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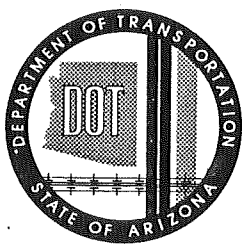

ARIZONA DEPARTMENT OF TRANSPORTATION

REPORT NUMBER FHWA/AZ-84/195, II

VEHICLE CLASSIFICATION PROCEDURE STUDY

Final Report (Appendices)

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in cooperation with
U.S. Department of Transportation
Federal Highway Administration

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16. Abstract

A procedure was developed that can be used to estimate vehicle mix and volumes on county roads in Arizona. The methodology involves short visual sampling periods for rapid and economical estimates.

Included are recommendations for updating and maintaining the data base. Expansion factors were developed from field data collections and the data base provided by the Automatic Traffic Recorders located on elements of the State Highway Systems.

Results show that a great deal of consistency exists on roads regardless of classification relative to hourly, weekly, and monthly factors. Vehicle mix, as a percentage of volume, is independent of volume and road classification.

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VEHICLE CLASSIFICATION PROCEDURE STUDY

TABLE OF CONTENTS

VOLUME 1

	Page Number
INTRODUCTION	1
Study Scope and Objectives	3
METHOD OF STUDY	5
Hourly, Daily and Seasonal Factors	6
Field Data Collection	7
Field Testing	11
DATA ANALYSIS	1/
ATR Locations and Regional Boundaries	18
Proposed Method For Determining Hourly, Daily & Seasonal Factors	18
Vehicle Mix Representative Values	19
Recommended Procedure for Determining Vehicle Mix and ADT	21
Prediction Methodology Accuracy	28
CONCLUSIONS AND RECOMMENDATIONS	31
Recommended Sampling Hours	33
Recommended Data Updating	34
Recommended Vehicle Mix and ADT Estimating Procedures	35
Identification of Diesel Powered Vehicles	36
Automatic Traffic Recorders	36
RECOMMENDATION FOR FURTHER STUDY	38

VEHICLE CLASSIFICATION PROCEDURE STUDY

TABLE OF CONTENTS (Continued)

VOLUME 2

	Page Number
APPENDIX A	1
APPENDIX B	29
APPENDIX C	39
APPENDIX D	46

VEHICLE CLASSIFICATION PROCEDURE STUDY

LIST OF TABLES

VOLUME 1

Table Number	Description	Page Number
1	Sampling Sites	7
2	Hourly Percent of ADT for Permanent Counting Stations	10
3	Hourly, Daily and Seasonal ADT Factors Northern Region	13
4	Hourly, Daily and Seasonal ADT Factors Southeast Region	14
5	Hourly, Daily, and Seasonal ADT Factor Southwest Region	15
6	Vehicle Mix Percentages	17
7	Average Vehicle Mix	20
8	Patagonia Data Comparisons 12 Hour Volume: 931	22
9	Rittenhouse Data Comparisons 24 Hour Volume: 3093	27

VEHICLE CLASSIFICATION PROCEDURE STUDY

LIST OF FIGURES

VOLUME 1

Figure Number	Description	Page Number
1	Approximate ATR Locations	2
2	Vehicle Classifications	4
3	Approximate Sampling Sites	8
4	Approximate ATR Locations and Regional Boundaries	12

APPENDIX A

1982 ATR DATA

1982 COUNTING STATION NO. 1

HOURLY FACTORS	%	WEEKLY FACTORS	%	SEASONAL FACTORS	%
2. 637	0. 016	1. 556	0. 092	1. 033	0. 081
4. 166	0. 010	0. 953	0. 150	0. 914	0. 091
7. 942	0. 005	0. 902	0. 158	0. 896	0. 093
11. 810	0. 004	0. 896	0. 159	0. 912	0. 091
10. 289	0. 004	0. 901	0. 159	1. 053	0. 079
3. 412	0. 012	0. 868	0. 165	1. 019	0. 082
0. 994	0. 042	1. 218	0. 117	1. 112	0. 075
0. 539	0. 077			1. 089	0. 077
0. 712	0. 059			1. 005	0. 083
0. 911	0. 046			0. 970	0. 086
0. 824	0. 051			1. 009	0. 083
0. 717	0. 058			1. 043	0. 080
0. 658	0. 063				
0. 690	0. 060				
0. 670	0. 062				
0. 551	0. 076				
0. 520	0. 080				
0. 543	0. 077				
0. 875	0. 048				
1. 096	0. 038				
1. 393	0. 030				
1. 341	0. 031				
1. 390	0. 030				
1. 889	0. 022				

1982 COUNTING STATION NO. 2

HOURLY FACTORS	%
2. 205	0. 019
2. 532	0. 016
3. 016	0. 014
3. 107	0. 013
2. 734	0. 015
1. 864	0. 022
1. 434	0. 029
1. 103	0. 038
0. 911	0. 046
0. 746	0. 056
0. 664	0. 063
0. 639	0. 065
0. 641	0. 065
0. 639	0. 065
0. 623	0. 067
0. 625	0. 067
0. 651	0. 064
0. 705	0. 059
0. 804	0. 052
0. 936	0. 045
1. 091	0. 038
1. 274	0. 033
1. 530	0. 027
1. 881	0. 022

WEEKLY FACTORS	%
0. 963	0. 148
0. 998	0. 143
1. 117	0. 128
1. 084	0. 132
1. 027	0. 139
0. 867	0. 165
0. 984	0. 145

SEASONAL FACTORS	%
0. 977	0. 085
0. 943	0. 088
0. 993	0. 084
0. 986	0. 085
1. 037	0. 080
0. 975	0. 085
0. 908	0. 092
0. 967	0. 086
1. 146	0. 073
1. 163	0. 072
1. 013	0. 082
0. 953	0. 087

1982 COUNTING STATION NO. 3

HOURLY FACTORS	%
2. 233	0. 019
2. 415	0. 017
2. 651	0. 016
2. 672	0. 016
2. 470	0. 017
1. 918	0. 022
1. 299	0. 032
0. 956	0. 044
0. 815	0. 051
0. 715	0. 058
0. 679	0. 061
0. 664	0. 063
0. 659	0. 063
0. 647	0. 064
0. 637	0. 065
0. 632	0. 066
0. 641	0. 065
0. 698	0. 060
0. 834	0. 050
1. 032	0. 040
1. 230	0. 034
1. 399	0. 030
1. 630	0. 026
1. 918	0. 022

WEEKLY FACTORS	%
0. 985	0. 145
1. 112	0. 128
1. 063	0. 134
1. 004	0. 142
0. 985	0. 145
0. 964	0. 148
0. 912	0. 157

SEASONAL FACTORS	%
1. 100	0. 076
1. 149	0. 073
1. 084	0. 077
1. 037	0. 080
0. 986	0. 085
0. 902	0. 092
0. 869	0. 096
0. 951	0. 088
0. 979	0. 085
0. 999	0. 083
1. 012	0. 082
1. 002	0. 083

1982 COUNTING STATION NO. 4

HOURLY FACTORS	%
1.957	0.021
2.102	0.020
2.204	0.019
2.365	0.018
2.340	0.018
2.142	0.019
1.746	0.024
1.275	0.033
0.915	0.046
0.735	0.057
0.650	0.064
0.634	0.066
0.638	0.065
0.619	0.067
0.596	0.070
0.602	0.069
0.641	0.065
0.735	0.057
0.880	0.047
1.041	0.040
1.214	0.034
1.367	0.030
1.523	0.027
1.773	0.024

WEEKLY FACTORS	%
0.912	0.157
1.120	0.128
1.080	0.132
1.020	0.140
1.004	0.142
0.988	0.145
0.913	0.156

SEASONAL FACTORS	%
1.415	0.059
1.441	0.058
1.228	0.068
1.042	0.080
0.946	0.088
0.775	0.108
0.726	0.115
0.787	0.106
0.877	0.095
0.943	0.088
1.258	0.066
1.199	0.070

1982 COUNTING STATION NO. 5

HOURLY FACTORS	%
2. 428	0. 017
2. 932	0. 014
3. 418	0. 012
3. 606	0. 012
3. 056	0. 014
2. 085	0. 020
1. 321	0. 032
0. 969	0. 043
0. 796	0. 052
0. 696	0. 060
0. 658	0. 063
0. 667	0. 062
0. 704	0. 059
0. 700	0. 060
0. 662	0. 063
0. 621	0. 067
0. 609	0. 068
0. 651	0. 064
0. 750	0. 056
0. 908	0. 046
1. 118	0. 037
1. 326	0. 031
1. 610	0. 026
1. 939	0. 021

WEEKLY FACTORS	%
0. 916	0. 156
1. 089	0. 131
1. 133	0. 126
1. 075	0. 133
1. 030	0. 139
0. 881	0. 162
0. 933	0. 153

SEASONAL FACTORS	%
0. 940	0. 089
0. 913	0. 091
0. 941	0. 089
0. 978	0. 085
1. 030	0. 081
1. 035	0. 081
1. 009	0. 083
1. 008	0. 083
1. 193	0. 070
1. 105	0. 075
1. 025	0. 081
0. 897	0. 093

1982 COUNTING STATION NO. 6

HOURLY FACTORS	%
5. 192	0. 008
7. 080	0. 006
9. 734	0. 004
8. 653	0. 005
5. 563	0. 007
3. 540	0. 012
2. 049	0. 020
1. 217	0. 034
0. 875	0. 048
0. 677	0. 062
0. 552	0. 075
0. 526	0. 079
0. 519	0. 080
0. 519	0. 080
0. 526	0. 079
0. 545	0. 076
0. 573	0. 073
0. 623	0. 067
0. 763	0. 055
1. 011	0. 041
1. 320	0. 032
1. 657	0. 025
2. 225	0. 019
3. 386	0. 012

WEEKLY FACTORS	%
0. 804	0. 178
1. 022	0. 140
1. 299	0. 110
1. 245	0. 115
1. 148	0. 124
0. 790	0. 181
0. 936	0. 153

SEASONAL FACTORS	%
1. 161	0. 072
1. 224	0. 068
1. 093	0. 076
1. 071	0. 078
0. 930	0. 090
0. 910	0. 092
0. 757	0. 110
0. 628	0. 101
0. 933	0. 089
1. 062	0. 078
1. 172	0. 071
1. 100	0. 076

1982 COUNTING STATION NO. 7

HOURLY FACTORS	%
5. 376	0. 008
6. 574	0. 006
7. 519	0. 006
8. 045	0. 005
7. 192	0. 006
4. 620	0. 009
2. 792	0. 015
2. 134	0. 020
1. 694	0. 025
0. 142	0. 293
0. 139	0. 300
1. 403	0. 030
1. 451	0. 029
1. 433	0. 029
1. 396	0. 030
1. 328	0. 031
1. 261	0. 033
1. 373	0. 030
1. 634	0. 025
2. 088	0. 020
2. 545	0. 016
3. 012	0. 014
3. 540	0. 012
4. 341	0. 010

WEEKLY FACTORS	%
0. 957	0. 149
1. 093	0. 131
1. 101	0. 130
1. 052	0. 136
1. 019	0. 140
0. 924	0. 155
0. 895	0. 160

SEASONAL FACTORS	%
0. 960	0. 086
0. 997	0. 084
1. 008	0. 083
1. 005	0. 083
1. 020	0. 081
0. 976	0. 085
0. 957	0. 087
0. 982	0. 085
1. 077	0. 077
1. 056	0. 079
1. 059	0. 080
0. 931	0. 090

1982 COUNTING STATION NO. 8

HOURLY FACTORS	%
3. 630	0. 011
4. 667	0. 009
6. 533	0. 006
6. 533	0. 006
4. 356	0. 010
2. 841	0. 015
1. 815	0. 023
1. 233	0. 034
0. 871	0. 048
0. 660	0. 063
0. 583	0. 071
0. 573	0. 073
0. 573	0. 073
0. 554	0. 075
0. 536	0. 078
0. 554	0. 075
0. 568	0. 073
0. 641	0. 065
0. 787	0. 053
0. 961	0. 043
1. 256	0. 033
1. 593	0. 026
2. 108	0. 020
2. 841	0. 015

WEEKLY FACTORS	%
0. 874	0. 163
1. 018	0. 140
1. 181	0. 121
1. 152	0. 124
1. 073	0. 133
0. 831	0. 172
0. 976	0. 146

SEASONAL FACTORS	%
1. 228	0. 068
1. 001	0. 083
0. 980	0. 085
0. 858	0. 097
0. 903	0. 090
0. 972	0. 086
0. 936	0. 089
1. 017	0. 082
1. 071	0. 078
1. 002	0. 083
1. 002	0. 083
1. 095	0. 076

1982 COUNTING STATION NO. 9

HOURLY FACTORS	%
3. 114	0. 013
1. 912	0. 022
3. 743	0. 011
6. 515	0. 006
6. 515	0. 006
3. 228	0. 013
1. 697	0. 025
1. 096	0. 038
0. 919	0. 045
0. 725	0. 057
0. 634	0. 066
0. 596	0. 070
0. 581	0. 072
0. 600	0. 069
0. 591	0. 071
0. 572	0. 073
0. 581	0. 072
0. 642	0. 065
0. 762	0. 055
0. 926	0. 045
1. 169	0. 036
1. 517	0. 027
1. 852	0. 022
2. 410	0. 017

WEEKLY FACTORS	%
0. 992	0. 144
1. 013	0. 141
1. 060	0. 135
1. 046	0. 137
1. 057	0. 135
0. 927	0. 154
0. 926	0. 154

SEASONAL FACTORS	%
0. 860	0. 097
0. 864	0. 096
0. 940	0. 089
0. 932	0. 089
1. 026	0. 081
1. 103	0. 075
1. 145	0. 073
1. 205	0. 069
1. 198	0. 070
1. 038	0. 080
0. 909	0. 092
0. 941	0. 089

1982 COUNTING STATION NO. 10

HOURLY FACTORS		%	
3.	265	0.	013
4.	440	0.	009
10.	091	0.	004
11.	100	0.	004
6.	938	0.	006
3.	700	0.	011
1.	820	0.	023
0.	965	0.	043
0.	917	0.	045
0.	716	0.	058
0.	634	0.	066
0.	620	0.	067
0.	613	0.	068
0.	594	0.	070
0.	566	0.	074
0.	561	0.	074
0.	519	0.	080
0.	581	0.	072
0.	694	0.	060
0.	874	0.	048
1.	156	0.	036
1.	442	0.	029
1.	881	0.	022
2.	413	0.	017

WEEKLY FACTORS		%	
1.	057	0.	135
1.	069	0.	134
1.	129	0.	127
1.	111	0.	129
1.	050	0.	136
0.	793	0.	180
0.	893	0.	160

SEASONAL FACTORS		%	
1.	039	0.	080
1.	030	0.	081
0.	903	0.	087
0.	950	0.	088
0.	950	0.	088
0.	986	0.	085
0.	992	0.	084
0.	977	0.	085
1.	074	0.	078
1.	005	0.	083
1.	044	0.	080
1.	007	0.	083

1982 COUNTING STATION NO. 11

HOURLY FACTORS	%
7. 338	0. 006
9. 172	0. 005
18. 344	0. 002
18. 344	0. 002
12. 229	0. 003
4. 586	0. 009
1. 931	0. 022
1. 048	0. 040
0. 798	0. 052
0. 633	0. 066
0. 582	0. 072
0. 556	0. 075
0. 582	0. 072
0. 573	0. 073
0. 540	0. 077
0. 503	0. 083
0. 503	0. 083
0. 556	0. 075
0. 719	0. 058
0. 992	0. 042
1. 334	0. 031
1. 668	0. 025
2. 446	0. 017
3. 669	0. 011

WEEKLY FACTORS	%
0. 870	0. 164
1. 058	0. 135
1. 106	0. 129
1. 117	0. 128
1. 081	0. 132
0. 926	0. 154
0. 909	0. 157

SEASONAL FACTORS	%
0. 995	0. 084
0. 909	0. 092
0. 927	0. 090
0. 918	0. 091
0. 976	0. 085
0. 996	0. 084
0. 990	0. 084
1. 050	0. 079
1. 116	0. 075
1. 024	0. 081
1. 066	0. 078
1. 081	0. 077

1982 COUNTING STATION NO. 12

HOURLY FACTORS	%
4. 277	0. 010
5. 943	0. 007
7. 630	0. 005
7. 058	0. 006
4. 953	0. 008
2. 689	0. 015
1. 518	0. 027
1. 053	0. 040
0. 799	0. 052
0. 637	0. 065
0. 605	0. 069
0. 642	0. 065
0. 701	0. 059
0. 680	0. 061
0. 635	0. 066
0. 588	0. 071
0. 557	0. 075
0. 572	0. 073
0. 639	0. 065
0. 773	0. 054
1. 092	0. 038
1. 486	0. 028
1. 988	0. 021
2. 250	0. 019

WEEKLY FACTORS	%
0. 730	0. 196
1. 127	0. 127
1. 300	0. 110
1. 274	0. 112
1. 203	0. 119
0. 879	0. 163
0. 820	0. 174

SEASONAL FACTORS	%
1. 324	0. 063
1. 215	0. 069
1. 154	0. 072
1. 034	0. 081
0. 940	0. 089
0. 895	0. 093
0. 784	0. 106
0. 807	0. 103
0. 969	0. 086
0. 937	0. 089
1. 069	0. 078
1. 168	0. 071

1982 COUNTING STATION NO. 13

HOURLY FACTORS		%	
3.	864	0.	011
4.	918	0.	008
5.	796	0.	007
5.	796	0.	007
4.	637	0.	009
2.	898	0.	014
1.	764	0.	024
0.	984	0.	042
0.	796	0.	052
0.	641	0.	065
0.	597	0.	070
0.	601	0.	069
0.	608	0.	069
0.	590	0.	071
0.	565	0.	074
0.	565	0.	074
0.	576	0.	072
0.	627	0.	066
0.	755	0.	055
0.	960	0.	043
1.	239	0.	034
1.	546	0.	027
1.	979	0.	021
2.	798	0.	015

WEEKLY FACTORS		%	
0.	840	0.	170
1.	042	0.	137
1.	157	0.	123
1.	121	0.	127
1.	095	0.	130
0.	867	0.	165
0.	974	0.	147

SEASONAL FACTORS		%	
1.	016	0.	082
0.	903	0.	092
0.	914	0.	091
0.	926	0.	090
0.	963	0.	087
1.	042	0.	080
1.	045	0.	080
1.	094	0.	076
1.	100	0.	076
0.	999	0.	083
1.	010	0.	083
1.	037	0.	080

1982 COUNTING STATION NO. 14

HOURLY FACTORS	%
2.960	0.014
4.541	0.009
3.701	0.006
7.480	0.006
4.696	0.009
1.755	0.024
0.748	0.056
0.598	0.070
0.684	0.061
0.796	0.052
0.804	0.052
0.774	0.054
0.761	0.055
0.737	0.057
0.659	0.063
0.569	0.073
0.545	0.076
0.585	0.071
0.799	0.052
1.110	0.038
1.439	0.029
1.480	0.028
1.608	0.026
2.096	0.020

WEEKLY FACTORS	%
1.556	0.092
0.948	0.151
0.905	0.158
0.890	0.161
0.894	0.160
0.864	0.165
1.254	0.114

SEASONAL FACTORS	%
1.047	0.080
0.997	0.084
0.945	0.088
0.963	0.087
1.031	0.081
0.995	0.084
1.053	0.079
1.033	0.081
1.022	0.082
0.981	0.085
0.979	0.085
0.967	0.086

1982 COUNTING STATION NO. 15

HOURLY FACTORS	%
1.546	0.027
1.741	0.024
1.932	0.022
2.101	0.020
2.147	0.019
1.992	0.021
1.534	0.027
1.143	0.036
0.925	0.045
0.799	0.052
0.718	0.058
0.673	0.062
0.690	0.060
0.695	0.060
0.685	0.061
0.683	0.061
0.690	0.060
0.740	0.056
0.844	0.049
0.986	0.042
1.080	0.039
1.178	0.035
1.271	0.033
1.411	0.030

WEEKLY FACTORS	%
0.945	0.151
1.088	0.131
1.082	0.132
1.039	0.137
0.992	0.144
0.967	0.148
0.915	0.156

SEASONAL FACTORS	%
1.301	0.064
1.297	0.064
1.179	0.071
1.040	0.080
0.957	0.087
0.624	0.101
0.783	0.106
0.792	0.105
0.935	0.089
0.974	0.086
1.113	0.075
1.166	0.071

1982 COUNTING STATION NO. 16

HOURLY FACTORS	%
2. 329	0. 018
2. 733	0. 015
2. 901	0. 014
3. 062	0. 014
2. 952	0. 014
2. 468	0. 017
1. 713	0. 024
1. 156	0. 036
0. 913	0. 046
0. 767	0. 054
0. 667	0. 062
0. 617	0. 068
0. 605	0. 069
0. 594	0. 070
0. 596	0. 070
0. 606	0. 069
0. 632	0. 066
0. 686	0. 061
0. 778	0. 054
0. 934	0. 045
1. 121	0. 037
1. 344	0. 031
1. 629	0. 026
1. 968	0. 021

WEEKLY FACTORS	%
0. 953	0. 150
1. 086	0. 132
1. 052	0. 136
1. 019	0. 140
1. 011	0. 141
0. 990	0. 144
0. 910	0. 157

SEASONAL FACTORS	%
1. 338	0. 062
1. 420	0. 059
1. 139	0. 073
1. 029	0. 081
0. 938	0. 089
0. 777	0. 107
0. 771	0. 108
0. 780	0. 107
0. 900	0. 087
0. 985	0. 085
1. 133	0. 074
1. 205	0. 069

1982 COUNTING STATION NO. 17

HOURLY FACTORS	%
33. 569	0. 001
33. 569	0. 001
50. 354	0. 001
33. 569	0. 001
20. 142	0. 002
7. 193	0. 006
2. 582	0. 016
1. 228	0. 034
0. 699	0. 060
0. 522	0. 080
0. 475	0. 088
0. 475	0. 088
0. 499	0. 084
0. 487	0. 086
0. 466	0. 089
0. 462	0. 090
0. 499	0. 084
0. 614	0. 068
0. 868	0. 048
1. 343	0. 031
1. 937	0. 022
3. 357	0. 012
6. 294	0. 007
14. 387	0. 003

WEEKLY FACTORS	%
0. 965	0. 148
1. 024	0. 140
1. 017	0. 140
1. 034	0. 138
1. 068	0. 134
1. 041	0. 137
0. 877	0. 163

SEASONAL FACTORS	%
3. 939	0. 021
2. 456	0. 034
1. 415	0. 059
0. 964	0. 086
0. 817	0. 102
0. 607	0. 137
0. 543	0. 153
0. 599	0. 139
0. 880	0. 095
0. 966	0. 086
1. 691	0. 049
2. 448	0. 034

1982 COUNTING STATION NO. 18

HOURLY FACTORS	%
5. 981	0. 007
7. 903	0. 005
10. 059	0. 004
9. 220	0. 005
6. 323	0. 007
3. 207	0. 013
1. 785	0. 023
1. 069	0. 039
0. 788	0. 053
0. 655	0. 064
0. 590	0. 071
0. 567	0. 073
0. 576	0. 072
0. 575	0. 072
0. 545	0. 076
0. 537	0. 078
0. 541	0. 077
0. 593	0. 070
0. 714	0. 058
0. 878	0. 047
1. 196	0. 035
1. 729	0. 024
2. 666	0. 016
4. 098	0. 010

WEEKLY FACTORS	%
0. 684	0. 209
1. 113	0. 128
1. 385	0. 103
1. 365	0. 105
1. 286	0. 111
0. 859	0. 166
0. 804	0. 178

SEASONAL FACTORS	%
1. 592	0. 052
1. 424	0. 059
1. 291	0. 065
1. 057	0. 079
0. 835	0. 100
0. 855	0. 097
0. 741	0. 112
0. 788	0. 106
0. 832	0. 100
0. 942	0. 088
1. 142	0. 073
1. 213	0. 069

1982 COUNTING STATION NO. 19

HOURLY FACTORS	%
9. 333	0. 004
37. 333	0. 001
37. 333	0. 001
37. 333	0. 001
18. 667	0. 002
3. 733	0. 011
1. 333	0. 031
0. 866	0. 048
0. 747	0. 056
0. 644	0. 065
0. 633	0. 066
0. 644	0. 065
0. 655	0. 064
0. 644	0. 065
0. 602	0. 069
0. 549	0. 076
0. 498	0. 084
0. 498	0. 084
0. 593	0. 070
0. 794	0. 052
1. 098	0. 038
1. 697	0. 025
2. 872	0. 015
5. 333	0. 008

WEEKLY FACTORS	%
1. 030	0. 139
1. 024	0. 140
1. 055	0. 135
1. 085	0. 132
1. 102	0. 130
0. 837	0. 171
0. 925	0. 154

SEASONAL FACTORS	%
1. 217	0. 068
1. 052	0. 079
1. 090	0. 076
0. 986	0. 085
1. 000	0. 083
0. 906	0. 092
0. 930	0. 090
0. 940	0. 089
0. 919	0. 091
0. 913	0. 091
1. 010	0. 083
1. 137	0. 073

1982 COUNTING STATION NO. 20

HOURLY FACTORS	%
1. 577	0. 026
1. 686	0. 025
1. 860	0. 022
1. 880	0. 022
1. 801	0. 023
1. 475	0. 028
1. 218	0. 034
1. 116	0. 037
0. 992	0. 042
0. 823	0. 051
0. 754	0. 055
0. 730	0. 057
0. 736	0. 057
0. 728	0. 057
0. 713	0. 058
0. 693	0. 060
0. 691	0. 060
0. 774	0. 054
0. 880	0. 047
0. 969	0. 043
1. 046	0. 040
1. 122	0. 037
1. 258	0. 033
1. 420	0. 029

WEEKLY FACTORS	%
0. 980	0. 146
1. 016	0. 141
1. 114	0. 128
1. 037	0. 138
0. 975	0. 147
0. 886	0. 161
1. 022	0. 140

SEASONAL FACTORS	%
0. 981	0. 085
0. 969	0. 086
0. 996	0. 084
0. 969	0. 086
1. 053	0. 079
0. 986	0. 085
0. 943	0. 088
0. 995	0. 084
1. 129	0. 074
1. 122	0. 074
0. 973	0. 086
0. 927	0. 090

1982 COUNTING STATION NO. 21

HOURLY FACTORS	%
4. 551	0. 009
6. 301	0. 007
10. 240	0. 004
11. 702	0. 004
7. 447	0. 006
3. 413	0. 012
1. 820	0. 023
1. 205	0. 035
0. 845	0. 049
0. 655	0. 064
0. 581	0. 072
0. 561	0. 074
0. 561	0. 074
0. 546	0. 076
0. 539	0. 077
0. 546	0. 076
0. 535	0. 078
0. 589	0. 071
0. 745	0. 056
0. 975	0. 043
1. 241	0. 034
1. 575	0. 026
2. 156	0. 019
3. 562	0. 012

WEEKLY FACTORS	%
1. 084	0. 132
1. 009	0. 142
1. 078	0. 133
0. 998	0. 143
0. 979	0. 146
0. 855	0. 167
1. 034	0. 138

SEASONAL FACTORS	%
1. 392	0. 060
1. 334	0. 062
1. 139	0. 073
1. 062	0. 078
1. 008	0. 083
0. 787	0. 106
0. 822	0. 101
0. 752	0. 111
0. 885	0. 094
0. 945	0. 088
1. 151	0. 072
1. 183	0. 070

1982 COUNTING STATION NO. 22

HOURLY FACTORS	%
7. 472	0. 006
9. 807	0. 004
26. 153	0. 002
31. 383	0. 001
17. 435	0. 002
6. 035	0. 007
1. 846	0. 023
0. 801	0. 052
0. 730	0. 057
0. 662	0. 063
0. 604	0. 069
0. 569	0. 073
0. 536	0. 078
0. 513	0. 081
0. 505	0. 083
0. 483	0. 086
0. 490	0. 085
0. 549	0. 076
0. 839	0. 050
1. 297	0. 032
1. 914	0. 022
1. 846	0. 023
2. 572	0. 016
4. 241	0. 010

WEEKLY FACTORS	%
1. 084	0. 132
1. 024	0. 140
0. 988	0. 145
0. 969	0. 147
1. 001	0. 143
0. 940	0. 152
1. 006	0. 142

SEASONAL FACTORS	%
1. 033	0. 063
1. 090	0. 076
1. 014	0. 082
0. 913	0. 091
0. 915	0. 091
0. 920	0. 091
0. 928	0. 090
0. 949	0. 088
0. 959	0. 087
0. 915	0. 091
1. 071	0. 078
1. 148	0. 073

1982 COUNTING STATION NO. 23

HOURLY FACTORS	%
3. 528	0. 012
4. 082	0. 010
7. 178	0. 006
8. 674	0. 005
6. 308	0. 007
3. 253	0. 013
1. 983	0. 021
0. 977	0. 043
0. 875	0. 048
0. 696	0. 060
0. 585	0. 071
0. 552	0. 075
0. 541	0. 077
0. 555	0. 075
0. 551	0. 076
0. 561	0. 074
0. 570	0. 073
0. 618	0. 067
0. 826	0. 050
1. 057	0. 039
1. 293	0. 032
1. 508	0. 028
1. 945	0. 021
2. 539	0. 016

WEEKLY FACTORS	%
1. 077	0. 133
0. 994	0. 144
1. 059	0. 135
1. 070	0. 134
1. 038	0. 138
0. 860	0. 166
0. 942	0. 152

SEASONAL FACTORS	%
1. 187	0. 070
0. 953	0. 087
0. 947	0. 088
0. 903	0. 092
0. 853	0. 098
0. 929	0. 090
0. 953	0. 087
1. 086	0. 077
1. 026	0. 081
1. 074	0. 078
1. 090	0. 076
1. 108	0. 075

1982 COUNTING STATION NO. 24

HOURLY FACTORS	%
2. 971	0. 014
3. 941	0. 011
5. 924	0. 007
7. 209	0. 006
5. 082	0. 008
1. 898	0. 022
0. 845	0. 049
0. 642	0. 065
0. 790	0. 053
0. 802	0. 052
0. 737	0. 057
0. 705	0. 059
0. 697	0. 060
0. 679	0. 061
0. 635	0. 066
0. 588	0. 071
0. 545	0. 076
0. 579	0. 072
0. 843	0. 049
1. 110	0. 038
1. 366	0. 031
1. 444	0. 029
1. 598	0. 026
2. 138	0. 019

WEEKLY FACTORS	%
1. 492	0. 096
0. 945	0. 151
0. 917	0. 156
0. 912	0. 157
0. 916	0. 156
0. 876	0. 163
1. 174	0. 122

SEASONAL FACTORS	%
1. 022	0. 082
0. 945	0. 088
0. 916	0. 091
0. 938	0. 089
1. 019	0. 082
1. 017	0. 082
1. 085	0. 077
1. 091	0. 076
1. 049	0. 079
0. 995	0. 084
0. 987	0. 084
0. 970	0. 086

1982 COUNTING STATION NO. 25

HOURLY FACTORS		%	
2.	633	0.	015
3.	130	0.	013
3.	859	0.	010
4.	334	0.	009
4.	024	0.	010
2.	218	0.	018
1.	241	0.	033
0.	900	0.	046
0.	897	0.	046
0.	763	0.	054
0.	674	0.	061
0.	603	0.	069
0.	571	0.	072
0.	584	0.	071
0.	596	0.	069
0.	578	0.	072
0.	599	0.	069
0.	692	0.	060
0.	867	0.	048
1.	067	0.	039
1.	304	0.	031
1.	430	0.	029
1.	638	0.	025
2.	087	0.	019

WEEKLY FACTORS		%	
1.	137	0.	125
0.	961	0.	148
1.	010	0.	141
1.	004	0.	142
0.	972	0.	148
0.	879	0.	162
1.	079	0.	132

SEASONAL FACTORS		%	
0.	929	0.	089
0.	905	0.	092
0.	971	0.	085
0.	946	0.	088
1.	040	0.	080
1.	061	0.	080
1.	030	0.	080
1.	078	0.	077
1.	201	0.	069
1.	129	0.	073
0.	956	0.	087
0.	879	0.	094

1982 COUNTING STATION NO. 26

HOURLY FACTORS	%
7. 392	0. 005
12. 319	0. 003
18. 479	0. 002
18. 479	0. 002
36. 958	0. 001
12. 319	0. 003
3. 300	0. 012
1. 421	0. 029
0. 948	0. 043
0. 637	0. 065
0. 552	0. 075
0. 536	0. 077
0. 521	0. 079
0. 513	0. 081
0. 513	0. 081
0. 506	0. 082
0. 528	0. 078
0. 606	0. 068
0. 711	0. 058
0. 924	0. 045
1. 120	0. 037
1. 320	0. 031
1. 945	0. 021
3. 696	0. 011

WEEKLY FACTORS	%
0. 912	0. 156
1. 009	0. 141
1. 115	0. 128
1. 156	0. 123
1. 073	0. 133
0. 828	0. 172
0. 988	0. 144

SEASONAL FACTORS	%
0. 916	0. 090
0. 782	0. 106
0. 755	0. 110
0. 777	0. 107
0. 852	0. 093
1. 167	0. 071
1. 286	0. 064
1. 351	0. 061
1. 418	0. 058
1. 122	0. 074
1. 084	0. 076
0. 995	0. 083

1982 COUNTING STATION NO. 27

HOURLY FACTORS		%	
4.	746	0.	008
8.	019	0.	005
11.	627	0.	003
14.	534	0.	002
9.	689	0.	004
4.	306	0.	009
1.	922	0.	021
1.	186	0.	035
0.	957	0.	043
0.	703	0.	059
0.	590	0.	070
0.	545	0.	076
0.	589	0.	070
0.	577	0.	072
0.	550	0.	075
0.	521	0.	079
0.	517	0.	080
0.	556	0.	074
0.	674	0.	061
0.	894	0.	046
1.	211	0.	034
1.	520	0.	027
2.	040	0.	020
2.	981	0.	013

WEEKLY FACTORS		%	
0.	958	0.	149
1.	100	0.	129
1.	083	0.	131
1.	077	0.	132
1.	036	0.	137
0.	946	0.	151
0.	852	0.	167

SEASONAL FACTORS		%	
0.	925	0.	090
0.	781	0.	106
0.	831	0.	100
0.	904	0.	092
0.	974	0.	085
1.	068	0.	078
1.	108	0.	075
1.	178	0.	070
1.	324	0.	062
1.	134	0.	073
1.	064	0.	078
0.	963	0.	086

1982 COUNTING STATION NO. 28

HOURLY FACTORS	%
3. 398	0. 012
3. 990	0. 010
8. 871	0. 004
14. 363	0. 002
13. 867	0. 003
5. 069	0. 008
1. 782	0. 023
0. 939	0. 044
0. 877	0. 047
0. 794	0. 052
0. 676	0. 061
0. 605	0. 068
0. 565	0. 073
0. 579	0. 071
0. 581	0. 071
0. 571	0. 072
0. 558	0. 074
0. 574	0. 072
0. 736	0. 056
0. 889	0. 046
1. 076	0. 038
1. 200	0. 034
1. 575	0. 026
2. 222	0. 018

WEEKLY FACTORS	%
1. 359	0. 105
0. 989	0. 144
0. 956	0. 149
0. 946	0. 151
0. 942	0. 151
0. 879	0. 162
1. 052	0. 135

SEASONAL FACTORS	%
1. 046	0. 079
0. 965	0. 086
0. 940	0. 088
0. 953	0. 087
1. 014	0. 082
1. 036	0. 080
1. 051	0. 079
1. 027	0. 081
1. 006	0. 081
0. 997	0. 083
1. 015	0. 082
0. 948	0. 087

TABLE 8

PATAGONIA DATA COMPARISONS

12 HOUR VOLUME: 931

Day: Wednesday
Date: 8-3-1983

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 12 HR VOLUME	DIFFERENCE	PERCENT ERROR
8 - 11AM	22.14	226	1021	90	9.7
8 - 12AM	31.02	313	1009	78	8.4
1 - 4PM	27.99	277	990	59	6.3
1 - 5PM	37.86	371	980	49	5.3

Vehicle Type	8 - 11AM			8 - 12AM			1 - 4PM			1 - 5PM			12 HR VOLUME		
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ
A	138	132	6	190	191	-1	169	160	9	226	222	4	567	596	-29
B	2	3	- 1	3	3	0	3	2	1	4	2	2	10	6	4
C	4	7	- 3	5	8	-3	5	6	- 1	6	7	0	16	19	- 3
D	1	0	1	1	0	1	1	0	1	1	0	1	3	2	1
E	63	60	3	87	84	3	77	92	-15	103	117	-14	260	250	10
F	6	16	-10	9	18	-9	8	12	- 4	10	15	- 5	26	38	-12
G	2	1	1	3	2	1	3	0	3	4	0	4	9	2	7
H	7	7	0	10	7	3	9	5	4	12	8	4	30	18	12
I	2	0	2	3	0	3	2	0	2	3	0	3	7	0	7
J	0	0	0	1	0	0	1	0	1	1	0	0	2	0	2

TABLE 9

RITTENHOUSE DATA COMPARISONS

24 HOUR VOLUME: 3093

Day: Friday
Date: 2-10-84

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 24 HR VOLUME	DIFFERENCE	PERCENT ERROR
8 - 11AM	17.50	570	3257	164	5.3
8 - 12AM	24.52	742	3026	- 67	2.1
1 - 4PM	22.13	633	2860	-233	7.5
1 - 5PM	29.93	905	3024	- 69	2.2

Vehicle Type	8 - 11AM			8 - 12AM			1 - 4PM			1 - 5PM			24 HR VOLUME		
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ
A	347	286	61	452	376	76	385	352	33	551	502	49	1882	1766	106
B	6	2	4	8	2	6	7	7	0	10	11	- 1	34	31	3
C	10	1	9	13	2	11	11	1	10	16	3	13	54	11	43
D	2	2	0	2	4	- 2	2	8	- 6	3	8	- 5	10	15	- 5
E	159	193	-34	207	254	-47	176	229	-53	252	335	-83	862	1087	-225
F	16	44	-28	21	55	-34	18	25	- 7	25	33	-13	87	98	- 11
G	6	12	- 6	8	13	- 5	6	2	4	9	3	6	32	18	14
H	19	10	9	24	10	14	21	0	21	30	0	30	101	16	85
I	5	19	-14	6	25	-19	5	9	- 4	7	10	- 3	25	47	- 22
J	5	1	4	1	1	0	1	0	1	2	0	2	6	3	3

TABLE 10

WICKENBURG DATA COMPARISONS

12 HOUR VOLUME: 4662

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 12 HR VOLUME	DIFFERENCE	PERCENT ERROR
8 - 11AM	23.50	977	4157	- 505	10.8
8 - 12AM	32.83	1343	4091	- 571	12.2
1 - 4PM	29.61	1384	4674	12	0.2
1 - 5PM	39.55	1875	4741	79	1.7

Vehicle Type	8 - 11AM			8 - 12AM			1 - 4PM			1 - 5PM			12 HR VOLUME		
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ
A	595	624	-29	817	851	-34	842	874	-32	1141	1182	-41	2837	2950	-113
B	11	12	- 1	15	18	- 3	15	11	4	20	15	5	51	44	7
C	17	30	-13	24	44	-20	24	37	-13	33	57	-24	82	150	- 68
D	3	6	- 3	4	10	- 6	4	4	0	6	9	- 3	15	28	- 13
E	272	211	61	374	288	86	386	366	20	523	489	34	1300	1105	195
F	27	33	- 6	38	45	- 7	39	27	12	53	37	16	131	127	4
G	10	1	9	14	2	12	14	4	10	19	5	14	48	15	33
H	32	47	-15	44	65	-21	45	47	- 2	61	64	- 3	152	193	- 41
I	8	9	- 1	11	16	- 5	11	13	- 2	15	15	0	37	44	- 7
J	2	4	- 2	3	4	- 1	3	0	3	4	1	3	9	5	4

TABLE 11

WICKENBURG DATA COMPARISONS

24 HOUR VOLUME: 4822

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 24 HR VOLUME	DIFFERENCE	PERCENT ERROR
9 - 12AM	21.08	1049	4976	154	3.2
9AM - 1PM	28.72	1407	4899	77	1.6
1 - 4PM	23.72	1258	5304	482	10.0
1 - 5PM	31.68	1563	4934	112	2.3

Vehicle Type	9 - 12AM			9 - 1PM			1 - 4PM			1 - 5PM			24 HR VOLUME		
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ Δ
A	638	629	9	856	847	9	765	794	-29	951	990	- 39	2934	2904	30
B	11	1	10	15	2	13	14	0	14	17	0	17	53	3	50
C	18	60	-42	25	76	- 51	22	39	-17	27	47	- 20	84	145	- 61
D	3	3	0	5	5	0	4	12	- 8	5	15	- 10	15	40	- 25
E	292	207	85	392	277	115	351	251	100	436	324	112	1344	1016	328
F	29	52	-23	40	67	- 27	35	76	- 41	44	81	- 37	135	196	- 61
G	11	19	- 8	14	26	- 12	13	16	- 3	16	18	- 2	49	68	- 19
H	34	63	-29	46	88	- 42	41	52	- 11	51	69	- 18	158	342	-184
I	8	15	- 7	11	18	- 7	10	18	- 8	13	19	- 6	39	86	- 47
J	2	0	2	3	1	2	3	0	3	3	0	3	10	22	- 12

TABLE 12

WILLIAMS FIELD DATA COMPARISONS

12 HOUR VOLUME: 9264

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 12 HR VOLUME	DIFFERENCE	PERCENT ERROR
8 - 11AM	23.03	1736	7538	-1726	18.6
8 - 12AM	32.26	2367	7337	-1927	20.8
1 - 4PM	29.12	2433	8355	- 909	9.8
1 - 5PM	39.38	3186	8090	-1174	12.7

Vehicle Type	8 - 11AM			8 - 12AM			1 - 4PM			1 - 5PM			12 HR VOLUME		
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ
A	1056	892	164	1440	1221	219	1480	1353	127	1939	1826	113	5637	5410	227
B	19	11	8	26	19	7	27	41	- 14	35	57	- 22	101	142	- 41
C	30	7	23	41	9	32	43	12	31	56	16	40	162	46	116
D	6	2	4	8	2	6	8	1	7	10	2	8	30	10	20
E	484	540	-56	660	745	-85	678	780	-102	888	996	-108	2583	2713	-130
F	49	96	-47	67	127	-60	68	84	- 16	90	101	- 11	260	299	- 39
G	18	58	-40	24	78	-54	25	70	- 45	32	77	- 45	94	207	-113
H	57	105	-48	77	131	-54	80	83	- 3	104	102	2	303	343	- 40
I	14	24	-10	19	29	-10	19	8	11	25	8	17	74	73	1
J	3	0	3	5	4	1	5	0	5	6	0	6	19	10	9

TABLE 13

WILLIAMS FIELD DATA COMPARISONS

24 HOUR VOLUME: 12304

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 24 HR VOLUME	DIFFERENCE	PERCENT ERROR
8 - 11AM	17.50	1554	8880	-3424	27.8
8 - 12AM	24.52	2119	8641	-3663	29.8
1 - 4PM	22.13	2403	10858	-1446	11.8
1 - 5PM	29.93	3445	11510	- 794	6.4

