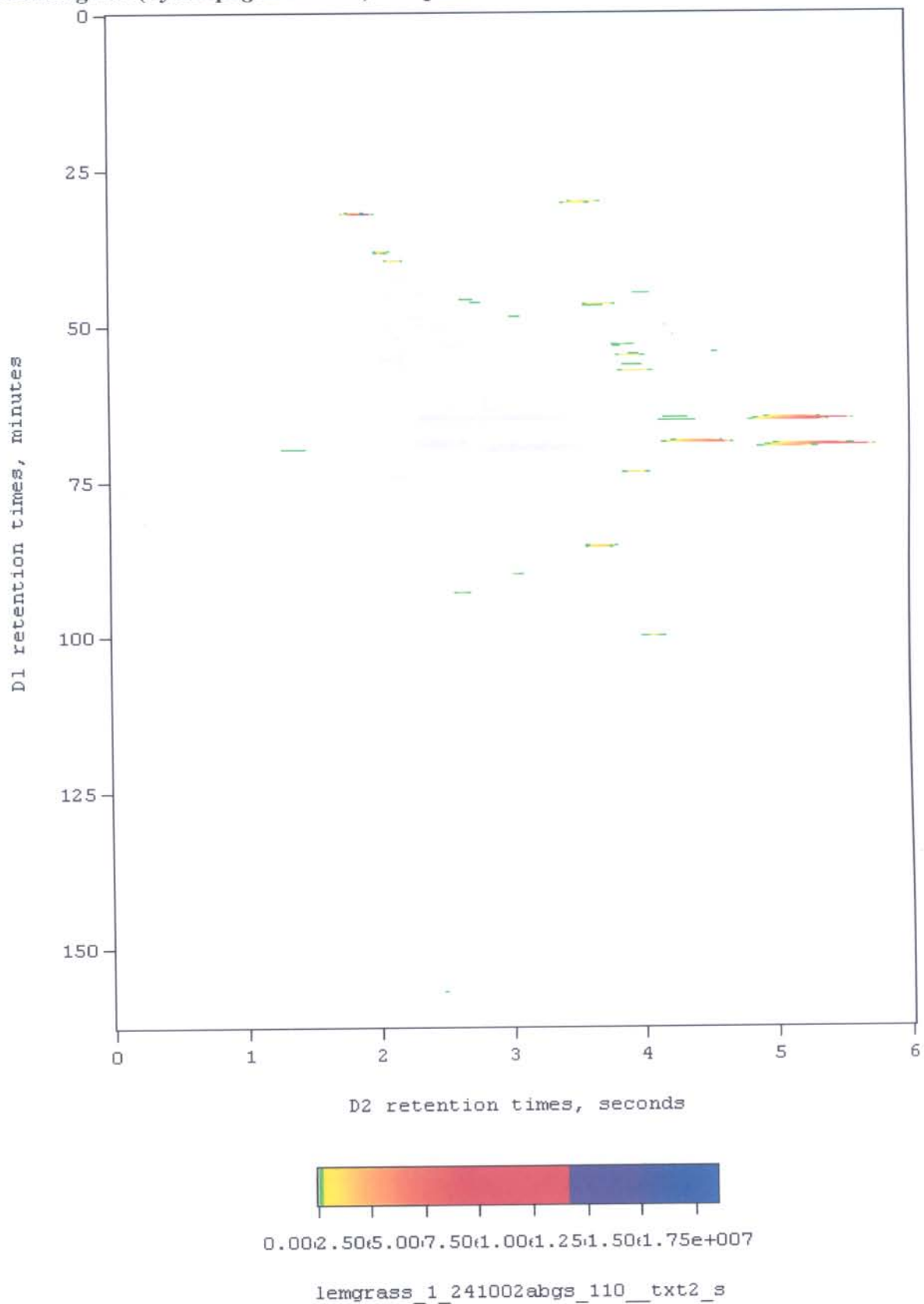


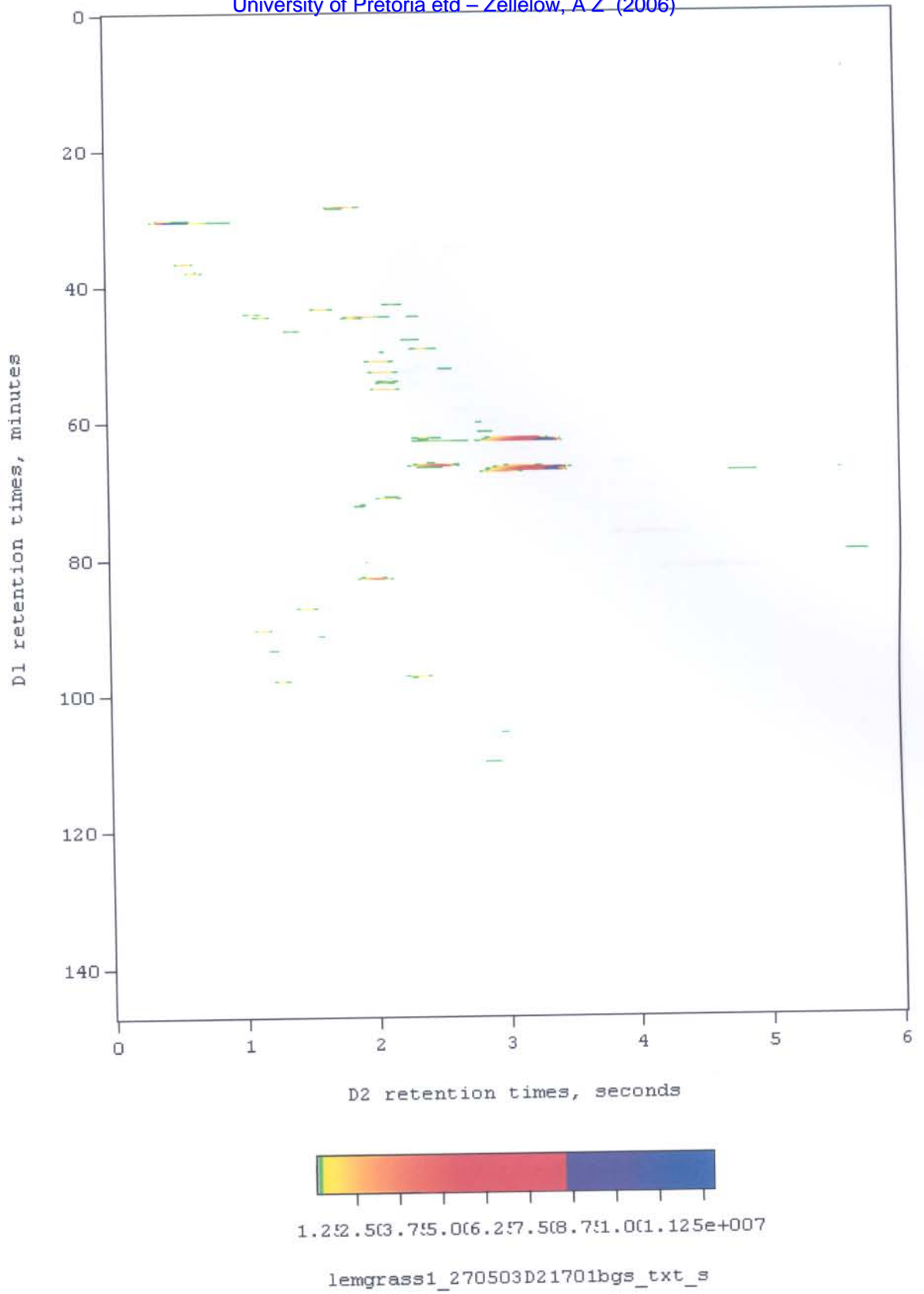
APPENDIX

Key to file names: at the bottom of each chromatogram there is a file name, which consists of the name of the sample, the date it was run and the type of the second dimension column. A letter 'a', 'b', or 'c' after the name of the second dimension column indicates the number of the same sample runs in the same day. If there is a 'bgs' at the end of the file name, it indicates that the second dimension retention times have been re-aligned. Some file names also include the pressure (110) at the end of the file name. For example, the file name '**lemgrass_1_241002abgs_110_txt2_s**' indicates: lemongrass sample 1 run on 24/10/2002, 'a' it was the first lemongrass sample 1 run on that day, 'bgs' the second dimension retention times have been re-aligned, '110' it was run at 110 kPa and the file is a text file (all files are text files). The scales (s) on the X-Y axes are time scales, the first dimension (D1) volatility axis retention times are in minutes and the second dimension (D2) polarity axis retention times are in seconds.

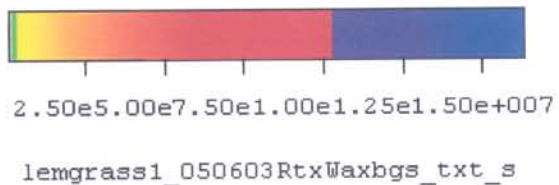
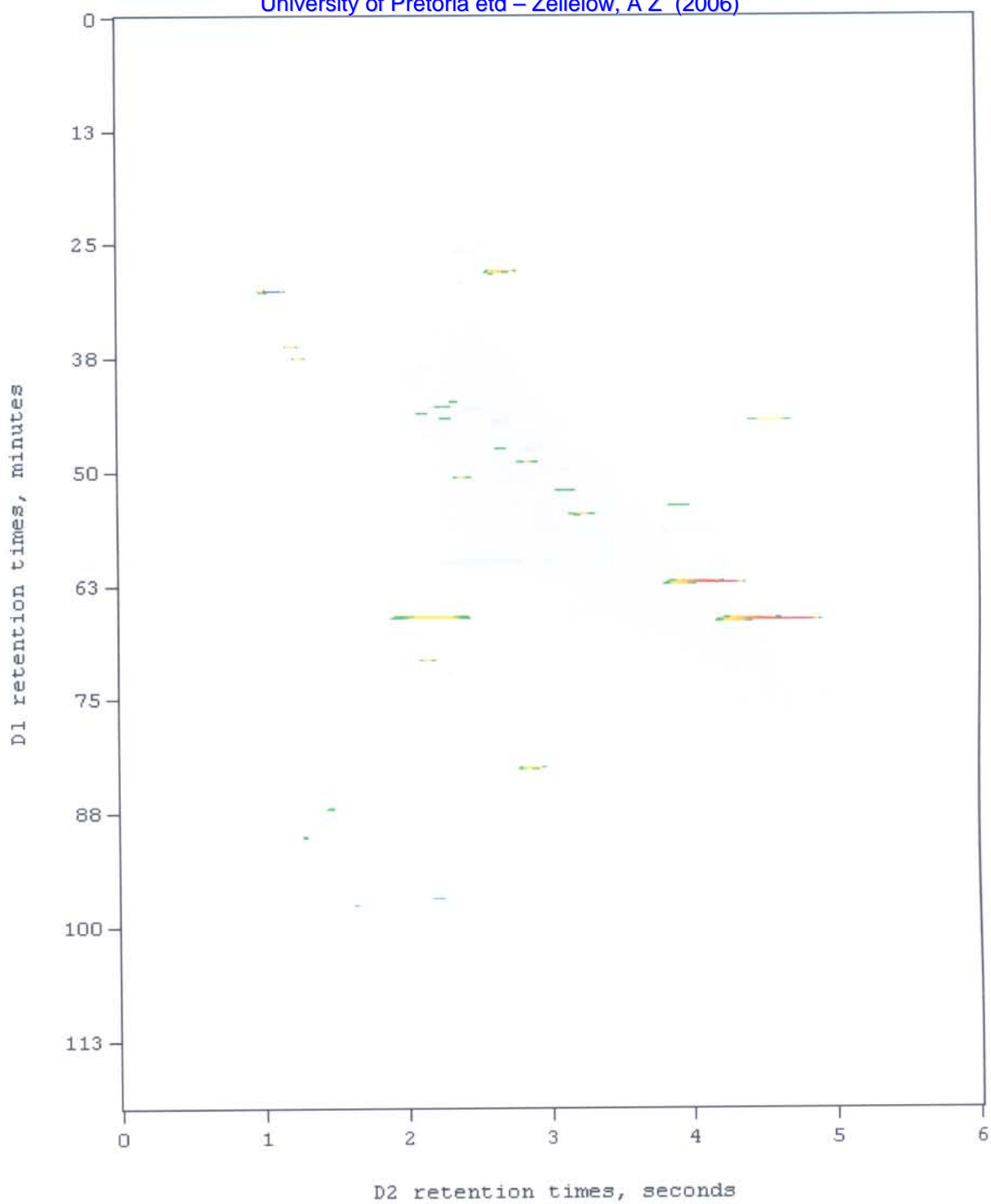
The coloured bar at the bottom of the chromatograms is the key indicating the intensity (abundance) of the components in the sample, from the lowest (green) to the highest (blue).

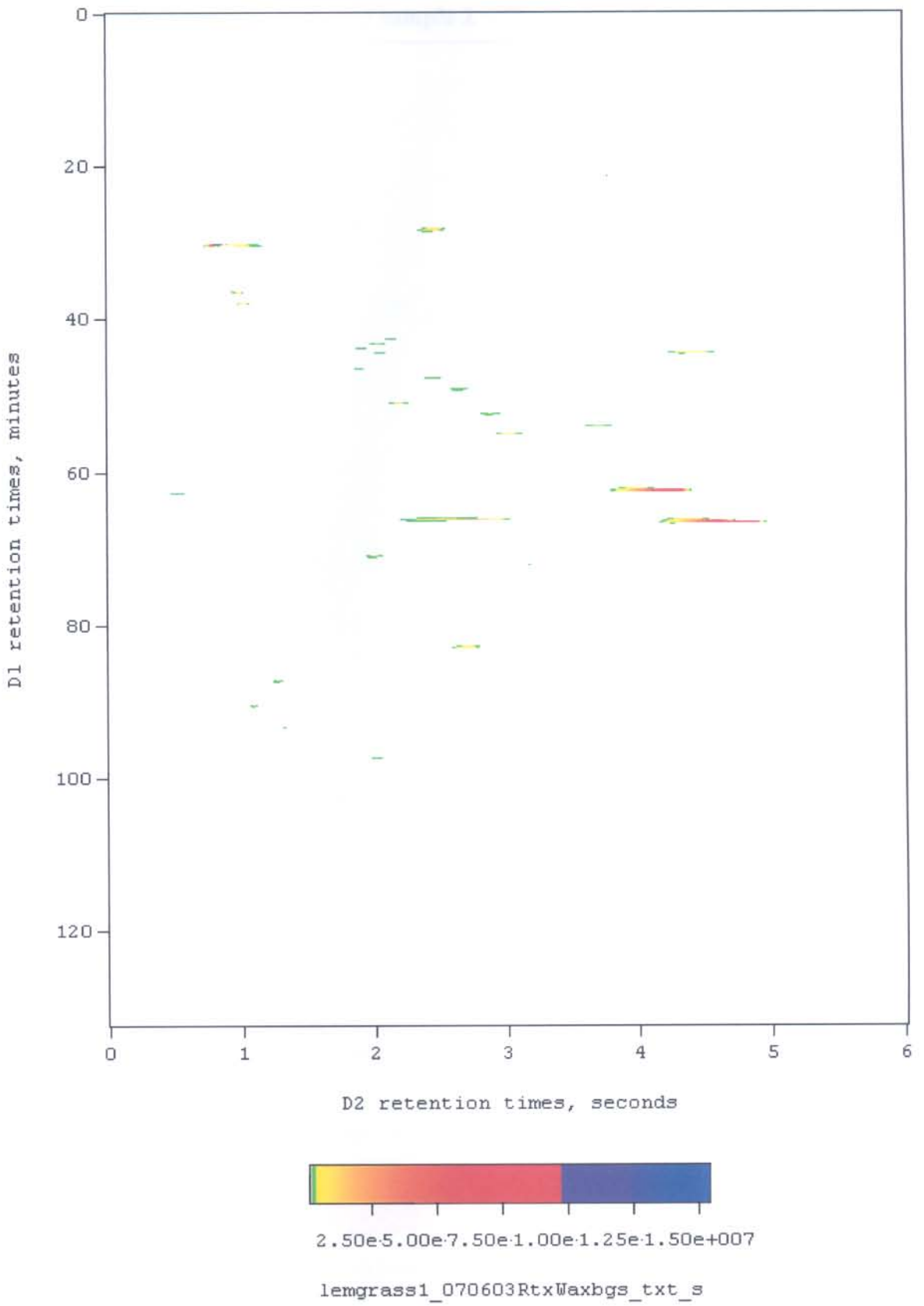
Lemongrass (*Cymbopogon citratus*) sample-1



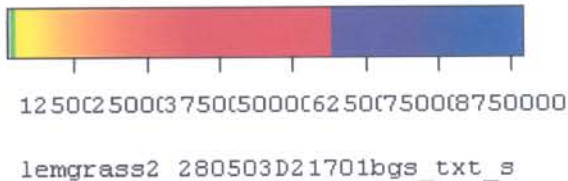
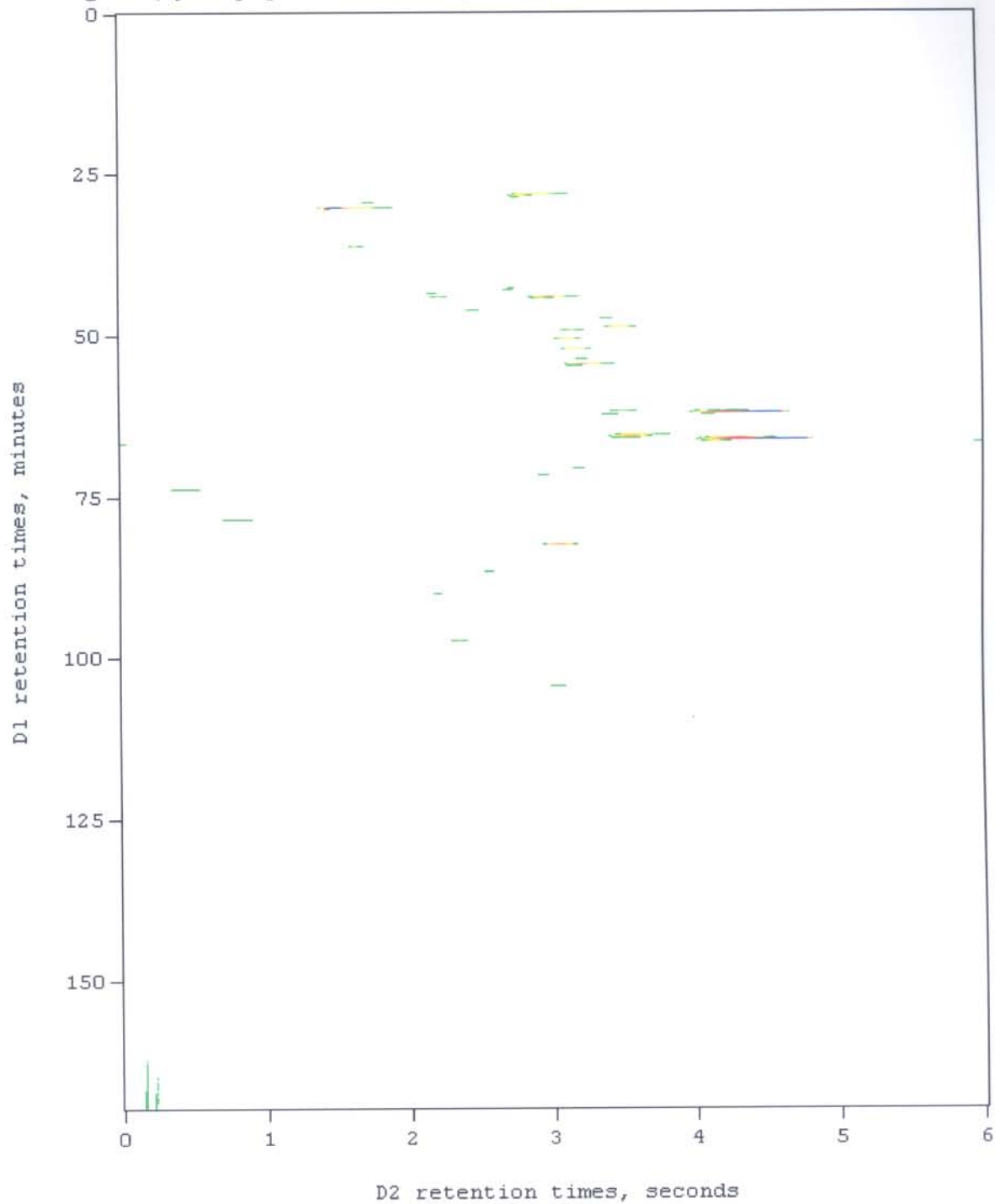


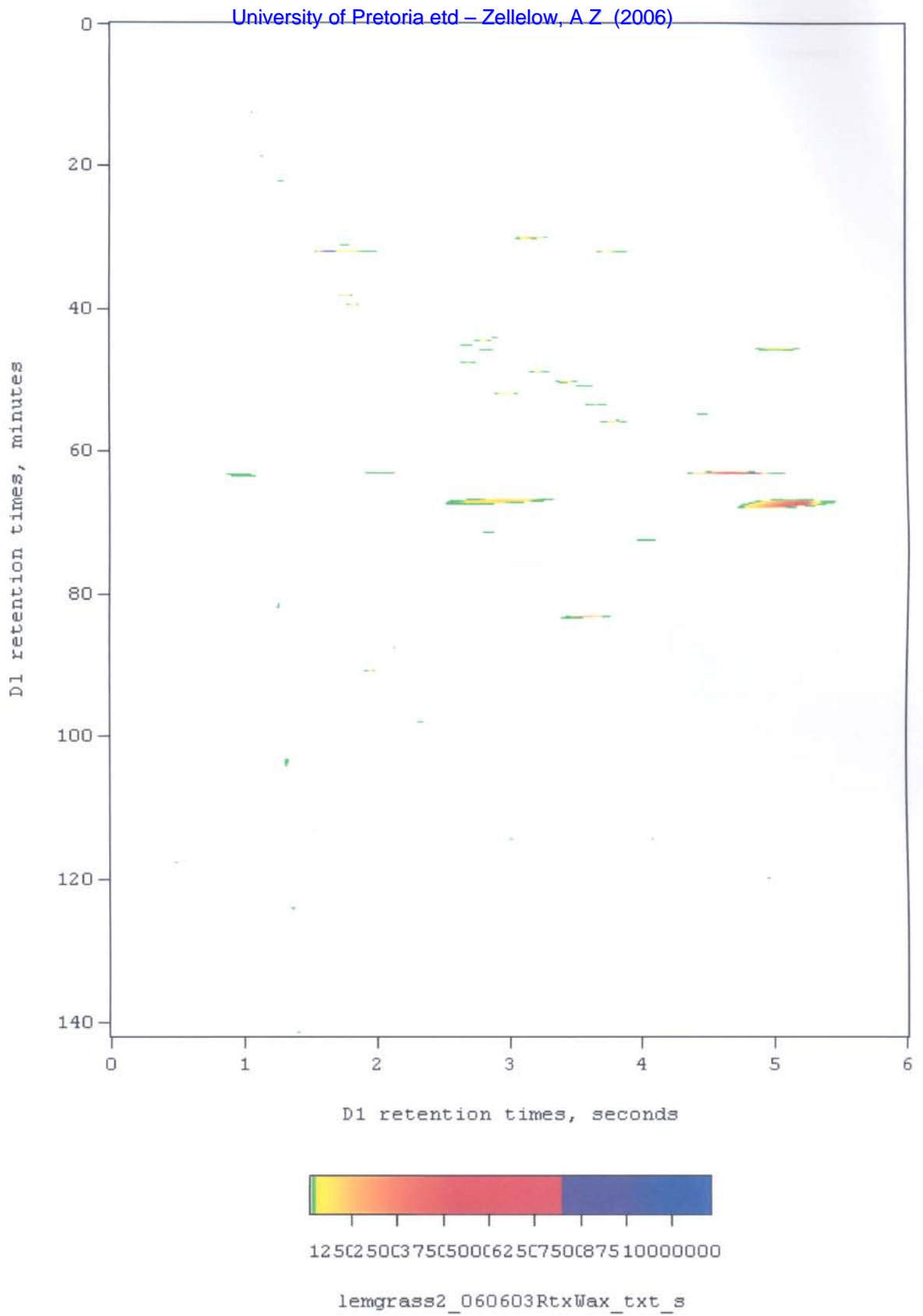
University of Pretoria etd – Zellelow, A Z (2006)

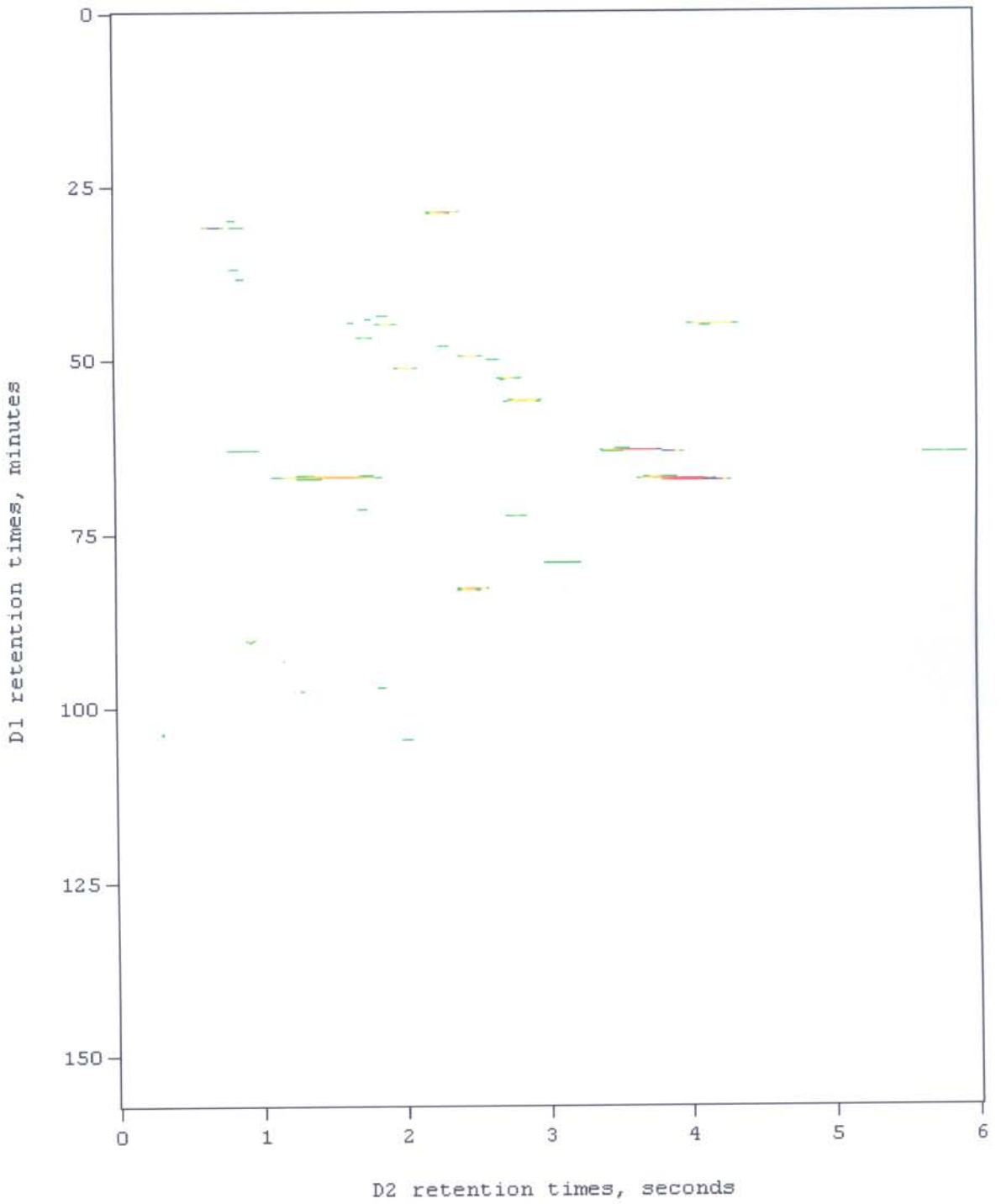




Lemongrass (*Cymbopogon citratus*) sample-2





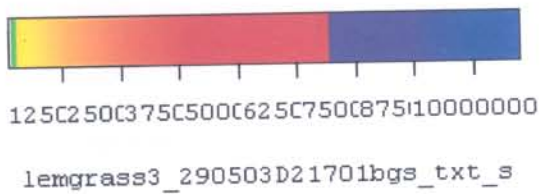
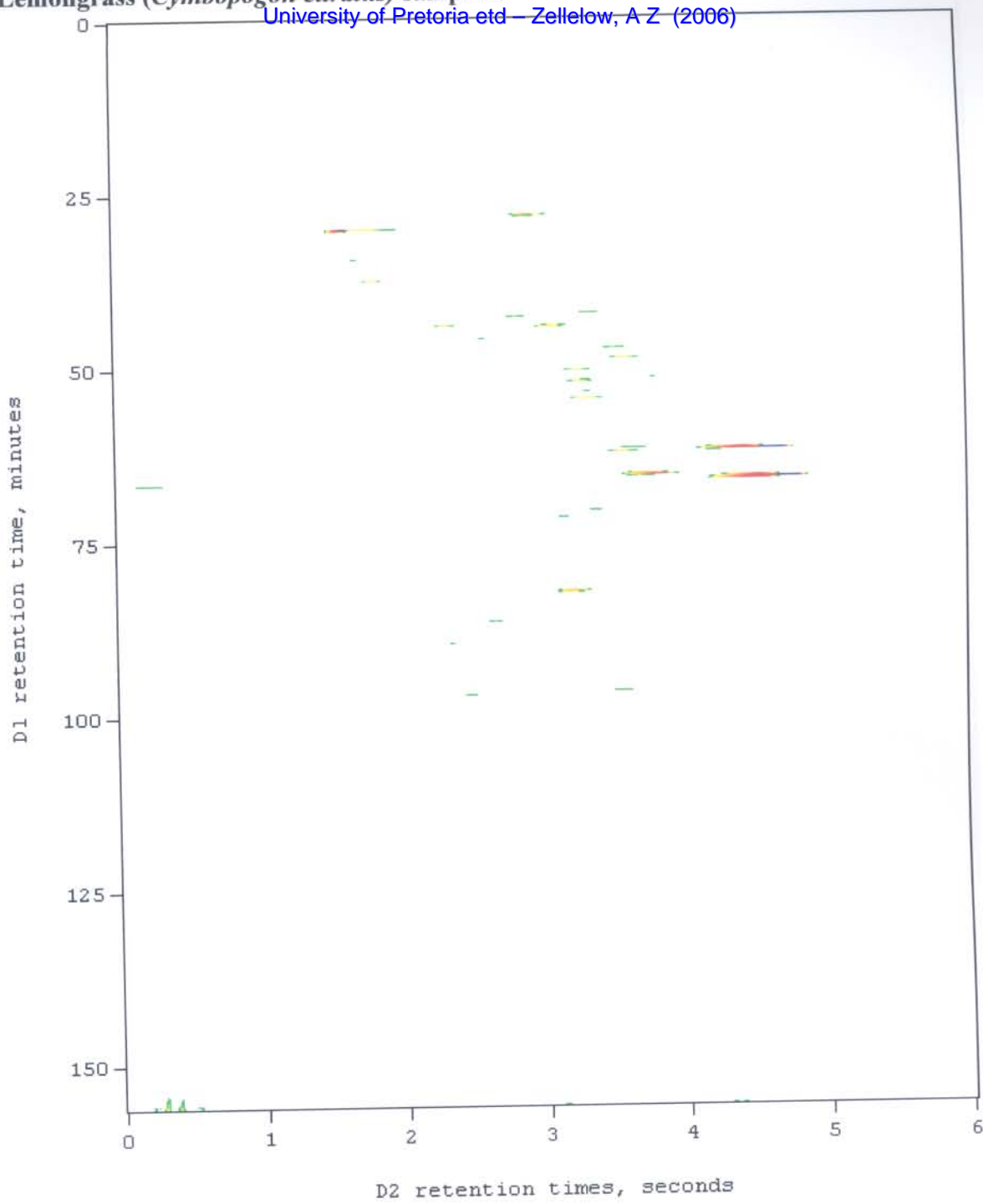


