

Dispersion Report

Workspace: 72438-1RiempFSRU-4R

Study: Riempimento FSRU-ME4

Equipment Item: 4R Linee di caricamento taniche FSRU durante riempimento

72438-1RiempFSRU-4R\Riempimento FSRU-ME4\4R Linee di caricamento taniche FSRU durante riempimento

Material	GAS NATURALE	
East	0	m
North	0	m

Scenario (Leak) : 80mm

72438-1RiempFSRU-4R\Riempimento FSRU-ME4\4R Linee di caricamento taniche FSRU durante riempimento\80mm

Material to track	GAS NATURALE
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Weather: Category 2/F

Wind speed [m/s]	2
Pasquill stability	F stable - night with moderate clouds and light/moderate wind
Atmospheric temperature [degC]	25
Relative humidity [fraction]	0,75
Solar radiation flux [kW/m2]	0,5
Mixing layer height [m]	100

Observer Release Data and Observer Mass Data

Observer number	Release type	Start time [s]	Start downwind distance [m]	Unit	Masses or mass rates			
					Released	Rainout	Pool vapour pick-up	Final

1	Continuou s	0	0	kg/s	14,8647	14,8333		0,031363 7
2	Continuou s	0,22	-0,246382	kg/s	14,8647	14,8333		4,09
3	Continuou s	42,398 2	-6,06009	kg/s	14,8647	14,8333		11,1057
4	Continuou s	75,134 9	-7,30819	kg/s	14,8647	14,8333		11,88
5	Continuou s	105,96 4	-8,13166	kg/s	14,8647	14,8333		12,3086
6	Continuou s	135,81 5	-8,76608	kg/s	14,8647	14,8333		12,5702
7	Continuou s	164,96 8	-9,27866	kg/s	14,8647	14,8333		12,8031
8	Continuou s	193,65 7	-9,71535	kg/s	14,8647	14,8333		12,5263
9	Continuou s	204,45 3	-9,86145	kg/s	14,8647	14,8333		11,1027
10	Continuou s	204,45 4	-9,86145	kg/s	0	0	11,071 4	11,0714
11	Continuou s	216,30 5	-10,0218	kg/s	0	0		8,90198
12	Continuou s	222,00 8	-10,099	kg/s	0	0		7,8451
13	Continuou s	270,12 9	-10,1391	kg/s	0	0		3,67483
14	Continuou s	489,43 8	-10,1391	kg/s	0	0		0,366534

Time-varying Observer Dispersion Data (before along-wind-diffusion effects)

Dispersion data correspond to an averaging time of: 18,75 s

Observer number	Time [s]	Down wind distance [m]	C/Li ne heig ht [m]	C/Lin e conc [ppm]	Effecti ve width [m]	Effecti ve depth [m]	C/Line vapour temperature [degC]	C/Li ne liqui d fracti	Centr oid veloci ty [m/s]	C/Lin e cloud densi ty
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								on]	[kg/ m3]
1	0	0	0	999.70 1,07	0,1107 33	0,0531 229	-160,288	0	2,6224	2,0341 1
1	0,01	0,02518 12	0	988.76 7,65	0,1210 66	0,0548 155	-157,292	0	2,4194 5	1,9885 3
1	0,02	0,04851 87	0	979.19 9,30	0,1313 92	0,0563 205	-154,512	0	2,2488 3	1,9481 2
1	0,03	0,07028 24	0	970.73 6,24	0,1416 98	0,0576 792	-151,903	0	2,1033 3	1,9116 5
1	0,04	0,09068 45	0	963.18 4,46	0,1519 75	0,0589 172	-149,435	0	1,9777 8	1,8783 6
1	0,05	0,10990 1	0	956.39 2,47	0,1622 23	0,0600 392	-147,114	0	1,8683 1	1,8481 4
1	0,06	0,12808 9	0	950.23 4,33	0,1724 41	0,0610 59	-144,939	0	1,7718	1,8207 7
1	0,07	0,14536 9	0	944.61 7,06	0,1826 24	0,0619 922	-142,893	0	1,6860 2	1,7958
1	0,08	0,16184 4	0	939.41 5,25	0,1927 68	0,0628 664	-140,948	0	1,6091 2	1,7727 7
1	0,09	0,17759 7	0	934.35 4,18	0,2028 67	0,0637 411	-139,053	0	1,5394 1	1,7510 4
1	0,1	0,19268 7	0	929.30 5,56	0,2129 19	0,0646 355	-137,183	0	1,4758 8	1,7303 4
1	0,11	0,20719 1	0	924.24 8,52	0,2229 27	0,0655 57	-135,334	0	1,4175 9	1,7105 6
1	0,12	0,22113 2	0	919.18 1,78	0,2328 92	0,0664 881	-133,506	0	1,3642	1,6916 5
1	0,13	0,23456 3	0	914.10 5,11	0,2428 16	0,0674 275	-131,699	0	1,3151 3	1,6735 5
1	0,14	0,24751 9	0	909.01 8,47	0,2527	0,0683 7	-129,912	0	1,2699 5	1,6562 2
1	0,15	0,26002 8	0	903.92 2,28	0,2625 44	0,0693 081	-128,144	0	1,2283 4	1,6396 1
1	0,16	0,27215	0	898.81 7,18	0,2723 46	0,0702 538	-126,396	0	1,1897 1	1,6236 7
1	0,17	0,28387 9	0	893.70 4,53	0,2821 08	0,0711 871	-124,666	0	1,1540 6	1,6083 8



1	0,18	0,29526	0	888.58	0,2918	0,0721	-122,955	0	1,1209	1,5936
				4,99	27	167			4	9
1	0,19	0,30631	0	883.45	0,3015	0,0730	-121,263	0	1,0901	1,5795
		5		8,91	04	398			6	7
1	0,2	0,31706	0	878.32	0,3111	0,0739	-119,588	0	1,0614	1,5659
		9		6,53	35	589			6	9
1	0,212	0,32960	0	872.16	0,3226	0,0750	-117,601	0	1,0295	1,5503
		8		0,10	3	566				6
1	0,226	0,34416	0	864.75	0,3363	0,0763	-115,248	0	0,9943	1,5325
	4	8		0,04	3	648			58	1
1	0,243	0,36099	0	855.84	0,3526	0,0779	-112,469	0	0,9563	1,5122
	68	4		3,87	29	165			38	9
1	0,264	0,38036	0	845.13	0,3719	0,0797	-109,194	0	0,9157	1,4896
	416	4		9,41	72	609			81	
1	0,289	0,40259	0	832.27	0,3946	0,0819	-105,35	0	0,8731	1,4644
	299	1		5,11	36	647			42	2
1	0,319	0,42798	0	816.81	0,4210	0,0845	-100,852	0	0,8292	1,4368
	159	2		9,56	53	89			77	3
1	0,354	0,45689	0	798.25	0,4516	0,0877	-95,6121	0	0,7851	1,4070
	991	3		9,81	8	197			28	1
1	0,397	0,48972	0	775.99	0,4869	0,0914	-89,5376	0	0,7417	1,3752
	989	5		3,46	56	676			89	8
1	0,449	0,52696	0	749.68	0,5272	0,0958	-82,5961	0	0,7005	1,3422
	587			4,95	72	965			33	9
1	0,511	0,56919	0	719.51	0,5728	0,1009	-74,8568	0	0,6626	1,3089
	504	4		5,52	87	78			74	9
1	0,585	0,61719	0	685.40	0,6237	0,1068	-66,3576	0	0,6290	1,2761
	805	6		3,01	8	47			93	2
1	0,674	0,67192	0	647.20	0,6792	0,1137	-57,1569	0	0,6004	1,2444
	966	7		9,91	91	97			68	1
1	0,781	0,73480	0	605.12	0,7354	0,1223	-47,4056	0	0,5770	1,2147
	959	6		6,51	88	93			26	3
1	0,895	0,79922	0	564.83	0,7802	0,1323	-38,4802	0	0,5604	1,1908
	368	7		0,40	87	7			8	2
1	0,895	0,79922	0	564.83	0,7802	0,1323	-38,4802	0	0,5604	1,1908
	368	7		0,40	87	7			8	2
1	0,910	0,80760	0	559.85	0,7848	0,1338	-37,4087	0	0,5587	1,1881
	351	7		3,91	01	03			62	5



1	1,064 42	0,89254 7	0	513.02 9,27	0,8086 32	0,1511 94	-27,7287	0	0,5454 2	1,1661
1	1,249 31	0,99242	0	459.52 4,73	0,8274 19	0,1745 89	-18,049	0	0,5358 87	1,149
1	1,471 17	1,11054	0	408.27 0,26	0,8475 18	0,2003 64	-9,997	0	0,5296 53	1,1387 3
1	1,737 4	1,25098	0	364.61 3,61	0,8659 13	0,2264 26	-4,048	0	0,5257 3	1,1339 2
1	2,056 88	1,41851	0	331.42 6,38	0,8807 66	0,2499 63	0,01	0	0,5233 15	1,1320 5
1	2,440 26	1,61883	0	311.02 2,61	0,8927 26	0,2662 15	2,58347	0	0,5218 4	1,1304 1
1	2,900 31	1,85866	0	296.05 2,42	0,9058 12	0,2784 11	4,65616	0	0,5208 85	1,1283 4
1	3,452 37	2,14603	0	279.50 0,35	0,9214 77	0,2926 08	6,71335	0	0,5202 71	1,1270 1
1	4,114 84	2,49056	0	261.50 4,96	0,9402 56	0,3091 74	8,7138	0	0,5199 1	1,1265 1
1	4,909 81	2,90378	0	242.18 2,29	0,9627 79	0,3286 77	10,6252	0	0,5197 16	1,1269 1
1	5,863 77	3,39952	0	221.79 0,84	0,9897 66	0,3517 31	12,4165	0	0,5196 22	1,1282 2
1	7,008 53	3,99433	0	200.66 1,70	1,0220 6	0,3790 78	14,0635	0	0,5195 82	1,1304
1	8,382 23	4,70807	0	179.18 9,47	1,0606 9	0,4116 01	15,5489	0	0,5195 66	1,1333 5
1	10,03 07	5,56454	0	157.81 4,75	1,1068 9	0,4503 53	16,863	0	0,5195 61	1,1369 3
1	12,00 88	6,5923	0	136.99 2,04	1,1621 1	0,4968 91	18,1994	0	0,5195 59	1,1403
1	14,38 26	7,82561	0	117.14 0,98	1,2280 9	0,5540 81	20,2974	0	0,5195 59	1,1408 1
1	17,23 11	9,30559	0	98.642, 81	1,3068 7	0,6218 73	21,8506	0	0,5195 59	1,1428 5
1	20,64 93	11,0816	0	82.633, 16	1,4009	0,7025 02	22,959	0	0,5195 59	1,1458 7
1	24,75 12	13,2127	0	69.564, 50	1,5130 9	0,7986 38	23,7158	0	0,5195 59	1,1494 2



1	29,67 34	15,7701	0	59.274, 94	1,6468 7	0,9134 91	24,2096	0	0,5195 59	1,1531 3
1	35,58 01	18,839	0	52.474, 47	1,8063 2	1,0509 4	24,528	0	0,5195 59	1,1566 8
1	42,66 81	22,5216	0	50.121, 26	1,9962 8	1,2155 7	24,7263	0	0,5195 59	1,1599
1	51,17 37	26,9408	0	38.916, 98	2,2224 7	1,4129 1	24,846	0	0,5195 59	1,1627
1	55,86 36	29,3778	0	34.291, 87	2,3464 8	1,5216 9	24,8846	0	0,5195 59	1,1638 8
1	60,43 48	32,2442	0	29.817, 40	2,4916 4	1,6511 7	24,9153	0	0,5195 59	1,1650 5
1	70,48 61	38,829	0	22.263, 82	2,8228 7	1,8383 3	24,9552	0	0,5534	1,1670 7
1	82,75 6	47,265	0	16.016, 09	3,2432 3	2,0751 1	24,978	0	0,5947 29	1,1687 7
1	97,67 97	58,2034	0	11.042, 56	3,7823 5	2,3818 8	24,9898	0	0,6457 55	1,1701 4
1	115,9 23	72,5299	0	7.287,2 8	4,4799 3	2,7821 2	24,9955	0	0,7084 81	1,1711 8
1	125,8 19	80,8279	0	5.892,4 3	4,8801 4	3,0139 2	24,997	0	0,7429 5	1,1715 7
1	138,2 78	91,5227	0	4.583,5 1	5,3921 1	3,3154 8	24,9981	0	0,7862 9	1,1719 4
1	165,1 12	116,795	0	2.932,9 8	6,5874 4	3,8705 5	24,9991	0	0,8622 99	1,1724
1	196,7 93	149,73	0	1.897,3 4	8,1203 5	4,4622	24,9994	0	0,9385 23	1,1726 9
1	235,3 05	192,835	0	1.205,1 5	10,091 5	5,1753 7	24,9996	0	1,0255 8	1,1728 8
1	282,3 69	249,446	0	754,02	12,631 9	6,0338 4	24,9998	0	1,1235 6	1,1730 1
1	339,6 41	323,975	0	465,96	15,91	7,0617 9	24,9999	0	1,2337	1,1730 9
1	409,3 11	422,275	0	284,83	20,141 8	8,2937 4	24,9999	0	1,3576 1	1,1731 4
1	493,9 85	552,186	0	172,67	25,609 4	9,7653 3	24,9999	0	1,4961 4	1,1731 7



