAY	0.08572 0.5186 59	-0.60548 0.0001 59	-0.29755 0.0221 59	0.02820 0.8321 59	0.01415 0.9153 59	-0.00876 0.9475 59	-0.14414 0.2761 59	0.18474 0.1613 59	-0.14645 0.2684 59	-0.09287 0.4842 59	0.27748 0.0334 59	0.08138 0.5400 59	-0.18403 0.1629 59
ORCAR	0.09758 0.4622 59	-0.20910 0.1120 59	-0.10404 0.4329 59	-0.10377 0.4341 59	-0.03547 0.7897 59	-0.02133 0.8726 59	0.30655 0.0182 59	0.08819 0.5066 59	0.03311 0.8034 59	-0.16177 0.2209 59	0.26574 0.0419 59	0.15055 0.2551 59	0.10306 0.4373 59
CACO	-0.12675 0.3388 59	0.49906 0.0001 59	0.16952 0.1993 59	-0.07162 0.5899 59	-0.19215 0.1448 59	0.10066 0.4481 59	0.07484 0.5732 59	-0.00504 0.9698 59	0.36405 0.0046 59	0.23827 0.0692 59	-0.32943 0.0108 59	-0.04089 0.7585 59	0.31546 0.0149 59
DELC13	-0.09490 0.4746 59	0.38676 0.0025 59	0.07798 0.5572 59	-0.06471 0.6263 59	-0.19523 0.1384 59	0.35621 0.0056 59	0.12337 0.3519 59	-0.03397 0.7984 59	0.52434 0.0001 59	-0.01233 0.9261 59	-0.16075 0.2239 59	0.02628 0.8434 59	0.16840 0.2023 59
BOTTEM	0.03918 0.7683 59	0.26176 0.0452 59	0.06991 0.5988 59	-0.30484 0.0189 59	-0.42268 0.0009 59	-0.19493 0.1390 59	0.45838 0.0003 59	-0.10898 0.4113 59	0.06800 0.6088 59	-0.01515 0.9093 59	0.36785 0.0042 59	0.00210 0.9874 59	0.18316 0.1650 59
BOTSAL	0.00511 0.9694 59	-0.08172 0.5384 59	0.09613 0.4689 59	-0.06163 0.6429 59	-0.09174 0.4895 59	-0.02104 0.8743 59	0.03409 0.7977 59	-0.15051 0.2552 59	-0.17795 0.1775 59	-0.18974 0.1500 59	0.28307 0.0298 59	-0.10215 0.4414 59	-0.03468 0.7943 59
BOTDO	-0.13294 0.3155 59	-0.06373 0.6316 59	-0.04480 0.7362 59	0.25088 0.0553 59	0.37791 0.0032 59	0.21082 0.1090 59	-0.41735 0.0010 59	-0.09963 0.4528 59	-0.14998 0.2569 59	-0.00448 0.9731 59	-0.24373 0.0629 59	-0.08724 0.5112 59	-0.30547 0.0186 59

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	SP5	SP6	SP7	SP8	SP9	SP10	SP11	SP12	SP13	SP14	SP15	SP16	SP17	
BOTTRAN	-0.03852 0.7721 59	0.08227 0.5356 59	-0.01664 0.9005 59	0.12550 0.3436 59	0.04055 0.7604 59	0.00331 0.9801 59	-0.17413 0.1872 59	-0.17511 0.1847 59	-0.09752 0.4625 59	0.00985 0.9410 59	0.04840 0.7159 59	-0.10470 0.4300 59	-0.18796 0.1540 59	
BOTPOC	-0.07555 0.5696 59	0.03962 0.7658 59	0.08560 0.5192 59	-0.11680 0.3783 59	-0.10768 0.4169 59	-0.16801 0.2034 59	0.09106 0.4928 59	0.05106 0.7010 59	0.16510 0.2114 59	0.14682 0.2672 59	-0.31524 0.0150 59	0.05193 0.6961 59	0.33311 0.0099 59	
BOTDOC	0.09430 0.5475 43	-0.14020 0.3699 43	-0.13133 0.4012 43	-0.06058 0.6996 43	0.18339 0.2391 43	-0.29076 0.0586 43	0.26218 0.0894 43	0.11068 0.4799 43	-0.51834 0.0004 43	-0.04772 0.7612 43	0.39411 0.0089 43	-0.21108 0.1742 43	-0.2658 0.1440 43	
SURTRAN	0.00961 0.9424 59	0.12970 0.3275 59	0.00334 0.9799 59	0.13916 0.2932 59	0.12429 0.3483 59	-0.05063 0.7033 59	-0.16651 0.2075 59	-0.21874 0.0960 59	-0.23963 0.0676 59	-0.06496 0.6250 59	0.02843 0.8307 59	-0.18250 0.1665 59	-0.28105 0.0311 59	
SURPOC	0.00156 0.9906 59	0.05681 0.6691 59	-0.00765 0.9541 59	-0.08455 0.5243 59	-0.17130 0.1945 59	-0.21738 0.0982 59	0.23285 0.0759 59	0.00556 0.9667 59	0.25063 0.0555 59	0.05151 0.6984 59	-0.01304 0.9219 59	0.12427 0.3484 59	0.37697 0.0033 59	
SURDOC	-0.05722 0.7155 43	-0.16749 0.2830 43	-0.27016 0.0798 43	-0.22260 0.1514 43	-0.16920 0.2781 43	-0.10570 0.4999 43	0.10013 0.5229 43	-0.05134 0.7437 43	-0.03846 0.8065 43	0.00719 0.9635 43	0.08613 0.5829 43	0.01350 0.9315 43	0.15885 0.3090 43	
B-20	SP1	0.14803 0.2632 59	-0.00667 0.9600 59	-0.05958 0.6540 59	-0.02243 0.8661 59	-0.07384 0.5784 59	0.11391 0.3903 59	0.07521 0.5713 59	-0.15657 0.2363 59	0.03595 0.7869 59	0.04425 0.7393 59	0.35905 0.0052 59	-0.08938 0.5008 59	-0.10905 0.4110 59
	SP2	-0.18292 0.1655 59	0.07691 0.5626 59	0.02759 0.8356 59	-0.05608 0.6731 59	-0.11585 0.3822 59	0.07425 0.5762 59	-0.16370 0.2154 59	-0.07926 0.5507 59	0.40012 0.0017 59	0.25399 0.0522 59	-0.05440 0.6824 59	0.15188 0.2508 59	0.11376 0.3910 59
	SP3	-0.18813 0.1536 59	-0.08071 0.5434 59	-0.05001 0.7068 59	0.56572 0.0001 59	0.33089 0.0105 59	0.13698 0.3009 59	-0.09685 0.4656 59	-0.13948 0.2921 59	-0.21876 0.0960 59	-0.35610 0.0056 59	-0.10403 0.4330 59	-0.15472 0.2420 59	-0.19684 0.1351 59
	SP4	-0.07134 0.5913 59	0.06540 0.6226 59	0.23642 0.0714 59	-0.17636 0.1815 59	-0.27752 0.0333 59	-0.03890 0.7699 59	0.26794 0.0402 59	0.35552 0.0057 59	0.68682 0.0001 59	0.45804 0.0003 59	-0.14566 0.2710 59	0.30430 0.0191 59	0.69478 0.0001 59
	SP5	1.00000 0.0000 59	-0.02441 0.8544 59	0.01632 0.9023 59	-0.12656 0.3395 59	0.03322 0.8028 59	-0.09000 0.4979 59	0.07067 0.5948 59	0.18173 0.1684 59	-0.15392 0.2445 59	0.23879 0.0685 59	-0.08787 0.5081 59	0.08181 0.5379 59	0.03285 0.8049 59
	SP6	-0.02441 0.8544 59	1.00000 0.0000 59	0.34836 0.0069 59	-0.05828 0.6611 59	-0.10618 0.4235 59	0.15297 0.2474 59	0.18671 0.1568 59	-0.17962 0.1734 59	0.11888 0.3698 59	0.03882 0.7704 59	-0.11238 0.3968 59	-0.06215 0.6400 59	0.11083 0.4034 59
	SP7	0.01632 0.9023 59	0.34836 0.0069 59	1.00000 0.0000 59	0.19607 0.1367 59	-0.06332 0.6338 59	0.13624 0.3035 59	0.31154 0.0163 59	0.10053 0.4487 59	0.01157 0.9307 59	0.17838 0.1765 59	-0.18690 0.1564 59	0.26404 0.0433 59	0.14030 0.2892 59

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	SP5	SP6	SP7	SP8	SP9	SP10	SP11	SP12	SP13	SP14	SP15	SP16	SP17	
SP8	-0.12656 0.3395 59	-0.05828 0.6611 59	0.19607 0.1367 59	1.00000 0.0000 59	0.32064 0.0133 59	0.37791 0.0032 59	0.00437 0.9738 59	0.05978 0.6529 59	-0.17833 0.1766 59	-0.23144 0.0778 59	-0.07750 0.5596 59	-0.08761 0.5094 59	-0.15993 0.2263 59	
SP9	0.03322 0.8028 59	-0.10618 0.4235 59	-0.06332 0.6338 59	0.32064 0.0133 59	1.00000 0.0000 59	-0.00930 0.9443 59	-0.21373 0.1041 59	-0.08240 0.5349 59	-0.29820 0.0218 59	-0.18001 0.1725 59	-0.10460 0.4305 59	-0.08908 0.5023 59	-0.24599 0.0604 59	
SP10	-0.09000 0.4979 59	0.15297 0.2474 59	0.13624 0.3035 59	0.37791 0.0032 59	-0.00930 0.9443 59	1.00000 0.0000 59	-0.17299 0.1901 59	-0.11391 0.3903 59	0.18536 0.1599 59	-0.15966 0.2271 59	-0.15384 0.2447 59	-0.15845 0.2307 59	+0.16219 0.2498 59	
SP11	0.07067 0.5948 59	0.18671 0.1568 59	0.31154 0.0163 59	0.00437 0.9738 59	-0.21373 0.1041 59	-0.17299 0.1901 59	1.00000 0.0000 59	0.31394 0.0155 59	0.14425 0.2757 59	0.08136 0.5401 59	0.21732 0.0983 59	0.22122 0.0922 59	0.38679 0.0025 59	
SP12	0.18173 0.1684 59	-0.17962 0.1734 59	0.10053 0.4487 59	0.05978 0.6529 59	-0.08240 0.5349 59	-0.11391 0.3903 59	0.31394 0.0155 59	1.00000 0.0000 59	0.20240 0.1242 59	0.40763 0.0014 59	-0.00861 0.9484 59	0.20191 0.1251 59	0.33898 0.0086 59	
B-21	SP13	-0.15392 0.2445 59	0.11888 0.3698 59	0.01157 0.9307 59	-0.17833 0.1766 59	-0.29820 0.0218 59	0.18536 0.1599 59	0.14425 0.2757 59	0.20240 0.1242 59	1.00000 0.0000 59	0.24010 0.0670 59	-0.18886 0.1520 59	0.16104 0.2230 59	0.49061 0.0001 59
SP14	0.23879 0.0685 59	0.03882 0.7704 59	0.17838 0.1765 59	-0.23144 0.0778 59	-0.18001 0.1725 59	-0.15966 0.2271 59	0.08136 0.5401 59	0.40763 0.0014 59	0.24010 0.0670 59	1.00000 0.0000 59	-0.20477 0.1198 59	0.49295 0.0001 59	0.44135 0.0005 59	
SP15	-0.08787 0.5081 59	-0.11238 0.3968 59	-0.18690 0.1564 59	-0.07750 0.5596 59	-0.10460 0.4305 59	-0.15384 0.2447 59	0.21732 0.0983 59	-0.00861 0.9484 59	-0.18886 0.1520 59	-0.20477 0.1198 59	1.00000 0.0000 59	-0.14544 0.2717 59	-0.12911 0.3298 59	
SP16	0.08181 0.5379 59	-0.06215 0.6400 59	0.26404 0.0433 59	-0.08761 0.5094 59	-0.08908 0.5023 59	-0.15845 0.2307 59	0.22122 0.0922 59	0.20191 0.1251 59	0.16104 0.2230 59	0.49295 0.0001 59	-0.14544 0.2717 59	1.00000 0.0000 59	0.40632 0.0014 59	
SP17	0.03285 0.8049 59	0.11083 0.4034 59	0.14030 0.2892 59	-0.15993 0.2263 59	-0.24599 0.0604 59	-0.15219 0.2498 59	0.38679 0.0025 59	0.33898 0.0086 59	0.49061 0.0001 59	0.44135 0.0005 59	-0.12911 0.3298 59	0.40632 0.0014 59	1.00000 0.0000 59	
SP18	0.15362 0.2454 59	0.27773 0.0332 59	0.25714 0.0493 59	-0.06990 0.5988 59	-0.18341 0.1644 59	-0.02925 0.8259 59	0.18957 0.1504 59	0.19916 0.1305 59	0.21614 0.1001 59	0.50492 0.0001 59	-0.17522 0.1844 59	0.24508 0.0614 59	0.39320 0.0021 59	
SP19	-0.13420 0.3109 59	0.08330 0.5305 59	0.18405 0.1629 59	-0.01455 0.9129 59	-0.11423 0.3890 59	0.06548 0.6222 59	0.09833 0.4587 59	-0.13216 0.3184 59	-0.10118 0.4458 59	-0.14166 0.2845 59	-0.16320 0.2168 59	0.10920 0.4103 59	-0.09919 0.4548 59	
SP20	0.41867 0.0010 59	-0.09398 0.4790 59	0.10688 0.4204 59	-0.05899 0.6572 59	0.16937 0.1997 59	0.01140 0.9317 59	0.07403 0.5774 59	0.15881 0.2296 59	-0.02753 0.8360 59	0.24529 0.0611 59	-0.10060 0.4484 59	0.28157 0.0307 59	0.02500 0.8509 59	

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	SP5	SP6	SP7	SP8	SP9	SP10	SP11	SP12	SP13	SP14	SP15	SP16	SP17
SP21	0.01357 0.9188 59	-0.05323 0.6889 59	0.12606 0.3414 59	-0.10248 0.4399 59	-0.19711 0.1346 59	-0.00835 0.9500 59	0.04982 0.7079 59	0.26557 0.0421 59	0.31387 0.0155 59	0.40529 0.0015 59	-0.22485 0.0869 59	0.44175 0.0005 59	0.41800 0.0010 59
SP22	-0.06099 0.6463 59	-0.01565 0.9064 59	-0.10213 0.4415 59	-0.04453 0.7377 59	-0.06522 0.6236 59	-0.06731 0.6125 59	-0.11797 0.3735 59	-0.12939 0.3287 59	-0.09672 0.4662 59	-0.06789 0.6094 59	0.36791 0.0041 59	-0.07743 0.5600 59	-0.07384 0.5783 59
SP23	0.31921 0.0137 59	-0.07797 0.5572 59	0.19207 0.1450 59	-0.03171 0.8116 59	-0.04016 0.7627 59	-0.11723 0.3766 59	0.13973 0.2912 59	-0.04767 0.7199 59	-0.05362 0.6867 59	0.22519 0.0864 59	-0.07916 0.5512 59	0.07808 0.5567 59	-0.00283 0.9830 59
SP24	0.06866 0.6054 59	-0.19094 0.1474 59	0.29113 0.0253 59	-0.10905 0.4110 59	-0.18794 0.1540 59	-0.21213 0.1068 59	0.26528 0.0423 59	0.10367 0.4346 59	-0.10571 0.4255 59	0.27481 0.0352 59	-0.10158 0.4440 59	0.49255 0.0001 59	0.22600 0.0852 59
SP25	-0.05409 0.6841 59	0.05766 0.6645 59	0.09604 0.4693 59	-0.17850 0.1762 59	-0.24245 0.0643 59	-0.17315 0.1897 59	0.22833 0.0820 59	0.16257 0.2186 59	0.35828 0.0053 59	0.35261 0.0062 59	-0.14065 0.2880 59	0.41803 0.0010 59	0.44505 0.0004 59
SP26	0.40699 0.0014 59	-0.04456 0.7375 59	0.06097 0.6464 59	0.12519 0.3448 59	-0.02935 0.8254 59	0.20596 0.1176 59	-0.07870 0.5535 59	-0.02662 0.8414 59	0.18515 0.1604 59	0.19379 0.1414 59	-0.17339 0.1891 59	0.14017 0.2897 59	0.02733 0.8372 59
B-22	SP27	0.15594 0.2383 59	-0.19482 0.1392 59	0.07666 0.5639 59	0.00831 0.9502 59	-0.01268 0.9241 59	-0.16201 0.2202 59	0.06716 0.6133 59	-0.01241 0.9257 59	-0.19950 0.1298 59	0.19203 0.1451 59	-0.06541 0.6226 59	0.05340 0.6879 59
	SP28	0.25724 0.0492 59	0.26800 0.0401 59	0.12573 0.3427 59	-0.10241 0.4402 59	-0.04146 0.7552 59	0.19388 0.1412 59	-0.04088 0.7585 59	0.07890 0.5525 59	0.31128 0.0164 59	0.42924 0.0007 59	-0.18947 0.1506 59	0.07029 0.5968 59
SP29	0.10055 0.4486 59	0.23734 0.0703 59	0.11762 0.3750 59	-0.17875 0.1755 59	-0.25320 0.0530 59	-0.14221 0.2826 59	0.29156 0.0251 59	0.37808 0.0032 59	0.48549 0.0001 59	0.52907 0.0001 59	-0.16687 0.2065 59	0.15921 0.2284 59	0.54624 0.0001 59
SP30	0.13699 0.3009 59	0.00438 0.9737 59	-0.13033 0.3252 59	-0.10788 0.4160 59	-0.19268 0.1437 59	-0.08447 0.5247 59	0.01668 0.9002 59	-0.24659 0.0597 59	-0.13677 0.3016 59	-0.04203 0.7519 59	0.26571 0.0419 59	-0.05978 0.6529 59	-0.09592 0.4699 59
SP31	0.01923 0.8850 59	0.09903 0.4555 59	0.24017 0.0669 59	0.17558 0.1835 59	-0.06080 0.6474 59	0.19949 0.1298 59	-0.09155 0.4904 59	-0.02662 0.8414 59	0.31359 0.0156 59	0.24369 0.0629 59	-0.05101 0.7012 59	0.03250 0.8070 59	0.11300 0.3941 59
SP32	-0.03267 0.8060 59	0.33243 0.0101 59	0.21651 0.0995 59	-0.14285 0.2805 59	-0.25370 0.0525 59	0.13763 0.2986 59	0.18387 0.1633 59	0.33896 0.0086 59	0.58509 0.0001 59	0.50532 0.0001 59	-0.14567 0.2709 59	0.17016 0.1976 59	0.60400 0.0001 59
SP33	0.03186 0.8107 59	-0.01656 0.9009 59	0.20816 0.1136 59	-0.14706 0.2664 59	-0.22486 0.0869 59	-0.24813 0.0581 59	0.46425 0.0002 59	0.34890 -0.0068 59	0.37278 0.0036 59	0.52045 0.0001 59	-0.11872 0.3705 59	0.60315 0.0001 59	0.76675 0.0001 59

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	SP5	SP6	SP7	SP8	SP9	SP10	SP11	SP12	SP13	SP14	SP15	SP16	SP17
SP34	0.16311 0.2171 59	0.36066 0.0050 59	0.25300 0.0532 59	0.02565 0.8471 59	-0.17331 0.1893 59	0.41370 0.0011 59	0.00982 0.9412 59	0.11929 0.3682 59	0.27208 0.0371 59	0.18782 0.1543 59	-0.15933 0.2280 59	0.03548 0.7897 59	0.04851 0.7152 59
SP35	0.24206 0.0647 59	-0.21160 0.1077 59	0.21101 0.1087 59	-0.17911 0.1747 59	-0.11502 0.3857 59	-0.10452 0.4308 59	0.26695 0.0410 59	0.20231 0.1244 59	0.14429 0.2756 59	0.30885 0.0173 59	-0.04850 0.7153 59	0.48428 0.0001 59	0.28788 0.0270 59
SP36	0.12585 0.3422 59	0.52951 0.0001 59	0.52755 0.0001 59	-0.10548 0.4266 59	-0.21284 0.1056 59	0.13807 0.2970 59	0.38540 0.0026 59	-0.01601 0.9042 59	0.13082 0.3234 59	0.12840 0.3325 59	-0.04820 0.7169 59	0.11287 0.3947 59	0.33317 0.0099 59
SP37	0.20422 0.1208 59	-0.06837 0.6069 59	0.18062 0.1710 59	0.36131 0.0049 59	0.07193 0.5882 59	0.30031 0.0208 59	0.02285 0.8636 59	0.33005 0.0107 59	0.37614 0.0033 59	0.25743 0.0490 59	-0.19508 0.1387 59	0.10878 0.4122 59	0.31166 0.0163 59
SP38	-0.12093 0.3616 59	0.19156 0.1461 59	0.10630 0.4230 59	-0.05996 0.6519 59	-0.09080 0.4940 59	-0.00834 0.9500 59	0.07798 0.5571 59	0.15651 0.2365 59	0.48219 0.0001 59	0.39230 0.0021 59	-0.26822 0.0400 59	0.20174 0.1255 59	0.49947 0.0001 59
SP39	0.05704 0.6678 59	0.08106 0.5417 59	-0.15800 0.2320 59	0.10049 0.4489 59	0.03440 0.7959 59	-0.10271 0.4389 59	-0.14079 0.2875 59	-0.02180 0.8698 59	-0.25292 0.0533 59	0.03117 0.8147 59	0.03834 0.7731 59	-0.10494 0.4290 59	-0.13891 0.2941 59
B-23	SP40	0.11727 0.3764 59	-0.07778 0.5582 59	0.51224 0.0001 59	-0.09042 0.4958 59	-0.10579 0.4252 59	-0.10746 0.4179 59	0.27087 0.0380 59	0.15850 0.2305 59	-0.01901 0.8863 59	0.35375 0.0060 59	-0.07499 0.5724 59	0.37444 0.0035 59
	SP41	0.36200 0.0048 59	0.26893 0.0394 59	0.11807 0.3731 59	-0.24546 0.0610 59	-0.17789 0.1777 59	-0.04265 0.7484 59	0.21772 0.0976 59	0.06577 0.6207 59	0.44993 0.0004 59	0.43599 0.0006 59	0.01023 0.9387 59	0.21740 0.0981 59
	SP42	0.23965 0.0675 59	-0.05639 0.6714 59	-0.00295 0.9823 59	0.14213 0.2829 59	0.04753 0.7207 59	0.24228 0.0645 59	-0.14907 0.2598 59	-0.00789 0.9527 59	0.01298 0.9222 59	0.26081 0.0460 59	-0.21099 0.1087 59	-0.01622 0.9030 59
	SP43	0.00362 0.9783 59	-0.03367 0.8001 59	0.04222 0.7509 59	-0.07696 0.5623 59	-0.09097 0.4932 59	-0.16368 0.2154 59	-0.00228 0.9863 59	-0.14579 0.2706 59	-0.08928 0.5013 59	0.08172 0.5384 59	0.00076 0.9954 59	-0.04442 0.7383 59
	SP44	-0.09979 0.4521 59	0.08656 0.5145 59	0.28955 0.0261 59	-0.15787 0.2324 59	-0.37240 0.0037 59	-0.03904 0.7691 59	0.46325 0.0002 59	0.28288 0.0299 59	0.48502 0.0001 59	0.33310 0.0099 59	-0.09936 0.4540 59	0.35150 0.0063 59
	SP45	0.13277 0.3161 59	0.49551 0.0001 59	0.23507 0.0731 59	0.04319 0.7453 59	-0.15191 0.2507 59	0.14664 0.2678 59	0.16145 0.2218 59	-0.18428 0.1624 59	0.06789 0.6094 59	0.03931 0.7676 59	-0.15135 0.2525 59	0.01767 0.8943 59
SP46	-0.01443 0.9136 59	0.26830 0.0399 59	0.11526 0.3847 59	-0.16722 0.2056 59	-0.30558 0.0186 59	0.20658 0.1165 59	0.05872 0.6587 59	-0.05658 0.6704 59	0.38311 0.0027 59	0.16661 0.2072 59	-0.25772 0.0488 59	0.08904 0.5024 59	0.26452 0.0429 59

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	SP5	SP6	SP7	SP8	SP9	SP10	SP11	SP12	SP13	SP14	SP15	SP16	SP17	
SP47	0.16771 0.2042 59	0.26790 0.0402 59	0.28583 0.0282 59	0.10128 0.4453 59	-0.16737 0.2051 59	0.03909 0.7688 59	0.17308 0.1899 59	-0.07337 0.5808 59	0.04510 0.7345 59	-0.19143 0.1464 59	-0.13036 0.3251 59	0.07030 0.5967 59	0.15863 0.2301 59	
SP48	0.07717 0.5613 59	-0.00214 0.9872 59	0.14948 0.2585 59	-0.04856 0.7149 59	-0.22498 0.0867 59	-0.02509 0.8504 59	0.19143 0.1464 59	0.40009 0.0017 59	0.28561 0.0283 59	0.40204 0.0016 59	-0.12436 0.3480 59	0.46105 0.0002 59	0.61362 0.0001 59	
SP49	0.03965 0.7656 59	0.21522 0.1016 59	0.23358 0.0750 59	-0.22723 0.0835 59	-0.34213 0.0080 59	-0.00267 0.9840 59	0.53919 0.0001 59	0.19533 0.1382 59	0.34384 0.0077 59	-0.05639 0.6714 59	0.05593 0.6739 59	0.04205 0.7518 59	0.41900 0.0010 59	
SP50	-0.04245 0.7495 59	-0.17270 0.1909 59	0.11659 0.3792 59	-0.13168 0.3201 59	-0.20138 0.1262 59	-0.23719 0.0705 59	0.26355 0.0437 59	0.06100 0.6463 59	-0.03817 0.7741 59	0.32771 0.0113 59	-0.10197 0.4422 59	0.48724 0.0001 59	0.26368 0.0436 59	
SP51	0.10248 0.4399 59	0.09100 0.4930 59	-0.09856 0.4577 59	-0.24942 0.0568 59	-0.38621 0.0025 59	-0.22149 0.0918 59	0.56526 0.0001 59	0.36362 0.0046 59	0.30879 0.0173 59	0.07883 0.5529 59	0.29618 0.0227 59	-0.05929 0.6555 59	0.44855 0.0004 59	
SP52	-0.02611 0.8444 59	-0.15665 0.2361 59	-0.09069 0.4946 59	-0.08270 0.5335 59	-0.16493 0.2119 59	-0.23793 0.0696 59	0.43670 0.0005 59	0.09955 0.4531 59	-0.25248 0.0537 59	-0.16560 0.2100 59	0.87286 0.0001 59	-0.03277 0.8054 59	-0.12436 0.3480 59	
B-24	SP53	0.06249 0.6382 59	-0.16474 0.2124 59	0.14641 0.2685 59	0.61503 0.0001 59	0.30991 0.0169 59	0.08936 0.5009 59	-0.12463 0.3470 59	0.24208 0.0647 59	-0.17768 0.1782 59	-0.06094 0.6466 59	-0.05639 0.6714 59	0.02931 0.8256 59	-0.15950 0.2275 59
SP54	0.08465 0.5239 59	0.41931 0.0009 59	0.24629 0.0601 59	-0.21686 0.0990 59	-0.30046 0.0208 59	0.21364 0.1042 59	0.22711 0.0837 59	0.23296 0.0758 59	0.72940 0.0001 59	0.38030 0.0030 59	-0.18073 0.1707 59	0.08526 0.5208 59	0.57705 0.0001 59	
SP55	-0.02987 0.8223 59	0.03309 0.8035 59	-0.16128 0.2224 59	0.01460 0.9126 59	-0.09273 0.4848 59	-0.13600 0.3044 59	-0.00025 0.9985 59	-0.06324 0.6342 59	-0.15591 0.2383 59	-0.00271 0.9838 59	0.53036 0.0001 59	-0.08398 0.5271 59	-0.12990 0.3268 59	
SP56	0.10797 0.4157 59	0.01721 0.8971 59	0.24104 0.0659 59	0.45685 0.0003 59	0.34025 0.0084 59	0.14641 0.2685 59	0.04032 0.7618 59	0.15294 0.2475 59	0.06882 0.6045 59	0.19199 0.1452 59	-0.17911 0.1747 59	0.13013 0.3259 59	0.07152 0.5904 59	
SP57	0.32765 0.0113 59	0.05631 0.6719 59	0.41490 0.0011 59	-0.04695 0.7240 59	-0.13450 0.3098 59	-0.19730 0.1342 59	0.38858 0.0024 59	0.09341 0.4816 59	-0.09090 0.4935 59	0.41470 0.0011 59	0.03503 0.7922 59	0.28301 0.0299 59	0.14632 0.2688 59	
SP58	0.09421 0.4778 59	0.04203 0.7519 59	0.26965 0.0389 59	-0.17609 0.1822 59	-0.17590 0.1827 59	-0.17079 0.1959 59	0.46183 0.0002 59	0.04306 0.7461 59	-0.08396 0.5273 59	0.10549 0.4265 59	0.03649 0.7838 59	0.34574 0.0073 59	0.31711 0.0144 59	
SP59	0.21570 0.1008 59	0.47691 0.0001 59	0.23056 0.0790 59	-0.17398 0.1876 59	-0.27275 0.0366 59	0.02034 0.8785 59	0.27207 0.0371 59	0.01480 0.9114 59	0.32195 0.0129 59	0.26553 0.0421 59	-0.24246 0.0643 59	0.08739 0.5105 59	0.24723 0.0591 59	

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	SP5	SP6	SP7	SP8	SP9	SP10	SP11	SP12	SP13	SP14	SP15	SP16	SP17	
SP60	0.00463 0.9722 59	-0.02860 0.8297 59	0.04568 0.7312 59	-0.15290 0.2476 59	-0.23474 0.0735 59	-0.09008 0.4975 59	0.10153 0.4442 59	-0.08746 0.5101 59	0.05751 0.6653 59	0.11823 0.3725 59	-0.12134 0.3599 59	0.09252 0.4858 59	0.11073 0.4038 59	
SP61	-0.11196 0.3985 59	0.26191 0.0451 59	0.24292 0.0638 59	-0.13994 0.2904 59	-0.22218 0.0908 59	-0.09242 0.4863 59	0.22236 0.0905 59	0.33926 0.0086 59	0.51536 0.0001 59	0.42226 0.0009 59	-0.11877 0.3703 59	0.06430 0.6285 59	0.56295 0.0001 59	
	SP18	SP19	SP20	SP21	SP22	SP23	SP24	SP25	SP26	SP27	SP28	SP29	SP30	
PL1ALK	-0.19518 0.1385 59	0.06325 0.6341 59	-0.02161 0.8709 59	-0.24414 0.0624 59	0.01348 0.9193 59	0.13703 0.3007 59	0.13942 0.2923 59	-0.15030 0.2559 59	-0.02433 0.8549 59	0.04659 0.7260 59	-0.19255 0.1440 59	-0.29090 0.0254 59	0.05852 0.6597 59	
PELOALK	-0.15278 0.2480 59	0.09065 0.4947 59	0.07903 0.5519 59	-0.22260 0.0902 59	0.02939 0.8251 59	0.22919 0.0808 59	0.15195 0.2506 59	-0.16358 0.2157 59	0.04760 0.7203 59	0.09167 0.4899 59	-0.14924 0.2592 59	-0.27968 0.0319 59	0.12759 0.3356 59	
PEHIALK	-0.24580 0.0606 59	-0.02513 0.8501 59	0.04552 0.7321 59	-0.24798 0.0583 59	0.06776 0.6101 59	-0.01972 0.8822 59	-0.06507 0.6244 59	-0.25655 0.0498 59	-0.12146 0.3595 59	0.03211 0.8092 59	-0.11676 0.3785 59	-0.28229 0.0303 59	0.05855 0.6596 59	
B-25	TERRI	-0.26869 0.0396 59	0.01424 0.9148 59	-0.06674 0.6155 59	-0.21910 0.0955 59	0.15183 0.2510 59	0.10881 0.4120 59	-0.03550 0.7895 59	-0.32665 0.0116 59	0.04326 0.7449 59	0.15934 0.2280 59	-0.06257 0.6378 59	-0.29838 0.0217 59	0.22616 0.0850 59
TOTEOM	-0.18489 0.1610 59	0.06287 0.6362 59	-0.09955 0.4532 59	-0.23823 0.0692 59	0.35290 0.0061 59	-0.07183 0.5888 59	0.27131 0.0377 59	-0.07513 0.5717 59	-0.11015 0.4063 59	0.00765 0.9541 59	-0.24542 0.0610 59	-0.23469 0.0736 59	0.20341 0.1223 59	
ALUMC	-0.16411 0.2142 59	0.07757 0.5592 59	-0.11112 0.4021 59	-0.24178 0.0651 59	0.20901 0.1121 59	-0.08175 0.5382 59	0.10491 0.4291 59	-0.17571 0.1831 59	-0.08930 0.5012 59	0.10811 0.4150 59	-0.03252 0.8068 59	-0.24724 0.0590 59	0.28586 0.0282 59	
CPI	-0.09319 0.4827 59	0.00539 0.9677 59	-0.11552 0.3836 59	-0.09855 0.4577 59	0.16279 0.2180 59	0.29699 0.0224 59	0.07253 0.5851 59	-0.24112 0.0658 59	0.27516 0.0349 59	0.31628 0.0147 59	-0.03660 0.7831 59	-0.06953 0.6008 59	0.14222 0.2826 59	
SAND	0.33802 0.0088 59	0.09974 0.4523 59	-0.18076 0.1707 59	-0.03491 0.7929 59	-0.13589 0.3048 59	-0.03636 0.7846 59	-0.14297 0.2800 59	0.08504 0.5219 59	-0.04714 0.7229 59	-0.21000 0.1104 59	0.10021 0.4502 59	0.21469 0.1025 59	-0.22109 0.0924 59	
SILT	0.03311 0.8034 59	-0.02856 0.8300 59	-0.11727 0.3764 59	-0.07851 0.5545 59	-0.18629 0.1577 59	0.00959 0.9425 59	-0.20624 0.1171 59	-0.05665 0.6700 59	-0.08281 0.5330 59	-0.28724 0.0274 59	0.12973 0.3274 59	0.09038 0.4960 59	-0.15851 0.2305 59	
CLAY	-0.30720 0.0179 59	-0.07440 0.5754 59	0.20634 0.1169 59	0.06341 0.6333 59	0.19675 0.1353 59	0.02738 0.8369 59	0.21131 0.1081 59	-0.04978 0.7081 59	0.07585 0.5680 59	0.30380 0.0193 59	-0.14199 0.2834 59	-0.22452 0.0873 59	0.25873 0.0479 59	
ORCAR	-0.18624 0.1579 59	0.08044 0.5447 59	0.10272 0.4388 59	0.02212 0.8680 59	0.02451 0.8538 59	0.10353 0.4352 59	0.09845 0.4582 59	0.18243 0.1667 59	-0.02720 0.8380 59	-0.15093 0.2539 59	-0.12483 0.3462 59	-0.07822 0.5559 59	0.08862 0.5045 59	

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	SP18	SP19	SP20	SP21	SP22	SP23	SP24	SP25	SP26	SP27	SP28	SP29	SP30
CACO	0.36553 0.0044	-0.15236 0.2493	-0.11494 0.3860	0.19944 0.1299	-0.13377 0.3124	-0.14645 0.2684	-0.19272 0.1436	0.07829 0.5556	-0.02121 0.8733	-0.16268 0.2183	0.30674 0.0181	0.32574 0.0118	-0.24962 0.0566
	59	59	59	59	59	59	59	59	59	59	59	59	59
DELC13	0.16823 0.2028	0.05550 0.6763	-0.07999 0.5470	0.31368 0.0156	-0.07705 0.5619	-0.03043 0.8190	-0.13931 0.2927	0.24410 0.0624	0.20798 0.1140	-0.12938 0.3287	0.35045 0.0065	0.18618 0.1580	0.01008 0.9396
	59	59	59	59	59	59	59	59	59	59	59	59	59
BOTTEM	0.20985 0.1107	0.32236 0.0128	-0.10114 0.4459	-0.20491 0.1195	0.28841 0.0267	-0.07233 0.5861	0.12021 0.3645	0.27784 0.0331	-0.22255 0.0902	-0.04772 0.7197	-0.17778 0.1779	0.17427 0.1868	0.49139 0.0001
	59	59	59	59	59	59	59	59	59	59	59	59	59
BOTSAL	0.16100 0.2232	0.20921 0.1118	-0.08462 0.5240	-0.34704 0.0071	0.31440 0.0153	-0.18354 0.1641	0.01560 0.9067	0.02907 0.8270	-0.26132 0.0456	-0.11878 0.3703	-0.17344 0.1890	-0.10199 0.4421	0.45075 0.0003
	59	59	59	59	59	59	59	59	59	59	59	59	59
BOTDO	-0.24465 0.0618	-0.22552 0.0859	0.02254 0.8655	0.02527 0.8493	-0.12864 0.3316	-0.01378 0.9175	-0.19911 0.1306	-0.24155 0.0653	0.05963 0.6537	0.06409 0.6296	0.18299 0.1654	-0.20953 0.1112	-0.36120 0.0049
	59	59	59	59	59	59	59	59	59	59	59	59	59
BOTTRAN	-0.07588 0.5679	-0.00564 0.9662	-0.12933 0.3289	0.03916 0.7684	0.04513 0.7343	0.18747 0.1551	0.02414 0.8560	-0.19421 0.1405	0.24106 0.0659	0.17212 0.1924	0.00231 0.9862	0.02504 0.8507	-0.07354 0.5799
	59	59	59	59	59	59	59	59	59	59	59	59	59
BOTP0C	0.43209 0.0006	0.12731 0.3366	-0.22043 0.0934	-0.02510 0.8503	-0.08090 0.5425	-0.26423 0.0431	0.07002 0.5982	0.24963 0.0566	-0.16877 0.2013	-0.00792 0.9526	-0.10974 0.4080	0.24696 0.0593	0.10177 0.4431
	59	59	59	59	59	59	59	59	59	59	59	59	59
BOTDOC	-0.13077 0.4032	-0.34559 0.0232	0.27755 0.0715	-0.23161 0.1351	0.22100 0.1544	0.06127 0.6963	-0.13459 0.3895	-0.33599 0.0276	-0.17603 0.2588	0.32968 0.0309	-0.00638 0.9676	-0.21249 0.1713	-0.04404 0.7791
	43	43	43	43	43	43	43	43	43	43	43	43	43
SURTRAN	-0.01881 0.8876	0.05558 0.6759	-0.16358 0.2157	-0.16950 0.1994	0.05709 0.6676	0.08636 0.5155	-0.07904 0.5518	-0.25805 0.0485	0.15122 0.2529	0.15116 0.2531	-0.03407 0.7978	-0.07011 0.5977	-0.04471 0.7367
	59	59	59	59	59	59	59	59	59	59	59	59	59
SURPOC	0.19035 0.1487	0.02334 0.8607	-0.21065 0.1093	0.04485 0.7359	0.18223 0.1672	-0.06161 0.6430	0.17885 0.1753	0.24064 0.0664	0.04347 0.7437	0.28980 0.0260	-0.05225 0.6943	0.33972 0.0085	0.33269 0.0100
	59	59	59	59	59	59	59	59	59	59	59	59	59
SURDOC	-0.14654 0.3484	0.05195 0.7408	-0.04362 0.7812	0.01555 0.9211	0.05214 0.7398	-0.04042 0.7969	0.14873 0.3412	0.22388 0.1490	-0.14379 0.3576	0.11962 0.4448	-0.20155 0.1949	-0.07242 0.6444	0.14052 0.3688
	43	43	43	43	43	43	43	43	43	43	43	43	43
SP1	-0.11684 0.3782	0.10983 0.4076	0.02937 0.8253	-0.11278 0.3951	-0.09441 0.4769	0.30460 0.0190	-0.16522 0.2111	-0.10532 0.4273	0.31410 0.0154	-0.13060 0.3242	0.04414 0.7399	0.01737 0.8961	0.15212 0.2501
	59	59	59	59	59	59	59	59	59	59	59	59	59
SP2	0.25363 0.0526	0.01585 0.9052	0.02196 0.8689	0.11259 0.3959	-0.04300 0.7464	-0.10787 0.4161	-0.03581 0.7877	0.42398 -0.9008	0.03088 0.8164	-0.04154 0.7548	0.15285 0.2478	0.04669 0.7255	0.18523 0.1602
	59	59	59	59	59	59	59	59	59	59	59	59	59

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	SP18	SP19	SP20	SP21	SP22	SP23	SP24	SP25	SP26	SP27	SP28	SP29	SP30
SP3	-0.15957 0.2273 59	0.05916 0.6563 59	-0.15549 0.2396 59	-0.16542 0.2105 59	-0.05593 0.6740 59	-0.09028 0.4965 59	-0.15415 0.2437 59	-0.22627 0.0848 59	0.00565 0.3662 59	-0.11706 0.3773 59	-0.16571 0.2097 59	-0.26887 0.0395 59	-0.06186 0.6416 59
SP4	0.21536 0.1014 59	-0.14792 0.2635 59	0.03502 0.7923 59	0.51860 0.0001 59	-0.07416 0.5767 59	0.07065 0.5949 59	0.21192 0.1071 59	0.44999 0.0003 59	0.05968 0.6534 59	-0.09747 0.4627 59	0.22418 0.0878 59	0.57868 0.0001 59	-0.16452 0.2131 59
SP5	0.15362 0.2454 59	-0.13420 0.3109 59	0.41867 0.0010 59	0.01357 0.9188 59	-0.06099 0.6463 59	0.31921 0.0137 59	0.06866 0.6054 59	-0.05409 0.6841 59	0.40699 0.0014 59	0.15594 0.2383 59	0.25724 0.0492 59	0.10055 0.4486 59	0.18699 0.3009 59
SP6	0.27773 0.0332 59	0.08330 0.5305 59	-0.09398 0.4790 59	-0.05323 0.6889 59	-0.01565 0.9064 59	-0.07797 0.5572 59	-0.19094 0.1474 59	0.05766 0.6645 59	-0.04456 0.7375 59	-0.19482 0.1392 59	0.26800 0.0401 59	0.23734 0.0703 59	0.00438 0.9737 59
SP7	0.25714 0.0493 59	0.18405 0.1629 59	0.10688 0.4204 59	0.12606 0.3414 59	-0.10213 0.4415 59	0.19207 0.1450 59	0.29113 0.0253 59	0.09604 0.4693 59	0.06097 0.6464 59	0.07666 0.6464 59	0.12573 0.5639 59	0.11762 0.3427 59	-0.13033 0.3750 59
SP8	-0.06990 0.5988 59	-0.01455 0.9129 59	-0.05899 0.6572 59	-0.10248 0.4399 59	-0.04453 0.7377 59	-0.03171 0.6116 59	-0.10905 0.4110 59	-0.17850 0.1762 59	0.12519 0.3448 59	0.00831 0.9502 59	-0.10241 0.4402 59	-0.17875 0.1755 59	-0.10788 0.4160 59
SP9	-0.18341 0.1644 59	-0.11423 0.3890 59	0.16937 0.1997 59	-0.19711 0.1346 59	-0.06522 0.6236 59	-0.04016 0.7627 59	-0.18794 0.1540 59	-0.24245 0.0643 59	-0.02935 0.8254 59	-0.01268 0.9241 59	-0.04146 0.7552 59	-0.25320 0.0530 59	-0.19268 0.1437 59
SP10	-0.02925 0.8259 59	0.06548 0.6222 59	0.01140 0.9317 59	-0.00835 0.9500 59	-0.06731 0.6125 59	-0.11723 0.3766 59	-0.21213 0.1068 59	-0.17315 0.1897 59	0.20596 0.1176 59	-0.16201 0.2202 59	0.19388 0.1412 59	-0.14221 0.2826 59	-0.08447 0.5247 59
SP11	0.18957 0.1504 59	0.09833 0.4587 59	0.07403 0.5774 59	0.04982 0.7079 59	-0.11797 0.3735 59	0.13973 0.2912 59	0.26528 0.0423 59	0.22833 0.0820 59	-0.07870 0.5535 59	0.06716 0.6133 59	-0.04088 0.7585 59	0.29156 0.0251 59	0.01668 0.9002 59
SP12	0.19916 0.1305 59	-0.13216 0.3184 59	0.15881 0.2296 59	0.26557 0.0421 59	-0.12939 0.3287 59	-0.04767 0.7199 59	0.10367 0.4346 59	0.16257 0.2186 59	-0.02662 0.8414 59	-0.01241 0.9257 59	0.07890 0.5525 59	0.37808 0.0032 59	-0.24659 0.0597 59
SP13	0.21614 0.1001 59	-0.10118 0.4458 59	-0.02753 0.8360 59	0.31387 0.0155 59	-0.09672 0.4662 59	-0.05362 0.6867 59	-0.10571 0.4255 59	0.35828 0.0053 59	0.18515 0.1604 59	-0.19950 0.1298 59	0.31128 0.0164 59	0.48549 0.0001 59	-0.13677 0.3016 59
SP14	0.50492 0.0001 59	-0.14166 0.2845 59	0.24529 0.0611 59	0.40529 0.0015 59	-0.06789 0.6094 59	0.22519 0.0864 59	0.27481 0.0352 59	0.35261 0.0062 59	0.19379 0.1414 59	0.19203 0.1451 59	0.42924 0.0007 59	0.52907 0.0001 59	-0.04203 0.7519 59
SP15	-0.17522 0.1844 59	-0.16320 0.2168 59	-0.10060 0.4484 59	-0.22485 0.0869 59	0.36791 0.0041 59	-0.07916 0.5512 59	-0.10158 0.4440 59	-0.14065 0.2880 59	-0.17339 0.1891 59	-0.06541 0.6226 59	-0.18947 0.1506 59	-0.16687 0.2065 59	0.26571 0.0419 59

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	SP18	SP19	SP20	SP21	SP22	SP23	SP24	SP25	SP26	SP27	SP28	SP29	SP30	
SP16	0.24508 0.0614 59	0.10920 0.4103 59	0.28157 0.0307 59	0.44175 0.0005 59	-0.07743 0.5600 59	0.07808 0.5567 59	0.49255 0.0001 59	0.41803 0.0010 59	0.14017 0.2897 59	0.05340 0.6879 59	0.07029 0.5968 59	0.15921 0.2284 59	-0.05978 0.6529 59	
SP17	0.39320 0.0021 59	-0.09919 0.4548 59	0.02500 0.8509 59	0.41800 0.0010 59	-0.07384 0.5783 59	-0.00283 0.9830 59	0.22600 0.0852 59	0.44505 0.0004 59	0.02733 0.8372 59	-0.14199 0.2834 59	0.16915 0.2003 59	0.54624 0.0001 59	-0.09592 0.4699 59	
SP18	1.00000 0.0000 59	-0.08812 0.5069 59	-0.08612 0.5166 59	0.11023 0.4059 59	-0.09614 0.4688 59	0.04186 0.7529 59	0.02342 0.8603 59	0.31620 0.0147 59	0.09466 0.4758 59	-0.02722 0.8379 59	0.25311 0.0531 59	0.48826 0.0001 59	0.11513 0.3852 59	
SP19	-0.08812 0.5069 59	1.00000 0.0000 59	0.03088 0.8164 59	-0.06078 0.6475 59	-0.09868 0.4571 59	0.01252 0.9250 59	0.25743 0.0490 59	0.11959 0.3670 59	-0.13219 0.3183 59	-0.03879 0.7705 59	-0.26957 0.0390 59	-0.04377 0.7420 59	0.29269 0.0245 59	
SP20	-0.08612 0.5166 59	0.03088 0.8164 59	1.00000 0.0000 59	0.22771 0.0828 59	-0.02800 0.8333 59	0.12411 0.3490 59	0.24067 0.0663 59	0.06273 0.6369 59	0.05215 0.6949 59	0.14785 0.2638 59	0.17207 0.1925 59	-0.01404 0.9159 59	-0.02133 0.8726 59	
SP21	0.11023 0.4059 59	-0.06078 0.6475 59	0.22771 0.0828 59	1.00000 0.0000 59	-0.11268 0.3955 59	0.25429 0.0520 59	0.27697 0.0337 59	0.33221 0.0102 59	0.32351 0.0124 59	0.05735 0.6661 59	0.33851 0.0087 59	0.24087 0.0661 59	-0.11950 0.3673 59	
B-28	SP22	-0.09614 0.4688 59	-0.09868 0.4571 59	-0.02800 0.8333 59	-0.11268 0.3955 59	1.00000 0.0000 59	-0.05738 0.6660 59	-0.05814 0.6618 59	-0.08051 0.5444 59	-0.10906 0.4109 59	-0.03366 0.8002 59	-0.04059 0.7602 59	-0.10006 0.4508 59	0.56665 0.0001 59
	SP23	0.04186 0.7529 59	0.01252 0.9250 59	0.12411 0.3490 59	0.25429 0.0520 59	-0.05738 0.0000 59	1.00000 0.0955 59	0.21909 0.6100 59	0.06778 0.0001 59	0.64628 0.0062 59	0.35245 0.1131 59	0.20845 0.1131 59	0.15322 0.2466 59	0.14815 0.2628 59
SP24	0.02342 0.8603 59	0.25743 0.0490 59	0.24067 0.0663 59	0.27697 0.0337 59	-0.05814 0.6618 59	0.21909 0.0955 59	1.00000 0.0000 59	0.27694 0.0337 59	-0.08446 0.5248 59	0.30972 0.0170 59	-0.21107 0.1086 59	0.21653 0.0995 59	0.04009 0.7630 59	
SP25	0.31620 0.0147 59	0.11959 0.3670 59	0.06273 0.6369 59	0.33221 0.0102 59	-0.08051 0.5444 59	0.06778 0.6100 59	0.27694 0.0337 59	1.00000 0.0000 59	0.07161 0.5899 59	-0.06235 0.6390 59	-0.00207 0.9876 59	0.39548 0.0019 59	0.15509 0.2408 59	
SP26	0.09466 0.4758 59	-0.13219 0.3183 59	0.05215 0.6949 59	0.32351 0.0124 59	-0.10906 0.4109 59	0.64628 0.0001 59	-0.08446 0.5248 59	0.07161 0.5899 59	1.00000 0.0000 59	0.21508 0.1019 59	0.48800 0.0001 59	0.06573 0.6209 59	0.09063 0.4948 59	
SP27	-0.02722 0.8379 59	-0.03879 0.7705 59	0.14785 0.2638 59	0.05735 0.6661 59	-0.03366 0.8002 59	0.35245 0.0062 59	0.30972 0.0170 59	-0.06235 0.6390 59	0.21508 0.1019 59	1.00000 0.0000 59	0.16987 0.1984 59	0.04977 0.7082 59	0.15290 0.2476 59	
SP28	0.25311 0.0531 59	-0.26957 0.0390 59	0.17207 0.1925 59	0.33851 0.0087 59	-0.04059 0.7602 59	0.20845 0.1131 59	-0.21107 0.1086 59	-0.00207 0.9876 59	0.48800 0.0001 59	0.16987 0.1984 59	1.00000 0.0000 59	0.25100 0.0552 59	-0.02558 0.8475 59	

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	SP18	SP19	SP20	SP21	SP22	SP23	SP24	SP25	SP26	SP27	SP28	SP29	SP30	
SP29	0.48826 0.0001 59	-0.04377 0.7420 59	-0.01404 0.9159 59	0.24087 0.0661 59	-0.10006 0.4508 59	0.15322 0.2466 59	0.21653 0.0995 59	0.39548 0.0019 59	0.06573 0.6209 59	0.04977 0.7082 59	0.25100 0.0552 59	1.00000 0.0000 59	-0.00780 0.9532 59	
SP30	0.11513 0.3852 59	0.29269 0.0245 59	-0.02133 0.8726 59	-0.11950 0.3673 59	0.56665 0.0001 59	0.14815 0.2628 59	0.04009 0.7630 59	0.15509 0.2408 59	0.09063 0.4948 59	0.15290 0.2476 59	-0.02558 0.8475 59	-0.00780 0.9532 59	1.00000 0.0000 59	
SP31	0.12768 0.3352 59	-0.05305 0.6899 59	0.02478 0.8522 59	0.35015 0.0066 59	-0.13107 0.3224 59	0.32429 0.0122 59	-0.09877 0.4567 59	0.10089 0.4471 59	0.40290 0.0016 59	-0.07252 0.5852 59	0.38511 0.0026 59	0.21597 0.1004 59	+0.02671 0.8409 59	
SP32	0.46606 0.0002 59	-0.18579 0.1589 59	-0.04451 0.7378 59	0.41993 0.0009 59	-0.06878 0.6047 59	0.04335 0.7444 59	-0.09089 0.4936 59	0.24473 0.0618 59	0.08689 0.5129 59	-0.16684 0.2066 59	0.40661 0.0014 59	0.57407 0.0001 59	-0.11801 0.3734 59	
SP33	0.27921 0.0322 59	-0.02450 0.8539 59	0.12511 0.3451 59	0.45657 0.0003 59	-0.06821 0.6077 59	0.21050 0.1095 59	0.48541 0.0001 59	0.47003 0.0002 59	0.05338 0.6880 59	0.17786 0.1777 59	0.07692 0.5625 59	0.56620 0.0001 59	-0.10117 0.4458 59	
SP34	0.05574 0.6750 59	-0.02249 0.8657 59	0.15021 0.2562 59	0.33863 0.0087 59	-0.09135 0.4914 59	-0.08642 0.5152 59	-0.02251 0.8656 59	0.09300 0.4836 59	0.22794 0.0825 59	-0.08468 0.5237 59	0.48989 0.0001 59	0.27584 0.0345 59	-0.07855 0.5543 59	
B-29	SP35	-0.02701 0.8391 59	0.18811 0.1537 59	0.59375 0.0001 59	0.43682 0.0005 59	-0.06659 0.6163 59	0.38409 0.0027 59	0.59693 0.0001 59	0.41569 0.0011 59	0.19817 0.1324 59	0.31343 0.0156 59	-0.06407 0.6297 59	0.26723 0.0408 59	0.09309 0.4832 59
	SP36	0.46632 0.0002 59	0.11109 0.4022 59	-0.05525 0.6777 59	0.04669 0.7255 59	-0.11687 0.3780 59	0.12746 0.3360 59	0.02799 0.8334 59	0.08376 0.5282 59	0.06408 0.6297 59	-0.11220 0.3975 59	0.19668 0.1354 59	0.34122 0.0082 59	0.00194 0.9884 59
	SP37	0.15874 0.2298 59	-0.19612 0.1366 59	0.12575 0.3426 59	0.22071 0.0930 59	-0.10125 0.4454 59	0.27184 0.0373 59	-0.12514 0.3450 59	0.07806 0.5567 59	0.50939 0.0001 59	0.05719 0.6670 59	0.32327 0.0125 59	0.20205 0.1249 59	-0.09571 0.4709 59
	SP38	0.36382 0.0046 59	-0.12535 0.3442 59	-0.07412 0.5769 59	0.41493 0.0011 59	-0.13659 0.3023 59	-0.08636 0.5155 59	-0.04948 0.7098 59	0.20540 0.1186 59	-0.04832 0.7163 59	-0.29624 0.0227 59	0.11031 0.4056 59	0.45517 0.0003 59	-0.22738 0.0833 59
	SP39	0.12336 0.3519 59	-0.24443 0.0621 59	-0.03683 0.7818 59	-0.23162 0.0775 59	0.27499 0.0350 59	-0.16112 0.2228 59	-0.06253 0.6380 59	-0.09856 0.4577 59	-0.07175 0.5892 59	0.44938 0.0004 59	0.06780 0.6099 59	-0.01995 0.8808 59	0.25101 0.0552 59
	SP40	0.02983 0.8225 59	0.22183 0.0913 59	0.27464 0.0353 59	0.23337 0.0753 59	-0.04021 0.7624 59	0.42974 0.0007 59	0.68952 0.0001 59	0.24703 0.0593 59	-0.00172 0.9897 59	0.30319 0.0196 59	-0.06174 0.6423 59	0.18915 0.1514 59	-0.02185 0.8695 59
	SP41	0.36172 0.0049 59	-0.24004 0.0671 59	0.30269 0.0198 59	0.36100 0.0050 59	-0.06374 0.6315 59	0.34958 0.0066 59	-0.13943 0.2923 59	0.17510 0.1847 59	0.39135 0.0022 59	0.00422 0.9747 59	0.55488 0.0001 59	0.45463 0.0003 59	0.09288 0.4841 59

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	SP18	SP19	SP20	SP21	SP22	SP23	SP24	SP25	SP26	SP27	SP28	SP29	SP30	
SP42	-0.06748 0.6116 59	-0.09725 0.4637 59	0.28827 0.0268 59	0.27538 0.0348 59	-0.09179 0.4893 59	0.36792 0.0041 59	0.07258 0.5849 59	-0.07270 0.5843 59	0.47234 0.0002 59	0.54332 0.0001 59	0.44623 0.0004 59	0.03766 0.7770 59	-0.02224 0.8672 59	
SP43	-0.04421 0.7395 59	0.05905 0.6569 59	0.01150 0.9311 59	-0.03408 0.7978 59	0.21331 0.1048 59	0.07954 0.5493 59	0.23632 0.0716 59	-0.12827 0.3329 59	-0.06449 0.6275 59	0.51167 0.0001 59	-0.04884 0.7133 59	0.09173 0.4896 59	0.11674 0.3786 59	
SP44	0.22673 0.0842 59	0.11088 0.4031 59	0.05920 0.6560 59	0.28471 0.0288 59	-0.12683 0.3385 59	0.05070 0.7030 59	0.36716 0.0042 59	0.40158 0.0016 59	-0.01767 0.8943 59	0.00796 0.9523 59	0.02131 0.8727 59	0.48426 0.0001 59	-0.10387 0.4337 59	
SP45	0.49976 0.0001 59	0.12633 0.3404 59	-0.03260 0.8064 59	-0.18104 0.1700 59	-0.06433 0.6283 59	-0.04382 0.7418 59	-0.17330 0.1893 59	0.25122 0.0550 59	0.08898 0.5028 59	-0.17649 0.1812 59	0.01544 0.9076 59	0.01249 0.9252 59	0.21328 0.1048 59	
SP46	0.39566 0.0019 59	-0.01114 0.9333 59	-0.16113 0.2228 59	0.16622 0.2083 59	-0.14146 0.2852 59	-0.00684 0.9590 59	-0.21310 0.1051 59	0.13681 0.3015 59	0.22361 0.0887 59	-0.25017 0.0560 59	0.21875 0.0960 59	0.18837 0.1531 59	0.00392 0.9765 59	
SP47	0.27228 0.0370 59	-0.00087 0.9948 59	-0.16343 0.2162 59	-0.12211 0.3569 59	-0.07408 0.5771 59	-0.11311 0.3937 59	-0.09312 0.4830 59	0.04115 0.7570 59	-0.02554 0.8477 59	-0.16920 0.2002 59	-0.08159 0.5390 59	0.07570 0.5688 59	-0.03401 0.7982 59	
B-30	SP48	0.25184 0.0543 59	-0.10140 0.4447 59	0.01134 0.9321 59	0.47052 0.0002 59	-0.00615 0.9631 59	0.00825 0.9505 59	0.39138 0.0022 59	0.29171 0.0250 59	0.13875 0.2946 59	-0.07033 0.5966 59	0.10378 0.4341 59	0.36321 0.0047 59	-0.06347 0.6329 59
	SP49	0.13147 0.3209 59	0.20159 0.1258 59	-0.02657 0.8416 59	-0.02490 0.8515 59	0.02776 0.8347 59	-0.09376 0.4800 59	0.21564 0.1009 59	0.24332 0.0633 59	-0.09699 0.4649 59	-0.18980 0.1499 59	-0.13196 0.3191 59	0.28275 0.0300 59	0.13918 0.2931 59
	SP50	0.01555 0.9069 59	0.15725 0.2343 59	0.19816 0.1324 59	0.29638 0.0227 59	-0.06044 0.6493 59	0.16592 0.2092 59	0.75581 0.0001 59	0.25984 0.0469 59	-0.06423 0.6289 59	0.40454 0.0015 59	-0.16347 0.2161 59	0.21963 0.0946 59	0.00332 0.9801 59
	SP51	0.28449 0.0290 59	0.03609 0.7861 59	-0.08348 0.5296 59	0.10581 0.4251 59	-0.09521 0.4732 59	-0.03799 0.7751 59	0.03757 0.7776 59	0.41113 0.0012 59	-0.13721 0.3001 59	-0.15209 0.2502 59	-0.09185 0.4890 59	0.41326 0.0011 59	0.15881 0.2296 59
	SP52	-0.18032 0.1717 59	-0.08555 0.5194 59	-0.01002 0.9400 59	-0.15563 0.2392 59	0.36959 0.0040 59	0.05474 0.6805 59	0.20237 0.1243 59	-0.10297 0.4377 59	-0.17096 0.1955 59	0.17777 0.1780 59	-0.22740 0.0833 59	-0.10444 0.4312 59	0.31654 0.0146 59
	SP53	-0.04485 0.7359 59	-0.14505 0.2730 59	-0.26945 0.0390 59	-0.05962 0.6538 59	-0.04128 0.7563 59	-0.04862 0.7146 59	-0.11386 0.3905 59	-0.16119 0.2226 59	0.00437 0.9738 59	0.04797 0.7182 59	0.02416 0.8559 59	-0.20438 0.1205 59	-0.12582 0.3424 59
	SP54	0.34807 0.0069 59	-0.17938 0.1740 59	0.01099 0.9342 59	0.35636 0.0056 59	-0.09195 0.4886 59	0.08124 0.5408 59	-0.11563 0.3831 59	0.30219 0.0200 59	0.23380 0.0747 59	-0.19158 0.1461 59	0.47616 0.0001 59	0.60880 0.0001 59	-0.16522 0.2111 59

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	SP18	SP19	SP20	SP21	SP22	SP23	SP24	SP25	SP26	SP27	SP28	SP29	SP30	
SP55	-0.07793 0.5574 59	-0.23168 0.0775 59	0.04479 0.7362 59	-0.15792 0.2323 59	0.72069 0.0001 59	-0.03215 0.8090 59	-0.00653 0.9608 59	-0.08410 0.5265 59	-0.07857 0.5542 59	0.24275 0.0640 59	0.02864 0.8295 59	0.02845 0.8306 59	0.44945 0.0004 59	
SP56	0.06141 0.6440 59	-0.12157 0.3590 59	0.08951 0.5002 59	0.28455 0.0289 59	-0.16760 0.2045 59	0.34538 0.0074 59	0.10994 0.4072 59	0.04692 0.7242 59	0.36189 0.0049 59	-0.05250 0.6929 59	0.12992 0.3267 59	0.21925 0.0952 59	-0.24983 0.0564 59	
SP57	0.21148 0.1079 59	0.05209 0.6952 59	0.34938 0.0067 59	0.18580 0.1589 59	-0.15176 0.2512 59	0.63490 0.0001 59	0.41903 0.0010 59	0.30724 0.0179 59	0.30717 0.0180 59	0.30777 0.0177 59	0.12903 0.3301 59	0.32844 0.0111 59	0.10339 0.4358 59	
SP58	0.07189 0.5885 59	0.32164 0.0130 59	0.22736 0.0833 59	0.16570 0.2098 59	0.03553 0.7893 59	0.13576 0.3053 59	0.77833 0.0001 59	0.17824 0.1768 59	-0.10659 0.4217 59	0.13528 0.3070 59	-0.19795 0.1329 59	0.19667 0.1355 59	0.22806 0.0823 59	
SP59	0.27772 0.0332 59	0.30281 0.0197 59	0.09007 0.4975 59	0.02137 0.8724 59	-0.14173 0.2843 59	0.12139 0.3597 59	0.03383 0.7992 59	0.27078 0.0380 59	0.04881 0.7135 59	-0.15213 0.2501 59	0.17586 0.1828 59	0.38784 0.0024 59	0.07544 0.5701 59	
SP60	0.19508 0.1387 59	0.35856 0.0053 59	-0.03254 0.8067 59	-0.12761 0.3354 59	-0.07057 0.5953 59	-0.07041 0.5962 59	0.36977 0.0039 59	0.38222 0.0028 59	-0.20077 0.1273 59	-0.02353 0.8596 59	-0.26672 0.0411 59	0.13735 0.2996 59	0.17799 0.1774 59	
B-31	SP61	0.39425 0.0020 59	-0.10800 0.4155 59	-0.07833 0.5554 59	0.18905 0.1516 59	-0.06149 0.6436 59	-0.04762 0.7202 59	-0.05478 0.6803 59	0.35394 0.0060 59	-0.05961 0.6538 59	-0.15802 0.2320 59	0.16893 0.2009 59	0.61211 0.0001 59	-0.02300 0.8627 59
	SP31	SP32	SP33	SP34	SP35	SP36	SP37	SP38	SP39	SP40	SP41	SP42	SP43	
PL1ALK	0.04368 0.7425 59	-0.33503 0.0095 59	-0.06353 0.6326 59	-0.40331 0.0015 59	-0.04996 0.7071 59	-0.20109 0.1267 59	-0.07467 0.5741 59	-0.28731 0.0274 59	0.10814 0.4149 59	0.20849 0.1130 59	-0.22087 0.0927 59	-0.04831 0.7163 59	0.12385 0.3500 59	
PELOALK	0.08460 0.5241 59	-0.32814 0.0112 59	-0.04084 0.7588 59	-0.39200 0.0021 59	0.03854 0.7719 59	-0.16086 0.2236 59	-0.02593 0.8455 59	-0.32364 0.0124 59	0.09916 0.4549 59	0.27448 0.0354 59	-0.15648 0.2366 59	-0.02869 0.8292 59	0.10294 0.4378 59	
PEHIALK	-0.13429 0.3106 59	-0.31330 0.0157 59	-0.18063 0.1710 59	-0.32379 0.0124 59	-0.08946 0.5005 59	-0.32091 0.0132 59	-0.09373 0.4801 59	-0.17740 0.1789 59	0.02792 0.8338 59	-0.03309 0.8035 59	-0.23677 0.0710 59	-0.08292 0.5324 59	0.08154 0.5393 59	
TERRI	-0.00682 0.9591 59	-0.38603 0.0025 59	-0.18295 0.1655 59	-0.34190 0.0080 59	-0.09276 0.4847 59	-0.35283 0.0061 59	-0.02717 0.8382 59	-0.29178 0.0249 59	0.16341 0.2162 59	0.03804 0.2162 59	-0.24715 0.7749 59	-0.01750 0.0591 59	0.17496 0.8953 59	
TOTEOM	-0.13864 0.2950 59	-0.36872 0.0041 59	-0.14753 0.2648 59	-0.23375 0.0748 59	-0.07705 0.5619 59	-0.21320 0.1050 59	-0.15856 0.2303 59	-0.25774 0.0487 59	0.00568 0.9659 59	0.02159 0.8711 59	-0.33647 0.0092 59	-0.15076 0.2544 59	0.31156 0.0163 59	
ALUMC	-0.01899 0.8865 59	-0.33360 0.0098 59	-0.18224 0.1671 59	-0.27709 0.0336 59	-0.13633 0.3032 59	-0.26973 0.0388 59	-0.06784 0.6097 59	-0.28316 0.0298 59	0.19978 0.1292 59	-0.02671 0.8409 59	-0.25938 0.0473 59	-0.06014 0.6509 59	0.28115 0.0310 59	

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	SP31	SP32	SP33	SP34	SP35	SP36	SP37	SP38	SP39	SP40	SP41	SP42	SP43	
CPI	0.05515 0.6783 59	-0.32850 0.0111 59	-0.06297 0.6357 59	-0.22275 0.0899 59	0.02730 0.8374 59	-0.14676 0.2674 59	-0.05038 0.7047 59	-0.17575 0.1830 59	0.35768 0.0054 59	0.21280 0.1056 59	-0.07685 0.5629 59	0.11497 0.3859 59	0.44741 0.0004 59	
SAND	0.14728 0.2656 59	0.29948 0.0212 59	0.07367 0.5792 59	0.04527 0.7335 59	-0.25898 0.0476 59	0.35286 0.0061 59	-0.10477 0.4297 59	0.34849 0.0068 59	0.04320 0.7453 59	-0.02328 0.8611 59	0.22880 0.0813 59	-0.15540 0.2399 59	0.22508 0.0865 59	
SILT	0.08317 0.5311 59	0.22027 0.0937 59	-0.09449 0.4766 59	0.17780 0.1779 59	-0.22833 0.0820 59	0.42192 0.0009 59	-0.10627 0.4231 59	0.19940 0.1300 59	-0.30230 0.0200 59	-0.11626 0.3805 59	0.21826 0.0968 59	-0.11038 0.4052 59	-0.31531 0.0150 59	
CLAY	-0.16298 0.2174 59	-0.35306 0.0061 59	-0.02386 0.8576 59	-0.11477 0.3867 59	0.32123 0.0131 59	-0.48480 0.0001 59	0.13576 0.3053 59	-0.38677 0.0025 59	0.09062 0.4949 59	0.06943 0.6013 59	-0.29087 0.0254 59	0.18137 0.1692 59	-0.06146 0.6438 59	
ORCAR	-0.07353 0.5799 59	-0.06444 0.6278 59	0.07297 0.5829 59	0.01061 0.9364 59	0.19093 0.1475 59	0.02924 0.8260 59	-0.07087 0.5938 59	-0.19646 0.1359 59	-0.33984 0.0085 59	0.02671 0.8408 59	0.04860 0.7147 59	-0.04633 0.7275 59	-0.36414 0.0046 59	
CACO	0.19300 0.1431 59	0.49895 0.0001 59	0.17506 0.1848 59	0.27171 0.0374 59	-0.21123 0.1083 59	0.36750 0.0042 59	0.01140 0.9317 59	0.55123 0.0001 59	0.05674 0.6695 59	-0.06681 0.6151 59	0.38019 0.0030 59	-0.00639 0.9617 59	0.01983 0.8815 59	
B-32	DELC13	0.32226 0.0128 59	0.37681 0.0033 59	0.06021 0.6505 59	0.47652 0.0001 59	0.01035 0.9380 59	0.33916 0.0086 59	0.14263 0.2812 59	0.29697 0.0224 59	-0.05980 0.6528 59	-0.07349 0.5802 59	0.35750 0.0054 59	0.14061 0.2881 59	-0.18996 0.1496 59
BOTTEM	-0.15766 0.2331 59	0.05117 0.7003 59	0.07158 0.5901 59	-0.00515 0.9691 59	0.07158 0.5901 59	0.44101 0.0005 59	-0.30313 0.0196 59	-0.07559 0.5693 59	-0.02184 0.8696 59	-0.00164 0.9902 59	0.15449 0.2427 59	-0.31873 0.0139 59	0.25312 0.0531 59	
BOTSAL	-0.14365 0.2777 59	-0.08534 0.5204 59	-0.18076 0.1707 59	-0.08059 0.5440 59	-0.09621 0.4685 59	0.20088 0.1271 59	-0.23550 0.0726 59	-0.12858 0.3318 59	0.10288 0.4381 59	-0.10672 0.4211 59	-0.16859 0.2018 59	-0.30556 0.0186 59	0.13157 0.3205 59	
BOTDO	0.00172 0.9897 59	-0.01800 0.8923 59	-0.20355 0.1220 59	0.14533 0.2721 59	-0.23879 0.0685 59	-0.34519 0.0074 59	0.04357 0.7432 59	0.00958 0.9426 59	0.07676 0.5634 59	-0.10902 0.4111 59	-0.11807 0.3731 59	0.25118 0.0550 59	-0.20970 0.1109 59	
BOTTRAN	0.15906 0.2289 59	-0.19931 0.1302 59	0.00862 0.9484 59	-0.11127 0.4015 59	0.01125 0.9326 59	-0.24228 0.0645 59	0.02575 0.8465 59	0.05787 0.6633 59	0.28293 0.0299 59	0.17236 0.1918 59	-0.07515 0.5716 59	0.13388 0.3121 59	0.45164 0.0003 59	
BOTPOC	-0.24453 0.0620 59	0.13235 0.3177 59	0.21980 0.0944 59	-0.14550 0.2715 59	-0.03248 0.8071 59	0.14172 0.2843 59	0.01214 0.9273 59	0.27281 0.0366 59	0.11424 0.3889 59	-0.06521 0.6237 59	-0.02429 0.8551 59	-0.23639 0.0715 59	0.10937 0.4096 59	
BOTDOC	-0.17391 0.2647 43	-0.24129 0.1190 43	-0.07427 0.6360 43	-0.29485 0.0549 43	0.05273 0.7370 43	-0.18981 0.2228 43	-0.05257 0.7378 43	-0.30543 0.0464 43	0.26762 0.0827 43	-0.04442 0.7773 43	0.13873 0.3750 43	0.12505 0.4243 43	0.10095 0.5195 43	

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	SP31	SP32	SP33	SP34	SP35	SP36	SP37	SP38	SP39	SP40	SP41	SP42	SP43	
SURTRAN	0.00532 0.9681 59	-0.33255 0.0101 59	-0.15723 0.2343 59	-0.18688 0.1564 59	-0.15874 0.2298 59	-0.20321 0.1227 59	-0.08252 0.5344 59	0.01276 0.9236 59	0.31062 0.0166 59	0.09074 0.4943 59	-0.16083 0.2237 59	0.09157 0.4904 59	0.44622 0.0004 59	
SURPOC	-0.21721 0.0984 59	0.16526 0.2110 59	0.35520 0.0058 59	-0.11107 0.4023 59	0.20053 0.1278 59	0.22189 0.0912 59	0.00539 0.9677 59	0.02078 0.8759 59	0.25471 0.0516 59	-0.06900 0.6036 59	0.10076 0.4476 59	-0.14519 0.2725 59	0.29715 0.0223 59	
SURDOC	-0.30619 0.0458 43	0.03796 0.8091 43	0.12616 0.4201 43	-0.03401 0.8286 43	0.09308 0.5527 43	-0.08337 0.5951 43	-0.13553 0.3862 43	-0.20740 0.1820 43	-0.10947 0.4847 43	-0.10009 0.5231 43	-0.12437 0.4268 43	0.00031 0.9984 43	-0.17188 0.2704 43	
SP1	0.16894 0.2009 59	0.01180 0.9293 59	-0.13784 0.2978 59	0.03583 0.7876 59	0.04946 0.7099 59	0.12345 0.3516 59	0.07849 0.5546 59	-0.06932 0.6019 59	-0.29285 0.0244 59	-0.01389 0.9169 59	0.24960 0.0566 59	0.01428 0.9145 59	-0.16904 0.2006 59	
SP2	0.30675 0.0181 59	0.28473 0.0288 59	0.01149 0.9312 59	0.16969 0.1989 59	0.00227 0.9864 59	-0.05800 0.6626 59	0.15115 0.2531 59	0.21084 0.1090 59	0.06215 0.6401 59	-0.04612 0.7287 59	0.21371 0.1041 59	-0.02393 0.8572 59	0.01089 0.9347 59	
B-33	SP3	0.05277 0.6914 59	-0.21190 0.1071 59	-0.18437 0.1621 59	-0.20891 0.1123 59	-0.25044 0.0557 59	-0.26213 0.0449 59	0.11260 0.3958 59	0.00347 0.9792 59	0.05554 0.6761 59	-0.11905 0.3692 59	-0.31508 0.0151 59	-0.06955 0.6007 59	-0.14042 0.2888 59
	SP4	0.25356 0.0527 59	0.70814 0.0001 59	0.68406 0.0001 59	0.21835 0.0966 59	0.27366 0.0360 59	0.20434 0.1206 59	0.32557 0.0119 59	0.56400 0.0001 59	-0.28373 0.0294 59	0.28313 0.0298 59	0.38333 0.0027 59	-0.00857 0.9486 59	-0.14265 0.2811 59
	SP5	0.01923 0.8850 59	-0.03267 0.8060 59	0.03186 0.8107 59	0.16311 0.2171 59	0.24206 0.0647 59	0.12585 0.3422 59	0.20422 0.1208 59	-0.12093 0.3616 59	0.05704 0.6678 59	0.11727 0.3764 59	0.36200 0.0048 59	0.23965 0.0675 59	0.00362 0.9783 59
	SP6	0.09903 0.4555 59	0.33243 0.0101 59	-0.01656 0.9009 59	0.36066 0.0050 59	-0.21160 0.1077 59	0.52951 0.0001 59	-0.06837 0.6069 59	0.19156 0.1461 59	0.08106 0.5417 59	-0.07778 0.5582 59	0.26893 0.0394 59	-0.05639 0.6714 59	-0.03367 0.8001 59
	SP7	0.24017 0.0669 59	0.21651 0.0995 59	0.20816 0.1136 59	0.25300 0.0532 59	0.21101 0.1087 59	0.52755 0.0001 59	0.18062 0.1710 59	0.10630 0.4230 59	-0.15800 0.2320 59	0.51224 0.0001 59	0.11807 0.3731 59	-0.00295 0.9823 59	0.04222 0.7509 59
	SP8	0.17558 0.1835 59	-0.14285 0.2805 59	-0.14706 0.2664 59	0.02565 0.8471 59	-0.17911 0.1747 59	-0.10548 0.4266 59	0.36131 0.0049 59	-0.05996 0.6519 59	0.10049 0.4489 59	-0.09042 0.4958 59	-0.24546 0.0610 59	0.14213 0.2829 59	-0.07696 0.5623 59
	SP9	-0.06080 0.6474 59	-0.25370 0.0525 59	-0.22486 0.0869 59	-0.17331 0.1893 59	-0.11502 0.3857 59	-0.21284 0.1056 59	0.07193 0.5882 59	-0.09080 0.4940 59	0.03440 0.7959 59	-0.10579 0.4252 59	-0.17789 0.1777 59	0.04753 0.7207 59	-0.09097 0.4932 59
	SP10	0.19949 0.1298 59	0.13763 0.2986 59	-0.24813 0.0581 59	0.41370 0.0011 59	-0.10452 0.4308 59	0.13807 0.2970 59	0.30031 0.0208 59	-0.00834 0.9500 59	-0.10271 0.4389 59	-0.10746 0.4179 59	-0.04265 0.7484 59	0.24228 0.0645 59	-0.16368 0.2154 59

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	SP31	SP32	SP33	SP34	SP35	SP36	SP37	SP38	SP39	SP40	SP41	SP42	SP43	
SP11	-0.09155 0.4904 59	0.18387 0.1633 59	0.46425 0.0002 59	0.00982 0.9412 59	0.26695 0.0410 59	0.38540 0.0026 59	0.02285 0.8636 59	0.07798 0.5571 59	-0.14079 0.2875 59	0.27087 0.0380 59	0.21772 0.0976 59	-0.14907 0.2598 59	-0.00228 0.9863 59	
SP12	-0.02662 0.8414 59	0.33896 0.0086 59	0.34890 0.0068 59	0.11929 0.3682 59	0.20231 0.1244 59	-0.01601 0.9042 59	0.33005 0.0107 59	0.15651 0.2365 59	-0.02180 0.8698 59	0.15850 0.2305 59	0.06577 0.6207 59	-0.00789 0.9527 59	-0.14579 0.2706 59	
SP13	0.31359 0.0156 59	0.58509 0.0001 59	0.37278 0.0036 59	0.27208 0.0371 59	0.14429 0.2756 59	0.13082 0.3234 59	0.37614 0.0033 59	0.48219 0.0001 59	-0.25292 0.0533 59	-0.01901 0.8863 59	0.44993 0.0004 59	0.01298 0.9222 59	-0.08928 0.5013 59	
SP14	0.24369 0.0629 59	0.50532 0.0001 59	0.52045 0.0001 59	0.18782 0.1543 59	0.30885 0.0173 59	0.12840 0.3325 59	0.25743 0.0490 59	0.39230 0.0021 59	0.03117 0.8147 59	0.35375 0.0060 59	0.43599 0.0006 59	0.26081 0.0460 59	0.08172 0.5384 59	
SP15	-0.05101 0.7012 59	-0.14567 0.2709 59	-0.11872 0.3705 59	-0.15933 0.2280 59	-0.04850 0.7153 59	-0.04820 0.7169 59	-0.19508 0.1387 59	-0.26822 0.0400 59	0.03834 0.7731 59	-0.07499 0.5724 59	0.01023 0.9387 59	-0.21099 0.1087 59	0.00076 0.9954 59	
B-34	SP16	0.03250 0.8070 59	0.17016 0.1976 59	0.60315 0.0001 59	0.03548 0.7897 59	0.48428 0.0001 59	0.11287 0.3947 59	0.10878 0.4122 59	0.20174 0.1255 59	-0.10494 0.4290 59	0.37444 0.0035 59	0.21740 0.0981 59	-0.01622 0.9030 59	-0.04442 0.7383 59
SP17	0.11300 0.3941 59	0.60400 0.0001 59	0.76675 0.0001 59	0.04851 0.7152 59	0.28788 0.0270 59	0.33317 0.0099 59	0.31166 0.0163 59	0.49947 0.0001 59	-0.13891 0.2941 59	0.05347 0.6875 59	0.41265 0.0012 59	-0.03026 0.8200 59	-0.12655 0.3395 59	
SP18	0.12768 0.3352 59	0.46606 0.0002 59	0.27921 0.0322 59	0.05574 0.6750 59	-0.02701 0.8391 59	0.46632 0.0002 59	0.15874 0.2298 59	0.36382 0.0046 59	0.12336 0.3519 59	0.02983 0.8225 59	0.36172 0.0049 59	-0.06748 0.6116 59	-0.04421 0.7395 59	
SP19	-0.05305 0.6899 59	-0.18579 0.1589 59	-0.02450 0.8539 59	-0.02249 0.8657 59	0.18811 0.1537 59	0.11109 0.4022 59	-0.19612 0.1366 59	-0.12535 0.3442 59	-0.24443 0.0621 59	0.22183 0.0913 59	-0.24004 0.0671 59	-0.09725 0.4637 59	0.05905 0.6569 59	
SP20	0.02478 0.8522 59	-0.04451 0.7378 59	0.12511 0.3451 59	0.15021 0.2562 59	0.59375 0.0001 59	-0.05525 0.6777 59	0.12575 0.3426 59	-0.07412 0.5769 59	-0.03683 0.7818 59	0.27464 0.0353 59	0.30269 0.0198 59	0.28827 0.0268 59	0.01150 0.9311 59	
SP21	0.35015 0.0066 59	0.41993 0.0009 59	0.45657 0.0003 59	0.33863 0.0087 59	0.43682 0.0005 59	0.04669 0.7255 59	0.22071 0.0930 59	0.41493 0.0011 59	-0.23162 0.0775 59	0.23337 0.0753 59	0.36100 0.0050 59	0.27538 0.0348 59	-0.03408 0.7978 59	
SP22	-0.13107 0.3224 59	-0.06878 0.6047 59	-0.06821 0.6077 59	-0.09135 0.4914 59	-0.06659 0.6163 59	-0.11687 0.3780 59	-0.10125 0.4454 59	-0.13659 0.3023 59	0.27499 0.0350 59	-0.04021 0.7624 59	-0.06374 0.6315 59	-0.09179 0.4893 59	0.21331 0.1048 59	
SP23	0.32429 0.0122 59	0.04335 0.7444 59	0.21050 0.1095 59	-0.08642 0.5152 59	0.38409 0.0027 59	0.12746 0.3360 59	0.27184 0.0373 59	-0.08636 0.5155 59	-0.16112 0.2228 59	0.42974 0.0007 59	0.34958 0.0066 59	0.36792 0.0041 59	0.07954 0.5493 59	

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	SP31	SP32	SP33	SP34	SP35	SP36	SP37	SP38	SP39	SP40	SP41	SP42	SP43	
SP24	-0.09877 0.4567 59	-0.09089 0.4936 59	0.48541 0.0001 59	-0.02251 0.8656 59	0.59693 0.0001 59	0.02799 0.8334 59	-0.12514 0.3450 59	-0.04948 0.7098 59	-0.06253 0.6380 59	0.68952 0.0001 59	-0.13943 0.2923 59	0.07258 0.5849 59	0.23632 0.0716 59	
SP25	0.10089 0.4471 59	0.24473 0.0618 59	0.47003 0.0002 59	0.09300 0.4836 59	0.41569 0.0011 59	0.08376 0.5282 59	0.07806 0.5567 59	0.20540 0.1186 59	-0.09856 0.4577 59	0.24703 0.0593 59	0.17510 0.1847 59	-0.07270 0.5843 59	-0.12827 0.3329 59	
SP26	0.40290 0.0016 59	0.08689 0.5129 59	0.05338 0.6880 59	0.22794 0.0825 59	0.19817 0.1324 59	0.06408 0.6297 59	0.50939 0.0001 59	-0.04832 0.7163 59	-0.07175 0.5892 59	-0.00172 0.9897 59	0.39135 0.0022 59	0.47234 0.0002 59	-0.06449 0.6275 59	
SP27	-0.07252 0.5852 59	-0.16684 0.2066 59	0.17786 0.1777 59	-0.08468 0.5237 59	0.31343 0.0156 59	-0.11220 0.3975 59	0.05719 0.6670 59	-0.29624 0.0227 59	0.44938 0.0004 59	0.30319 0.0196 59	0.00422 0.9747 59	0.54332 0.0001 59	0.51167 0.0001 59	
SP28	0.38511 0.0026 59	0.40661 0.0014 59	0.07692 0.5625 59	0.48989 0.0001 59	-0.06407 0.6297 59	0.19668 0.1354 59	0.32327 0.0125 59	0.11031 0.4056 59	0.06780 0.6099 59	-0.06174 0.6423 59	0.55488 0.0001 59	0.44623 0.0004 59	-0.04884 0.7133 59	
SP29	0.21597 0.1004 59	0.57407 0.0001 59	0.56620 0.0001 59	0.27584 0.0345 59	0.26723 0.0408 59	0.34122 0.0082 59	0.20205 0.1249 59	0.45517 0.0003 59	-0.01995 0.8808 59	0.18915 0.1514 59	0.45463 0.0003 59	0.03766 0.7770 59	0.09173 0.4896 59	
B-35	SP30	-0.02671 0.8409 59	-0.11801 0.3734 59	-0.10117 0.4458 59	-0.07855 0.5543 59	0.09309 0.4832 59	0.00194 0.9884 59	-0.09571 0.4709 59	-0.22738 0.0833 59	0.25101 0.0552 59	-0.02185 0.8695 59	0.09288 0.4841 59	-0.02224 0.8672 59	0.11674 0.3786 59
	SP31	1.00000 0.0000 59	0.25255 0.0536 59	0.04495 0.7353 59	0.33909 0.0086 59	0.08132 0.5404 59	0.18073 0.1707 59	0.46484 0.0002 59	0.15990 0.2264 59	-0.17579 0.1829 59	0.11550 0.3837 59	0.45623 0.0003 59	0.32894 0.0110 59	-0.08939 0.5008 59
	SP32	0.25255 0.0536 59	1.00000 0.0000 59	0.48968 0.0001 59	0.29609 0.0228 59	0.03465 0.7944 59	0.43800 0.0005 59	0.29322 0.0242 59	0.58724 0.0001 59	-0.15045 0.2554 59	0.00828 0.9504 59	0.50744 0.0001 59	0.01110 0.9335 59	-0.21130 0.1082 59
	SP33	0.04495 0.7353 59	0.48968 0.0001 59	1.00000 0.0000 59	-0.07124 0.5918 59	0.50546 0.0001 59	0.14439 0.2752 59	0.24990 0.0563 59	0.33258 0.0101 59	-0.03594 0.7870 59	0.47194 0.0002 59	0.29930 0.0213 59	-0.00645 0.9613 59	0.08870 0.5041 59
	SP34	0.33909 0.0086 59	0.29609 0.0228 59	-0.07124 0.5918 59	1.00000 0.0000 59	0.07041 0.5962 59	0.28464 0.0289 59	0.14367 0.2777 59	0.25996 0.0468 59	-0.13711 0.3004 59	-0.01266 0.9242 59	0.31110 0.0165 59	0.19334 0.1423 59	-0.12661 0.3393 59
	SP35	0.08132 0.5404 59	0.03465 0.7944 59	0.50546 0.0001 59	0.07041 0.5962 59	1.00000 0.0000 59	0.04135 0.7558 59	0.23967 0.0675 59	0.00197 0.9882 59	-0.11958 0.3670 59	0.53517 0.0001 59	0.23490 0.0733 59	0.22752 0.0831 59	0.16410 0.2142 59
	SP36	0.18073 0.1707 59	0.43800 0.0005 59	0.14439 0.2752 59	0.28464 0.0289 59	0.04135 0.7558 59	1.00000 0.0000 59	0.01497 0.9104 59	0.21984 0.0943 59	-0.18980 0.1499 59	0.07641 0.5651 59	0.42074 0.0009 59	-0.08585 0.5179 59	-0.12806 0.3338 59

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	SP31	SP32	SP33	SP34	SP35	SP36	SP37	SP38	SP39	SP40	SP41	SP42	SP43
SP37	0.46484 0.0002 59	0.29322 0.0242 59	0.24990 0.0563 59	0.14367 0.2777 59	0.23967 0.0675 59	0.01497 0.9104 59	1.00000 0.0000 59	0.10379 0.4341 59	-0.01695 0.8986 59	-0.02240 0.8663 59	0.27112 0.0378 59	0.38264 0.0028 59	-0.15546 0.2397 59
SP38	0.15990 0.2264 59	0.58724 0.0001 59	0.33258 0.0101 59	0.25996 0.0468 59	0.00197 0.9882 59	0.21984 0.0943 59	0.10379 0.4341 59	1.00000 0.0000 59	-0.24561 0.0608 59	-0.00796 0.9523 59	0.37759 0.0032 59	-0.08442 0.5250 59	-0.03570 0.7883 59
SP39	-0.17579 0.1829 59	-0.15045 0.2554 59	-0.03594 0.7870 59	-0.13711 0.3004 59	-0.11958 0.3670 59	-0.18980 0.1499 59	-0.01695 0.8986 59	-0.24561 0.0608 59	1.00000 0.0000 59	-0.15776 0.2327 59	-0.16386 0.2149 59	0.18472 0.1613 59	0.42935 0.0007 59
SP40	0.11550 0.3837 59	0.00828 0.9504 59	0.47194 0.0002 59	-0.01266 0.9242 59	0.53517 0.0001 59	0.07641 0.5651 59	-0.02240 0.8663 59	-0.00796 0.9523 59	-0.15776 0.2327 59	1.00000 0.0000 59	0.02956 0.8241 59	0.06703 0.6140 59	0.19293 0.1432 59
SP41	0.45623 0.0003 59	0.50744 0.0001 59	0.29930 0.0213 59	0.31110 0.0165 59	0.23490 0.0733 59	0.42074 0.0009 59	0.27112 0.0378 59	0.37759 0.0032 59	-0.16386 0.2149 59	0.02956 0.8241 59	1.00000 0.0000 59	0.20148 0.1260 59	-0.10544 0.4267 59
SP42	0.32894 0.0110 59	0.01110 0.9335 59	-0.00645 0.9613 59	0.19334 0.1423 59	0.22752 0.0831 59	-0.08585 0.5179 59	0.38264 0.0028 59	-0.08442 0.5250 59	0.18472 0.1613 59	0.06703 0.6140 59	0.20148 0.1260 59	1.00000 0.0000 59	0.06703 0.6140 59
SP43	-0.08939 0.5008 59	-0.21130 0.1082 59	0.08870 0.5041 59	-0.12661 0.3393 59	0.16410 0.2142 59	-0.12806 0.3338 59	-0.15546 0.2397 59	-0.03570 0.7883 59	0.42935 0.0007 59	0.19293 0.1432 59	-0.10544 0.4267 59	0.06703 0.6140 59	1.00000 0.0000 59
SP44	0.11333 0.3928 59	0.29837 0.0217 59	0.54448 0.0001 59	0.18674 0.1567 59	0.43393 0.0006 59	0.19424 0.1404 59	0.22140 0.0919 59	0.39396 0.0020 59	-0.22677 0.0841 59	0.21910 0.0955 59	0.26202 0.0450 59	0.00931 0.9442 59	0.18523 0.1502 59
SP45	0.14552 0.2715 59	0.16024 0.2254 59	-0.11120 0.4018 59	0.06207 0.6405 59	-0.17534 0.1841 59	0.49319 0.0001 59	-0.09943 0.4537 59	0.00831 0.9502 59	0.06726 0.6127 59	-0.10677 0.4209 59	0.23949 0.0677 59	-0.08718 0.5115 59	-0.11393 0.3902 59
SP46	0.18343 0.1643 59	0.52539 0.0001 59	0.08810 0.5070 59	0.20606 0.1174 59	-0.17116 0.1949 59	0.47050 0.0002 59	-0.07734 0.5604 59	0.44856 0.0004 59	-0.16337 0.2163 59	-0.13866 0.2950 59	0.44098 0.0005 59	-0.12083 0.3620 59	-0.13637 0.3031 59
SP47	0.01556 0.9069 59	0.13272 0.3163 59	0.00846 0.9493 59	0.11065 0.4041 59	-0.09553 0.4717 59	0.51715 0.0001 59	-0.03788 0.7758 59	0.00190 0.9886 59	-0.13046 0.3247 59	-0.10585 0.4249 59	0.12000 0.3653 59	-0.17363 0.1885 59	-0.20666 0.1163 59
SP48	0.06682 0.6151 59	0.40845 0.0013 59	0.56807 0.0001 59	0.16241 0.2191 59	0.30158 0.0203 59	0.04608 0.7289 59	0.37736 0.0032 59	0.33201 0.0102 59	0.02887 0.8282 59	0.09347 0.4814 59	0.16962 0.1990 59	0.04962 0.7090 59	-0.13404 0.3115 59
SP49	-0.12201 0.3573 59	0.16462 0.2128 59	0.18192 0.1679 59	0.23596 0.0720 59	0.27300 0.0364 59	0.46414 0.0002 59	0.02803 0.8331 59	0.08129 0.5405 59	-0.24782 0.0584 59	0.02940 0.8251 59	0.13057 0.3243 59	-0.19097 0.1474 59	-0.12223 0.3564 59

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	SP31	SP32	SP33	SP34	SP35	SP36	SP37	SP38	SP39	SP40	SP41	SP42	SP43
SP50	-0.16302 0.2173 59	0.00218 0.9869 59	0.52862 0.0001 59	-0.01031 0.9382 59	0.52336 0.0001 59	-0.03029 0.8198 59	-0.10578 0.4253 59	0.01905 0.8861 59	-0.00276 0.9834 59	0.42293 0.0008 59	-0.02889 0.8281 59	0.12483 0.3462 59	0.16296 0.2175 59
SP51	-0.02521 0.8497 59	0.28725 0.0274 59	0.27773 0.0332 59	0.00032 0.9981 59	0.13879 0.2945 59	0.38079 0.0029 59	-0.02569 0.8469 59	0.14321 0.2792 59	-0.14364 0.2778 59	-0.01652 0.9012 59	0.29598 0.0228 59	-0.20733 0.1151 59	-0.13999 0.2903 59
SP52	-0.15750 0.2335 59	-0.22663 0.0843 59	0.00437 0.9738 59	-0.14014 0.2898 59	0.14553 0.2714 59	-0.02582 0.8461 59	-0.25916 0.0475 59	-0.35661 0.0056 59	0.10740 0.4181 59	0.13835 0.2960 59	-0.05559 0.6758 59	-0.13865 0.2950 59	0.12020 0.3645 59
SP53	-0.00368 0.9779 59	-0.15878 0.2297 59	-0.14466 0.2743 59	0.01322 0.9209 59	-0.05316 0.6892 59	-0.11497 0.3859 59	0.30320 0.0196 59	-0.10015 0.4504 59	0.17863 0.1758 59	-0.06386 0.6308 59	-0.07684 0.5630 59	0.13160 0.3205 59	-0.04061 0.7601 59
SP54	0.29503 0.0233 59	0.78470 0.0001 59	0.40869 0.0013 59	0.51721 0.0001 59	0.10515 0.4280 59	0.45732 0.0003 59	0.35427 0.0059 59	0.53007 0.0001 59	-0.26244 0.0446 59	0.02265 0.8648 59	0.58485 0.0001 59	0.10437 0.4315 59	-0.22552 0.0859 59
SP55	-0.09929 0.4543 59	-0.10800 0.4155 59	-0.01952 0.8833 59	-0.04255 0.7490 59	0.02081 0.8757 59	-0.10325 0.4364 59	-0.12336 0.3520 59	-0.23232 0.0766 59	0.47983 0.0001 59	-0.04272 0.7480 59	0.06342 0.6332 59	0.02259 0.8652 59	0.32518 0.0120 59
SP56	0.27009 0.0386 59	0.13281 0.3160 59	0.19740 0.1340 59	0.13934 0.2925 59	0.13619 0.3037 59	0.02671 0.8408 59	0.34865 0.0068 59	0.31036 0.0167 59	-0.26938 0.0391 59	0.27579 0.0345 59	0.21723 0.0984 59	0.22410 0.0880 59	-0.11639 0.3800 59
SP57	0.31767 0.0142 59	0.08260 0.5340 59	0.32411 0.0123 59	0.01664 0.9005 59	0.48221 0.0001 59	0.28825 0.0268 59	0.12235 0.3559 59	-0.06033 0.6499 59	-0.03921 0.7681 59	0.46823 0.0002 59	0.34129 0.0082 59	0.23249 0.0764 59	0.24536 0.0611 59
SP58	-0.21453 0.1028 59	-0.04305 0.7461 59	0.36580 0.0044 59	0.10141 0.4447 59	0.54963 0.0001 59	0.23111 0.0782 59	-0.17725 0.1793 59	0.01482 0.9113 59	-0.12916 0.3296 59	0.45435 0.0003 59	0.03060 0.8180 59	-0.03160 0.8122 59	0.09009 0.4974 59
SP59	0.11979 0.3662 59	0.37574 0.0034 59	0.12681 0.3385 59	0.27648 0.0340 59	0.05655 0.6705 59	0.45041 0.0003 59	-0.01835 0.8903 59	0.30999 0.0169 59	-0.24215 0.0646 59	0.07835 0.5553 59	0.40389 0.0015 59	-0.06945 0.6012 59	0.19517 0.1385 59
SP60	-0.09403 0.4787 59	-0.07033 0.5966 59	0.06077 0.6475 59	-0.08755 0.5096 59	0.15311 0.2470 59	0.01792 0.8929 59	-0.15263 0.2485 59	0.03277 0.8054 59	0.01644 0.9017 59	0.10365 0.4347 59	-0.19212 0.1449 59	-0.17237 0.1917 59	0.44893 0.0004 59
SP61	0.20568 0.1181 59	0.79441 0.0001 59	0.48300 0.0001 59	0.13444 0.3100 59	0.04336 0.7444 59	0.29619 0.0227 59	0.21042 0.1097 59	0.47565 0.0001 59	-0.10974 0.4080 59	0.01969 0.8823 59	0.36177 0.0049 59	-0.12092 0.3616 59	-0.17304 0.1900 59
	SP44	SP45	SP46	SP47	SP48	SP49	SP50	SP51	SP52	SP53	SP54	SP55	SP56
PL1ALK	-0.29294 0.0243 59	-0.02222 0.8673 59	-0.24705 0.0592 59	-0.13777 0.2981 59	-0.17572 0.1831 59	-0.30884 0.0173 59	-0.02601 0.8450 59	-0.22022 0.0937 59	0.06001 0.6516 59	-0.04139 0.7556 59	-0.42330 0.0008 59	-0.06691 0.6146 59	0.19888 0.1310 59