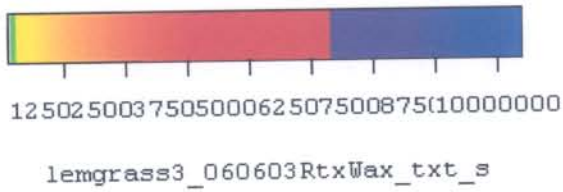
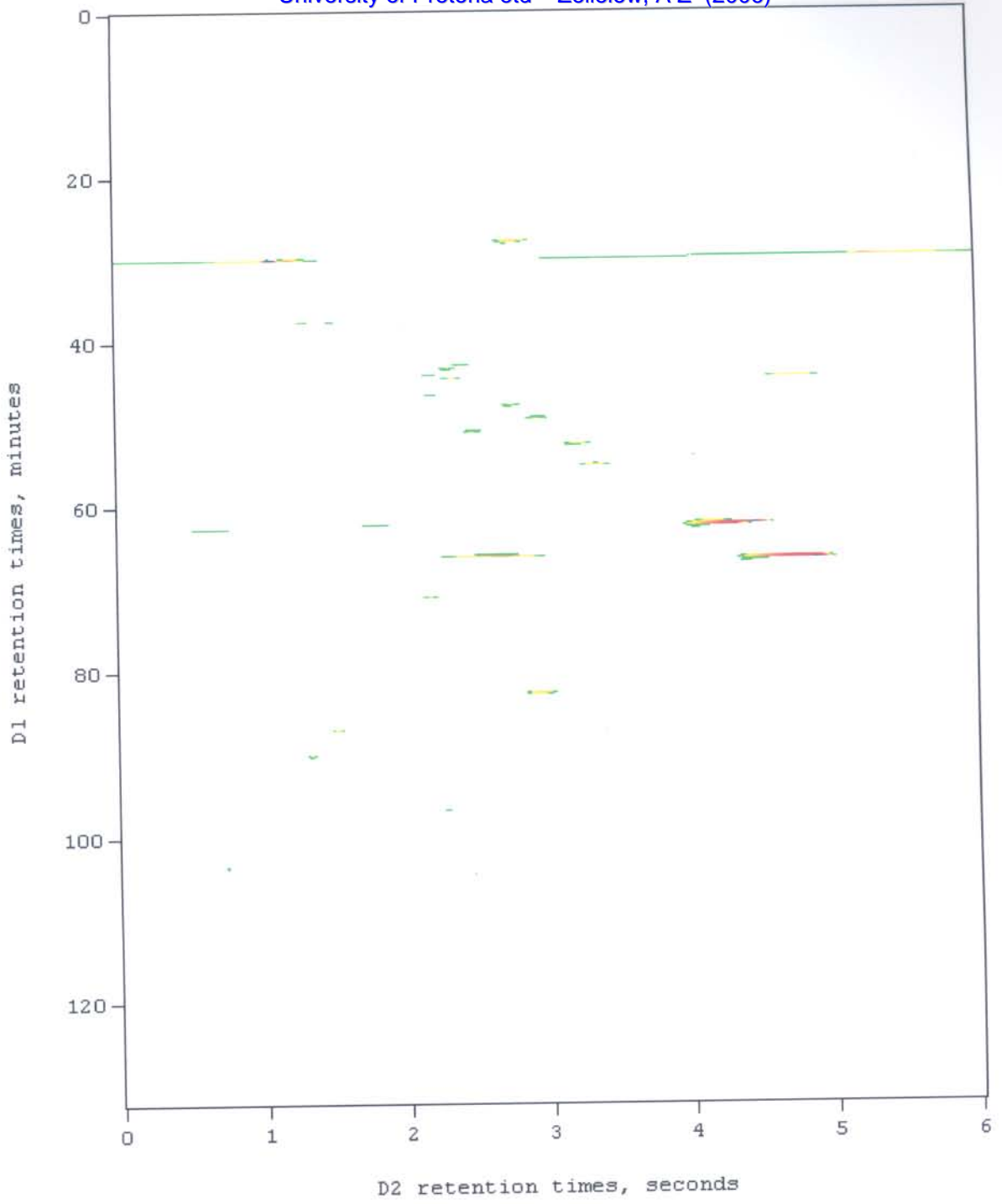
125C250C375C500C6250750C87510000000

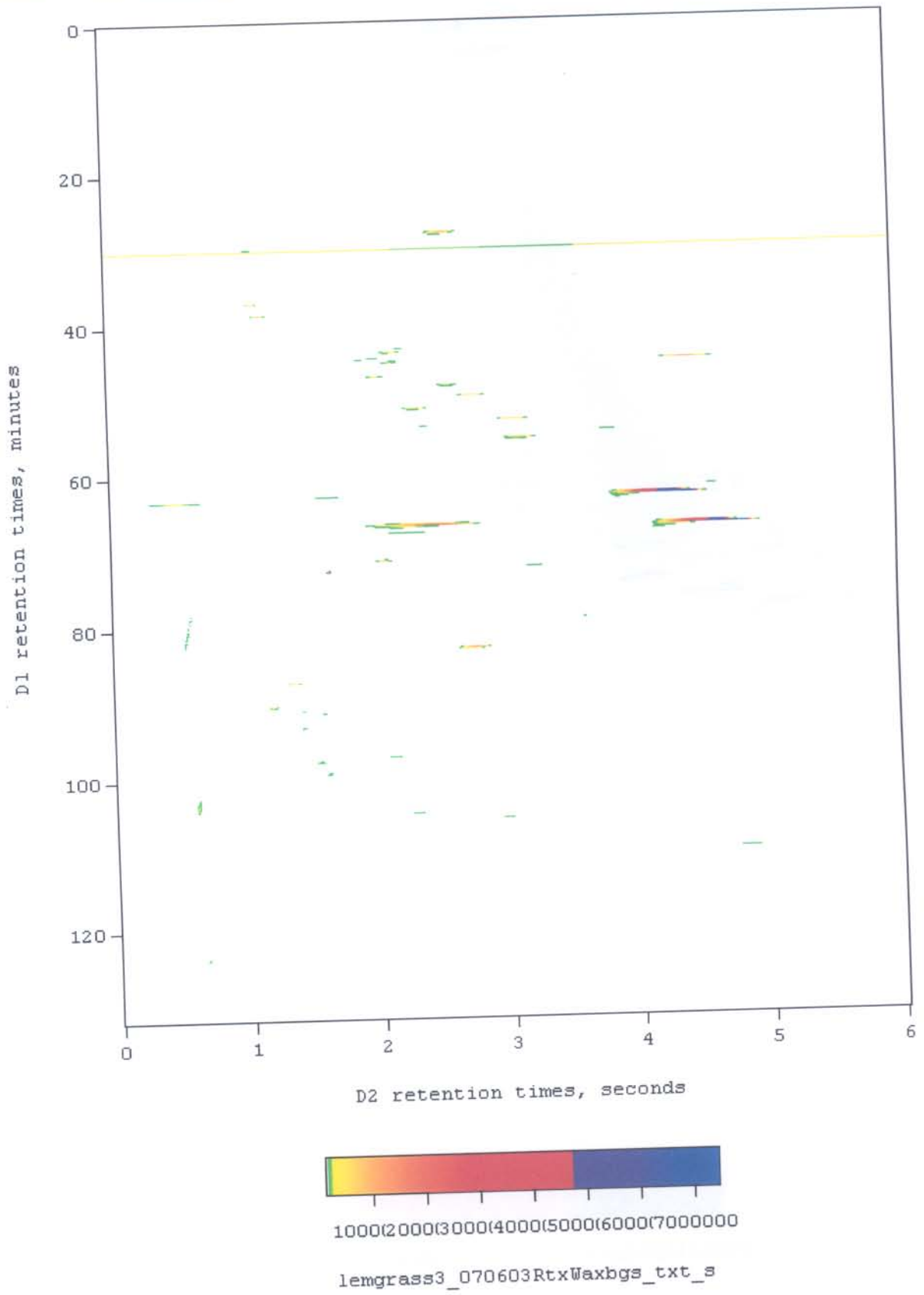
lemgrass2_060603RtxWaxbbgs_txt_s

Lemongrass (*Cymbopogon citratus*) sample-3

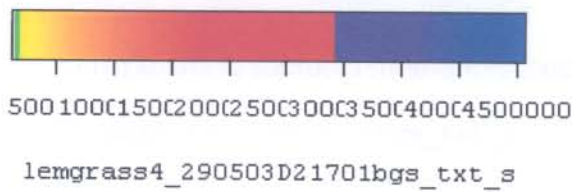
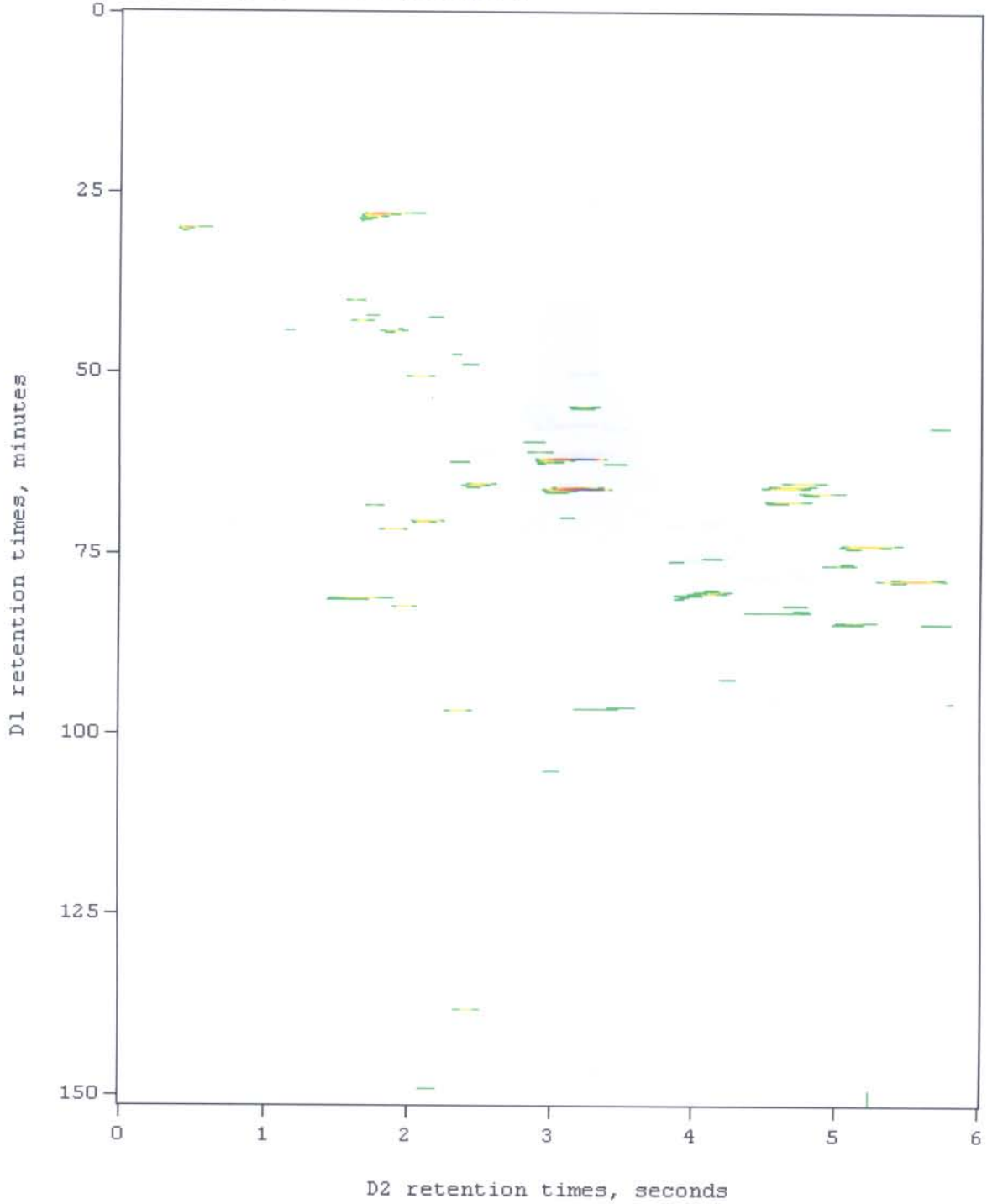
University of Pretoria etd — Zellelow, A-Z (2006)

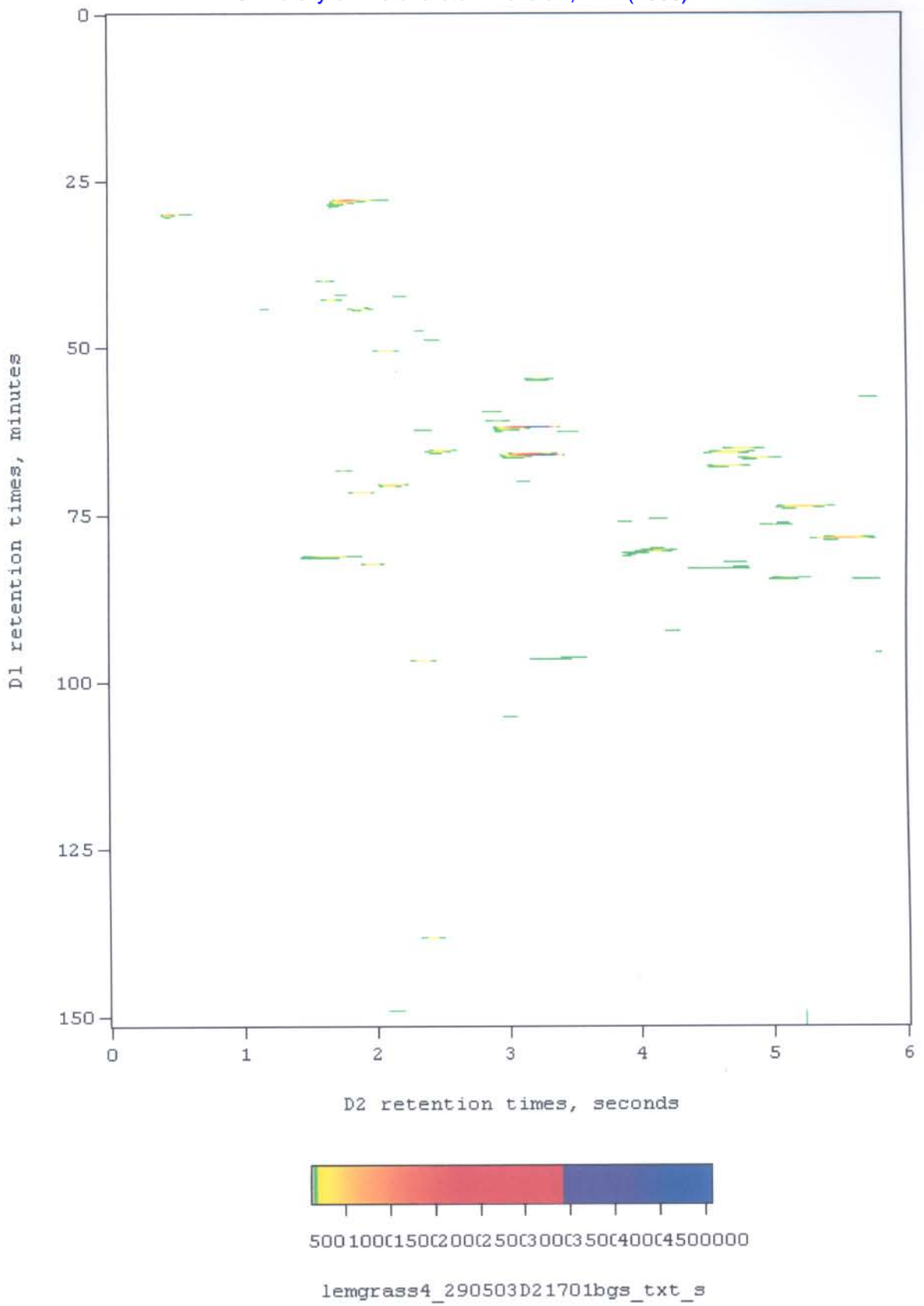


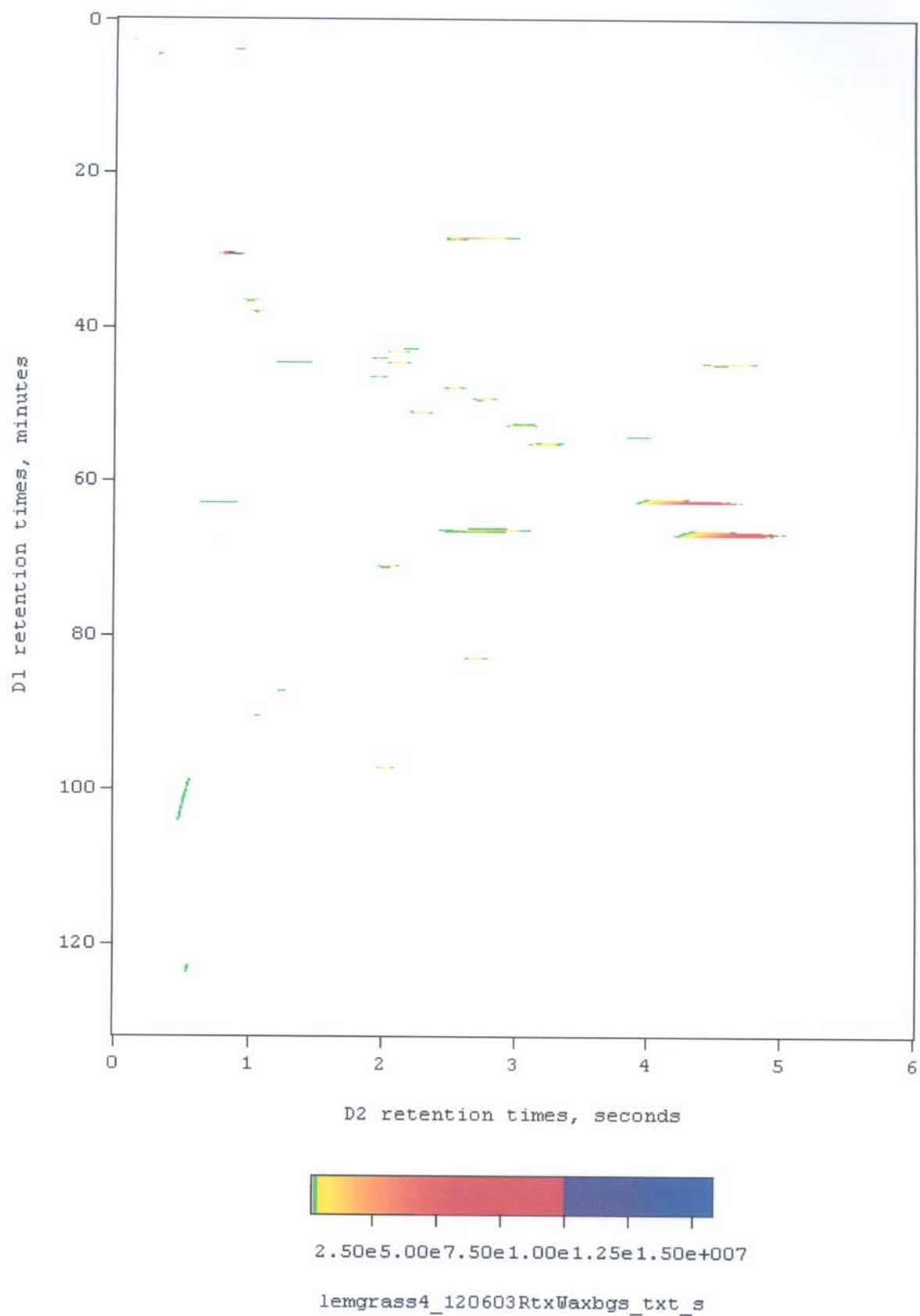


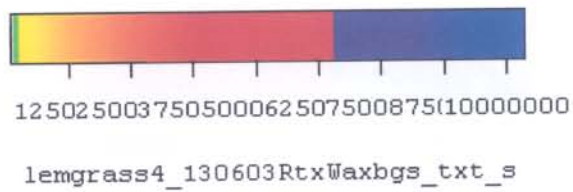
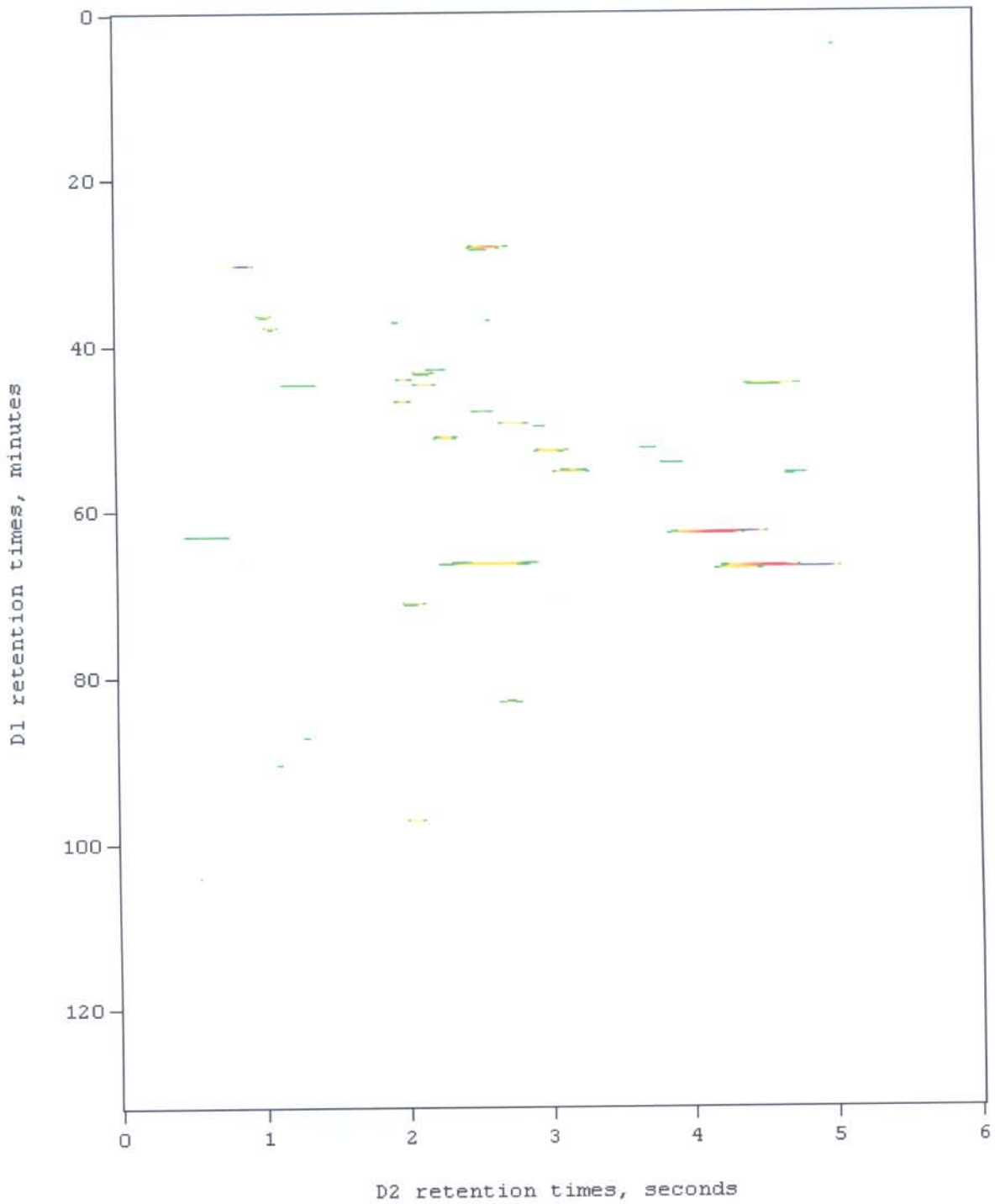


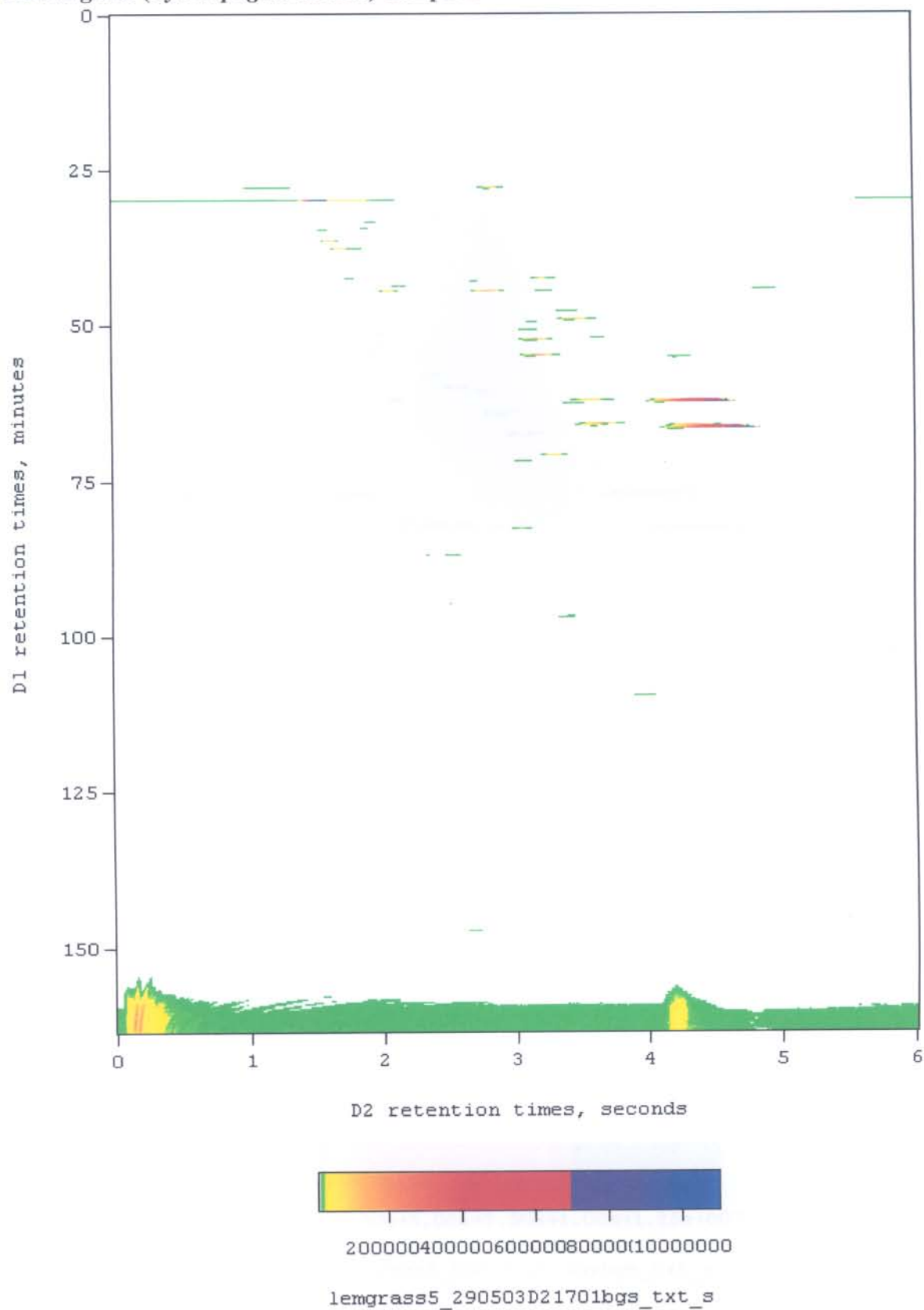
Lemongrass (*Cymbopogon citratus*) sample-4