1	515,747	585,089	0	154,97	26,9752	10,1154	25	0	1,52785	1,17318
2	0,22	-0,246382	0	1,00	0,00177245	0,925914	24,6396	0	0,519559	1,17396
2	0,32	-0,227503	0	894.089,48	0,368049	0,111553	-141,267	0	0,113506	1,8219
2	0,42	-0,217378	0	932.137,90	0,585943	0,150824	-148,387	0	0,0946663	1,89356
2	0,52	-0,20812	0	945.809,36	0,78742	0,171081	-150,812	0	0,0918143	1,91952
2	0,62	-0,198884	0	952.693,65	0,981089	0,183097	-151,829	0	0,0934723	1,92959
2	0,72	-0,189363	0	956.452,53	1,17613	0,189864	-152,187	0	0,097234	1,93175
2	0,82	-0,179396	0	958.411,28	1,37354	0,193642	-152,159	0	0,102269	1,92918
2	0,92	-0,168884	0	959.238,28	1,57163	0,196183	-151,879	0	0,108081	1,92349
2	1,02	-0,157764	0	959.289,61	1,7699	0,198152	-151,432	0	0,114407	1,9158
2	1,12	-0,145994	0	958.787,60	1,96804	0,199938	-150,865	0	0,121065	1,90672
2	1,22	-0,133546	0	957.879,80	2,16591	0,201737	-150,212	0	0,127927	1,89674
2	1,32	-0,120405	0	956.669,87	2,3635	0,20365	-149,498	0	0,134899	1,8862
2	1,42	-	0	955.23	2,5608	0,2057	-148,741	0	0,1418	1,8753



		0,10656 7		6,22	7	41			97	4
2	1,52	- 0,09203	0	953.63 4,68	2,7581 1	0,2080 22	-147,955	0	0,1488 71	1,8643 4
2	1,62	- 0,07679 83	0	951.90 6,69	2,9552 8	0,2104 82	-147,15	0	0,1557 82	1,8533 2
2	1,72	- 0,06088 03	0	950.08 5,27	3,1524 6	0,2131 11	-146,333	0	0,1625 99	1,8423 7
2	1,82	- 0,04429 04	0	948.19 9,46	3,3497 3	0,2159 09	-145,511	0	0,1692 87	1,8315 6
2	1,92	- 0,02704 03	0	946.26 7,78	3,5471 6	0,2188 58	-144,685	0	0,1758 34	1,8209 2
2	2,02	- 0,00914 177	0	944.30 0,28	3,7447 7	0,2219 12	-143,86	0	0,1822 42	1,8104 7
2	2,069 75	2,55685 E-17	0	943.31 0,91	3,8431 7	0,2234 62	-143,451	0	0,1853 79	1,8053 5
2	2,069 75	2,55685 E-17	0	954.24 1,32	3,4654 8	0,1157 73	-146,738	0	0,4271 82	1,8444 4
2	2,12	0,02079 83	0	949.44 5,02	3,5378 3	0,1335 26	-145,522	0	0,4019 16	1,8304 8
2	2,22	0,05917 42	0	943.01 6,97	3,6974	0,1644 9	-143,837	0	0,3680 51	1,8114 1
2	2,34	0,10168 8	0	938.22 3,82	3,9090 6	0,1951 27	-142,481	0	0,3428 43	1,7961 1
2	2,484	0,14954 5	0	934.87 1,45	4,1834 9	0,2243 42	-141,359	0	0,3237 77	1,7831 3
2	2,656 8	0,20413 4	0	932.39 9,72	4,5329 2	0,2511 82	-140,316	0	0,3096 47	1,7706 5
2	2,864 16	0,26722 1	0	930.21 0,30	4,9709 7	0,2749 28	-139,187	0	0,2999 13	1,7569 2
2	3,112 99	0,34108 2	0	927.85 2,98	5,5129 6	0,2950 78	-137,837	0	0,2943 85	1,7406
2	3,411	0,42869	0	924.90	6,1758	0,3114	-136,14	0	0,2931	1,7205



	59	6		3,77	1	62			17	7
2	3,769 91	0,53418 5	0	920.84 7,46	6,9775 2	0,3245 7	-133,945	0	0,2962 43	1,6957 1
2	4,199 89	0,66311 7	0	915.06 2,74	7,9379 6	0,3353 7	-131,094	0	0,3039 35	1,6651 7
2	4,715 87	0,82302 8	0	906.73 3,44	9,0790 8	0,3453 11	-127,401	0	0,3162 96	1,6283 2
2	5,335 04	1,02391	0	894.79 8,22	10,426 2	0,3564 38	-122,667	0	0,3330 72	1,5851 1
2	6,078 05	1,27894	0	877.88 7,04	12,007 5	0,3712 81	-116,674	0	0,3535 88	1,5360 3
2	6,969 66	1,60473	0	854.01 4,88	13,853 3	0,3922 95	-109,097	0	0,3769 99	1,4816
2	8,039 59	2,02183	0	820.66 4,77	15,988 7	0,4223 02	-99,5362	0	0,4021 79	1,4227 2
2	9,323 51	2,55503	0	776.74 9,13	18,412 9	0,4624 47	-87,7255	0	0,4279 49	1,361
2	10,86 42	3,23574	0	715.80 5,74	21,047 6	0,5159 69	-72,1124	0	0,4553 66	1,2932 5
2	11,79 44	3,66742	0	668.34 4,58	22,410 8	0,5512 83	-60,1397	0	0,4735 47	1,2489 3
2	11,79 44	3,66742	0	668.34 4,58	22,410 8	0,5512 83	-60,1397	0	0,4735 47	1,2489 3
2	12,71 31	4,11607	0	603.56 6,49	23,001 3	0,6022 57	-44,6563	0	0,4928 92	1,2008 5
2	12,95 15	4,23445	0	585.85 7,66	23,151 4	0,6216 13	-40,801	0	0,4964 24	1,1908 2
2	12,95 15	4,23445	0	585.85 7,66	23,151 4	0,6216 13	-40,801	0	0,4964 24	1,1908 2
2	14,93 17	5,23599	0	423.64 3,01	23,587 2	0,9186 02	-12,3622	0	0,5121 53	1,1415 8
2	17,59 4	6,60773	0	291.83 6,40	23,913 5	1,3822 1	2,89417	0	0,5170 71	1,1383 1
2	20,78 88	8,26292	0	243.19 4,95	24,066 9	1,6666 6	7,66633	0	0,5208 94	1,1399 8
2	24,62 26	10,283	0	230.14 5,68	24,174 1	1,7269 5	9,37699	0	0,5326 21	1,1383 5
2	29,22	12,7643	0	217.64	24,304	1,7990	11,0609	0	0,5460	1,1373



	31			0,23	9	5			56	5
2	34,74 37	15,823	0	204.32 1,27	24,465	1,8873 9	12,706	0	0,5620 09	1,1371 5
2	41,36 84	19,6093	0	190.44 7,10	24,661 6	1,9959 5	14,2781	0	0,5810 96	1,1378 5
2	49,31 81	24,32	0	176.47 7,09	24,904	2,1300 4	15,7452	0	0,6040 51	1,1395
2	58,85 77	30,2145	0	162.27 6,15	25,204 4	2,2967 3	17,0796	0	0,6317 76	1,1420 7
2	70,30 53	37,6391	0	142.99 6,18	25,578 8	2,5068 2	18,5137	0	0,6655 64	1,1445 9
2	84,04 23	47,0701	0	123.31 3,16	26,049 2	2,7773 1	20,7402	0	0,7075 74	1,1445 8
2	100,5 27	59,1525	0	103.37 4,61	26,644 5	3,1202 4	22,3379	0	0,7584 36	1,1467 2
2	120,3 08	74,7656	0	84.148, 54	27,403 7	3,5607	23,4171	0	0,8204 29	1,1502 7
2	144,0 46	95,141	0	66.116, 77	28,380 3	4,1324 9	24,1042	0	0,8965 98	1,1545
2	171,8 42	121,752	0	53.041, 53	29,635 9	4,6836 5	24,4856	0	0,9660 71	1,1577 9
2	204,3 66	156,086	0	41.660, 49	31,228 8	5,2924 3	24,7122	0	1,0390 7	1,1607 1
2	243,5 51	200,405	0	31.984, 32	33,249 6	6,0144	24,8466	0	1,1213 2	1,1633 7
2	253,9 07	212,682	0	29.861, 88	33,803 3	6,2044 1	24,8686	0	1,1422 9	1,1639 5
2	291,0 7	258,202	0	23.988, 63	35,833 2	6,8848 2	24,9205	0	1,2152 2	1,1657
2	348,2 85	333,282	0	17.612, 41	39,125 6	7,9129 1	24,9606	0	1,3203 2	1,1676 3
2	417,0 2	431,03	0	12.705, 94	43,325 4	9,1298	24,9814	0	1,4373 9	1,1691 6
2	499,8 77	558,882	0	9.075,2 5	48,698 8	10,572 8	24,9916	0	1,5684 3	1,1703 4
2	516,3 42	585,083	0	8.691,6 7	49,785 8	10,851 5	24,9927	0	1,5928 8	1,1705 1



3	42,39 82	- 6,06009	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
3	42,49 82	- 6,01811	0	564.10 6,83	1,1396 3	0,0122 047	-91,8811	0	0,4007 24	1,5474 4
3	42,59 82	- 5,97808	0	596.81 0,57	1,6112	0,0215 56	-97,8025	0	0,4004 49	1,5761 2
3	42,69 82	-5,938	0	604.67 5,32	1,9854 2	0,0310 566	-99,0038	0	0,4011 94	1,5812 8
3	42,79 82	- 5,89784	0	607.10 3,09	2,3110 2	0,0404 977	-99,3162	0	0,4020 56	1,5823 4
3	42,89 82	-5,8576	0	608.61 9,55	2,6062 2	0,0497 113	-99,5803	0	0,4027 13	1,5836 5
3	42,99 82	- 5,81732	0	611.88 0,01	2,8802 8	0,0583 752	-100,326	0	0,4028 36	1,5881 5
3	43,09 82	- 5,77703	0	616.15 9,80	3,1387 7	0,0664 899	-101,332	0	0,4027 42	1,5943 8
3	43,19 82	- 5,73676	0	620.71 1,65	3,3850 9	0,0741 454	-102,404	0	0,4026 35	1,6011
3	43,29 82	-5,6965	0	625.22 5,63	3,6214 4	0,0814 207	-103,464	0	0,4025 68	1,6078 4
3	43,39 82	- 5,65624	0	629.56 7,00	3,8497 6	0,0883 623	-104,48	0	0,4025 59	1,6143 7
3	43,49 82	- 5,61599	0	633.68 4,43	4,0714 6	0,0950 081	-105,442	0	0,4026 1	1,6206 2
3	43,59 82	- 5,57572	0	637.56 1,05	4,2876 2	0,1013 89	-106,345	0	0,4027 17	1,6265 6
3	43,69 82	- 5,53544	0	641.19 8,26	4,4989 3	0,1075 37	-107,192	0	0,4028 74	1,6321 9
3	43,79 82	- 5,49515	0	644.60 6,37	4,7058 6	0,1134 79	-107,985	0	0,4030 74	1,6375 1
3	43,89 82	- 5,45483	0	647.79 6,33	4,9090 4	0,1192 31	-108,727	0	0,4033 13	1,6425 5
3	43,99 82	- 5,41449	0	650.78 2,43	5,1089 9	0,1248 06	-109,422	0	0,4035 86	1,6473 1
3	44,09 82	- 5,37411	0	653.57 5,92	5,3062 8	0,1302 1	-110,073	0	0,4038 9	1,6518 2
3	44,19 82	- 5,33371	0	656.18 9,43	5,5007 7	0,1355 02	-110,648	0	0,4042 22	1,6557 1

