

ANEXE

BIBLIOTECA CENTRALA
UNIVERSITATEA "POLITEHNICA"
TIMISOARA

622.200/1
366 A

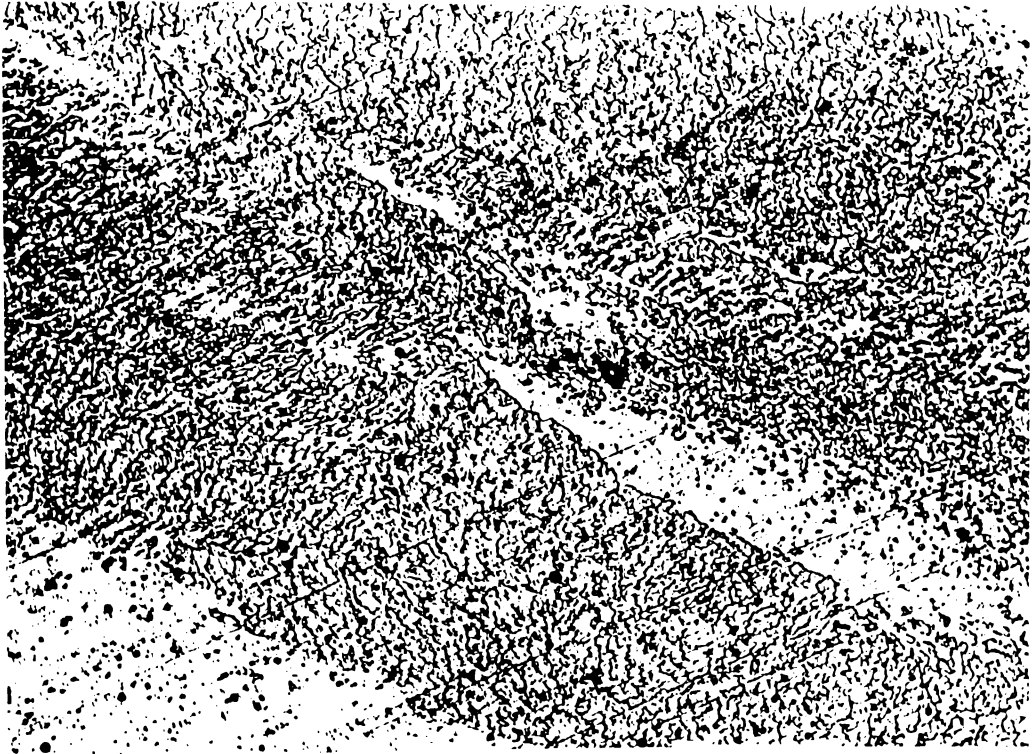
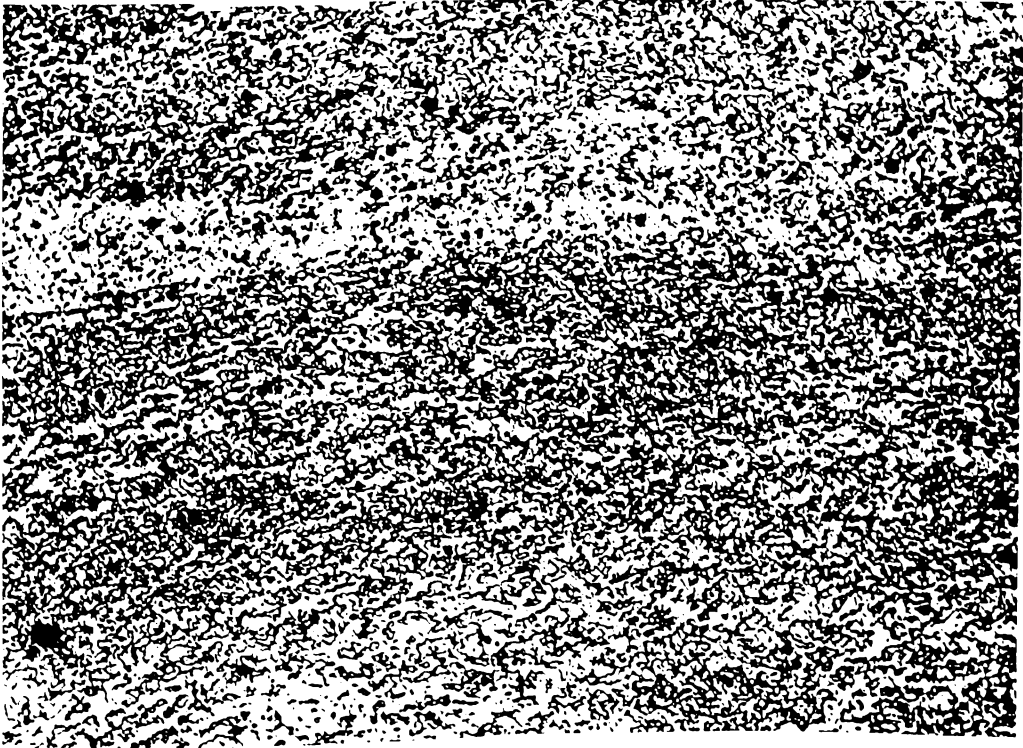


Foto 4.4 ↑
0-A-T-I-E

↓ Foto 4.5.
9-A-T-I-E



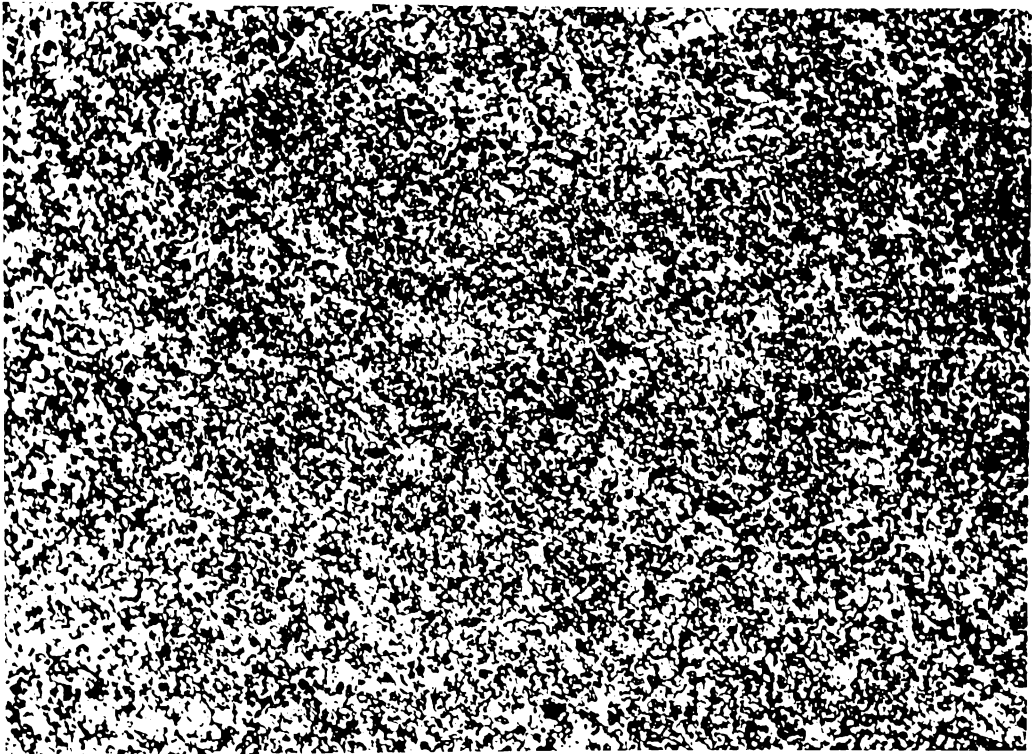


Foto 4.6. ↑
24-A-T-I-E

↓ Foto 4.7.
33-A-T-I-E

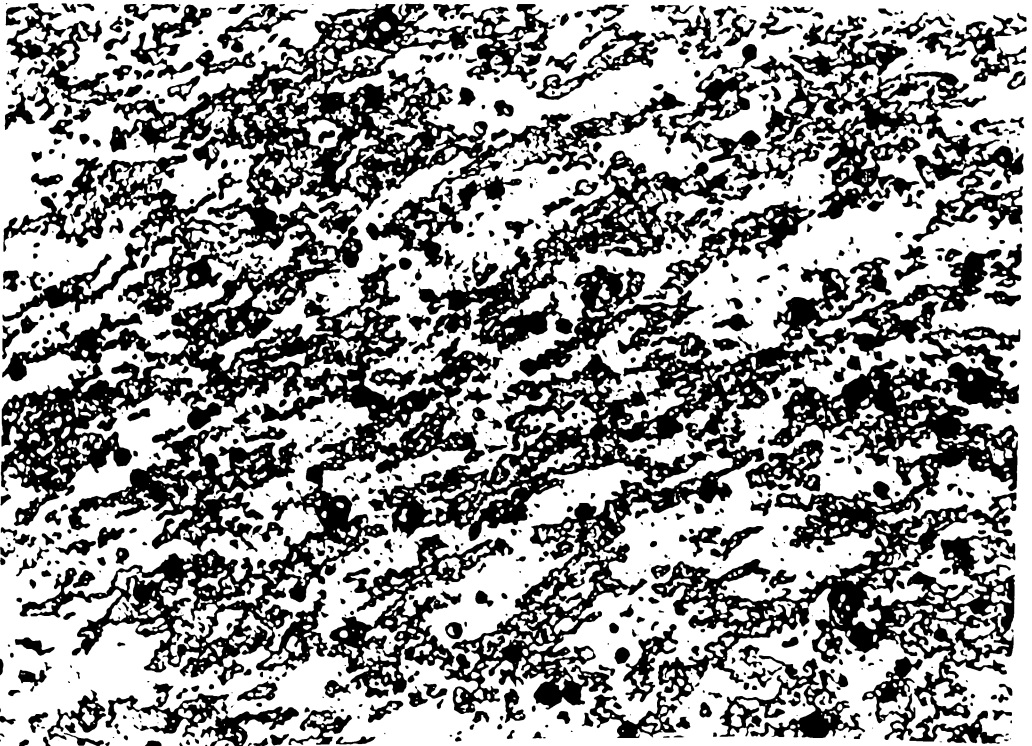
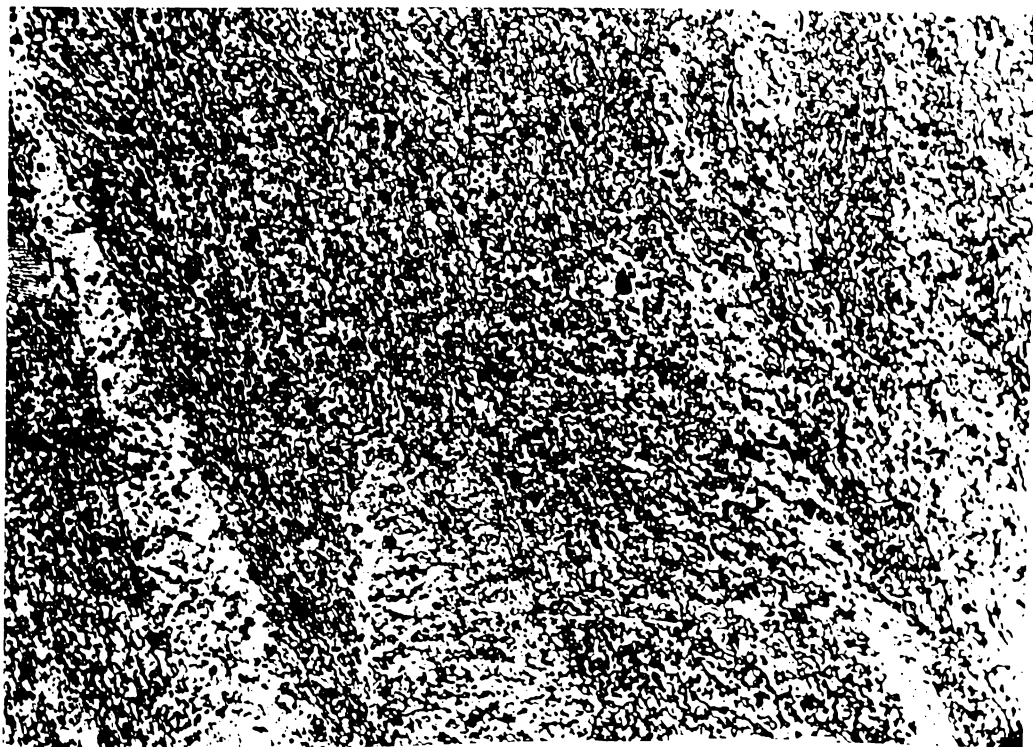




Foto 4.8. ↑
0-A-T-1-1

↓ Foto 4.9.
9-A-T-1-1



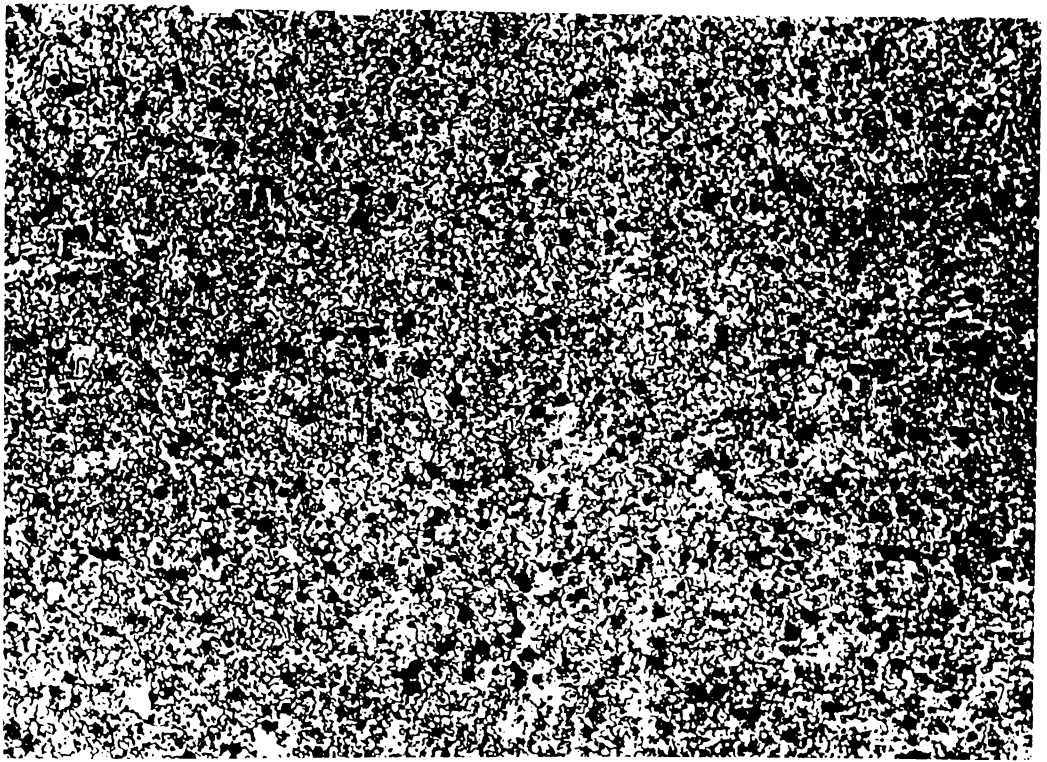
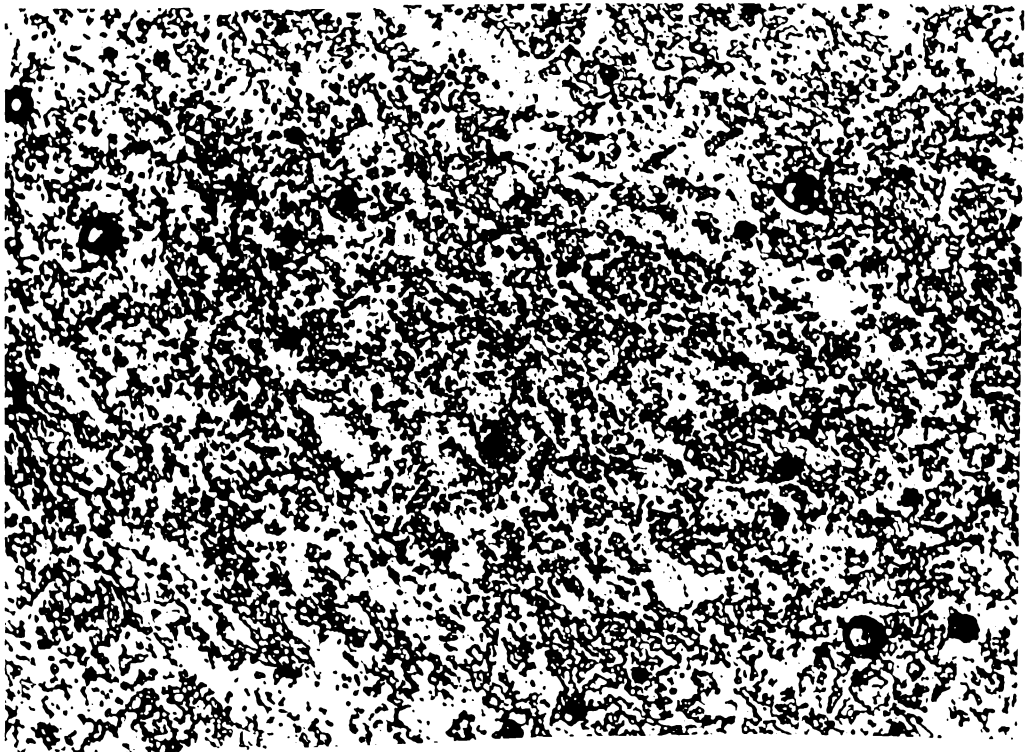


Foto 4.10. ↑
24-A-T-I-I

↓ Foto 4.11.
33-A-T-I-I



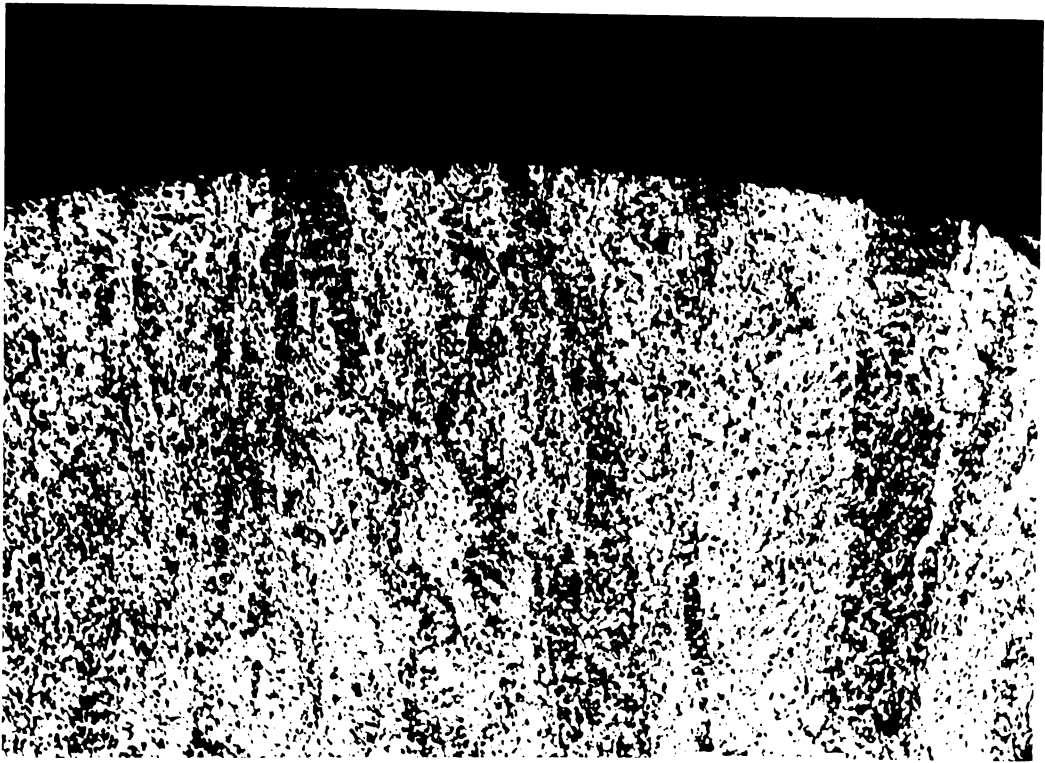
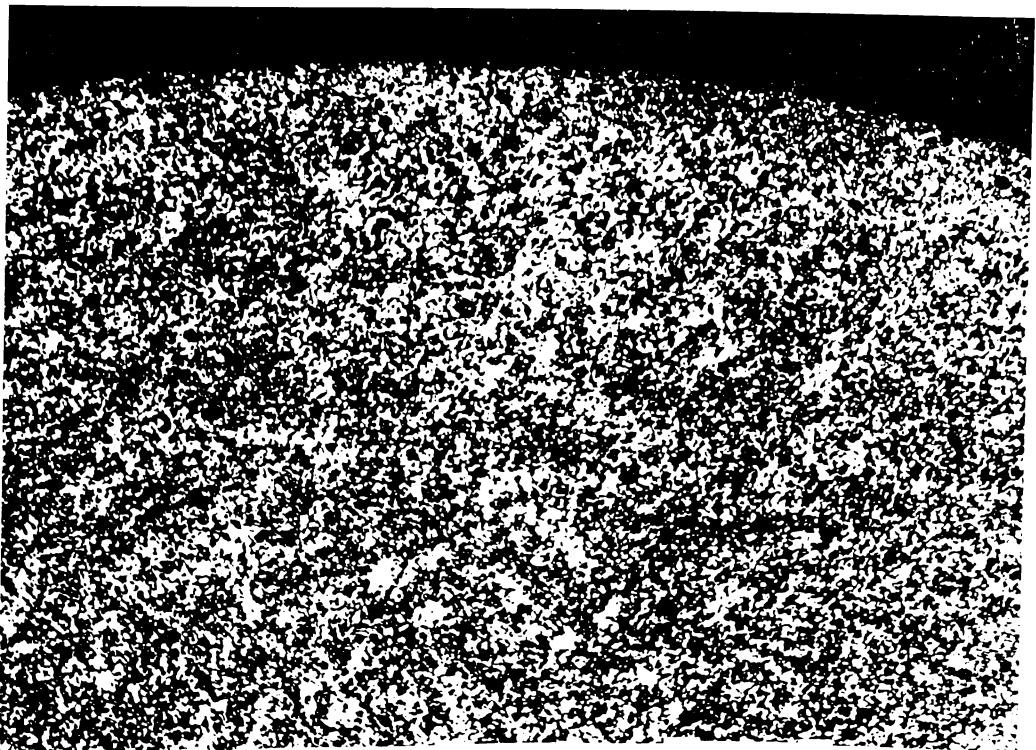