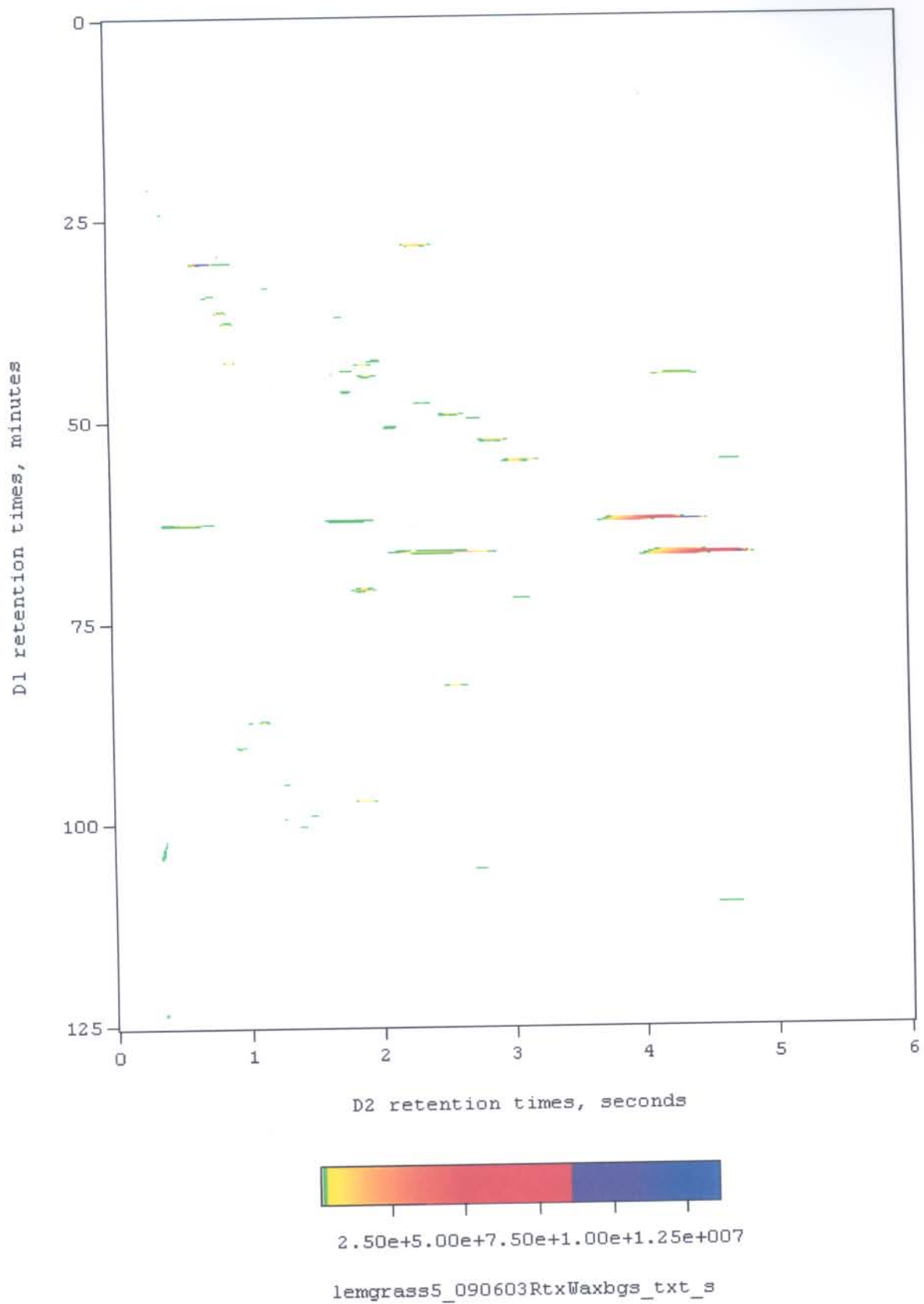


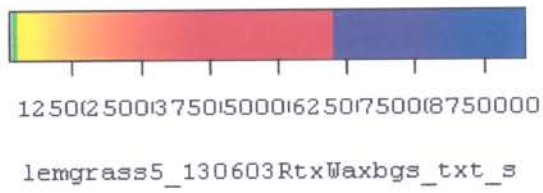
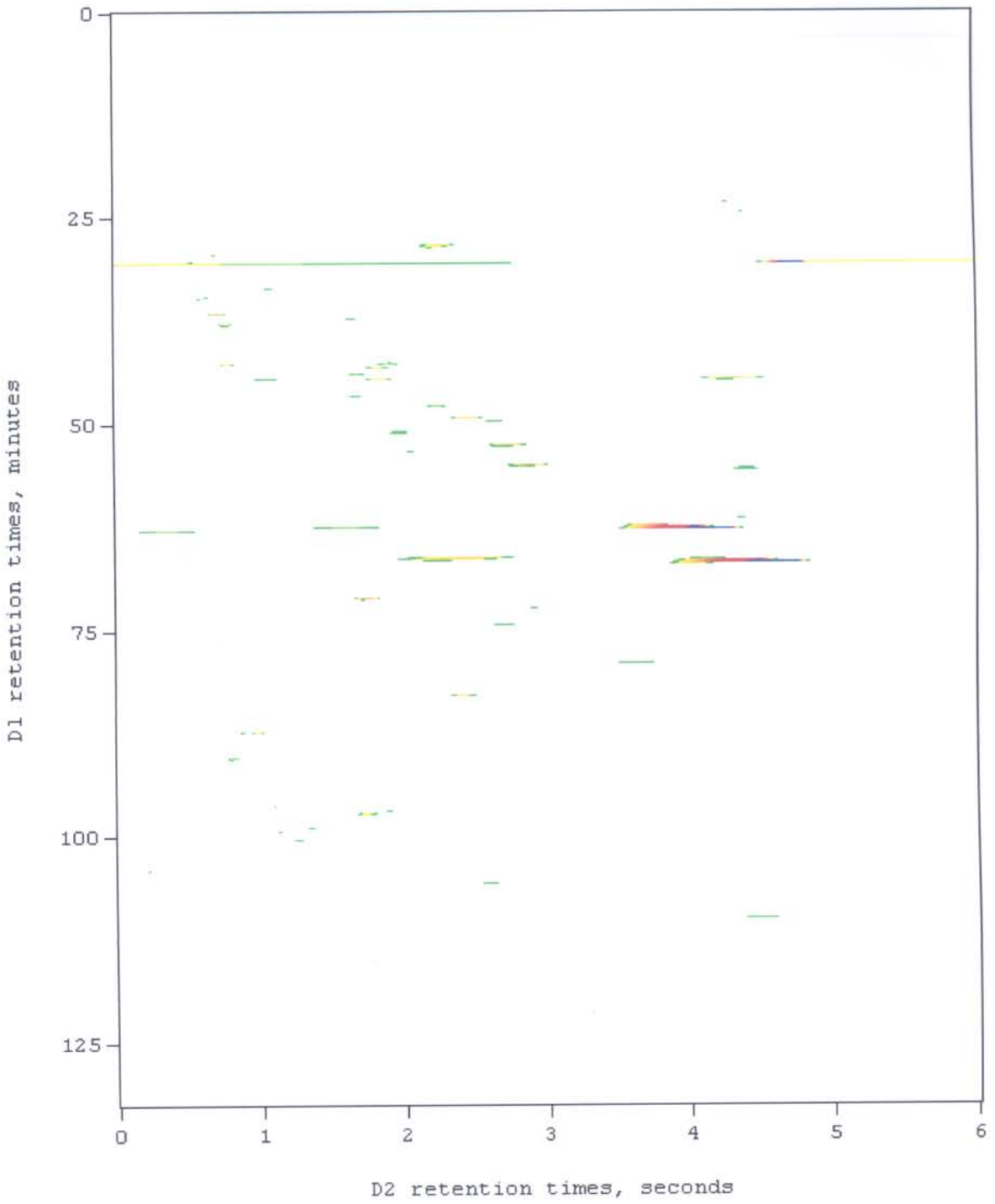




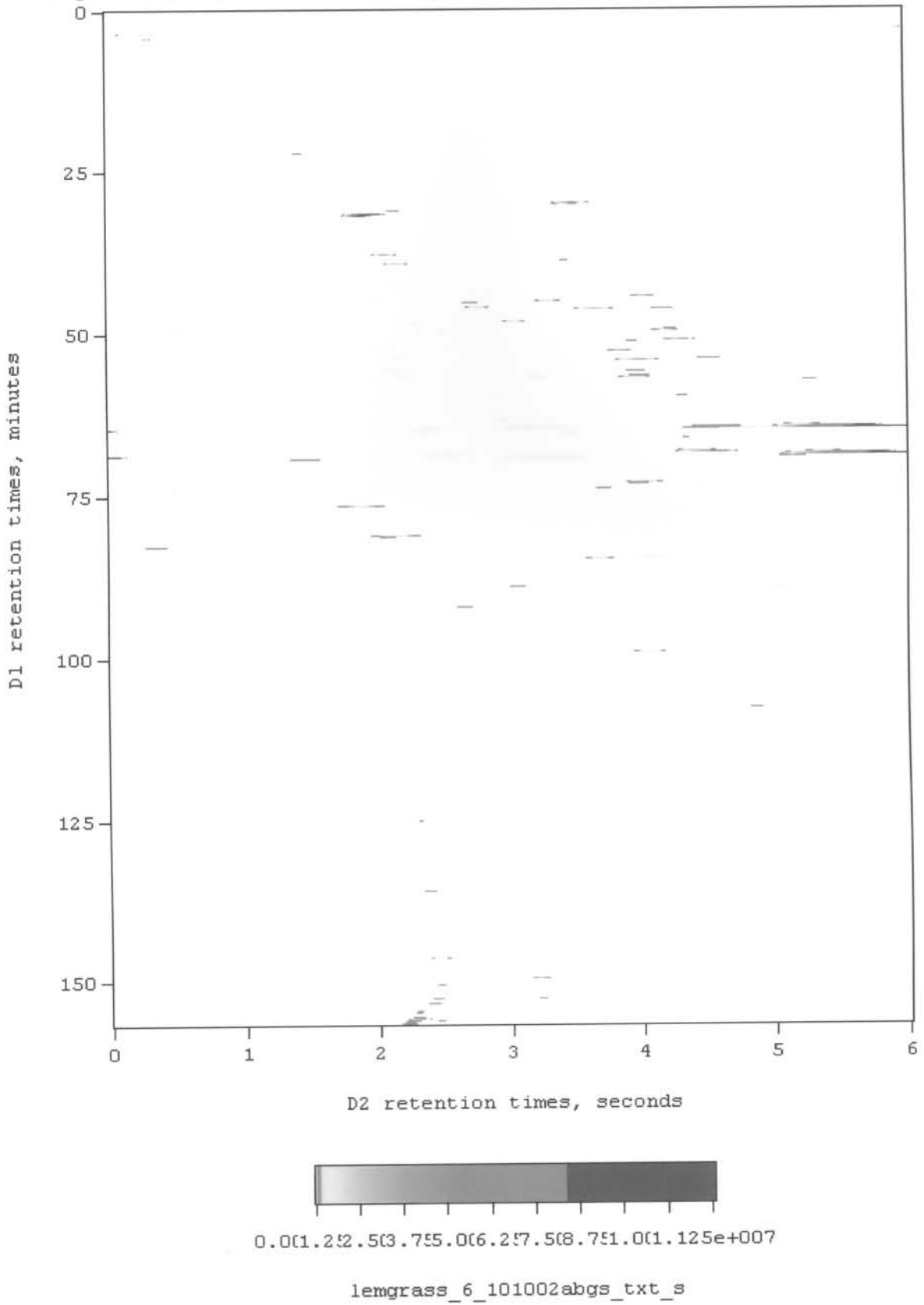


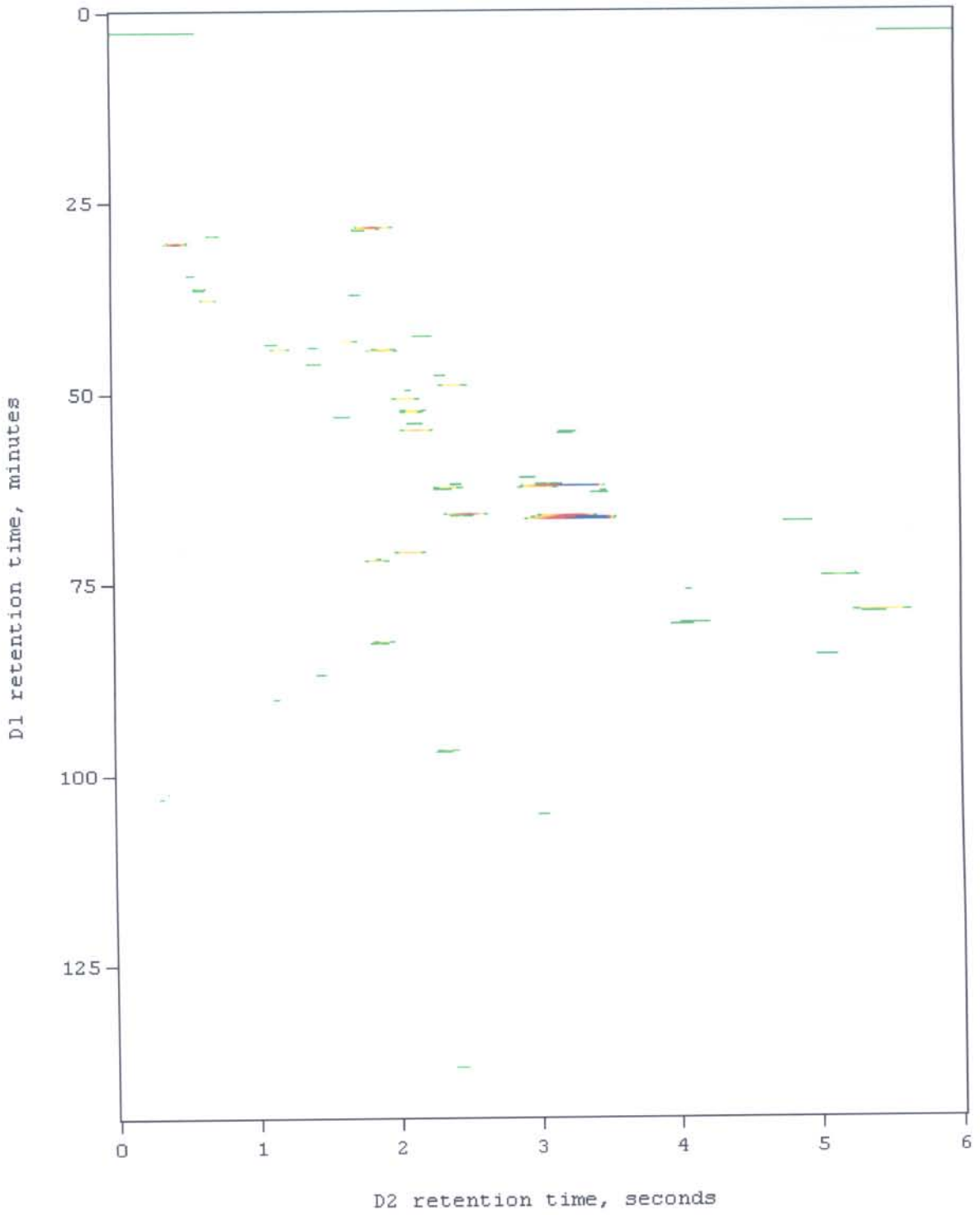
Lemongrass (*Cymbopogon citratus*) sample-5





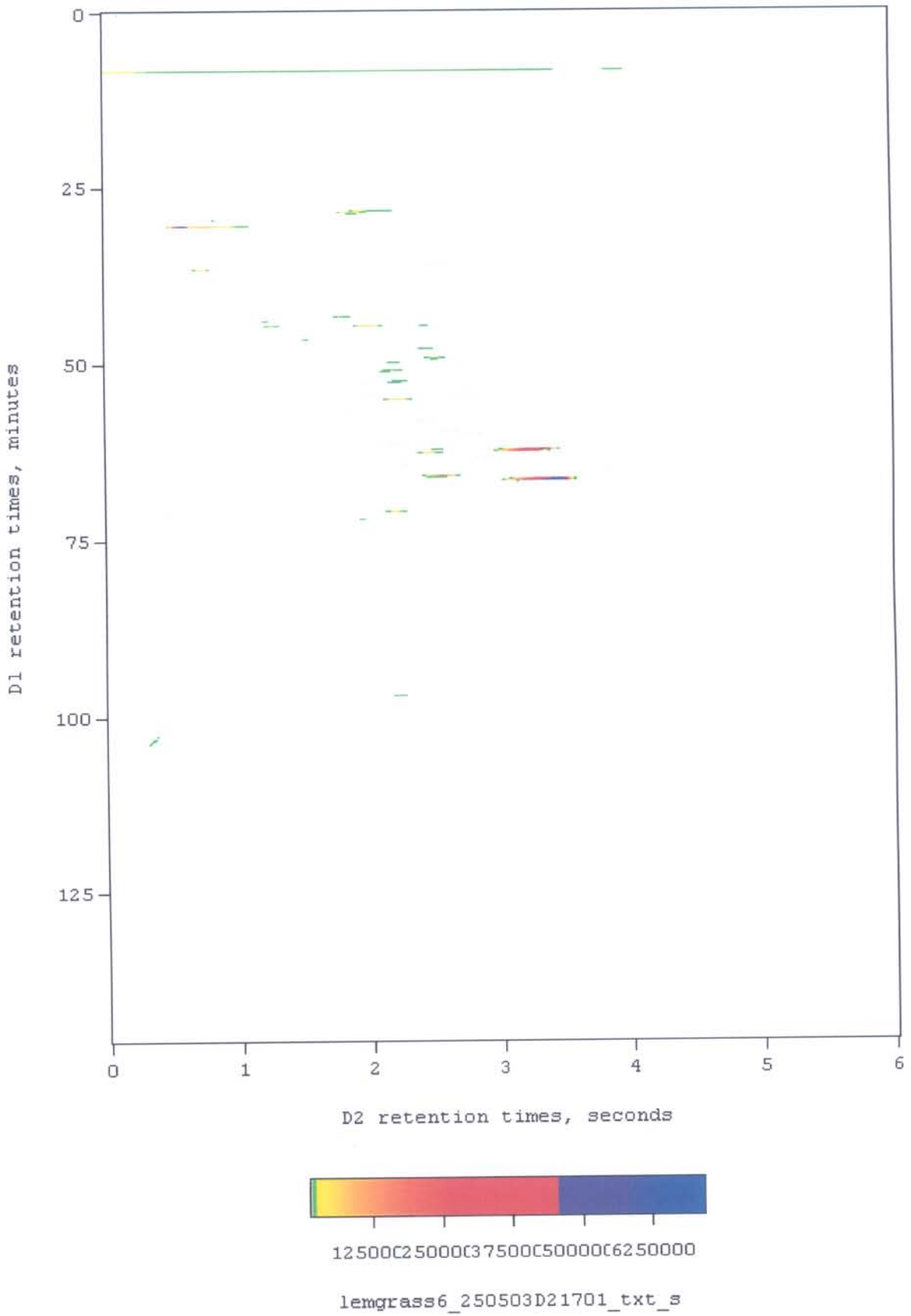
Lemongrass- (*Cymbopogon citratus*) sample-6

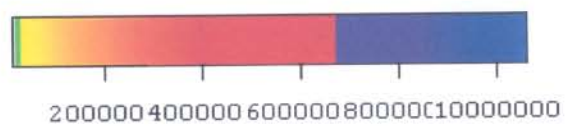
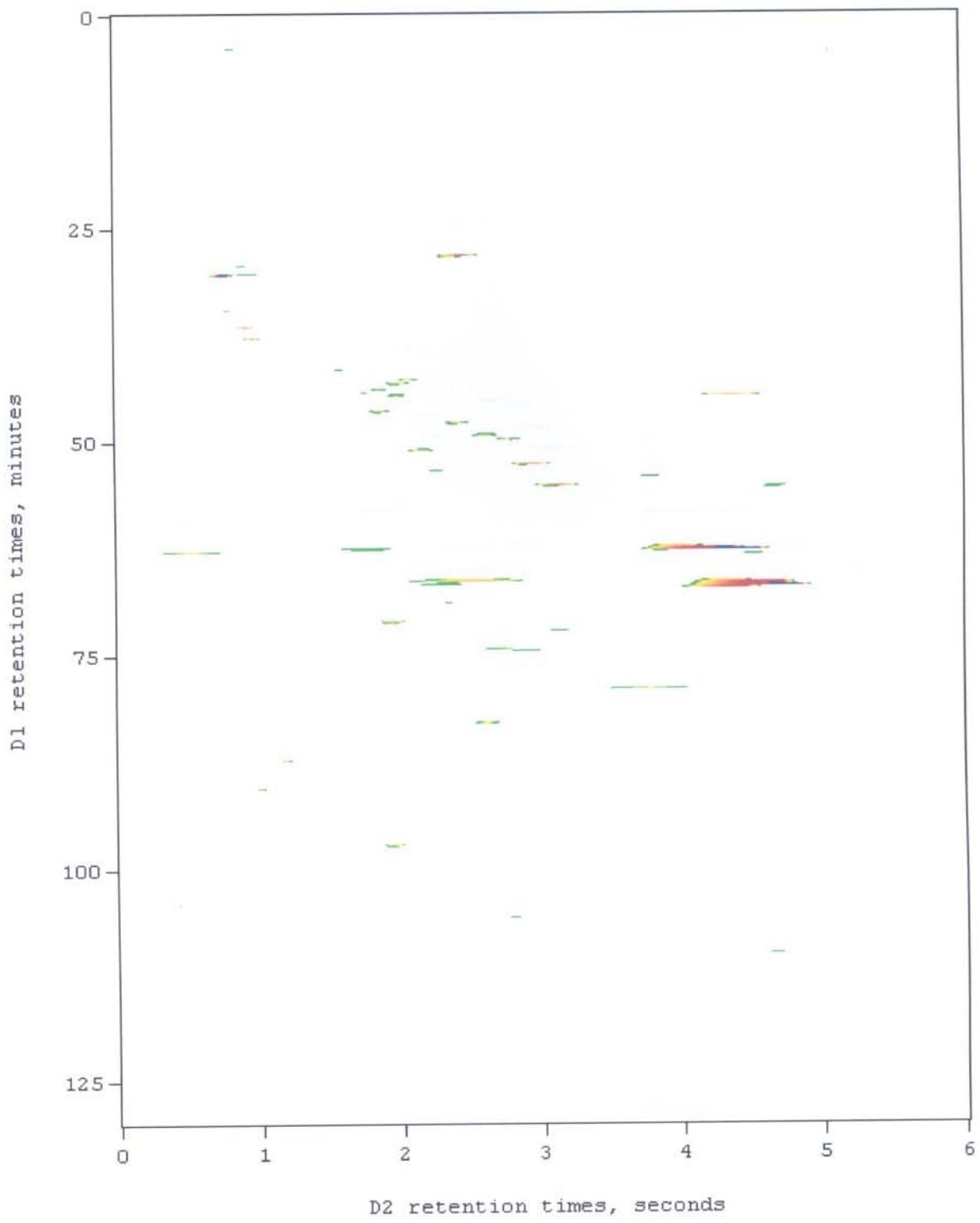




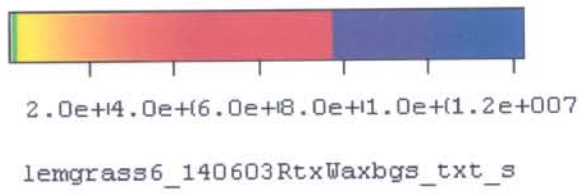
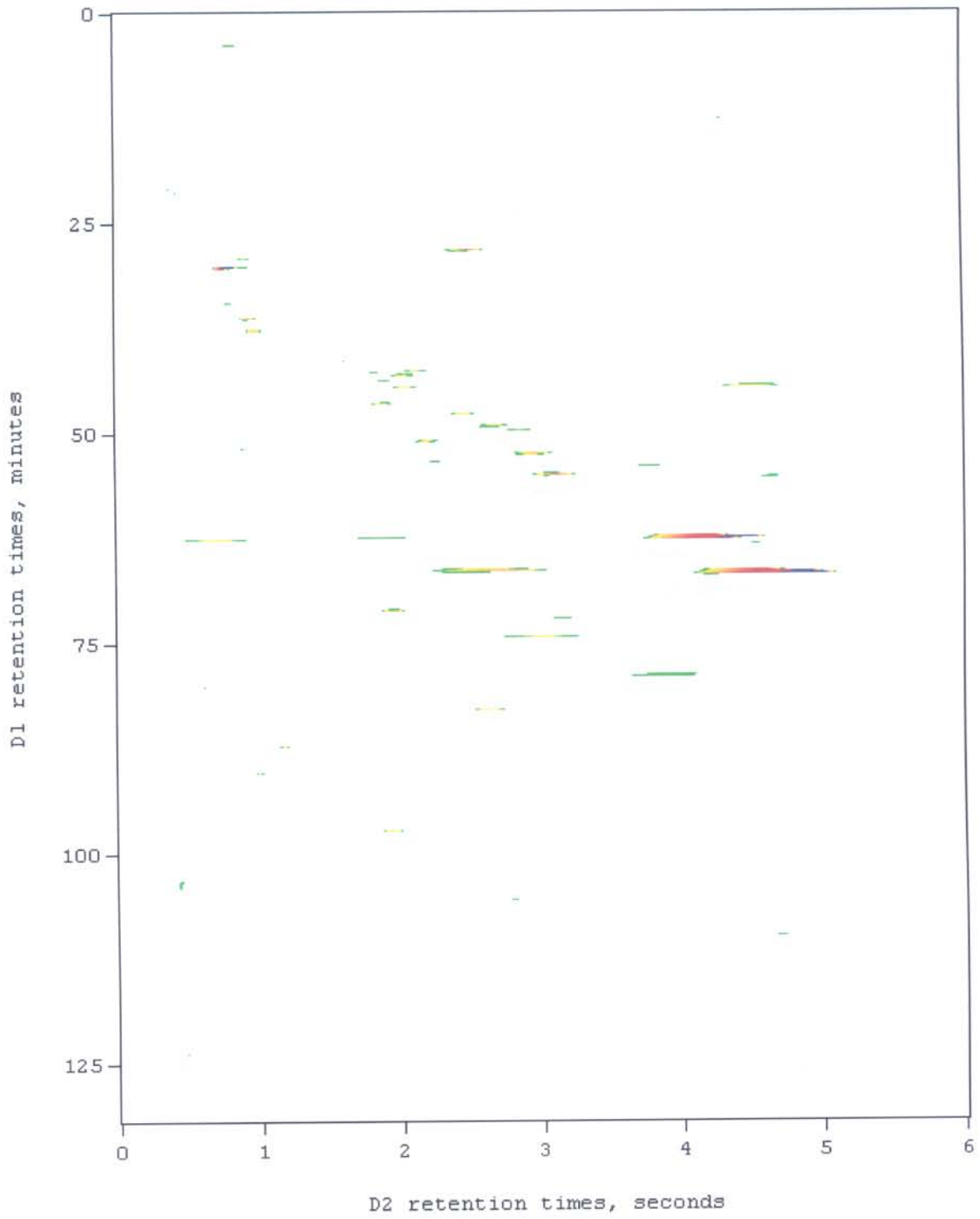
0 12500C25000C37500C50000C6250000