3	44,29 82	- 5,29327	0	658.63 3,26	5,6929 6	0,1406 85	-111,154	0	0,4045 78	1,6590 4
3	44,39 82	-5,2528	0	660.91 9,50	5,8829 4	0,1457 72	-111,595	0	0,4049 57	1,6618 4
3	44,51 82	- 5,20417	0	663.46 9,69	6,1081 8	0,1517 7	-112,044	0	0,4054 36	1,6645 3
3	44,66 22	- 5,14575	0	666.27 3,88	6,3749 4	0,1588 29	-112,483	0	0,4060 42	1,6669 2
3	44,83 5	- 5,07552	0	669.30 3,22	6,6905 2	0,1671 21	-112,884	0	0,4068 07	1,6687 3
3	45,04 24	- 4,99107	0	672.50 4,90	7,0633 8	0,1768 47	-113,215	0	0,4077 67	1,6696 7
3	45,29 12	- 4,88946	0	675.80 3,71	7,5035 6	0,1882 33	-113,44	0	0,4089 66	1,6693 8
3	45,58 98	- 4,76712	0	679.08 1,26	8,0275 2	0,2014 3	-113,508	0	0,4104 61	1,6674 2
3	45,94 81	- 4,61971	0	682.13 7,82	8,6676 2	0,2163 15	-113,34	0	0,4123 56	1,6631 2
3	46,37 81	- 4,44189	0	684.74 0,68	9,4552 7	0,2329 29	-112,843	0	0,4147 74	1,6556 9
3	46,89 41	-4,2271	0	686.88 5,58	10,429	0,2511 81	-111,958	0	0,4178 19	1,6446
3	47,51 33	- 3,96724	0	688.41 2,26	11,630 6	0,2711 98	-110,588	0	0,4216 11	1,6291 1
3	48,25 63	- 3,65225	0	688.67 9,29	13,106 8	0,2935 84	-108,542	0	0,4262 86	1,6080 9
3	49,14 79	- 3,26968	0	686.81 7,68	14,913 1	0,3193 01	-105,625	0	0,4318 87	1,5808 2
3	50,21 78	- 2,80413	0	681.86 6,01	17,115 1	0,3496 17	-101,669	0	0,4383 51	1,5472 3
3	51,50 17	- 2,23665	0	672.78 9,22	19,788	0,3861 45	-96,5442	0	0,4455 28	1,5080 6
3	53,04 24	- 1,54418	0	658.44 5,45	23,015 5	0,4310 19	-90,1504	0	0,4532 09	1,4646
3	54,89 13	- 0,69867	0	637.49 5,80	26,884	0,4872 75	-82,3822	0	0,4611 96	1,4183 5
3	56,39 67	2,52068 E-13	0	618.15 1,55	30,005 6	0,5355 85	-76,0828	0	0,4668 68	1,3852 4



3	56,39 67	2,52068 E-13	0	620.95 8,59	29,829 3	0,5303 09	-76,7415	0	0,4733 72	1,3880 7
3	57,10 99	0,33779 6	0	610.88 9,42	31,294 4	0,5568 12	-73,6827	0	0,4738 51	1,3731 3
3	59,77 22	1,60525	0	573.68 1,10	36,660 8	0,6521 34	-63,0293	0	0,4785 68	1,3260 3
3	62,96 7	3,14573	0	527.85 4,22	42,756 3	0,7703 7	-50,9444	0	0,4858 05	1,2804 9
3	66,80 08	5,02489	0	468.09 3,79	49,29	0,9348 52	-36,3867	0	0,4944 8	1,2345 7
3	71,11 03	7,17861	0	382.32 8,37	54,761 7	1,2029 7	-17,5724	0	0,5056 35	1,1871 5
3	71,11 03	7,17861	0	382.32 8,37	54,761 7	1,2029 7	-17,5724	0	0,5056 35	1,1871 5
3	71,40 13	7,32599	0	374.60 5,17	54,986 5	1,2276 8	-15,968	0	0,5068 04	1,1835 7
3	76,92 19	10,2046	0	237.57 5,26	56,027 2	1,8713	4,17218	0	0,5564 34	1,1587 2
3	83,54 66	14,1706	0	178.00 4,87	56,410 4	2,2680 2	10,55	0	0,6261 09	1,1577 8
3	91,49 63	19,2451	0	163.21 3,69	56,673 7	2,4133 2	12,6023	0	0,6503 01	1,1557 5
3	101,0 36	25,5863	0	147.35 7,69	56,999 7	2,5940 3	14,4675	0	0,6791 35	1,1549 3
3	112,4 83	33,5592	0	130.66 3,48	57,404 5	2,8196 6	16,1219	0	0,7138 45	1,1552 7
3	126,2 21	43,6536	0	113.50 6,00	57,910 4	3,1036 8	17,5525	0	0,7559 06	1,1566 6
3	142,7 05	56,5354	0	96.314, 54	58,547 1	3,4643 2	18,7566	0	0,8071 63	1,1589
3	162,4 86	73,1338	0	79.577, 39	59,355 7	3,9383 6	21,0865	0	0,8711 02	1,1571 3
3	186,2 24	94,7389	0	63.808, 95	60,392 1	4,5486 4	22,6563	0	0,9493 44	1,1577 7
3	214,7 09	122,87	0	52.218, 50	61,719 3	5,1367 3	23,5762	0	1,0207 3	1,1589
3	248,8 91	159,039	0	42.265, 74	63,396 3	5,7763 2	24,1527	0	1,0946 5	1,1604 6



3	289,91	205,662	0	33.718,03	65,5187	6,53103	24,5139	0	1,17771	1,16233
3	339,132	265,953	0	26.394,19	68,2112	7,42333	24,7311	0	1,27099	1,16425
3	344,173	272,383	0	25.796,50	68,4954	7,51403	24,7459	0	1,28021	1,16443
3	398,199	344,147	0	20.348,71	71,6335	8,47919	24,8567	0	1,37561	1,16606
3	469,079	445,844	0	15.400,76	75,991	9,72781	24,9263	0	1,49264	1,16766
3	554,136	578,401	0	11.548,39	81,5457	11,2022	24,9635	0	1,62314	1,16901
3	654,942	749,314	0	8.480,83	88,5434	12,9166	24,9824	0	1,7662	1,1701
4	75,1349	-7,30819	0	1,00	0,00177245	0,925914	24,6396	0	0,519559	1,17396
4	75,2349	-7,26416	0	499.673,25	1,25869	0,0107004	-82,9156	0	0,426128	1,51809
4	75,3349	-7,22155	0	529.455,82	1,78077	0,0191044	-88,5483	0	0,42621	1,54379
4	75,4349	-7,1789	0	536.648,04	2,19251	0,0276755	-89,6821	0	0,42675	1,54831
4	75,5349	-7,13619	0	538.947,61	2,54776	0,0362421	-89,9894	0	0,427334	1,5493
4	75,6349	-7,09343	0	539.531,76	2,86749	0,0447648	-90,0363	0	0,427915	1,54928
4	75,7349	-7,05062	0	540.228,93	3,16391	0,0530612	-90,1984	0	0,428335	1,55017
4	75,8349	-7,00778	0	542.383,37	3,44296	0,0608946	-90,771	0	0,428439	1,55356
4	75,9349	-6,96494	0	545.563,91	3,70827	0,0682571	-91,6152	0	0,42838	1,5586
4	76,0349	-6,9221	0	549.232,14	3,96232	0,0752111	-92,5786	0	0,428288	1,56438
4	76,1349	-6,87928	0	553.054,63	4,20708	0,0818212	-93,5735	0	0,428214	1,57039
4	76,23	-	0	556.86	4,4440	0,0881	-94,5582	0	0,4281	1,5763



	49	6,83646		3,14	2	38			72	9
4	76,33	-	0	560.58	4,6741	0,0941	-95,5148	0	0,4281	1,5822
	49	6,79364		2,13	6	971			67	8
4	76,43	-	0	564.17	4,8984	0,1000	-96,434	0	0,4281	1,5879
	49	6,75083		0,48	6	26			99	9
4	76,53	-6,708	0	567.60	5,1177	0,1056	-97,3121	0	0,4282	1,5934
	49			8,82	9	46			65	9
4	76,63	-	0	570.89	5,3327	0,1110	-98,1483	0	0,4283	1,5987
	49	6,66517		1,98	3	76			62	8
4	76,73	-	0	574.02	5,5436	0,1163	-98,9441	0	0,4284	1,6038
	49	6,62233		1,75	3	39			85	7
4	76,83	-	0	577.00	5,7509	0,1214	-99,7005	0	0,4286	1,6087
	49	6,57948		0,57	9	47			32	4
4	76,93	-	0	579.83	5,9552	0,1264	-100,418	0	0,4287	1,6134
	49	6,53661		3,14	2	12			99	
4	77,03	-	0	582.52	6,1566	0,1312	-101,096	0	0,4289	1,6178
	49	6,49372		5,32	6	46			86	3
4	77,13	-	0	585.08	6,3557	0,1359	-101,736	0	0,4291	1,6220
	49	6,45081		2,43	5	52			91	4
4	77,25	-	0	587.98	6,5916	0,1414	-102,435	0	0,4294	1,6265
	49	6,39929		0,62	1	73			58	9
4	77,39	-	0	591.22	6,8706	0,1479	-103,162	0	0,4298	1,6311
	89	6,33743		5,45	1	52			05	9
4	77,57	-	0	594.80	7,2002	0,1555	-103,895	0	0,4302	1,6356
	17	6,26312		7,65	5	41			56	2
4	77,77	-	0	598.69	7,5890	0,1644	-104,59	0	0,4308	1,6394
	9	6,17385		5,47	4	3			36	9
4	78,02	-	0	602.82	8,0470	0,1748	-105,207	0	0,4315	1,6424
	79	6,06655		9,78	9	34			79	2
4	78,32	-	0	607.11	8,5861	0,1870	-105,695	0	0,4325	1,6439
	65	5,93754		3,17	2	04			21	5
4	78,68	-	0	611.41	9,2200	0,2012	-105,998	0	0,4337	1,6436
	48	5,78236		9,45	5	27				3
4	79,11	-	0	615.54	9,9816	0,2175	-106,038	0	0,4351	1,6407
	48	5,59556		3,48	1	18			9	9
4	79,63	-	0	619.16	10,918	0,2357	-105,693	0	0,4371	1,6345
	07	5,37052		1,02	9	53			05	
4	80,24	-	0	622.01	12,078	0,2560	-104,846	0	0,4395	1,6238



	99	5,09912		5,60		2			66	5
4	80,99 29	-4,7714	0	624.17 7,66	13,513 4	0,2782 5	-103,449	0	0,4426 38	1,6085
4	81,88 45	- 4,37506	0	625.02 6,42	15,281 6	0,3031 16	-101,307	0	0,4464 29	1,5873 6
4	82,95 45	- 3,89498	0	623.54 9,47	17,449 1	0,3318 36	-98,1871	0	0,4509 8	1,5595 5
4	84,23 84	- 3,31258	0	618.61 1,41	20,094 1	0,3660 34	-93,8958	0	0,4562 23	1,5250 9
4	85,77 91	- 2,60515	0	609.03 1,70	23,305 3	0,4077 88	-88,3025	0	0,4620 14	1,4849 1
4	87,62 79	- 1,74514	0	593.57 0,70	27,179 8	0,4598 44	-81,3299	0	0,4681 73	1,4406 8
4	89,84 65	- 0,69915	0	570.84 6,62	31,814	0,5262 05	-72,9038	0	0,4745 46	1,3941 7
		3								
4	91,31 4	1,84268 E-15	0	554.11 0,57	34,846 2	0,5727 49	-67,4113	0	0,4782 4	1,3672 4
4	91,31 4	1,84268 E-15	0	556.80 3,89	34,658 3	0,5683 75	-68,0142	0	0,4833 97	1,3695 7
4	92,50 89	0,57784 3	0	542.25 9,15	37,100 1	0,6108 18	-63,5444	0	0,4838 86	1,3492 1
4	95,70 37	2,12984	0	503.96 6,25	43,461 9	0,7224 59	-52,5325	0	0,4879 65	1,3041 9
4	99,53 74	4,01219	0	456.64 1,51	50,599 5	0,8668 91	-40,0781	0	0,4940 36	1,2608 7
4	104,1 38	6,30184	0	394.51 7,75	58,042	1,0776 7	-25,2121	0	0,5013 72	1,2178 6
4	107,8 49	8,17477	0	331.53 7,59	62,486 4	1,3217 7	-11,9336	0	0,5085 24	1,1867 8
4	107,8 49	8,17477	0	331.53 7,59	62,486 4	1,3217 7	-11,9336	0	0,5085 24	1,1867 8
4	109,6 59	9,09961	0	297.03 9,91	63,485 3	1,4767 6	-5,51021	0	0,5126 78	1,1742 8
4	116,2 83	12,722	0	189.25 9,79	64,160 8	2,0783 9	8,1921	0	0,5937 25	1,1627 8
4	124,2 33	17,7039	0	152.85 5,23	64,495 9	2,3848 8	12,1559	0	0,6454 95	1,1611 5