Foto 4.12. ↑
0-A-T-M-E

↓ Foto 4.13.
9-A-T-M-E



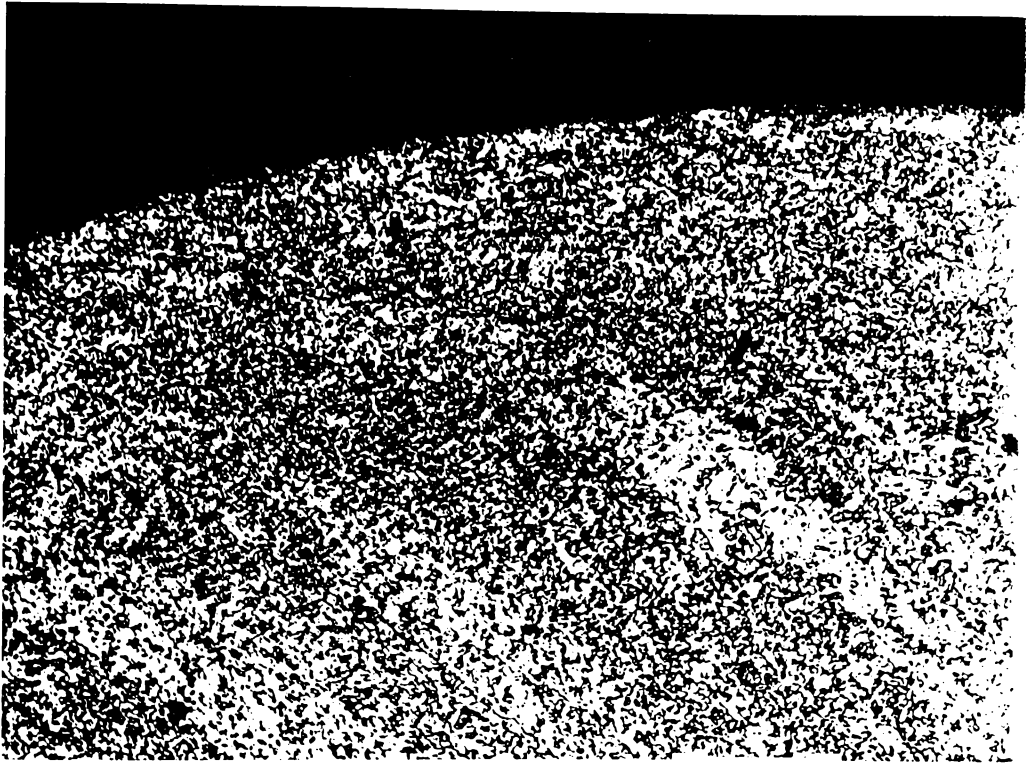
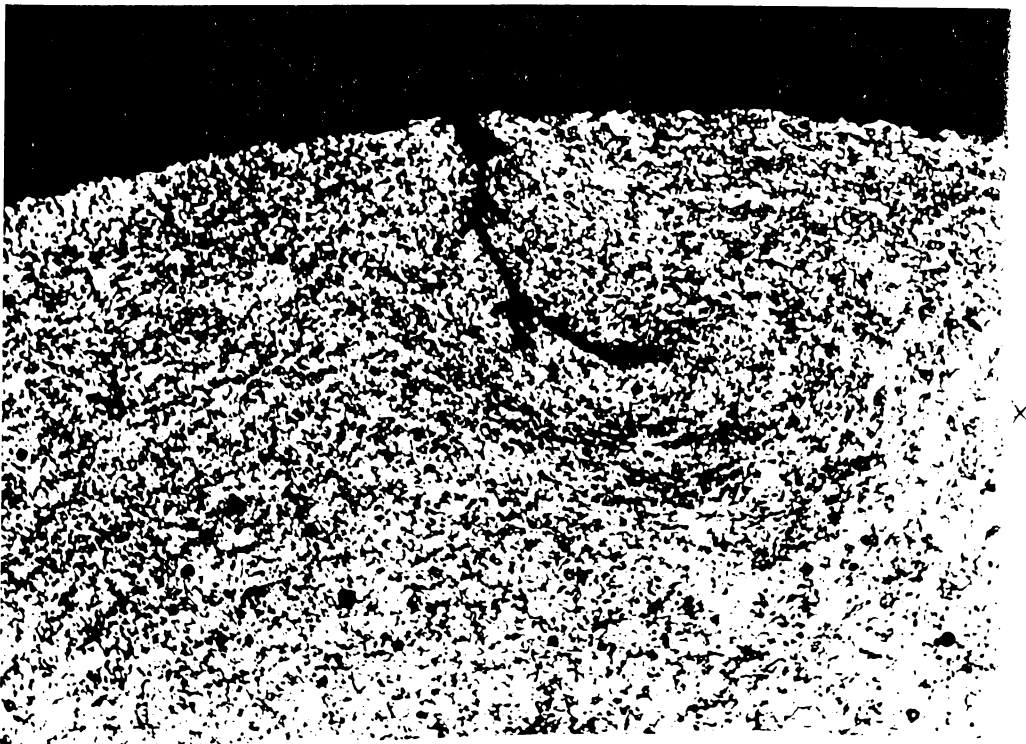


Foto 4.14. ↑
24-A-T-M-E

↓ Foto 4.15.
33-A-T-M-E



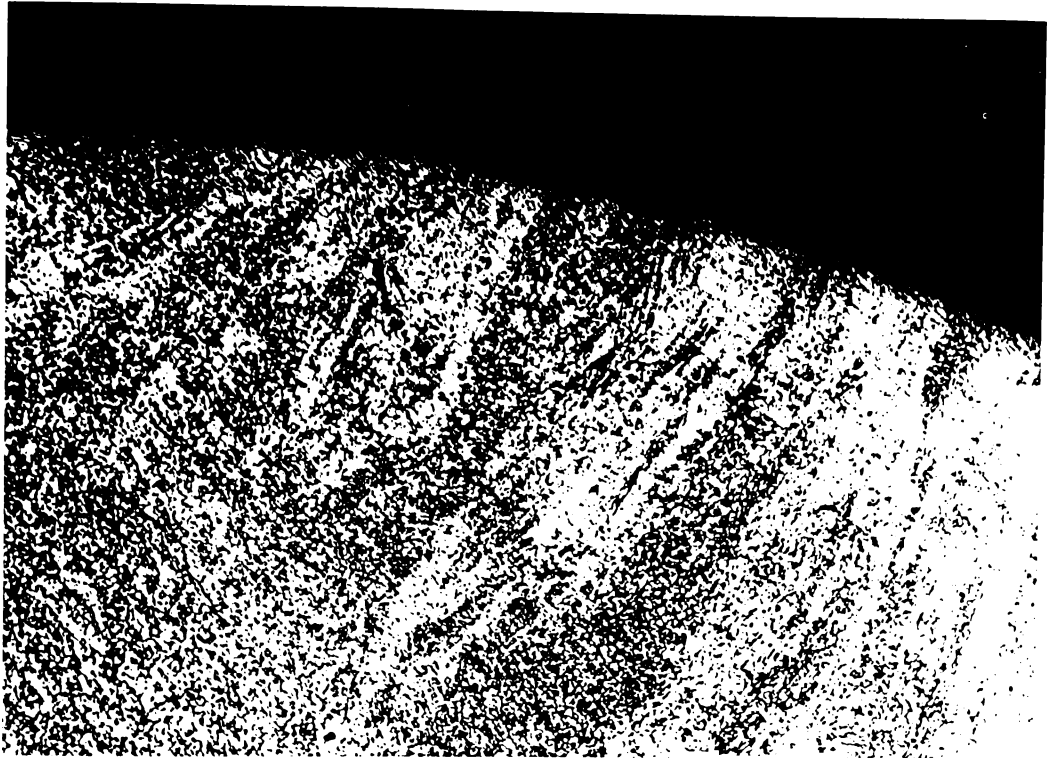
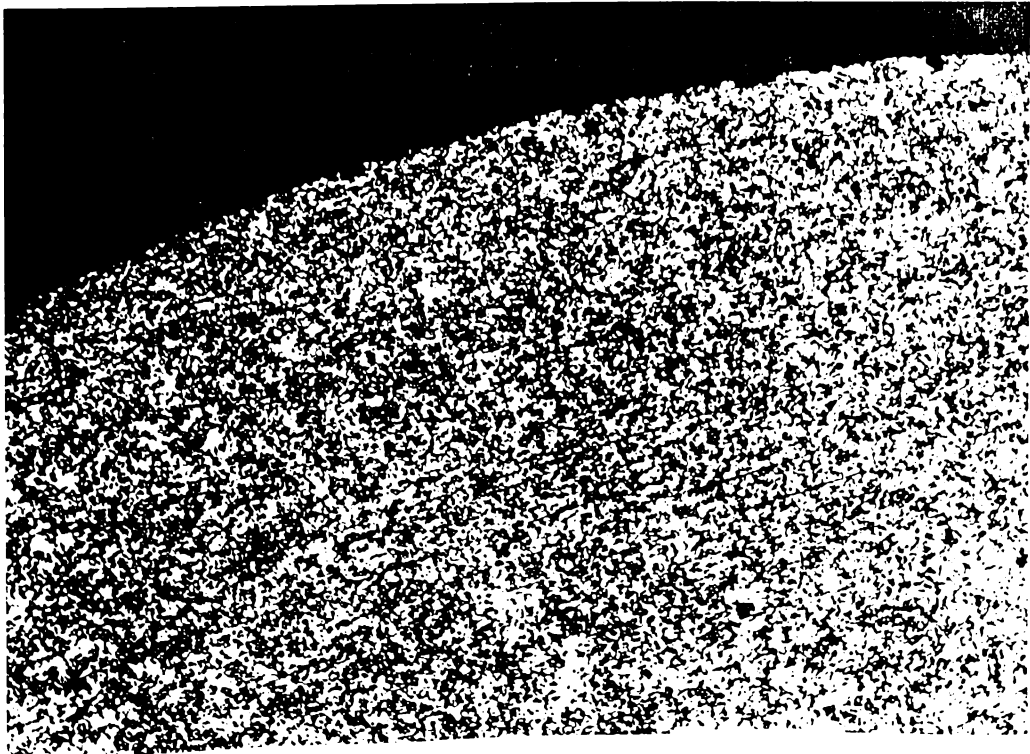


Foto 4.16. ↑
0-A-T-M-I

↓ Foto 4.17.
9-A-T-M-I



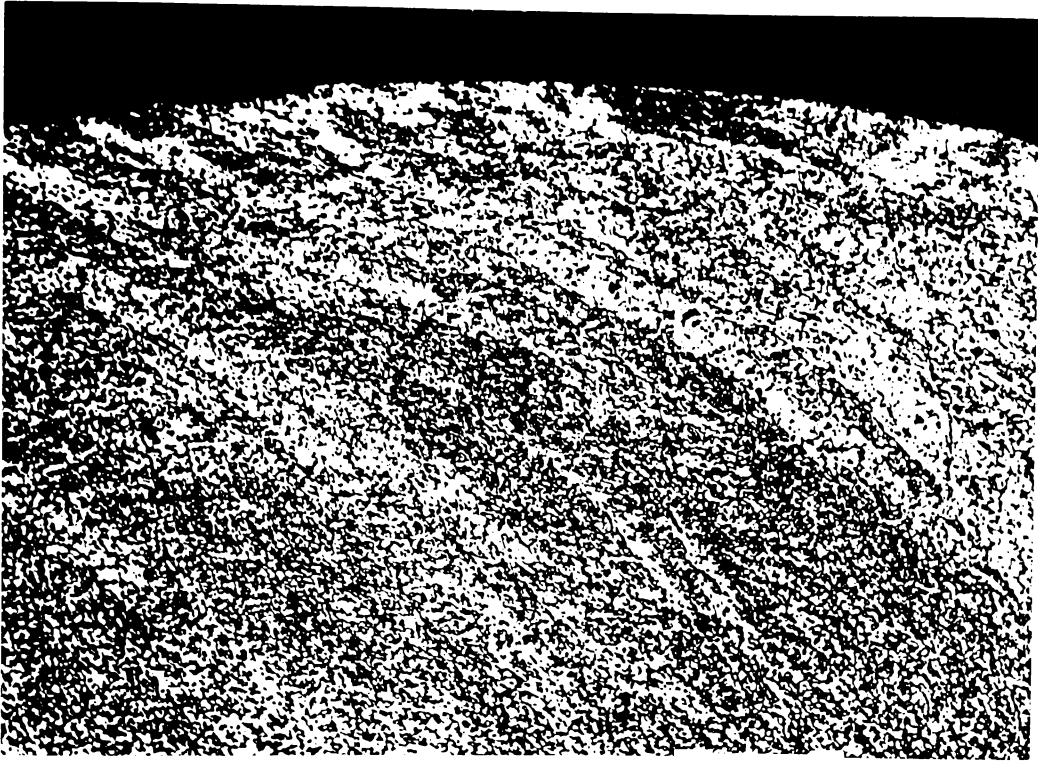
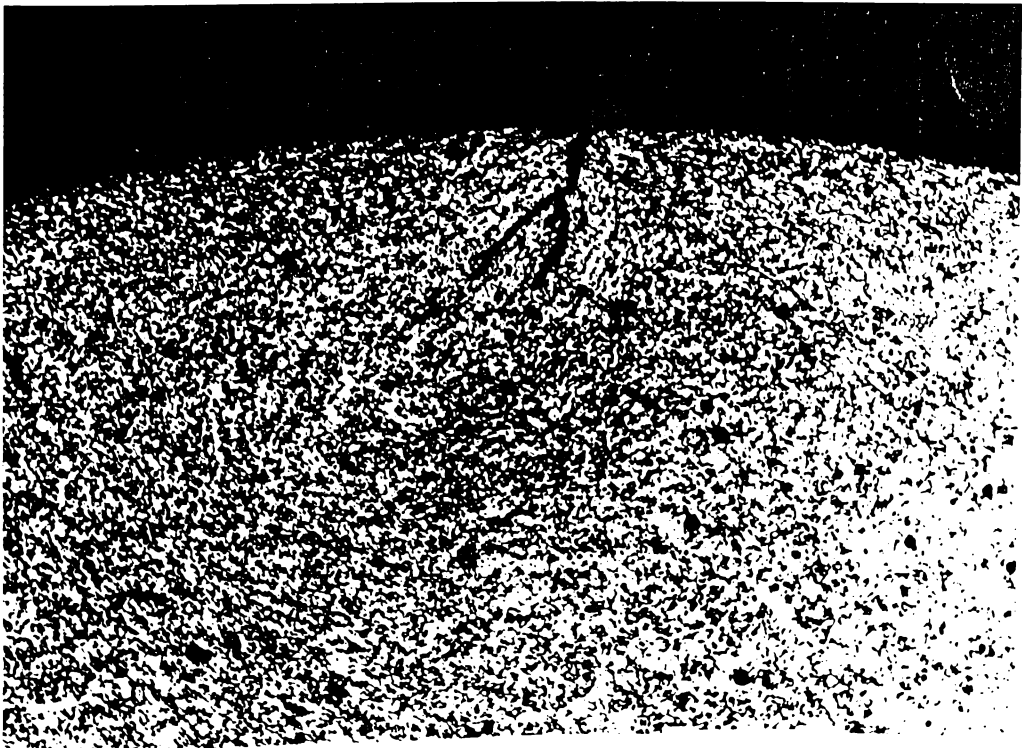


Foto 4.18. ↑
24-A-T-M-I

↓ Foto 4.19.
33-A-T-M-I



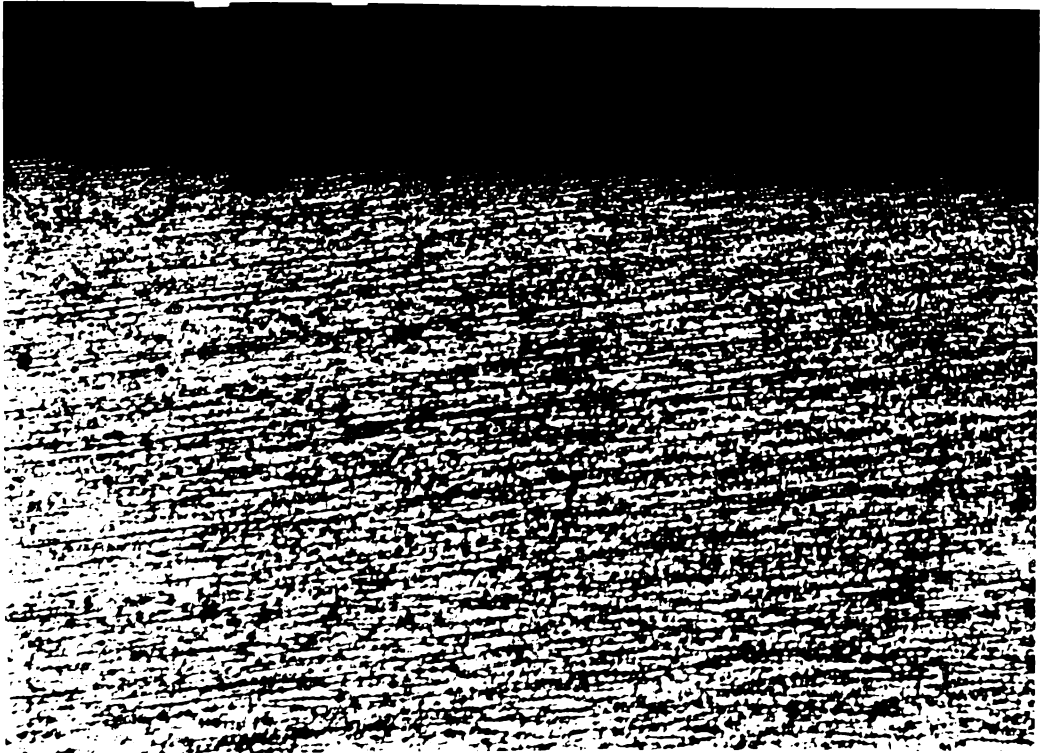
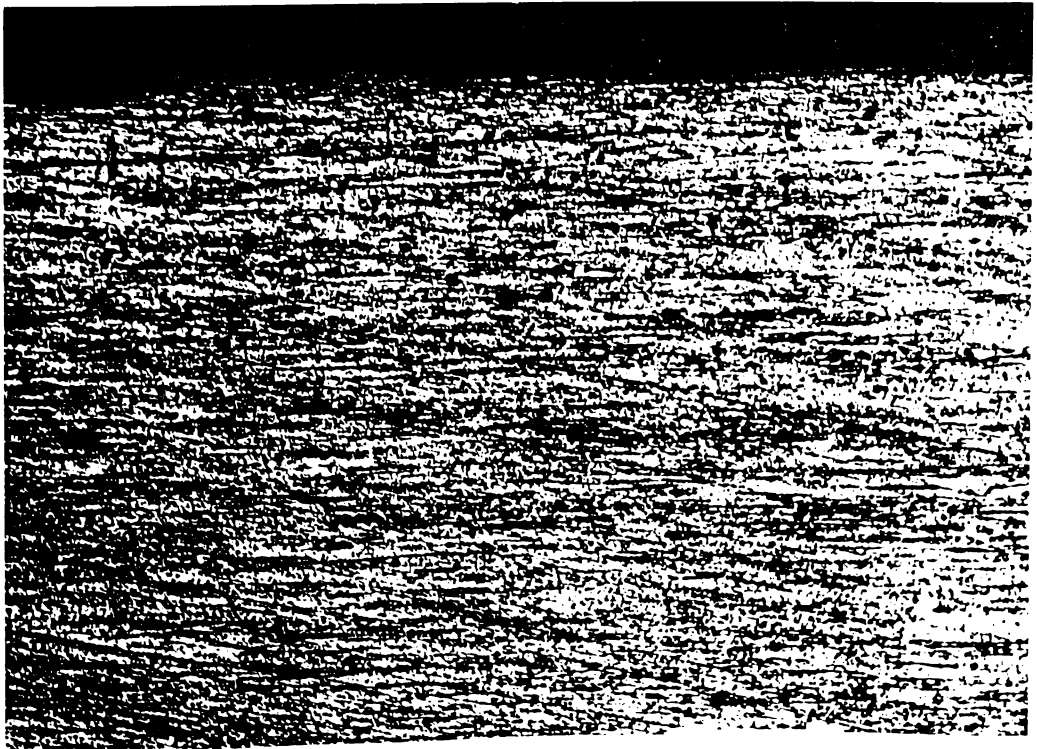


Foto 4.20. ↑
0-A-L-M-E

↓ Foto 4.21.
9-A-L-M-E



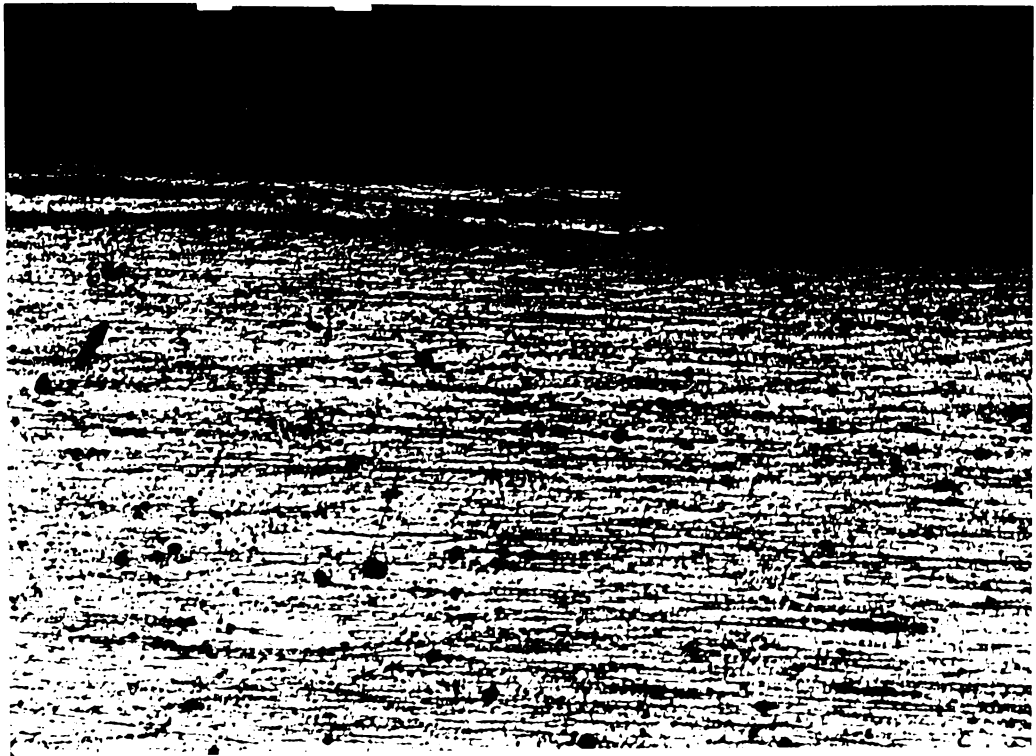
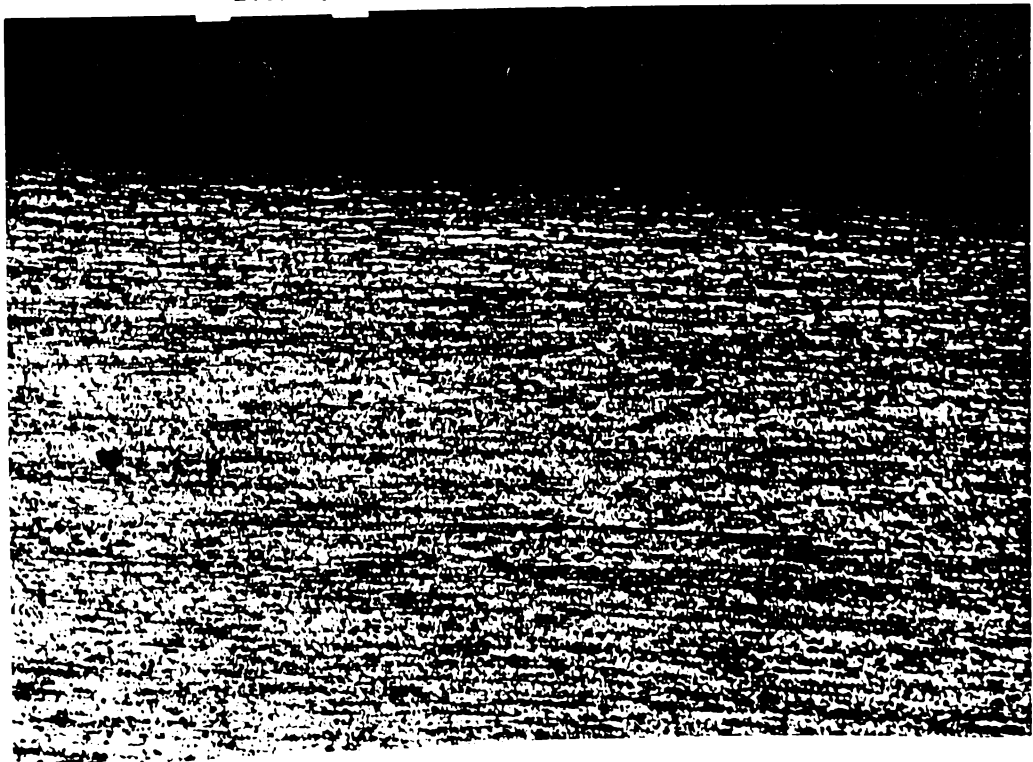