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	SP44	SP45	SP46	SP47	SP48	SP49	SP50	SP51	SP52	SP53	SP54	SP55	SP56
PELOALK	-0.33138 0.0104	-0.01477 0.9116	-0.22888 0.0812	-0.11433 0.3886	-0.19289 0.1433	-0.30634 0.0183	-0.00546 0.9672	-0.23326 0.0754	0.08780 0.5084	-0.03066 0.8177	-0.42632 0.0008	-0.03501 0.7923	0.23232 0.0766
PEHIALK	59	59	59	59	59	59	59	59	59	59	59	59	59
TERRI	-0.30273 0.0198	-0.24229 0.0645	-0.30545 0.0186	-0.09743 0.4629	-0.21777 0.0975	-0.30932 0.0171	-0.11475 0.3868	-0.36344 0.0047	-0.03100 0.8157	0.03978 0.7649	-0.38045 0.0030	-0.04504 0.7348	0.05348 0.6875
TOTEOM	59	59	59	59	59	59	59	59	59	59	59	59	59
ALUMC	-0.04141 0.7555	-0.13801 0.2972	-0.17458 0.1860	-0.15210 0.2501	-0.06488 0.6254	-0.19596 0.1369	-0.02221 0.8674	-0.22480 0.0869	0.07815 0.5563	0.05069 0.7030	-0.36901 0.0040	0.14765 0.2644	-0.15926 0.2283
CPI	59	59	59	59	59	59	59	59	59	59	59	59	59
SAND	0.16465 0.2127	0.51838 0.0001	0.43659 0.0005	0.17060 0.1964	-0.03549 0.7896	0.01208 0.9277	-0.11757 0.3752	0.01276 0.9236	-0.33577 0.0093	-0.07499 0.5724	0.23817 0.0693	-0.15736 0.2339	0.03860 0.7716
SILT	59	59	59	59	59	59	59	59	59	59	59	59	59
CLAY	-0.06363 0.6321	0.21609 0.1002	0.21233 0.1064	0.34205 0.0080	-0.26471 0.0428	0.18468 0.1614	-0.20193 0.1251	0.09815 0.4596	-0.18587 0.1587	-0.05550 0.6763	0.23590 0.0721	-0.25769 0.0488	0.24872 0.0575
ORCAR	59	59	59	59	59	59	59	59	59	59	59	59	59
CACO	0.20586 0.1178	-0.07789 0.5576	-0.13200 0.3190	0.13168 0.3201	0.04680 0.7249	0.30329 0.0195	0.07357 0.5798	0.34855 0.0068	0.33429 0.0097	-0.12705 0.3376	0.09580 0.4704	-0.02009 0.8800	-0.07971 0.5484
DELC13	59	59	59	59	59	59	59	59	59	59	59	59	59
BOTTEM	0.30898 0.0173	0.43117 0.0007	0.16994 0.1982	0.20934 0.1115	-0.10602 0.4242	0.57198 0.0001	0.09400 0.4789	0.61116 0.0001	0.41600 0.0011	-0.26132 0.0456	0.09484 0.4749	0.32083 0.0132	-0.36015 0.0051

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	SP44	SP45	SP46	SP47	SP48	SP49	SP50	SP51	SP52	SP53	SP54	SP55	SP56
BOTSAL	-0.01153 0.9309 59	0.12750 0.3359 59	0.04716 0.7228 59	0.18834 0.1531 59	-0.16514 0.2113 59	0.18171 0.1684 59	-0.09382 0.4797 59	0.17995 0.1726 59	0.25043 0.0557 59	-0.04065 0.7598 59	-0.19863 0.1315 59	0.19147 0.1463 59	-0.39478 0.0020 59
BOTDO	-0.29739 0.0222 59	-0.29795 0.0219 59	-0.10461 0.4304 59	-0.19674 0.1353 59	-0.07789 0.5576 59	-0.50922 0.0001 59	0.11864 0.3708 59	-0.57895 0.0001 59	-0.28761 0.0272 59	0.21872 0.0961 59	-0.10058 0.4485 59	-0.14122 0.2860 59	0.30016 0.0209 59
BOTTRAN	-0.16421 0.2139 59	-0.16408 0.2143 59	-0.08765 0.5092 59	-0.33276 0.0100 59	-0.00920 0.9449 59	-0.34745 0.0070 59	-0.04874 0.7139 59	-0.35592 0.0057 59	-0.01231 0.9263 59	-0.09084 0.4938 59	-0.19305 0.1429 59	0.10066 0.4481 59	0.26239 0.0765 59
BOTPOC	0.14895 0.2602 59	0.13791 0.2976 59	0.14340 0.2786 59	0.22742 0.0832 59	0.26066 0.0462 59	0.23891 0.0684 59	0.01818 0.8913 59	0.22317 0.0893 59	-0.30024 0.0209 59	-0.16341 0.2162 59	0.15797 0.2321 59	-0.19802 0.1327 59	-0.08903 0.5025 59
BOTDOC	-0.20488 0.1875 43	-0.24694 0.1104 43	-0.43360 0.0037 43	-0.25353 0.1009 43	-0.16799 0.2816 43	-0.17041 0.2746 43	-0.04008 0.7986 43	-0.02878 0.8547 43	0.42831 0.0042 43	0.04122 0.7930 43	-0.30072 0.0501 43	0.45784 0.0020 43	-0.16297 0.2964 43
SURTRAN	-0.23943 0.0678 59	-0.06439 0.6280 59	-0.09380 0.4798 59	-0.24435 0.0622 59	-0.20505 0.1192 59	-0.32121 0.0131 59	-0.15603 0.2380 59	-0.34279 0.0079 59	-0.03471 0.7941 59	-0.06247 0.6384 59	-0.31841 0.0140 59	0.10112 0.4460 59	0.19234 0.1444 59
SURPOC	0.19983 0.1291 59	0.09561 0.4713 59	0.08157 0.5391 59	0.24434 0.0622 59	0.25026 0.0559 59	0.37480 0.0034 59	0.20987 0.1106 59	0.33729 0.0090 59	0.11345 0.3923 59	-0.19615 0.1365 59	0.21291 0.1054 59	0.21530 0.1015 59	-0.12655 0.3395 59
SURDOC	0.22516 0.1466 43	-0.12312 0.4315 43	-0.10302 0.5109 43	-0.02971 0.8500 43	0.05904 0.7069 43	0.27815 0.0709 43	0.59412 0.0001 43	0.27673 0.0724 43	0.20027 0.1979 43	-0.20151 0.1950 43	-0.00617 0.9687 43	0.04472 0.7758 43	-0.17878 0.2514 43
SP1	-0.13654 0.3025 59	0.01751 0.8953 59	0.04207 0.7517 59	-0.08643 0.5151 59	-0.13591 0.3047 59	0.03685 0.7817 59	-0.16786 0.2038 59	0.09254 0.4857 59	0.22801 0.0824 59	-0.02783 0.8343 59	0.08177 0.5381 59	-0.05659 0.6703 59	0.08958 0.4998 59
SP2	0.11337 0.3926 59	0.27694 0.0337 59	0.31910 0.0138 59	-0.12702 0.3377 59	0.08706 0.5121 59	-0.03109 0.8152 59	-0.03023 0.8202 59	0.05377 0.6858 59	-0.14286 0.2804 59	-0.00578 0.9653 59	0.22486 0.0869 59	0.02271 0.8645 59	-0.07736 0.5603 59
SP3	-0.28914 0.0263 59	-0.09314 0.4829 59	-0.02704 0.8389 59	-0.07783 0.5579 59	-0.13508 0.3077 59	-0.30509 0.0188 59	-0.17489 0.1852 59	-0.33068 0.0105 59	-0.15699 0.2350 59	0.07077 0.5943 59	-0.29430 0.0237 59	-0.10483 0.4295 59	0.34827 0.0069 59
SP4	0.48630 0.0001 59	-0.09655 0.4669 59	0.24839 0.0578 59	-0.00012 0.9993 59	0.60102 0.0001 59	0.27597 0.0344 59	0.17389 0.1878 59	0.32366 0.0124 59	-0.15433 0.2432 59	-0.17661 0.1809 59	0.75218 0.0001 59	-0.12816 0.3334 59	0.19244 0.1442 59
SP5	-0.09979 0.4521 59	0.13277 0.3161 59	-0.01443 0.9136 59	0.16771 0.2042 59	0.07717 0.5613 59	0.03965 0.7656 59	-0.04245 0.7495 59	0.10248 0.4399 59	-0.02611 0.8444 59	0.06249 0.6382 59	0.08465 0.6382 59	-0.02987 0.5239 59	0.10797 0.4157 59

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	SP44	SP45	SP46	SP47	SP48	SP49	SP50	SP51	SP52	SP53	SP54	SP55	SP56	
SP6	0.08656 0.5145 59	0.49551 0.0001 59	0.26830 0.0399 59	0.26790 0.0402 59	-0.00214 0.9872 59	0.21522 0.1016 59	-0.17270 0.1909 59	0.09100 0.4930 59	-0.15665 0.2361 59	-0.16474 0.2124 59	0.41931 0.0009 59	0.03309 0.8035 59	0.01721 0.8971 59	
SP7	0.28955 0.0261 59	0.23507 0.0731 59	0.11526 0.3847 59	0.28583 0.0282 59	0.14948 0.2585 59	0.23358 0.0750 59	0.11659 0.3792 59	-0.09856 0.4577 59	-0.09069 0.4946 59	0.14641 0.2685 59	0.24629 0.0601 59	-0.16128 0.2224 59	0.24104 0.0659 59	
SP8	-0.15787 0.2324 59	0.04319 0.7453 59	-0.16722 0.2056 59	0.10128 0.4453 59	-0.04856 0.7149 59	-0.22723 0.0835 59	-0.13168 0.3201 59	-0.24942 0.0568 59	-0.08270 0.5335 59	0.61503 0.0001 59	-0.21686 0.0990 59	0.01460 0.9126 59	0.45685 0.0003 59	
SP9	-0.37240 0.0037 59	-0.15191 0.2507 59	-0.30558 0.0186 59	-0.16737 0.2051 59	-0.22498 0.0867 59	-0.34213 0.0080 59	-0.20138 0.1262 59	-0.38621 0.0025 59	-0.16493 0.2119 59	0.30991 0.0169 59	-0.30046 0.0208 59	-0.09273 0.4848 59	0.34025 0.0084 59	
SP10	-0.03904 0.7691 59	0.14664 0.2678 59	0.20658 0.1165 59	0.03909 0.7688 59	-0.02509 0.8504 59	-0.00267 0.9840 59	-0.23719 0.0705 59	-0.22149 0.0918 59	-0.23793 0.0696 59	0.08936 0.5009 59	0.21364 0.1042 59	-0.13600 0.3044 59	0.14641 0.2685 59	
SP11	0.46325 0.0002 59	0.16145 0.2218 59	0.05872 0.6587 59	0.17308 0.1899 59	0.19143 0.1464 59	0.53919 0.0001 59	0.26355 0.0437 59	0.56526 0.0001 59	0.43670 0.0005 59	-0.12463 0.3470 59	0.22711 0.0837 59	-0.00025 0.9985 59	0.04032 0.7618 59	
B-40	SP12	0.28288 0.0299 59	-0.18428 0.1624 59	-0.05658 0.6704 59	-0.07337 0.5808 59	0.40009 0.0017 59	0.19533 0.1382 59	0.06100 0.6463 59	0.36362 0.0046 59	0.09955 0.4531 59	0.24208 0.0647 59	0.23296 0.0758 59	-0.06324 0.6342 59	0.15294 0.2475 59
	SP13	0.48502 0.0001 59	0.06789 0.6094 59	0.38311 0.0027 59	0.04510 0.7345 59	0.28561 0.0283 59	0.34384 0.0077 59	-0.03817 0.7741 59	0.30879 0.0173 59	-0.25248 0.0537 59	-0.17768 0.1782 59	0.72940 0.0001 59	-0.15591 0.2383 59	0.06882 0.6045 59
	SP14	0.33310 0.0099 59	0.03931 0.7676 59	0.16661 0.2072 59	-0.19143 0.1464 59	0.40204 0.0016 59	-0.05639 0.6714 59	0.32771 0.0113 59	0.07883 0.5529 59	-0.16560 0.2100 59	-0.06094 0.6466 59	0.38030 0.0030 59	-0.00271 0.9838 59	0.19199 0.1452 59
	SP15	-0.09936 0.4540 59	-0.15135 0.2525 59	-0.25772 0.0488 59	-0.13036 0.3251 59	-0.12436 0.3480 59	0.05593 0.6739 59	-0.10197 0.4422 59	0.29618 0.0227 59	0.87286 0.0001 59	-0.05639 0.6714 59	-0.18073 0.1707 59	0.53036 0.0001 59	-0.17911 0.1747 59
	SP16	0.35150 0.0063 59	0.01767 0.8943 59	0.08904 0.5024 59	0.07030 0.5967 59	0.46105 0.0002 59	0.04205 0.7518 59	0.48724 0.0001 59	-0.05929 0.6555 59	-0.03277 0.8054 59	0.02931 0.8256 59	0.08526 0.5208 59	-0.08398 0.5271 59	0.13013 0.3259 59
	SP17	0.56013 0.0001 59	0.06365 0.6320 59	0.26452 0.0429 59	0.15863 0.2301 59	0.61362 0.0001 59	0.41900 0.0010 59	0.26368 0.0436 59	0.44855 0.0004 59	-0.12436 0.3480 59	-0.15950 0.2275 59	0.57705 0.0001 59	-0.12990 0.3268 59	0.07152 0.5904 59
	SP18	0.22673 0.0842 59	0.49976 0.0001 59	0.39566 0.0019 59	0.27228 0.0370 59	0.25184 0.0543 59	0.13147 0.3209 59	0.01555 0.9069 59	0.28449 0.0290 59	-0.18032 0.1717 59	-0.04485 0.7359 59	0.34807 0.0069 59	-0.07793 0.5574 59	0.06141 0.6440 59

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	SP44	SP45	SP46	SP47	SP48	SP49	SP50	SP51	SP52	SP53	SP54	SP55	SP56
SP19	0.11088 0.4031 59	0.12633 0.3404 59	-0.01114 0.9333 59	-0.00087 0.9948 59	-0.10140 0.4447 59	0.20159 0.1258 59	0.15725 0.2343 59	0.03609 0.7861 59	-0.08555 0.5194 59	-0.14505 0.2730 59	-0.17938 0.1740 59	-0.23168 0.0775 59	-0.12157 0.3590 59
SP20	0.05920 0.6560 59	-0.03260 0.8064 59	-0.16113 0.2228 59	-0.16343 0.2162 59	0.01134 0.9321 59	-0.02657 0.8416 59	0.19816 0.1324 59	-0.08348 0.5296 59	-0.01002 0.9400 59	0.26945 0.0390 59	0.01099 0.9342 59	0.04479 0.7362 59	0.08951 0.5002 59
SP21	0.28471 0.0288 59	-0.18104 0.1700 59	0.16622 0.2083 59	-0.12211 0.3569 59	0.47052 0.0002 59	-0.02490 0.8515 59	0.29638 0.0227 59	0.10581 0.4251 59	-0.15563 0.2392 59	-0.05962 0.6538 59	0.35636 0.0056 59	-0.15792 0.2323 59	0.28455 0.0289 59
SP22	-0.12683 0.3385 59	-0.06433 0.6283 59	-0.14146 0.2852 59	-0.07408 0.5771 59	-0.00615 0.9631 59	0.02776 0.8347 59	-0.06044 0.6493 59	-0.09521 0.4732 59	0.36959 0.0040 59	-0.04128 0.7563 59	-0.09195 0.4886 59	0.72069 0.0001 59	-0.16760 0.2045 59
SP23	0.05070 0.7030 59	-0.04382 0.7418 59	-0.00684 0.9590 59	-0.11311 0.3937 59	0.00825 0.9505 59	-0.09376 0.4800 59	0.16592 0.2092 59	-0.03799 0.7751 59	0.05474 0.6805 59	-0.04862 0.7146 59	0.08124 0.5408 59	-0.03215 0.8090 59	0.34538 0.0074 59
SP24	0.36716 0.0042 59	-0.17330 0.1893 59	-0.21310 0.1051 59	-0.09312 0.4830 59	0.39138 0.0022 59	0.21564 0.1009 59	0.75581 0.0001 59	0.03757 0.7776 59	0.20237 0.1243 59	-0.11386 0.3905 59	-0.11563 0.3831 59	-0.00653 0.9608 59	0.10994 0.4072 59
SP25	0.40158 0.0016 59	0.25122 0.0550 59	0.13681 0.3015 59	0.04115 0.7570 59	0.29171 0.0250 59	0.24332 0.0633 59	0.25984 0.0469 59	0.41113 0.0012 59	-0.10297 0.4377 59	-0.16119 0.2226 59	0.30219 0.0200 59	-0.08410 0.5265 59	0.04692 0.7242 59
SP26	-0.01767 0.8943 59	0.08898 0.5028 59	0.22361 0.0887 59	-0.02554 0.8477 59	0.13875 0.2946 59	-0.09699 0.4649 59	-0.06423 0.6289 59	-0.13721 0.3001 59	-0.17096 0.1955 59	0.00437 0.9738 59	0.23380 0.0747 59	-0.07857 0.5542 59	0.36189 0.0049 59
SP27	0.00796 0.9523 59	-0.17649 0.1812 59	-0.25017 0.0560 59	-0.16920 0.2002 59	-0.07033 0.5966 59	-0.18980 0.1499 59	0.40454 0.0015 59	-0.15209 0.2502 59	0.17777 0.1780 59	0.04797 0.7182 59	-0.19158 0.1461 59	0.24275 0.0640 59	-0.05250 0.6929 59
SP28	0.02131 0.8727 59	0.01544 0.9076 59	0.21875 0.0960 59	-0.08159 0.5390 59	0.10378 0.4341 59	-0.13196 0.3191 59	-0.16347 0.2161 59	-0.09185 0.4890 59	-0.22740 0.0833 59	0.02416 0.8559 59	0.47616 0.0001 59	0.02864 0.8295 59	0.12992 0.3267 59
SP29	0.48426 0.0001 59	0.01249 0.9252 59	0.18837 0.1531 59	0.07570 0.5688 59	0.36321 0.0047 59	0.28275 0.0300 59	0.21963 0.0946 59	0.41326 0.0011 59	-0.10444 0.4312 59	-0.20438 0.1205 59	0.60880 0.0001 59	0.02845 0.8306 59	0.21925 0.0952 59
SP30	-0.10387 0.4337 59	0.21328 0.1048 59	0.00392 0.9765 59	-0.03401 0.7982 59	-0.06347 0.6329 59	0.13918 0.2931 59	0.00332 0.9801 59	0.15881 0.2296 59	0.31654 0.0146 59	-0.12582 0.3424 59	-0.16522 0.2111 59	0.44945 0.0004 59	-0.24983 0.0564 59
SP31	0.11333 0.3928 59	0.14552 0.2715 59	0.18343 0.1643 59	0.01556 0.9069 59	0.06682 0.6151 59	-0.12201 0.3573 59	-0.16302 0.2173 59	-0.02521 0.8497 59	-0.15750 0.2335 59	-0.00368 0.9779 59	0.29503 0.0233 59	-0.09929 0.4543 59	0.27009 0.0386 59

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	SP44	SP45	SP46	SP47	SP48	SP49	SP50	SP51	SP52	SP53	SP54	SP55	SP56
SP32	0.29837 0.0217 59	0.16024 0.2254 59	0.52539 0.0001 59	0.13272 0.3163 59	0.40845 0.0013 59	0.16462 0.2128 59	0.00218 0.9869 59	0.28725 0.0274 59	-0.22663 0.0843 59	-0.15878 0.2297 59	0.78470 0.0001 59	-0.10800 0.4155 59	0.13281 0.3160 59
SP33	0.54448 0.0001 59	-0.11120 0.4018 59	0.08810 0.5070 59	0.00846 0.9493 59	0.56807 0.0001 59	0.18192 0.1679 59	0.52862 0.0001 59	0.27773 0.0332 59	0.00437 0.9738 59	-0.14466 0.2743 59	0.40869 0.0013 59	-0.01952 0.8833 59	0.19740 0.1340 59
SP34	0.18674 0.1567 59	0.06207 0.6405 59	0.20606 0.1174 59	0.11065 0.4041 59	0.16241 0.2191 59	0.23596 0.0720 59	-0.01031 0.9382 59	0.00032 0.9981 59	-0.14014 0.2898 59	0.01322 0.9209 59	0.51721 0.0001 59	-0.04255 0.7490 59	0.13934 0.2925 59
SP35	0.43393 0.0006 59	-0.17534 0.1841 59	-0.17116 0.1949 59	-0.09553 0.4717 59	0.30158 0.0203 59	0.27300 0.0364 59	0.52336 0.0001 59	0.13879 0.2945 59	0.14553 0.2714 59	-0.05316 0.6892 59	0.10515 0.4280 59	0.02081 0.8757 59	0.13619 0.3037 59
SP36	0.19424 0.1404 59	0.49319 0.0001 59	0.47050 0.0002 59	0.51715 0.0001 59	0.04608 0.7289 59	0.46414 0.0002 59	-0.03029 0.8198 59	0.38079 0.0029 59	-0.02582 0.8461 59	-0.11497 0.3859 59	0.45732 0.0003 59	-0.10325 0.4364 59	0.02671 0.8408 59
SP37	0.22140 0.0919 59	-0.09943 0.4537 59	-0.07734 0.5604 59	-0.03788 0.7758 59	0.37736 0.0032 59	0.028G3 0.8331 59	-0.10578 0.4253 59	-0.02569 0.8469 59	-0.25916 0.0475 59	0.30320 0.0196 59	0.35427 0.0059 59	-0.12336 0.3520 59	0.34865 0.0068 59
SP38	0.39396 0.0020 59	0.00831 0.9502 59	0.44856 0.0004 59	0.00190 0.9886 59	0.33201 0.0102 59	0.08129 0.5405 59	0.01905 0.8861 59	0.14321 0.2792 59	-0.35661 0.0056 59	-0.10015 0.4504 59	0.53007 0.0001 59	-0.23232 0.0766 59	0.31036 0.0167 59
SP39	-0.22677 0.0841 59	0.06726 0.6127 59	-0.16337 0.2163 59	-0.13046 0.3247 59	0.02887 0.8282 59	-0.24782 0.0584 59	-0.00276 0.9834 59	-0.14364 0.2778 59	0.10740 0.4181 59	0.17863 0.1758 59	-0.26244 0.0446 59	0.47983 0.0001 59	-0.26938 0.0391 59
SP40	0.21910 0.0955 59	-0.10677 0.4209 59	-0.13866 0.2950 59	-0.10585 0.4249 59	0.09347 0.4814 59	0.02940 0.8251 59	0.42293 0.0008 59	-0.01652 0.9012 59	0.13835 0.2960 59	-0.06386 0.6308 59	0.02265 0.8648 59	-0.04272 0.7480 59	0.27579 0.0345 59
SP41	0.26202 0.0450 59	0.23949 0.0677 59	0.44098 0.0005 59	0.12000 0.3653 59	0.16962 0.1990 59	0.13057 0.3243 59	-0.02889 0.8281 59	0.29598 0.0228 59	-0.05559 0.6758 59	-0.07684 0.5630 59	0.58485 0.0001 59	0.06342 0.6332 59	0.21723 0.0984 59
SP42	0.00931 0.9442 59	-0.08718 0.5115 59	-0.12083 0.3620 59	-0.17363 0.1885 59	0.04962 0.7090 59	-0.19097 0.1474 59	0.12483 0.3462 59	-0.20733 0.1151 59	-0.13865 0.2950 59	0.13160 0.3205 59	0.10437 0.4315 59	0.02259 0.8652 59	0.22410 0.0880 59
SP43	0.18523 0.1602 59	-0.11393 0.3902 59	-0.13637 0.3031 59	-0.20666 0.1163 59	-0.13404 0.3115 59	-0.12223 0.3564 59	0.16296 0.2175 59	-0.13999 0.2903 59	0.12020 0.3645 59	-0.04061 0.7601 59	-0.22552 0.0859 59	0.32518 0.0120 59	-0.11639 0.3800 59
SP44	1.00000 0.0000 59	0.01976 0.8819 59	0.08807 0.5071 59	-0.03944 0.7668 59	0.36566 0.0044 59	0.49868 0.0001 59	0.43970 0.0005 59	0.36712 0.0042 59	0.05793 0.6630 59	-0.09674 0.4661 59	0.41810 0.0010 59	-0.07855 0.5543 59	0.09702 0.4648 59

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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

	SP44	SP45	SP46	SP47	SP48	SP49	SP50	SP51	SP52	SP53	SP54	SP55	SP56	
SP45	0.01976 0.8819 59	1.00000 0.0000 59	0.56909 0.0001 59	0.43131 0.0006 59	-0.16627 0.2082 59	0.24903 0.0572 59	-0.18346 0.1643 59	0.23552 0.0725 59	-0.16926 0.2000 59	-0.01981 0.8816 59	0.17339 0.1891 59	-0.05633 0.6717 59	-0.06634 0.6176 59	
SP46	0.08807 0.5071 59	0.56909 0.0001 59	1.00000 0.0000 59	0.25274 0.0534 59	0.09466 0.4758 59	0.15722 0.2344 59	-0.14520 0.2725 59	0.18599 0.1584 59	-0.32482 0.0121 59	-0.24311 0.0635 59	0.45292 0.0003 59	-0.19108 0.1471 59	0.05695 0.6683 59	
SP47	-0.03944 0.7668 59	0.43131 0.0006 59	0.25274 0.0534 59	1.00000 0.0000 59	-0.03948 0.7666 59	0.30452 0.0190 59	-0.10650 0.4221 59	0.17322 0.1895 59	-0.11270 0.3954 59	0.03571 0.7883 59	0.19946 0.1299 59	-0.18807 0.1537 59	-0.11039 0.4052 59	
SP48	0.36566 0.0044 59	-0.16627 0.2082 59	0.09466 0.4758 59	-0.03948 0.7666 59	1.00000 0.0000 59	0.19007 0.1493 59	0.33120 0.0104 59	0.14497 0.2733 59	-0.04876 0.7138 59	-0.07385 0.5783 59	0.40571 0.0014 59	-0.03682 0.7819 59	0.09162 0.4901 59	
SP49	0.49868 0.0001 59	0.24903 0.0572 59	0.15722 0.2344 59	0.30452 0.0190 59	0.19007 0.1493 59	1.00000 0.0000 59	0.14534 0.2720 59	0.53902 0.0001 59	0.19170 0.1458 59	-0.21769 0.0977 59	0.38453 0.0026 59	-0.03916 0.7684 59	-0.15049 0.2553 59	
SP50	0.43970 0.0005 59	-0.18346 0.1643 59	-0.14520 0.2725 59	-0.10650 0.4221 59	0.33120 0.0104 59	0.14534 0.2720 59	1.00000 0.0000 59	0.02153 0.8714 59	0.19167 0.1459 59	-0.11493 0.3861 59	-0.06785 0.6096 59	0.03264 0.8061 59	0.07468 0.5740 59	
B-43	SP51	0.36712 0.0042 59	0.23552 0.0725 59	0.18599 0.1584 59	0.17322 0.1895 59	0.14497 0.2733 59	0.53902 0.0001 59	0.02153 0.8714 59	1.00000 0.0000 59	0.35474 0.0058 59	-0.19136 0.1465 59	0.33211 0.0102 59	0.04938 0.7103 59	-0.09462 0.4759 59
SP52	0.05793 0.6630 59	-0.16926 0.2000 59	-0.32482 0.0121 59	-0.11270 0.3954 59	-0.04876 0.7138 59	0.19170 0.1458 59	0.19167 0.1459 59	0.35474 0.0058 59	1.00000 0.0000 59	-0.06436 0.6282 59	-0.24358 0.0630 59	0.56908 0.0001 59	-0.19381 0.1413 59	
SP53	-0.09674 0.4661 59	-0.01981 0.8816 59	-0.24311 0.0635 59	0.03571 0.7883 59	-0.07385 0.5783 59	-0.21769 0.0977 59	-0.11493 0.3861 59	-0.19136 0.1465 59	-0.06436 0.6282 59	1.00000 0.0000 59	-0.21897 0.0957 59	0.05189 0.6963 59	0.26315 0.0440 59	
SP54	0.41810 0.0010 59	0.17339 0.1891 59	0.45292 0.0003 59	0.19946 0.1299 59	0.40571 0.0014 59	0.38453 0.0026 59	-0.06785 0.6096 59	0.33211 0.0102 59	-0.24358 0.0630 59	-0.21897 0.0957 59	1.00000 0.0000 59	-0.11608 0.3813 59	0.19910 0.1306 59	
SP55	-0.07855 0.5543 59	-0.05633 0.6717 59	-0.19108 0.1471 59	-0.18807 0.1537 59	-0.03682 0.7819 59	-0.03916 0.7684 59	0.03264 0.8061 59	0.04938 0.7103 59	0.56908 0.0001 59	0.05189 0.6963 59	-0.11608 0.3813 59	1.00000 0.0000 59	-0.12478 0.3464 59	
SP56	0.09702 0.4648 59	-0.06634 0.6176 59	0.05695 0.6683 59	-0.11039 0.4052 59	0.09162 0.4901 59	-0.15049 0.2553 59	0.07468 0.5740 59	-0.09462 0.4759 59	-0.19381 0.1413 59	0.26315 0.0440 59	0.19910 0.1306 59	-0.12478 0.3464 59	1.00000 0.0000 59	
SP57	0.33421 0.0097 59	0.18325 0.1648 59	0.00048 0.9971 59	-0.01763 0.8946 59	0.07211 0.5873 59	0.07309 0.5822 59	0.32130 0.0131 59	0.20118 0.1265 59	0.21138 0.1080 59	0.03560 0.7889 59	0.05865 0.7889 59	0.06383 0.6590 59	0.19481 0.6310 59	

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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

SP44 SP45 SP46 SP47 SP48 SP49 SP50 SP51 SP52 SP53 SP54 SP55 SP56

SP58	0.38399 0.0027 59	0.02298 0.8628 59	-0.04659 0.7260 59	0.03078 0.8170 59	0.29644 0.0226 59	0.55269 0.0001 59	0.58305 0.0001 59	0.22167 0.0915 59	0.30888 0.0173 59	-0.17909 0.1747 59	0.01529 0.9085 59	0.08388 0.5276 59	0.09674 0.4661 59
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SP59	0.36787 0.0042 59	0.44012 0.0005 59	0.40777 0.0013 59	0.24306 0.0636 59	-0.00304 0.9818 59	0.29367 0.0240 59	-0.06329 0.6339 59	0.32216 0.0128 59	-0.23681 0.0709 59	-0.10915 0.4106 59	0.42919 0.0007 59	-0.22435 0.0876 59	0.01294 0.9225 59
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SP60	0.39917 0.0017 59	0.24044 0.0666 59	0.04342 0.7440 59	-0.05282 0.6911 59	0.02119 0.8734 59	0.24549 0.0609 59	0.17894 0.1751 59	0.18809 0.1537 59	-0.05960 0.6539 59	-0.14761 0.2646 59	-0.09228 0.4870 59	-0.10993 0.4072 59	-0.24701 0.0593 59
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SP61	0.42594 0.0008 59	0.23673 0.0710 59	0.43362 0.0006 59	0.09466 0.4758 59	0.34907 0.0067 59	0.29410 0.0238 59	0.00766 0.9541 59	0.35331 0.0061 59	-0.17569 0.1832 59	-0.14320 0.2793 59	0.67864 0.0001 59	-0.06664 0.6160 59	0.09642 0.4675 59
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SP57 SP58 SP59 SP60 SP61

PL1ALK	0.05701 0.6680 59	0.01581 0.9054 59	-0.14649 0.2682 59	0.07712 0.5615 59	-0.28936 0.0262 59
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PELOALK	0.12508 0.3452 59	0.05425 0.6832 59	-0.18183 0.1681 59	0.01207 0.9277 59	-0.30285 0.0197 59
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PEHIALK	-0.15232 0.2494 59	-0.08093 0.5423 59	-0.28449 0.0290 59	-0.09164 0.4900 59	-0.26488 0.0426 59
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TERRI	-0.12593 0.3419 59	-0.07939 0.5501 59	-0.40577 0.0014 59	-0.17511 0.1846 59	-0.35003 0.0066 59
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TOTEOM	-0.01391 0.9167 59	0.08102 0.5419 59	0.02440 0.8544 59	0.39557 0.0019 59	-0.19853 0.1317 59
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ALUMC	-0.12750 0.3359 59	-0.04198 0.7522 59	-0.12711 0.3374 59	0.18488 0.1610 59	-0.21131 0.1081 59
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CPI	0.14363 0.2778 59	0.04036 0.7615 59	-0.24273 0.0640 59	-0.12718 0.3371 59	-0.33458 0.0096 59
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SAND	0.10687 0.4205 59	-0.10279 0.4385 59	0.50670 0.0001 59	0.25564 0.0507 59	0.25367 0.0525 59
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SILT	-0.03224 0.8084 59	0.05656 0.6705 59	0.27742 0.0334 59	-0.17941 0.1739 59	0.13989 0.2906 59
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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

	SP57	SP58	SP59	SP60	SP61
CLAY	-0.07898 0.5521 59	0.06506 0.6244 59	-0.55698 0.0001 59	-0.14559 0.2712 59	-0.27926 0.0322 59
ORCAR	0.10844 0.4136 59	0.14852 0.2616 59	0.02769 0.8351 59	0.04794 0.7184 59	-0.00897 0.9462 59
CACO	-0.12386 0.3500 59	-0.07105 0.5928 59	0.31710 0.0144 59	-0.11318 0.3934 59	0.36749 0.0042 59
DELC13	-0.18045 0.1714 59	0.00447 0.9732 59	0.23787 0.0697 59	-0.12156 0.3591 59	0.20411 0.1210 59
BOTTEM	0.25025 0.0559 59	0.35202 0.0063 59	0.54416 0.0001 59	0.53481 0.0001 59	0.15196 0.2506 59
BOTSAL	0.07465 0.5742 59	0.07925 0.5507 59	0.20560 0.1182 59	0.46596 0.0002 59	-0.00543 0.9674 59
BOTDO	-0.18857 0.1526 59	-0.34856 0.0068 59	-0.35170 0.0063 59	-0.38174 0.0029 59	-0.14056 0.2883 59
BOTTRAN	0.00872 0.9477 59	-0.08167 0.5386 59	-0.19073 0.1479 59	-0.09198 0.4884 59	-0.24867 0.0575 59
BOTPOC	-0.18416 0.1626 59	0.13533 0.3068 59	0.10610 0.4238 59	0.24462 0.0619 59	0.27619 0.0342 59
BOTDOC	0.07386 0.6378 43	-0.05524 0.7250 43	-0.27677 0.0724 43	-0.28634 0.0627 43	-0.30724 0.0451 43
SURTRAN	-0.01347 0.9193 59	-0.11038 0.4053 59	-0.15645 0.2367 59	-0.02755 0.8359 59	-0.33230 0.0101 59
SURPOC	-0.03559 0.7890 59	0.27367 0.0360 59	0.09450 0.4765 59	0.14694 0.2668 59	0.26447 0.0430 59
SURDOC	0.03155 0.8408 43	0.11559 0.4605 43	-0.10284 0.5117 43	0.12324 0.4311 43	0.14902 0.3402 43

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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER H0:RHO=0 / NUMBER OF OBSERVATIONS

	SP57	SP58	SP59	SP60	SP61
SP1	0.21733 0.0982 59	-0.01739 0.8960 59	0.10082 0.4474 59	-0.14293 0.2802 59	-0.06745 0.6117 59
SP2	0.10205 0.4419 59	-0.07988 0.5476 59	0.24247 0.0643 59	0.35546 0.0057 59	0.28604 0.0281 59
SP3	-0.29692 0.0224 59	-0.14215 0.2828 59	-0.32797 0.0112 59	-0.20444 0.1204 59	-0.19239 0.1443 59
SP4	0.15340 0.2461 59	0.09523 0.4731 59	0.22635 0.0847 59	0.00834 0.9500 59	0.73308 0.0001 59
SP5	0.32765 0.0113 59	0.09421 0.4778 59	0.21570 0.1008 59	0.00463 0.9722 59	-0.11196 0.3985 59
SP6	0.05631 0.6719 59	0.04203 0.7519 59	0.47691 0.0001 59	-0.02860 0.8297 59	0.26191 0.0451 59
SP7	0.41490 0.0011 59	0.26965 0.0389 59	0.23056 0.0790 59	0.04568 0.7312 59	0.24292 0.0638 59
SP8	-0.04695 0.7240 59	-0.17609 0.1822 59	-0.17398 0.1876 59	-0.15290 0.2476 59	-0.13994 0.2904 59
SP9	-0.13450 0.3098 59	-0.17590 0.1827 59	-0.27275 0.0366 59	-0.23474 0.0735 59	-0.22218 0.0908 59
SP10	-0.19730 0.1342 59	-0.17079 0.1959 59	0.02034 0.8785 59	-0.09008 0.4975 59	-0.09242 0.4863 59
SP11	0.38858 0.0024 59	0.46183 0.0002 59	0.27207 0.0371 59	0.10153 0.4442 59	0.22236 0.0905 59
SP12	0.09341 0.4816 59	0.04306 0.7461 59	0.01480 0.9114 59	-0.08746 0.5101 59	0.33926 0.0086 59
SP13	-0.09090 0.4935 59	-0.08396 0.5273 59	0.32195 0.0129 59	0.05751 0.6653 59	0.51536 0.0001 59

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	PEARSON CORRELATION COEFFICIENTS / PROB > R UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS					
	SP57	SP58	SP59	SP60	SP61	
SP14	0.41470 0.0011 59	0.10549 0.4265 59	0.26553 0.0421 59	0.11823 0.3725 59	0.42226 0.0009 59	
SP15	0.03503 0.7922 59	0.03649 0.7838 59	-0.24246 0.0643 59	-0.12134 0.3599 59	-0.11877 0.3703 59	
SP16	0.28301 0.0299 59	0.34574 0.0073 59	0.08739 0.5105 59	0.09252 0.4858 59	0.06430 0.6285 59	
SP17	0.14632 0.2688 59	0.31711 0.0144 59	0.24723 0.0591 59	0.11073 0.4038 59	0.56295 0.0001 59	
SP18	0.21148 0.1079 59	0.07189 0.5885 59	0.27772 0.0332 59	0.19508 0.1387 59	0.39425 0.0020 59	
SP19	0.05209 0.6952 59	0.32164 0.0130 59	0.30281 0.0197 59	0.35856 0.0053 59	-0.10800 0.4155 59	
SP20	0.34938 0.0067 59	0.22736 0.0833 59	0.09007 0.4975 59	-0.03254 0.8067 59	-0.07833 0.5554 59	
SP21	0.18580 0.1589 59	0.16570 0.2098 59	0.02137 0.8724 59	-0.12761 0.3354 59	0.18905 0.1516 59	
SP22	-0.15176 0.2512 59	0.03553 0.7893 59	-0.14173 0.2843 59	-0.07057 0.5953 59	-0.06149 0.6436 59	
SP23	0.63490 0.0001 59	0.13576 0.3053 59	0.12139 0.3597 59	-0.07041 0.5962 59	-0.04762 0.7202 59	
SP24	0.41903 0.0010 59	0.77833 0.0001 59	0.03383 0.7992 59	0.36977 0.0039 59	-0.05478 0.6803 59	
SP25	0.30724 0.0179 59	0.17824 0.1768 59	0.27078 0.0380 59	0.38222 0.0028 59	0.35394 0.0060 59	
SP26	0.30717 0.0180 59	-0.10659 0.4217 59	0.04881 0.7135 59	-0.20077 0.1273 59	-0.05961 0.6538 59	

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PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO: RHO=0 / NUMBER OF OBSERVATIONS

	SP57	SP58	SP59	SP60	SP61
SP27	0.30777 0.0177 59	0.13528 0.3070 59	-0.15213 0.2501 59	-0.02353 0.8596 59	-0.15802 0.2320 59
SP28	0.12903 0.3301 59	-0.19795 0.1329 59	0.17586 0.1828 59	-0.26672 0.0411 59	0.16893 0.2009 59
SP29	0.32844 0.0111 59	0.19667 0.1355 59	0.38784 0.0024 59	0.13735 0.2996 59	0.61211 0.0001 59
SP30	0.10339 0.4358 59	0.22806 0.0823 59	0.07544 0.5701 59	0.17799 0.1774 59	-0.02300 0.8627 59
SP31	0.31767 0.0142 59	-0.21453 0.1028 59	0.11979 0.3662 59	-0.09403 0.4787 59	0.20568 0.1181 59
SP32	0.08260 0.5340 59	-0.04305 0.7461 59	0.37574 0.0034 59	-0.07033 0.5966 59	0.79441 0.0001 59
SP33	0.32411 0.0123 59	0.36580 0.0044 59	0.12681 0.3385 59	0.06077 0.6475 59	0.48300 0.0001 59
SP34	0.01664 0.9005 59	0.10141 0.4447 59	0.27648 0.0340 59	-0.08755 0.5096 59	0.13444 0.3100 59
SP35	0.48221 0.0001 59	0.54963 0.0001 59	0.05655 0.6705 59	0.15311 0.2470 59	0.04336 0.7444 59
SP36	0.28825 0.0268 59	0.23111 0.0782 59	0.45041 0.0003 59	0.01792 0.8929 59	0.29619 0.0227 59
SP37	0.12235 0.3559 59	-0.17725 0.1793 59	-0.01835 0.8903 59	-0.15263 0.2485 59	0.21042 0.1097 59
SP38	-0.06033 0.6499 59	0.01482 0.9113 59	0.30999 0.0169 59	0.03277 0.8054 59	0.47565 0.0001 59
SP39	-0.03921 0.7681 59	-0.12916 0.3296 59	-0.24215 0.0646 59	0.01644 0.9017 59	-0.10974 0.4080 59

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	PEARSON CORRELATION COEFFICIENTS / PROB > R UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS				
	SP57	SP58	SP59	SP60	SP61
SP40	0.46823 0.0002 59	0.45435 0.0003 59	0.07835 0.5553 59	0.10365 0.4347 59	0.01969 0.8823 59
SP41	0.34129 0.0082 59	0.03060 0.8180 59	0.40389 0.0015 59	-0.19212 0.1449 59	0.36177 0.0049 59
SP42	0.23249 0.0764 59	-0.03160 0.8122 59	-0.06945 0.6012 59	-0.17237 0.1917 59	-0.12092 0.3616 59
SP43	0.24536 0.0611 59	0.09009 0.4974 59	0.19517 0.1385 59	0.44893 0.0004 59	-0.17304 0.1900 59
SP44	0.33421 0.0097 59	0.38399 0.0027 59	0.36787 0.0042 59	0.39917 0.0017 59	0.42594 0.0008 59
SP45	0.18325 0.1648 59	0.02298 0.8628 59	0.44012 0.0005 59	0.24044 0.0666 59	0.23673 0.0710 59
SP46	0.00048 0.9971 59	-0.04659 0.7260 59	0.40777 0.0013 59	0.04342 0.7440 59	0.43362 0.0006 59
SP47	-0.01763 0.8946 59	0.03078 0.8170 59	0.24306 0.0636 59	-0.05282 0.6911 59	0.09466 0.4758 59
SP48	0.07211 0.5873 59	0.29644 0.0226 59	-0.00304 0.9818 59	0.02119 0.8734 59	0.34907 0.0067 59
SP49	0.07309 0.5822 59	0.55269 0.0001 59	0.29367 0.0240 59	0.24549 0.0609 59	0.29410 0.0238 59
SP50	0.32130 0.0131 59	0.58305 0.0001 59	-0.06329 0.6339 59	0.17894 0.1751 59	0.00766 0.9541 59
SP51	0.20118 0.1265 59	0.22167 0.0915 59	0.32216 0.0128 59	0.18809 0.1537 59	0.35331 0.0061 59
SP52	0.21138 0.1080 59	0.30888 0.0173 59	-0.23681 0.0709 59	-0.05960 0.6539 59	-0.17569 0.1832 59

SAS

PEARSON CORRELATION COEFFICIENTS / PROB > |R| UNDER HO:RHO=0 / NUMBER OF OBSERVATIONS

	SP57	SP58	SP59	SP60	SP61
SP53	0.03560 0.7889 59	-0.17909 0.1747 59	-0.10915 0.4106 59	-0.14761 0.2646 59	-0.14320 0.2793 59
SP54	0.05865 0.6590 59	0.01529 0.9085 59	0.42919 0.0007 59	-0.09228 0.4870 59	0.67864 0.0001 59
SP55	0.06383 0.6310 59	0.08388 0.5276 59	-0.22435 0.0876 59	-0.10993 0.4072 59	-0.06664 0.6160 59
SP56	0.19481 0.1393 59	0.09674 0.4661 59	0.01294 0.9225 59	-0.24701 0.0593 59	0.09642 0.4675 59
SP57	1.00000 0.0000 59	0.27353 0.0361 59	0.33819 0.0088 59	0.31826 0.0140 59	0.16689 0.2065 59
SP58	0.27353 0.0361 59	1.00000 0.0000 59	0.11471 0.3870 59	0.24155 0.0653 59	-0.01835 0.8903 59
SP59	0.33819 0.0088 59	0.11471 0.3870 59	1.00000 0.0000 59	0.51967 0.0001 59	0.34293 0.0078 59
SP60	0.31826 0.0140 59	0.24155 0.0653 59	0.51967 0.0001 59	1.00000 0.0000 59	0.07553 0.5697 59
SP61	0.16689 0.2065 59	-0.01835 0.8903 59	0.34293 0.0078 59	0.07553 0.5697 59	1.00000 0.0000 59

APPENDIX C
DISTRIBUTIONAL PATTERNS OF MACROFAUNA

C-1

Polychaetes

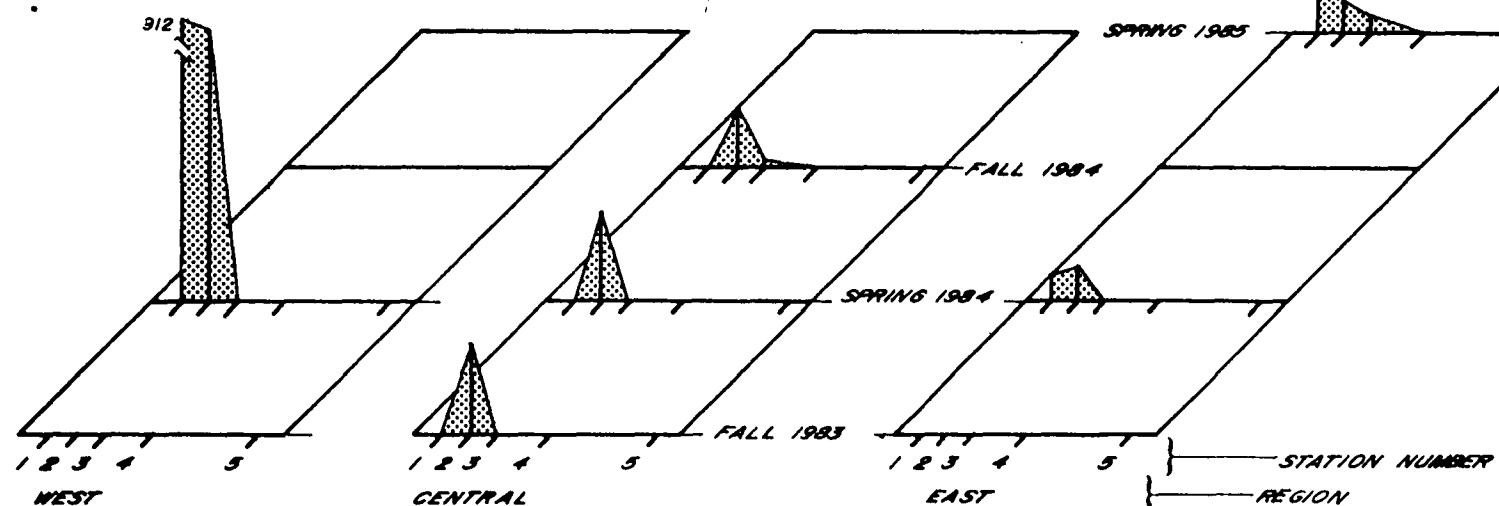
C-2

Litocorsa antennata (POLYCHAETA)

REGION · SEASON · YEAR COMPARISONS

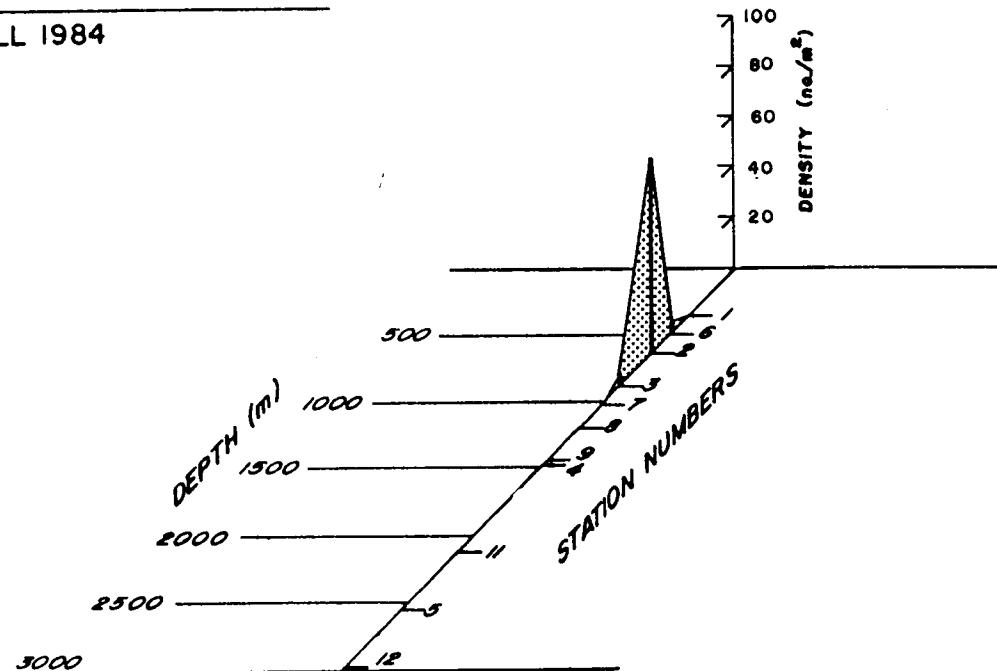
Station-Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



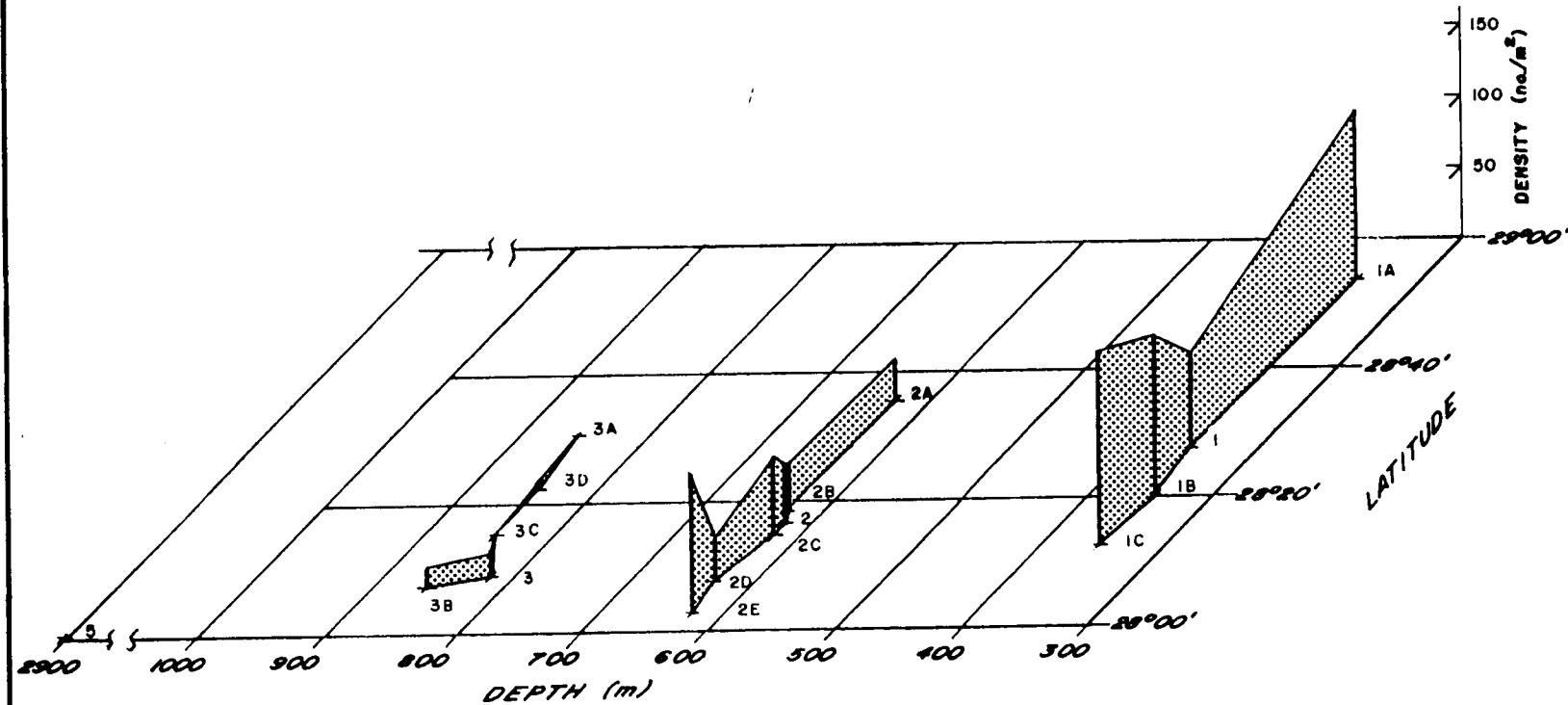
Litocorsa antennata (POLYCHAETA)

CENTRAL REGION - FALL 1984



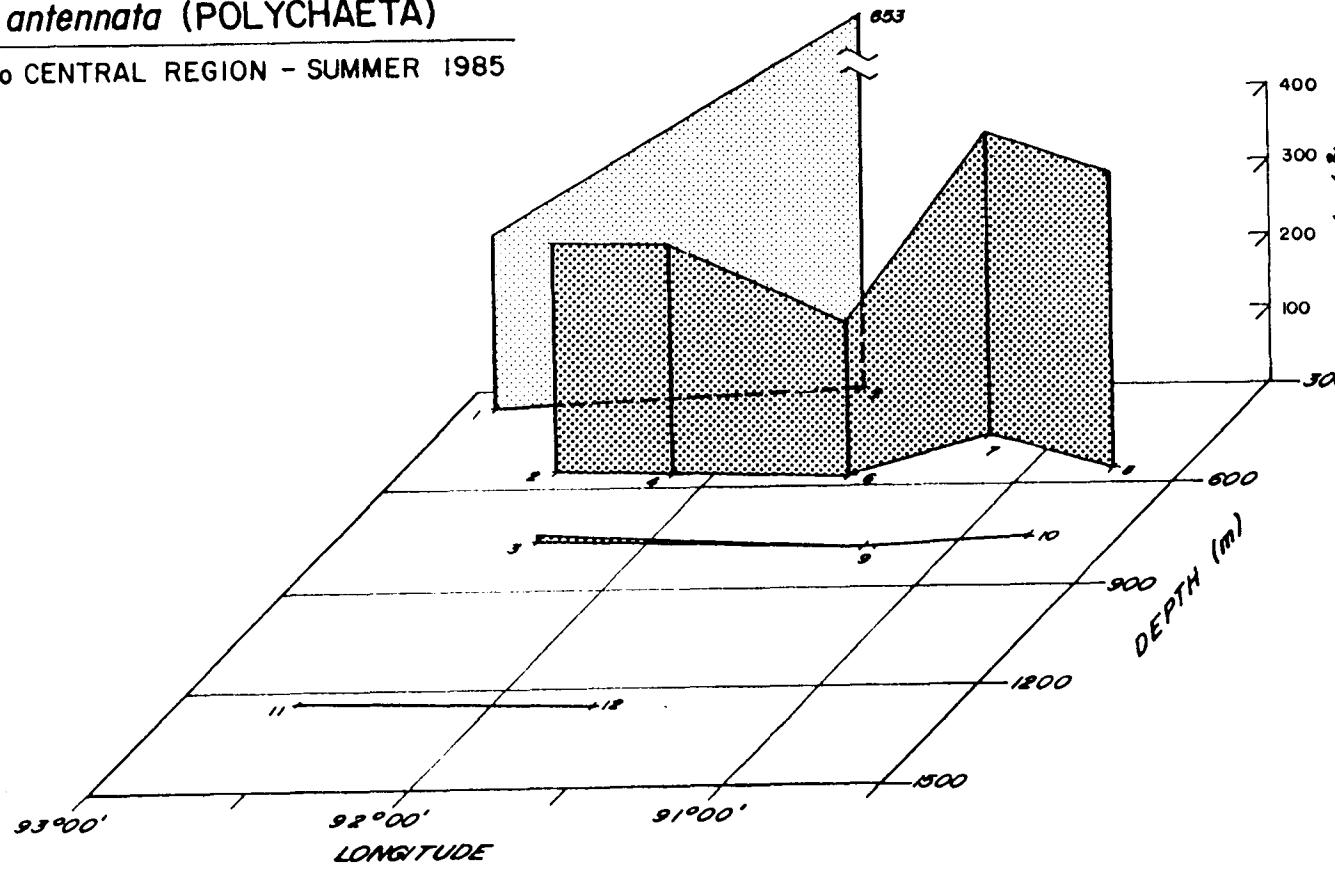
Litocorsa antennata (POLYCHAETA)

EASTERN REGION - SPRING 1985



Litocorsa antennata (POLYCHAETA)

WESTERN to CENTRAL REGION - SUMMER 1985

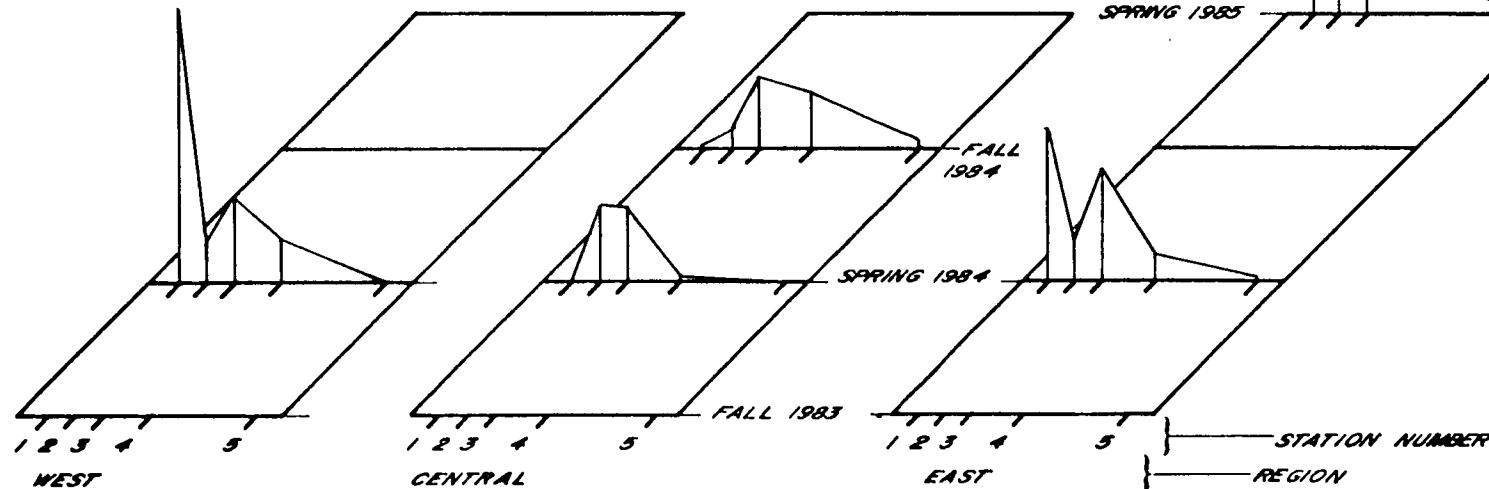


AUROSPIO DIBRANCHIATA

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602

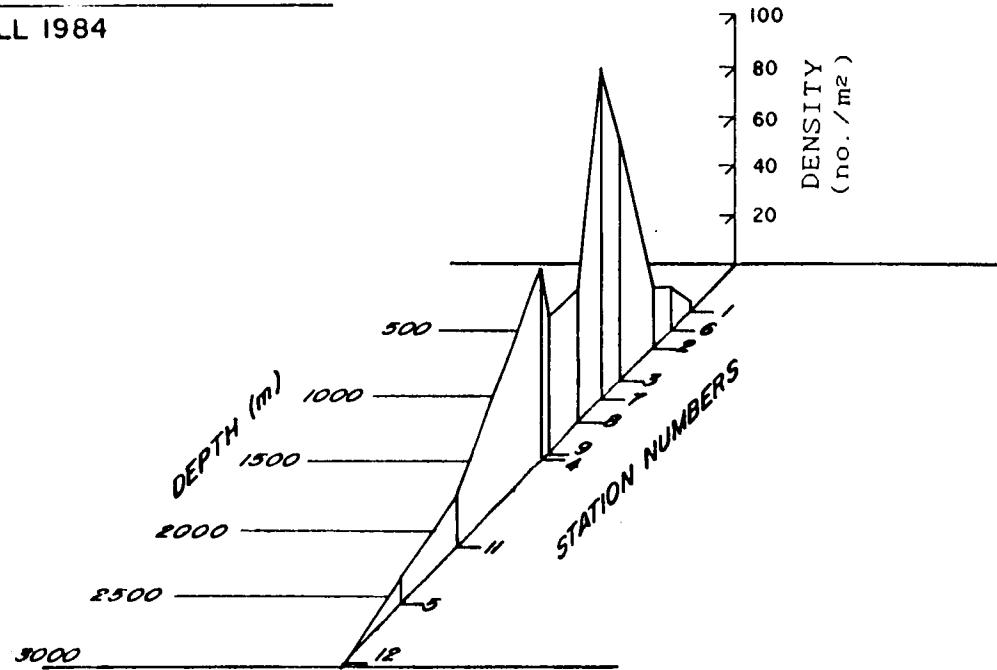


DENSITY (no./m²)

C

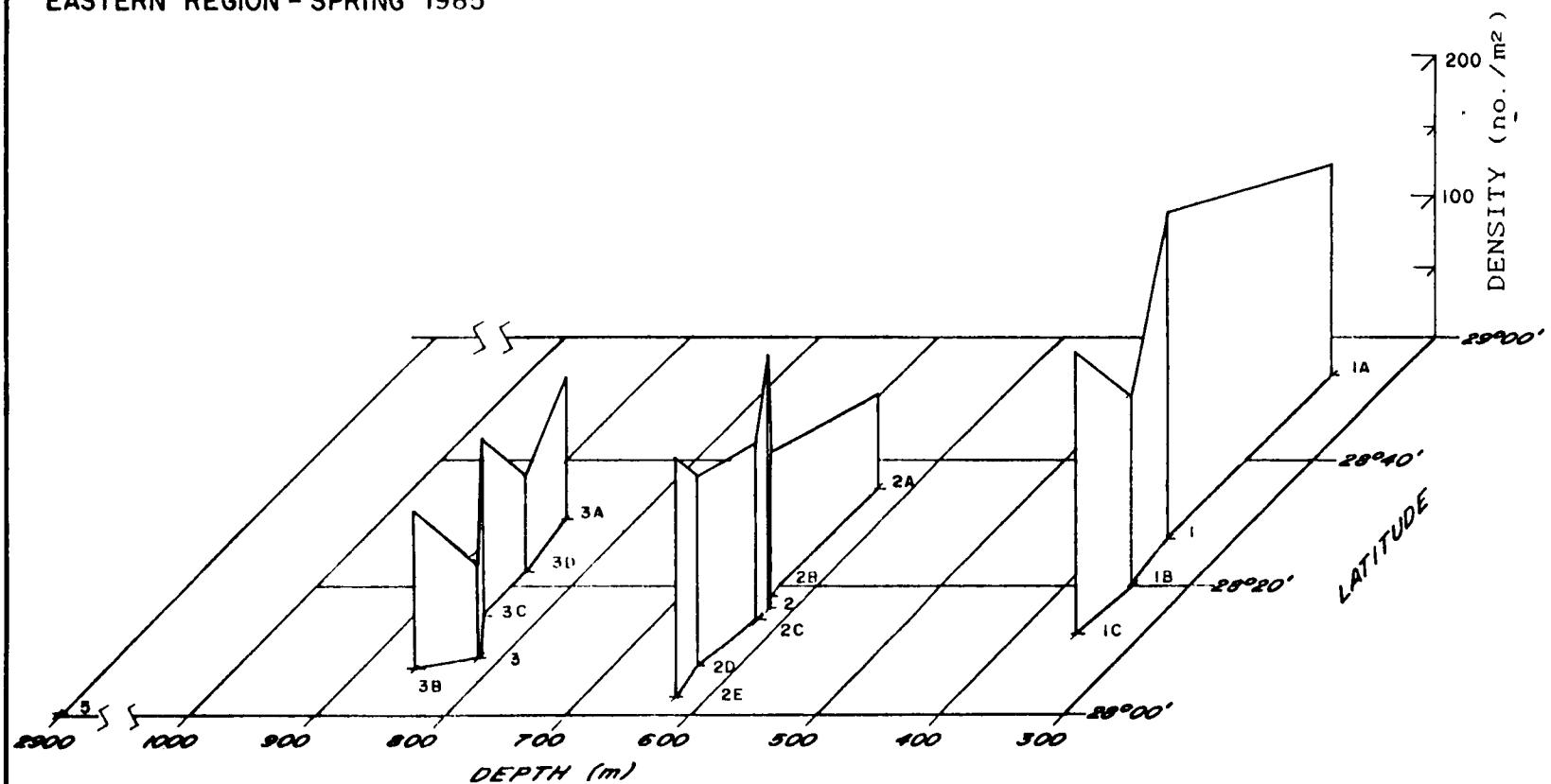
AUROSPPIO DIBRANCHIATA

CENTRAL REGION - FALL 1984



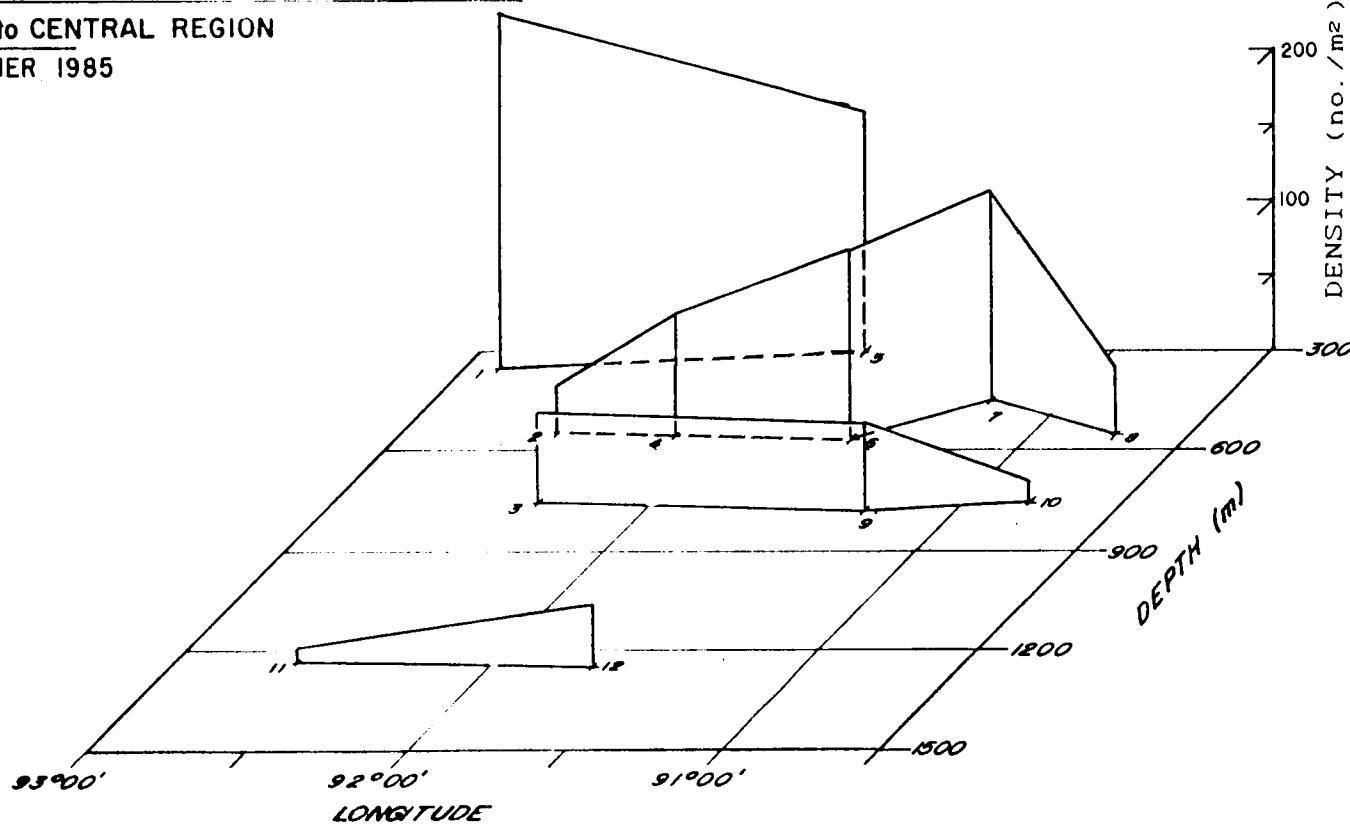
AUROSPIO DIBRANCHIATA

EASTERN REGION - SPRING 1985



AUROSPIO DIBRANCHIATA

**WESTERN to CENTRAL REGION
SUMMER 1985**

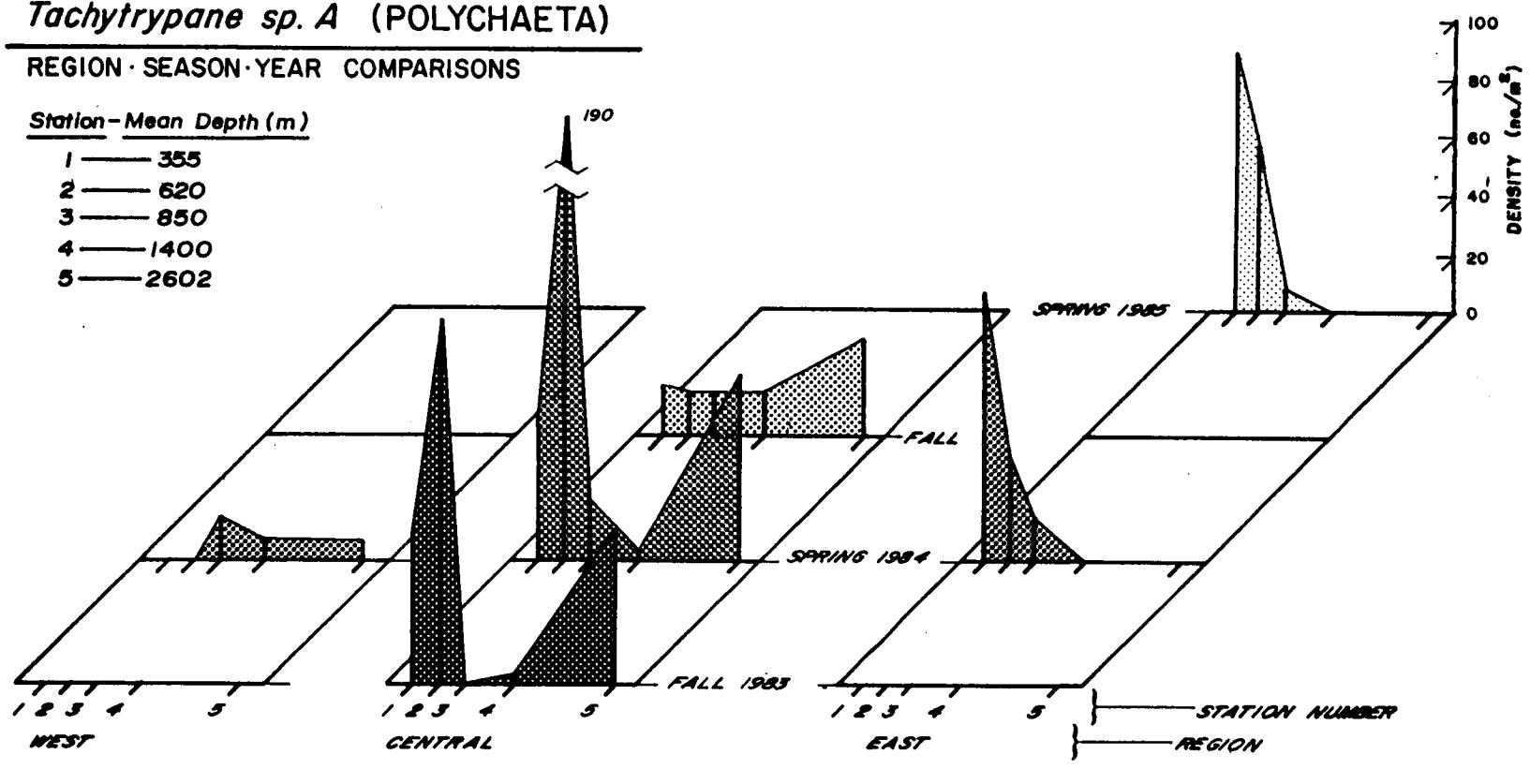


Tachytrypane sp. A (POLYCHAETA)

REGION · SEASON · YEAR COMPARISONS

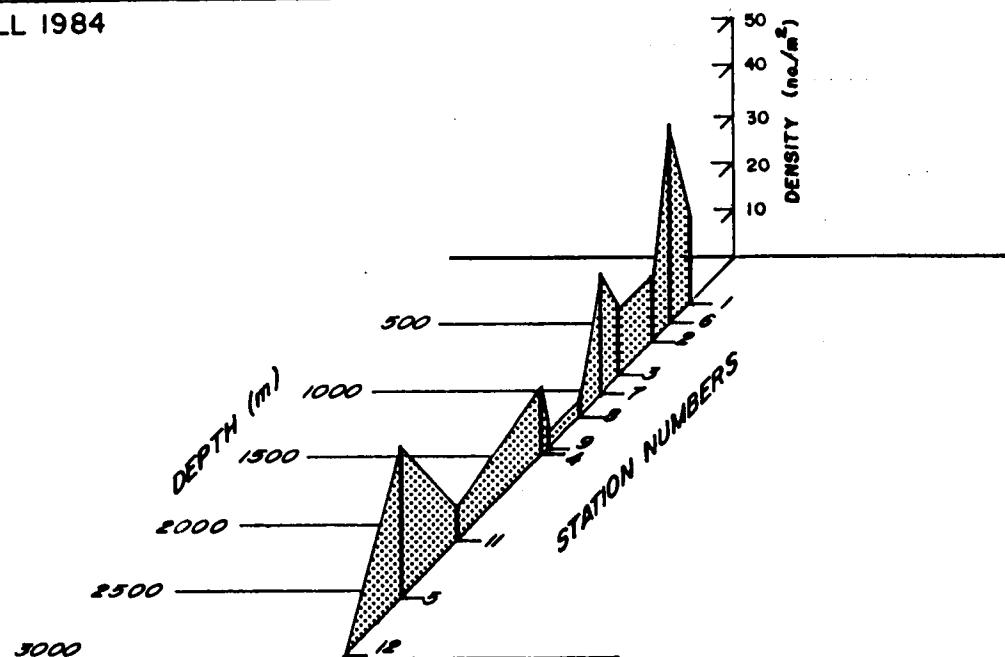
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



Tachytrypane sp. A (POLYCHAETA)

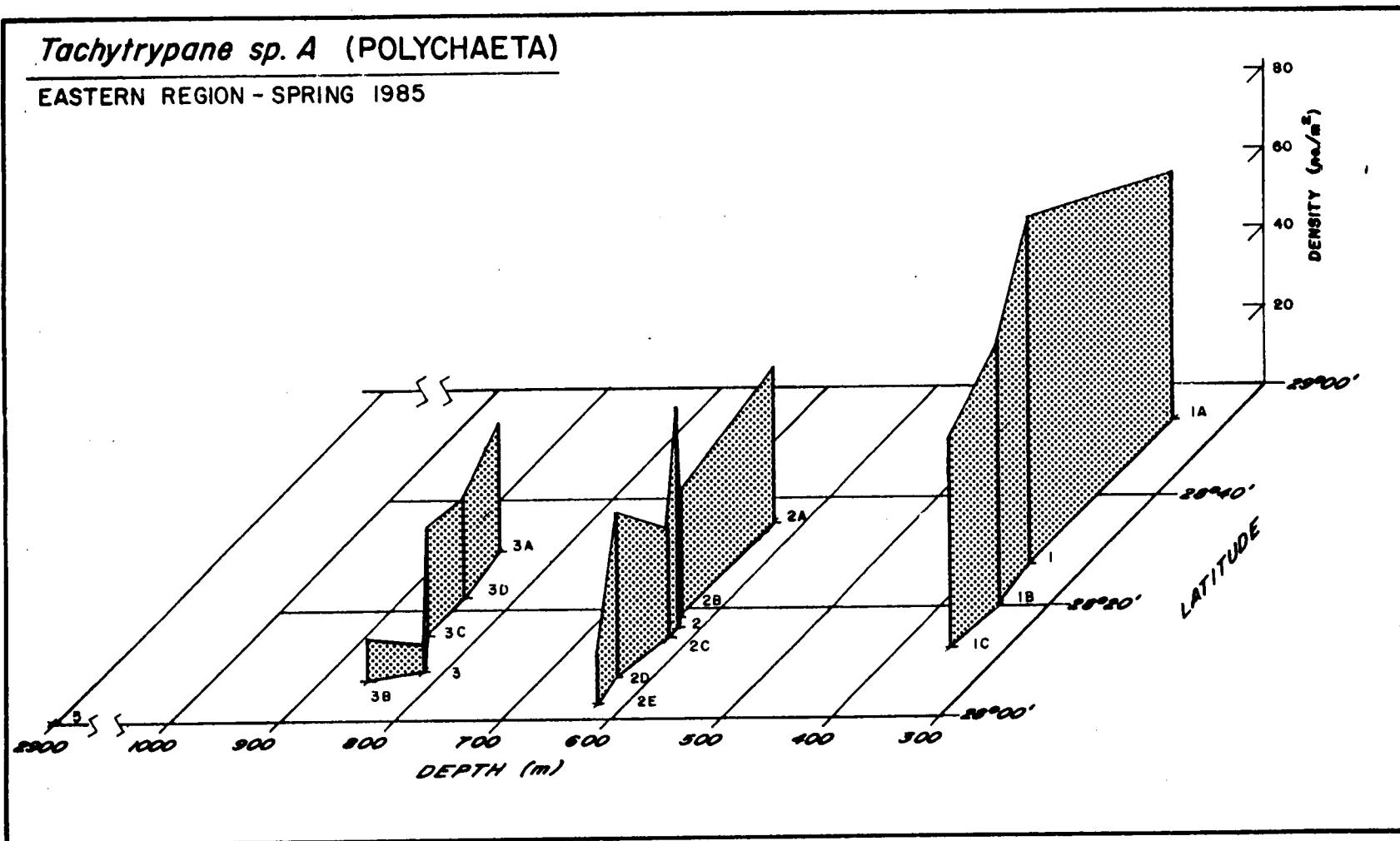
CENTRAL REGION - FALL 1984



Tachytrypane sp. A (POLYCHAETA)

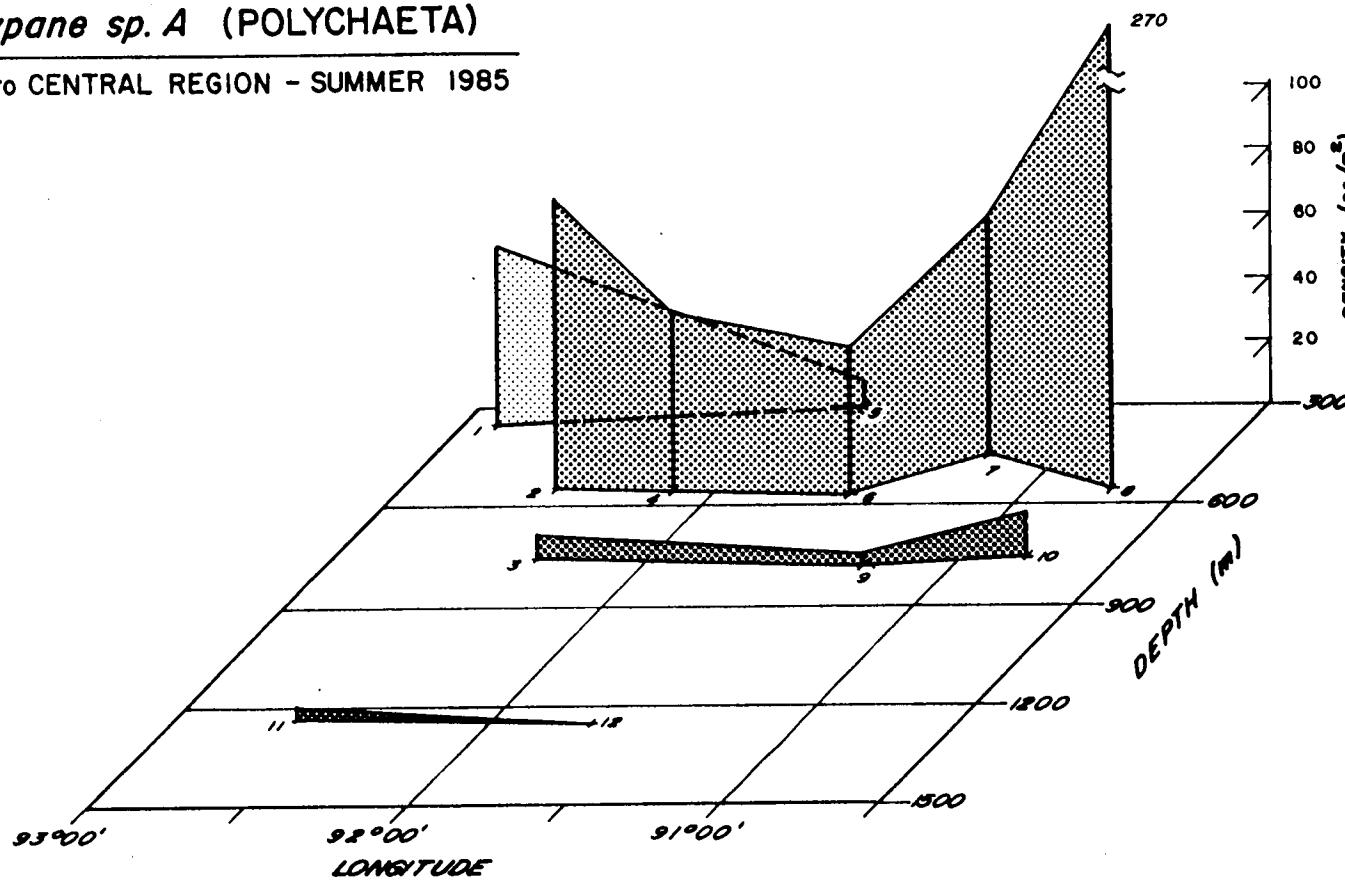
EASTERN REGION - SPRING 1985

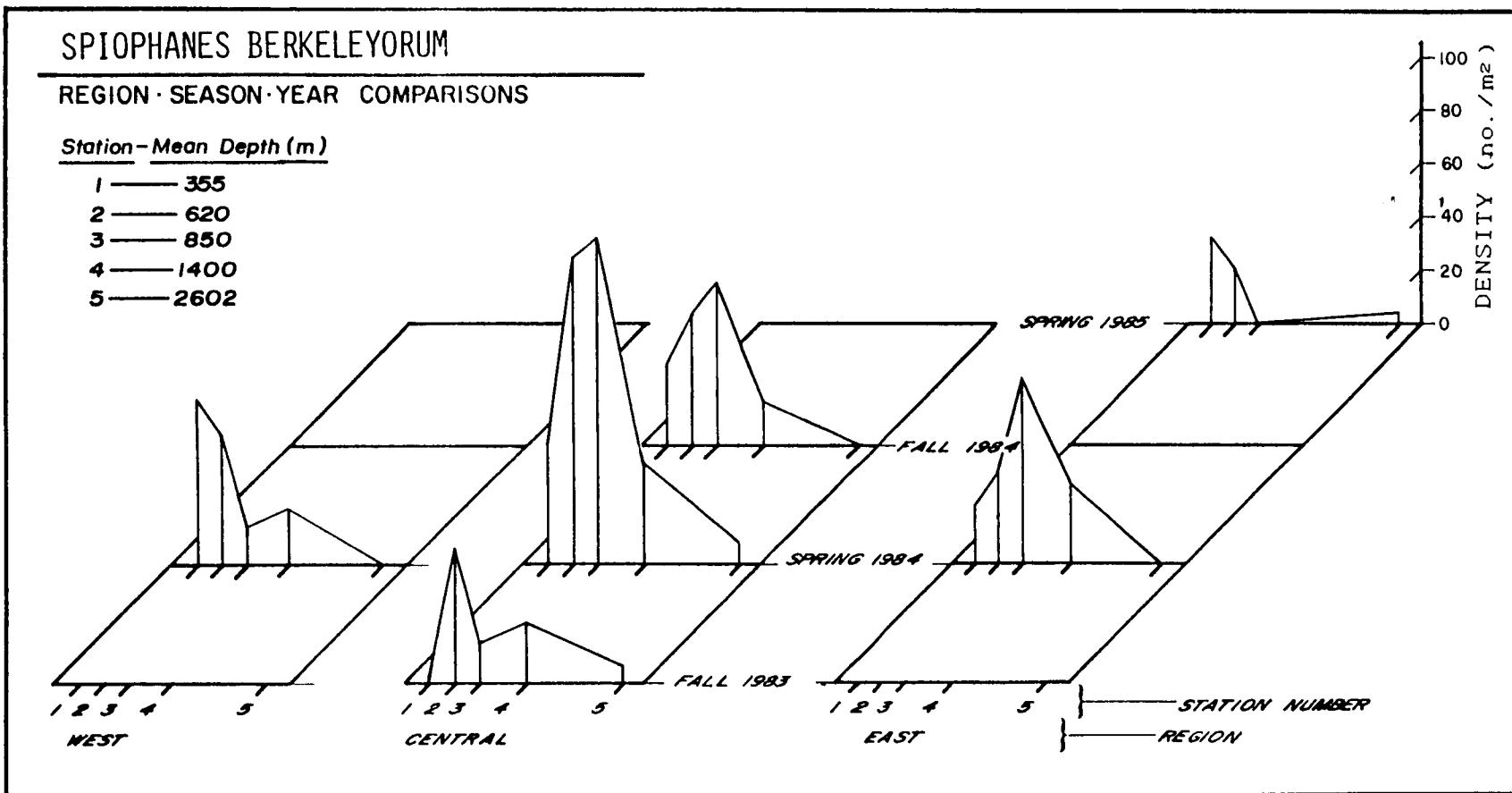
C-13



Tachytrypane sp. A (POLYCHAETA)