4	133,7 73	23,9981	0	136.49 6,48	64,820 5	2,5632 1	14,1224	0	0,6742 56	1,1594 3
4	145,2 2	31,9152	0	119.42 6,89	65,223 6	2,7875	15,8641	0	0,7089 61	1,1589 8
4	158,9 57	41,9423	0	102.17 3,03	65,727 2	3,0698 6	17,3635	0	0,7509 79	1,1596 5
4	175,4 42	54,7422	0	85.235, 71	66,361 1	3,4285 4	18,6188	0	0,8021 3	1,1612 6
4	195,2 23	71,2348	0	69.119, 74	67,165 9	3,8978 2	20,7332	0	0,8656 65	1,1597 9
4	218,9 61	92,7104	0	54.304, 67	68,197 6	4,5053 7	22,4489	0	0,9438 35	1,1595 4
4	247,4 46	120,741	0	43.654, 31	69,521 7	5,1130 1	23,4614	0	1,0179 2	1,1602 2
4	281,6 28	156,82	0	35.352, 06	71,196 3	5,7547 7	24,0842	0	1,0922 2	1,1614 1
4	322,6 47	203,35	0	28.203, 76	73,316 5	6,5113 5	24,474	0	1,1755 9	1,1629 9
4	368,9 34	259,828	0	22.413, 39	75,842 1	7,3525 8	24,6985	0	1,2637 6	1,1646 1
4	371,8 69	263,547	0	22.170, 67	76,006 8	7,4055 8	24,7084	0	1,2691 8	1,1647 8
4	430,9 36	341,682	0	17.154, 26	79,428 3	8,4641 7	24,8439	0	1,3741 7	1,1663 6
4	501,8 16	443,289	0	13.049, 69	83,784 3	9,7145 9	24,9193	0	1,4914 4	1,1678 5
4	586,8 72	575,772	0	9.759,9 6	89,338 4	11,190 4	24,9597	0	1,6221 1	1,1691 2
4	669,5 28	714,778	0	7.594,1 7	95,044 1	12,600 1	24,9778	0	1,7404	1,17
5	105,9 64	- 8,13166	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
5	106,0 64	- 8,08658	0	460.48 2,41	1,3272 5	0,0100 106	-77,506	0	0,4390 84	1,5020 9
5	106,1 64	- 8,04267	0	488.35 7,79	1,8793 2	0,0179 495	-82,979	0	0,4392 32	1,5264 7
5	106,2	-	0	495.06	2,3131	0,0260	-84,0724	0	0,4396	1,5307



	64	7,99873		7,41	4	628			85	3
5	106,3	-	0	497.21	2,6871	0,0341	-84,3725	0	0,4401	1,5316
	64	7,95473		9,38	5	748			61	9
5	106,4	-	0	497.76	3,0234	0,0422	-84,4229	0	0,4406	1,5317
	64	7,91069		7,27	3	481			37	2
5	106,5	-	0	497.64	3,334	0,0502	-84,3856	0	0,4411	1,5315
	64	7,86661		9,80		5			02	
5	106,6	-	0	498.28	3,6252	0,0579	-84,5953	0	0,4413	1,5327
	64	7,82249		2,74	9	84			79	8
5	106,7	-	0	500.30	3,9015	0,0652	-85,1942	0	0,4414	1,5363
	64	7,77835		2,92	2	722			16	1
5	106,8	-7,7342	0	503.23	4,1658	0,0721	-86,0372	0	0,4413	1,5412
	64			4,58	4	243			32	6
5	106,9	-	0	506.56	4,4203	0,0786	-86,9769	0	0,4412	1,5468
	64	7,69007		2,20	8	124			36	
5	107,0	-	0	510.01	4,6665	0,0847	-87,9397	0	0,4411	1,5524
	64	7,64595		6,75	8	963			66	9
5	107,1	-	0	513.48	4,9055	0,0907	-88,8982	0	0,4411	1,5582
	64	7,60184		8,09	2	173			21	1
5	107,2	-	0	516.91	5,1381	0,0964	-89,8394	0	0,4410	1,5638
	64	7,55773		9,72	4	046			99	6
5	107,3	-	0	520.26	5,3653	0,1018	-90,7508	0	0,4411	1,5693
	64	7,51362		2,52	6	82			06	8
5	107,4	-7,4695	0	523.49	5,5879	0,1071	-91,6282	0	0,4411	1,5747
	64			6,83	7	66			38	4
5	107,5	-	0	526.61	5,8064	0,1122	-92,4709	0	0,4411	1,5799
	64	7,42539		4,40	4	75			94	3
5	107,6	-	0	529.60	6,0212	0,1172	-93,2782	0	0,4412	1,5849
	64	7,38127		9,46	7	22			72	4
5	107,7	-	0	532.48	6,2328	0,1220	-94,0503	0	0,4413	1,5897
	64	7,33713		0,79	4	22			7	8
5	107,8	-	0	535.23	6,4412	0,1266	-94,7893	0	0,4414	1,5944
	64	7,29299		2,47	6	92			85	4
5	107,9	-	0	537.86	6,6468	0,1312	-95,496	0	0,4416	1,5989
	64	7,24884		6,76	4	4			16	5
5	108,0	-	0	540.87	6,8901	0,1365	-96,3035	0	0,4417	1,6041
	84	7,19584		7,75	8	47			91	3
5	108,2	-7,1322	0	544.28	7,1777	0,1427	-97,1825	0	0,4420	1,6097



	28			1,22	3	5			26	5
5	108,4	-7,0558	0	548.07	7,5173	0,1499	-98,1074	0	0,4423	1,6155
				7,94	5	82			4	5
5	108,6	-	0	552.25	7,9177	0,1584	-99,0403	0	0,4427	1,6212
	08	6,96403		0,75	5	16			54	2
5	108,8	-6,8538	0	556.75	8,3892	0,1682	-99,9215	0	0,4432	1,6262
	57			2,98	1	59			97	1
5	109,1	-	0	561.50	8,9435	0,1797	-100,694	0	0,4439	1,6300
	55	6,72133		4,77	3	55			99	1
5	109,5	-	0	566.38	9,5945	0,1931	-101,293	0	0,4448	1,6320
	14	6,56208		0,38	1	89			96	7
5	109,9	-	0	571.22	10,358	0,2088	-101,655	0	0,4460	1,6318
	44	6,37054		1,96	6	91			22	7
5	110,4	-	0	575.79	11,278	0,2268	-101,689	0	0,4474	1,6287
	59	6,14005		0,99	3	19			43	1
5	111,0	-	0	579.68	12,410	0,2469	-101,246	0	0,4492	1,6214
	79	5,86244		6,13	3	23			8	4
5	111,8	-	0	582.76	13,818	0,2690	-100,225	0	0,4516	1,6093
	22	5,52776		9,03	8	67			4	4
5	112,7	-	0	584.93	15,562	0,2934	-98,5338	0	0,4545	1,5918
	13	5,12376		1,21	8	7			89	1
5	113,7	-	0	585.23	17,707	0,3212	-95,9161	0	0,4582	1,5676
	83	4,63544		1,77		66			06	2
5	115,0	-4,0444	0	582.47	20,330	0,3540	-92,1363	0	0,4624	1,5362
	67			5,91	5	78			73	8
5	116,6	-	0	575.59	23,527	0,3938	-87,0645	0	0,4672	1,4985
	08	3,32817		1,97	7	03			81	7
5	118,4	-	0	563.46	27,403	0,4429	-80,6191	0	0,4724	1,4559
	57	2,45936		7,53	3	79			86	3
5	120,6	-	0	544.68	32,061	0,5054	-72,7174	0	0,4779	1,4101
	75	1,40489		7,76	8	04			34	4
5	123,3	-	0	517.90	37,597	0,5865	-63,3294	0	0,4835	1,3632
	38	0,12480		2,70	5	06			02	1
		6								
5	123,5	6,73051	0	515.15	38,128	0,5947	-62,4402	0	0,4839	1,3591
	96	E-13		9,28	3	13			92	2
5	123,5	6,73051	0	517.76	37,931	0,5907	-63,0097	0	0,4884	1,3612
	96	E-13		9,25	2	9			93	

5	126,5 32	1,43616	0	485.91 2,21	43,890 9	0,6911 74	-53,2505	0	0,4901 27	1,3194 1
5	130,3 66	3,32388	0	444.06 9,16	51,307 3	0,8271 08	-41,5699	0	0,4947 97	1,2763
5	134,9 67	5,61374	0	391.58 1,53	59,373 1	1,0144 5	-28,2754	0	0,5006 15	1,2349 1
5	140,4 87	8,39764	0	318.24 5,70	67,077 7	1,3188 1	-12,0983	0	0,5082 7	1,1943 8
5	141,4 15	8,86979	0	302.87 8,43	68,030 3	1,3880 2	-9,0768	0	0,5100 13	1,1879 7
5	141,4 15	8,86979	0	302.87 8,43	68,030 3	1,3880 2	-9,0768	0	0,5100 13	1,1879 7
5	147,1 12	11,8436	0	216.43 6,74	69,915	1,8405 9	4,38324	0	0,5512 79	1,1678 4
5	155,0 62	16,6061	0	151.71 6,58	70,406 3	2,3178 9	11,5854	0	0,6345 51	1,1645 1
5	164,6 01	22,8178	0	133.89 3,75	70,729	2,5093 9	13,7925	0	0,6657 27	1,1622 3
5	176,0 49	30,6369	0	116.92 2,08	71,127 8	2,7311 9	15,6302	0	0,7003 33	1,1611 9
5	189,7 86	40,5451	0	99.809, 02	71,626 4	3,0103 2	17,2026	0	0,7422 66	1,1613 8
5	206,2 7	53,1998	0	83.063, 24	72,254 2	3,3647 8	18,5116	0	0,7933 39	1,1625 9
5	226,0 52	69,5124	0	67.192, 17	73,051 4	3,8271 6	20,4889	0	0,8566 12	1,1613 8
5	249,7 89	90,7739	0	52.648, 64	74,074 1	4,4299 2	22,3166	0	0,9345 26	1,1605 5
5	278,2 75	118,561	0	42.053, 63	75,388 5	5,0458 8	23,395	0	1,0099 3	1,1609 5
5	312,4 57	154,371	0	33.963, 75	77,052 5	5,6862	24,0486	0	1,0844 5	1,1619 2
5	353,4 75	200,587	0	27.024, 53	79,160 7	6,4415	24,4554	0	1,1680 7	1,1633 6
5	394,7 8	250,485	0	21.938, 05	81,396 4	7,1914 8	24,6704	0	1,2472 2	1,1647 2
5	402,6 98	260,437	0	21.227, 75	81,837 9	7,3348 1	24,6987	0	1,2619 3	1,1649 6



5	461,7 65	338,175	0	16.356, 00	85,244 7	8,3923 4	24,8389	0	1,3672 2	1,1665 4
5	532,6 45	439,294	0	12.426, 43	89,583 3	9,6414 3	24,9169	0	1,4847 6	1,1679 7
5	617,7 01	571,21	0	9.282,4 7	95,117 7	11,116 2	24,9586	0	1,6157 1	1,1692
5	688,4 08	689,077	0	7.494,7 7	99,965 9	12,322 7	24,9753	0	1,7175 8	1,1699 4
6	135,8 15	- 8,76608	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
6	135,9 15	- 8,72032	0	432.52 8,43	1,3830 9	0,0095 7626	-73,6887	0	0,4474 07	1,4915 9
6	136,0 15	- 8,67558	0	458.84 8,48	1,9590 4	0,0172 306	-79,0168	0	0,4475 87	1,5150 3
6	136,1 15	-8,6308	0	465.17 8,49	2,4105 9	0,0250 607	-80,077	0	0,4479 8	1,5191 1
6	136,2 15	- 8,58598	0	467.22 1,39	2,7995 8	0,0328 902	-80,3727	0	0,4483 85	1,5200 7
6	136,3 15	- 8,54112	0	467.75 2,10	3,1486 5	0,0406 925	-80,4272	0	0,4487 92	1,5201 4
6	136,4 15	- 8,49622	0	467.60 6,51	3,4701 5	0,0484 483	-80,3831	0	0,4491 94	1,5198 9
6	136,5 15	- 8,45129	0	467.60 9,89	3,7716 3	0,0560 517	-80,4295	0	0,4495 16	1,5202 6
6	136,6 15	- 8,40633	0	468.83 7,96	4,0572 3	0,0632 795	-80,8389	0	0,4496 28	1,5226 9
6	136,7 15	- 8,36137	0	471.06 3,23	4,3300 9	0,0700 971	-81,531	0	0,4496 01	1,5267 2
6	136,8 15	- 8,31641	0	473.87 9,61	4,5925 4	0,0765 417	-82,3816	0	0,4495 22	1,5316 6
6	136,9 15	- 8,27145	0	476.97 6,36	4,8462 4	0,0826 669	-83,2996	0	0,4494 45	1,5370 1
6	137,0 15	- 8,22651	0	480.18 2,58	5,0924 2	0,0885 166	-84,2377	0	0,4493 86	1,5425
6	137,1 15	- 8,18158	0	483.40 9,62	5,3319 5	0,0941 272	-85,173	0	0,4493 46	1,5480 1
6	137,2	-	0	486.60	5,5656	0,0995	-86,0918	0	0,4493	1,5534