Foto 4.22. ↑
24-A-L-M-E

↓ Foto 4.23.
33-A-L-M-E



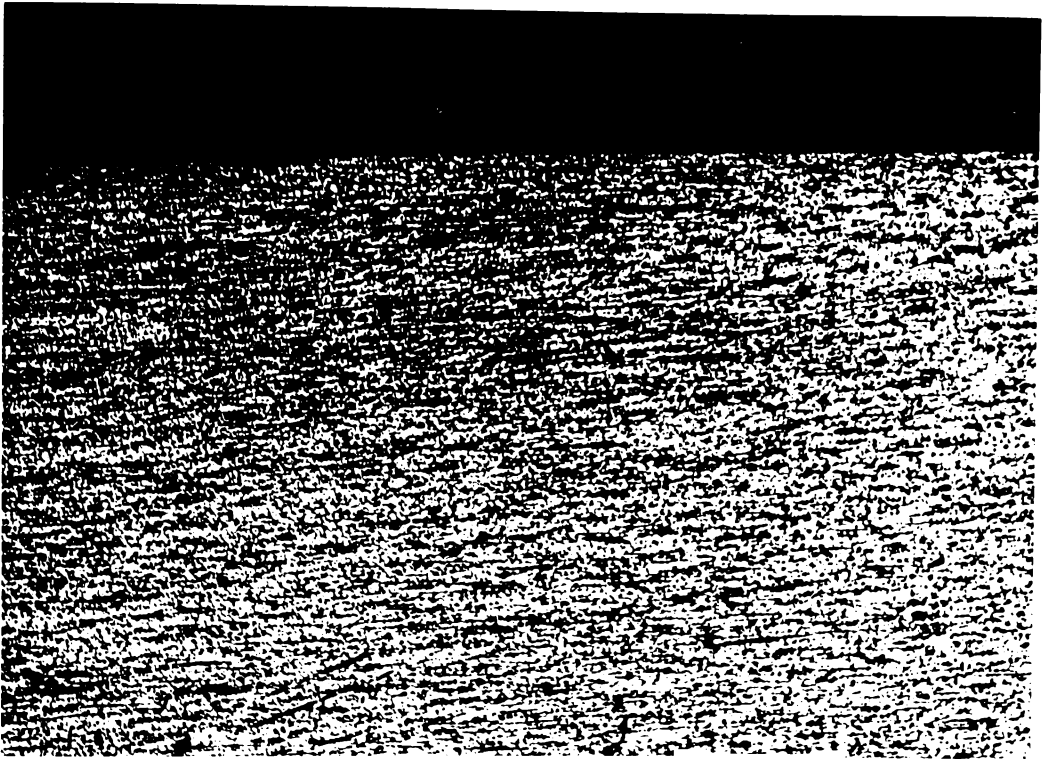
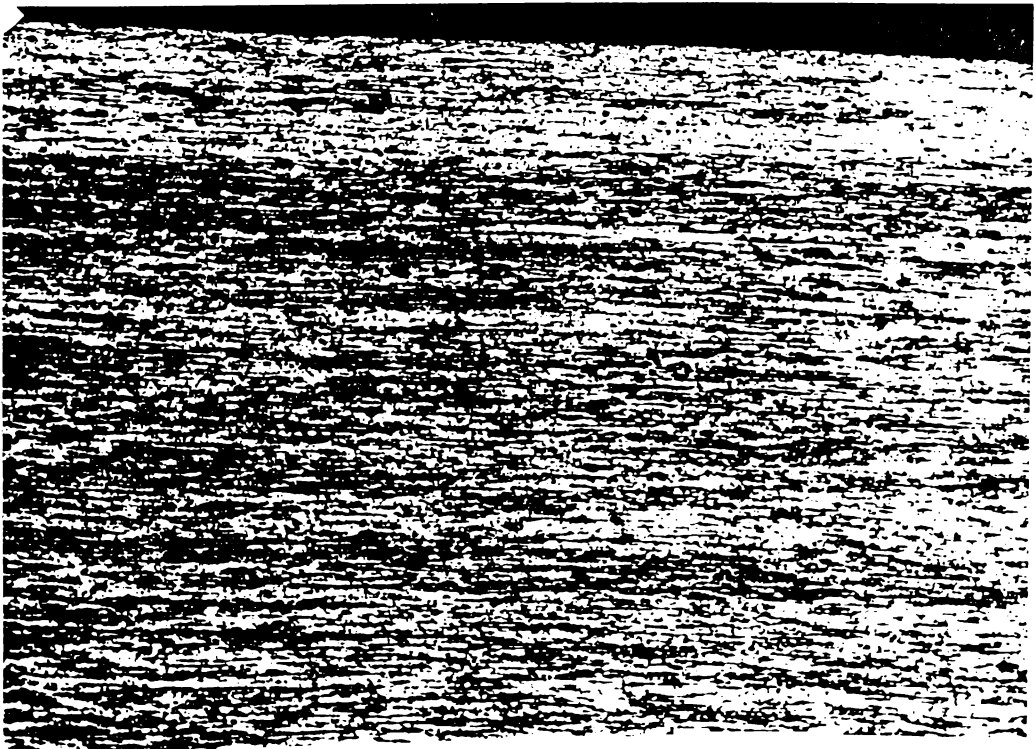


Foto 4.24. ↑
0-A-L-M-I

↓ Foto 4.25.
9-A-L-M-I



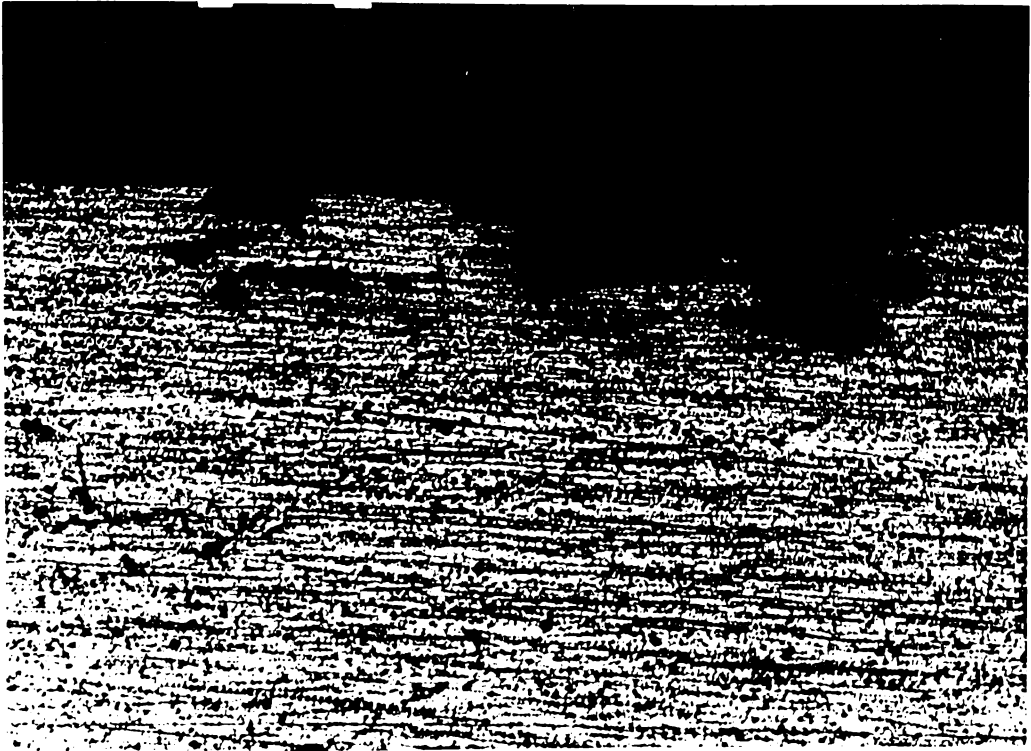
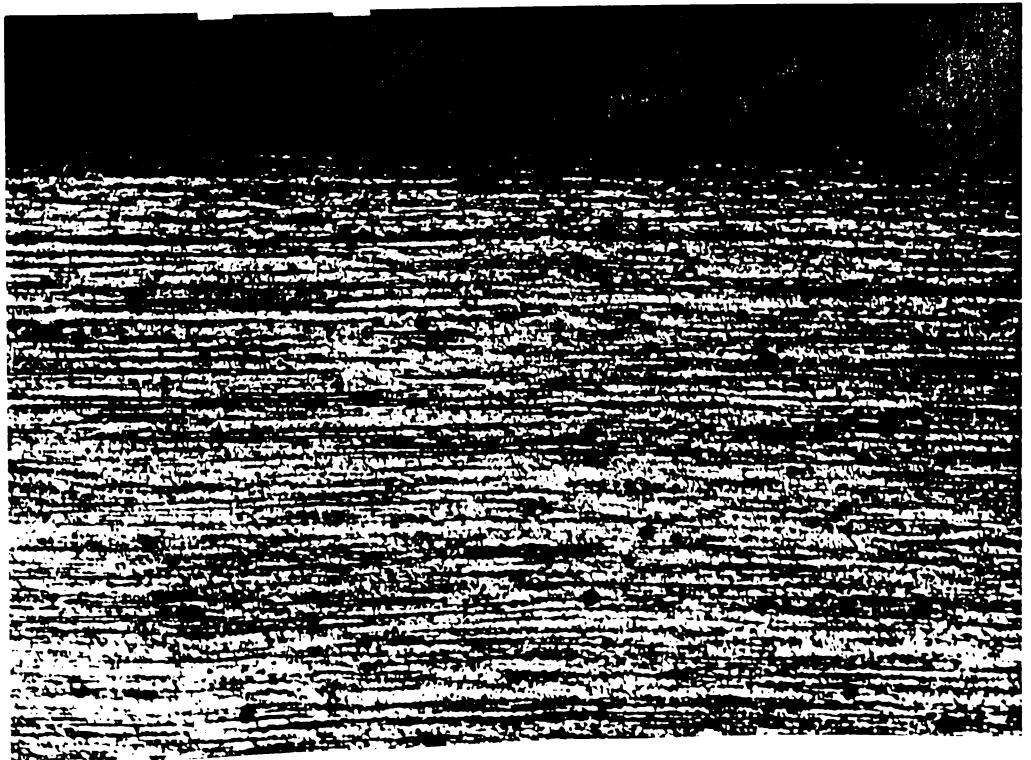


Foto 4.26. ↑
24-A-L-M-1

↓ Foto 4.27.
33-A-L-M-1



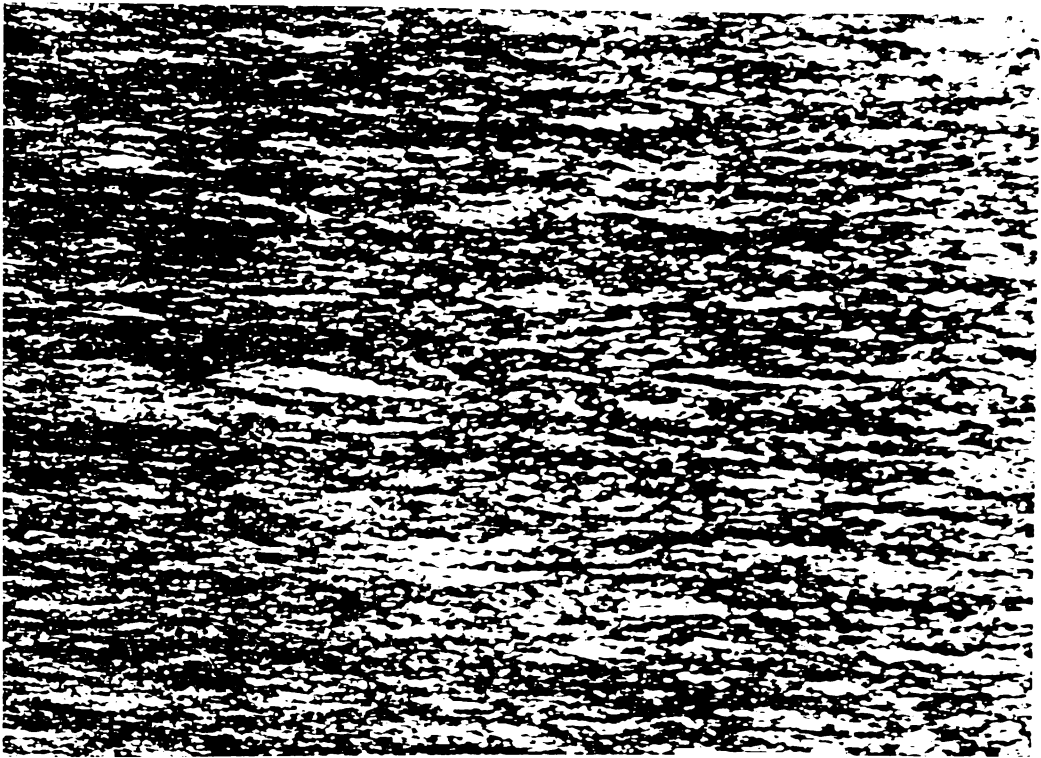


Foto 4.28. ↑
0-O-L

↓ Foto 4.29.
9-O-L

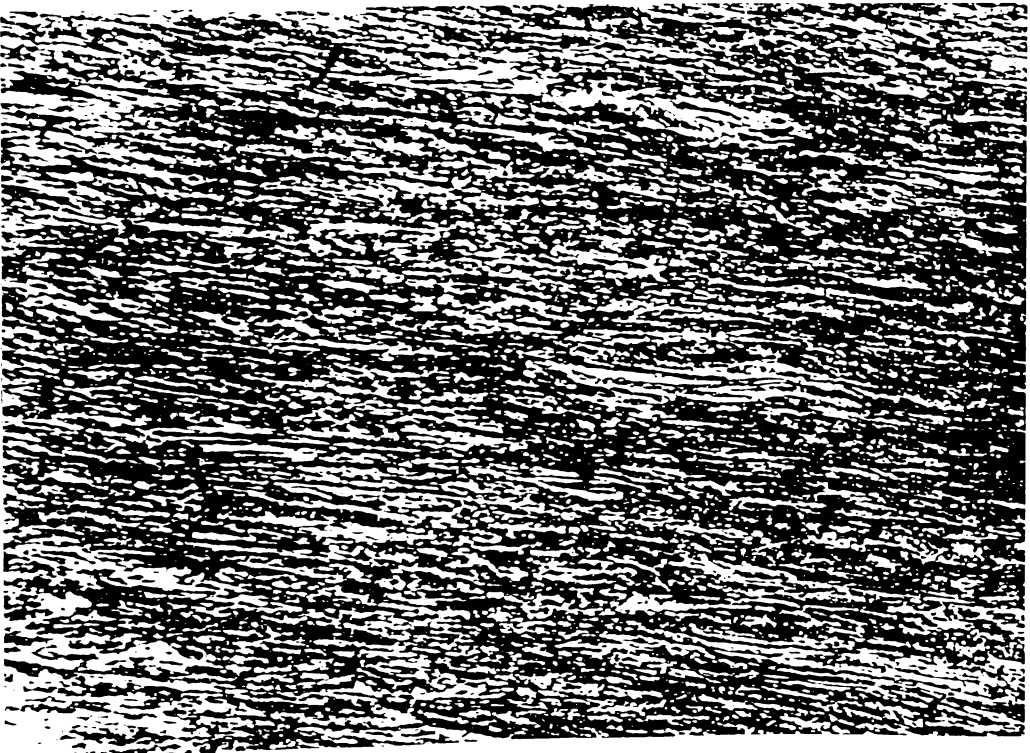




Foto 4.30. ↑
24-O-L

↓ Foto 4.31.
33 O-L

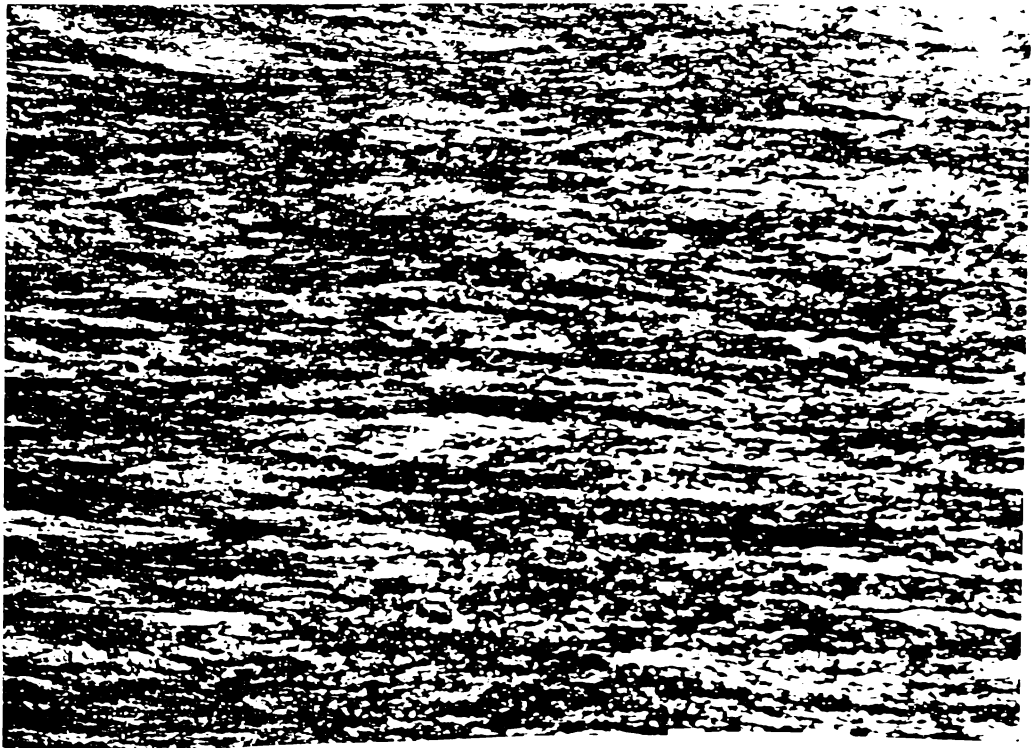
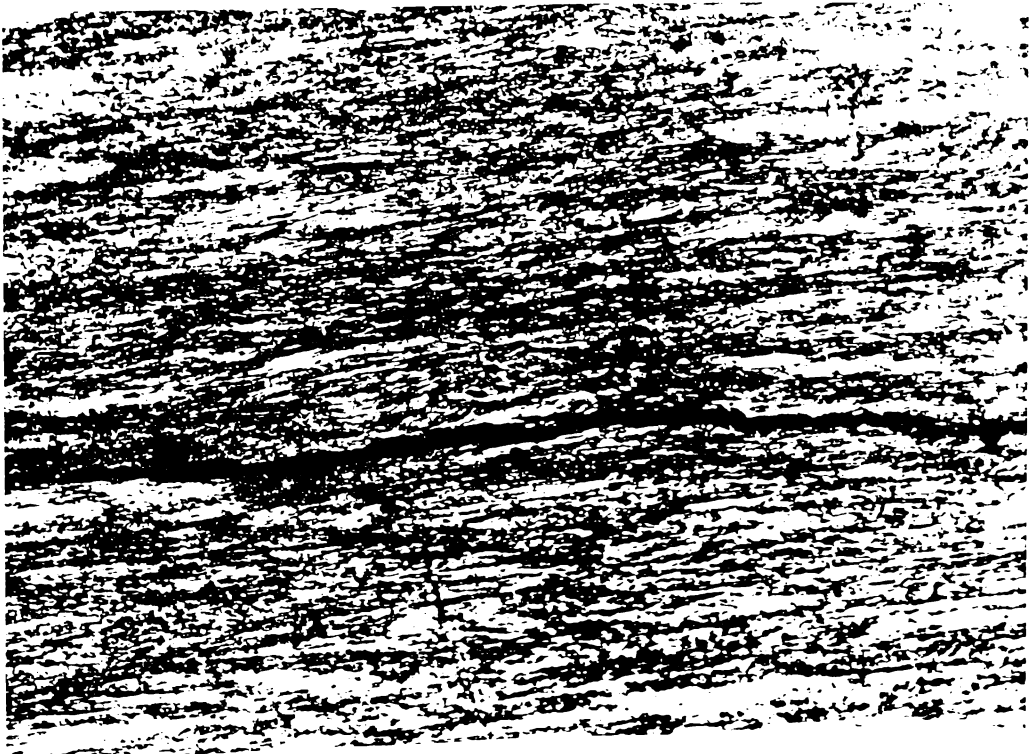




Foto 4.32. ↑
33-O-L-cu fisură

↓ Foto 4.33.
33 O-L-cu fisură



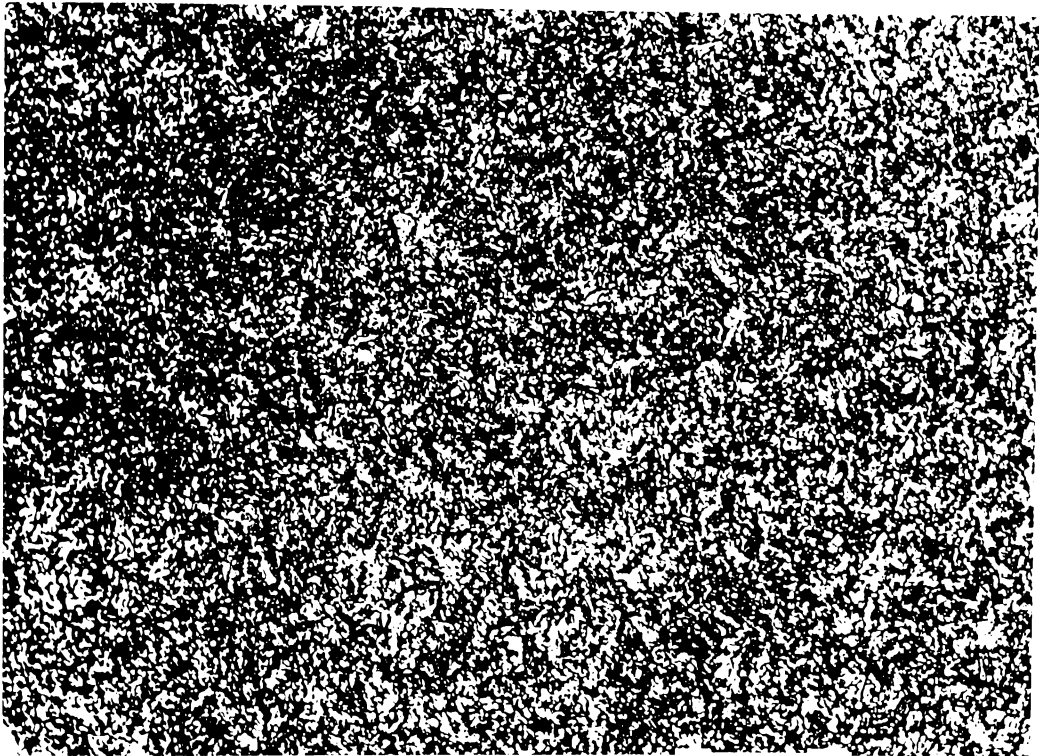
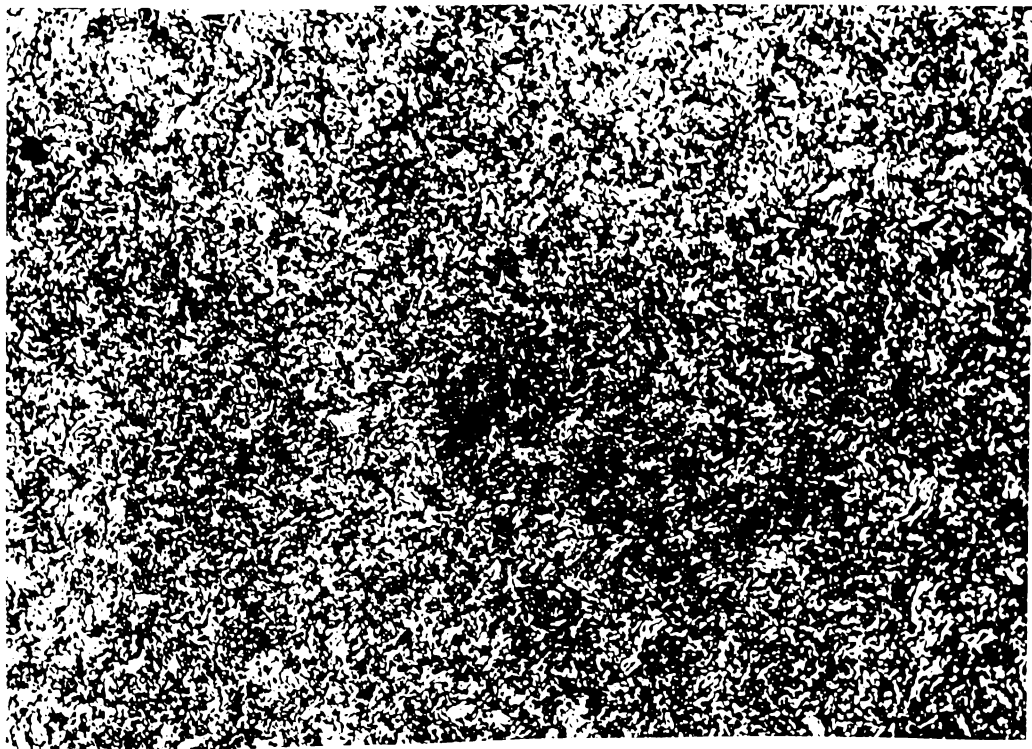