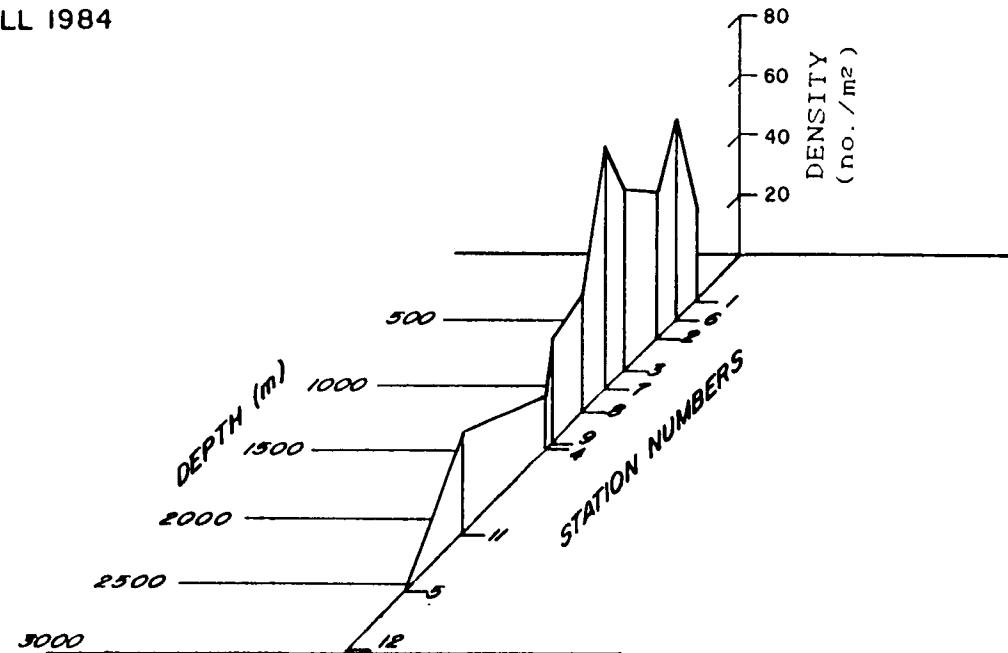
WESTERN to CENTRAL REGION - SUMMER 1985





SPIOPHANES BERKELEYORUM

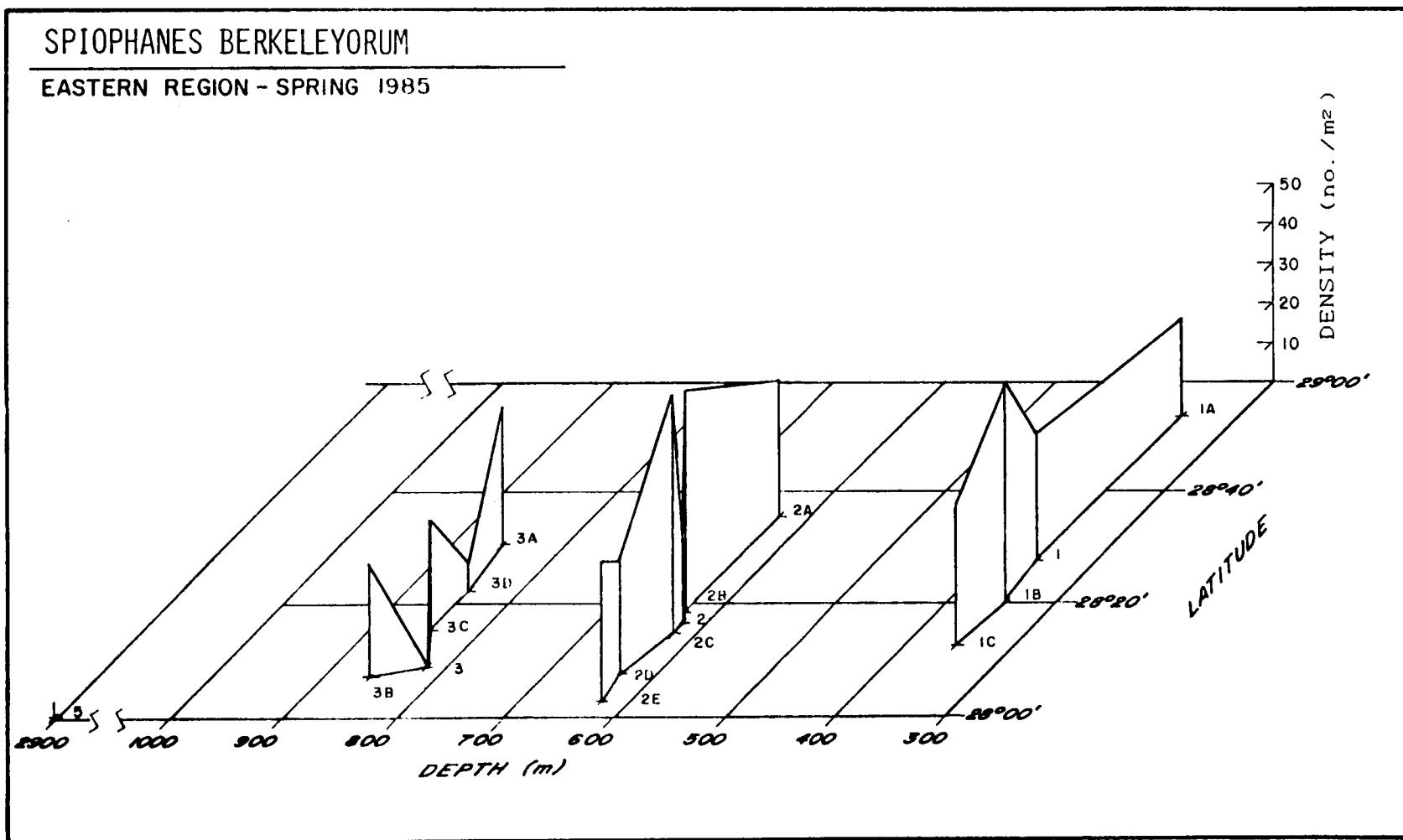
CENTRAL REGION - FALL 1984



SPIOPHANES BERKELEYORUM

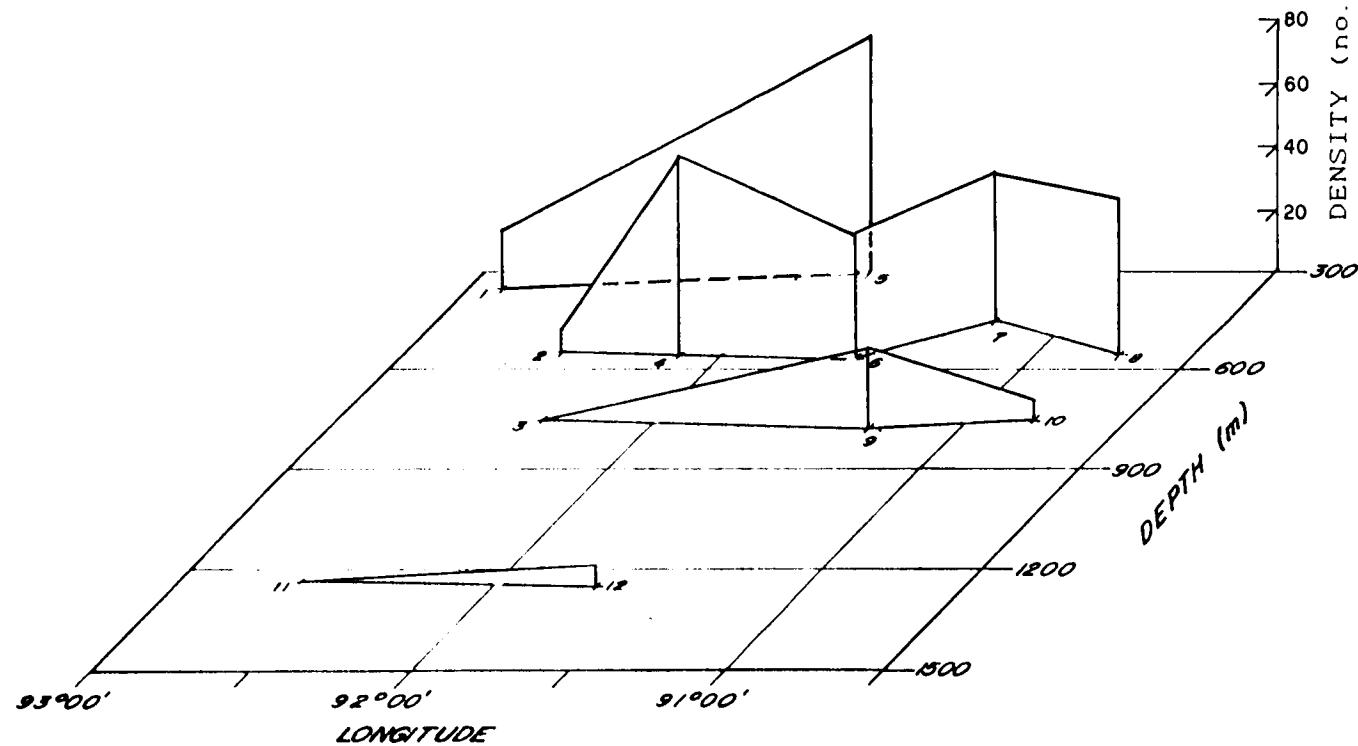
EASTERN REGION - SPRING 1985

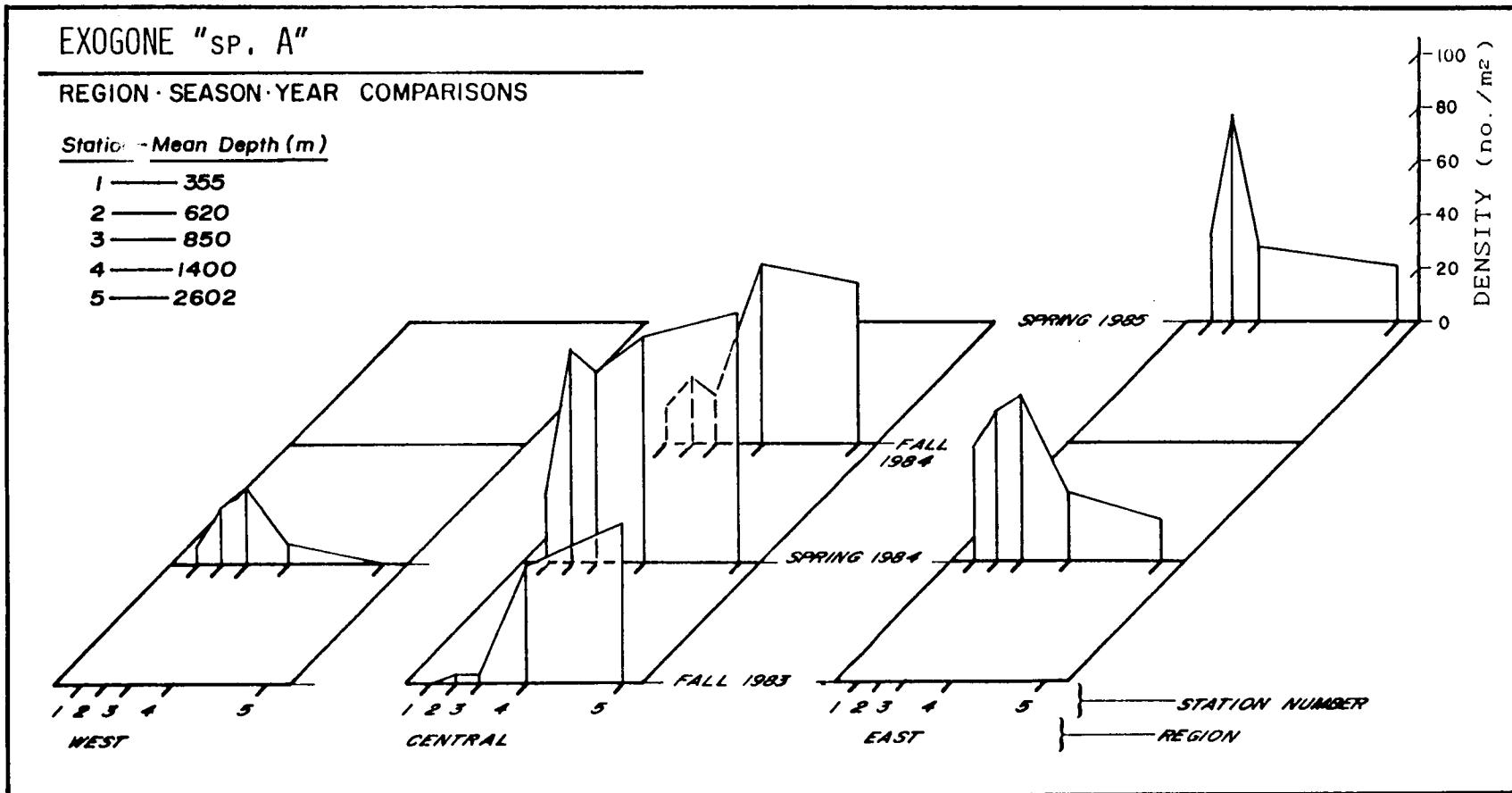
C-17



SPIOPHANES BERKELEYORUM

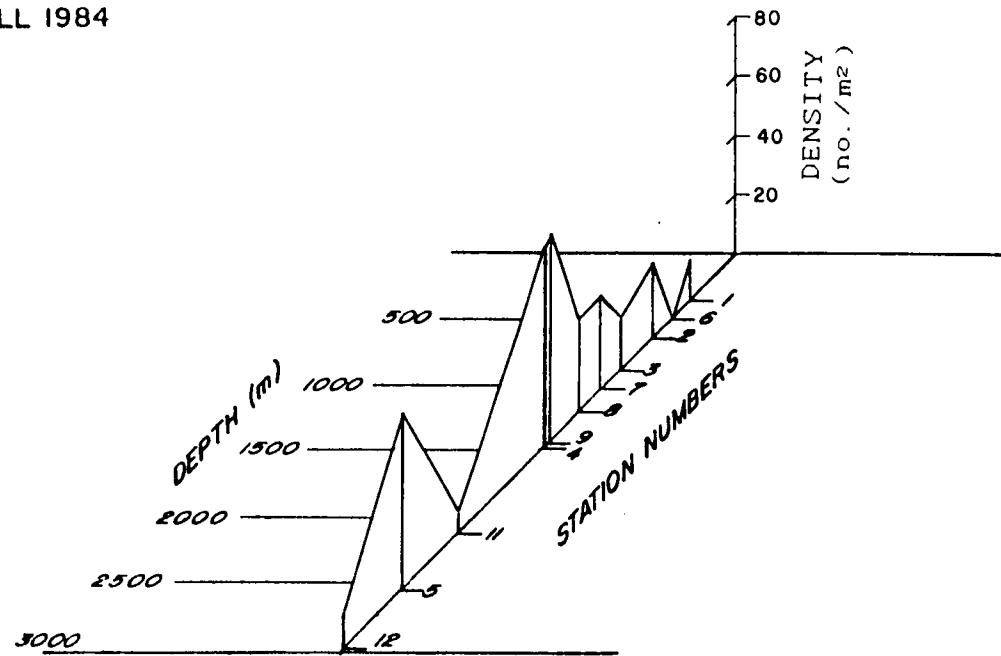
WESTERN to CENTRAL REGION - SUMMER 1985





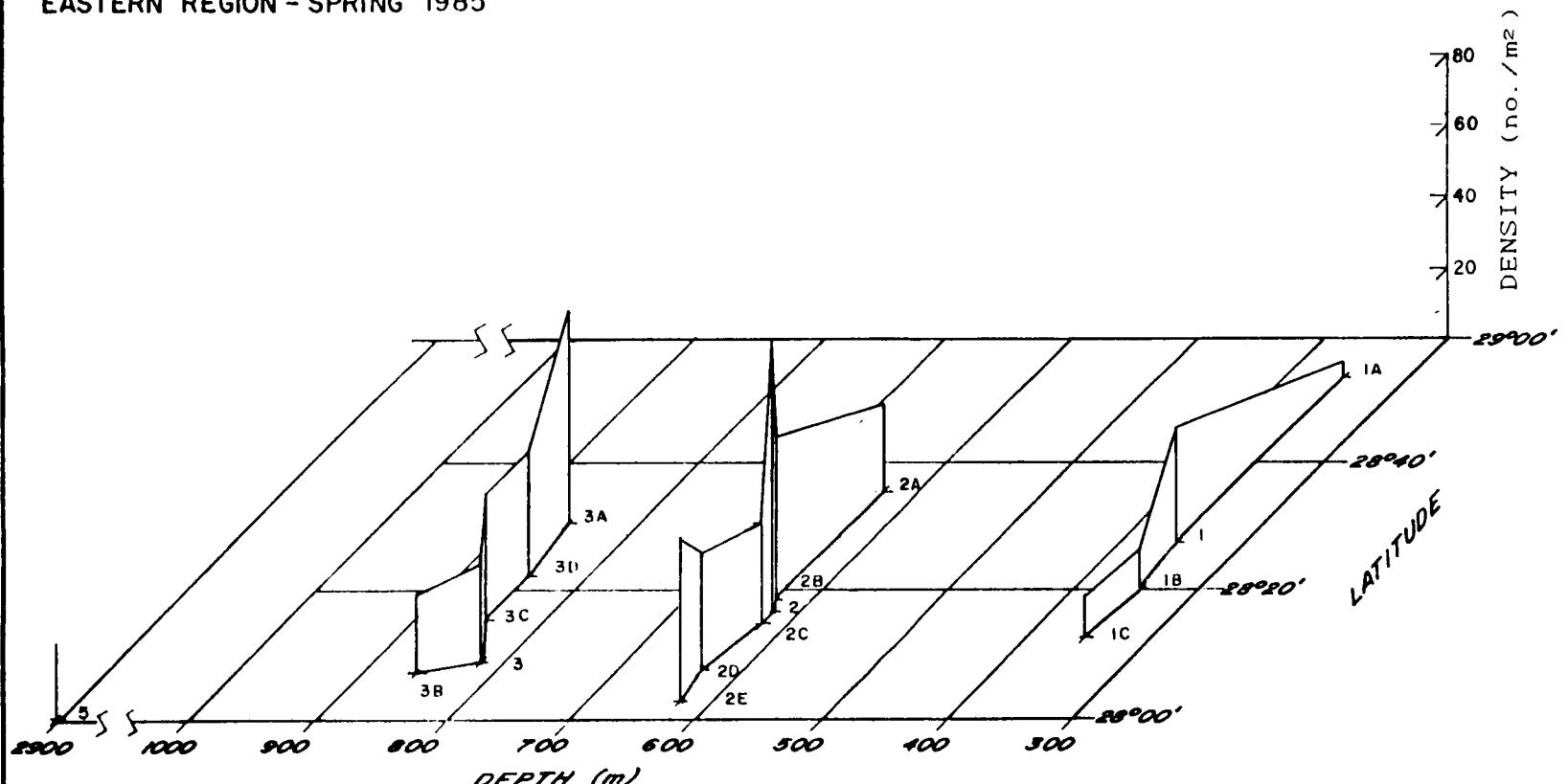
EXOGONE "SP. A"

CENTRAL REGION - FALL 1984



EXOGONE "SP. A"

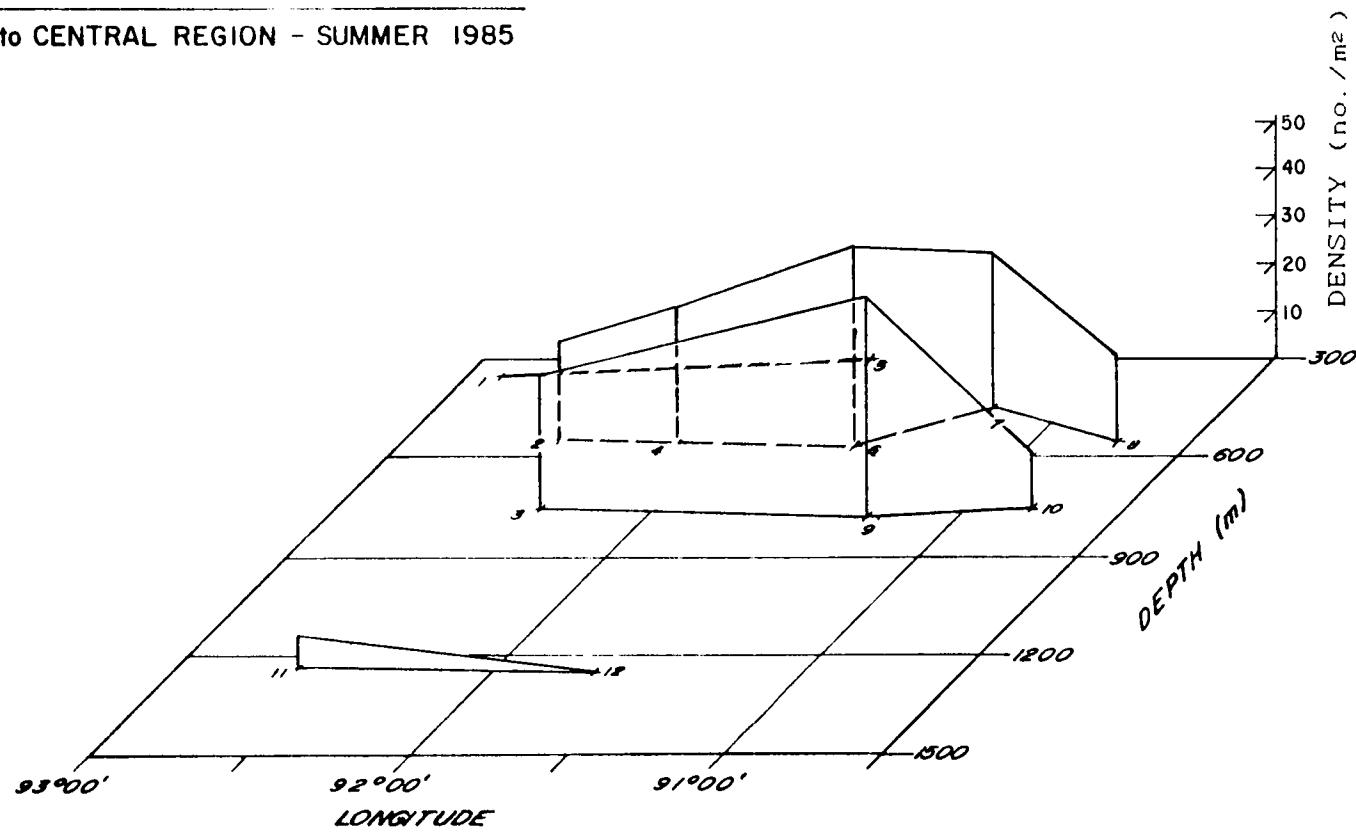
EASTERN REGION - SPRING 1985

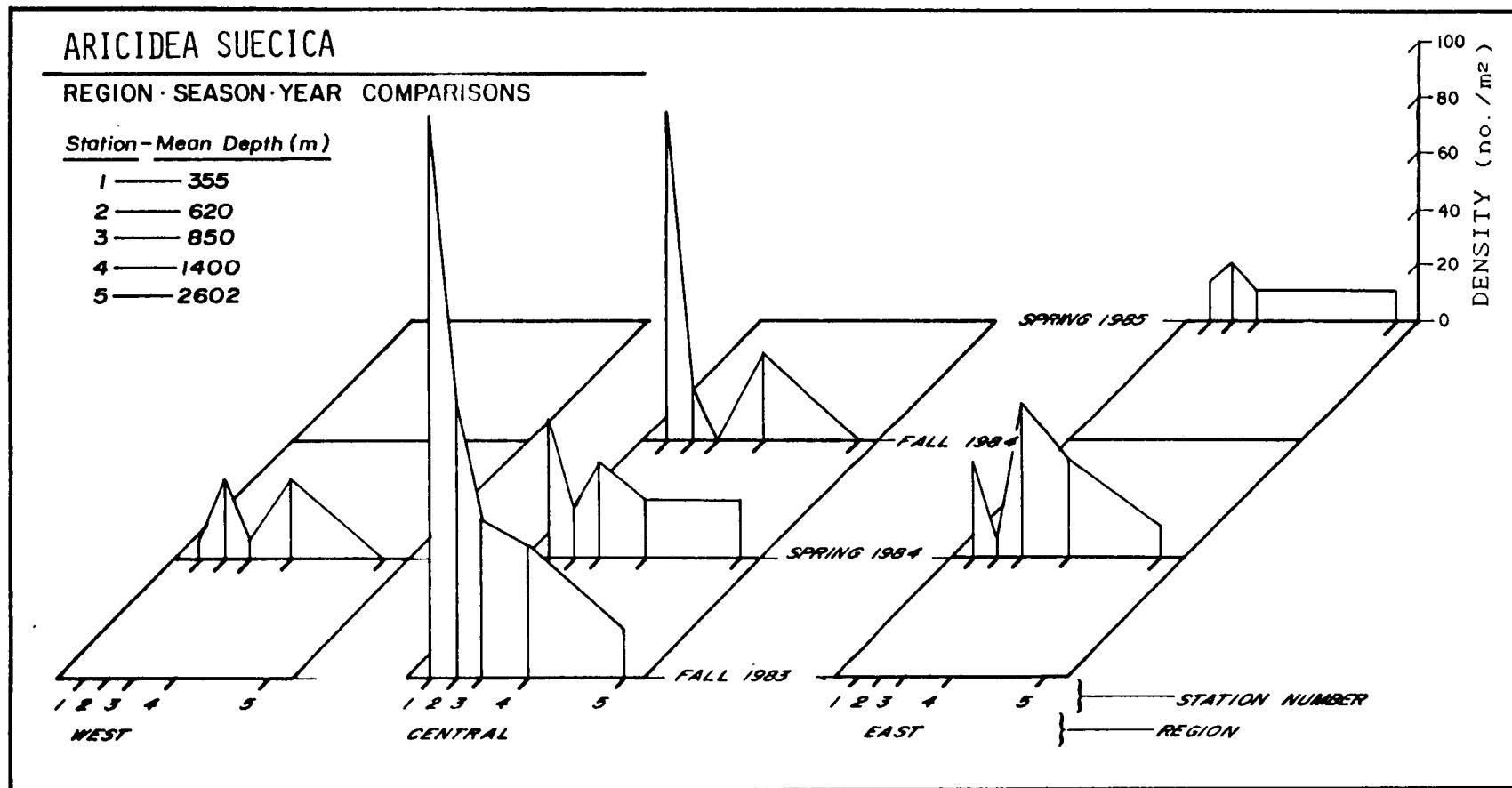


EXOGONE "SP. A"

WESTERN to CENTRAL REGION - SUMMER 1985

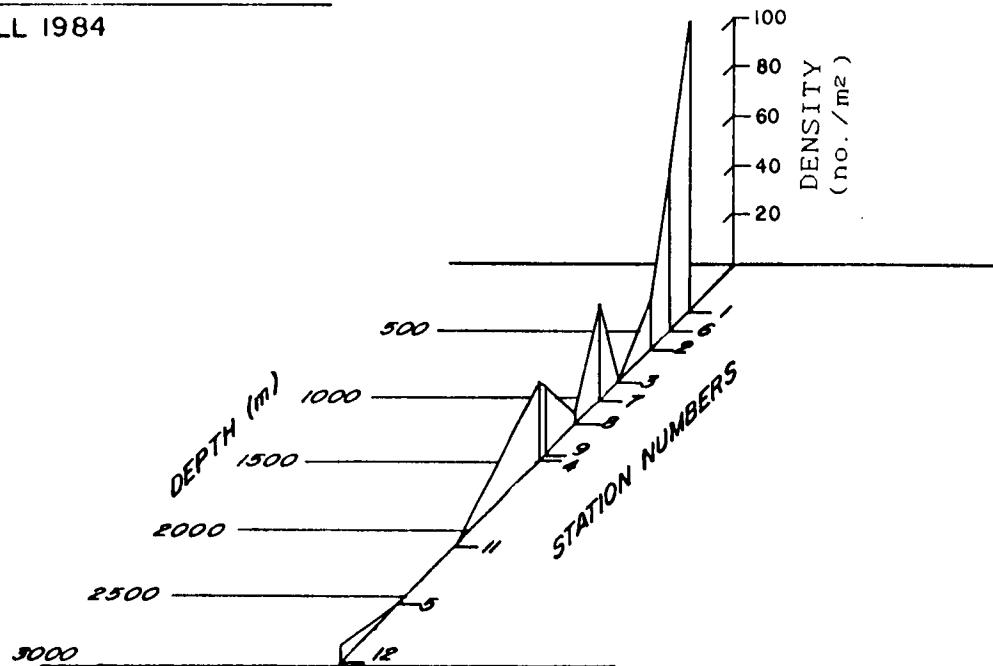
C-22





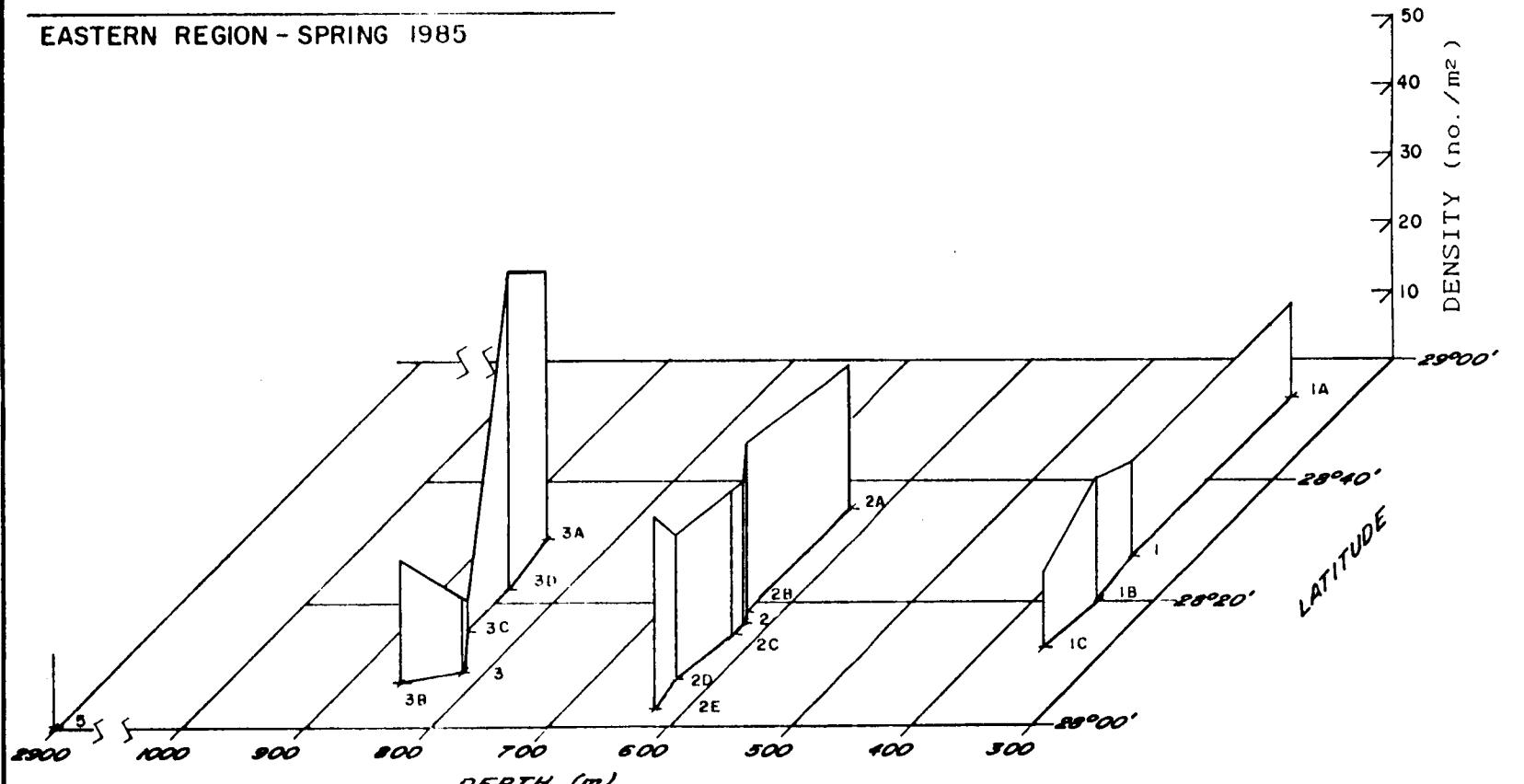
ARICIDEA SUECICA

CENTRAL REGION - FALL 1984



ARICIDEA SUECICA

EASTERN REGION - SPRING 1985

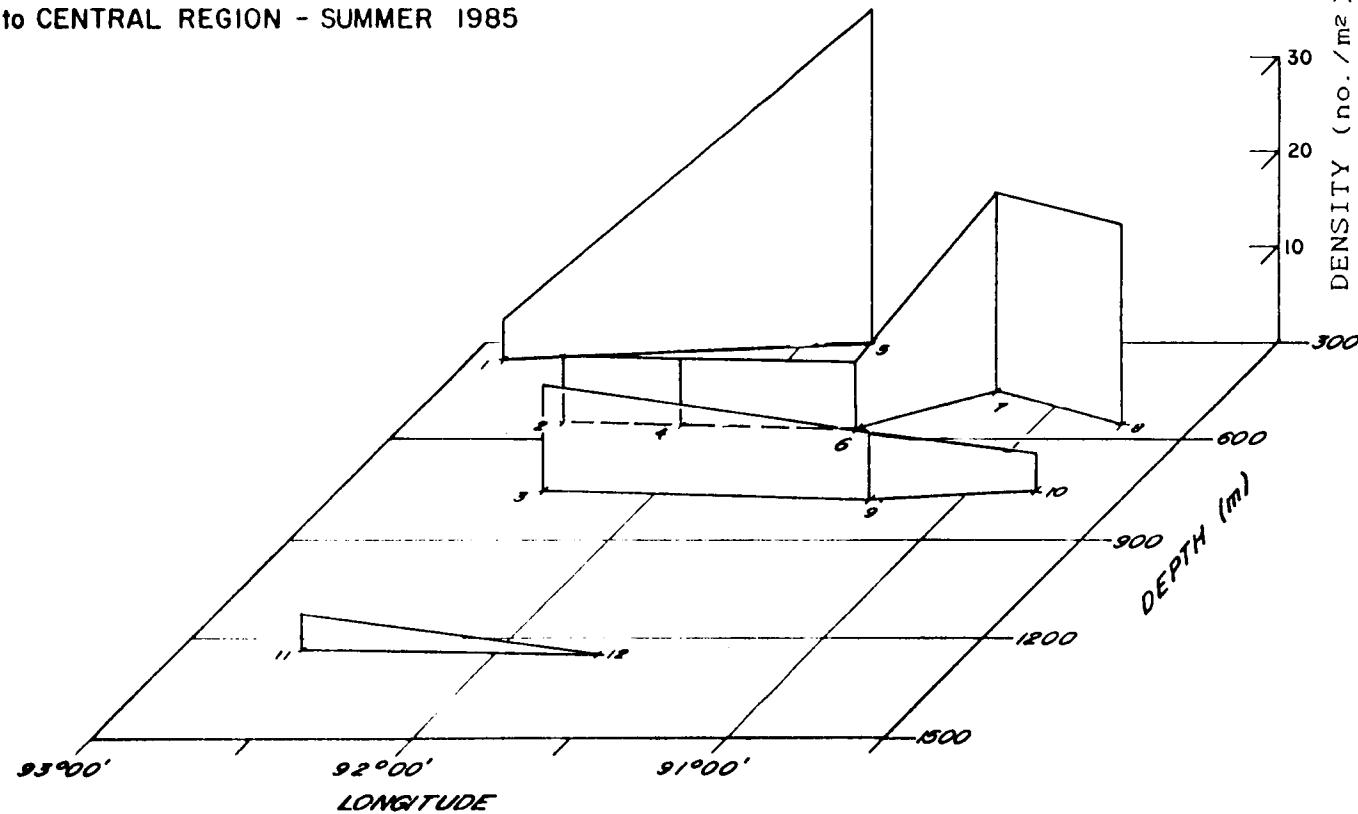


C-25

ARICIDEA SUECICA

WESTERN to CENTRAL REGION - SUMMER 1985

C-26

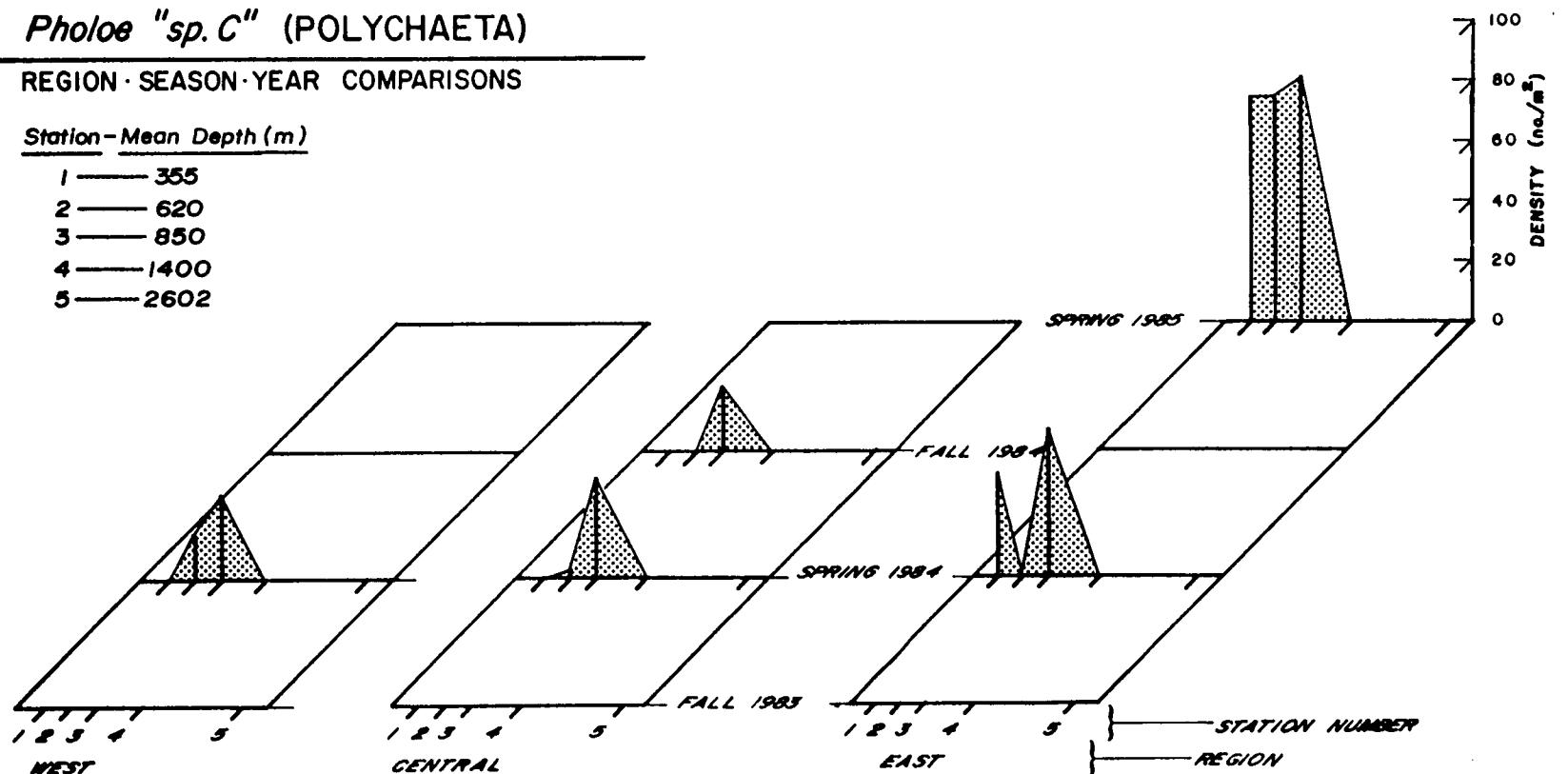


Pholoe "sp. C" (POLYCHAETA)

REGION · SEASON · YEAR COMPARISONS

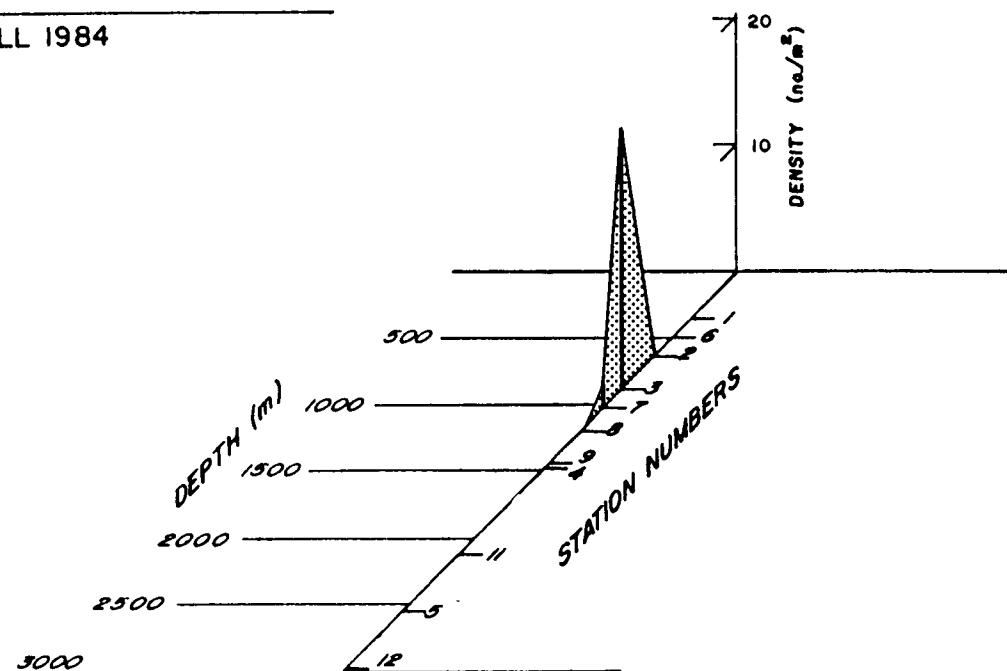
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



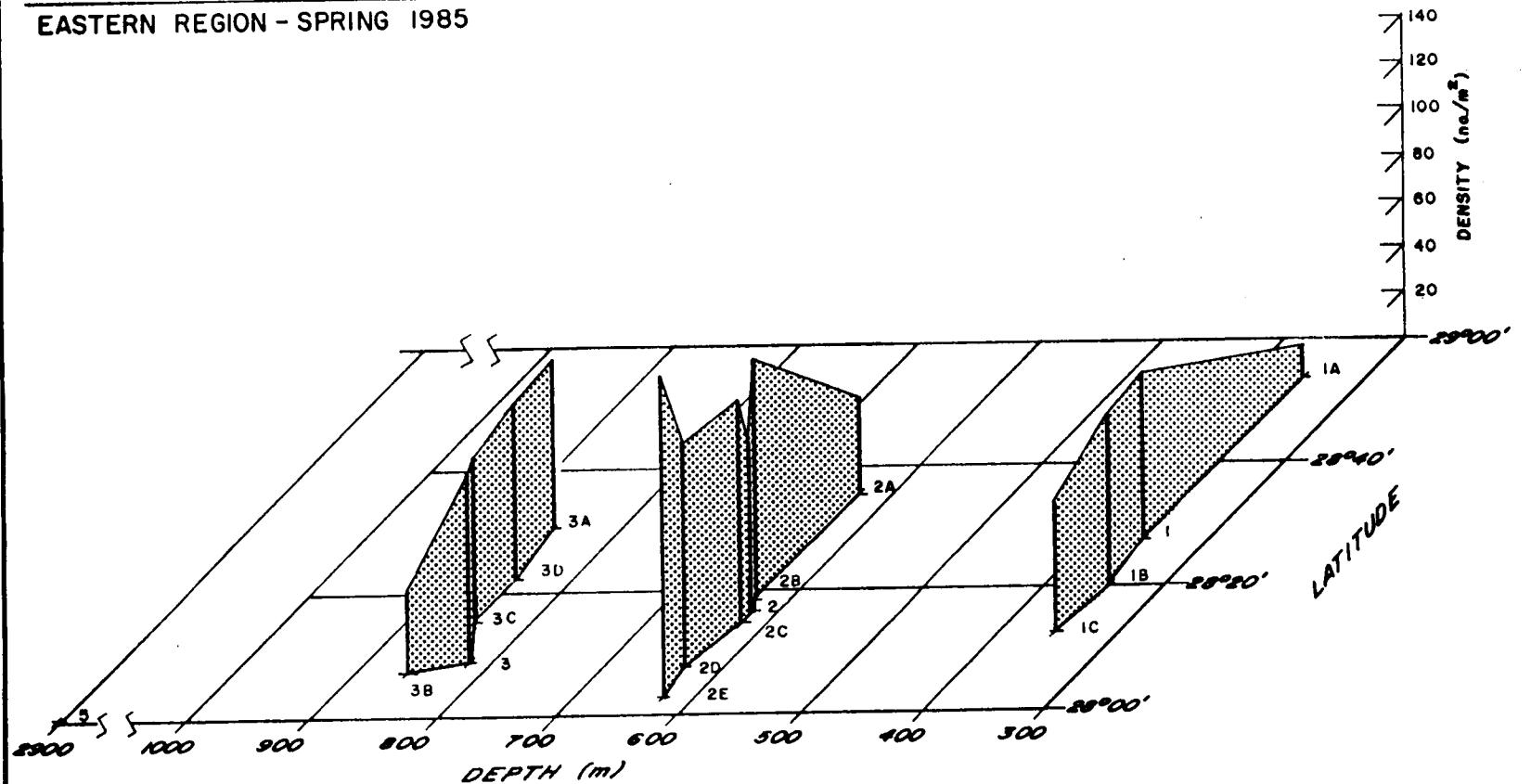
Pholoe "sp. C" (POLYCHAETA)

CENTRAL REGION - FALL 1984



Pholoe "sp. C" (POLYCHAETA)

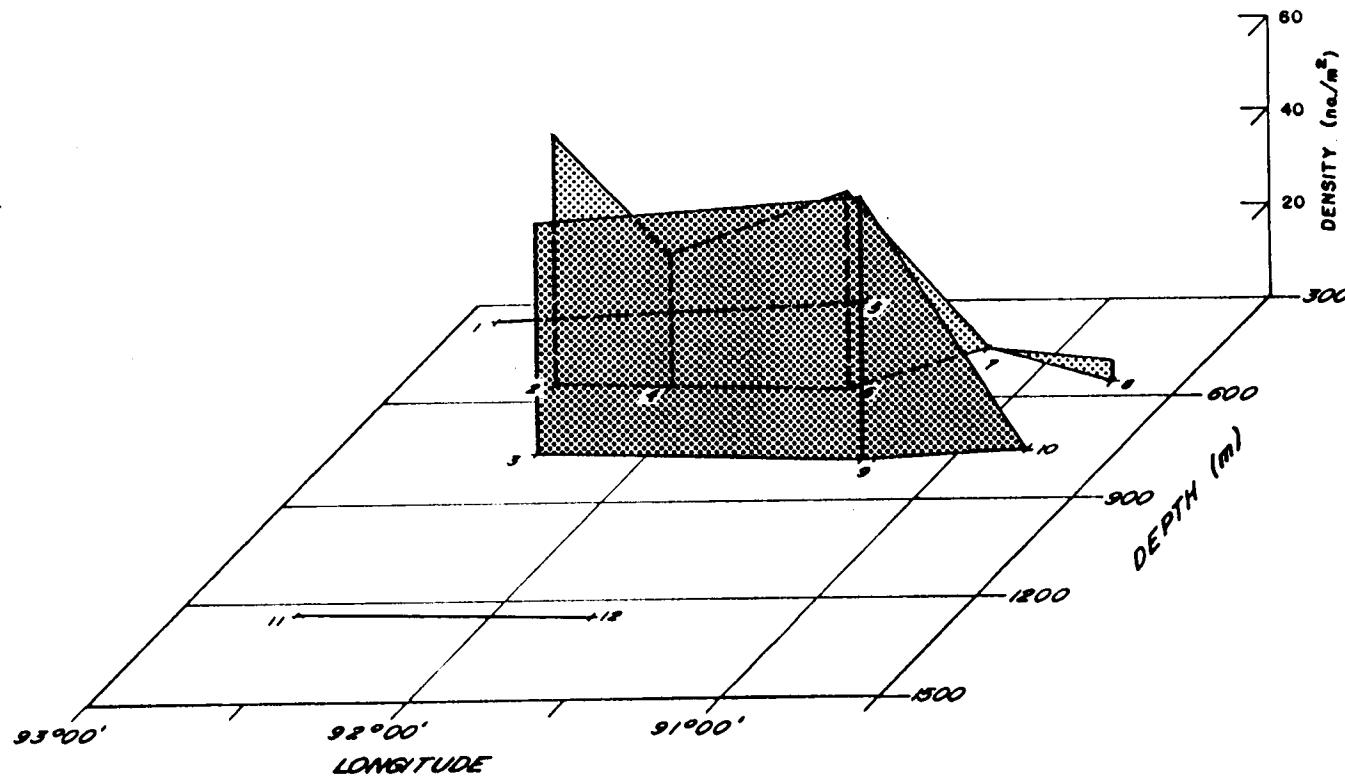
EASTERN REGION - SPRING 1985

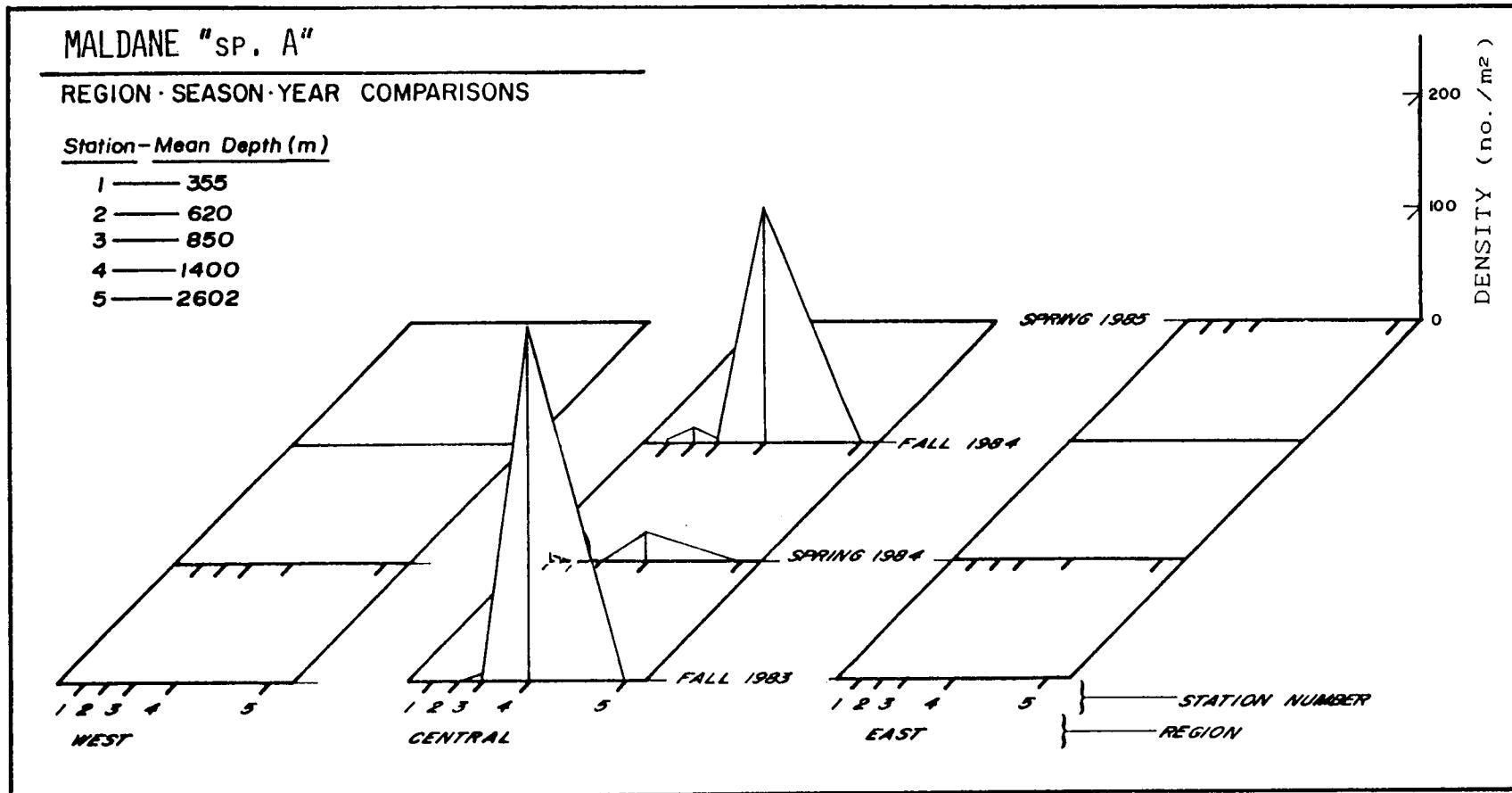


C-29

Pholoe "sp. C" (POLYCHAETA)

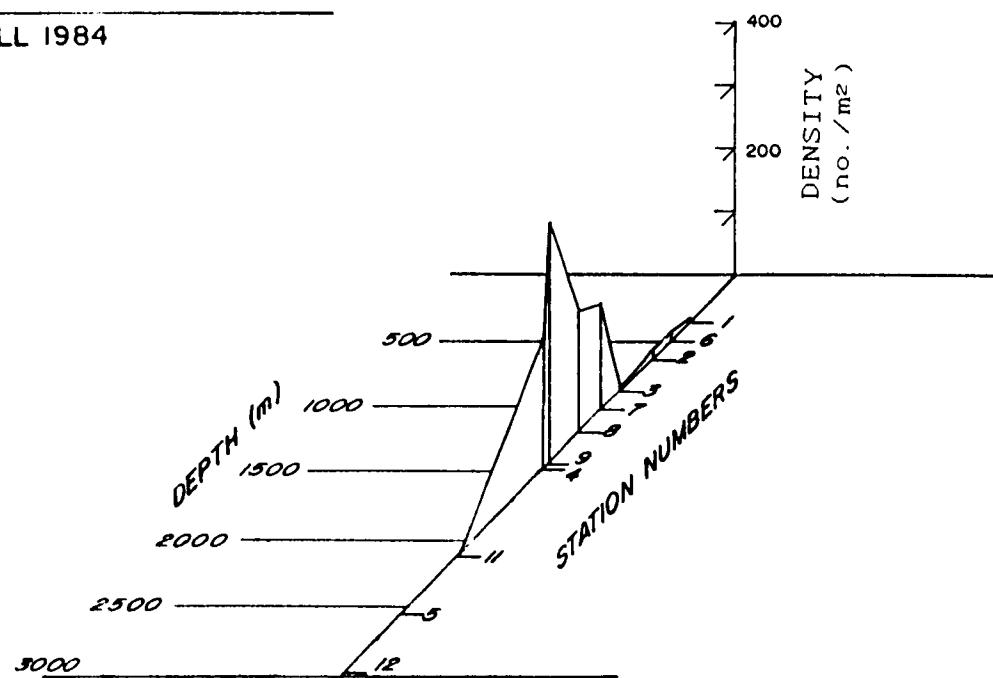
WESTERN to CENTRAL REGION - SUMMER 1985





MALDANE "SP. A"

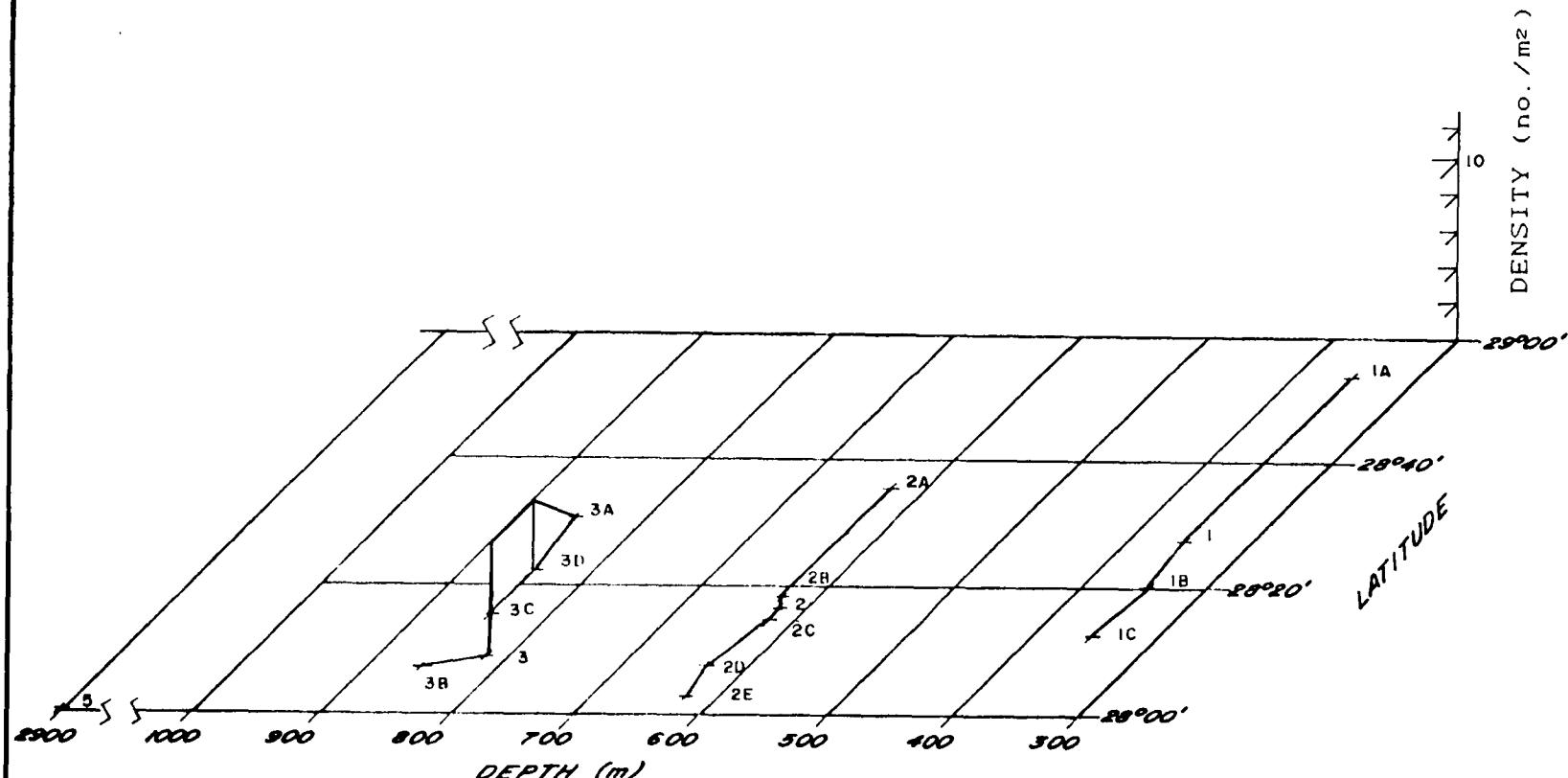
CENTRAL REGION - FALL 1984



MALDANE "SP. A"

EASTERN REGION - SPRING 1985

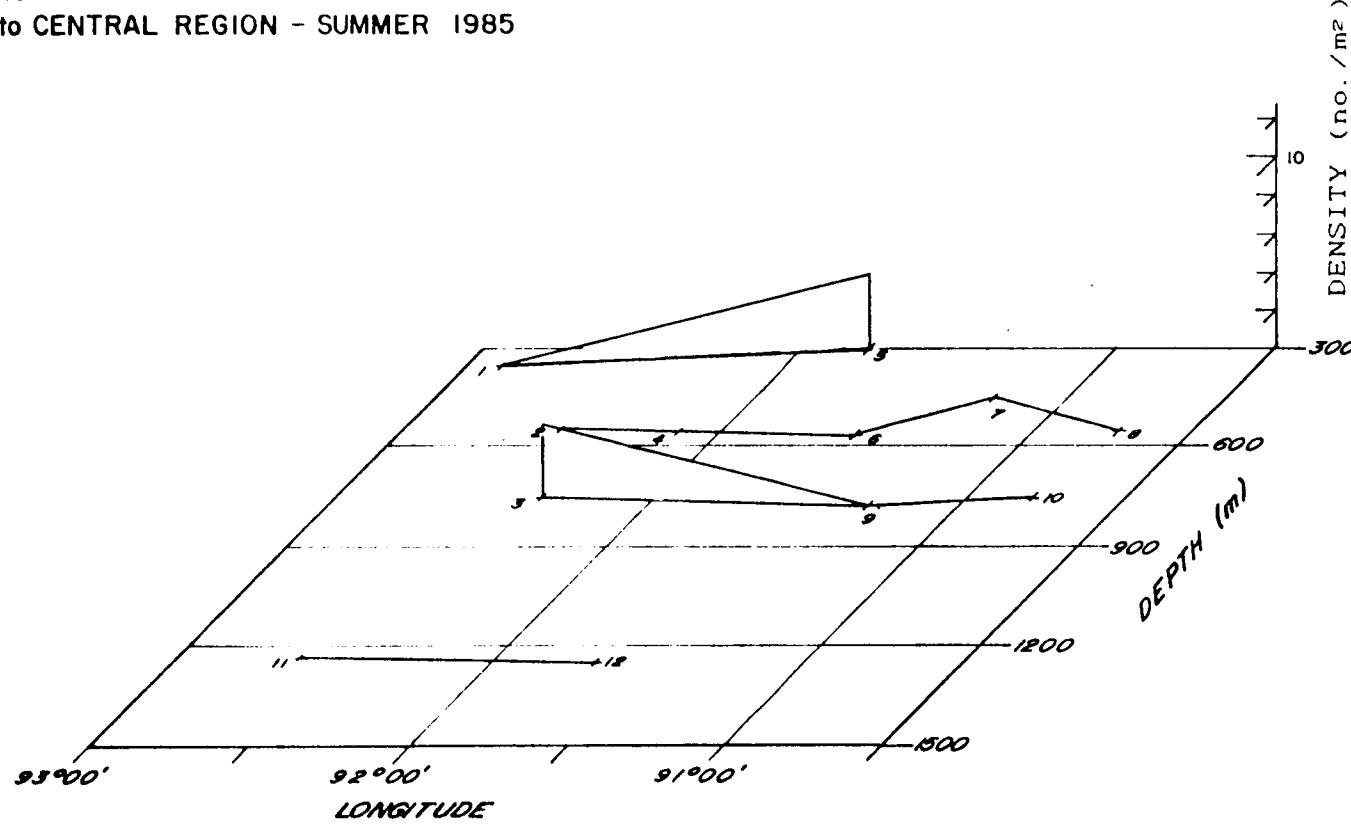
C-33



MALDANE "SP. A"

WESTERN to CENTRAL REGION - SUMMER 1985

C-34

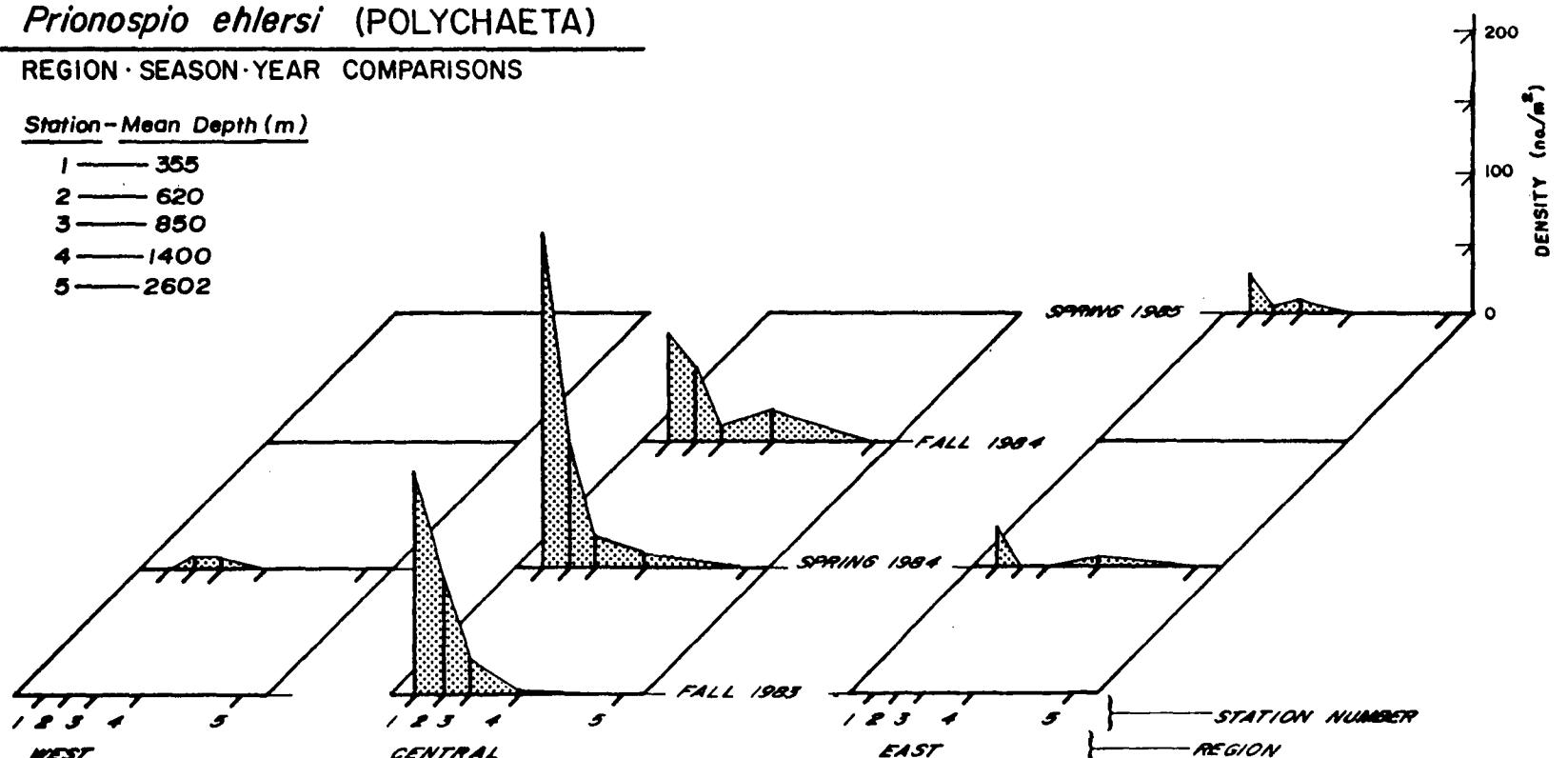


Prionospio ehlersi (POLYCHAETA)

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

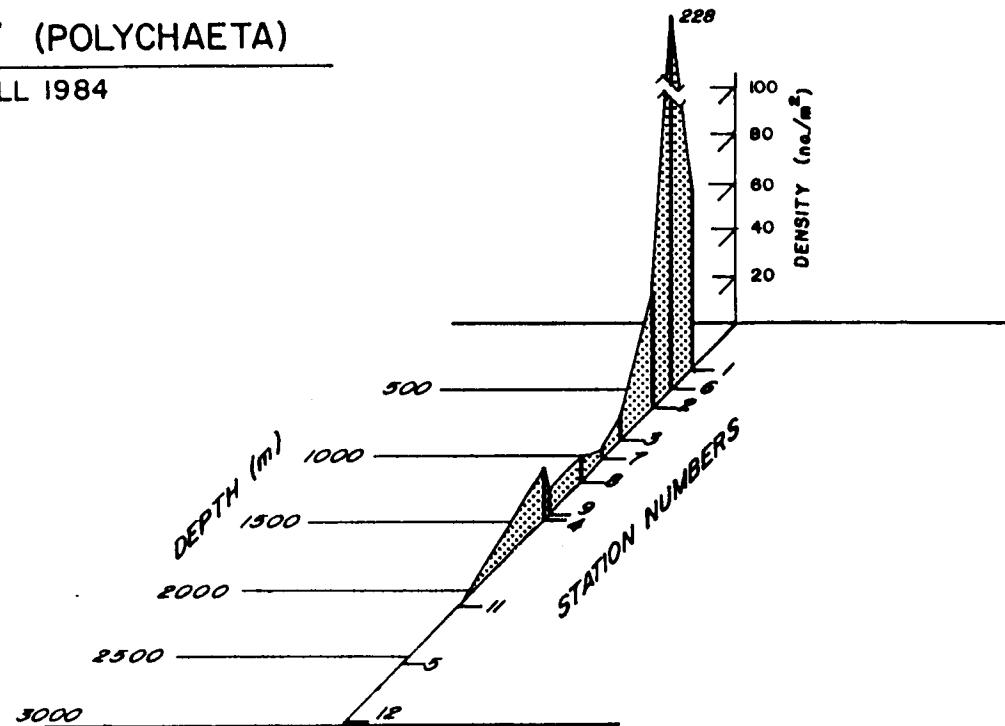
- 1 — 365
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-35

Prionospio ehlersi (POLYCHAETA)

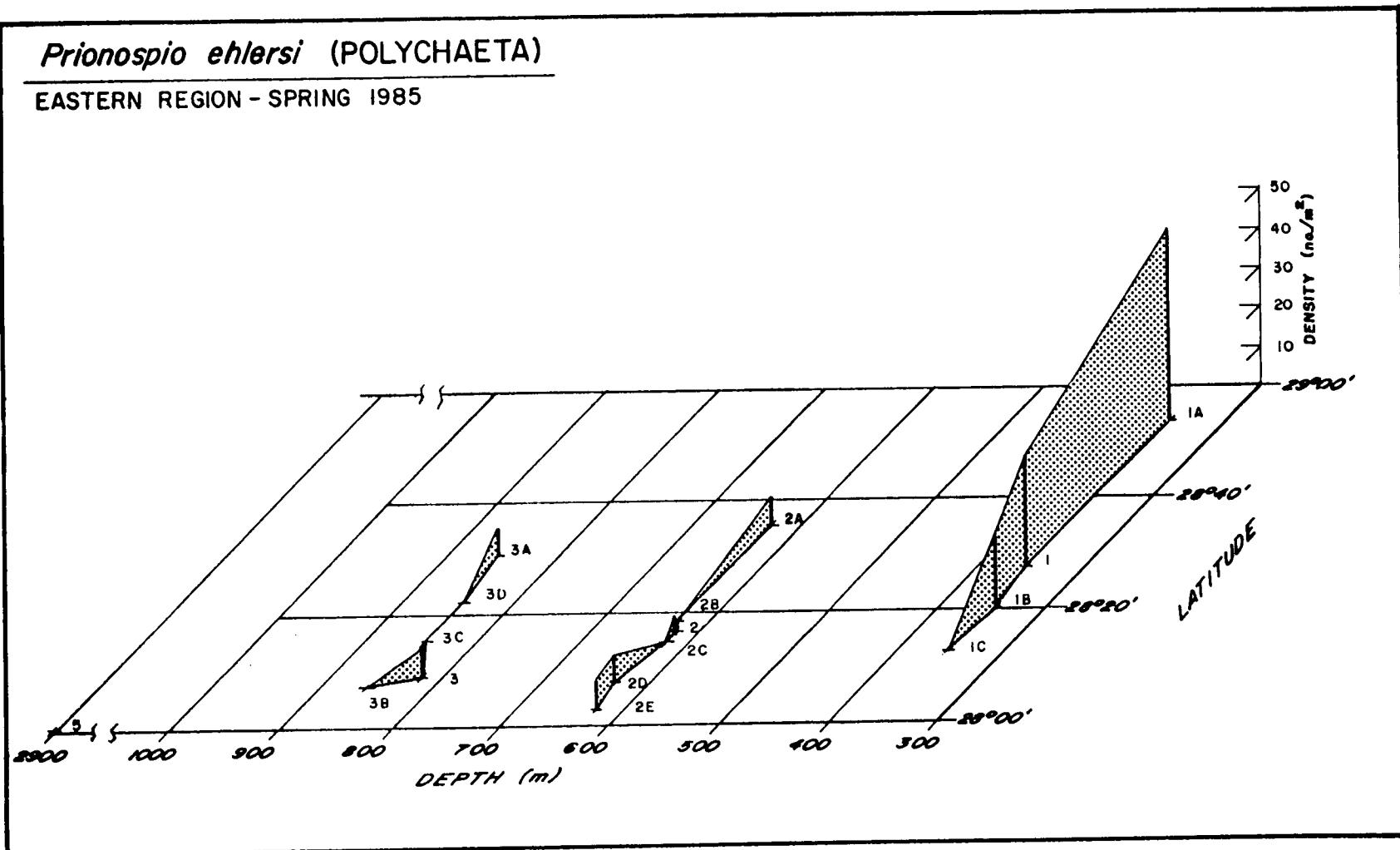
CENTRAL REGION - FALL 1984



Prionospio ehlersi (POLYCHAETA)

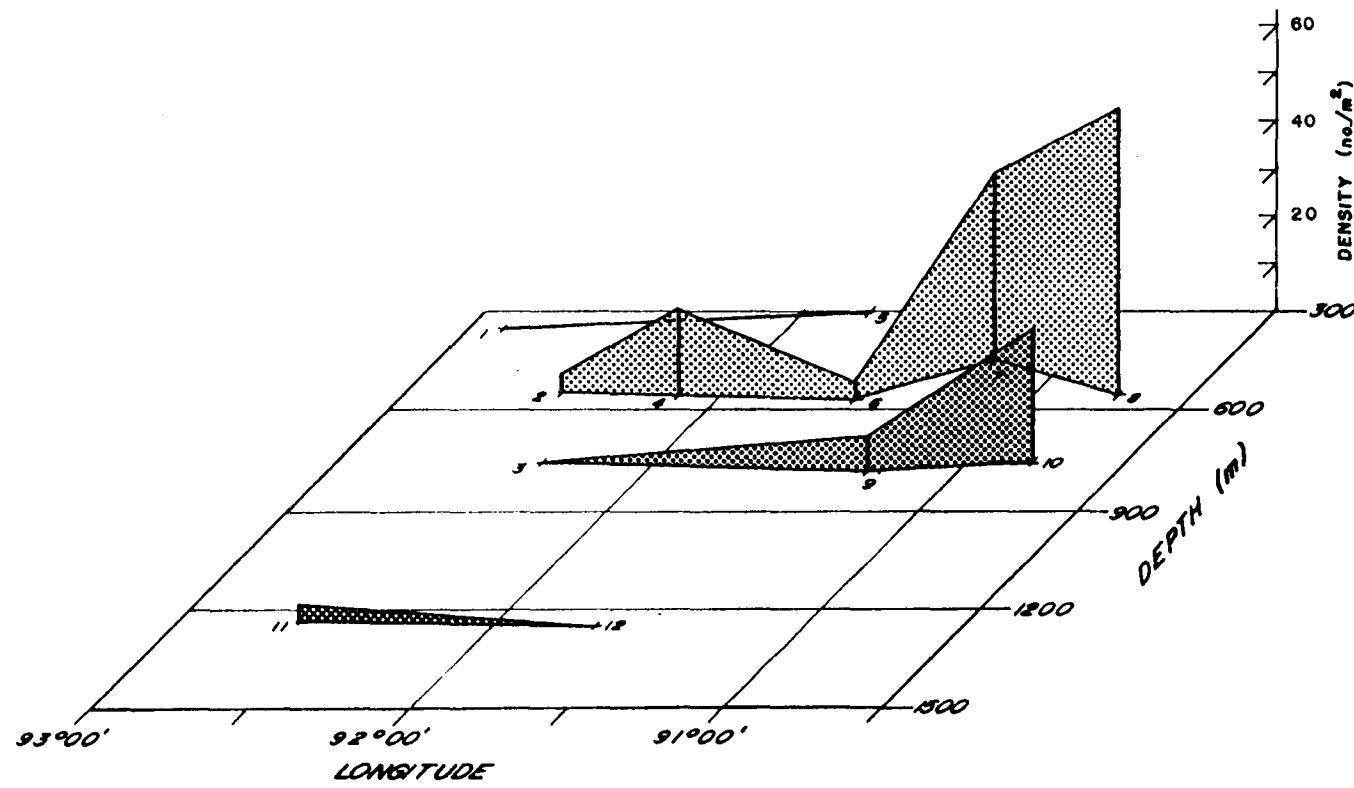
EASTERN REGION - SPRING 1985

C-37



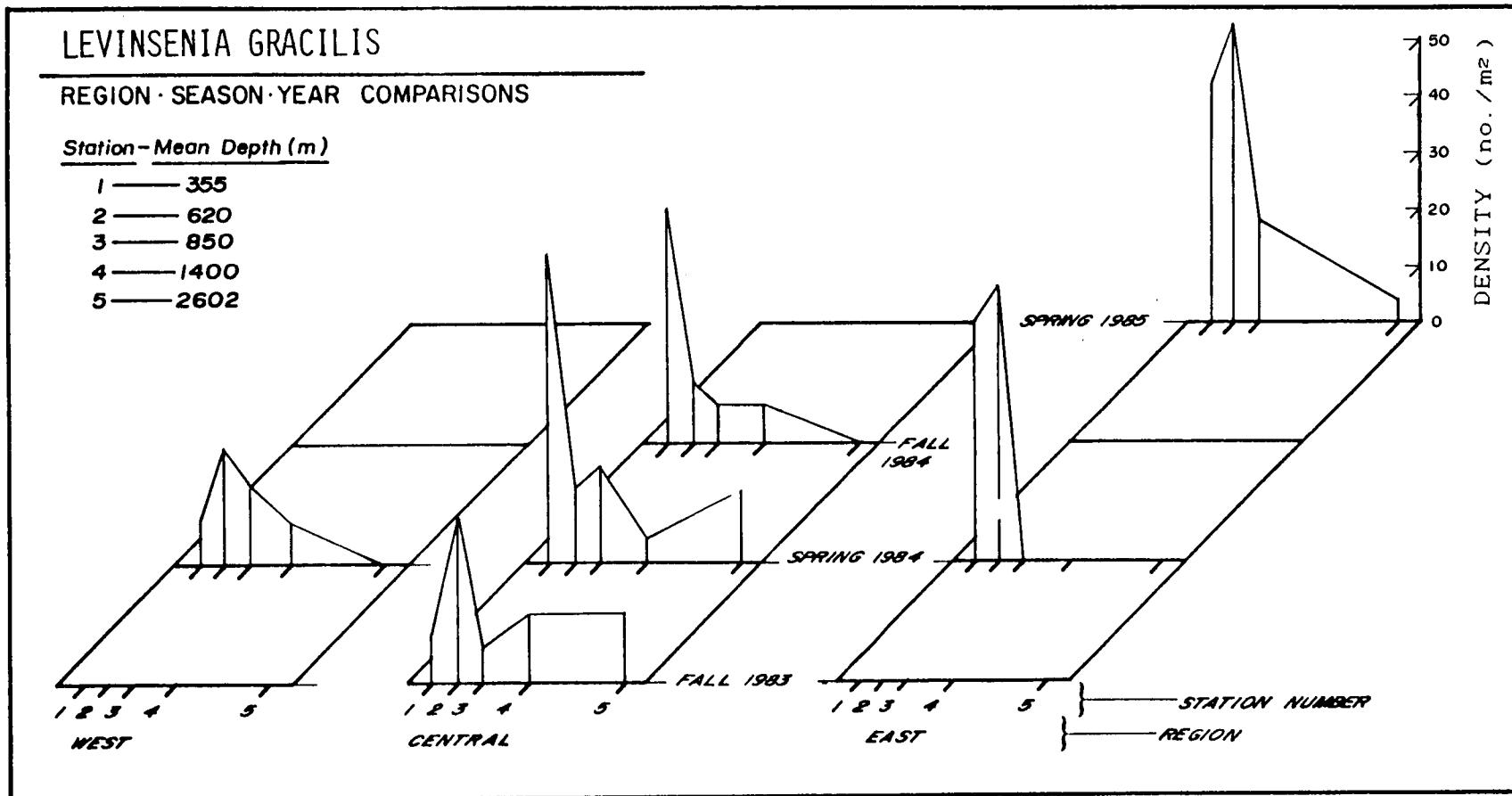
Prionospio ehlersi (POLYCHAETA)

WESTERN to CENTRAL REGION - SUMMER 1985



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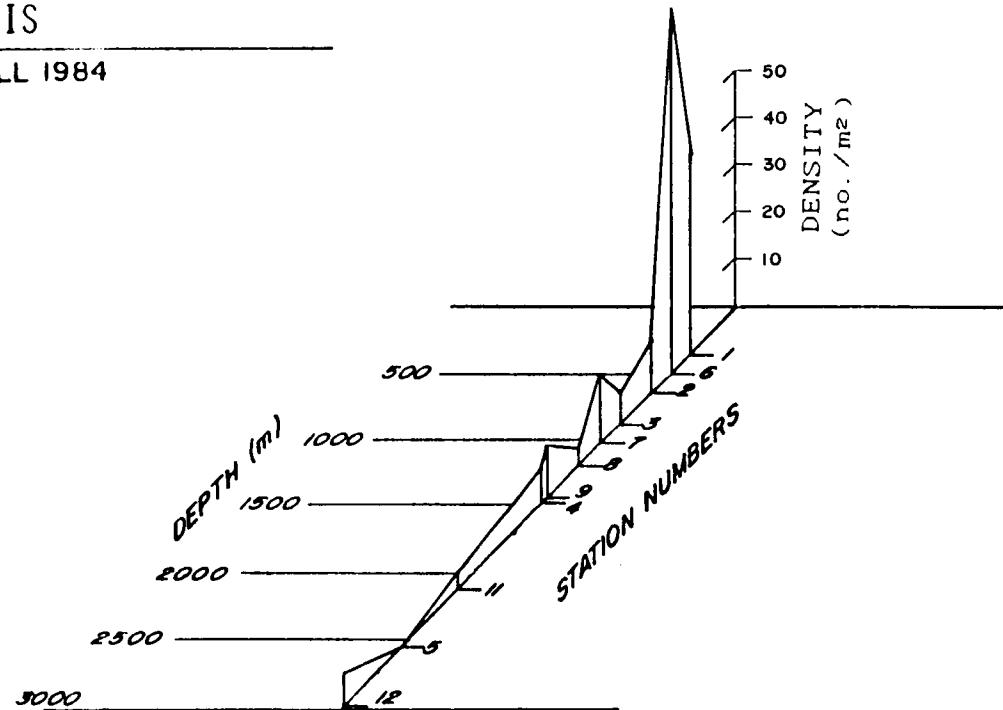
C-39



C-40

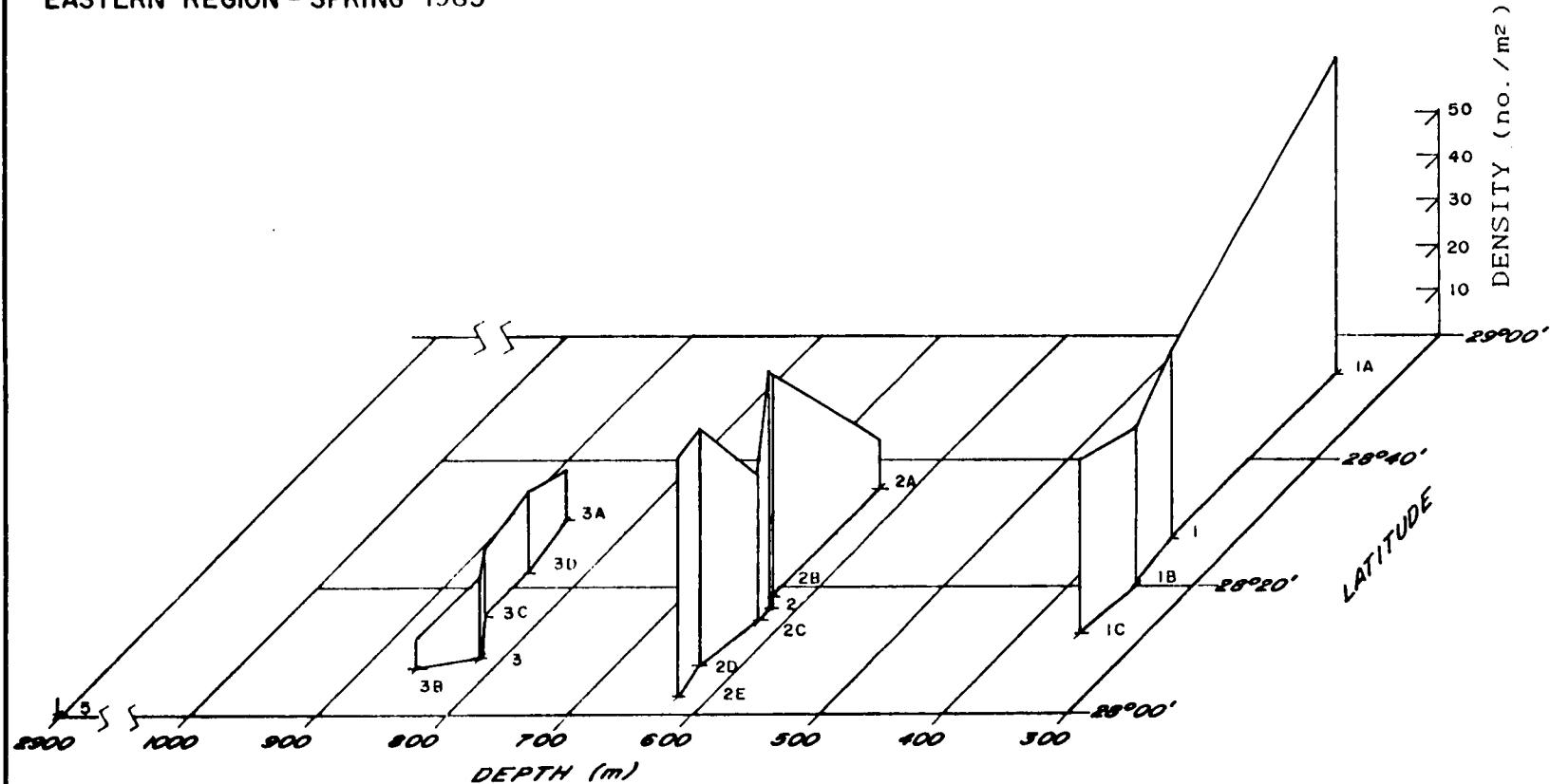
LEVINSENIA GRACILIS

CENTRAL REGION - FALL 1984



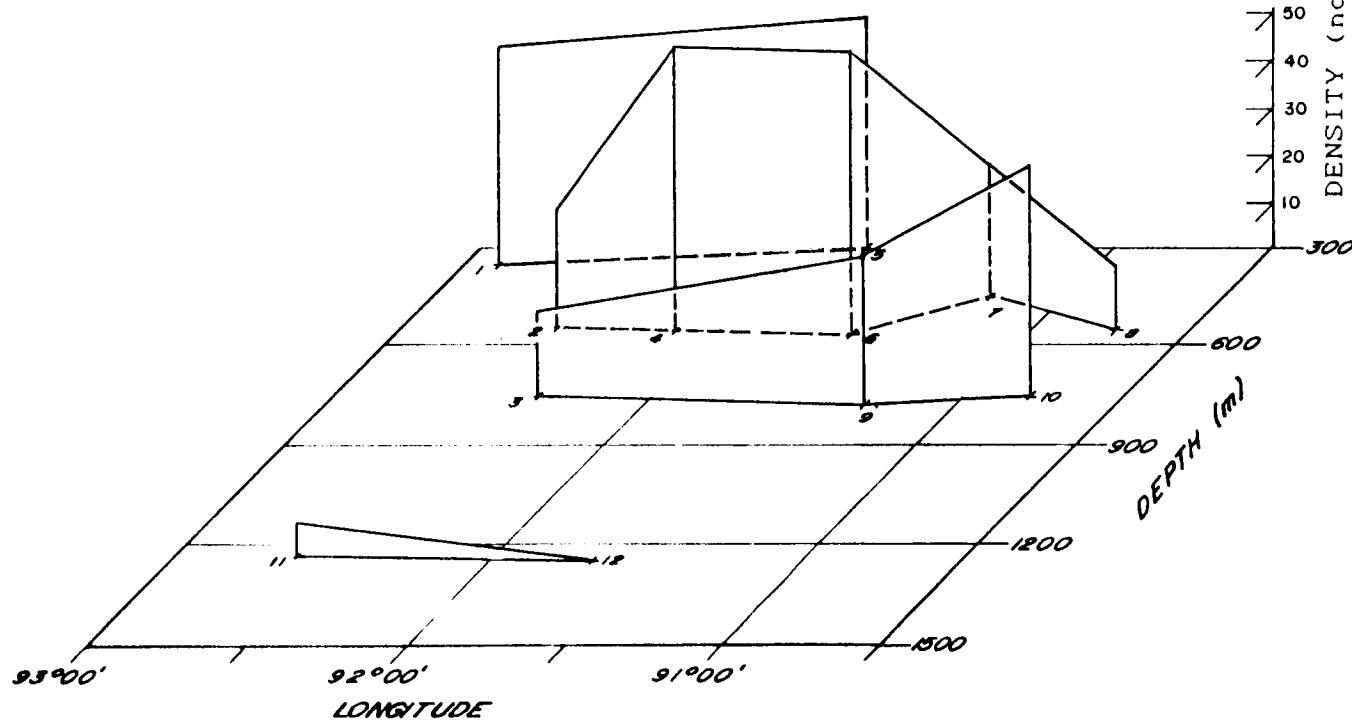
LEVINSENIA GRACILIS

EASTERN REGION - SPRING 1985



LEVINSENIA GRACILIS

WESTERN to CENTRAL REGION - SUMMER 1985

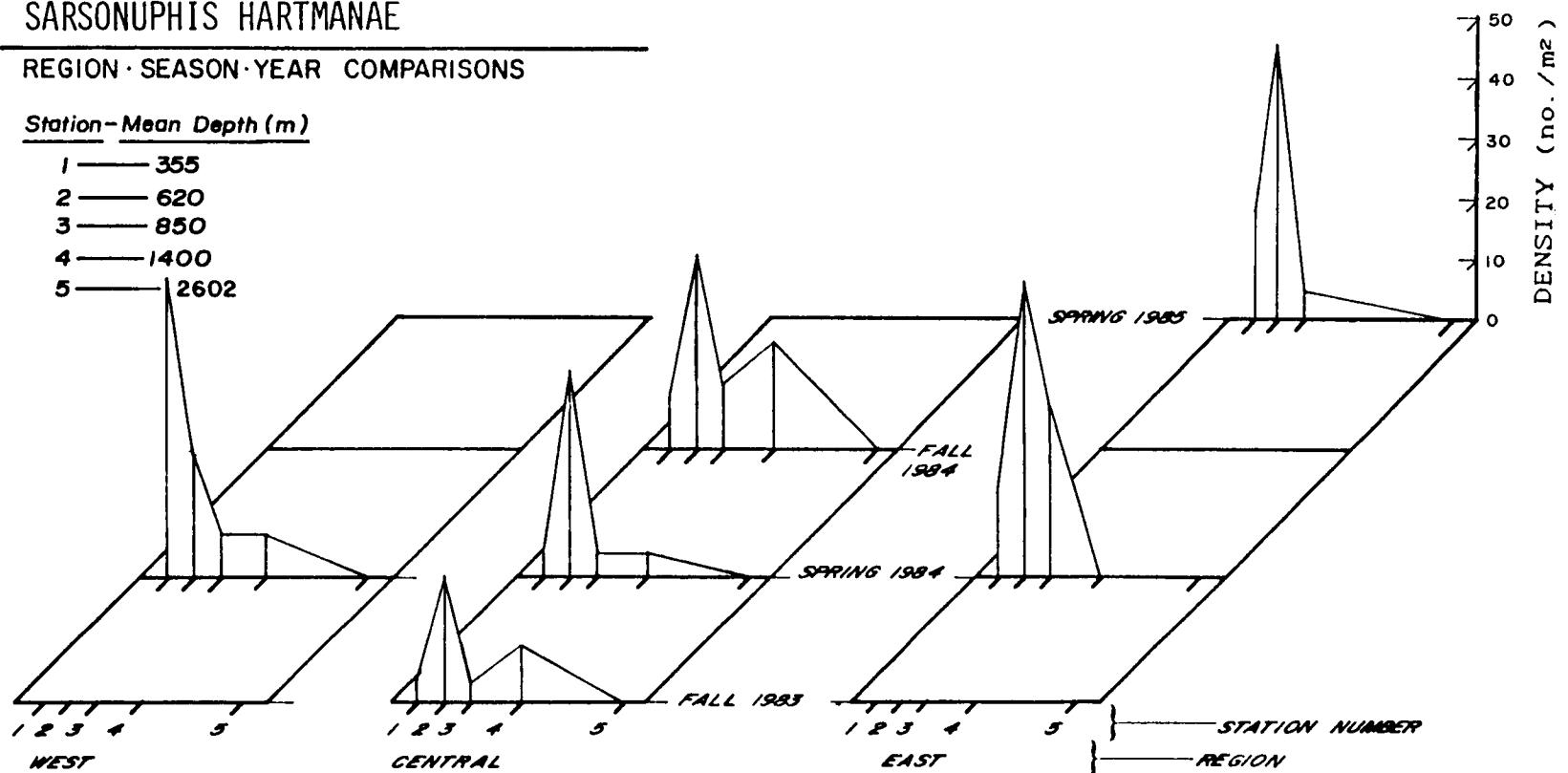


SARSONUPHIS HARTMANAE

REGION · SEASON · YEAR COMPARISONS

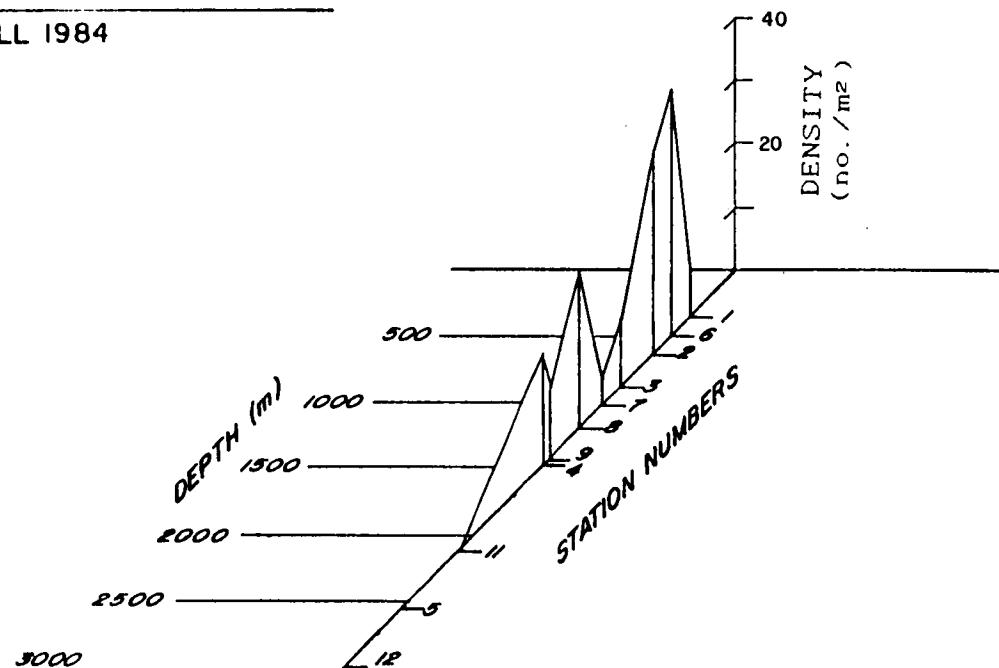
Station-Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



SARSONUPHIS HARTMANAE

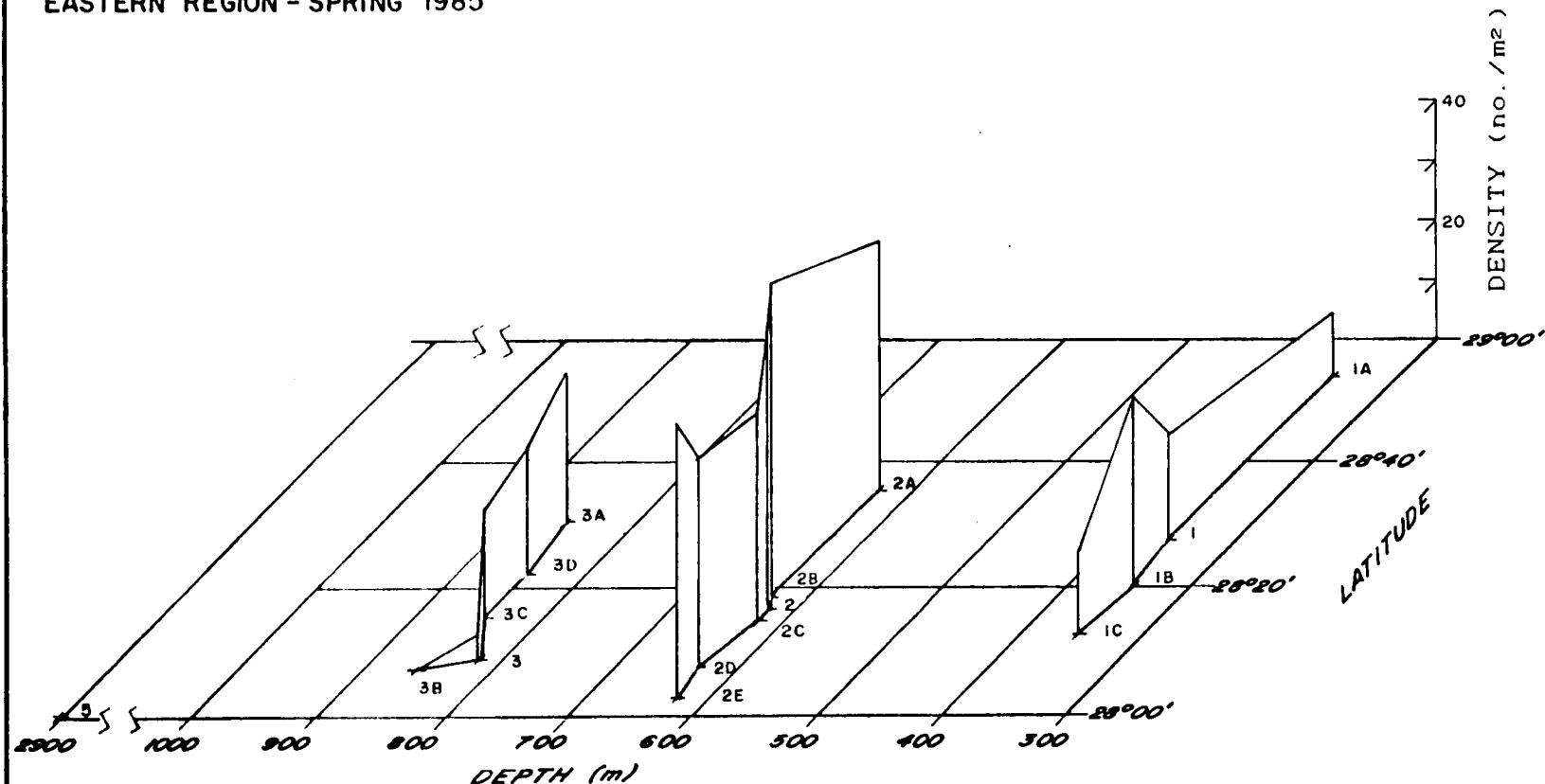
CENTRAL REGION - FALL 1984



SARSONUPHIS HARTMANAE

EASTERN REGION - SPRING 1985

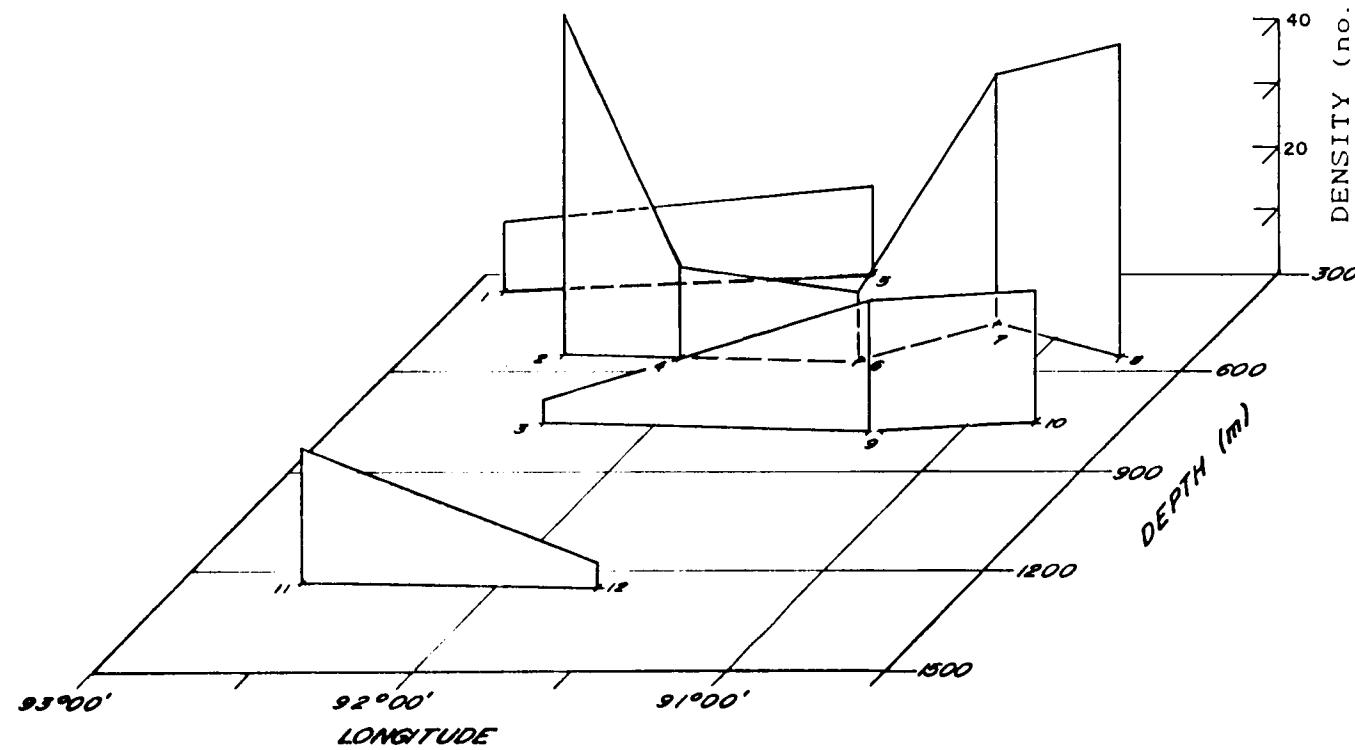
C-45



SARSONUPHIS HARTMANAE

WESTERN to CENTRAL REGION - SUMMER 1985

C-46

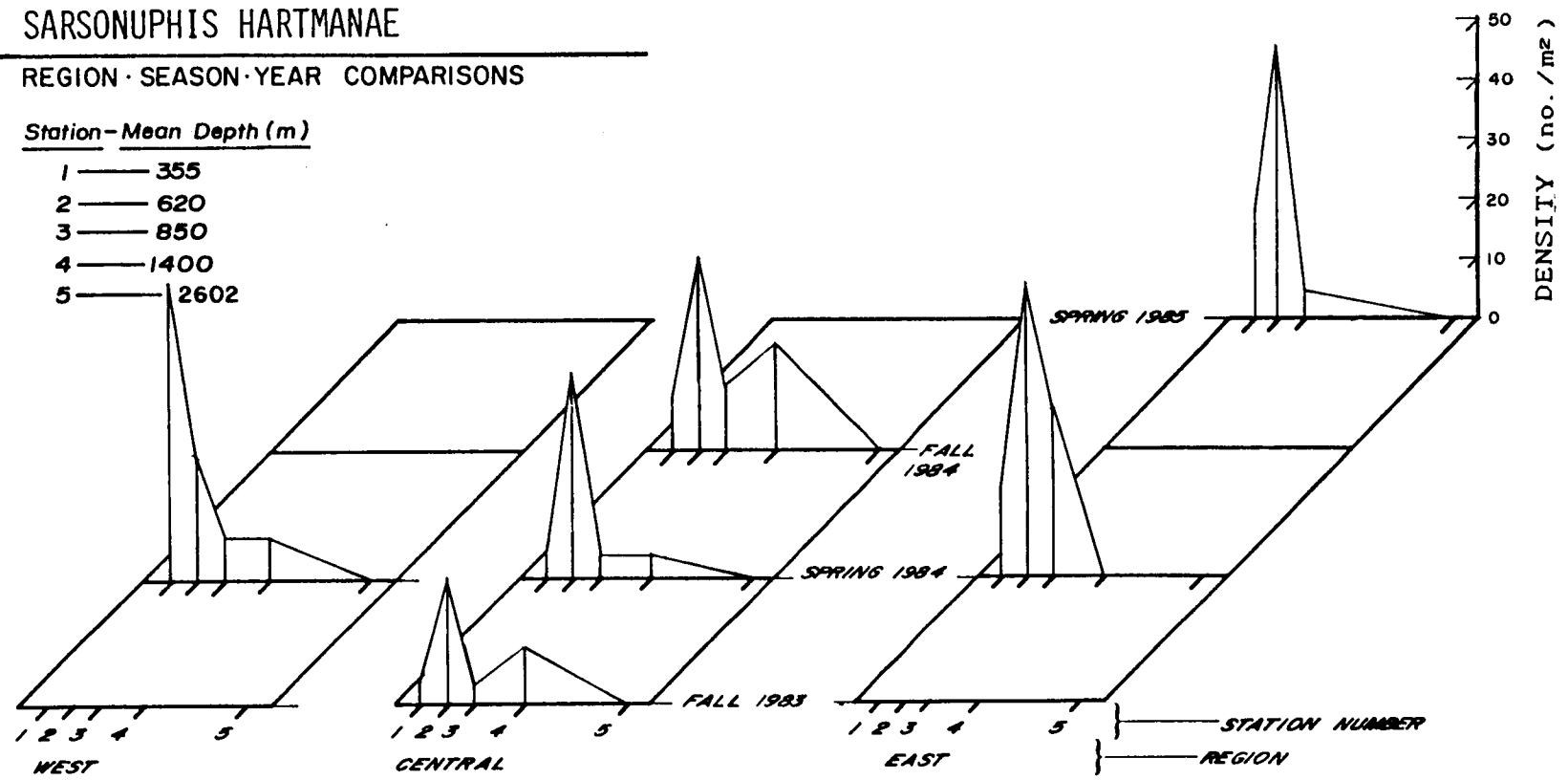


SARSONUPHIS HARTMANAE

REGION · SEASON · YEAR COMPARISONS

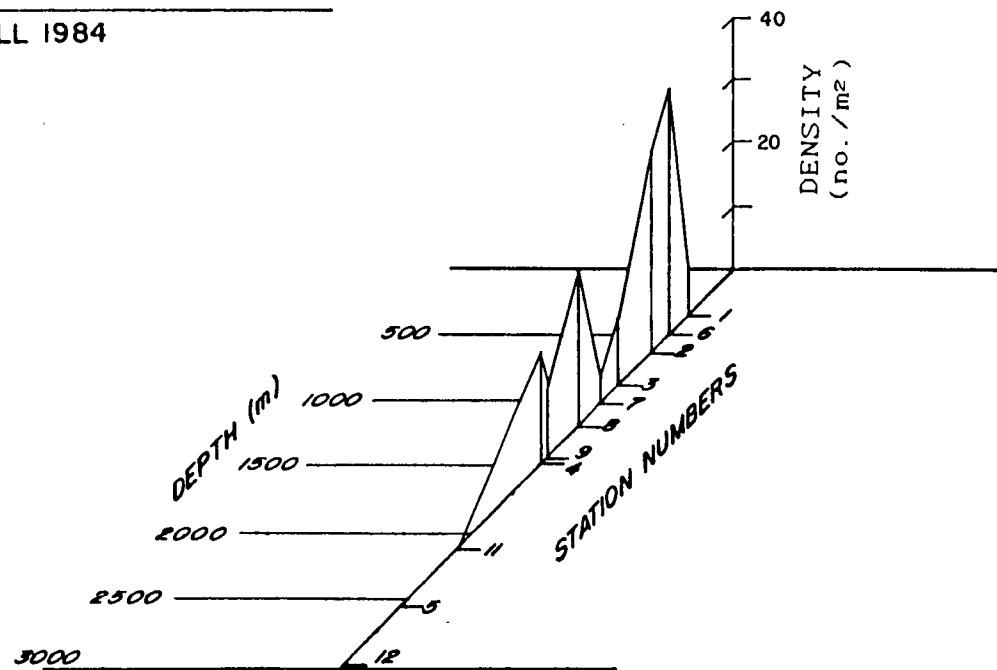
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