Vehicle Type	8 - 11AM			8 - 12AM			1 - 4PM			1 - 5PM			24 HOUR VOLUME		
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ
A	946	888	58	1289	1219	70	1462	1497	-35	2096	2246	-150	7487	8130	-643
B	17	11	6	23	13	10	26	45	-19	38	57	- 19	134	175	- 41
C	27	13	14	37	17	20	42	20	22	60	21	39	215	52	163
D	5	3	2	7	4	3	8	4	4	11	5	6	39	21	18
E	433	458	-25	591	623	-32	670	628	42	960	869	91	3430	3142	288
F	44	76	-32	60	107	-47	68	83	-15	97	94	3	346	320	26
G	16	19	- 3	22	22	0	25	26	- 1	35	31	4	126	74	52
H	51	64	-13	69	85	-16	79	79	0	113	99	14	402	314	88
I	12	11	1	17	17	0	19	20	- 1	28	22	6	98	55	43
J	3	8	- 5	4	9	- 5	5	1	4	7	1	6	25	18	7

TABLE 14

HIGLEY DATA COMPARISONS

12 HOUR VOLUME: 1762

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 12 HR VOLUME	DIFFERENCE	PERCENT ERROR
8 - 11AM	23.03	353	1533	-229	13.0
8 - 12AM	32.26	466	1445	-317	18.0
1 - 4PM	29.12	441	1514	-248	14.1
1 - 5PM	39.38	625	1587	-175	9.9

Vehicle Type	8 - 11AM			8 - 12AM			1 - 4PM			1 - 5PM			12 HOUR VOLUME		
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ
A	214	182	32	284	243	41	268	240	28	380	355	25	1072	1025	47
B	4	5	- 1	5	6	- 1	5	6	- 1	7	9	- 2	19	25	- 6
C	6	0	6	8	0	8	8	1	7	11	2	9	31	9	22
D	1	0	1	1	0	1	1	8	1	2	0	2	6	0	6
E	98	134	-36	130	173	-43	123	160	-37	174	217	-43	491	585	-94
F	10	17	- 7	13	20	- 7	12	17	- 5	18	20	- 2	50	57	- 7
G	4	11	- 7	5	18	-13	5	11	- 7	6	12	- 6	18	40	-22
H	11	3	8	15	5	10	14	6	8	20	10	10	58	19	38
I	3	1	2	4	1	3	4	0	4	5	0	5	14	1	13
J	1	0	1	1	0	1	1	0	1	1	0	5	4	0	4

TABLE 15

HIGLEY DATA COMPARISONS

24 HOUR VOLUME: 2245

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 24 HR VOLUME	DIFFERENCE	PERCENT ERROR
9 - 12AM	20.48	405	1978	-267	11.9
9AM - 1PM	28.01	540	1928	-317	14.1
1 - 4PM	23.31	475	2038	-207	9.2
1 - 5PM	31.53	757	2401	156	7.0

Vehicle Type	9 - 12AM			9 - 1PM			1 - 4PM			1 - 5PM			24 HR VOLUME		
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ
A	246	239	7	329	307	22	289	255	34	461	424	37	1366	1322	44
B	4	3	1	6	3	3	5	13	- 8	8	21	-13	24	26	- 2
C	7	2	5	9	5	4	8	4	4	13	4	9	39	9	30
D	1	3	- 2	2	3	- 1	2	8	- 6	2	8	- 6	7	11	- 4
E	113	124	-11	151	173	-22	132	165	-33	211	255	-44	625	763	-138
F	11	19	- 8	15	26	-11	13	6	7	21	8	13	63	44	19
G	4	10	- 6	6	13	- 7	5	1	4	8	5	3	23	20	3
H	13	5	8	18	7	11	16	5	11	25	8	17	73	20	53
I	3	0	3	4	3	1	4	15	-11	6	21	-15	18	27	- 9
J	1	0	1	1	0	1	1	3	- 2	2	3	- 1	4	3	1

TABLE 16

KOHL'S RANCH DATA COMPARISONS

12 HOUR VOLUME: 3242

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 12 HR VOLUME	DIFFERENCE	PERCENT ERROR
8 - 11AM	22.14	825	3726	484	14.9
8 - 12AM	31.02	1106	3565	323	10.0
1 - 4PM	27.99	889	3176	- 66	2.0
1 - 5PM	37.86	1190	3143	- 99	3.0

Vehicle Type	8 - 11AM			8 - 12AM			1 - 4PM			1 - 5PM			12 HR VOLUME		
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ
A	502	437	65	673	591	82	541	480	61	724	651	73	1973	1767	206
B	9	5	4	12	5	7	10	4	6	13	7	6	35	22	13
C	14	49	-35	19	77	-58	16	40	-24	21	50	-29	57	180	-123
D	3	13	-10	4	13	- 9	3	2	1	4	3	1	10	17	- 7
E	230	253	-23	308	341	-33	248	311	-63	332	408	-76	904	1046	-142
F	23	14	9	31	21	10	25	15	10	33	20	13	91	64	27
G	8	3	5	11	3	8	9	6	3	12	7	5	33	13	30
H	27	40	-13	36	44	- 8	29	24	5	39	28	11	106	98	8
I	7	6	1	9	6	3	7	4	3	10	9	1	26	18	8
J	2	4	- 2	2	4	- 2	2	3	- 1	2	7	- 5	6	16	- 10

TABLE 17

RYE DATA COMPARISONS

12 HOUR VOLUME: 3851

HOURS	PERCENTAGE	ACTUAL VOLUME	PREDICTED 12 HR VOLUME	DIFFERENCE	PERCENT ERROR
8 - 11AM	22.14	1030	4652	801	20.8
8 - 12AM	31.02	1390	4480	629	16.3
1 - 4PM	27.99	1006	3594	-257	6.7
1 - 5PM	37.86	1313	3468	-383	9.9

Vehicle Type	8 - 11AM			8 - 12AM			1 - 4PM			1 - 5PM					
	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ	Pred	Act	Δ
A	627	580	47	846	805	41	612	584	28	799	760	39	2343	2216	127
B	11	6	5	15	8	7	11	12	- 1	14	17	- 3	42	30	12
C	18	69	-51	24	81	-57	18	50	-32	23	63	-40	67	189	-122
D	3	2	1	4	2	2	3	1	2	4	1	3	12	4	8
E	287	295	- 8	388	396	- 8	280	299	-19	366	387	-21	1074	1161	- 87
F	29	17	12	39	20	19	28	13	15	37	19	18	108	55	53
G	11	10	1	14	10	4	10	2	8	13	3	10	39	16	23
H	34	40	- 6	45	54	- 9	33	38	- 5	43	50	- 7	126	147	- 21
I	8	5	3	11	7	4	8	4	4	11	6	5	31	17	14
J	2	6	- 4	3	7	- 4	2	3	- 1	3	7	- 4	8	16	- 8

TABLE 18

WILLIAMS FIELD

Road: Williams Field
Date: 11-17-83 Day: Thursday

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0600	751	19	2	1	342	28	1	14	5	1	0	1164
0700	914	14	8	7	301	25	8	24	3	3	0	1307
0800	382	1	4	2	181	19	10	18	2	1	3	623
0900	276	2	4	1	143	23	3	18	5	2	0	477
1000	230	8	5	0	134	34	6	28	4	5	0	454
1100	331	2	4	1	165	31	3	21	6	1	0	565
1200	374	15	1	2	157	21	6	17	5	2	0	600
1300	319	5	4	0	178	19	6	31	7	0	0	569
1400	441	16	9	3	211	26	10	30	6	1	0	753
1500	737	24	7	1	239	38	10	18	7	0	0	1081
1600	749	12	1	1	241	11	5	20	2	0	0	1042
1700	825	20	0	2	252	14	4	9	0	1	0	1127
1800	367	8	1	0	121	4	0	18	0	0	0	519
1900	325	4	0	0	71	6	7	0	0	0	0	413
2000	179	1	0	0	46	3	1	1	2	1	0	234
2100	116	1	0	0	40	3	0	4	0	0	0	164
2200	134	0	0	0	44	3	0	3	0	0	0	184
2300	182	6	2	0	35	0	0	5	0	0	0	230
2400	132	6	0	0	40	1	0	3	0	0	0	182
0100	54	2	0	0	23	1	0	3	0	0	0	83
0200	33	0	0	0	8	1	0	1	0	0	0	43
0300	27	0	0	0	15	0	0	5	0	0	0	47
0400	58	3	0	0	28	6	1	6	0	0	0	102
0500	194	6	0	0	127	3	0	10	1	0	0	341
	8130	175	52	21	3142	320	74	314	55	18	3	12304

Road: Williams Field
Date: 7-12-83 Day: Tuesday

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0600	601	20	8	2	285	23	17	24	8	4	5	997
0700	774	26	5	2	279	25	14	41	8	1	0	1175
0800	328	6	2	2	176	30	24	30	9	0	0	607
0900	278	3	2	0	184	28	13	34	7	0	0	549
1000	286	2	3	0	180	38	21	41	8	0	1	580
1100	329	8	2	0	205	31	20	26	5	4	1	631
1200	317	2	3	0	156	16	18	33	12	1	0	558
1300	338	8	2	0	299	16	28	27	6	0	1	725
1400	430	12	5	1	218	27	29	36	2	0	0	760
1500	585	21	5	0	263	41	13	20	0	0	0	948
1600	473	16	4	1	216	17	7	19	0	0	0	753
1700	671	18	5	2	252	7	3	12	8	0	3	981
1800												
1900												
2000												
2100												
2200												
2300												
2400												
0100												
0200												
0300												
0400												
0500												
	5410	142	46	10	2713	299	207	343	73	10	11	9264

TABLE 19

HIGLEY

Road: Higley
Date: 1-18-83 Day: Friday

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0600	33	0	0	0	31	1	0	1	0	0	0	66
0700	39	0	0	0	49	4	2	0	0	0	0	94
0800												
0900	78	1	0	0	46	1	2	0	0	0	0	128
1000	81	0	1	1	41	6	8	2	0	0	0	140
1100	80	2	1	2	37	12	0	3	0	0	0	137
1200	68	0	3	0	49	7	3	2	3	0	0	135
1300	69	1	0	2	37	2	1	1	1	0	0	114
1400	83	0	1	2	53	2	0	2	9	1	0	153
1500	103	12	3	4	75	2	0	2	5	2	0	208
1600	169	8	0	0	90	2	4	3	6	0	0	282
1700	135	1	0	0	70	1	0	1	3	0	0	211
1800	97	55	0	0	66	1	0	2	0	0	0	166
1900	55	0	0	0	25	2	0	0	0	0	0	82
2000	26	0	0	0	18	0	0	0	0	0	0	44
2100	61	0	0	0	29	1	0	0	0	0	0	91
2200	26	0	0	0	12	0	0	0	0	0	0	38
2300	39	0	0	0	14	0	0	0	0	0	0	53
2400	20	0	0	0	2	0	0	0	0	0	0	22
0100	19	0	0	0	2	0	0	0	0	0	0	21
0200	11	0	0	0	0	0	0	0	0	0	0	11
0300	5	0	0	0	1	0	0	0	0	0	0	6
0400	10	0	0	0	2	0	0	1	0	0	0	13
0500	15	1	0	0	14	0	0	0	0	0	0	30
	1322	26	9	11	763	44	20	20	27	3	0	2245

Road: Higley
Date: 7-14-83 Day: Thursday

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0600	108	5	3	0	59	4	2	1	0	0	1	183
0700	137	3	2	0	56	4	2	1	0	0	0	205
0800	71	3	0	0	37	6	2	1	0	0	0	120
0900	52	1	0	0	54	7	5	2	1	0	0	122
1000	59	1	0	0	43	4	4	0	0	0	0	111
1100	61	1	0	0	39	3	7	2	0	0	0	113
1200	76	1	0	0	34	5	6	1	0	0	0	123
1300	81	2	0	0	48	8	4	2	0	0	0	145
1400	63	1	1	0	55	4	3	4	0	0	0	131
1500	96	3	0	0	57	5	4	0	0	0	0	165
1600	115	3	1	0	57	3	1	4	0	0	0	184
1700	106	1	2	0	46	4	0	1	0	0	0	160
1800												
1900												
2000												
2100												
2200												
2300												
2400												
0100												
0200												
0300												
0400												
0500												
	1025	25	9	0	585	57	40	19	1	0	1	1762

TABLE 20

Day: Wednesday
Date: 8-4-83

KOHL'S RANCH-HIGHWAY 260

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0700	83	2	10	0	55	8	1	4	0	2	0	164
0800	107	0	18	4	47	4	2	13	3	1	1	200
0900	173	2	15	9	96	6	1	11	1	2	0	316
1000	157	3	16	0	110	4	0	16	2	1	0	309
1100	154	0	28	0	88	7	0	4	0	0	0	281
1200	196	3	13	0	90	2	1	16	1	1	0	323
1300	163	2	11	2	100	2	0	11	4	1	0	296
1400	152	1	12	0	107	9	0	8	0	0	0	289
1500	165	1	17	0	104	4	6	5	0	2	0	304
1600	171	3	10	1	97	5	1	4	5	4	0	301
1700	119	2	16	0	79	9	0	4	2	1	0	232
1800	127	4	14	1	73	4	1	2	0	1	0	227
	1767	22	180	17	1046	64	13	98	18	16	1	3242

TABLE 21

Day: Wednesday
Date: 8-3-83

PATAGONIA-HIGHWAY 82

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0730	35	0	0	0	19	3	0	1	0	0	0	58
0830	38	2	0	0	29	8	0	2	0	0	0	79
0930	47	1	4	0	12	4	0	4	0	0	0	72
1030	47	0	3	0	19	4	1	1	0	0	0	75
1130	59	0	1	0	24	2	1	0	0	0	0	87
1230	73	1	2	2	17	2	0	2	0	0	0	99
1330	61	1	2	0	17	4	0	2	0	0	0	878
1430	56	0	1	0	39	5	0	2	0	0	0	103
1530	43	1	3	0	36	3	0	1	0	0	0	87
1630	62	0	1	0	25	3	0	3	0	0	0	94
1730	39	0	1	0	4	0	0	0	0	0	0	44
1830	36	0	1	0	9	0	0	0	0	0	0	46
	596	6	19	2	250	38	2	18	0	0	0	931

TABLE 22

Day: Thursday
Date: 8-4-83

RYE-HIGHWAY 87

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0700	162	0	10	0	88	4	0	16	2	0	0	282
0800	154	2	23	0	87	4	3	15	5	1	0	294
0900	239	1	28	1	99	8	4	13	0	2	0	395
1000	187	3	18	1	109	5	3	12	0	3	0	341
1100	225	2	12	0	101	3	0	14	2	1	0	360
1200	201	1	18	1	102	4	3	14	2	1	0	347
1300	206	5	13	1	101	4	0	16	2	0	0	348
1400	180	4	9	0	88	2	1	16	0	1	0	301
1500	198	3	28	0	110	7	1	6	2	2	2	357
1600	176	5	13	0	88	6	1	12	2	4	0	307
1700	140	3	8	0	101	2	0	9	0	1	0	264
1800	148	1	9	0	87	6	0	4	0	0	0	255
	2216	30	189	4	1161	55	16	147	17	16	0	3851

TABLE 23

Day: Friday
Date: 2-10-84

RITTENHOUSE-HIGHWAY

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0700	135	1	0	2	85	0	0	3	2	0	0	228
0800	92	0	0	1	67	20	0	5	6	0	0	191
0900	91	1	0	1	62	10	7	4	5	1	0	182
1000	103	1	1	0	64	14	5	1	8	0	0	197
1100	90	0	1	2	61	11	1	0	6	0	0	172
1200	105	3	0	0	71	4	0	0	5	0	0	188
1300	150	3	0	1	89	12	0	0	6	0	0	261
1400	74	1	1	2	59	8	1	0	1	0	0	147
1500	128	3	0	5	81	5	1	0	2	0	0	225
1600	150	4	2	0	106	8	1	0	1	0	0	272
1700	147	4	1	0	98	1	1	1	1	1	0	255
1800	123	2	1	0	67	0	0	1	1	0	0	195
1900	85	1	2	0	42	1	0	0	1	0	0	132
2000	58	1	0	0	30	1	0	1	2	1	0	94
2100	51	2	0	0	14	1	0	0	0	0	0	68
2200	37	0	0	0	14	1	0	0	0	0	0	52
2300	24	1	0	0	11	0	0	0	0	0	0	36
2400	20	1	0	0	8	0	0	0	0	0	0	29
0100	15	0	1	0	12	0	0	0	0	0	0	28
0200	13	0	1	0	6	0	0	0	0	0	0	20
0300	7	0	0	0	6	0	0	0	0	0	0	13
0400	9	0	0	0	5	0	0	0	0	0	0	14
0500	18	1	0	1	9	0	0	0	0	0	1	30
0600	41	1	0	0	20	1	1	0	0	0	0	64
	1766	31	11	15	1087	98	18	16	47	3	1	3093

TABLE 24

WICKENBURG

Road: Wickenburg
Date: 12-1-83 Day: Thursday

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0600	63	0	5	1	44	1	0	10	6	0	0	130
0700	144	0	4	6	54	11	1	13	6	0	0	239
0800												
0900	192	0	11	1	64	25	5	28	3	0	0	329
1000	240	1	28	1	71	11	9	23	4	0	0	388
1100	197	0	21	1	72	16	5	12	8	0	0	332
1200	218	1	16	2	70	15	7	25	3	1	0	358
1300	240	0	15	0	78	26	7	14	5	0	0	385
1400	286	0	14	4	86	26	6	19	6	0	0	447
1500	268	0	10	8	87	24	3	19	7	0	0	426
1600	196	0	8	3	73	5	2	17	1	0	0	305
1700	226	0	4	3	99	14	3	17	8	0	0	374
1800	186	1	2	0	74	3	6	4	5	0	0	281
1900	92	0	3	1	36	3	7	12	1	0	0	155
2000	99	0	0	1	25	1	3	16	6	0	0	151
2100	17	0	0	0	9	2	1	5	0	0	0	34
2200	53	0	2	5	6	0	0	13	5	0	0	84
2300	37	0	0	0	7	2	1	10	1	0	0	58
2400	54	0	0	1	16	1	1	13	1	4	0	91
0100	20	0	0	0	7	1	0	22	0	5	0	55
0200	8	0	0	1	4	2	0	9	0	4	0	28
0300	9	0	0	0	4	0	1	13	0	8	0	35
0400	25	0	2	1	16	4	0	15	3	0	0	66
0500	34	0	0	0	14	3	0	13	7	0	0	71
	2904	3	145	40	1016	196	68	342	86	22	0	4822

Road: Wickenburg
Date: 7-22-83 Day: Friday

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0600	172	0	10	2	54	8	2	14	4	0	0	266
0700	199	2	12	2	65	10	3	21	3	0	0	317
0800	198	3	9	1	56	15	0	19	3	0	0	304
0900	222	5	11	2	78	13	0	15	6	2	0	354
1000	204	4	10	3	77	5	1	13	0	2	0	319
1100	227	6	14	4	77	12	1	18	7	0	0	366
1200	263	3	15	2	97	18	1	18	2	0	0	419
1300	284	4	9	3	102	7	0	18	5	0	0	432
1400	280	4	10	0	133	12	2	17	4	0	0	462
1500	310	3	18	1	131	8	2	12	4	0	1	490
1600	308	4	20	5	123	10	1	17	2	1	0	491
1700	283	6	12	3	112	9	2	11	4	0	0	442
1800												
1900												
2000												
2100												
2200												
2300												
2400												
0100												
0200												
0300												
0400												
0500												
	2950	44	150	28	1105	127	15	193	44	5	1	4662

APPENDIX D

ATR DATA

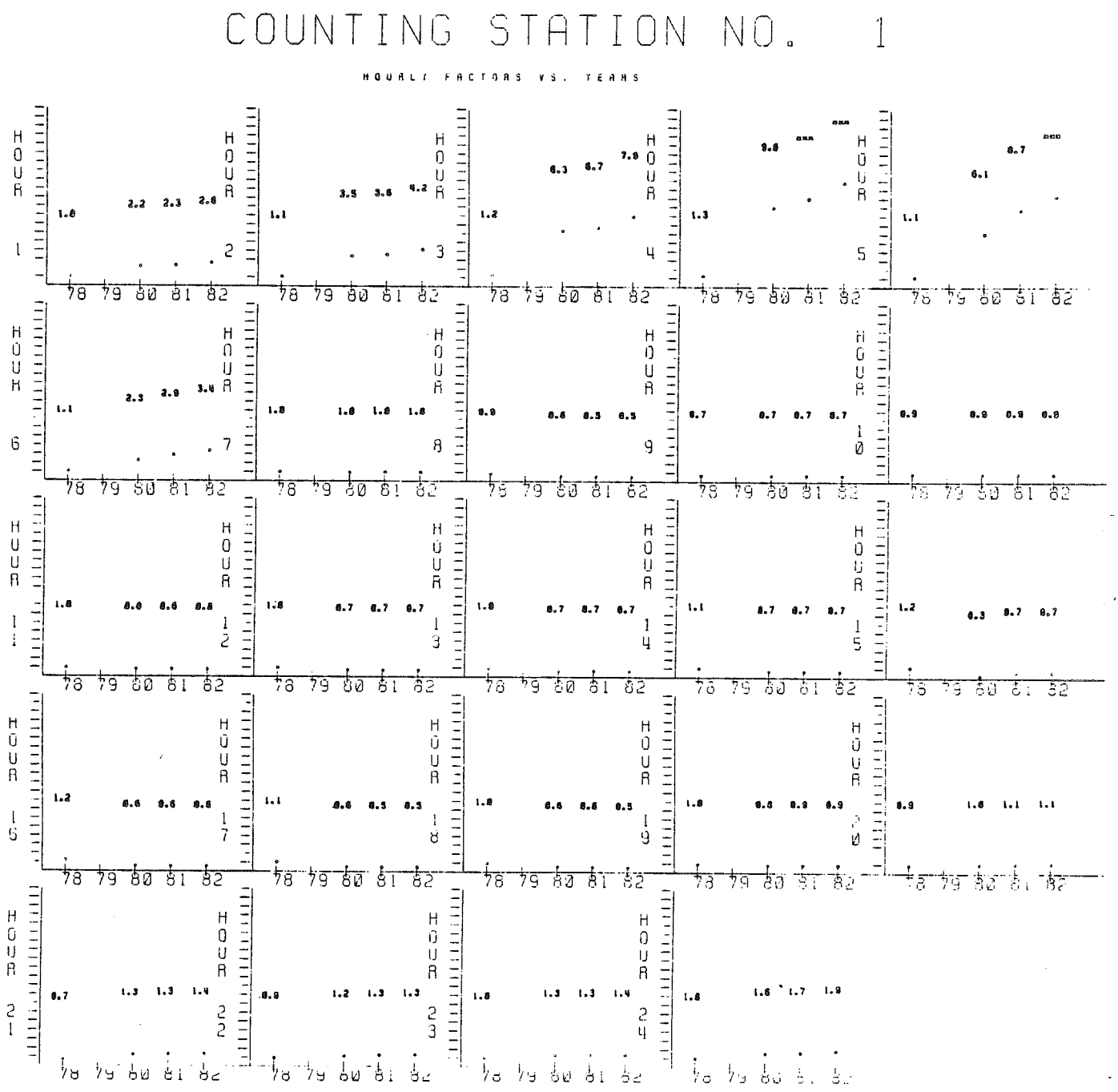


TABLE 24

WICKENBURG

Road: Wickenburg
Date: 12-1-83 Day: Thursday

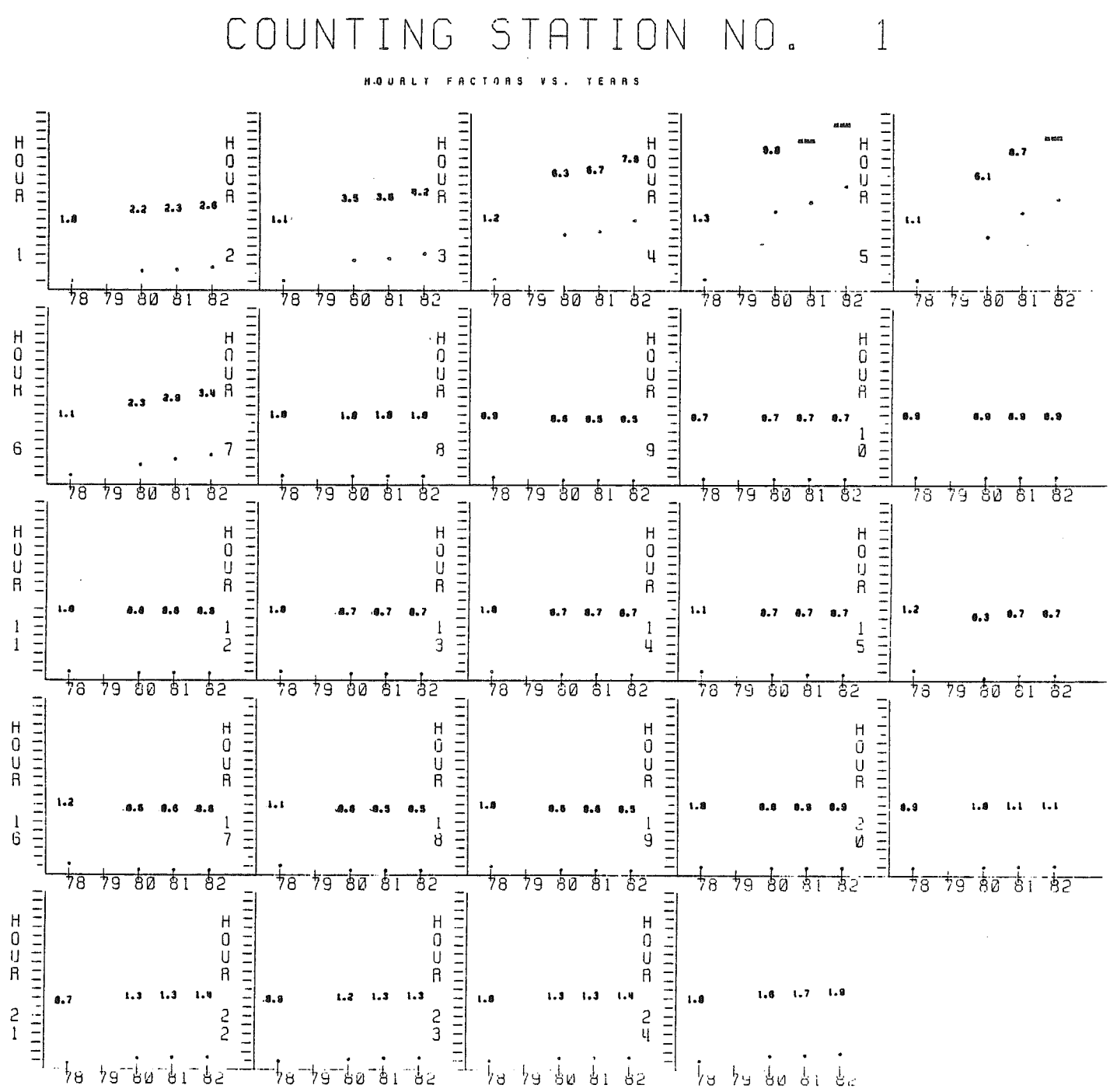
Time	A	B	C	D	E	F	G	H	I	J	*	Total
0600	63	0	5	1	44	1	0	10	6	0	0	130
0700	144	0	4	6	54	11	1	13	6	0	0	239
0800												
0900	192	0	11	1	64	25	5	28	3	0	0	329
1000	240	1	28	1	71	11	9	23	4	0	0	388
1100	197	0	21	1	72	16	5	12	8	0	0	332
1200	218	1	16	2	70	15	7	25	3	1	0	358
1300	240	0	15	0	78	26	7	14	5	0	0	385
1400	286	0	14	4	86	26	6	19	6	0	0	447
1500	268	0	10	8	87	24	3	19	7	0	0	426
1600	196	0	8	3	73	5	2	17	1	0	0	305
1700	226	0	4	3	99	14	3	17	8	0	0	374
1800	186	1	2	0	74	3	6	4	5	0	0	281
1900	92	0	3	1	36	3	7	12	1	0	0	155
2000	99	0	0	1	25	1	3	16	6	0	0	151
2100	17	0	0	0	9	2	1	5	0	0	0	34
2200	53	0	2	5	6	0	0	13	5	0	0	84
2300	37	0	0	0	7	2	1	10	1	0	0	58
2400	54	0	0	1	16	1	1	13	1	4	0	91
0100	20	0	0	0	7	1	0	22	0	5	0	55
0200	8	0	0	1	4	2	0	9	0	4	0	28
0300	9	0	0	0	4	0	1	13	0	8	0	35
0400	25	0	2	1	16	4	0	15	3	0	0	66
0500	34	0	0	0	14	3	0	13	7	0	0	71
	2904	3	145	40	1016	196	68	342	86	22	0	4822

Road: Wickenburg
Date: 7-22-83 Day: Friday

Time	A	B	C	D	E	F	G	H	I	J	*	Total
0600	172	0	10	2	54	8	2	14	4	0	0	266
0700	199	2	12	2	65	10	3	21	3	0	0	317
0800	198	3	9	1	56	15	0	19	3	0	0	304
0900	222	5	11	2	78	13	0	15	6	2	0	354
1000	204	4	10	3	77	5	1	13	0	2	0	319
1100	227	6	14	4	77	12	1	18	7	0	0	366
1200	263	3	15	2	97	18	1	18	2	0	0	419
1300	284	4	9	3	102	7	0	18	5	0	0	432
1400	280	4	10	0	133	12	2	17	4	0	0	462
1500	310	3	18	1	131	8	2	12	4	0	1	490
1600	308	4	20	5	123	10	1	17	2	1	0	491
1700	283	6	12	3	112	9	2	11	4	0	0	442
1800												
1900												
2000												
2100												
2200												
2300												
2400												
0100												
0200												
0300												
0400												
0500												
	2950	44	150	28	1105	127	15	193	44	5	1	4662