Foto 4.34. ↑
0-O-T-1

↓ Foto 4.35.
10-O-T-1



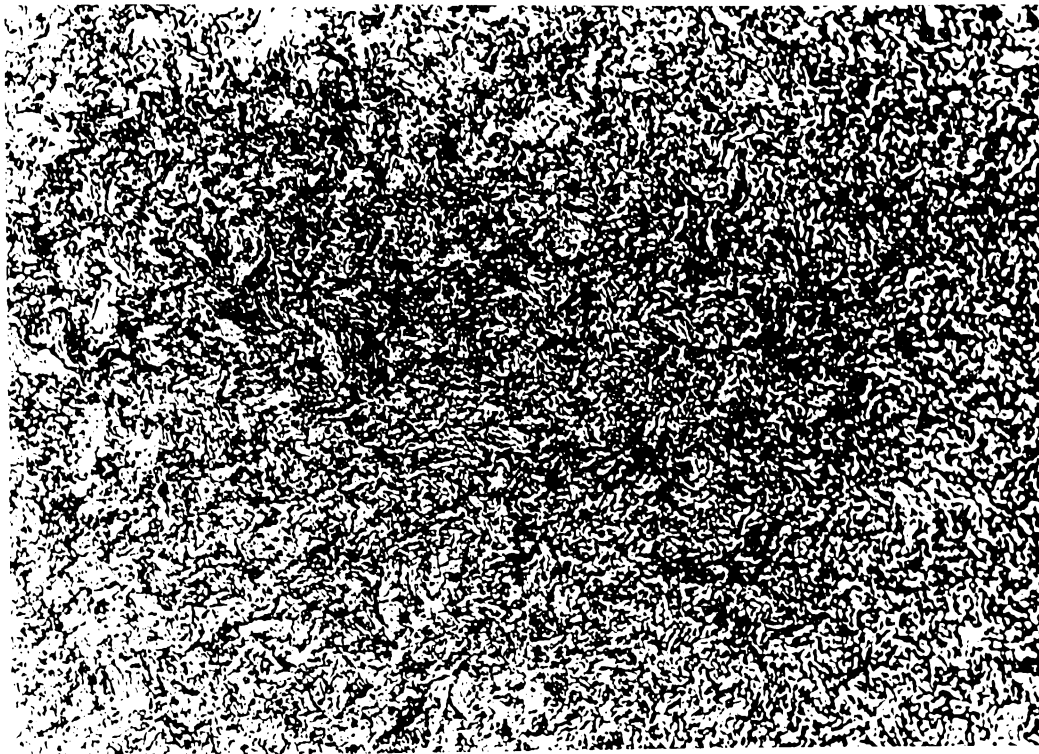
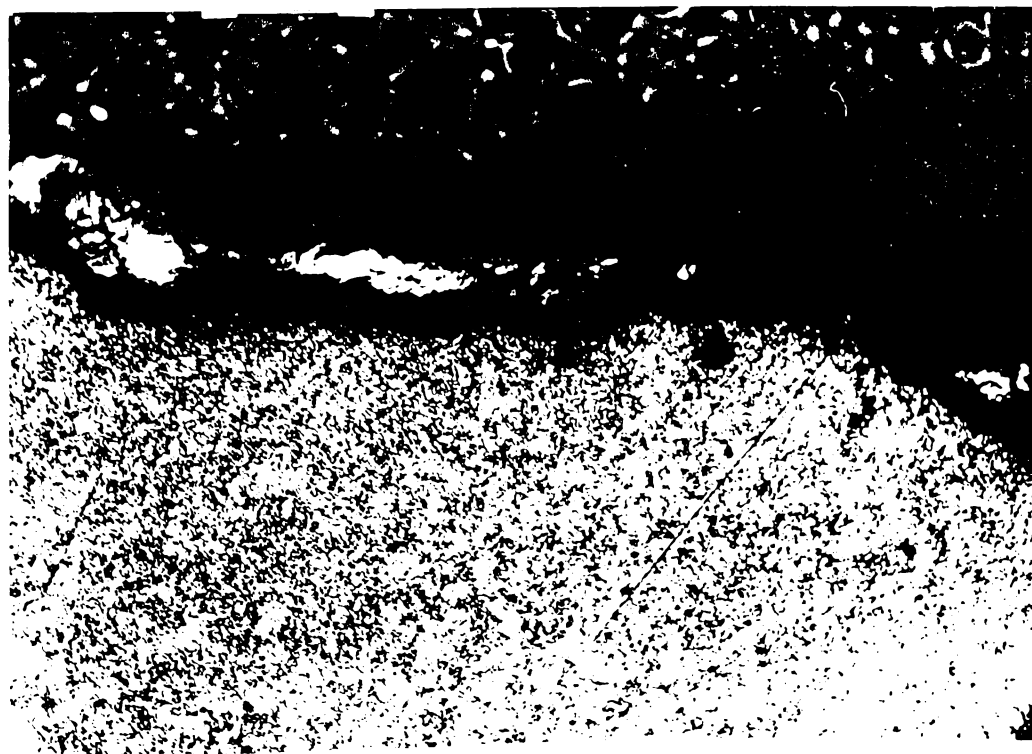


Foto 4.36. ↑
24-O-T-I

↓ Foto 4.37.
24-O-T-M



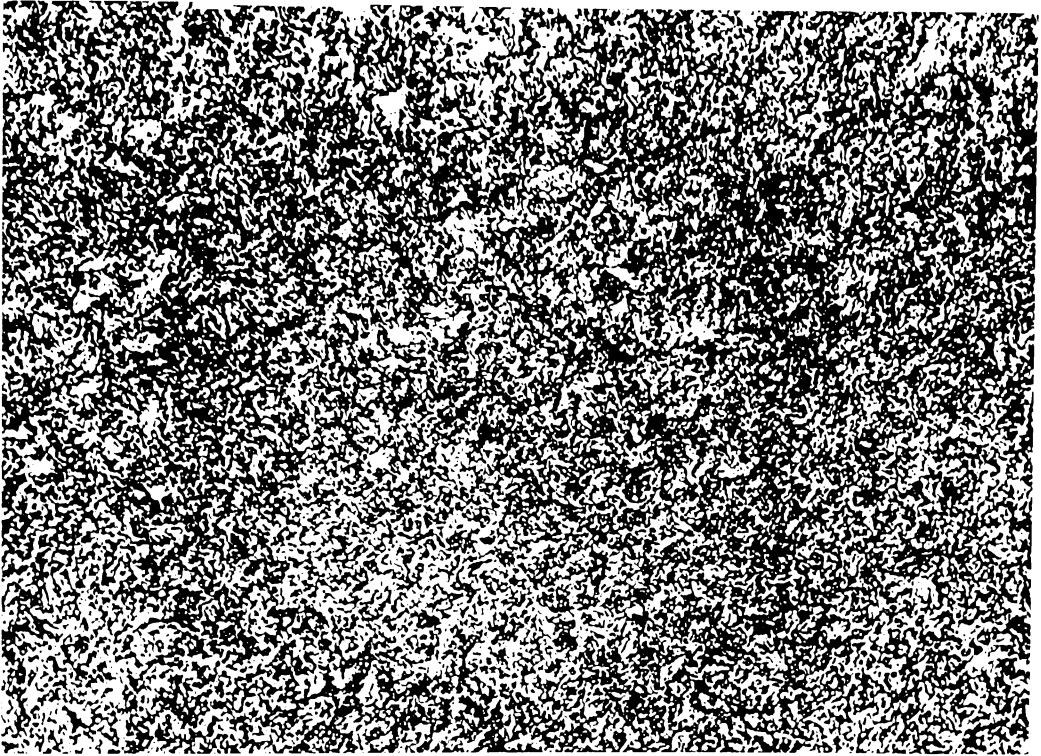
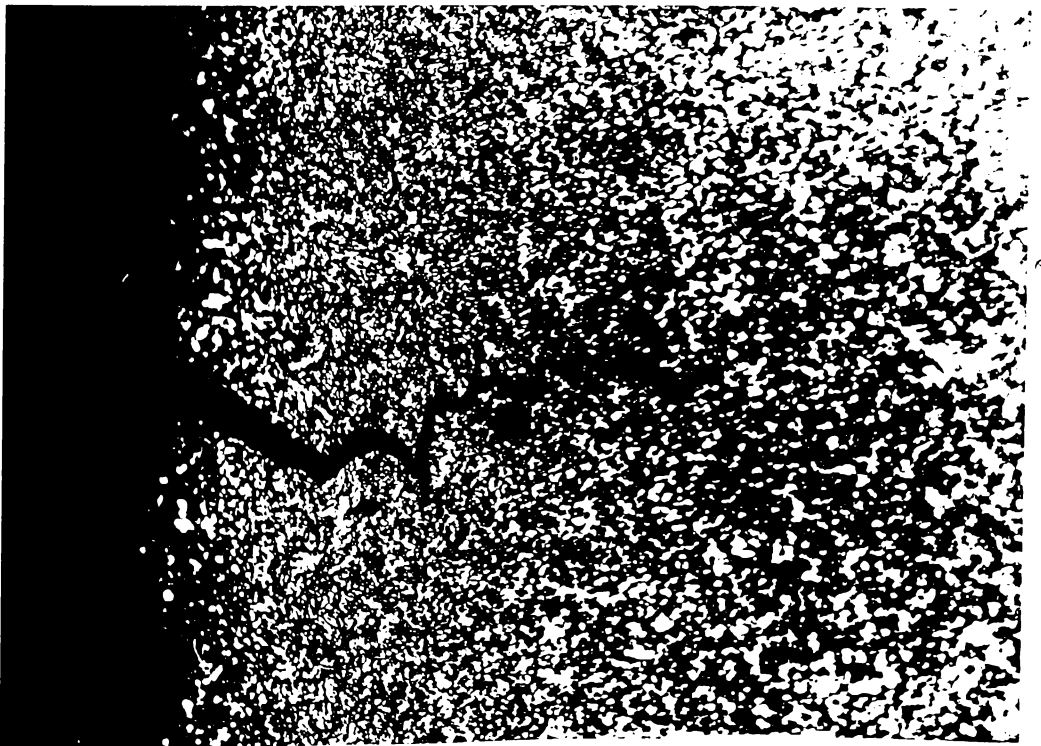


Foto 4.38. ↑
33 O-T-I

↓ Foto 4.39.
33-O-T-M- cu fisură



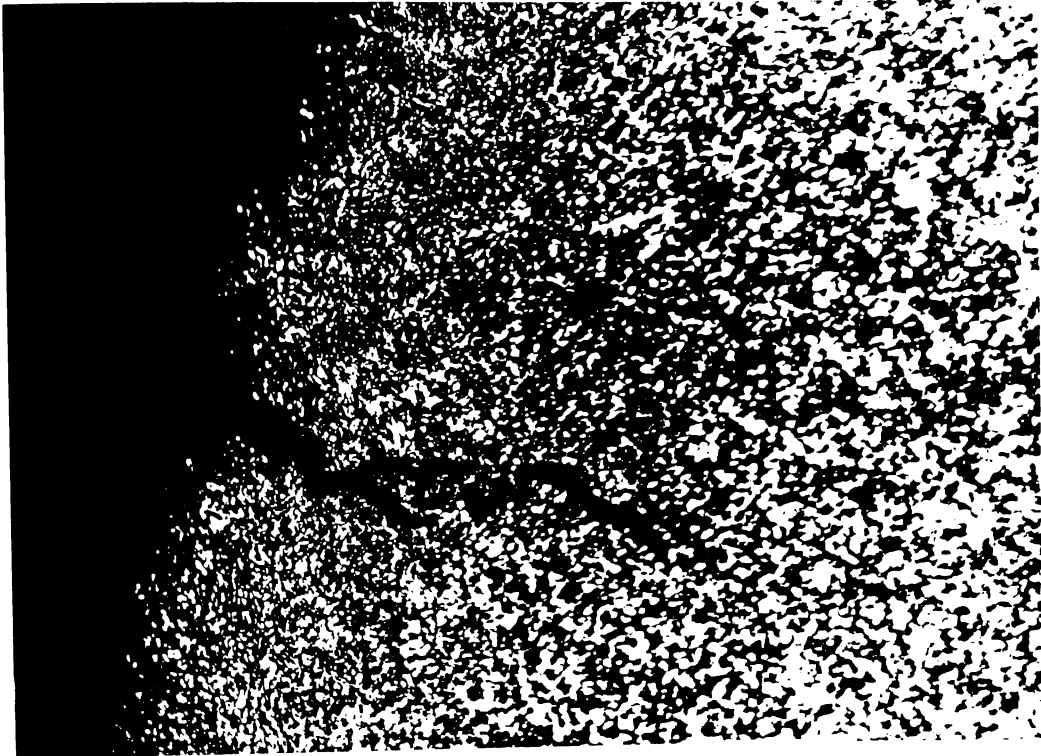


Foto 4.40. ↑
33-O-T-M- cu fisură

4.2.5.4. Eșantion rezultate experimentale (pentru conductoare active)

Populatii - (CER1) Cuplarea 1

Nr.crt	Simbol	D(BD(1,1,1,1) A(1,1,1))	D(BD(1,1,1,2) A(1,1,1))	D(BD(1,1,2,1) A(1,1,1))
1		2.880	2.900	2.620
2		2.870	2.890	2.640
3		2.900	2.870	2.630
4		2.900	2.880	2.630
5		2.900	2.910	2.650
6		2.900	2.910	2.620
7		2.890	2.890	2.610
8		2.890	2.910	0.000
9		2.900	2.890	0.000
10		2.890	2.880	0.000
11		2.910	2.900	0.000
12		2.900	0.000	0.000
13		2.900	0.000	0.000
14		2.900	0.000	0.000
15		2.900	0.000	0.000
16		2.900	0.000	0.000
17		2.900	0.000	0.000

Populatii - (CER1) Cuplarea 2

Nr.crt	Simbol	D(BD(2,1,1,1) A(1,1,1))	D(BD(2,1,1,2) A(1,1,1))	D(BD(2,1,2,1) A(1,1,1))
1		3.390	3.360	2.710
2		3.390	3.350	2.690
3		3.390	3.360	2.650
4		3.370	3.390	2.650
5		3.340	3.360	2.650
6		3.370	3.400	2.630
7		3.400	3.380	2.630
8		3.370	3.390	0.000
9		3.370	3.390	0.000
10		3.380	3.390	0.000
11		3.370	0.000	0.000
12		3.360	0.000	0.000
13		3.360	0.000	0.000
14		3.390	0.000	0.000
15		3.320	0.000	0.000
16		3.380	0.000	0.000

Populatii - (CER1) Cuplarea 3

Nr.crt	Simbol	D(BD(3,1,1,1) A(1,1,1))	D(BD(3,1,1,2) A(1,1,1))	D(BD(3,1,2,1) A(1,1,1))
1		2.880	2.820	2.520
2		2.880	2.850	2.520
3		2.900	2.860	2.530
4		2.900	2.820	2.480
5		2.880	2.900	2.480
6		2.890	2.880	2.520
7		2.890	2.860	2.510
8		2.890	2.850	0.000
9		2.870	2.870	0.000
10		2.890	2.850	0.000
11		2.890	2.840	0.000
12		2.880	0.000	0.000
13		2.850	0.000	0.000
14		2.900	0.000	0.000
15		2.870	0.000	0.000
16		2.880	0.000	0.000
17		2.880	0.000	0.000

Populatii - (CER1) Cuplarea 4

Nr.crt	Simbol	D(BD(4,1,1,1) A(1,1,1))	D(BD(4,1,1,2) A(1,1,1))	D(BD(4,1,2,1) A(1,1,1))
1		2.990	2.980	2.390
2		2.980	3.000	2.420
3		3.060	2.980	2.390
4		3.000	3.000	2.390
5		3.010	2.990	2.420
6		3.010	2.990	2.440
7		2.990	3.000	2.410
8		3.020	3.010	0.000
9		2.990	2.990	0.000
10		3.030	3.010	0.000
11		3.010	0.000	0.000
12		3.010	0.000	0.000
13		3.010	0.000	0.000
14		3.000	0.000	0.000
15		3.000	0.000	0.000
16		2.990	0.000	0.000

Populatii - (CER1) Cuplarea 5

Nr.crt	Simbol	D(BD(5,1,1,1) A(1,1,1))	D(BD(5,1,1,2) A(1,1,1))	D(BD(5,1,2,1) A(1,1,1))
1		2.630	2.650	2.150
2		2.650	2.650	2.140
3		2.650	2.650	2.140
4		2.670	2.660	2.140
5		2.640	2.660	2.120
6		2.650	2.660	2.140
7		2.650	2.670	2.140
8		2.670	2.660	0.000
9		2.670	2.650	0.000
10		2.670	2.650	0.000
11		2.650	0.000	0.000
12		2.670	0.000	0.000
13		2.670	0.000	0.000
14		2.650	0.000	0.000
15		2.640	0.000	0.000
16		2.670	0.000	0.000

Populatii - (CER1) Cuplarea 1

Nr.crt	Simbol	A(BD(1,1,1,1) A(1,1,2))	A(BD(1,1,1,2) A(1,1,2))	A(BD(1,1,2,1) A(1,1,2))
1		6.514	6.605	5.391
2		6.469	6.560	5.474
3		6.605	6.469	5.433
4		6.605	6.514	5.433
5		6.605	6.651	5.515
6		6.605	6.651	5.391
7		6.560	6.560	5.350
8		6.560	6.651	0.000
9		6.605	6.560	0.000
10		6.560	6.514	0.000
11		6.651	6.605	0.000
12		6.605	0.000	0.000
13		6.605	0.000	0.000
14		6.605	0.000	0.000
15		6.605	0.000	0.000
16		6.605	0.000	0.000
17		6.605	0.000	0.000

Populatii - (CER1) Cuplarea 2

Nr.crt	Simbol	A(BD(2,1,1,1) A(1,1,2))	A(BD(2,1,1,2) A(1,1,2))	A(BD(2,1,2,1) A(1,1,2))
1		9.026	8.867	5.768
2		9.026	8.814	5.683
3		9.026	8.867	5.515
4		8.920	9.026	5.515
5		8.762	8.867	5.515
6		8.920	9.079	5.433
7		9.079	8.973	5.433
8		8.920	9.026	0.000
9		8.920	9.026	0.000
10		8.973	9.026	0.000
11		8.920	0.000	0.000
12		8.867	0.000	0.000
13		8.867	0.000	0.000
14		9.026	0.000	0.000
15		8.657	0.000	0.000
16		8.973	0.000	0.000

Populatii - (CER1) Cuplarea 3

Nr.crt	Simbol	A(BD(3,1,1,1) A(1,1,2))	A(BD(3,1,1,2) A(1,1,2))	A(BD(3,1,2,1) A(1,1,2))
1		6.514	6.246	4.988
2		6.514	6.379	4.988
3		6.605	6.424	5.027
4		6.605	6.246	4.831
5		6.514	6.605	4.831
6		6.560	6.514	4.988
7		6.560	6.424	4.948
8		6.560	6.379	0.000
9		6.469	6.469	0.000
10		6.560	6.379	0.000
11		6.560	6.335	0.000
12		6.514	0.000	0.000
13		6.379	0.000	0.000
14		6.605	0.000	0.000
15		6.469	0.000	0.000
16		6.514	0.000	0.000
17		6.514	0.000	0.000

Populatii - (CER1) Cuplarea 4

Nr.crt	Simbol	A(BD(4,1,1,1) A(1,1,2))	A(BD(4,1,1,2) A(1,1,2))	A(BD(4,1,2,1) A(1,1,2))
1		7.022	6.975	4.486
2		6.975	7.069	4.600
3		7.354	6.975	4.486
4		7.069	7.069	4.486
5		7.116	7.022	4.600
6		7.116	7.022	4.676
7		7.022	7.069	4.562
8		7.163	7.116	0.000
9		7.022	7.022	0.000
10		7.211	7.116	0.000
11		7.116	0.000	0.000
12		7.116	0.000	0.000
13		7.116	0.000	0.000
14		7.069	0.000	0.000
15		7.069	0.000	0.000
16		7.022	0.000	0.000

Populatii - (CER1) Cuplarea 5

Nr.crt	Simbol	A(BD(5,1,1,1) A(1,1,2))	A(BD(5,1,1,2) A(1,1,2))	A(BD(5,1,2,1) A(1,1,2))
1		5.433	5.515	3.631
2		5.515	5.515	3.597
3		5.515	5.515	3.597
4		5.599	5.557	3.597
5		5.474	5.557	3.530
6		5.515	5.557	3.597
7		5.515	5.599	3.597
8		5.599	5.557	0.000
9		5.599	5.515	0.000
10		5.599	5.515	0.000
11		5.515	0.000	0.000
12		5.599	0.000	0.000
13		5.599	0.000	0.000
14		5.515	0.000	0.000
15		5.474	0.000	0.000
16		5.599	0.000	0.000

Populatii - (CER1) Cuplarea 1

Nr.crt	Simbol	FT(BD(1,1,1,1) A(1,1,3))	FT(BD(1,1,1,2) A(1,1,3))	FT(BD(1,1,2,1) A(1,1,3))
1		800.000	900.000	9600.000
2		748.000	760.000	9400.000
3		775.000	727.000	9000.000
4		940.000	740.000	10200.000
5		910.000	725.000	9900.000
6		772.000	760.000	9900.000
7		760.000	708.000	9200.000
8		920.000	768.000	0.000
9		940.000	715.000	0.000
10		870.000	768.000	0.000
11		912.000	735.000	0.000
12		905.000	0.000	0.000
13		844.000	0.000	0.000
14		920.000	0.000	0.000
15		760.000	0.000	0.000
16		753.000	0.000	0.000
17		800.000	0.000	0.000

Populatii - (CER1) Cuplarea 2

Nr.crt	Simbol	FT(BD(2,1,1,1) A(1,1,3))	FT(BD(2,1,1,2) A(1,1,3))	FT(BD(2,1,2,1) A(1,1,3))
1		988.000	1500.000	9400.000
2		1355.000	1270.000	9600.000
3		1202.000	1470.000	9500.000
4		1395.000	1452.000	9900.000
5		1320.000	1400.000	10000.000
6		1500.000	1512.000	9500.000
7		1470.000	1285.000	10200.000
8		1450.000	1430.000	0.000
9		1460.000	1330.000	0.000
10		1570.000	1382.000	0.000
11		1260.000	0.000	0.000
12		1380.000	0.000	0.000
13		1190.000	0.000	0.000
14		1335.000	0.000	0.000
15		1300.000	0.000	0.000
16		1255.000	0.000	0.000

Populatii - (CER1) Cuplarea 3

Nr.crt	Simbol	FT(BD(3,1,1,1) A(1,1,3))	FT(BD(3,1,1,2) A(1,1,3))	FT(BD(3,1,2,1) A(1,1,3))
1		740.000	725.000	7600.000
2		740.000	766.000	7100.000
3		735.000	768.000	7200.000
4		758.000	725.000	7150.000
5		755.000	748.000	7450.000
6		800.000	703.000	7250.000
7		756.000	736.000	6600.000
8		765.000	741.000	0.000
9		788.000	718.000	0.000
10		705.000	765.000	0.000
11		790.000	732.000	0.000
12		770.000	0.000	0.000
13		765.000	0.000	0.000
14		742.000	0.000	0.000
15		772.000	0.000	0.000
16		750.000	0.000	0.000
17		725.000	0.000	0.000

Populatii - (CER1) Cuplarea 4

Nr.crt	Simbol	FT(BD(4,1,1,1) A(1,1,3))	FT(BD(4,1,1,2) A(1,1,3))	FT(BD(4,1,2,1) A(1,1,3))
1		690.000	780.000	5800.000
2		810.000	777.000	6200.000
3		760.000	772.000	5500.000
4		778.000	758.000	5550.000
5		802.000	740.000	5550.000
6		732.000	782.000	5800.000
7		756.000	762.000	6600.000
8		727.000	812.000	0.000
9		754.000	885.000	0.000
10		765.000	815.000	0.000
11		732.000	0.000	0.000
12		715.000	0.000	0.000
13		735.000	0.000	0.000
14		755.000	0.000	0.000
15		670.000	0.000	0.000
16		738.000	0.000	0.000