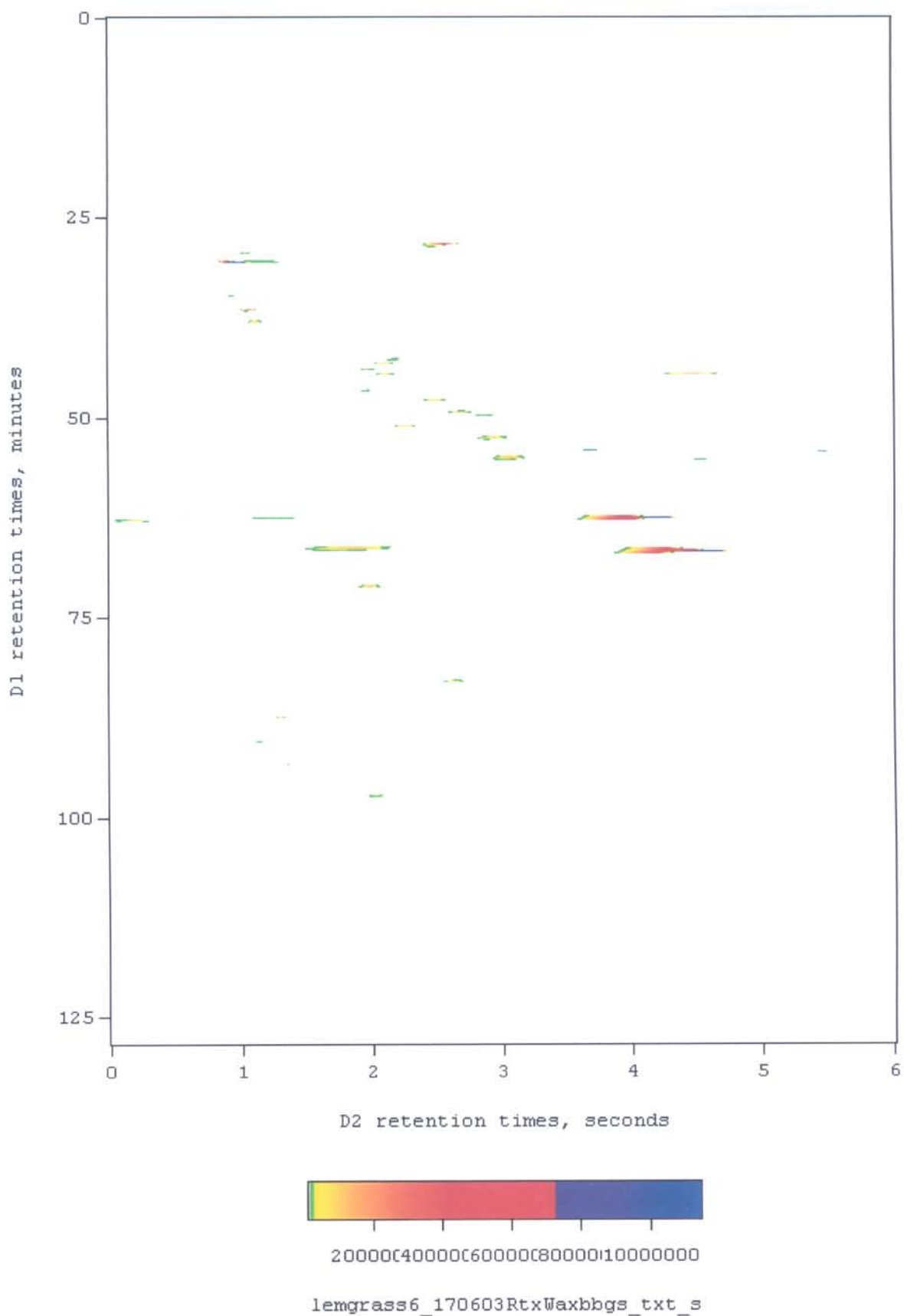
lemgrass6_240503D21701bgs_txt_s

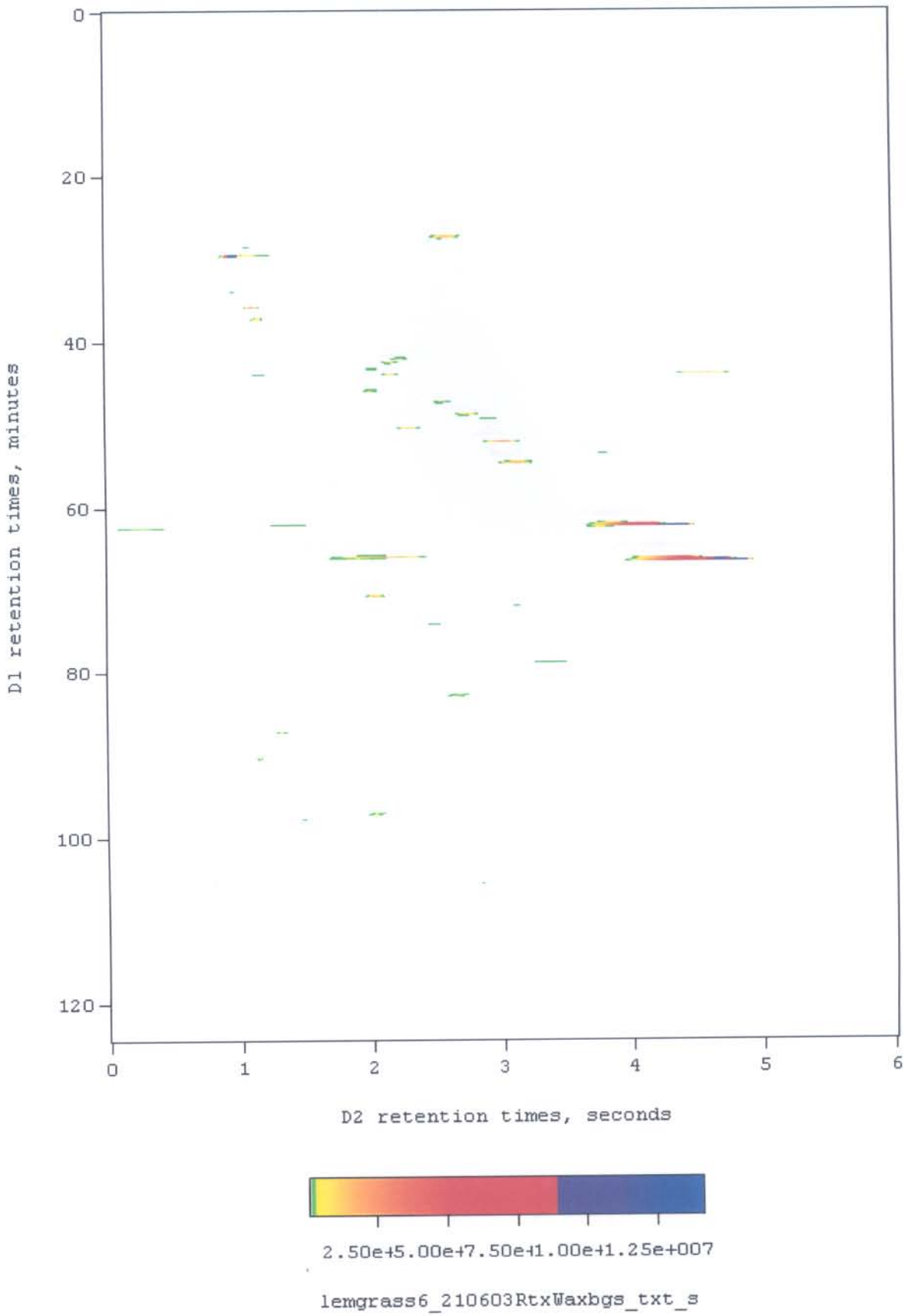


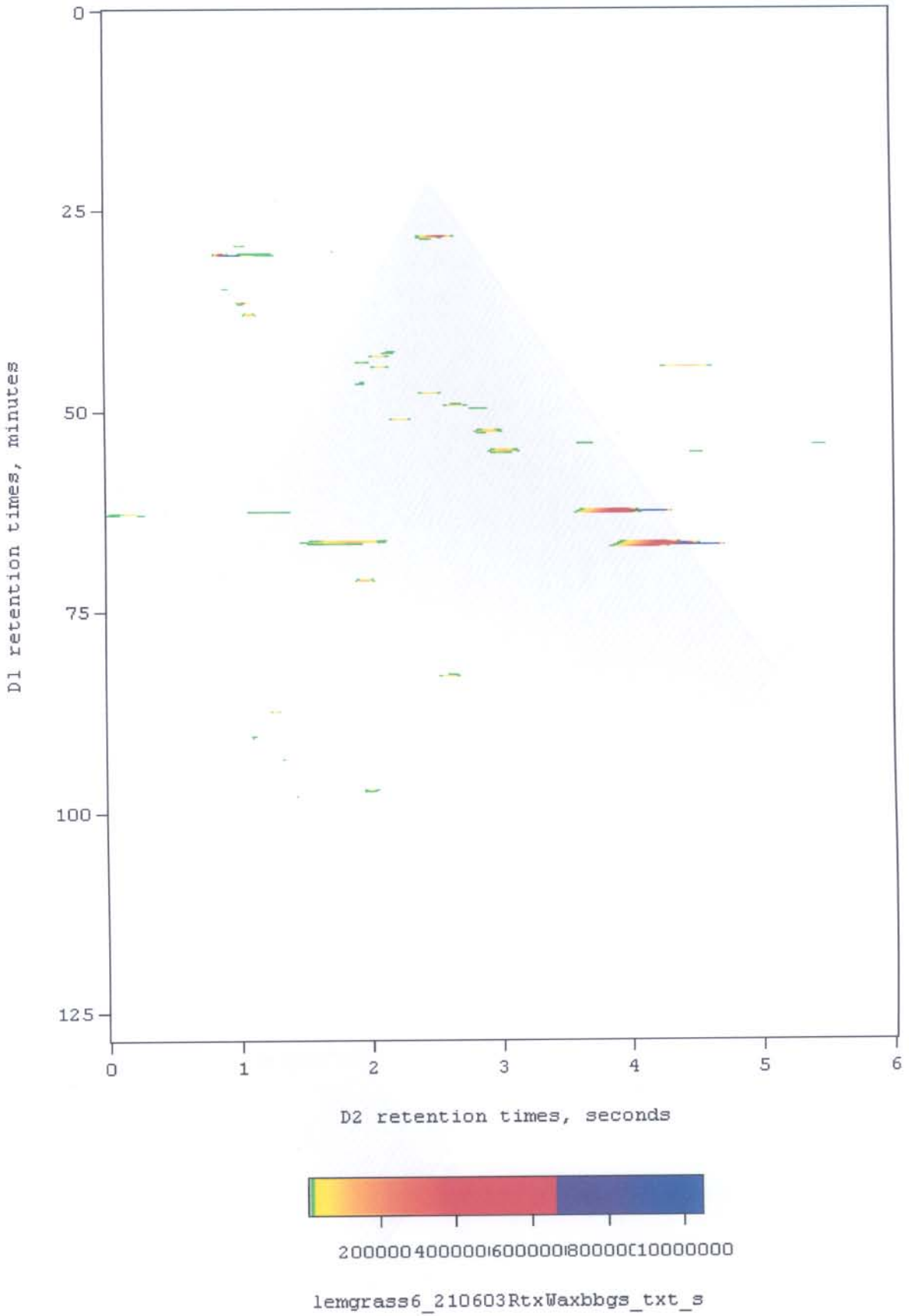


lemgrass6_090603RtxWaxbgs_txt_s

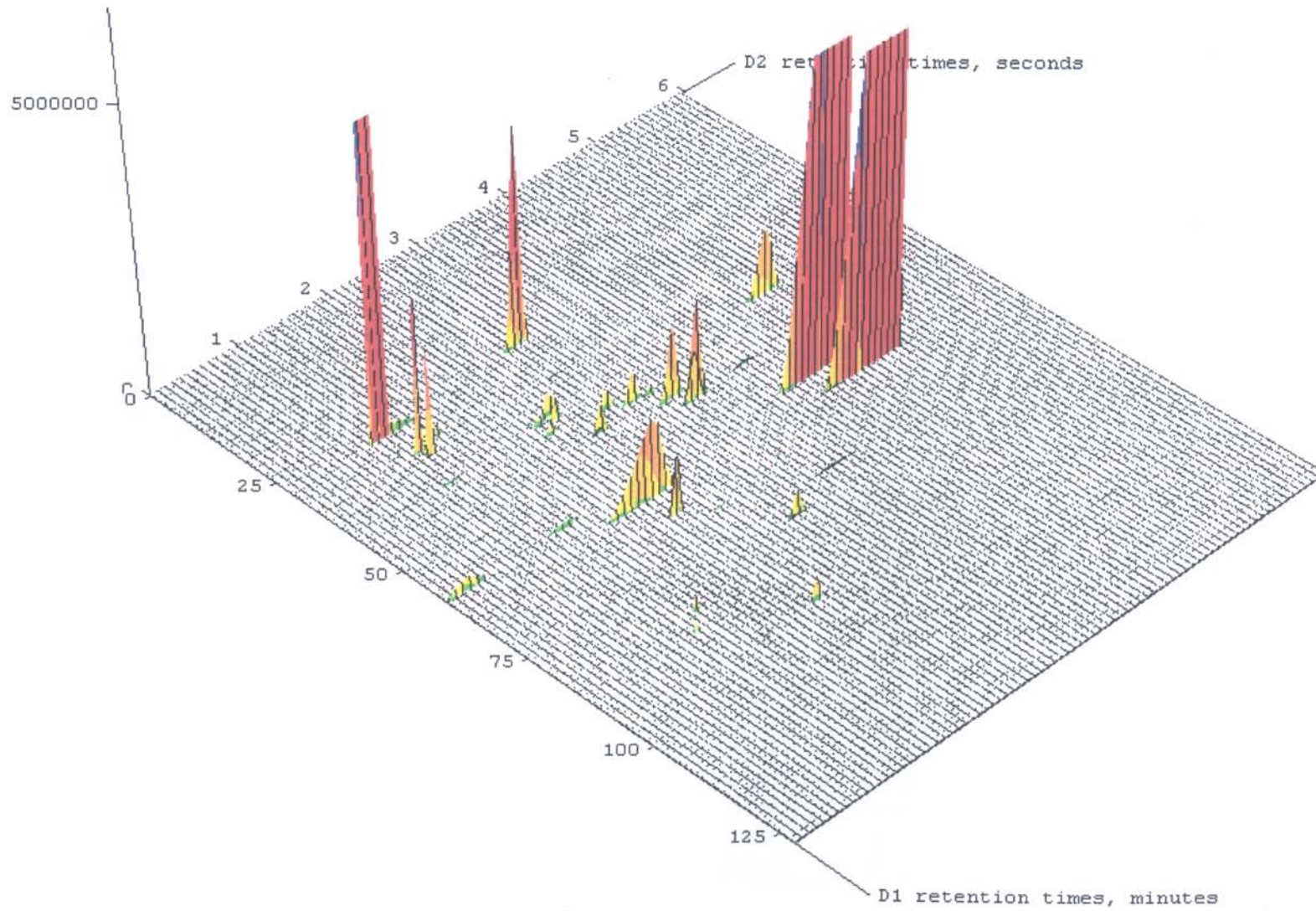








lemgrass6_210603RtxWaxbbgs 3D Image

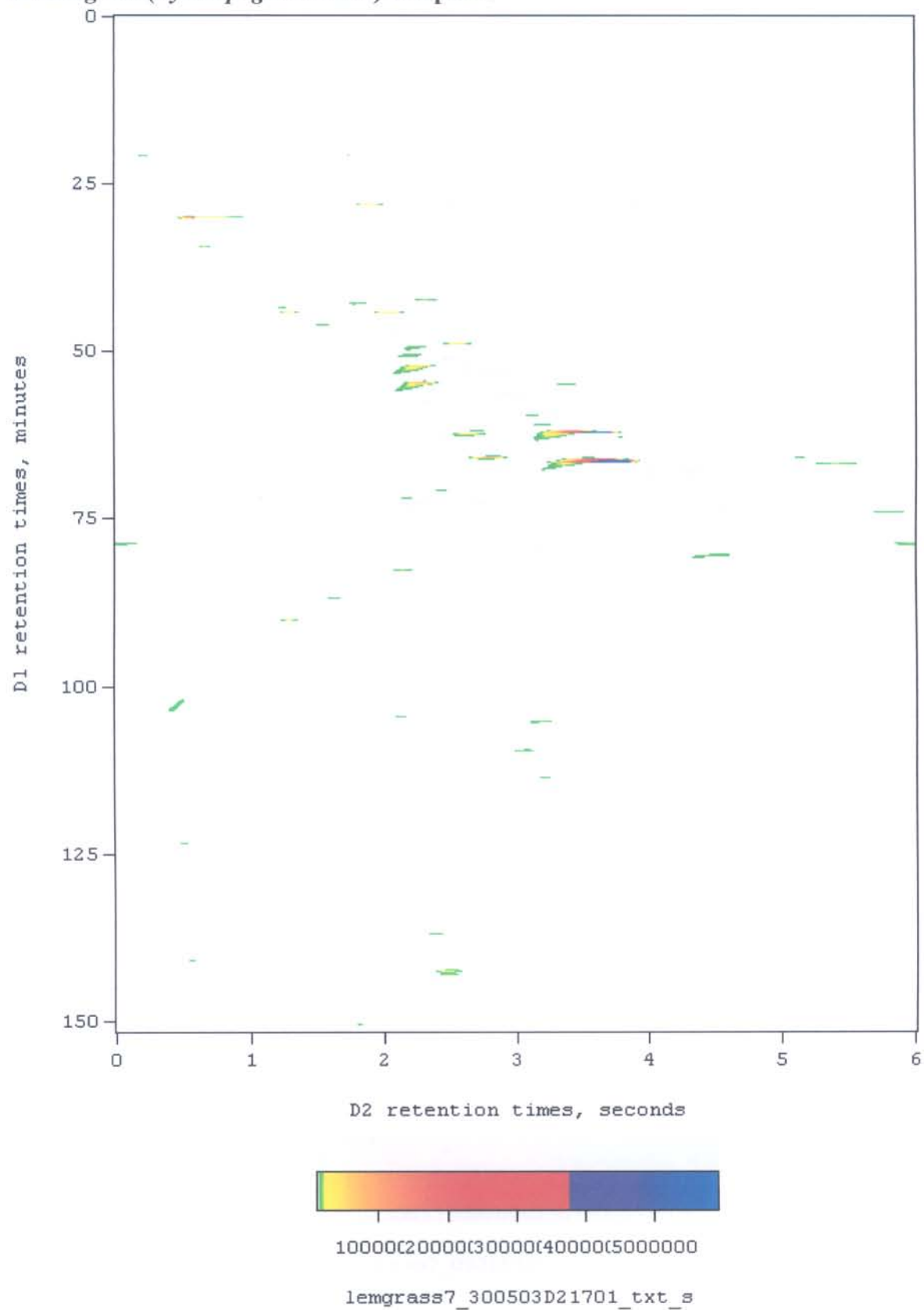


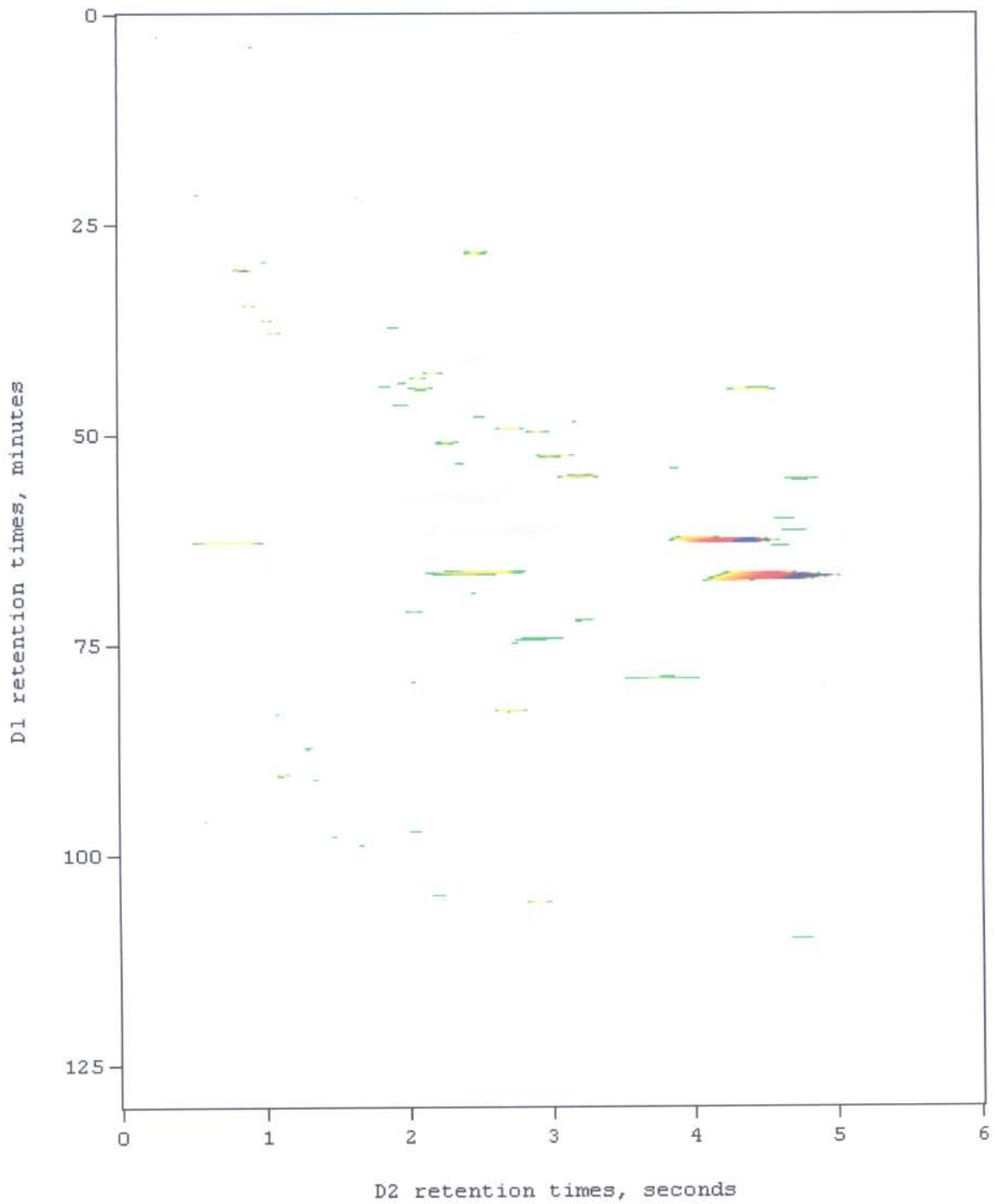
Lemongrass (*Cymbopogon citratus*) run-to-run peak reproducibility

Peak no.	D1 retention times in minutes					D2 retention times in seconds					D2 Peak width at half height, msec				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1.	28.1	28.0	28.1	27.2	28.1	2.5	2.6	2.6	2.6	2.5	130	160	125	130	120
2.	30.3	30.2	30.4	29.4	30.4	0.8	0.8	1.0	1.0	1.0	100	110	140	90	100
3.	36.4	36.3	36.5	35.6	36.4	0.9	0.9	1.1	1.1	1.0	55	55	60	50	55
4.	37.8	37.6	37.8	37.0	37.8	1.0	1.0	1.1	1.2	1.1	55	60	60	50	60
5.	44.5	44.3	44.4	43.2	44.4	4.4	4.5	4.5	4.6	4.5	200	220	200	200	200
6.	49.1	49.1	49.2	48.7	49.1	2.6	2.7	2.7	2.8	2.7	120	120	135	120	130
7.	50.8	50.8	50.9	50.3	50.9	2.2	2.2	2.3	2.1	2.2	100	100	105	100	100
8.	52.5	52.4	52.4	52.0	52.4	2.9	3.0	3.0	3.0	2.9	120	140	150	135	120
9.	55.0	54.9	54.9	54.6	54.9	3.1	3.1	3.1	3.2	3.1	140	150	150	140	130
10.	71.0	71.0	71.0	70.7	71.1	2.0	2.0	2.0	2.0	2.0	90	90	80	80	80
11.	82.8	82.9	82.9	82.7	82.9	2.6	2.6	2.6	2.7	2.6	120	120	125	100	105
12.	97.0	97.2	97.2	97.0	97.2	1.9	1.9	2.0	2.0	2.0	100	90	90	70	80

(1) lemgrass6090603RtxWaxbgs, (2) lemgrass6140603RtxWaxbgs, (3) lemgrass6170603RtxWaxb (4) lemgrass6210603RtxWaxbgs, and (5) lemgrass6210603RtxWaxbbgs

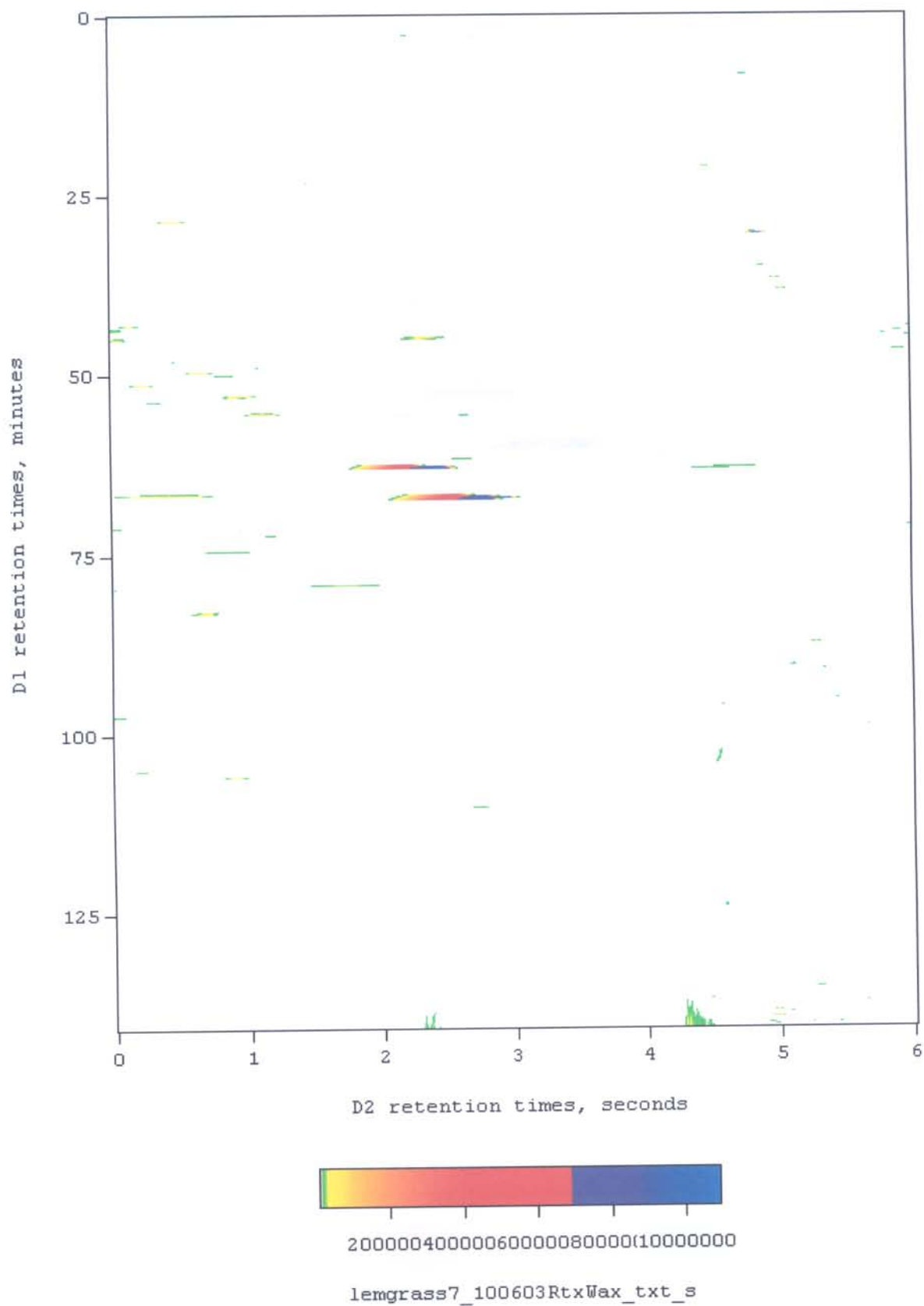
Peak no.	Mean D1 tr, minutes			Mean D2 tr, seconds			Mean D2 Wh, msec		
	Mean	STD	%RSD	Mean	STD	%RSD	Mean	STD	%RSD
1.	27.90	0.35	1.26	2.56	0.05	1.91	133.00	14.00	10.53
2.	30.14	0.38	1.25	0.92	0.10	10.65	108.00	17.20	15.93
3.	36.24	0.33	0.90	1.00	0.09	8.94	55.00	3.16	5.75
4.	37.60	0.31	0.82	1.08	0.07	6.93	57.00	4.00	7.02
5.	44.16	0.48	1.10	4.50	0.06	1.41	204.00	8.00	3.92
6.	49.04	0.17	0.36	2.70	0.06	2.34	125.00	6.32	5.06
7.	50.74	0.22	0.44	2.20	0.06	2.87	101.00	2.00	1.98
8.	52.34	0.17	0.33	2.96	0.05	1.66	133.00	11.66	8.77
9.	54.86	0.14	0.25	3.12	0.04	1.28	142.00	7.48	5.27
10.	70.96	0.14	0.19	2.00	0.00	0.00	84.00	4.90	5.83
11.	82.84	0.08	0.10	2.62	0.04	1.53	114.00	9.70	8.50
12.	97.12	0.10	0.10	1.96	0.05	2.50	86.00	10.20	11.86
	Mean		0.59			3.50			7.53

Lemongrass (*Cymbopogon citratus*) sample-7

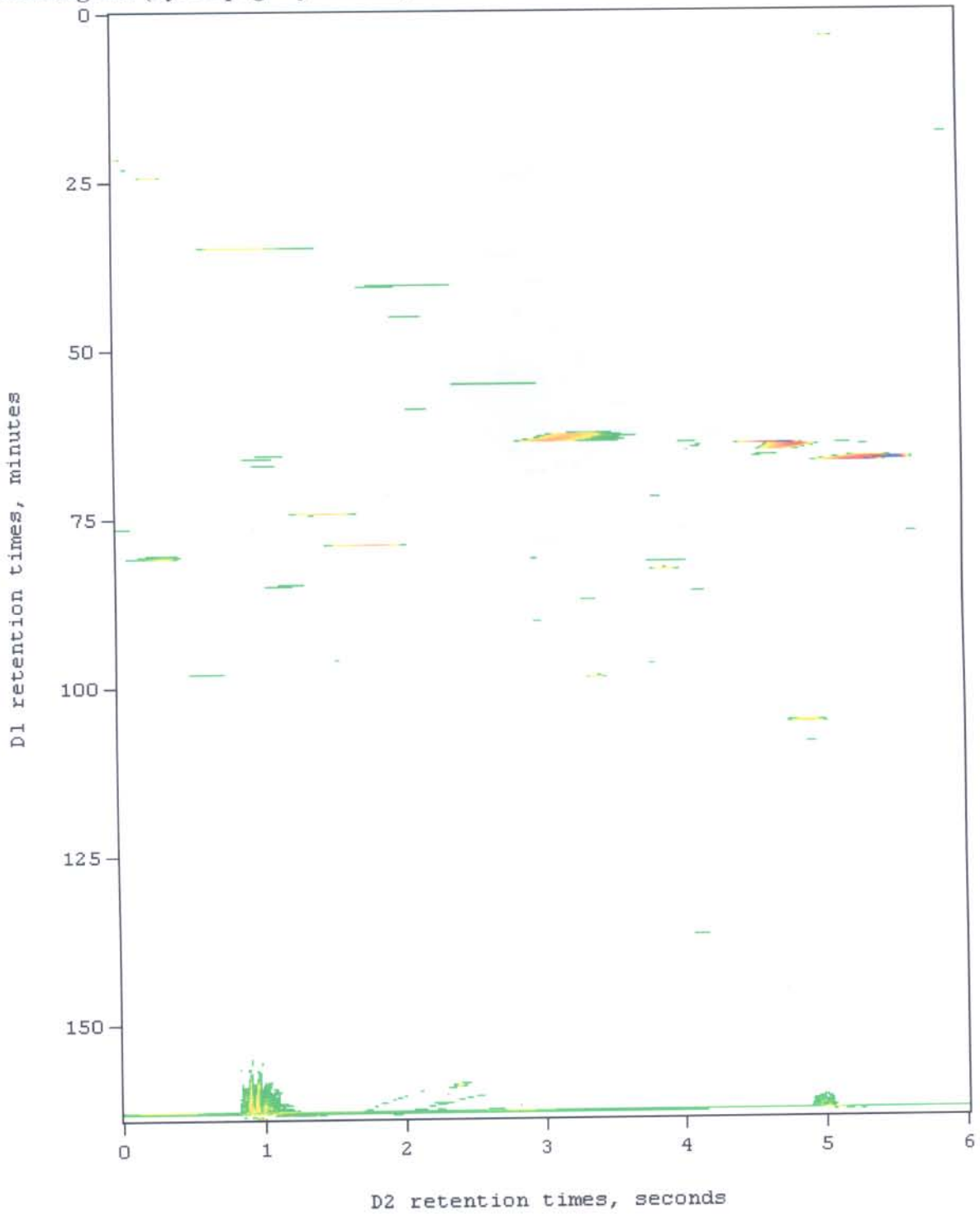


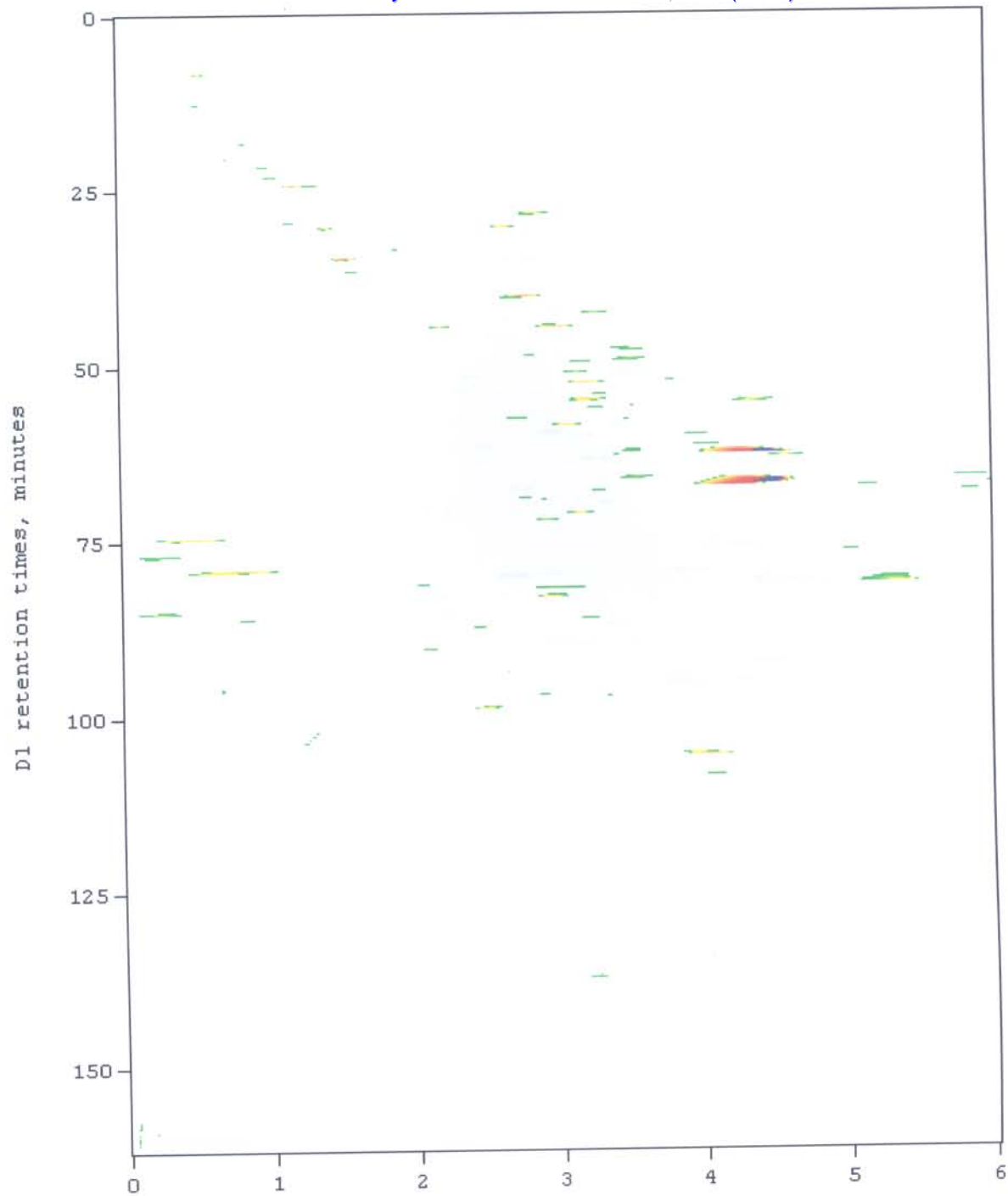
125025003750500062507500875(100000000

lemgrass7_090603RtxWaxbgs_txt_s

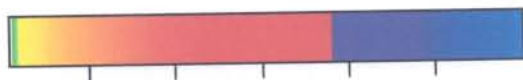


Lemongrass (*Cymbopogon flexuosus*)