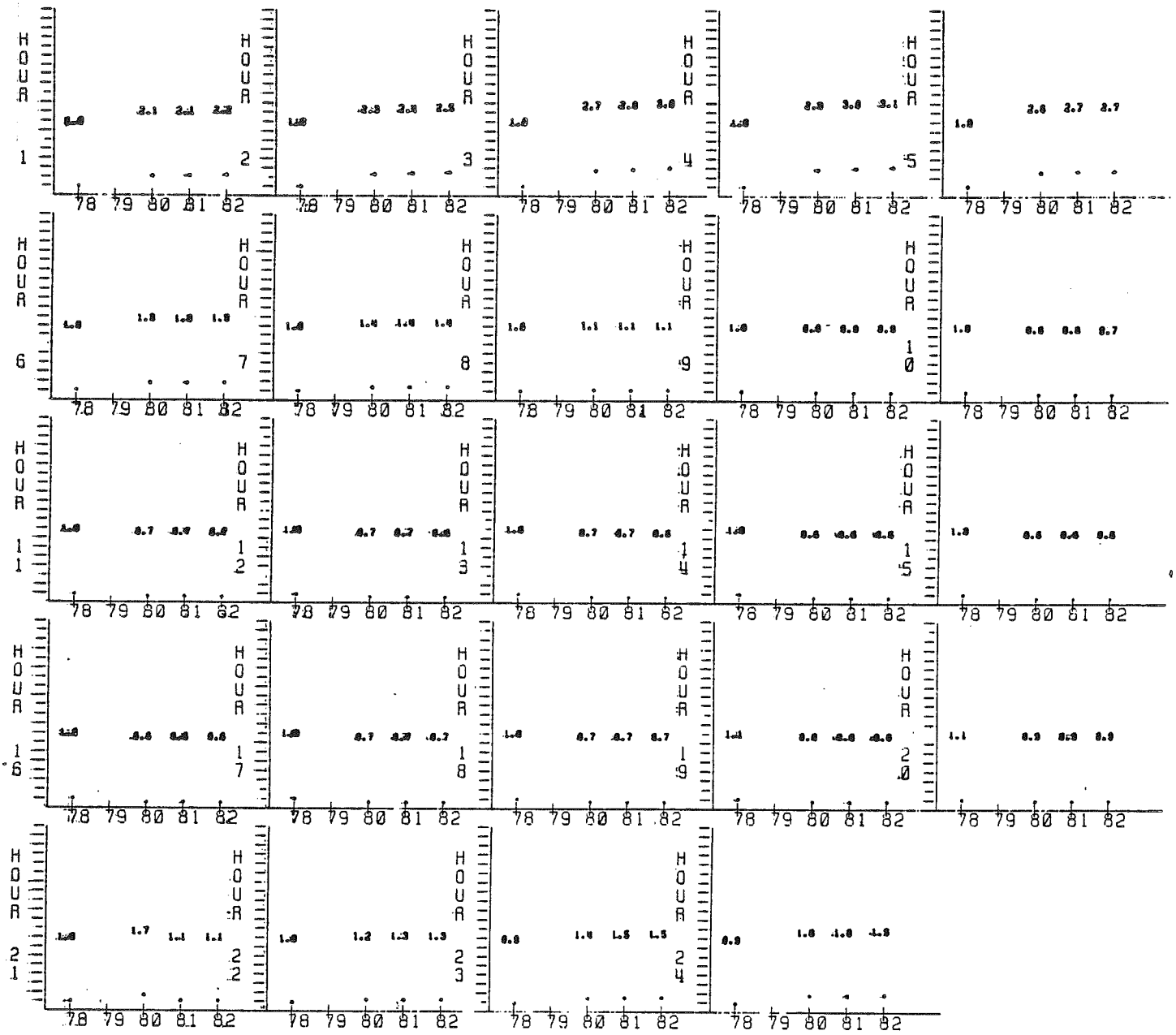
APPENDIX D

ATR DATA



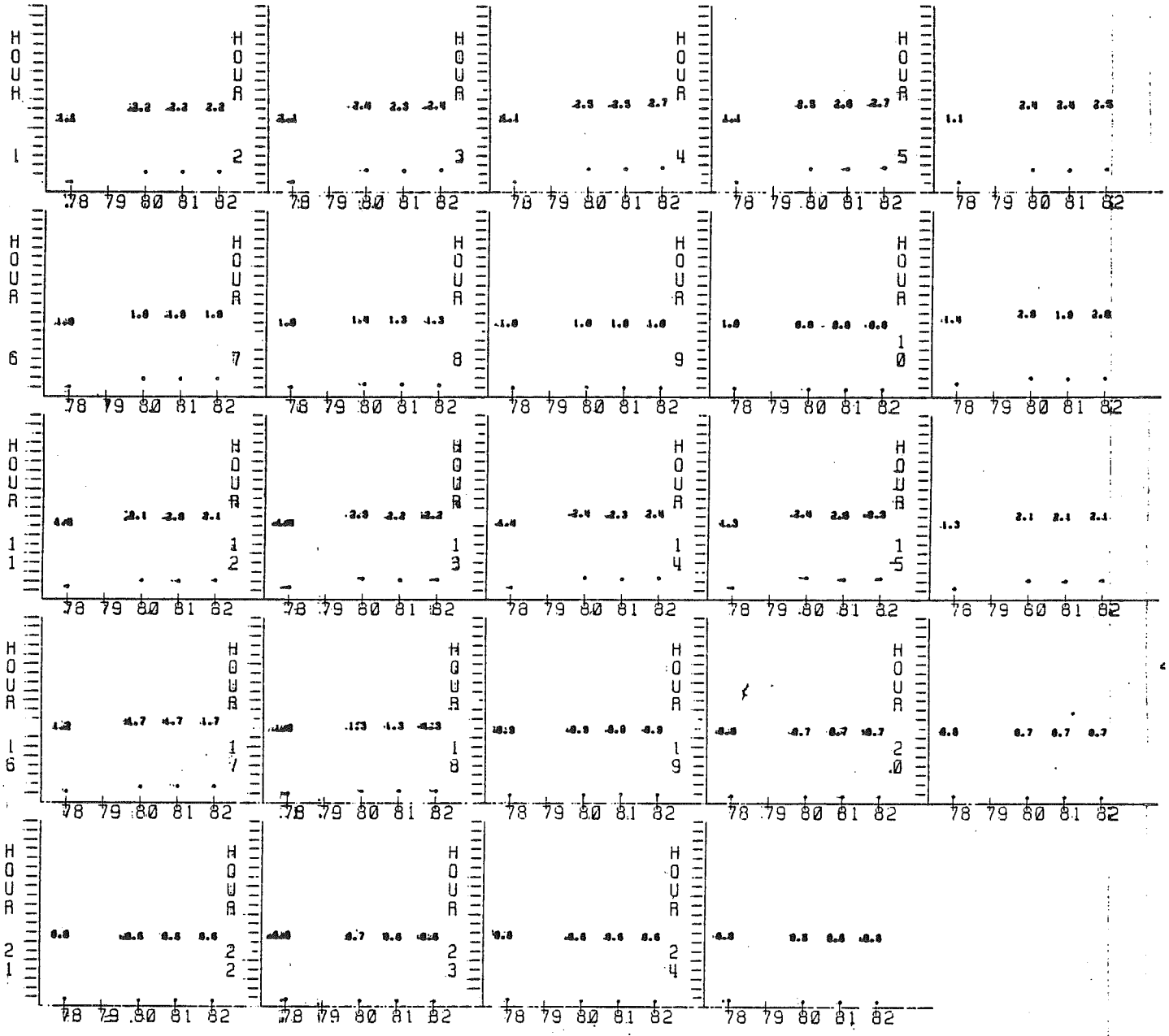
COUNTING STATION NO. 2

HOURLY FACTORS VS. YEARS



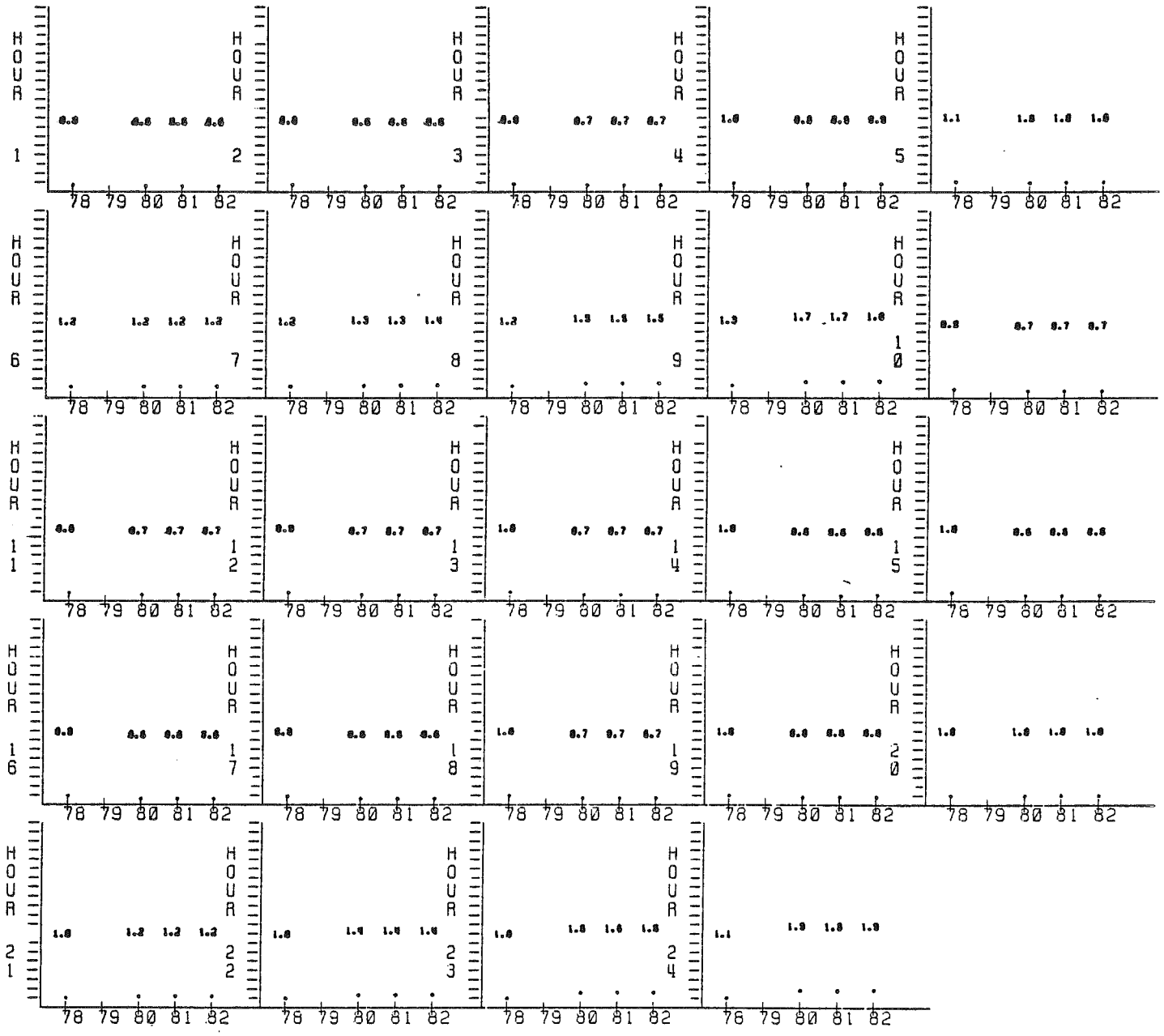
COUNTING STATION NO. 3

HOURLY FACTORS VS. YEARS



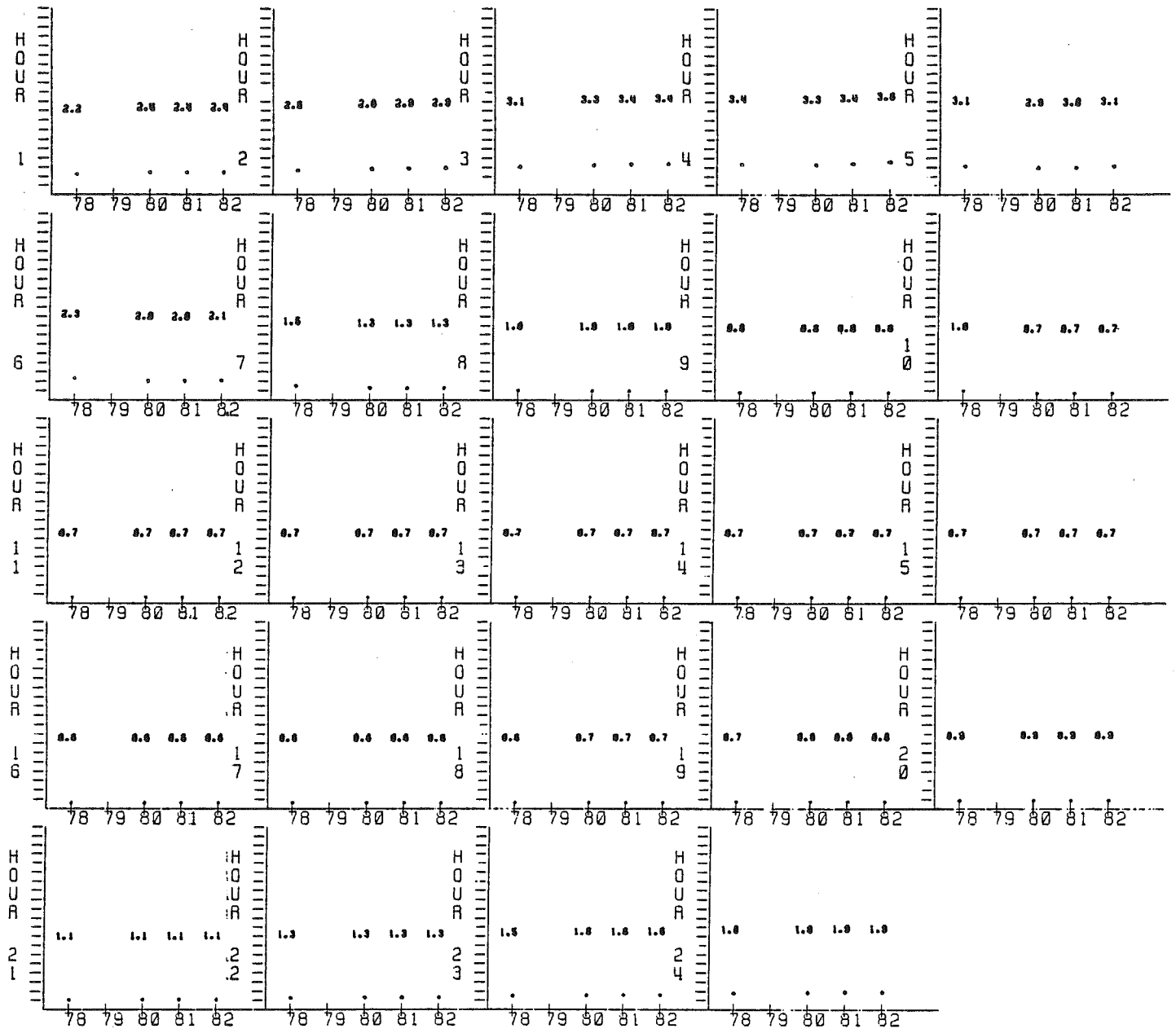
COUNTING STATION NO. 4

HOURLY FACTORS VS. YEARS



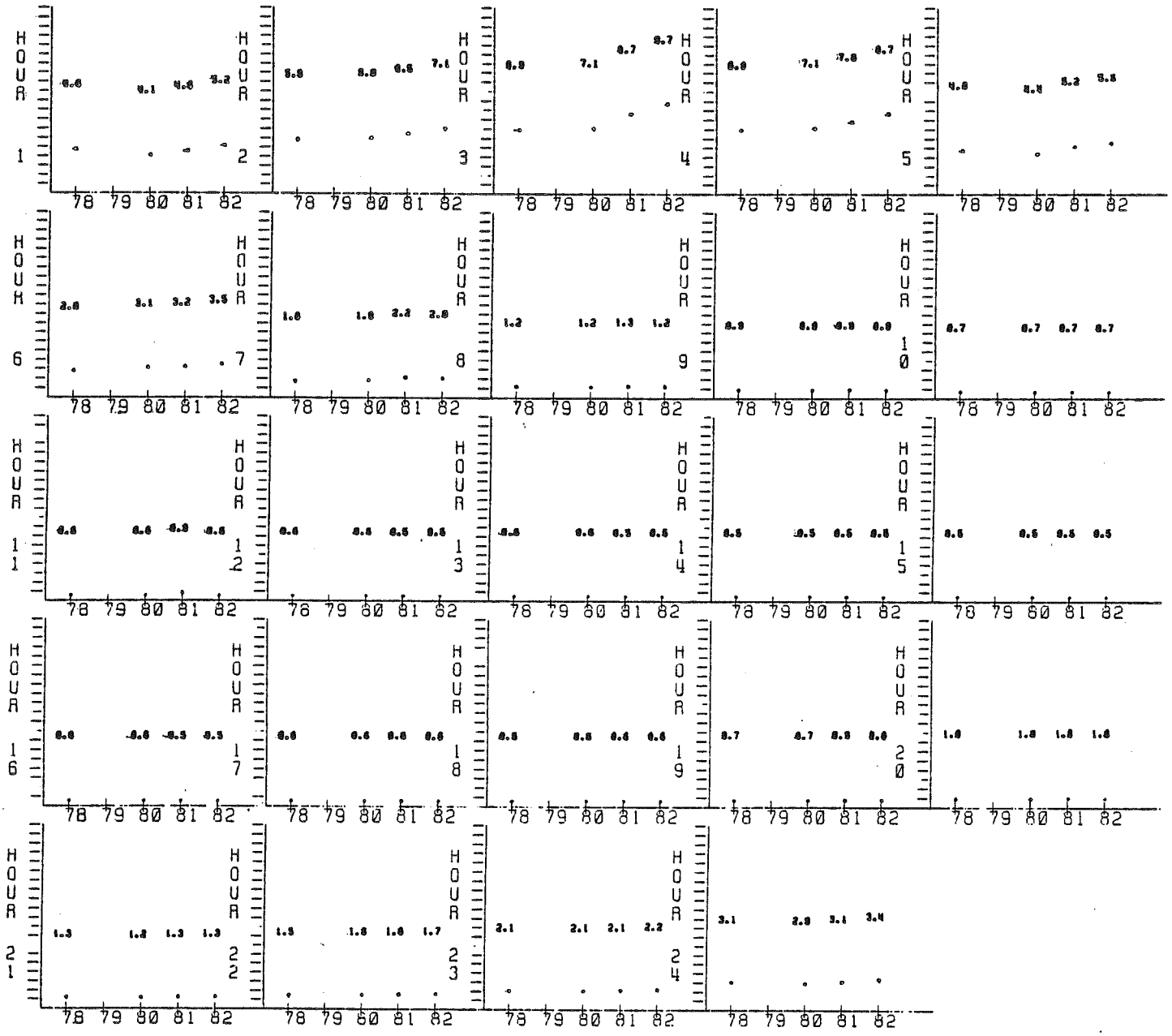
COUNTING STATION NO. 5

HOURLY FACTORS VS. YEARS



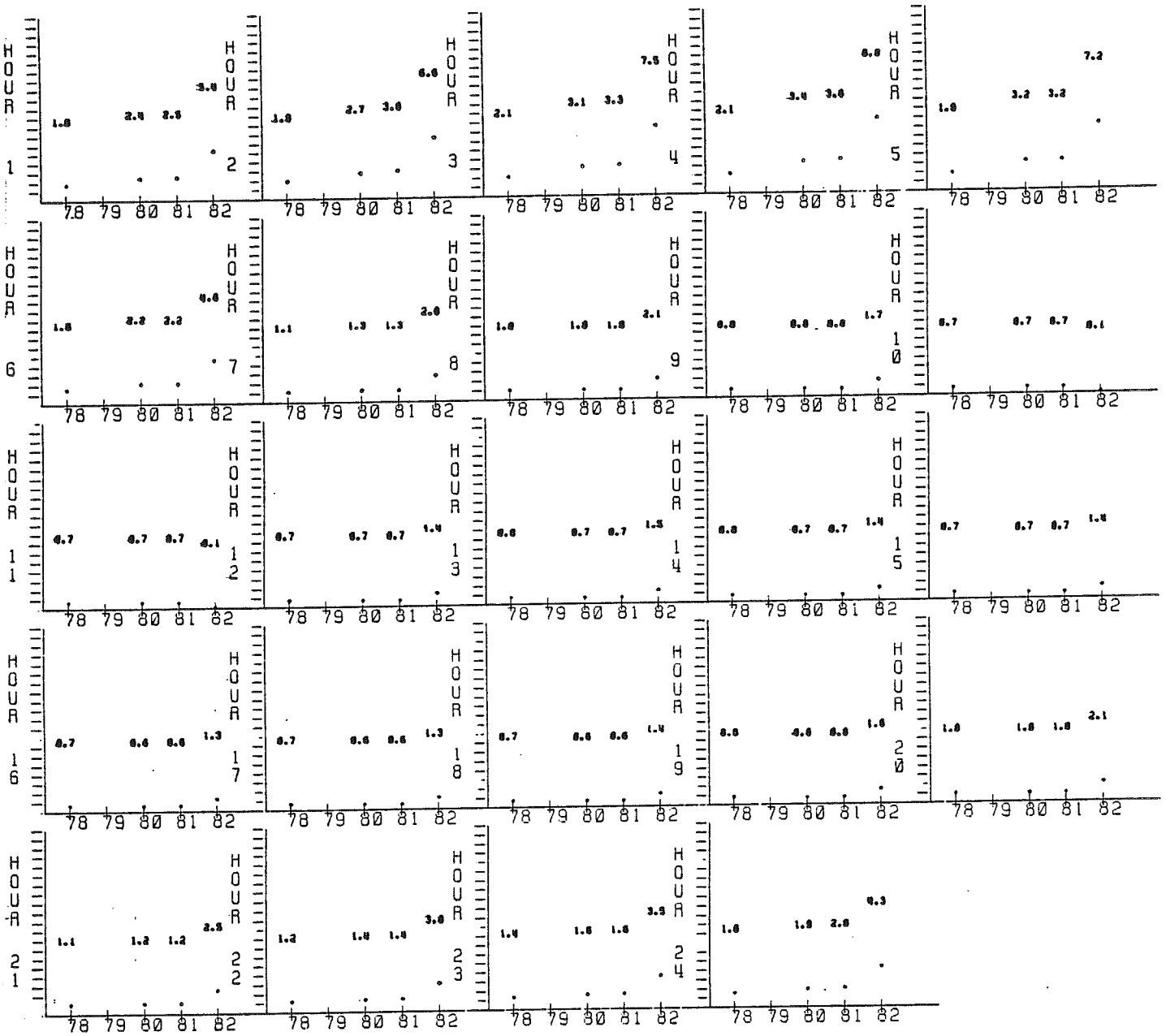
COUNTING STATION NO. 6

HOURLY FACTORS VS. YEARS



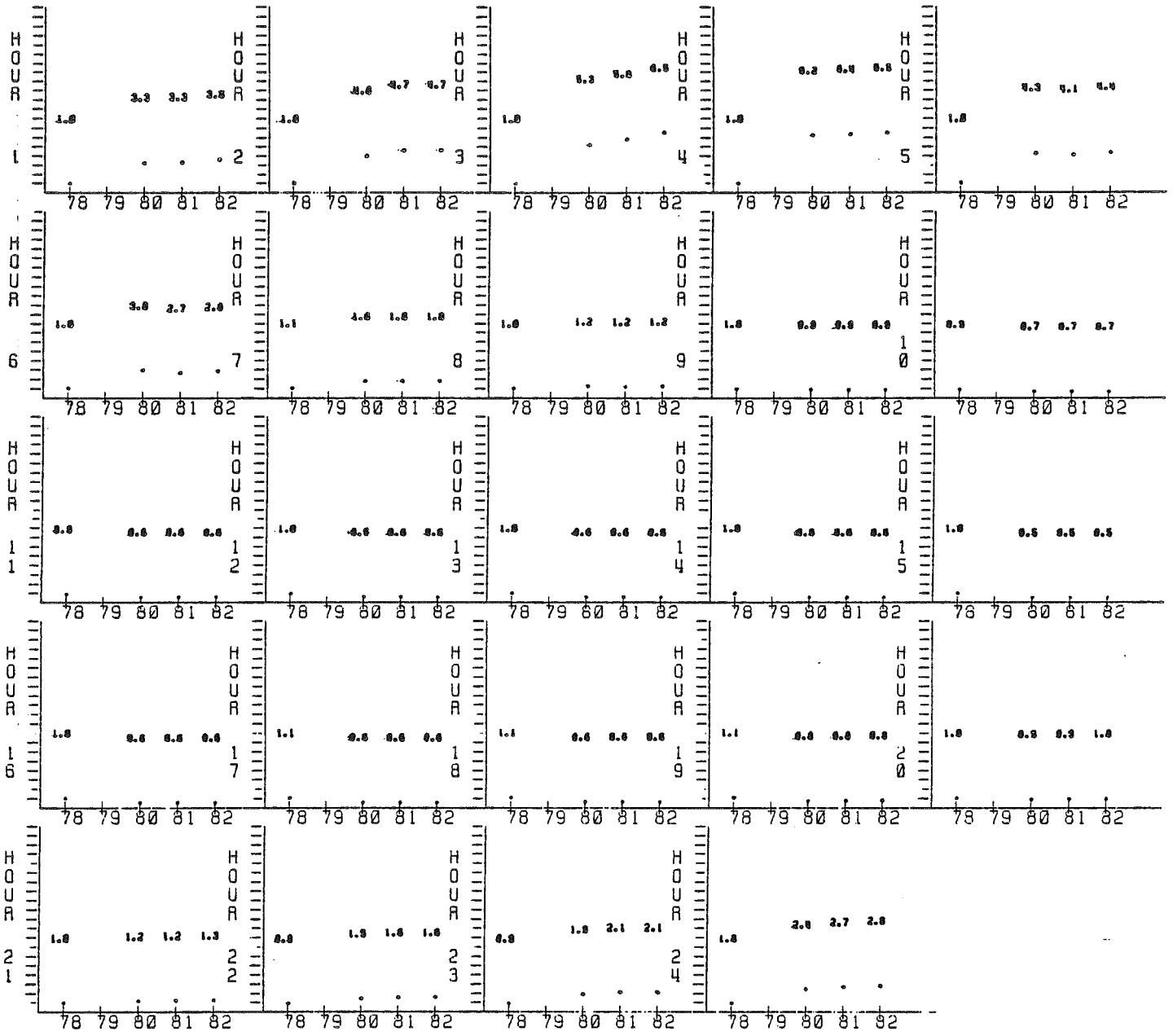
COUNTING STATION NO. 7

HOURLY FACTORS VS. YEARS



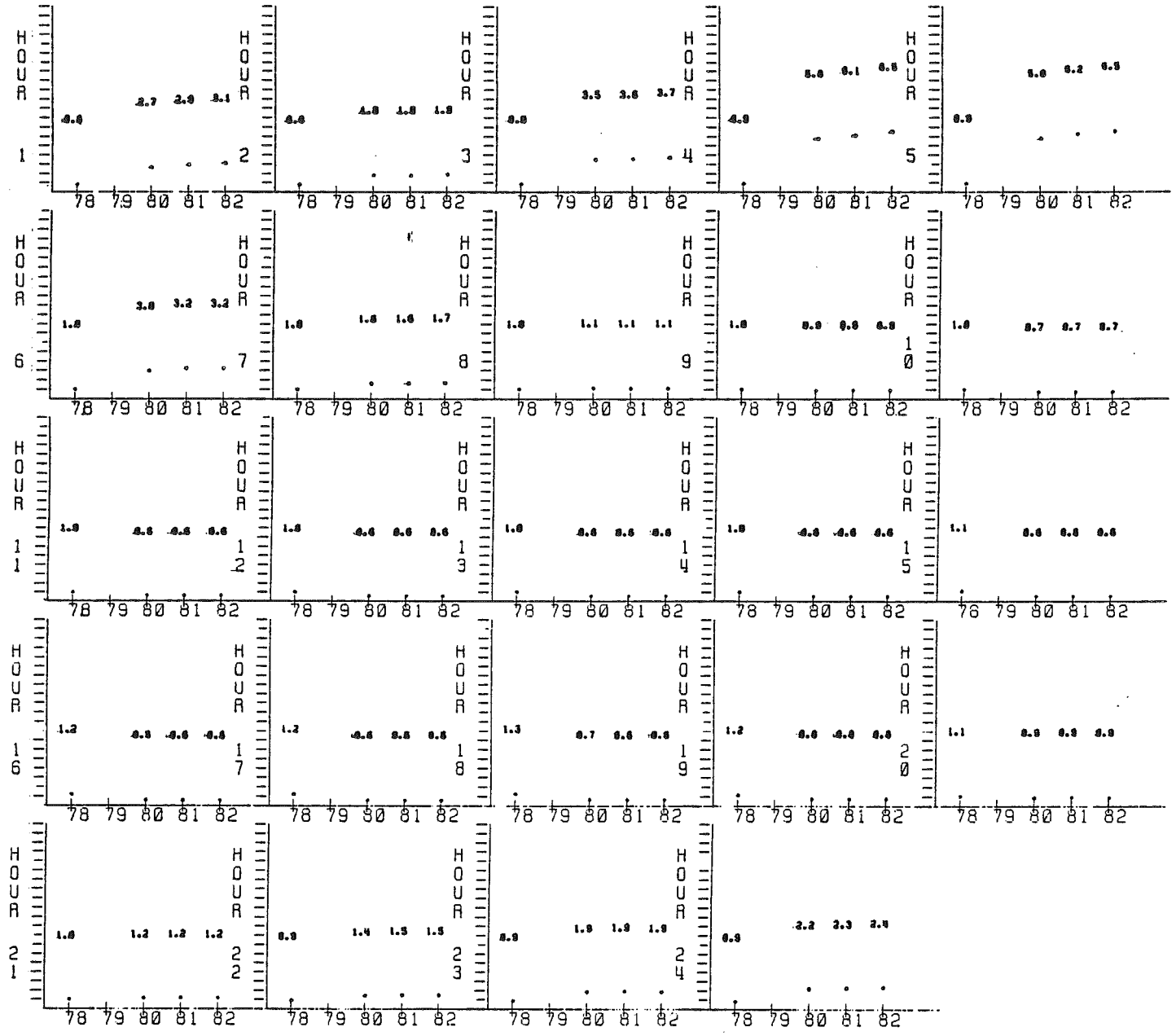
COUNTING STATION NO. 8

HOURLY FACTORS VS. YEARS



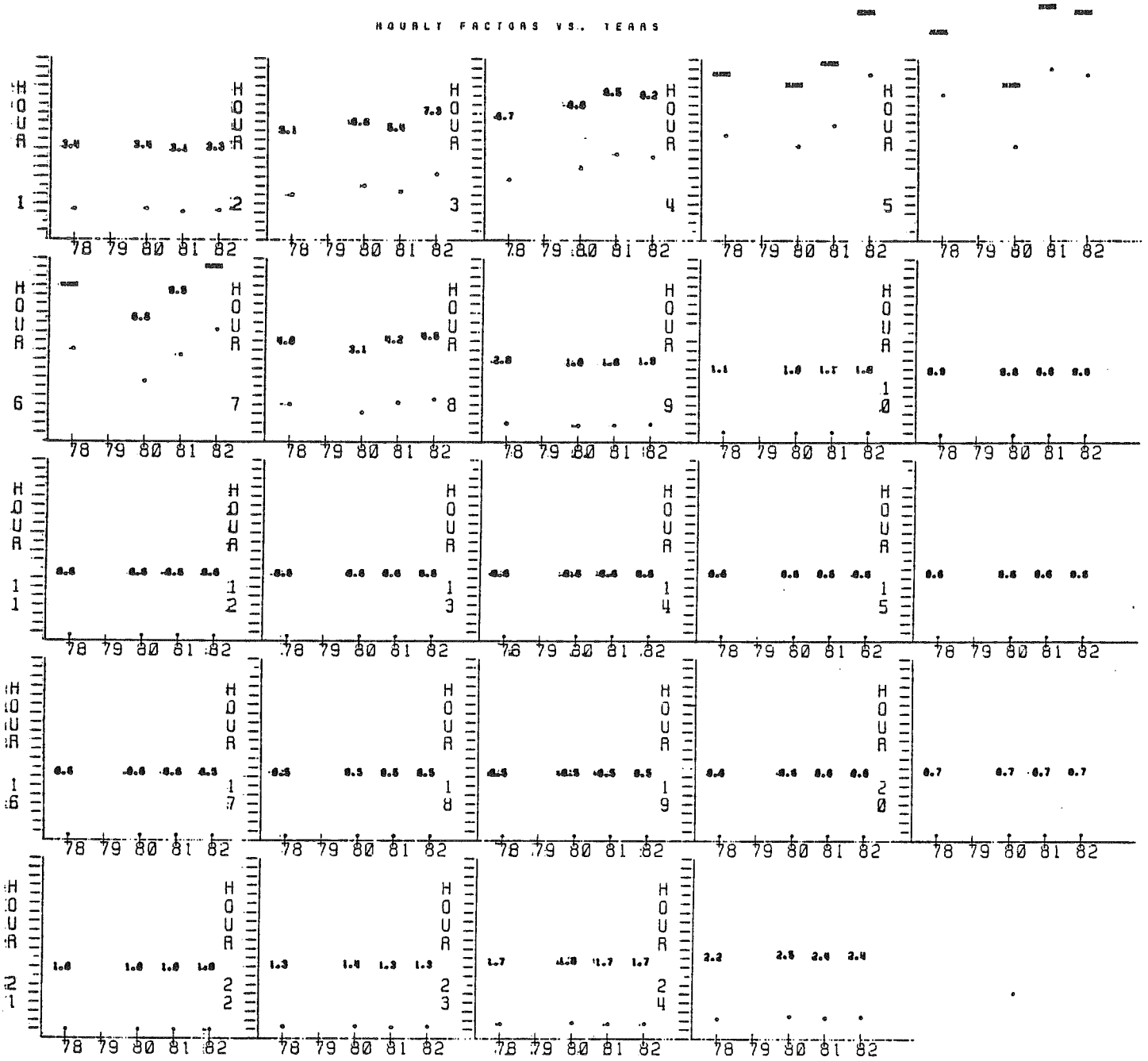
COUNTING STATION NO. 9

HOURLY FACTORS VS. YEARS



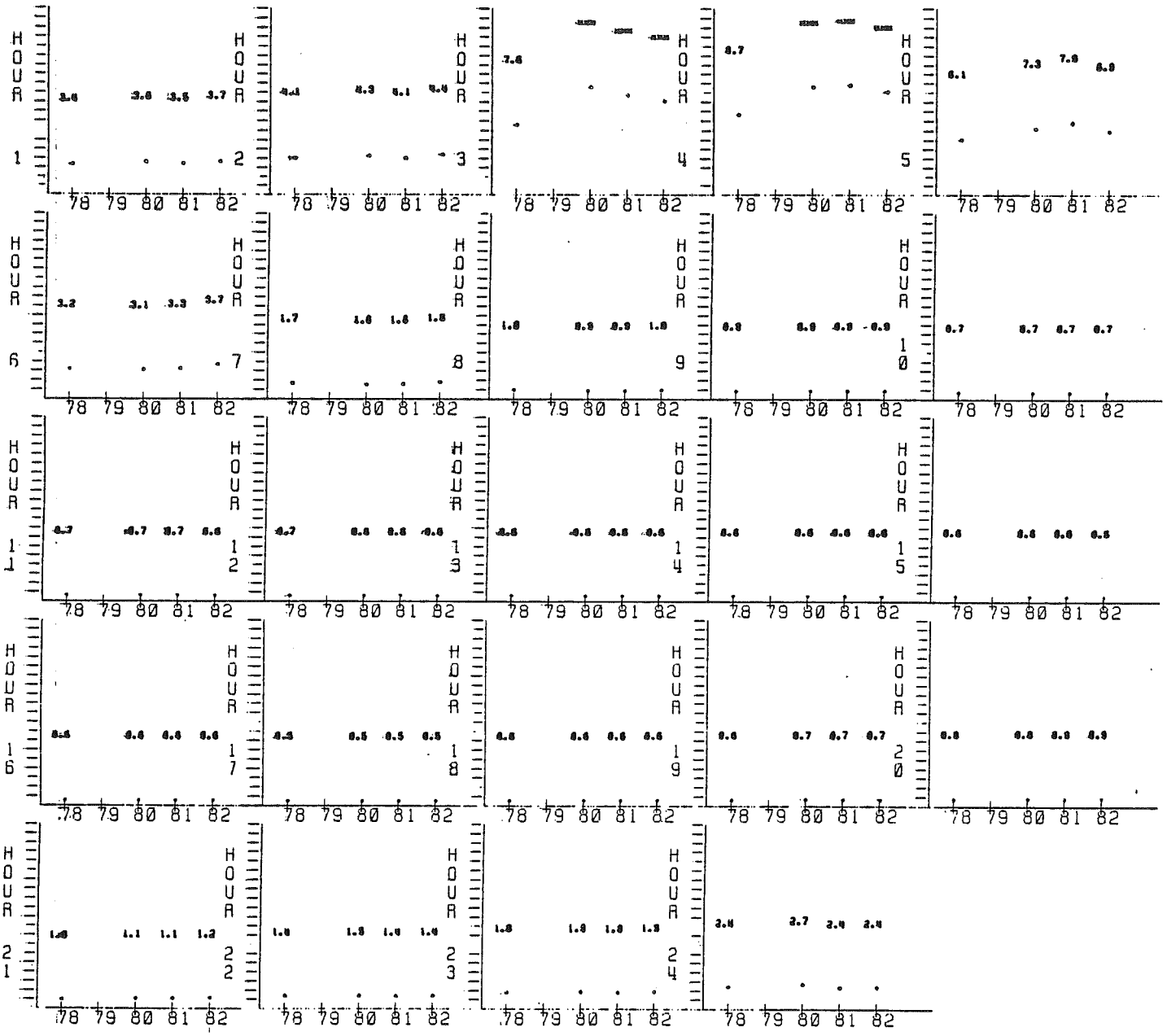
COUNTING STATION NO. 10

HOURLY FACTORS VS. YEARS



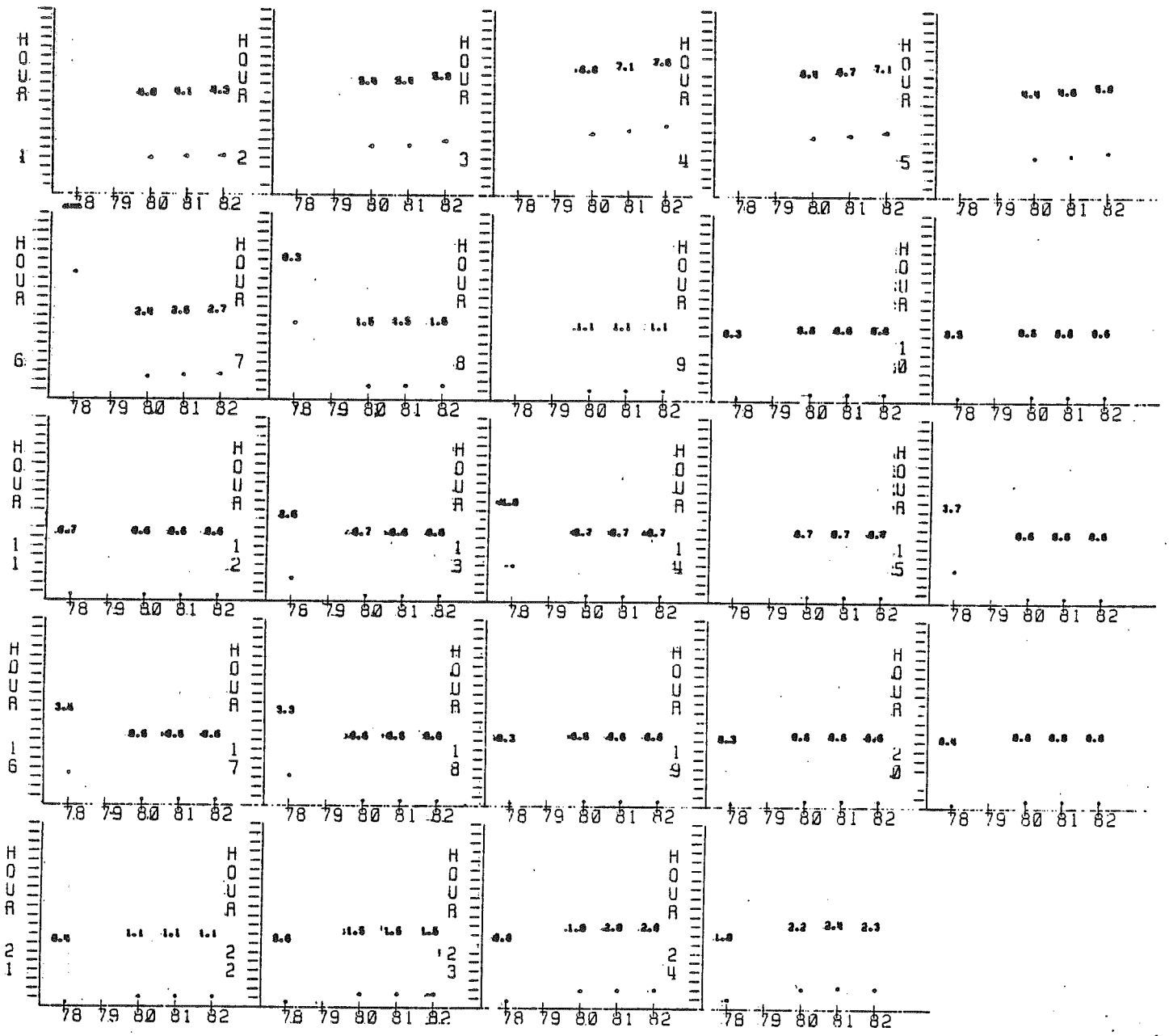
COUNTING STATION NO. 11

HOURLY FACTORS VS. YEARS



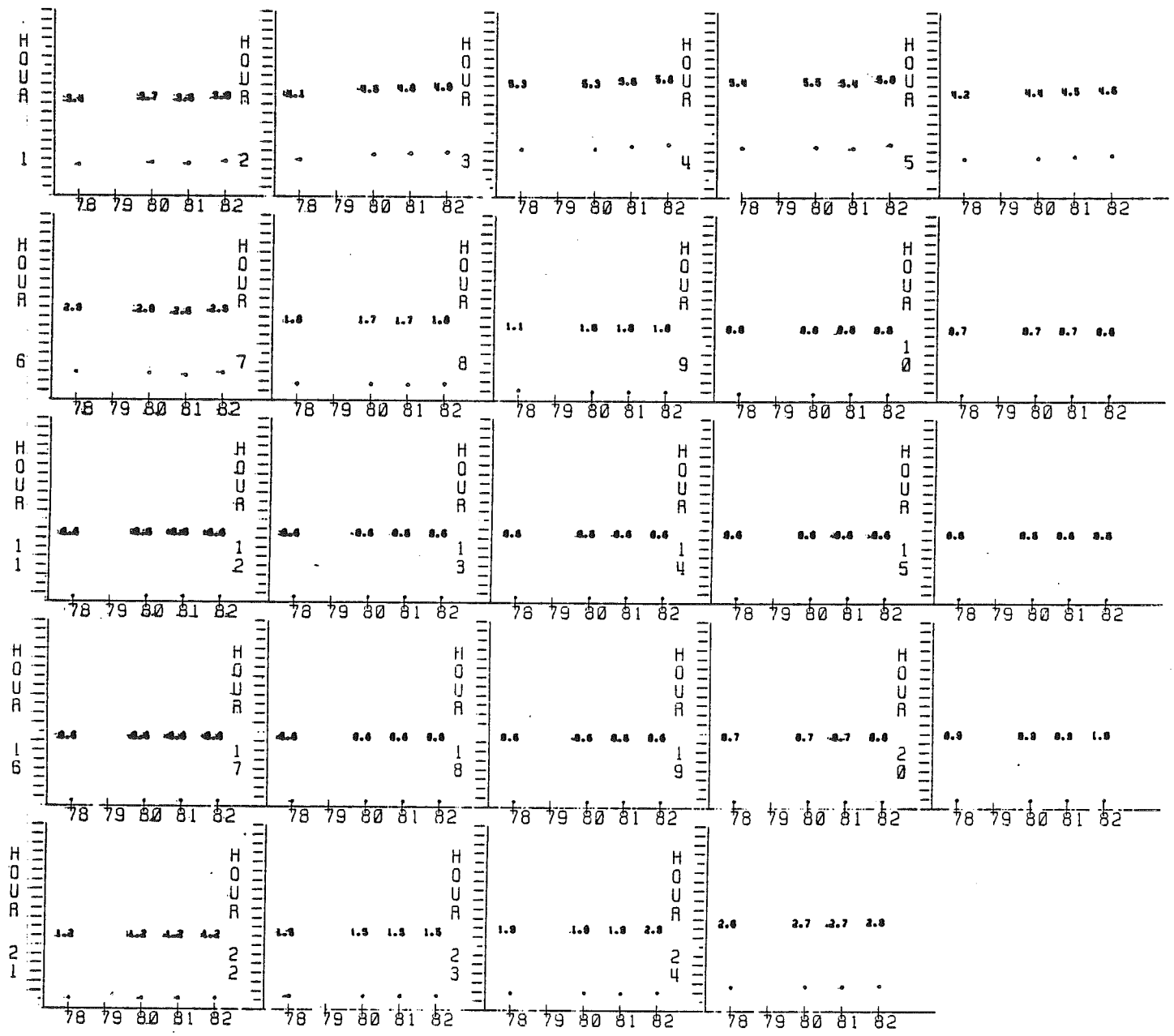
COUNTING STATION NO. 12

HOURLY FACTORS VS. YEARS



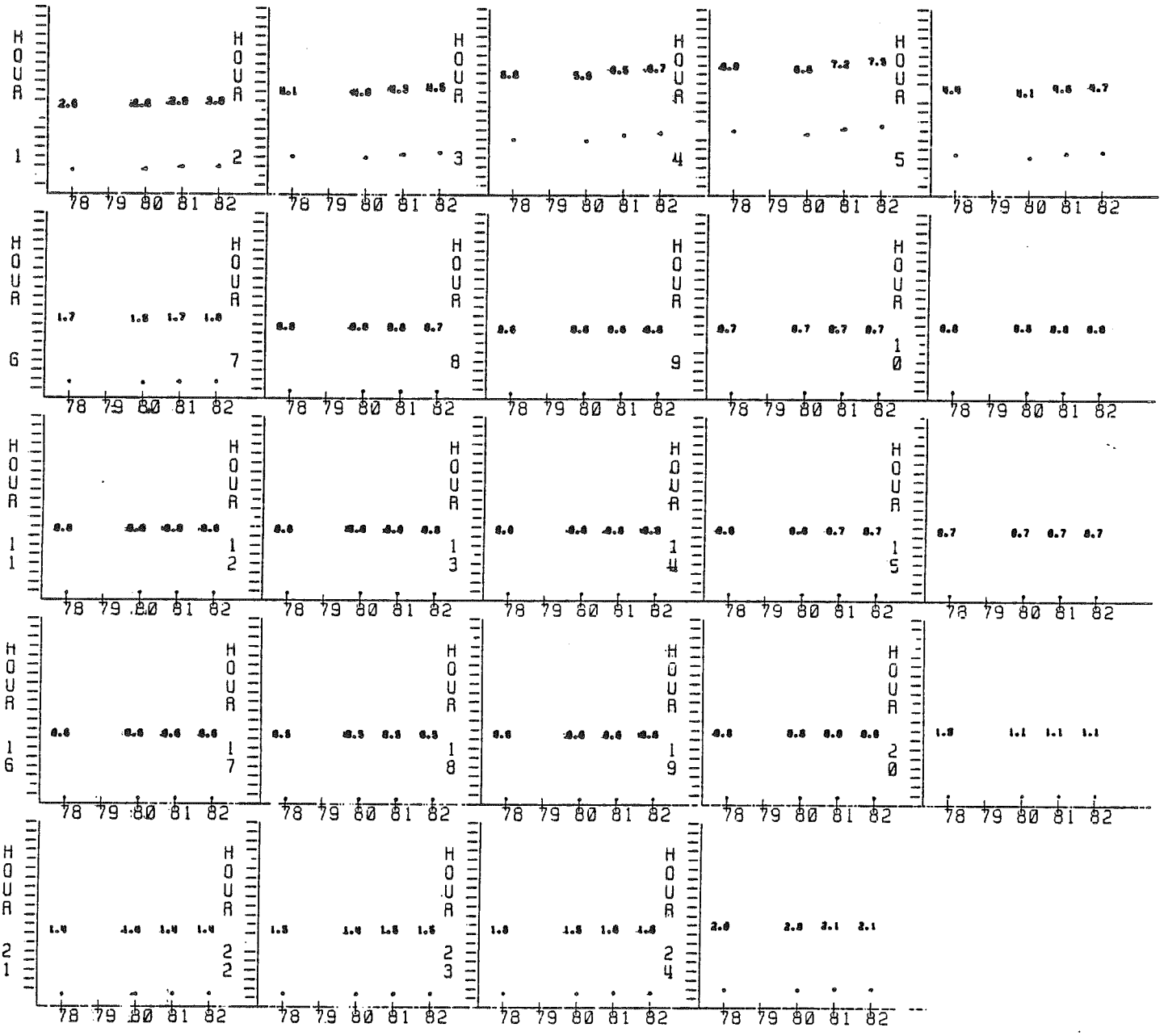
COUNTING STATION NO. 13

HOURLY FACTORS VS. YEARS



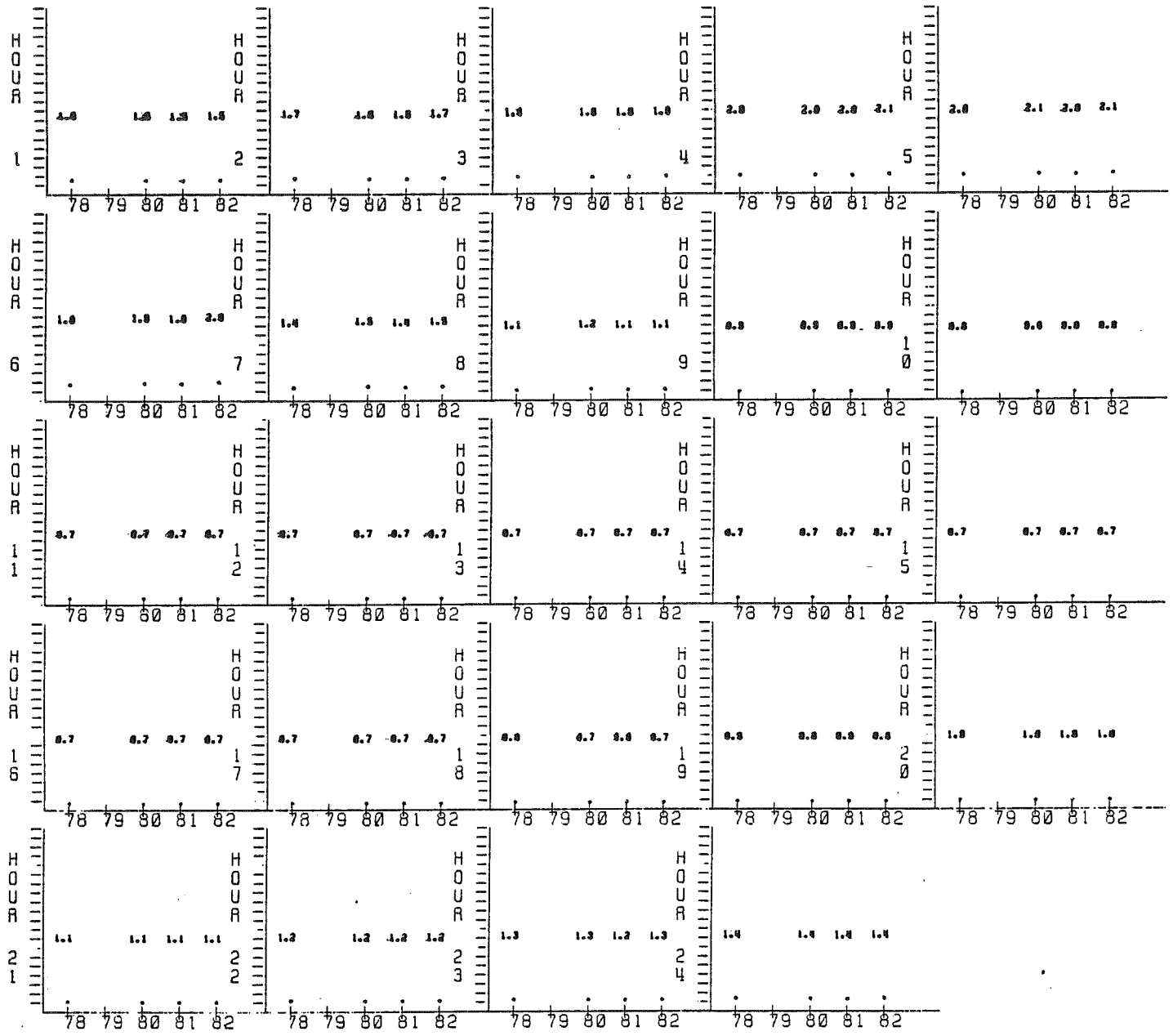
COUNTING STATION NO. 14