SARSONUPHIS HARTMANAE

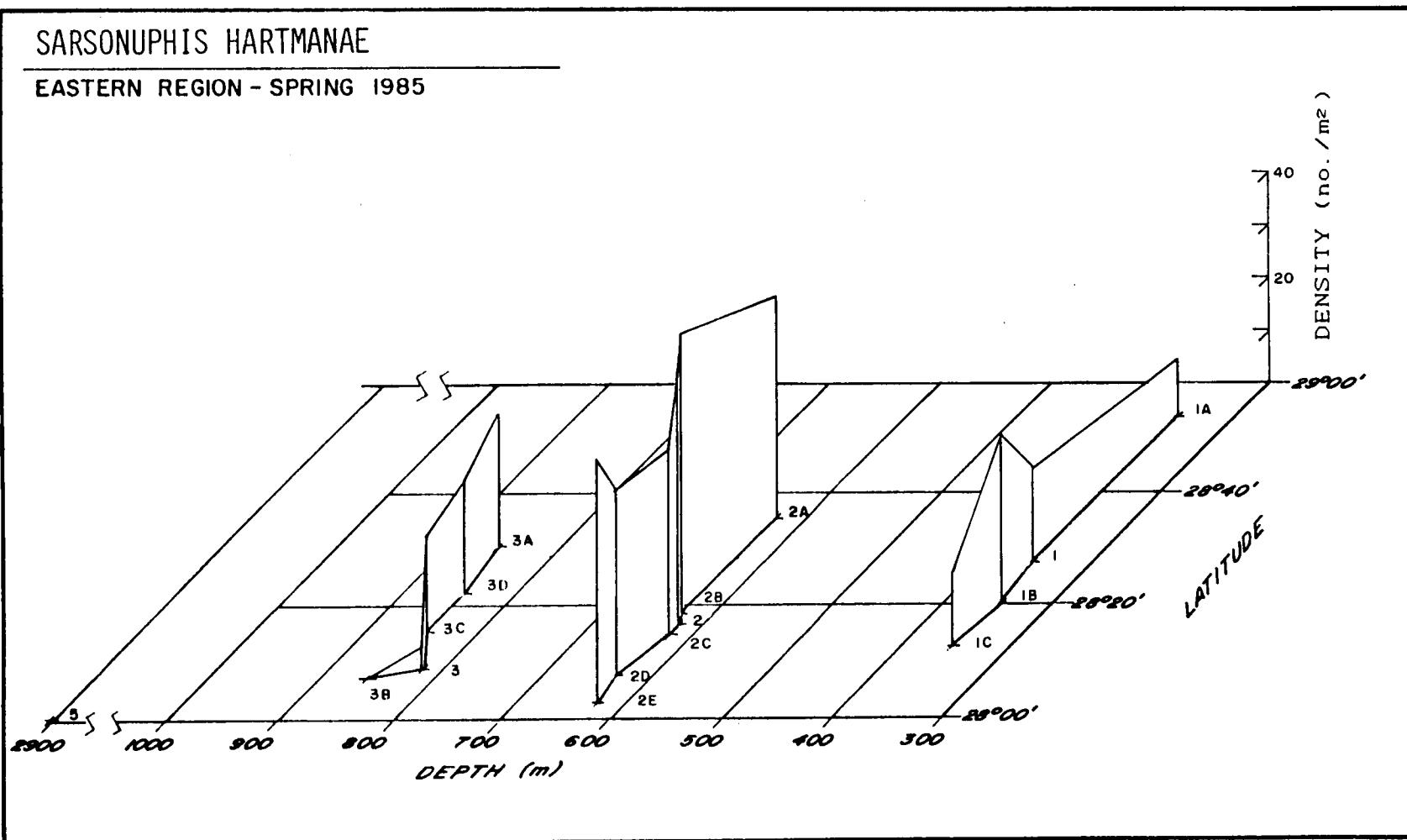
CENTRAL REGION - FALL 1984



SARSONUPHIS HARTMANAE

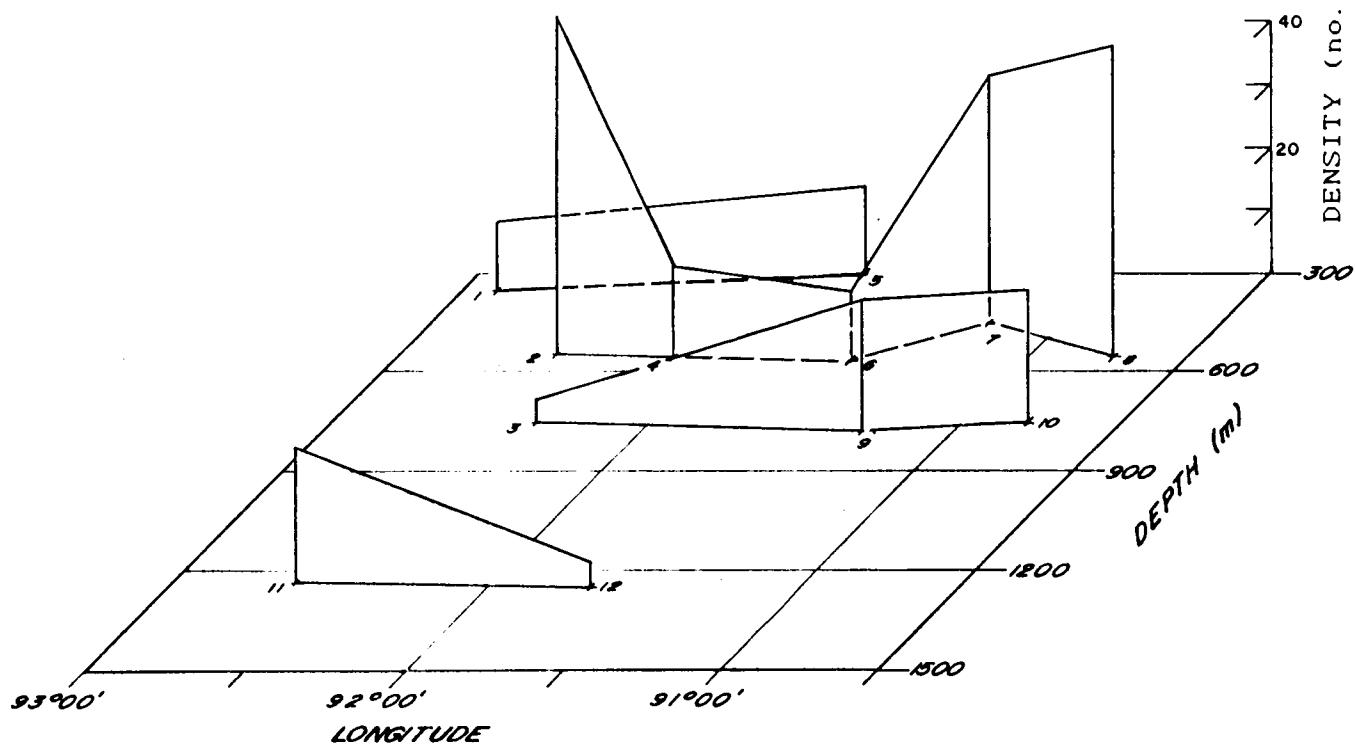
EASTERN REGION - SPRING 1985

C-49



SARSONUPHIS HARTMANAE

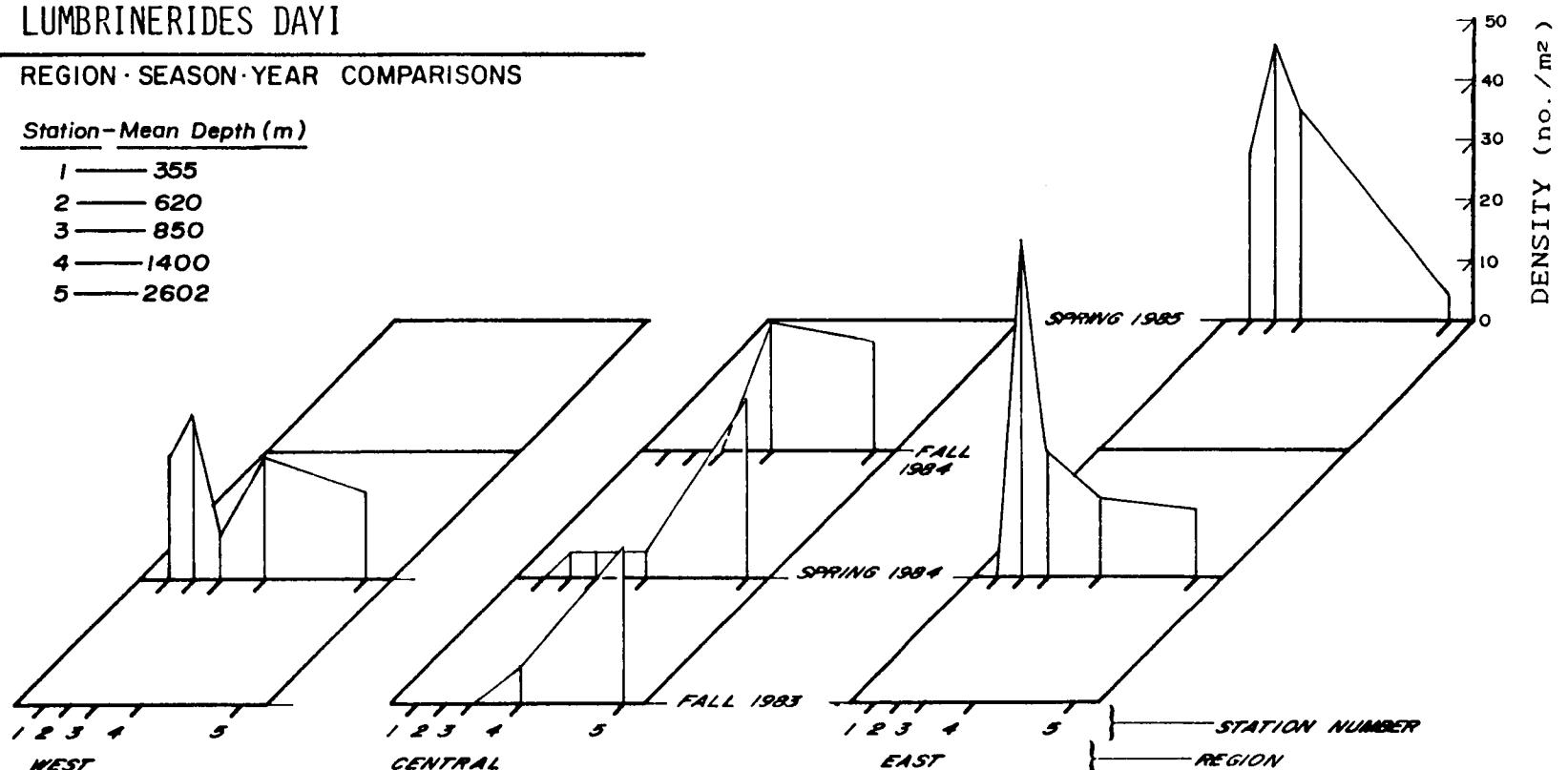
WESTERN to CENTRAL REGION - SUMMER 1985



C-50

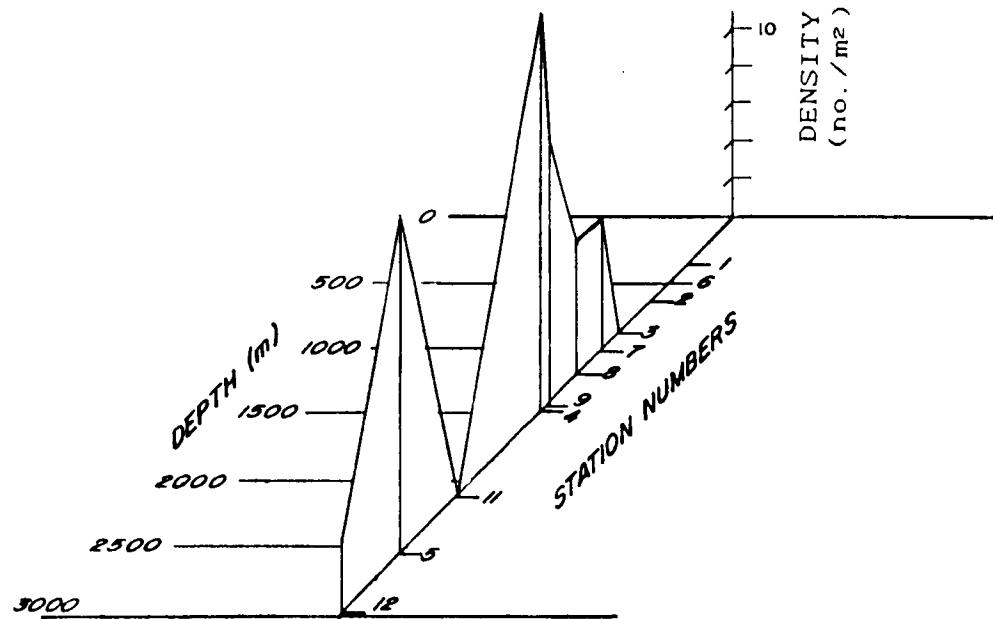
LUMBRINERIDES DAYI**REGION · SEASON · YEAR COMPARISONS****Station - Mean Depth (m)**

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



LUMBRINERIDES DAYI

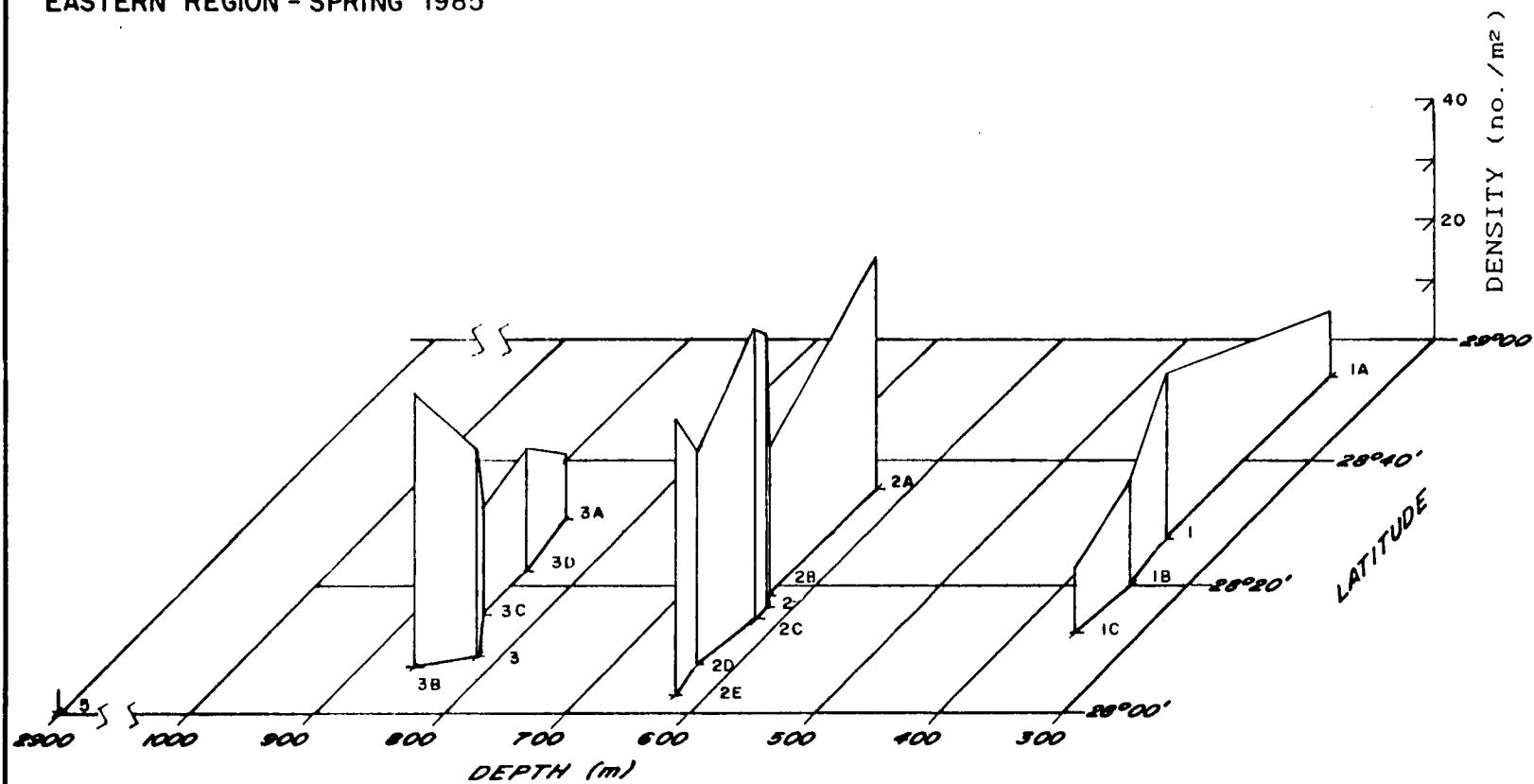
CENTRAL REGION - FALL 1984



LUMBRINERIDES DAYI

EASTERN REGION - SPRING 1985

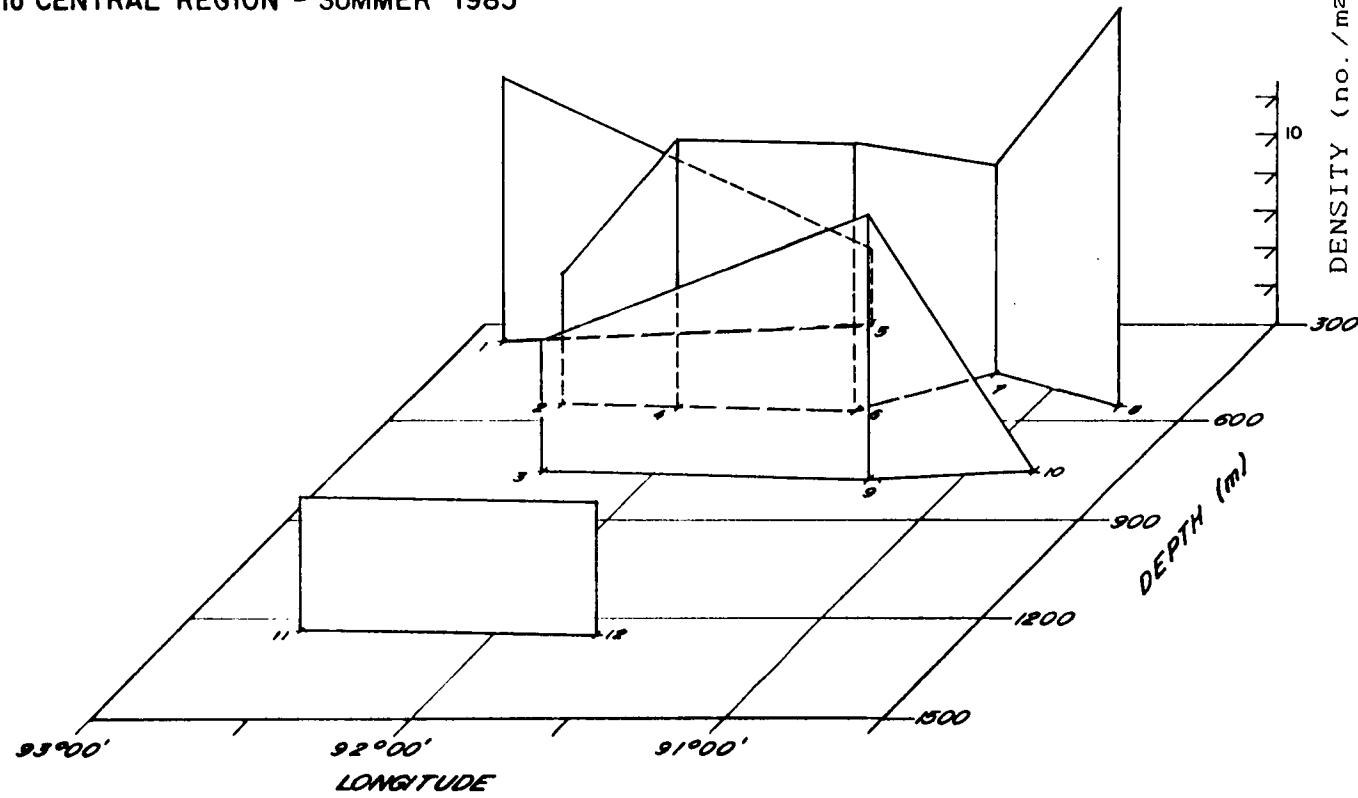
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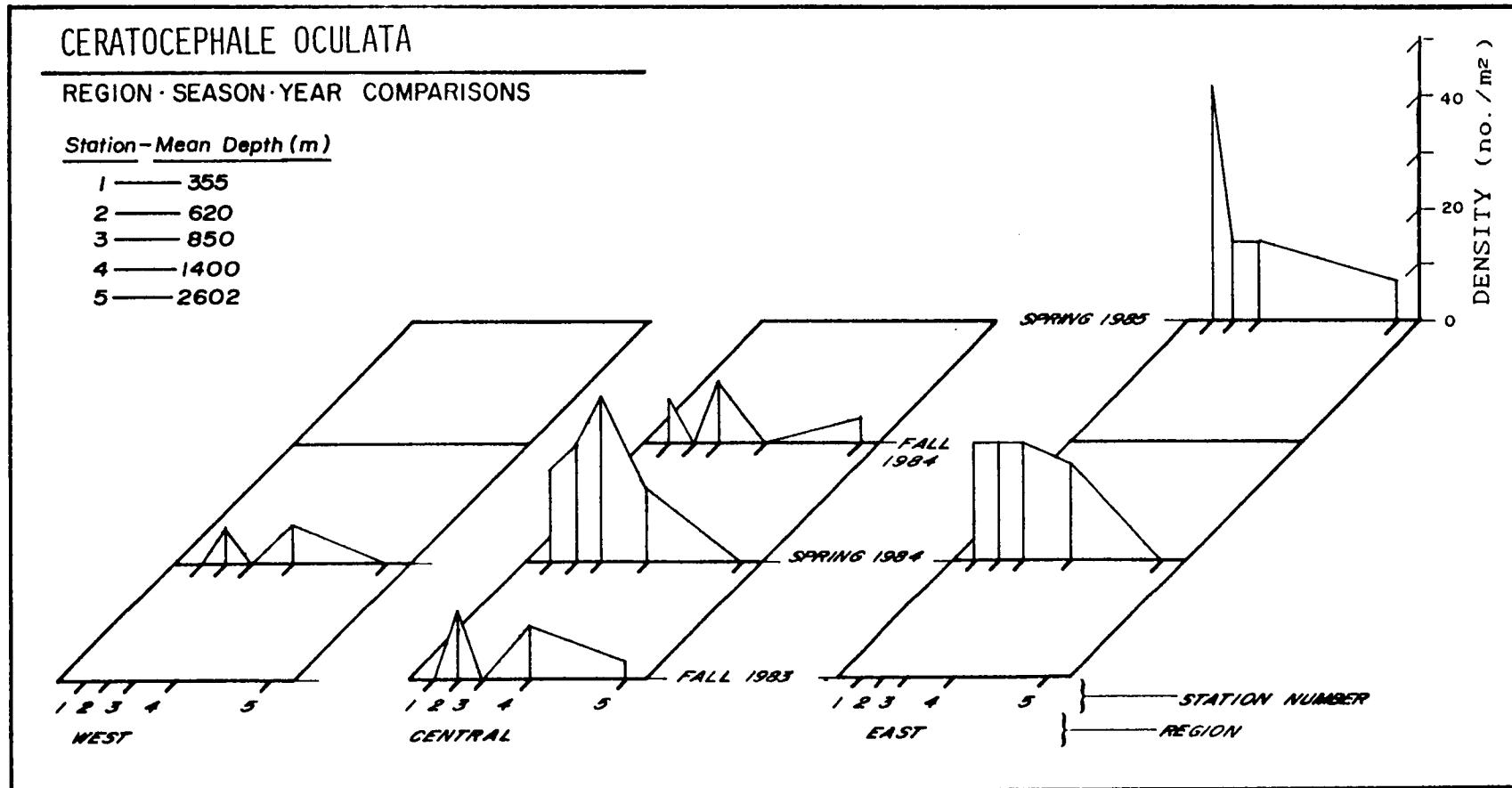


LUMBRINERIDES DAYI

WESTERN to CENTRAL REGION - SUMMER 1985

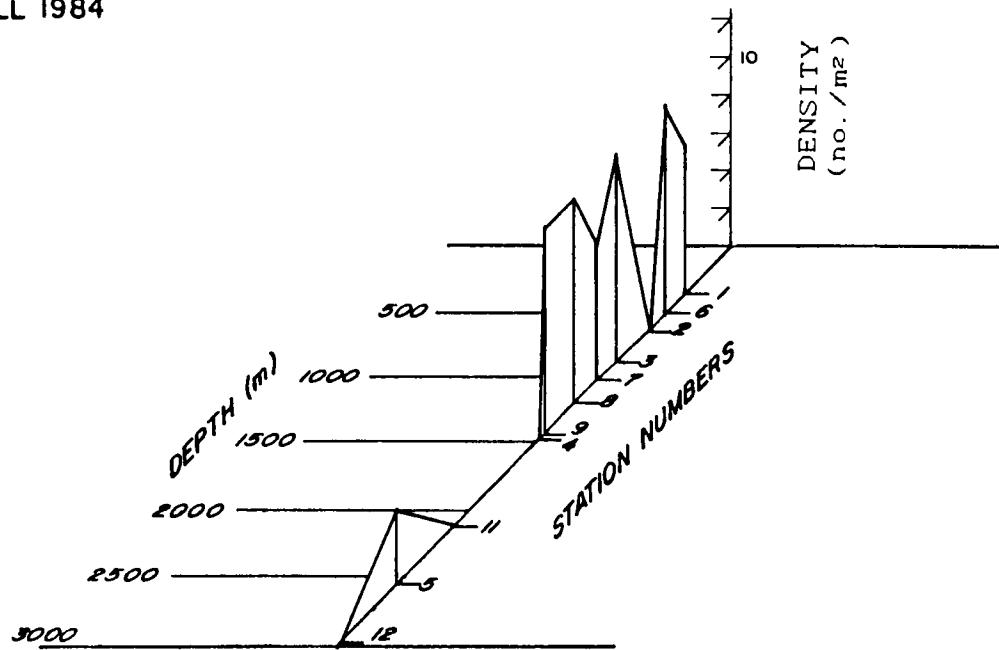
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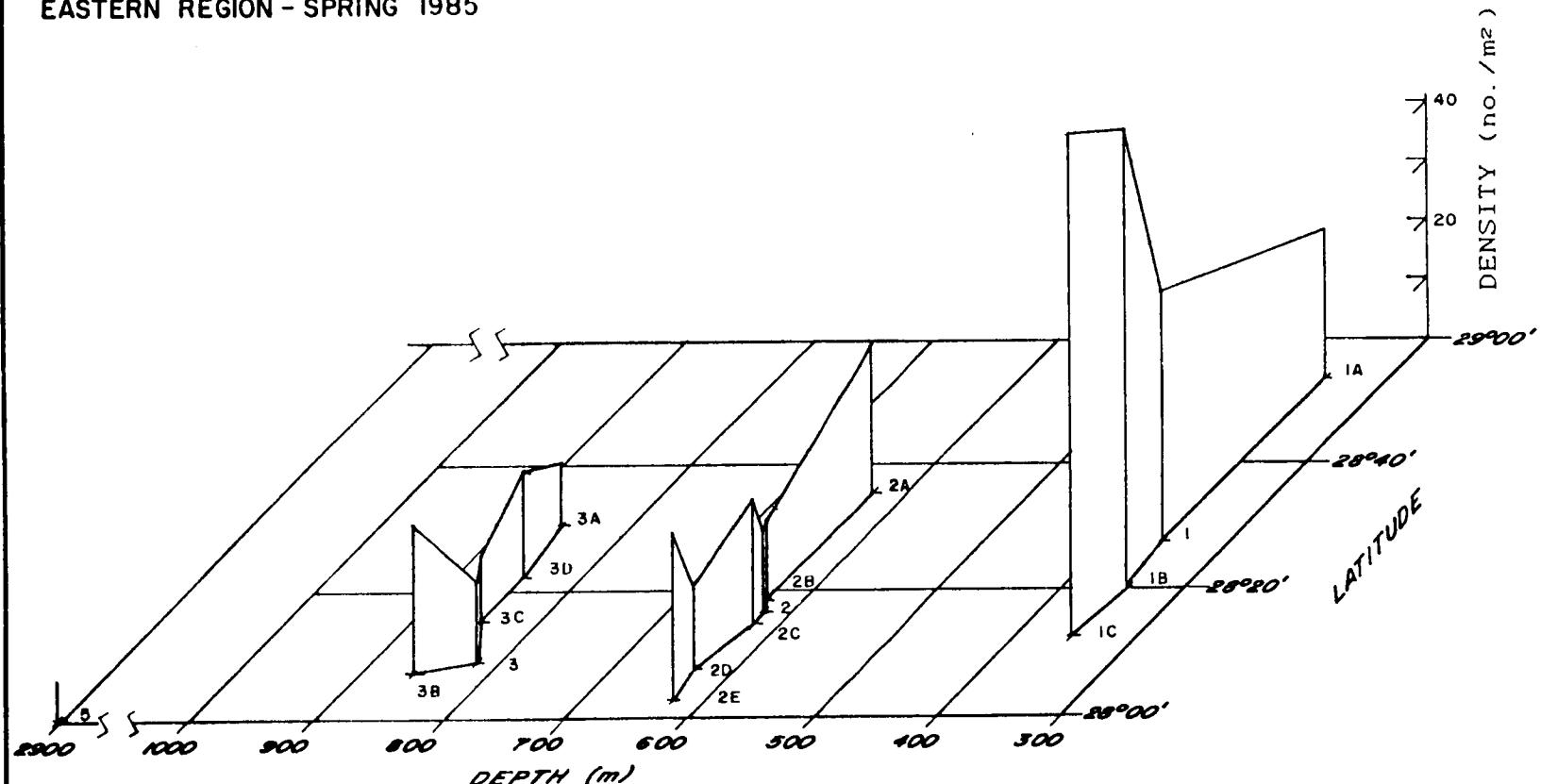
CERATOCEPHALE OCELLATA

CENTRAL REGION - FALL 1984



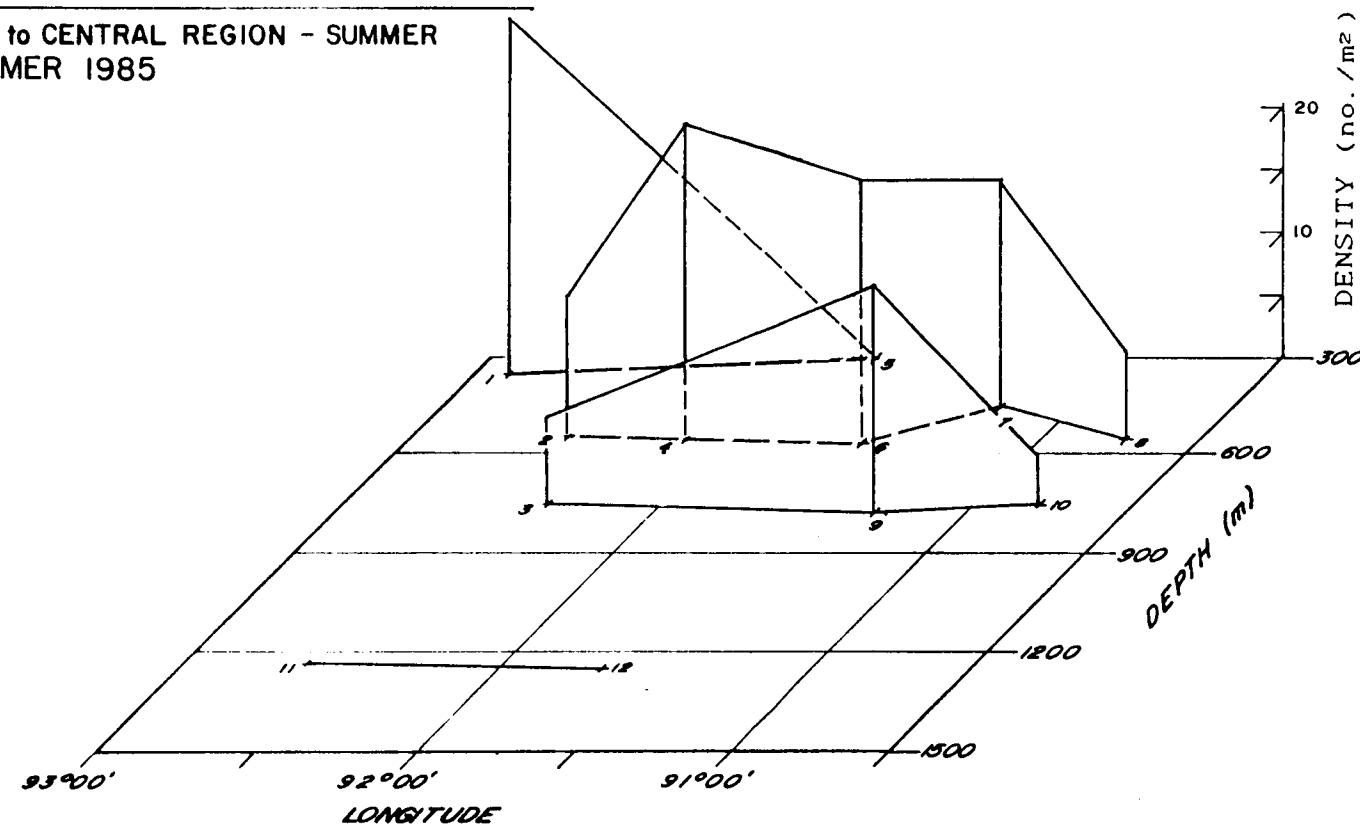
CERATOCEPHALE OCULATA

EASTERN REGION - SPRING 1985



CERATOCEPHALE OCULATA

**WESTERN to CENTRAL REGION - SUMMER
SUMMER 1985**



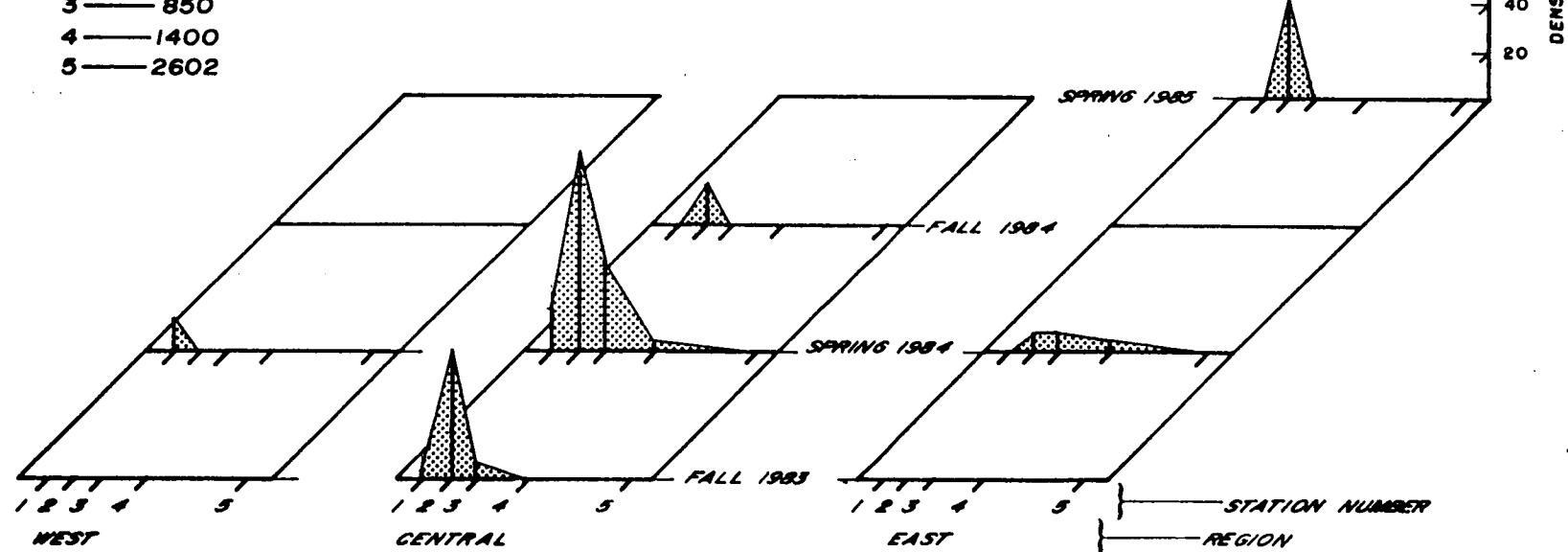
C-58

Paralacydonia paradoxa (POLYCHAETA)

REGION · SEASON · YEAR COMPARISONS

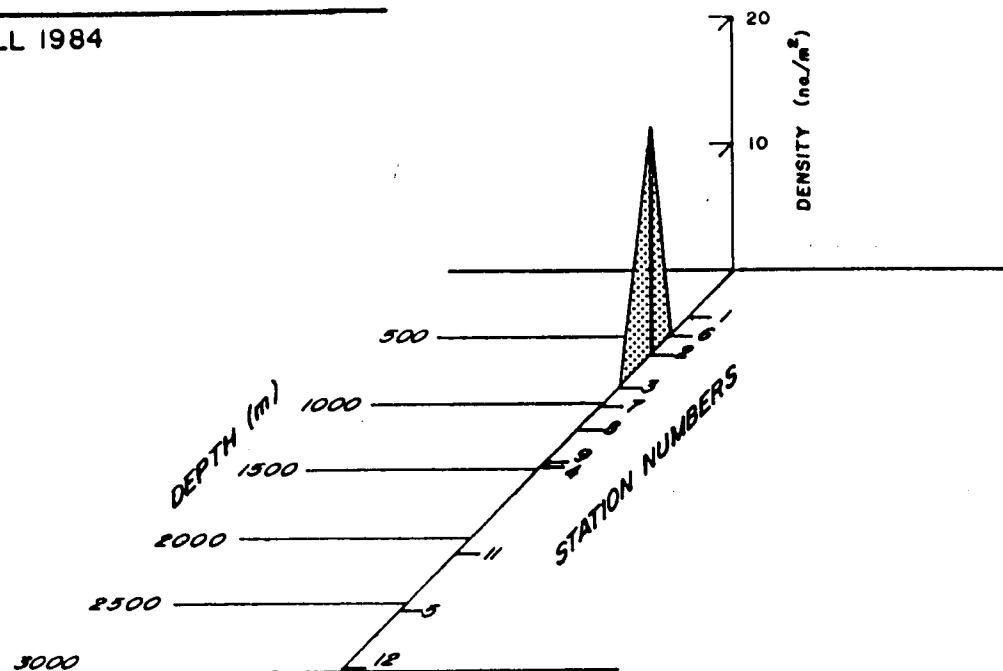
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



Paralacydonia paradoxa (POLYCHAETA)

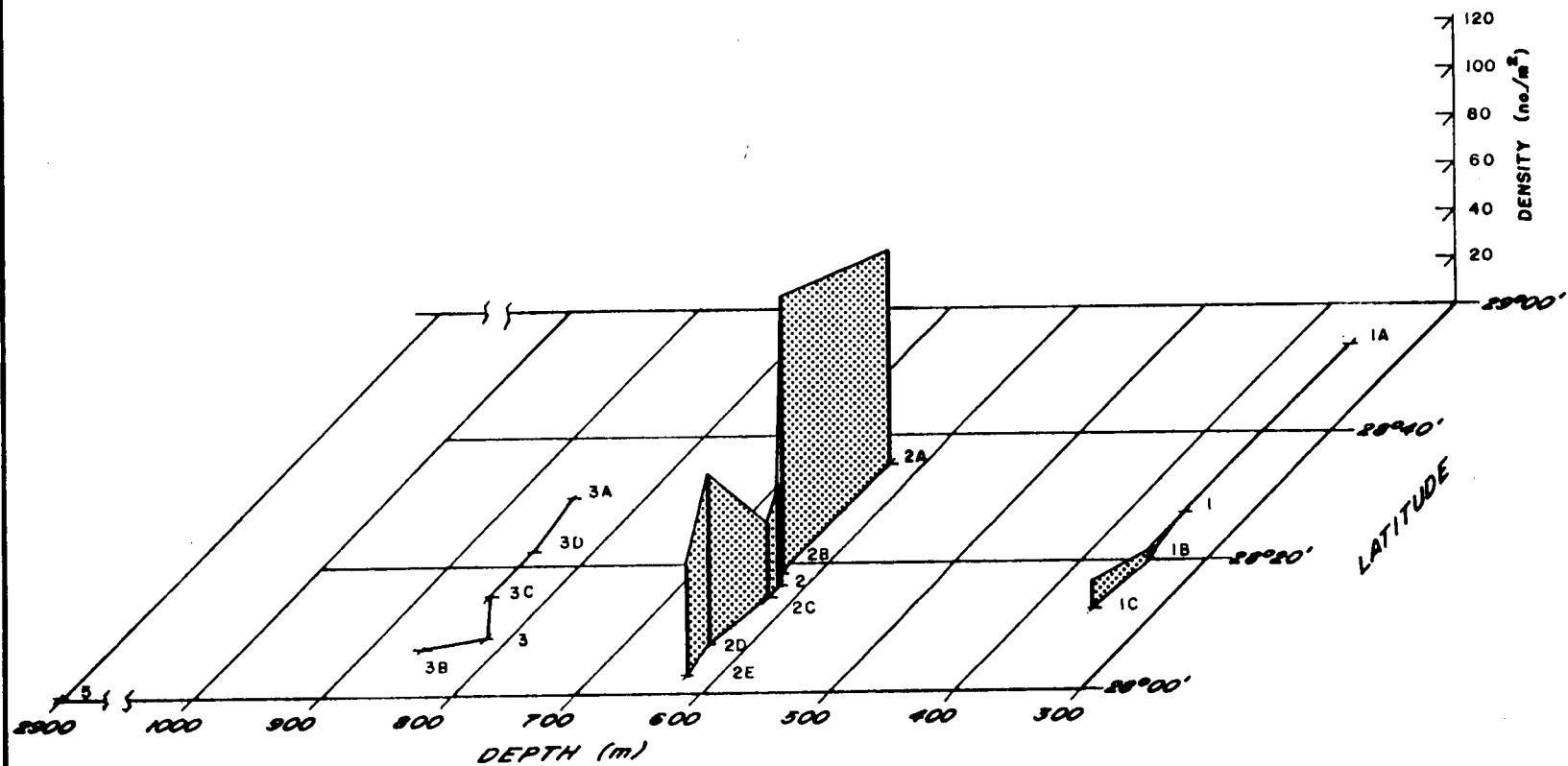
CENTRAL REGION - FALL 1984



Paralacydonia paradoxa (POLYCHAETA)

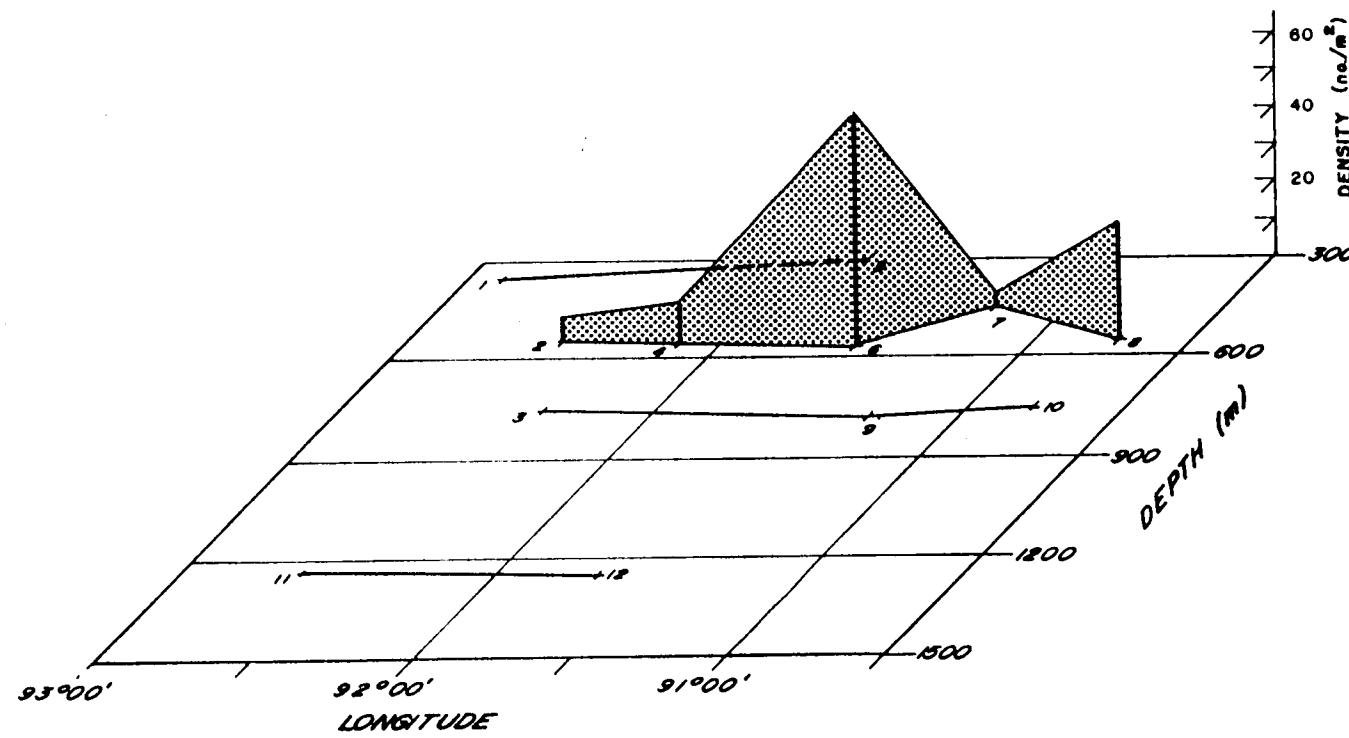
EASTERN REGION - SPRING 1985

C-D1

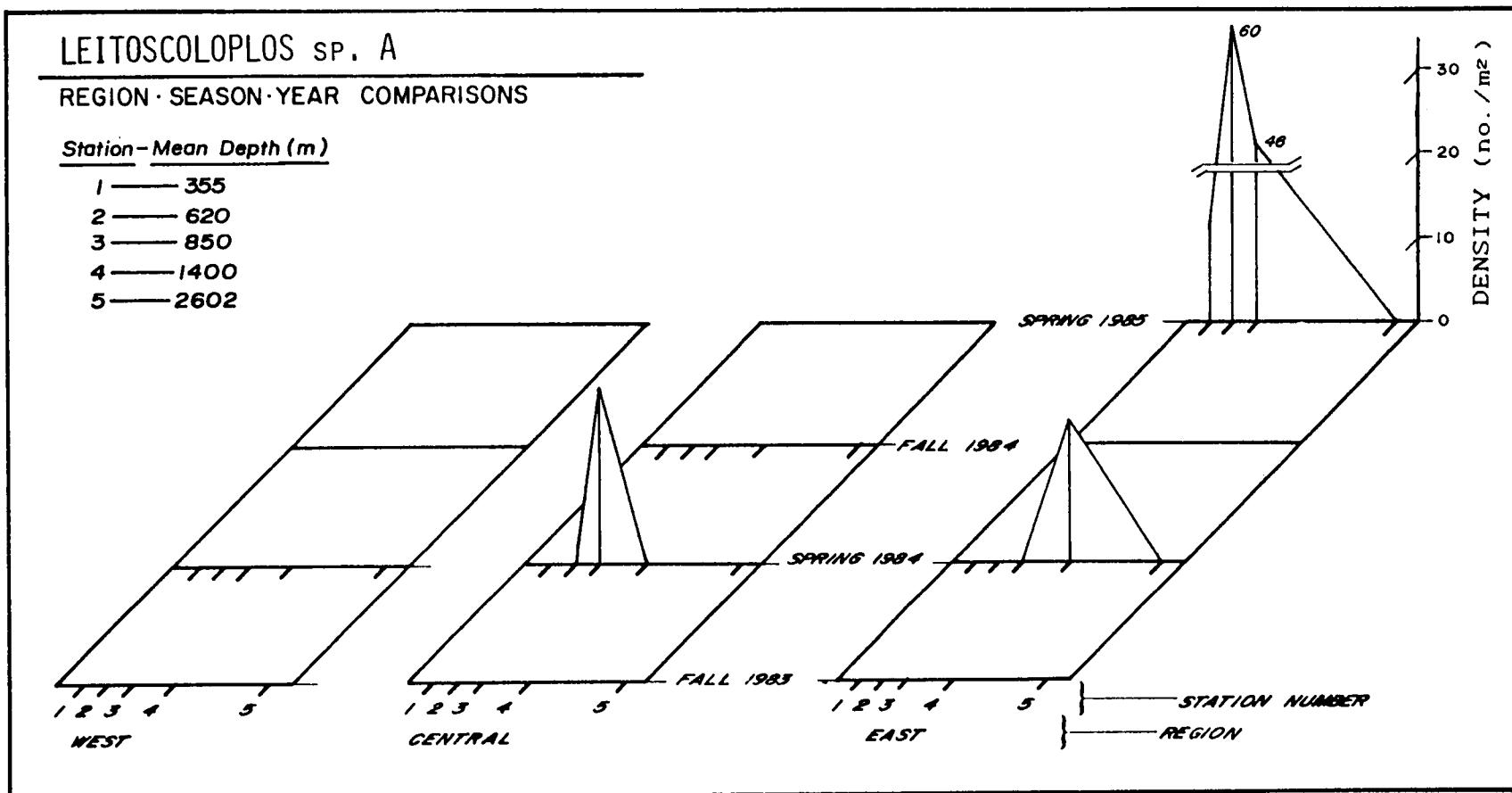


Paralacydonia paradoxa (POLYCHAETA)

WESTERN to CENTRAL REGION - SUMMER 1985

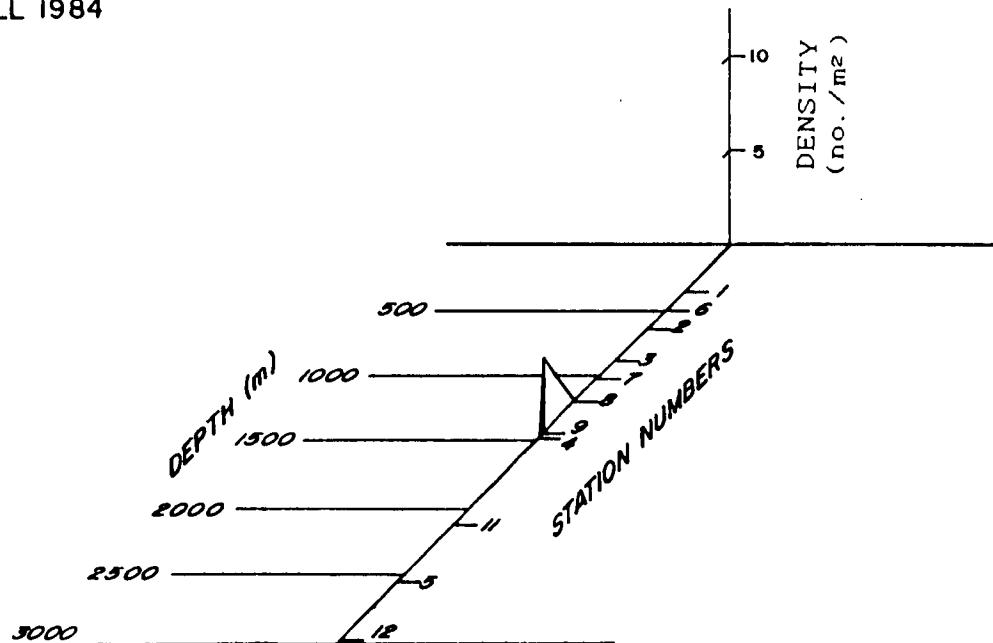


C-62



LEITOSCOLOPLOS SP. A

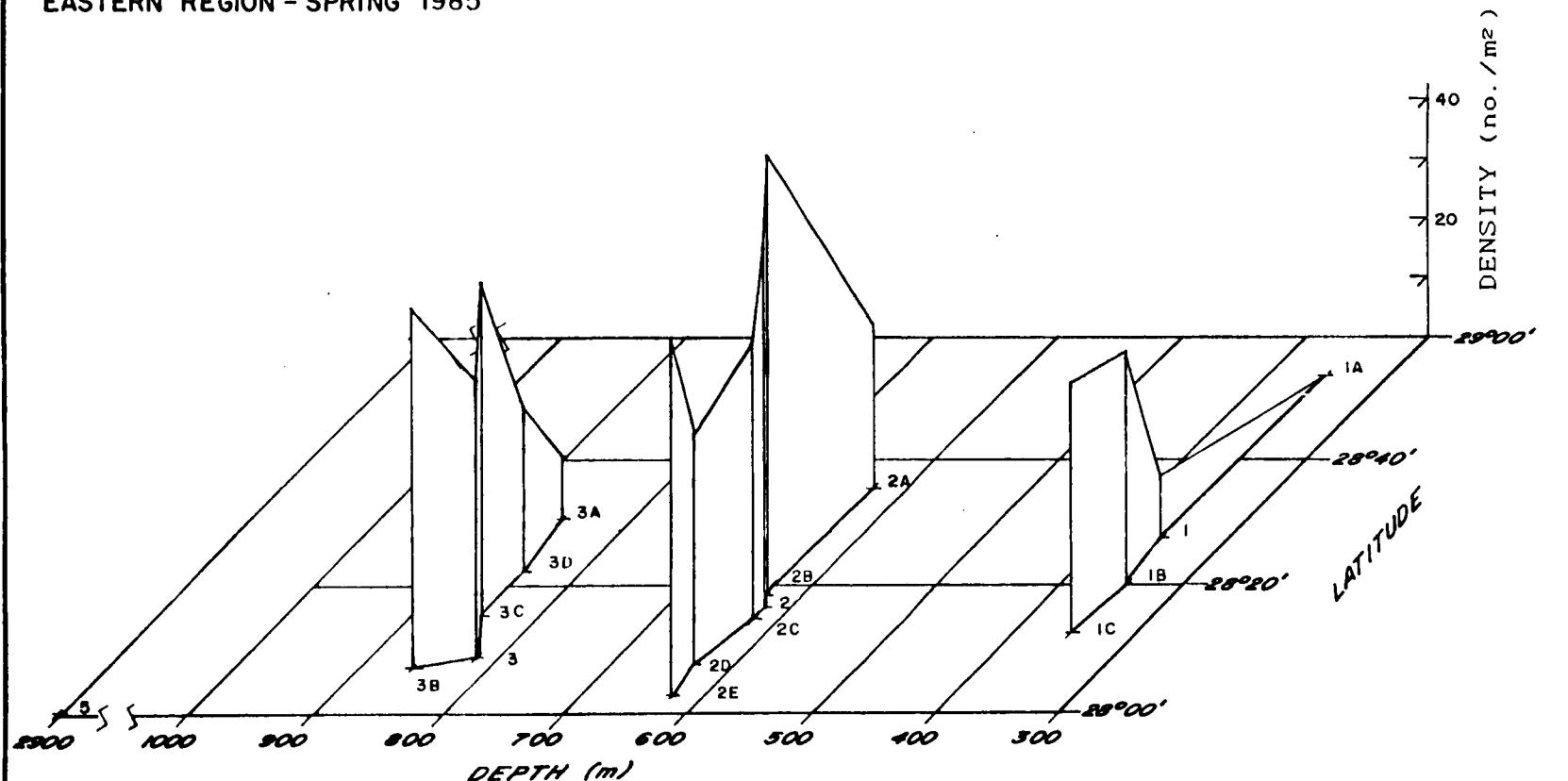
CENTRAL REGION - FALL 1984



LEITOSCOLOPLOS sp. A

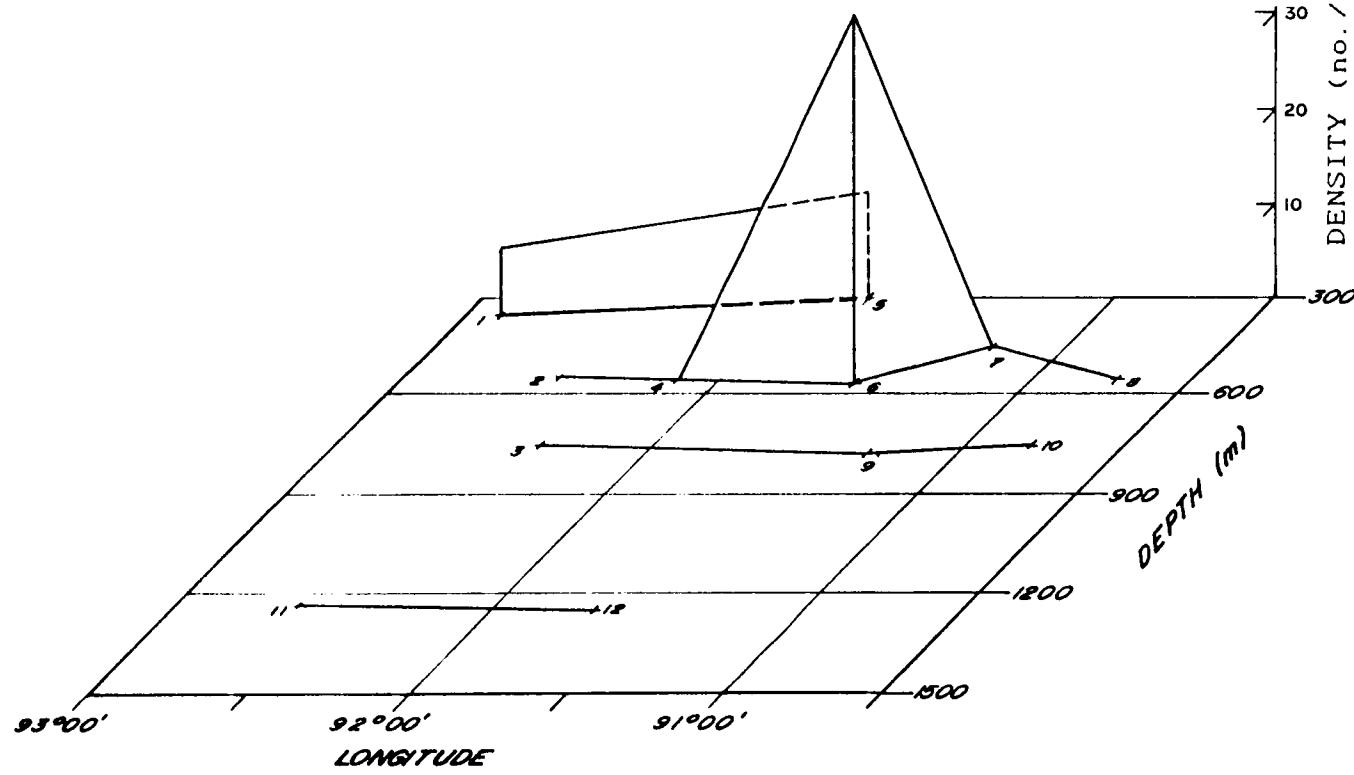
EASTERN REGION - SPRING 1985

C-65



LEITOSCOLOPLOS SP. A

WESTERN to CENTRAL REGION - SUMMER 1985

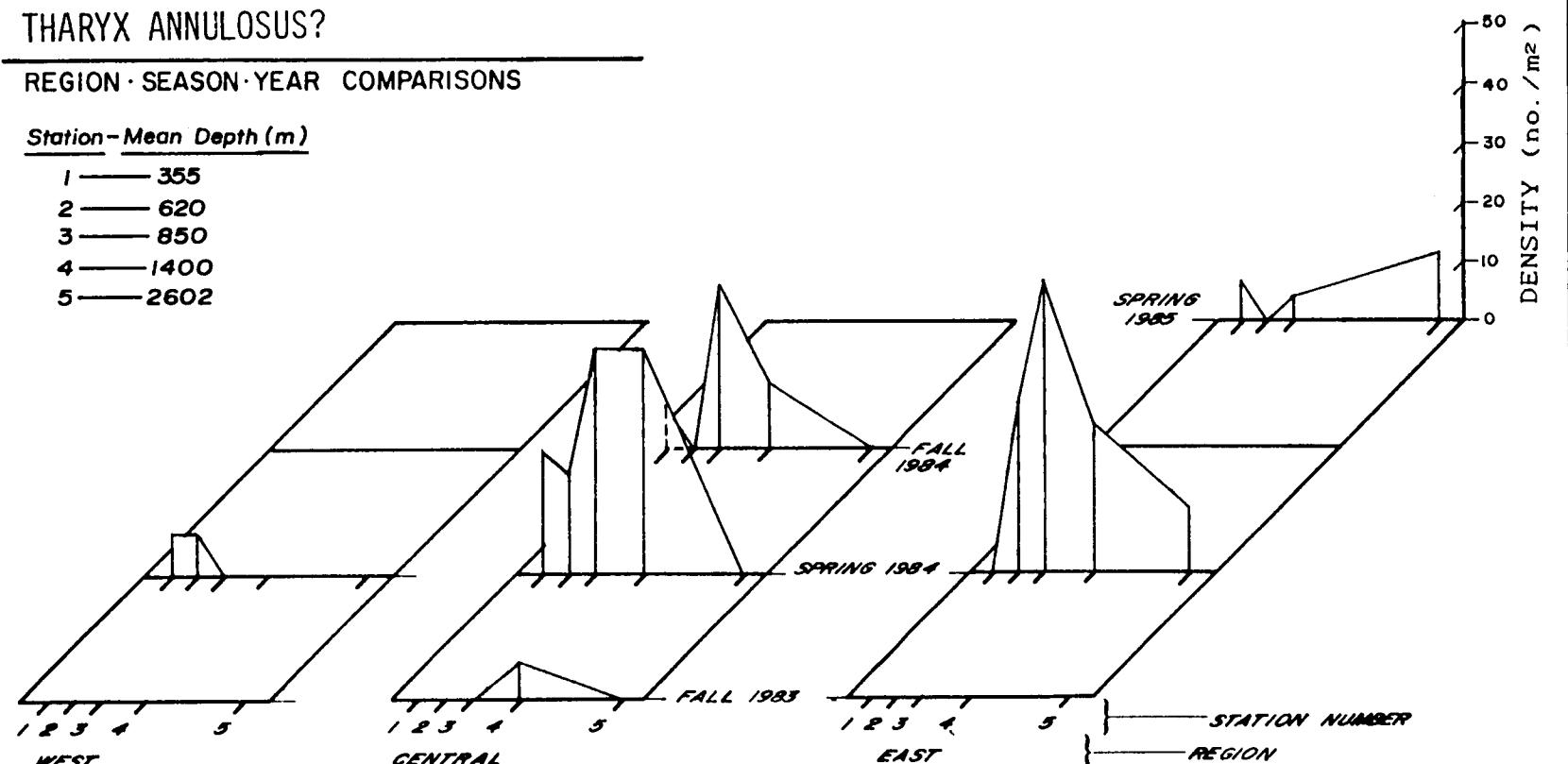


THARYX ANNULOSUS?

REGION · SEASON · YEAR COMPARISONS

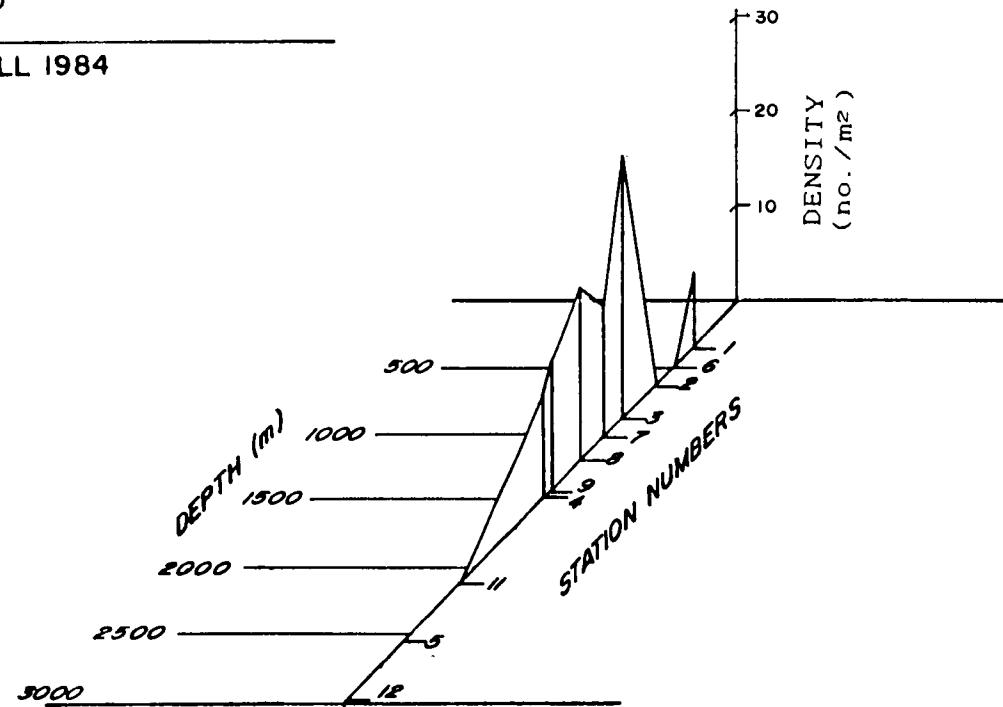
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



THARYX ANNULOSUS?

CENTRAL REGION - FALL 1984

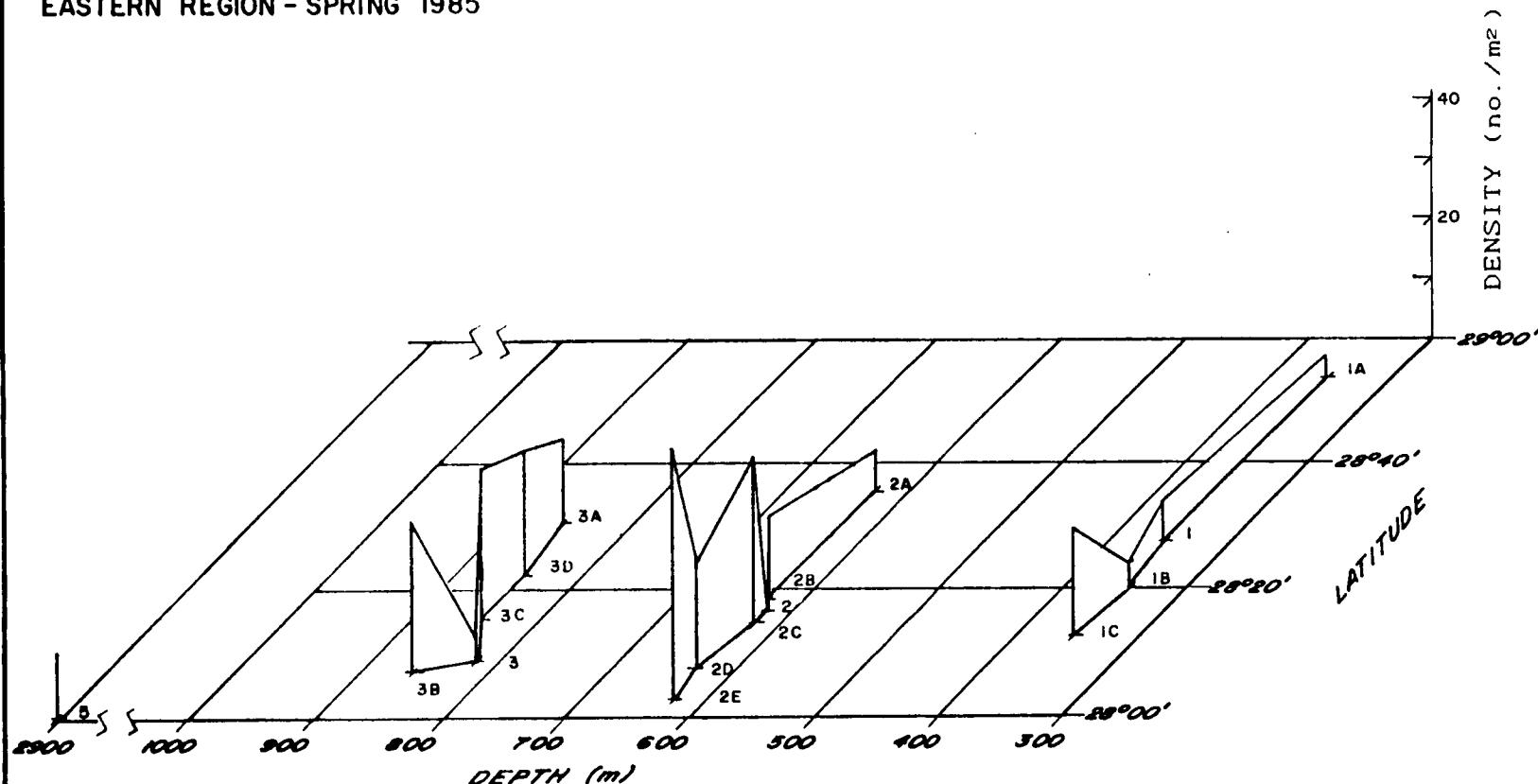


C-68

THARYX ANNULOSUS?

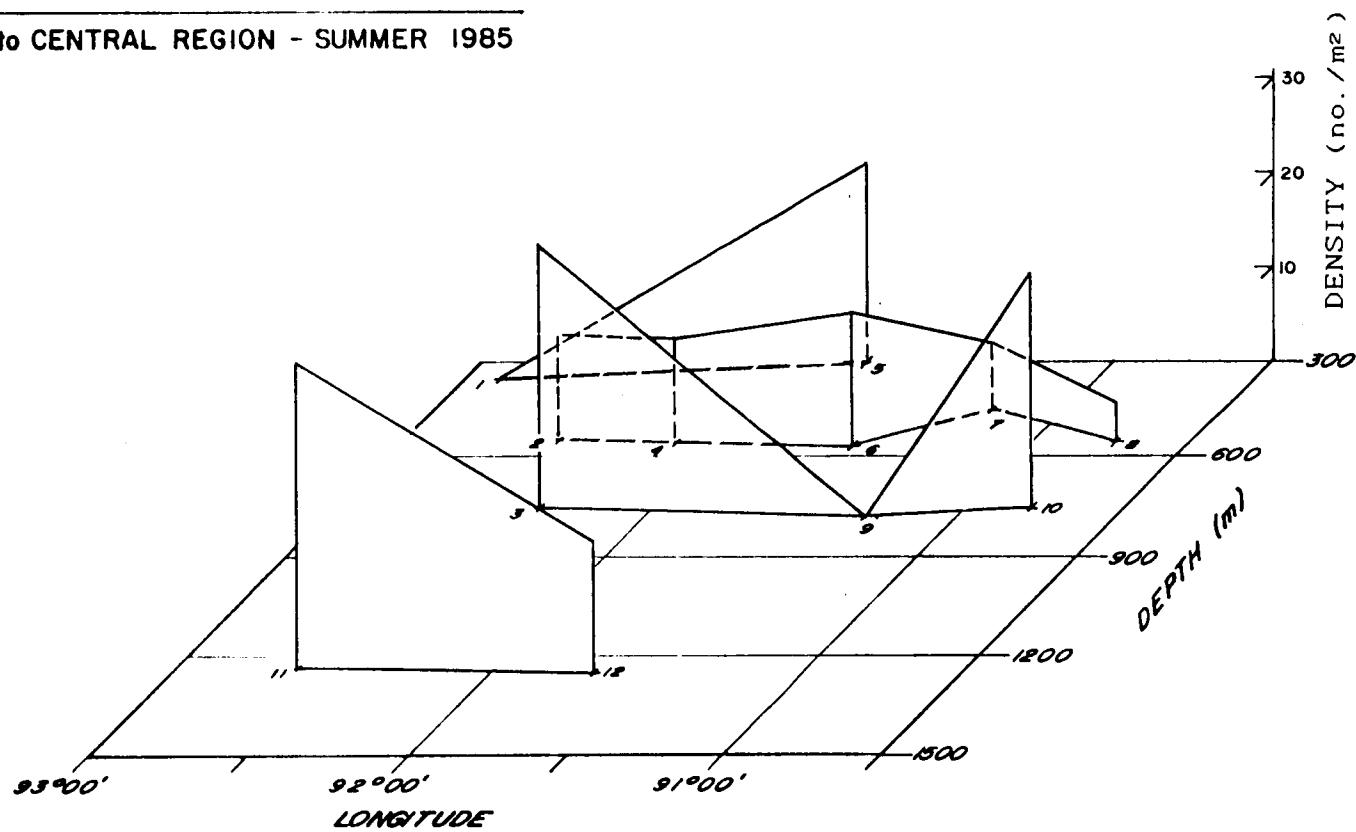
EASTERN REGION - SPRING 1985

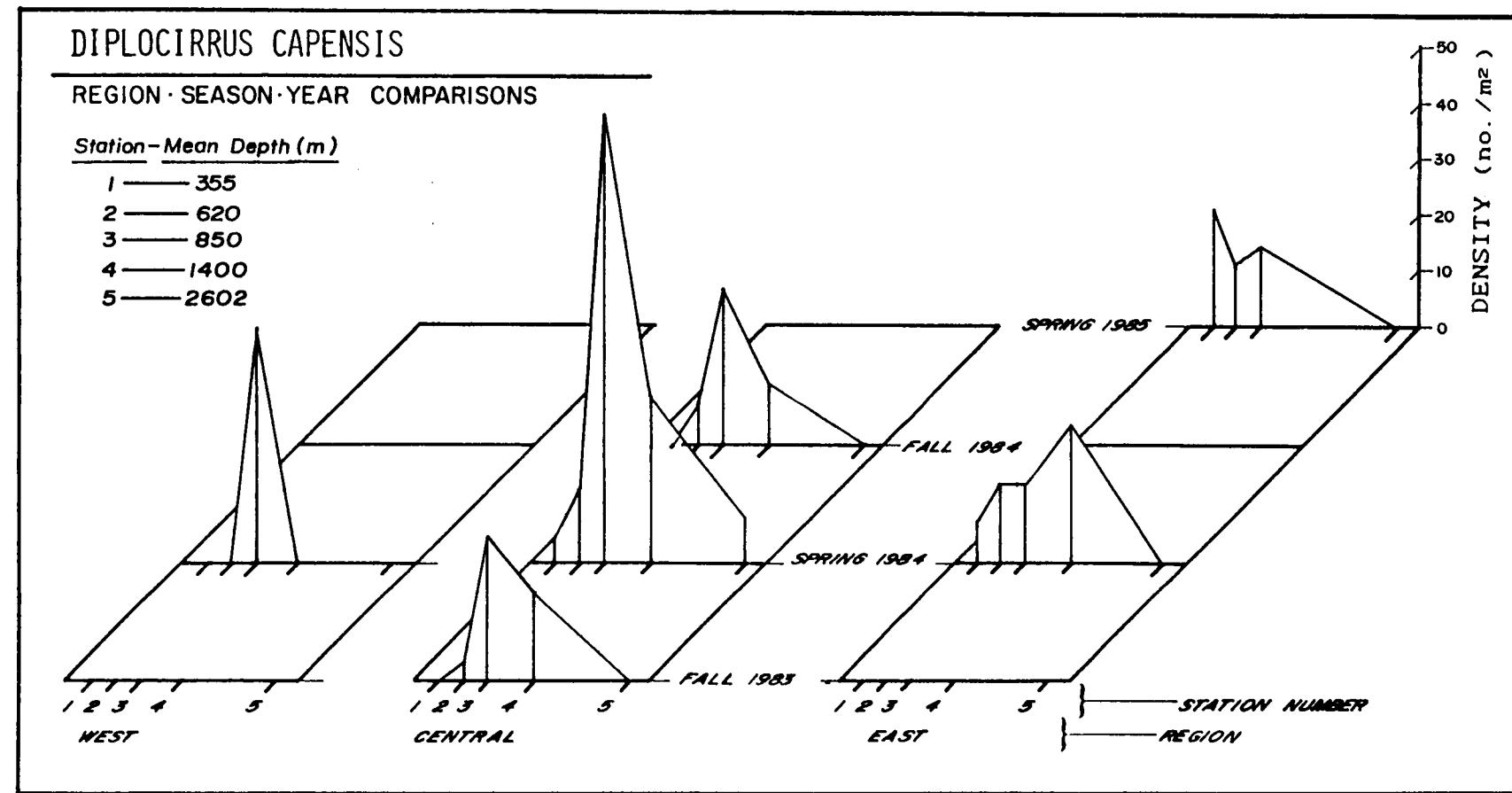
C-69



THARYX ANNULOSUS?

WESTERN to CENTRAL REGION - SUMMER 1985

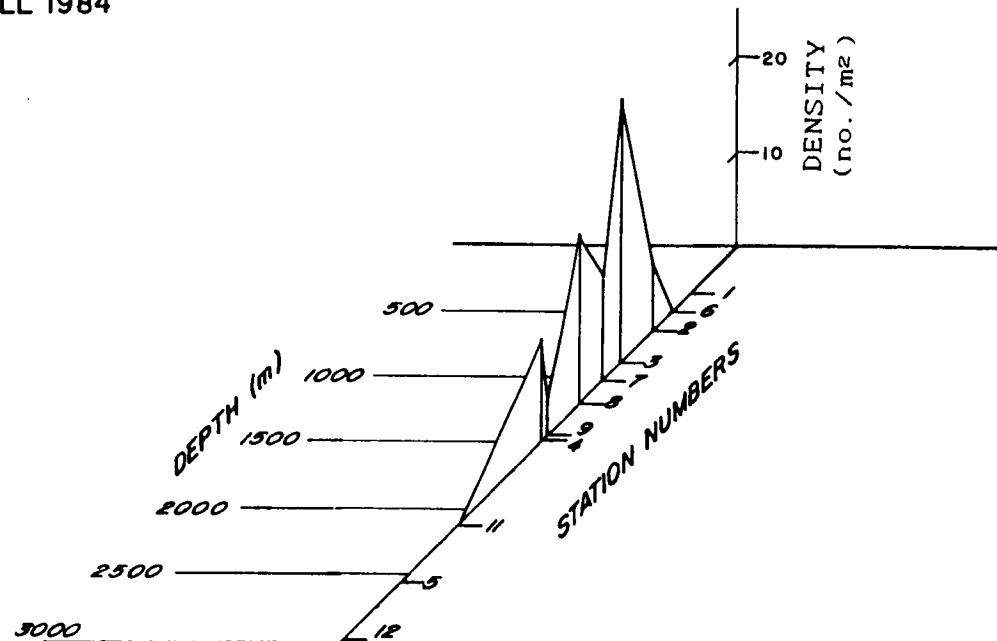




C-71

DIPLOCIRRUS CAPENSIS

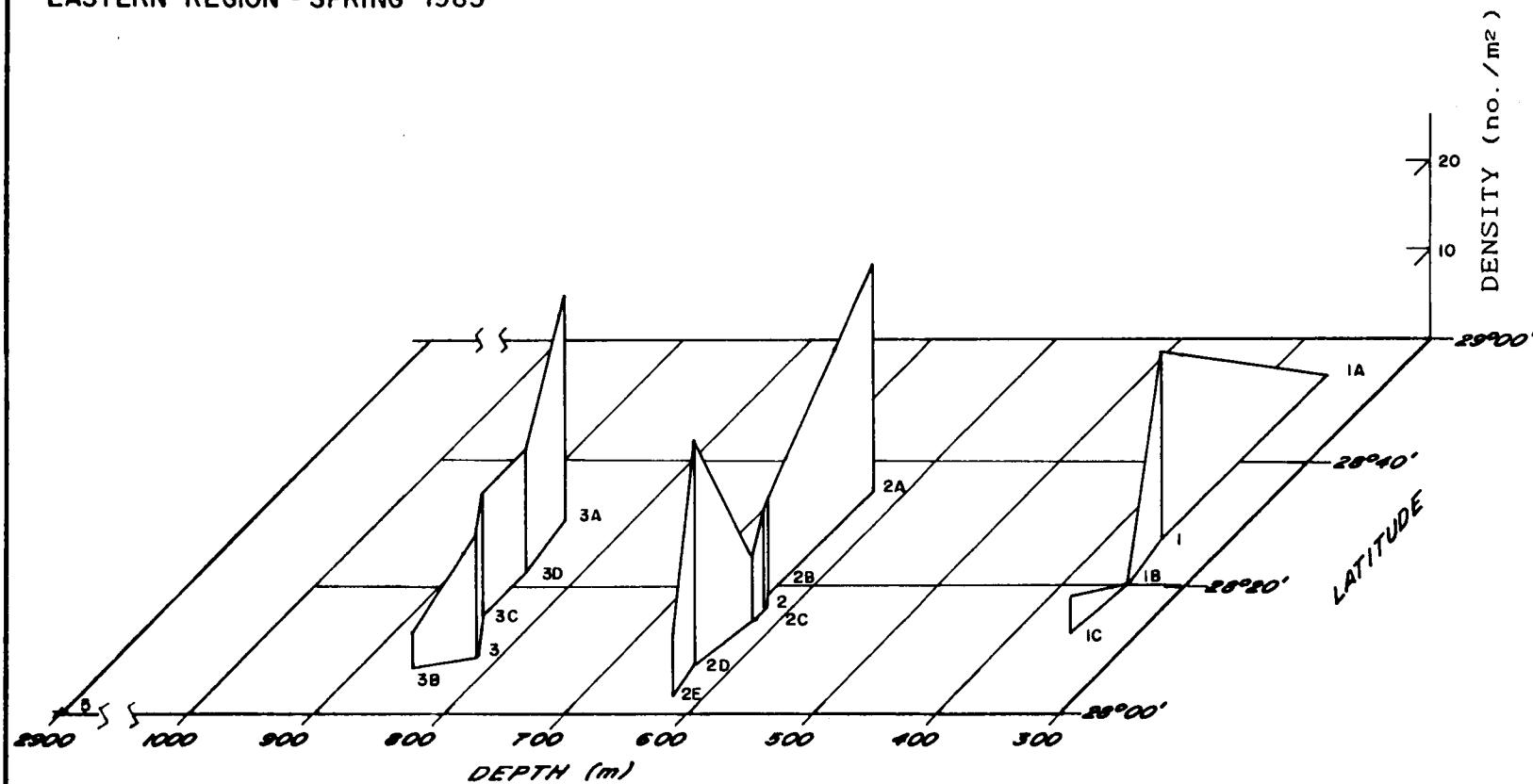
CENTRAL REGION - FALL 1984



DIPLOCIRRUS CAPENSIS

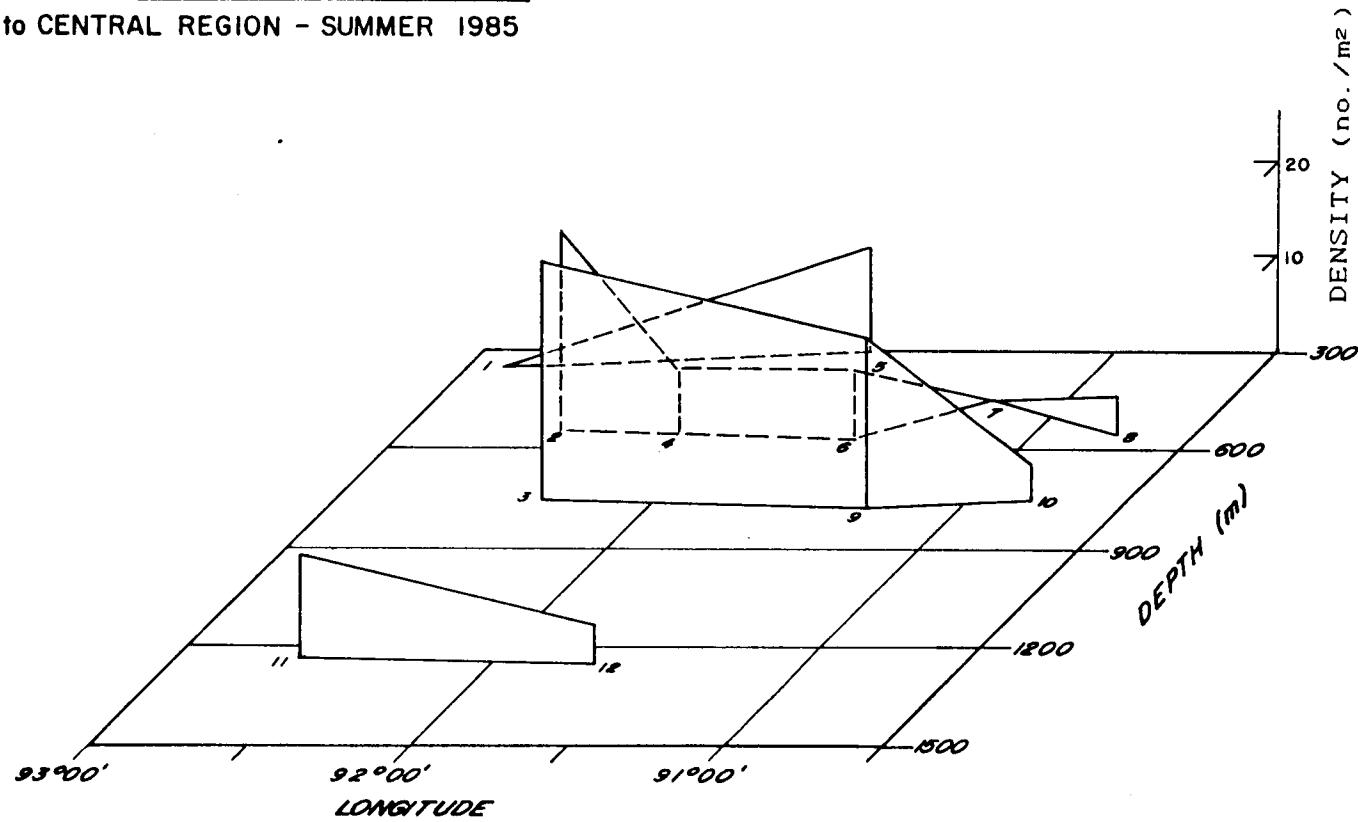
EASTERN REGION - SPRING 1985

C-73



DIPLOCIRRUS CAPENSIS

WESTERN to CENTRAL REGION - SUMMER 1985

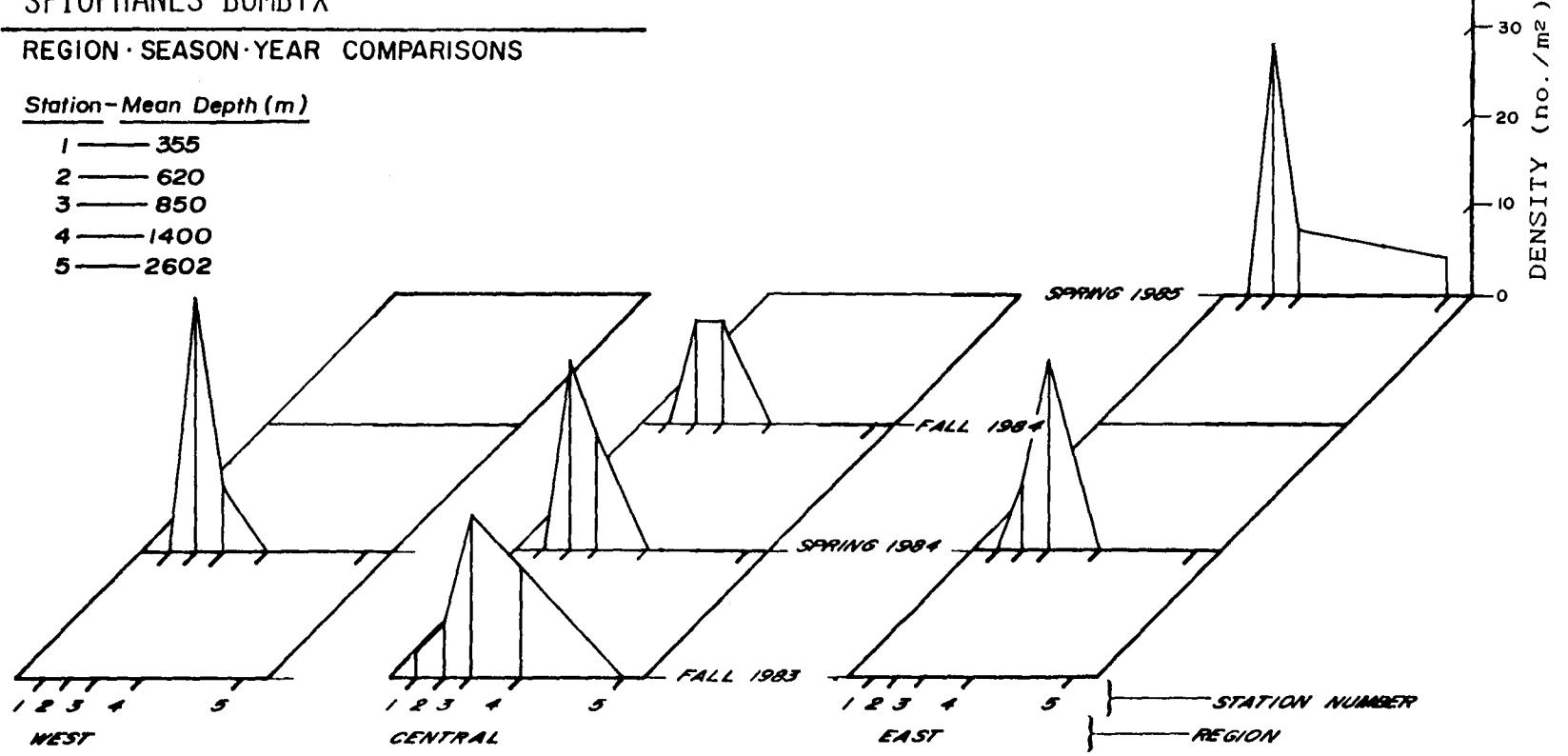


SPIOPHANES BOMBYX

REGION·SEASON·YEAR COMPARISONS

Station-Mean Depth (m)

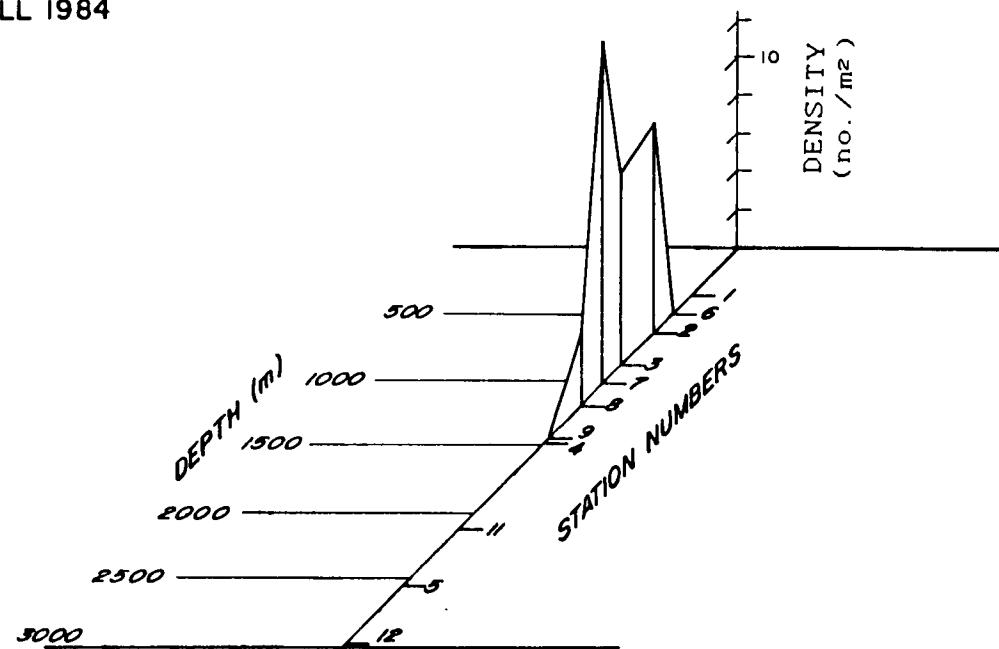
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-76