	15	8,13664		2,87	9	242			27	6
6	137,3	-	0	489.72	5,7944	0,1047	-86,9851	0	0,4493	1,5588
	15	8,09171		6,56		28			31	1
6	137,4	-	0	492.76	6,0188	0,1097	-87,8484	0	0,4493	1,5640
	15	8,04678		1,45		52			57	1
6	137,5	-	0	495.69	6,2392	0,1146	-88,681	0	0,4494	1,5690
	15	8,00184		9,72	5	16			03	7
6	137,6	-7,9569	0	498.53	6,4562	0,1193	-89,4818	0	0,4494	1,5739
	15			4,74	6	3			66	8
6	137,7	-	0	501.26	6,6700	0,1239	-90,2512	0	0,4495	1,5787
	15	7,91195		4,84	4	08			46	3
6	137,8	-	0	503.89	6,8808	0,1283	-90,99	0	0,4496	1,5833
	15	7,86699		1,00	7	62			41	3
6	137,9	-	0	506.90	7,1301	0,1335	-91,8381	0	0,4497	1,5886
	35	7,81302		9,20	2	59			71	5
6	138,0	-	0	510.34	7,4244	0,1395	-92,8026	0	0,4499	1,5947
	79	7,74825		3,69	5	99			5	7
6	138,2	-	0	514.20	7,7714	0,1466	-93,8502	0	0,4501	1,6014
	52	7,67048		4,42	7	22			93	
6	138,4	-	0	518.48	8,1803	0,1547	-94,928	0	0,4505	1,6080
	59	7,57709		0,00	6	93			2	9
6	138,7	-	0	523.13	8,6613	0,1643	-95,9883	0	0,4509	1,6144
	08	7,46494		7,87	4	01			54	1
6	139,0	-7,3302	0	528.11	9,2265	0,1753	-96,958	0	0,4515	1,6197
	07			0,06	1	8			21	4
6	139,3	-	0	533.28	9,8897	0,1883	-97,7695	0	0,4522	1,6234
	65	7,16829		7,43	4	1			52	8
6	139,7	-	0	538.51	10,667	0,2034	-98,3504	0	0,4531	1,6250
	95	6,97364		1,62	3	17			81	4
6	140,3	-	0	543.58	11,583	0,2209	-98,6269	0	0,4543	1,6238
	11	6,73951		8,05	4	98			42	4
6	140,9	-	0	548.18	12,702	0,2408	-98,4751	0	0,4558	1,6189
	3	6,45774		7,50	6	08			24	3
6	141,6	-	0	551.91	14,091	0,2628	-97,7288	0	0,4577	1,6091
	73	6,11835		0,90	3	6			56	3
6	142,5	-	0	554.89	15,816	0,2870	-96,3575	0	0,4601	1,5941
	65	5,70914		8,62	3	18			86	9
6	143,6	-	0	556.49	17,948	0,3140	-94,1406	0	0,4632	1,5729



	35	5,21515		7,10	3	54			1	2
6	144,9 19	-4,6181	0	555.51 3,57	20,563 9	0,3456 15	-90,793	0	0,4668 61	1,5442 6
6	146,4 59	- 3,89557	0	550.59 2,63	23,754 4	0,3838 5	-86,1036	0	0,4710 45	1,5083 9
6	148,3 08	- 3,02051	0	540.40 5,12	27,623 8	0,4313 82	-79,9703	0	0,4756 22	1,4667 5
6	150,5 27	- 1,95996	0	523.99 6,70	32,289 9	0,4914 3	-72,4063	0	0,4804 49	1,4215 7
6	153,1 89	- 0,67416 9	0	500.12 6,88	37,861 5	0,5690 61	-63,3941	0	0,4854 12	1,3748 8
6	154,5 75	8,43538 E-13	0	486.55 6,86	40,728 7	0,6120 87	-58,8221	0	0,4876 98	1,3536 5
6	154,5 75	8,43538 E-13	0	489.09 5,44	40,523 9	0,6084 57	-59,3668	0	0,4917 71	1,3555 6
6	156,3 84	0,88989 6	0	470.74 2,45	44,222 7	0,6697	-53,5628	0	0,4921 82	1,3304 9
6	160,2 18	2,78301	0	432.44 0,88	51,809 6	0,8007 26	-42,3554	0	0,4956 61	1,2874
6	164,8 18	5,0747	0	385.04 8,66	60,222 1	0,9764 95	-29,8249	0	0,5006 21	1,2464 5
6	170,3 39	7,8551	0	323.05 2,48	68,795 4	1,2412 1	-15,377	0	0,5067 46	1,2075 4
6	173,3 93	9,40904	0	281.91 1,96	72,436 2	1,4384 8	-7,04883	0	0,5110 74	1,1890 5
6	173,3 93	9,40904	0	281.91 1,96	72,436 2	1,4384 8	-7,04883	0	0,5110 74	1,1890 5
6	176,9 63	11,2476	0	233.36 4,03	74,659 2	1,6977	1,11415	0	0,5240 83	1,1749 3
6	184,9 13	15,7836	0	157.52 4,41	75,327 5	2,1949 4	10,5246	0	0,6140 99	1,1668 8
6	194,4 53	21,8889	0	132.41 3,37	75,670 5	2,4525 1	13,4797	0	0,6566 76	1,1644 4
6	205,9	29,6042	0	115.46 2,30	76,064 7	2,6718 8	15,4159	0	0,6912 68	1,1628 8
6	219,6 37	39,3865	0	98.427, 25	76,557 7	2,9478 3	17,0599	0	0,7330 36	1,1626 6



6	236,1 22	51,888	0	81.790, 65	77,178 8	3,2985 5	18,4207	0	0,7838 58	1,1635 5
6	255,9 03	68,0102	0	66.063, 98	77,967 8	3,7551 3	20,2966	0	0,8466 54	1,1625 6
6	279,6 41	89,0299	0	51.690, 45	78,980 2	4,3511	22,2205	0	0,9243 27	1,1612 6
6	308,1 26	116,569	0	40.999, 75	80,284 4	4,9781 5	23,3549	0	1,0018 2	1,1614 8
6	342,3 08	152,105	0	33.059, 59	81,937 5	5,6166 7	24,0293	0	1,0765 6	1,1623 1
6	383,3 27	198,003	0	26.268, 00	84,033 1	6,3698 7	24,4467	0	1,1604 8	1,1636 4
6	420,1 95	242,103	0	21.776, 54	86,012 8	7,0390 1	24,6484	0	1,2313 9	1,1648 1
6	432,5 49	257,49	0	20.610, 88	86,696 5	7,2621 5	24,6949	0	1,2544 9	1,1651 7
6	491,6 16	334,744	0	15.873, 19	90,085 5	8,3167 7	24,8377	0	1,3598 9	1,1666 9
6	562,4 96	435,356	0	12.058, 51	94,405 8	9,5638 2	24,9163	0	1,4776 4	1,1680 8
6	647,5 52	566,688	0	9.009,9 8	99,919 8	11,036 4	24,9583	0	1,6088 2	1,1692 7
6	707,6 57	666,021	0	7.512,4 0	104,01 4	12,062	24,9731	0	1,6959 2	1,1698 9
7	164,9 68	- 9,27866	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
7	165,0 68	- 9,23243	0	411.52 6,40	1,4221 1	0,0092 882	-70,8234	0	0,4531 83	1,4840 2
7	165,1 68	- 9,18711	0	436.68 5,11	2,0150 3	0,0167 463	-76,0536	0	0,4533 72	1,5068 8
7	165,2 68	- 9,14175	0	442.73 3,98	2,4792 3	0,0243 793	-77,0937	0	0,4537 24	1,5108 8
7	165,3 68	- 9,09636	0	444.69 4,53	2,8785 8	0,0320 177	-77,3868	0	0,4540 83	1,5118 4
7	165,4 68	- 9,05094	0	445.21 7,25	3,2365 2	0,0396 347	-77,4457	0	0,4544 41	1,5119 5
7	165,5	-	0	445.09	3,5661	0,0472	-77,4089	0	0,4547	1,5117



	68	9,00548		5,10	3	068			96	4
7	165,6 68	- 8,95998	0	444.73 5,84	3,8747 9	0,0547 097	-77,3539	0	0,4551 33	1,5115 6
7	165,7 68	- 8,91446	0	445.33 9,17	4,1668 9	0,0619 141	-77,6011	0	0,4553 03	1,5130 8
7	165,8 68	- 8,86893	0	447.05 9,91	4,4457 4	0,0687 141	-78,1782	0	0,4553 11	1,5164 4
7	165,9 68	-8,8234	0	449.53 0,18	4,7138 6	0,0751 247	-78,9674	0	0,4552 38	1,5209 9
7	166,0 68	- 8,77787	0	452.37 0,72	4,9729 6	0,0812 065	-79,8525	0	0,4551 54	1,5260 9
7	166,1 68	- 8,73236	0	455.36 7,56	5,2242 8	0,0870 106	-80,7708	0	0,4550 89	1,5314 1
7	166,2 68	- 8,68685	0	458.41 7,07	5,4687 7	0,0925 721	-81,6939	0	0,4550 44	1,5367 7
7	166,3 68	- 8,64135	0	461.46 5,99	5,7072 4	0,0979 176	-82,6089	0	0,4550 16	1,5421 3
7	166,4 68	- 8,59585	0	464.47 7,16	5,9404 5	0,1030 68	-83,5062	0	0,4550 06	1,5474 2
7	166,5 68	- 8,55035	0	467.42 5,77	6,1689 8	0,1080 41	-84,3798	0	0,4550 13	1,5526 1
7	166,6 68	- 8,50485	0	470.29 8,18	6,3933 6	0,1128 53	-85,2269	0	0,4550 38	1,5576 8
7	166,7 68	- 8,45934	0	473.08 6,12	6,6141	0,1175 13	-86,0459	0	0,4550 78	1,5626 2
7	166,8 68	- 8,41383	0	475.78 4,47	6,8315	0,1220 37	-86,8361	0	0,4551 33	1,5674 3
7	166,9 68	- 8,36832	0	478.39 0,74	7,0459 5	0,1264 32	-87,5974	0	0,4552 01	1,5720 9
7	167,0 88	- 8,31369	0	481.39 9,33	7,2994 6	0,1315 56	-88,4745	0	0,4552 99	1,5775 1
7	167,2 32	- 8,24812	0	484.83 9,97	7,5988	0,1375 06	-89,4759	0	0,4554 36	1,5837 6
7	167,4 05	-8,1694	0	488.73 0,43	7,9517 9	0,1443 92	-90,5966	0	0,4556 28	1,5908 2
7	167,6 12	-8,0749	0	493.06 6,80	8,3675 2	0,1523 81	-91,779	0	0,4558 91	1,5981 9
7	167,8	-	0	497.82	8,8568	0,1616	-92,9776	0	0,4562	1,6055