HOURLY FACTORS VS. YEARS



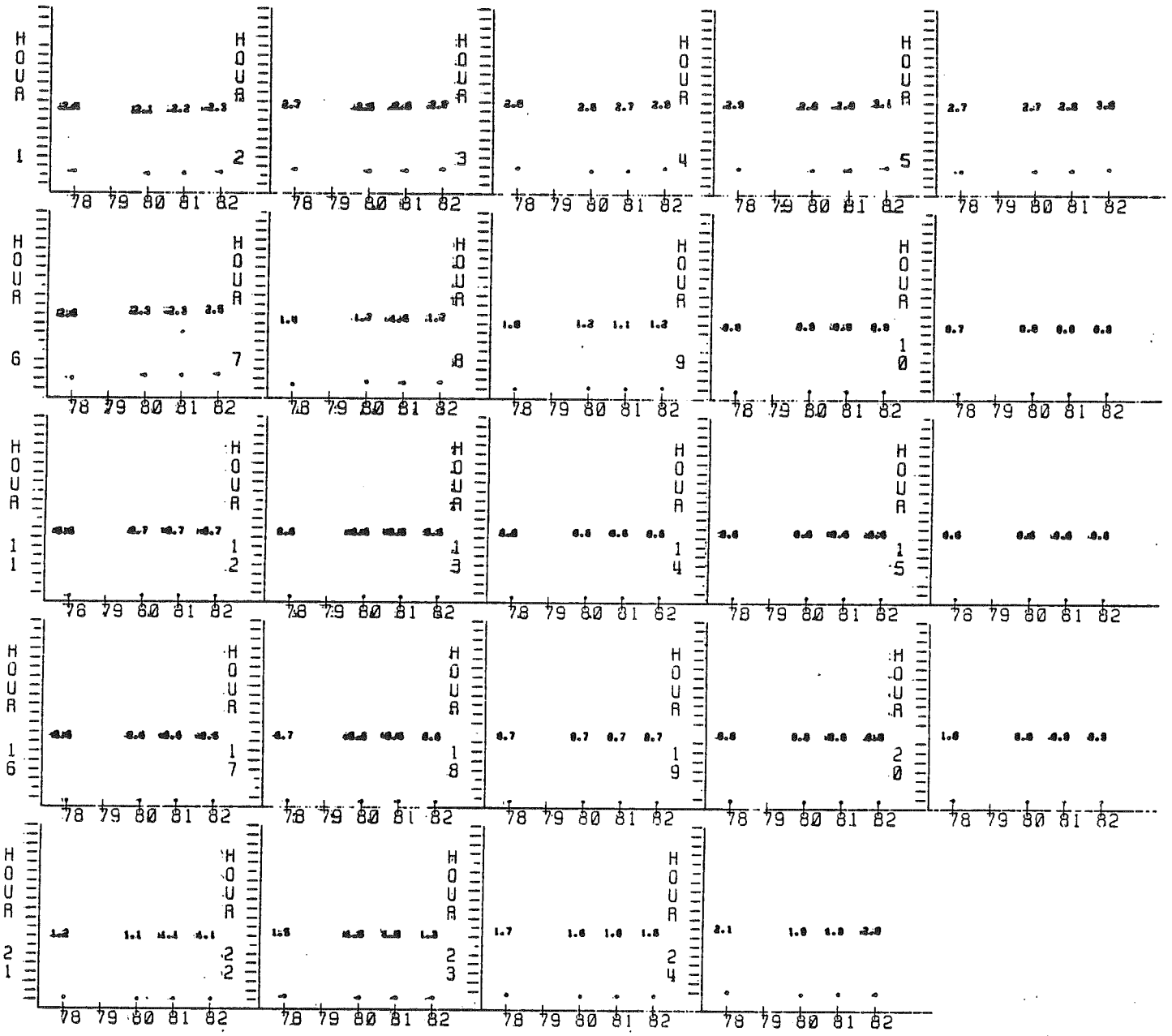
COUNTING STATION NO. 15

HOURLY FACTORS VS. YEARS



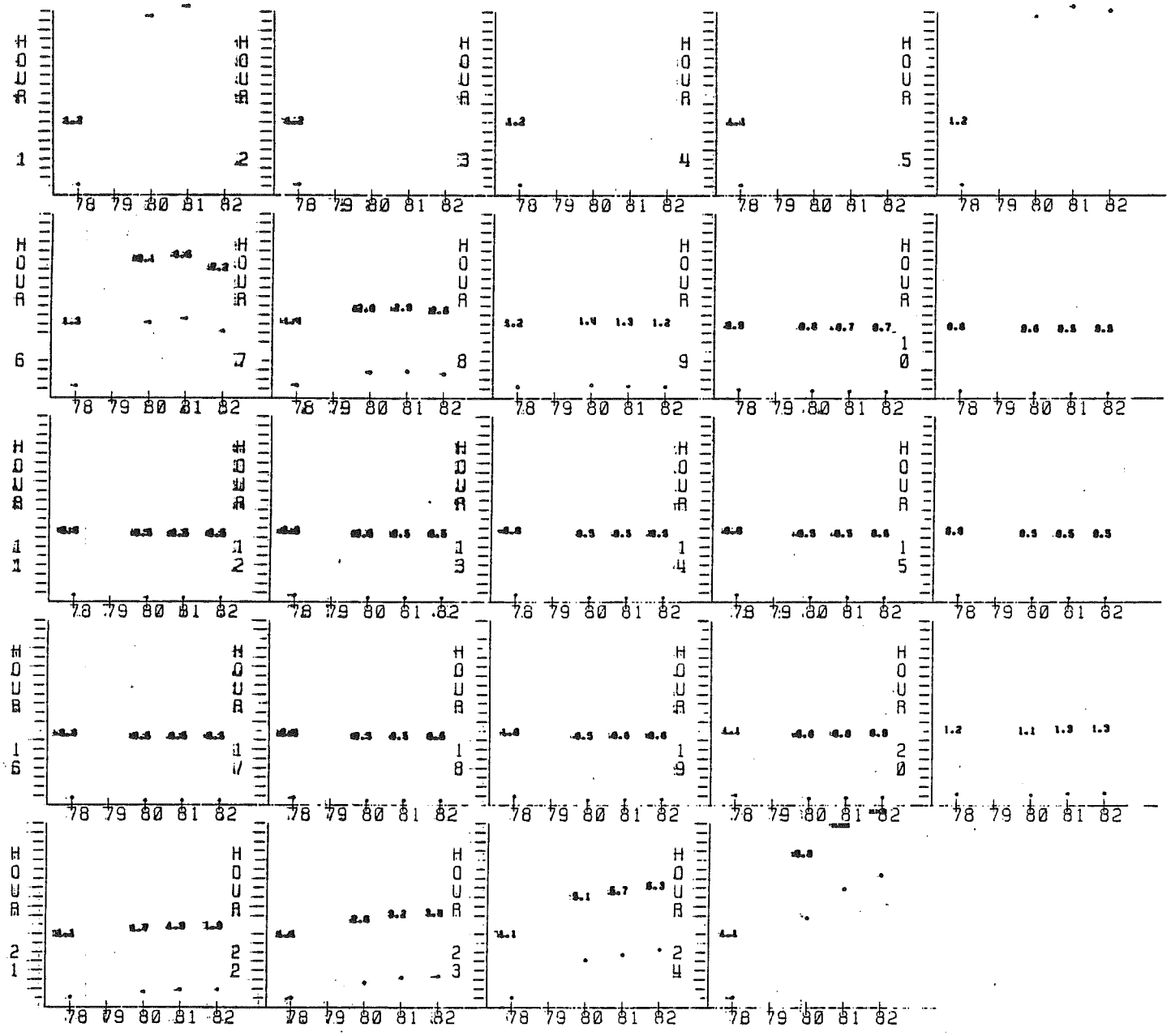
COUNTING STATION NO. 16

HOURLY FACTORS VS. YEARS



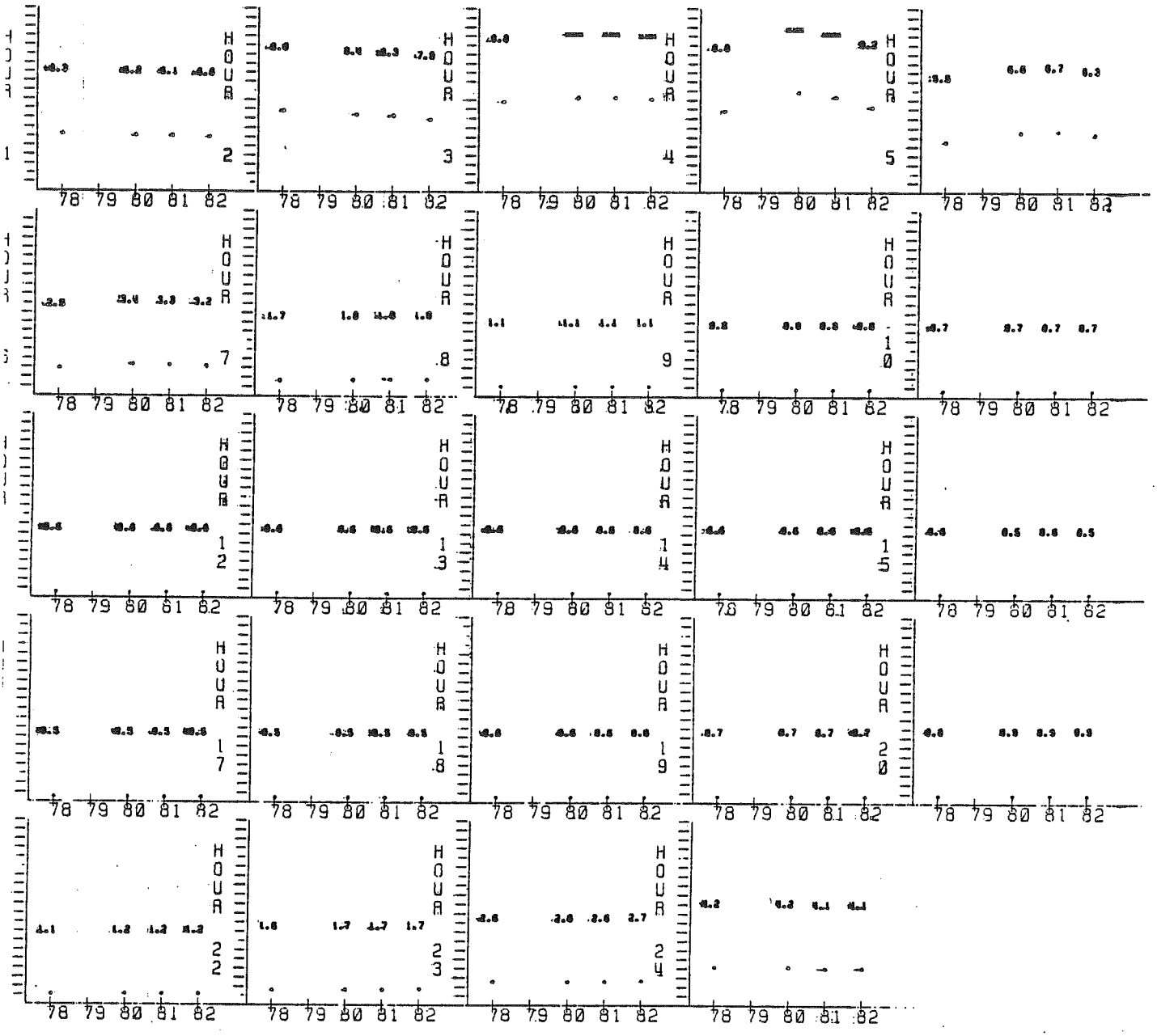
COUNTING STATION NO. 17

HOURLY FACTORS VS. YEARS

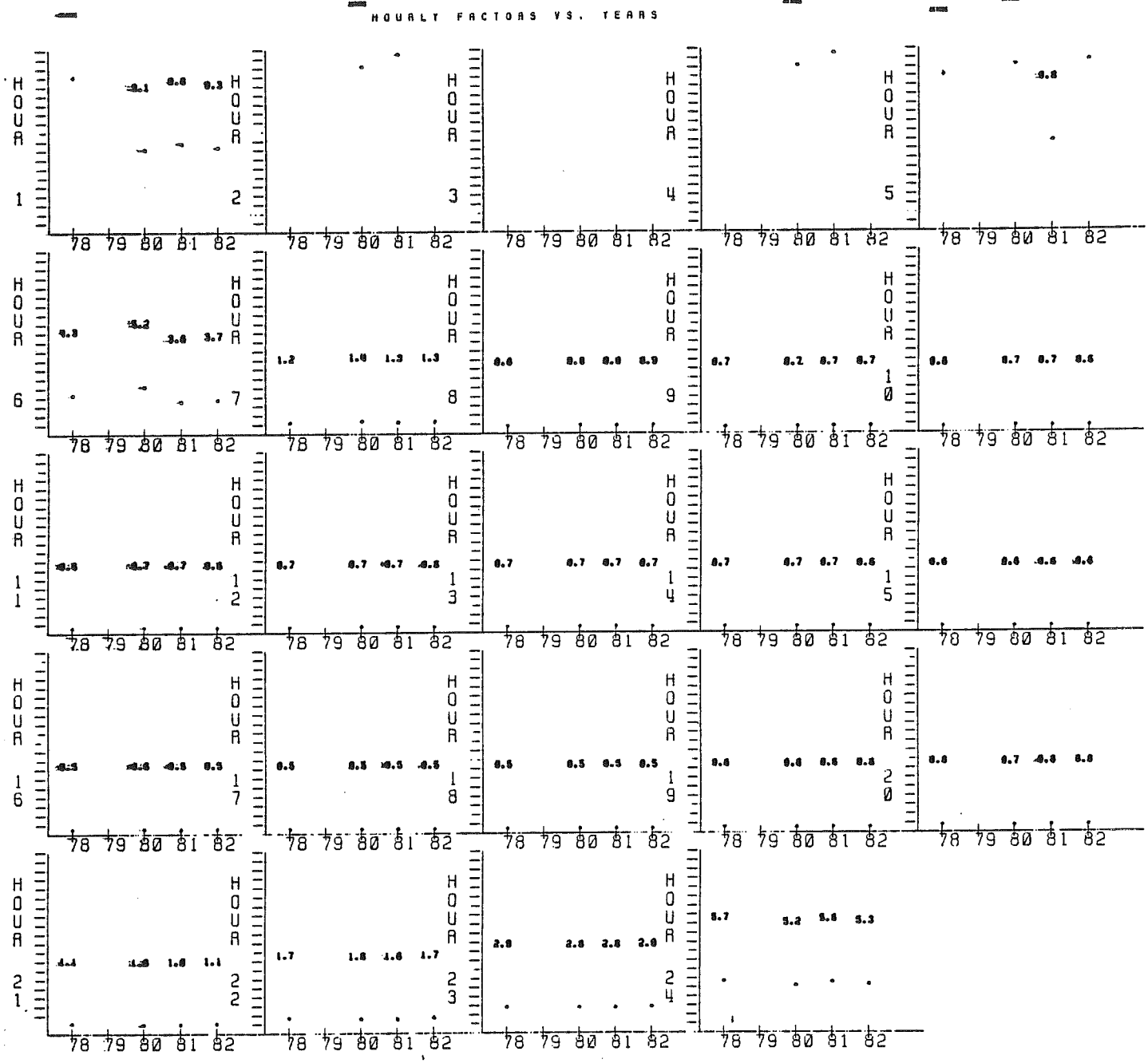


COUNTING STATION NO. 18

HOURLY FACTORS VS. YEARS

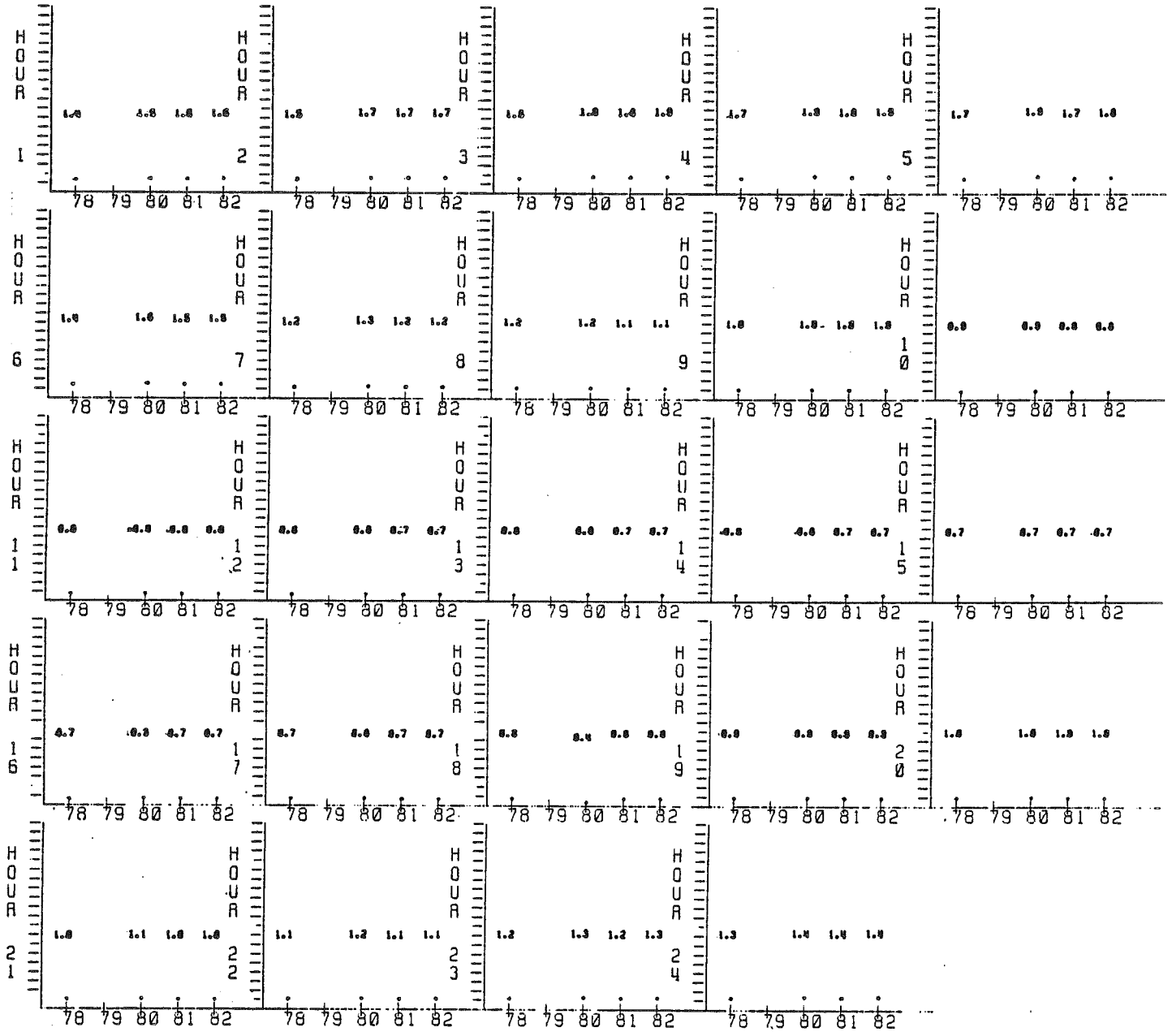


COUNTING STATION NO. 19



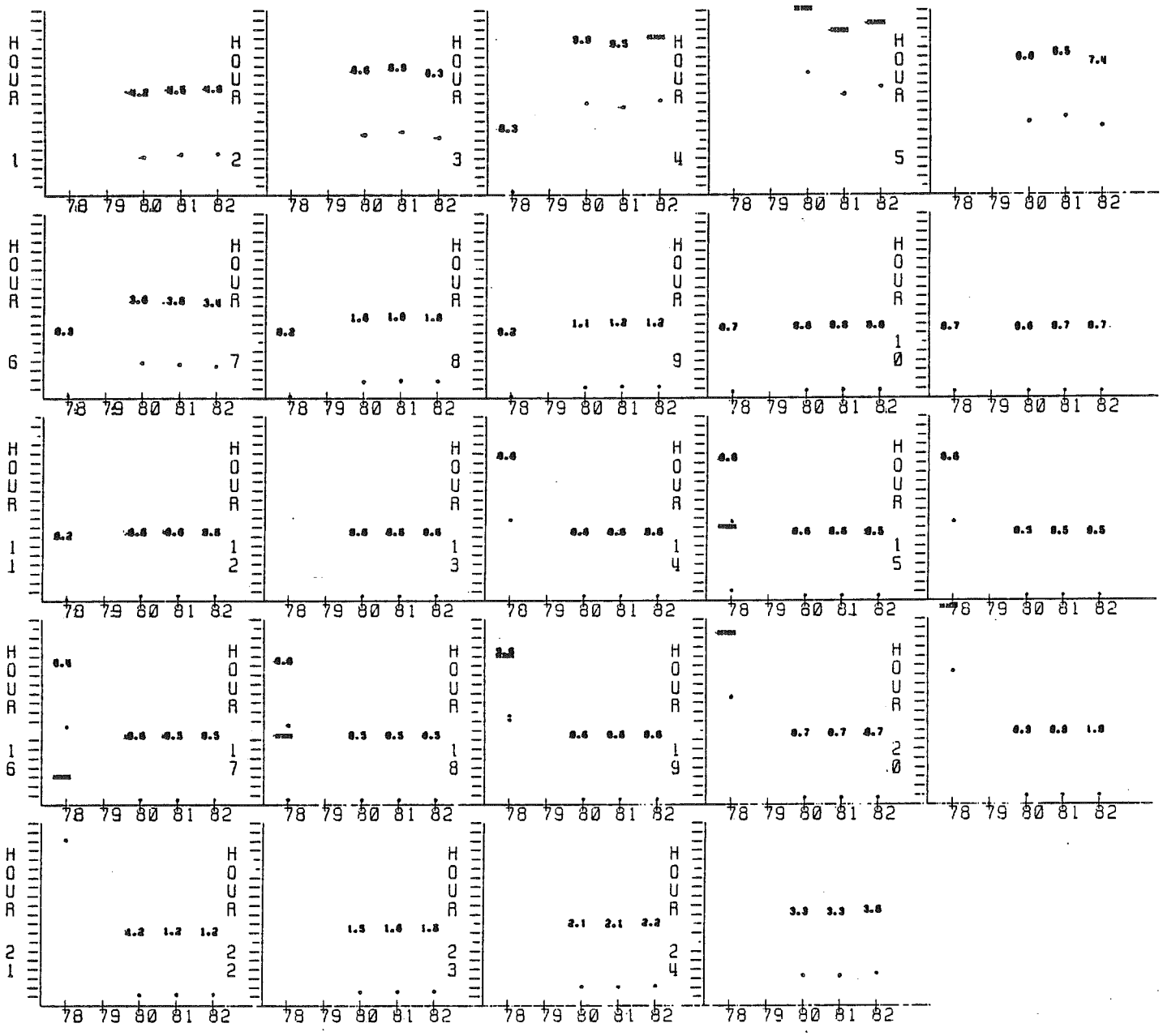
COUNTING STATION NO. 20

HOURLY FACTORS VS. YEARS



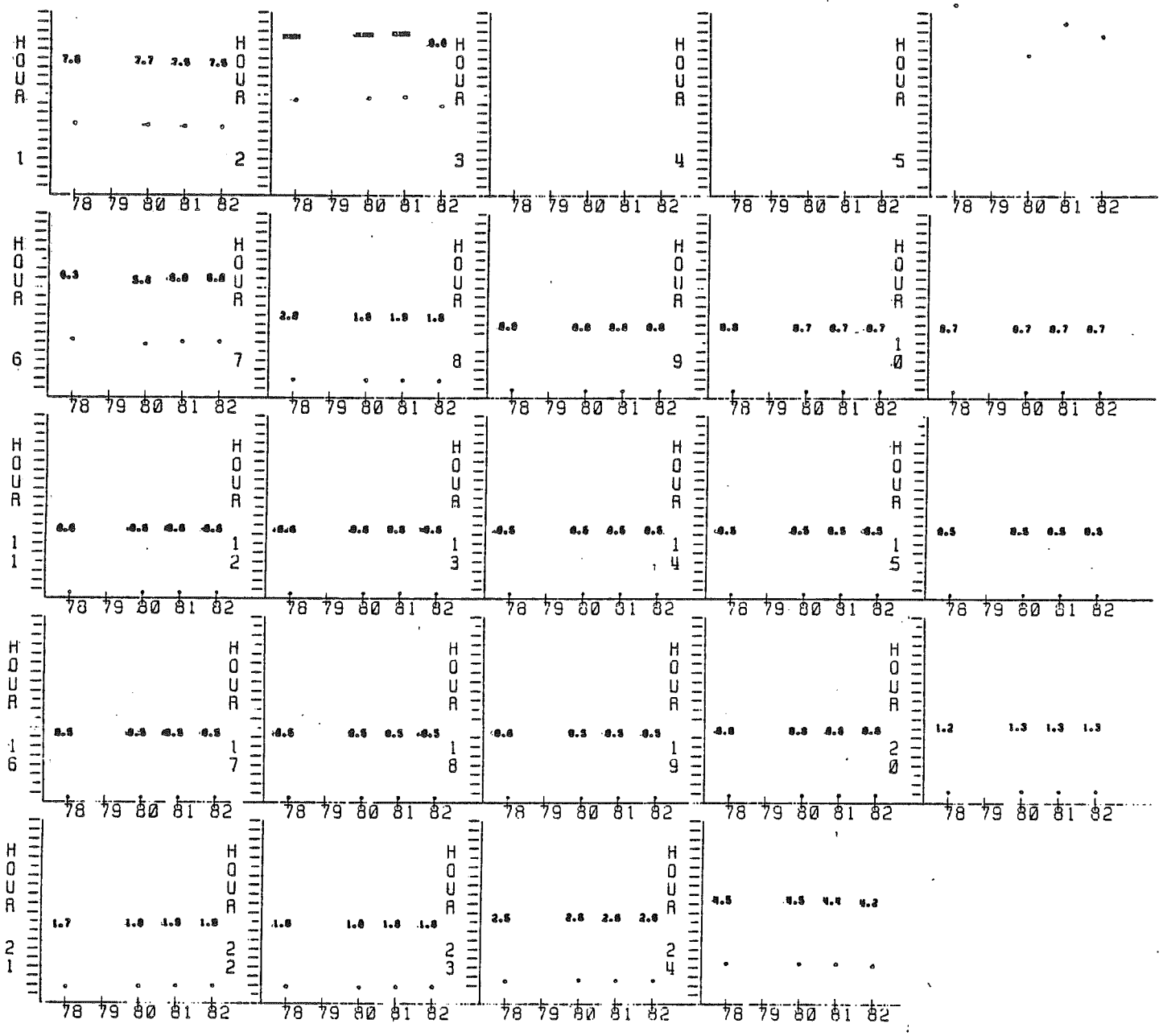
COUNTING STATION NO. 21

HOURLY FACTORS VS. YEARS



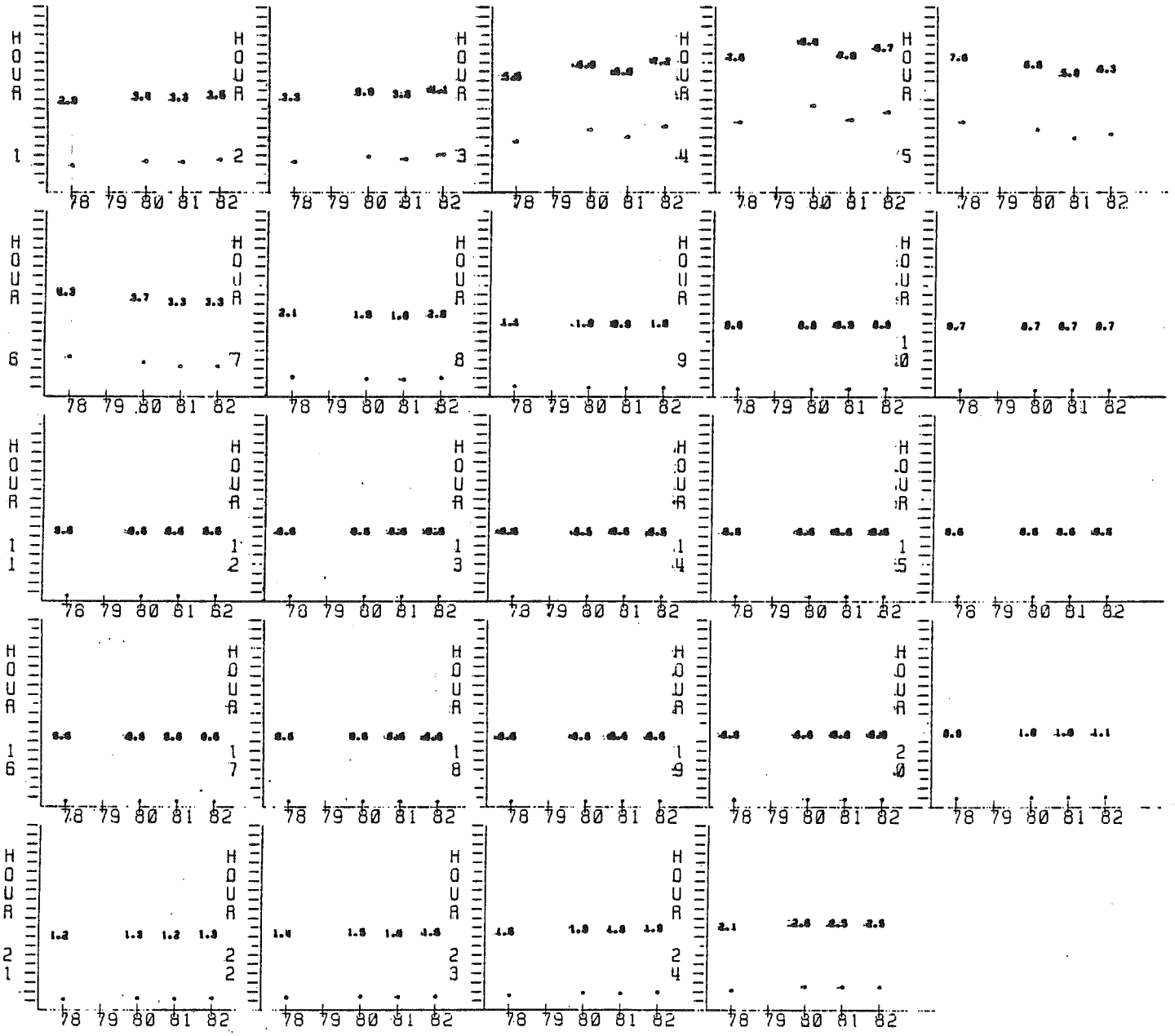
COUNTING STATION NO. 22

HOURLY FACTORS VS. YEARS



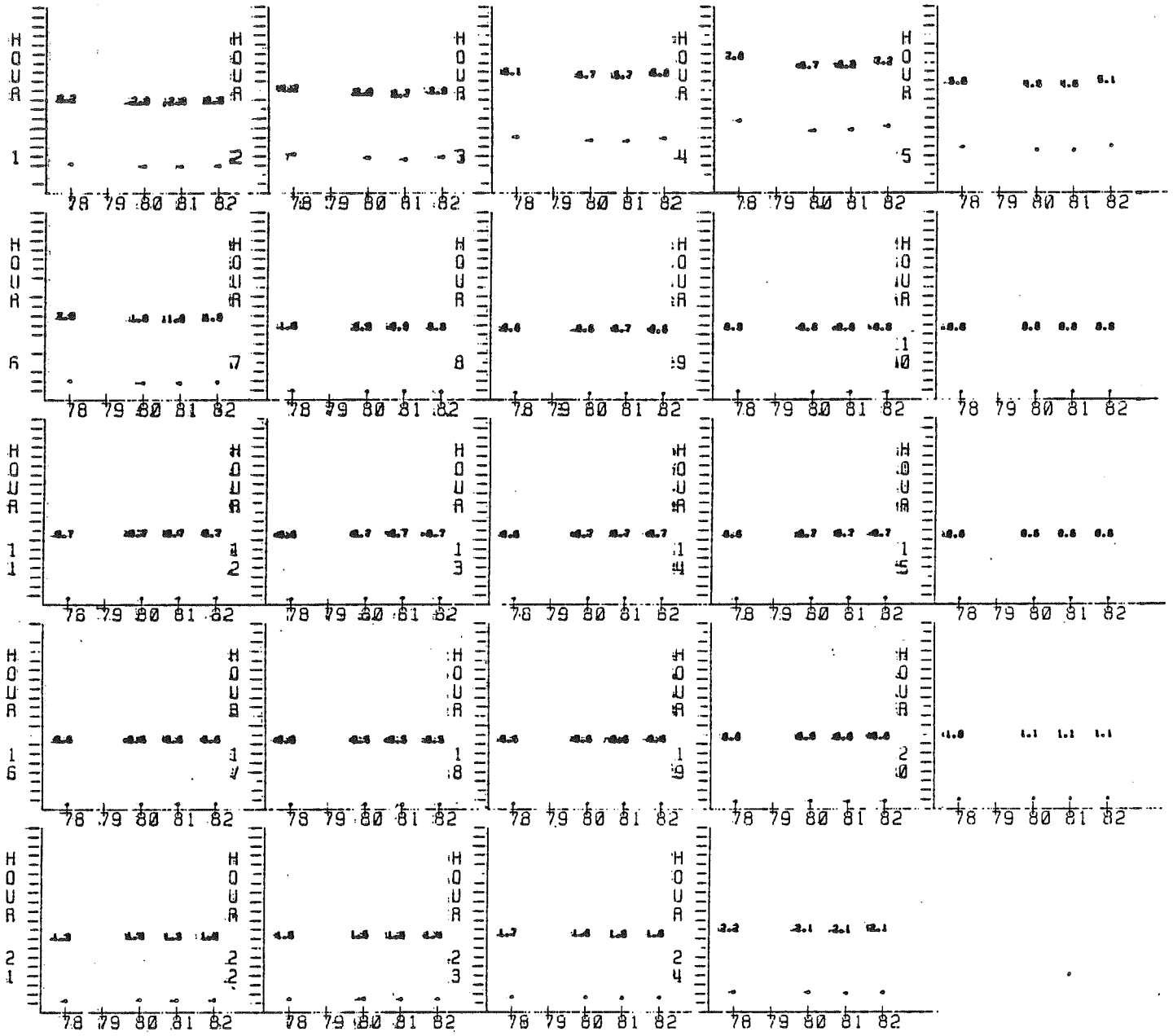
COUNTING STATION NO. 23

HOURLY FACTORS VS. YEARS



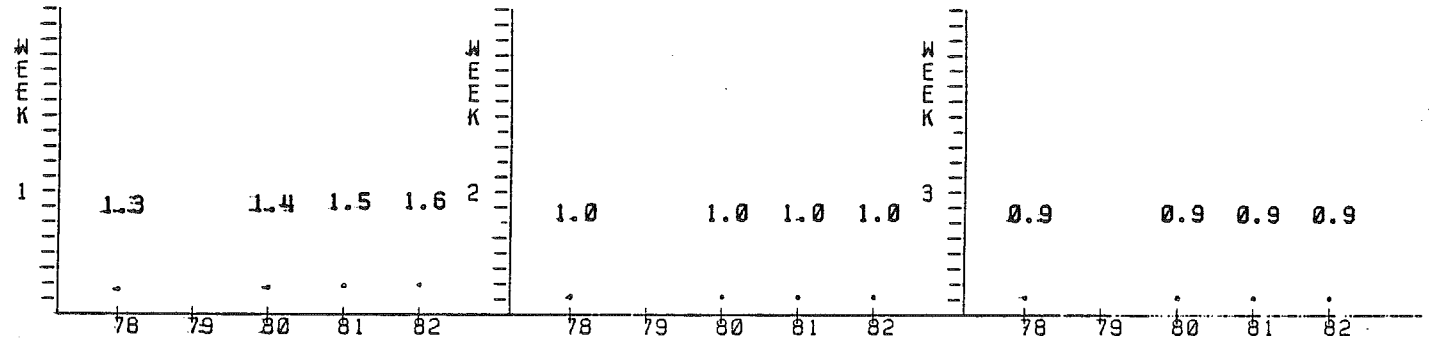
COUNTING STATION NO. 24

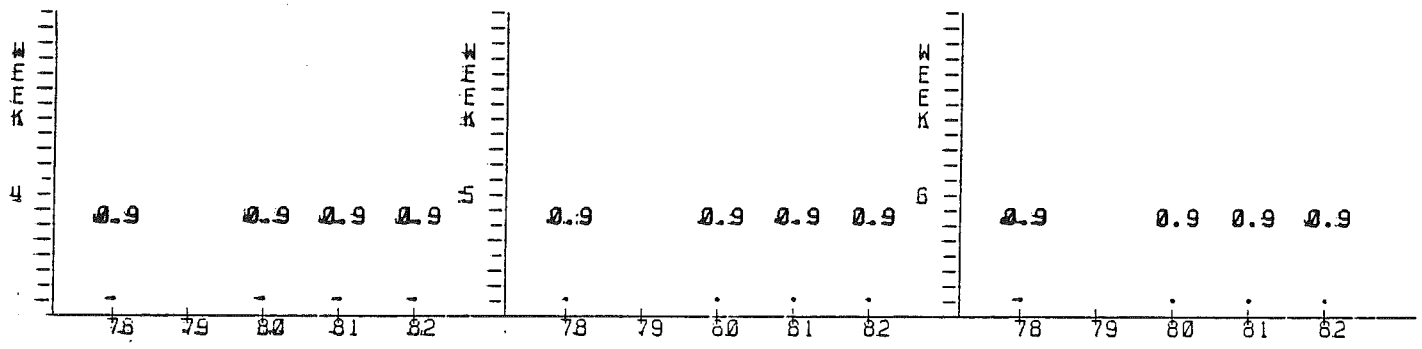
HOURLY FACTORS VS. YEARS

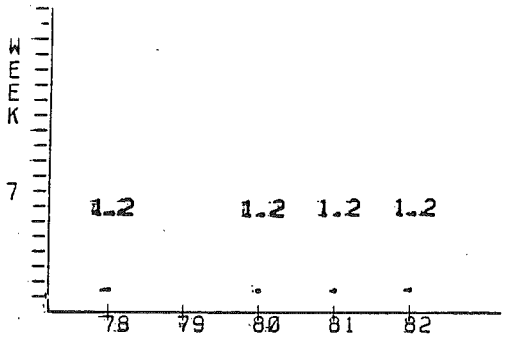


COUNTING STATION NO. 1

WEEKLY FACTORS VS. YEARS

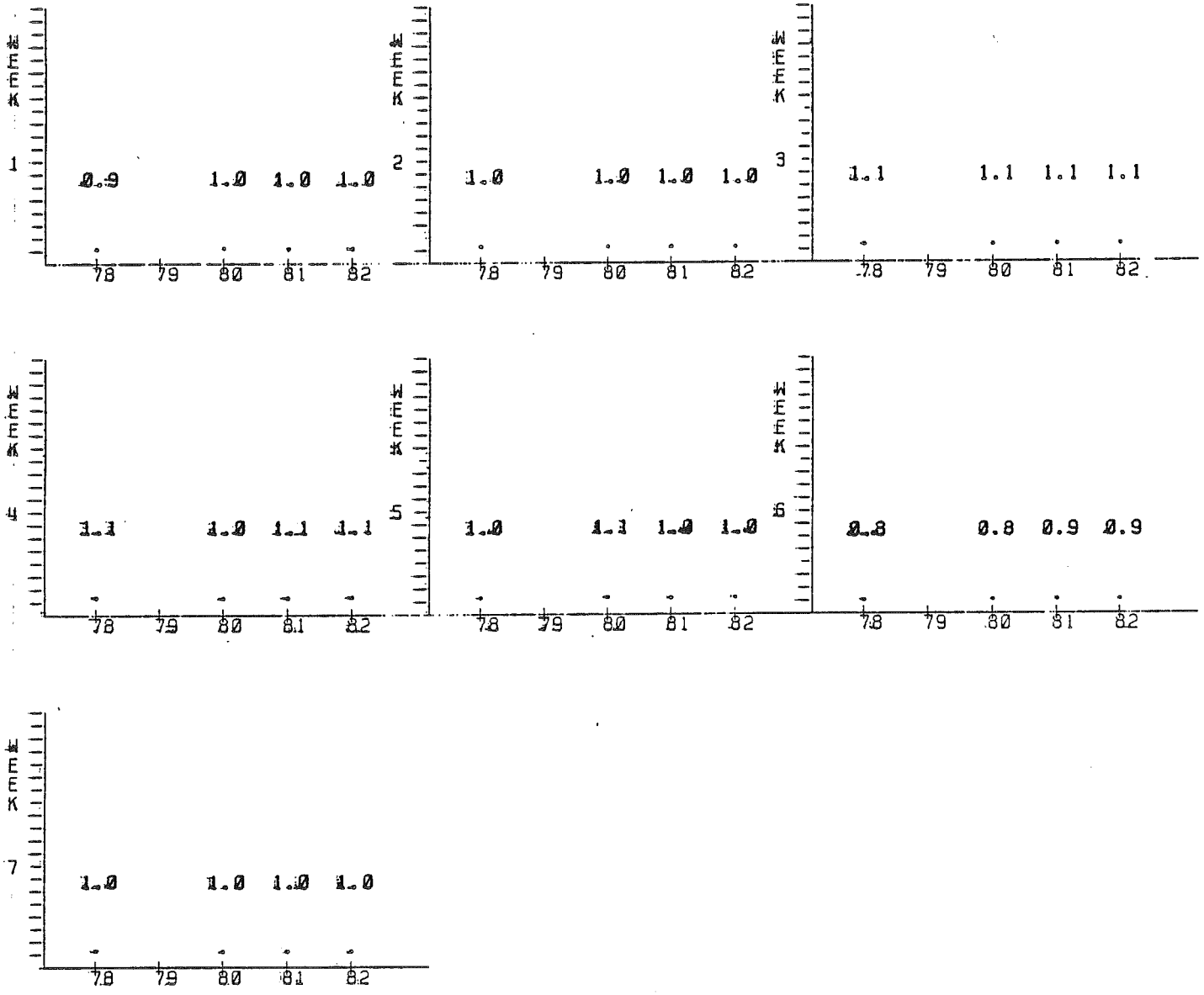






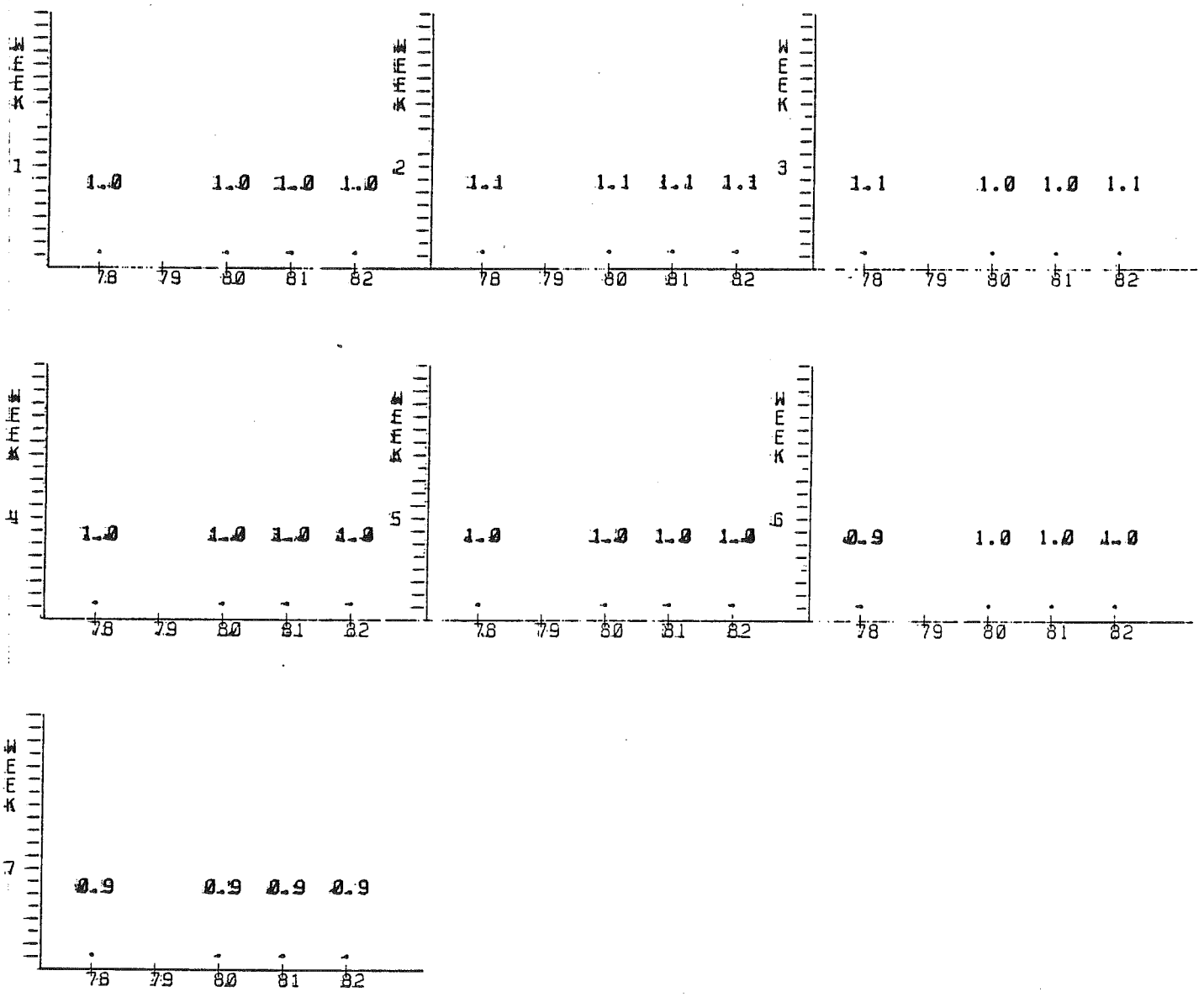
COUNTING STATION NO. 2

WEEKLY FACTORS VS. YEARS