SPIOPHANES BOMBYX

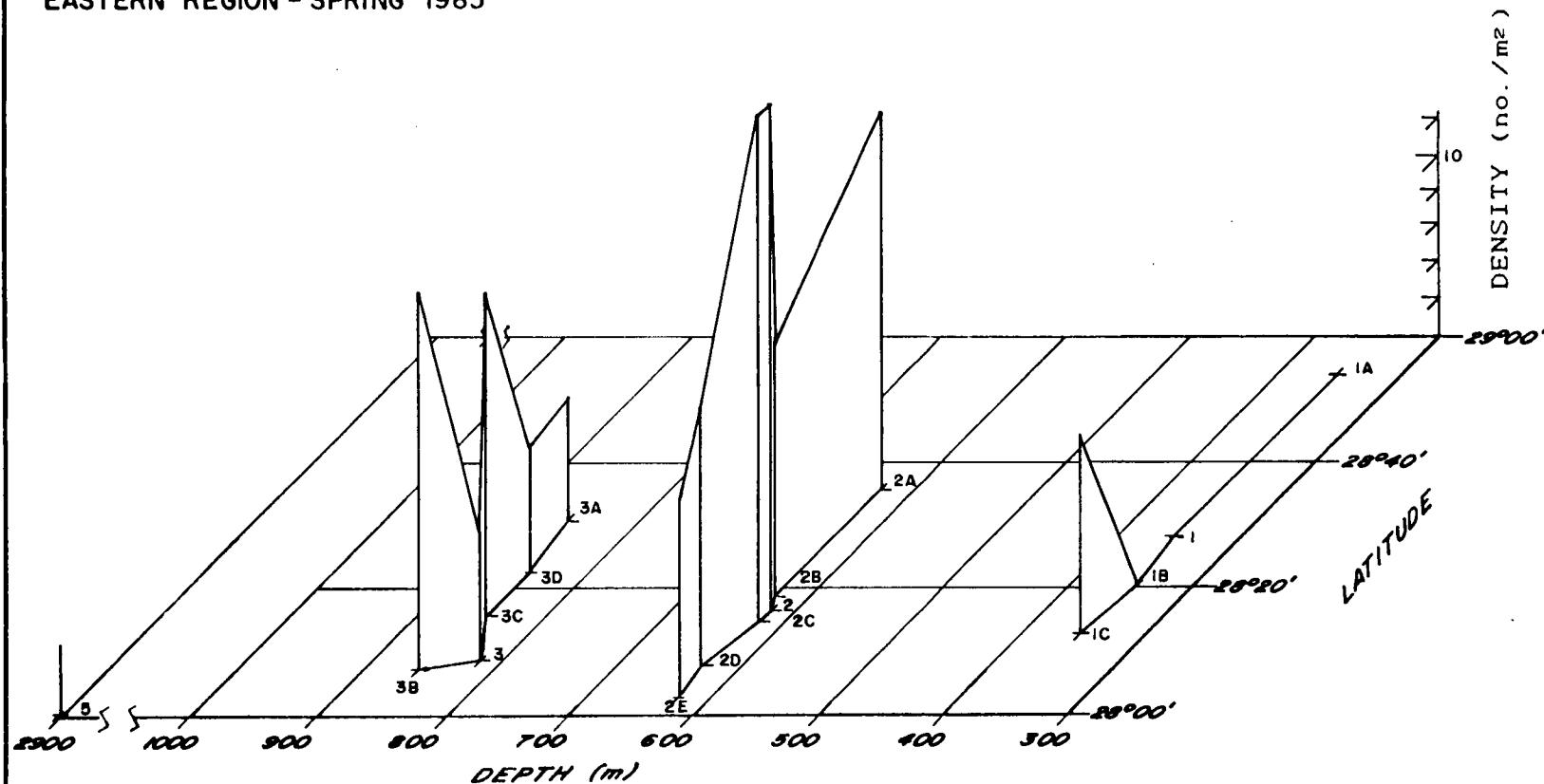
CENTRAL REGION - FALL 1984



SPIOPHANES BOMBYX

EASTERN REGION - SPRING 1985

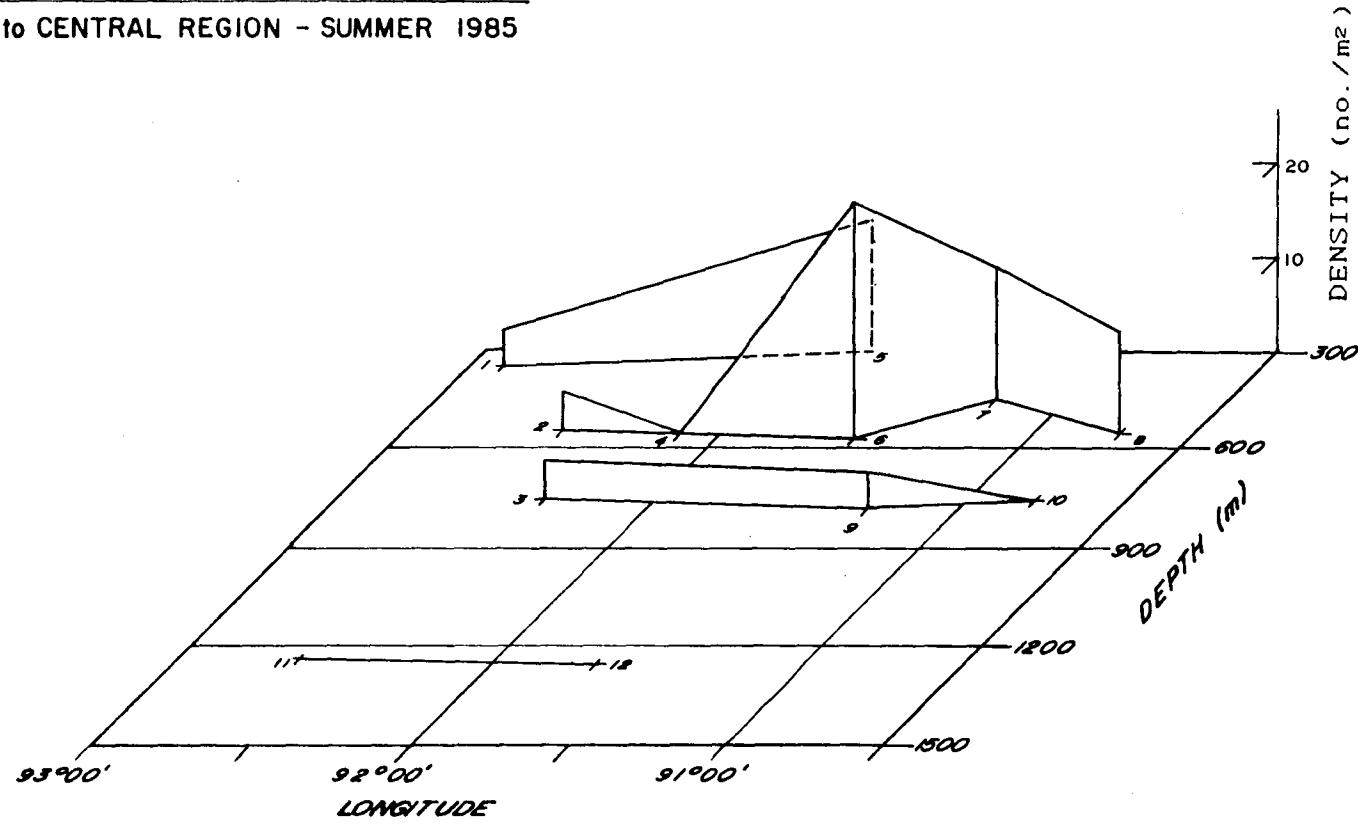
C-77



SPIOPHANES BOMBYX

WESTERN to CENTRAL REGION - SUMMER 1985

C-78

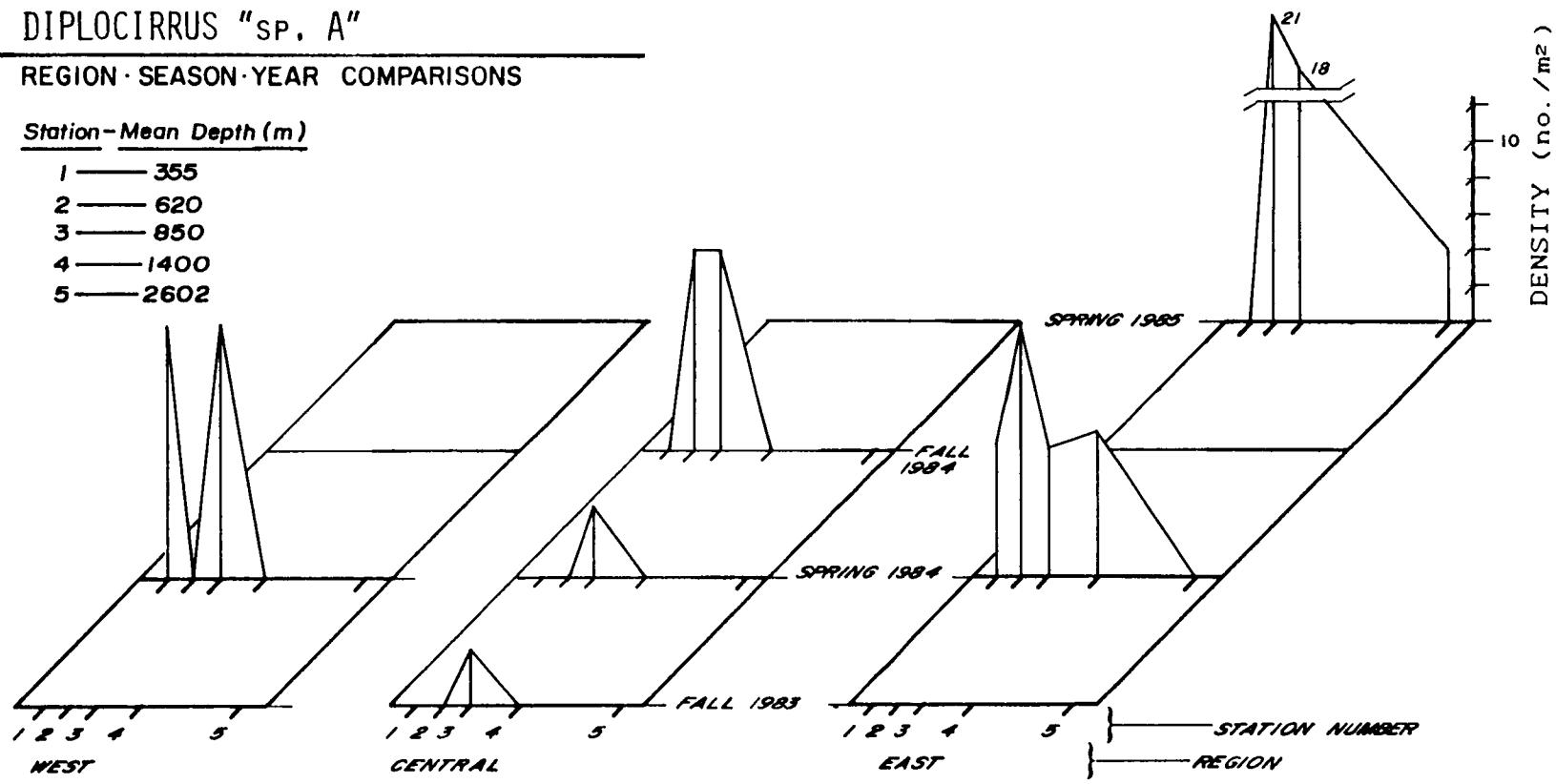


DIPLOCIRRUS "SP. A"

REGION · SEASON · YEAR COMPARISONS

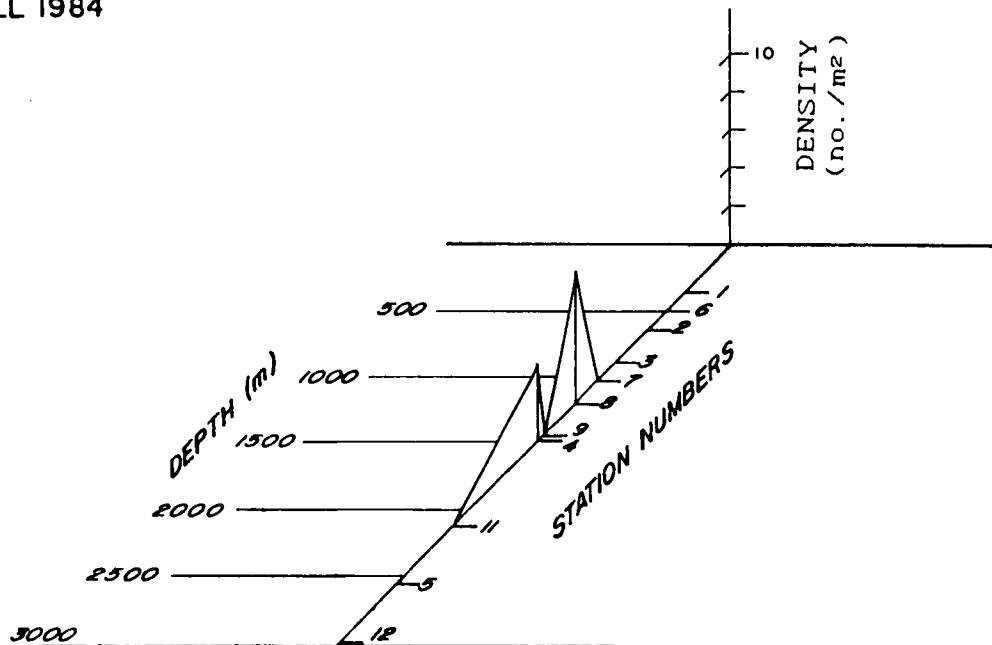
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



DIPLOCIRRUS "SP. A"

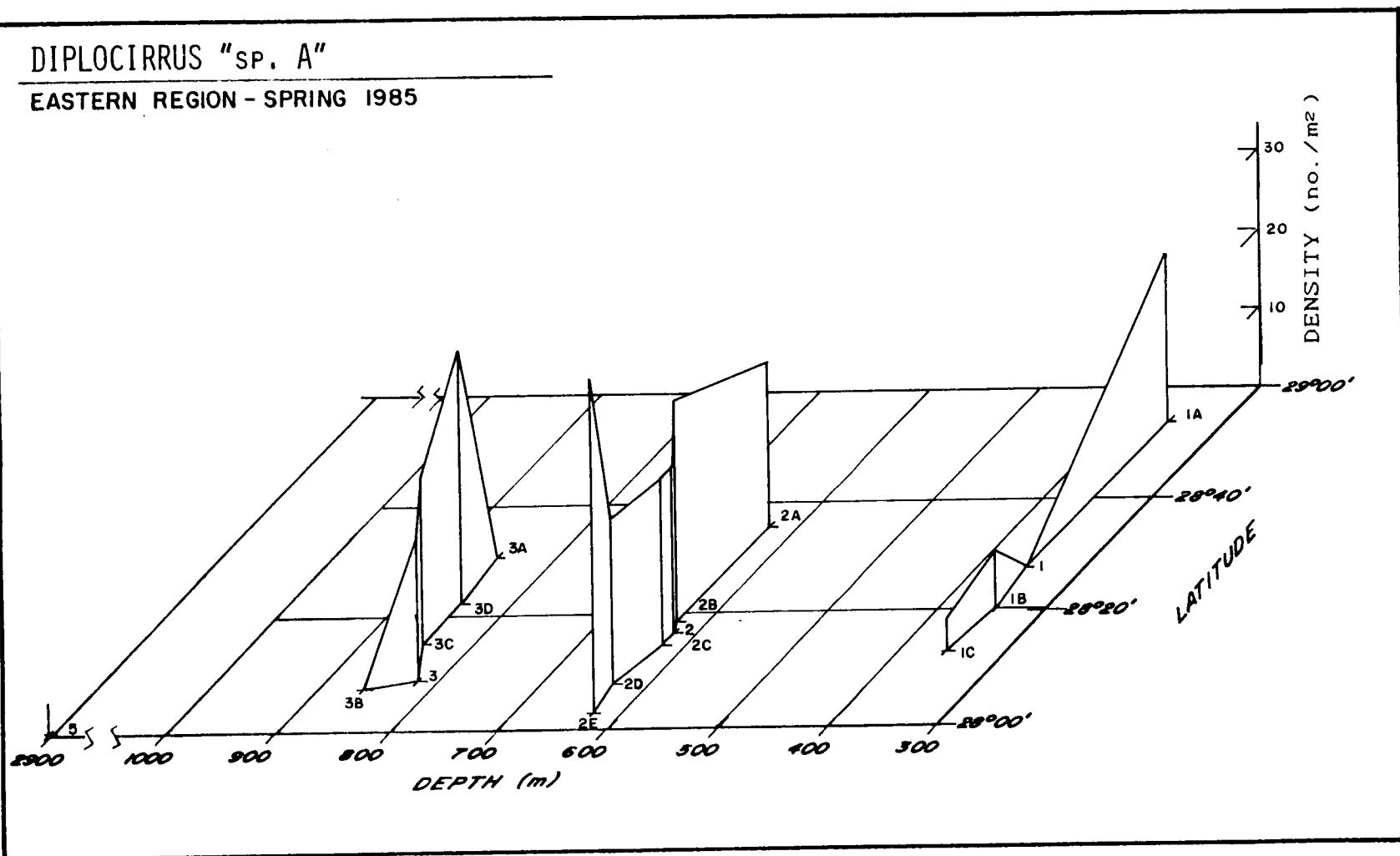
CENTRAL REGION - FALL 1984



DIPLOCIRRUS "SP. A"

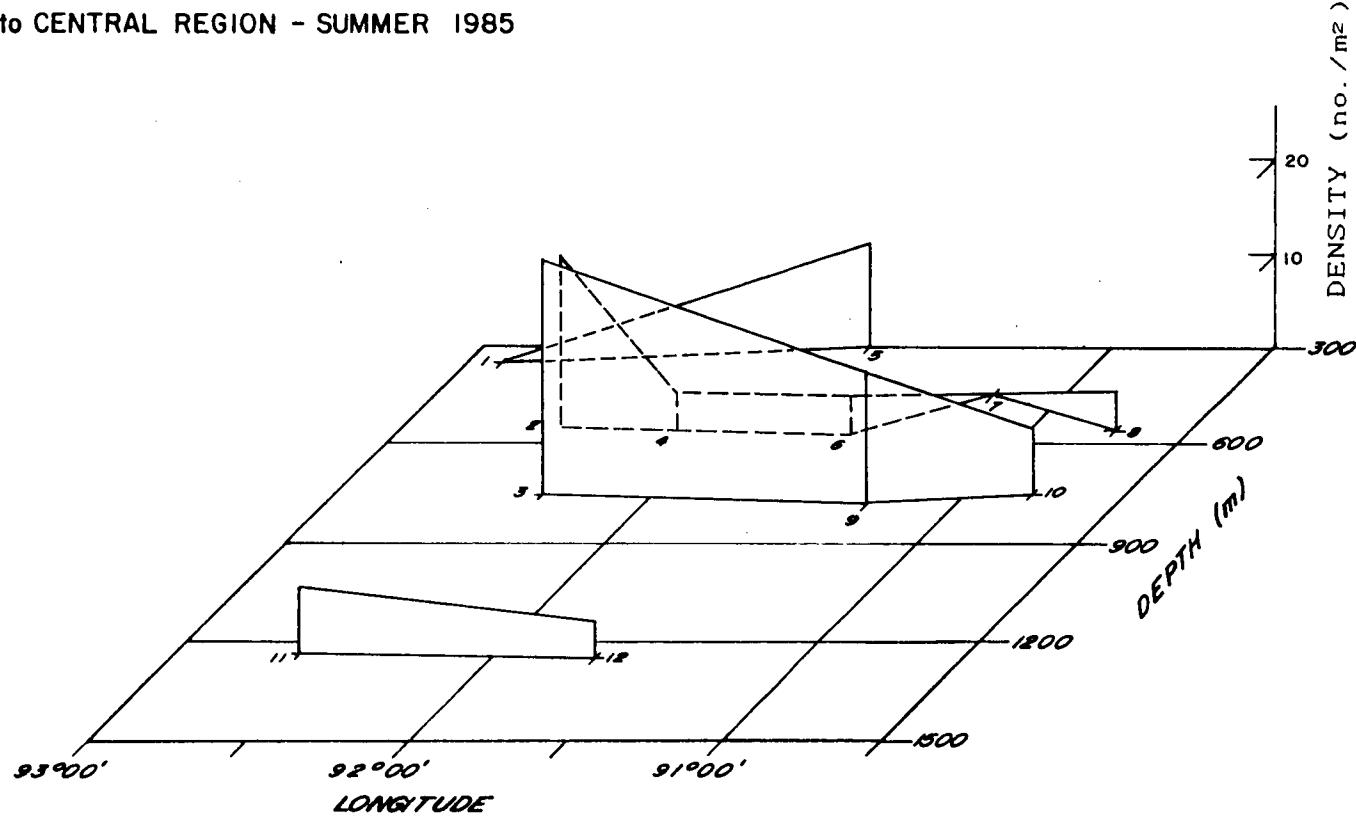
EASTERN REGION - SPRING 1985

C-81



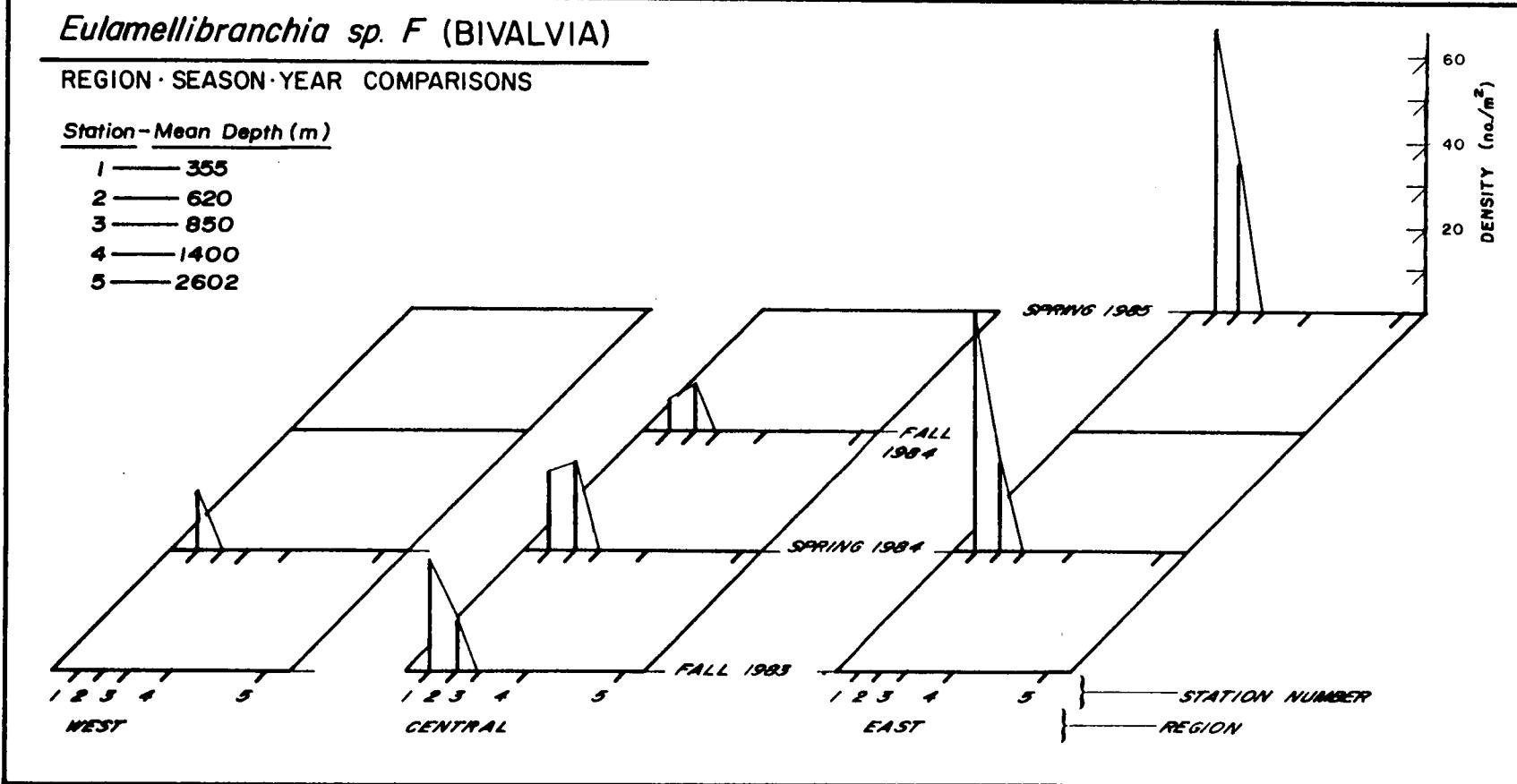
DIPLOCIRRUS "SP. A"

WESTERN to CENTRAL REGION - SUMMER 1985



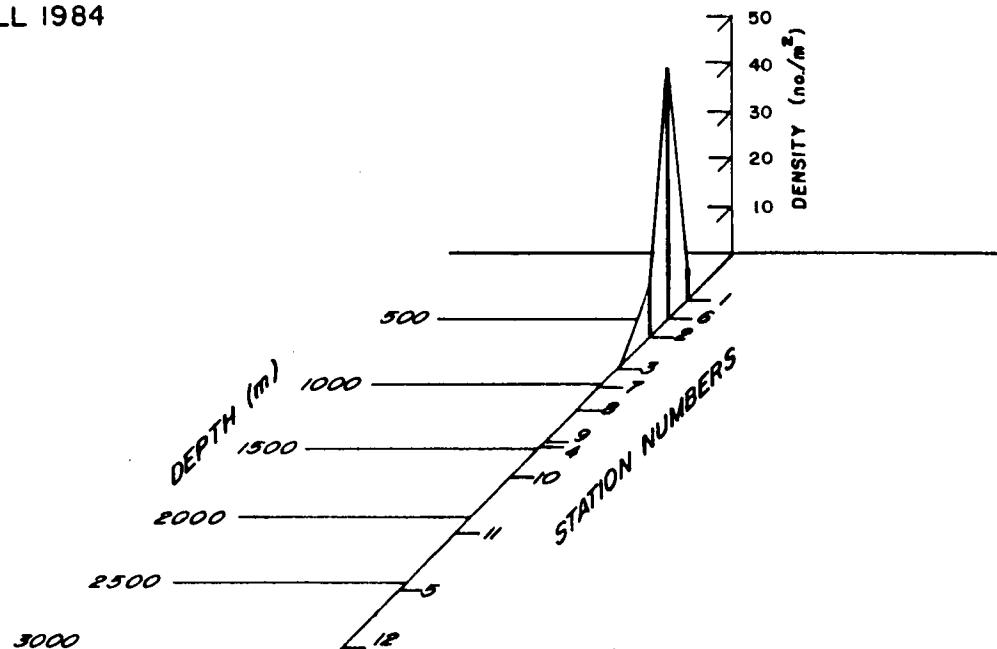
C-82

C-2
Bivalves



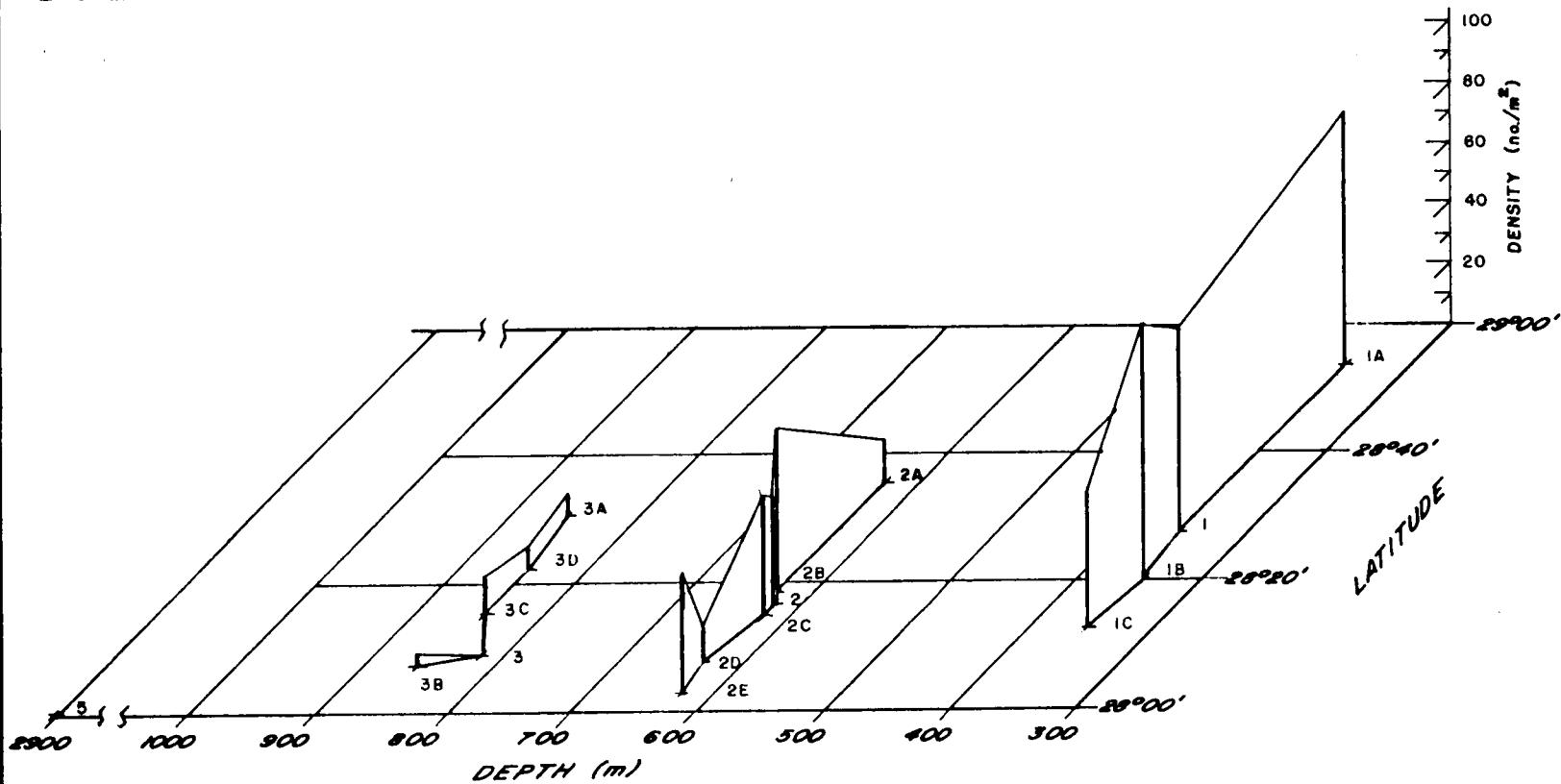
Eulamellibranchia sp. F (BIVALVIA)

CENTRAL REGION - FALL 1984



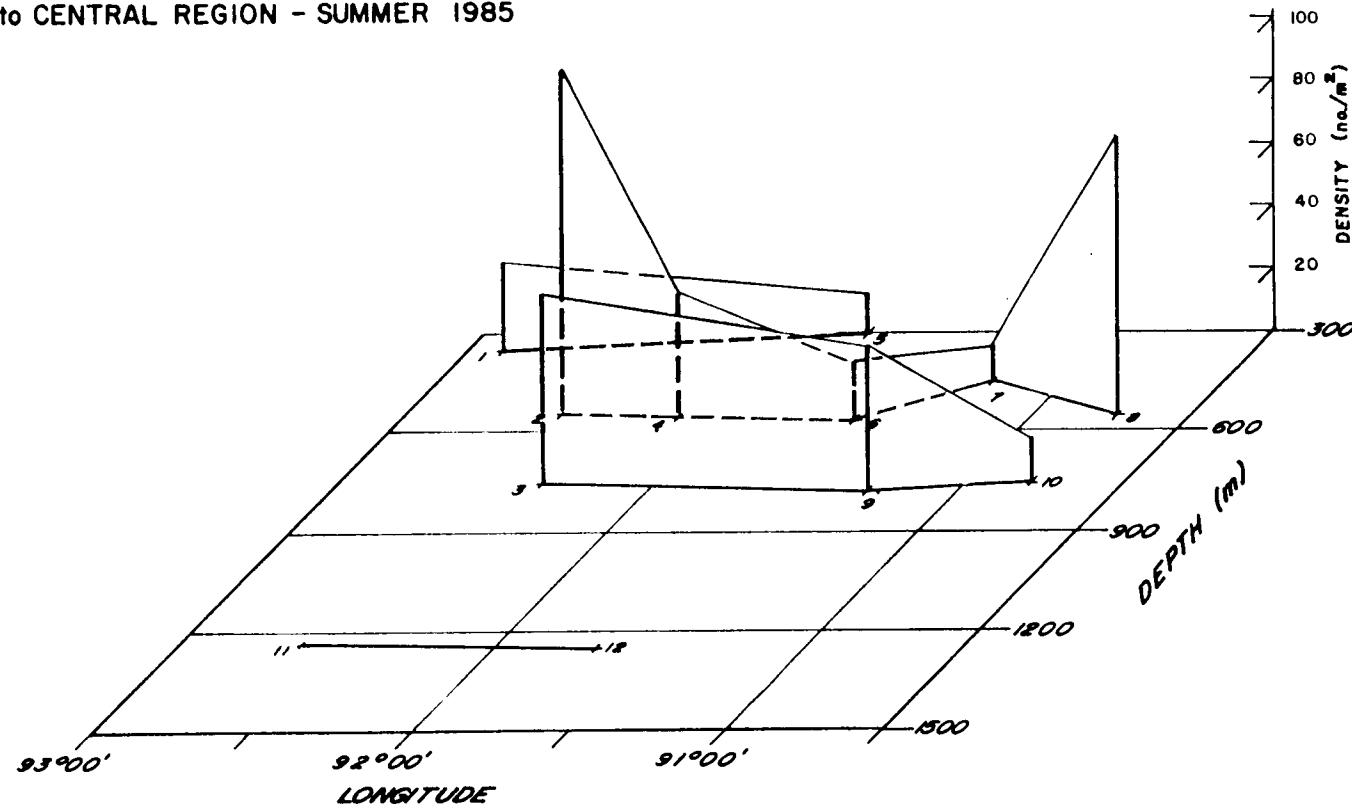
Eulamellibranchia sp. F (BIVALVIA)

EASTERN REGION - SPRING 1985



Eulamellibranchia sp. F (BIVALVIA)

WESTERN to CENTRAL REGION - SUMMER 1985



?*Vesicomya* sp. (BIVALVIA)

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

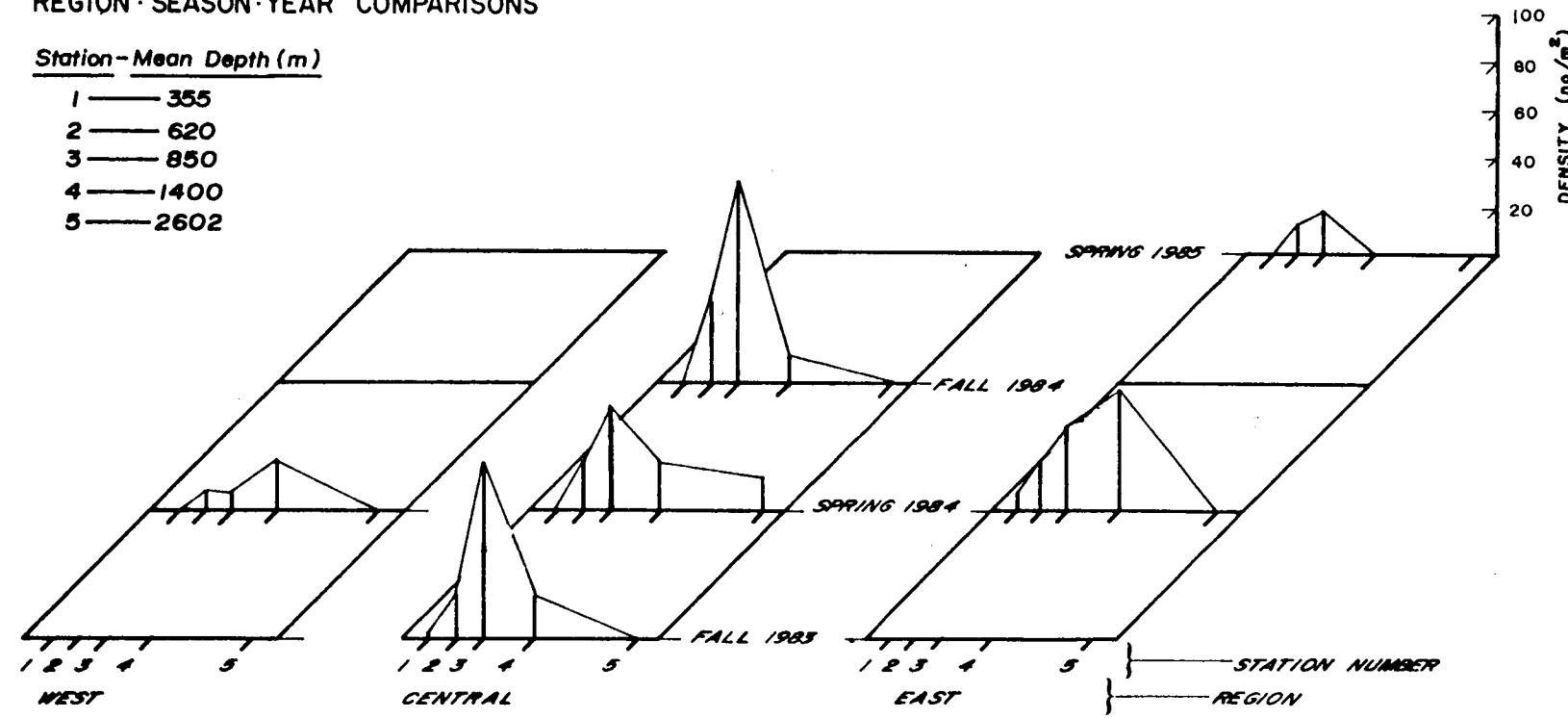
1 — 355

2 — 620

3 — 850

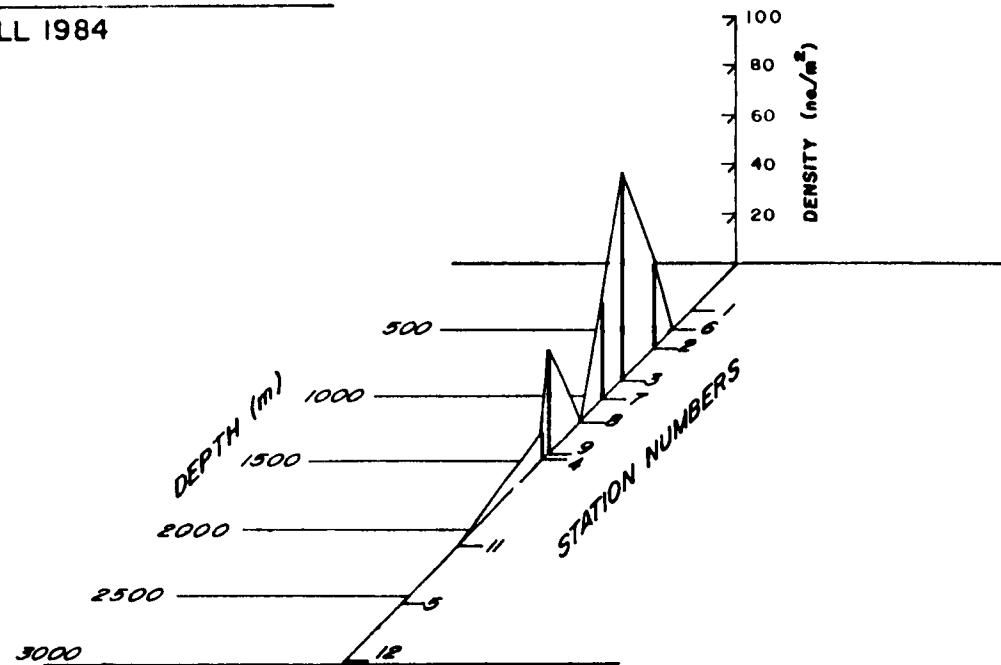
4 — 1400

5 — 2602



?*Vesicomya* sp. (BIVALVIA)

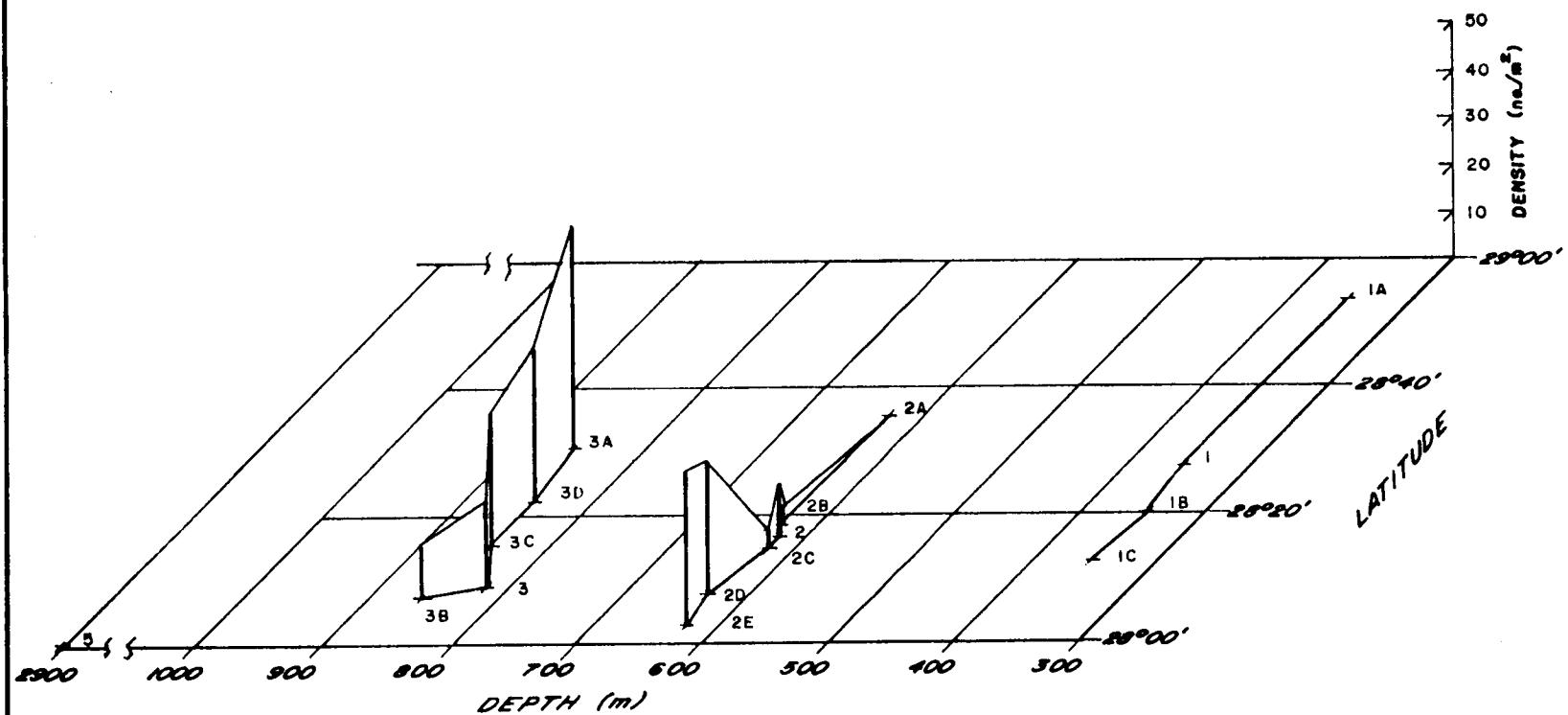
CENTRAL REGION - FALL 1984



?Vesicomya sp. (BIVALVIA)

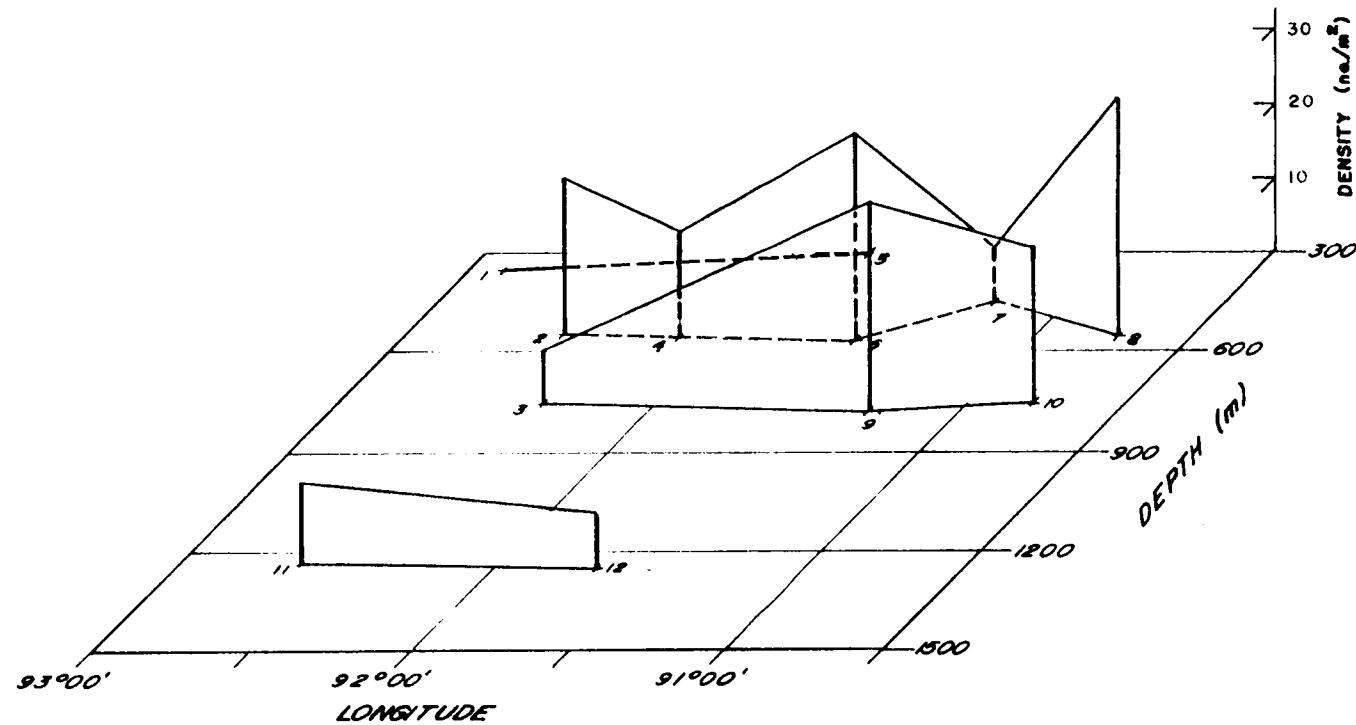
EASTERN REGION - SPRING 1985

C-90



?*Vesicomya* sp. (BIVALVIA)

WESTERN to CENTRAL REGION - SUMMER 1985



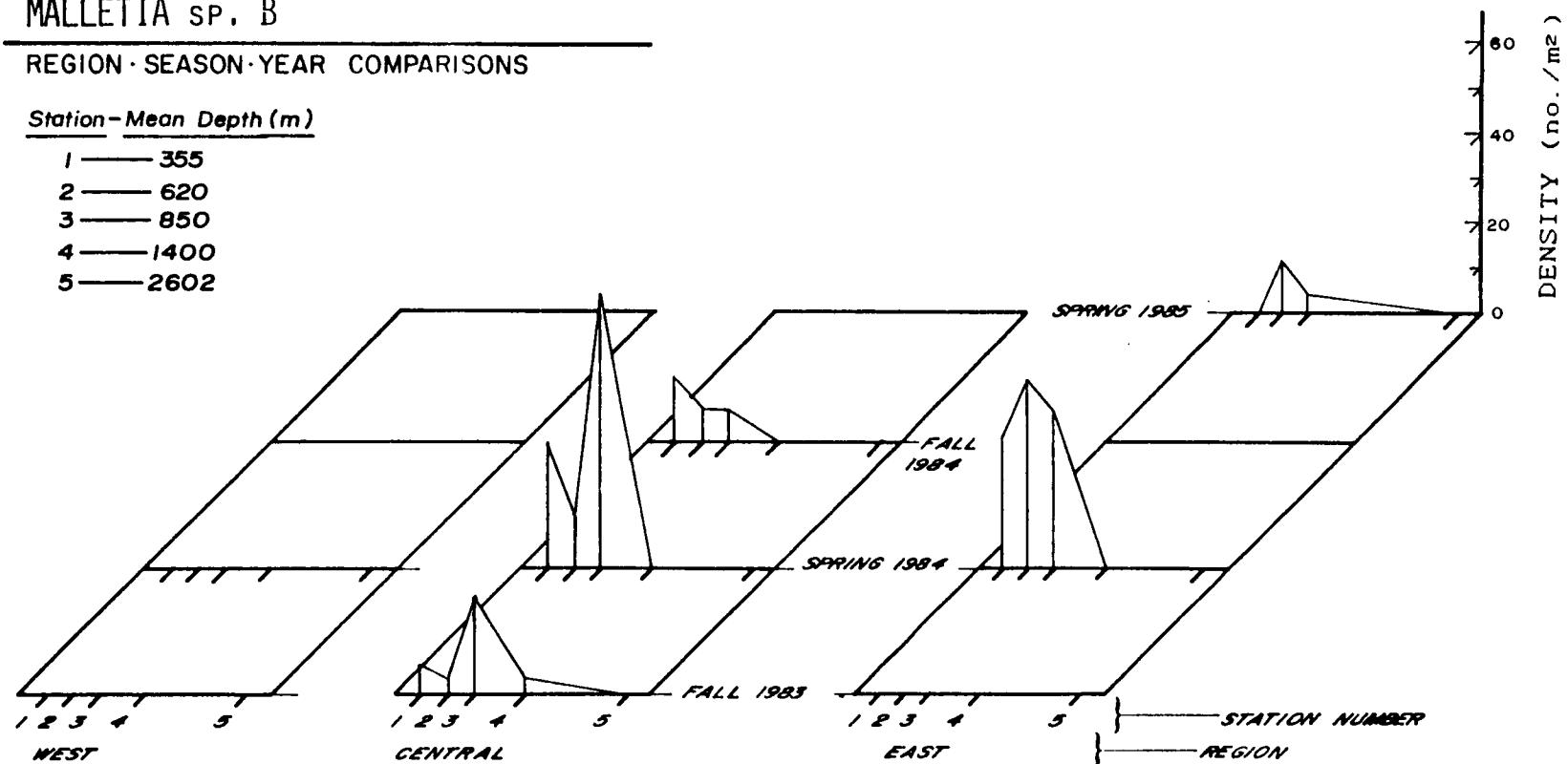
C-91

MALLETIA SP. B

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

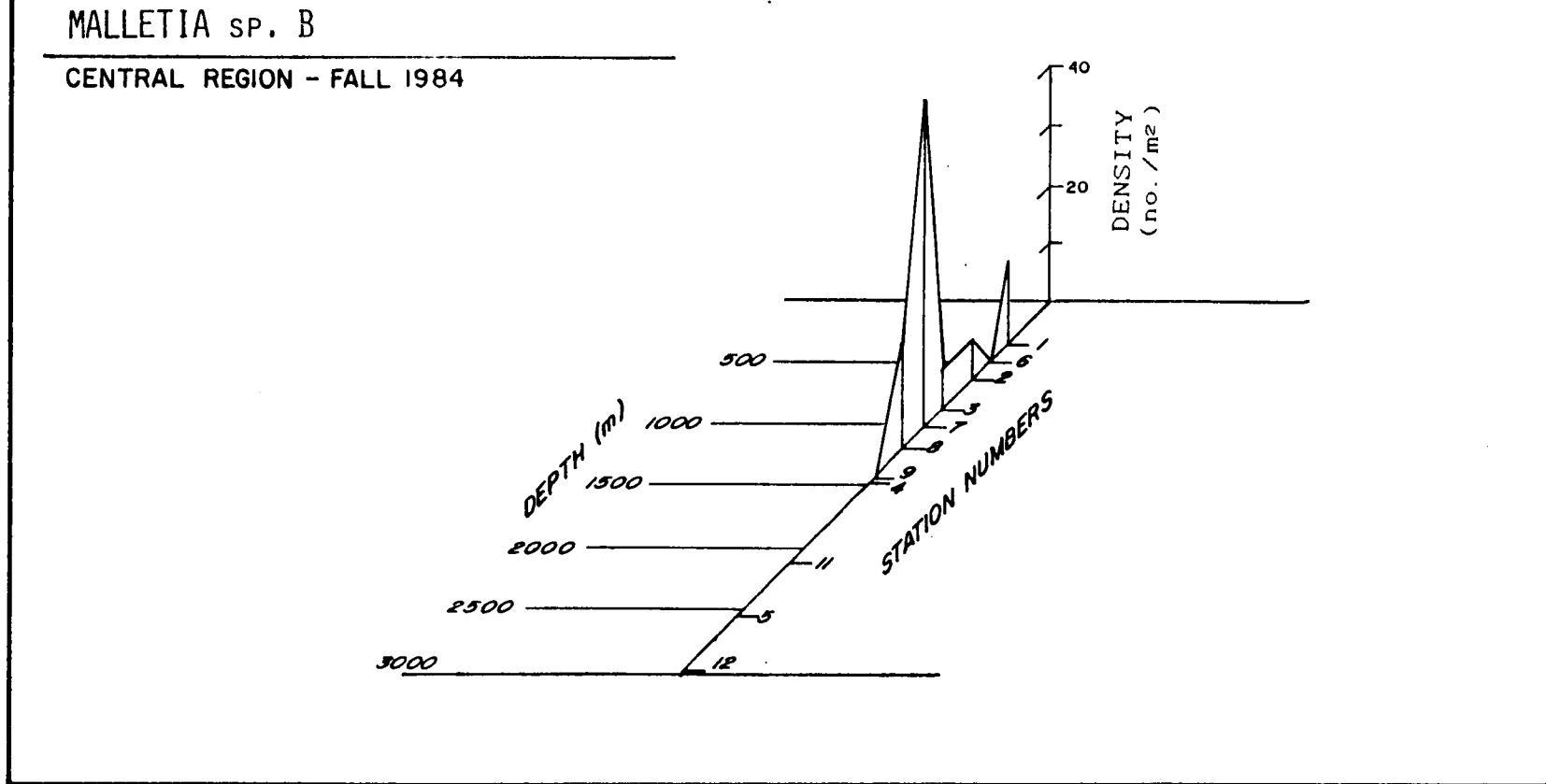
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-92

MALLETIA SP. B

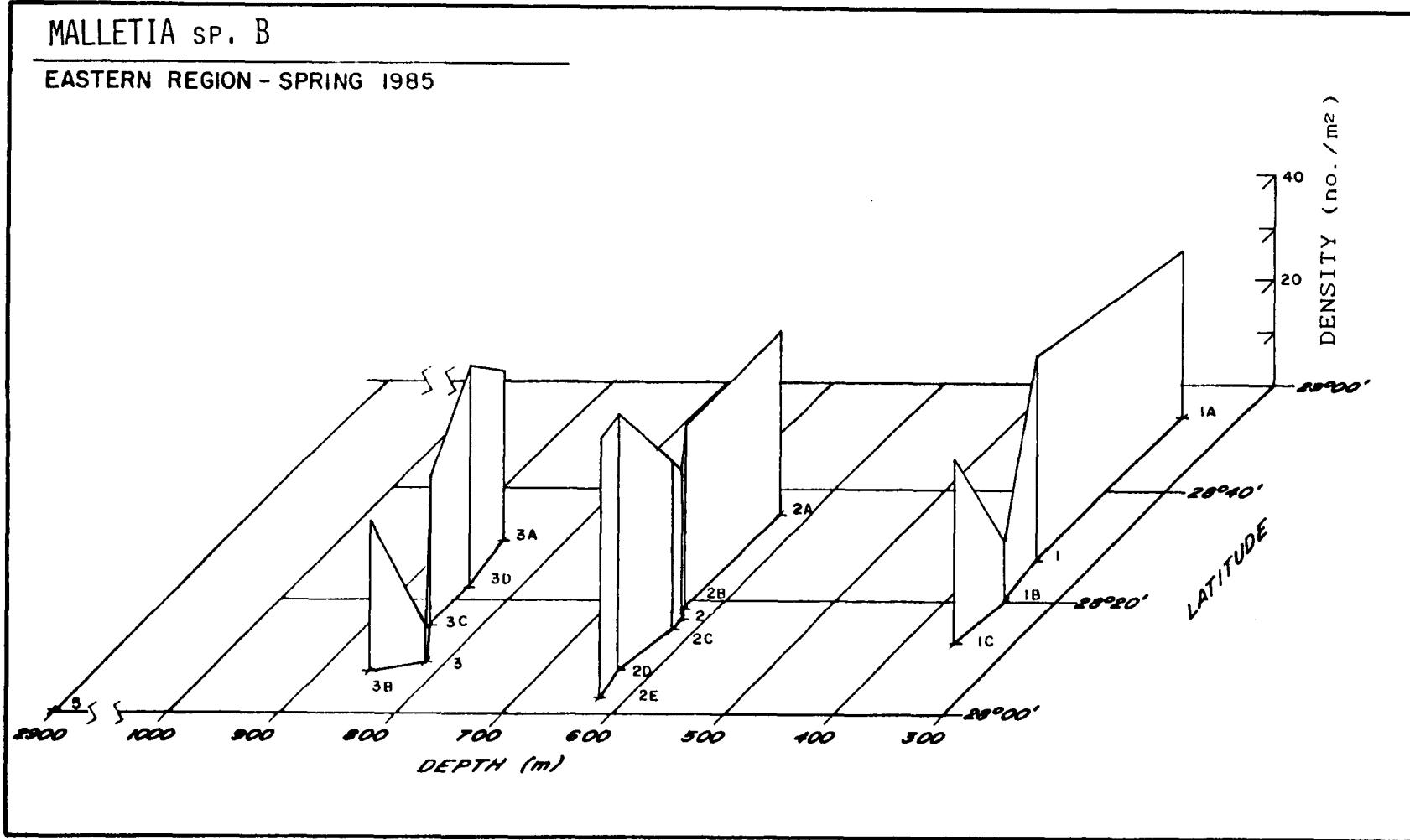
CENTRAL REGION - FALL 1984



MALLETIA sp. B

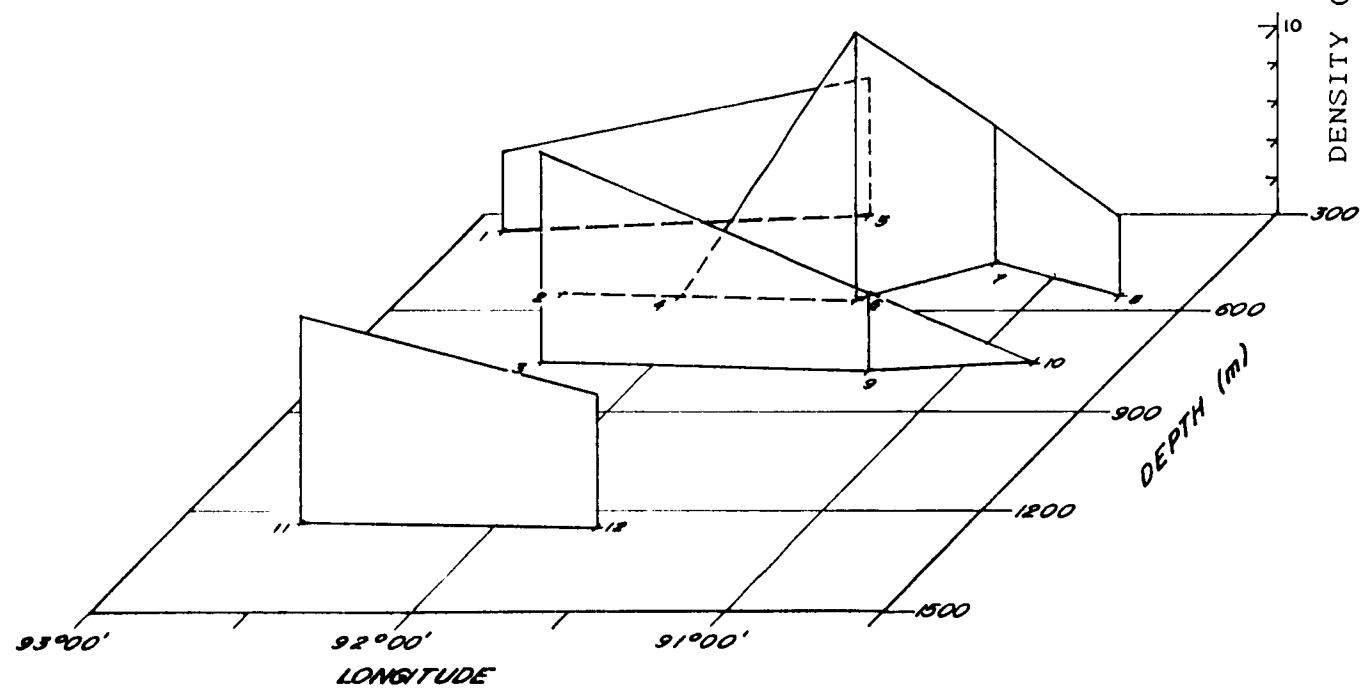
EASTERN REGION - SPRING 1985

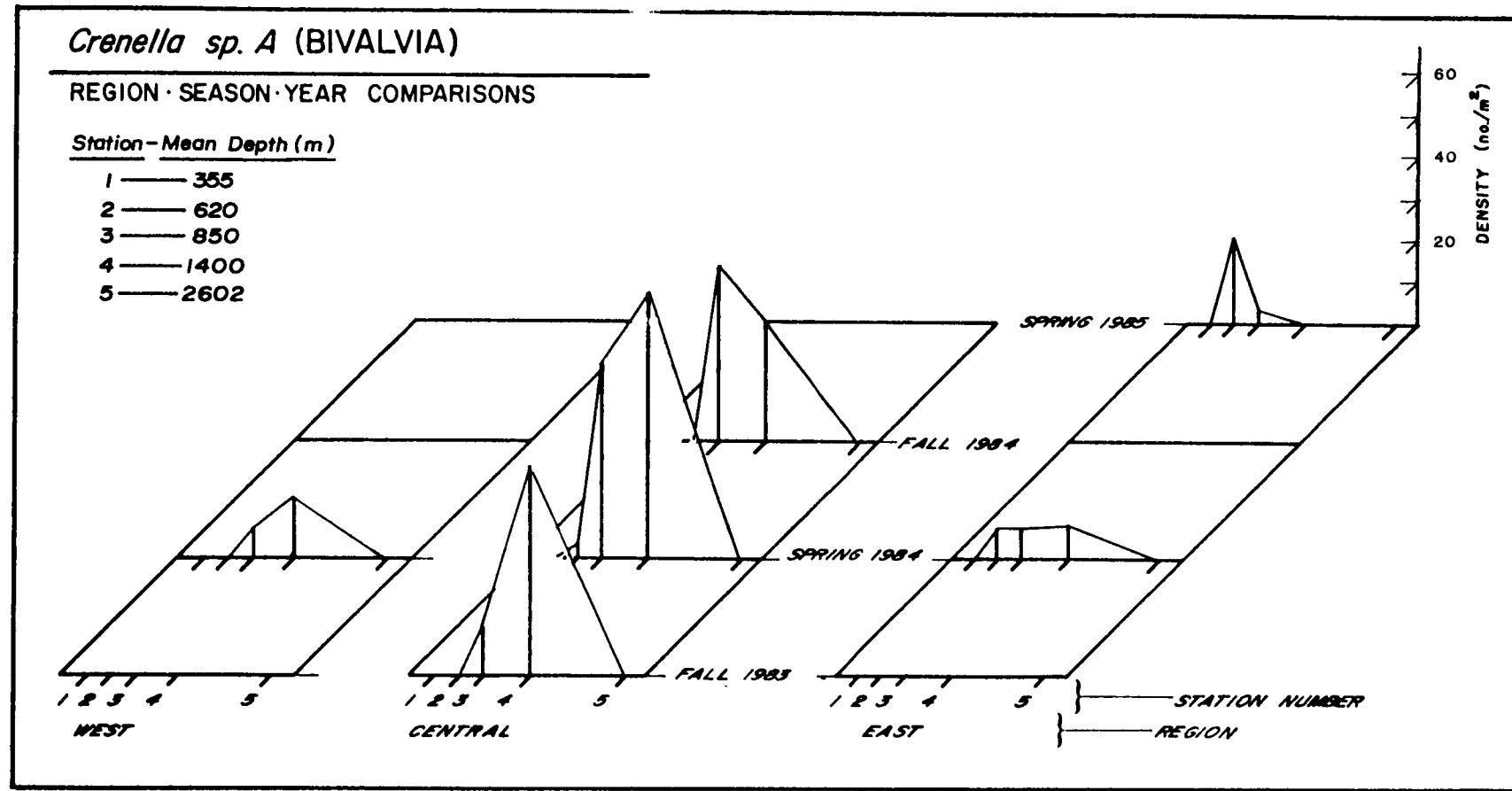
C-94



MALLETIA sp. B

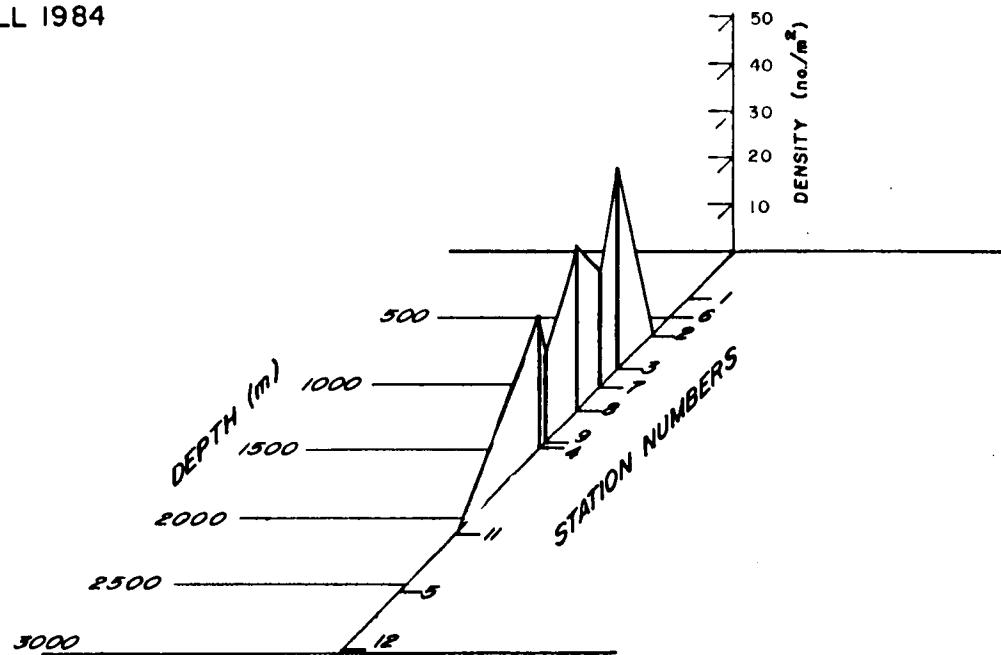
WESTERN to CENTRAL REGION - SUMMER 1985





Crenella sp. A (BIVALVIA)

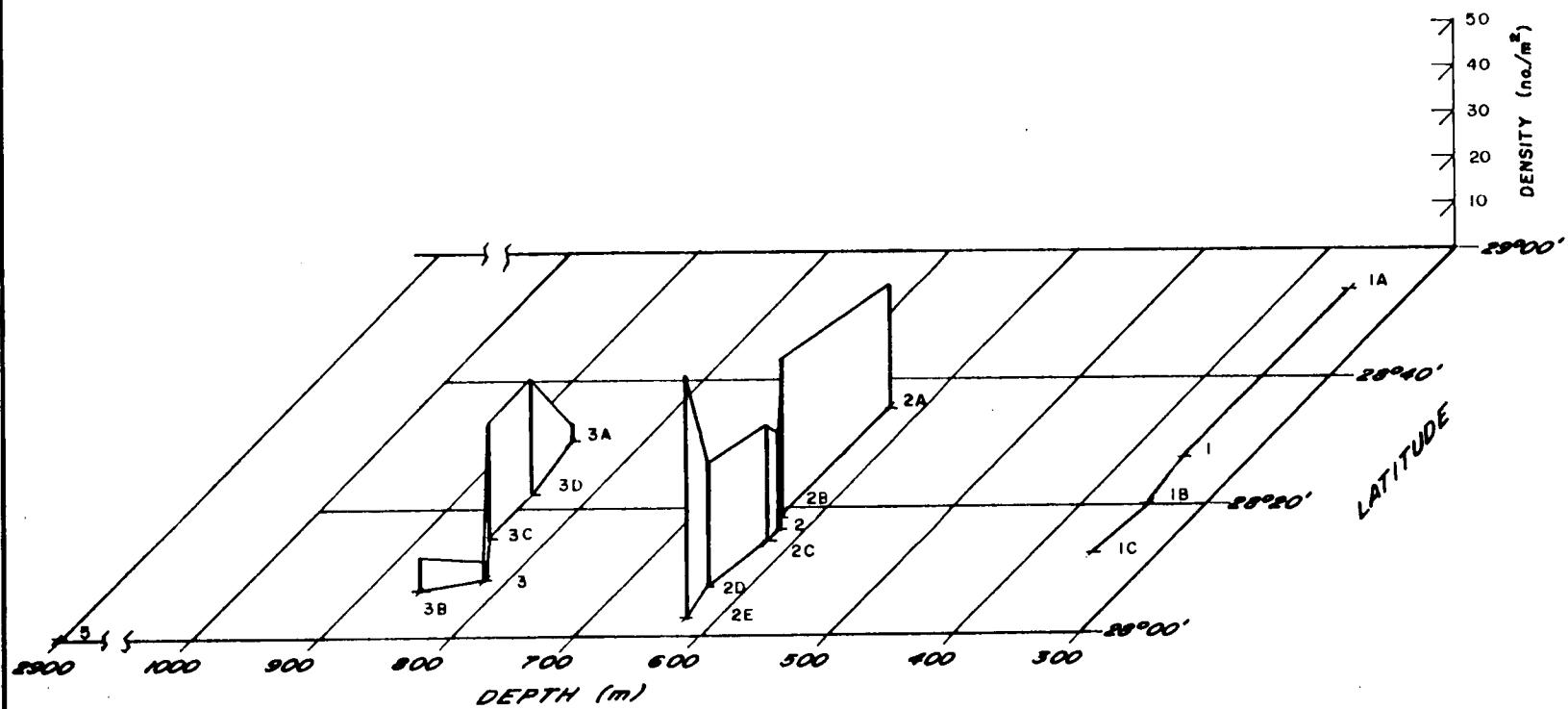
CENTRAL REGION - FALL 1984



Crenella sp. A (BIVALVIA)

EASTERN REGION - SPRING 1985

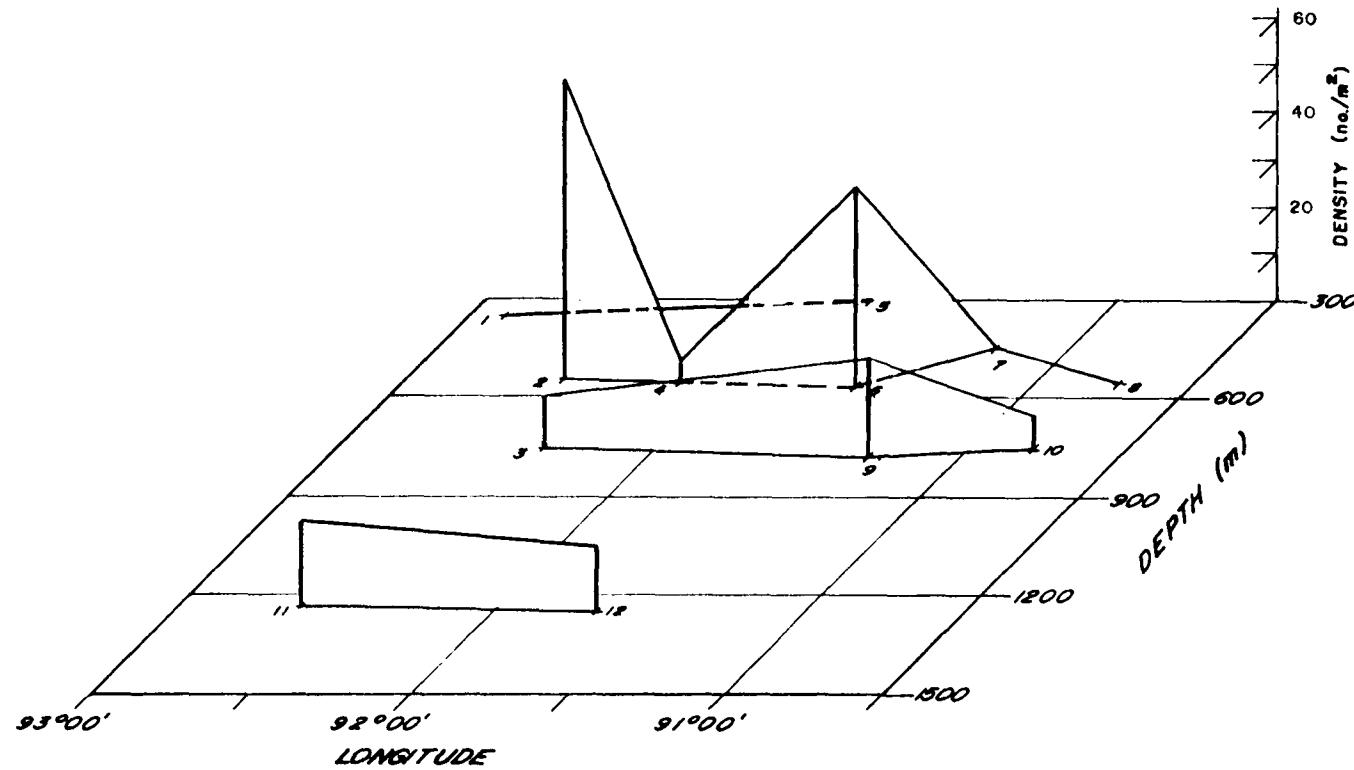
C-98



Crenella sp. A (BIVALVIA)

WESTERN to CENTRAL REGION - SUMMER 1985

C-99

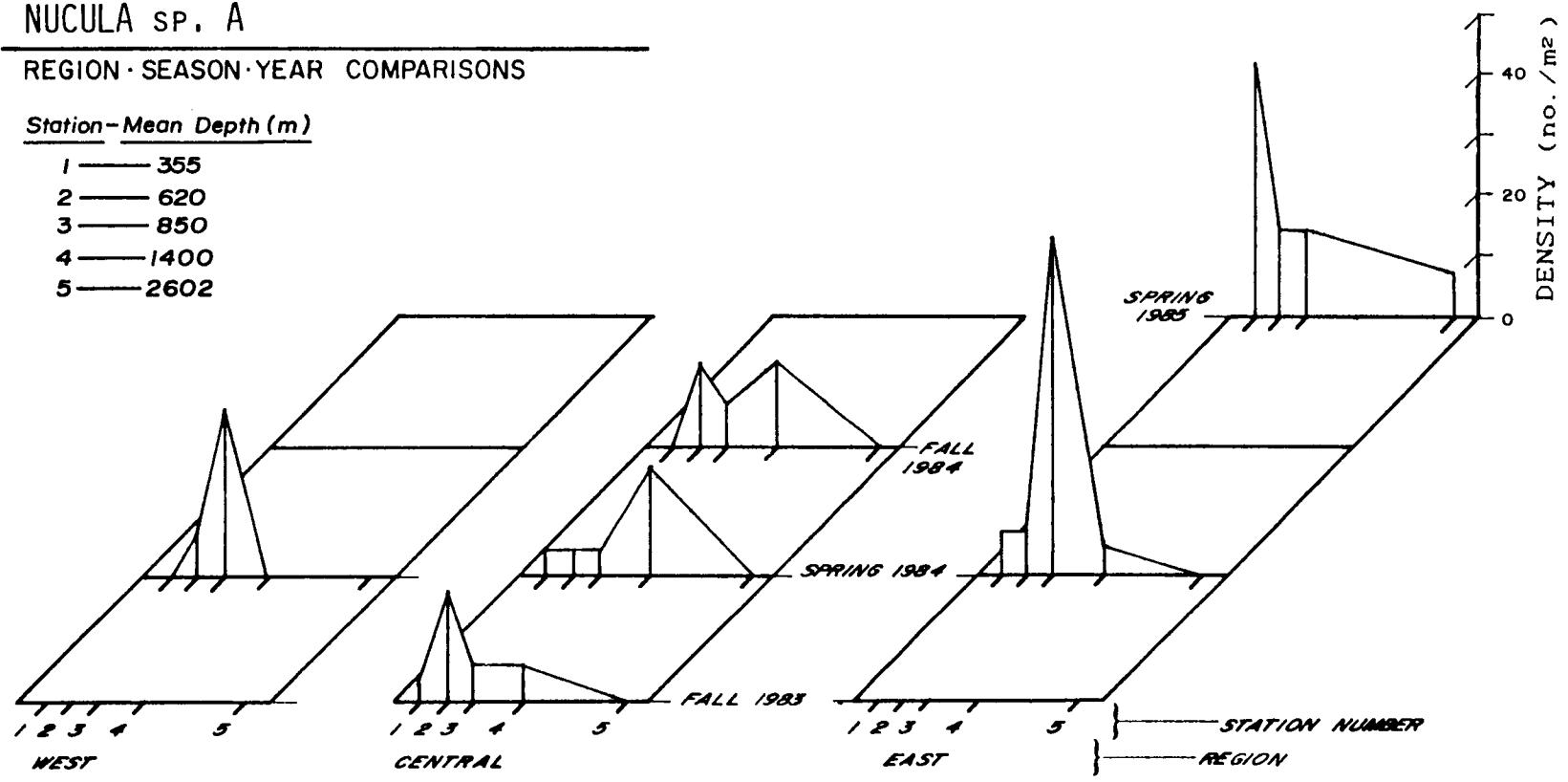


NUCULA SP. A

REGION · SEASON · YEAR COMPARISONS

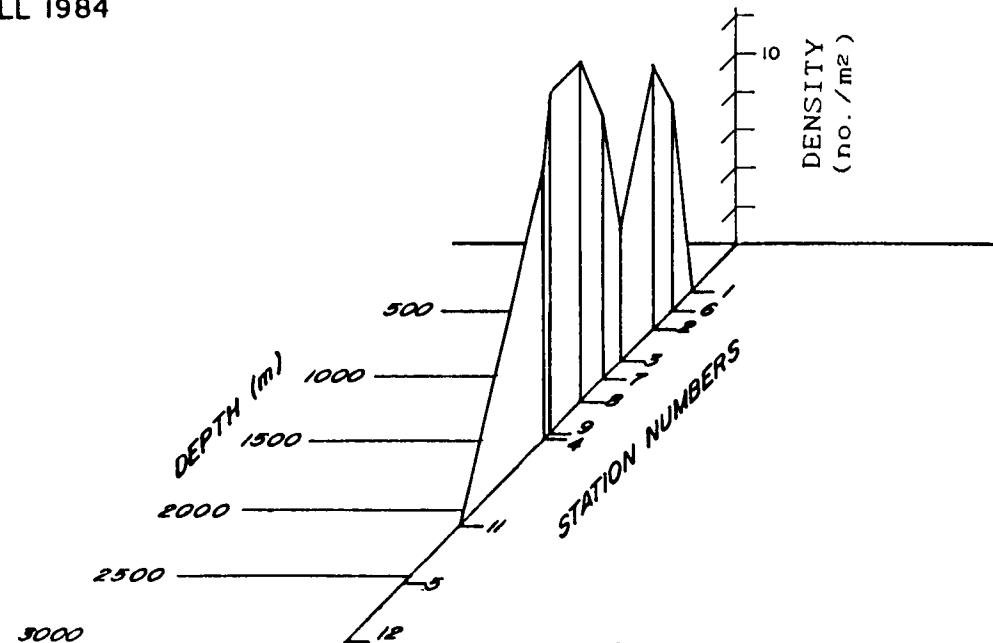
Station-Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



NUCULA SP. A

CENTRAL REGION - FALL 1984

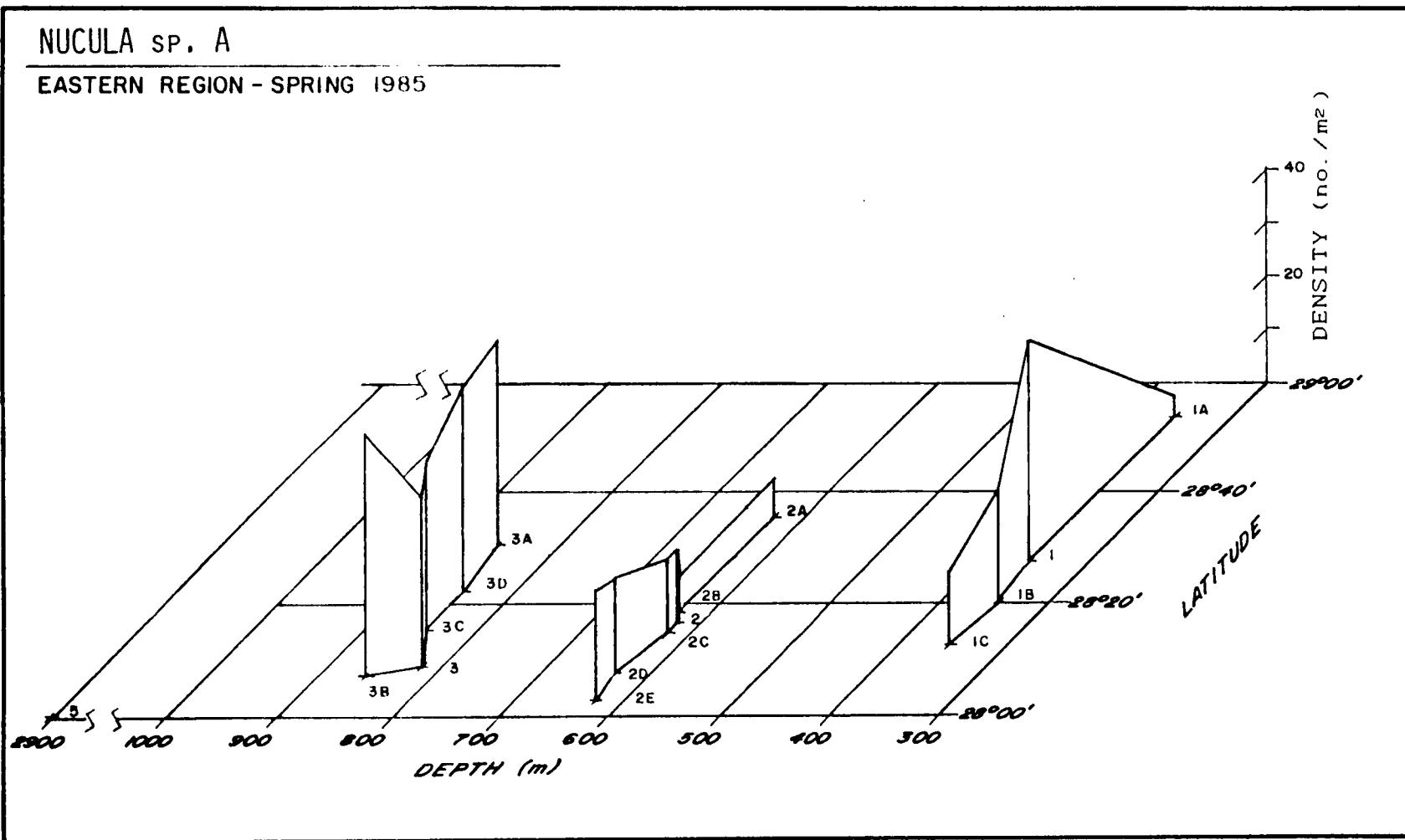


C-101

NUCULA SP. A

EASTERN REGION - SPRING 1985

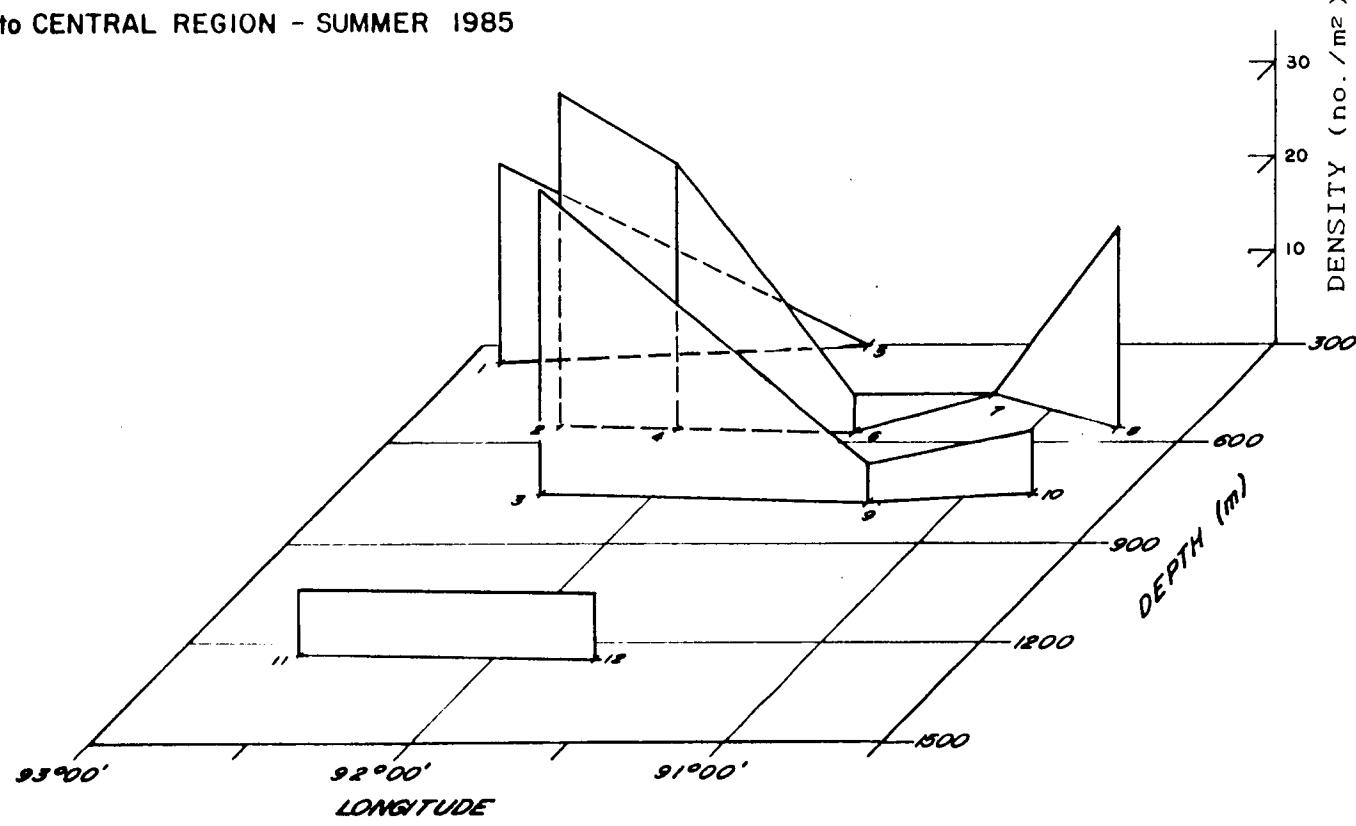
C-102

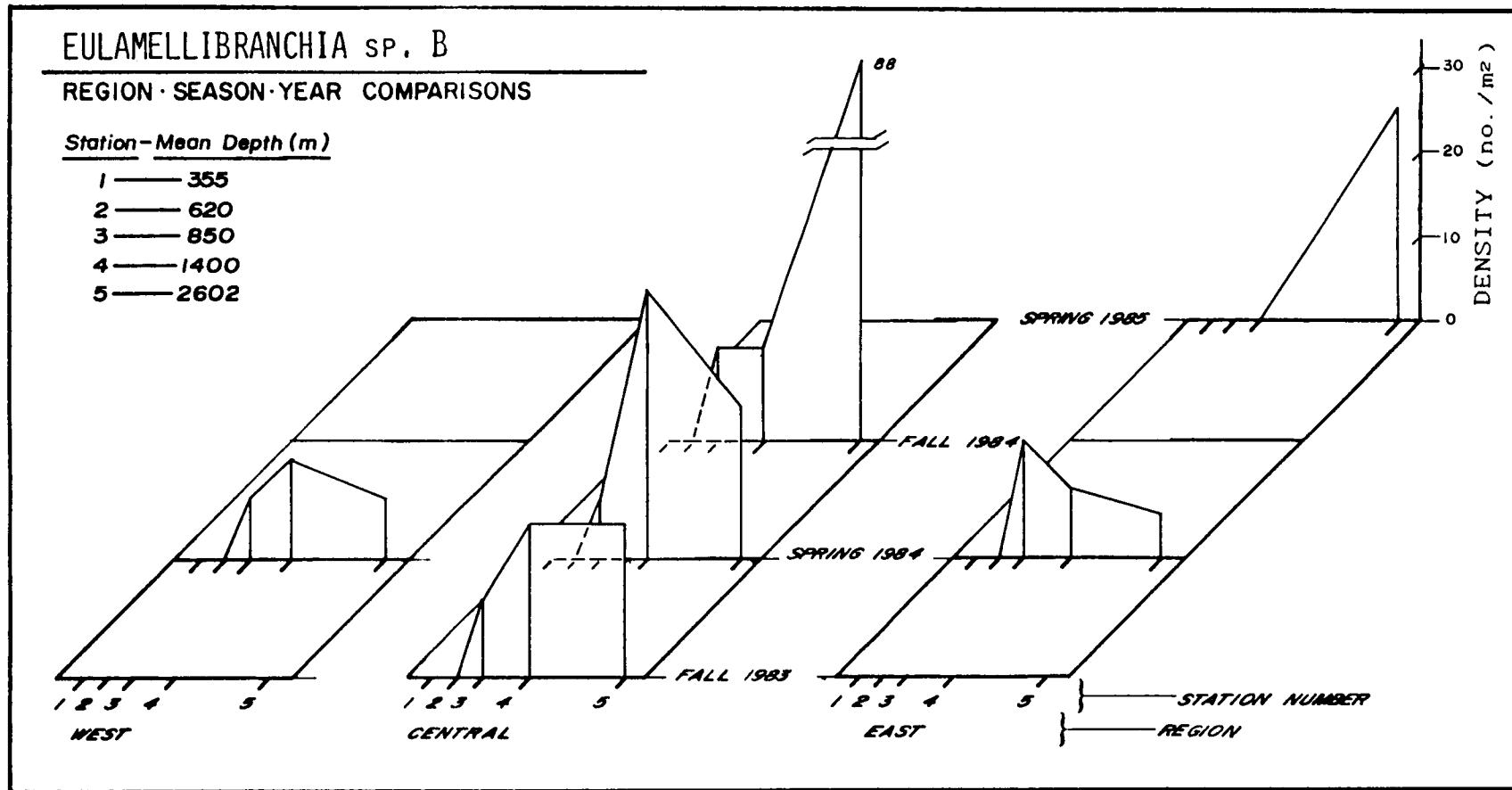


C-103

NUCULA SP. A

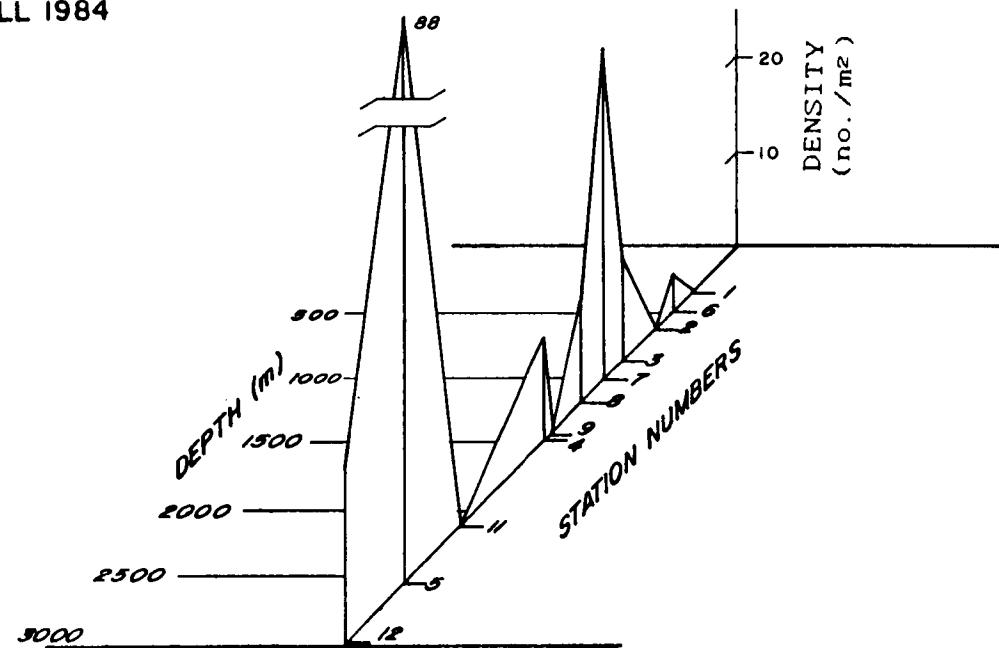
WESTERN to CENTRAL REGION - SUMMER 1985





EULAMELLIBRANCHIA SP. B

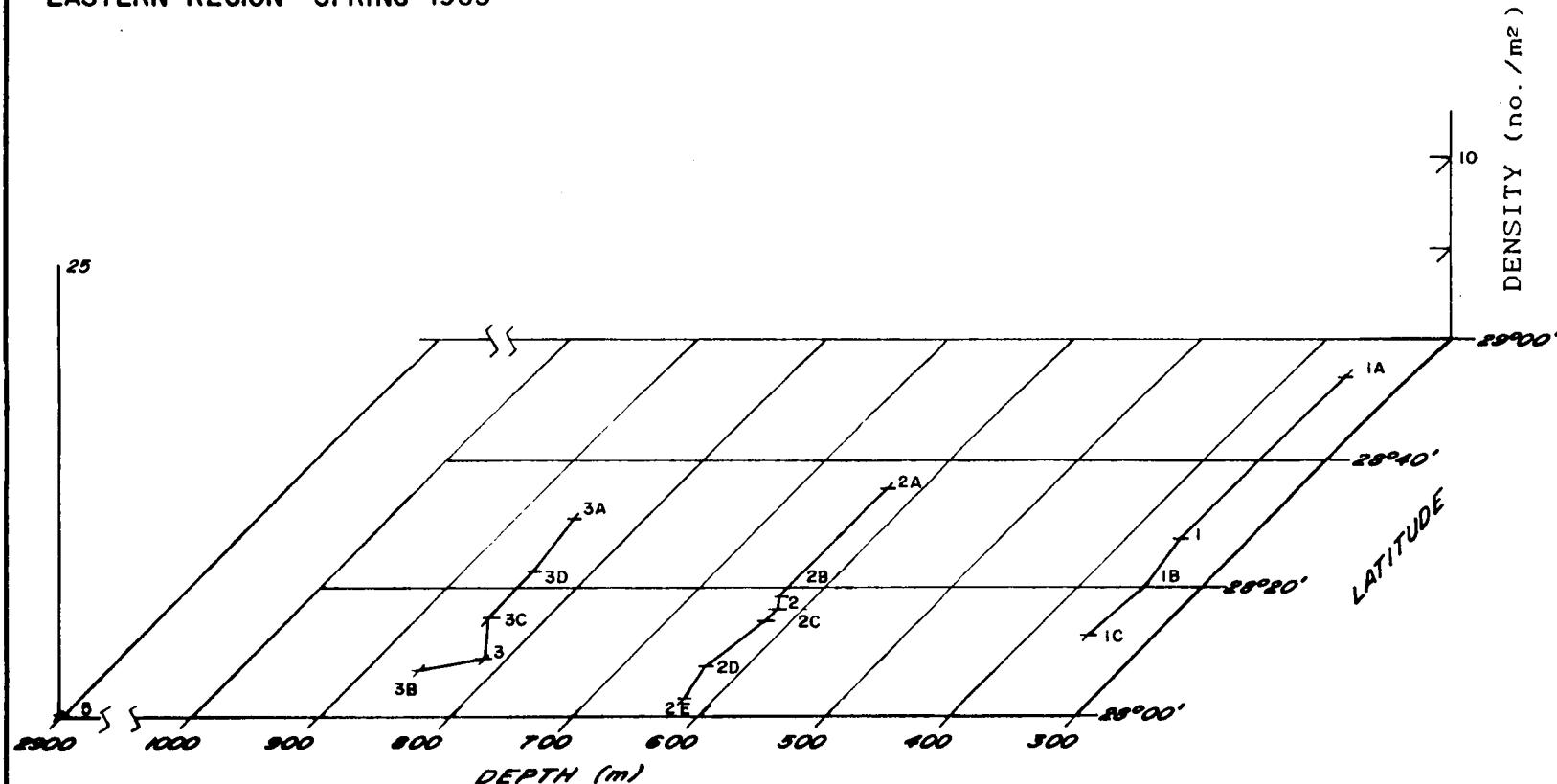
CENTRAL REGION - FALL 1984



EULAMELLIBRANCHIA SP. B

EASTERN REGION - SPRING 1985

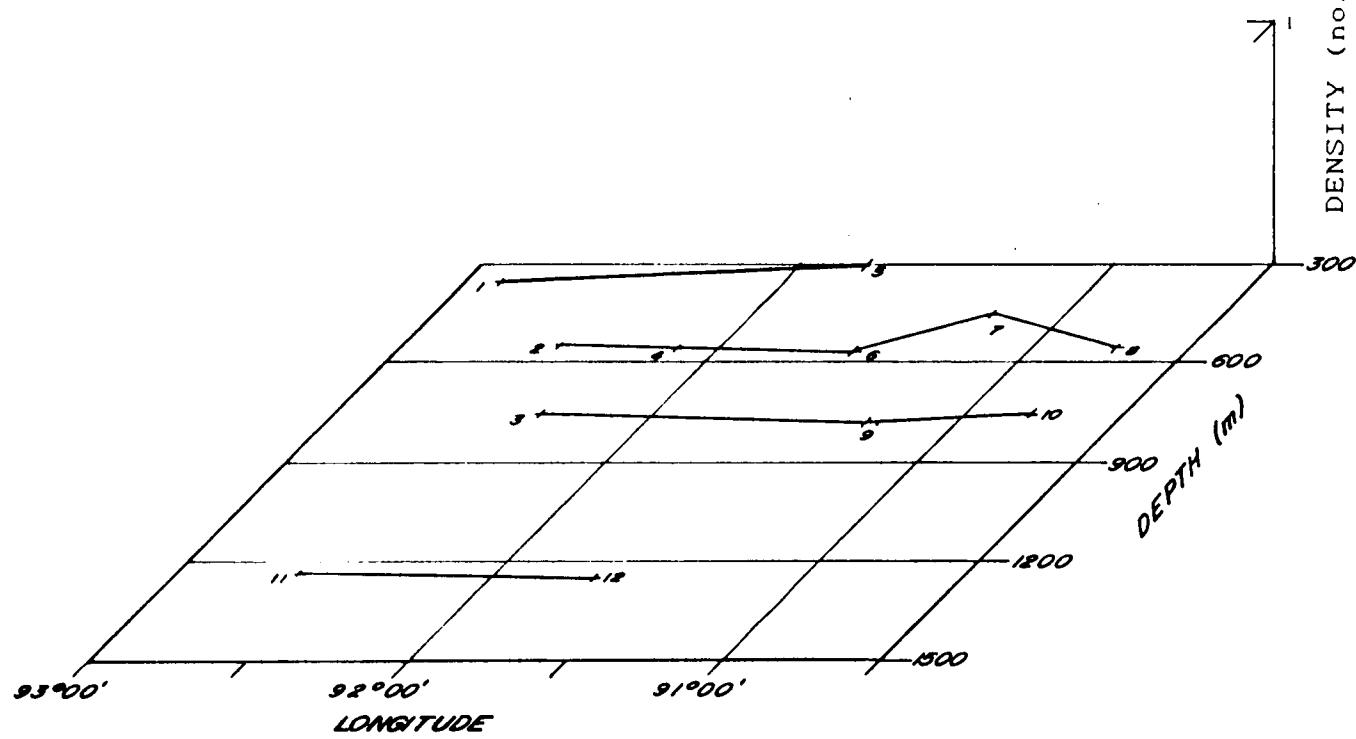
C-106



EULAMELLIBRANCHIA SP. B

WESTERN to CENTRAL REGION - SUMMER 1985

C-107

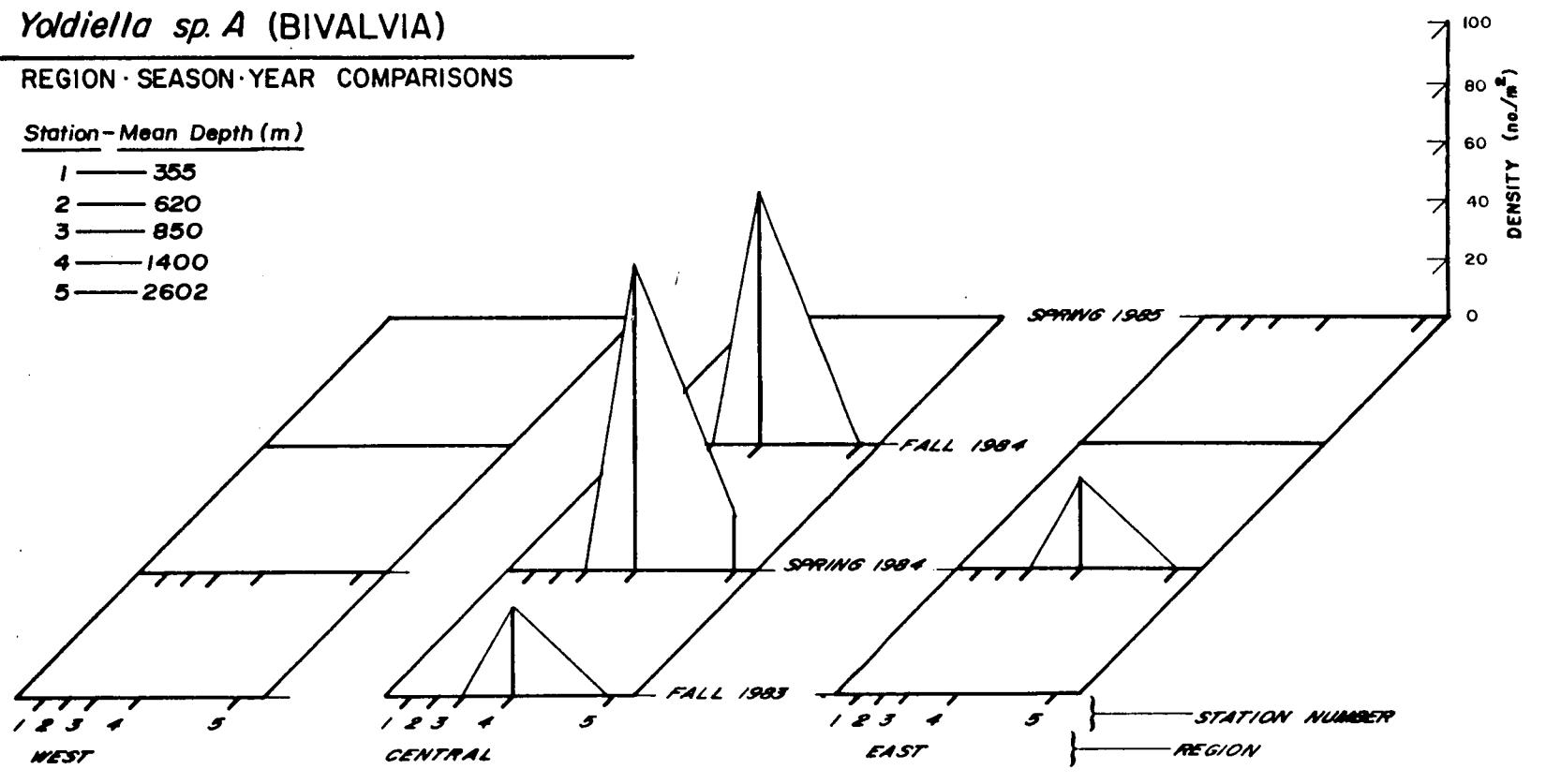


Yoldiella sp. A (BIVALVIA)