	61	7,96142		2,17		35			48	1
7	168,1	-	0	502.93	9,4315	0,1723	-94,1094	0	0,4567	1,6120
	6	7,82512		7,30	1	93			24	5
7	168,5	-	0	508.31	10,105	0,1849	-95,0966	0	0,4573	1,6171
	18	7,66136		1,12	7	26			46	6
7	168,9	-	0	513.79	10,895	0,1995	-95,8598	0	0,4581	1,6201
	48	7,46454		0,74	7	6			47	7
7	169,4	-	0	519.18	11,821	0,2166	-96,3234	0	0,4591	1,6204
	64	7,22789		6,62	1	69			56	7
7	170,0	-	0	524.22	12,935	0,2361	-96,3835	0	0,4604	1,6172
	83	6,94321		0,45	3	95			32	8
7	170,8	-	0	528.48	14,309	0,2580	-95,8768	0	0,4620	1,6094
	26	6,60049		3,14	9	52			87	1
7	171,7	-	0	531.97	16,022	0,2820	-94,7346	0	0,4641	1,5963
	18	6,18757		8,65		13			98	5
7	172,7	-	0	534.29	18,140	0,3086	-92,7821	0	0,4668	1,5770
	88	5,68949		5,19	8	42			45	9
7	174,0	-	0	534.27	20,743	0,3395	-89,7259	0	0,4700	1,5504
	72	5,08802		0,20	6	11			7	
7	175,6	-4,3609	0	530.67	23,925	0,3765	-85,3547	0	0,4738	1,5162
	12			3,28	8	98			16	8
7	177,4	-	0	522.35	27,797	0,4223	-79,5654	0	0,4779	1,4759
	61	3,48104		0,85	9	2			66	8
7	179,6	-	0	508.13	32,480	0,4799	-72,3194	0	0,4823	1,4314
	8	2,41565		6,82	3	44			87	1
7	182,3	-	0	486.72	38,085	0,5543	-63,5984	0	0,4869	1,3847
	42	1,12508		8,10	9	87			52	2
7	184,6	1,01415	0	465.63	42,869	0,6242	-56,2391	0	0,4903	1,3501
	44	E-12		7,21	5	16			56	9
7	184,6	1,01415	0	468.11	42,658	0,6207	-56,7644	0	0,4941	1,3519
	44	E-12		5,19	1	96			36	8
7	185,5	0,44106	0	459.41	44,493	0,6508	-53,9487	0	0,4940	1,3397
	37			8,39	2	59			98	2
7	189,3	2,33932	0	423.03	52,191	0,7793	-42,9149	0	0,4965	1,296
	71			2,32	5	44			6	
7	193,9	4,63362	0	379.21	60,850	0,9468	-30,9182	0	0,5008	1,2553
	71			9,85	7	14			74	6
7	199,4	7,41318	0	324.09	69,997	1,1876	-17,5221	0	0,5061	1,2173



	92			8,16	4	8			25	8
7	204,3 01	9,85939	0	267.92 4,17	76,252 9	1,4691 9	-5,86943	0	0,5117 22	1,1905 3
7	204,3 01	9,85939	0	267.92 4,17	76,252 9	1,4691 9	-5,86943	0	0,5117 22	1,1905 3
7	206,1 17	10,7915	0	242.55 3,86	77,814 6	1,6108 4	-1,30342	0	0,5144 46	1,1817 8
7	214,0 66	15,1608	0	167.11 7,30	79,663 8	2,0615 3	9,11339	0	0,5913 39	1,1691 4
7	223,6 06	21,1333	0	132.24 9,15	80,045 6	2,3964 2	13,1374	0	0,6476 11	1,1662 2
7	235,0 53	28,745	0	115.11 7,86	80,439 3	2,6137	15,1851	0	0,6822 49	1,1641 9
7	248,7 9	38,4026	0	97.981, 41	80,926 7	2,8863 6	16,9073	0	0,7238 86	1,1636
7	265,2 75	50,7518	0	81.280, 87	81,540 9	3,2330 1	18,3239	0	0,7745 36	1,1642 3
7	285,0 56	66,6861	0	65.537, 08	82,321 7	3,6826 1	20,1094	0	0,8371 77	1,1634 7
7	308,7 94	87,474	0	51.194, 01	83,324	4,2719 8	22,1284	0	0,9147 13	1,1617 8
7	337,2 79	114,737	0	40.467, 55	84,616 5	4,8998 1	23,3129	0	0,9923 91	1,1618 1
7	371,4 61	149,955	0	32.567, 29	86,256 5	5,5364 9	24,0104	0	1,0673 4	1,1625 3
7	412,4 8	195,478	0	25.831, 15	88,337 1	6,2874 1	24,4389	0	1,1513 5	1,1638
7	447,0 38	236,431	0	21.683, 40	90,178 1	6,9122 1	24,6349	0	1,2181 6	1,1648 6
7	461,7 02	254,538	0	20.239, 82	90,983 6	7,1765 8	24,6919	0	1,2456 7	1,1652 9
7	520,7 69	331,281	0	15.581, 47	94,353 1	8,2282 4	24,8367	0	1,3512 6	1,1667 7
7	591,6 49	431,288	0	11.830, 83	98,650 9	9,4723 8	24,9161	0	1,4692 3	1,1681 3
7	676,7 05	561,916	0	8.834,8 7	104,14	10,942 1	24,9583	0	1,6006 4	1,1693 1
7	730,6	650,419	0	7.505,1	107,79	11,861	24,972	0	1,6791	1,1698

	64			5	3	8			7	7
8	193,6 57	- 9,71535	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
8	193,7 57	- 9,66874	0	393.82 9,43	1,4575 4	0,0090 6148	-68,4167	0	0,4577 83	1,4778 8
8	193,8 57	- 9,62295	0	418.04 5,08	2,0639 8	0,0163 839	-73,5656	0	0,4579 43	1,5002 8
8	193,9 57	- 9,57715	0	423.90 4,10	2,5399 1	0,0238 584	-74,598	0	0,4582 47	1,5042 5
8	194,0 57	-9,5313	0	425.78 4,65	2,9488 9	0,0313 435	-74,8884	0	0,4585 83	1,5052 2
8	194,1 57	- 9,48543	0	426.26 9,84	3,3163 2	0,0387 964	-74,9474	0	0,4589 17	1,5053 5
8	194,2 57	- 9,43952	0	426.13 1,91	3,6538 5	0,0462 181	-74,9119	0	0,4592 49	1,5051 7
8	194,3 57	- 9,39358	0	425.71 3,38	3,9687 5	0,0535 989	-74,8421	0	0,4595 68	1,5049 1
8	194,4 57	- 9,34761	0	425.97 8,53	4,2666 8	0,0607 457	-75,0015	0	0,4597 56	1,5059 6
8	194,5 57	- 9,30164	0	427.38 7,71	4,5513 4	0,0674 865	-75,5064	0	0,4597 9	1,5089
8	194,6 57	- 9,25566	0	429.50 3,80	4,8249 4	0,0738 607	-76,2162	0	0,4597 55	1,5129 7
8	194,7 57	- 9,20969	0	432.02 1,72	5,0888 9	0,0799 232	-77,0365	0	0,4596 95	1,5176 7
8	194,8 57	- 9,16372	0	434.76 2,22	5,3446 3	0,0857 091	-77,9129	0	0,4596 34	1,5227
8	194,9 57	- 9,11776	0	437.61 4,37	5,5932	0,0912 523	-78,8131	0	0,4595 81	1,5278 9
8	195,0 57	- 9,07181	0	440.50 7,19	5,8356 2	0,0965 759	-79,7169	0	0,4595 41	1,5331 3
8	195,1 57	- 9,02585	0	443.39 3,86	6,0726 3	0,1017 01	-80,6113	0	0,4595 17	1,5383 5
8	195,2 57	-8,9799	0	446.24 4,88	6,3050 7	0,1066 39	-81,4882	0	0,4595 1	1,5435 1
8	195,3 57	- 8,93395	0	449.03 8,35	6,5333 5	0,1114 1	-82,3427	0	0,4595 2	1,5485 7

8	195,4 57	-8,888	0	451.76 1,82	6,7581 6	0,1160 19	-83,1716	0	0,4595 46	1,5535 1
8	195,5 57	- 8,84204	0	454.40 6,96	6,9793 4	0,1204 95	-83,9741	0	0,4595 86	1,5583 3
8	195,6 57	- 8,79608	0	456.96 8,78	7,1973 3	0,1248 44	-84,7491	0	0,4596 4	1,5630 3
8	195,7 77	- 8,74092	0	459.93 2,90	7,4550 5	0,1299 1	-85,6436	0	0,4597 18	1,5684 9
8	195,9 21	- 8,67472	0	463.33 1,16	7,7593 2	0,1357 85	-86,667	0	0,4598 33	1,5748 1
8	196,0 94	- 8,59524	0	467.18 6,14	8,1182 1	0,1425 68	-87,8261	0	0,4599 95	1,5820 4
8	196,3 01	- 8,49983	0	471.50 6,29	8,5407 7	0,1503 81	-89,1065	0	0,4602 2	1,5901
8	196,5 5	- 8,38528	0	476.27 4,32	9,0372 7	0,1594 45	-90,4048	0	0,4605 26	1,5981 2
8	196,8 49	-8,2477	0	481.43 4,46	9,6197 7	0,1699 88	-91,6417	0	0,4609 37	1,6054 2
8	197,2 07	- 8,08244	0	486.86 3,00	10,303	0,1822 6	-92,7338	0	0,4614 83	1,6113 1
8	197,6 37	- 7,88385	0	492.44 5,17	11,102 9	0,1965 73	-93,6195	0	0,4621 89	1,6152 9
8	198,1 53	- 7,64514	0	498.01 3,33	12,038 7	0,2132 96	-94,2241	0	0,4630 79	1,6167 3
8	198,7 72	- 7,35806	0	503.34 5,30	13,148 1	0,2326 34	-94,4583	0	0,4641 96	1,6149 5
8	199,5 15	- 7,01263	0	508.01 4,11	14,520 6	0,2542 01	-94,1504	0	0,4656 45	1,6086 9
8	200,4 07	- 6,59663	0	511.81 9,21	16,231 8	0,2779 56	-93,1703	0	0,4675 31	1,597
8	201,4 77	- 6,09516	0	514.68 4,50	18,344 6	0,3042 86	-91,4339	0	0,4698 94	1,5794 2
8	202,7 61	- 5,48999	0	515.61 7,96	20,940 5	0,3345 23	-88,6659	0	0,4727 81	1,5546 9
8	204,3 01	- 4,75893	0	513.31 8,32	24,119 9	0,3705 94	-84,6018	0	0,4761 75	1,5223
8	206,1 5	- 3,87499	0	506.48 2,02	27,992 7	0,4150 23	-79,0872	0	0,4799 74	1,4831 1



8	208,3 69	- 2,80548	0	493.85 6,44	32,679 3	0,4710 82	-72,0775	0	0,4840 42	1,4390 8
8	211,0 31	- 1,51099	0	474.24 3,21	38,301 7	0,5433 56	-63,5915	0	0,4882 63	1,3925 8
8	214,1 12	5,36208 E-15	0	447.54 1,87	44,730 1	0,6352 51	-54,0117	0	0,4924 18	1,3473 2
8	214,1 12	5,36208 E-15	0	449.96 9,48	44,512 7	0,6319 94	-54,5214	0	0,4959 67	1,3490 1
8	214,2 26	0,05640 77	0	448.92 7,22	44,747 8	0,6357 74	-54,1744	0	0,4959 26	1,3474 9
8	218,0 6	1,95949	0	414.15 4,38	52,530 9	0,7627 13	-43,2665	0	0,4974 02	1,3031 5
8	222,6 6	4,2564	0	372.95 5,64	61,367 7	0,9246	-31,6271	0	0,5011 97	1,2625 5
8	228,1 81	7,03738	0	320.19 7,85	70,876 9	1,1492	-18,476	0	0,5066 44	1,2241
8	234,2 62	10,1391	0	250.76 1,79	79,084 6	1,4855	-4,1649	0	0,5134 51	1,1910 9
8	234,2 62	10,1391	0	250.76 1,79	79,084 6	1,4855	-4,1649	0	0,5134 51	1,1910 9
8	234,3 12	10,165	0	250.08 8,82	79,119 1	1,4890 2	-4,03551	0	0,5135 25	1,1908 2
8	234,3 12	10,165	0	250.08 8,82	79,119 1	1,4890 2	-4,03551	0	0,5135 25	1,1908 2
8	234,8 05	10,4185	0	243.57 9,69	79,619 2	1,5246 8	-2,81483	0	0,5141 92	1,1883 3
8	242,7 55	14,7008	0	169.86 5,19	83,069 3	1,9572	8,29029	0	0,5736 98	1,1718 2
8	252,2 95	20,535	0	128.95 2,56	83,487 4	2,3363 4	13,0544	0	0,6379 55	1,1681
8	263,7 42	28,033	0	111.81 3,86	83,871 4	2,5488 5	15,1425	0	0,6721 26	1,1656 7
8	277,4 79	37,5502	0	94.606, 61	84,352 2	2,8177	16,8988	0	0,7135 79	1,1647 8
8	293,9 64	49,7277	0	77.973, 53	84,958 6	3,1596 3	18,3356	0	0,7640 1	1,1651 6
8	313,7 45	65,451	0	62.440, 26	85,729 8	3,6033 2	20,1129	0	0,8263 35	1,1642 7