Populatii - (CER1) Cuplarea 5

Nr.crt	Simbol	FT(BD(5,1,1,1) A(1,1,3))	FT(BD(5,1,1,2) A(1,1,3))	FT(BD(5,1,2,1) A(1,1,3))
1		602.000	675.000	4920.000
2		670.000	610.000	5000.000
3		705.000	642.000	4880.000
4		656.000	630.000	4880.000
5		655.000	695.000	4820.000
6		620.000	680.000	4880.000
7		650.000	650.000	4980.000
8		630.000	730.000	0.000
9		660.000	676.000	0.000
10		642.000	655.000	0.000
11		672.000	0.000	0.000
12		638.000	0.000	0.000
13		670.000	0.000	0.000
14		654.000	0.000	0.000
15		656.000	0.000	0.000
16		655.000	0.000	0.000

Populatii - (CER1) Cuplarea 1

Nr.crt	Simbol	SIGMA(BD(1,1,1,1) A(1,1,4))	SIGMA(BD(1,1,1,2) A(1,1,4))	SIGMA(BD(1,1,2,1) A(1,1,4))
1		122.812	136.260	1780.746
2		115.628	115.854	1717.209
3		117.335	112.382	1656.543
4		142.316	113.601	1877.416
5		137.774	109.006	1795.104
6		116.881	114.269	1836.394
7		115.854	107.927	1719.626
8		140.244	115.471	0.000
9		142.316	108.994	0.000
10		132.622	117.900	0.000
11		137.122	111.279	0.000
12		137.017	0.000	0.000
13		127.782	0.000	0.000
14		139.288	0.000	0.000
15		115.064	0.000	0.000
16		114.005	0.000	0.000
17		121.120	0.000	0.000

Populatii - (CER1) Cuplarea 2

Nr.crt	Simbol	SIGMA(BD(2,1,1,1) A(1,1,4))	SIGMA(BD(2,1,1,2) A(1,1,4))	SIGMA(BD(2,1,2,1) A(1,1,4))
1		109.462	169.167	1629.681
2		150.122	144.089	1689.249
3		133.171	165.783	1722.575
4		156.390	160.869	1795.104
5		150.651	157.889	1813.237
6		168.161	166.538	1748.574
7		161.912	143.207	1877.416
8		162.556	158.431	0.000
9		163.677	147.352	0.000
10		174.969	153.113	0.000
11		141.256	0.000	0.000
12		155.633	0.000	0.000
13		134.205	0.000	0.000
14		147.906	0.000	0.000
15		150.167	0.000	0.000
16		139.864	0.000	0.000

Populatii - (CER1) Cuplarea 3

Nr.crt	Simbol	SIGMA(BD(3,1,1,1) A(1,1,4))	SIGMA(BD(3,1,1,2) A(1,1,4))	SIGMA(BD(3,1,2,1) A(1,1,4))
1		113.601	116.074	1523.657
2		113.601	120.082	1423.416
3		111.279	119.552	1432.266
4		114.762	116.074	1480.025
5		115.904	113.248	1542.124
6		121.951	107.921	1453.488
7		115.244	114.570	1333.872
8		116.616	116.162	0.000
9		121.812	110.991	0.000
10		107.470	119.925	0.000
11		120.427	115.549	0.000
12		118.207	0.000	0.000
13		119.925	0.000	0.000
14		112.339	0.000	0.000
15		119.338	0.000	0.000
16		115.137	0.000	0.000
17		111.299	0.000	0.000

Populatii - (CER1) Cuplarea 4

Nr.crt	Simbol	SIGMA(BD(4,1,1,1) A(1,1,4))	SIGMA(BD(4,1,1,2) A(1,1,4))	SIGMA(BD(4,1,2,1) A(1,1,4))
1		98.263	111.828	1292.911
2		116.129	109.917	1347.826
3		103.345	110.681	1226.037
4		110.058	107.229	1237.182
5		112.704	105.383	1206.522
6		102.867	111.364	1240.376
7		107.662	107.795	1446.734
8		101.494	114.109	0.000
9		107.377	126.032	0.000
10		106.088	114.531	0.000
11		102.867	0.000	0.000
12		100.478	0.000	0.000
13		103.288	0.000	0.000
14		106.804	0.000	0.000
15		94.780	0.000	0.000
16		105.098	0.000	0.000

Populatii - (CER1) Cuplarea 5

Nr.crt	Simbol	SIGMA(BD(5,1,1,1) A(1,1,4))	SIGMA(BD(5,1,1,2) A(1,1,4))	SIGMA(BD(5,1,2,1) A(1,1,4))
1		110.804	122.393	1354.999
2		121.487	110.607	1390.047
3		127.833	116.410	1356.686
4		117.164	113.371	1356.686
5		119.657	125.067	1365.439
6		112.421	122.368	1356.686
7		117.860	116.092	1384.487
8		112.520	131.366	0.000
9		117.878	122.575	0.000
10		114.663	118.767	0.000
11		121.850	0.000	0.000
12		113.949	0.000	0.000
13		119.664	0.000	0.000
14		118.586	0.000	0.000
15		119.839	0.000	0.000
16		116.985	0.000	0.000

Populatii - (CER1) Cuplarea 1

Nr.crt	Simbol	NI(BD(1,1,1,1) A(1,2,1))	NI(BD(1,1,1,2) A(1,2,1))	NI(BD(1,1,2,1) A(1,2,1))
1		18.000	15.000	15.000
2		17.000	17.000	12.000
3		15.000	18.000	10.000
4		11.000	20.000	12.000
5		14.000	15.000	15.000
6		16.000	14.000	14.000
7		12.000	20.000	12.000
8		13.000	19.000	0.000
9		13.000	20.000	0.000
10		13.000	19.000	0.000
11		14.000	18.000	0.000
12		14.000	0.000	0.000
13		17.000	0.000	0.000
14		12.000	0.000	0.000
15		15.000	0.000	0.000
16		12.000	0.000	0.000
17		17.000	0.000	0.000

Populatii - (CER1) Cuplarea 2

Nr.crt	Simbol	NI(BD(2,1,1,1) A(1,2,1))	NI(BD(2,1,1,2) A(1,2,1))	NI(BD(2,1,2,1) A(1,2,1))
1		13.000	14.000	8.000
2		13.000	13.000	9.000
3		15.000	12.000	9.000
4		15.000	13.000	9.000
5		14.000	14.000	8.000
6		13.000	16.000	9.000
7		12.000	12.000	11.000
8		11.000	20.000	0.000
9		12.000	14.000	0.000
10		15.000	15.000	0.000
11		16.000	0.000	0.000
12		12.000	0.000	0.000
13		13.000	0.000	0.000
14		11.000	0.000	0.000
15		13.000	0.000	0.000
16		14.000	0.000	0.000

Populatii - (CER1) Cuplarea 3

Nr.crt	Simbol	NI(BD(3,1,1,1) A(1,2,1))	NI(BD(3,1,1,2) A(1,2,1))	NI(BD(3,1,2,1) A(1,2,1))
1		12.000	28.000	13.000
2		14.000	15.000	19.000
3		16.000	16.000	17.000
4		14.000	17.000	19.000
5		23.000	27.000	14.000
6		17.000	23.000	15.000
7		16.000	28.000	17.000
8		15.000	13.000	0.000
9		15.000	23.000	0.000
10		15.000	19.000	0.000
11		13.000	15.000	0.000
12		14.000	0.000	0.000
13		19.000	0.000	0.000
14		17.000	0.000	0.000
15		19.000	0.000	0.000
16		15.000	0.000	0.000
17		16.000	0.000	0.000

Populatii - (CER1) Cuplarea 4

Nr.crt	Simbol	NI(BD(4,1,1,1) A(1,2,1))	NI(BD(4,1,1,2) A(1,2,1))	NI(BD(4,1,2,1) A(1,2,1))
1		14.000	20.000	9.000
2		11.000	22.000	7.000
3		15.000	24.000	10.000
4		14.000	20.000	9.000
5		11.000	22.000	7.000
6		10.000	20.000	13.000
7		13.000	25.000	19.000
8		11.000	27.000	0.000
9		18.000	21.000	0.000
10		13.000	16.000	0.000
11		13.000	0.000	0.000
12		12.000	0.000	0.000
13		17.000	0.000	0.000
14		16.000	0.000	0.000
15		18.000	0.000	0.000
16		15.000	0.000	0.000

Populatii - (CER1) Cuplarea 5

Nr.crt	Simbol	NI(BD(5,1,1,1) A(1,2,1))	NI(BD(5,1,1,2) A(1,2,1))	NI(BD(5,1,2,1) A(1,2,1))
1		15.000	15.000	7.000
2		14.000	15.000	23.000
3		10.000	16.000	23.000
4		12.000	14.000	19.000
5		12.000	15.000	26.000
6		15.000	10.000	24.000
7		16.000	16.000	12.000
8		19.000	20.000	0.000
9		11.000	16.000	0.000
10		12.000	17.000	0.000
11		12.000	0.000	0.000
12		15.000	0.000	0.000
13		13.000	0.000	0.000
14		12.000	0.000	0.000
15		13.000	0.000	0.000
16		14.000	0.000	0.000

Populatii - (CER1) Cuplarea 1

Nr.crt	Simbol	NR(BD(1,1,1,1) A(1,3,1))	NR(BD(1,1,1,2) A(1,3,1))	NR(BD(1,1,2,1) A(1,3,1))
1		30.000	39.000	6.000
2		35.000	40.000	2.000
3		37.000	41.000	23.000
4		38.000	41.000	24.000
5		33.000	33.000	23.000
6		16.000	35.000	4.000
7		42.000	36.000	25.000
8		42.000	41.000	0.000
9		39.000	42.000	0.000
10		36.000	41.000	0.000
11		41.000	42.000	0.000
12		39.000	0.000	0.000
13		42.000	0.000	0.000
14		35.000	0.000	0.000
15		39.000	0.000	0.000
16		36.000	0.000	0.000
17		38.000	0.000	0.000

Populatii - (CER1) Cuplarea 2

Nr.crt	Simbol	NR(BD(2,1,1,1) A(1,3,1))	NR(BD(2,1,1,2) A(1,3,1))	NR(BD(2,1,2,1) A(1,3,1))
1		27.000	4.200	10.000
2		33.000	42.000	4.000
3		24.000	37.000	9.000
4		40.000	37.000	12.000
5		36.000	39.000	17.000
6		43.000	38.000	9.000
7		44.000	39.000	24.000
8		42.000	40.000	0.000
9		43.000	43.000	0.000
10		41.000	40.000	0.000
11		43.000	0.000	0.000
12		41.000	0.000	0.000
13		45.000	0.000	0.000
14		42.000	0.000	0.000
15		35.000	0.000	0.000
16		47.000	0.000	0.000

Populatii - (CER1) Cuplarea 3

Nr.crt	Simbol	NR(BD(3,1,1,1) A(1,3,1))	NR(BD(3,1,1,2) A(1,3,1))	NR(BD(3,1,2,1) A(1,3,1))
1		36.000	40.000	9.000
2		36.000	36.000	11.000
3		37.000	39.000	13.000
4		35.000	40.000	9.000
5		37.000	41.000	12.000
6		18.000	30.000	18.000
7		6.000	41.000	13.000
8		42.000	40.000	0.000
9		40.000	41.000	0.000
10		44.000	39.000	0.000
11		28.000	37.000	0.000
12		32.000	0.000	0.000
13		37.000	0.000	0.000
14		43.000	0.000	0.000
15		40.000	0.000	0.000
16		40.000	0.000	0.000
17		17.000	0.000	0.000

Populatii - (CER1) Cuplarea 4

Nr.crt	Simbol	NR(BD(4,1,1,1) A(1,3,1))	NR(BD(4,1,1,2) A(1,3,1))	NR(BD(4,1,2,1) A(1,3,1))
1		15.000	3.100	2.000
2		22.000	29.000	5.000
3		32.000	30.000	2.000
4		33.000	34.000	2.000
5		23.000	35.000	3.000
6		30.000	29.000	1.000
7		32.000	30.000	30.000
8		24.000	26.000	0.000
9		28.000	29.000	0.000
10		25.000	30.000	0.000
11		24.000	0.000	0.000
12		29.000	0.000	0.000
13		33.000	0.000	0.000
14		29.000	0.000	0.000
15		31.000	0.000	0.000
16		33.000	0.000	0.000

Populatii - (CER1) Cuplarea 5

Nr.crt	Simbol	NR(BD(5,1,1,1) A(1,3,1))	NR(BD(5,1,1,2) A(1,3,1))	NR(BD(5,1,2,1) A(1,3,1))
1		29.000	27.000	2.000
2		30.000	37.000	27.000
3		38.000	39.000	27.000
4		31.000	23.000	32.000
5		16.000	32.000	32.000
6		38.000	33.000	30.000
7		29.000	35.000	8.000
8		31.000	29.000	0.000
9		31.000	37.000	0.000
10		32.000	40.000	0.000
11		39.000	0.000	0.000
12		31.000	0.000	0.000
13		33.000	0.000	0.000
14		31.000	0.000	0.000
15		26.000	0.000	0.000
16		30.000	0.000	0.000

Populatii - (CER1) Cuplarea 1

Nr.crt	Simbol	FF(BD(1,1,1,1) A(1,4,3))	FF(BD(1,1,1,2) A(1,4,3))	FF(BD(1,1,2,1) A(1,4,3))
1		1340.000	1403.000	5457.000
2		1257.000	1300.000	4558.000
3		1360.000	1323.000	4517.000
4		1460.000	1243.000	5543.000
5		1457.000	1290.000	4967.000
6		1323.000	1300.000	4883.000
7		1443.000	1250.000	4500.000
8		1323.000	1237.000	0.000
9		1353.000	1290.000	0.000
10		1423.000	1327.000	0.000
11		1390.000	1327.000	0.000
12		1397.000	0.000	0.000
13		1330.000	0.000	0.000
14		1413.000	0.000	0.000
15		1313.000	0.000	0.000
16		1277.000	0.000	0.000
17		1303.000	0.000	0.000

Populatii - (CER1) Cuplarea 2

Nr.crt	Simbol	FF(BD(2,1,1,1) A(1,4,3))	FF(BD(2,1,1,2) A(1,4,3))	FF(BD(2,1,2,1) A(1,4,3))
1		1607.000	1763.000	5167.000
2		1637.000	1617.000	5117.000
3		1643.000	1767.000	5133.000
4		1717.000	1740.000	5083.000
5		1693.000	1683.000	5783.000
6		1757.000	1800.000	4750.000
7		1740.000	1710.000	4783.000
8		1747.000	1757.000	0.000
9		1777.000	1693.000	0.000
10		1850.000	1733.000	0.000
11		1660.000	0.000	0.000
12		1703.000	0.000	0.000
13		1620.000	0.000	0.000
14		1710.000	0.000	0.000
15		1710.000	0.000	0.000
16		1687.000	0.000	0.000

Populatii - (CER1) Cuplarea 3

Nr.crt	Simbol	FF(BD(3,1,1,1) A(1,4,3))	FF(BD(3,1,1,2) A(1,4,3))	FF(BD(3,1,2,1) A(1,4,3))
1		1357.000	1350.000	3893.000
2		1360.000	1387.000	3850.000
3		1347.000	1387.000	3750.000
4		1353.000	1360.000	3817.000
5		1387.000	1380.000	3833.000
6		1410.000	1320.000	4067.000
7		1393.000	1397.000	3700.000
8		1393.000	1340.000	0.000
9		1353.000	1350.000	0.000
10		1347.000	1353.000	0.000
11		1420.000	1397.000	0.000
12		1377.000	0.000	0.000
13		1367.000	0.000	0.000
14		1333.000	0.000	0.000
15		1353.000	0.000	0.000
16		1377.000	0.000	0.000
17		1340.000	0.000	0.000

Populatii - (CER1) Cuplarea 4

Nr.crt	Simbol	FF(BD(4,1,1,1) A(1,4,3))	FF(BD(4,1,1,2) A(1,4,3))	FF(BD(4,1,2,1) A(1,4,3))
1		1373.000	1440.000	3550.000
2		1360.000	1480.000	3710.000
3		1490.000	1413.000	3283.000
4		1440.000	1427.000	3350.000
5		1460.000	1453.000	3467.000
6		1400.000	1550.000	3500.000
7		1380.000	1423.000	3550.000
8		1390.000	1453.000	0.000
9		1410.000	1543.000	0.000
10		1397.000	1453.000	0.000
11		1367.000	0.000	0.000
12		1380.000	0.000	0.000
13		1430.000	0.000	0.000
14		1433.000	0.000	0.000
15		1407.000	0.000	0.000
16		1467.000	0.000	0.000

Populatii - (CER1) Cuplarea 5

Nr.crt	Simbol	FF(BD(5,1,1,1) A(1,4,3))	FF(BD(5,1,1,2) A(1,4,3))	FF(BD(5,1,2,1) A(1,4,3))
1		1133.000	1123.000	3550.000
2		1157.000	1113.000	3150.000
3		1173.000	1223.000	3050.000
4		1190.000	1133.000	3117.000
5		1153.000	1173.000	3133.000
6		1157.000	1210.000	3160.000
7		1123.000	1180.000	3050.000
8		1153.000	1167.000	0.000
9		1173.000	1153.000	0.000
10		1190.000	1173.000	0.000
11		1230.000	0.000	0.000
12		1173.000	0.000	0.000
13		1173.000	0.000	0.000
14		1137.000	0.000	0.000
15		1180.000	0.000	0.000
16		1153.000	0.000	0.000

Populatii - (CER1) Cuplarea 1

Nr.crt	Simbol	TAU(BD(1,1,1,1) A(1,4,4))	TAU(BD(1,1,1,2) A(1,4,4))	TAU(BD(1,1,2,1) A(1,4,4))
1		102.855	106.207	506.121
2		97.156	99.085	416.332
3		102.952	102.257	415.700
4		110.522	95.410	510.123
5		108.780	96.978	450.317
6		100.151	97.730	452.884
7		109.985	95.274	420.561
8		100.838	92.994	0.000
9		102.422	98.323	0.000
10		108.460	101.858	0.000
11		104.496	100.454	0.000
12		105.753	0.000	0.000
13		100.681	0.000	0.000
14		106.964	0.000	0.000
15		99.394	0.000	0.000
16		96.669	0.000	0.000
17		98.637	0.000	0.000

Populatii - (CER1) Cuplarea 2

Nr.crt	Simbol	TAU(BD(2,1,1,1) A(1,4,4))	TAU(BD(2,1,1,2) A(1,4,4))	TAU(BD(2,1,2,1) A(1,4,4))
1		89.021	99.414	444.588
2		90.682	91.729	450.202
3		91.015	99.639	465.367
4		96.244	96.388	460.834
5		96.610	94.902	524.297
6		98.487	99.130	437.143
7		95.826	95.286	440.180
8		97.926	97.330	0.000
9		99.608	93.785	0.000
10		103.087	96.000	0.000
11		93.049	0.000	0.000
12		96.030	0.000	0.000
13		91.350	0.000	0.000
14		95.852	0.000	0.000
15		98.764	0.000	0.000
16		94.004	0.000	0.000

Populatii - (CER1) Cuplarea 3

Nr.crt	Simbol	TAU(BD(3,1,1,1) A(1,4,4))	TAU(BD(3,1,1,2) A(1,4,4))	TAU(BD(3,1,2,1) A(1,4,4))
1		104.160	108.069	390.237
2		104.391	108.716	385.926
3		101.968	107.955	372.986
4		102.422	108.870	395.053
5		106.463	104.466	396.709
6		107.470	101.320	407.678
7		106.174	108.733	373.888
8		106.174	105.032	0.000
9		104.576	104.344	0.000
10		102.668	106.051	0.000
11		108.232	110.260	0.000
12		105.695	0.000	0.000
13		107.148	0.000	0.000
14		100.908	0.000	0.000
15		104.576	0.000	0.000
16		105.695	0.000	0.000
17		102.855	0.000	0.000

Populatii - (CER1) Cuplarea 4

Nr.crt	Simbol	TAU(BD(4,1,1,1) A(1,4,4))	TAU(BD(4,1,1,2) A(1,4,4))	TAU(BD(4,1,2,1) A(1,4,4))
1		97.764	103.226	395.675
2		97.491	104.682	403.261
3		101.305	101.290	365.916
4		101.853	100.934	373.384
5		102.586	103.461	376.848
6		98.370	110.367	374.251
7		98.263	100.651	389.084
8		97.026	102.094	0.000
9		100.399	109.869	0.000
10		96.866	102.094	0.000
11		96.051	0.000	0.000
12		96.965	0.000	0.000
13		100.478	0.000	0.000
14		101.358	0.000	0.000
15		99.519	0.000	0.000
16		104.457	0.000	0.000

Populatii - (CER1) Cuplarea 5

Nr.crt	Simbol	TAU(BD(5,1,1,1) A(1,4,4))	TAU(BD(5,1,1,2) A(1,4,4))	TAU(BD(5,1,2,1) A(1,4,4))
1		104.270	101.813	488.846
2		104.896	100.907	437.865
3		106.346	110.879	423.964
4		106.269	101.943	433.278
5		105.316	105.543	443.768
6		104.896	108.872	439.255
7		101.813	105.376	423.964
8		102.965	105.003	0.000
9		104.751	104.533	0.000
10		106.269	106.346	0.000
11		111.514	0.000	0.000
12		104.751	0.000	0.000
13		104.751	0.000	0.000
14		103.083	0.000	0.000
15		107.782	0.000	0.000
16		102.965	0.000	0.000

5.5. Program EXPERT de calcul specific aplicației

5.5.1. Selecțiuni din programul de calcul

```

*****
* formula.scx
* Setup
*****

PUBLIC m_message
PUBLIC m_strResult

PRIVATE p_formula
PRIVATE p_simbol
PRIVATE p_no
PRIVATE p_do
PRIVATE p_recNo
PRIVATE p_str
PRIVATE p_rcupd
PRIVATE p_crtSymbol
PRIVATE p_var

* Valoare Relatia Calcul initiala
STORE SPACE(30) TO p_rcupd
STORE 1 TO p_str
STORE m_message + SPACE(10) TO p_rcupd

* Salveaza inregistrare curenta
IF m_do = 1
    SELECT caract
    IF EOF("caract")
        STORE 7 TO m_error
        STORE "Sfârșit de fisier neasteptat" TO m_message
        DO error.spr
        RETURN .F.
    ENDIF
    STORE RECNO() TO p_recNo
    STORE caract.simbol TO p_crtSymbol
ENDIF

STORE 15 TO p_no

DIMENSION p_formula(p_no)
DIMENSION p_simbol(p_no)

STORE 'Adunare "+" TO p_formula[1]
STORE "+" TO p_simbol[1]
STORE 'Scădere "-" TO p_formula[2]
STORE "-" TO p_simbol[2]
STORE 'Inmultire "*" TO p_formula[3]
STORE "*" TO p_simbol[3]
STORE 'Impărțire "/" TO p_formula[4]
STORE "/" TO p_simbol[4]
STORE 'Ridicare la putere "^" TO p_formula[5]
STORE "^" TO p_simbol[5]

```

```

STORE 'Modulo "%'" TO p_formula[6]
STORE "%" TO p_simbol[6]
STORE 'Paranteză deschisă "(" TO p_formula[7]
STORE "(" TO p_simbol[7]
STORE 'Paranteză închisă ")" TO p_formula[8]
STORE ")" TO p_simbol[8]
STORE "Valoare absoluta" TO p_formula[9]
STORE "ABS(" TO p_simbol[9]
STORE "Cosinus" TO p_formula[10]
STORE "COS(" TO p_simbol[10]
STORE "Logaritm natural" TO p_formula[11]
STORE "LOG(" TO p_simbol[11]
STORE "PI" TO p_formula[12]
STORE "PI()" TO p_simbol[12]
STORE "Sinus" TO p_formula[13]
STORE "SIN(" TO p_simbol[13]
STORE "Radacina patrata" TO p_formula[14]
STORE "SQRT(" TO p_simbol[14]
STORE "Tangenta" TO p_formula[15]
STORE "TAN(" TO p_simbol[15]

```

```

IF m_do = 1

```

```

    * Formula pentru o Caracteristica a unei Analize
    GO TOP
    DO WHILE .NOT. EOF("caract")
        IF caract.simbol <> p_crtSymbol
            STORE p_no + 1 TO p_no
            DIMENSION p_formula[p_no]
            DIMENSION p_simbol[p_no]
            STORE caract.simbol TO p_simbol[p_no], p_var
            STORE caract.ume TO p_formula[p_no]
            PRIVATE p_var
            STORE RAND() TO &p_var
        ENDIF
        SKIP
    ENDDO