REGION · SEASON · YEAR COMPARISONS

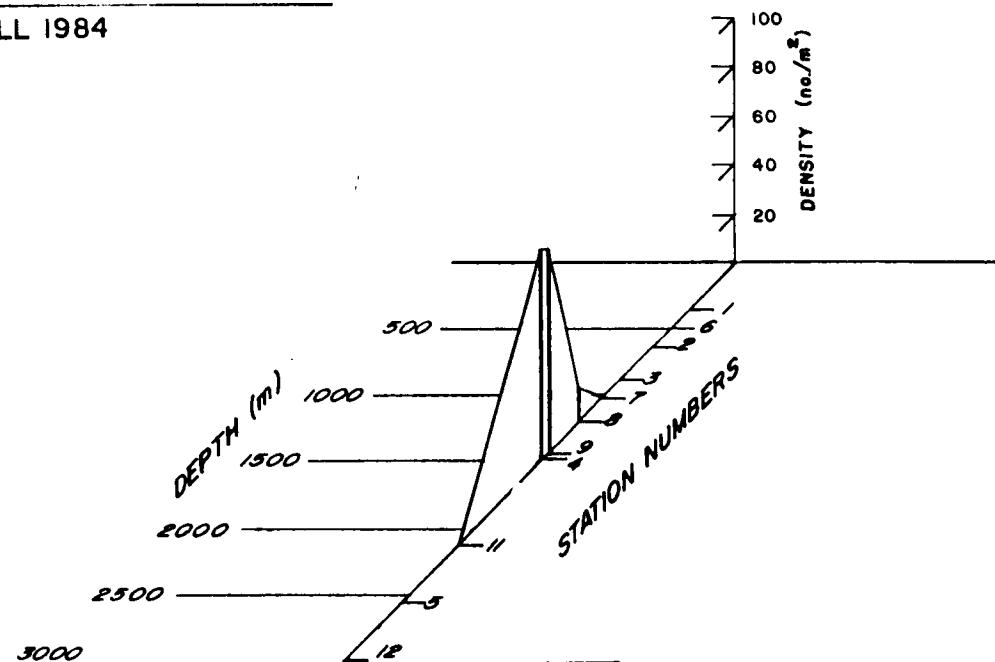
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



Yoldiella sp. A (BIVALVIA)

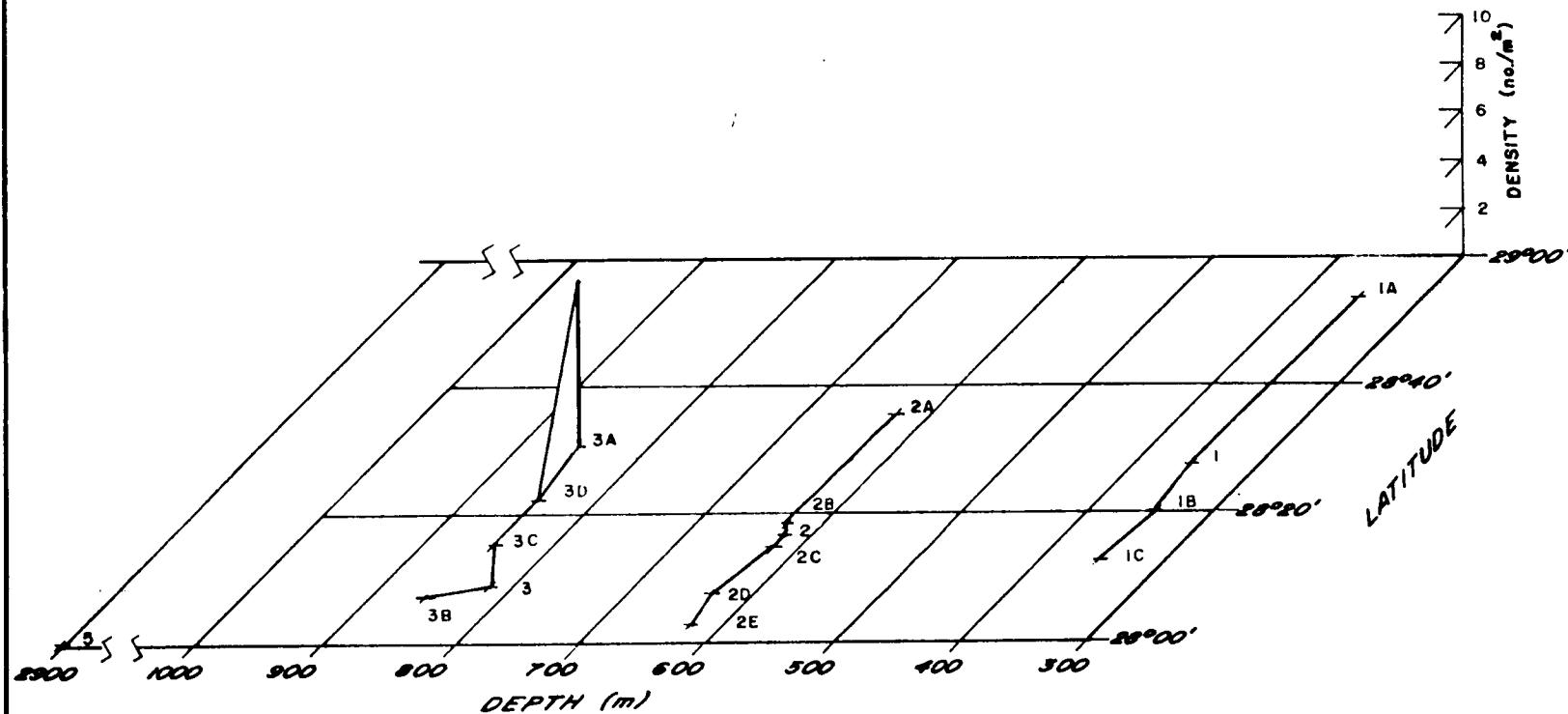
CENTRAL REGION - FALL 1984



Yoldiella sp. A (BIVALVIA)

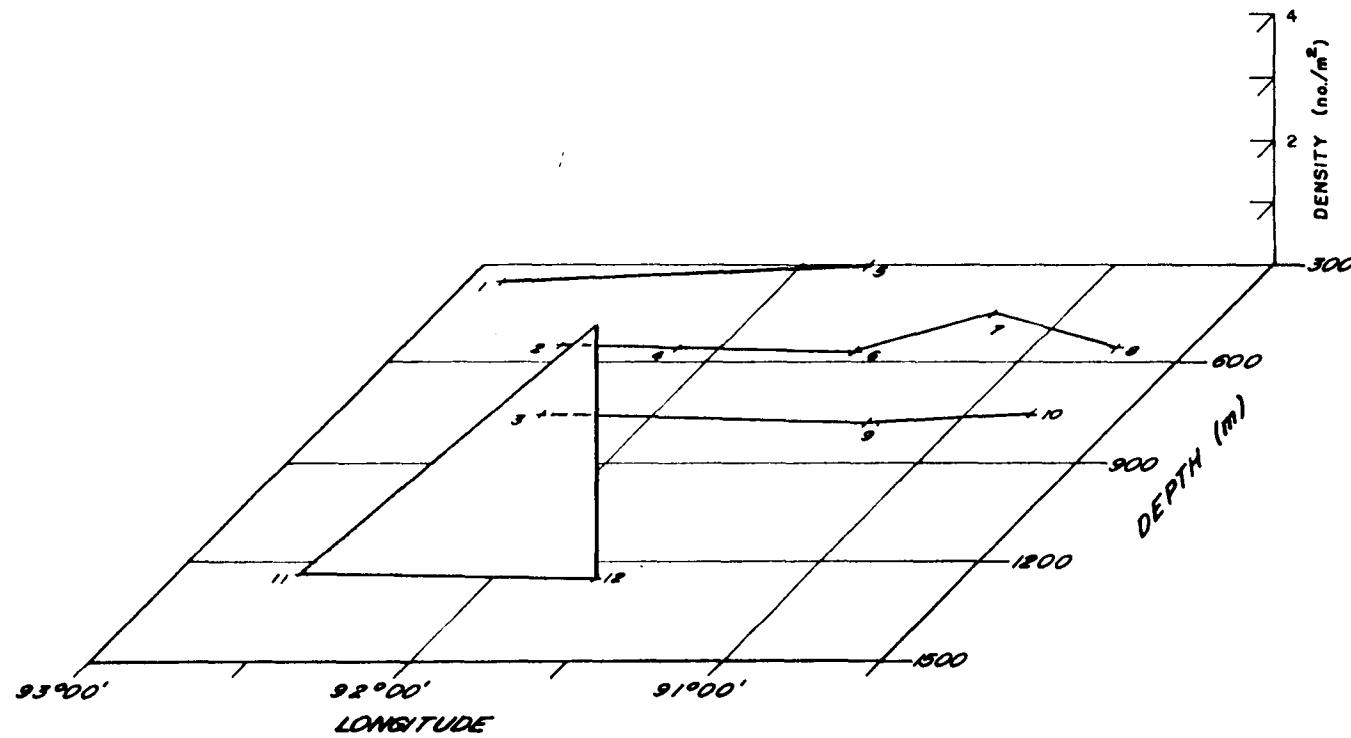
EASTERN REGION - SPRING 1985

C-110



Yoldiella sp. A (BIVALVIA)

WESTERN to CENTRAL REGION - SUMMER 1985

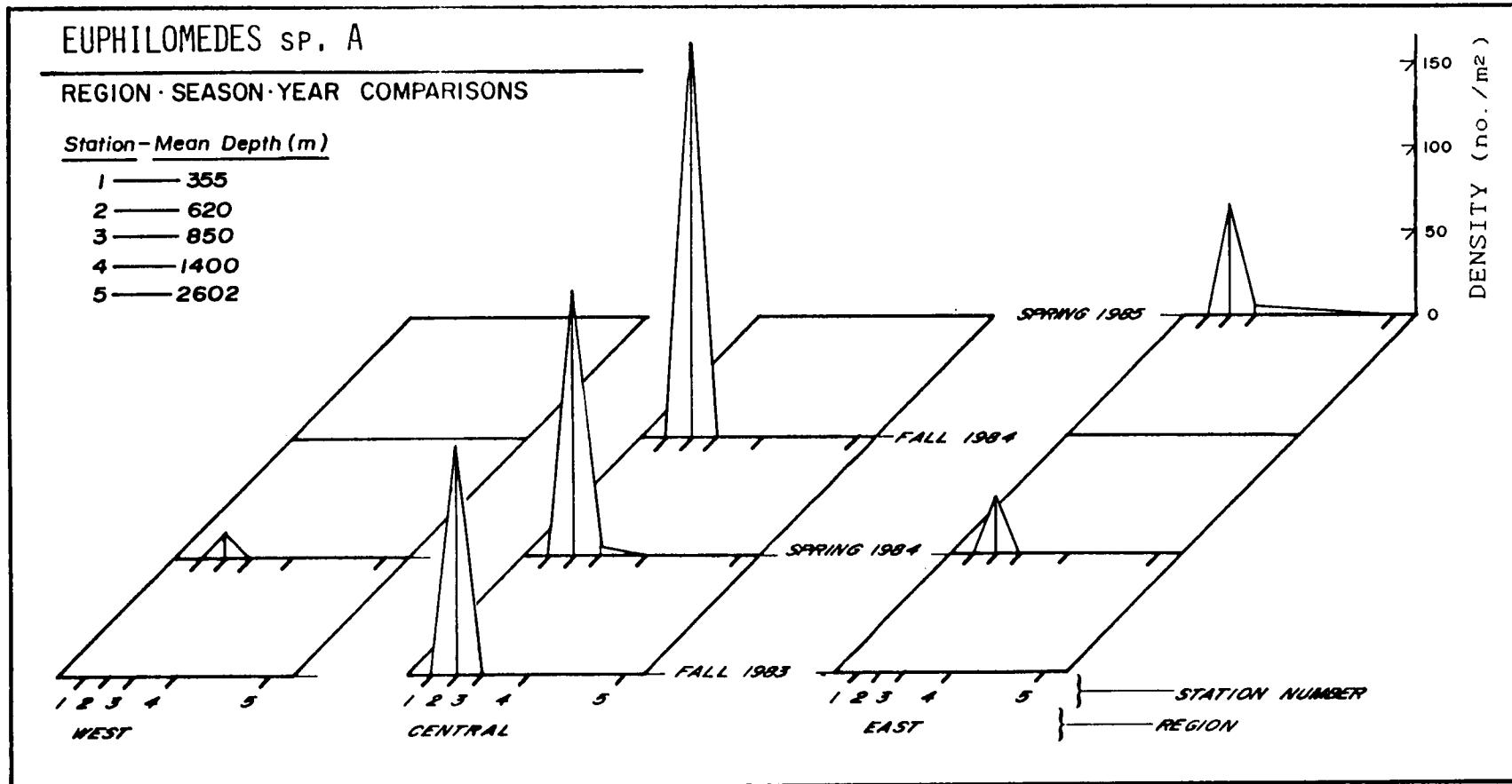


C-111

C-3

Myodocopan Ostracods

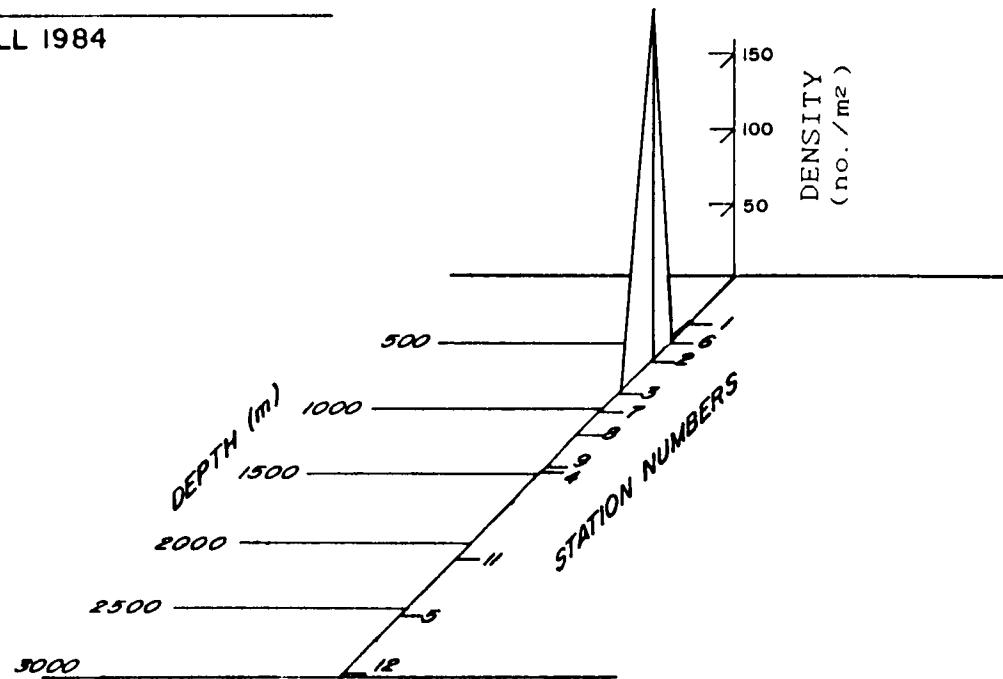
C-112



C-113

EUPHILOMEDES SP. A

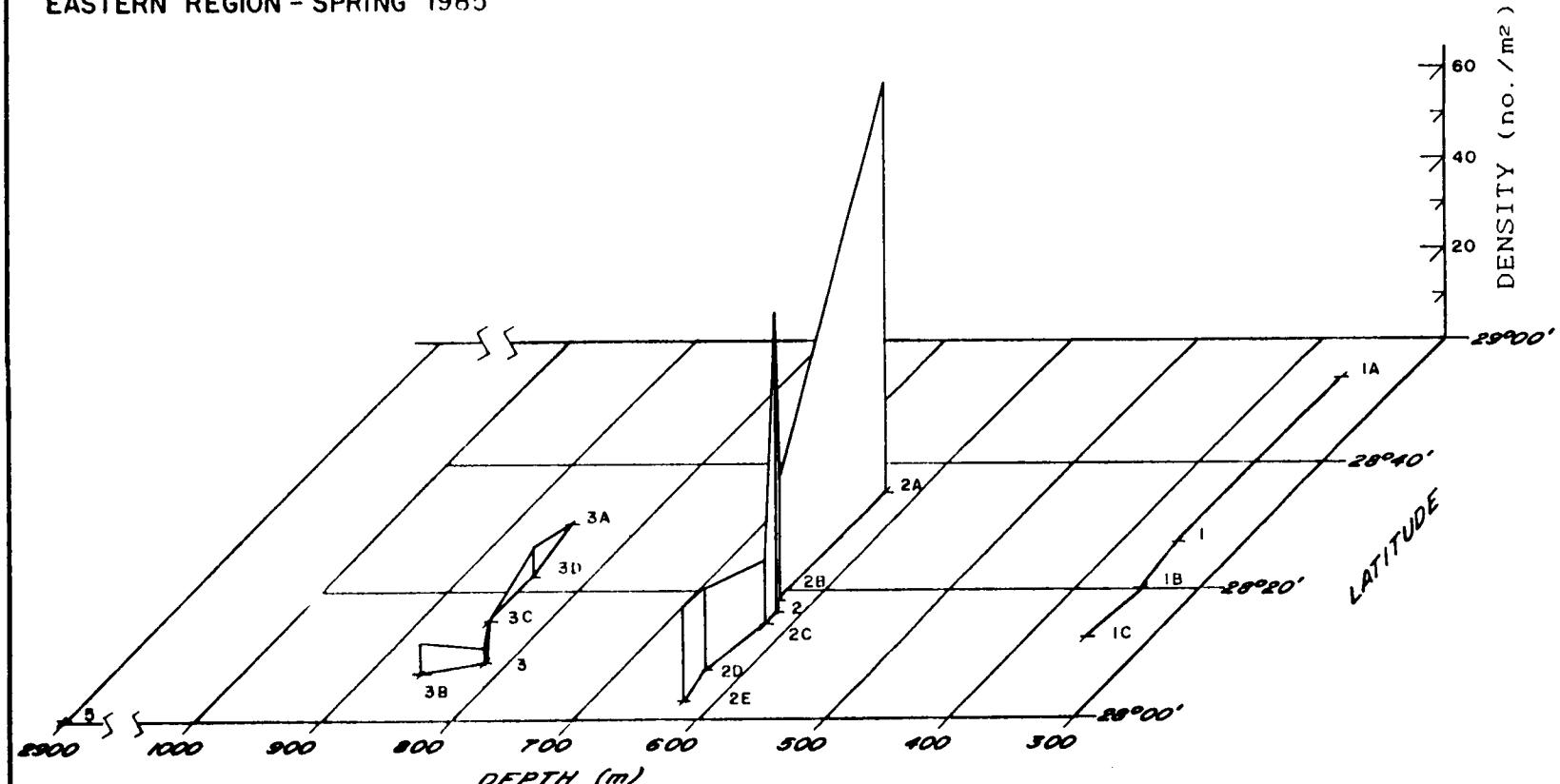
CENTRAL REGION - FALL 1984



EUPHILOMEDES SP. A

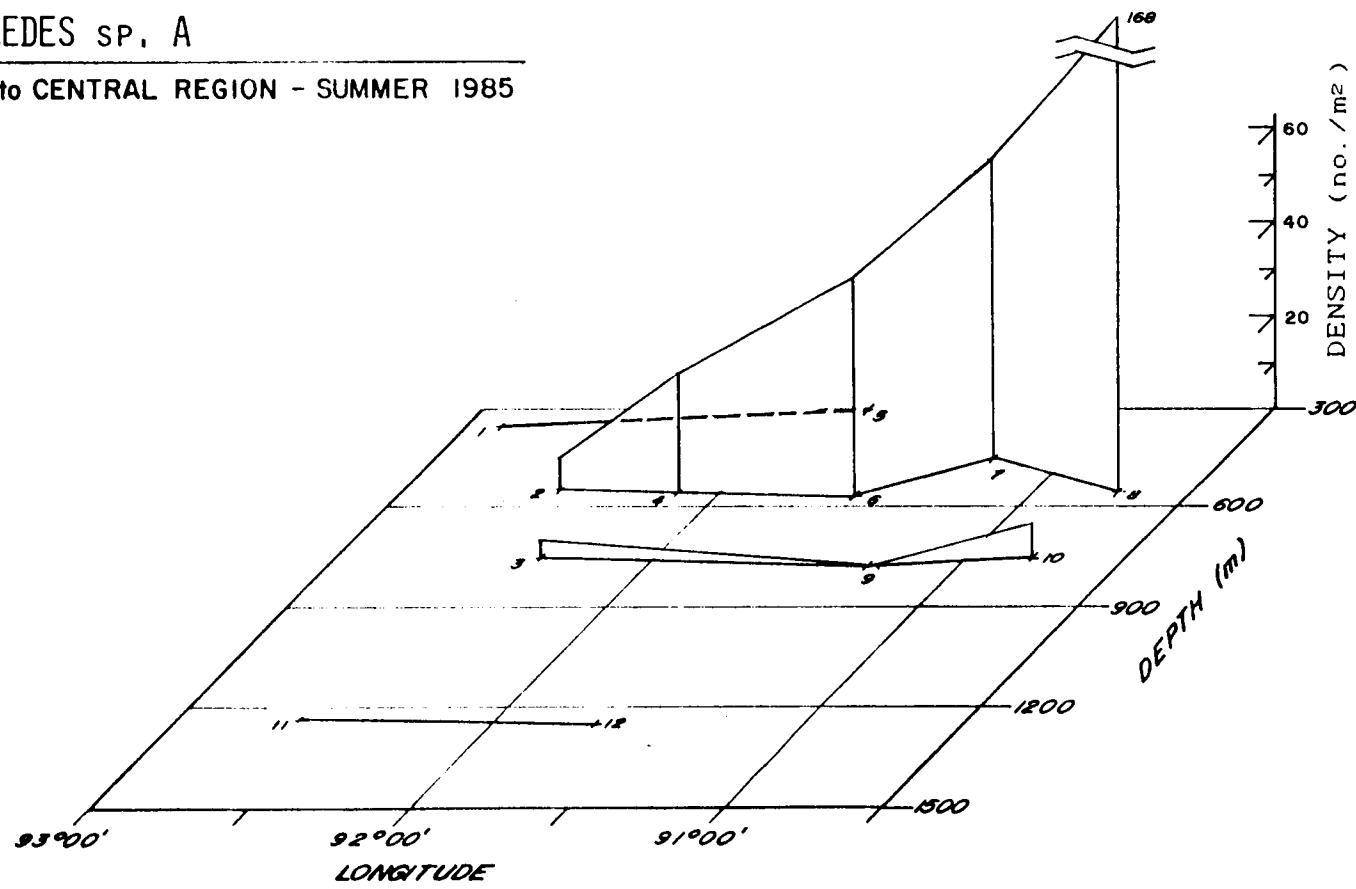
EASTERN REGION - SPRING 1985

C-115

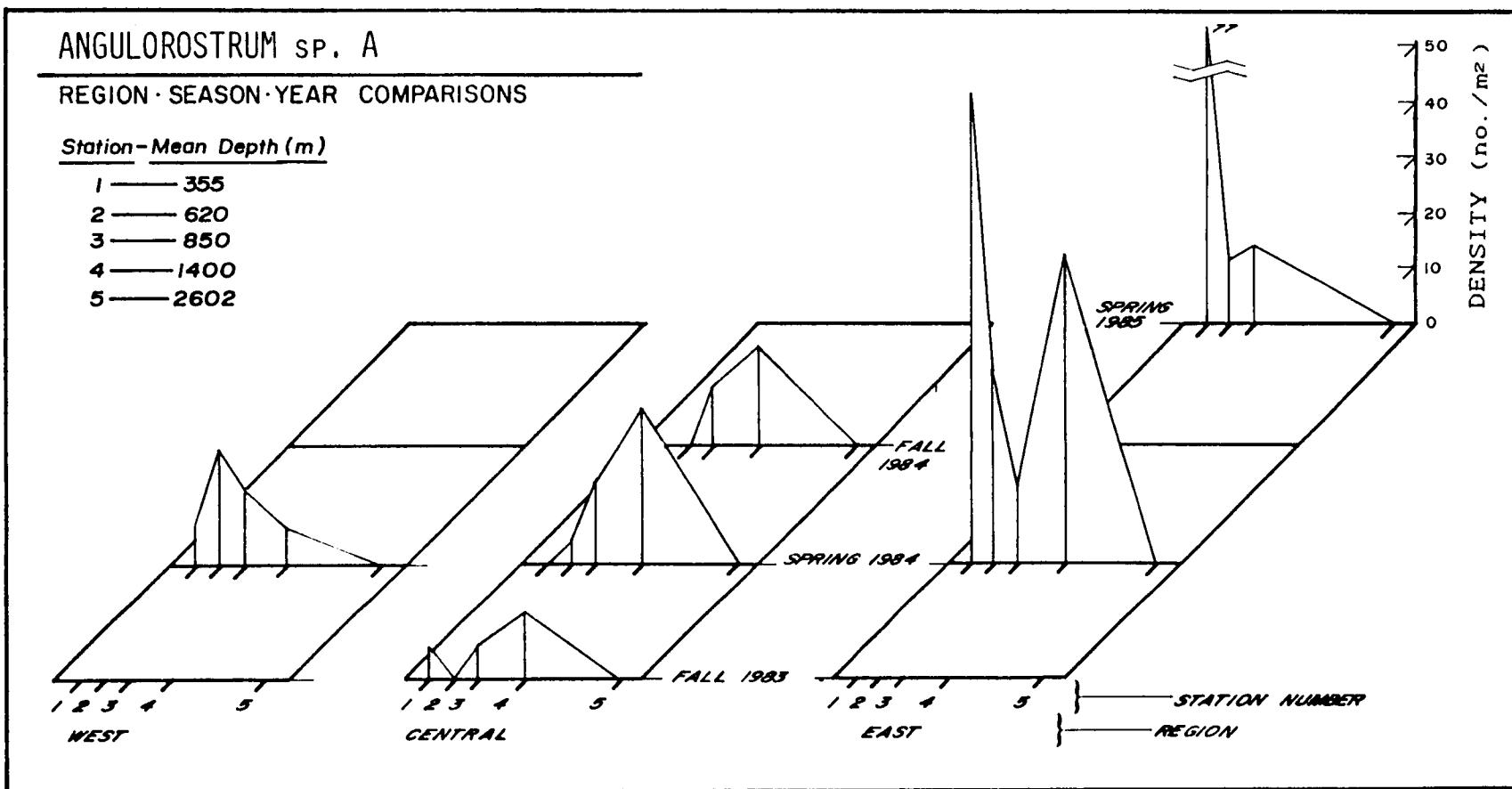


EUPHILOMEDES SP. A

WESTERN to CENTRAL REGION - SUMMER 1985



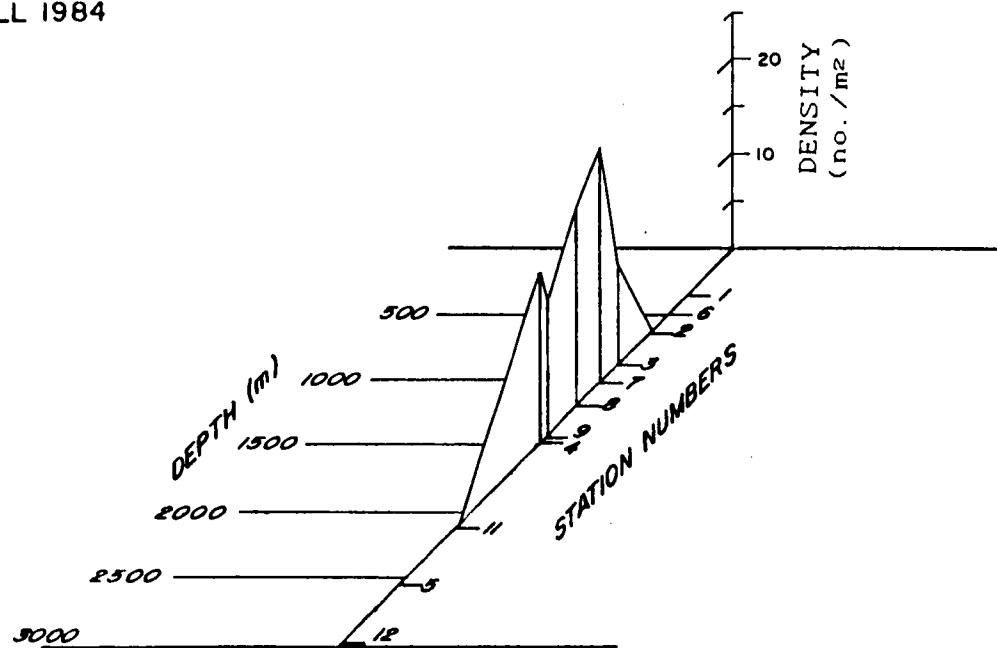
C-116



C-118

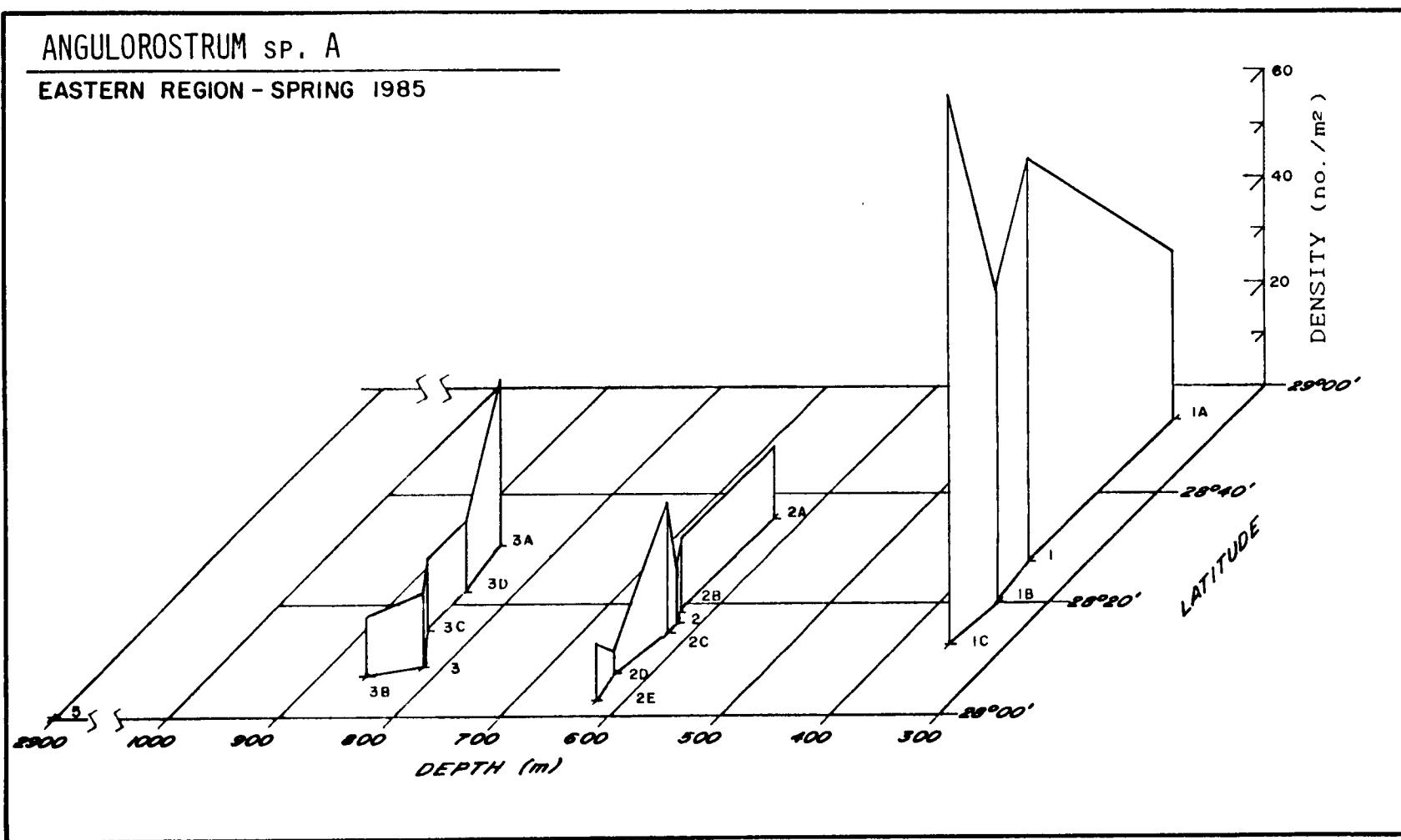
ANGULOROSTRUM SP. A

CENTRAL REGION - FALL 1984



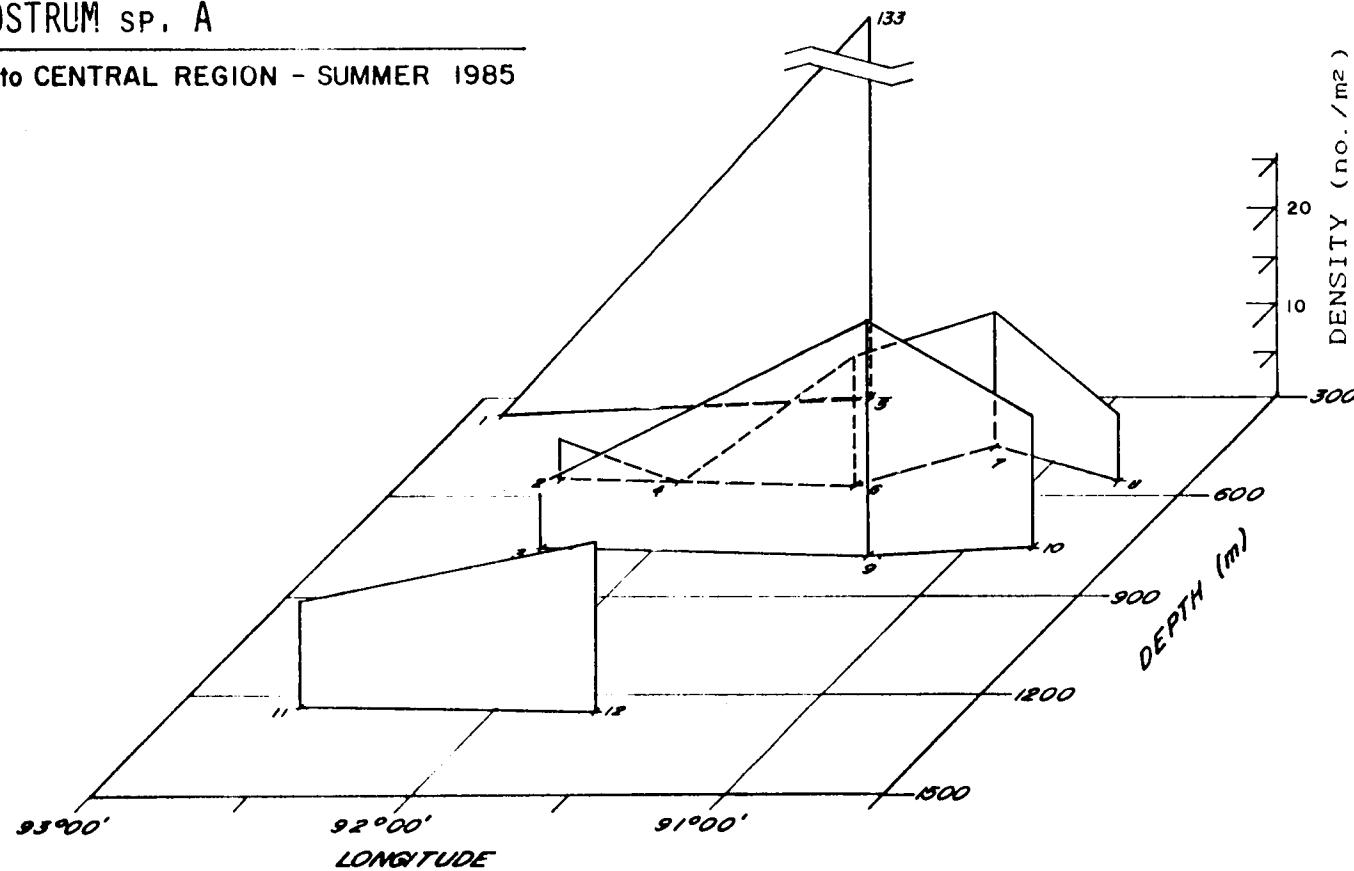
ANGULOROSTRUM SP. A
EASTERN REGION - SPRING 1985

C-119



ANGULOROSTRUM SP. A

WESTERN to CENTRAL REGION - SUMMER 1985

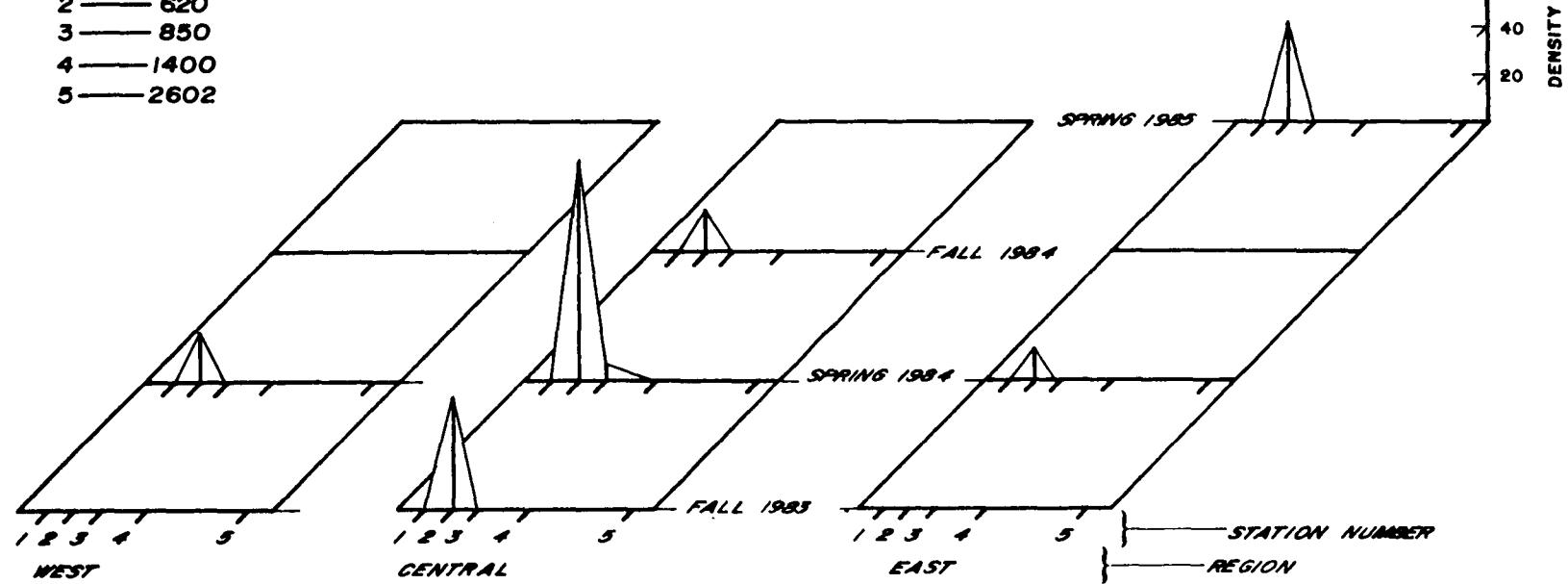


Philomedes sp. A (OSTRACODA; MYODOCOPA)

REGION · SEASON · YEAR COMPARISONS

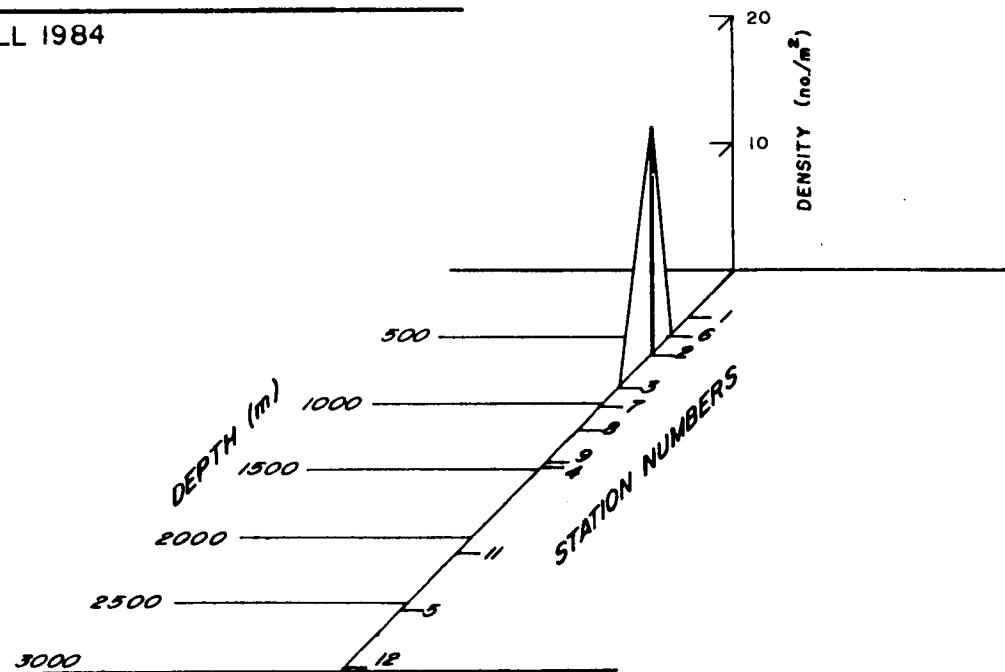
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



Philomedes sp. A (OSTRACODA; MYODOCOPA)

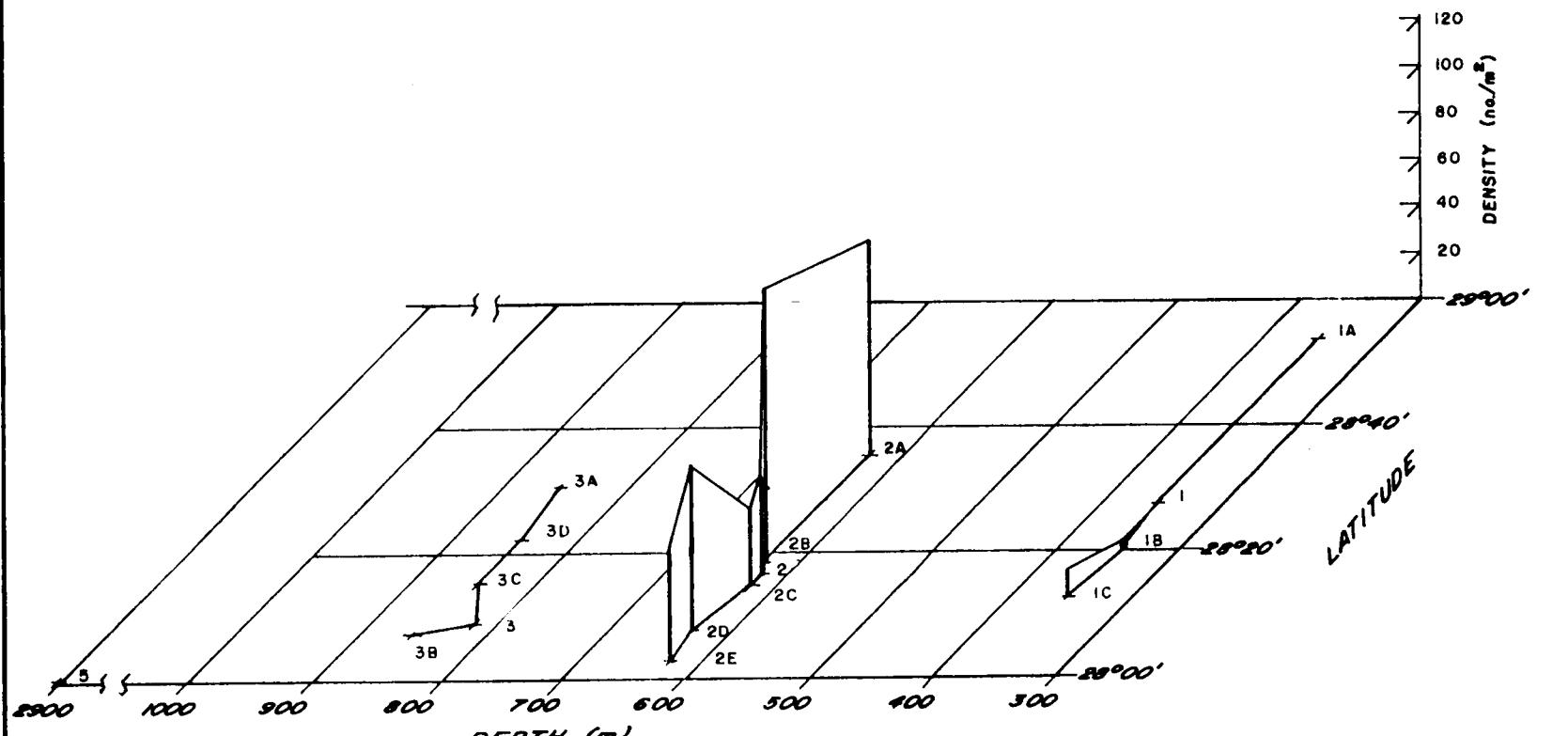
CENTRAL REGION - FALL 1984



Philomedes sp. A (OSTRACODA; MYODOCOPA)

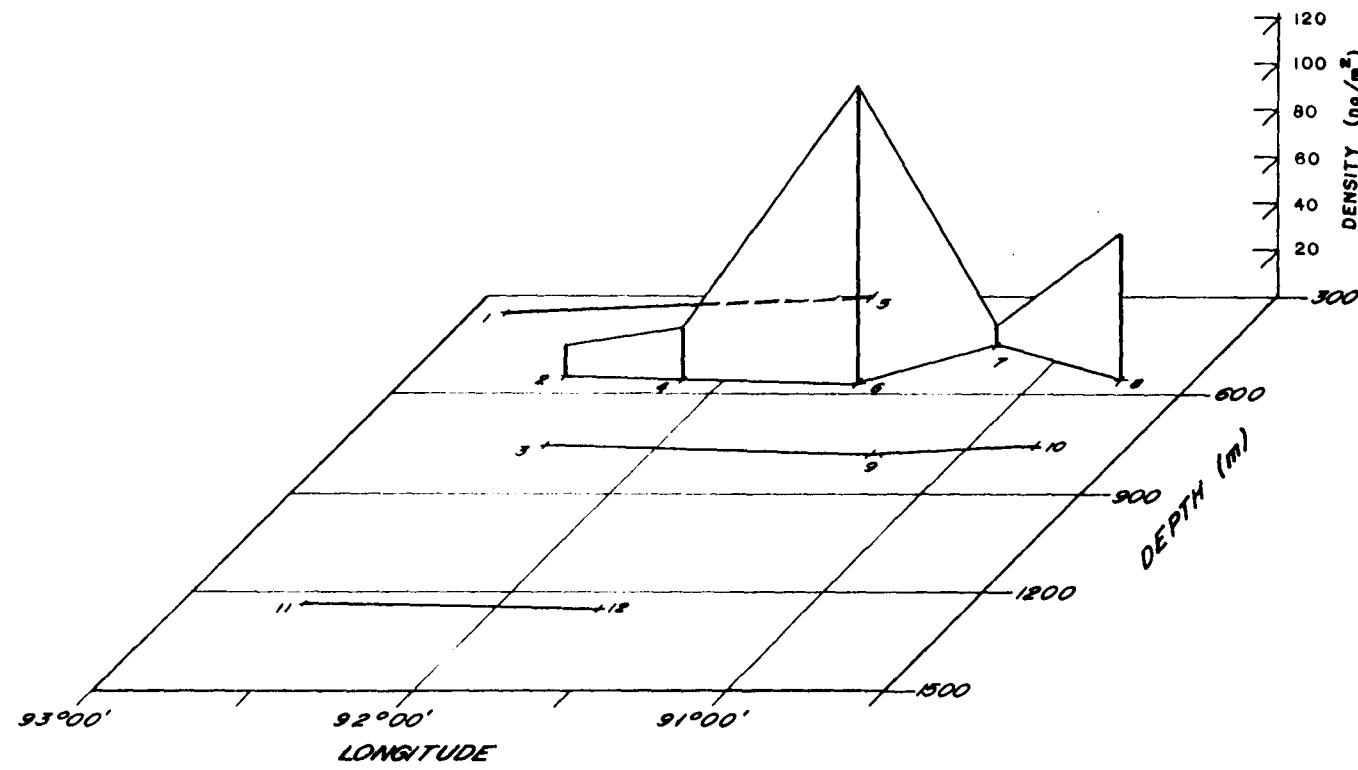
EASTERN REGION - SPRING 1985

C-123



Philomedes sp. A (OSTRACODA; MYODOCOPA)

WESTERN to CENTRAL REGION - SUMMER 1985

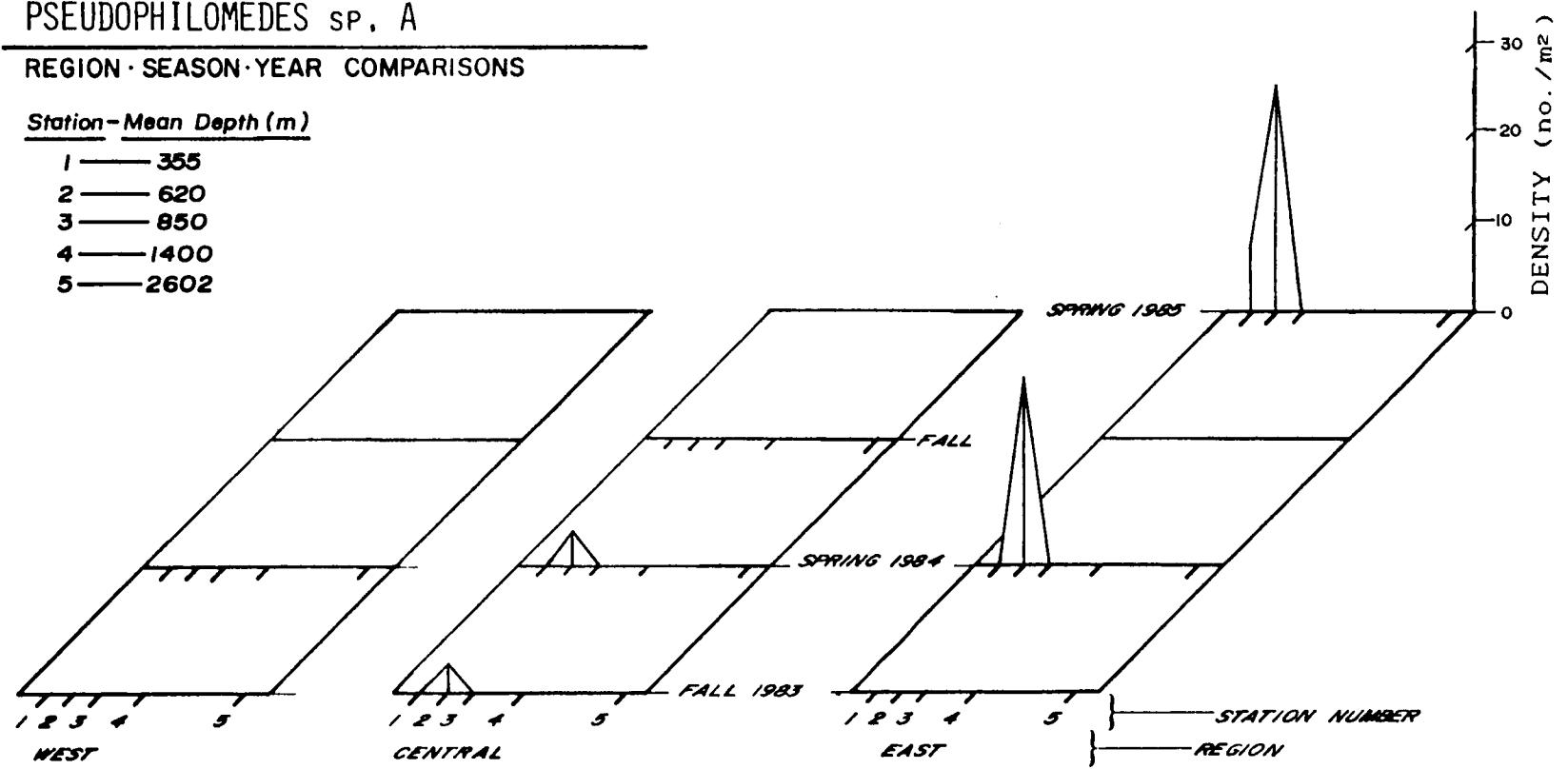


PSEUDOPHILOMEDES SP., A

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

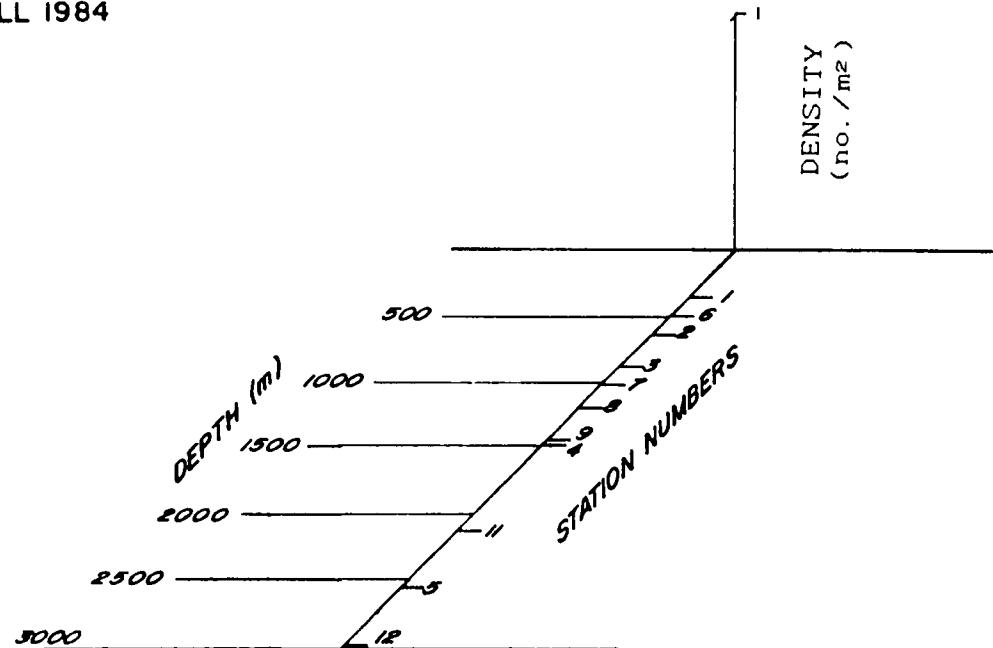
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-126

PSEUDOPHILOMEDES SP. A

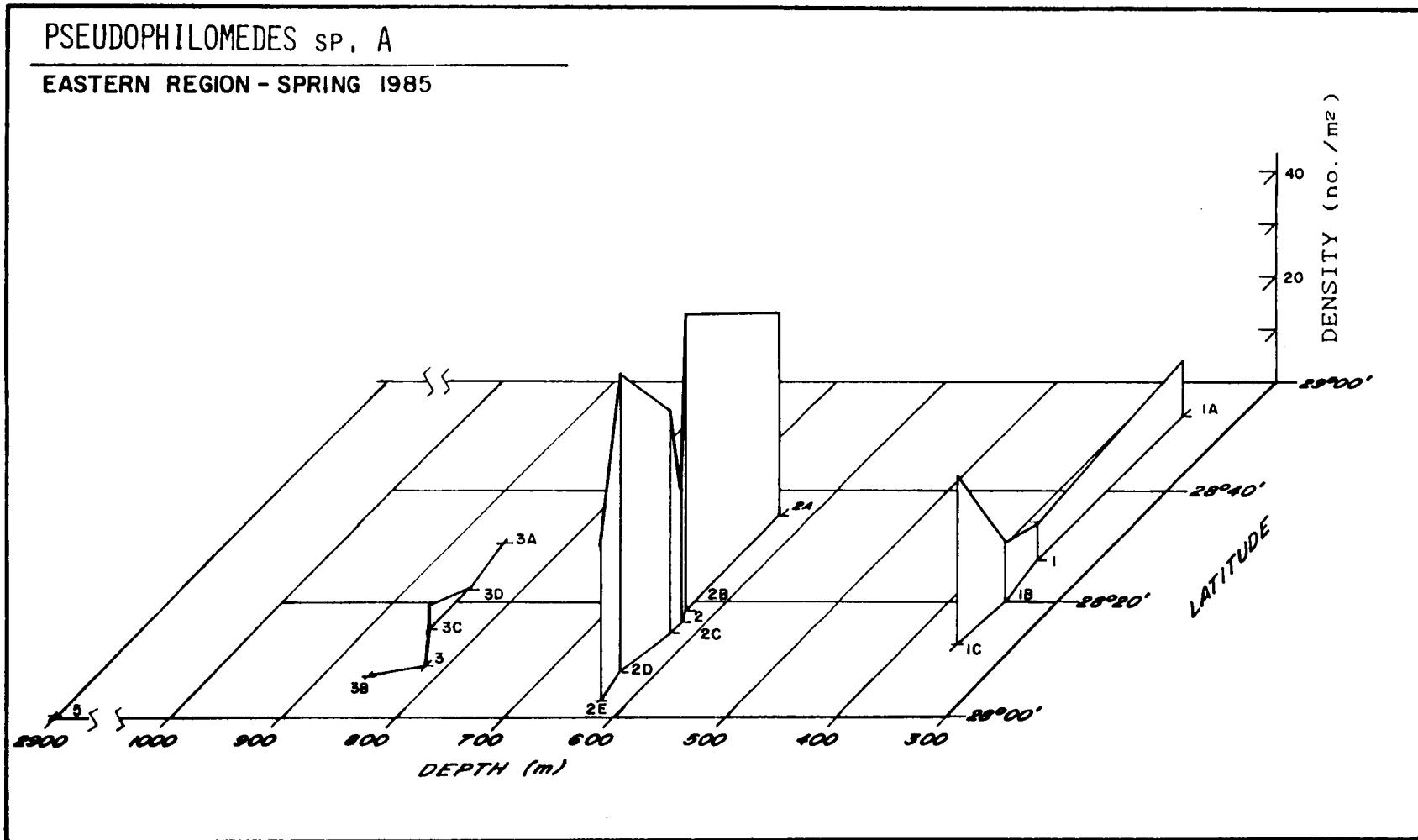
CENTRAL REGION - FALL 1984



PSEUDOPHILOMEDES SP. A

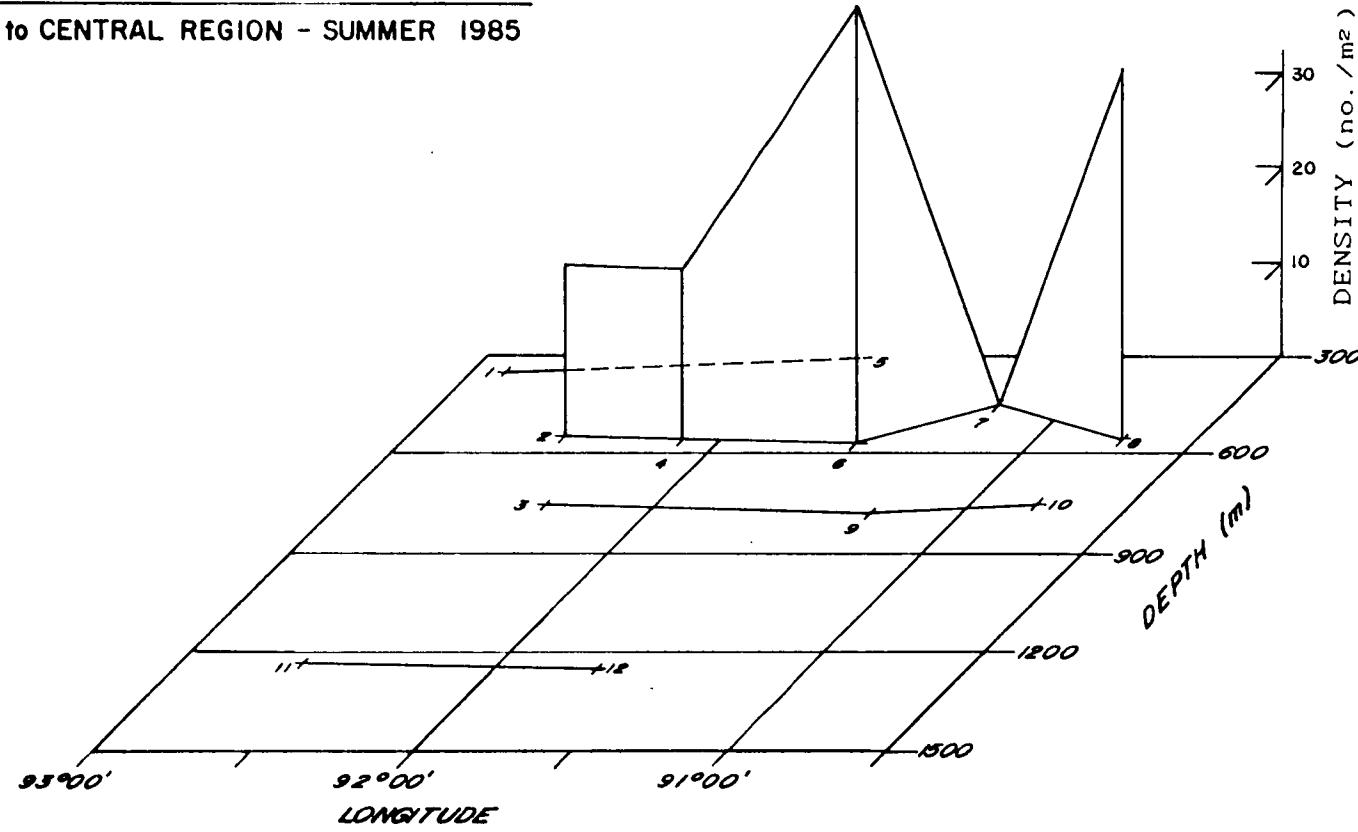
EASTERN REGION - SPRING 1985

C-127



PSEUDOPHILOMEDES SP. A

WESTERN to CENTRAL REGION - SUMMER 1985



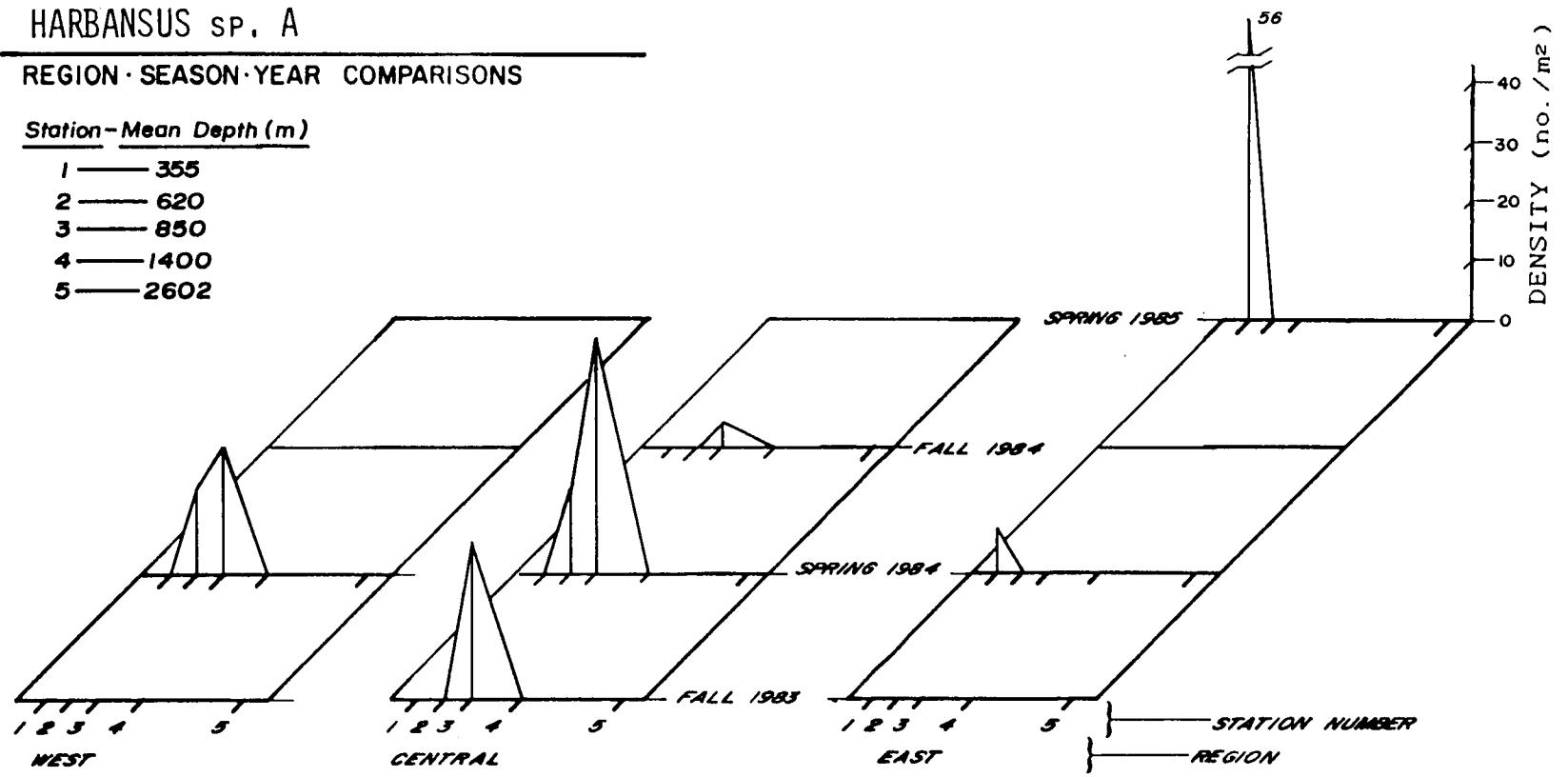
C-128

HARBANSUS SP. A

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

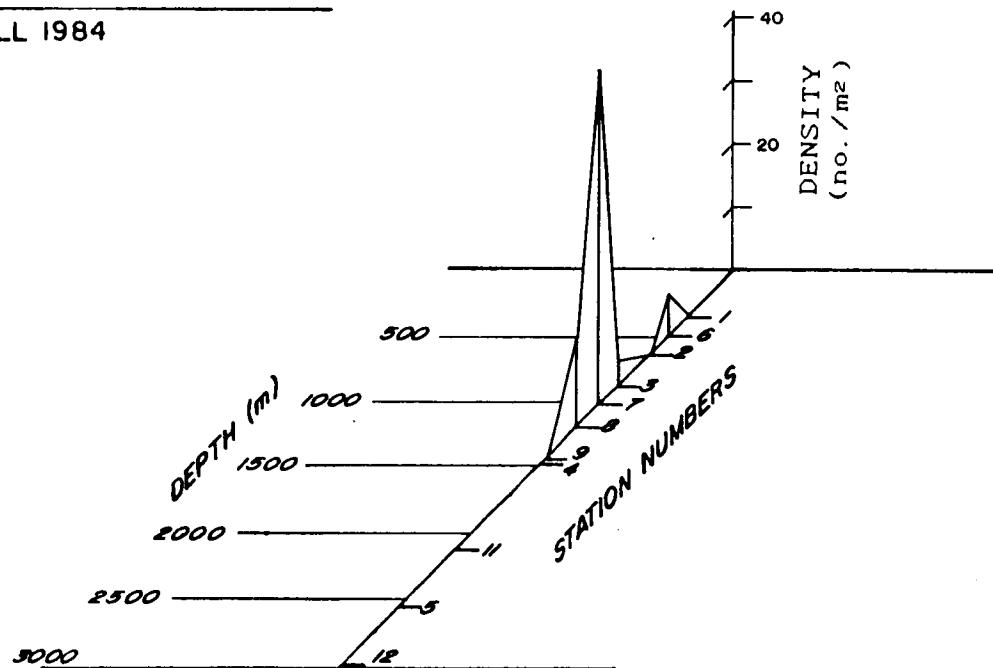
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-129

HARBANSUS SP. A

CENTRAL REGION - FALL 1984

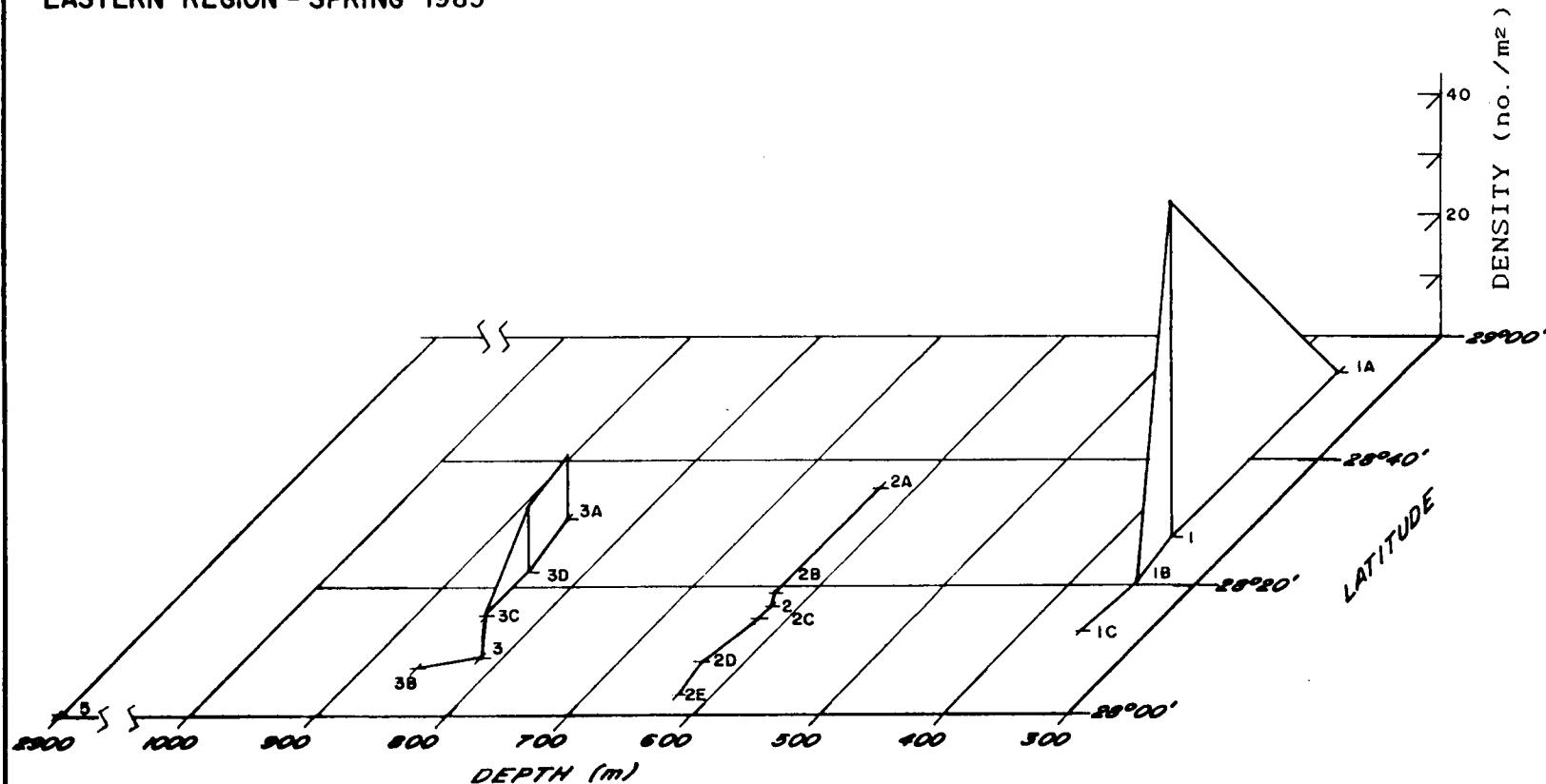


C-130

C-131

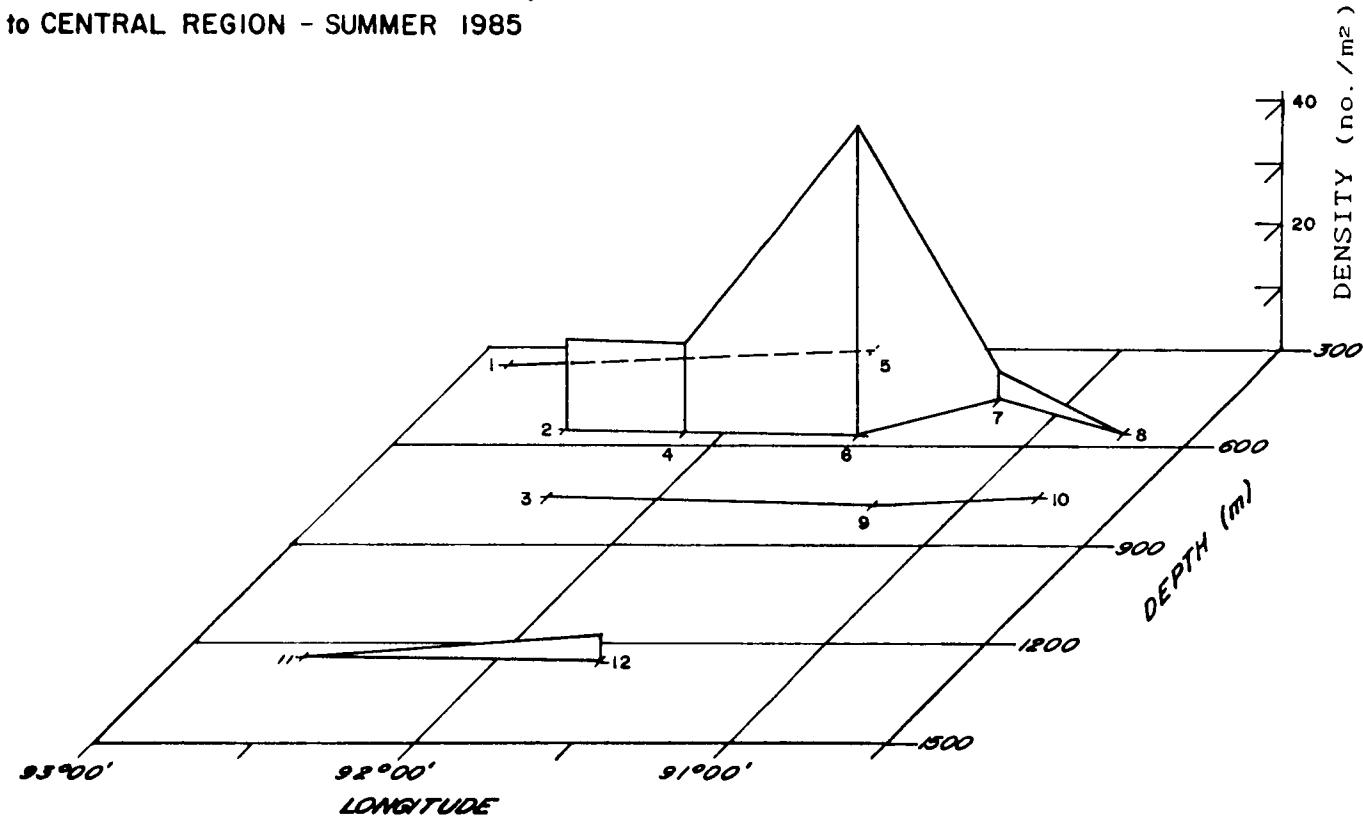
HARBANSUS SP. A

EASTERN REGION - SPRING 1985



HARBANSUS SP. A

WESTERN to CENTRAL REGION - SUMMER 1985



C-4
Tanaidaceans

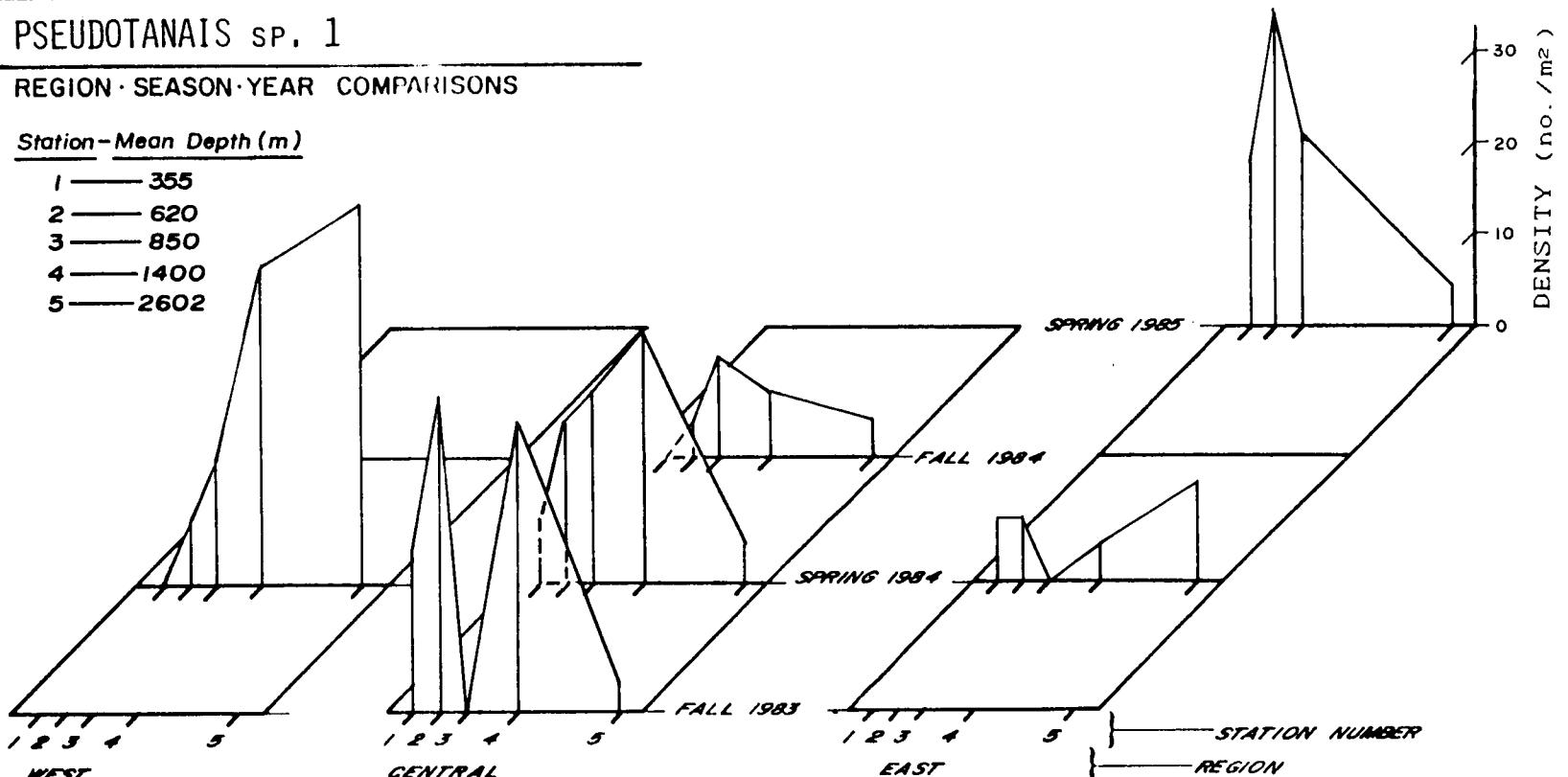
C-133

PSEUDOTANAIS SP. 1

REGION · SEASON · YEAR COMPARISONS

Station-Mean Depth (m)

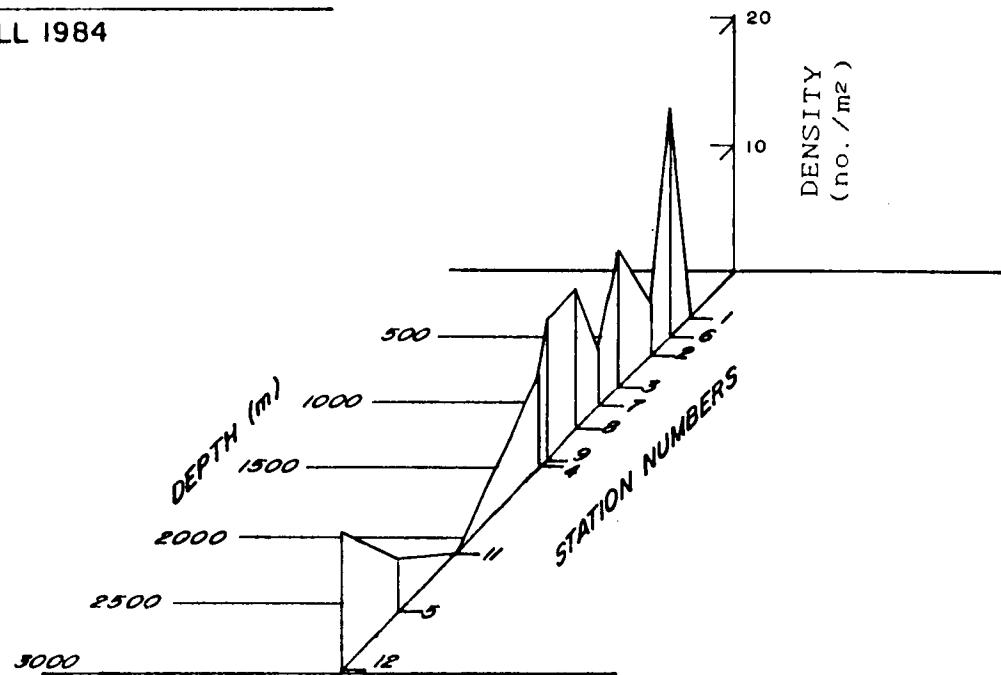
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-134

PSEUDOTANAIS sp. 1

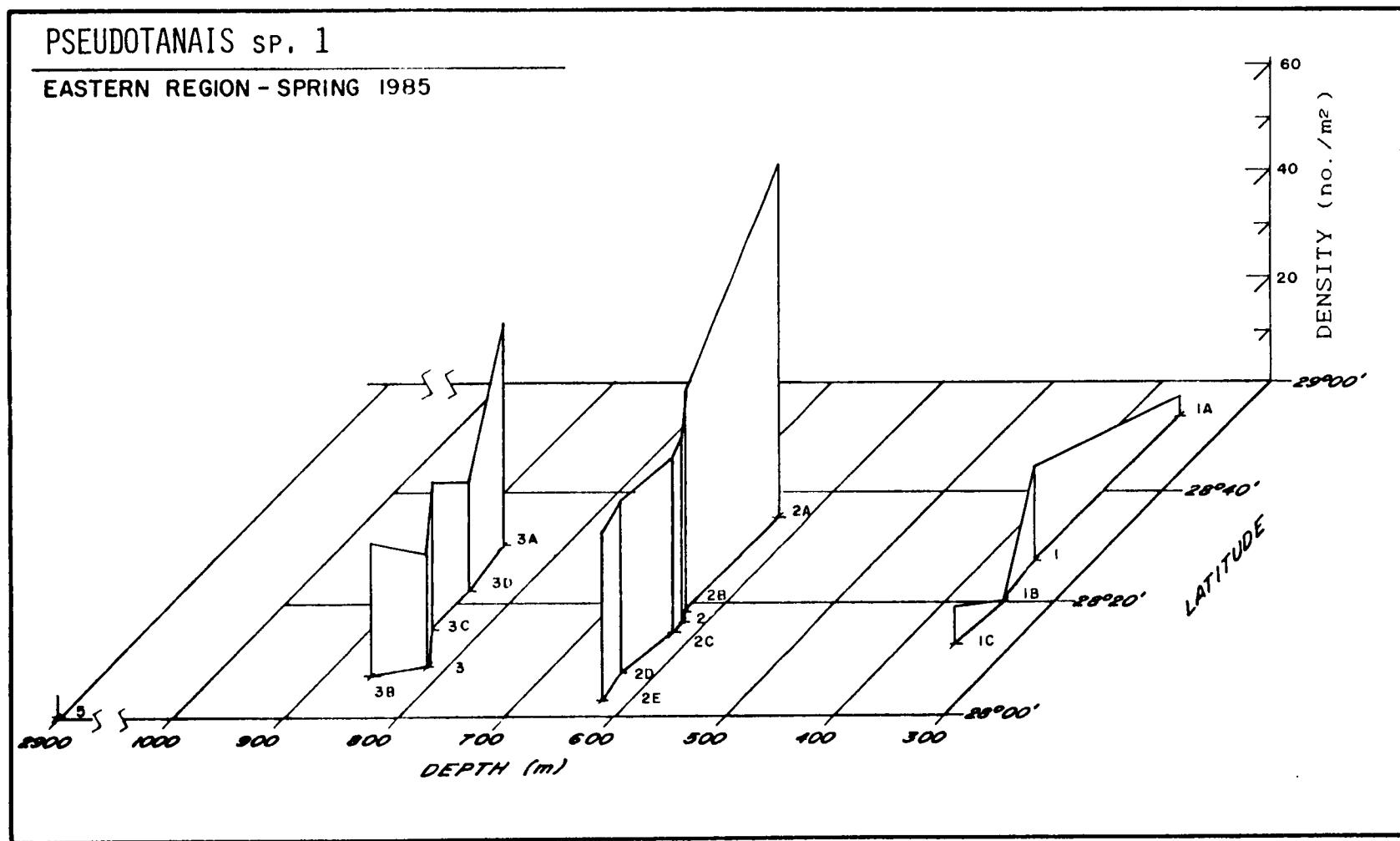
CENTRAL REGION - FALL 1984



PSEUDOTANAIS SP. 1

EASTERN REGION - SPRING 1985

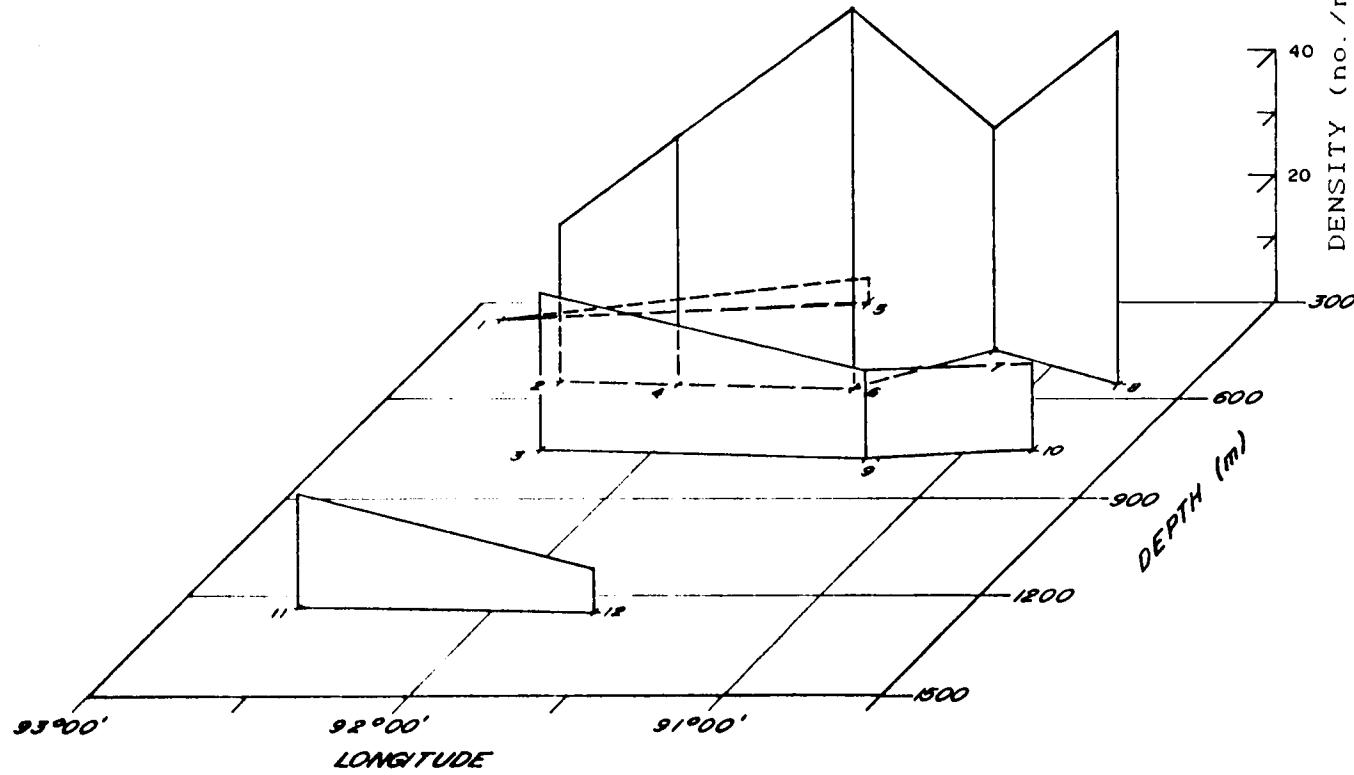
C-136



C-137

PSEUDOTANAIS sp. 1

WESTERN to CENTRAL REGION - SUMMER 1985

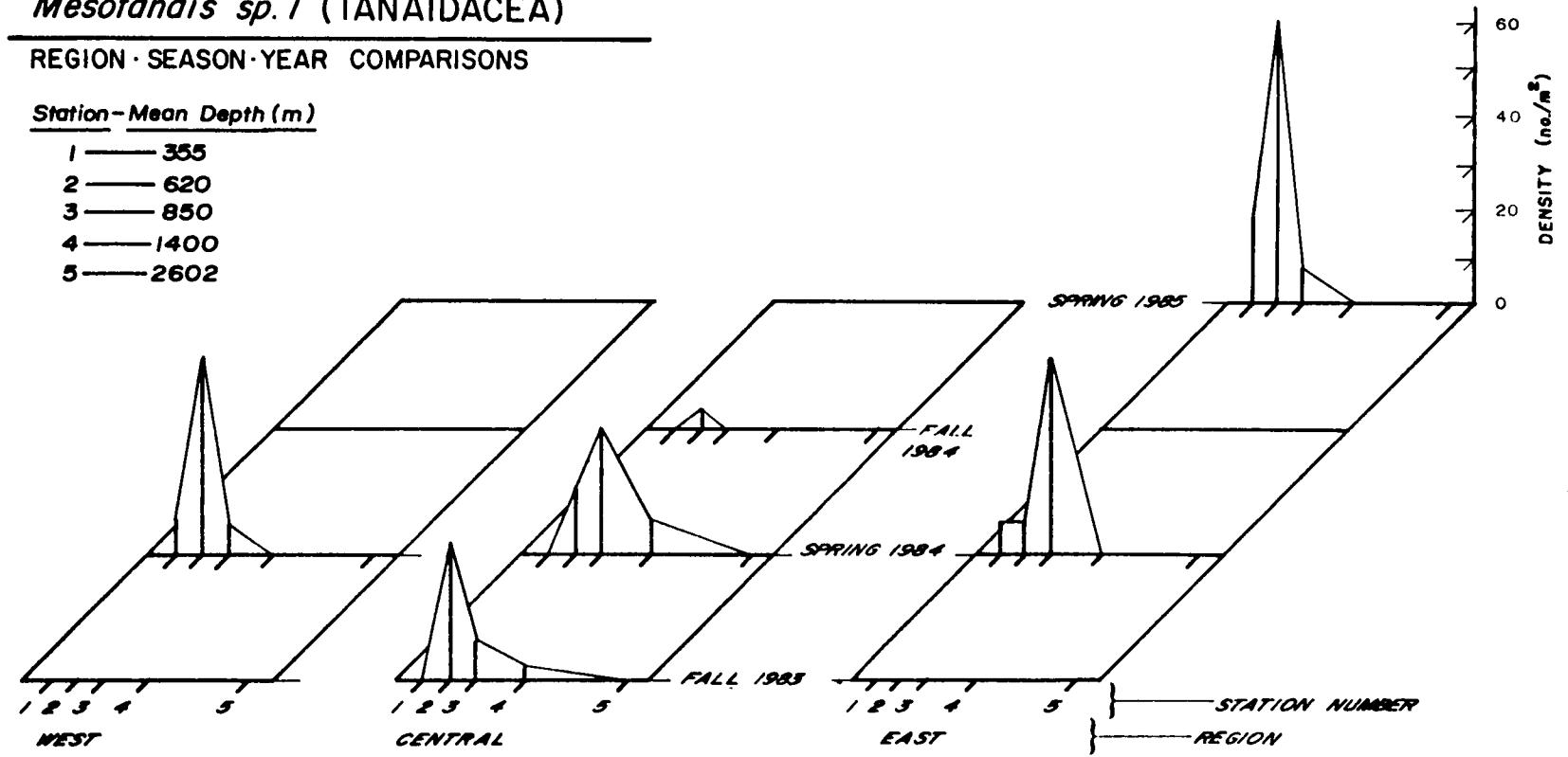


Mesotanais sp. / (TANAIDACEA)