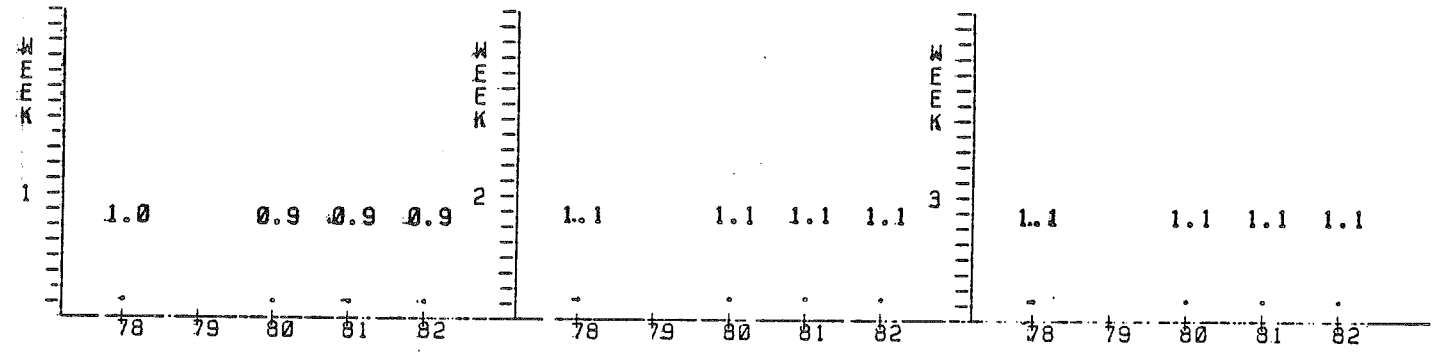
COUNTING STATION NO. 3

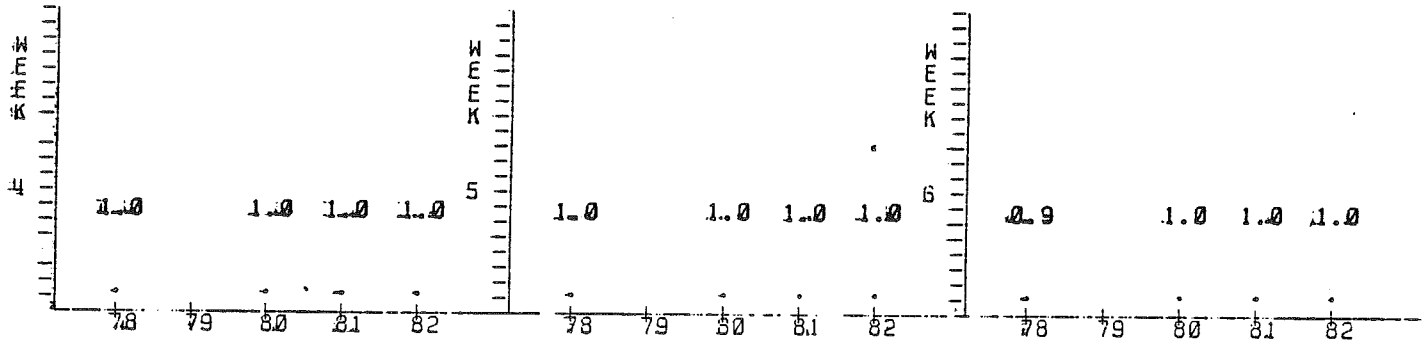
WEEKLY FACTORS VS. YEARS

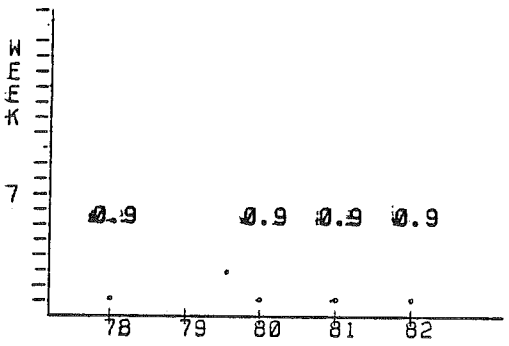


COUNTING STATION NO. 4

WEEKLY FACTORS VS. YEARS

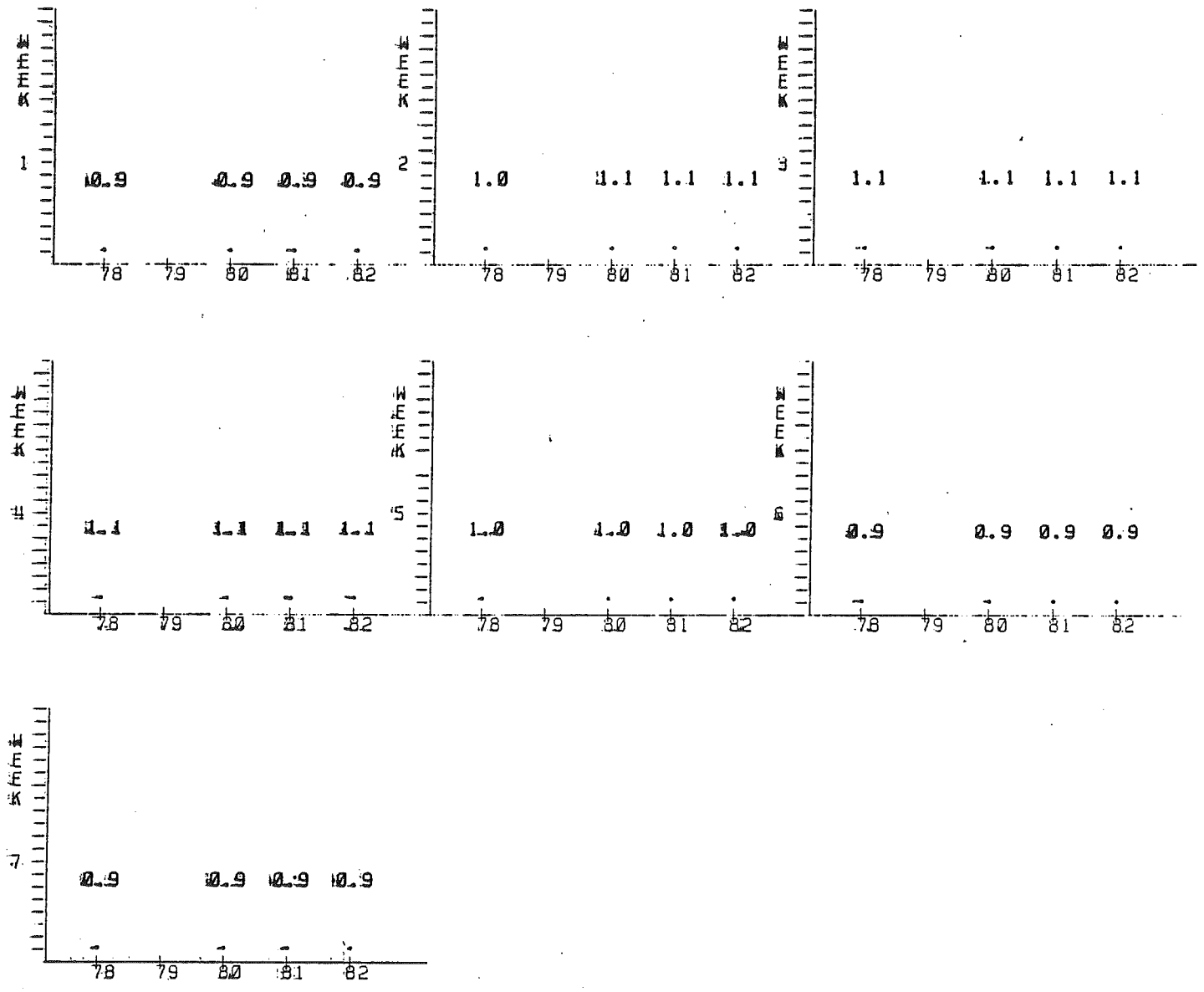






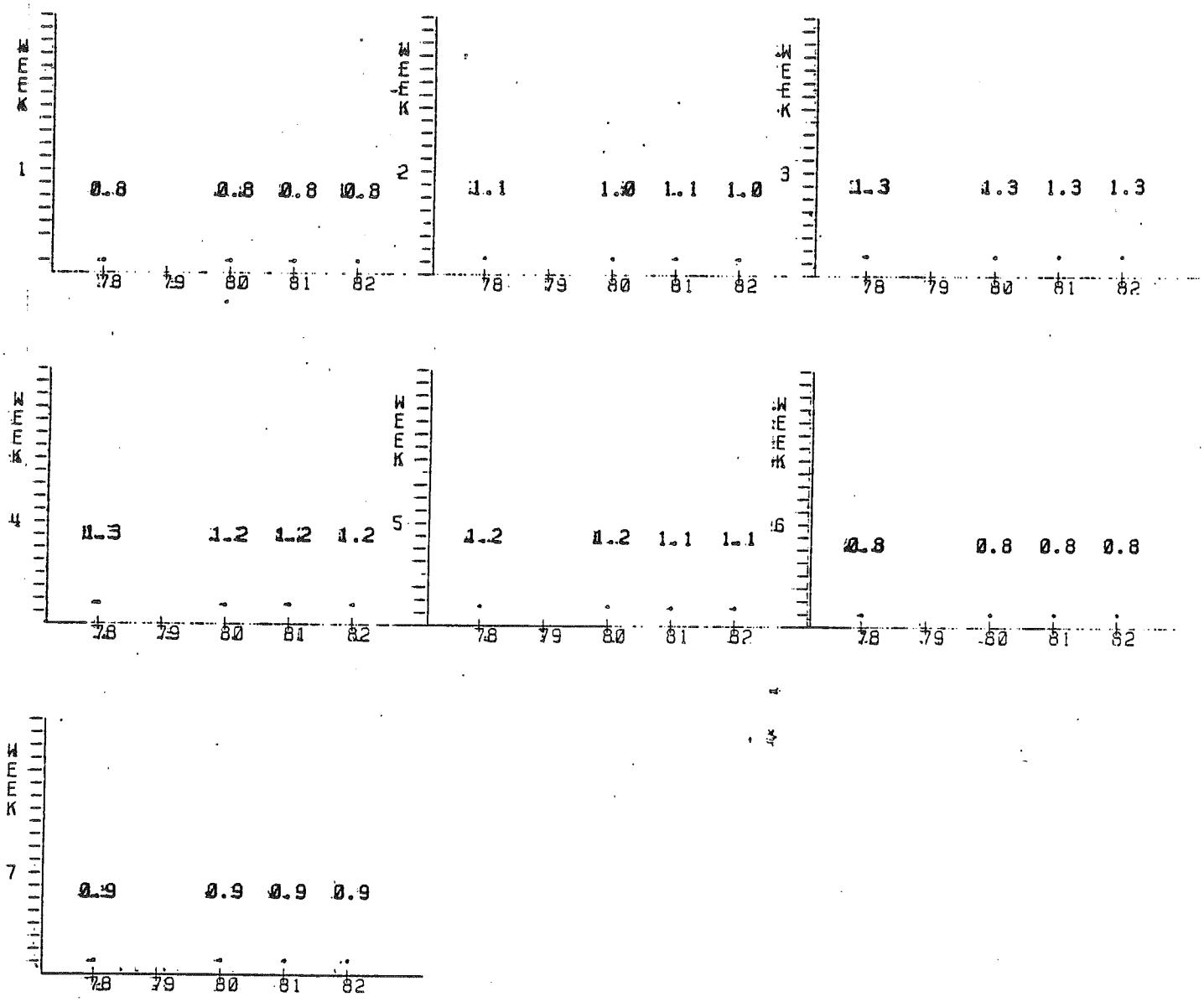
COUNTING STATION NO. 5

WEEKLY FACTORS VS. YEARS



COUNTING STATION NO. 16

WEEKLY FACTORS VS. YEARS



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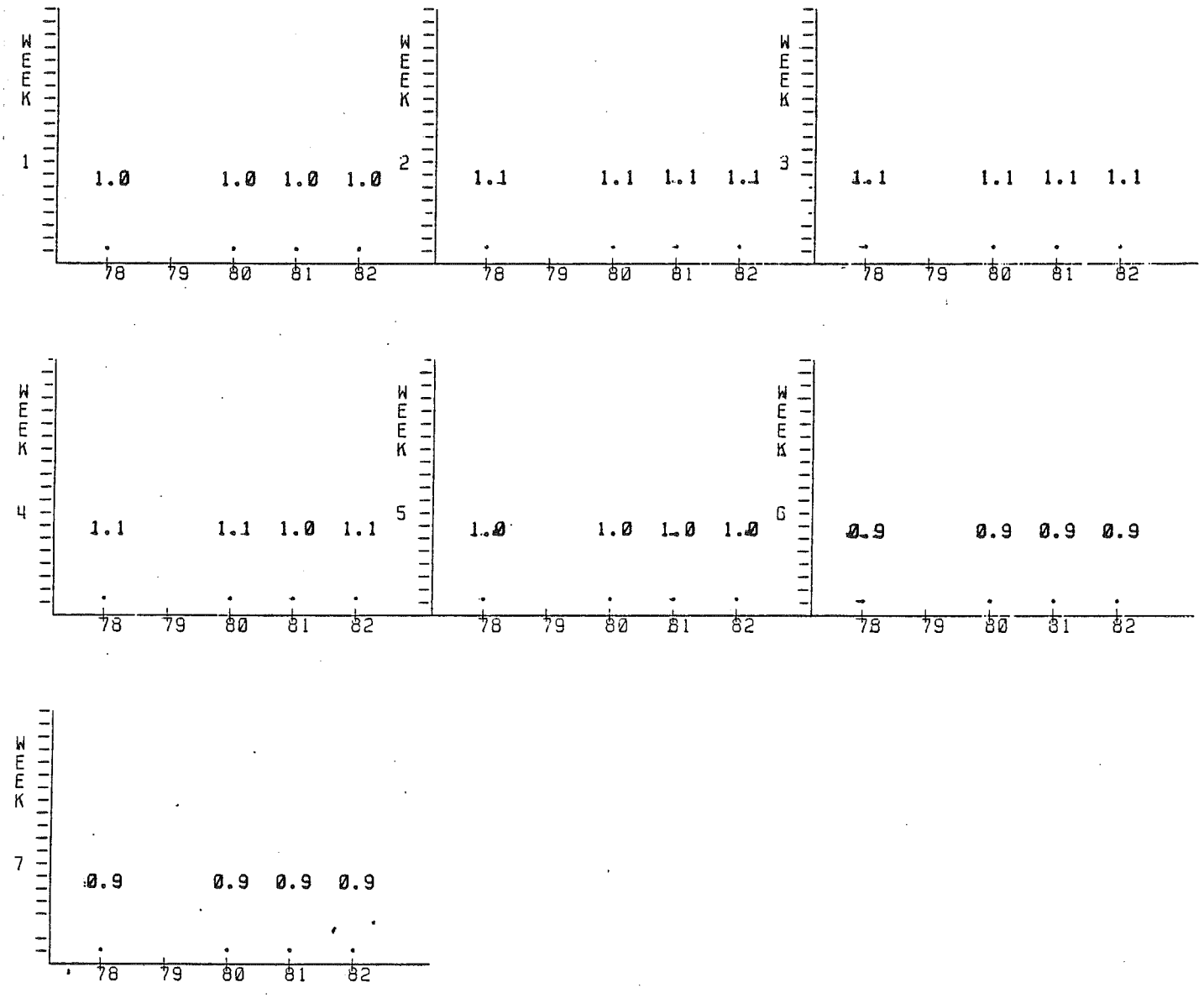
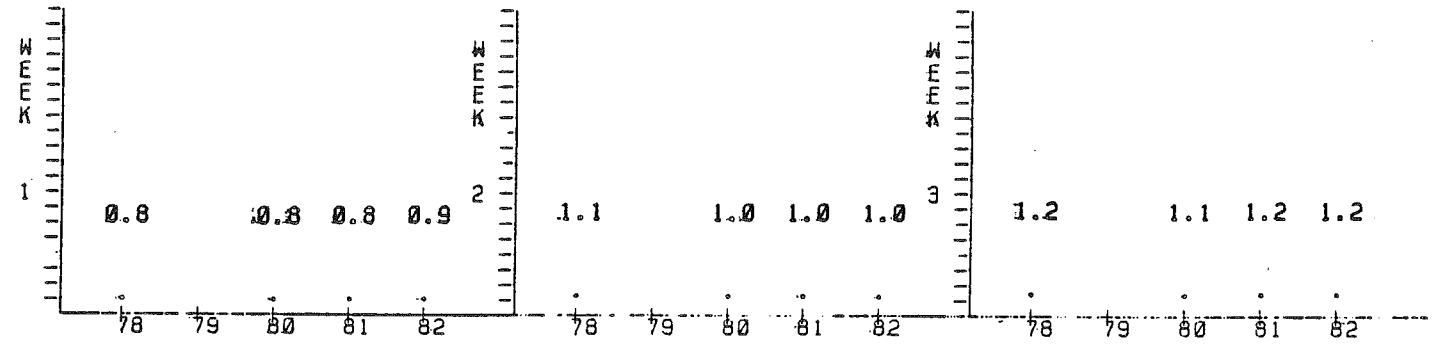
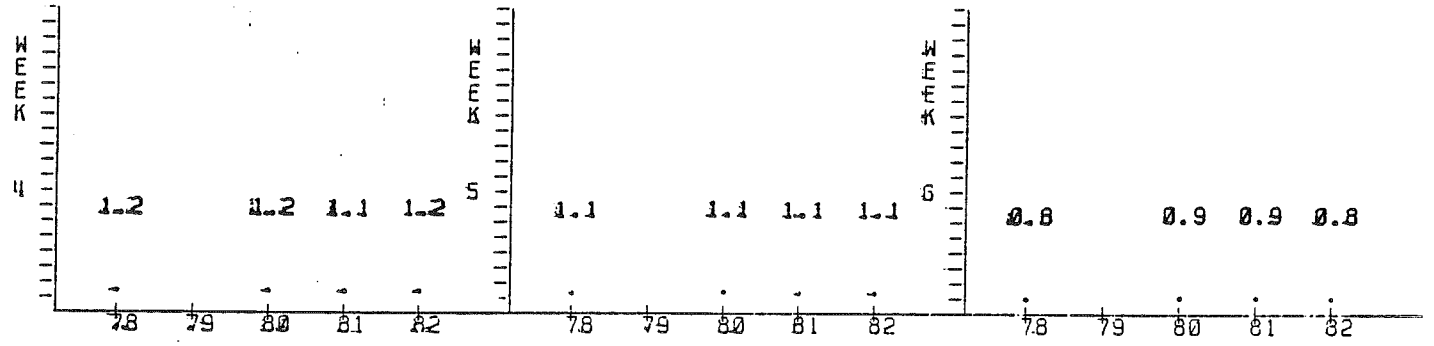
WEEKLY FACTORS VS. YEARS

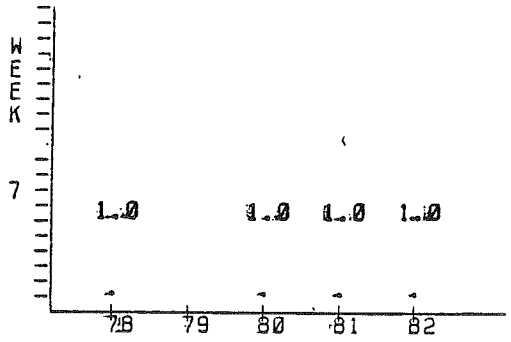


COUNTING STATION NO. 8

WEEKLY FACTORS VS. YEARS

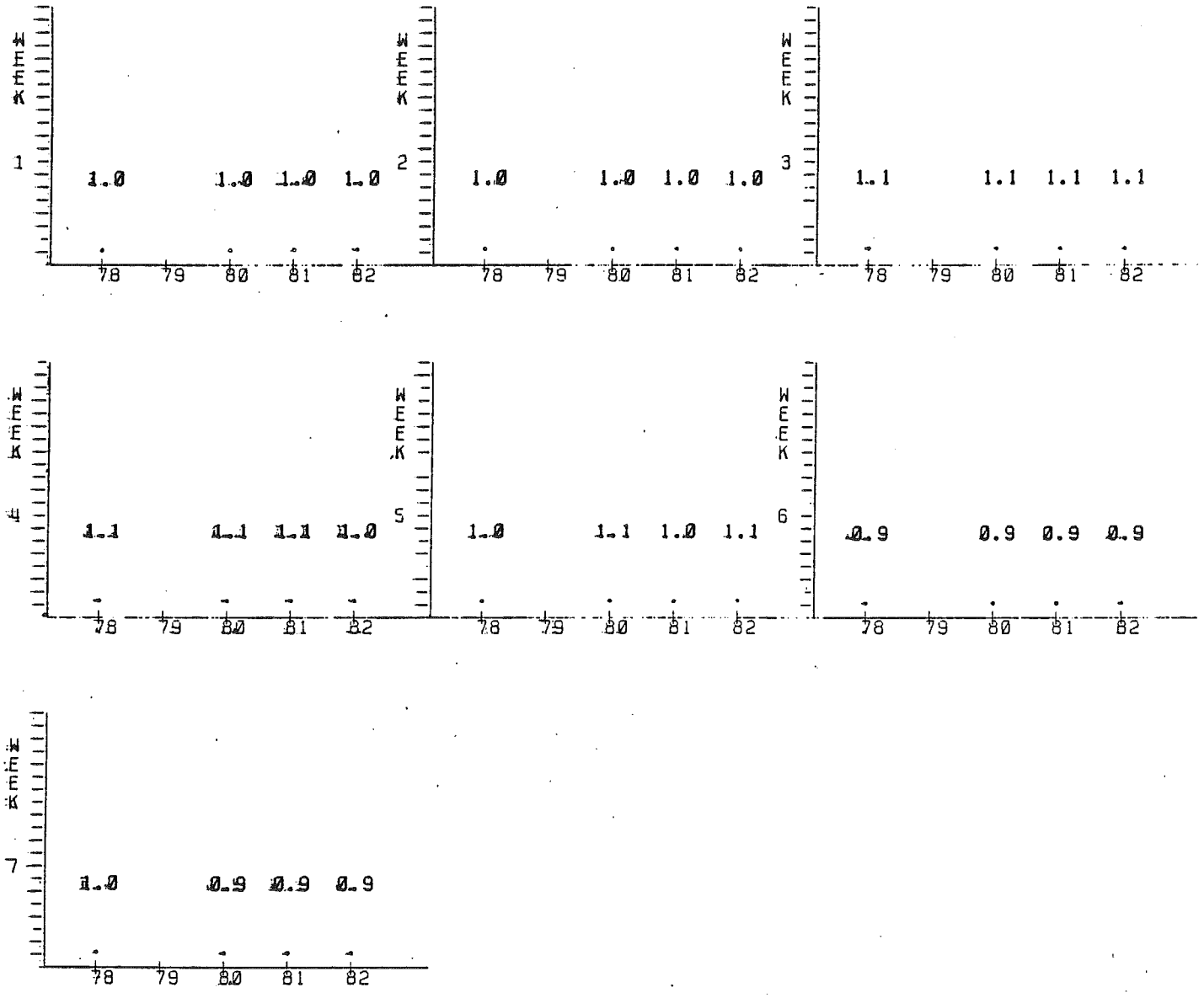






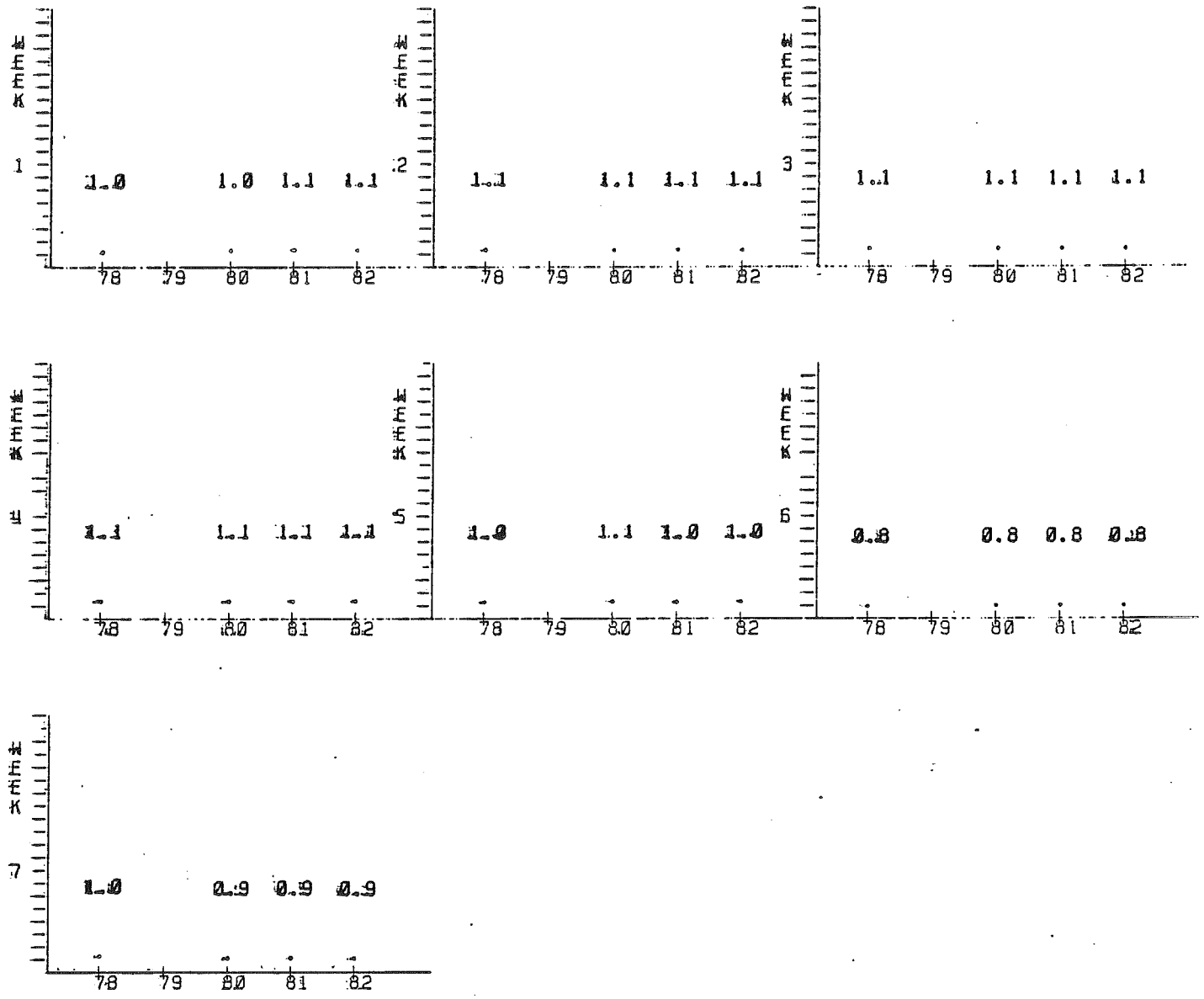
COUNTING STATION NO. 9

WEEKLY FACTORS VS. YEARS



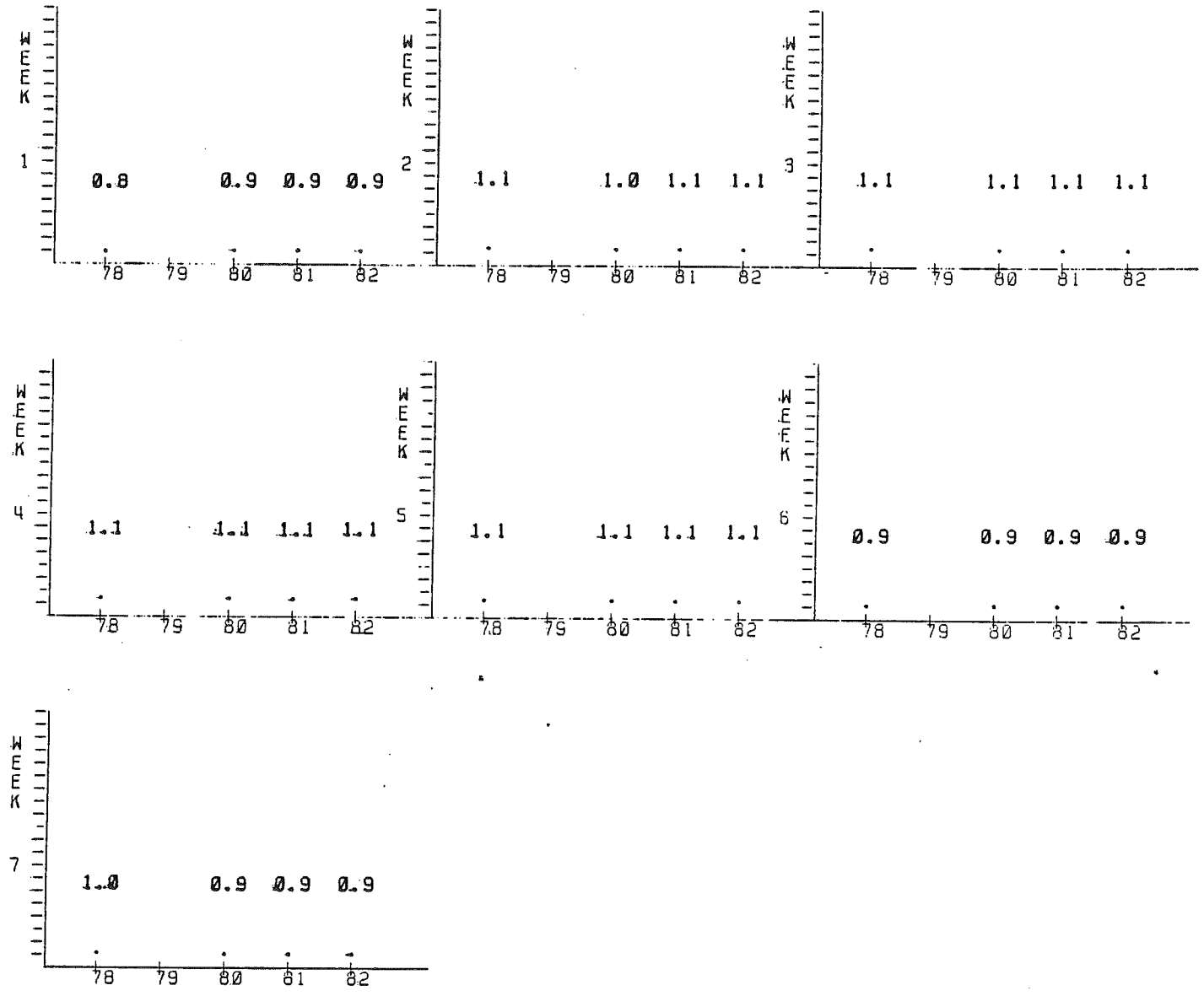
COUNTING STATION NO. 10

WEEKLY FACTORS VS. YEARS



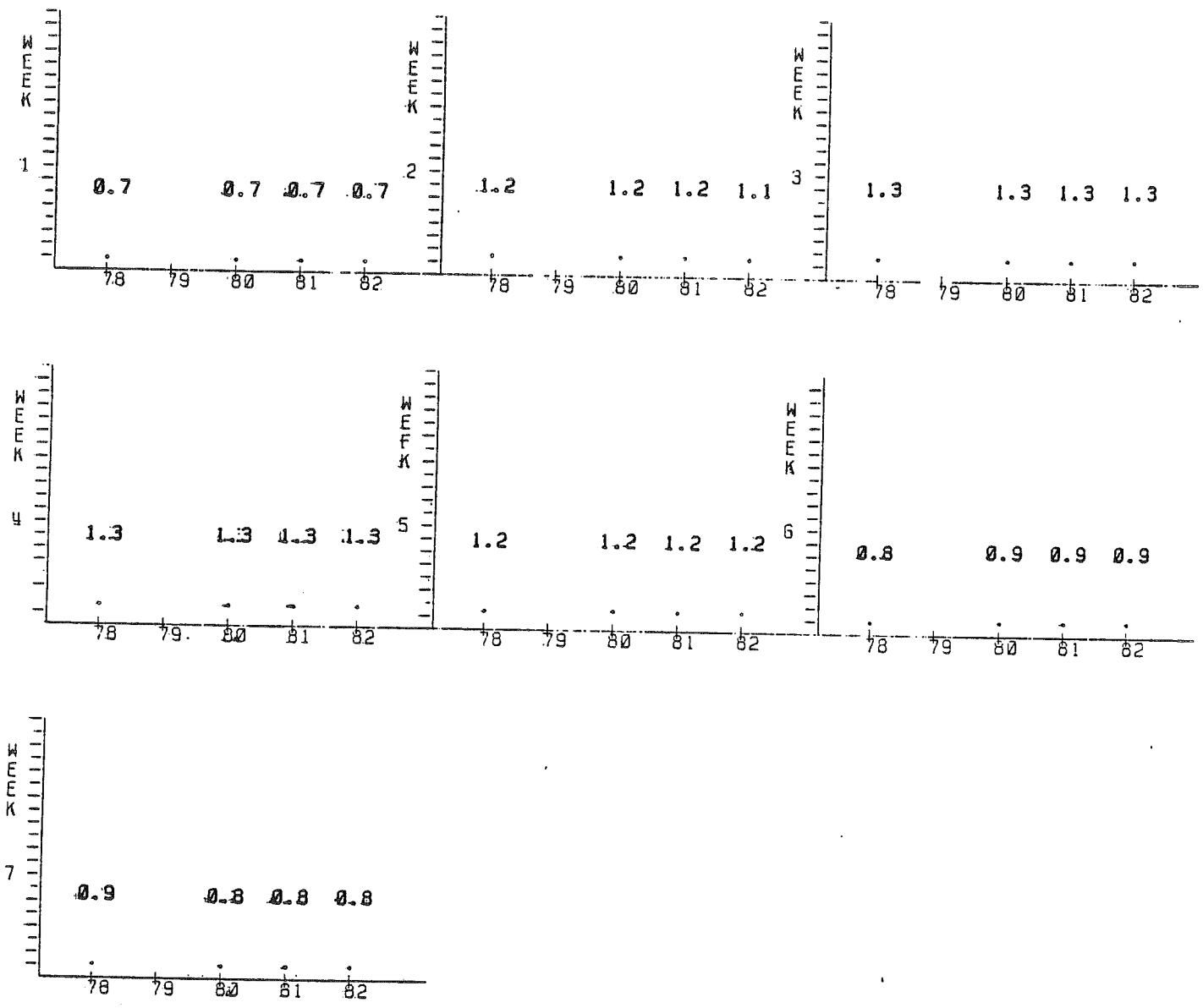
COUNTING STATION NO. 11

WEEKLY FACTORS VS. YEARS



COUNTING STATION NO. 12

WEEKLY FACTORS VS. YEARS



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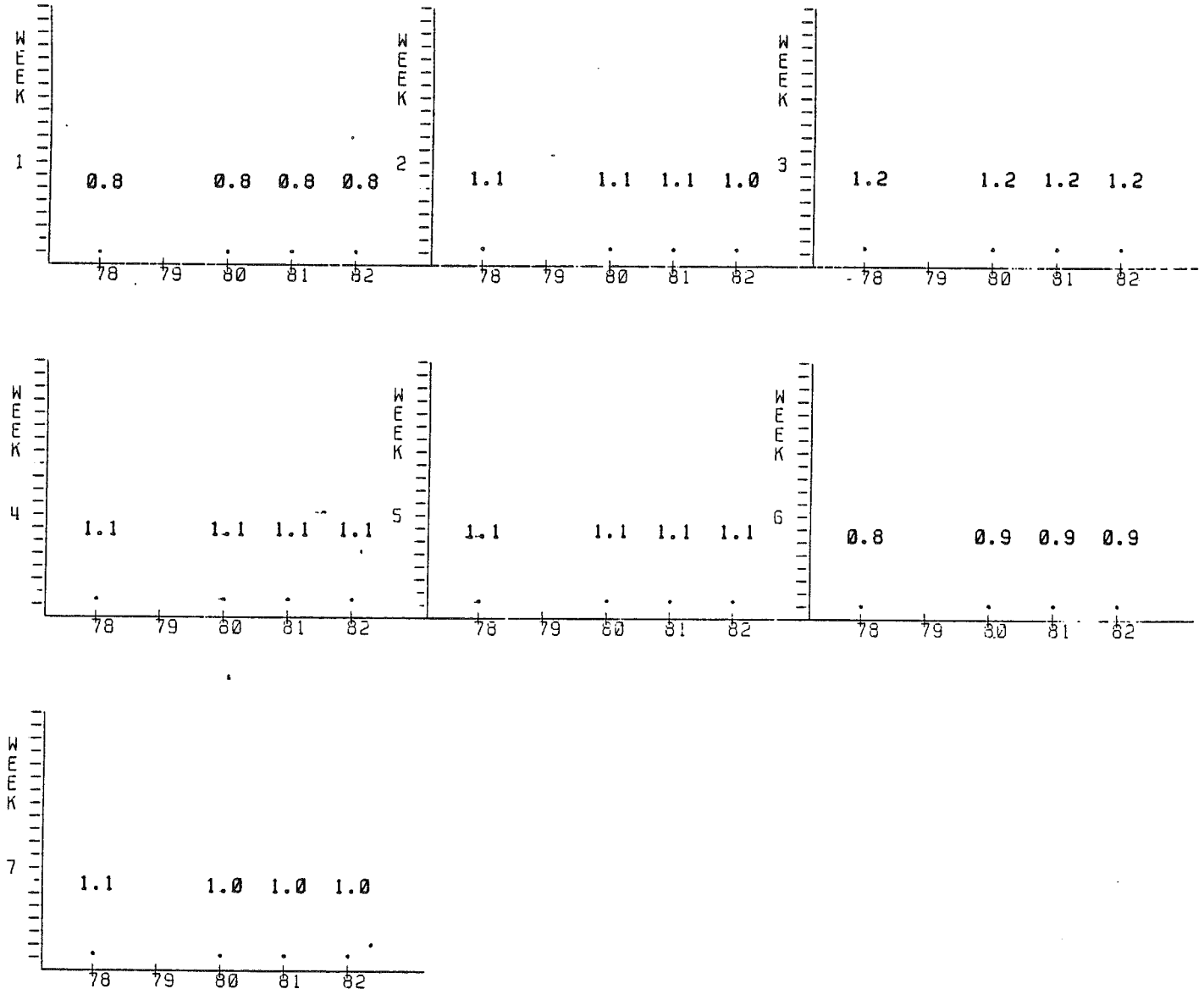
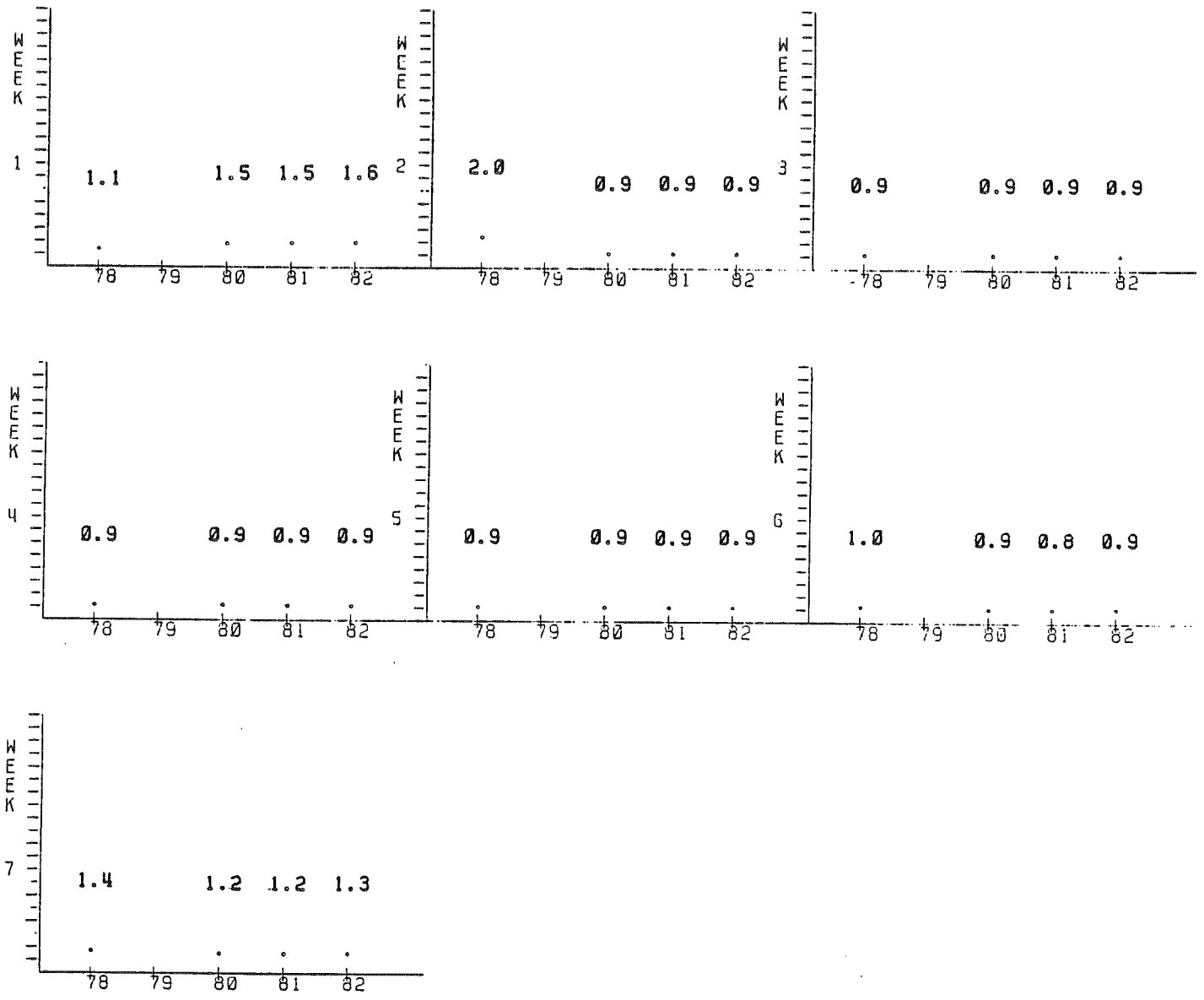
WEEKLY FACTORS VS. YEARS