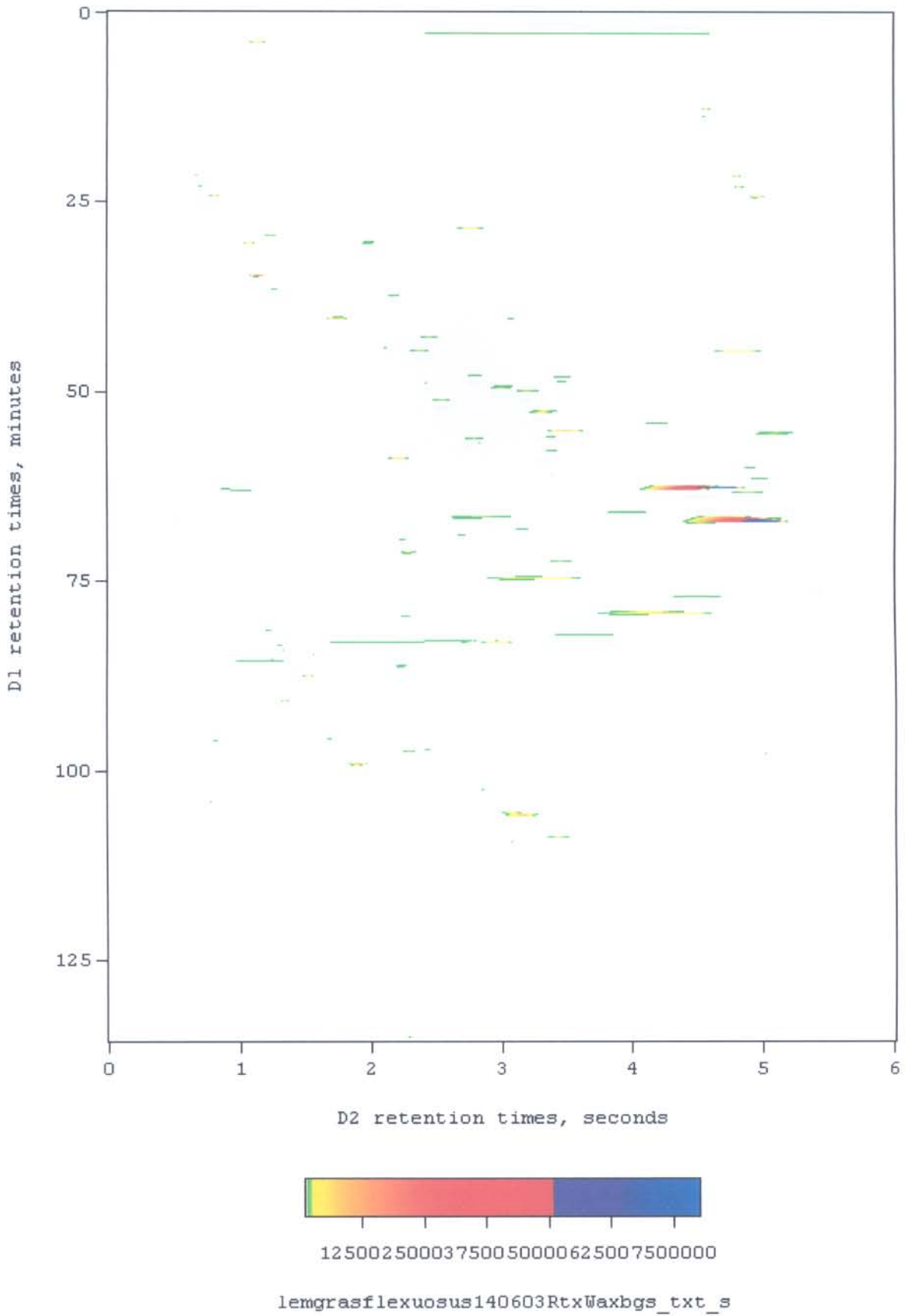


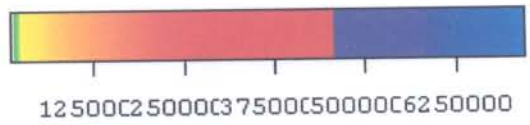
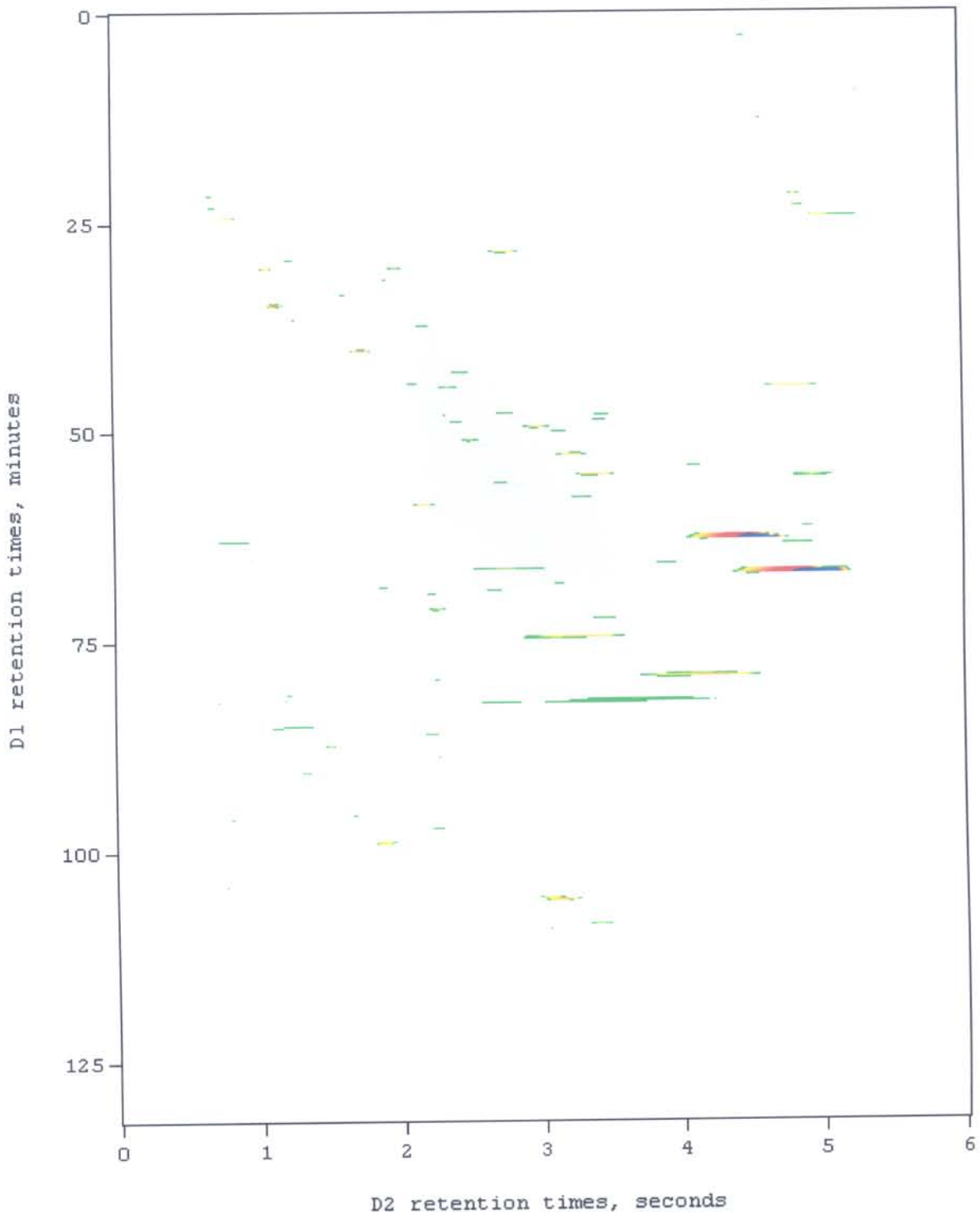
D2 retention times, seconds



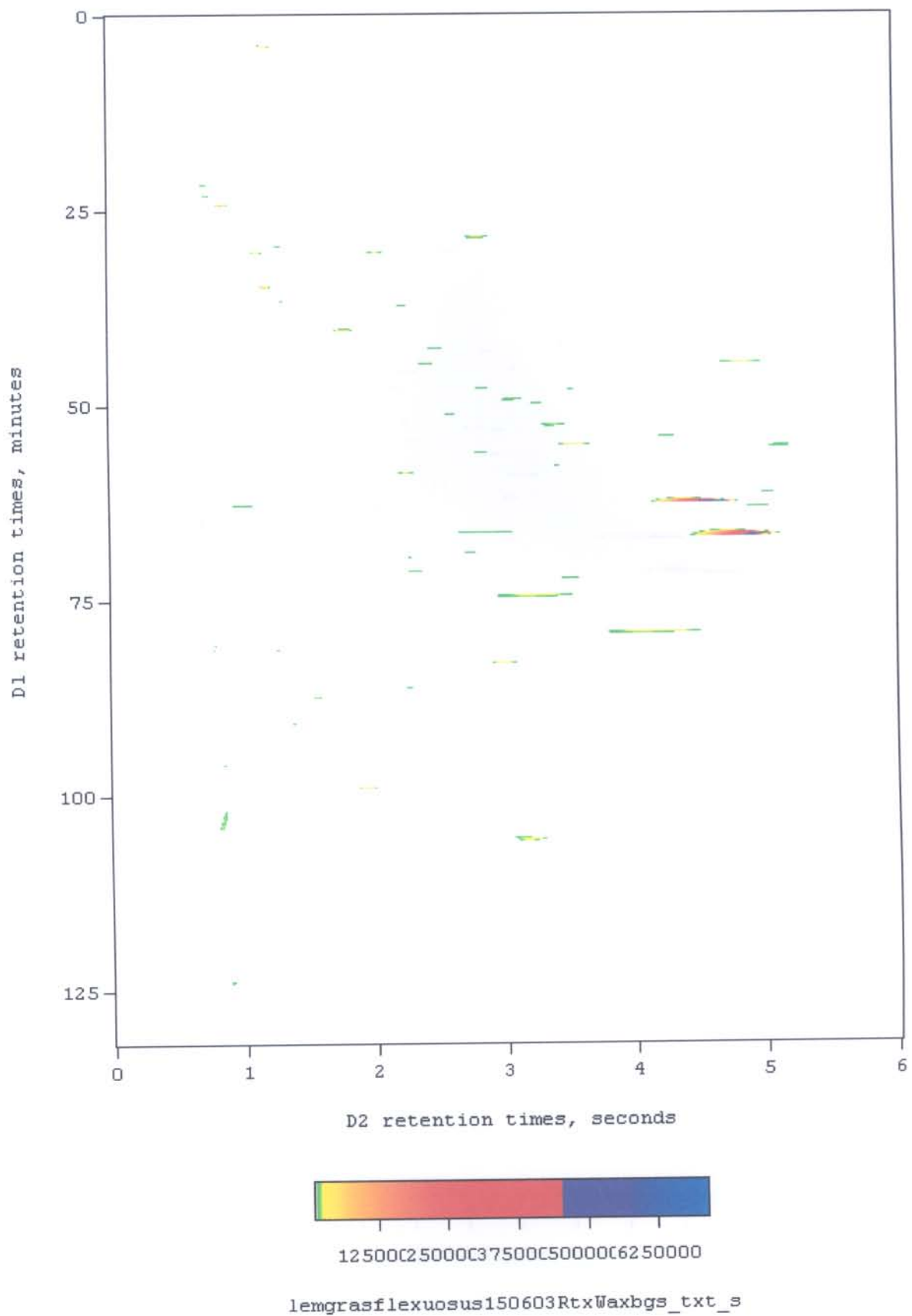
12500(25000(37500(50000(6250000

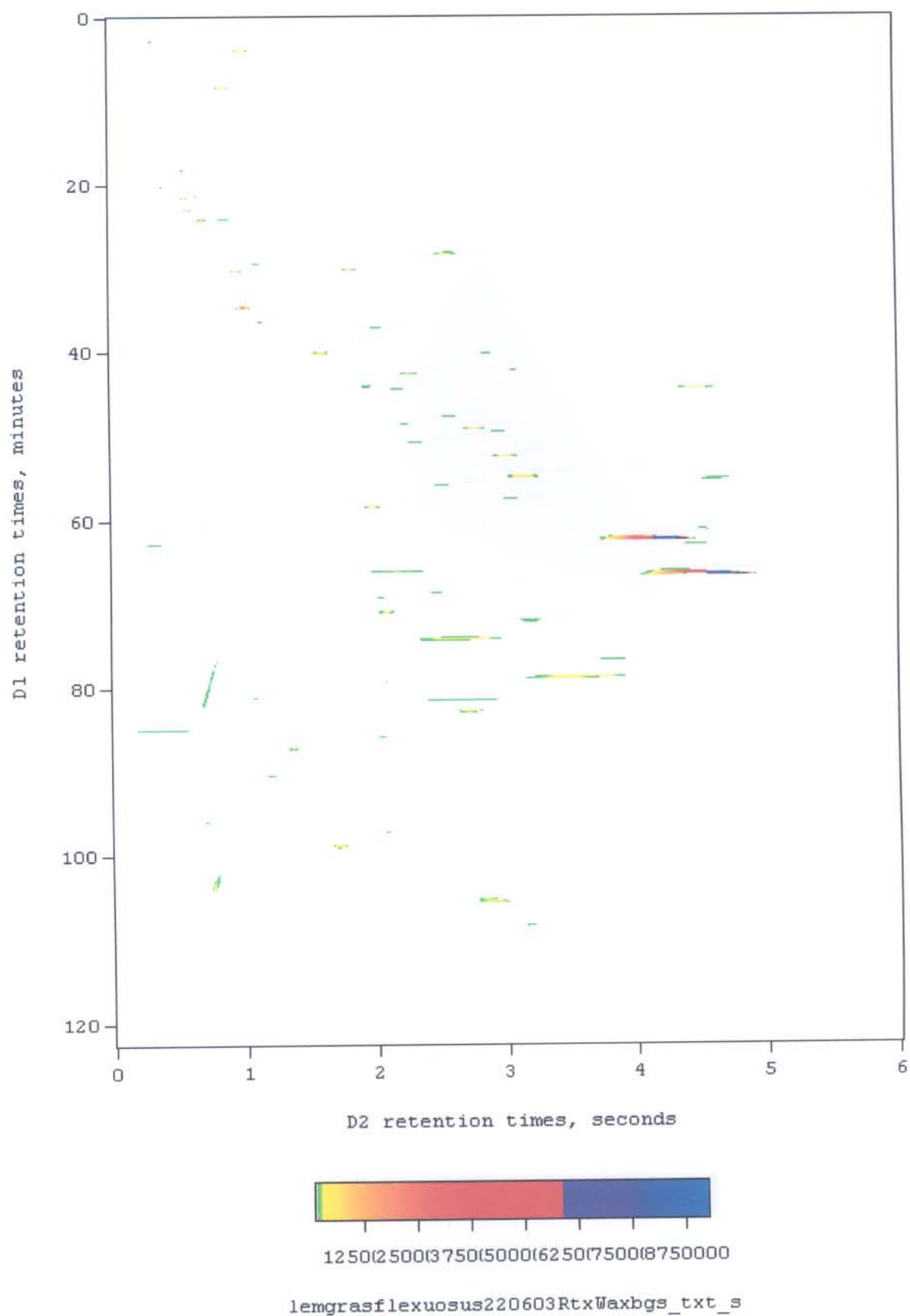
lemgrassflexuosus280503D21701_txt_s

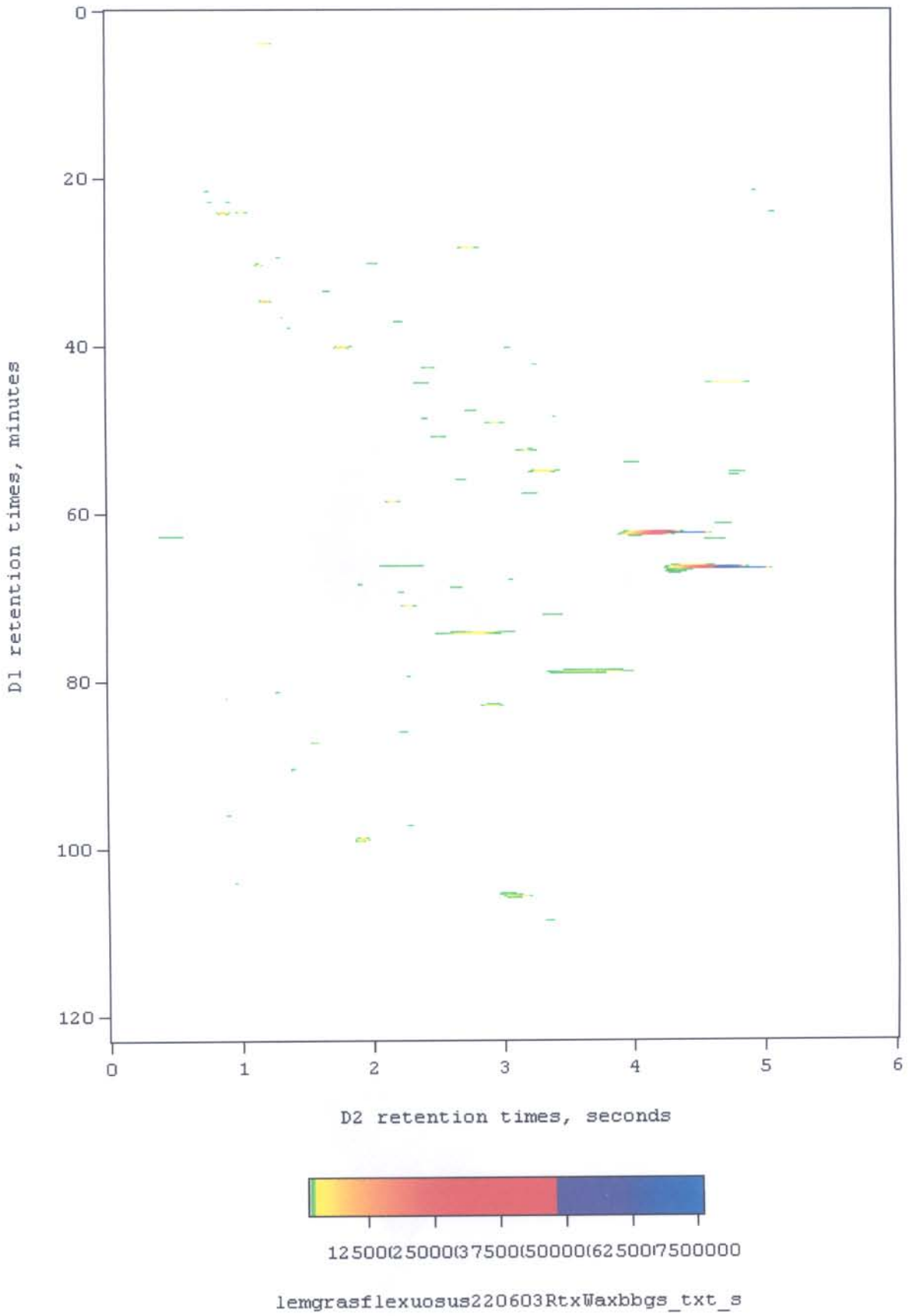


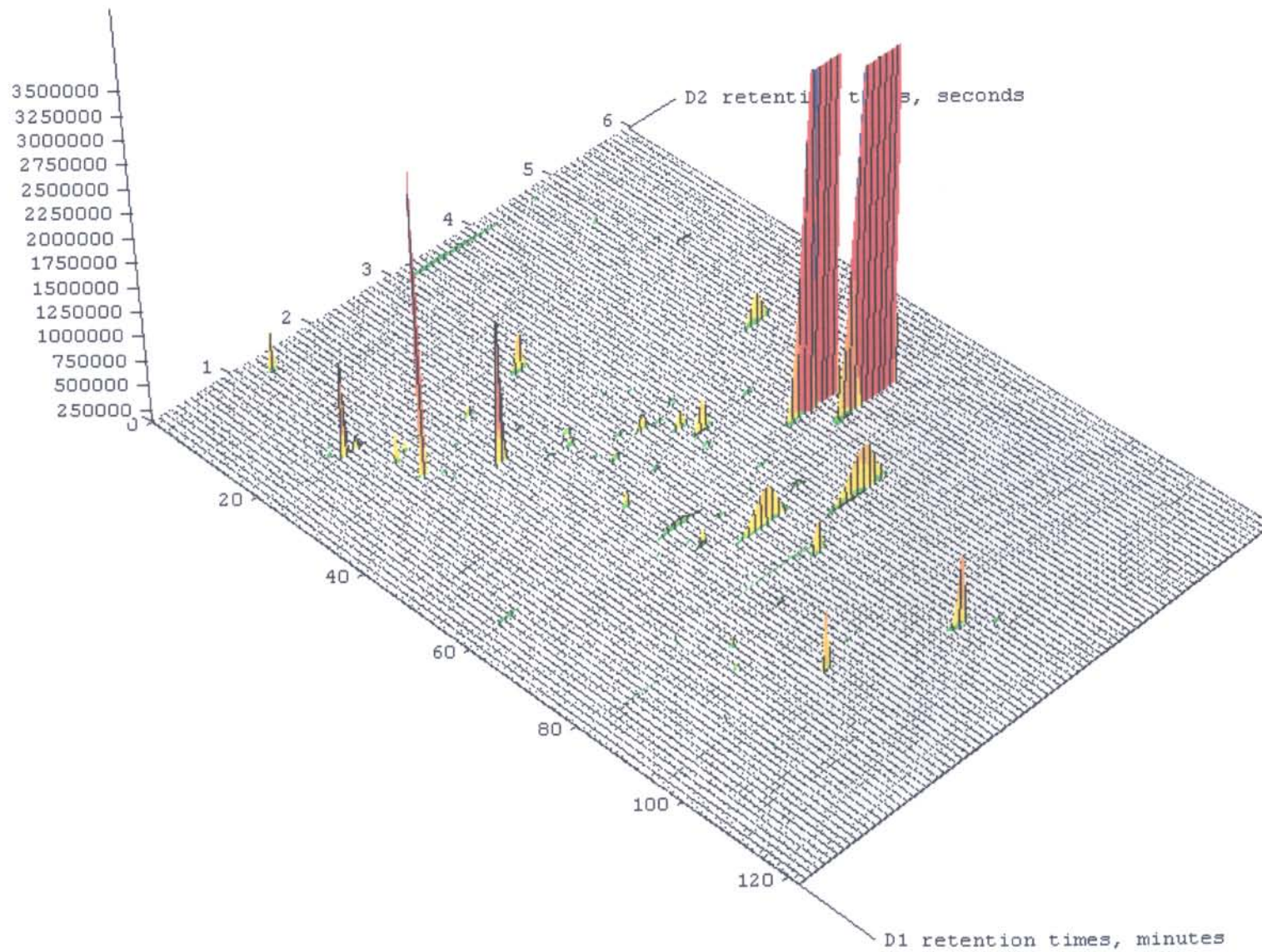


lemgrasflexuosus140603RtxWaxbbgs_txt_s









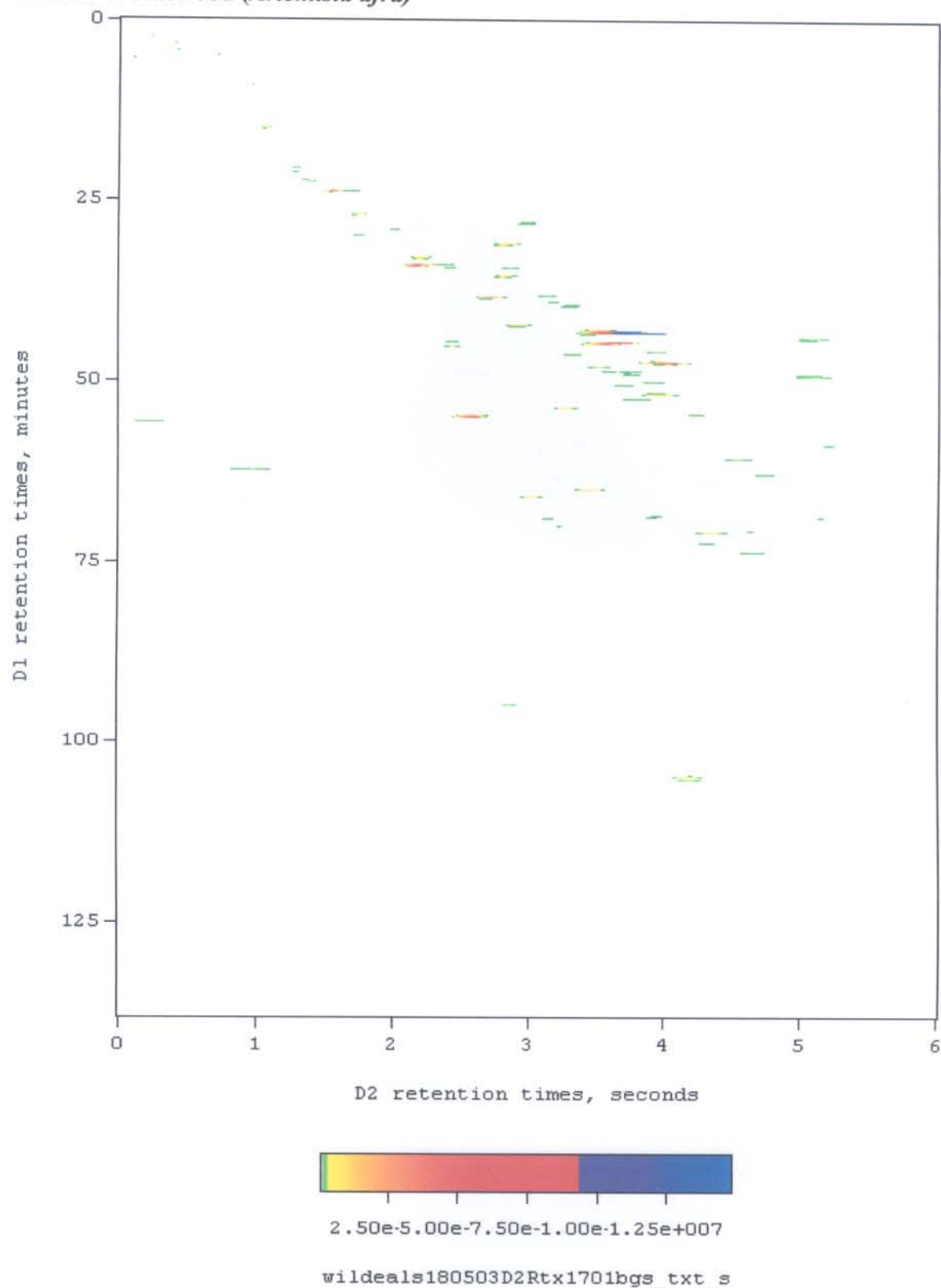
Lemongrass (*Cymbopogon flexuosus*) run-to-run peak reproducibility

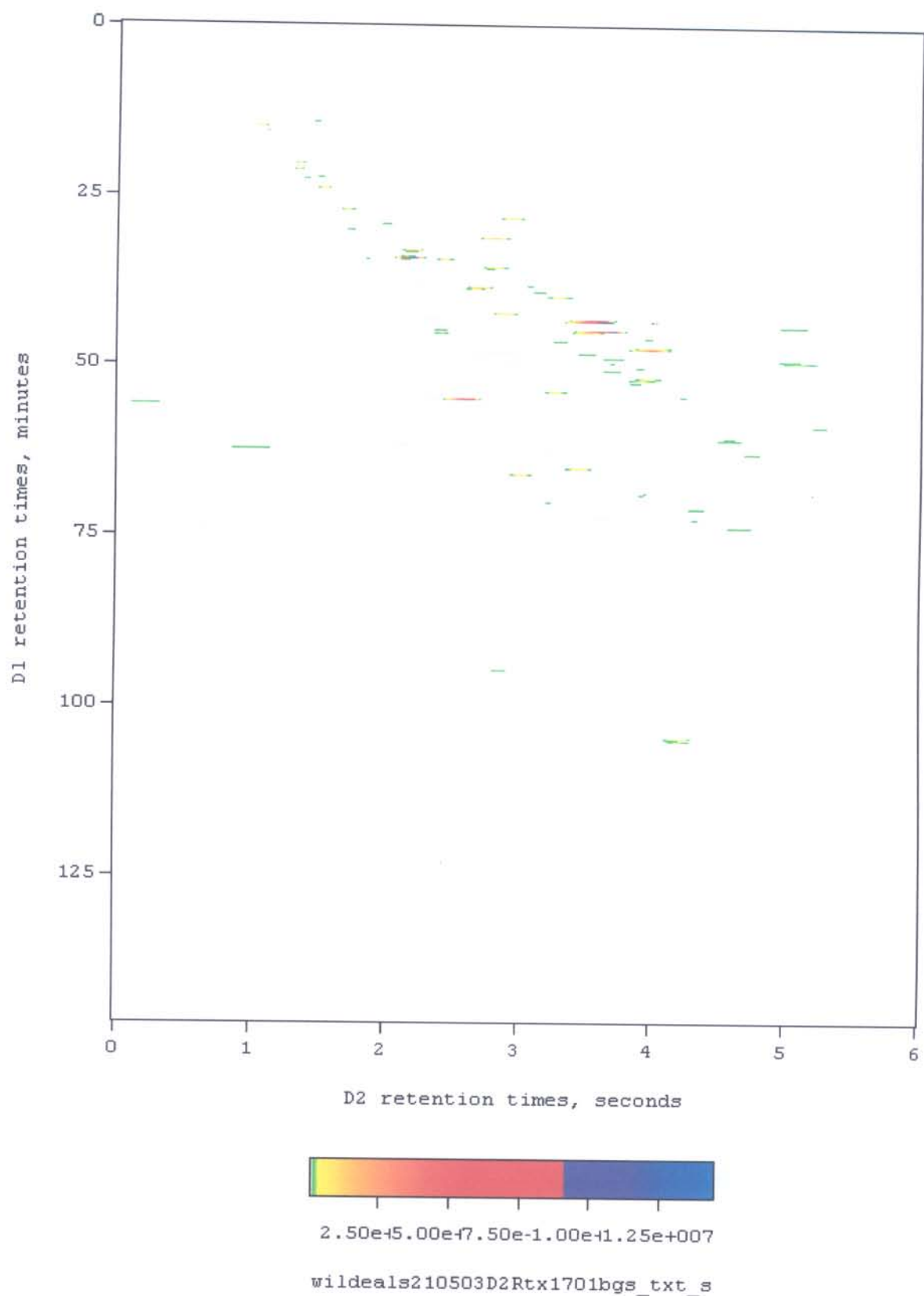
Peak no.	D1 retention times in minutes					D2 retention times in seconds					D2 Peak width at half height, msec				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1.	24.1	24.2	24.2	24.0	24.0	0.8	0.8	0.9	0.7	0.9	50	50	50	45	45
2.	28.2	28.3	28.4	28.0	28.1	2.8	2.8	2.8	2.6	2.8	125	120	125	110	120
3.	34.6	34.7	34.7	34.5	34.5	1.1	1.1	1.2	1.0	1.2	60	50	50	50	50
4.	40.1	40.1	40.2	39.9	40.0	1.7	1.7	1.8	1.6	1.8	70	70	80	70	70
5.	44.5	44.6	44.6	44.2	44.3	4.8	4.8	4.8	4.5	4.7	225	200	200	200	200
6.	52.5	52.6	52.6	52.3	52.2	3.3	3.2	2.4	3.0	3.2	150	140	150	140	140
7.	55.0	55.1	55.1	54.8	54.9	3.5	3.4	3.5	3.2	3.3	140	130	150	150	140
8.	82.9	81.9	83.0	82.7	82.8	3.0	3.6	3.0	2.7	2.9	125	---	125	110	120
9.	98.9	98.9	99.0	98.7	98.8	1.9	1.9	1.9	1.7	1.9	70	70	70	65	70
10.	105.7	105.7	105.8	105.5	105.5	3.2	3.1	3.2	2.9	3.1	125	120	125	110	120