REGION · SEASON · YEAR COMPARISONS

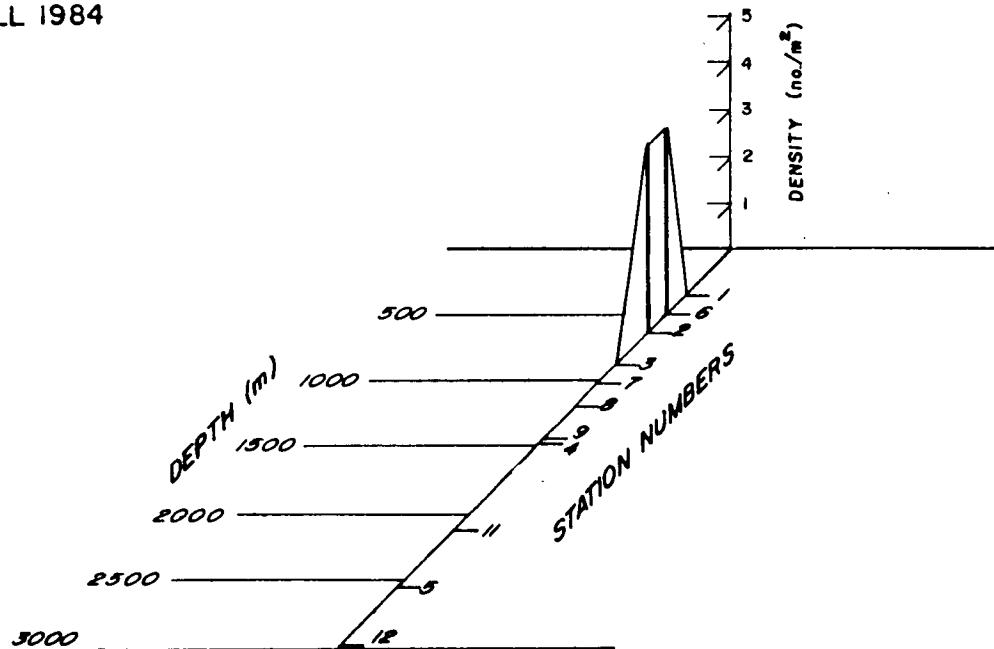
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



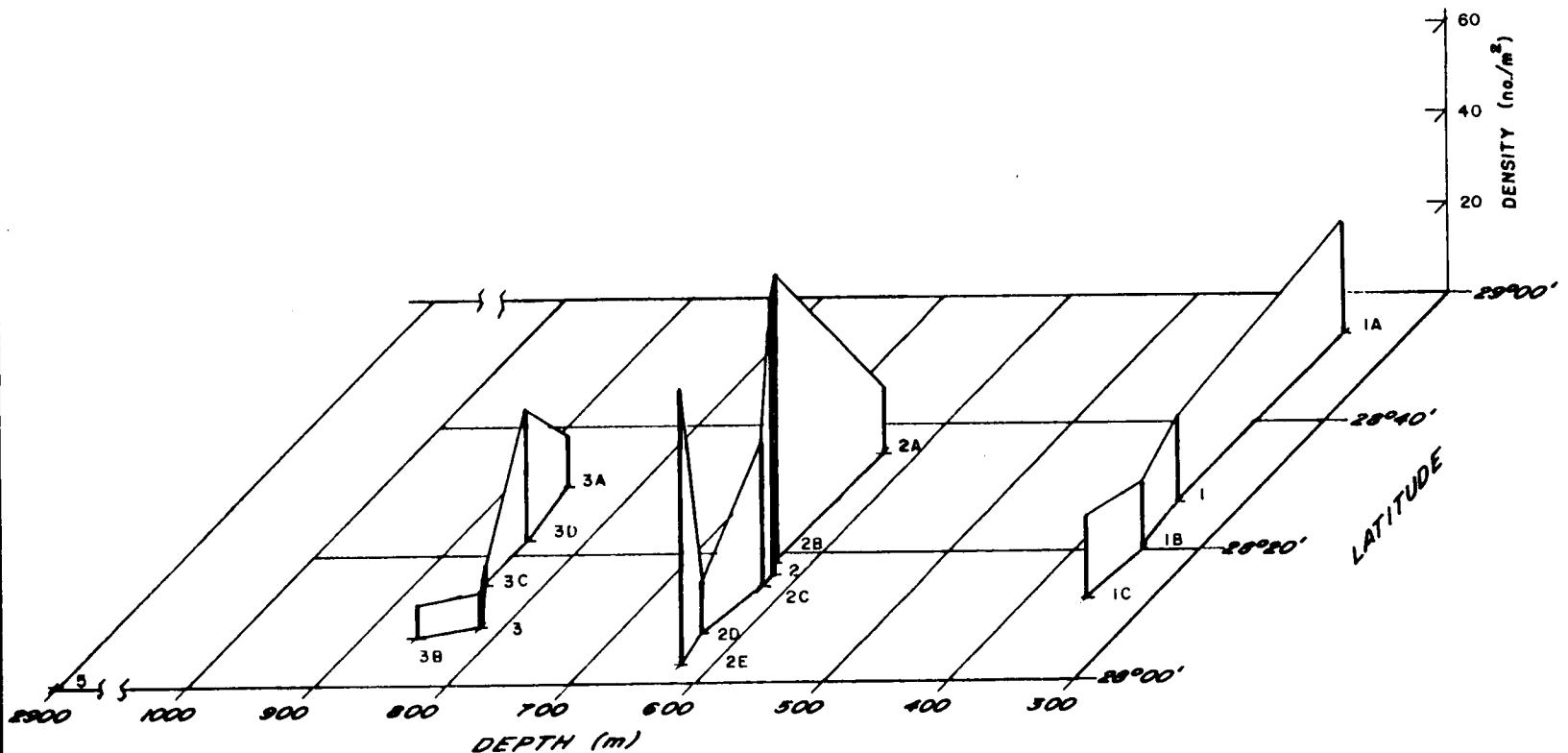
Mesotanais sp. 1 (TANAIDACEA)

CENTRAL REGION - FALL 1984



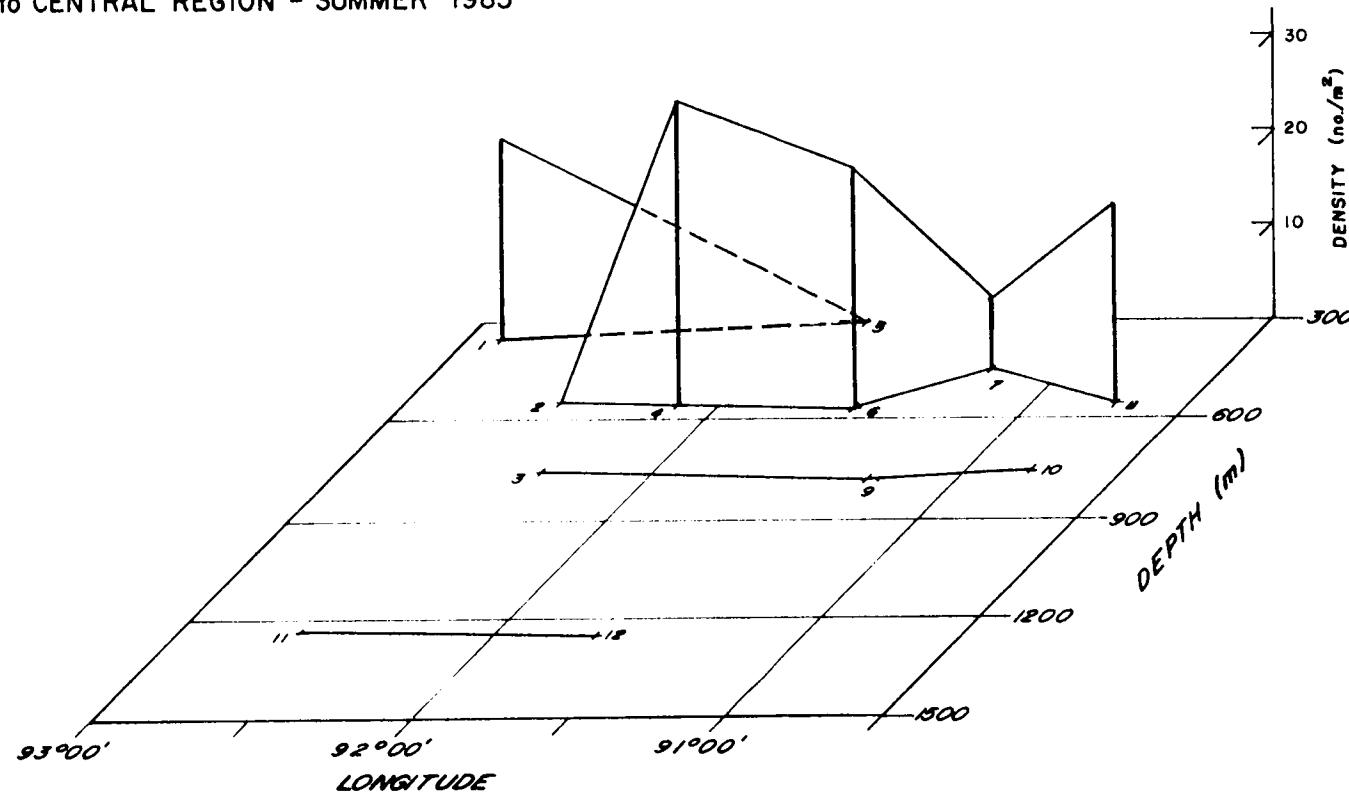
Mesotanais sp. / (TANAIDACEA)

EASTERN REGION - SPRING 1985



Mesotanais sp. / (TANAIDACEA)

WESTERN to CENTRAL REGION - SUMMER 1985

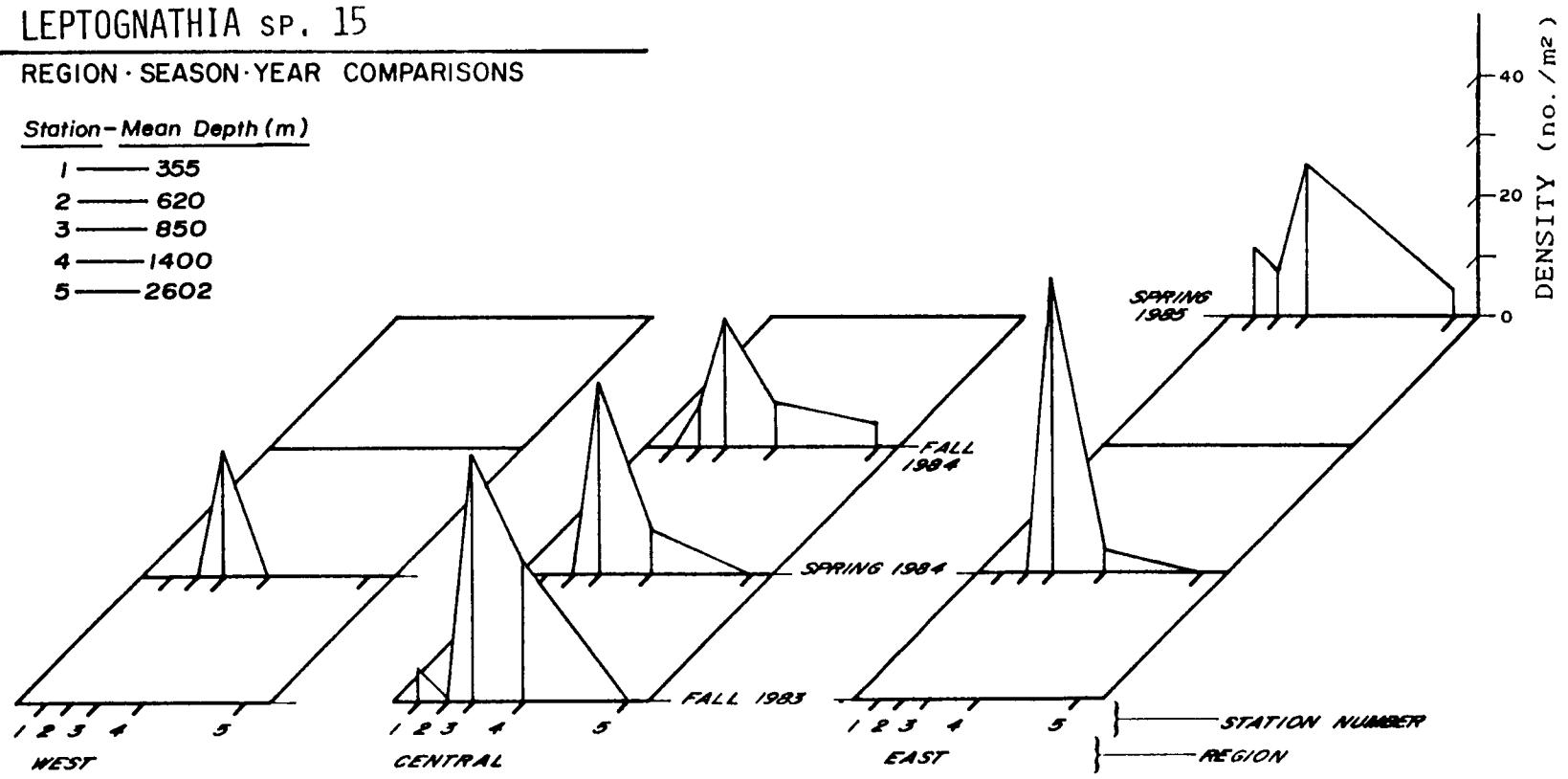


LEPTOGNATHIA SP. 15

REGION · SEASON · YEAR COMPARISONS

Station-Mean Depth (m)

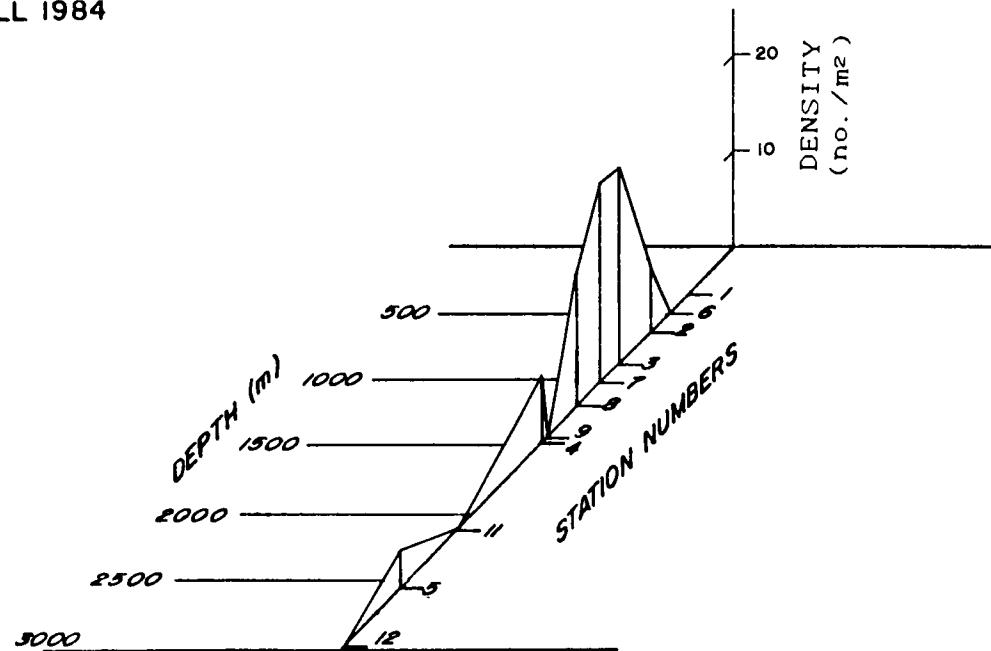
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-142

LEPTOGNATHIA sp. 15

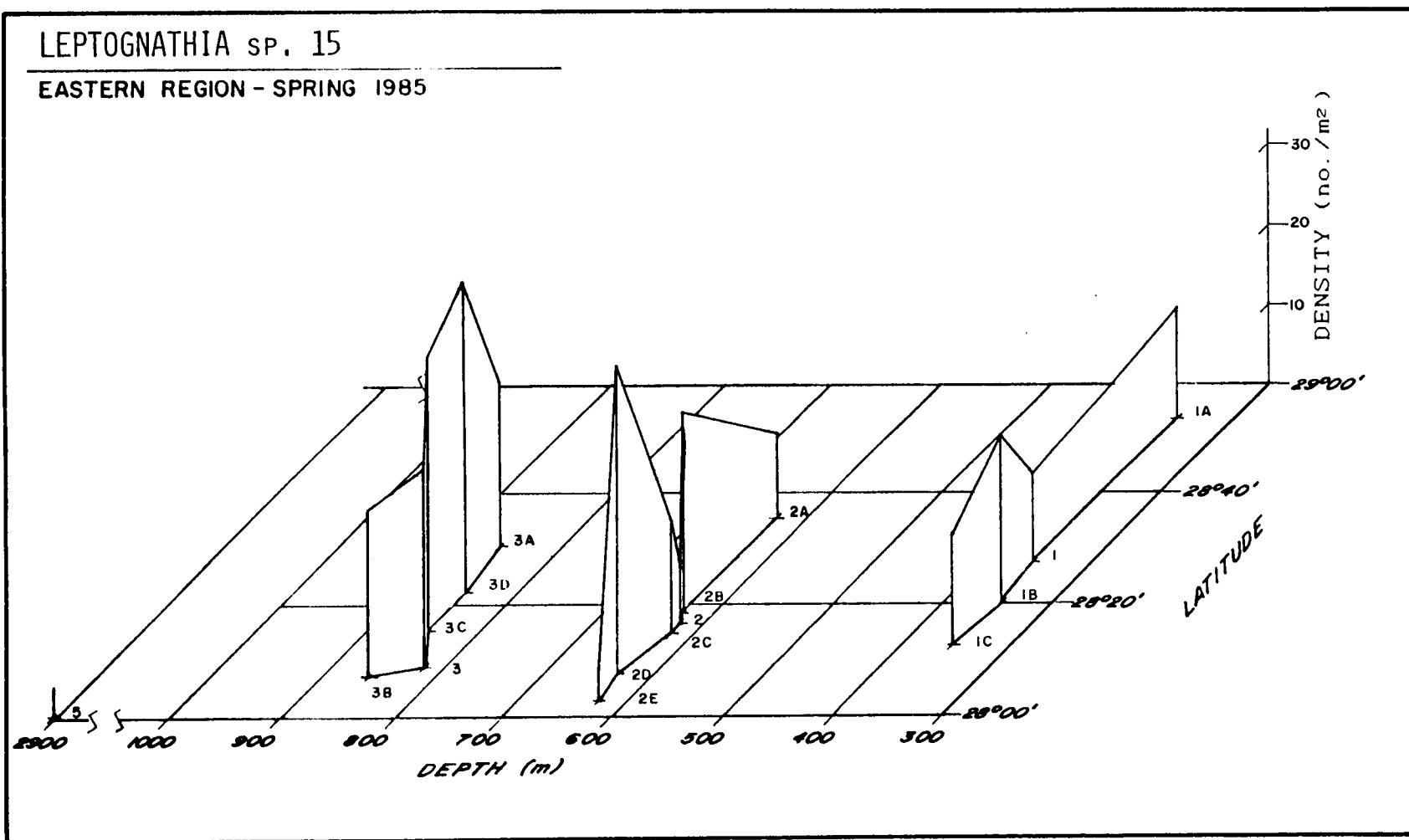
CENTRAL REGION - FALL 1984



LEPTOGNATHIA SP. 15

EASTERN REGION - SPRING 1985

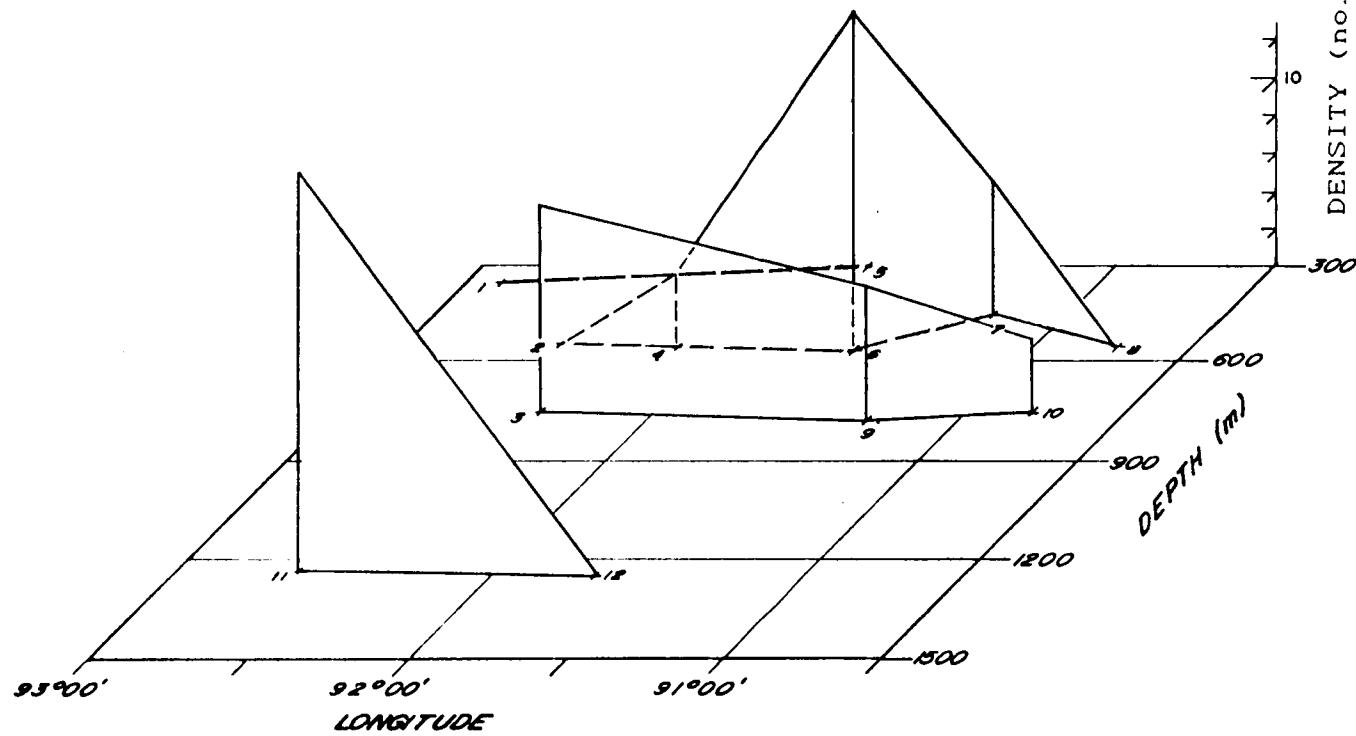
C-144



LEPTOGNATHIA SP. 15

WESTERN to CENTRAL REGION - SUMMER 1985

C-145

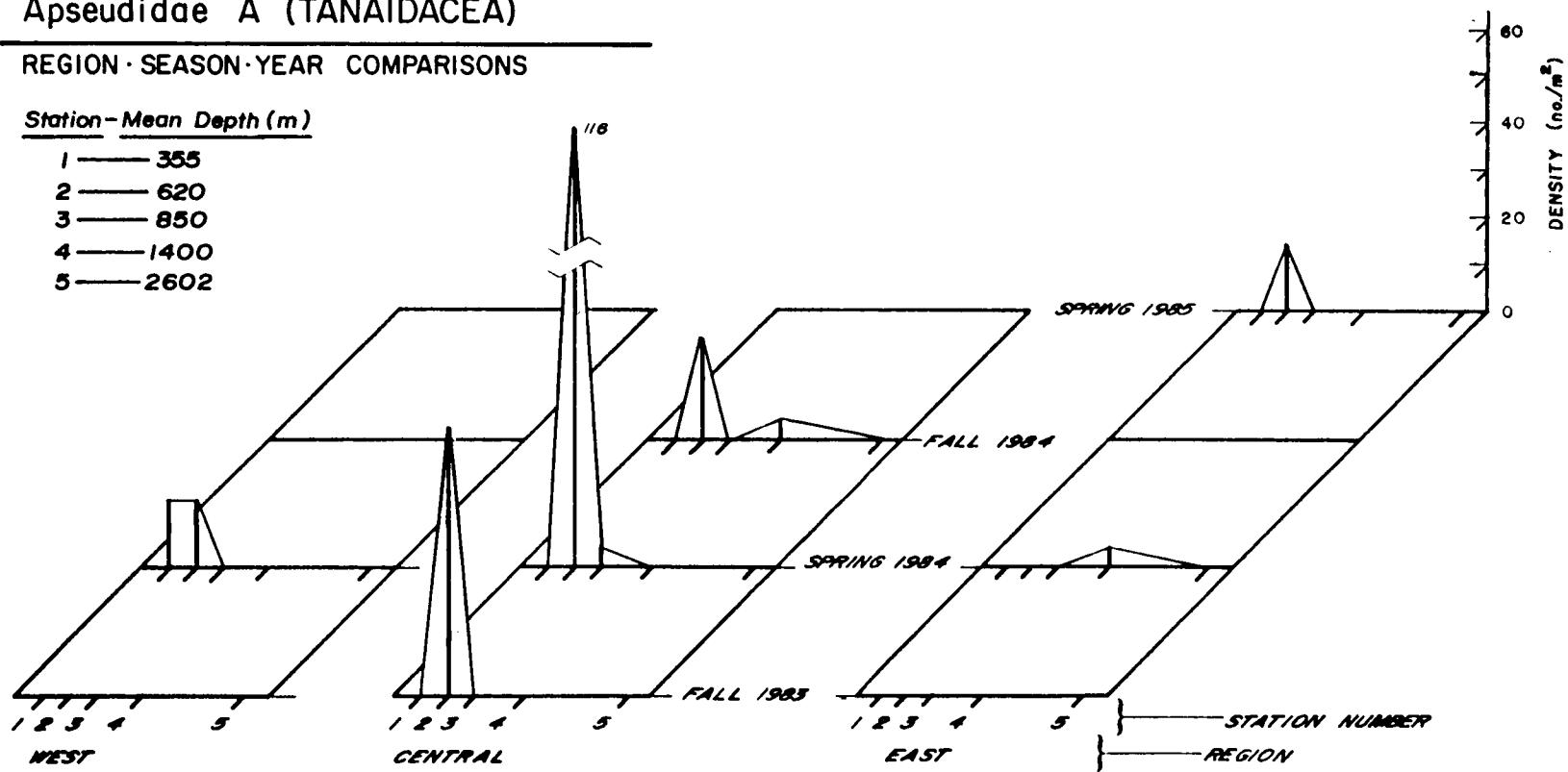


Apseudidae A (TANAIDACEA)

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

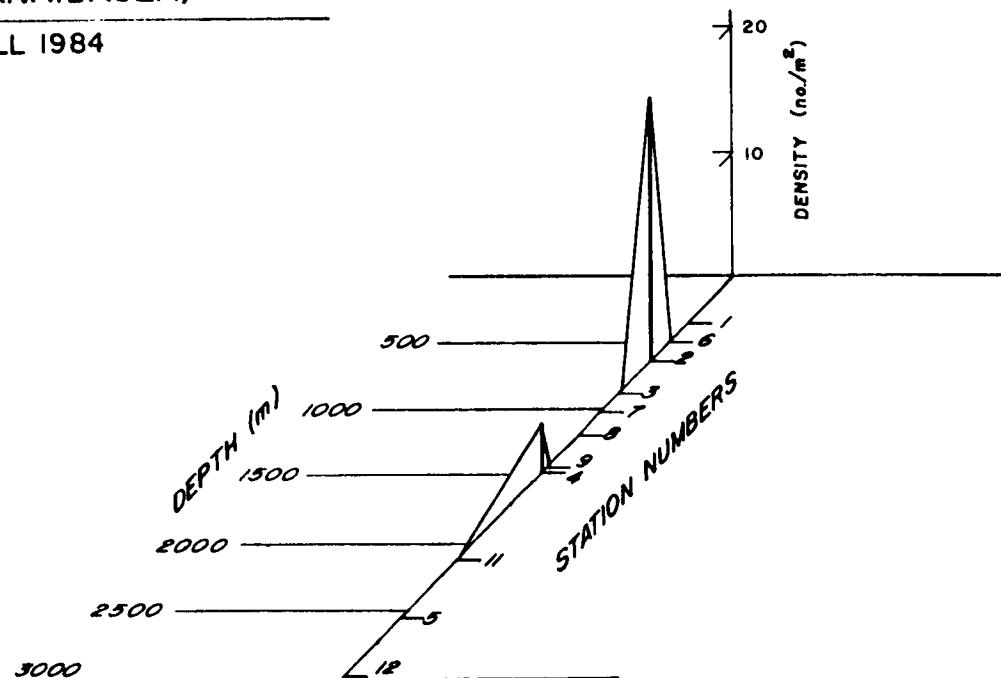
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-146

Apseudidae A (TANAIDACEA)

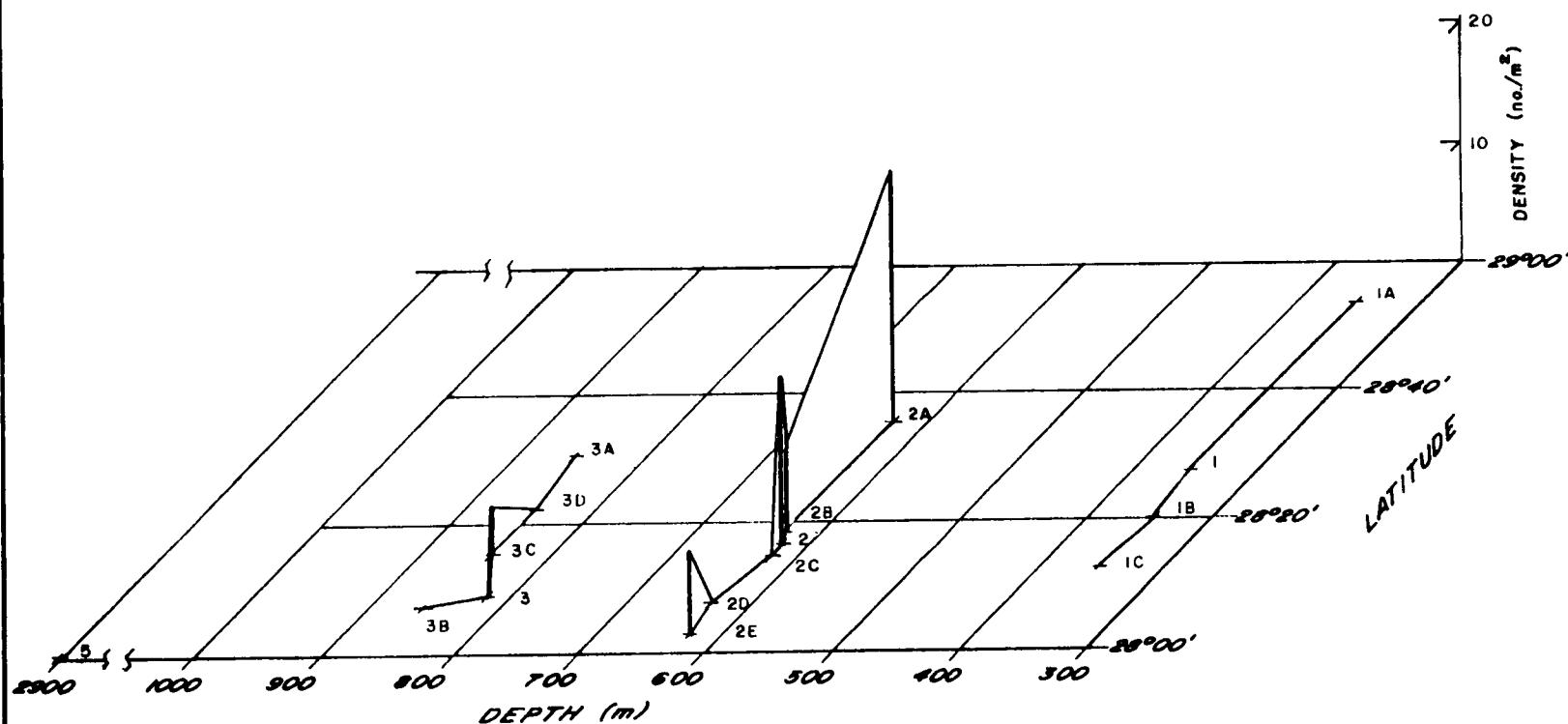
CENTRAL REGION - FALL 1984



Apseudidae A (TANAIDACEA)

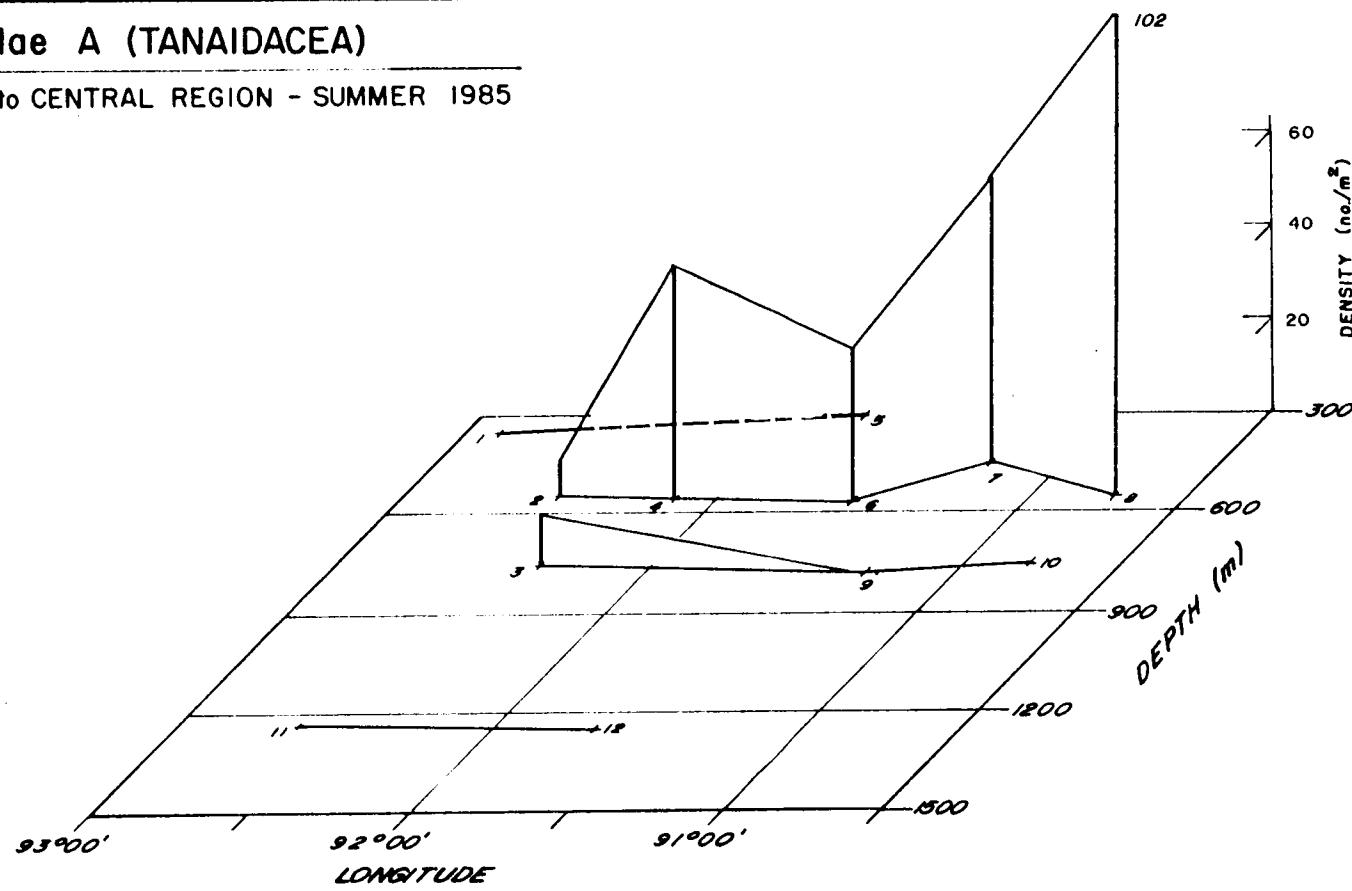
EASTERN REGION - SPRING 1985

C-148



Apseudidae A (TANAIDACEA)

WESTERN to CENTRAL REGION - SUMMER 1985

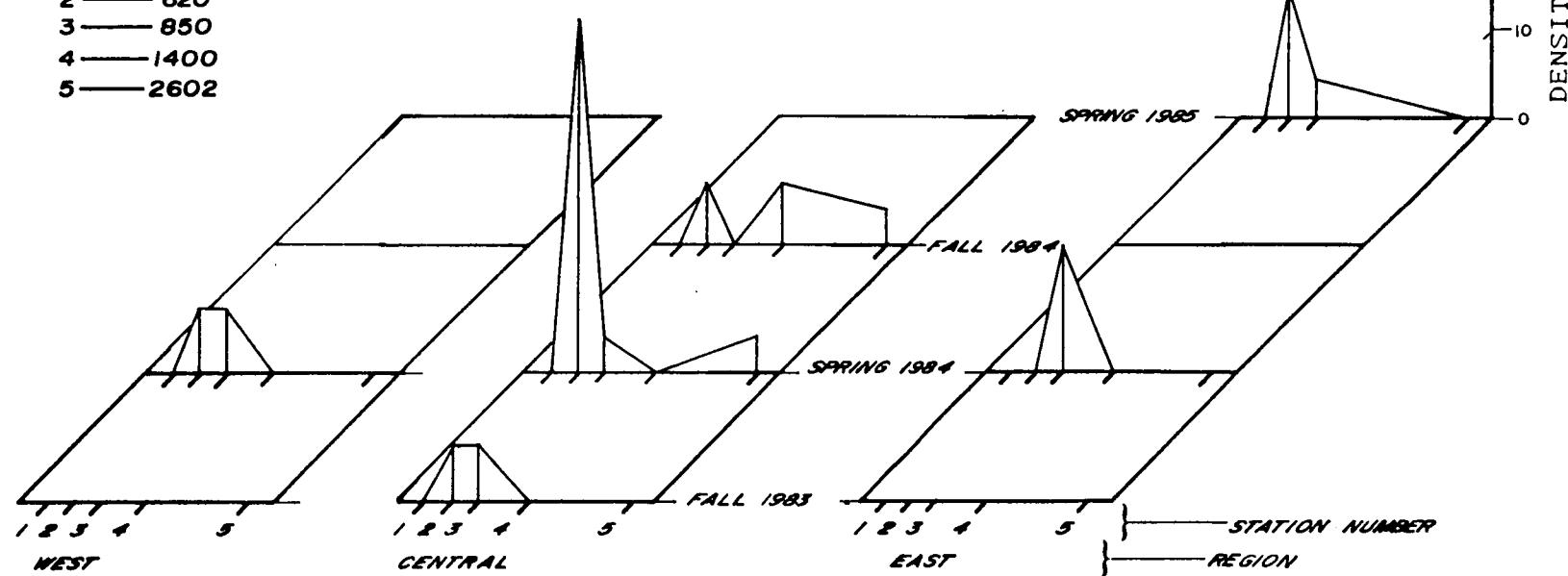


TANAElla sp. 1

REGION · SEASON · YEAR COMPARISONS

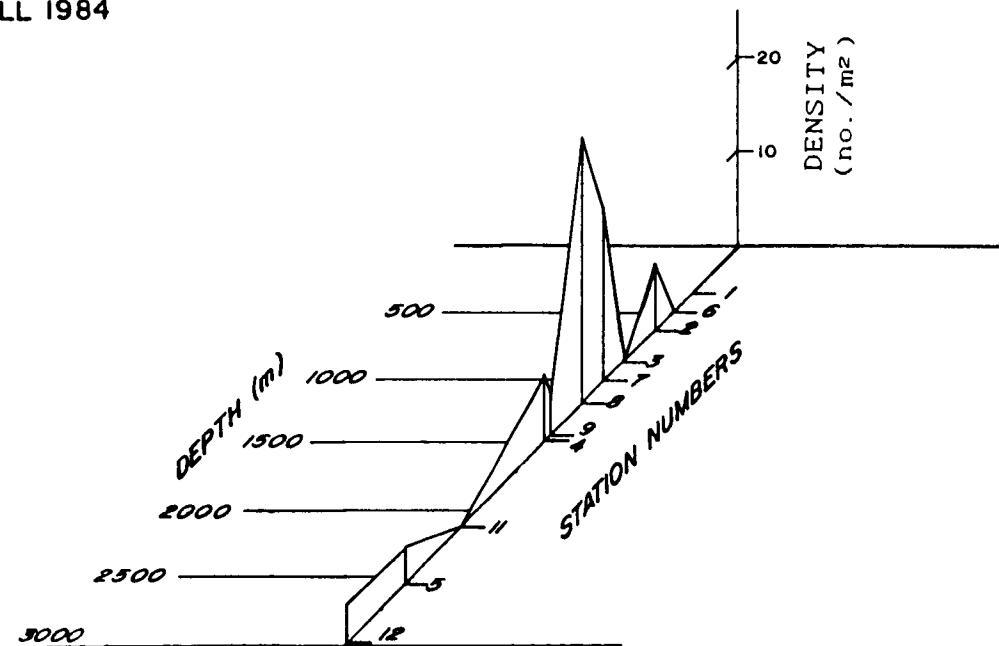
Station-Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



TANAElla SP. 1

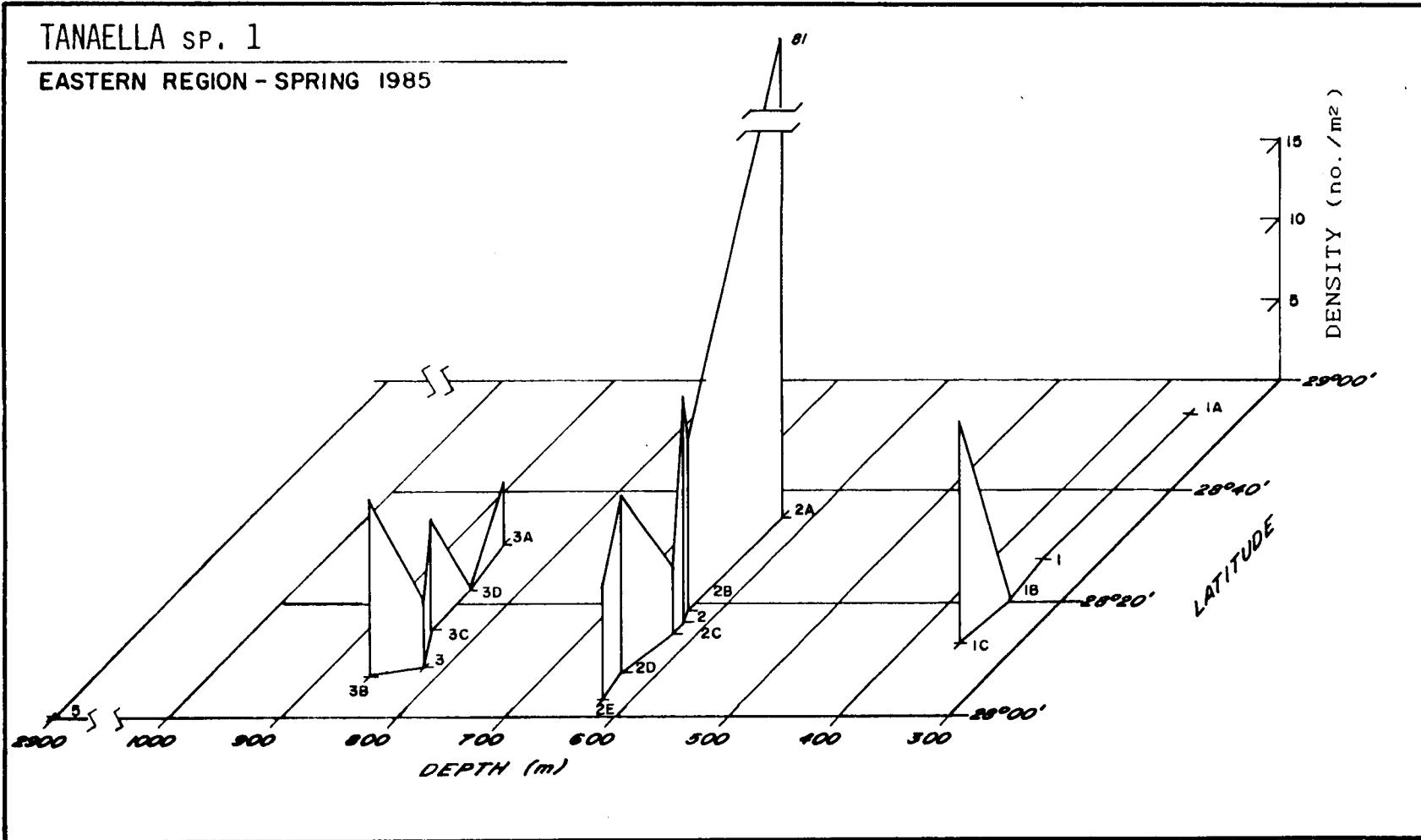
CENTRAL REGION - FALL 1984



TANAELLA SP. 1

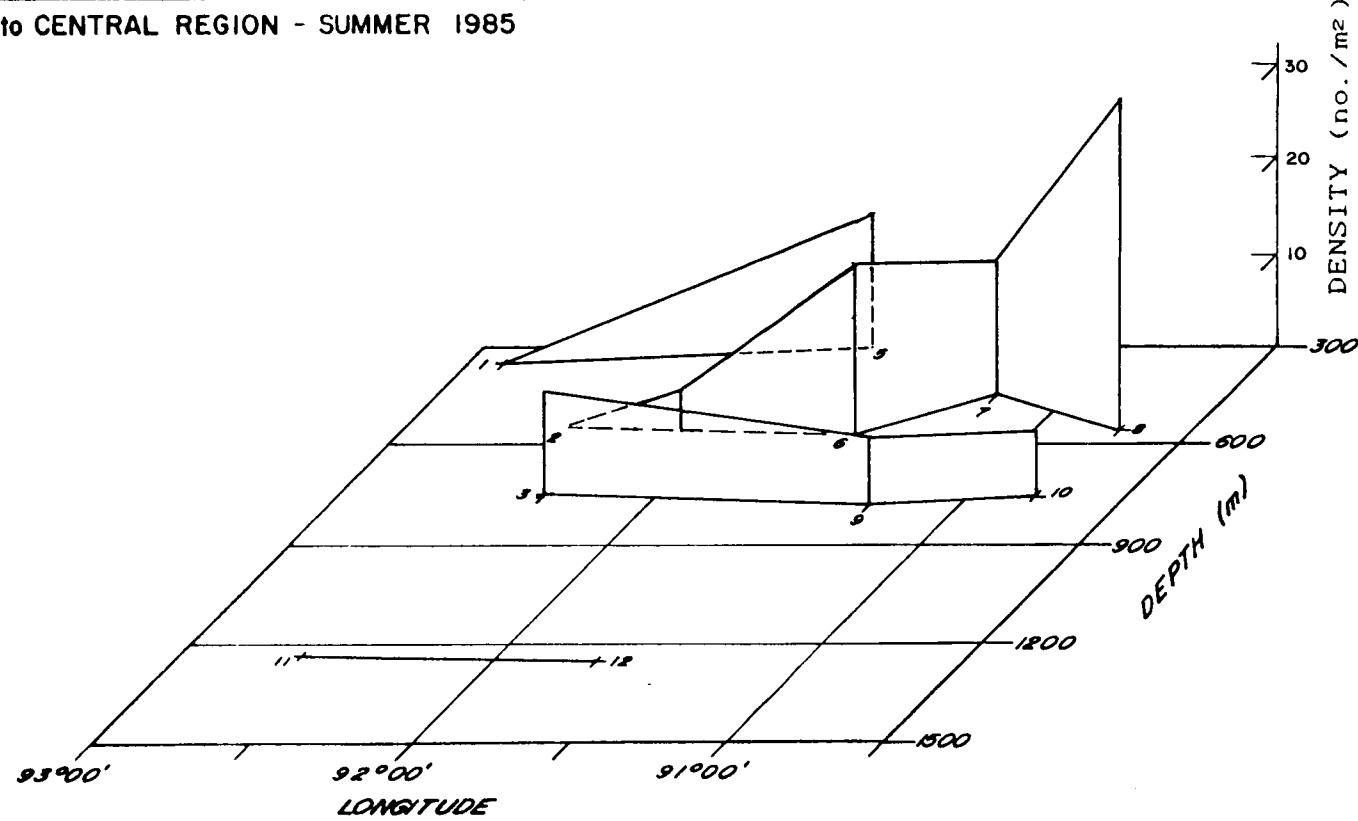
EASTERN REGION - SPRING 1985

C-152



TANAElla sp. 1

WESTERN to CENTRAL REGION - SUMMER 1985



C-5
Isopods

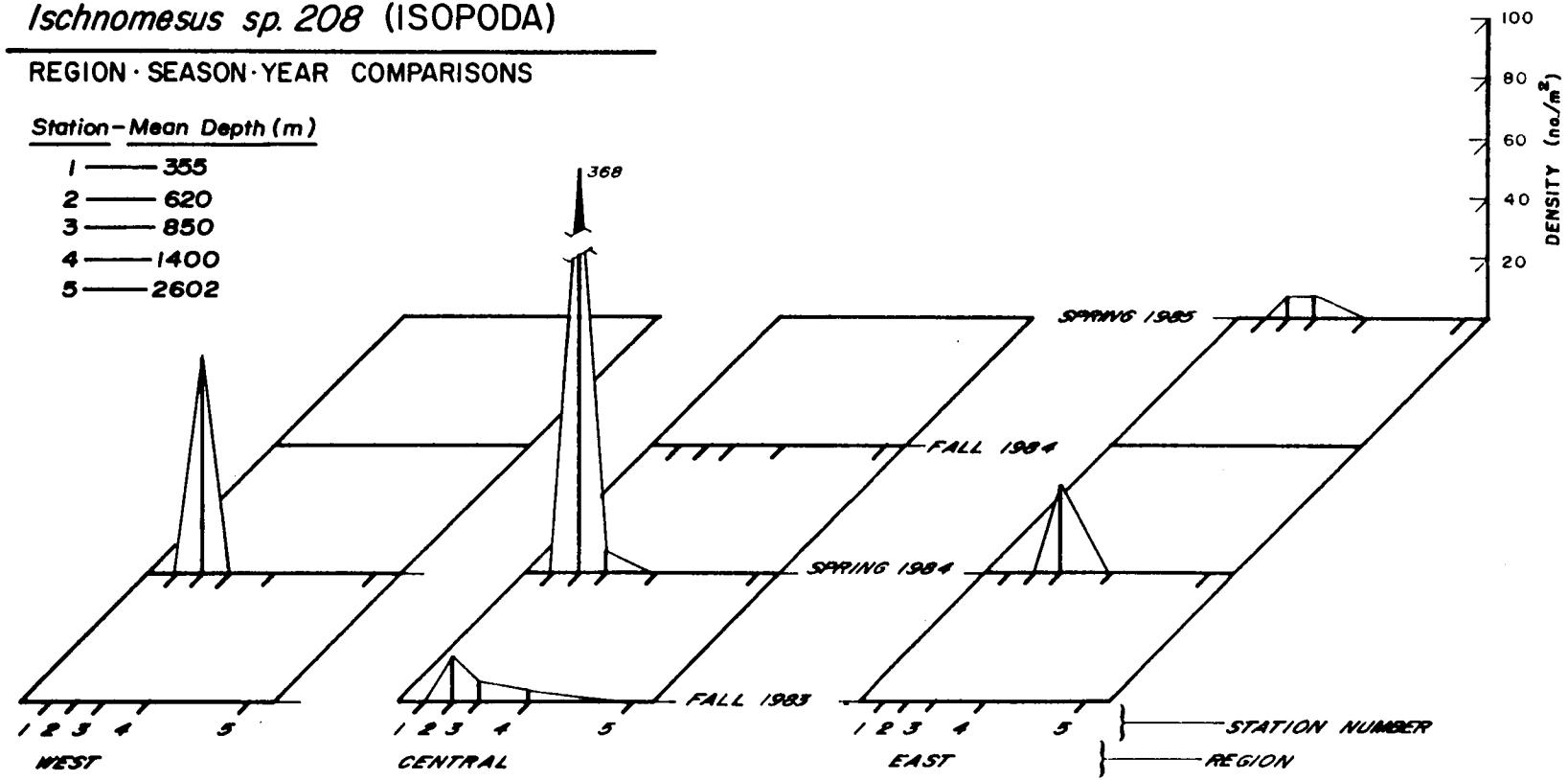
C-154

Ischnomesus sp. 208 (ISOPODA)

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

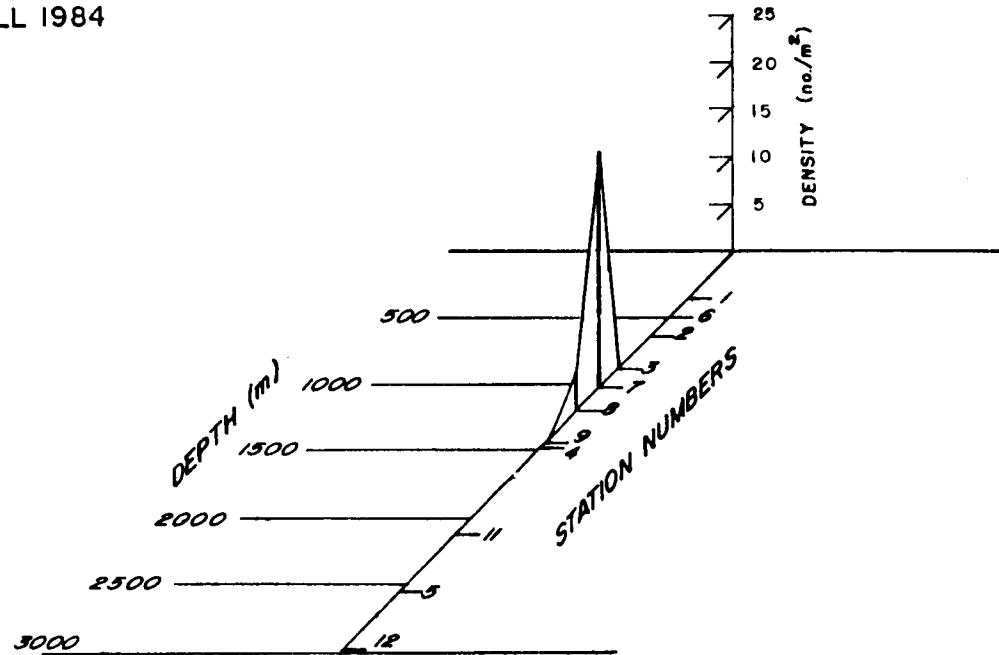
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-155

Ischnomesus sp. 208 (ISOPODA)

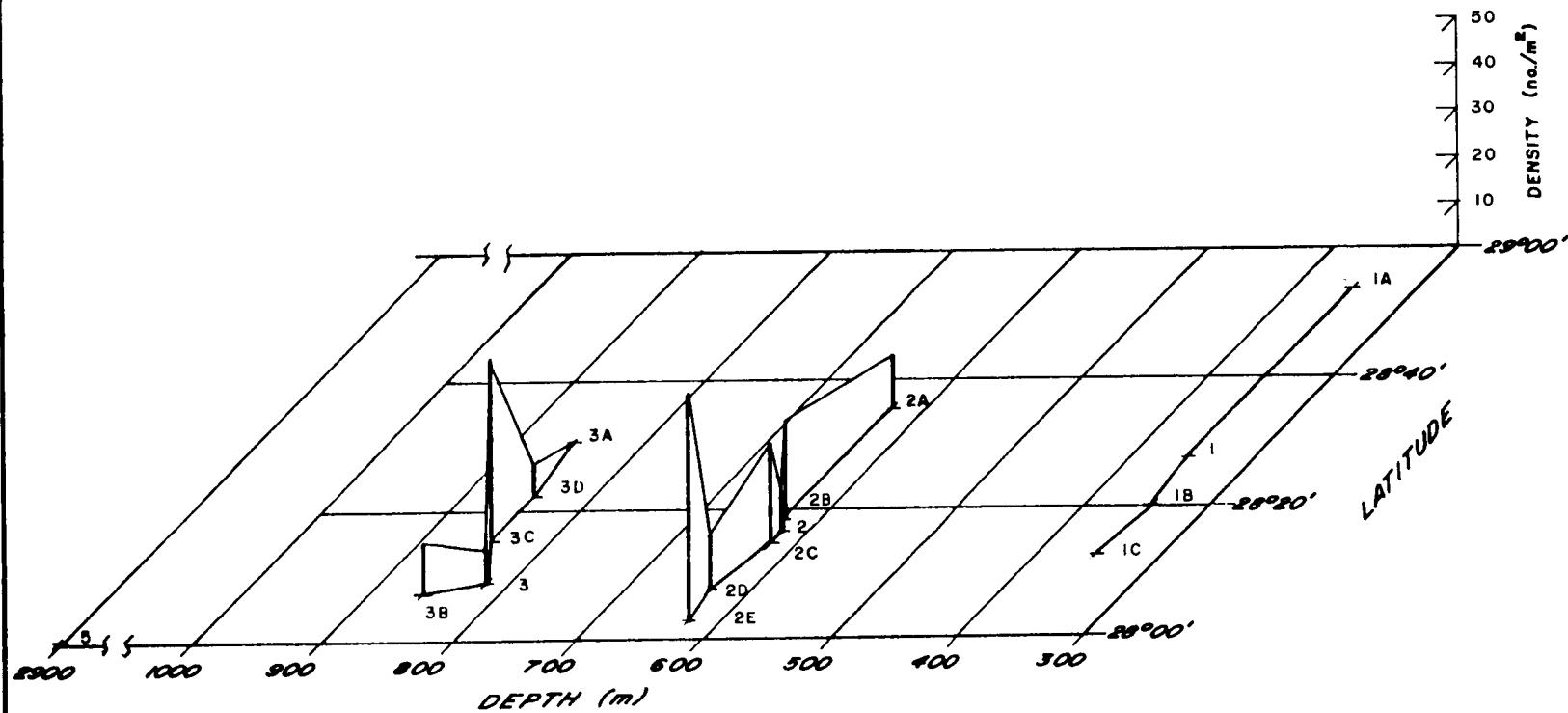
CENTRAL REGION - FALL 1984



Ischnomesus sp. 208 (ISOPODA)

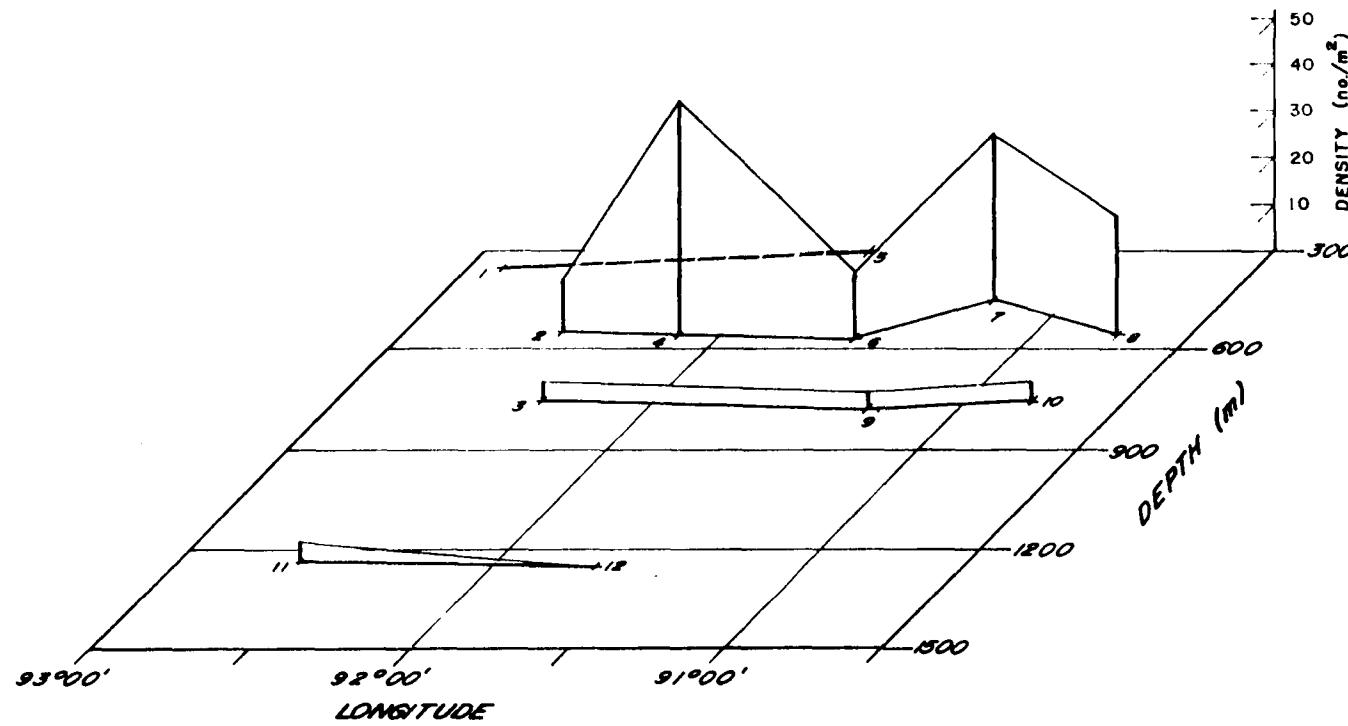
EASTERN REGION - SPRING 1985

C-157



Ischnomesus sp. 208 (ISOPODA)

WESTERN to CENTRAL REGION - SUMMER 1985



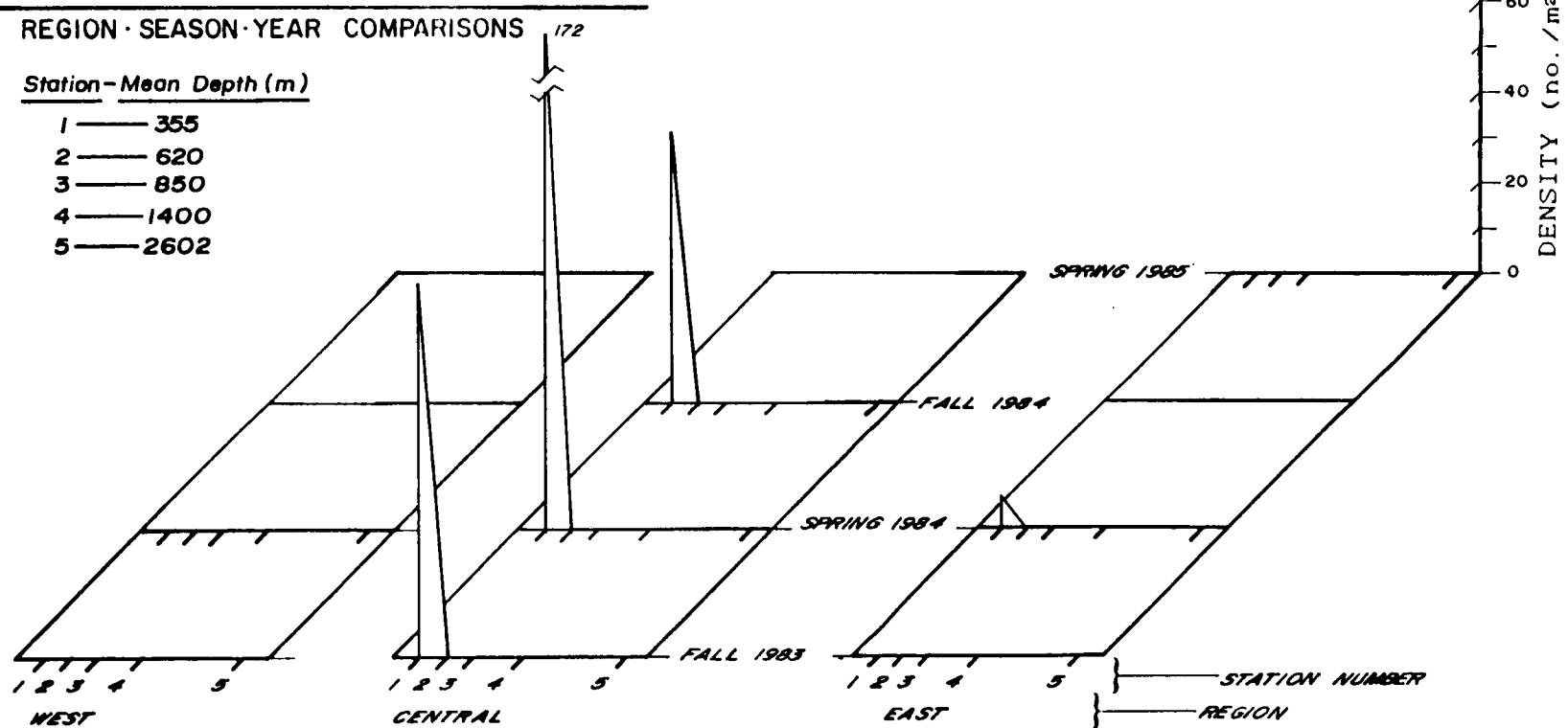
C5159

PROCHELATOR SP. 202

REGION · SEASON · YEAR COMPARISONS

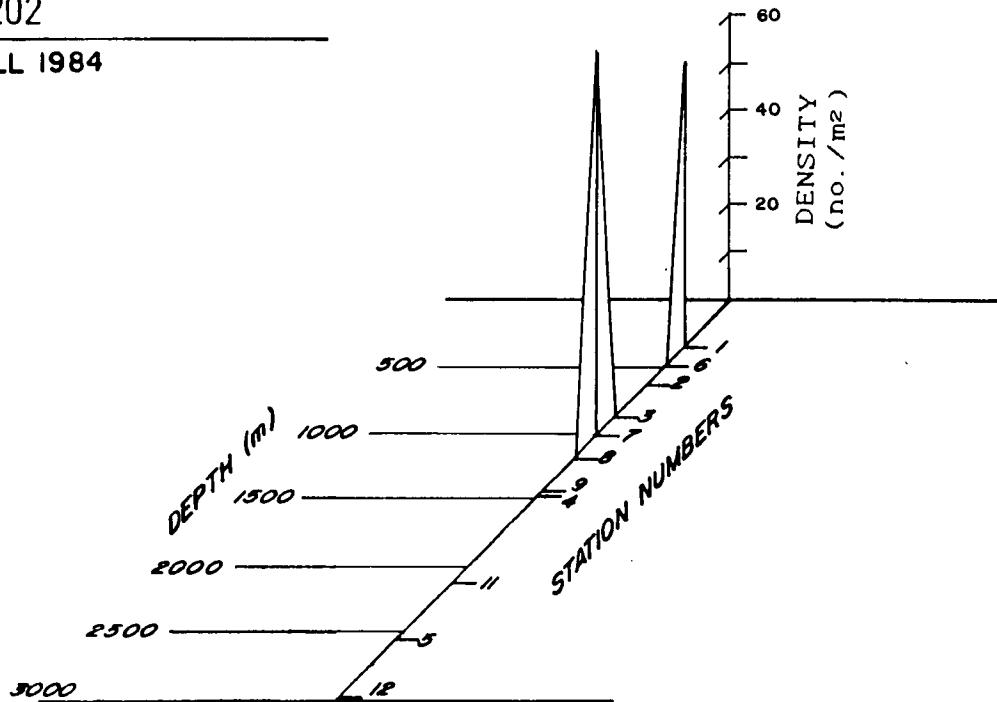
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



PROCHELATOR SP. 202

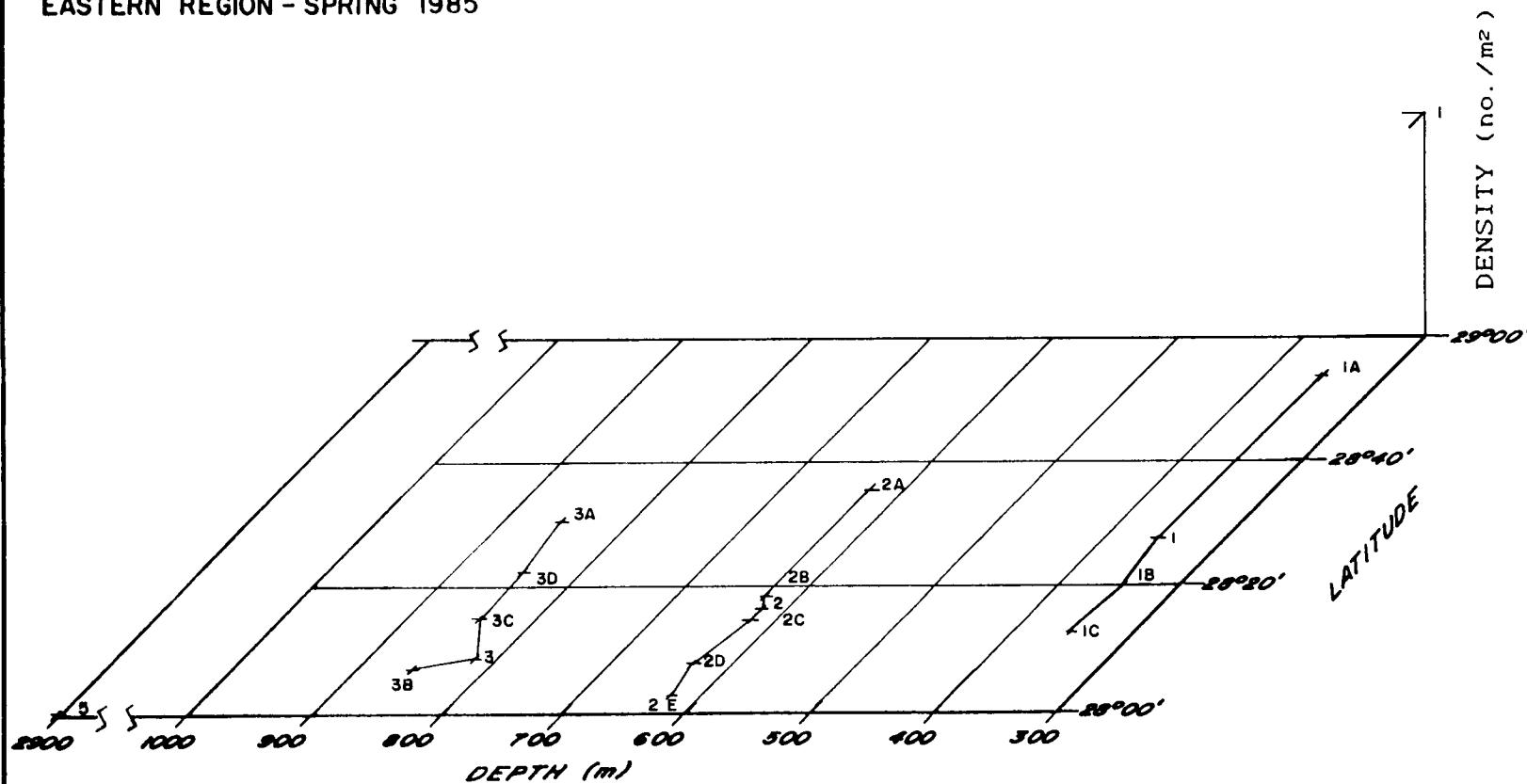
CENTRAL REGION - FALL 1984



PROCHELATOR SP. 202

EASTERN REGION - SPRING 1985

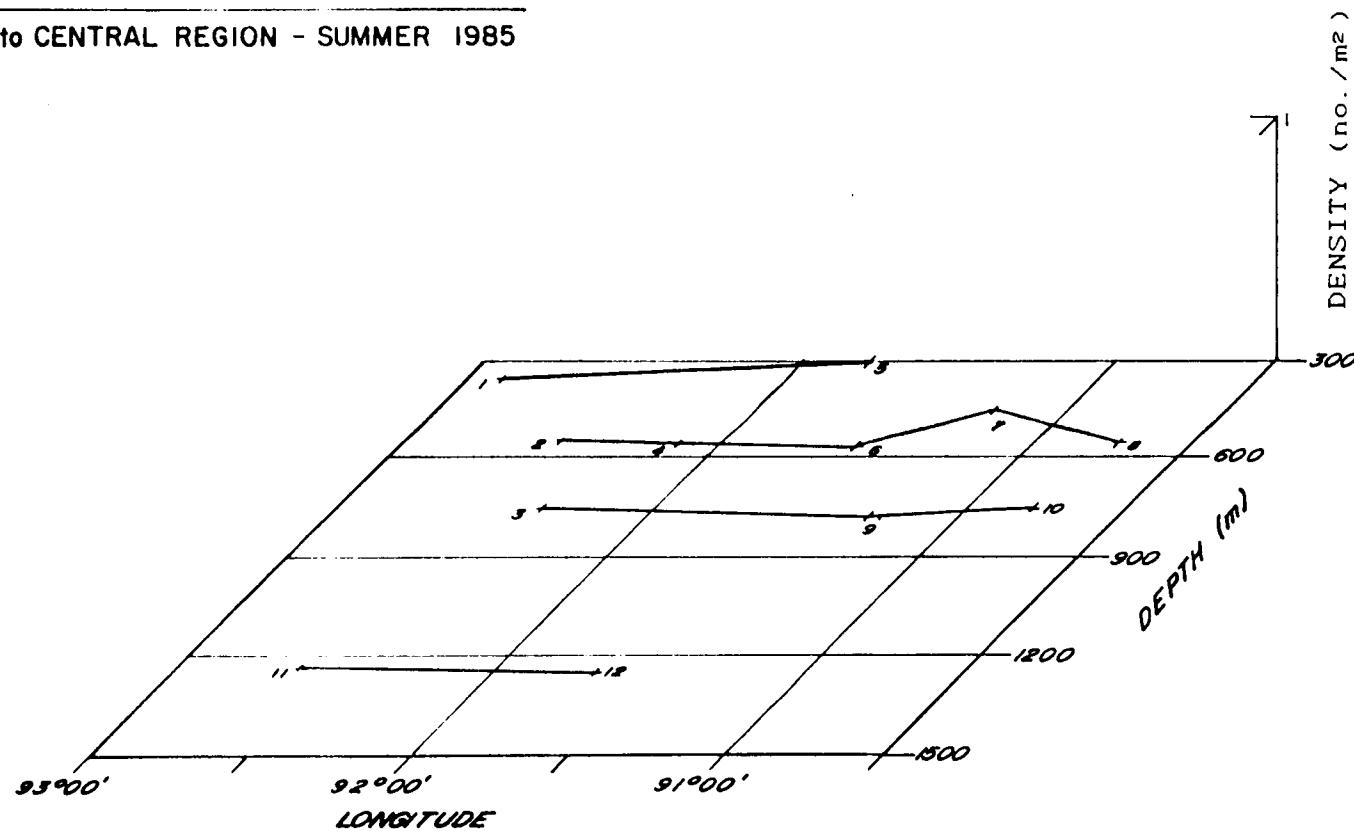
C-161



PROCHELATOR SP. 202

WESTERN to CENTRAL REGION - SUMMER 1985

C-162

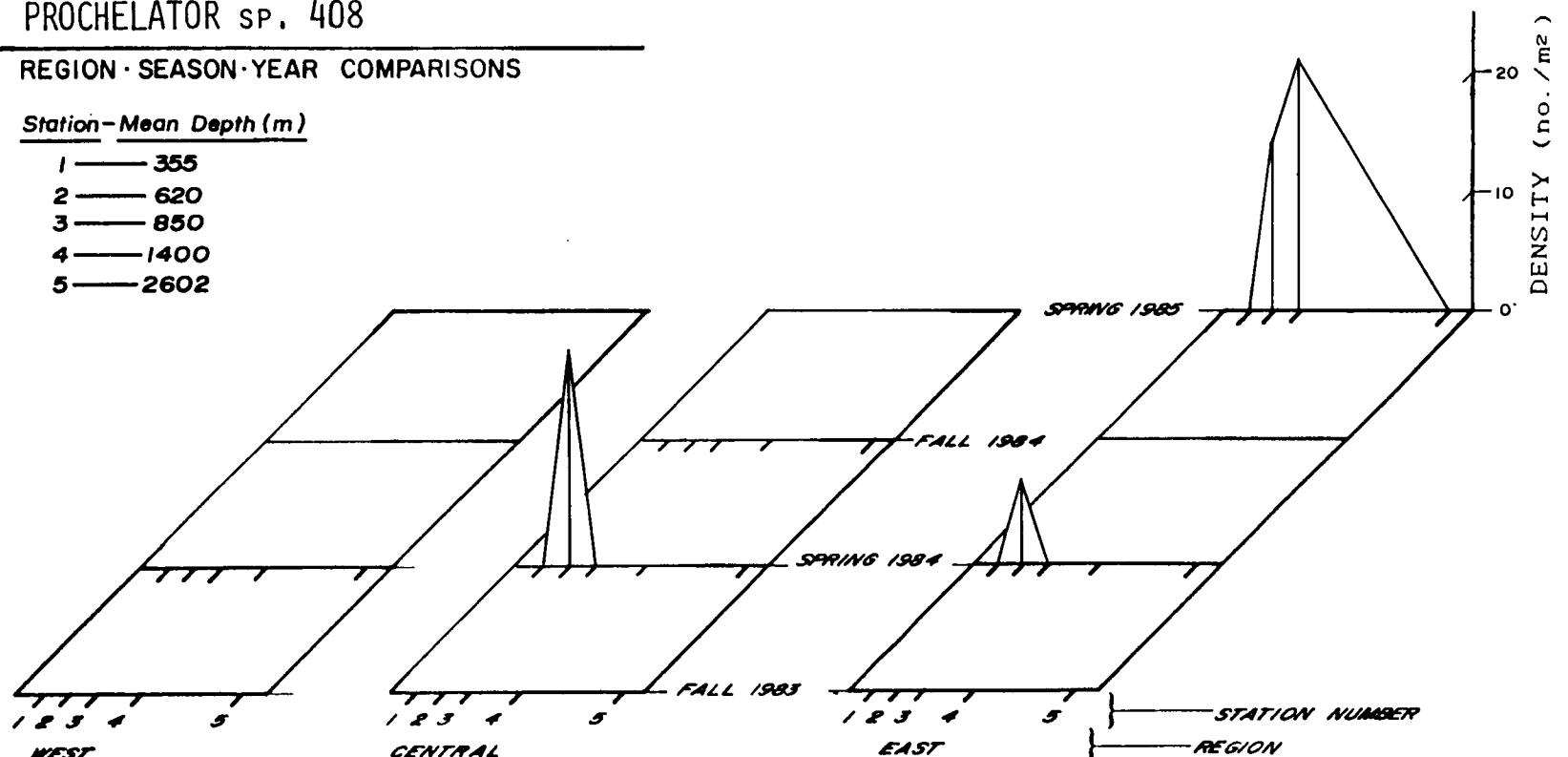


PROCHELATOR SP. 408

REGION · SEASON · YEAR COMPARISONS

Station-Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602

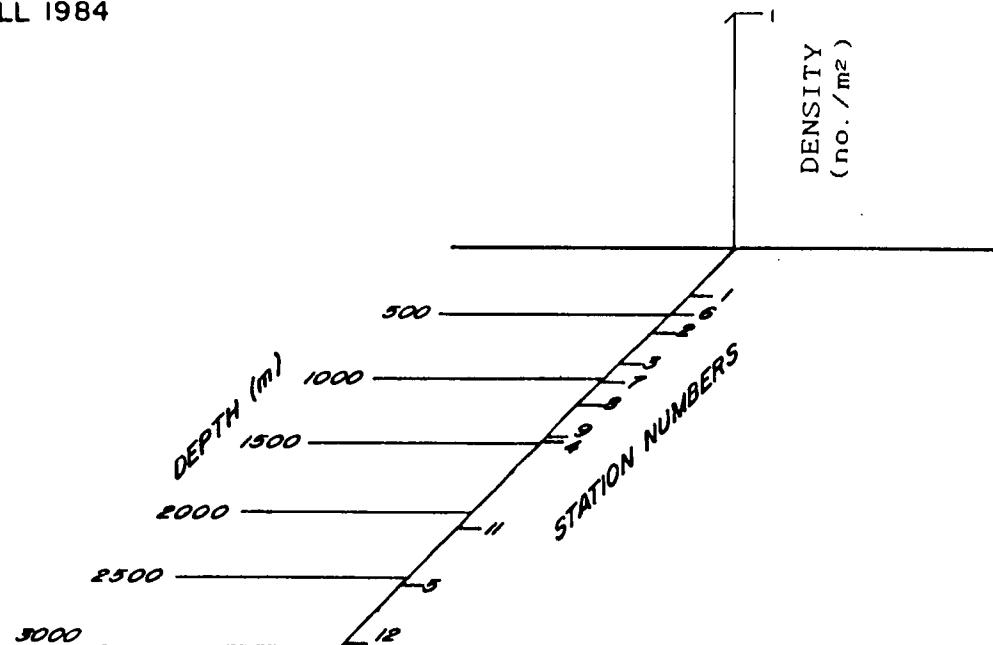


C-163

C-164

PROCHELATOR sp. 408

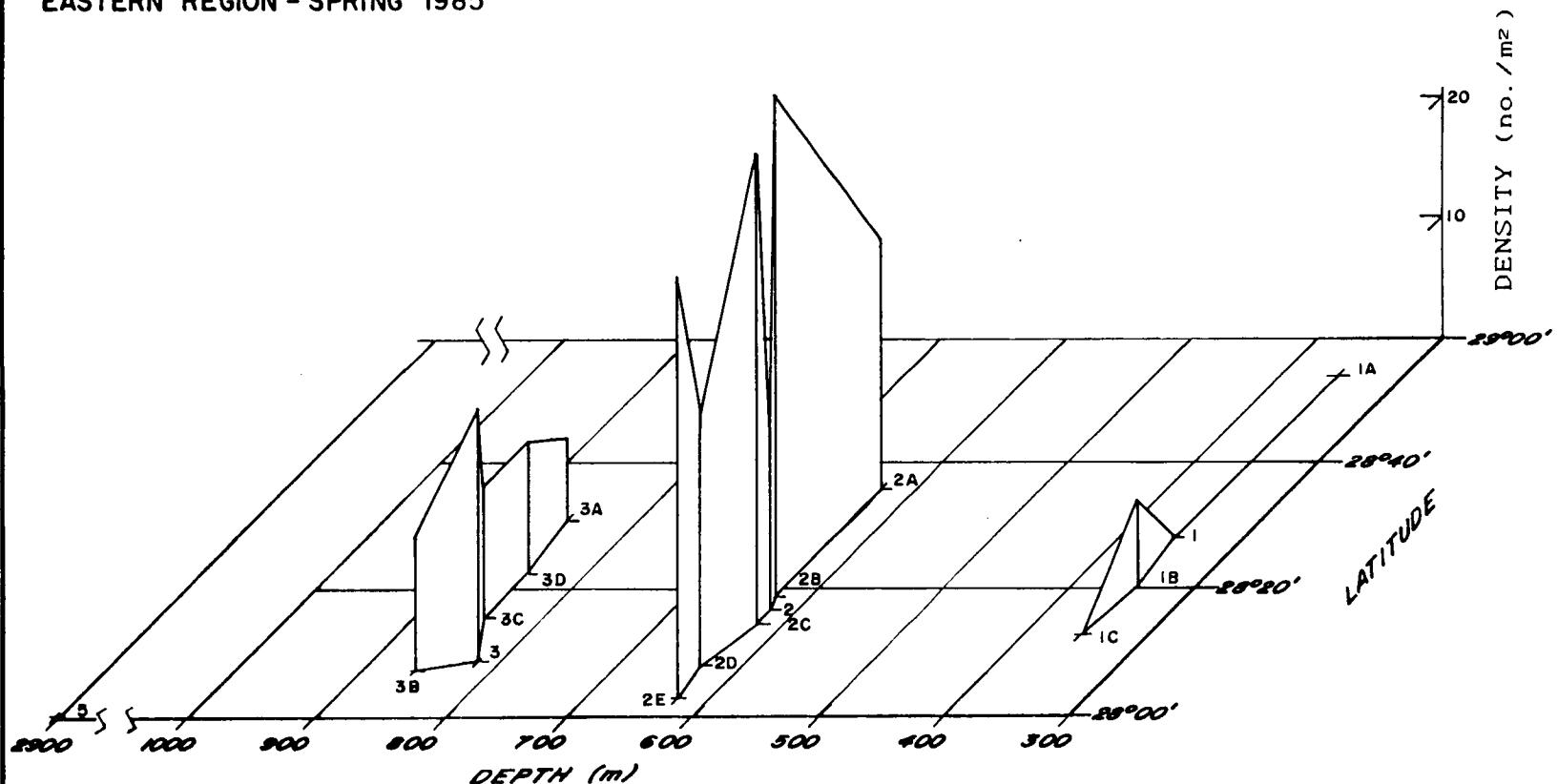
CENTRAL REGION - FALL 1984



PROCHELATOR SP. 408

EASTERN REGION - SPRING 1985

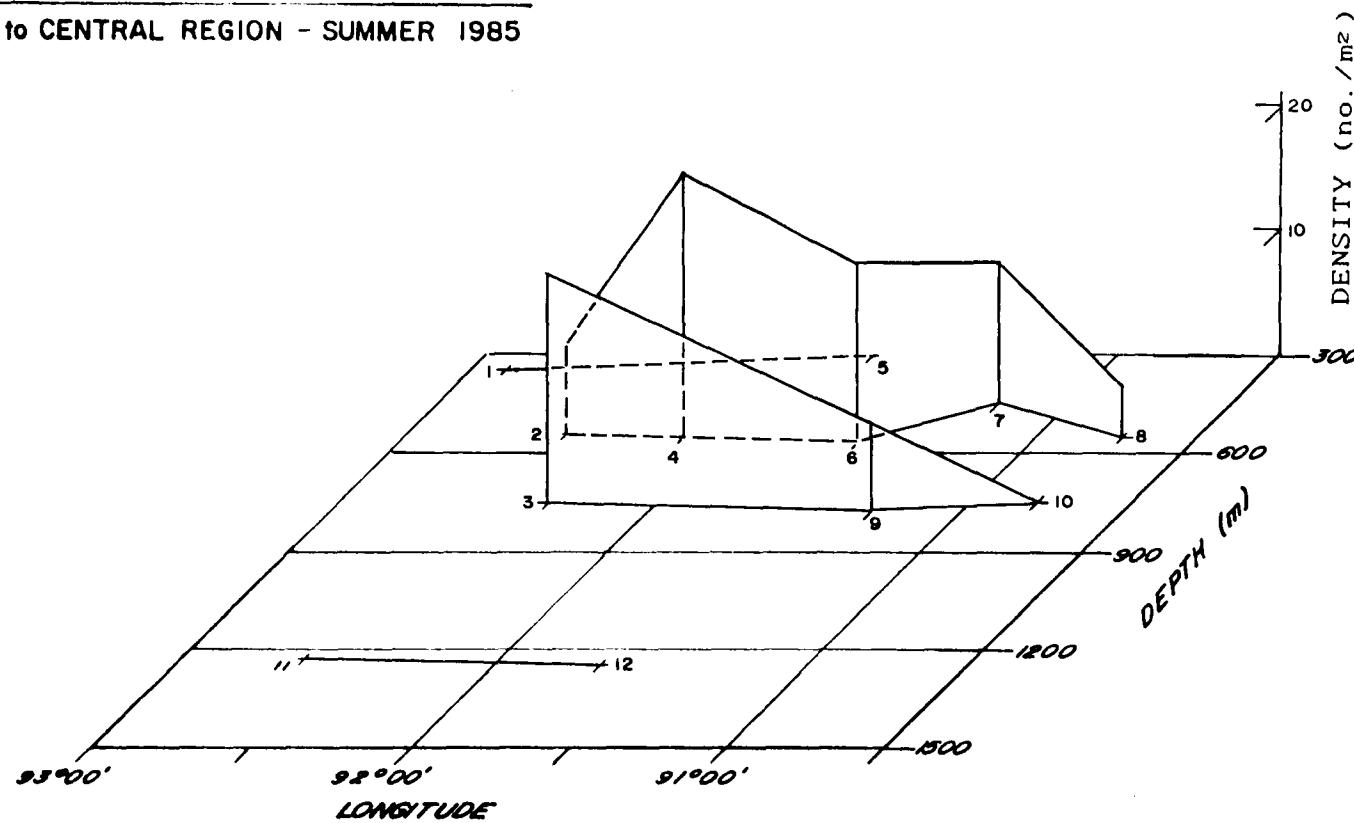
C-165



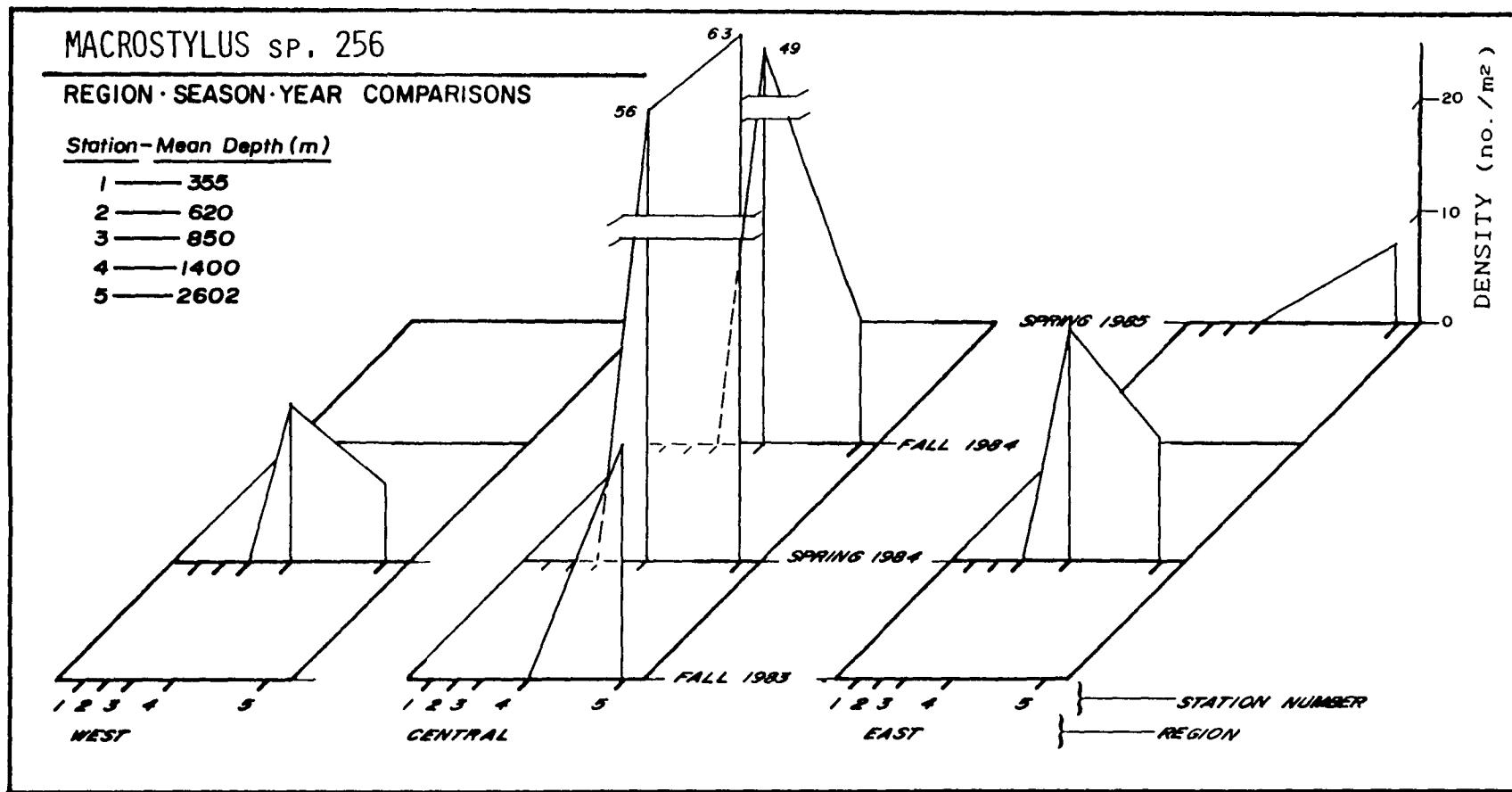
PROCHELATOR SP. 408

WESTERN to CENTRAL REGION - SUMMER 1985

C-166



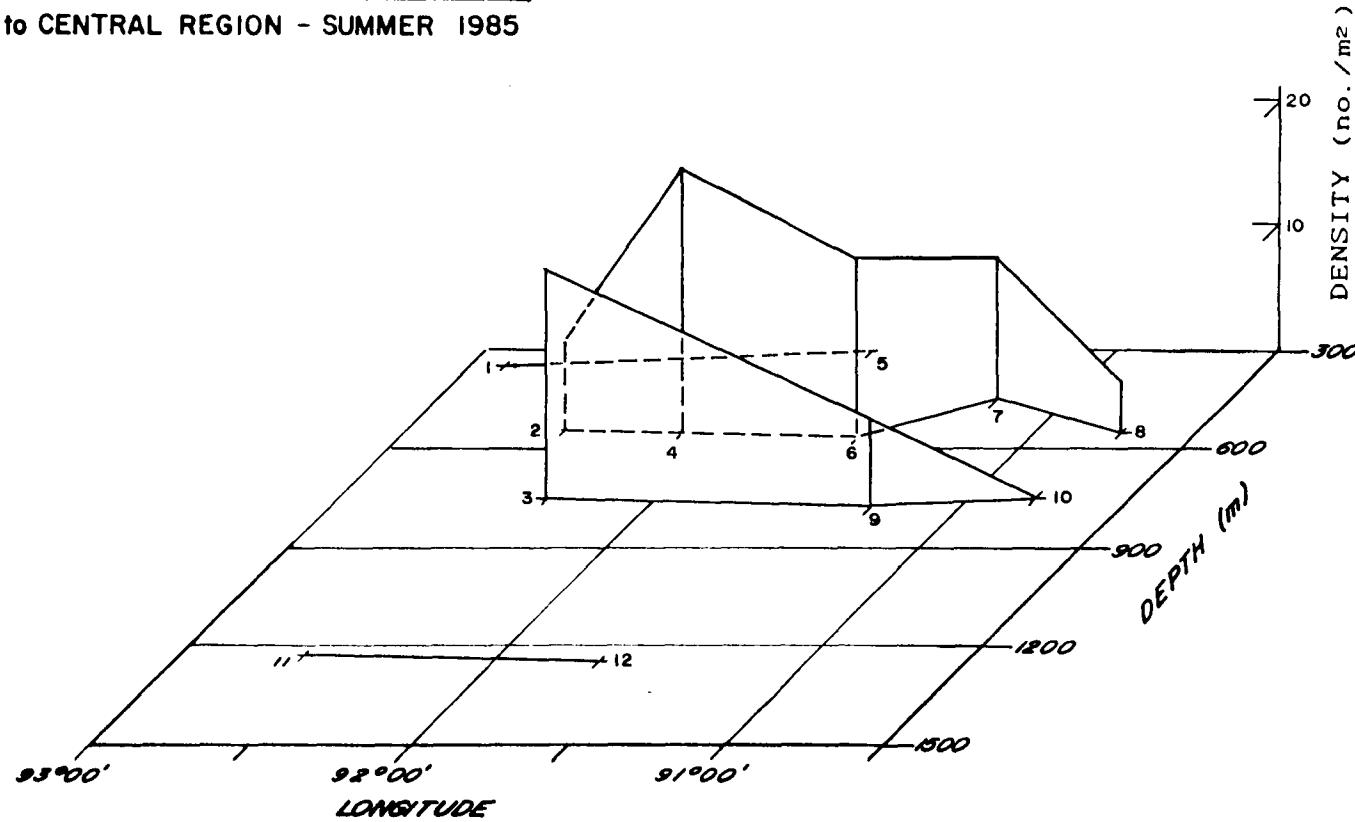
C-167



PROCHELATOR SP. 408

WESTERN to CENTRAL REGION - SUMMER 1985

C-168



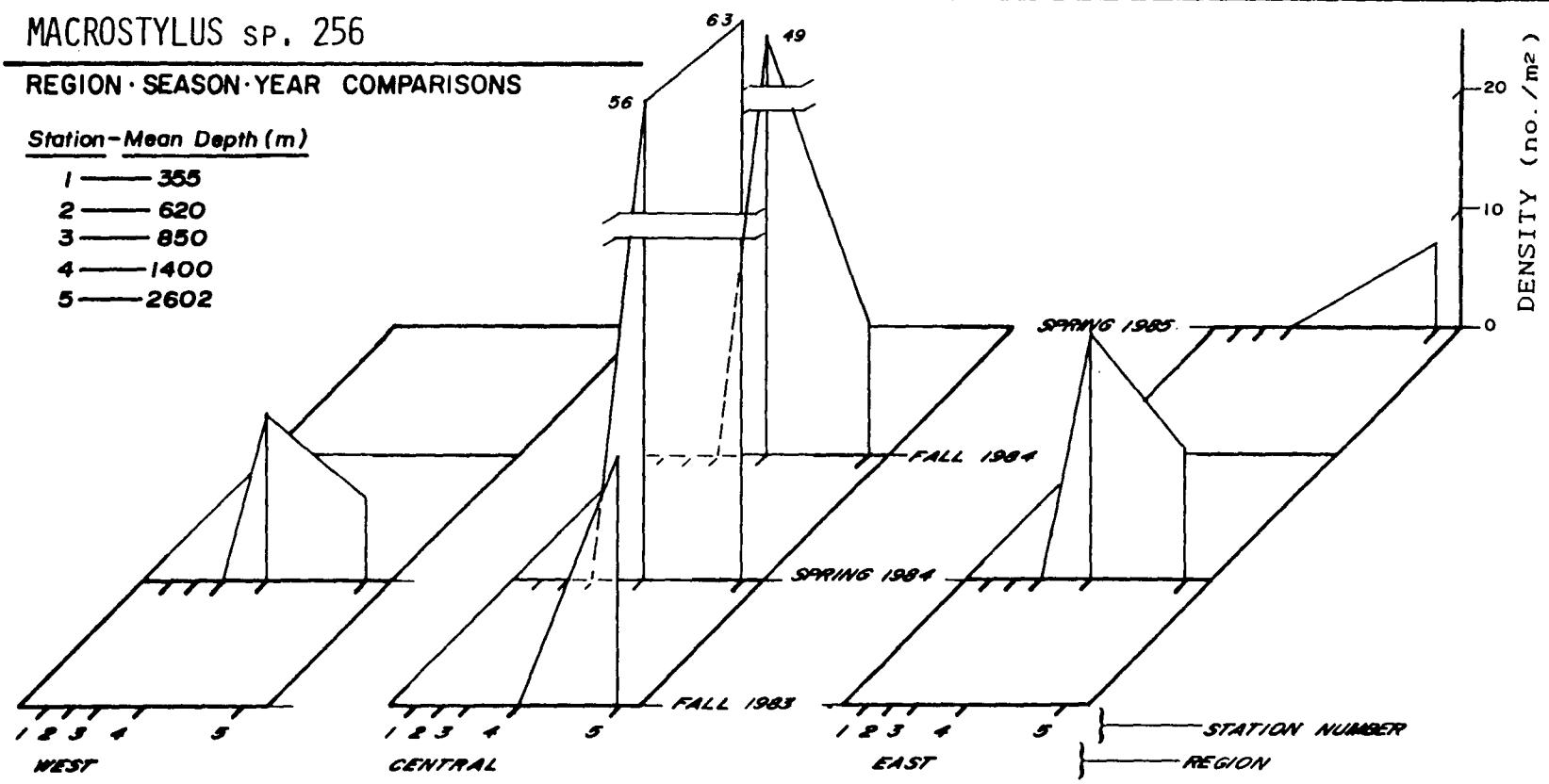
C-169

MACROSTYLUS SP. 256

REGION · SEASON · YEAR COMPARISONS

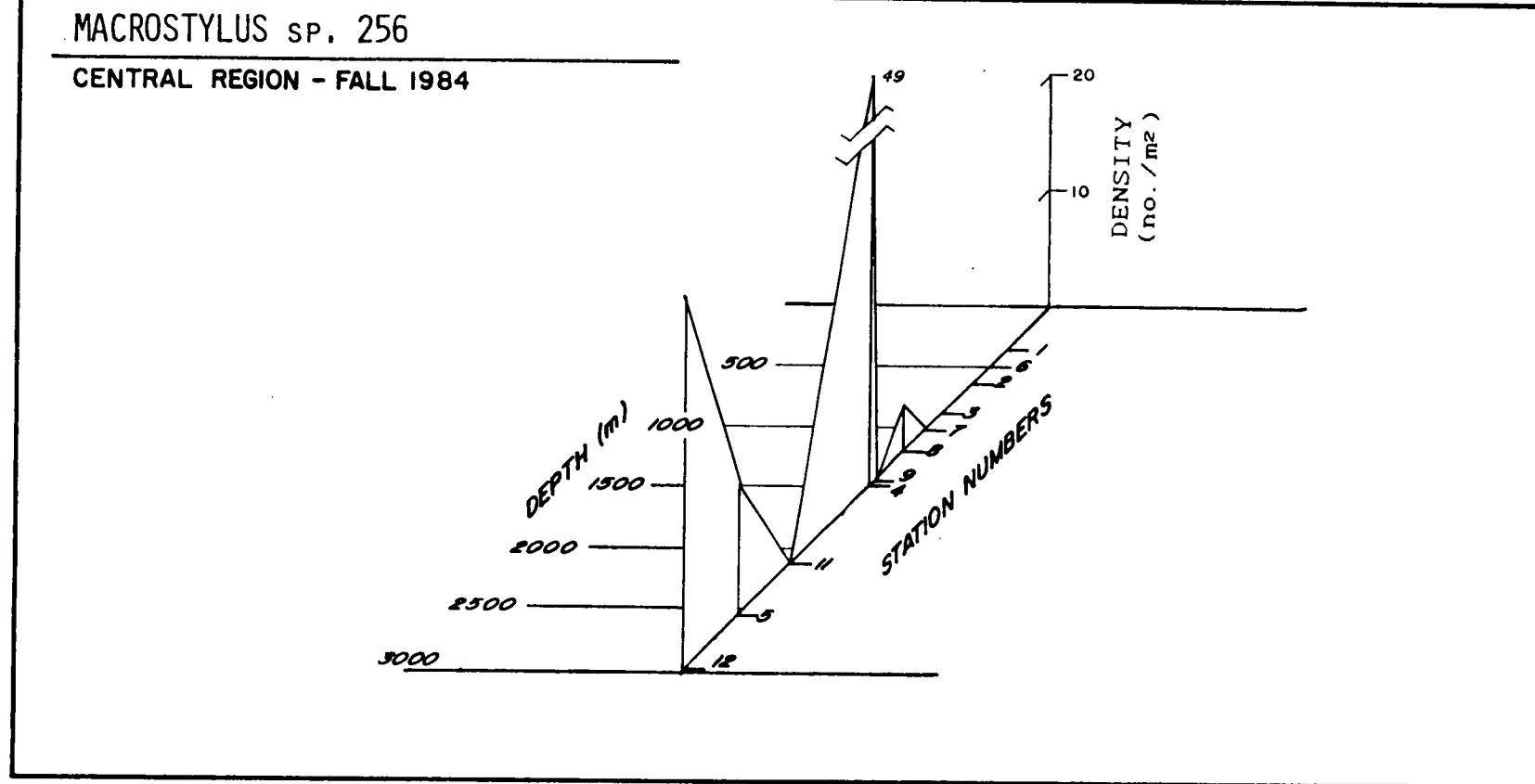
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