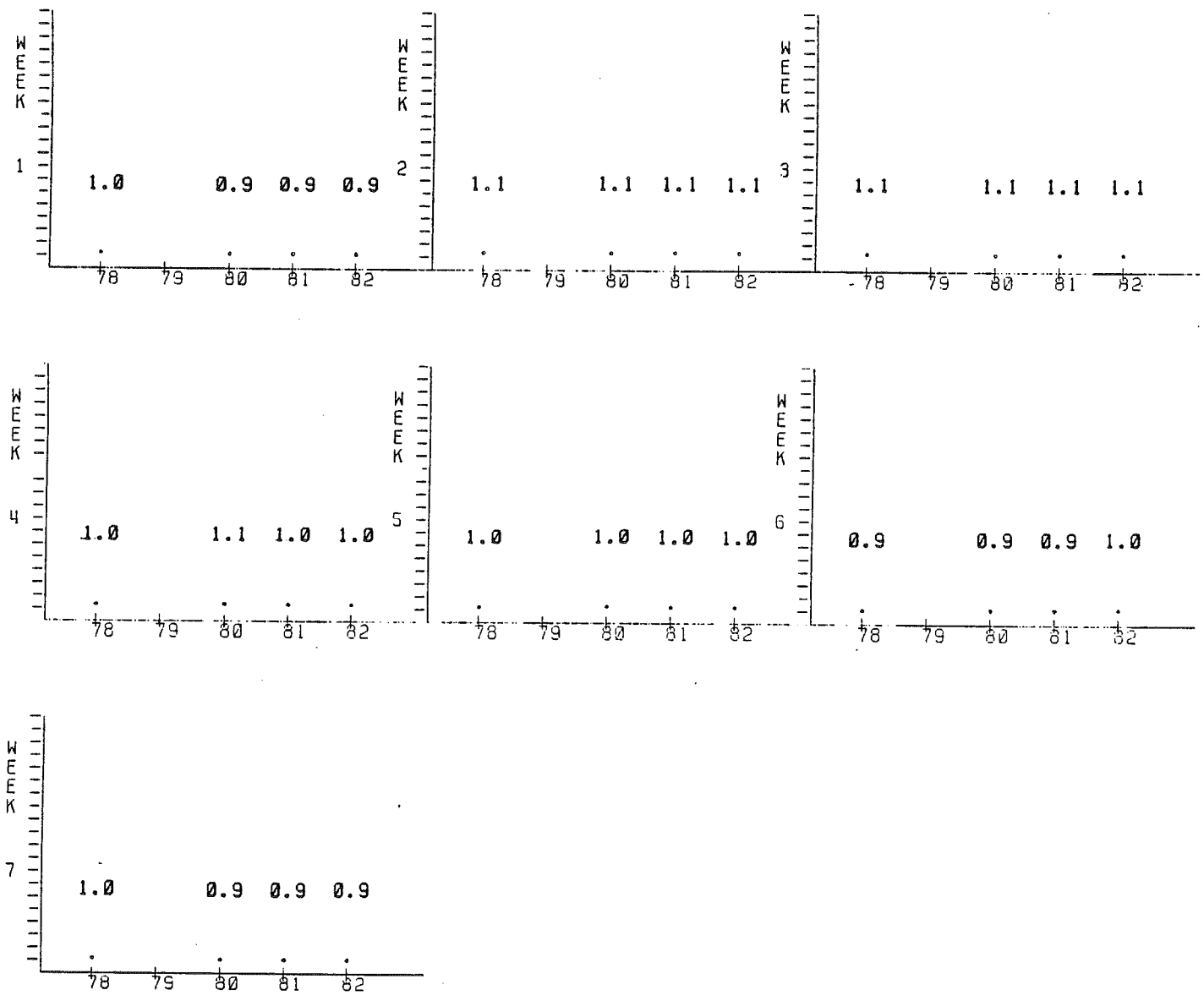
COUNTING STATION NO. 14

WEEKLY FACTORS VS. YEARS



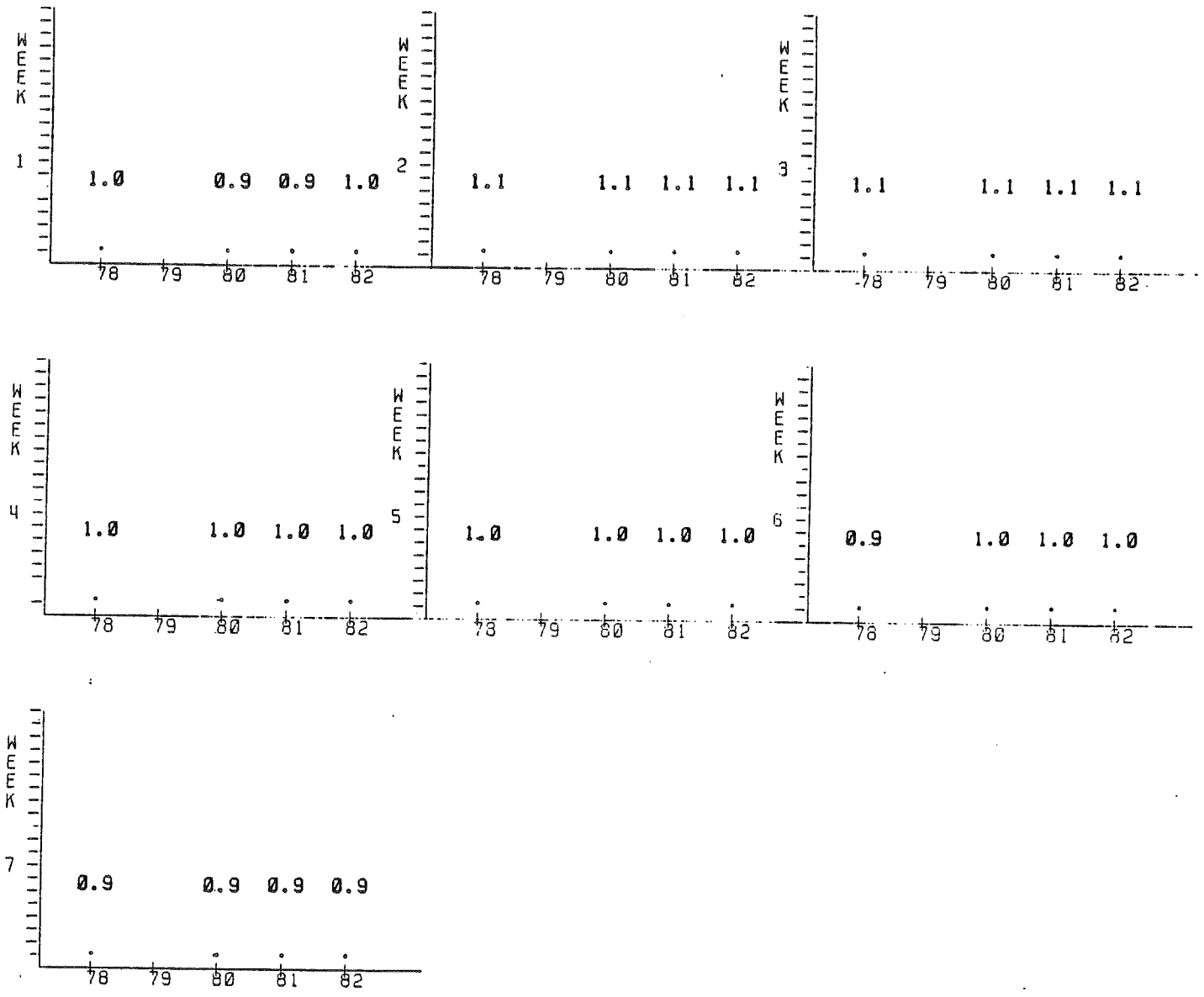
COUNTING STATION NO. 15

WEEKLY FACTORS VS. YEARS



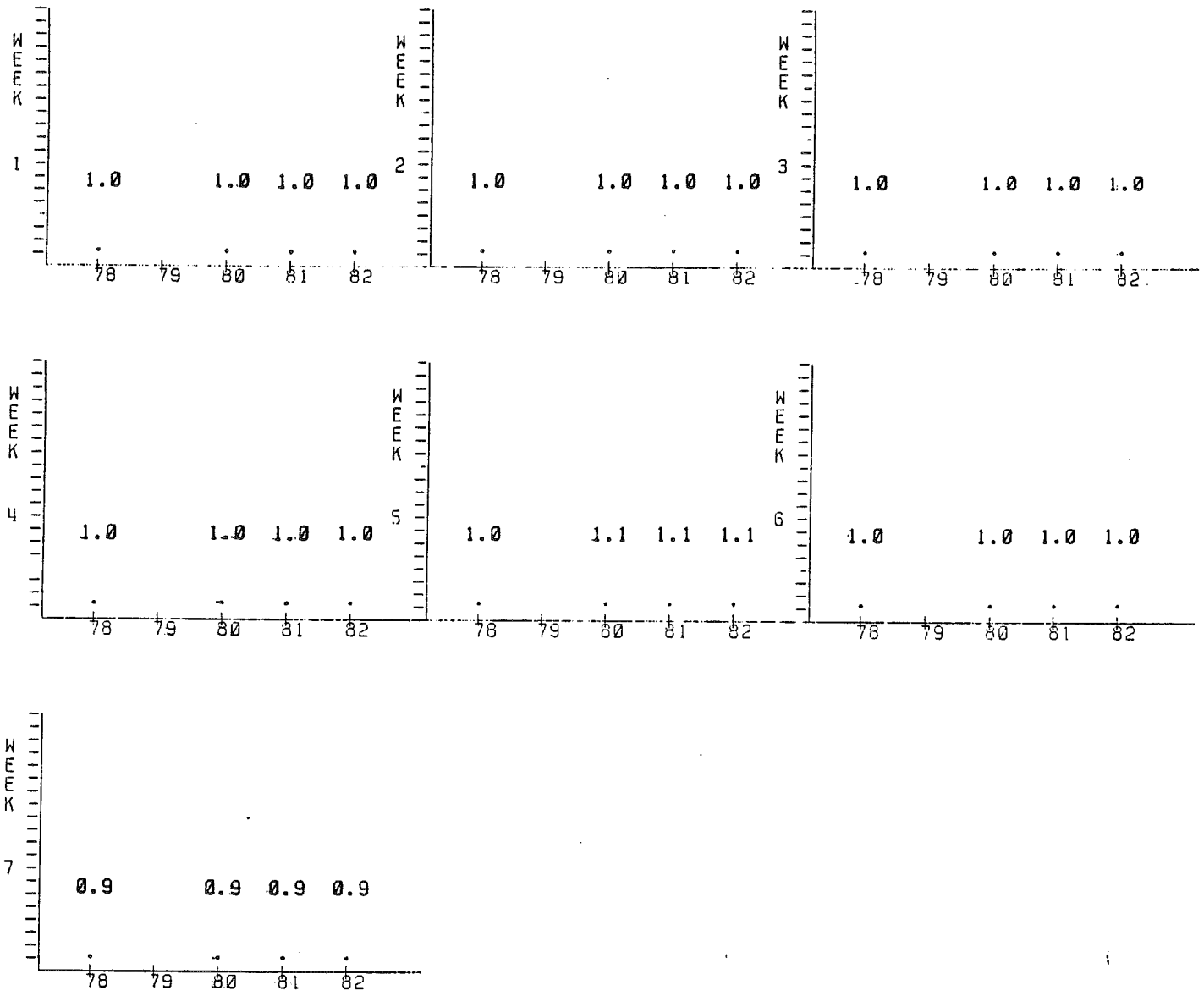
COUNTING STATION NO. 16

WEEKLY FACTORS VS. YEARS



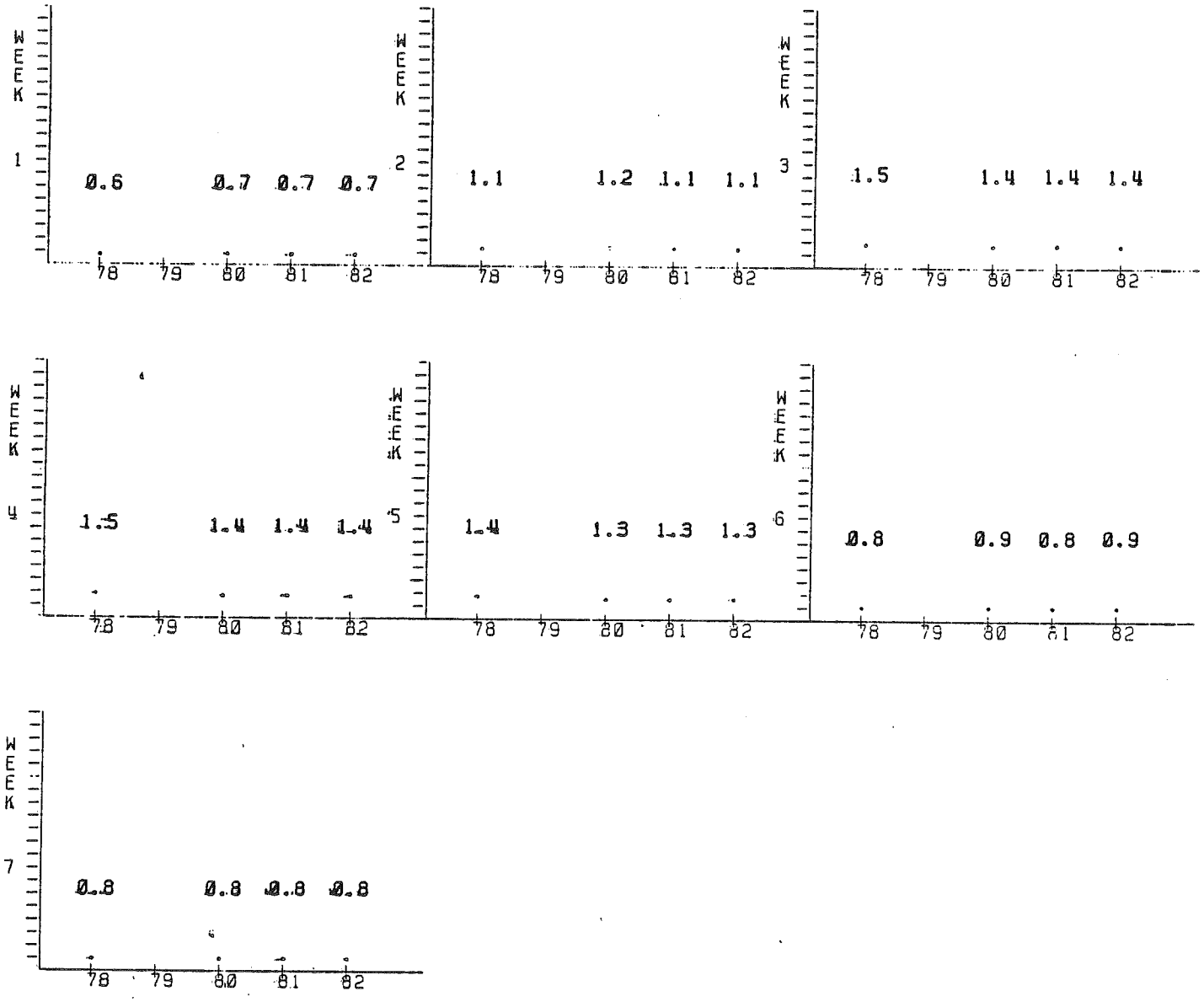
COUNTING STATION NO. 17

WEEKLY FACTORS VS. YEARS



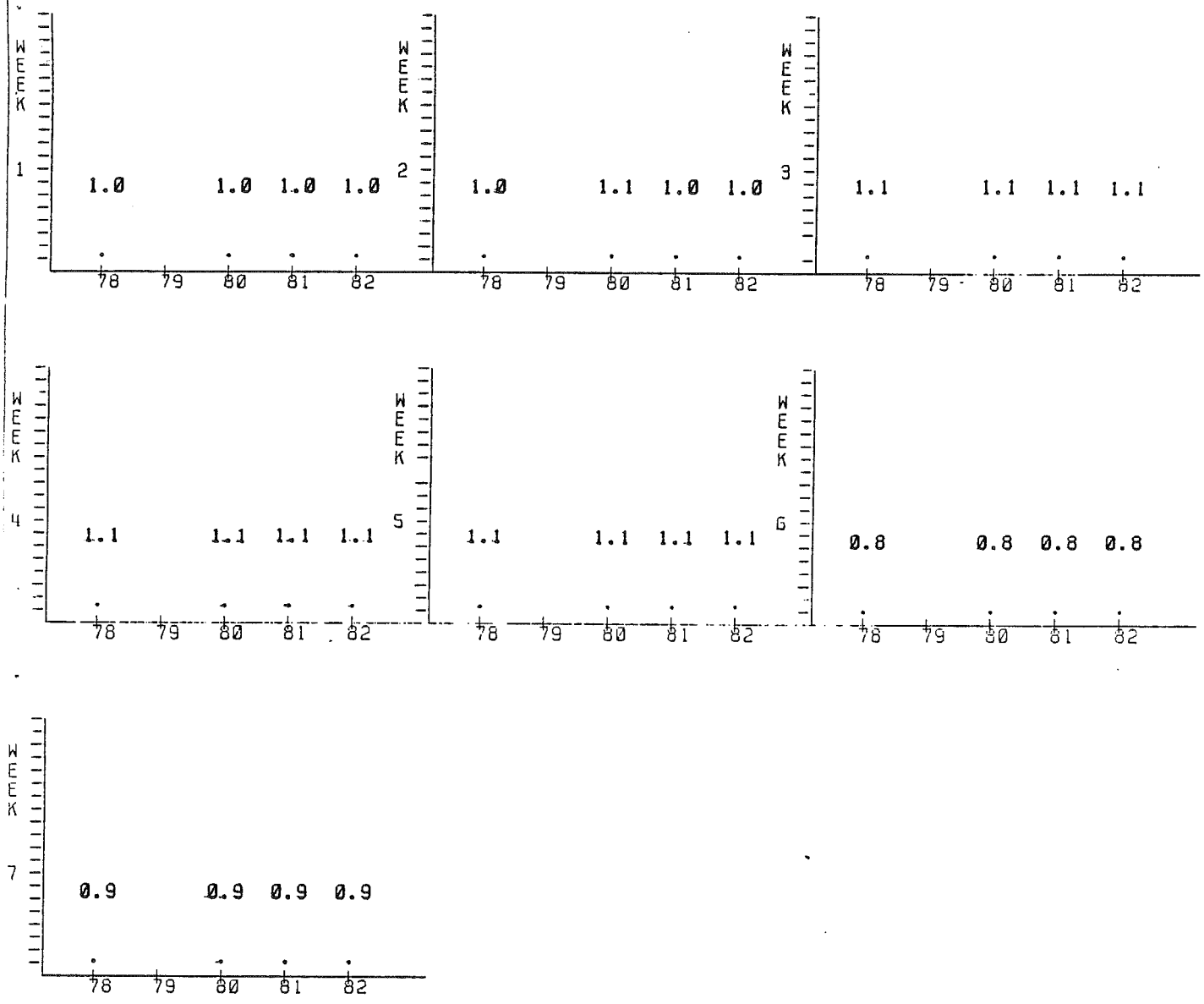
COUNTING STATION NO. 18

WEEKLY FACTORS VS. YEARS



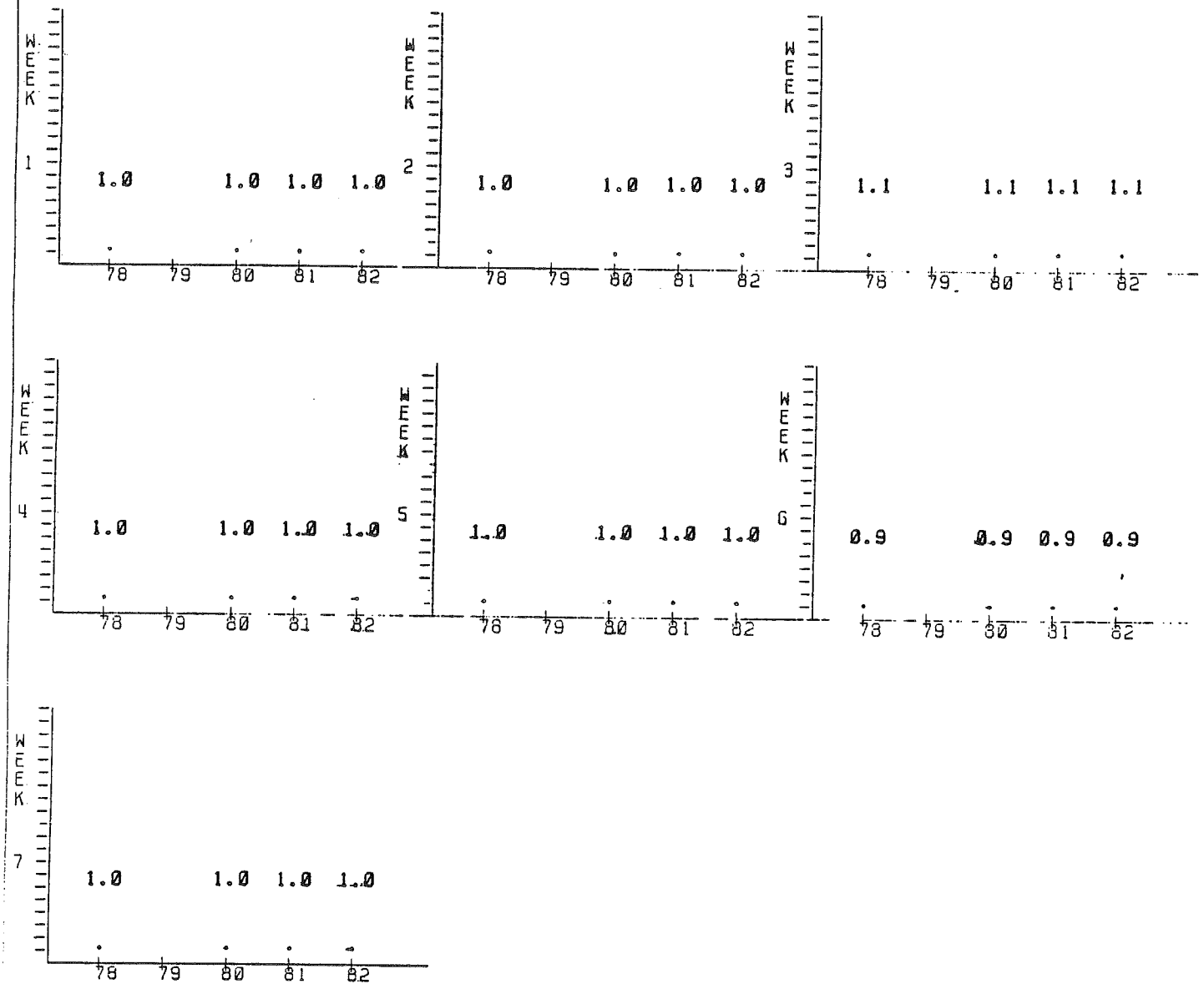
COUNTING STATION NO. 19

WEEKLY FACTORS VS. YEARS



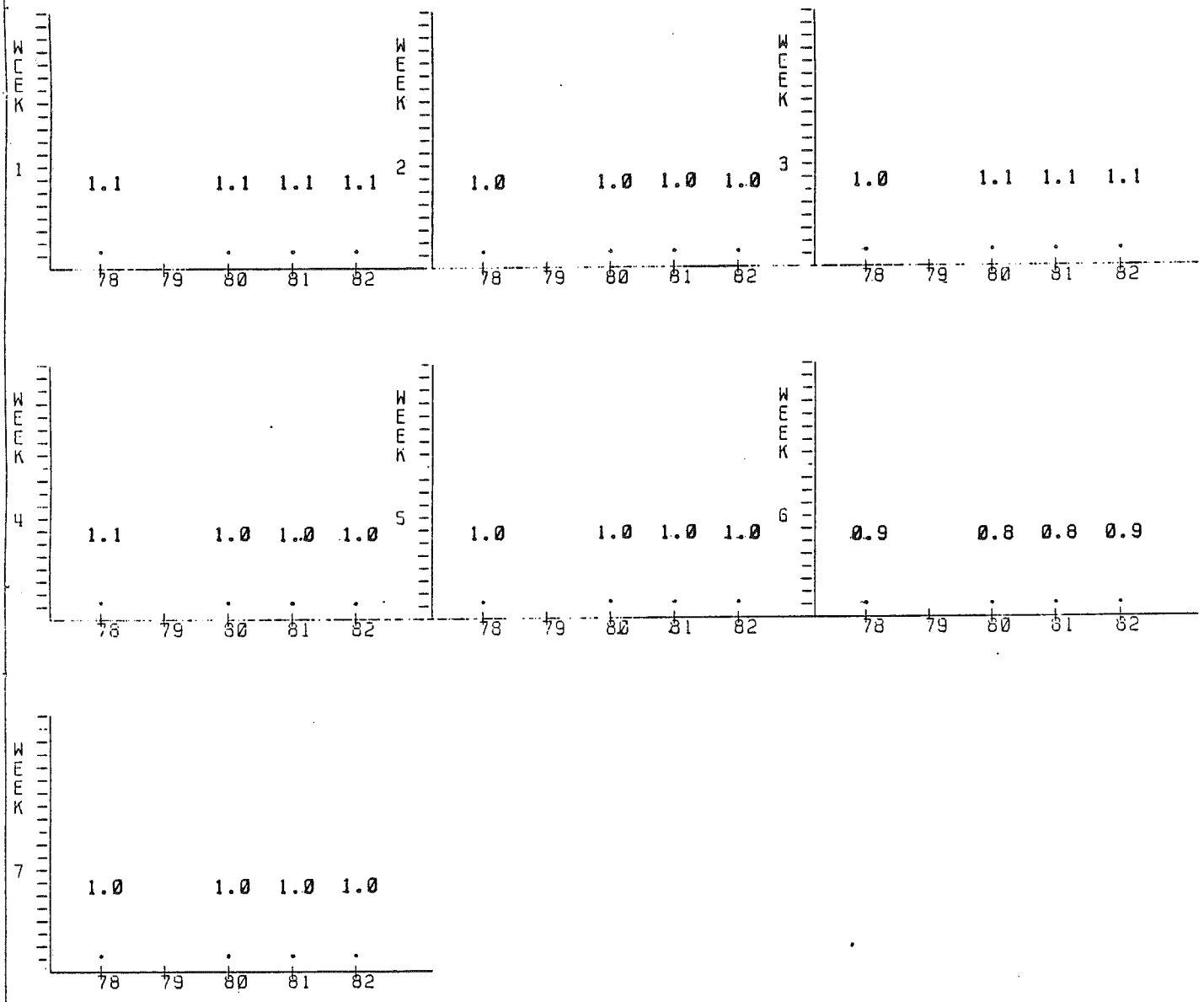
COUNTING STATION NO. 20

WEEKLY FACTORS VS. YEARS



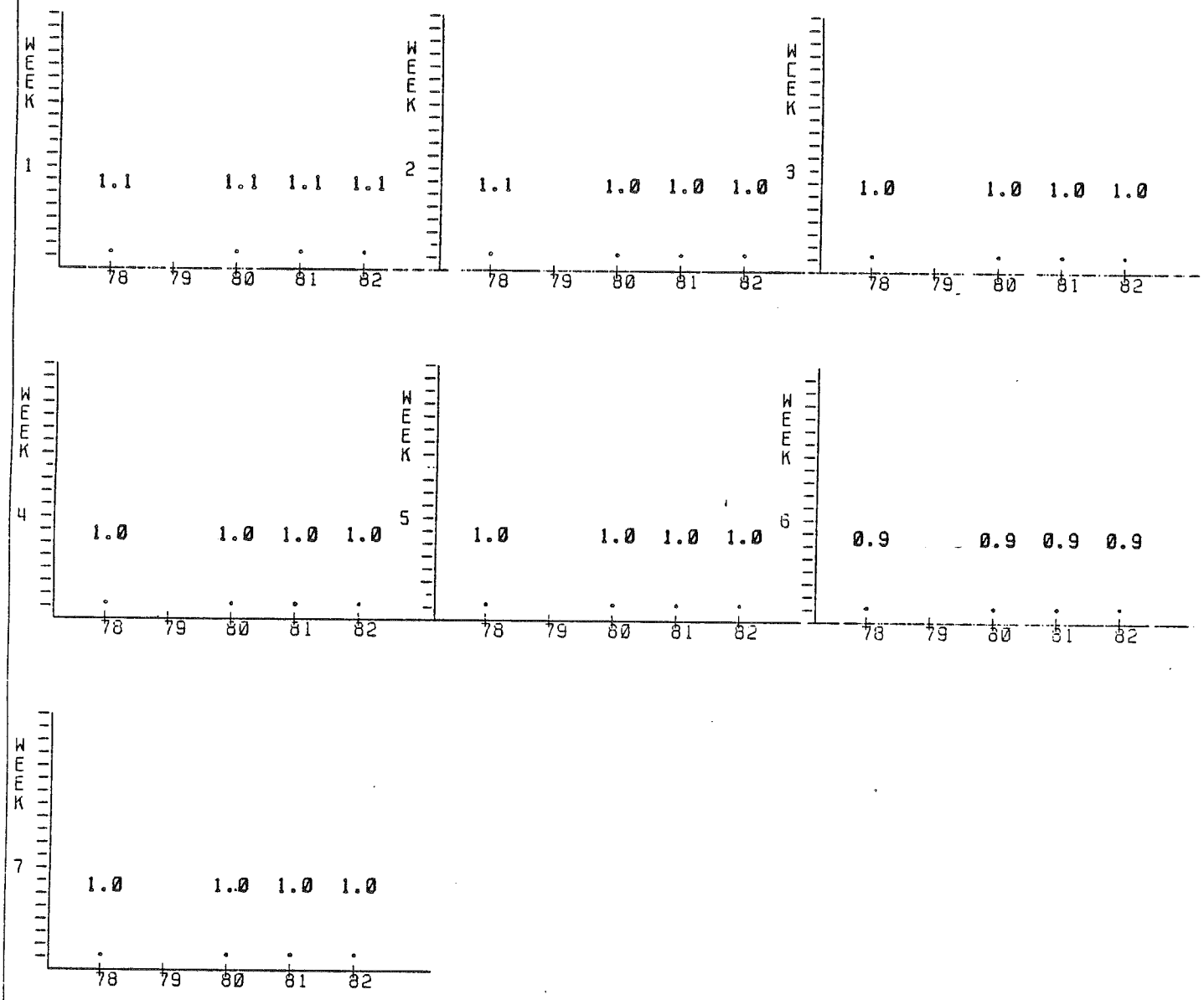
COUNTING STATION NO. 21

WEEKLY FACTORS VS. YEARS



COUNTING STATION NO. 22

WEEKLY FACTORS VS. YEARS



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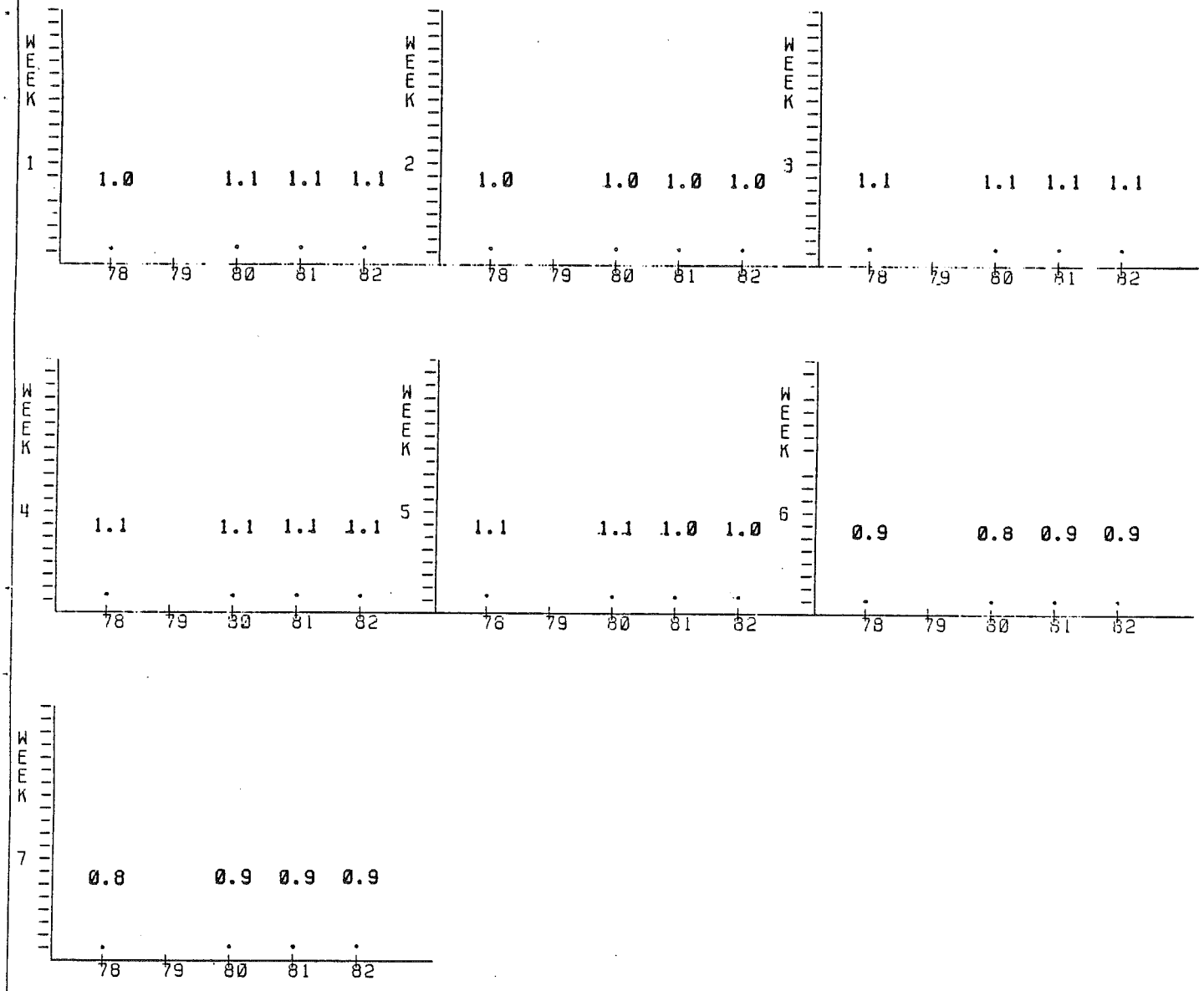
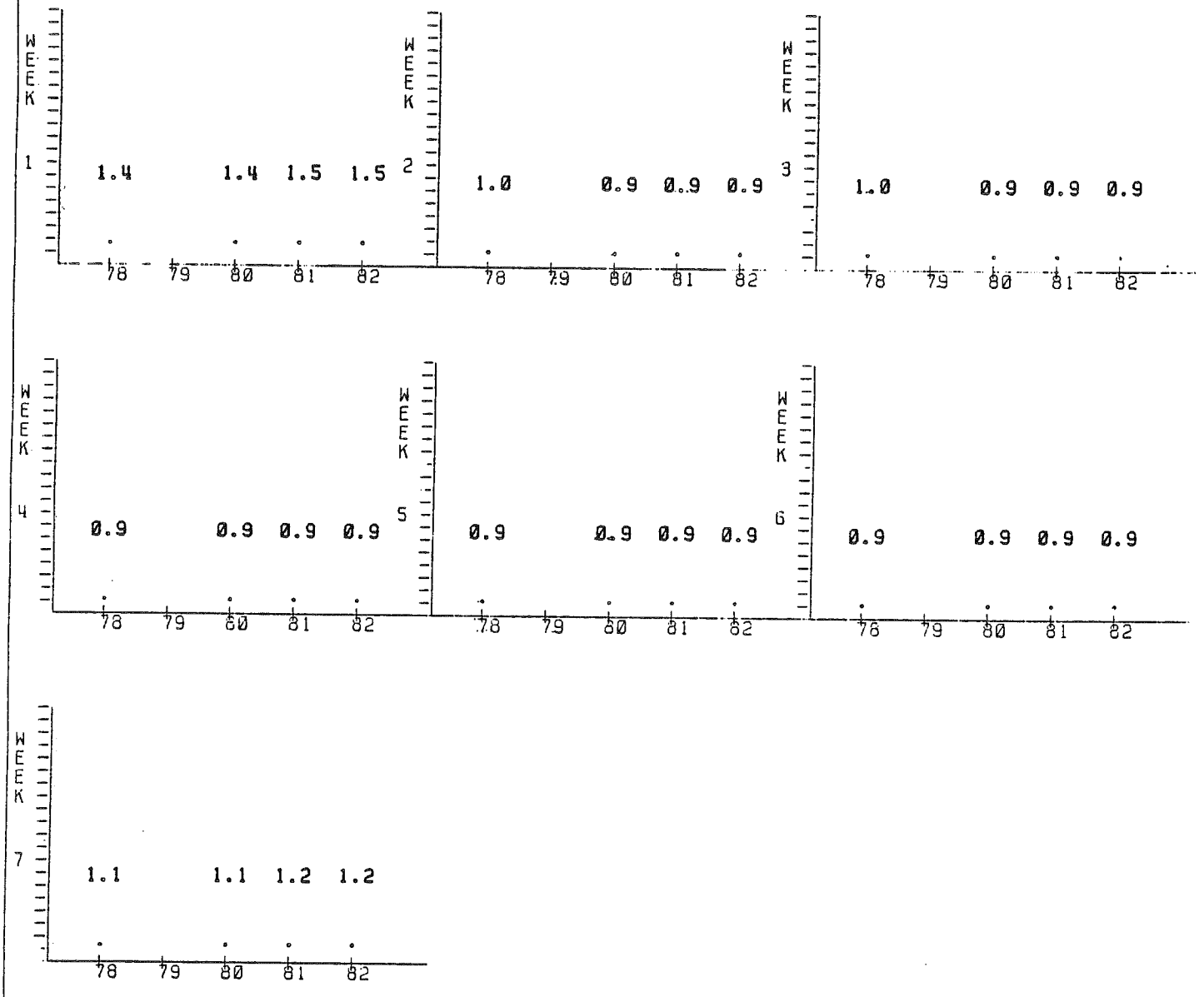
WEEKLY FACTORS VS. YEARS