```

```

    GO RECORD p_recNo

```

```

ELSE

```

```

    * Formule Statistice
    STORE 39 TO p_no
    DIMENSION p_formula[p_no]
    DIMENSION p_simbol[p_no]

    STORE "Numar elemente" TO p_formula[16]
    STORE "N" TO p_simbol[16]
    PRIVATE n
    STORE RAND() TO n

    STORE "Media aritmetica" TO p_formula[17]

```

STORE "MEDIA" TO p_simbol[17]
PRIVATE media
STORE RAND() TO media

STORE "Media geometrică" TO p_formula[18]
STORE "M_GEOM" TO p_simbol[18]
PRIVATE m_geom
STORE RAND() TO m_geom

STORE "Media armonică" TO p_formula[19]
STORE "M_ARM" TO p_simbol[19]
PRIVATE m_arm
STORE RAND() TO m_arm

STORE "Element maxim" TO p_formula[20]
STORE "MAX" TO p_simbol[20]
PRIVATE max
STORE RAND() TO max

STORE "Element minim" TO p_formula[21]
STORE "MIN" TO p_simbol[21]
PRIVATE min
STORE RAND() TO min

STORE "Abaterea medie absolută" TO p_formula[22]
STORE "ABAT_MEDIE_ABS" TO p_simbol[22]
PRIVATE abat_medie_abs
STORE RAND() TO abat_medie_abs

STORE "Dispersia elementelor" TO p_formula[23]
STORE "DISPERSIA" TO p_simbol[23]
PRIVATE dispersia
STORE RAND() TO dispersia

STORE "Abaterea medie patratice" TO p_formula[24]
STORE "ABATEREA" TO p_simbol[24]
PRIVATE abaterea
STORE RAND() TO abaterea

STORE "Amplitudinea" TO p_formula[25]
STORE "AMPLIT" TO p_simbol[25]
PRIVATE amplit
STORE RAND() TO amplit

STORE "Valoare centrală" TO p_formula[26]
STORE "VAL_CENTR" TO p_simbol[26]
PRIVATE val_cent
STORE RAND() TO val_cent

STORE "Coeficient variatie" TO p_formula[27]
STORE "COEF_VAR" TO p_simbol[27]

```

PRIVATE coef_var
STORE RAND() TO coef_var

STORE "Mediana" TO p_formula[28]
STORE "MEDIANA" TO p_simbol[28]
PRIVATE mediana
STORE RAND() TO mediana

STORE "Modul" TO p_formula[29]
STORE "MODUL" TO p_simbol[29]
PRIVATE modul
STORE RAND() TO modul

STORE "Coeficient Pearson" TO p_formula[30]
STORE "COEF_PEARSON" TO p_simbol[30]
PRIVATE coef_pearson
STORE RAND() TO coef_pearson

STORE "Moment 2" TO p_formula[31]
STORE "MOMENT2" TO p_simbol[31]
PRIVATE moment2
STORE RAND() TO moment2

STORE "Moment 3" TO p_formula[32]
STORE "MOMENT3" TO p_simbol[32]
PRIVATE moment3
STORE RAND() TO moment3

STORE "Moment 4" TO p_formula[33]
STORE "MOMENT4" TO p_simbol[33]
PRIVATE moment4
STORE RAND() TO moment4

STORE "Moment centrat 2" TO p_formula[34]
STORE "M_CENTRAT2" TO p_simbol[34]
PRIVATE m_centrat2
STORE RAND() TO m_centrat2

STORE "Moment centrat 3" TO p_formula[35]
STORE "M_CENTRAT3" TO p_simbol[35]
PRIVATE m_centrat3
STORE RAND() TO m_centrat3

STORE "Moment centrat 4" TO p_formula[36]
STORE "M_CENTRAT4" TO p_simbol[36]
PRIVATE m_centrat4
STORE RAND() TO m_centrat4

STORE "Coeficient asimetric" TO p_formula[37]
STORE "COEF_ASIM" TO p_simbol[37]
PRIVATE coef_asim

```

```
STORE RAND() TO coef_asim
```

```
STORE "Coeficient boltire" TO p_formula[38]
```

```
STORE "COEF_BOLT" TO p_simbol[38]
```

```
PRIVATE coef_bolt
```

```
STORE RAND() TO coef_bolt
```

```
STORE "Excesul" TO p_formula[39]
```

```
STORE "EXCES" TO p_simbol[39]
```

```
PRIVATE exces
```

```
STORE RAND() TO exces
```

```
ENDIF
```

```
*****
```

```
* formula.scx
```

```
* Ok - Verify - Cancel
```

```
*****
```

```
DO CASE
```

```
  CASE p_ok = 1
```

```
    && Ok
```

```
    STORE ALLTRIM(p_rcupd) TO m_strResult
```

```
    STORE 1 TO m_ok
```

```
    CLEAR READ
```

```
  CASE p_ok = 2
```

```
    && Verify
```

```
    STORE "Formulă eronată!" TO m_message
```

```
    ON ERROR DO message.spr
```

```
    STORE EVALUATE(p_rcupd) TO p_var
```

```
    ON ERROR
```

```
    IF m_message <> ""
```

```
      STORE "Formulă corectă!" TO m_message
```

```
      DO message.spr
```

```
    ENDIF
```

```
  CASE p_ok = 3
```

```
    && Cancel
```

```
    STORE 0 TO m_ok
```

```
    STORE "" TO m_strResult
```

```
    CLEAR READ
```

```
ENDCASE
```



```
PUBLIC m_no
PUBLIC m_col
PUBLIC m_row
PUBLIC m_error
PUBLIC m_filter
PUBLIC m_masiv
PUBLIC m_result
PUBLIC m_safety
PUBLIC m_message
PUBLIC m_window
PUBLIC m_strResult
PUBLIC m_crtState
PUBLIC m_nextState
PUBLIC m_grParamStat
PUBLIC m_ctParamStat
PUBLIC m_populatFields
```

```
PUBLIC w_wait
PUBLIC w_browser
PUBLIC w_desktop
```

```
STORE SPACE(80) TO m_prgPath, m_path
STORE ALLTRIM(SYS(5)) + ALLTRIM(SYS(2003)) + "\" TO m_prgPath
STORE SPACE(15) TO m_dBasePath, m_probePath, m_materPath, m_stratPath
STORE SPACE(15) TO m_analizePath, m_incercPath, m_caractPath
STORE SPACE(15) TO m_makeDBFPath, m_expertPath
STORE SPACE(15) TO m_populatPath, m_populatNamesPath, m_statistNamesPath,
m_statistPath
STORE SPACE(15) TO m_cuplariPath
STORE "makedbf.dbf" TO m_makeDBFPath
STORE "expert.dbf" TO m_expertPath
```

```
STORE DATE() TO m_date
```

```
STORE SPACE(8) TO m_name
STORE 0 TO m_error
STORE 1 TO m_dBase
STORE 1 TO m_analiza
STORE 1 TO m_cuplare
STORE 0 TO m_probaOrd, m_materOrd, m_stratOrd, m_incercOrd, m_caractOrd
STORE 1 TO m_grParamStat
STORE "TENDINTA CENTRALA" TO m_ctParamStat
```

```
STORE SPACE(15) TO m_window
STORE "" TO m_window
STORE .F. TO m_masiv
STORE .T. TO m_safety
STORE 2 TO m_do && Parse
STORE 0 TO m_ok && 0 - Cancel; 1 - Ok
STORE SPACE(50) TO m_message
STORE "" TO m_message
```

```

STORE 0 TO m_result
STORE SPACE(80) TO m_strResult
STORE SPACE(100) TO m_populatFields
STORE "" TO m_populatFields
STORE 0 TO m_no
STORE 3 TO m_col
STORE 0 TO m_row

PUBLIC m_headVector[3]
DIMENSION m_headVector[3]

PUSH MENU _MSYSMENU

DEFINE WINDOW w_desktop ;
    AT 0.200, 1.000 ;
    SIZE 28.000, 130.000 ;
    FONT "Times New Roman", 11 ;
    TITLE "Expert for Windows (none)" ;
    FLOAT ;
    CLOSE ;
    GROW ;
    ZOOM ;
    MINIMIZE ;
    SYSTEM
ACTIVATE WINDOW w_desktop
&& HIDE WINDOW w_desktop

DEFINE WINDOW w_browser ;
    AT 29.600, 4.500 ;
    SIZE 8.000,119.400 ;
    FONT "Times New Roman", 11 ;
    FLOAT ;
    CLOSE ;
    GROW ;
    ZOOM ;
    MINIMIZE ;
    SYSTEM

DEFINE WINDOW w_wait ;
    AT 0.000, 0.000 ;
    SIZE 5.278,52.500 ;
    FONT "Times New Roman", 11 ;
    NOFLOAT ;
    NOCLOSE ;
    DOUBLE ;
    NOMINIMIZE
*    COLOR RGB(238, 89, 0, 0, 19, 100)
MOVE WINDOW w_wait CENTER
ACTIVATE WINDOW w_wait NOSHOW

* meniul

```


DO prowin.mpr

* about

DO about.spr

* Program DataBases

IF USED("expert")

 SELECT expert

 SET ORDER TO TAG nume

ELSE

 SELECT 0

 USE (LOCFILE(m_expertPath,"DBF","Nu gasesc 'expert.dbf!"));

 AGAIN ALIAS expert;

 ORDER TAG nume

ENDIF

IF .NOT. USED("expert")

 STORE "Nu găsesc fisierul expert.dbf!" TO m_message

 DO message.spr

 CLOSE ALL

 RETURN

ENDIF

SELECT expert

STORE "IMPLICIT" TO m_name

SEEK "IMPLICIT"

IF EOF("expert")

 STORE m_prgPath TO m_path

 STORE "dbase.dbf" TO m_dBasePath

 STORE "mater.dbf" TO m_materPath

 STORE "probe.dbf" TO m_probePath

 STORE "strat.dbf" TO m_stratPath

 STORE "analyze.dbf" TO m_analizePath

 STORE "incerc.dbf" TO m_incercPath

 STORE "caract.dbf" TO m_caractPath

 STORE "cuplari.dbf" TO m_cuplariPath

 STORE "popul" TO m_populatPath

 STORE "populatn.dbf" TO m_populatNamesPath

 STORE "statistn.dbf" TO m_statistNamesPath

 STORE "stati" TO m_statistPath

 APPEND BLANK

 REPLACE expert.nr_crt WITH 1

 REPLACE expert.nume WITH "Implicit"

 REPLACE expert.path WITH m_path

 REPLACE expert.dbase WITH m_dBasePath

 REPLACE expert.mater WITH m_materPath

 REPLACE expert.probe WITH m_probePath

 REPLACE expert.strat WITH m_stratPath

 REPLACE expert.analize WITH m_analizePath

 REPLACE expert.incerc WITH m_incercPath

```

REPLACE expert.caract WITH m_caractPath
REPLACE expert.cuplari WITH m_cuplariPath
REPLACE expert.populat WITH m_populatPath
REPLACE expert.populatn WITH m_populatNamesPath
REPLACE expert.statistn WITH m_statistNamesPath
REPLACE expert.statist WITH m_statistPath
ELSE
STORE ALLTRIM(expert.path) TO m_path
STORE expert.dbase TO m_dBasePath
STORE expert.mater TO m_materPath
STORE expert.probe TO m_probePath
STORE expert.strat TO m_stratPath
STORE expert.analize TO m_analizePath
STORE expert.incerc TO m_incercPath
STORE expert.caract TO m_caractPath
STORE expert.cuplari TO m_cuplariPath
STORE ALLTRIM(expert.populat) TO m_populatPath
STORE expert.populatn TO m_populatNamesPath
STORE expert.statistn TO m_statistNamesPath
STORE ALLTRIM(expert.statist) TO m_statistPath
ENDIF

* Deschide Sesiunea
DO open.spr

IF (.NOT. FILE(m_path+m_dBasePath)) .AND. (.NOT. FILE(m_path+m_analizePath))
STORE "Nu există directorul " + m_path TO m_message
DO message.spr
CLOSE ALL
RETURN
ENDIF

* Modifica titlu fereastra principala
IF WEXIST("w_desktop")
MODIFY WINDOW w_desktop ;
TITLE "Expert for Windows (" + ALLTRIM(m_name) + ")"
ENDIF

* Deschide bazele de date
DO OpenDataBases

* Daca dbase.dbf este goala se adauga o baza de date
SELECT dbase
STORE 1 TO m_dBase
GO TOP
IF EOF("dbase")
STORE .F. TO m_masiv
STORE 0 TO m_do && Add
DO dbase.spr
STORE .F. TO m_masiv
ENDIF

```

* Daca analize.dbf este goala se adauga o analiza

```
SELECT analize
STORE 1 TO m_analiza
GO TOP
IF EOF("analize")
    STORE .F. TO m_masiv
    STORE 0 TO m_do && Add
    DO analiza.spr
    STORE .F. TO m_masiv
ENDIF
```

* Daca cuplari.dbf este goala se adauga o cuplare

```
SELECT cuplari
GO TOP
IF EOF("cuplari")
    STORE 0 TO m_do && Add
    STORE "CUPLARI" TO m_nextState
ELSE
    STORE cuplari.dbase TO m_dBase
    STORE cuplari.analiza TO m_analiza
    STORE cuplari.nr_crt TO m_cuplare
    STORE "BROWSE_CUPLARI" TO m_nextState
ENDIF
```

* Bucla de stari

```
DO WHILE .T.
    STORE m_nextState TO m_crtState
    DO CASE
        CASE m_nextState = "DBASE"
            * Baza de Date (dbase.scx)
            DO dbase.spr
            STORE "BROWSE_DBASE" TO m_nextState
        CASE m_nextState = "ANALIZA"
            * Analiza (analiza.scx)
            DO analiza.spr
            STORE "BROWSE_ANALIZA" TO m_nextState
        CASE (m_nextState = "CUPLARI") .OR. (m_nextState = "CUPLARE")
            * Cuplare (populat.scx)
            STORE "BROWSE_CUPLARI" TO m_nextState
            DO populat.spr
        CASE m_nextState = "BROWSE_DBASE"
            * Tabel cu Bazele de Date
            SELECT dbase
            STORE "EXIT" TO m_nextState
            DO CreateBrowser WITH " - Baza de Date"
            BROWSE IN WINDOW w_desktop NODELETE NOAPPEND
    NOMODIFY
        CASE m_nextState = "BROWSE_ANALIZA"
            * Tabel cu Analizele
            SELECT caract
```

```

        STORE "EXIT" TO m_nextState
        DO CreateBrowser WITH " - Analiza"
        BROWSE IN WINDOW w_desktop NODELETE NOAPPEND
NOMODIFY
    CASE m_nextState = "BROWSE_CUPLARI"
        * Tabel cu Cuplarile
        SELECT cuplari
        STORE "EXIT" TO m_nextState
        DO CreateBrowser WITH " - Cuplari"
        BROWSE IN WINDOW w_desktop NODELETE NOAPPEND
NOMODIFY
    CASE m_nextState = "BROWSE_POPULAT_NAME"
        * Tabel cu numele populatiilor pentru cuplarea curenta
        SELECT populatn
        STORE "EXIT" TO m_nextState
        DO CreateBrowser WITH " - Populatii"
        BROWSE IN w_desktop NODELETE NOAPPEND NOMODIFY
    CASE m_nextState = "BROWSE_POPULAT_FIRST"
        * Prima pagina din tabelul cu populatii pentru cuplarea curenta
        STORE "EXIT" TO m_nextState
        DO CreateBrowser WITH "- Populatii"
        DO BrowsePopulatOnPage WITH "FIRST"
    CASE m_nextState = "BROWSE_POPULAT_NEXT"
        * Pagina urmatoare din tabelul cu populatii
        STORE "EXIT" TO m_nextState
        DO CreateBrowser WITH "- Populatii"
        DO BrowsePopulatOnPage WITH "NEXT"
    CASE m_nextState = "BROWSE_POPULAT_PREV"
        * Pagina precedenta din tabelul cu populatii
        STORE "EXIT" TO m_nextState
        DO CreateBrowser WITH "- Populatii"
        DO BrowsePopulatOnPage WITH "PREV"
    CASE m_nextState = "BROWSE_STATIST_NAME"
        * Tabel cu denumirea parametrilor statistici pentru cuplarea curenta
        SELECT statistn
        STORE "EXIT" TO m_nextState
        DO CreateBrowser WITH " - Parametrii statistici"
        BROWSE IN WINDOW w_desktop ;
        FIELDS nr crt :H="Nr.crt." :R, grupa :R , caract
        :H="Subgrupa" :R, simbol, denumire, formula :W=formula();
        WINDOW w_desktop ;
        NODELETE NOAPPEND
    CASE m_nextState = "BROWSE_STATIST_FIRST"
        * Prima pagina din tabelul cu statistici pentru cuplarea curenta
        STORE "EXIT" TO m_nextState
        DO CreateBrowser WITH "- Statistici"
        DO BrowseStatistOnPage WITH "FIRST"
    CASE m_nextState = "BROWSE_STATIST_NEXT"
        * Pagina urmatoare din tabelul cu statistici
        STORE "EXIT" TO m_nextState
        DO CreateBrowser WITH "- Statistici"

```

```
        DO BrowseStatistOnPage WITH "NEXT"
CASE m_nextState = "BROWSE_STATIST_PREV"
    * Pagina precedenta din tabelul cu statistic
    STORE "EXIT" TO m_nextState
    DO CreateBrowser WITH "- Statistici"
    DO BrowseStatistOnPage WITH "PREV"
CASE (m_nextState = "EXIT") .OR. (m_nextState = "QUIT")
    * Iesire program
    EXIT
ENDCASE
ENDDO
```

&& Close DataBases

```
POP MENU _MSYSMENU
CLOSE DATABASES
RELEASE WINDOWS w_browser, w_desktop, w_wait
* QUIT
RETURN
Selectiuni din programul de calcul
```

* dbase.scx

* Setup

*Variabile globale

PUBLIC m_dBasePath

PUBLIC m_probePath

PUBLIC m_materPath

PUBLIC m_stratPath

PUBLIC m_window

PUBLIC m_message

PUBLIC m_safety

PUBLIC m_masiv

PUBLIC m_date

PUBLIC m_do

PUBLIC m_result

PUBLIC m_dBase

* Variabile locale

PRIVATE m

PRIVATE p_ok

PRIVATE p_do

PRIVATE p_old

PRIVATE p_copy

PRIVATE p_copyNo

PRIVATE p_modify

STORE 0 TO p_old

STORE 0 TO p_copyNo

STORE .F. TO p_modify

PRIVATE p_dBaseNo

PRIVATE p_stratNo

PRIVATE p_fireNo

PRIVATE p_proba

PRIVATE p_mater

PRIVATE p_strat

PRIVATE p_numcProba

PRIVATE p_numcMater

PRIVATE p_numcStrat

PRIVATE p_dummy

STORE SPACE(1) TO p_dummy

IF EMPTY(m_do)

 STORE 0 TO m_do

ENDIF

IF EMPTY(m_date)

 STORE DATE() TO m_date

ENDIF

IF EMPTY(m_result)

```

        STORE 0 TO m_result
    ENDIF

    * Deschide bazele da date
    * dbase.dbf
    IF EMPTY(m_dBasePath)
        STORE "dbase.dbf" TO m_dBasePath
    ENDIF
    IF USED("dbase")
        SELECT dbase
        SET ORDER TO TAG dbase
    ELSE
        SELECT 0
        USE (LOCFILE(m_path + m_dBasePath,"DBF","Nu gasesc 'dbase.dbf!'"));
        AGAIN ALIAS dbase ;
        ORDER TAG dbase
    ENDIF

    * probe.dbf
    IF EMPTY(m_probePath)
        STORE "probe.dbf" TO m_probePath
    ENDIF
    IF USED("probe")
        SELECT probe
        SET ORDER TO TAG proba
    ELSE
        SELECT 0
        USE (LOCFILE(m_path + m_probePath,"DBF","Nu gasesc 'probe.dbf!'"));
        AGAIN ALIAS probe ;
        ORDER TAG proba
    ENDIF

    * mater.dbf
    IF EMPTY(m_materPath)
        STORE "mater.dbf" TO m_materPath
    ENDIF
    IF USED("mater")
        SELECT mater
        SET ORDER TO TAG material
    ELSE
        SELECT 0
        USE (LOCFILE(m_path + m_materPath,"DBF","Nu gasesc 'mater.dbf!'"));
        AGAIN ALIAS mater ;
        ORDER TAG material
    ENDIF

    * strat.dbf
    IF EMPTY(m_stratPath)
        STORE "strat.dbf" TO m_stratPath
    ENDIF
    IF USED("strat")

```

```

SELECT strat
SET ORDER TO TAG strat
ELSE
SELECT 0
USE (LOCFILE(m_path + m_stratPath,"DBF","Nu gasesc 'strat.dbf!"));
AGAIN ALIAS strat ;
ORDER TAG strat
ENDIF

* Pregateste bazele de date
* dbase.dbf
SELECT dbase
GO BOTTOM
IF EOF("dbase") && ?
    STORE 0 TO m_do
ENDIF
SCATTER MEMVAR
IF m_do = 0 && add dbase
    STORE dbase.dbase + 1 TO p_dBaseNo
    STORE p_dBaseNo TO m_dBase
    STORE m_dBase TO m.dbase
    STORE SPACE(20) TO m.componenta
    STORE SPACE(20) TO m.cod
    STORE SPACE(30) TO m.linia
    STORE SPACE(10) TO m.data_pif
    STORE SPACE(10) TO m.data_proba
    STORE 1 TO m.nr_probe
    STORE 1 TO m.nr_mater
    STORE 0 TO m.nr_analize
    APPEND BLANK
    GATHER MEMVAR
    STORE SPACE(20) TO p_numeProba
    STORE SPACE(20) TO p_numeMater
    STORE SPACE(20) TO p_numeStrat
    STORE 1 TO p_stratNo
    STORE 1 TO p_fireNo
ELSE
    && modify dbase (dbase is not empty)
    STORE dbase.dbase TO p_dbaseNo
    STORE m.dbase TO m_dBase
ENDIF
STORE 1 TO p_proba
STORE 1 TO p_mater
STORE 1 TO p_strat

* probe.dbf
SELECT probe
SET FILTER TO probe.dbase = m_dBase
IF m_do = 0
    APPEND BLANK
    REPLACE probe.proba WITH 1
    REPLACE probe.dbase WITH m_dBase

```



```

REPLACE probe.ume WITH SPACE(20)
ELSE
  SEEK p_proba
  IF .NOT. EOF("probe")
    STORE probe.ume TO p_umeProba
  ELSE
    STORE 3 TO m_error
    STORE "Nu există Proba " + ALLTRIM(STR(p_proba)) + "!" TO m_message
    DO error.spr
  ENDIF
ENDIF

* mater.dbf
SELECT mater
SET FILTER TO mater.dbase = m_dBase
IF m_do = 0
  APPEND BLANK
  REPLACE mater.material WITH 1
  REPLACE mater.dbase WITH m_dBase
  REPLACE mater.ume WITH SPACE(20)
  REPLACE mater.nr_strat WITH 1
ELSE
  SEEK p_mater
  IF .NOT. EOF("mater")
    STORE mater.ume TO p_umeMater
    STORE mater.nr_strat TO p_stratNo
  ELSE
    STORE 4 TO m_error
    STORE "Nu există Materialul " + ALLTRIM(STR(p_mater)) + "!" TO
m_message
    DO error.spr
  ENDIF
ENDIF

* strat.dbf
SELECT strat
SET FILTER TO (strat.dbase = m_dBase) .AND. (strat.material = mater.material)
&&p_mater)
IF m_do = 0
  APPEND BLANK
  REPLACE strat.strat WITH 1
  REPLACE strat.material WITH 1
  REPLACE strat.dbase WITH m_dBase
  REPLACE strat.ume WITH SPACE(20)
  REPLACE strat.nr_fire WITH 1
ELSE
  SEEK p_strat
  IF .NOT. EOF("strat")
    STORE strat.ume TO p_umeStrat
    STORE strat.nr_fire TO p_fireNo
  ELSE

```

```

        STORE 5 TO m_error
        STORE "Nu există Stratul " + ALLTRIM(STR(p_strat)) + "!" TO m_message
        DO error.spr
    ENDIF
ENDIF