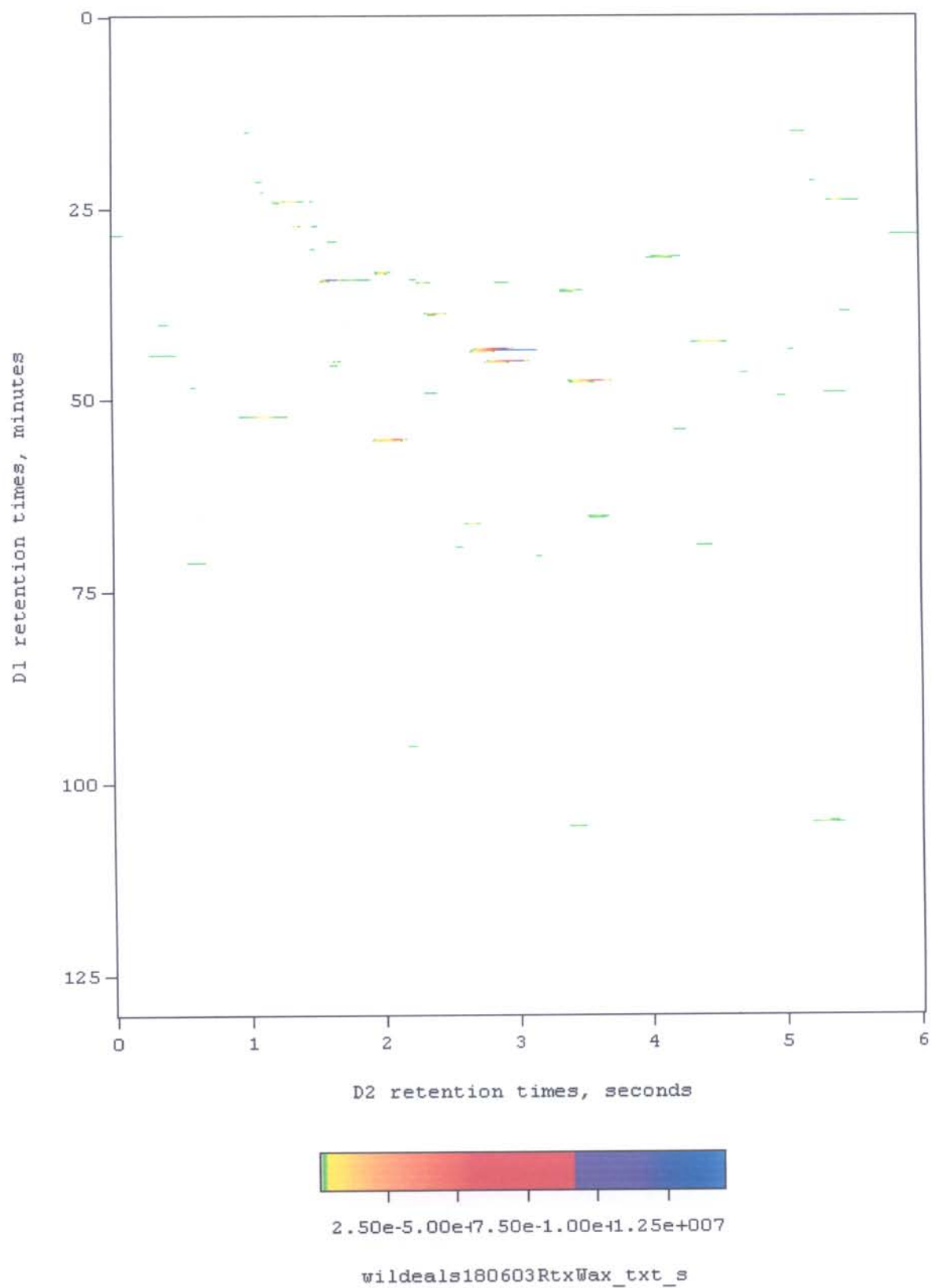
(1) lemgrassflexuosus140603RtxWax, (2) lemgrassflexuosus140603RtxWaxb, (3) lemgrassflexuosus150603RtxWax (4) lemgrassflexuosus220603RtxWax and (5) lemgrassflexuosus220603RtxWaxb

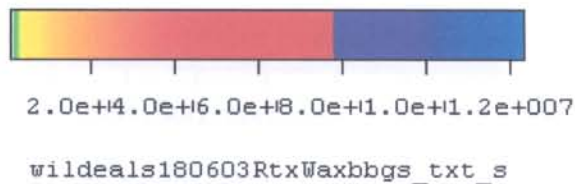
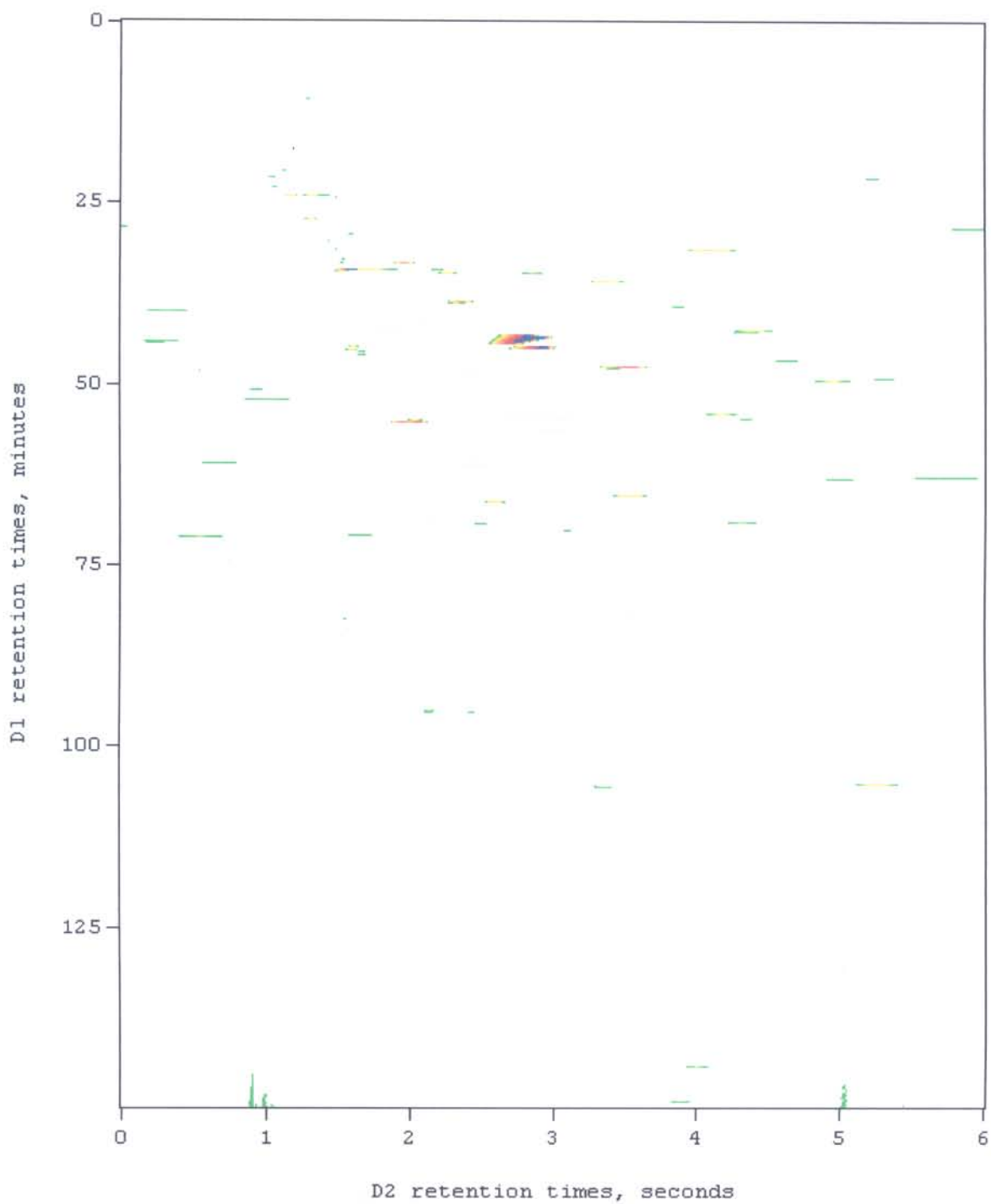
Peak no.	Mean D1 tr, minutes			Mean D2 tr, seconds			Mean D2 Wh, msec		
	Mean	STD	%RSD	Mean	STD	%RSD	Mean	STD	%RSD
1.	24.10	0.09	0.32	0.82	0.07	9.13	48.00	2.45	5.10
2.	28.20	0.14	0.41	2.76	0.08	2.90	120.00	5.48	4.56
3.	34.60	0.09	0.22	1.12	0.07	6.68	52.00	4.00	7.69
4.	40.06	0.10	0.23	1.72	0.07	4.35	72.00	4.00	5.56
5.	44.44	0.16	0.31	4.72	0.12	2.47	205.00	10.00	4.88
6.	52.44	0.16	0.30	3.02	0.32	10.76	144.00	4.90	3.40
7.	54.98	0.12	0.14	3.38	0.12	3.45	142.00	7.48	5.27
8.	82.66	0.39	0.40	3.04	0.30	9.89	120.00	6.12	5.10
9.	98.86	0.10	0.10	1.86	0.08	4.30	69.00	2.00	2.90
10.	105.64	0.12	0.11	3.10	0.11	3.53	120.00	5.48	4.56
Mean			0.25	5.75			4.90		

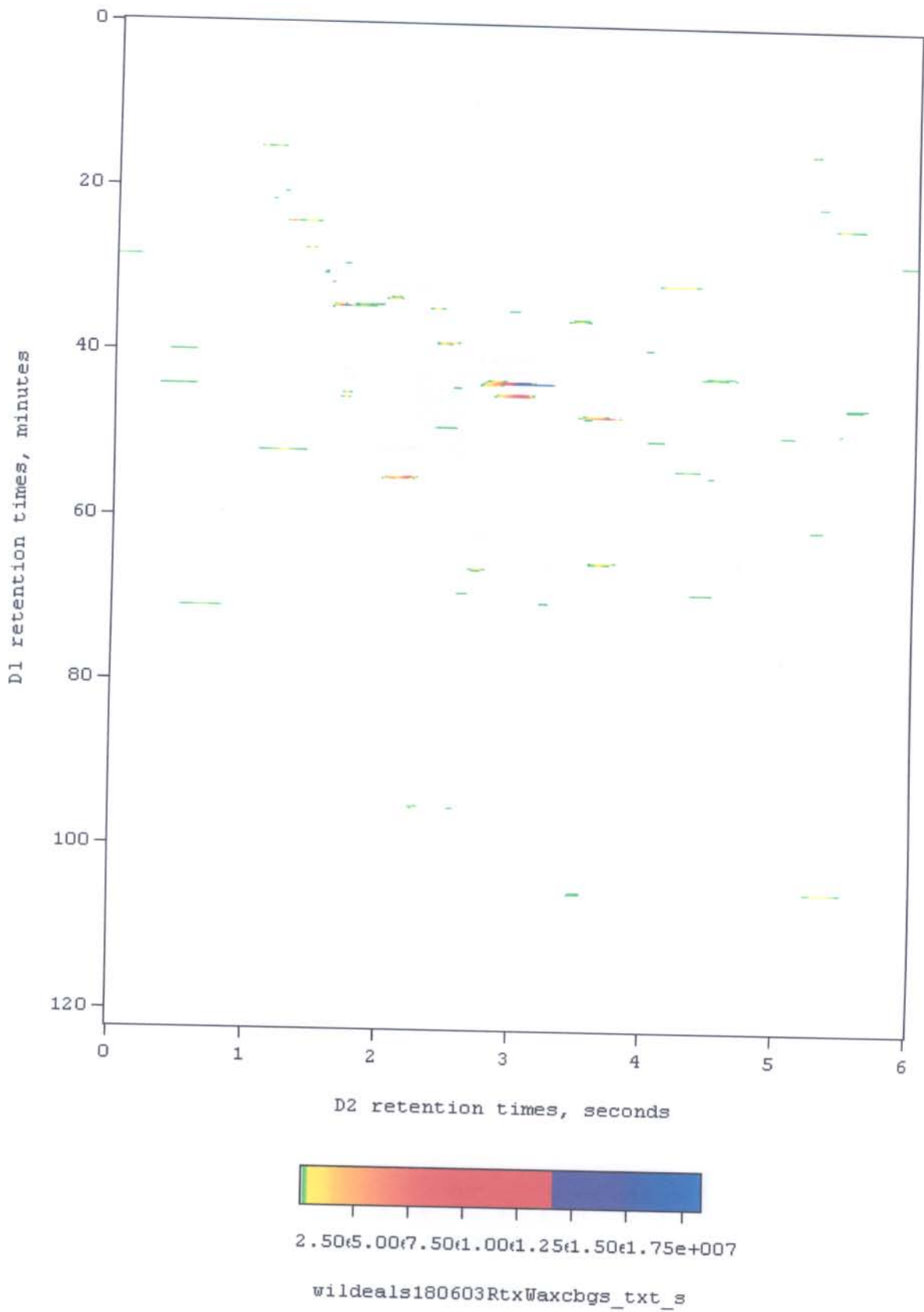
African Wormwood (*Artemisia afra*)

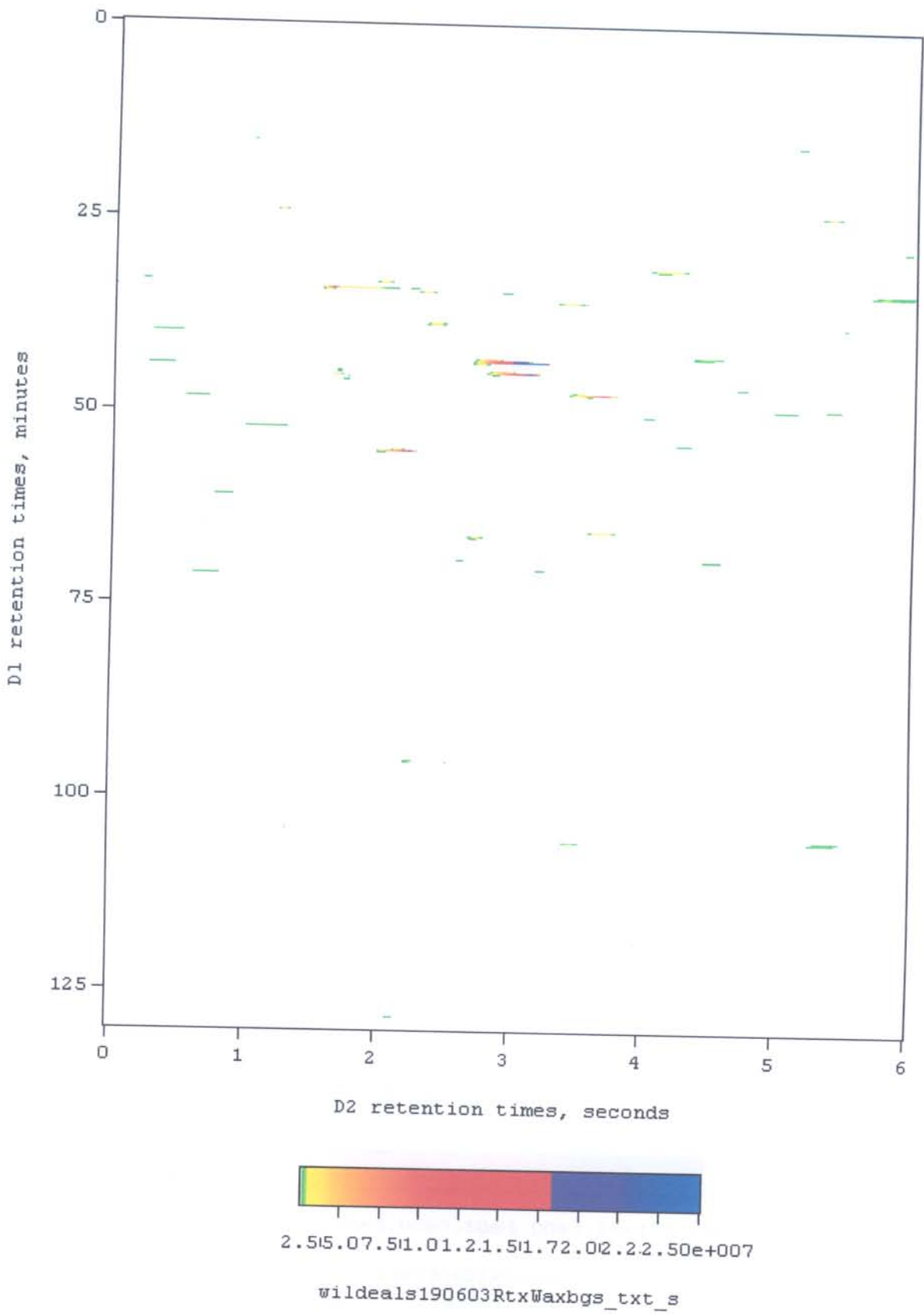


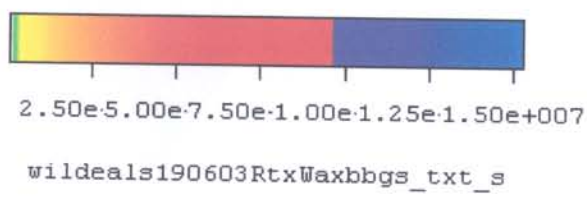
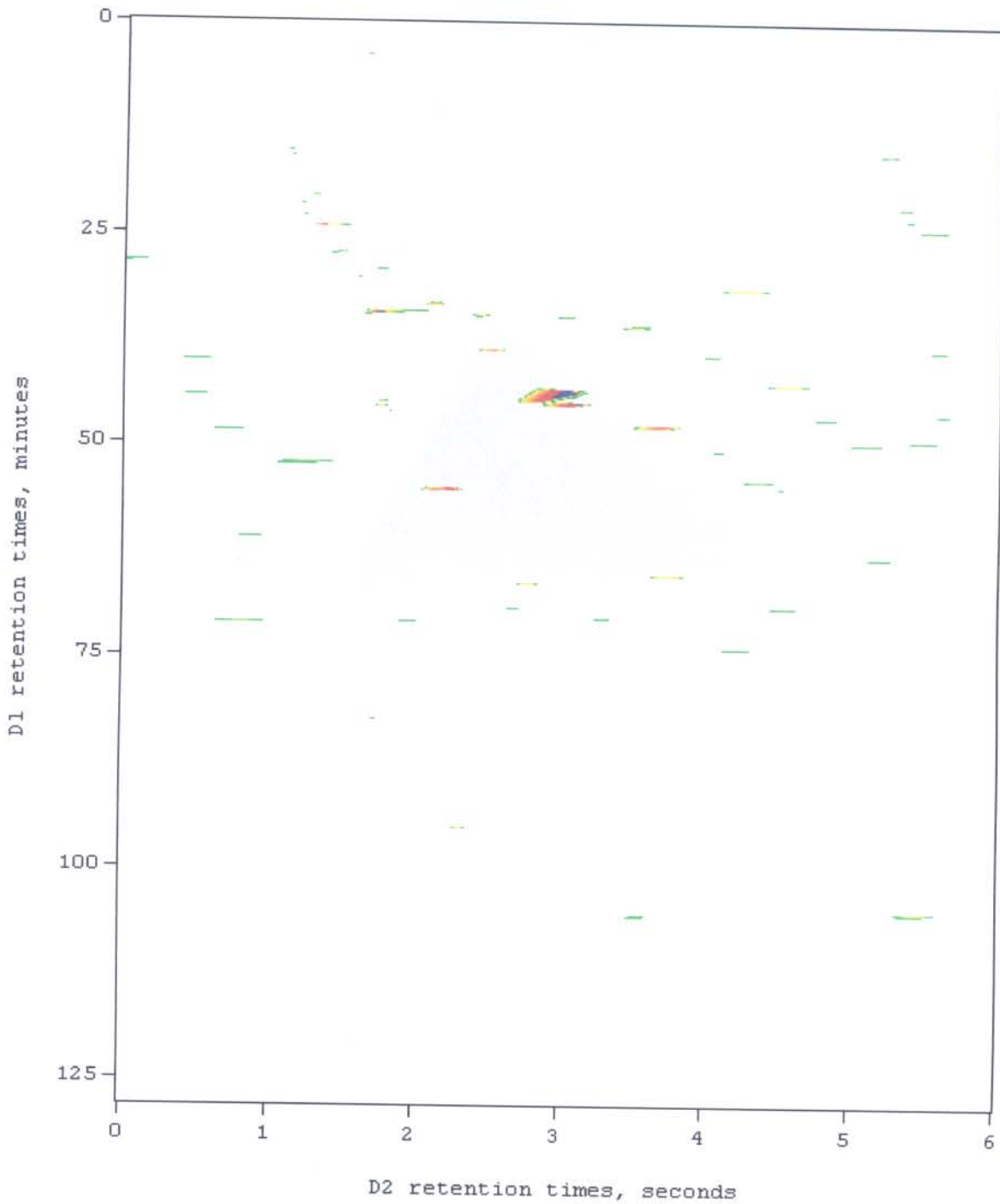






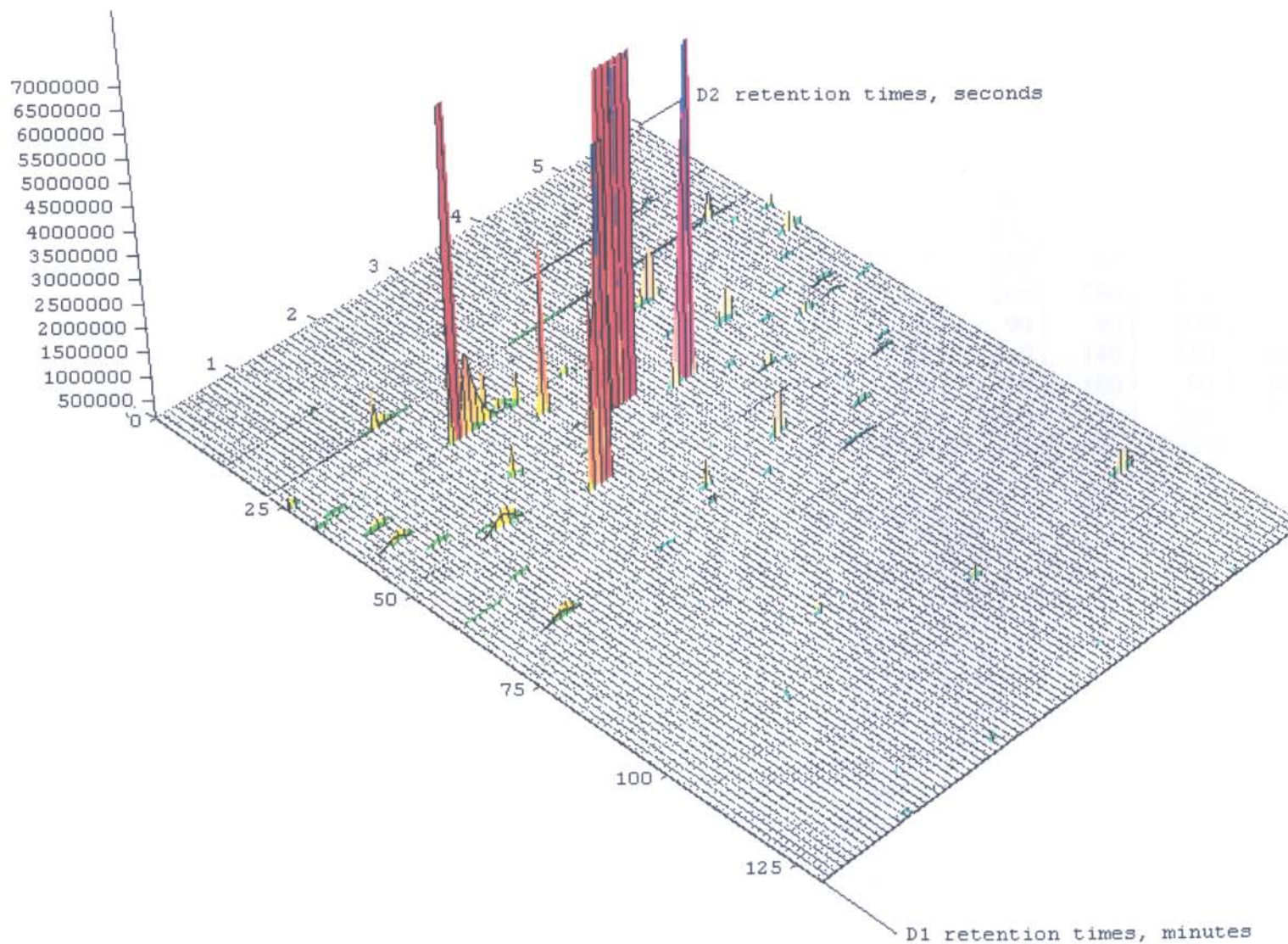






wildeals190603RtxWaxbbgs_txt_s

wildeals190603RtxWaxbgs 3D Image



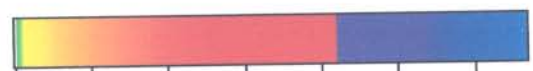
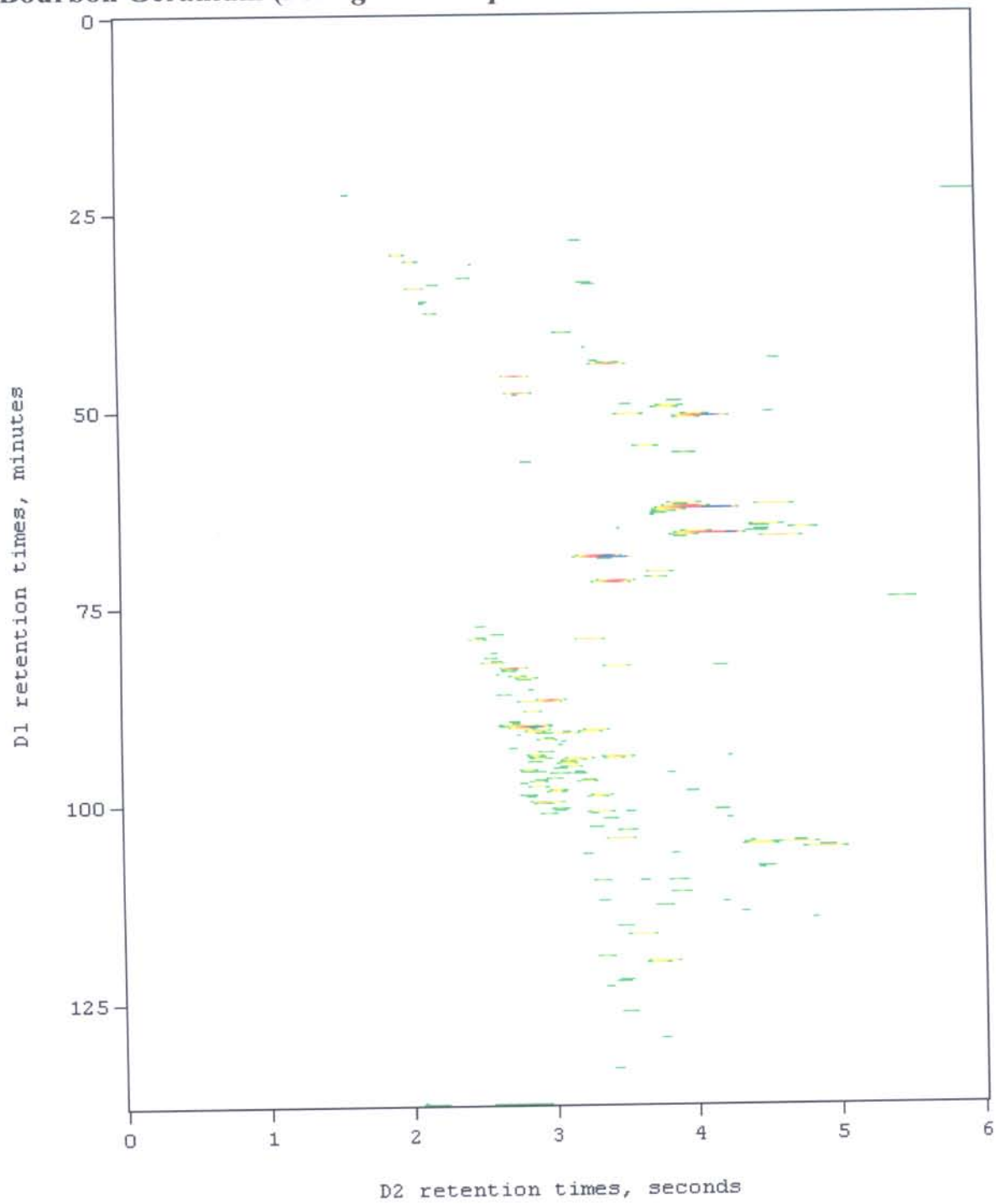
Artemisia afra run-to-run peak reproducibility

Peak no.	D1 retention times in minutes					D2 retention times in seconds					D2 Peak width at half height, msec				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1.	15.1	15.0	15.0	15.0	15.0	1.0	1.0	1.1	1.0	1.1	50	50	40	50	45
2.	24.1	24.0	24.0	23.9	24.0	1.2	1.2	1.3	1.2	1.3	50	40	50	50	50
3.	31.3	31.3	31.2	31.3	31.3	4.1	4.1	4.2	4.1	4.3	180	160	175	160	175
4.	33.3	33.2	33.2	33.2	33.2	2.0	2.0	2.1	2.0	2.1	70	70	70	70	80
5.	34.2	34.1	34.1	34.1	34.1	1.7	1.6	1.7	1.7	1.7	80	70	80	75	70
6.	35.7	35.7	35.6	35.5	35.7	3.4	3.4	3.5	3.4	3.5	150	135	130	135	125
7.	47.4	47.5	47.4	47.4	47.5	3.6	3.5	3.7	3.6	3.7	150	150	150	180	125
8.	52.1	52.0	52.0	51.9	52.1	1.1	1.1	1.2	1.2	1.2	245	260	275	275	250
9.	55.1	55.0	55.0	55.0	55.0	2.1	2.1	2.2	2.2	2.2	90	90	100	100	90
10.	65.2	65.2	65.1	65.2	65.2	3.6	3.5	3.7	3.6	3.7	140	140	130	130	125
11.	66.2	66.1	66.1	66.1	66.2	2.7	2.6	2.7	2.7	2.8	90	100	90	90	100
12.	105.2	105.1	105.1	105.1	105.1	5.3	5.2	5.3	5.4	5.5	200	180	200	175	245

(1) wildeals180603RtxWax, (2) wildeals180603RtxWaxb, (3) wildeals180603RtxWaxc, (4) wildeals190603RtxWax and (5) wildeals190603RtxWaxb

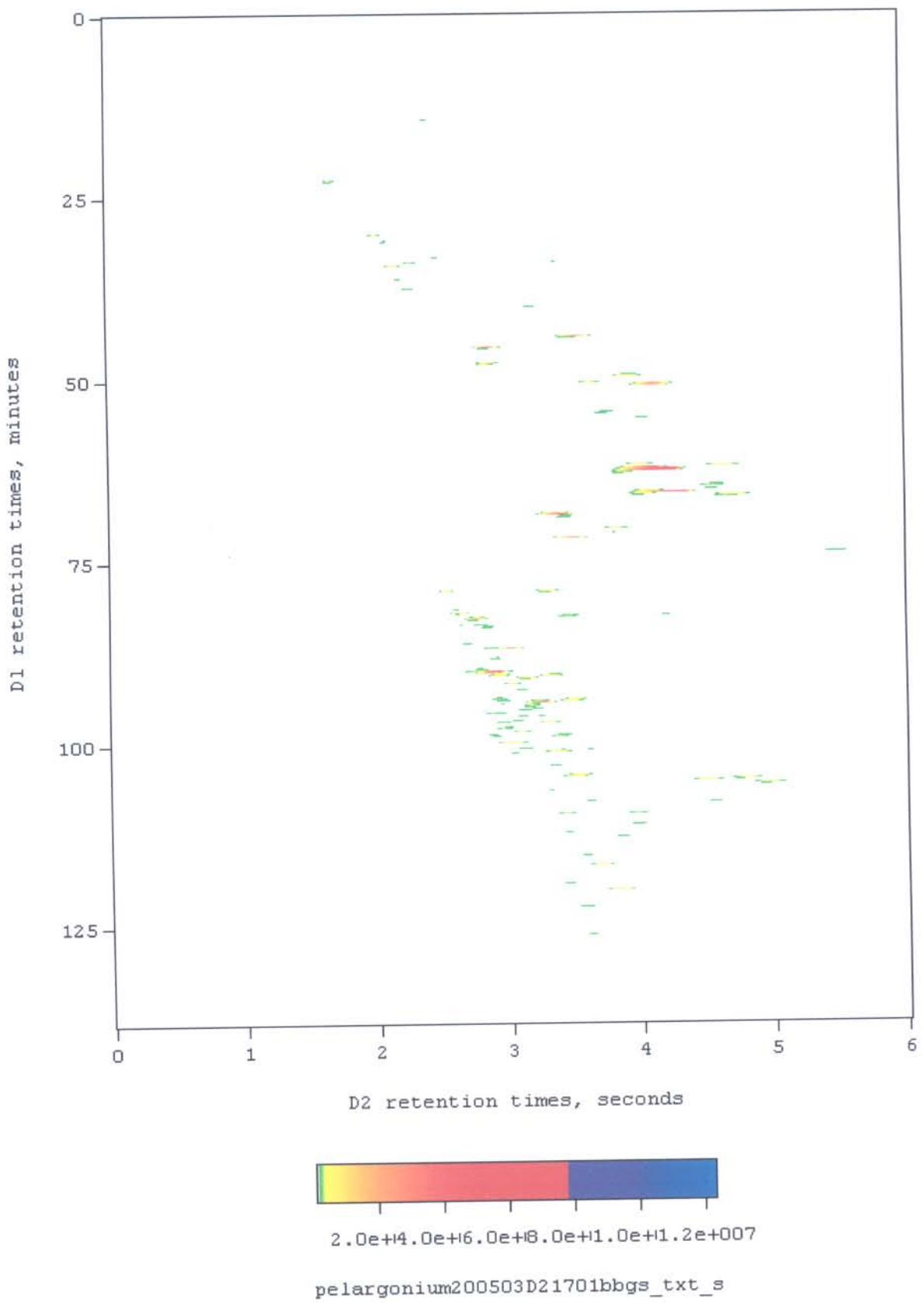
Peak no.	Mean D1 tr, minutes			Mean D2 tr, seconds			Mean D2 Wh, msec		
	Mean	STD	%RSD	Mean	STD	%RSD	Mean	STD	%RSD
1.	14.30	0.06	0.44	0.58	0.04	6.90	51.00	2.00	3.92
2.	16.80	0.06	0.38	0.88	0.04	4.55	59.00	2.00	3.39
3.	27.20	0.06	0.23	0.60	0.06	10.54	46.00	3.74	8.13
4.	34.52	0.07	0.22	0.80	0.06	7.91	70.00	7.07	10.10
5.	36.30	0.06	0.17	0.96	0.05	5.10	85.00	12.65	14.88
6.	37.40	0.00	0.00	1.46	0.05	3.36	124.00	18.55	14.96
7.	41.24	0.05	0.12	1.54	0.05	3.18	80.00	0.00	0.00
8.	44.02	0.04	0.09	1.72	0.07	4.35	86.00	8.00	9.30
9.	49.80	0.00	0.00	2.34	0.05	2.09	116.00	4.90	4.22
10.	154.72	0.04	0.03	4.28	0.04	0.93	178.00	12.88	7.24
11.	160.10	0.06	0.04	4.48	0.07	1.67	180.00	12.65	7.03
12.	164.62	0.04	0.02	4.96	0.05	0.99	195.00	10.00	5.13
	Mean		0.15			4.30			7.36