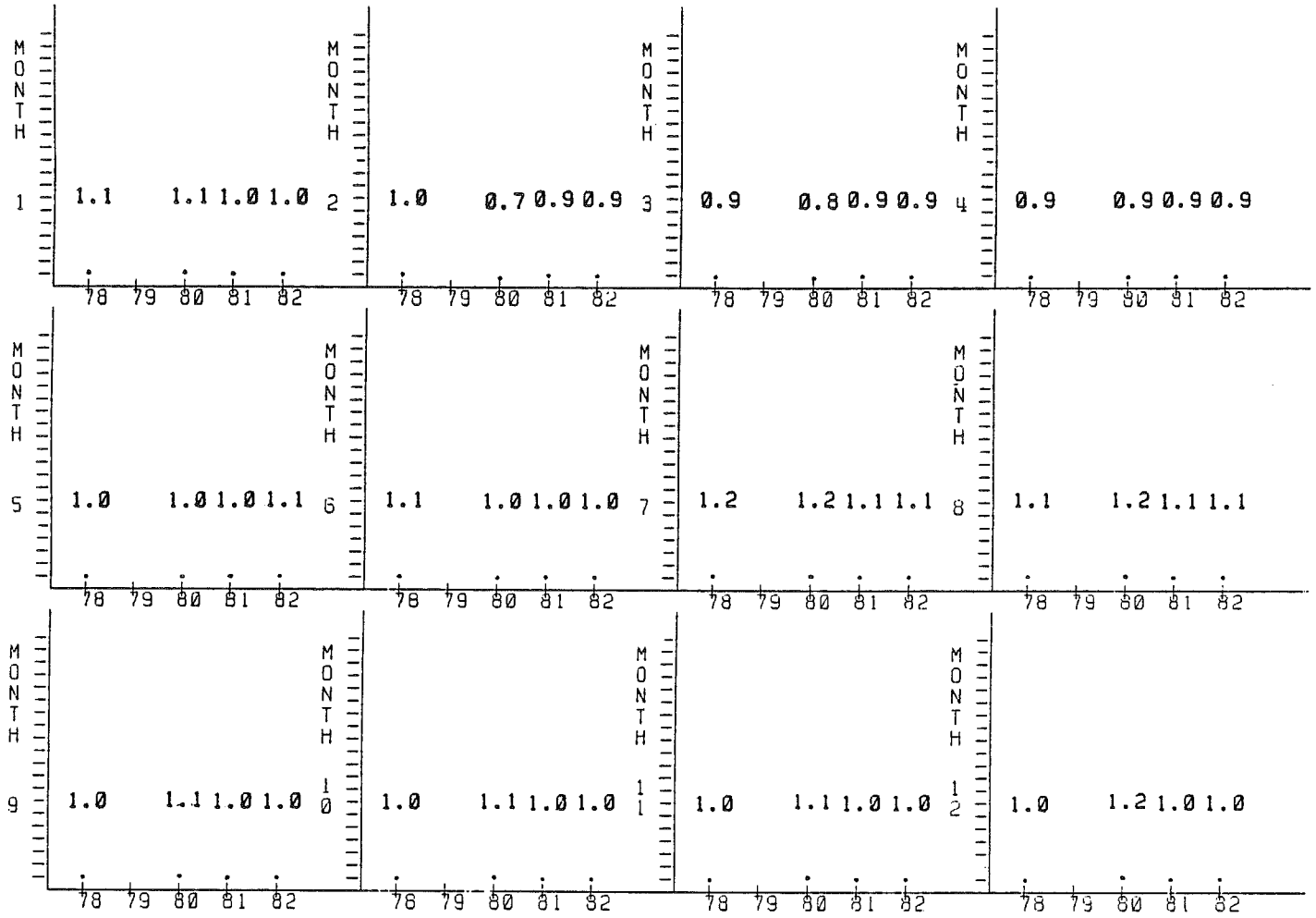
COUNTING STATION NO. 24

WEEKLY FACTORS VS. YEARS



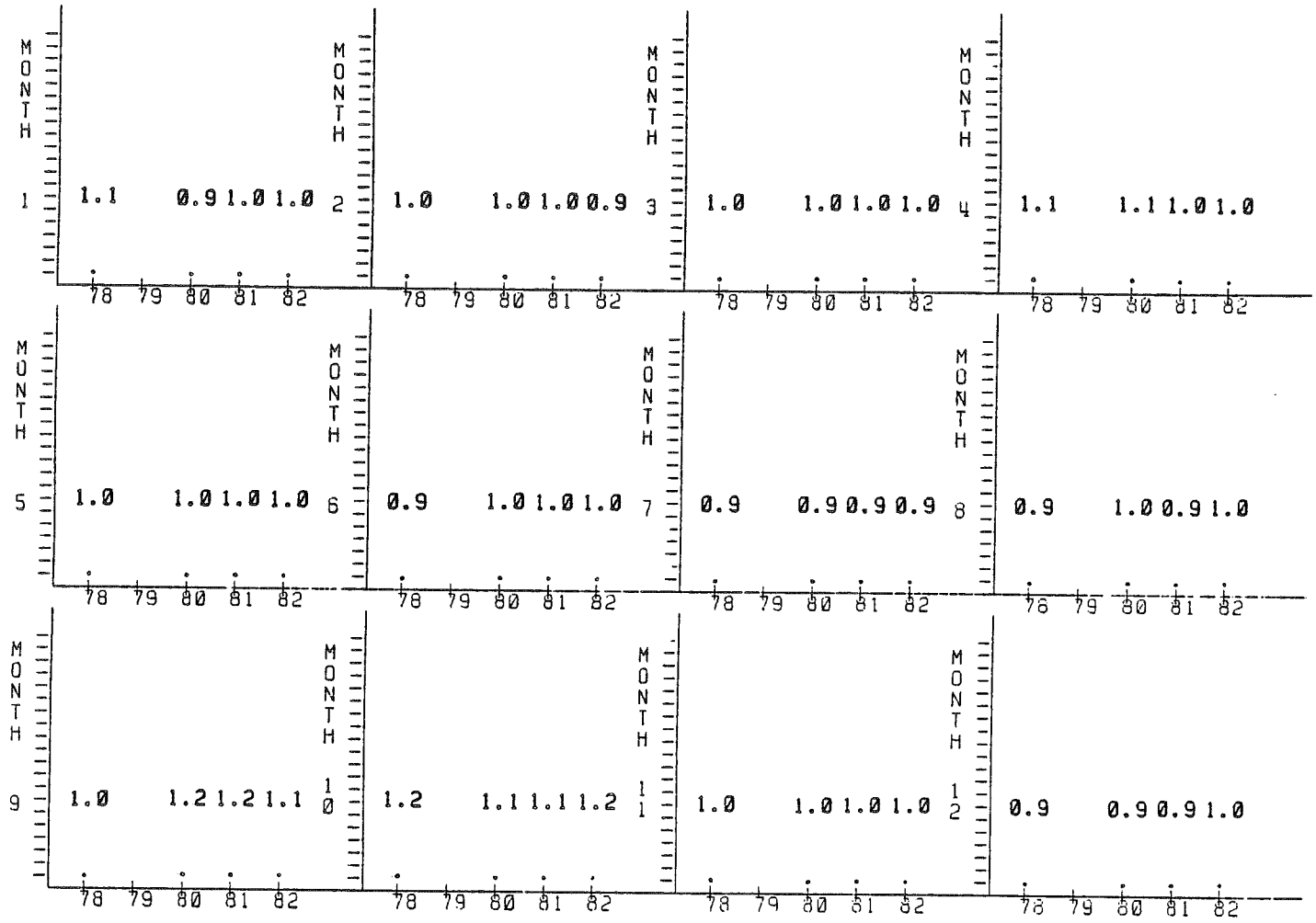
COUNTING STATION NO. 1

SEASONAL FACTORS VS. YEARS



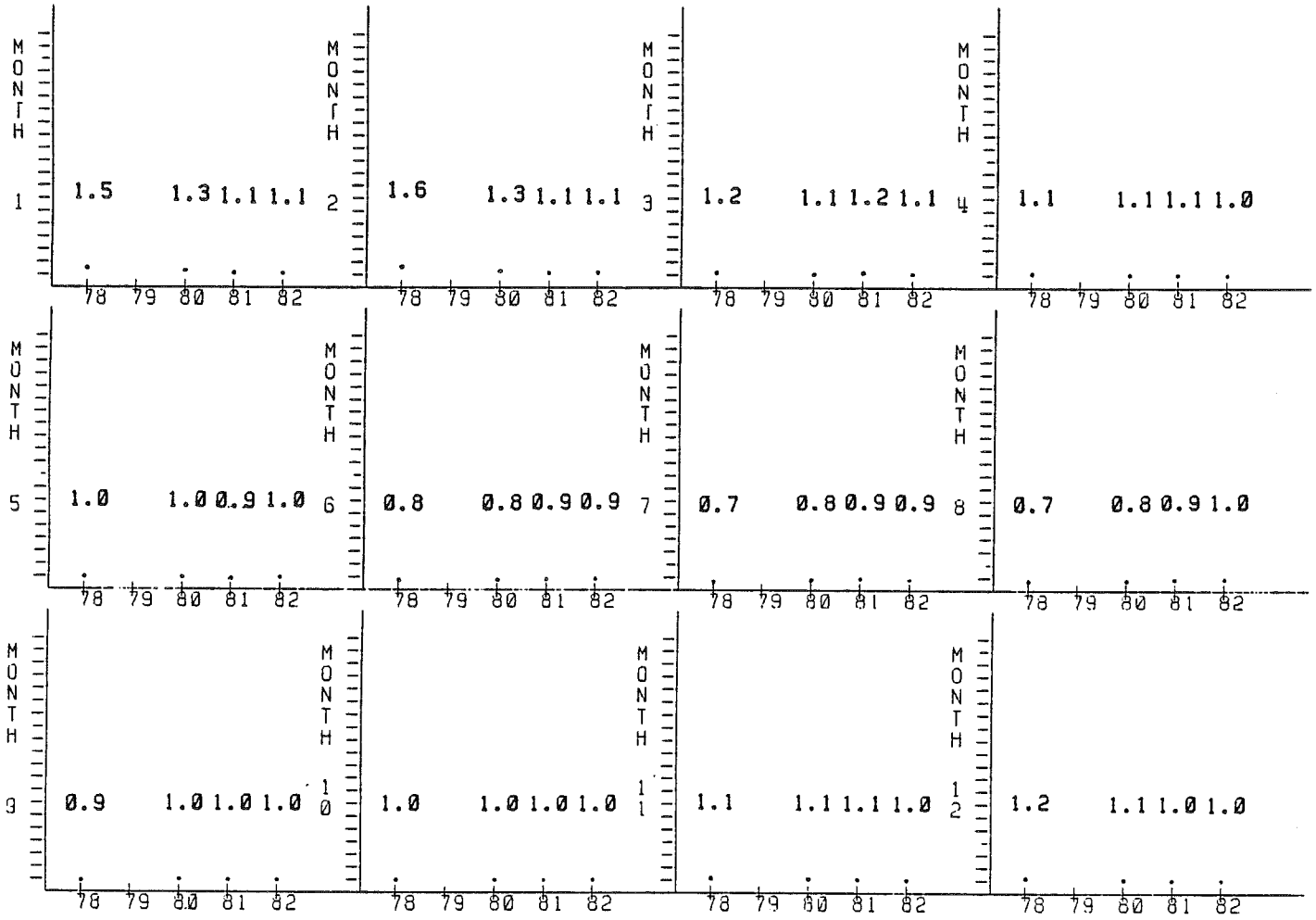
COUNTING STATION NO. 2

SEASONAL FACTORS VS. YEARS



COUNTING STATION NO. 3

SEASONAL FACTORS VS. YEARS



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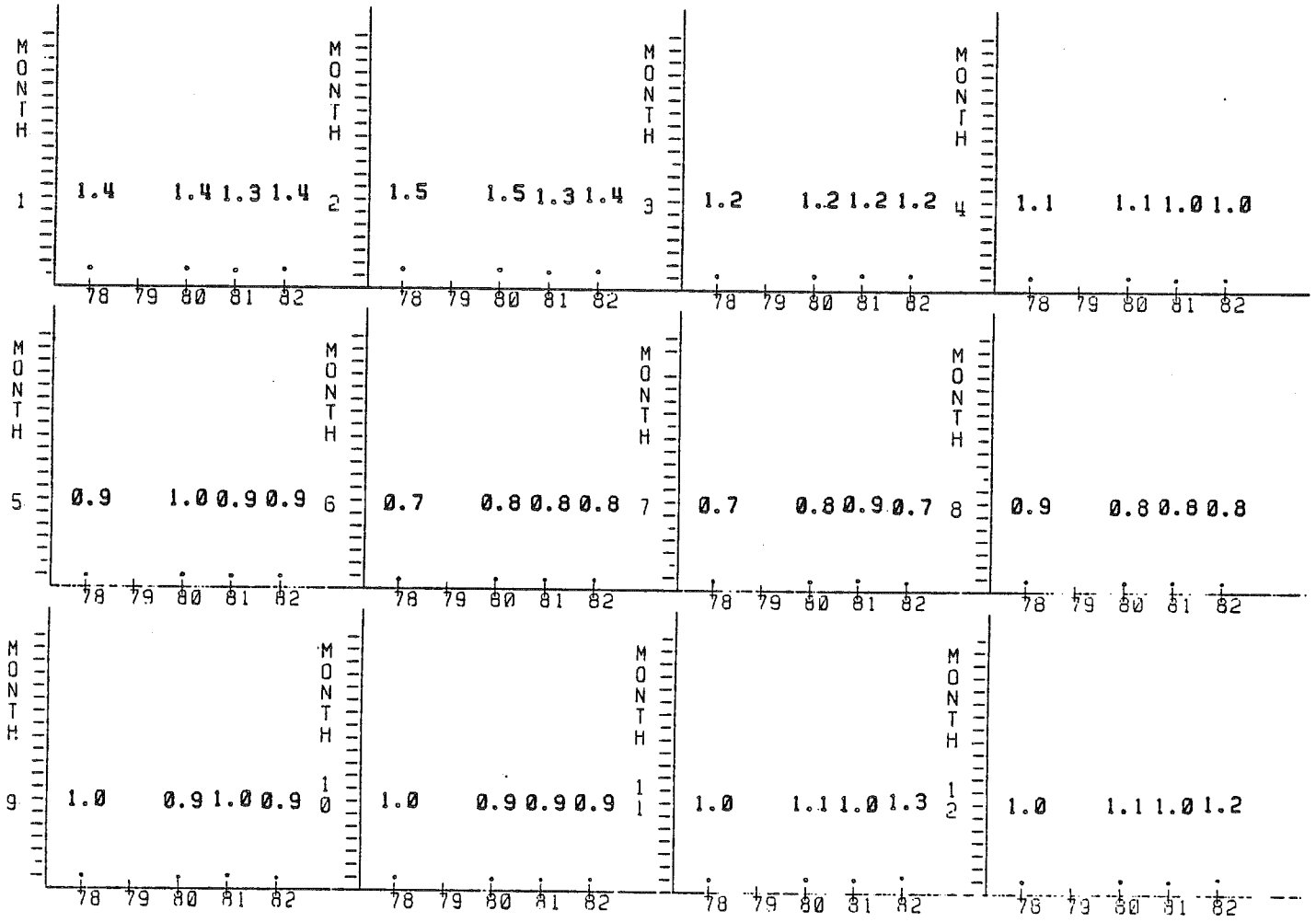
SEASONAL FACTORS VS. YEARS



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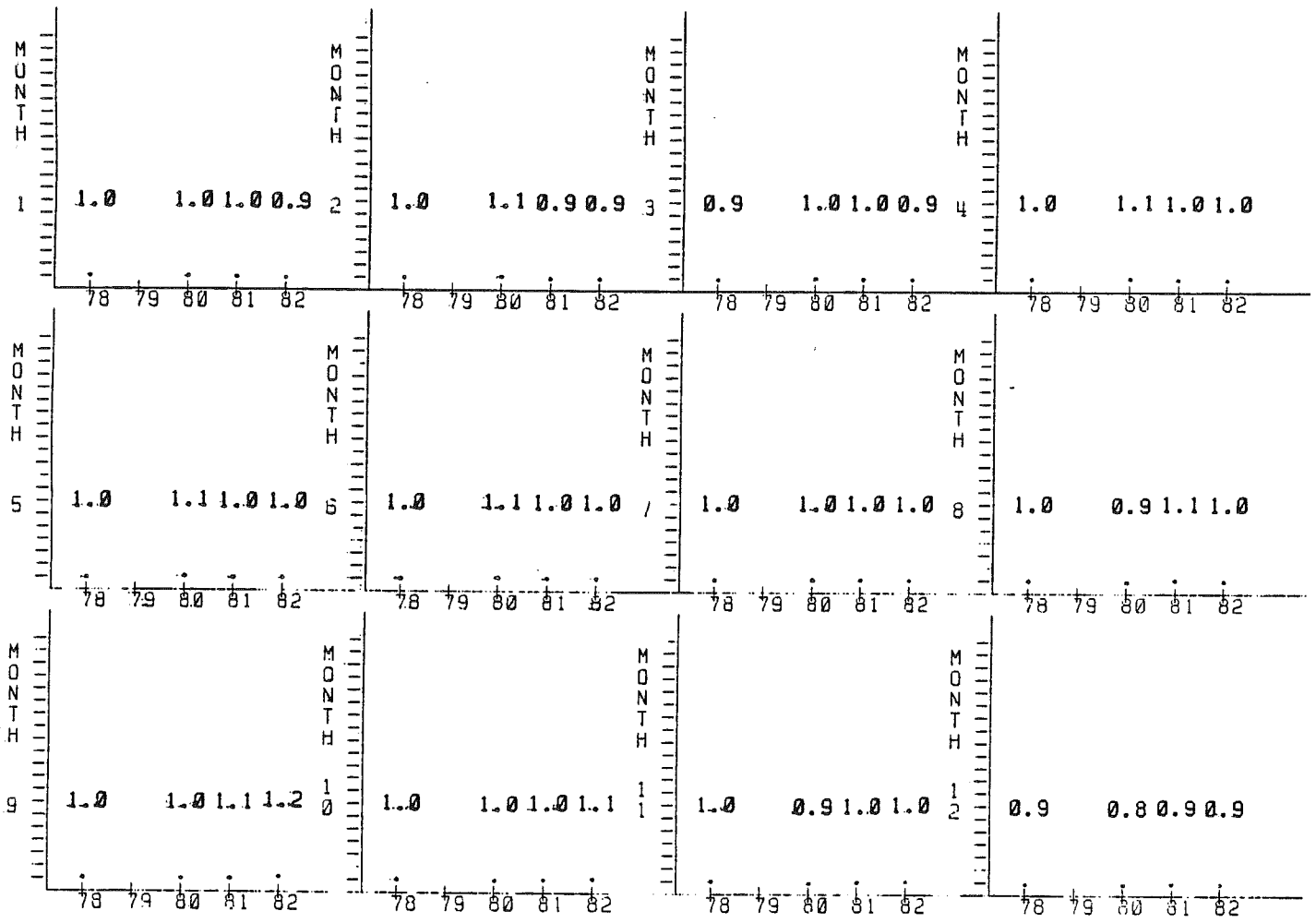
SEASONAL FACTORS VS. YEARS



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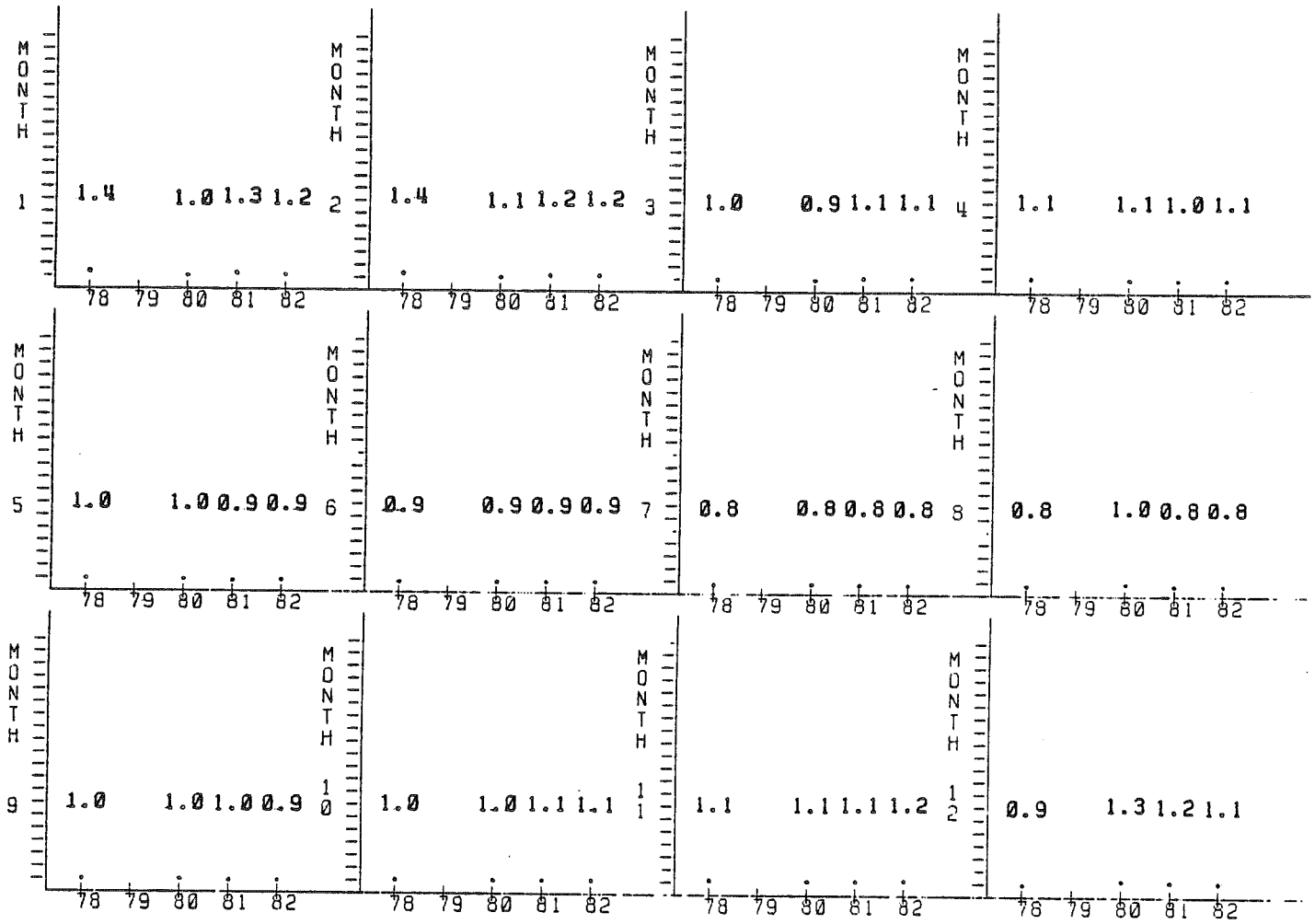

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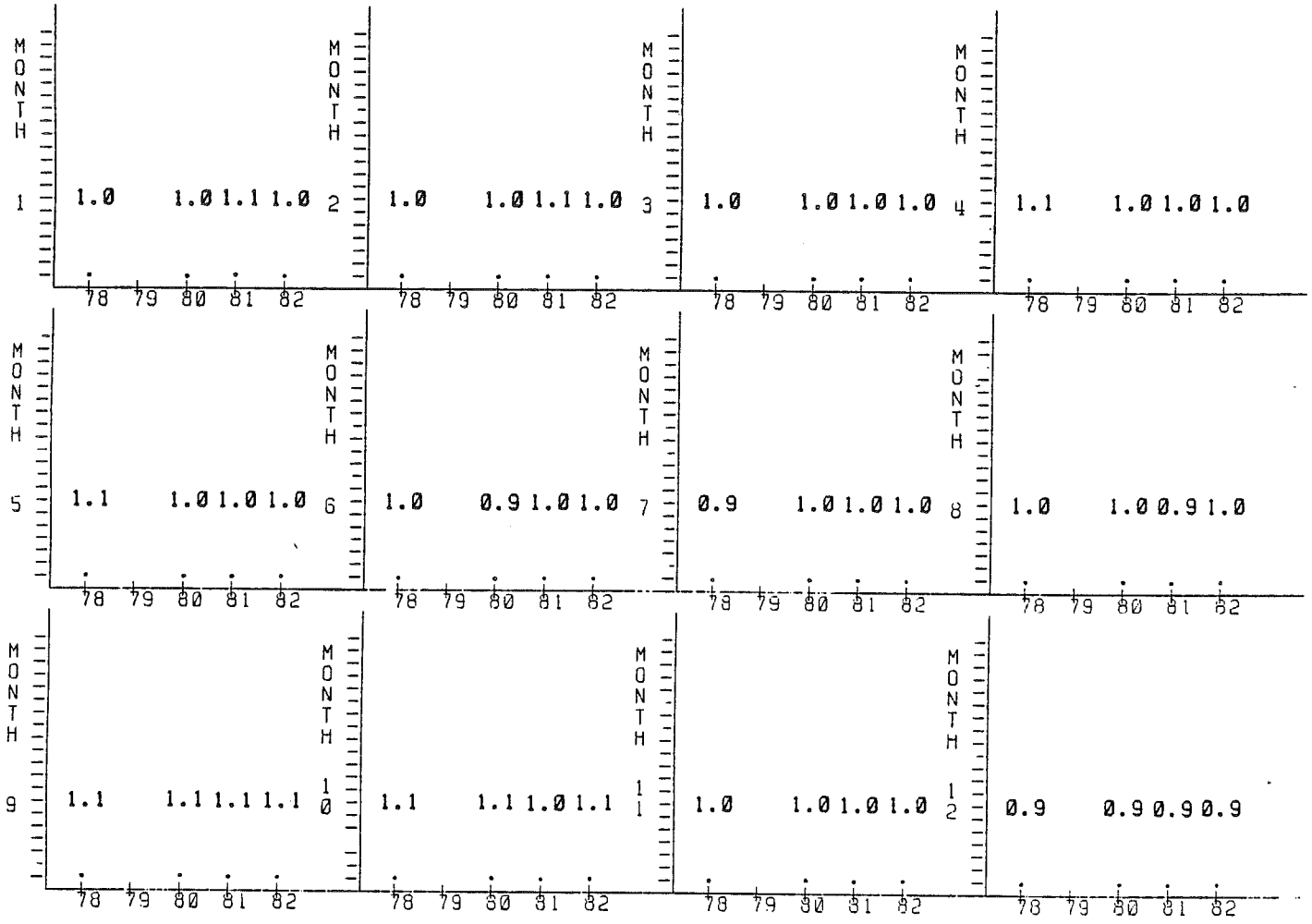
SEASONAL FACTORS VS. YEARS



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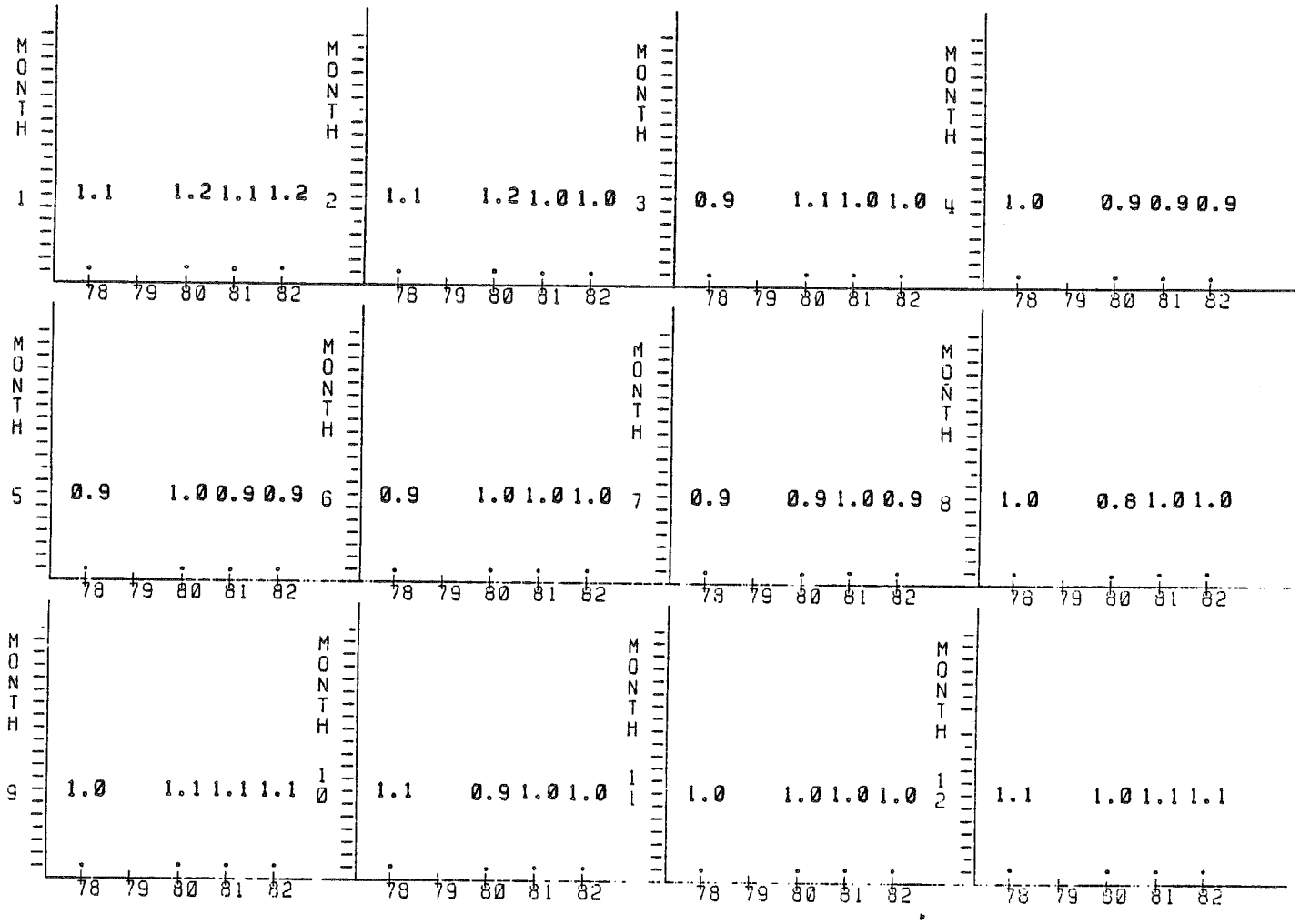
SEASONAL FACTORS VS. YEARS



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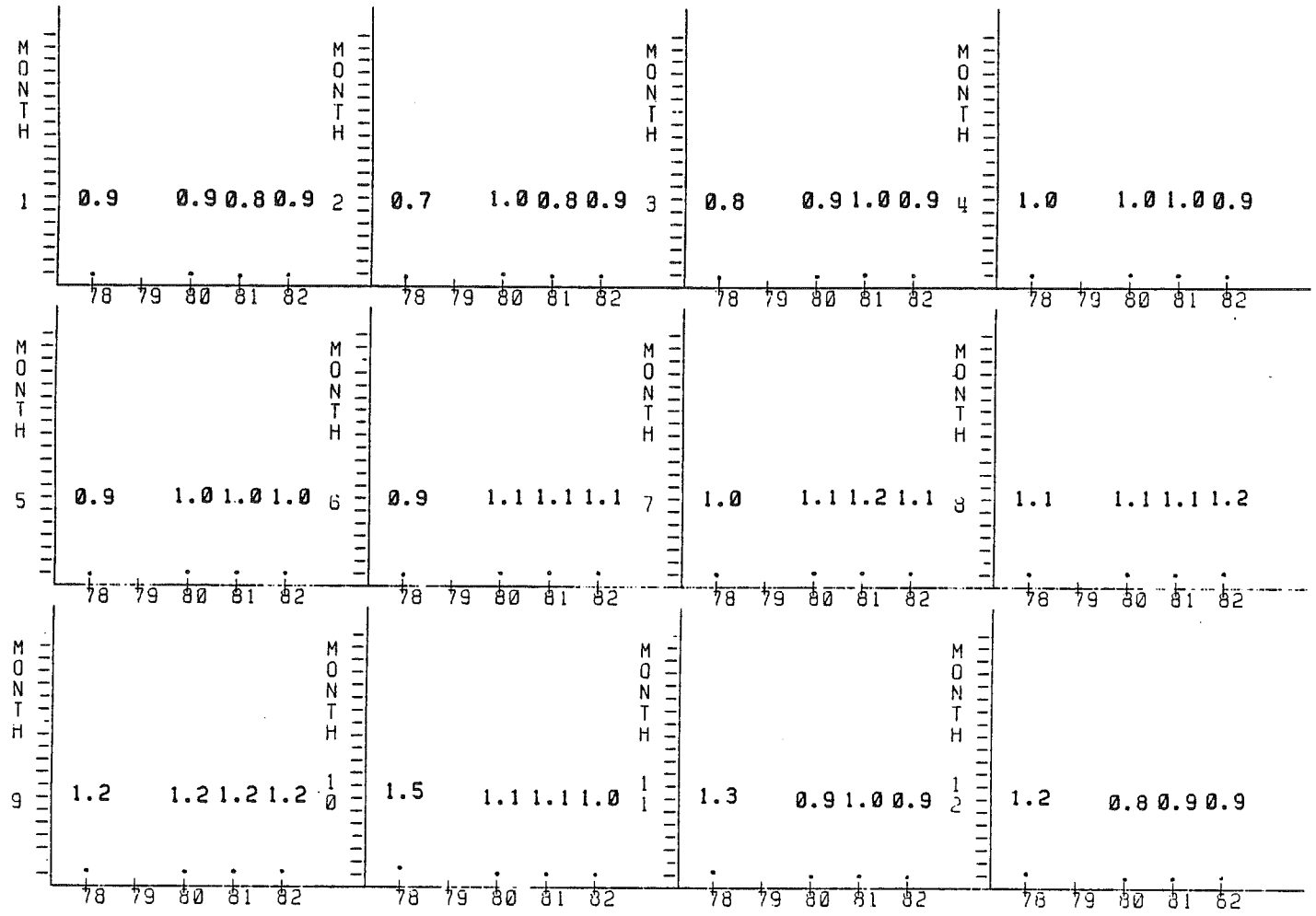
SEASONAL FACTORS VS. YEARS



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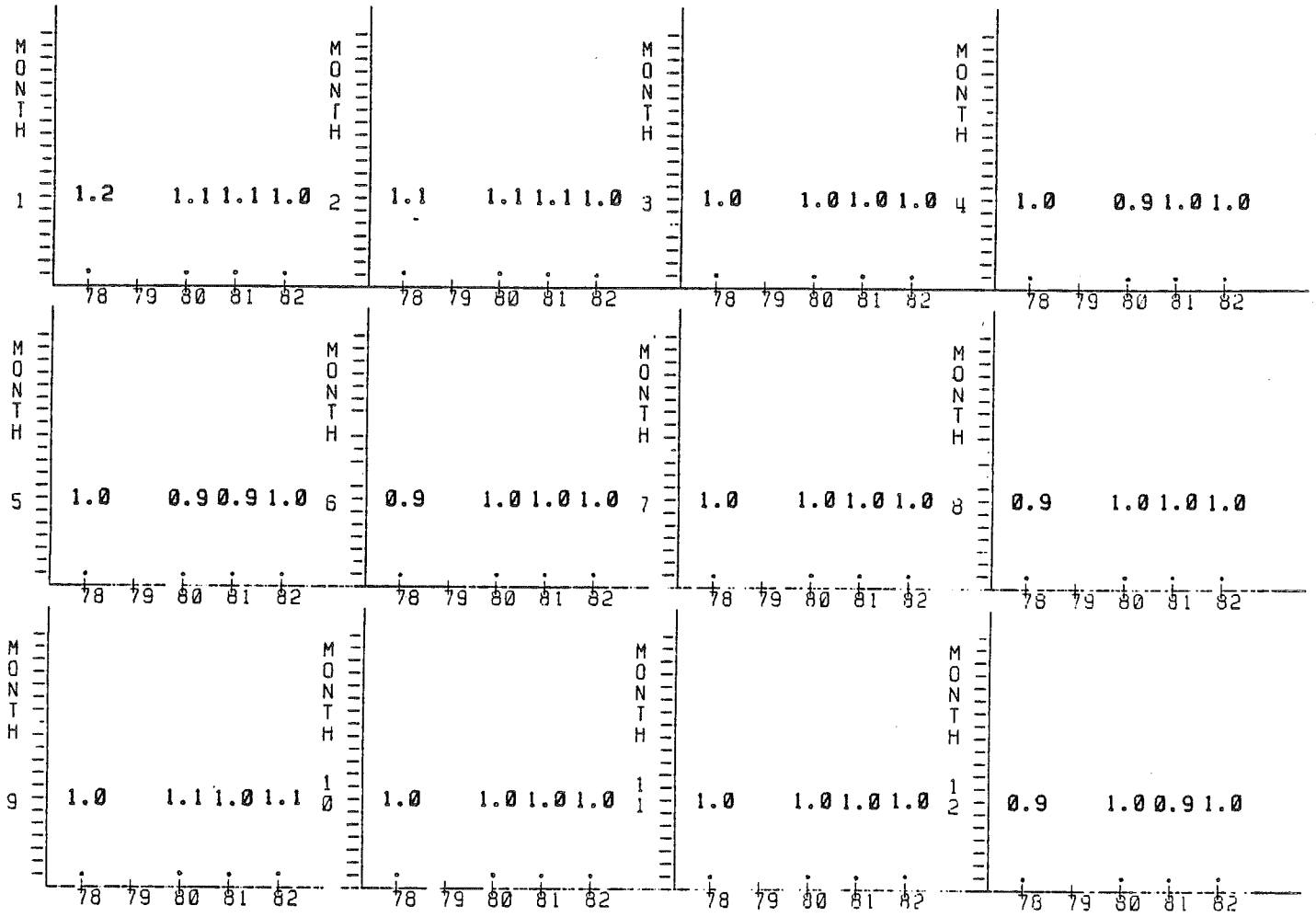
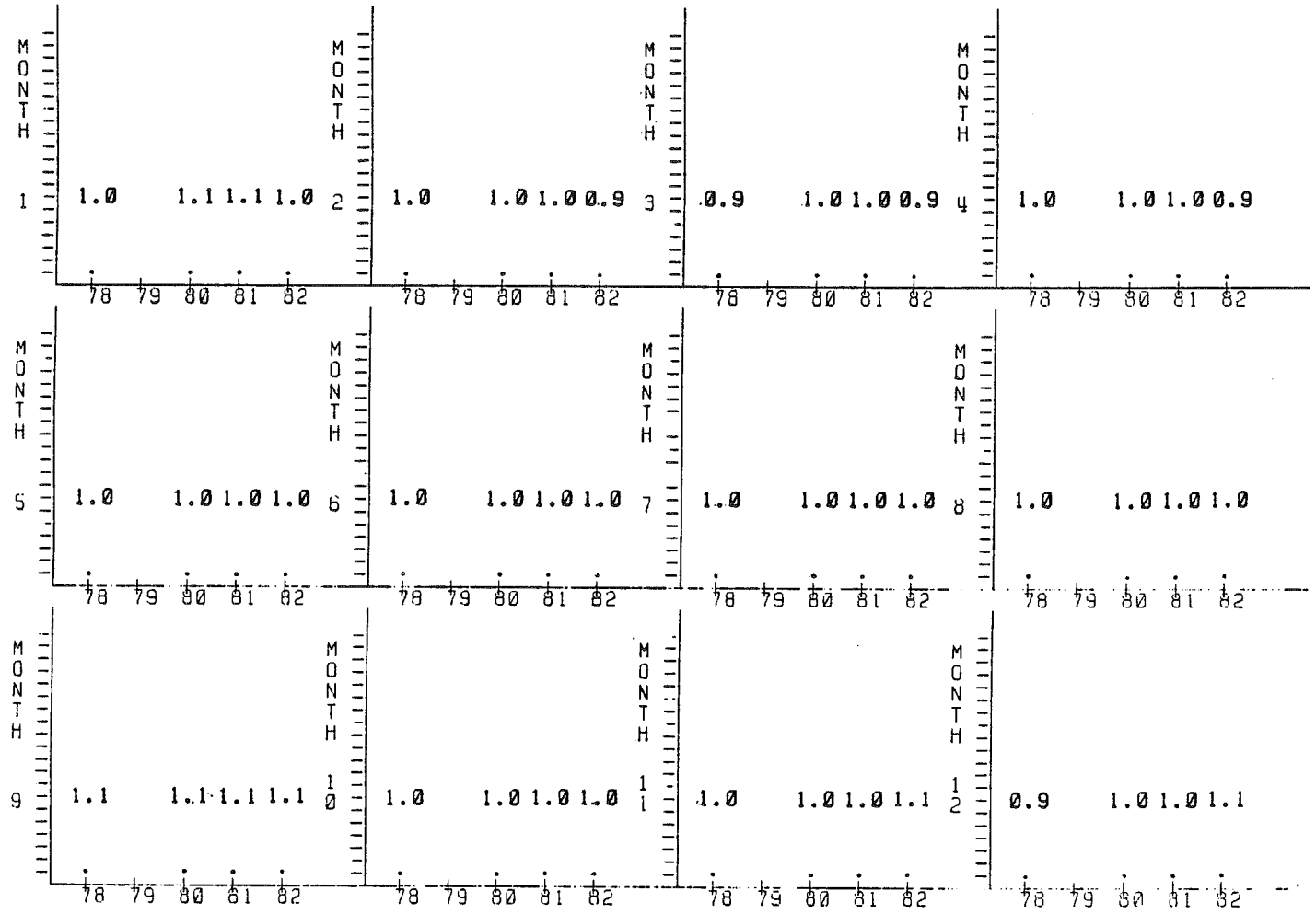
SEASONAL FACTORS VS. YEARS



COUNTING STATION NO. 11

SEASONAL FACTORS VS. YEARS



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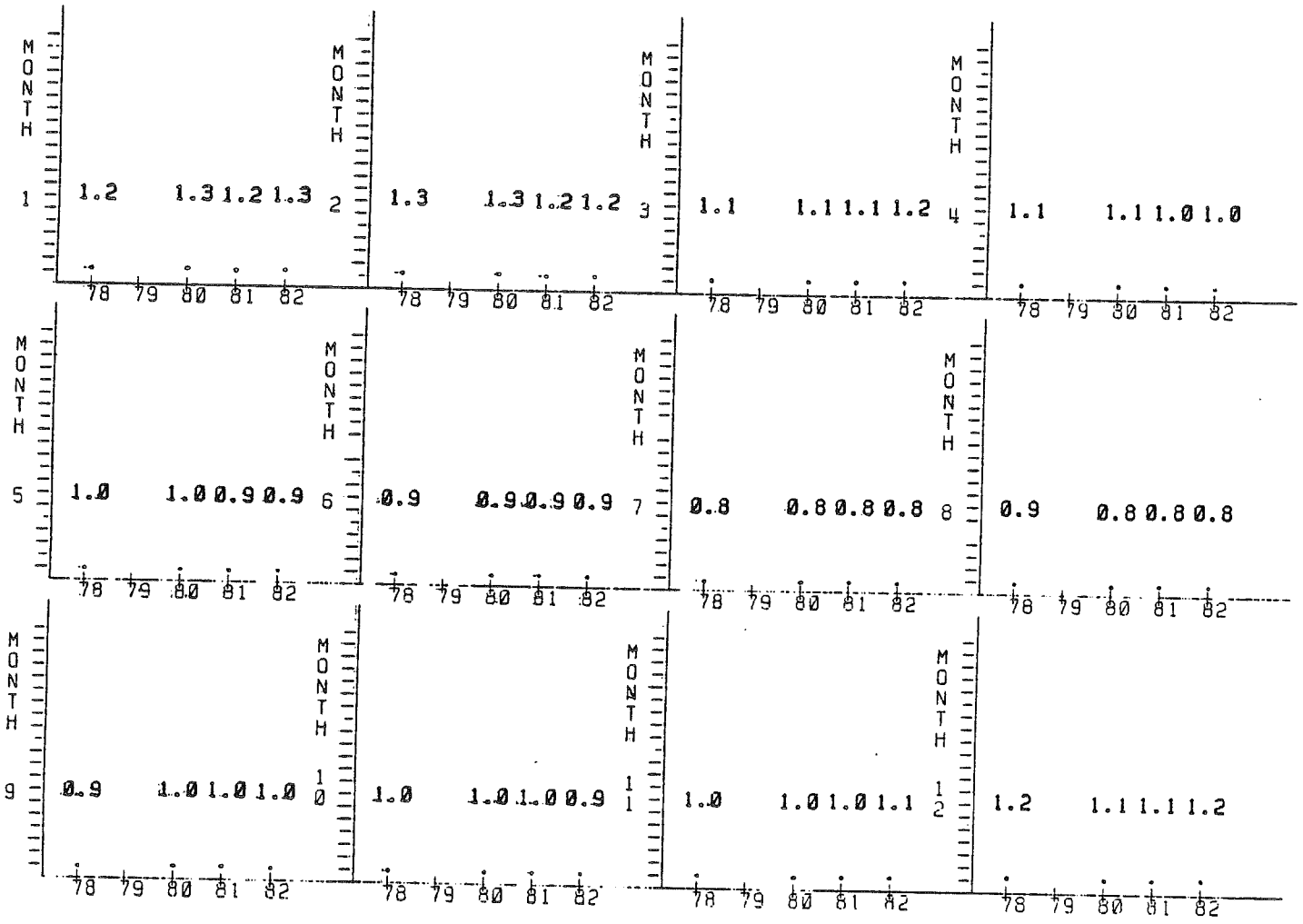