```

```

* nume fereastră curentă
STORE "w_dbase" TO m_window

```

```

*****
* dbase.scx
* Cleanup, Proceduri și Funcții
*****

```

```

IF USED("populat")
    SELECT populat
    USE

```

```

ENDIF
IF USED("statist")
    SELECT statist
    USE

```

```

ENDIF
STORE -1 TO m_cuplare

```

```

PROCEDURE SetNewDBase
*****
* dbase.scx
* Selectie Baza de Date
*****

```

```

PRIVATE p_aux

```

```

    IF m_dBase = p_old
        RETURN
    ENDIF

```

```

    STORE p_old TO p_aux
    STORE m_dBase TO p_old
    STORE p_aux TO m_dBase

```

```

* Salveaza
IF .NOT. SaveAllView()
    SHOW GETS
    RETURN
ENDIF

```

```

    STORE p_old TO m_dBase

```

```

* Verifica

```

```

    IF m_dBase > p_dBaseNo
        STORE "Există doar " + ALLTRIM(STR(p_dBaseNo)) + " Baza de Date!" TO

```

```

m_message

```

```

        DO message.spr
        STORE p_dBaseNo TO m_dBase
    ENDIF
    IF m_dBase <= 0
        STORE "Codul minim pentru o Bază de Date este 1!" TO m_message
        DO message.spr
        STORE 1 TO m_dBase
    ENDIF

    *Cauta Baza de Date
    SELECT dbase
    SEEK m_dBase
    IF EOF("dbase")
        STORE " Nu există Baza de Date " + ALLTRIM(STR(m_dBase)) + " !" TO
m_message
        DO message.spr
        STORE 1 TO m_dBase
        RETURN
    ENDIF
    SCATTER MEMVAR

    * Cauata Proba 1 pentru Baza de Date
    SELECT probe
    STORE 1 TO p_proba
    SEEK p_proba
    IF .NOT. EOF("probe")
        STORE probe.nume TO p_numeProba
    ELSE
        STORE 3 TO m_error
        STORE "Nu există Proba " + ALLTRIM(STR(p_proba)) + "!" TO m_message
        DO error.spr
    ENDIF

    * Cauta Materialul 1 pentru baza de Date
    SELECT mater
    STORE 1 TO p_mater
    SEEK p_mater
    IF .NOT. EOF("mater")
        STORE mater.nume TO p_numeMater
        STORE mater.nr_strat TO p_stratNo
    ELSE
        STORE 4 TO m_error
        STORE "Nu există Materialul " + ALLTRIM(STR(p_mater)) + "!" TO
m_message
        DO error.spr
    ENDIF

    * Cauta Stratul 1 pentru Materialul curent
    SELECT strat
    STORE 1 TO p_strat
    SEEK p_strat

```

```

IF .NOT. EOF("strat")
    STORE strat.numc TO p_numcStrat
    STORE strat.nr_fire TO p_fireNo
ELSE
    STORE 5 TO m_error
    STORE "Nu există Stratul " + ALLTRIM(STR(p_strat)) + "!" TO m_message
    DO error.spr
ENDIF

```

* Afiseaza

```

IF m_do = 1
    IF m.nr_analize > 0
        SHOW GET m.componenta DISABLE
        SHOW GET m.cod DISABLE
        SHOW GET m.linia DISABLE
        SHOW GET m.data_pif DISABLE
        SHOW GET m.data_proba DISABLE
        SHOW GET m.nr_probe DISABLE
        SHOW GET m.nr_mater DISABLE
        SHOW GET p_numcProba DISABLE
        SHOW GET p_numcMater DISABLE
        SHOW GET p_stratNo DISABLE
        SHOW GET p_fireNo DISABLE
        SHOW GET p_numcStrat DISABLE
    ELSE
        SHOW GET m.componenta ENABLE
        SHOW GET m.cod ENABLE
        SHOW GET m.linia ENABLE
        SHOW GET m.data_pif ENABLE
        SHOW GET m.data_proba ENABLE
        SHOW GET m.nr_probe ENABLE
        SHOW GET m.nr_mater ENABLE
        SHOW GET p_numcProba ENABLE
        SHOW GET p_numcMater ENABLE
        SHOW GET p_stratNo ENABLE
        SHOW GET p_fireNo ENABLE
        SHOW GET p_numcStrat ENABLE
    ENDIF
ENDIF

```

ENDIF

SHOW GETS

RETURN

PROCEDURE SetNewProba

* dbase.scx

* Selecti Proba

PRIVATE p_aux

* populat.scx

* Setup

PUBLIC m_dBasePath
PUBLIC m_analizePath
PUBLIC m_probePath
PUBLIC m_materPath
PUBLIC m_stratPath
PUBLIC m_incercPath
PUBLIC m_caractPath
PUBLIC m_cuplariPath
PUBLIC m_populatPath
PUBLIC m_populatNamesPath
PUBLIC m_statistPath
PUBLIC m_statistNamesPath

PUBLIC m_window
PUBLIC m_message
PUBLIC m_error
PUBLIC m_do
PUBLIC m_result
PUBLIC m_dBase
PUBLIC m_analiza

PRIVATE m
PRIVATE p_ok
PRIVATE p_do1
PRIVATE p_do2
PRIVATE p_old
PRIVATE p_filter
PRIVATE p_modify
PRIVATE p_populat, p_statist

STORE 0 TO p_old
STORE SPACE(100) TO p_filter
STORE .F. TO p_modify

PRIVATE p_couplesNo
PRIVATE p_couple
PRIVATE p_dbVar
PRIVATE p_anVar
PRIVATE p_populatNo
PRIVATE p_orderNo
PRIVATE p_order
PRIVATE p_proba
PRIVATE p_material
PRIVATE p_strat
PRIVATE p_caract
PRIVATE p_incerc

```

IF EMPTY(m_do)
    STORE 0 TO m_do
ENDIF
IF EMPTY(m_result)
    STORE 0 TO m_result
ENDIF

* Baze de date
* cuplari.dbf
IF EMPTY(m_cuplariPath)
    STORE "cuplari.dbf" TO m_cuplariPath
ENDIF
IF USED("cuplari")
    SELECT cuplari
    SET ORDER TO TAG nr_crt
ELSE
    SELECT 0
    USE (LOCFILE(m_path + m_cuplariPath,"DBF","Nu găsesc 'cuplari.dbf!'"));
    AGAIN ALIAS cuplari ;
    ORDER TAG nr_crt
ENDIF

* dbase.dbf
IF EMPTY(m_dBasePath)
    STORE "dbase.dbf" TO m_dBasePath
ENDIF
IF USED("dbase")
    SELECT dbase
    SET ORDER TO TAG dbase
ELSE
    SELECT 0
    USE (LOCFILE(m_path + m_dBasePath,"DBF","Nu găsesc 'dbase.dbf!'"));
    AGAIN ALIAS dbase ;
    ORDER TAG dbase
ENDIF
GO BOTTOM
IF EOF("dbase")
    STORE "Nu există nici o Bază de Date introdusă!" TO m_message
    DO message.spr
    RETURN .F.
ENDIF
GO TOP

* analize.dbf
IF EMPTY(m_analizePath)
    STORE "analize.dbf" TO m_analizePath
ENDIF
IF USED("analize")
    SELECT analize
    SET ORDER TO TAG analiza

```

```

ELSE
    SELECT 0
    USE (LOCFILE(m_path + m_analyzePath,"DBF","Nu găsesc 'analyze.dbf!"));
    AGAIN ALIAS analiza ;
    ORDER TAG analiza
ENDIF
GO BOTTOM
IF EOF("analyze")
    STORE "Nu există nici o Analiză introdusă!" TO m_message
    DO message.spr
    RETURN .F.
ENDIF
GO TOP

* probe.dbf
IF EMPTY(m_probePath)
    STORE "probe.dbf" TO m_probePath
ENDIF
IF USED("probe")
    SELECT probe
    SET ORDER TO TAG proba
ELSE
    SELECT 0
    USE (LOCFILE(m_path + m_probePath,"DBF","Nu găsesc 'probe.dbf!"));
    AGAIN ALIAS probe ;
    ORDER TAG proba
ENDIF
SET FILTER TO probe.dbase = m_dBase

* mater.dbf
IF EMPTY(m_materPath)
    STORE "mater.dbf" TO m_materPath
ENDIF
IF USED("mater")
    SELECT mater
    SET ORDER TO TAG material
ELSE
    SELECT 0
    USE (LOCFILE(m_path + m_materPath,"DBF","Nu găsesc 'mater.dbf!"));
    AGAIN ALIAS mater ;
    ORDER TAG material
ENDIF
SET FILTER TO mater.dbase = m_dBase

* strat.dbf
IF EMPTY(m_stratPath)
    STORE "strat.dbf" TO m_stratPath
ENDIF
IF USED("strat")
    SELECT strat
    SET ORDER TO TAG strat

```

```

ELSE
    SELECT 0
    USE (LOCFILE(m_path + m_stratPath,"DBF","Nu găseasc 'strat.dbf!"));
    AGAIN ALIAS strat ;
    ORDER TAG strat
ENDIF
SET FILTER TO (strat.dbase = m_dBase) .AND. (strat.material = mater.material)

* incerc.dbf
IF EMPTY(m_incercPath)
    STORE "incerc.dbf" TO m_incercPath
ENDIF
IF USED("incerc")
    SELECT incerc
    SET ORDER TO TAG incerc
ELSE
    SELECT 0
    USE (LOCFILE(m_path + m_incercPath,"DBF","Nu găseasc 'incerc.dbf!"));
    AGAIN ALIAS incerc ;
    ORDER TAG incerc
ENDIF
SET FILTER TO incerc.analiza = m_analiza

* caract.dbf
IF EMPTY(m_caractPath)
    STORE "caract.dbf" TO m_caractPath
ENDIF
IF USED("caract")
    SELECT caract
    SET ORDER TO TAG caract
ELSE
    SELECT 0
    USE (LOCFILE(m_path + m_caractPath,"DBF","Nu găseasc 'caract.dbf!"));
    AGAIN ALIAS caract ;
    ORDER TAG caract
ENDIF
SET FILTER TO (caract.analiza = m_analiza) .AND. (caract.incerc = incerc.incerc)

* populatn.dbf
IF EMPTY(m_populatNamesPath)
    STORE "populatn.dbf" TO m_populatNamesPath
ENDIF
IF USED("populatn")
    SELECT populatn
    SET ORDER TO TAG nr_crt
ELSE
    SELECT 0
    USE (LOCFILE(m_path + m_populatNamesPath,"DBF","Nu găseasc 'populatn.dbf!"));
    AGAIN ALIAS populatn ;
    ORDER TAG nr_crt
ENDIF

```



```

SET FILTER TO (populatn.analiza = m_analiza) .AND. (populatn.dbase = m_dBase)
STORE "(populatn.analiza = m_analiza) .AND. (populatn.dbase = m_dBase)" TO p_filter
IF m_do = 0
    SCATTER MEMVAR BLANK
ELSE
    SCATTER MEMVAR
ENDIF

* window name
STORE "w_populat" TO m_window

* pozitionare cuplari
SELECT cuplari
GO BOTTOM
IF .NOT. EOF("cuplari")
    STORE cuplari.nr_crt TO p_couplesNo
    IF (m_cuplare <= p_couplesNo) .AND. (m_cuplare >= 1)
        STORE m_cuplare TO p_couple
    ELSE
        STORE 1 TO p_couple
        STORE 1 TO m_cuplare
    ENDIF
    GO TOP
    SEEK p_couple
    IF .NOT. EOF("cuplari")
        STORE cuplari.dbase TO m_dBase
        STORE cuplari.analiza TO m_analiza
    ELSE
        STORE "Nu există Cuplarea " + ALLTRIM(STR(p_couple)) + "!" TO
m_message
        STORE 8 TO m_error
        DO error.spr
        RETURN .F.
    ENDIF
ELSE
    STORE 0 TO p_couplesNo
    STORE 0 TO p_couple
ENDIF

IF m_do = 0 && "Add"
    APPEND BLANK
    STORE p_couplesNo + 1 TO p_couplesNo
    REPLACE cuplari.nr_crt WITH p_couplesNo
    STORE p_couplesNo TO p_couple
    REPLACE cuplari.dbase WITH 0
    REPLACE cuplari.analiza WITH 0
    STORE 0 TO m_analiza
    STORE 0 TO m_dBase
ENDIF

* Pozitionare analize.dbf

```

```

SELECT analyze
GO BOTTOM
STORE "1.." + ALLTRIM(STR(analize.analiza)) + ":" TO p_anVar
GO TOP
IF m_analiza > 0
    SEEK m_analiza
    IF EOF("analize")
        STORE "Nu există Analiza " + ALLTRIM(STR(m_analiza)) + "!" TO
m_message
        STORE 1 TO m_error
        DO error.spr
        RETURN .F.
    ENDIF
ELSE
    STORE 0 TO p_populatNo
    STORE p_populatNo TO p_orderNo
    STORE 1 TO p_order
    STORE 0 TO m_dBase
ENDIF

* Pozitionare dbase.dbf
SELECT dbase
GO BOTTOM
STORE "1.." + ALLTRIM(STR(dbase.dbase)) + ":" TO p_dbVar
GO TOP
IF m_dBase > 0
    SEEK m_dBase
    IF EOF("dbase")
        STORE "Nu există Baza de Date " + ALLTRIM(STR(m_dBase)) + "!" TO
m_message
        STORE 2 TO m_error
        DO error.spr
        RETURN .F.
    ENDIF

* Genereaza vectorii
STORE 0 TO p_populatNo
STORE "" TO p_populat
DO GenerateAllVectors
STORE p_populatNo TO p_orderNo
STORE 1 TO p_order
IF FILE(p_populat)
    SELECT 0
    USE (LOCFILE(p_populat,"DBF","Nu găsesc fisierul de Populatii!"));
    AGAIN ALIAS populat
ELSE
    STORE 10 TO m_error
    STORE "Nu există fisierul " + p_populat TO m_message
    DO error.spr
ENDIF
ELSE

```

```

        STORE 0 TO p_populatNo
        STORE p_populatNo TO p_orderNo
        STORE 1 TO p_order
    ENDIF

```

```

PROCEDURE SetNewCouple

```

```

*****

```

```

* Alege o noua cuplare

```

```

*****

```

```

PRIVATE p_aux

```

```

    IF p_couple = p_old
        RETURN
    ENDIF

```

```

    IF (p_couple = 0) .AND. (p_couplesNo = 0)
        RETURN
    ENDIF

```

```

    * Verifica

```

```

    IF p_couple > p_couplesNo
        STORE "Există doar " + ALLTRIM(STR(p_couplesNo)) + " Cuplări!" TO

```

```

m_message

```

```

        DO message.spr
        STORE p_couplesNo TO p_couple
    ENDIF

```

```

    IF p_couple <= 0
        STORE "Codul minim pentru o Cuplare este 1!" TO m_message
        DO message.spr
        STORE 1 TO p_couple
    ENDIF

```

```

    * Cauta p_couple

```

```

    SELECT cuplari
    SEEK p_couple
    IF EOF("cuplari")
        STORE 8 TO m_error
        STORE "Nu există Cuplarea " + ALLTRIM(STR(p_couple)) + "!" TO

```

```

m_message

```

```

        DO error.spr
        RETURN
    ENDIF

```

```

    STORE cuplari.dbase TO m_dBase
    STORE cuplari.analiza TO m_analiza

```

```

    IF (m_dBase = 0) .OR. (m_analiza = 0)
        SHOW GET m_dBase ENABLE
        SHOW GET m_analiza ENABLE
        SHOW GET p_do1 ENABLE
    ENDIF

```

5.6. Rezultatele analizei statistice (eșantion)

Parametrii statistici - (CER1) Cuplarea 1

Nr.crt	Simbol	$D(BD(1,1,1,1) A(1,1,1))$	$D(BD(1,1,1,2) A(1,1,1))$	$D(BD(1,1,2,1) A(1,1,1))$
1	AEA	-0.012	0.011	-0.004
2	AIA	2.040	0.039	0.074
3	AER	-0.427	0.377	-0.163
4	AIR	-1.356	0.840	-0.344
5	CEA	4.767	1.920	2.124
6	CIA	0.228	0.325	0.311
7	CER	0.003	0.004	0.005
8	CIR	1.767	-1.080	-0.876
9	A	0.040	0.040	0.040
10	AMA	0.119	0.124	0.071
11	AMP	0.009	0.013	0.012
12	D	0.000	0.000	0.000
13	MA	2.896	2.894	2.629
14	ME	2.900	2.890	2.630
15	MO	2.908	2.883	2.633
16	VC	2.890	2.890	2.630
17	MG	2.896	2.894	2.629
18	MAR	2.896	2.894	2.629

Parametrii statistici - (CER1) Cuplarea 3

Nr.crt	Simbol	$D(BD(3,1,1,1) A(1,1,1))$	$D(BD(3,1,1,2) A(1,1,1))$	$D(BD(3,1,2,1) A(1,1,1))$
1	AEA	0.011	0.014	-0.034
2	AIA	0.777	0.049	0.476
3	AER	0.367	0.478	-1.367
4	AIR	0.858	0.600	-1.819
5	CEA	3.962	2.612	1.807
6	CIA	0.247	0.284	0.377
7	CER	0.004	0.008	0.008
8	CIR	0.962	-0.388	-1.193
9	A	0.050	0.080	0.050
10	AMA	0.164	0.195	0.114
11	AMP	0.012	0.023	0.019
12	D	0.000	0.001	0.000
13	MA	2.884	2.855	2.509
14	ME	2.880	2.850	2.520
15	MO	2.873	2.841	2.543
16	VC	2.875	2.860	2.505
17	MG	2.884	2.854	2.509
18	MAR	2.883	2.854	2.508

Parametrii statistici - (CER1) Cuplarea 4

Nr.crt	Simbol	D(BD(4,1,1,1) A(1,1,1))	D(BD(4,1,1,2) A(1,1,1))	D(BD(4,1,2,1) A(1,1,1))
1	AEA	0.004	0.000	-0.004
2	AIA	1.697	0.000	0.129
3	AER	0.125	0.000	-0.178
4	AIR	0.201	0.000	-0.237
5	CEA	4.870	1.871	1.831
6	CIA	0.233	0.342	0.361
7	CER	0.006	0.003	0.008
8	CIR	1.870	-1.129	-1.169
9	A	0.080	0.030	0.050
10	AMA	0.220	0.090	0.111
11	AMP	0.019	0.010	0.018
12	D	0.000	0.000	0.000
13	MA	3.006	2.995	2.409
14	ME	3.005	2.995	2.410
15	MO	3.003	2.995	2.413
16	VC	3.020	2.995	2.415
17	MG	3.006	2.995	2.409
18	MAR	3.006	2.995	2.408

Parametrii statistici - (CER1) Cuplarea 5

Nr.crt	Simbol	D(BD(5,1,1,1) A(1,1,1))	D(BD(5,1,1,2) A(1,1,1))	D(BD(5,1,2,1) A(1,1,1))
1	AEA	0.019	0.003	-0.004
2	AIA	0.074	0.433	1.466
3	AER	0.706	0.113	-0.200
4	AIR	1.424	0.452	-0.514
5	CEA	1.815	2.372	4.036
6	CIA	0.329	0.332	0.278
7	CER	0.005	0.002	0.004
8	CIR	-1.185	-0.628	1.036
9	A	0.040	0.020	0.030
10	AMA	0.193	0.060	0.037
11	AMP	0.013	0.007	0.008
12	D	0.000	0.000	0.000
13	MA	2.656	2.656	2.139
14	ME	2.650	2.655	2.140
15	MO	2.638	2.653	2.143
16	VC	2.650	2.660	2.135
17	MG	2.656	2.656	2.139
18	MAR	2.656	2.656	2.139

Parametrii statistici - (CER1) Cuplarea 1

Nr.crt	Simbol	A(BD(1,1,1,1) A(1,1,2))	A(BD(1,1,1,2) A(1,1,2))	A(BD(1,1,2,1) A(1,1,2))
1	AEA	-0.056	0.049	-0.019
2	AIA	2.027	0.038	0.070
3	AER	-0.847	0.746	-0.347
4	AIR	-1.348	0.830	-0.366
5	CEA	4.774	1.917	2.109
6	CLA	0.227	0.325	0.312
7	CER	0.006	0.009	0.009
8	CIR	1.774	-1.083	-0.891
9	A	0.182	0.182	0.165
10	AMA	0.538	0.562	0.296
11	AMP	0.041	0.059	0.051
12	D	0.002	0.003	0.003
13	MA	6.586	6.576	5.427
14	ME	6.605	6.560	5.433
15	MO	6.642	6.527	5.446
16	VC	6.560	6.560	5.433
17	MG	6.586	6.576	5.426
18	MAR	6.586	6.576	5.426

Parametrii statistici - (CER1) Cuplarea 3

Nr.crt	Simbol	A(BD(3,1,1,1) A(1,1,2))	A(BD(3,1,1,2) A(1,1,2))	A(BD(3,1,2,1) A(1,1,2))
1	AEA	0.049	0.063	-0.135
2	AIA	0.752	0.060	0.473
3	AER	0.751	0.984	-2.731
4	AIR	0.877	0.619	-1.826
5	CEA	3.915	2.629	1.803
6	CLA	0.247	0.283	0.377
7	CER	0.009	0.016	0.015
8	CIR	0.915	-0.371	-1.197
9	A	0.226	0.359	0.196
10	AMA	0.744	0.872	0.448
11	AMP	0.056	0.102	0.074
12	D	0.003	0.010	0.005
13	MA	6.530	6.400	4.943
14	ME	6.514	6.379	4.988
15	MO	6.481	6.337	5.078
16	VC	6.492	6.426	4.929
17	MG	6.530	6.399	4.942
18	MAR	6.530	6.398	4.942

Parametrii statistici - (CER1) Cuplarea 4

Nr.crt	Simbol	A(BD(4,1,1,1) A(1,1,2))	A(BD(4,1,1,2) A(1,1,2))	A(BD(4,1,2,1) A(1,1,2))
1	AEA	0.018	0.000	-0.016
2	ALA	1.750	0.000	0.129
3	AER	0.259	0.000	-0.357
4	AIR	0.208	0.000	-0.237
5	CEA	4.927	1.871	1.831
6	CIA	0.233	0.342	0.361
7	CER	0.012	0.007	0.015
8	CIR	1.927	-1.129	-1.169
9	A	0.379	0.141	0.190
10	AMA	1.038	0.423	0.423
11	AMP	0.088	0.048	0.069
12	D	0.008	0.002	0.005
13	MA	7.099	7.046	4.557
14	ME	7.093	7.046	4.562
15	MO	7.080	7.046	4.573
16	VC	7.165	7.046	4.581
17	MG	7.098	7.045	4.556
18	MAR	7.098	7.045	4.556

Parametrii statistici - (CER1) Cuplarea 5

Nr.crt	Simbol	A(BD(5,1,1,1) A(1,1,2))	A(BD(5,1,1,2) A(1,1,2))	A(BD(5,1,2,1) A(1,1,2))
1	AEA	0.080	0.013	-0.014
2	AIA	0.065	0.433	1.419
3	AER	1.435	0.227	-0.394
4	AIR	1.448	0.452	-0.505
5	CEA	1.785	2.372	4.019
6	CIA	0.331	0.332	0.277
7	CER	0.010	0.005	0.008
8	CIR	-1.215	-0.628	1.019
9	A	0.166	0.084	0.101
10	AMA	0.805	0.252	0.125
11	AMP	0.055	0.028	0.028
12	D	0.003	0.001	0.001
13	MA	5.542	5.540	3.592
14	ME	5.515	5.536	3.597
15	MO	5.462	5.528	3.606
16	VC	5.516	5.557	3.581
17	MG	5.541	5.540	3.592
18	MAR	5.541	5.540	3.592

Parametrii statistici - (CER1) Cuplarea 1

Nr.crt	Simbol	FT(BD(1,1,1,1) A(1,1,3))	FT(BD(1,1,1,2) A(1,1,3))	FT(BD(1,1,2,1) A(1,1,3))
1	AEA	-3.353	45.273	0.000
2	AIA	0.000	4.185	0.002
3	AER	-0.398	5.996	0.000
4	AIR	-0.046	0.905	0.000
5	CEA	1.297	6.533	1.751
6	CLA	0.376	0.261	0.330
7	CER	0.086	0.066	0.041
8	CIR	-1.703	3.533	-1.249
9	A	192.000	192.000	1200.000
10	AMA	1150.118	361.091	2400.000
11	AMP	72.260	50.028	396.412
12	D	5221.516	2502.810	157142.857
13	MA	842.882	755.091	9600.000
14	ME	844.000	740.000	9600.000
15	MO	846.235	709.818	9600.000
16	VC	844.000	804.000	9600.000
17	MG	839.778	753.564	9591.797
18	MAR	836.682	752.157	9583.582