8	337,4 83	85,9779	0	48.427, 91	86,720 7	4,1876 7	22,1544	0	0,9030 89	1,1623 3
8	365,9 68	112,949	0	37.777, 18	88,000 7	4,8250 3	23,3501	0	0,9833 49	1,1623 2
8	400,1 5	147,858	0	30.176, 34	89,627 9	5,4585 3	24,0381	0	1,0583 6	1,1629 6
8	441,1 69	193,016	0	23.717, 88	91,693 8	6,2066 7	24,4578	0	1,1425 2	1,1641 6
8	467,5 6	223,851	0	20.718, 15	93,083 6	6,6827 6	24,612	0	1,1939 2	1,1649 5
8	490,3 91	251,637	0	18.467, 10	94,323 1	7,0926 6	24,704	0	1,2369 9	1,1655 9
8	549,4 58	327,86	0	14.101, 79	97,672 8	8,1411 9	24,8439	0	1,3427 4	1,1670 2
8	620,3 38	427,273	0	10.627, 11	101,94 9	9,3823 1	24,9201	0	1,4609 2	1,1683 3
8	705,3 94	557,202	0	8.000,0 1	107,41 2	10,849 2	24,9605	0	1,5925 6	1,1694 6
8	741,5 91	615,815	0	7.162,7 1	109,83 8	11,466 1	24,9698	0	1,6457 1	1,1698 3
9	204,4 53	- 9,86145	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
9	204,5 53	- 9,81472	0	388.01 9,83	1,4716 5	0,0089 7761	-67,6443	0	0,4592 36	1,4760 3
9	204,6 53	- 9,76879	0	411.84 5,07	2,0849 4	0,0162 413	-72,7526	0	0,4594 17	1,4982 3
9	204,7 53	- 9,72283	0	417.55 5,68	2,5650 9	0,0236 609	-73,767	0	0,4597 29	1,5021 4
9	204,8 53	- 9,67684	0	419.41 6,23	2,9767 3	0,0311 029	-74,0559	0	0,4600 42	1,5031
9	204,9 53	- 9,63082	0	419.94 2,69	3,3449 7	0,0385 406	-74,1209	0	0,4603 45	1,5032 4
9	205,0 53	- 9,58477	0	419.86 5,75	3,6844 5	0,0459 285	-74,0947	0	0,4606 45	1,5031
9	205,1 53	- 9,53869	0	419.49 2,91	4,0031	0,0532 468	-74,0326	0	0,4609 46	1,5028 7
9	205,2	-	0	419.53	4,3033	0,0604	-74,1247	0	0,4611	1,5035

	53	9,49259	0	6,77	9	048			64	4
9	205,3	-	0	420.77	4,5893	0,0671	-74,5845	0	0,4612	1,5062
	53	9,44647		0,60	3	772			02	4
9	205,4	-	0	422.82	4,8642	0,0735	-75,2868	0	0,4611	1,5102
	53	9,40034		6,12	7	604			51	6
9	205,5	-	0	425.31	5,1301	0,0796	-76,1087	0	0,4610	1,5149
	53	9,35423		7,35	7	086			85	5
9	205,6	-	0	428.01	5,3878	0,0853	-76,9817	0	0,4610	1,5199
	53	9,30813		6,49	4	812			28	5
9	205,7	-	0	430.82	5,6381	0,0909	-77,8787	0	0,4609	1,5251
	53	9,26203		7,62	4	101			77	
9	205,8	-	0	433.68	5,8823	0,0962	-78,7795	0	0,4609	1,5303
	53	9,21593		0,84	1	138			39	
9	205,9	-	0	436.52	6,1211	0,1013	-79,6707	0	0,4609	1,5354
	53	9,16984		6,68	9	13			18	8
9	206,0	-	0	439.33	6,3553	0,1062	-80,5447	0	0,4609	1,5406
	53	9,12375		6,07		29			12	
9	206,1	-	0	442.09	6,5849	0,1109	-81,3984	0	0,4609	1,5456
	53	9,07765		4,85	4	84			2	4
9	206,2	-	0	444.78	6,8106	0,1155	-82,2284	0	0,4609	1,5505
	53	9,03156		9,31	2	91			42	7
9	206,3	-	0	447.40	7,0328	0,1200	-83,0325	0	0,4609	1,5553
	53	8,98546		8,95	2	57			78	9
9	206,4	-	0	449.95	7,2516	0,1244	-83,8117	0	0,4610	1,5600
	53	8,93936		5,49	6				25	9
9	206,5	-	0	452.90	7,5104	0,1294	-84,7129	0	0,4610	1,5655
	73	8,88404		8,78	1	56			96	7
9	206,7	-	0	456.30	7,8159	0,1353	-85,7469	0	0,4611	1,5719
	17	8,81763		6,01		2			99	3
9	206,8	-	0	460.17	8,1761	0,1420	-86,9209	0	0,4613	1,5792
	9	8,73792		1,13	7	88			47	2
9	207,0	-	0	464.51	8,6005	0,1498	-88,2144	0	0,4615	1,5873
	97	8,64224		2,12	2	83			56	2
9	207,3	-	0	469.31	9,0996	0,1588	-89,5686	0	0,4618	1,5957
	46	8,52735		0,07	1	73			44	4
9	207,6	-	0	474.51	9,6858	0,1692	-90,878	0	0,4622	1,6036
	45	8,38939		1,85	4	92			36	
9	208,0	-	0	480.02	10,373	0,1814	-92,0295	0	0,4627	1,6099



	03	8,22367		3,62		41			57	3
9	208,4	-	0	485.68	11,176	0,1956	-92,9634	0	0,4634	1,6142
	33	8,02455		3,53	7	33			35	6
9	208,9	-7,7852	0	491.33	12,116	0,2122	-93,6199	0	0,4642	1,6161
	49			1,95	6	14			94	1
9	209,5	-	0	496.69	13,232	0,2313	-93,8851	0	0,4653	1,6145
	68	7,49738		8,45	8	6			81	9
9	210,3	-	0	501.37	14,606	0,2528	-93,5958	0	0,4667	1,6085
	11	7,15107		8,74	6	51			97	1
9	211,2	-	0	505.27	16,307	0,2766	-92,6633	0	0,4686	1,5972
	03	6,73405		5,54	3	81			09	3
9	212,2	-	0	508.31	18,411	0,3029	-91,0082	0	0,4708	1,5802
	73	6,23146		3,81	8	79			63	9
9	213,5	-	0	509.53	21,005	0,3329	-88,349	0	0,4736	1,5563
	56	5,62513		4,84	9	66			36	3
9	215,0	-	0	507.60	24,184	0,3686	-84,3896	0	0,4769	1,5245
	97	4,89287		3,98	5	73			23	6
9	216,9	-	0	501.20	28,057	0,4126	-78,9642	0	0,4806	1,4857
	46	4,00765		9,47	3	47			2	5
9	219,1	-2,9369	0	489.02	32,745	0,4681	-72,0303	0	0,4845	1,4419
	65			2,55	6	59			84	2
9	221,8	-	0	469.95	38,375	0,5396	-63,6227	0	0,4887	1,3955
	27	1,64121		4,16	1	36			02	1
9	225,0	-	0	442.79	45,056	0,6336	-53,7526	0	0,4929	1,3485
	22	0,07293		5,29		2			92	9
		3								
9	225,1	1,37064	0	441.43	45,361	0,6381	-53,3016	0	0,4931	1,3466
	7	E-12		8,52	8	61			91	2
9	225,1	1,37064	0	443.85	45,142	0,6349	-53,8064	0	0,4966	1,3482
	7	E-12		1,85		58			7	9
9	228,8	1,83548	0	404.95	52,599	0,7522	-42,1525	0	0,5000	1,3021
	56			1,08	9	43			24	3
9	233,4	4,14876	0	352.81	61,238	0,9124	-28,4713	0	0,5054	1,2570
	56			6,00	4	13			38	8
9	238,9	6,95313	0	291.27	70,311	1,1477	-14,3639	0	0,5102	1,2191
	77			0,33	6				72	3
9	245,1	10,1391	0	223.70	78,457	1,4992	-1,39845	0	0,5149	1,1914
	92			0,79	3	3			67	7

9	245,1 92	10,1391	0	223.70 0,79	78,457 3	1,4992 3	-1,39845	0	0,5149 67	1,1914 7
9	245,3 41	10,2159	0	221.94 9,27	78,559 5	1,5094 3	-1,07735	0	0,5151 27	1,1908 2
9	245,3 41	10,2159	0	221.94 9,27	78,559 5	1,5094 3	-1,07735	0	0,5151 27	1,1908 2
9	245,6 01	10,3499	0	218.92 0,79	78,832 3	1,5275 6	-0,53281	0	0,5153 9	1,1897 5
9	253,5 51	14,6288	0	153.91 2,75	83,403	1,9325 8	9,32113	0	0,5692 12	1,1746 8
9	263,0 91	20,352	0	119.84 2,30	83,970 3	2,2535 6	13,408	0	0,6245 87	1,1704 1
9	274,5 38	27,6961	0	102.60 1,72	84,345	2,4621 3	15,453	0	0,6587 17	1,1677 5
9	288,2 75	37,0246	0	85.625, 51	84,816 7	2,7259 8	17,1606	0	0,6997 47	1,1666 3
9	304,7 6	48,9703	0	69.514, 06	85,411 9	3,0613 3	18,5509	0	0,7498 3	1,1667 6
9	324,5 41	64,4103	0	54.773, 61	86,169 9	3,4984 7	20,4639	0	0,8118 49	1,165
9	348,2 79	84,5889	0	41.778, 20	87,144 9	4,0703 6	22,3884	0	0,8885 38	1,1631 3
9	376,7 64	111,145	0	32.016, 50	88,406 4	4,7050 5	23,5053	0	0,9686 71	1,1631 3
9	410,9 46	145,544	0	25.109, 68	90,011 7	5,3294 7	24,1378	0	1,0433 5	1,1637 4
9	451,9 65	190,087	0	19.378, 22	92,051 7	6,0705 7	24,5193	0	1,1275 7	1,1648 8
9	460,2 49	199,495	0	18.453, 83	92,477 9	6,2194 5	24,5692	0	1,1438 7	1,1651 2
9	501,1 87	247,968	0	14.802, 61	94,650 8	6,9497 6	24,7405	0	1,2220 9	1,1662 2
9	560,2 54	323,315	0	11.040, 20	97,965 8	7,9912 4	24,8645	0	1,3279 7	1,1675 5
9	631,1 34	421,687	0	8.152,2 0	102,20 2	9,2254 1	24,9314	0	1,4463 5	1,1687 6
9	715,1 92	548,815	0	5.937,7 8	107,55 4	10,668 4	24,966	0	1,5767 5	1,1697 9

10	204,4	-	0	1,00	0,0017	0,9259	24,6396	0	0,5195	1,1739
	54	9,86145			7245	14			59	6
10	204,5	-	0	386.92	1,4716	0,0089	-67,6443	0	0,4592	1,4760
	54	9,81472		3,73	5	7761			36	3
10	204,6	-	0	410.68	2,0849	0,0162	-72,7526	0	0,4594	1,4982
	54	9,76879		1,66	4	413			17	3
10	204,7	-	0	416.37	2,5650	0,0236	-73,767	0	0,4597	1,5021
	54	9,72283		6,14	9	609			29	4
10	204,8	-	0	418.23	2,9767	0,0311	-74,0559	0	0,4600	1,5031
	54	9,67684		1,44	3	029			42	
10	204,9	-	0	418.75	3,3449	0,0385	-74,1209	0	0,4603	1,5032
	54	9,63082		6,41	7	406			45	4
10	205,0	-	0	418.67	3,6844	0,0459	-74,0947	0	0,4606	1,5031
	54	9,58477		9,69	5	285			45	
10	205,1	-	0	418.30	4,0031	0,0532	-74,0326	0	0,4609	1,5028
	54	9,53869		7,90		468			46	7
10	205,2	-	0	418.35	4,3033	0,0604	-74,1247	0	0,4611	1,5035
	54	9,49259		1,64	9	048			64	4
10	205,3	-	0	419.58	4,5893	0,0671	-74,5845	0	0,4612	1,5062
	54	9,44647		1,98	3	772			02	4
10	205,4	-	0	421.63	4,8642	0,0735	-75,2868	0	0,4611	1,5102
	54	9,40034		1,70	7	604			51	6
10	205,5	-	0	424.11	5,1301	0,0796	-76,1087	0	0,4610	1,5149
	54	9,35423		5,89	7	086			85	5
10	205,6	-	0	426.80	5,3878	0,0853	-76,9817	0	0,4610	1,5199
	54	9,30813		7,41	4	812			28	5
10	205,7	-	0	429.61	5,6381	0,0909	-77,8787	0	0,4609	1,5251
	54	9,26203		0,59	4	101			77	
10	205,8	-	0	432.45	5,8823	0,0962	-78,7795	0	0,4609	1,5303
	54	9,21593		5,75	1	138			39	
10	205,9	-	0	435.29	6,1211	0,1013	-79,6707	0	0,4609	1,5354
	54	9,16984		3,55	9	13			18	8
10	206,0	-	0	438.09	6,3553	0,1062	-80,5447	0	0,4609	1,5406
	54	9,12375		5,00		29			12	
10	206,1	-	0	440.84	6,5849	0,1109	-81,3984	0	0,4609	1,5456
	54	9,07765		5,99	4	84			2	4
10	206,2	-	0	443.53	6,8106	0,1155	-82,2284	0	0,4609	1,5505