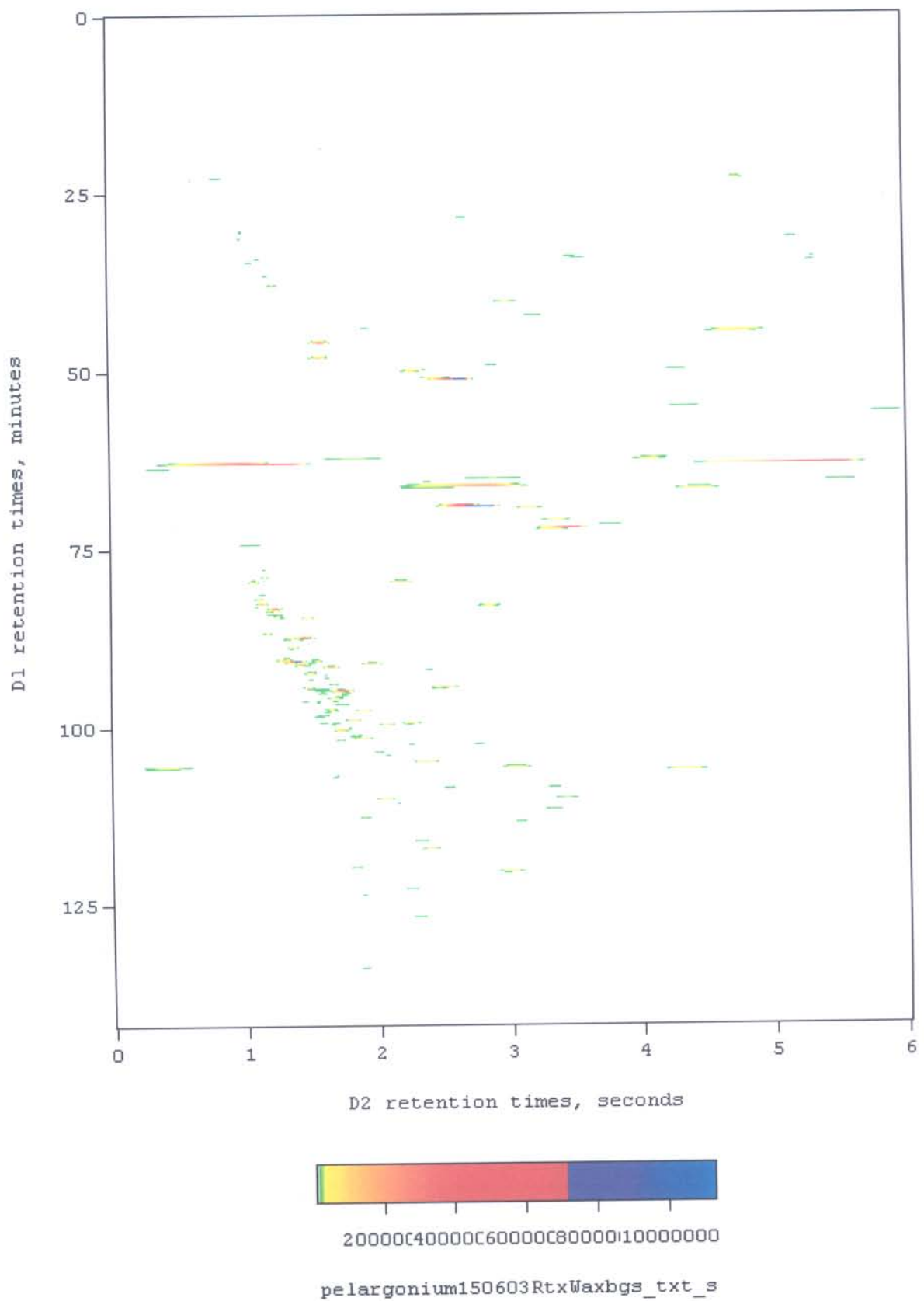
Bourbon Geranium (*Pelargonium capitatum* × *P. radens*)

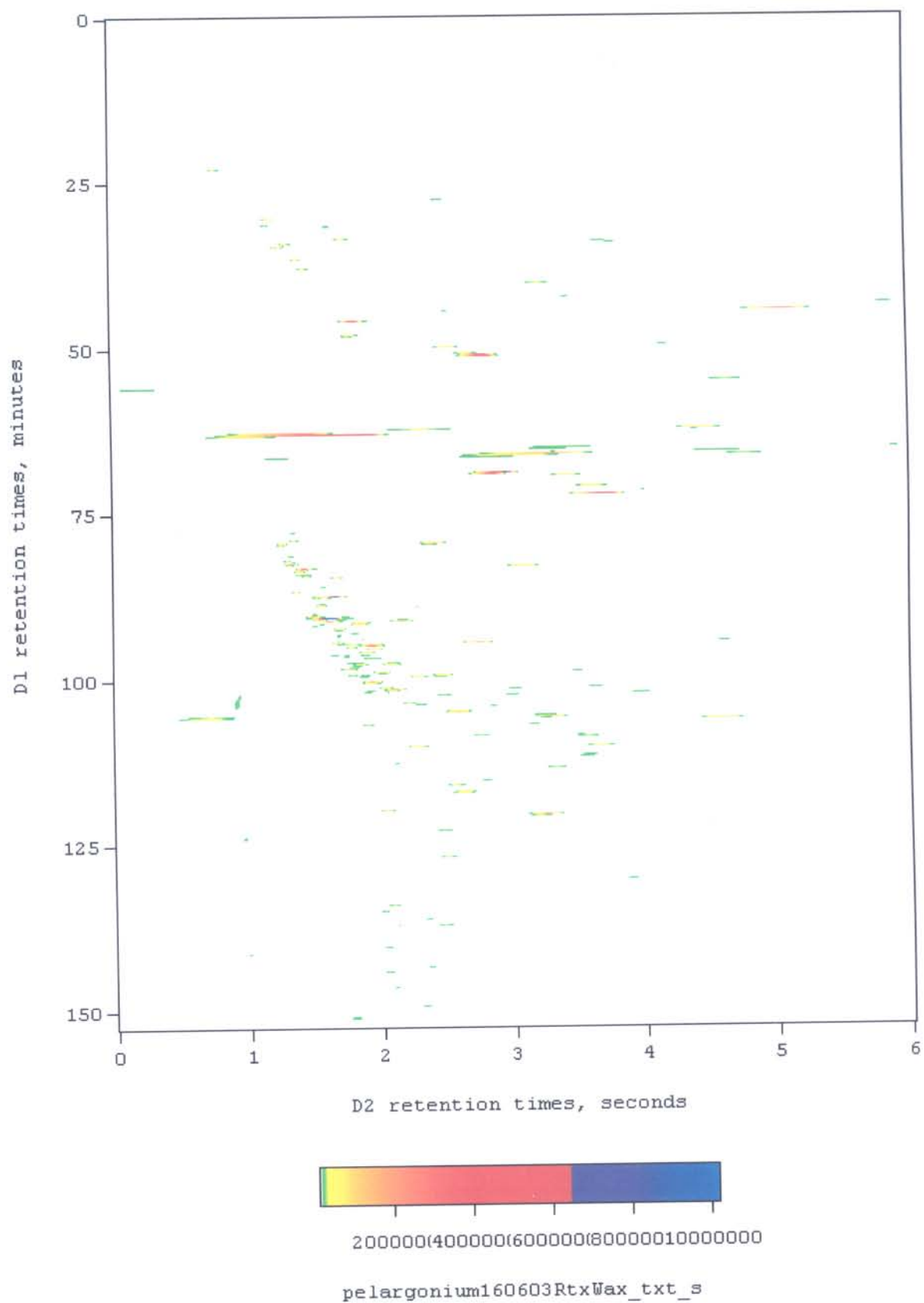


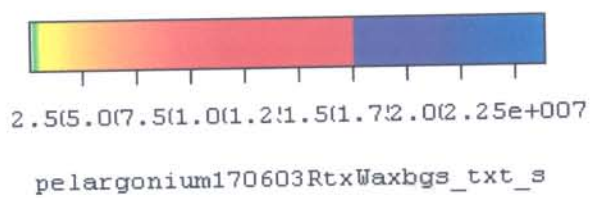
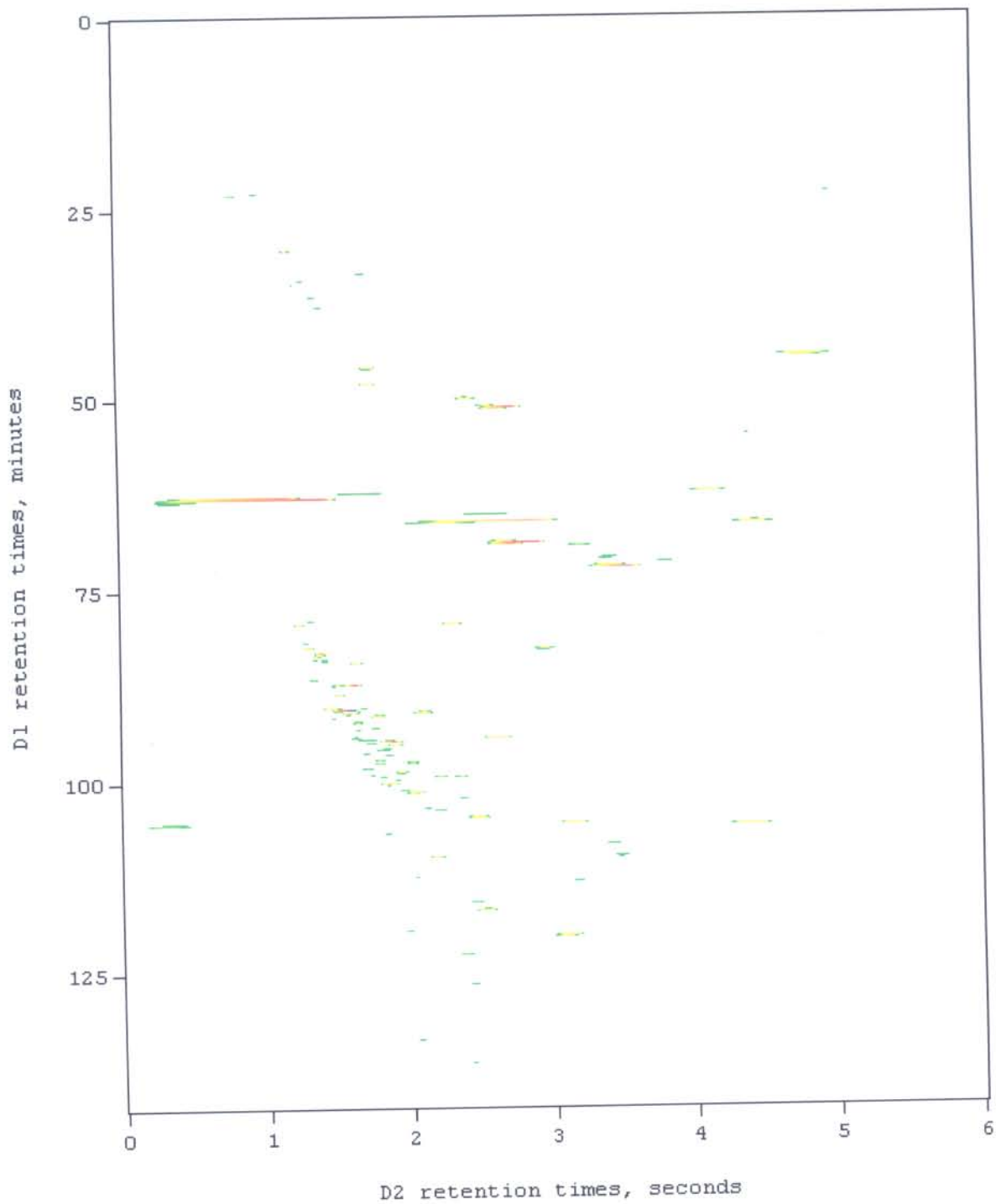
0 1250C250003750C5000C625007500000

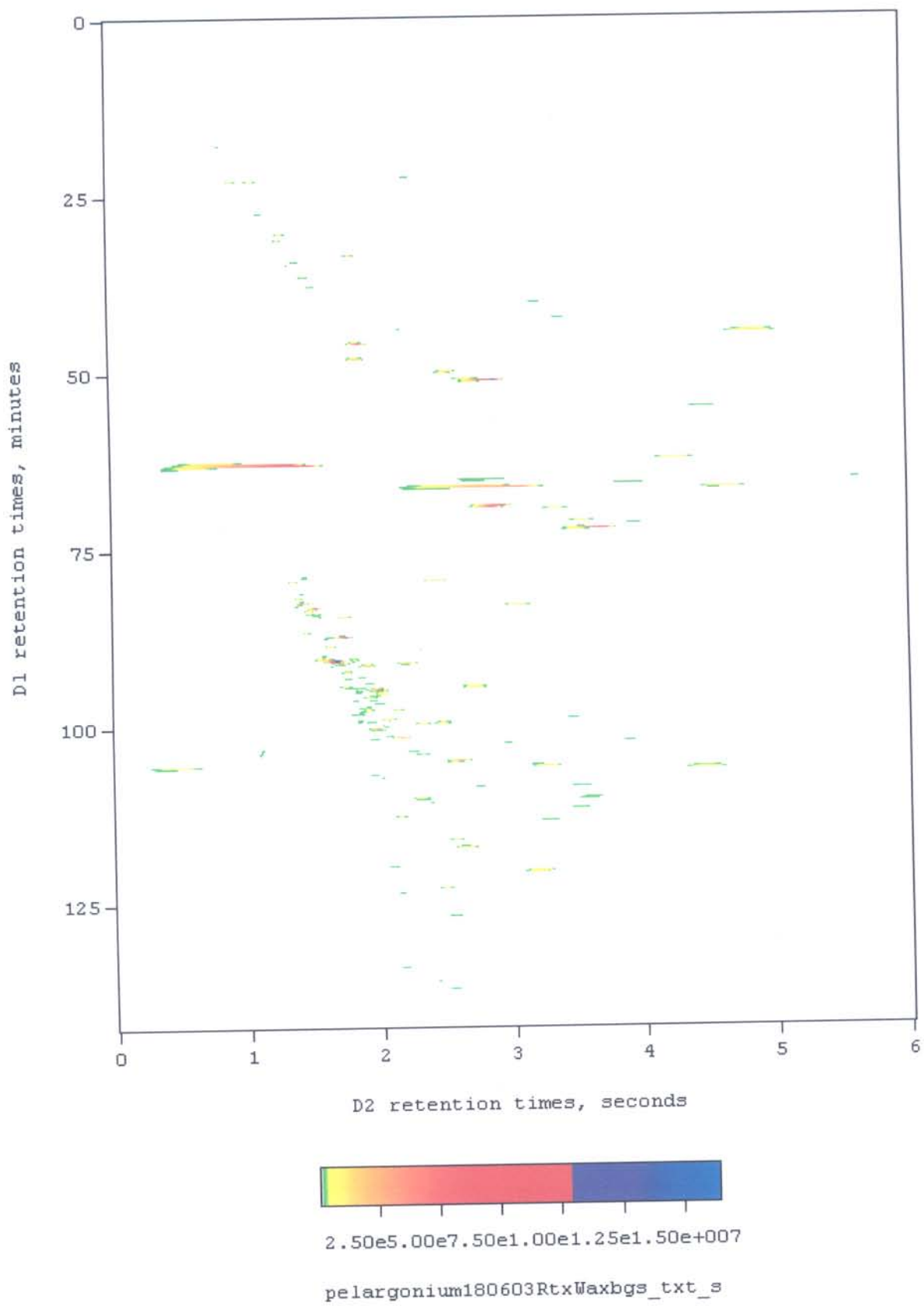
pelargonium200503_D2_1701bgs_txt_s

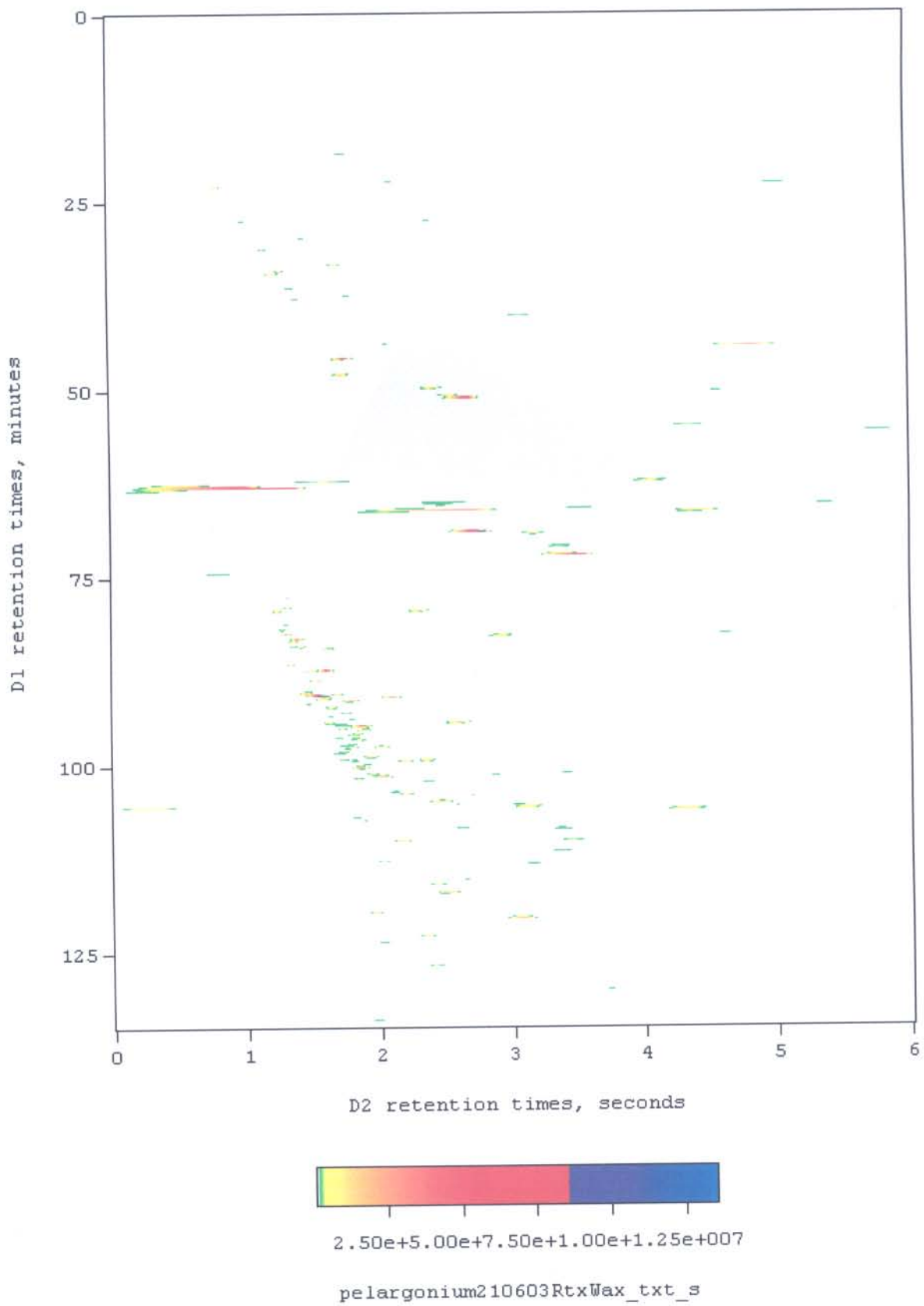




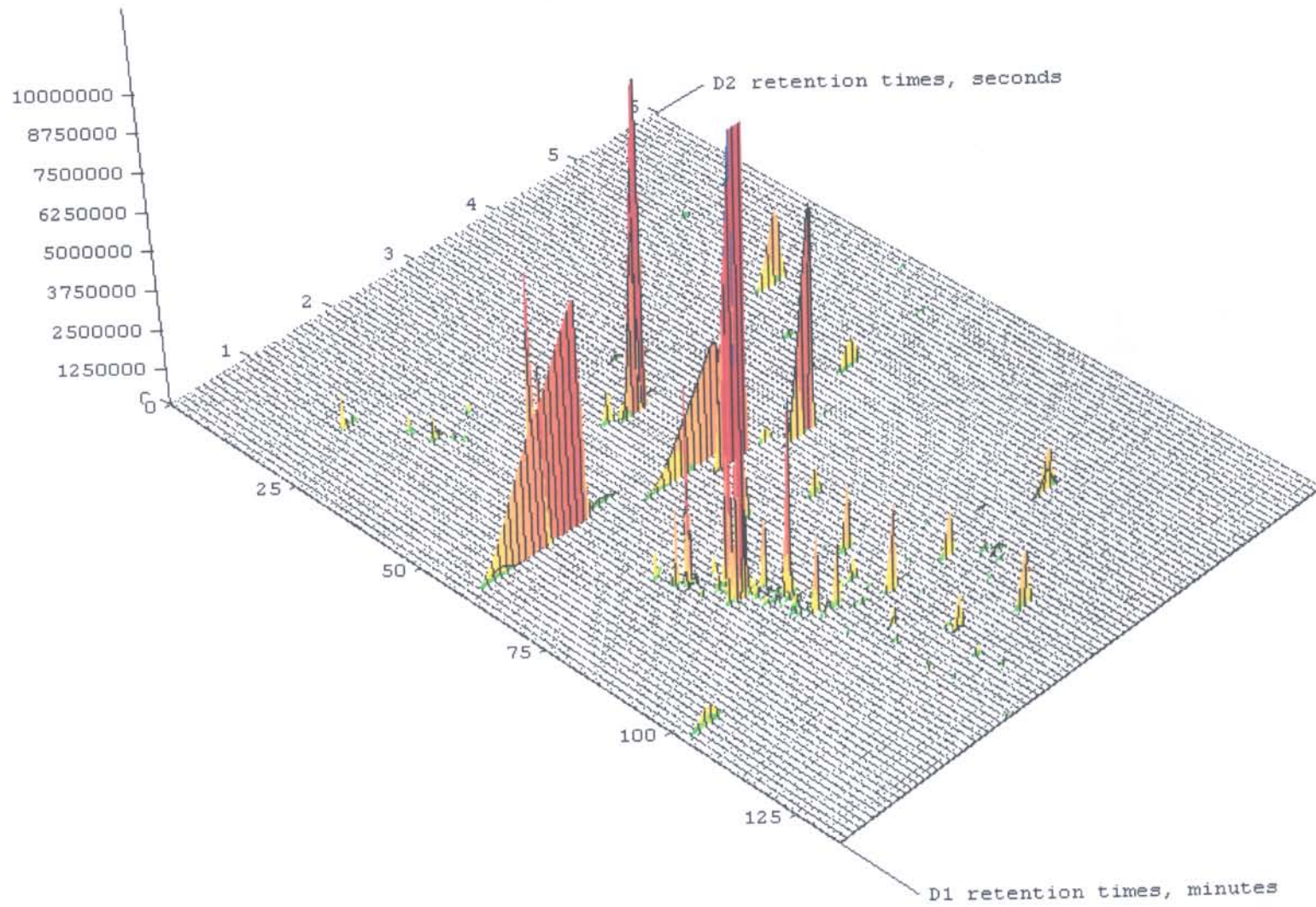








pelargonium210603RtxWax_txt_s



Bourbon Geranium run-to-run peak reproducibility

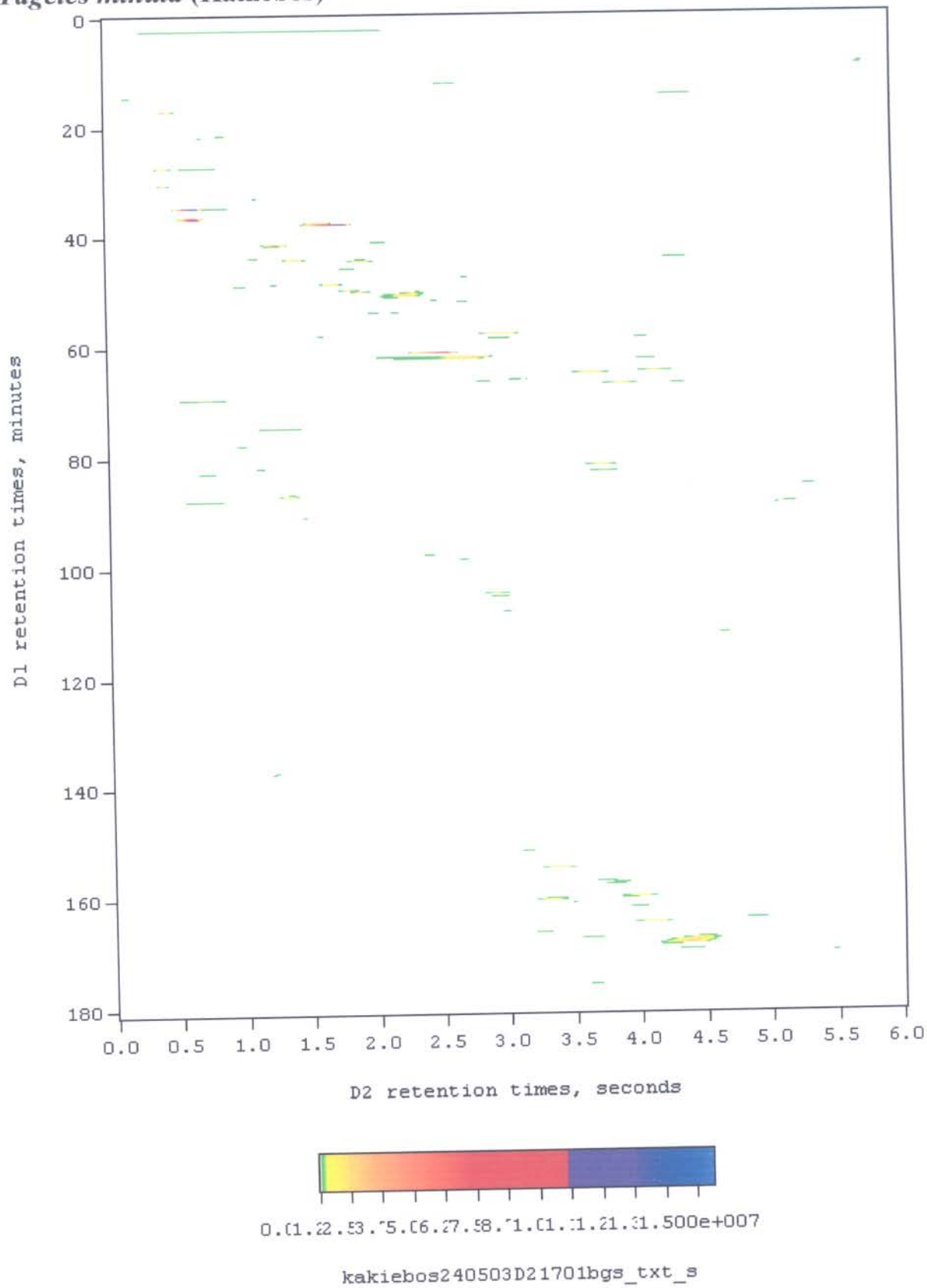
Peak no.	D1 retention times in minutes					D2 retention times in seconds					D2 Peak width at half height, msec				
	1	2	3	4	4	1	2	3	4	5	1	2	3	4	5
1.	44.4	44.3	44.4	44.3	44.2	4.8	5.1	4.9	4.9	4.8	200	225	200	225	200
2.	45.7	45.7	45.7	45.7	45.7	1.6	1.8	1.8	1.9	1.7	70	90	70	70	70
3.	47.9	47.9	47.9	47.8	47.8	1.6	1.8	1.8	1.9	1.7	70	80	70	70	60
4.	49.8	49.8	49.7	49.8	49.7	2.3	2.5	2.4	2.5	2.4	100	95	90	90	90
5.	79.4	79.4	79.2	79.3	79.3	2.2	2.4	2.3	2.4	2.3	90	90	80	90	90
6.	83.2	83.2	83.1	83.0	83.1	1.2	1.4	1.4	1.5	1.4	50	55	50	50	50
7.	87.3	87.3	87.1	87.1	87.4	1.5	1.7	1.6	1.7	1.6	60	65	60	70	60
8.	104.8	104.8	104.6	104.7	104.7	2.4	2.6	2.5	2.6	2.5	100	90	100	90	90
9.	105.6	105.6	105.6	105.5	105.5	3.1	3.3	3.2	3.3	3.1	110	120	125	110	100
10.	106.1	106.0	105.8	106.0	105.9	4.3	4.6	4.4	4.5	4.3	170	180	160	150	160
11.	116.9	117.0	116.8	116.9	116.9	2.4	2.6	2.5	2.6	2.5	90	100	90	90	80
12.	120.4	120.4	120.2	120.3	120.3	3.0	3.3	3.1	3.2	3.1	120	120	120	110	105