Parametrii statistici - (CER1) Cuplarea 3

Nr.crt	Simbol	FT(BD(3,1,1,1) A(1,1,3))	FT(BD(3,1,1,2) A(1,1,3))	FT(BD(3,1,2,1) A(1,1,3))
1	AEA	0.706	8.455	-21.429
2	AIA	0.011	0.001	0.510
3	AER	0.093	1.144	-0.298
4	AIR	0.030	0.417	-0.073
5	CEA	2.709	1.971	3.052
6	CLA	0.249	0.312	0.292
7	CER	0.031	0.027	0.041
8	CIR	-0.291	-1.029	0.052
9	A	95.000	65.000	1000.000
10	AMA	316.235	187.818	1457.143
11	AMP	23.616	20.266	292.072
12	D	557.709	410.694	85306.122
13	MA	756.235	738.818	7192.857
14	ME	756.000	736.000	7200.000
15	MO	755.529	730.364	7214.286
16	VC	752.500	735.500	7100.000
17	MG	755.865	738.540	7186.799
18	MAR	755.494	738.262	7180.611

Parametrii statistici - (CER1) Cuplarea 4

Nr.crt	Simbol	FT(BD(4,1,1,1) A(1,1,3))	FT(BD(4,1,1,2) A(1,1,3))	FT(BD(4,1,2,1) A(1,1,3))
1	AEA	-3.188	29.400	171.429
2	ALA	0.026	1.738	0.860
3	AER	-0.428	3.730	2.927
4	AIR	-0.090	0.757	0.455
5	CEA	2.906	4.188	2.506
6	CLA	0.252	0.268	0.342
7	CER	0.047	0.049	0.064
8	CIR	-0.094	1.188	-0.494
9	A	140.000	145.000	1100.000
10	AMA	441.000	294.200	2171.429
11	AMP	35.223	38.820	376.477
12	D	1240.684	1507.010	141734.694
13	MA	744.938	788.300	5857.143
14	ME	746.000	778.500	5800.000
15	MO	748.125	758.900	5685.714
16	VC	740.000	812.500	6050.000
17	MG	744.098	787.382	5845.478
18	MAR	743.252	786.499	5834.249

Parametrii statistici - (CER1) Cuplarea 5

Nr.crt	Simbol	FT(BD(5,1,1,1) A(1,1,3))	FT(BD(5,1,1,2) A(1,1,3))	FT(BD(5,1,2,1) A(1,1,3))
1	AEA	-8.438	-2.100	85.714
2	ALA	0.002	0.089	0.069
3	AER	-1.294	-0.316	1.746
4	AIR	-0.371	-0.064	1.467
5	CEA	3.697	2.634	1.957
6	CLA	0.221	0.272	0.325
7	CER	0.035	0.049	0.012
8	CIR	0.697	-0.366	-1.043
9	A	103.000	120.000	180.000
10	AMA	262.250	269.000	348.571
11	AMP	22.752	32.665	58.414
12	D	517.652	1067.010	3412.245
13	MA	652.188	664.300	4908.571
14	ME	655.000	665.000	4880.000
15	MO	660.625	666.400	4822.857
16	VC	653.500	670.000	4910.000
17	MG	651.789	663.503	4908.225
18	MAR	651.390	662.711	4907.878

Parametrii statistici - (CER1) Cuplarea 1

Nr.crt	Simbol	SIGMA(BD(1,1,1,1) A(1,1,4))	SIGMA(BD(1,1,1,2) A(1,1,4))	SIGMA(BD(1,1,2,1) A(1,1,4))
1	AEA	0.509	3.636	-35.222
2	AIA	0.000	4.104	0.001
3	AER	0.398	3.167	-1.991
4	AIR	0.048	0.490	-0.499
5	CEA	1.298	6.478	1.912
6	CIA	0.378	0.262	0.320
7	CER	0.084	0.065	0.040
8	CIR	-1.702	3.478	-1.088
9	A	28.311	28.333	220.873
10	AMA	170.170	52.466	427.277
11	AMP	10.694	7.423	70.591
12	D	114.357	55.108	4983.149
13	MA	127.952	114.813	1769.005
14	ME	127.782	113.601	1780.746
15	MO	127.442	111.177	1804.227
16	VC	128.161	122.094	1766.980
17	MG	127.504	114.591	1767.594
18	MAR	127.057	114.386	1766.181

Parametrii statistici - (CER1) Cuplarea 3

Nr.crt	Simbol	SIGMA(BD(3,1,1,1) A(1,1,4))	SIGMA(BD(3,1,1,2) A(1,1,4))	SIGMA(BD(3,1,2,1) A(1,1,4))
1	AEA	1.723	-1.818	6.185
2	AIA	0.024	0.293	0.214
3	AER	1.488	-1.574	0.425
4	AIR	0.436	-0.506	0.096
5	CEA	2.306	2.625	2.466
6	CIA	0.273	0.295	0.310
7	CER	0.034	0.031	0.044
8	CIR	-0.694	-0.375	-0.534
9	A	14.481	12.161	208.252
10	AMA	55.266	30.284	358.314
11	AMP	3.948	3.590	64.495
12	D	15.585	12.890	4159.596
13	MA	115.818	115.468	1455.550
14	ME	115.244	116.074	1453.488
15	MO	114.095	117.286	1449.365
16	VC	114.711	114.002	1437.998
17	MG	115.751	115.411	1454.098
18	MAR	115.683	115.354	1452.625

Parametrii statistici - (CER1) Cuplarea 4

Nr.crt	Simbol	SIGMA(BD(4,1,1,1) A(1,1,4))	SIGMA(BD(4,1,1,2) A(1,1,4))	SIGMA(BD(4,1,2,1) A(1,1,4))
1	AEA	2.205	2.593	134.981
2	AIA	0.058	2.178	1.026
3	AER	2.101	2.318	10.501
4	AIR	0.429	0.475	1.701
5	CEA	2.973	4.793	2.715
6	CIA	0.241	0.265	0.330
7	CER	0.049	0.049	0.062
8	CIR	-0.027	1.793	-0.285
9	A	21.349	20.649	240.212
10	AMA	64.538	38.023	462.724
11	AMP	5.143	5.462	79.354
12	D	26.456	29.836	6297.131
13	MA	104.956	111.887	1285.370
14	ME	104.222	111.023	1240.376
15	MO	102.752	109.294	1150.389
16	VC	105.455	115.708	1326.628
17	MG	104.831	111.759	1283.013
18	MAR	104.706	111.637	1280.748

Parametrii statistici - (CER1) Cuplarea 5

Nr.crt	Simbol	SIGMA(BD(5,1,1,1) A(1,1,4))	SIGMA(BD(5,1,1,2) A(1,1,4))	SIGMA(BD(5,1,2,1) A(1,1,4))
1	AEA	-0.515	-1.998	29.241
2	AIA	0.194	0.070	0.695
3	AER	-0.437	-1.666	2.140
4	AIR	-0.124	-0.345	2.145
5	CEA	3.234	2.479	1.910
6	CIA	0.243	0.279	0.389
7	CER	0.035	0.048	0.010
8	CIR	0.234	-0.521	-1.090
9	A	17.029	20.759	35.048
10	AMA	50.753	48.522	83.337
11	AMP	4.136	5.784	13.629
12	D	17.106	33.458	185.758
13	MA	117.698	119.902	1366.433
14	ME	117.869	120.568	1356.686
15	MO	118.212	121.899	1337.192
16	VC	119.319	120.987	1372.523
17	MG	117.625	119.763	1366.365
18	MAR	117.554	119.625	1366.298

Parametrii statistici - (CER1) Cuplarea 1

Nr.crt	Simbol	NI(BD(1,1,1,1) A(1,2,1))	NI(BD(1,1,1,2) A(1,2,1))	NI(BD(1,1,2,1) A(1,2,1))
1	AEA	0.882	-0.818	2.571
2	ALA	0.065	0.280	0.013
3	AER	6.173	-4.615	20.000
4	AIR	0.430	-0.391	1.490
5	CEA	1.886	1.844	1.804
6	CIA	0.293	0.349	0.345
7	CER	0.144	0.118	0.134
8	CIR	-1.114	-1.156	-1.196
9	A	7.000	6.000	5.000
10	AMA	29.882	19.818	10.857
11	AMP	2.051	2.093	1.726
12	D	4.208	4.380	2.980
13	MA	14.294	17.727	12.857
14	ME	14.000	18.000	12.000
15	MO	13.412	18.545	10.286
16	VC	14.500	17.000	12.500
17	MG	14.148	17.597	12.739
18	MAR	14.005	17.461	12.618

Parametrii statistici - (CER1) Cuplarea 3

Nr.crt	Simbol	NI(BD(3,1,1,1) A(1,2,1))	NI(BD(3,1,1,2) A(1,2,1))	NI(BD(3,1,2,1) A(1,2,1))
1	AEA	2.647	4.091	-2.143
2	ALA	1.306	0.051	0.015
3	AER	16.667	20.089	-13.158
4	AIR	1.042	0.760	-0.981
5	CEA	4.367	1.510	1.601
6	CIA	0.231	0.359	0.364
7	CER	0.160	0.264	0.134
8	CIR	1.367	-1.490	-1.399
9	A	11.000	15.000	6.000
10	AMA	31.882	54.364	13.714
11	AMP	2.541	5.381	2.185
12	D	6.457	28.959	4.776
13	MA	15.882	20.364	16.286
14	ME	15.000	19.000	17.000
15	MO	13.235	16.273	18.429
16	VC	17.500	20.500	16.000
17	MG	15.696	19.657	16.136
18	MAR	15.524	18.978	15.984

Parametrii statistici - (CER1) Cuplarea 4

Nr.crt	Simbol	NI(BD(4,1,1,1) A(1,2,1))	NI(BD(4,1,1,2) A(1,2,1))	NI(BD(4,1,2,1) A(1,2,1))
1	AEA	0.938	0.600	4.714
2	AIA	0.072	0.000	1.480
3	AER	6.787	2.765	44.595
4	AIR	0.382	0.204	1.202
5	CEA	1.989	2.720	3.270
6	CIA	0.307	0.267	0.327
7	CER	0.178	0.135	0.371
8	CIR	-1.011	-0.280	0.270
9	A	8.000	11.000	12.000
10	AMA	33.000	23.000	21.714
11	AMP	2.455	2.934	3.923
12	D	6.027	8.610	15.388
13	MA	13.813	21.700	10.571
14	ME	13.500	21.500	9.000
15	MO	12.875	21.100	5.857
16	VC	14.000	21.500	13.000
17	MG	13.596	21.497	9.972
18	MAR	13.384	21.289	9.492

Parametrii statistici - (CER1) Cuplarea 5

Nr.crt	Simbol	NI(BD(5,1,1,1) A(1,2,1))	NI(BD(5,1,1,2) A(1,2,1))	NI(BD(5,1,2,1) A(1,2,1))
1	AEA	1.313	-0.300	-11.571
2	AIA	0.675	0.190	0.674
3	AER	9.767	-1.948	-60.448
4	AIR	0.611	-0.126	-1.771
5	CEA	3.556	4.115	2.160
6	CIA	0.239	0.237	0.344
7	CER	0.160	0.154	0.341
8	CIR	0.556	1.115	-0.840
9	A	9.000	10.000	19.000
10	AMA	27.875	16.000	38.857
11	AMP	2.150	2.375	6.534
12	D	4.621	5.640	42.694
13	MA	13.438	15.400	19.143
14	ME	13.000	15.500	23.000
15	MO	12.125	15.700	30.714
16	VC	14.500	15.000	16.500
17	MG	13.275	15.199	17.618
18	MAR	13.121	14.976	15.698

Parametrii statistici - (CER1) Cuplarea 4

Nr.crt	Simbol	NR(BD(4,1,1,1) A(1,3,1))	NR(BD(4,1,1,2) A(1,3,1))	NR(BD(4,1,2,1) A(1,3,1))
1	AEA	-3.938	-5.970	13.286
2	AIA	0.850	5.067	3.926
3	AER	-14.221	-21.701	206.667
4	AIR	-0.796	-0.703	1.371
5	CEA	3.248	6.915	5.030
6	CIA	0.275	0.266	0.334
7	CER	0.179	0.309	1.508
8	CIR	0.248	3.915	2.030
9	A	18.000	31.900	29.000
10	AMA	66.250	51.840	47.143
11	AMP	4.946	8.495	9.693
12	D	24.465	72.161	93.959
13	MA	27.688	27.510	6.429
14	ME	29.000	29.500	2.000
15	MO	31.625	33.480	-6.857
16	VC	24.000	19.050	15.500
17	MG	27.168	23.991	3.221
18	MAR	26.551	16.065	2.283

Parametrii statistici - (CER1) Cuplarea 5

Nr.crt	Simbol	NR(BD(5,1,1,1) A(1,3,1))	NR(BD(5,1,1,2) A(1,3,1))	NR(BD(5,1,2,1) A(1,3,1))
1	AEA	-0.188	-2.400	-13.286
2	AIA	1.023	0.275	0.852
3	AER	-0.606	-7.229	-58.861
4	AIR	-0.036	-0.459	-1.167
5	CEA	5.234	2.179	2.071
6	CIA	0.225	0.308	0.380
7	CER	0.167	0.158	0.505
8	CIR	2.234	-0.821	-0.929
9	A	23.000	17.000	30.000
10	AMA	51.250	44.000	70.286
11	AMP	5.166	5.231	11.387
12	D	26.684	27.360	129.673
13	MA	30.938	33.200	22.571
14	ME	31.000	34.000	27.000
15	MO	31.125	35.600	35.857
16	VC	27.500	31.500	17.000
17	MG	30.414	32.755	16.674
18	MAR	29.756	32.277	8.806

Parametrii statistici - (CER1) Cuplarea 1

Nr.crt	Simbol	NR(BD(1,1,1,1) A(1,3,1))	NR(BD(1,1,1,2) A(1,3,1))	NR(BD(1,1,2,1) A(1,3,1))
1	AEA	-4.941	-5.455	-23.143
2	AlA	4.732	0.932	0.097
3	AER	-13.592	-13.921	-151.402
4	AIR	-0.822	-1.850	-2.349
5	CEA	7.986	2.452	1.161
6	CIA	0.231	0.328	0.428
7	CER	0.165	0.075	0.645
8	CIR	4.986	-0.548	-1.839
9	A	26.000	9.000	23.000
10	AMA	66.941	27.455	67.714
11	AMP	6.009	2.949	9.852
12	D	36.111	8.694	97.061
13	MA	36.353	39.182	15.286
14	ME	38.000	41.000	23.000
15	MO	41.294	44.636	38.429
16	VC	29.000	37.500	13.500
17	MG	35.645	39.065	10.620
18	MAR	34.607	38.942	6.450

Parametrii statistici - (CER1) Cuplarea 3

Nr.crt	Simbol	NR(BD(3,1,1,1) A(1,3,1))	NR(BD(3,1,1,2) A(1,3,1))	NR(BD(3,1,2,1) A(1,3,1))
1	AEA	-10.765	-4.364	0.429
2	AlA	1.992	3.154	0.732
3	AER	-32.218	-11.321	3.529
4	AIR	-1.060	-1.401	0.150
5	CEA	4.027	5.314	2.977
6	CIA	0.267	0.283	0.317
7	CER	0.304	0.081	0.235
8	CIR	1.027	2.314	-0.023
9	A	38.000	11.000	9.000
10	AMA	132.118	25.273	15.143
11	AMP	10.152	3.115	2.850
12	D	103.066	9.702	8.122
13	MA	33.412	38.545	12.143
14	ME	37.000	40.000	12.000
15	MO	44.176	42.909	11.714
16	VC	25.000	35.500	13.500
17	MG	30.710	38.405	11.835
18	MAR	25.835	38.249	11.554

Parametrii statistici - (CER1) Cuplarea 1

Nr.crt	Simbol	FF(BD(1,1,1,1) A(1,4,3))	FF(BD(1,1,1,2) A(1,4,3))	FF(BD(1,1,2,1) A(1,4,3))
1	AEA	28.412	-2.727	104.571
2	AIA	0.012	0.400	0.217
3	AER	2.085	-0.210	2.126
4	AIR	0.469	-0.060	0.258
5	CEA	1.911	3.230	1.643
6	CIA	0.298	0.272	0.389
7	CER	0.044	0.035	0.082
8	CIR	-1.089	0.230	-1.357
9	A	203.000	166.000	1043.000
10	AMA	891.412	370.909	2426.857
11	AMP	60.529	45.232	405.304
12	D	3663.779	2045.901	164270.980
13	MA	1362.471	1299.091	4917.857
14	ME	1353.000	1300.000	4883.000
15	MO	1334.059	1301.818	4813.286
16	VC	1358.500	1320.000	5021.500
17	MG	1361.128	1298.314	4901.522
18	MAR	1359.790	1297.547	4885.600

Parametrii statistici - (CER1) Cuplarea 3

Nr.crt	Simbol	FF(BD(3,1,1,1) A(1,4,3))	FF(BD(3,1,1,2) A(1,4,3))	FF(BD(3,1,2,1) A(1,4,3))
1	AEA	25.941	16.636	33.857
2	AIA	0.332	0.051	0.662
3	AER	1.895	1.218	0.881
4	AIR	1.070	0.684	0.312
5	CEA	2.325	1.896	3.057
6	CIA	0.279	0.316	0.296
7	CER	0.018	0.018	0.028
8	CIR	-0.675	-1.104	0.057
9	A	87.000	77.000	367.000
10	AMA	352.941	240.545	554.286
11	AMP	24.236	24.321	108.620
12	D	587.405	591.521	11798.204
13	MA	1368.647	1365.545	3844.286
14	ME	1360.000	1360.000	3833.000
15	MO	1342.706	1348.909	3810.429
16	VC	1376.500	1358.500	3883.500
17	MG	1368.434	1365.328	3842.773
18	MAR	1368.222	1365.110	3841.282

Parametrii statistici - (CER1) Cuplarea 4

Nr.crt	Simbol	FF(BD(4,1,1,1) A(1,4,3))	FF(BD(4,1,1,2) A(1,4,3))	FF(BD(4,1,2,1) A(1,4,3))
1	AEA	24.000	31.500	-38.571
2	AIA	0.298	0.930	0.001
3	AER	1.700	2.152	-1.106
4	AIR	0.645	0.696	-0.296
5	CEA	2.265	2.558	2.283
6	CIA	0.286	0.330	0.305
7	CER	0.026	0.031	0.037
8	CIR	-0.735	-0.442	-0.717
9	A	130.000	137.000	427.000
10	AMA	502.000	365.000	722.857
11	AMP	37.197	45.255	130.176
12	D	1383.625	2048.050	16945.837
13	MA	1411.500	1463.500	3487.143
14	ME	1403.500	1453.000	3500.000
15	MO	1387.500	1432.000	3525.714
16	VC	1425.000	1481.500	3496.500
17	MG	1411.014	1462.814	3484.712
18	MAR	1410.533	1462.140	3482.280

Parametrii statistici - (CER1) Cuplarea 5

Nr.crt	Simbol	FF(BD(5,1,1,1) A(1,4,3))	FF(BD(5,1,1,2) A(1,4,3))	FF(BD(5,1,2,1) A(1,4,3))
1	AEA	1.500	-15.600	119.571
2	AIA	0.405	0.016	3.073
3	AER	0.129	-1.339	3.769
4	AIR	0.060	-0.462	0.750
5	CEA	3.651	2.085	4.582
6	CIA	0.235	0.307	0.319
7	CER	0.022	0.029	0.050
8	CIR	0.651	-0.915	1.582
9	A	107.000	110.000	500.000
10	AMA	316.000	274.400	754.286
11	AMP	25.105	33.737	159.383
12	D	630.250	1138.160	25402.980
13	MA	1165.500	1164.800	3172.857
14	ME	1165.000	1170.000	3133.000
15	MO	1164.000	1180.400	3053.286
16	VC	1176.500	1168.000	3300.000
17	MG	1165.232	1164.312	3169.070
18	MAR	1164.966	1163.826	3165.490

Parametrii statistici - (CER1) Cuplarea 1

Nr.crt	Simbol	TAU(BD(1,1,1,1) A(1,4,4))	TAU(BD(1,1,1,2) A(1,4,4))	TAU(BD(1,1,2,1) A(1,4,4))
1	AEA	1.444	1.368	8.494
2	AIA	0.036	0.162	0.280
3	AER	1.397	1.385	1.874
4	AIR	0.334	0.382	0.226
5	CEA	1.819	2.589	1.674
6	CIA	0.312	0.271	0.398
7	CER	0.042	0.036	0.083
8	CIR	-1.181	-0.411	-1.326
9	A	13.853	13.213	94.423
10	AMA	63.214	31.931	219.895
11	AMP	4.318	3.584	37.569
12	D	18.647	12.846	1411.437
13	MA	103.336	98.779	453.148
14	ME	102.855	98.323	450.317
15	MO	101.893	97.411	444.654
16	VC	103.596	99.601	462.912
17	MG	103.246	98.715	451.631
18	MAR	103.157	98.651	450.157

Parametrii statistici - (CER1) Cuplarea 3

Nr.crt	Simbol	TAU(BD(3,1,1,1) A(1,4,4))	TAU(BD(3,1,1,2) A(1,4,4))	TAU(BD(3,1,2,1) A(1,4,4))
1	AEA	0.668	-3.733	-3.935
2	AIA	0.040	0.365	0.000
3	AER	0.637	-3.499	-1.012
4	AIR	0.328	-1.462	-0.339
5	CEA	2.047	2.413	1.934
6	CIA	0.278	0.286	0.334
7	CER	0.019	0.024	0.030
8	CIR	-0.953	-0.587	-1.066
9	A	7.324	8.940	34.692
10	AMA	29.326	24.679	67.952
11	AMP	2.035	2.553	11.592
12	D	4.141	6.520	134.385
13	MA	104.799	106.711	388.925
14	ME	104.576	107.955	390.237
15	MO	104.131	110.444	392.860
16	VC	104.570	105.790	390.332
17	MG	104.779	106.680	388.752
18	MAR	104.759	106.649	388.579

Parametrii statistici - (CER1) Cuplarea 4

Nr.crt	Simbol	TAU(BD(4,1,1,1) A(1,4,4))	TAU(BD(4,1,1,2) A(1,4,4))	TAU(BD(4,1,2,1) A(1,4,4))
1	AEA	1.432	3.620	17.350
2	AIA	0.189	1.183	0.131
3	AER	1.441	3.486	4.534
4	AIR	0.606	1.085	1.380
5	CEA	2.154	2.683	1.735
6	CIA	0.281	0.344	0.337
7	CER	0.024	0.032	0.033
8	CIR	-0.846	-0.317	-1.265
9	A	8.406	9.716	37.345
10	AMA	33.159	26.635	80.252
11	AMP	2.362	3.337	12.570
12	D	5.578	11.139	157.993
13	MA	99.422	103.867	382.631
14	ME	98.945	102.660	376.848
15	MO	97.990	100.246	365.281
16	VC	100.254	105.509	384.589
17	MG	99.394	103.814	382.426
18	MAR	99.366	103.763	382.223

Parametrii statistici - (CER1) Cuplarea 5

Nr.crt	Simbol	TAU(BD(5,1,1,1) A(1,4,4))	TAU(BD(5,1,1,2) A(1,4,4))	TAU(BD(5,1,2,1) A(1,4,4))
1	AEA	1.024	-0.204	11.094
2	AIA	1.493	0.152	2.425
3	AER	0.974	-0.194	2.512
4	AIR	0.465	-0.069	0.541
5	CEA	4.951	2.365	4.185
6	CIA	0.227	0.298	0.316
7	CER	0.021	0.028	0.046
8	CIR	1.951	-0.635	1.185
9	A	9.701	9.972	64.882
10	AMA	25.014	22.817	98.977
11	AMP	2.204	2.969	20.521
12	D	4.858	8.813	421.091
13	MA	105.165	105.122	441.563
14	ME	104.824	105.190	437.865
15	MO	104.141	105.326	430.469
16	VC	106.664	105.893	456.405
17	MG	105.142	105.080	441.107
18	MAR	105.120	105.039	440.672