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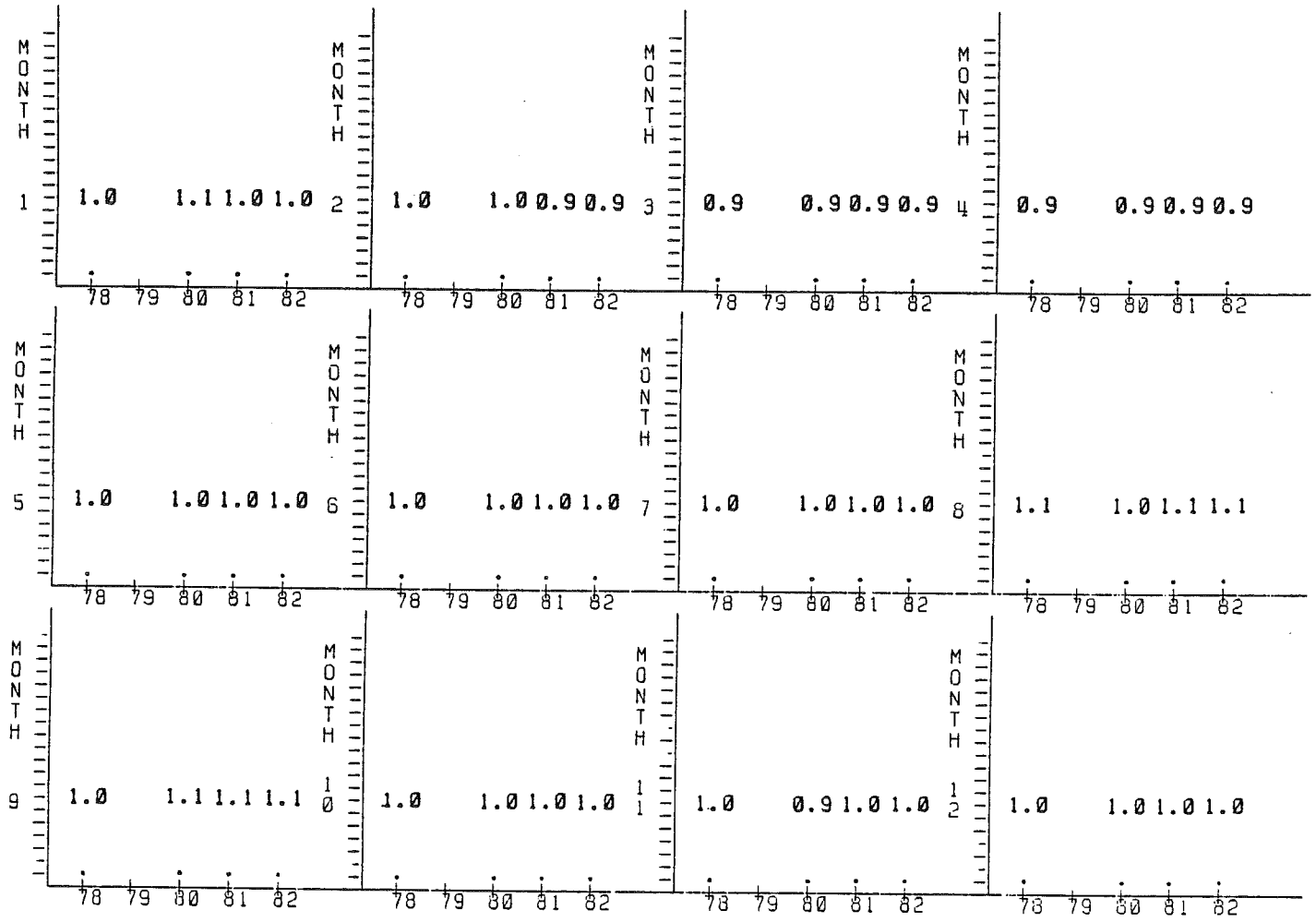
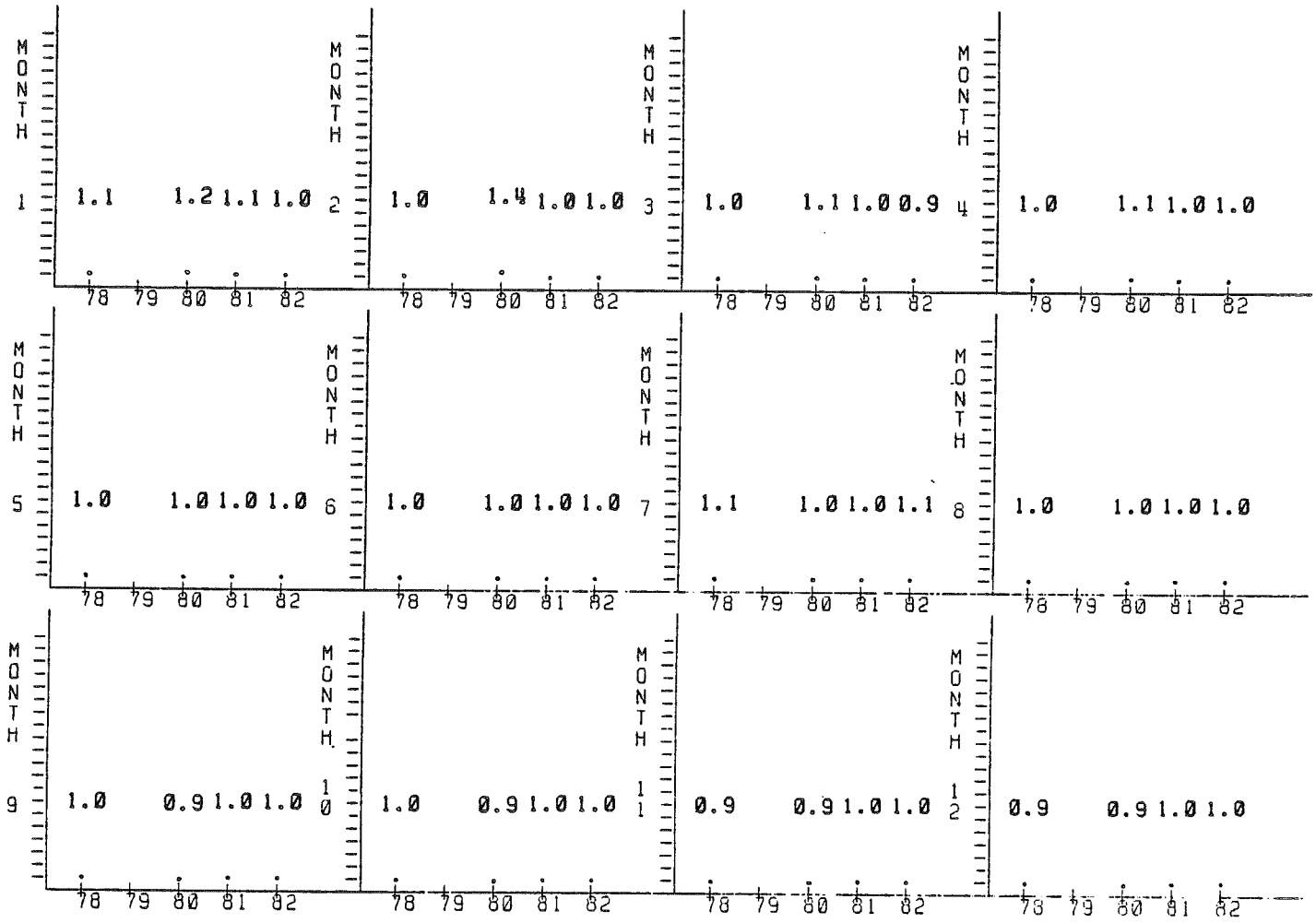
SEASONAL FACTORS VS. YEARS



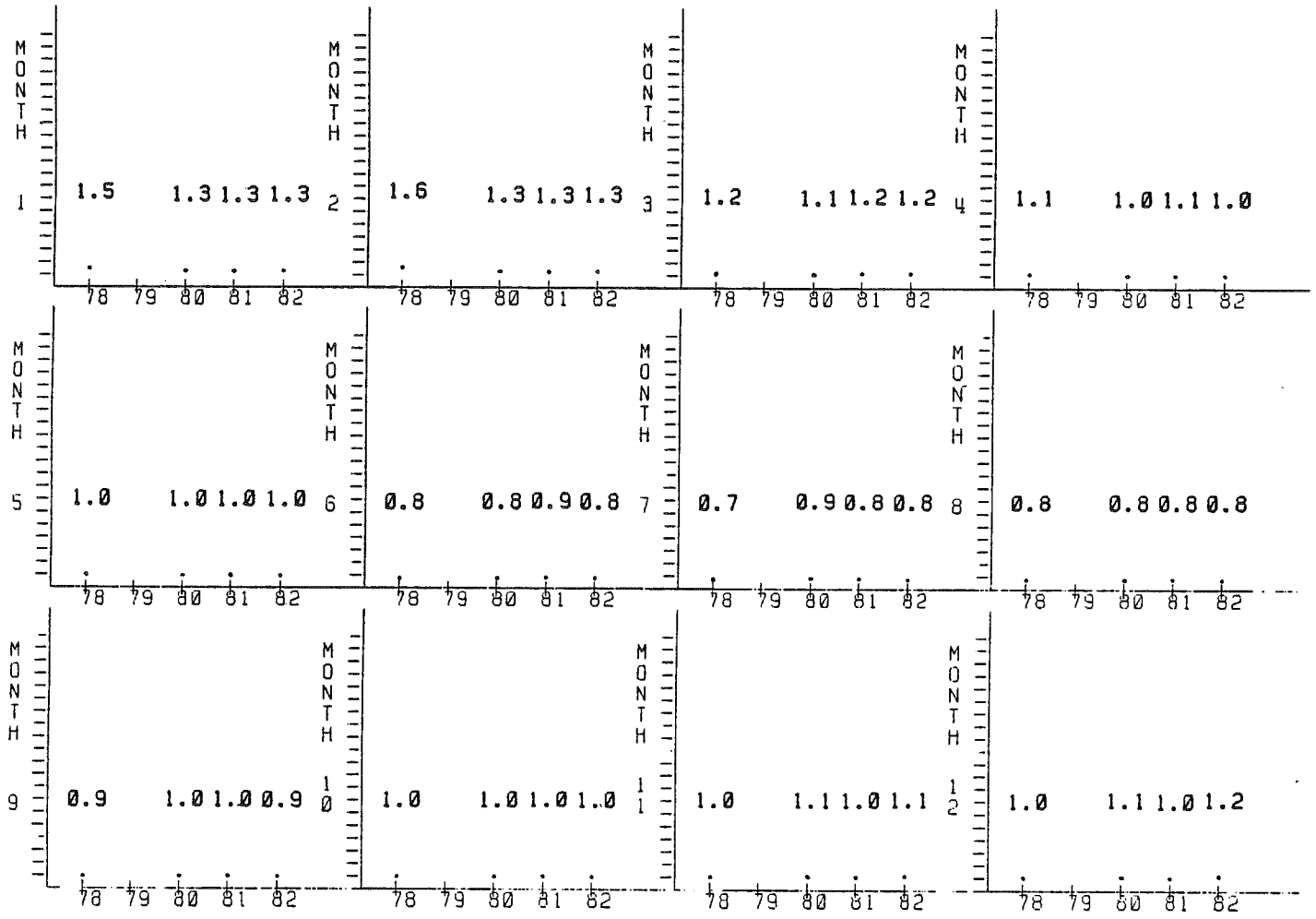
COUNTING STATION NO. 14

SEASONAL FACTORS VS. YEARS



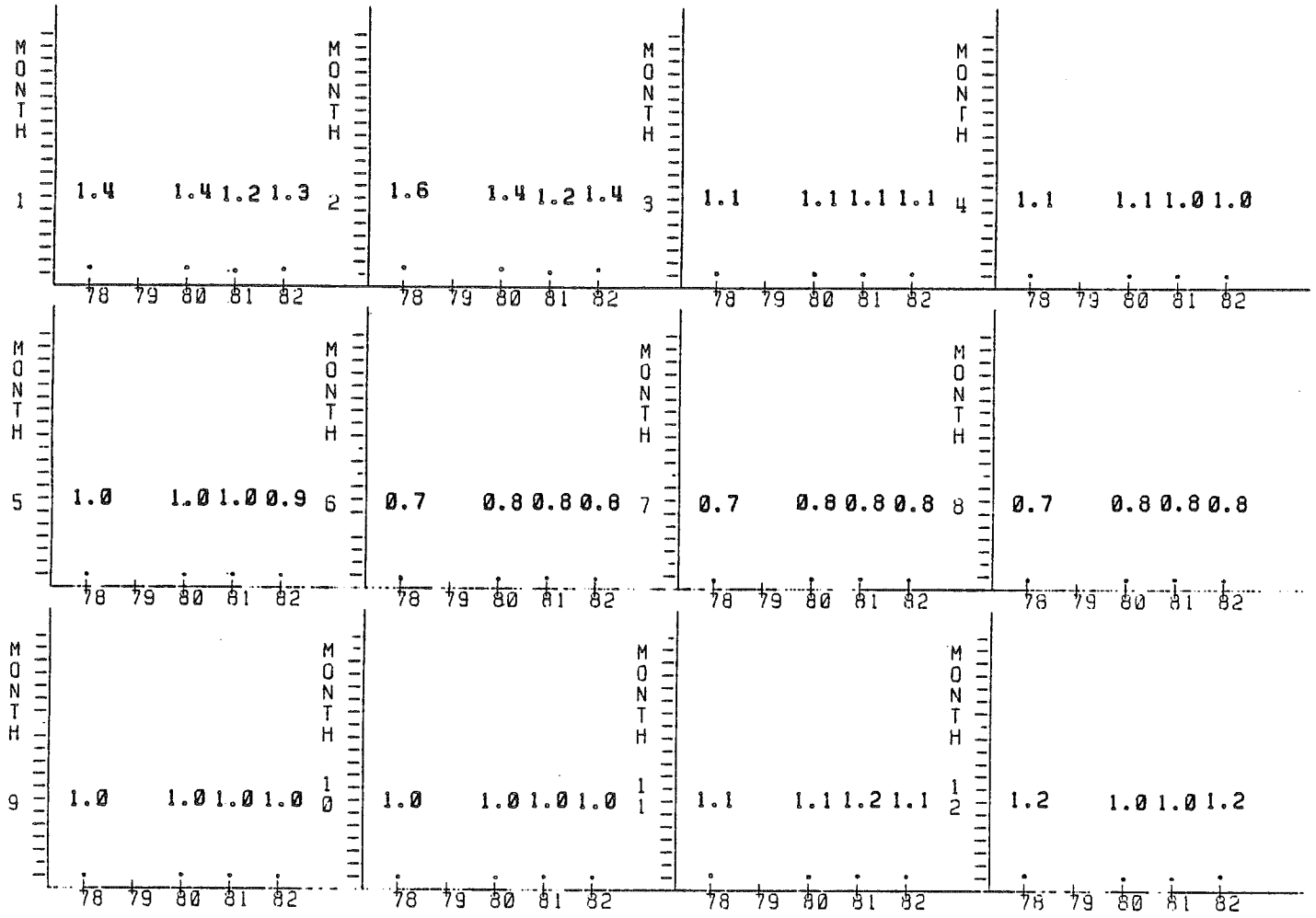
COUNTING STATION NO. 15

SEASONAL FACTORS VS. YEARS



COUNTING STATION NO. 16

SEASONAL FACTORS VS. YEARS



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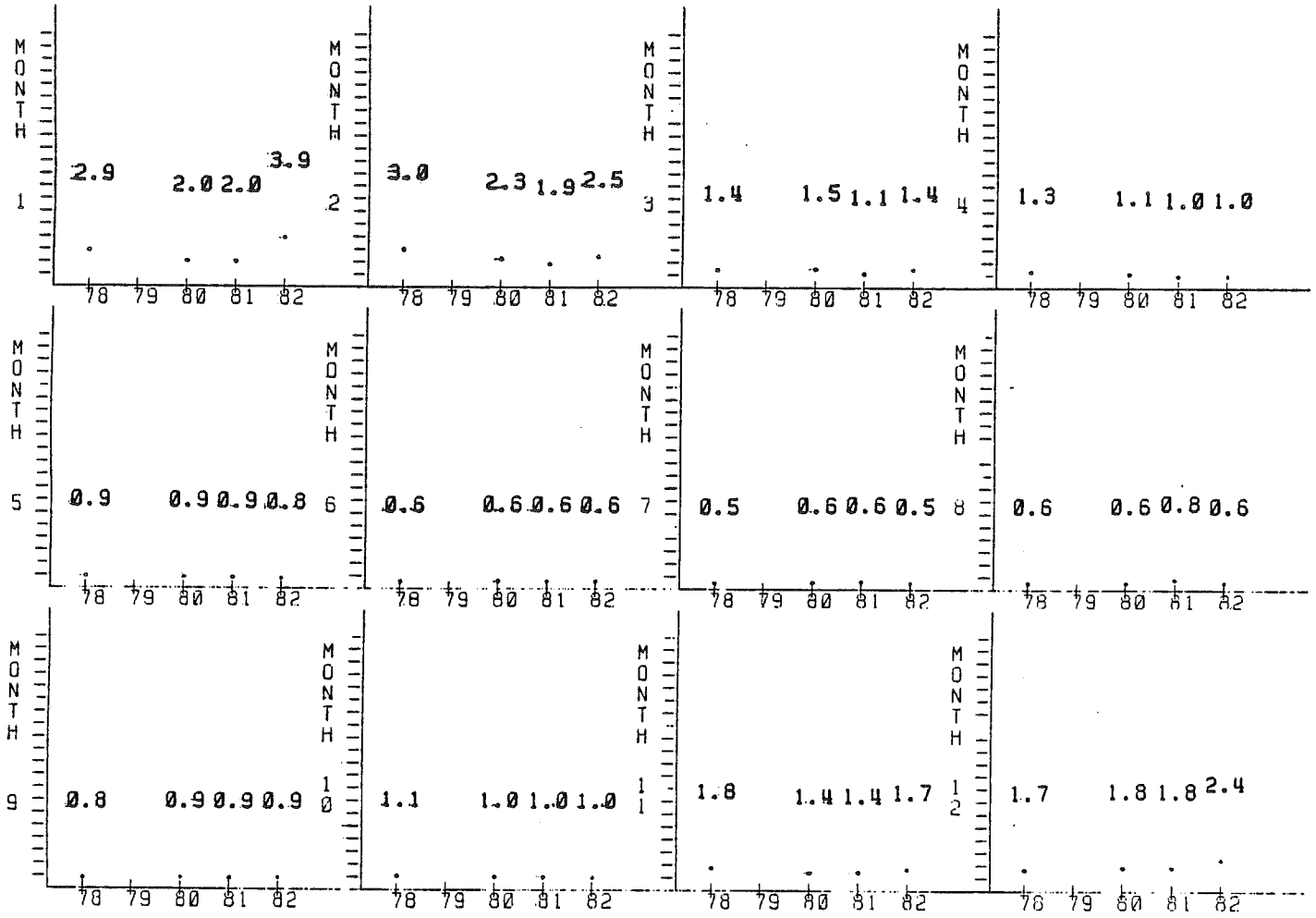
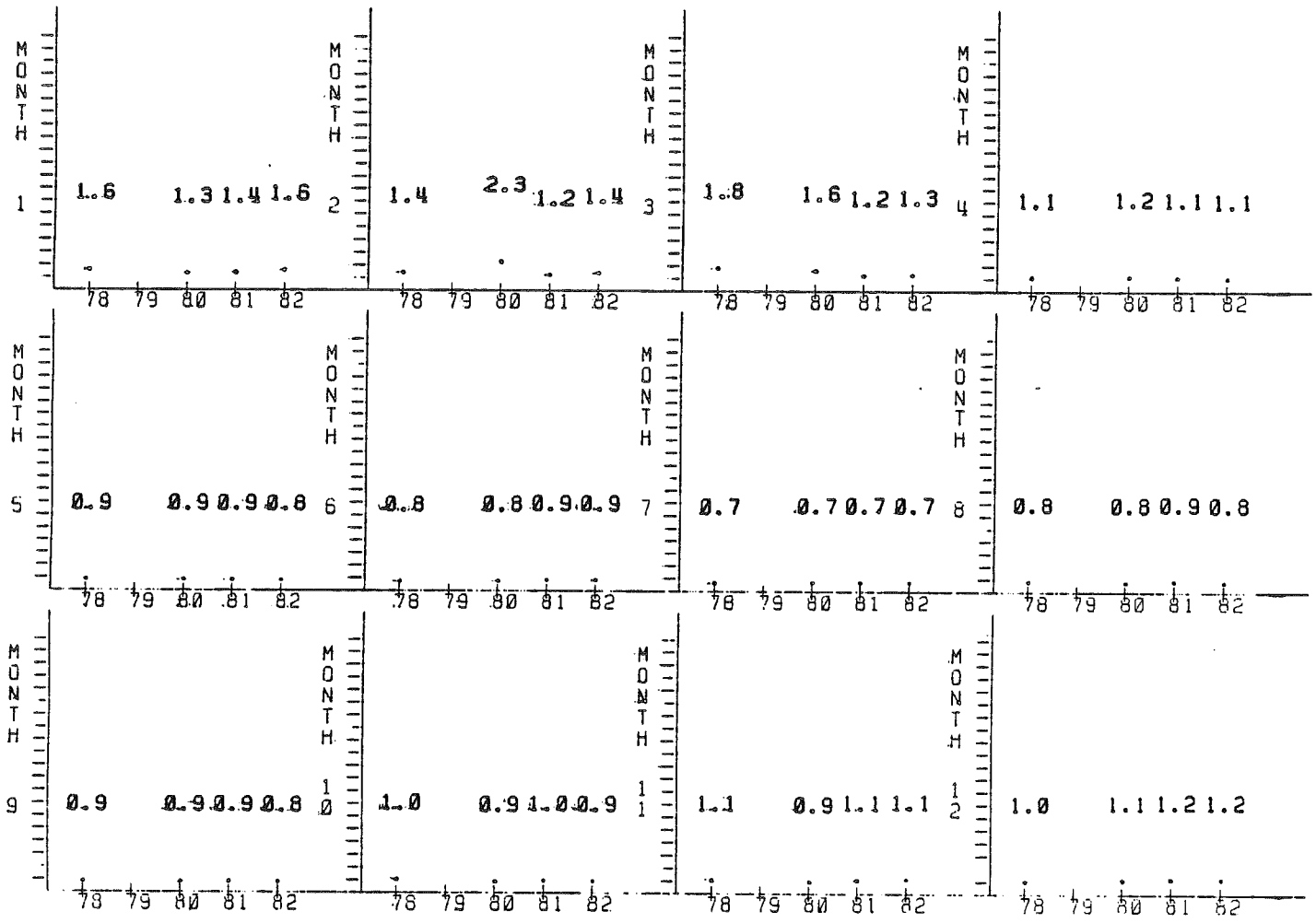


COUNTING STATION NO. 18

SEASONAL FACTORS VS. YEARS



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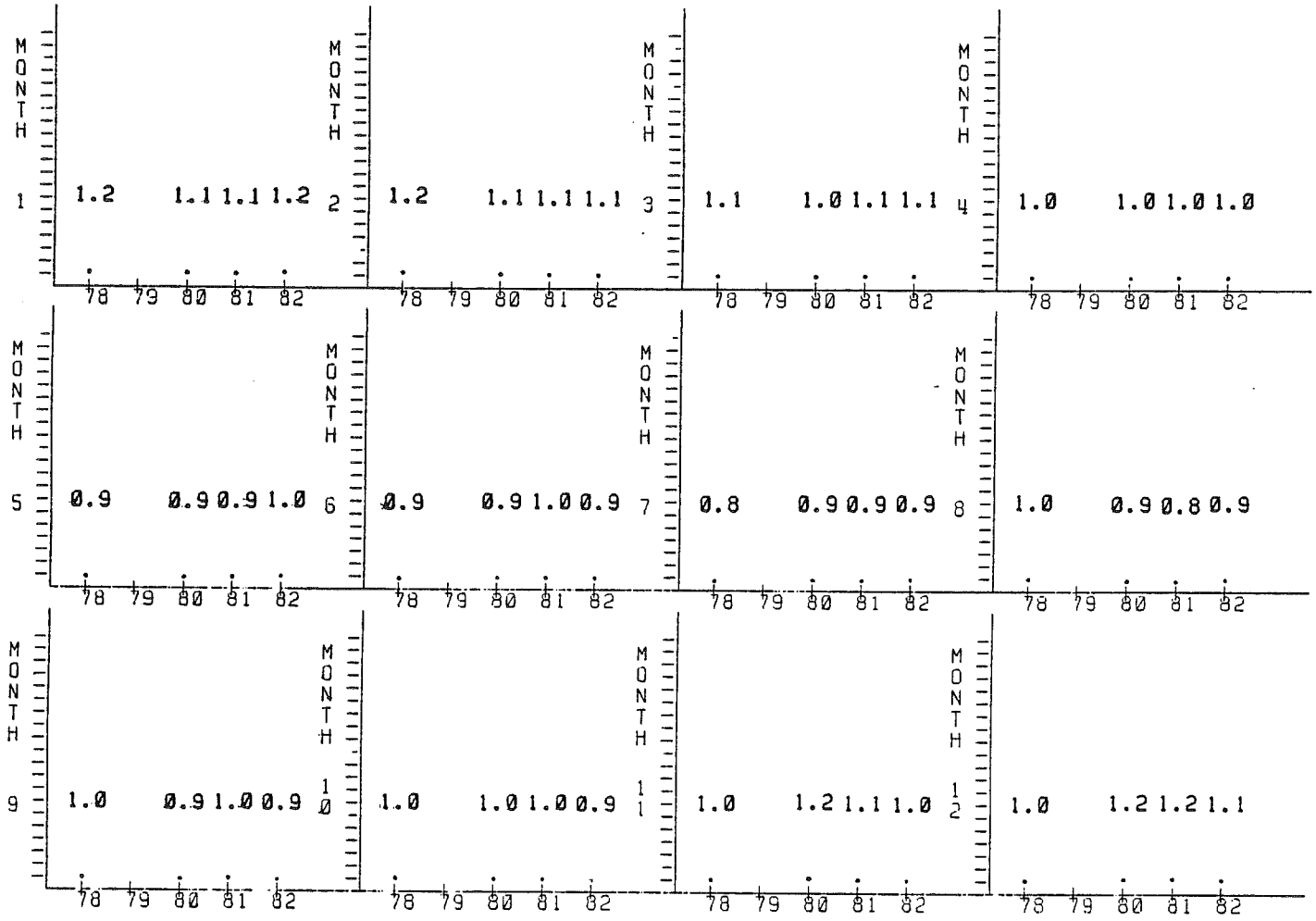
SEASONAL FACTORS VS. YEARS



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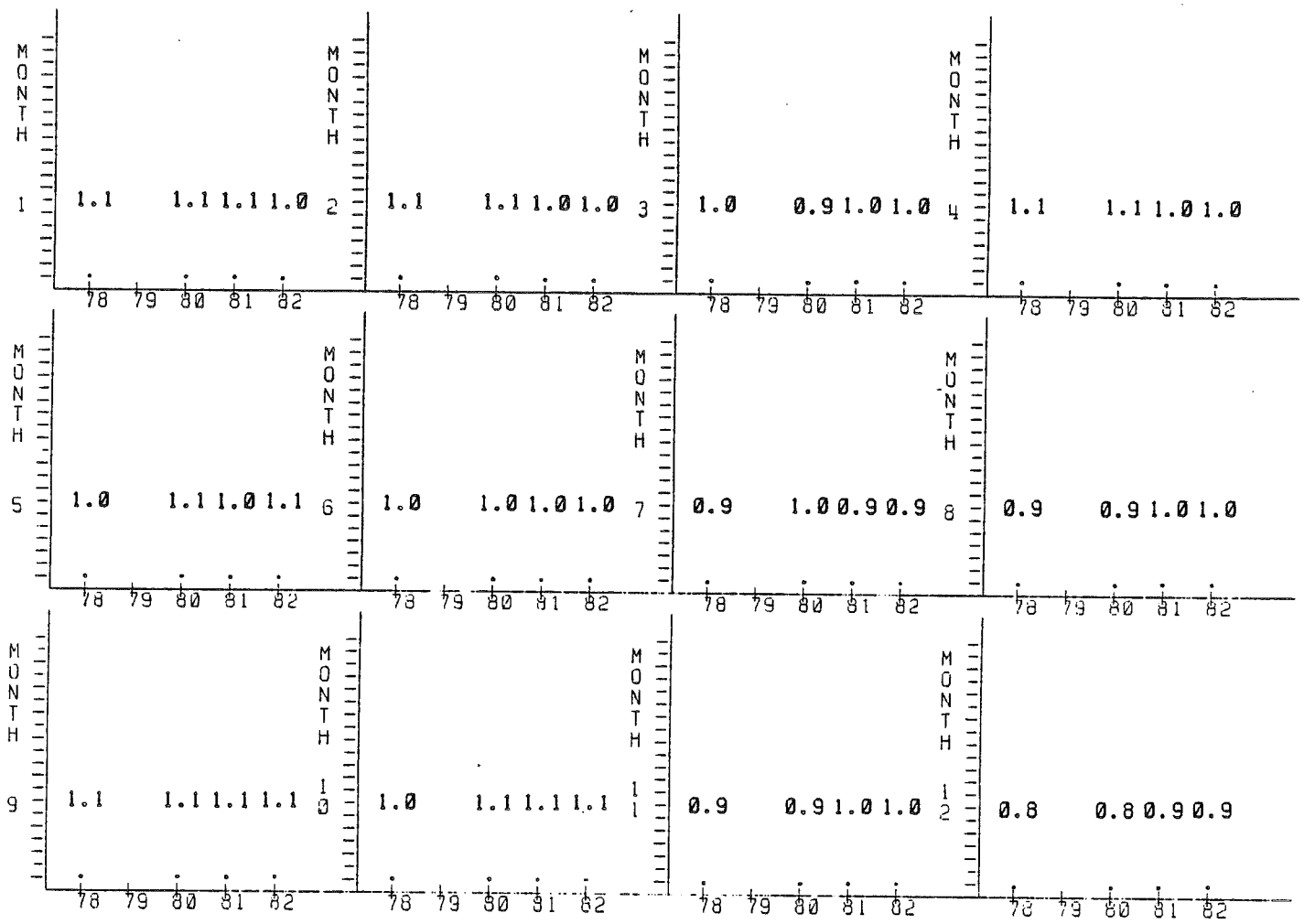
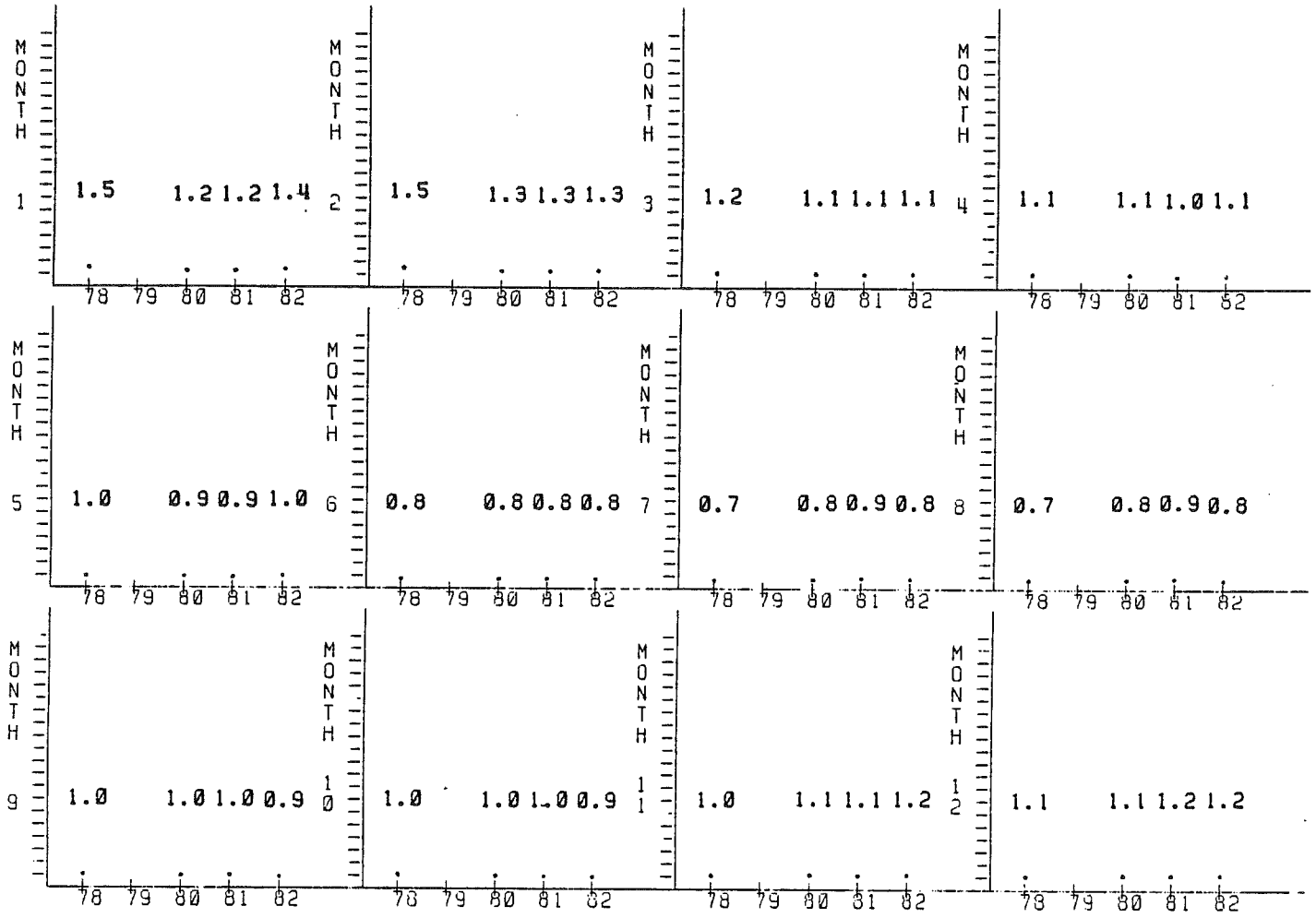
SEASONAL FACTORS VS. YEARS



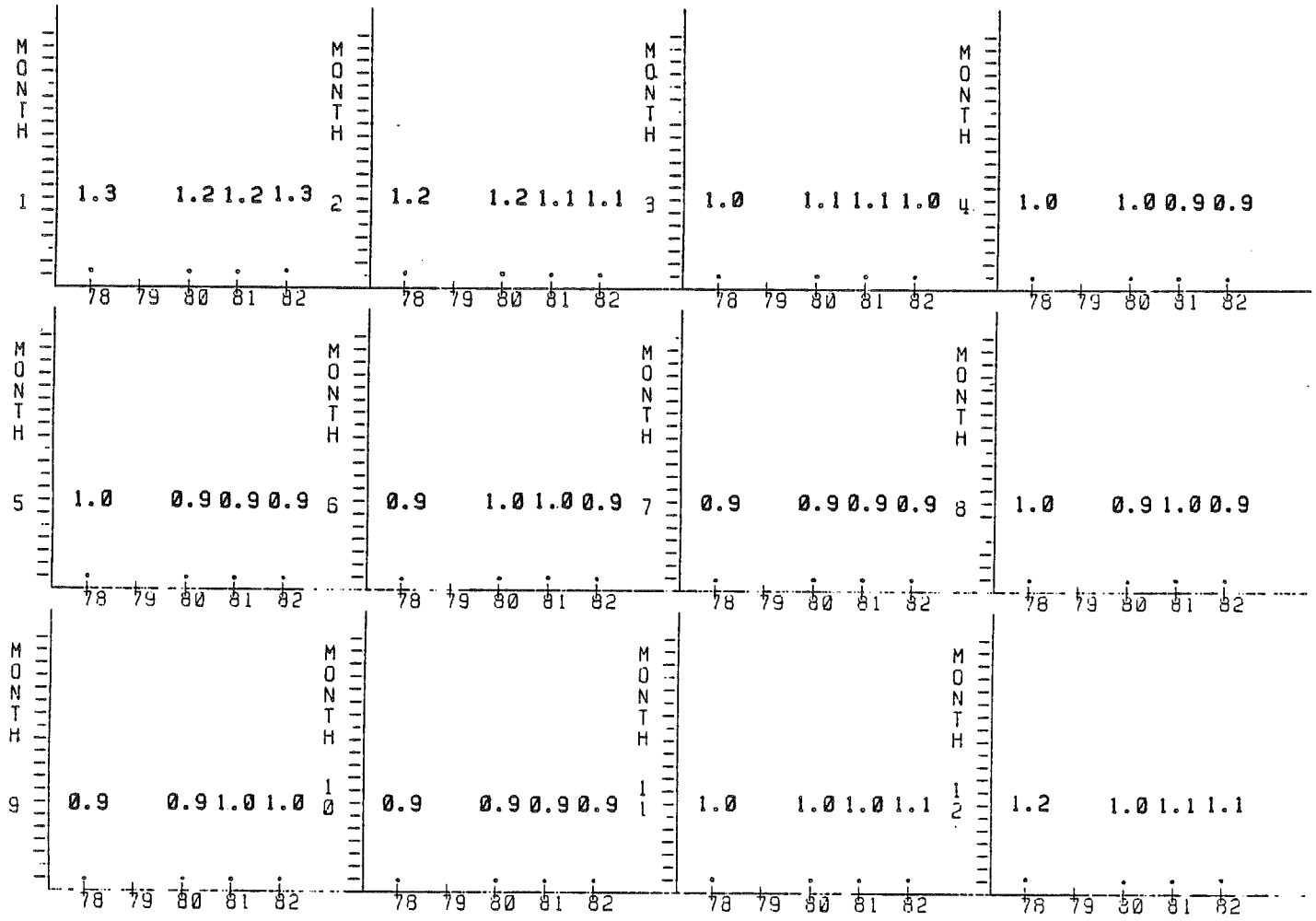
COUNTING STATION NO. 21

SEASONAL FACTORS VS. YEARS



COUNTING STATION NO. 22

SEASONAL FACTORS VS. YEARS



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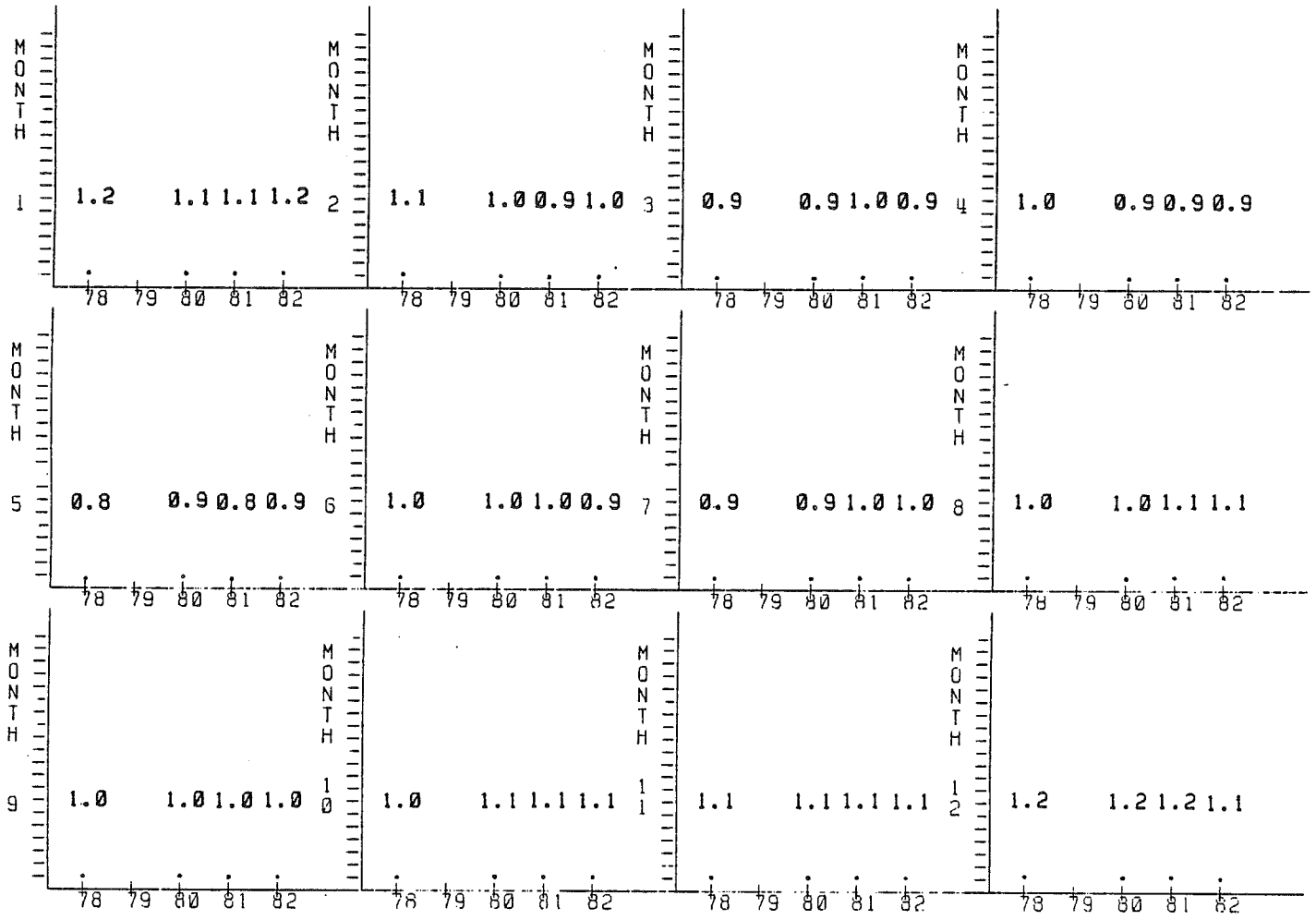
SEASONAL FACTORS VS. YEARS



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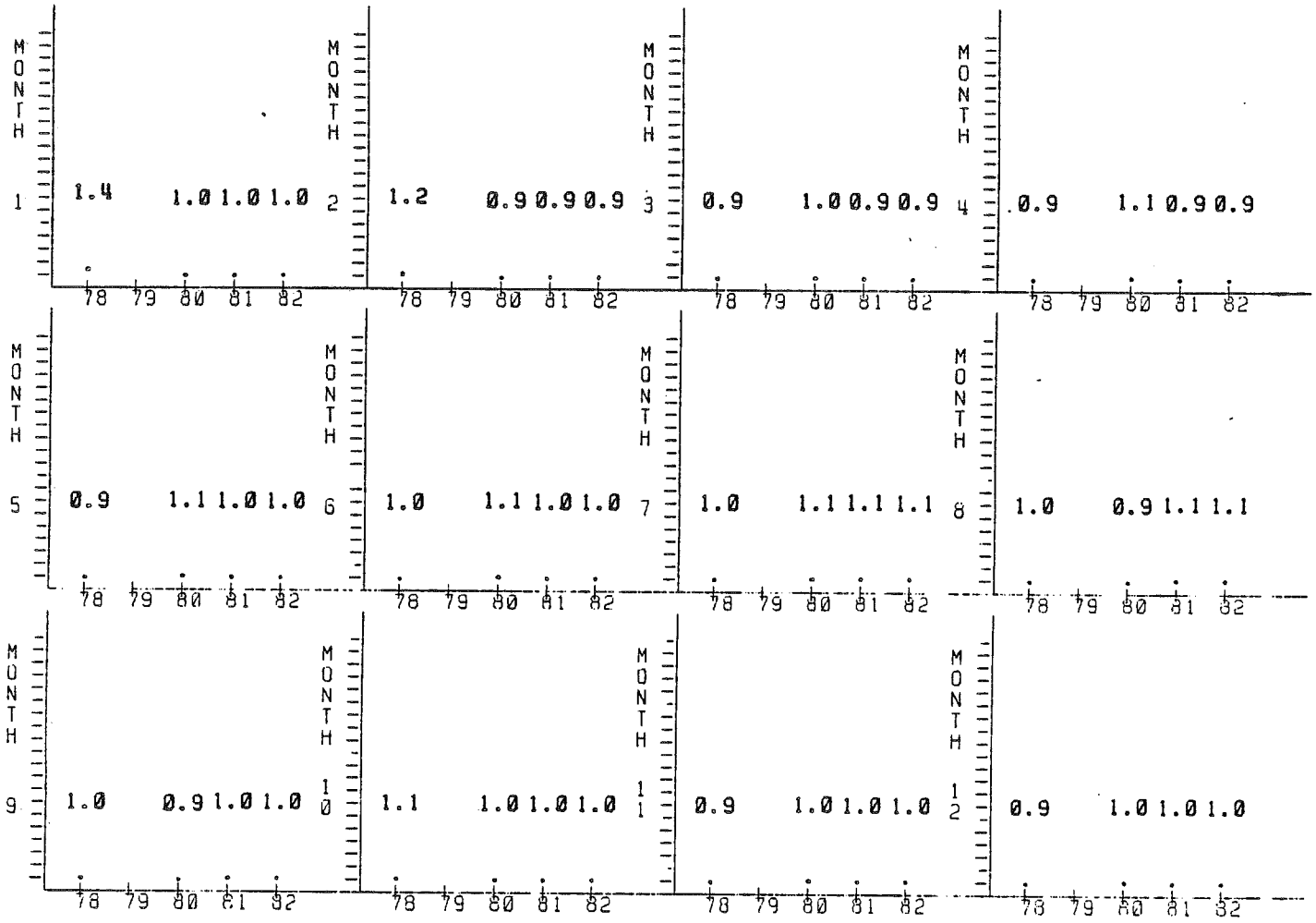
SEASONAL FACTORS VS. YEARS