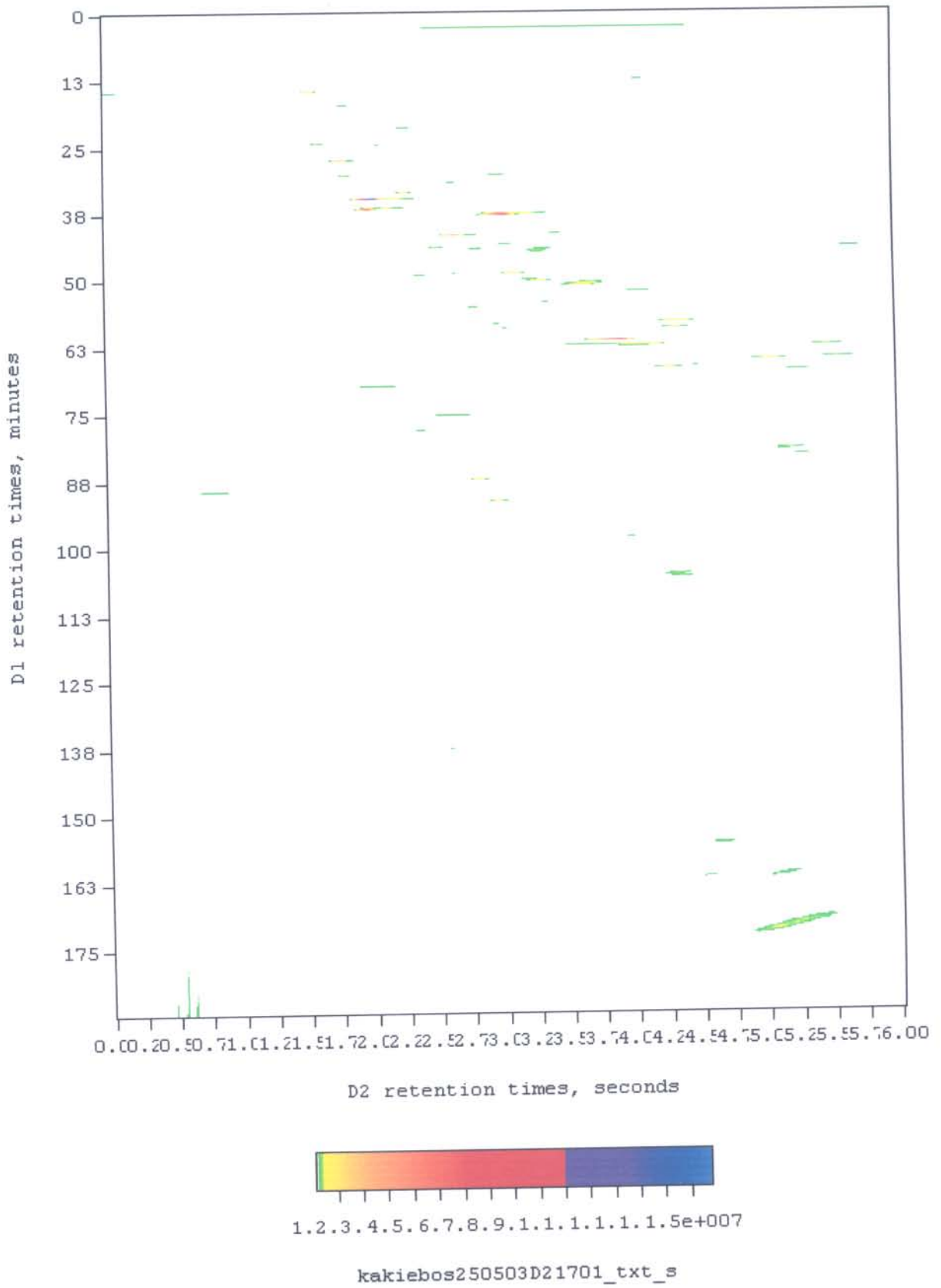
(1) pelargonium150603RtxWaxbgs, (2) pelargonium160603RtxWax, (3) pelargonium170603RtxWax, (4) pelargonium180603RtxWax and (5)

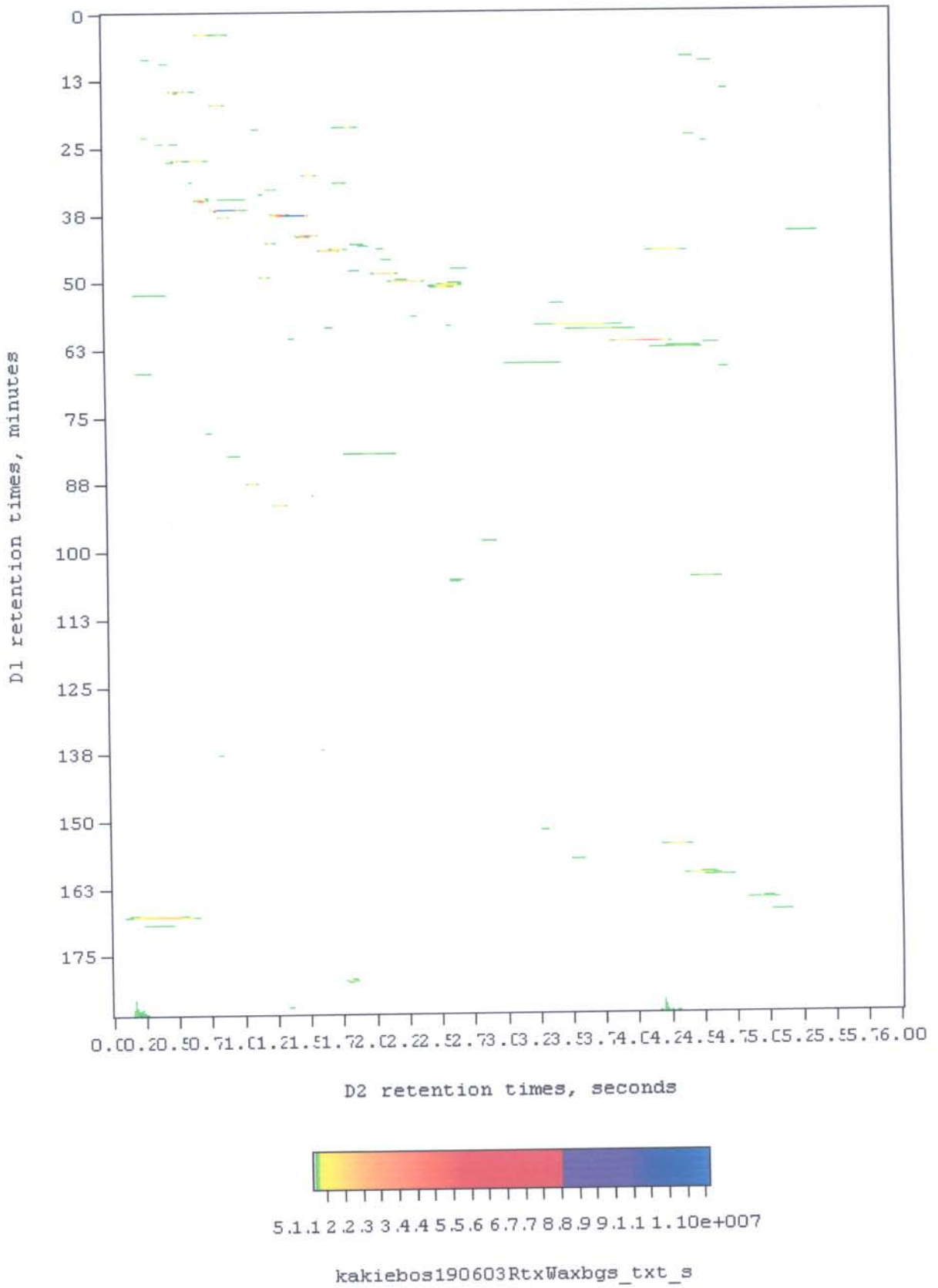
pelargonium210603RtxWax

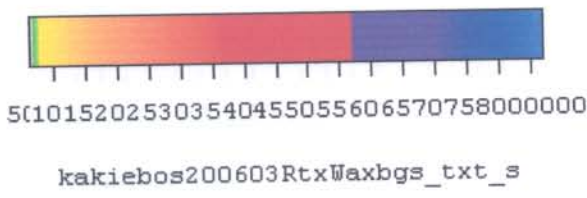
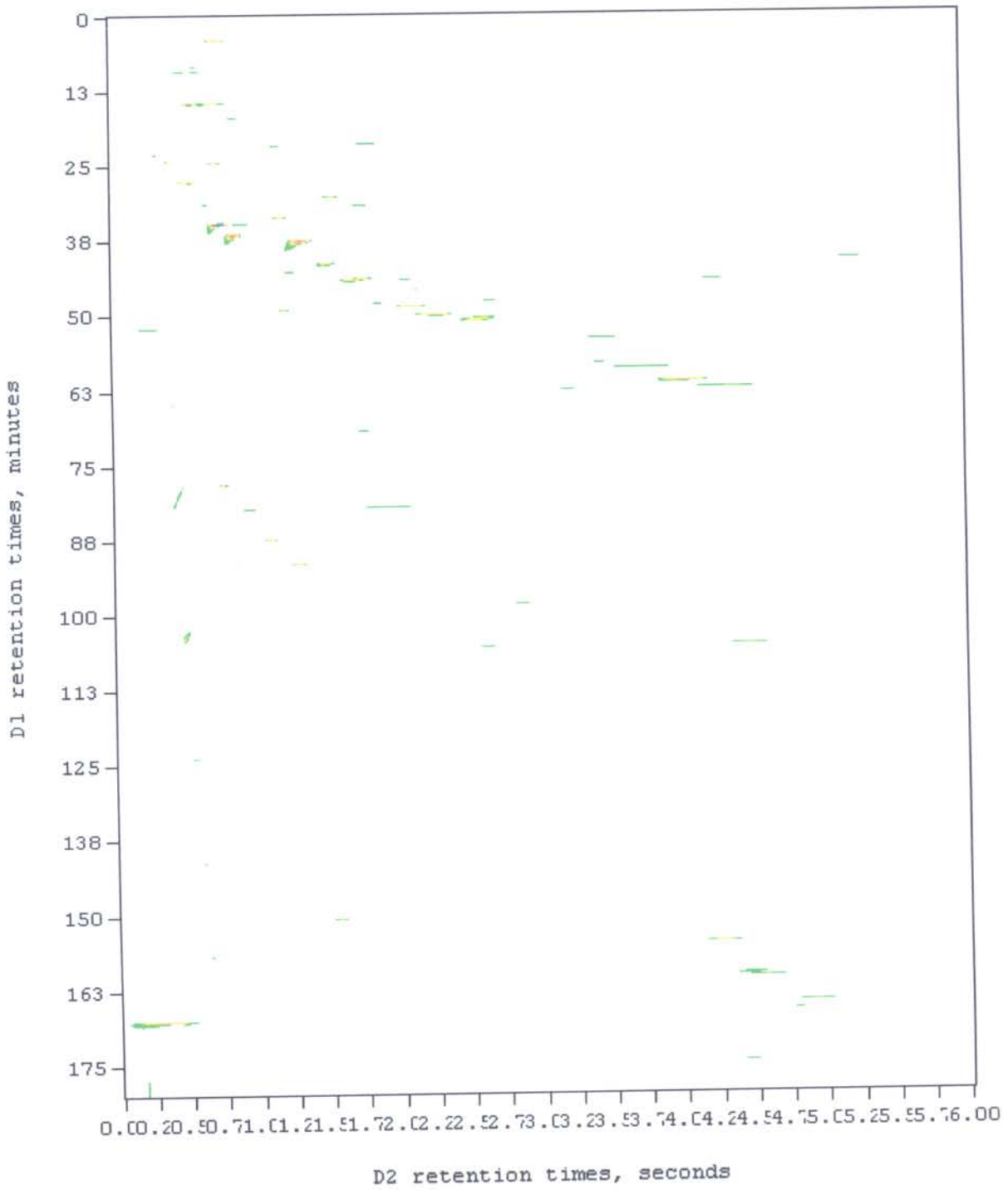
Peak no.	Mean D1 tr, minutes			Mean D2 tr, seconds			Mean D2 Wh, msec		
	Mean	STD	%RSD	Mean	STD	%RSD	Mean	STD	%RSD
1.	44.32	0.07	0.17	4.90	0.11	2.24	210.00	12.25	5.83
2.	45.70	0.00	0.00	1.76	0.10	5.79	74.00	8.00	10.81
3.	47.86	0.05	0.10	1.76	0.10	5.79	70.00	6.32	9.04
4.	49.76	0.05	0.10	2.42	0.07	3.09	93.00	4.00	4.30
5.	79.32	0.07	0.09	2.32	0.07	3.23	88.00	4.00	4.55
6.	83.12	0.07	0.09	1.38	0.10	7.10	51.00	2.00	3.92
7.	87.24	0.12	0.14	1.62	0.07	4.62	63.00	4.00	6.35
8.	104.72	0.07	0.07	2.52	0.07	2.97	94.00	4.90	5.21
9.	105.56	0.05	0.05	3.20	0.09	2.80	113.00	8.72	7.71
10.	105.96	0.10	0.10	4.42	0.12	2.64	164.00	10.20	6.22
11.	116.90	0.06	0.05	2.52	0.07	2.97	90.00	6.32	7.03
12.	120.32	0.07	0.06	3.14	0.10	3.25	115.00	6.32	5.50
Mean			0.09			3.87			6.37

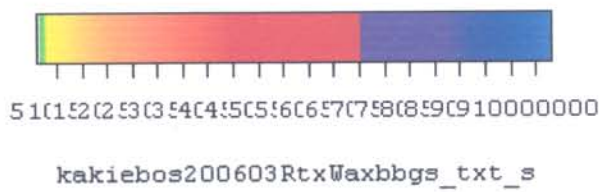
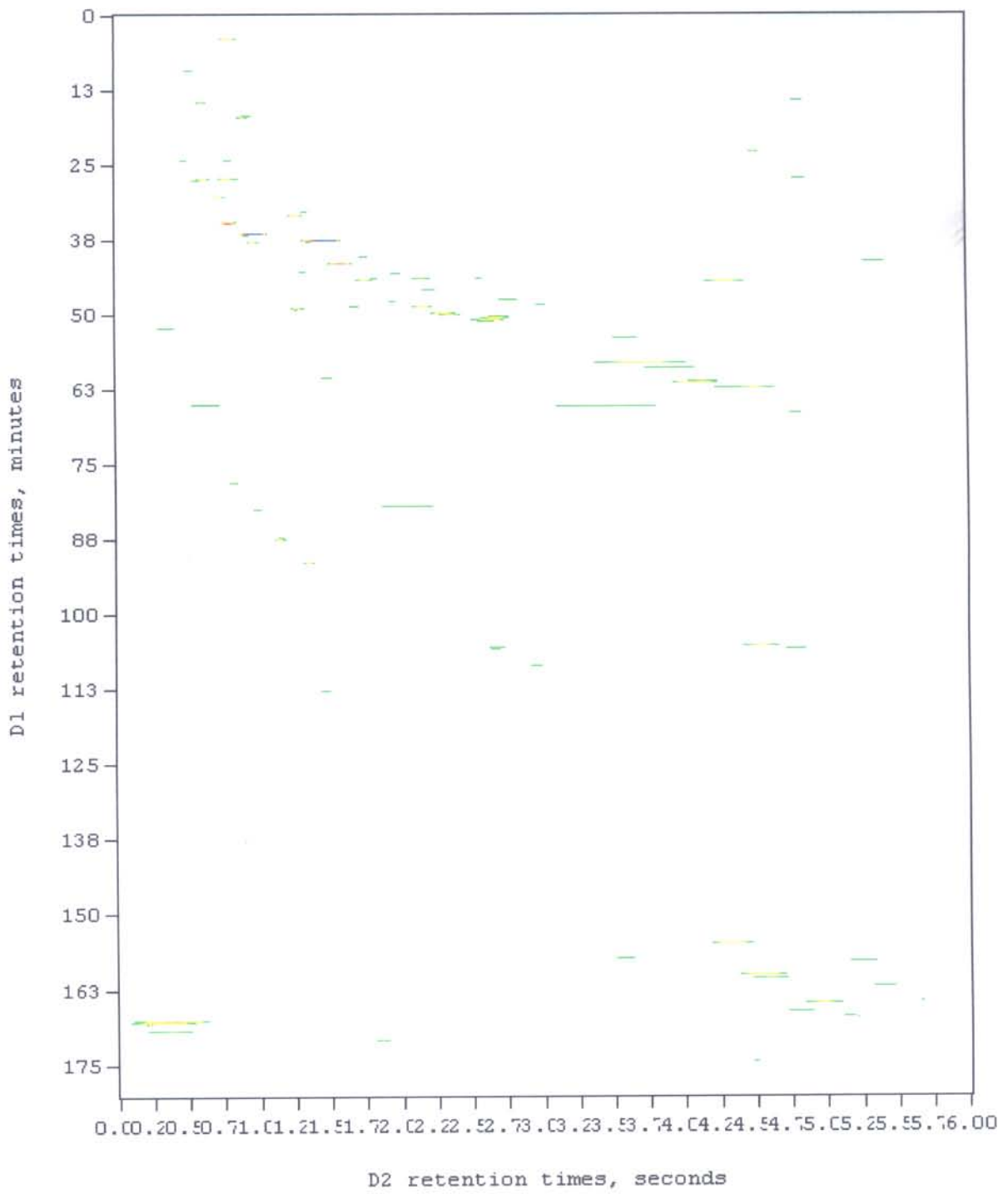
Tagetes minuta (Kakiebos)

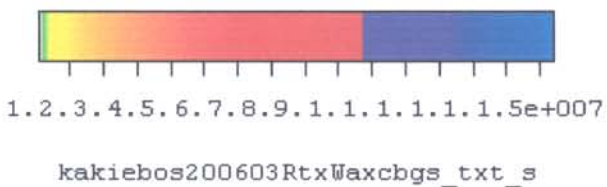
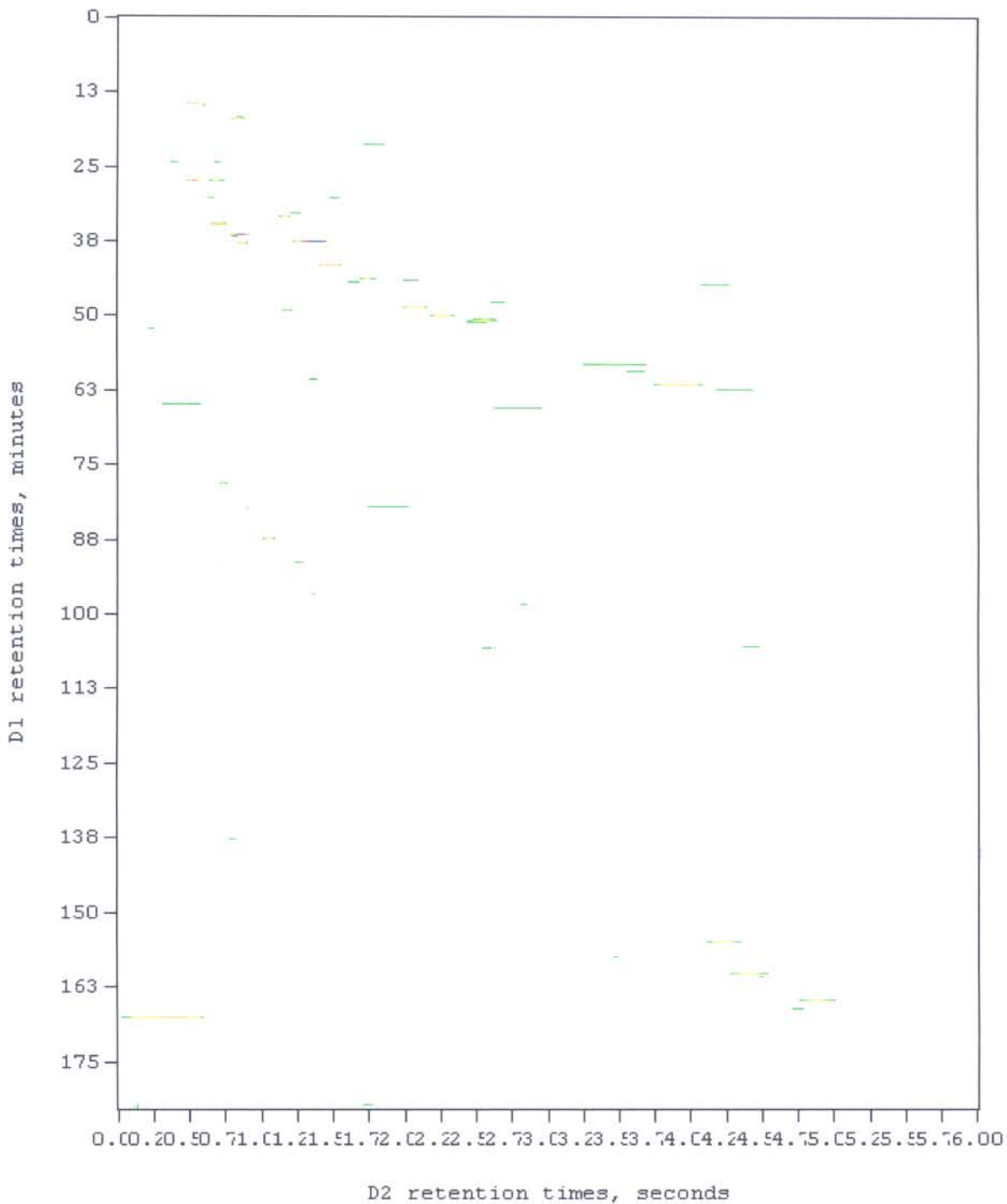


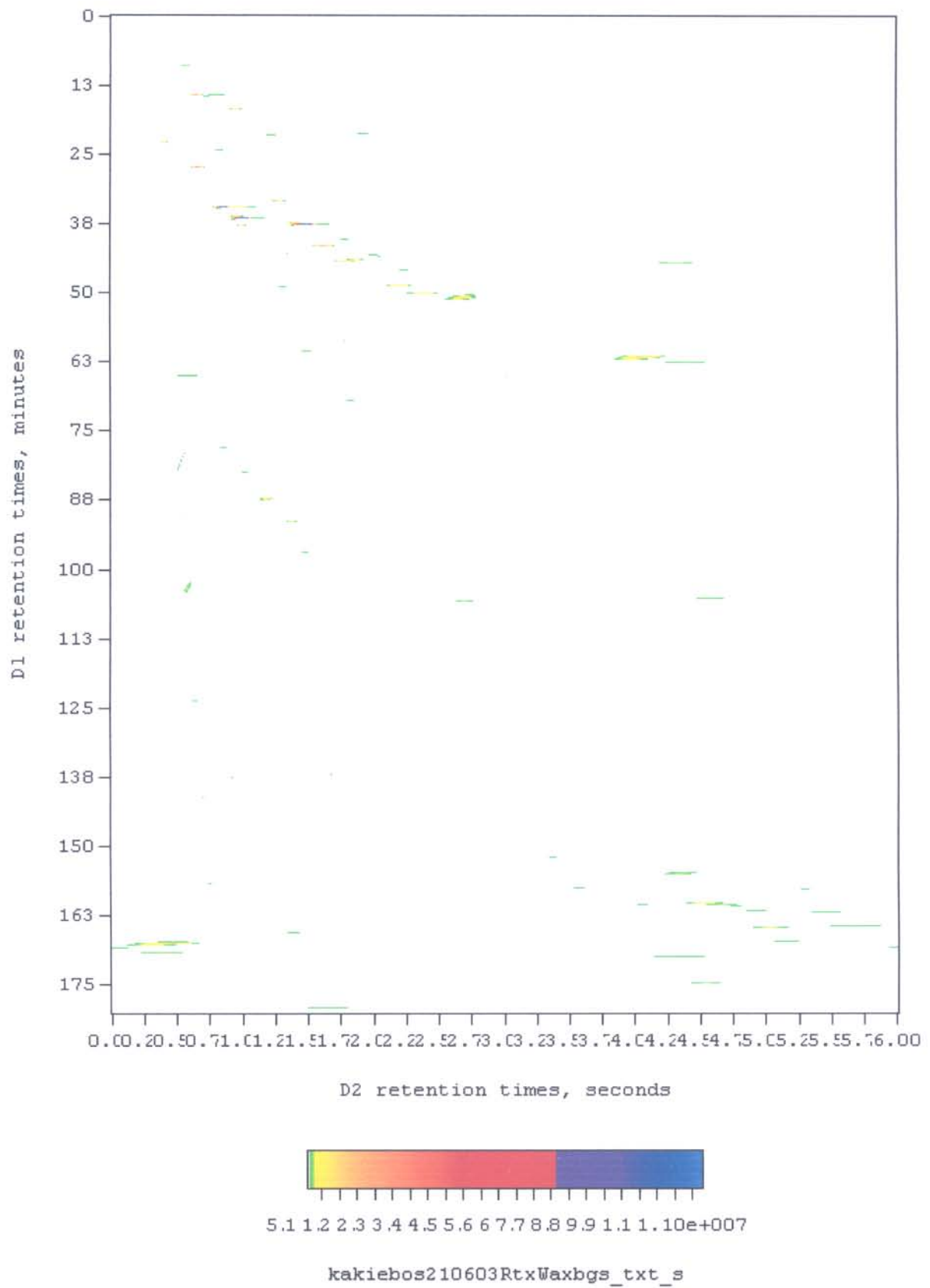




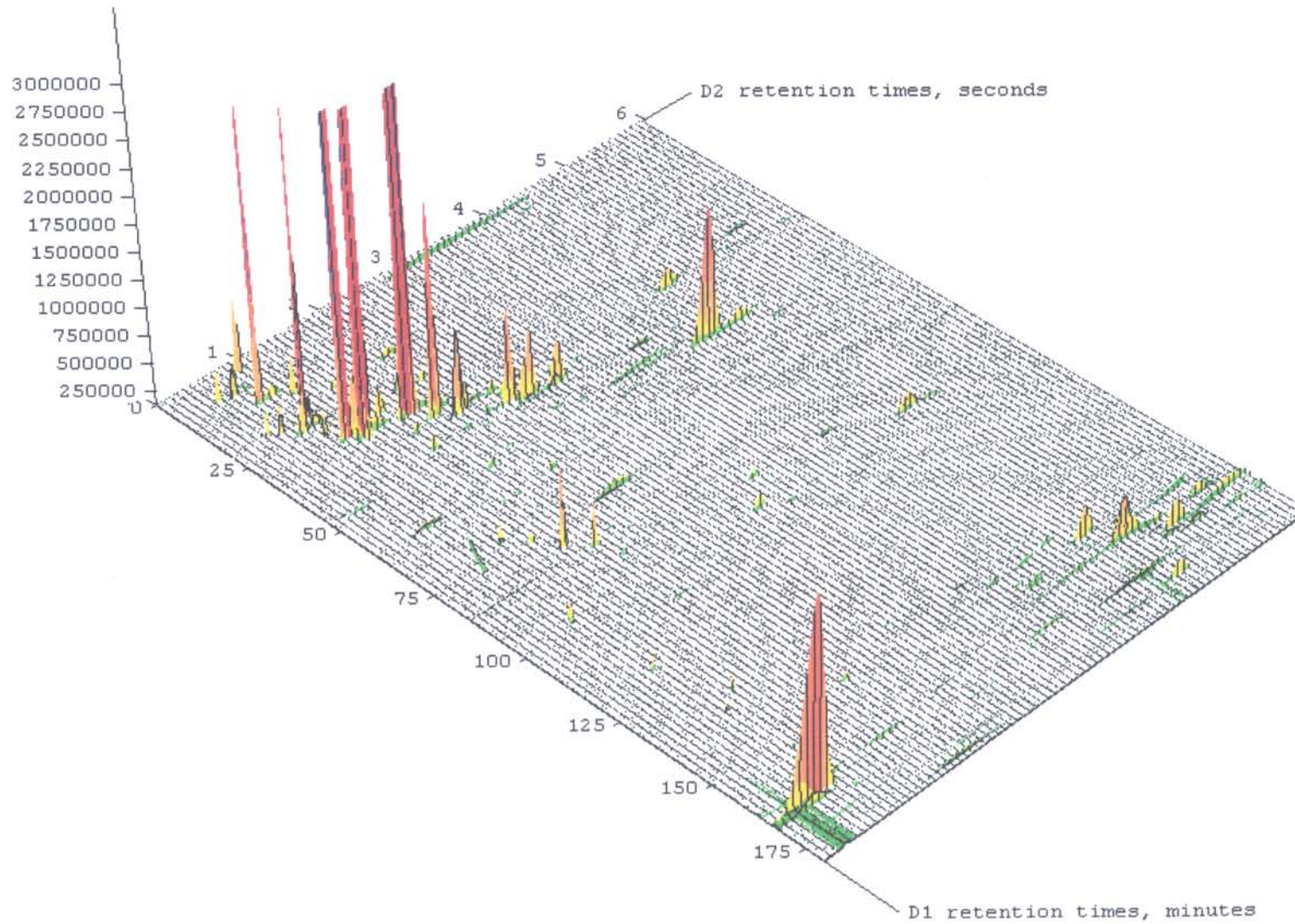








kakiebos210603RtxWaxbgs 3D Image



Tagetes minuta run-to-run peak reproducibility

Peak no.	D1 retention times in minutes					D2 retention times in seconds					D2 Peak width at half height, msec				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1.	14.3	14.4	14.3	14.3	14.2	0.6	0.6	0.6	0.5	0.6	50	50	55	50	50
2.	16.8	16.9	16.8	16.8	16.7	0.9	0.9	0.9	0.8	0.9	60	60	60	55	60
3.	27.2	27.3	27.2	27.2	27.1	0.6	0.6	0.6	0.5	0.7	50	45	50	40	45
4.	34.6	34.6	34.5	34.5	34.4	0.8	0.8	0.8	0.7	0.9	80	60	75	65	70
5.	36.3	36.4	36.3	36.3	36.2	1.0	0.9	1.0	0.9	1.0	100	70	100	80	75
6.	37.4	37.4	37.4	37.4	37.4	1.5	1.4	1.5	1.4	1.5	140	100	150	110	120
7.	41.2	41.3	41.2	41.2	41.3	1.5	1.5	1.6	1.5	1.6	80	80	80	80	80
8.	44.0	44.1	44.0	44.0	44.0	1.7	1.7	1.8	1.6	1.8	100	90	80	80	80
9.	49.8	49.8	49.8	49.8	49.8	2.3	2.3	2.4	2.3	2.4	120	120	120	110	110
10.	154.8	154.7	154.7	154.7	154.7	4.3	4.3	4.3	4.2	4.3	200	180	175	175	160
11.	160.2	160.1	160.1	160.1	160.0	4.5	4.4	4.5	4.4	4.6	200	180	180	180	160
12.	164.7	164.6	164.6	164.6	164.6	5.0	4.9	5.0	4.9	5.0	200	200	200	200	175

(1) kakiebos190603RtxWax, (2) kakiebos200603RtxWax, (3) kakiebos200603RtxWaxb (4) kakiebos190603RtxWax and (5) kakiebos190603RtxWax

Peak no.	Mean D1 tr, minutes			Mean D2 tr, seconds			Mean D2 Wh, msec		
	Mean	STD	%RSD	Mean	STD	%RSD	Mean	STD	%RSD
1.	14.30	0.06	0.44	0.58	0.04	6.90	51.00	2.00	3.92
2.	16.80	0.06	0.38	0.88	0.04	4.55	59.00	2.00	3.39
3.	27.20	0.06	0.23	0.60	0.06	10.54	46.00	3.74	8.13
4.	34.52	0.07	0.22	0.80	0.06	7.91	70.00	7.07	10.10
5.	36.30	0.06	0.17	0.96	0.05	5.10	85.00	12.65	14.88
6.	37.40	0.00	0.00	1.46	0.05	3.36	124.00	18.55	14.96
7.	41.24	0.05	0.12	1.54	0.05	3.18	80.00	0.00	0.00
8.	44.02	0.04	0.09	1.72	0.07	4.35	86.00	8.00	9.30
9.	49.80	0.00	0.00	2.34	0.05	2.09	116.00	4.90	4.22
10.	154.72	0.04	0.03	4.28	0.04	0.93	178.00	12.88	7.24
11.	160.10	0.06	0.04	4.48	0.07	1.67	180.00	12.65	7.03
12.	164.62	0.04	0.02	4.96	0.05	0.99	195.00	10.00	5.13
Mean			0.15			4.30			7.36