MACROSTYLUS SP. 256

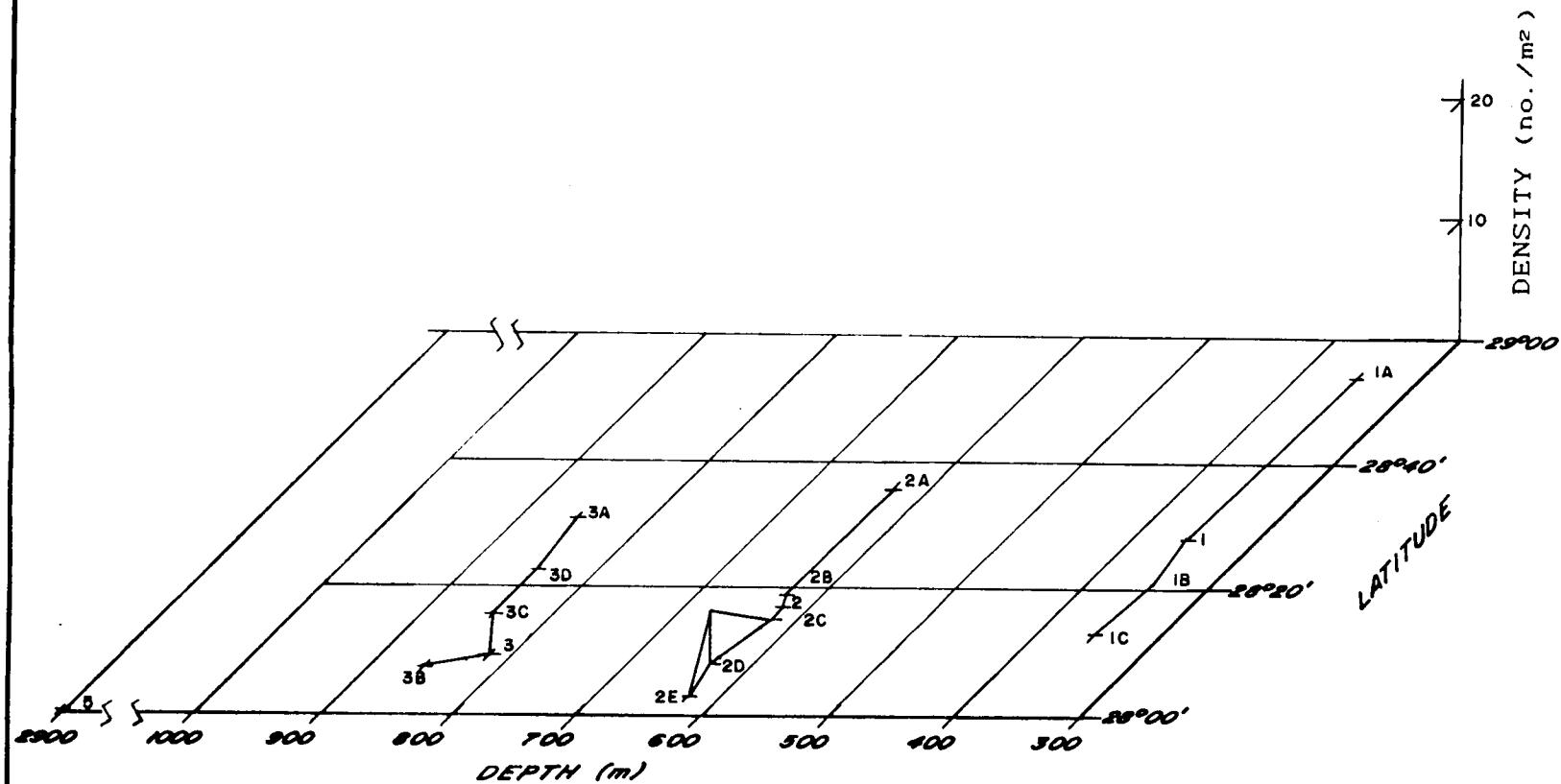
CENTRAL REGION - FALL 1984



MACROSTYLUS SP. 256

EASTERN REGION - SPRING 1985

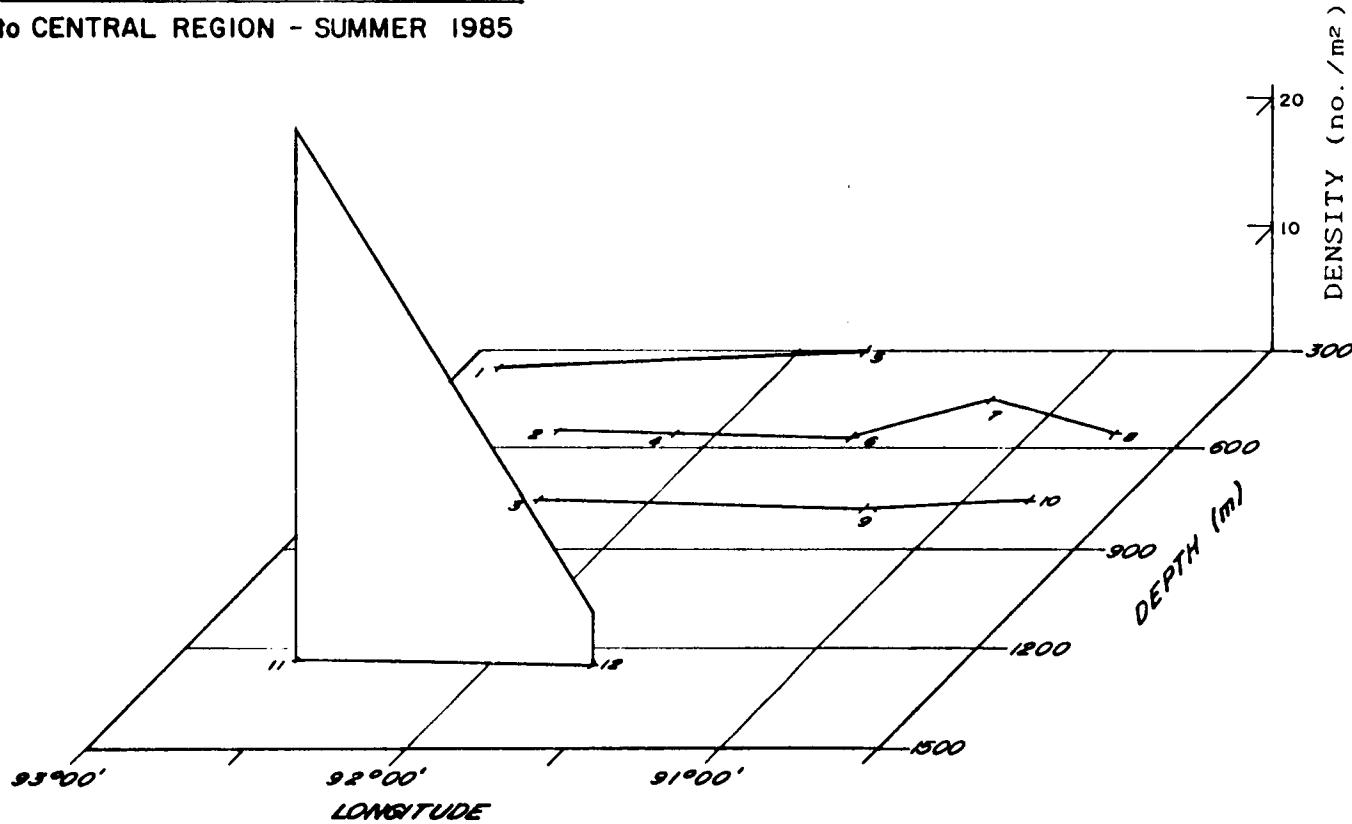
C-171



MACROSTYLUS SP. 256

WESTERN to CENTRAL REGION - SUMMER 1985

C-172

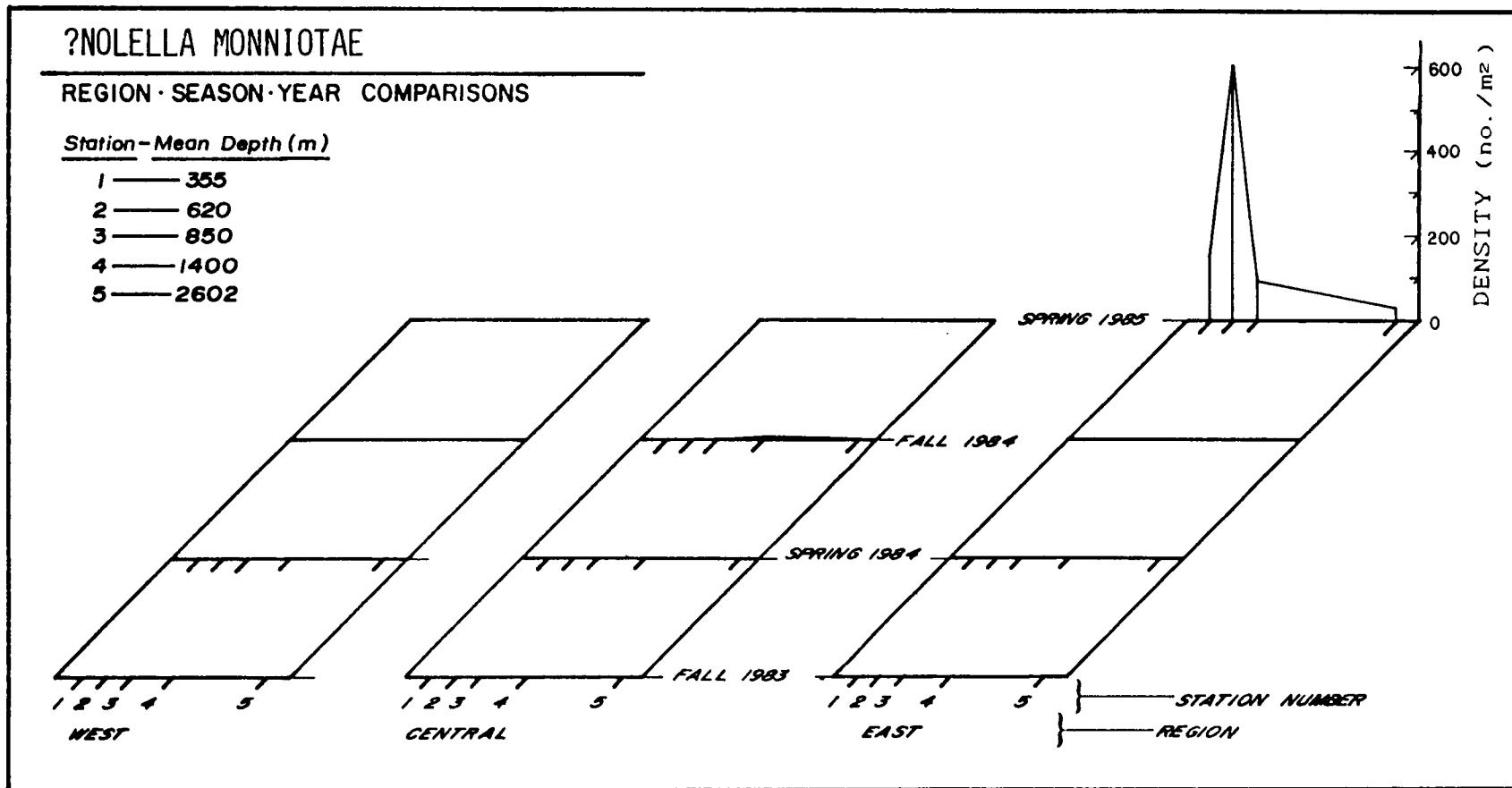


C-6

Bryozoans

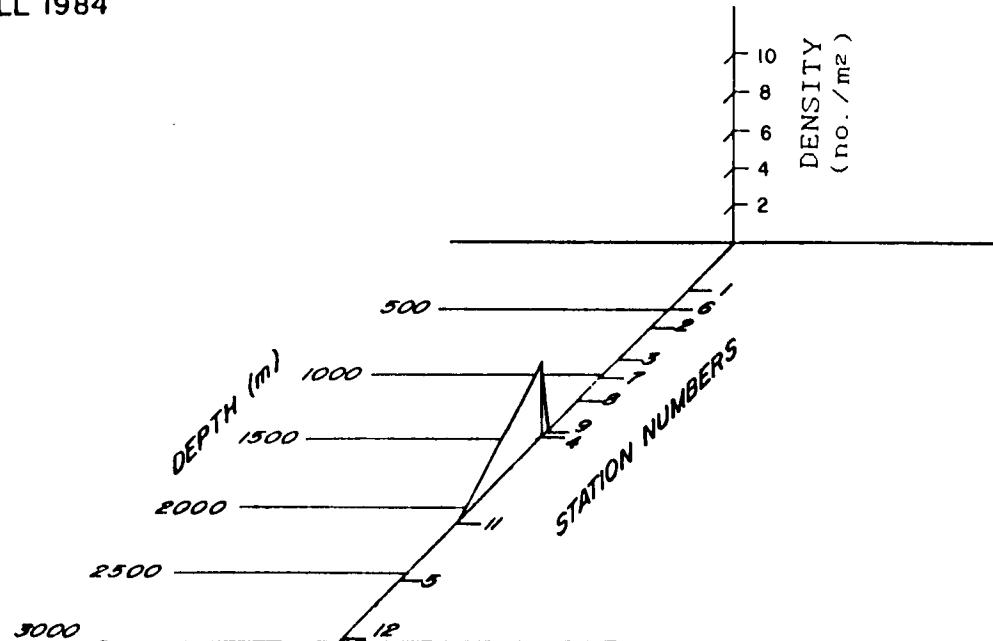
C-173

C-174



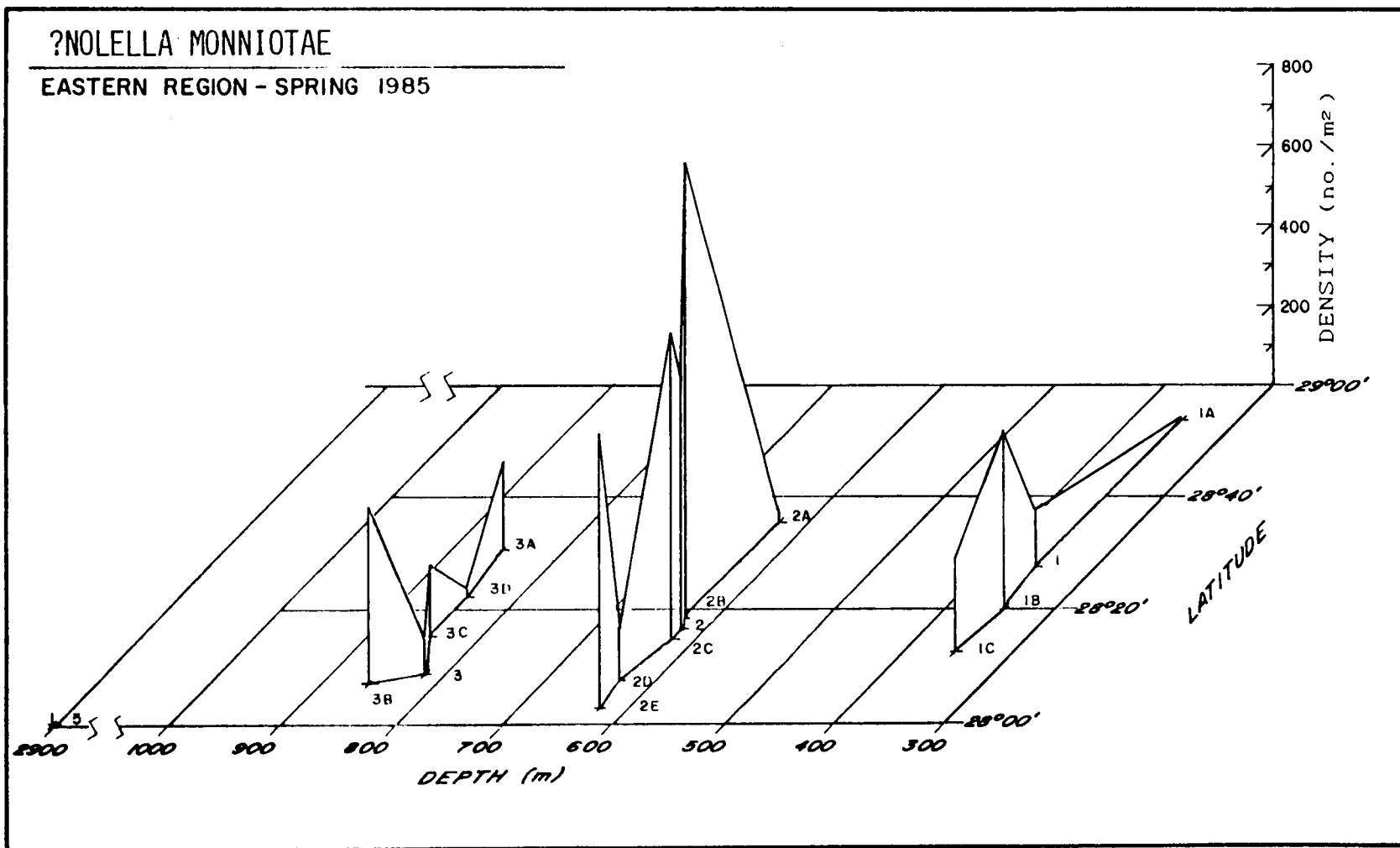
?NOLELLA MONNIOTAE

CENTRAL REGION - FALL 1984



?NOLELLA MONNIOTAE
EASTERN REGION - SPRING 1985

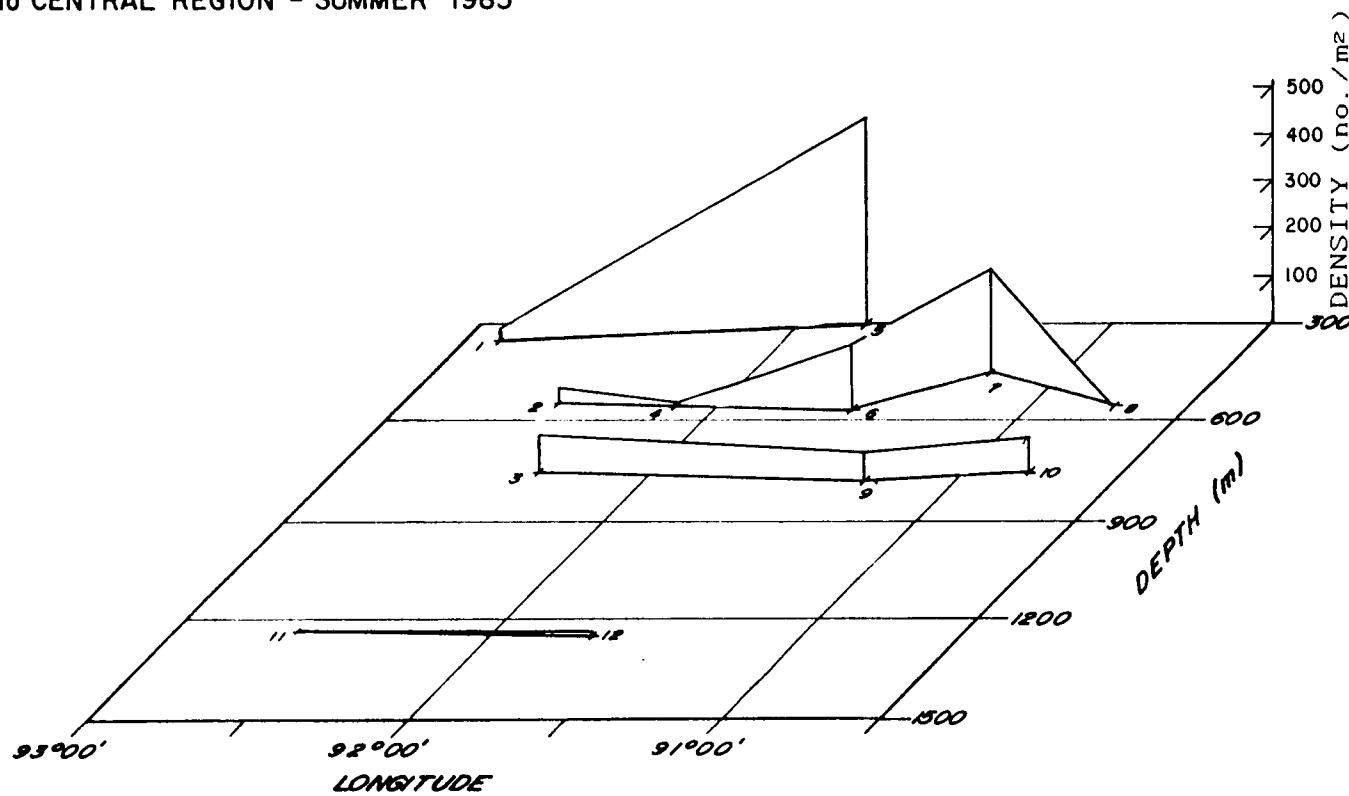
C-176

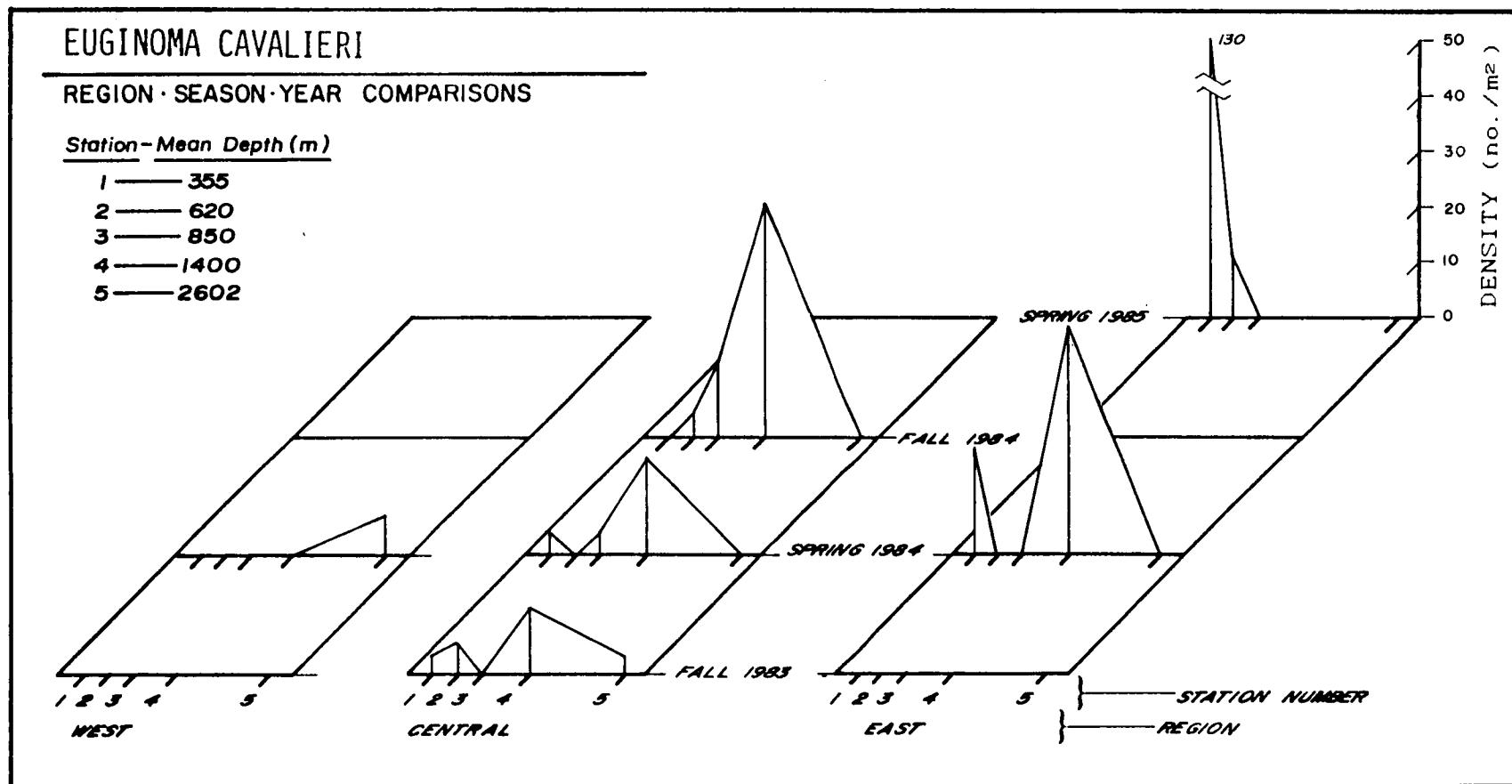


?NOLELLA MONNIOTAE

WESTERN to CENTRAL REGION - SUMMER 1985

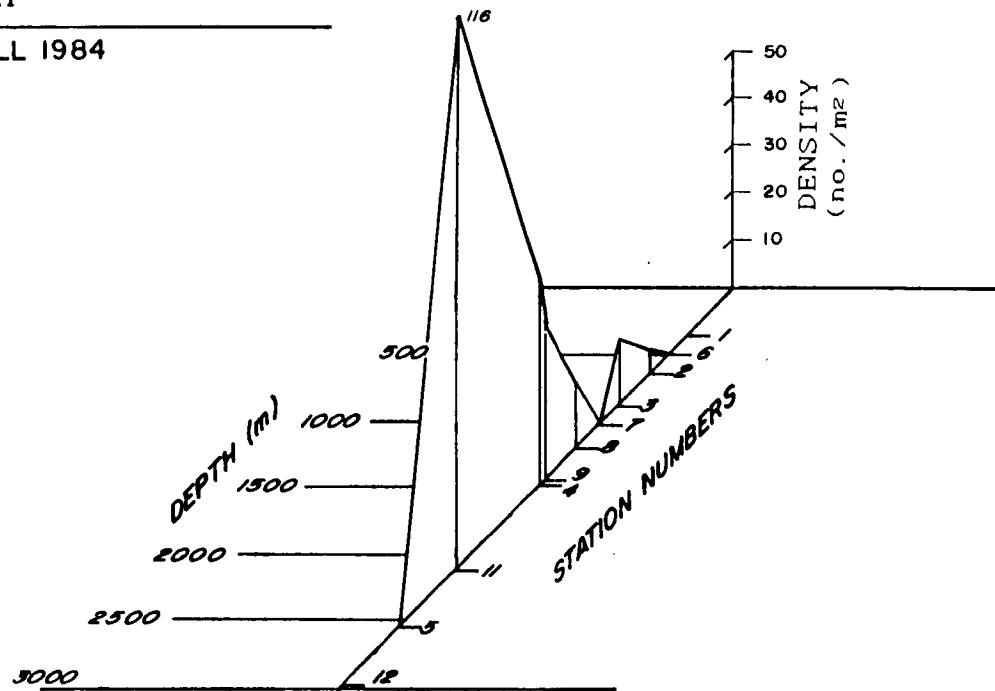
C-177





EUGINOMA CAVALIERI

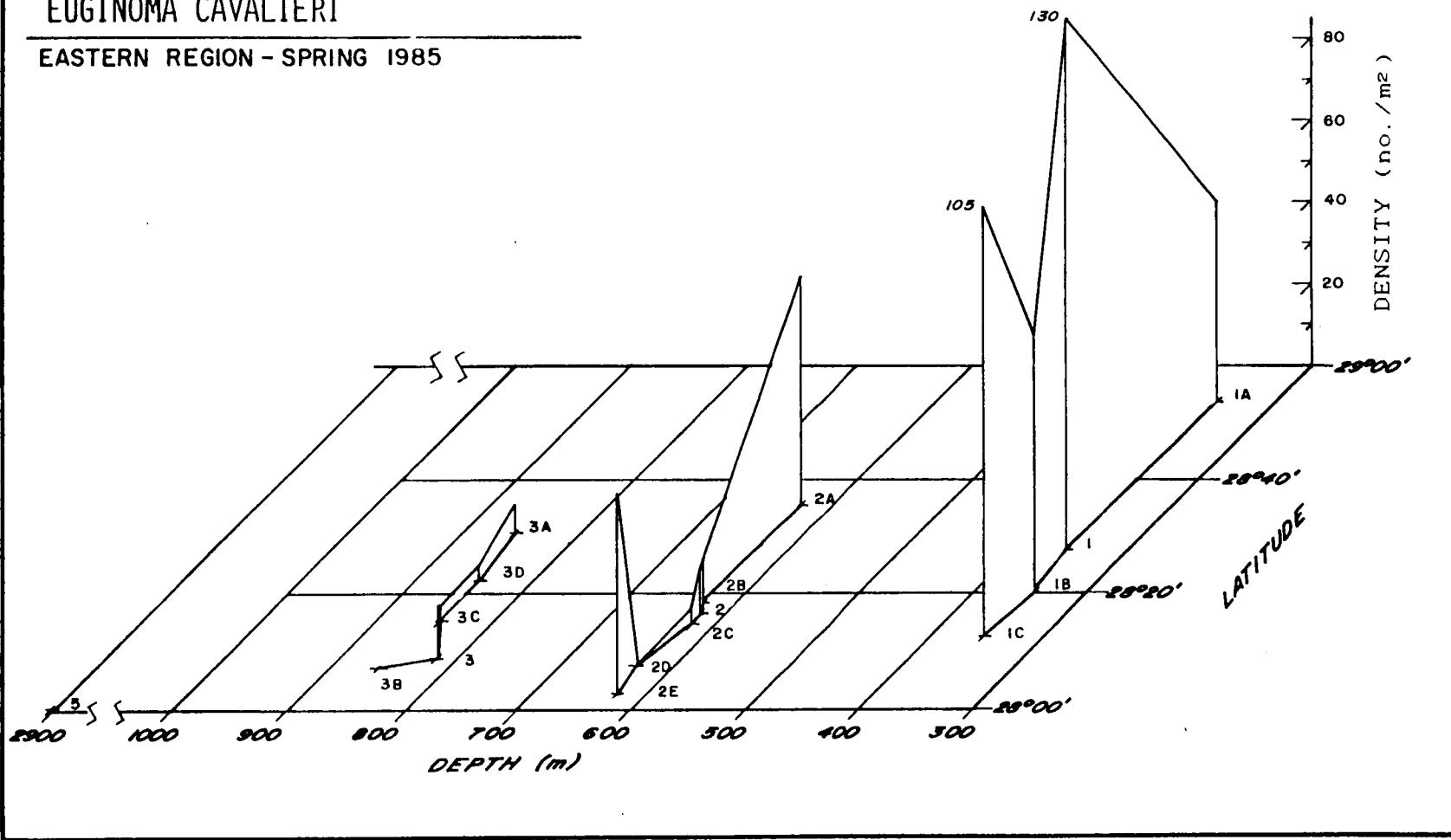
CENTRAL REGION - FALL 1984



C-179

EUGINOMA CAVALIERI

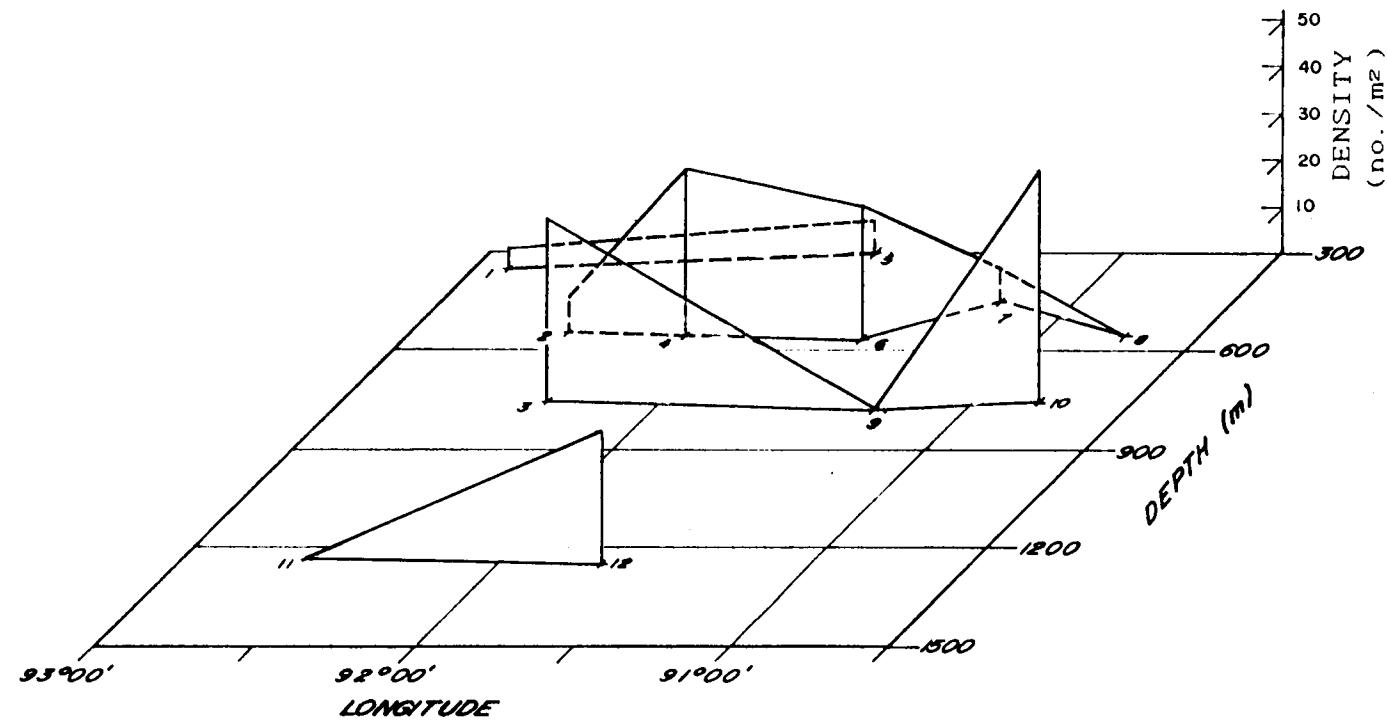
EASTERN REGION - SPRING 1985

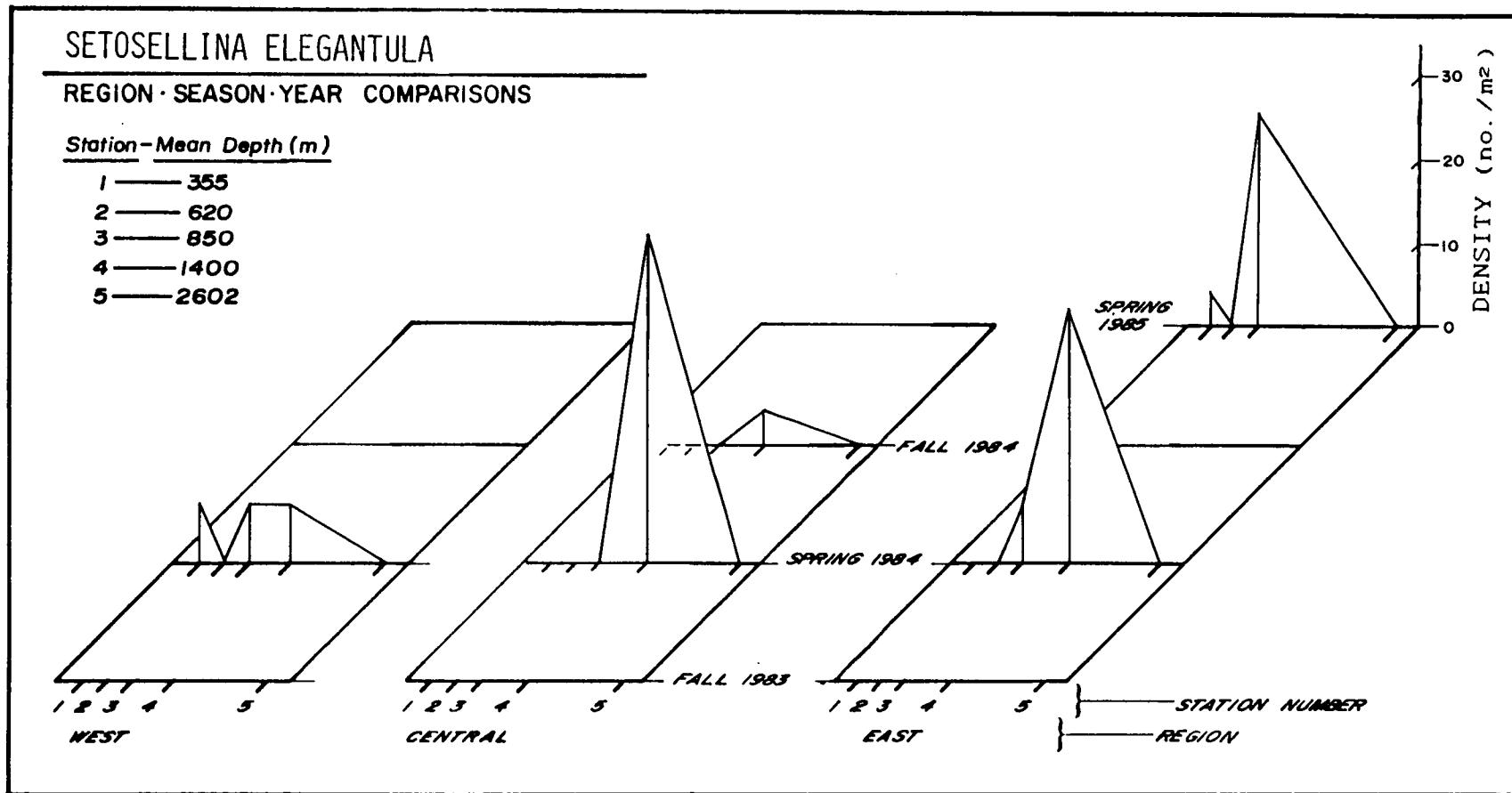


C-180

EUGINOMA CAVALIERI

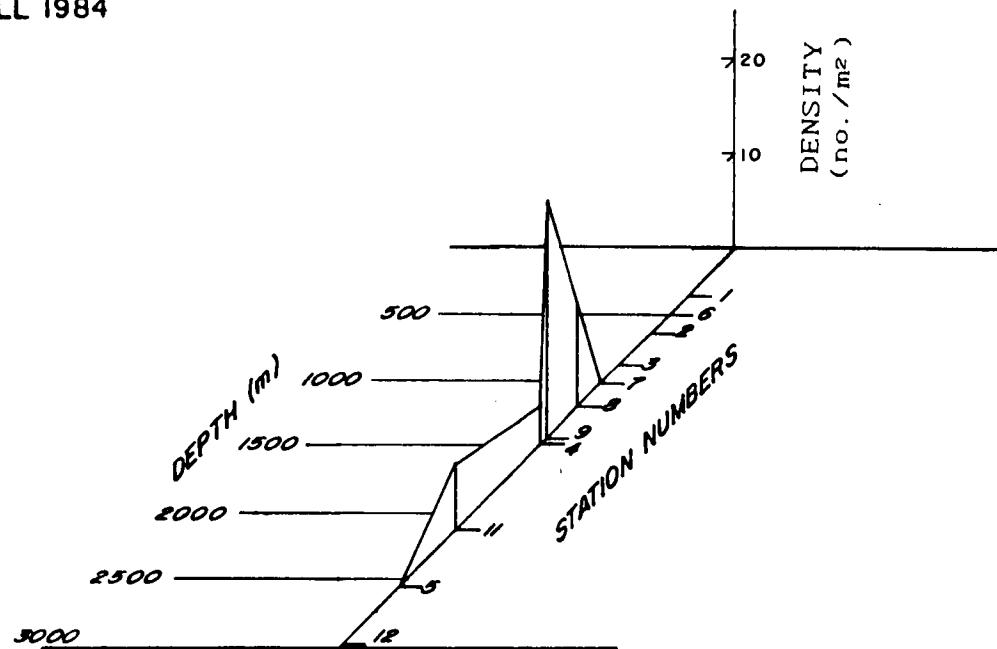
WESTERN to CENTRAL REGION - SUMMER 1985





SETOSELLINA ELEGANTULA

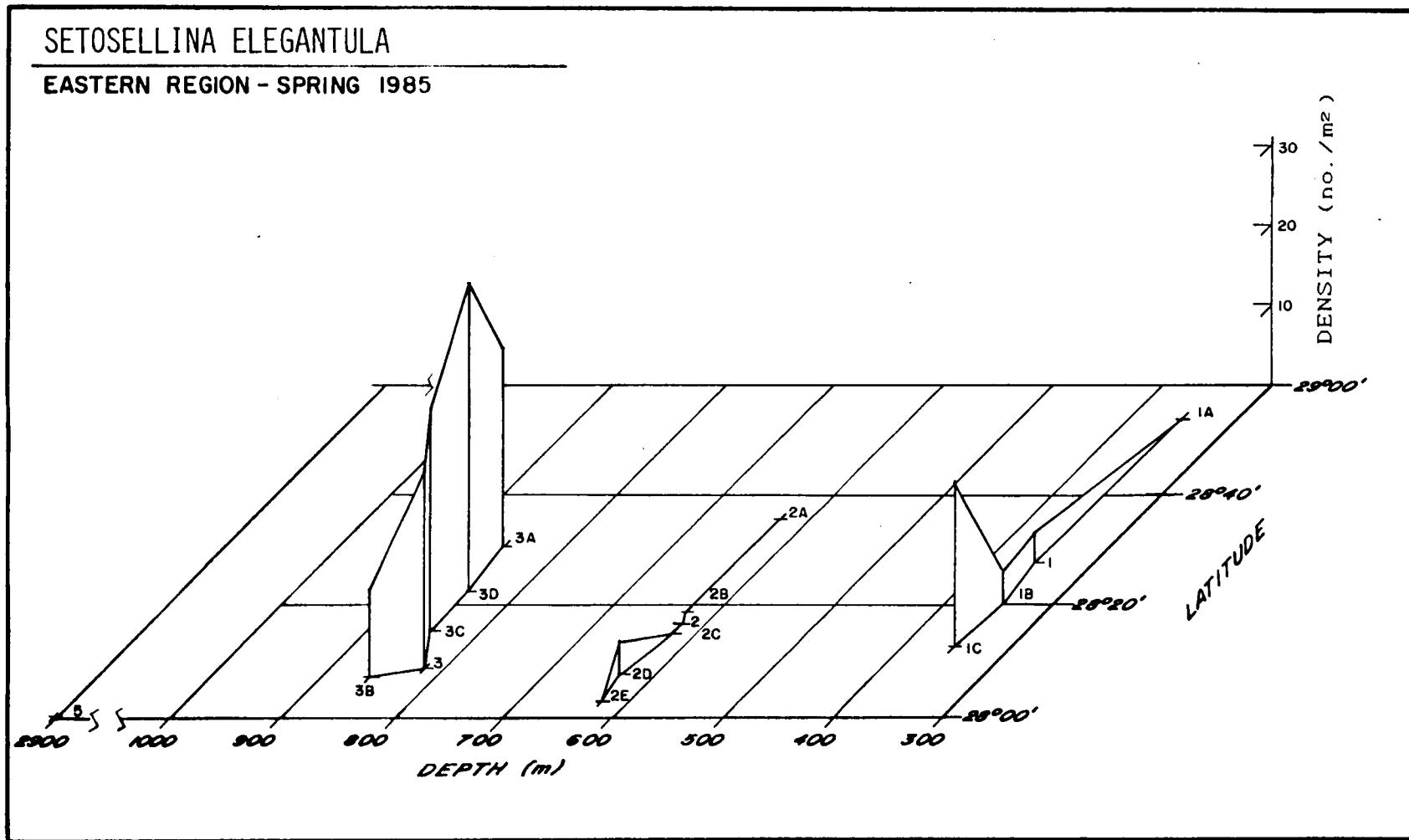
CENTRAL REGION - FALL 1984



SETOSELLINA ELEGANTULA

EASTERN REGION - SPRING 1985

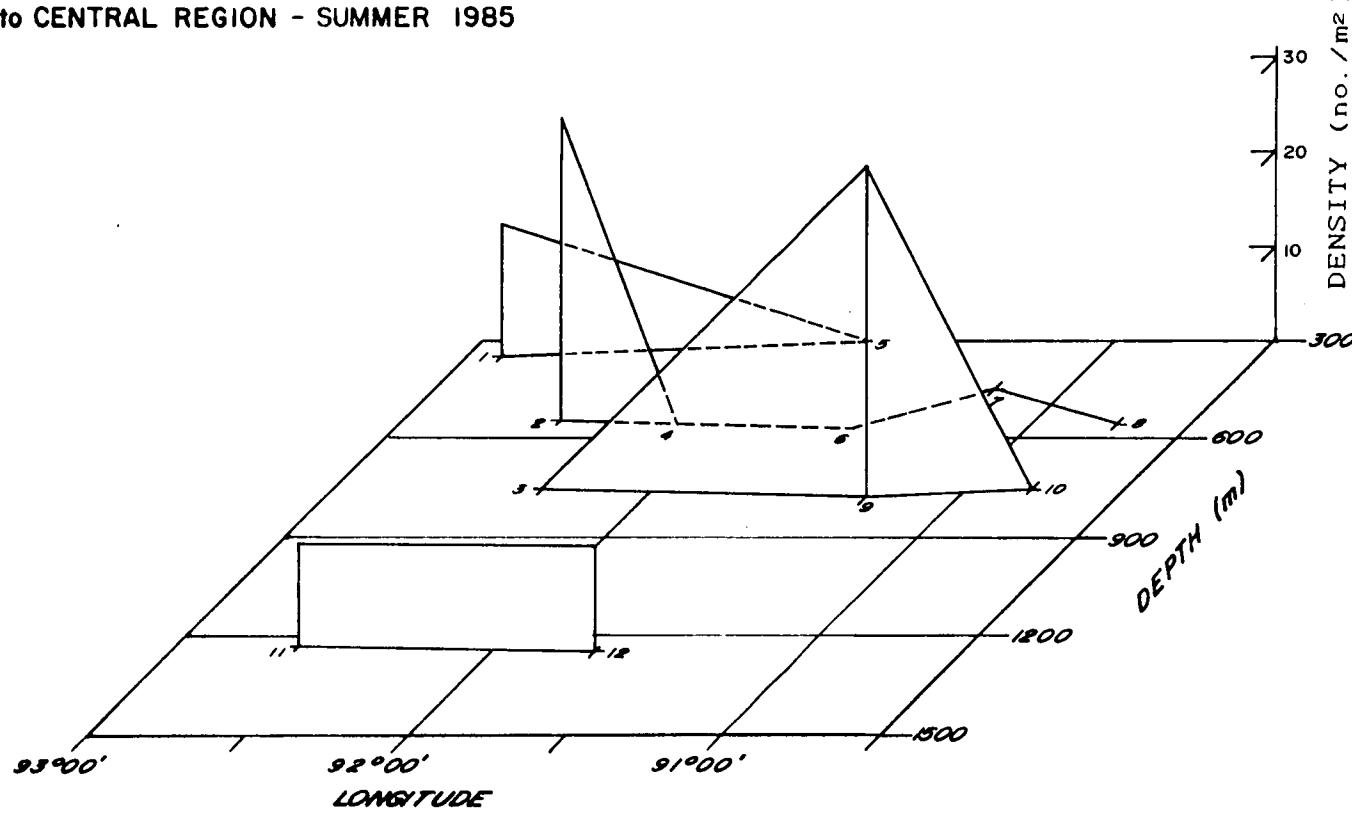
C-184



SETOSELLINA ELEGANTULA

WESTERN to CENTRAL REGION - SUMMER 1985

C-185



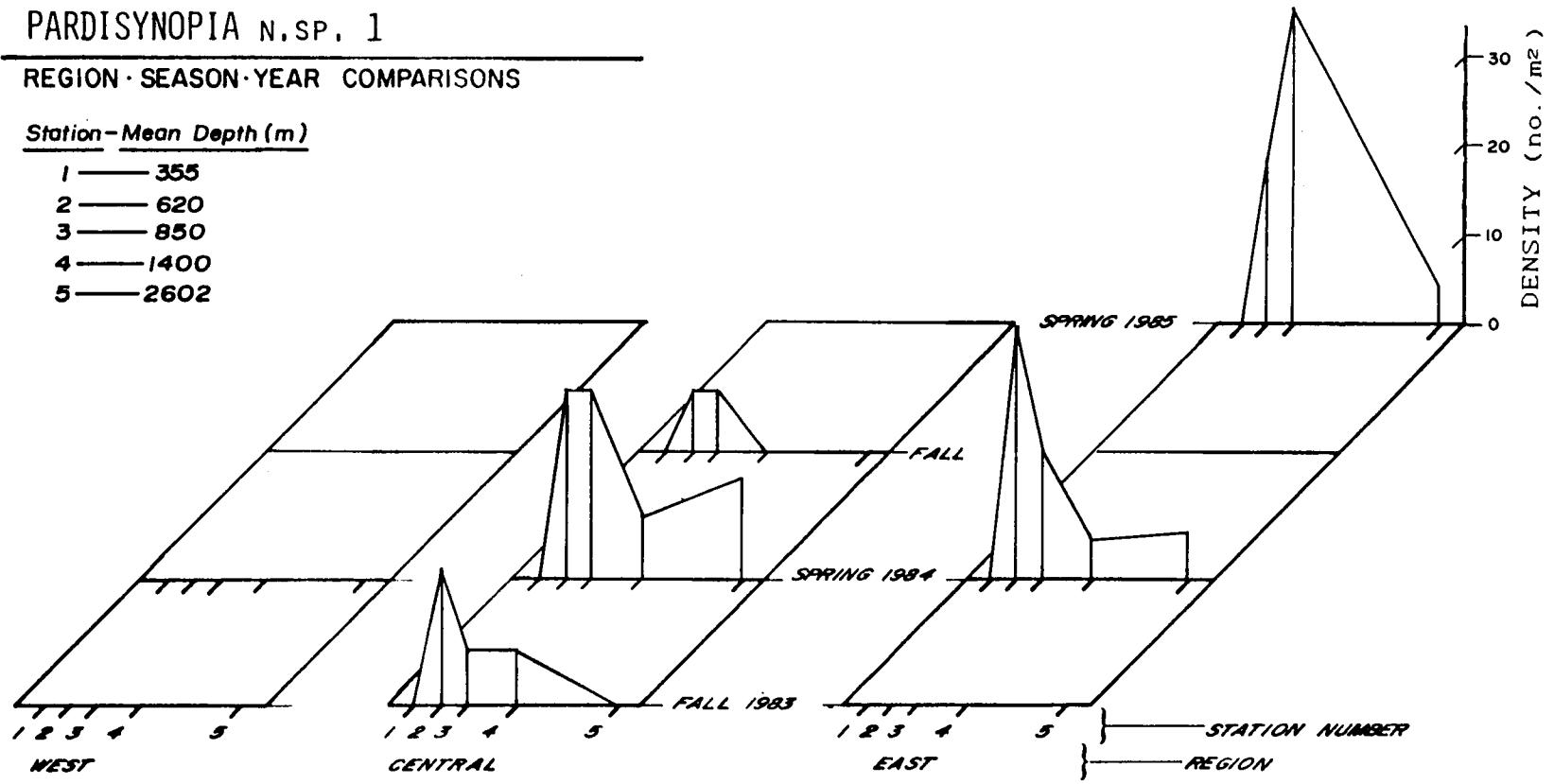
C-7
Amphipods

PARDISYNOPIA N.SP. 1

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

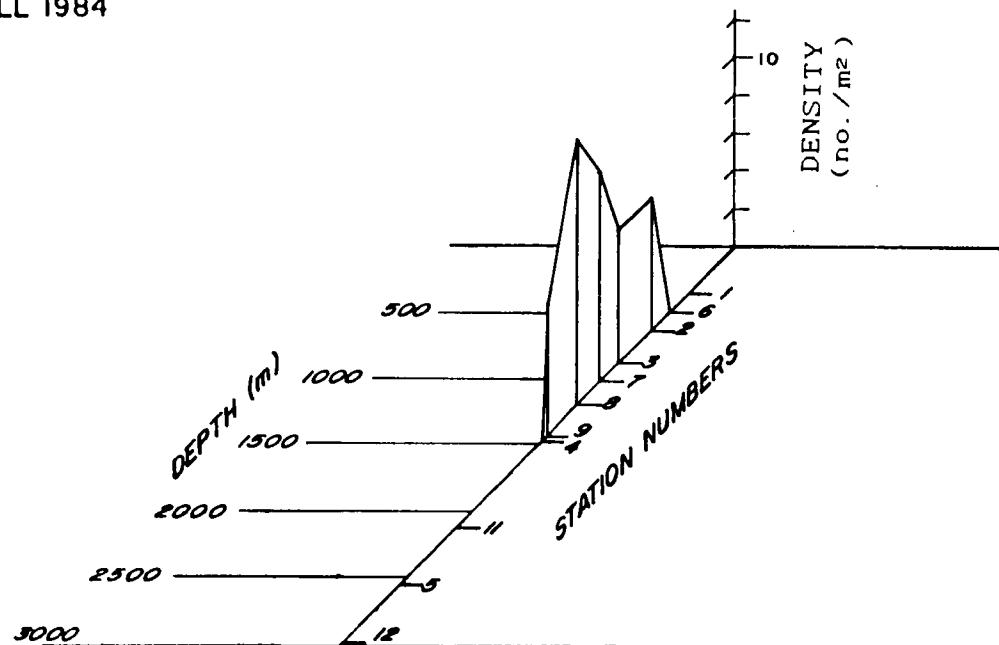
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-187

PARDISYNOPIA N.SP. 1

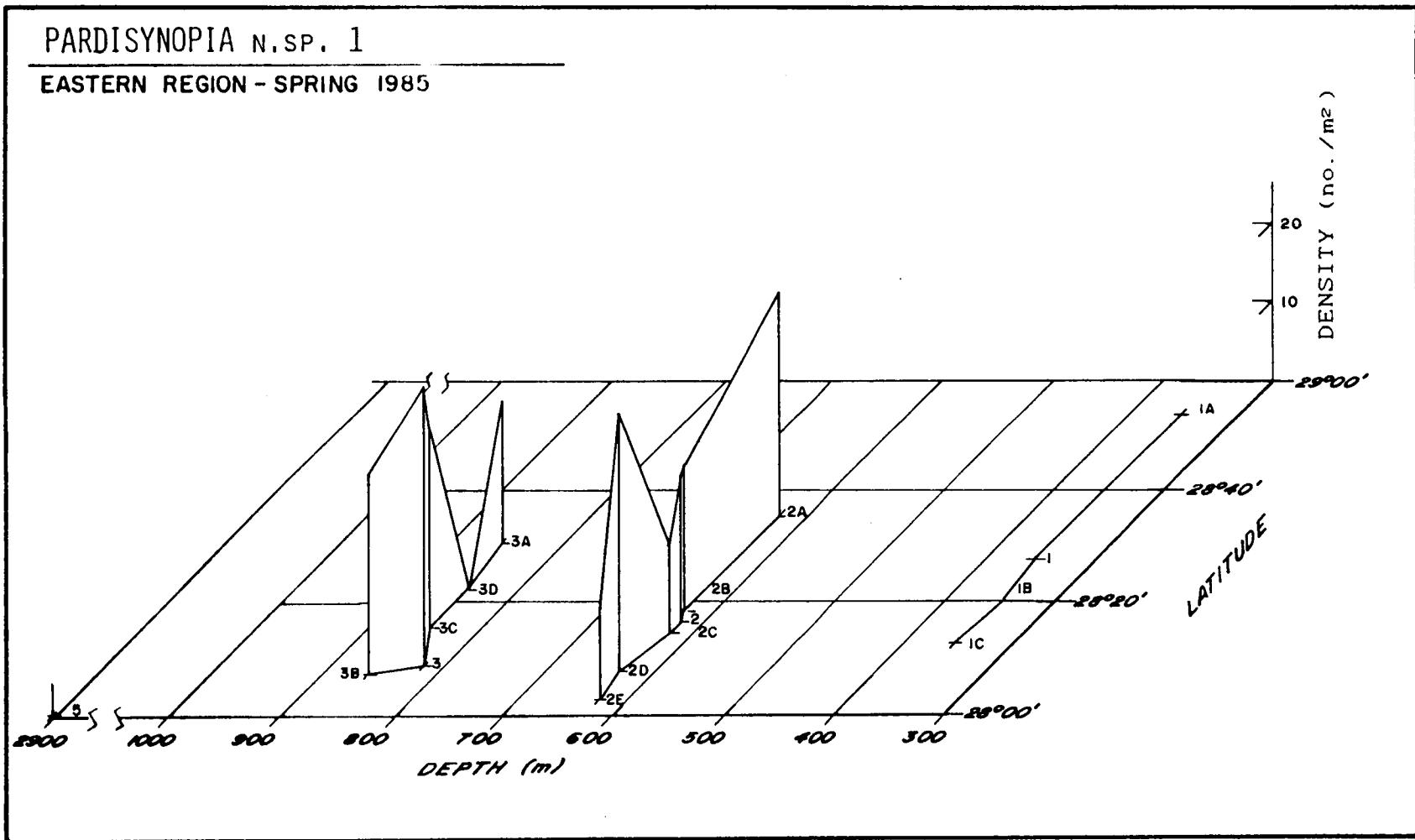
CENTRAL REGION - FALL 1984



PARDISYNOPIA N.SP. 1

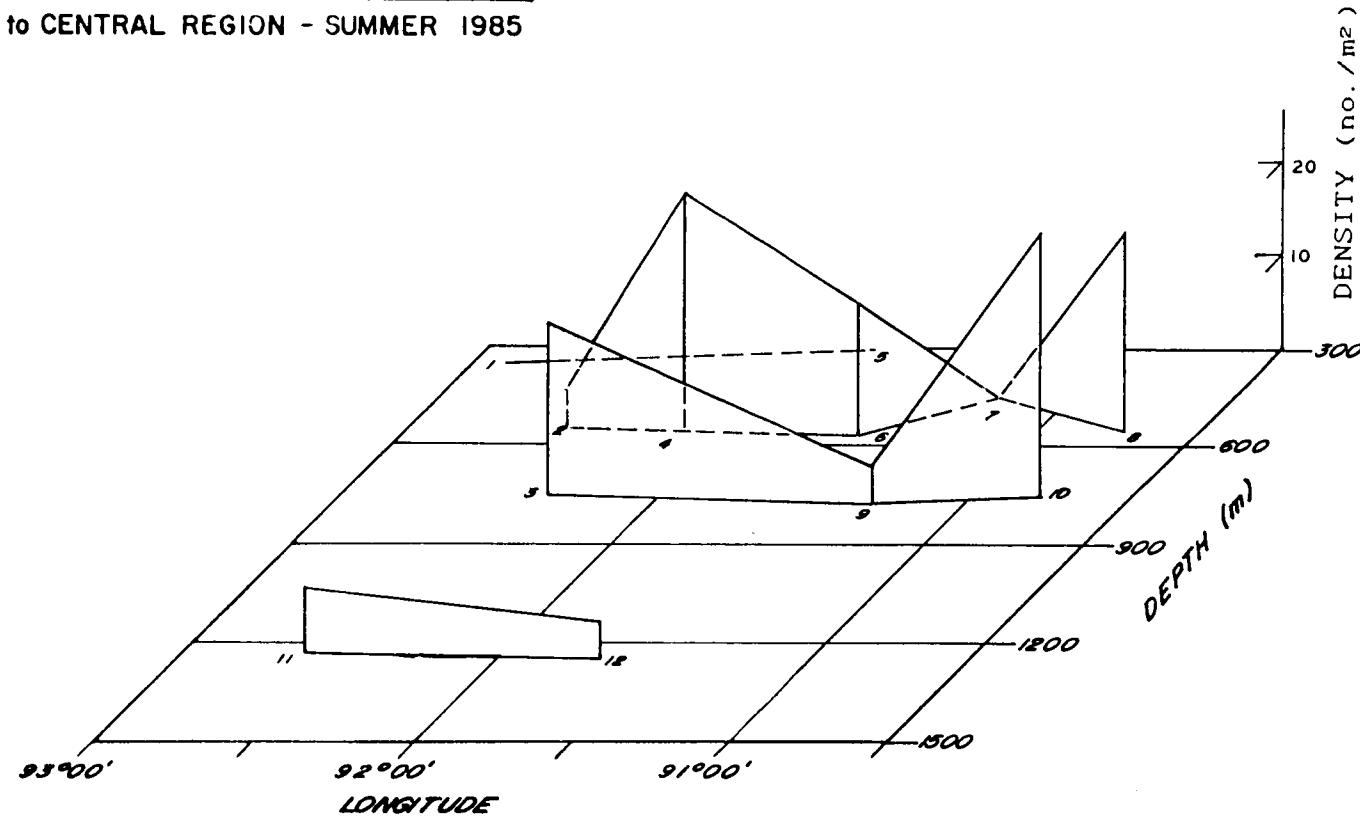
EASTERN REGION - SPRING 1985

C-189



PARDISYNOPIA N.SP. 1

WESTERN to CENTRAL REGION - SUMMER 1985



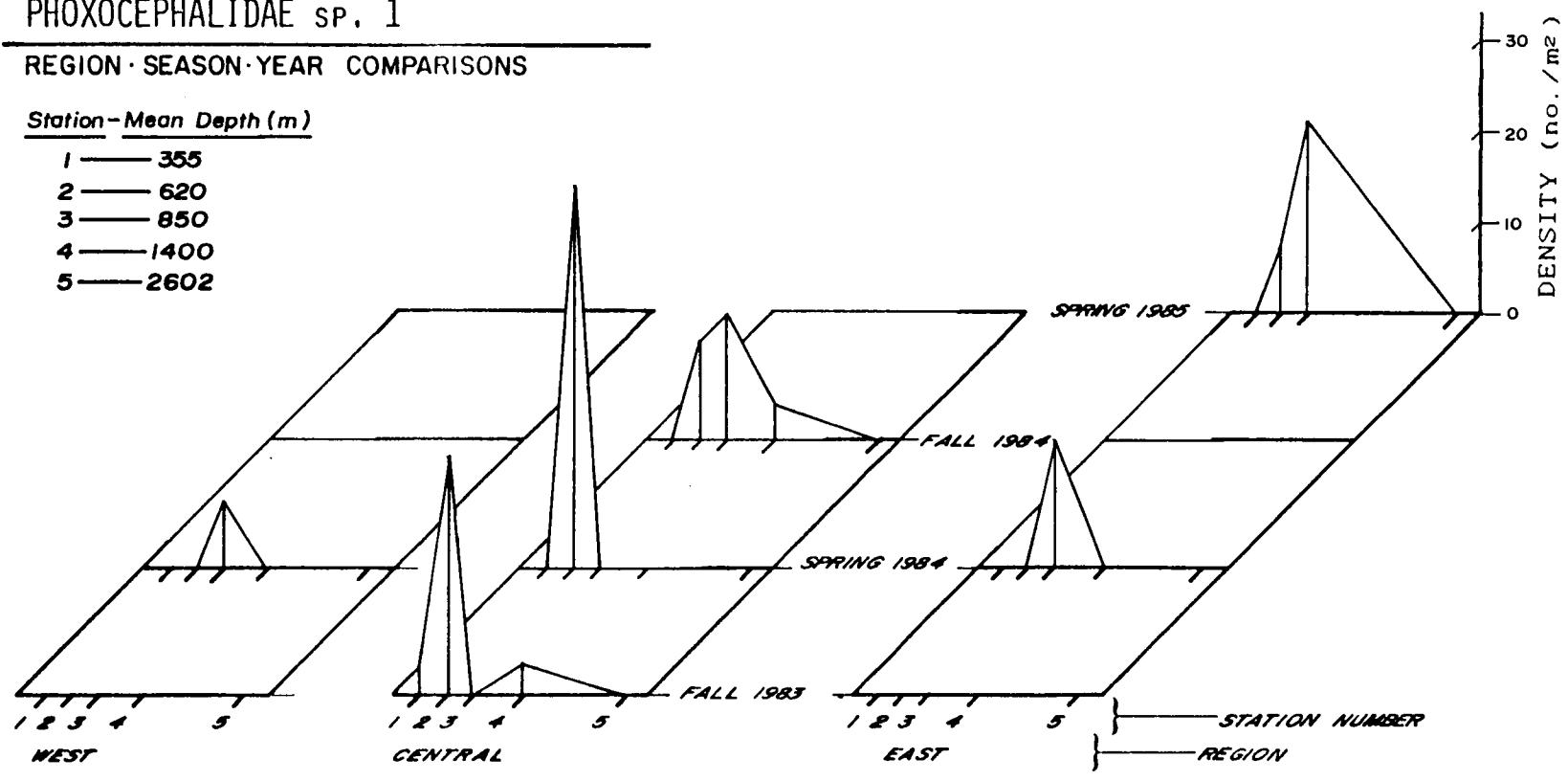
C-190

PHOXOCEPHALIDAE SP. 1

REGION · SEASON · YEAR COMPARISONS

Station - Mean Depth (m)

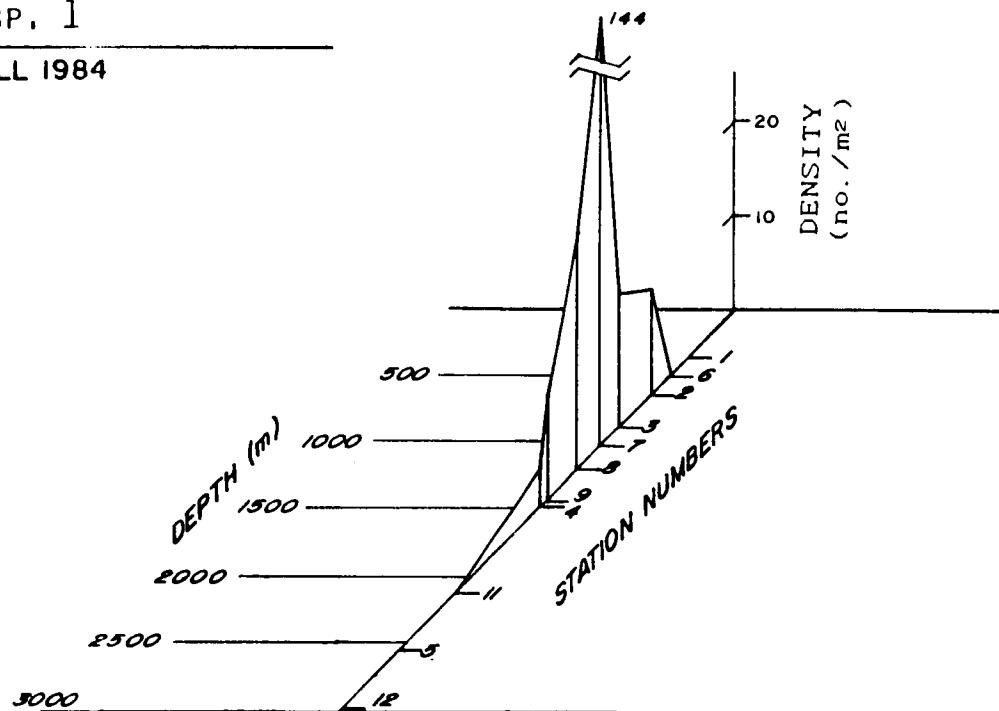
- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



C-191

PHOXOCEPHALIDAE SP. 1

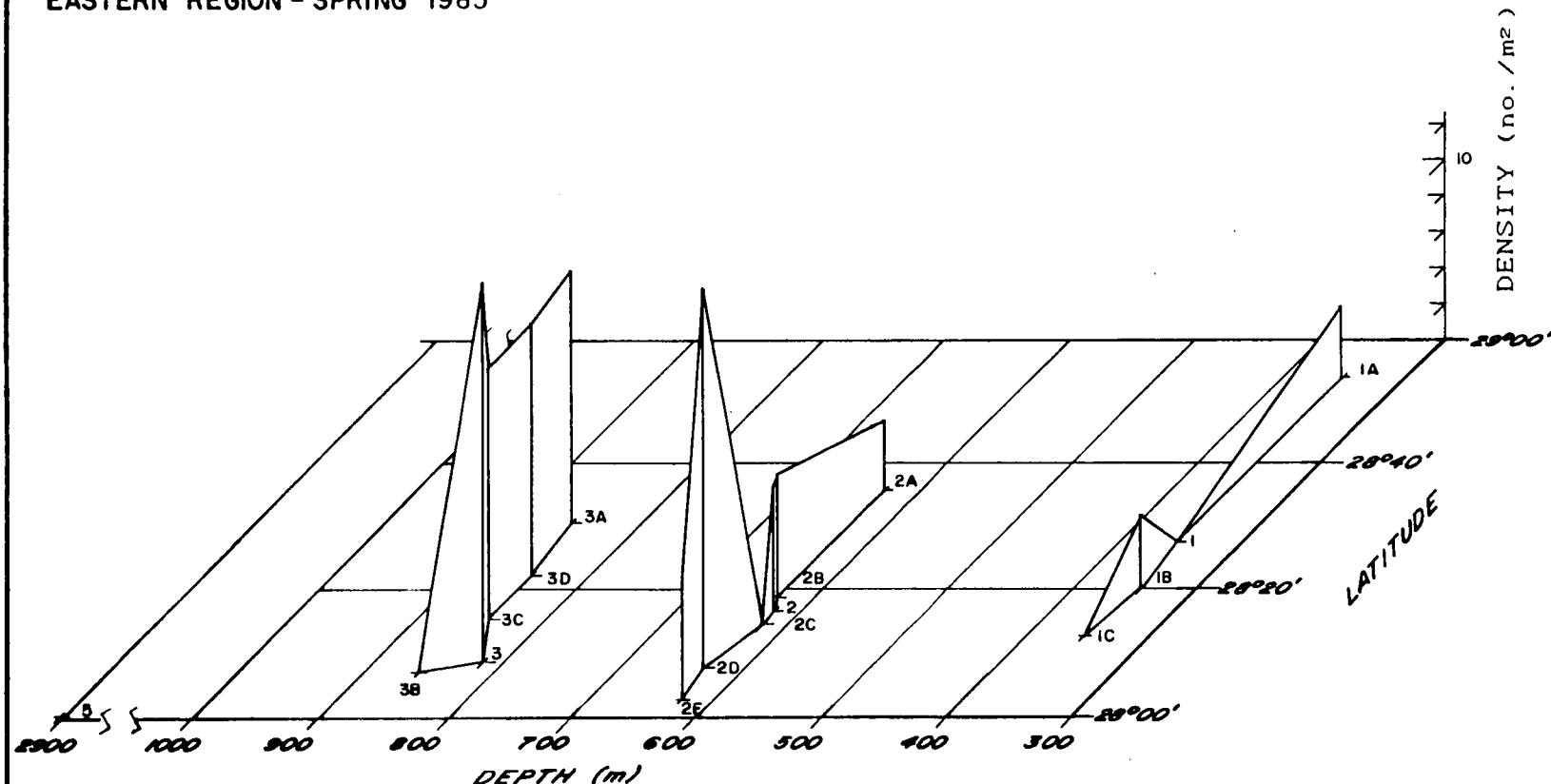
CENTRAL REGION - FALL 1984



PHOXOCEPHALIDAE SP. 1

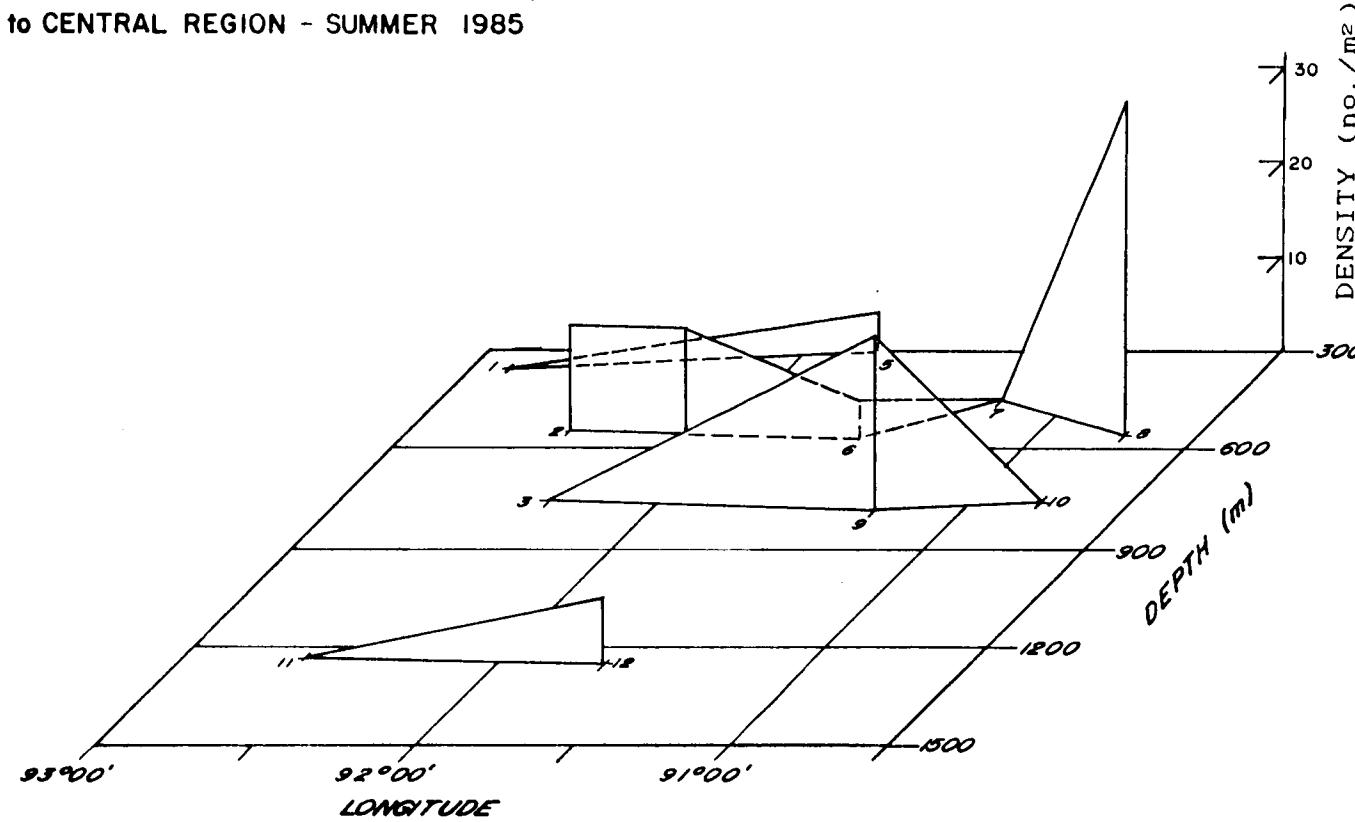
EASTERN REGION - SPRING 1985

C-193



PHOXOCEPHALIDAE SP. 1

WESTERN to CENTRAL REGION - SUMMER 1985



C-194

C-8

Nemerteans

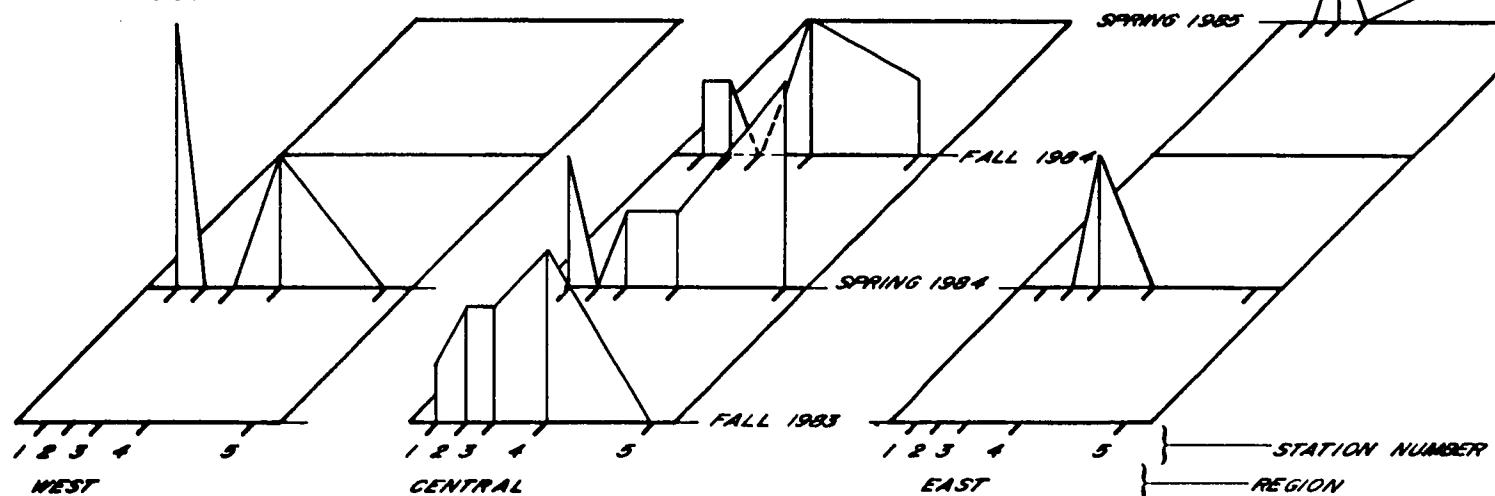
C-195

NEMERTEA SP. D

REGION · SEASON · YEAR COMPARISONS

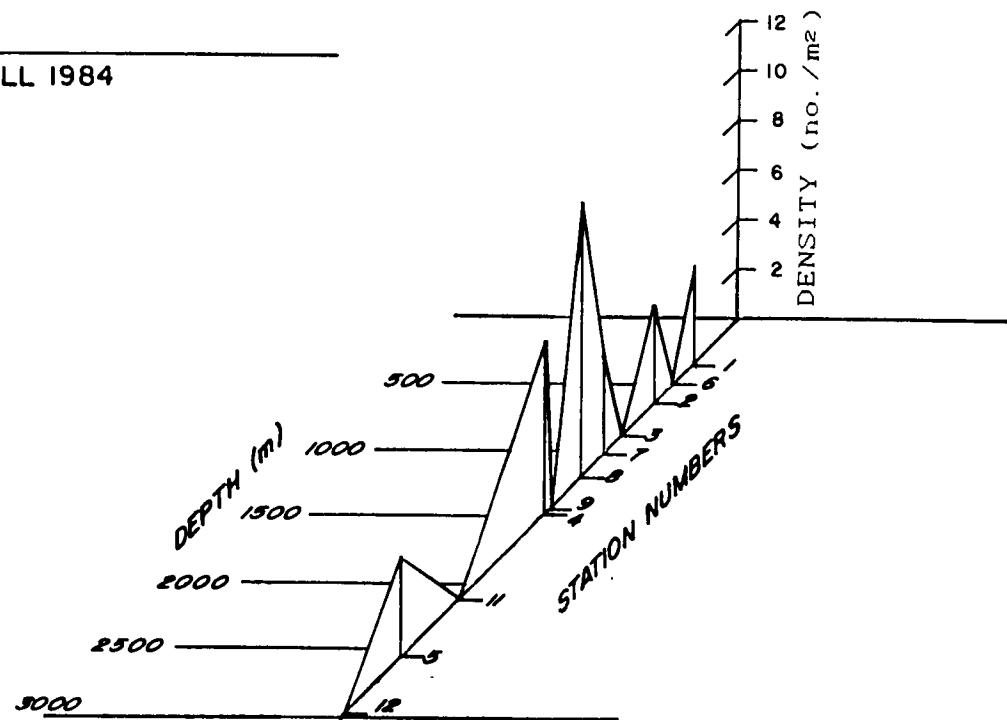
Station - Mean Depth (m)

- 1 — 355
- 2 — 620
- 3 — 850
- 4 — 1400
- 5 — 2602



NEMERTEA SP. D

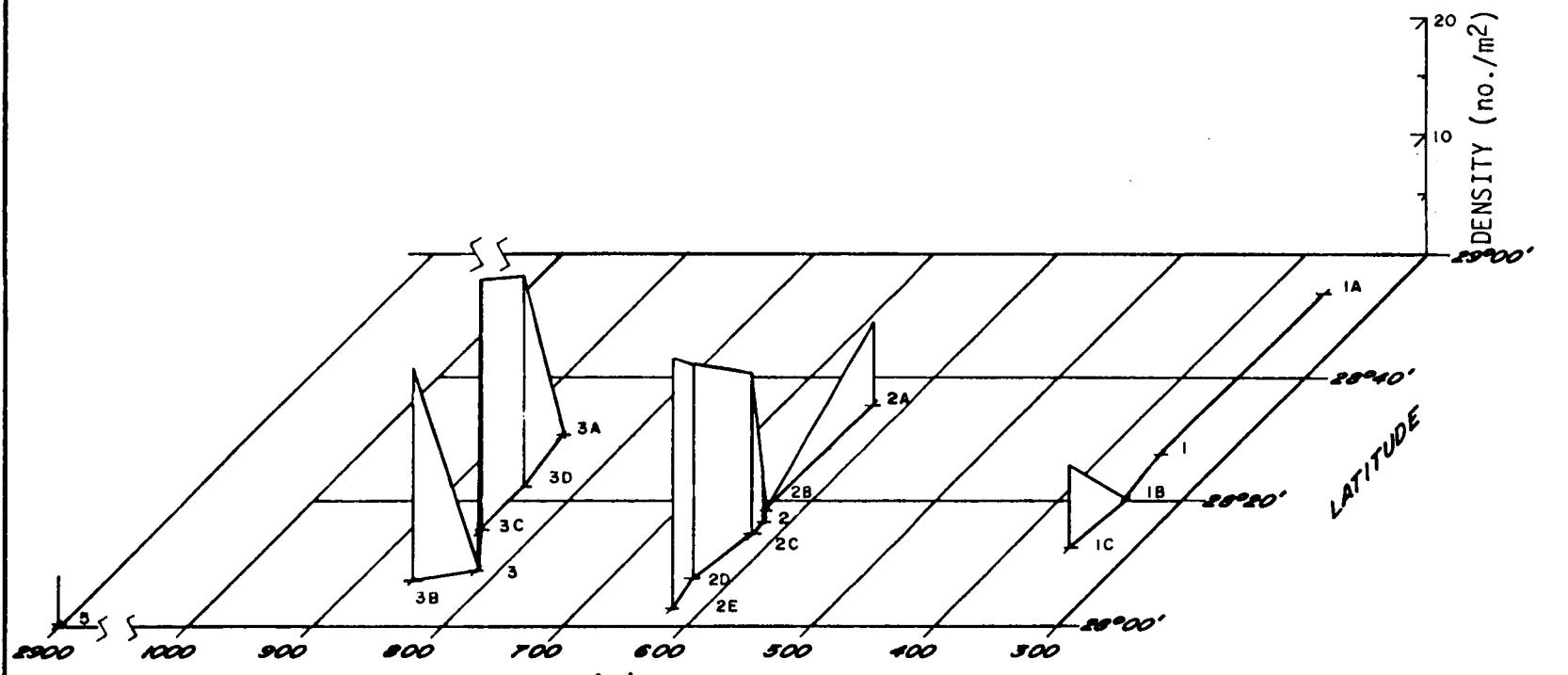
CENTRAL REGION - FALL 1984



NEMERTEA SP. D

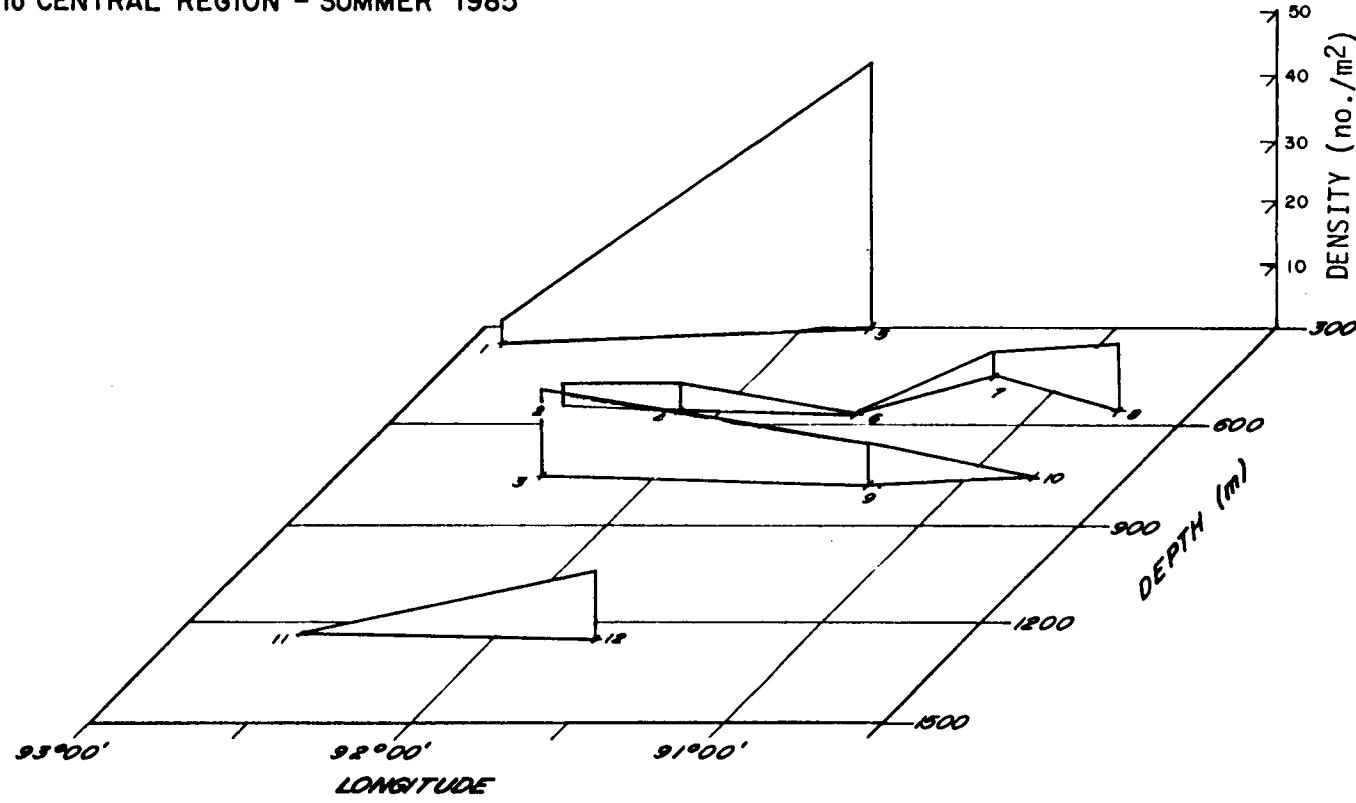
EASTERN REGION - SPRING 1985

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NEMERTEA sp. D

WESTERN to CENTRAL REGION - SUMMER 1985



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As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.