	54	9,03156		2,84	2	91			42	7
10	206,3 54	- 8,98546	0	446.14 5,08	7,0328 2	0,1200 57	-83,0325	0	0,4609 78	1,5553 9
10	206,4 54	- 8,93936	0	448.68 4,43	7,2516 6	0,1244	-83,8117	0	0,4610 25	1,5600 9
10	206,5 74	- 8,88404	0	451.62 9,38	7,5104 1	0,1294 56	-84,7129	0	0,4610 96	1,5655 7
10	206,7 18	- 8,81763	0	455.01 7,00	7,8159	0,1353 2	-85,7469	0	0,4611 99	1,5719 3
10	206,8 91	- 8,73792	0	458.87 1,21	8,1761 7	0,1420 88	-86,9209	0	0,4613 47	1,5792 2
10	207,0 98	- 8,64224	0	463.19 9,93	8,6005 2	0,1498 83	-88,2144	0	0,4615 56	1,5873 2
10	207,3 47	- 8,52735	0	467.98 4,33	9,0996 1	0,1588 73	-89,5686	0	0,4618 44	1,5957 4
10	207,6 46	- 8,38939	0	473.17 1,42	9,6858 4	0,1692 92	-90,878	0	0,4622 36	1,6036
10	208,0 04	- 8,22367	0	478.66 7,62	10,373	0,1814 41	-92,0295	0	0,4627 57	1,6099 3
10	208,4 34	- 8,02455	0	484.31 1,54	11,176 7	0,1956 33	-92,9634	0	0,4634 35	1,6142 6
10	208,9 5	-7,7852	0	489.94 4,01	12,116 6	0,2122 14	-93,6199	0	0,4642 94	1,6161 1
10	209,5 69	- 7,49738	0	495.29 5,35	13,232 8	0,2313 6	-93,8851	0	0,4653 81	1,6145 9
10	210,3 12	- 7,15107	0	499.96 2,42	14,606 6	0,2528 51	-93,5958	0	0,4667 97	1,6085 1
10	211,2 04	- 6,73405	0	503.84 8,21	16,307 3	0,2766 81	-92,6633	0	0,4686 09	1,5972 3
10	212,2 74	- 6,23146	0	506.87 7,89	18,411 8	0,3029 79	-91,0082	0	0,4708 63	1,5802 9
10	213,5 57	- 5,62513	0	508.09 5,48	21,005 9	0,3329 66	-88,349	0	0,4736 36	1,5563 3
10	215,0 98	- 4,89287	0	506.17 0,07	24,184 5	0,3686 73	-84,3896	0	0,4769 23	1,5245 6
10	216,9 47	- 4,00765	0	499.79 3,62	28,057 3	0,4126 47	-78,9642	0	0,4806 2	1,4857 5
10	219,1	-2,9369	0	487.64	32,745	0,4681	-72,0303	0	0,4845	1,4419

	66			1,12	6	59			84	2
10	221,8 28	- 1,64121	0	468.62 6,60	38,375 1	0,5396 36	-63,6227	0	0,4887 02	1,3955 1
10	225,0 23	- 0,07293 3	0	441.54 4,46	45,056	0,6336 2	-53,7526	0	0,4929 92	1,3485 9
10	225,1 71	1,37064 E-12	0	440.19 1,51	45,361 8	0,6381 61	-53,3016	0	0,4931 91	1,3466 2
10	225,1 71	1,37064 E-12	0	442.59 8,03	45,142	0,6349 58	-53,8064	0	0,4966 7	1,3482 9
10	228,8 57	1,83548	0	403.80 7,15	52,599 9	0,7522 43	-42,1525	0	0,5000 24	1,3021 3
10	233,4 57	4,14876	0	351.81 9,34	61,238 4	0,9124 13	-28,4713	0	0,5054 38	1,2570 8
10	238,9 78	6,95313	0	290.44 7,53	70,311 6	1,1477	-14,3639	0	0,5102 72	1,2191 3
10	245,1 93	10,1391	0	223.06 8,87	78,457 3	1,4992 3	-1,39845	0	0,5149 67	1,1914 7
10	245,1 93	10,1391	0	223.06 8,87	78,457 3	1,4992 3	-1,39845	0	0,5149 67	1,1914 7
10	245,3 42	10,2159	0	221.32 1,91	78,559 5	1,5094 3	-1,07735	0	0,5151 27	1,1908 2
10	245,3 42	10,2159	0	221.32 1,91	78,559 5	1,5094 3	-1,07735	0	0,5151 27	1,1908 2
10	245,6 02	10,3499	0	218.30 4,35	78,832 3	1,5275 6	-0,53281	0	0,5153 9	1,1897 5
10	253,5 52	14,6288	0	152.54 9,17	83,403	1,9325 8	9,32113	0	0,5692 12	1,1746 8
10	263,0 92	20,352	0	119.11 4,48	83,970 3	2,2535 6	13,408	0	0,6245 87	1,1704 1
10	274,5 39	27,6961	0	103.01 4,38	84,345	2,4621 3	15,453	0	0,6587 17	1,1677 5
10	288,2 76	37,0246	0	87.023, 64	84,816 7	2,7259 8	17,1606	0	0,6997 47	1,1666 3
10	304,7 61	48,9703	0	71.598, 51	85,411 9	3,0613 3	18,5509	0	0,7498 3	1,1667 6
10	324,5 42	64,4103	0	57.250, 25	86,169 9	3,4984 7	20,4639	0	0,8118 49	1,165

10	348,2 8	84,5889	0	44.331, 03	87,144 9	4,0703 6	22,3884	0	0,8885 38	1,1631 3
10	376,7 65	111,145	0	34.512, 89	88,406 4	4,7050 5	23,5053	0	0,9686 71	1,1631 3
10	410,9 47	145,544	0	27.666, 34	90,011 7	5,3294 7	24,1378	0	1,0433 5	1,1637 4
10	451,9 66	190,087	0	22.034, 76	92,051 7	6,0705 7	24,5193	0	1,1275 7	1,1648 8
10	460,2 5	199,495	0	21.529, 85	92,477 9	6,2194 5	24,5692	0	1,1438 7	1,1651 2
10	501,1 88	247,968	0	17.183, 45	94,650 8	6,9497 6	24,7405	0	1,2220 9	1,1662 2
10	560,2 55	323,315	0	13.226, 37	97,965 8	7,9912 4	24,8645	0	1,3279 7	1,1675 5
10	631,1 35	421,687	0	10.083, 12	102,20 2	9,2254 1	24,9314	0	1,4463 5	1,1687 6
10	715,1 93	548,815	0	7.599,6 0	107,55 4	10,668 4	24,966	0	1,5767 5	1,1697 9
11	216,3 05	- 10,0218	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
11	216,4 05	- 9,97499	0	382.12 3,32	1,4839 3	0,0089 142	-66,8353	0	0,4606 96	1,4739 9
11	216,5 05	- 9,92891	0	405.55 3,44	2,1030 1	0,0161 256	-71,9153	0	0,4608 85	1,4960 9
11	216,6 05	- 9,88281	0	411.18 4,79	2,5868 7	0,0235 086	-72,9243	0	0,4611 83	1,4999 7
11	216,7 05	- 9,83668	0	413.02 5,05	3,0024 9	0,0309 011	-73,2141	0	0,4614 83	1,5009 5
11	216,8 05	- 9,79051	0	413.52 7,50	3,3748	0,0382 747	-73,2783	0	0,4617 84	1,5011
11	216,9 05	- 9,74432	0	413.43 3,40	3,7167 6	0,0456 179	-73,2507	0	0,4620 81	1,5009 5
11	217,0 05	-9,6981	0	413.02 8,92	4,0365 8	0,0529 174	-73,1791	0	0,4623 74	1,5006 8
11	217,1 05	- 9,65185	0	412.99 3,35	4,3392 7	0,0600 489	-73,2473	0	0,4625 92	1,5012 2
11	217,2	-	0	414.01	4,6279	0,0668	-73,6474	0	0,4626	1,5035



	05	9,60559		5,91		231			58	8
11	217,3	-	0	415.86	4,9049	0,0732	-74,297	0	0,4626	1,5073
	05	9,55932		3,65	7	243			27	1
11	217,4	-	0	418.22	5,1724	0,0792	-75,0945	0	0,4625	1,5118
	05	9,51306		6,96	2	863			59	6
11	217,5	-9,4668	0	420.86	5,4316	0,0850	-75,9633	0	0,4624	1,5168
	05			2,77	8	563			91	2
11	217,6	-	0	423.63	5,6838	0,0905	-76,8609	0	0,4624	1,5219
	05	9,42056		0,48	2	723			34	6
11	217,7	-	0	426.45	5,9296	0,0958	-77,7655	0	0,4623	1,5271
	05	9,37432		2,05	2	651			92	7
11	217,8	-	0	429.27	6,1697	0,1009	-78,6639	0	0,4623	1,5323
	05	9,32808		9,17	9	58			63	8
11	217,9	-	0	432.07	6,405	0,1058	-79,5464	0	0,4623	1,5375
	05	9,28184		6,76		71			5	3
11	218,0	-	0	434.82	6,6359	0,1106	-80,4073	0	0,4623	1,5425
	05	9,23561		3,02	6	15			52	9
11	218,1	-	0	437.50	6,8629	0,1152	-81,2448	0	0,4623	1,5475
	05	9,18937		7,54	4	09			69	5
11	218,2	-	0	440.12	7,0865	0,1196	-82,0567	0	0,4624	1,5523
	05	9,14313		1,27	1	6				9
11	218,3	-	0	442.66	7,3068	0,1239	-82,843	0	0,4624	1,5571
	05	9,09689		0,26		83			42	2
11	218,4	-9,0414	0	445.60	7,5673	0,1290	-83,752	0	0,4625	1,5626
	25			4,65	5	13			08	3
11	218,5	-	0	448.99	7,8747	0,1348	-84,7953	0	0,4626	1,5690
	69	8,97479		2,34	4	49			06	1
11	218,7	-	0	452.84	8,2369	0,1415	-85,9806	0	0,4627	1,5763
	42	8,89484		9,09	5	88			45	5
11	218,9	-	0	457.18	8,6631	0,1493	-87,2818	0	0,4629	1,5844
	49	8,79887		3,82	9	62			43	5
11	219,1	-	0	461.98	9,1646	0,1583	-88,6522	0	0,4632	1,5929
	98	8,68364		0,37	5	16			17	5
11	219,4	-	0	467.19	9,7531	0,1686	-89,9989	0	0,4635	1,6010
	96	8,54528		4,33	6	84			89	7
11	219,8	-	0	472.73	10,443	0,1807	-91,2278	0	0,4640	1,6080
	55	8,37908		7,62	4	19			84	2
11	220,2	-8,1794	0	478.47	11,251	0,1947	-92,2466	0	0,4647	1,6130

	85			3,53	6	4			31	2
11	220,801	-7,9394	0	484.210,31	12,1969	0,211128	-92,9704	0	0,465558	1,6154
11	221,42	-7,65082	0	489.721,69	13,3076	0,230232	-93,3212	0	0,466591	1,61456
11	222,163	-7,30364	0	494.646,92	14,671	0,251671	-93,1513	0	0,467912	1,60941
11	223,055	-6,88569	0	498.726,08	16,3722	0,275301	-92,3091	0	0,469642	1,59882
11	224,124	-6,38204	0	502.044,06	18,4768	0,301263	-90,7633	0	0,471821	1,58266
11	225,408	-5,77426	0	502.737,86	21,0645	0,330534	-88,0429	0	0,474924	1,55856
11	226,949	-5,0388	0	496.905,09	24,2261	0,363805	-83,4308	0	0,479975	1,5242
11	228,798	-4,14548	0	481.843,45	28,0486	0,404565	-76,5152	0	0,486201	1,48004
11	231,017	-3,0601	0	457.880,93	32,6325	0,458629	-67,5682	0	0,49193	1,43037
11	233,679	-1,74342	0	425.149,60	38,0785	0,531443	-56,9288	0	0,496949	1,37944
11	236,874	-0,148502	0	386.137,05	44,47	0,625872	-45,4312	0	0,501332	1,33205
11	240,707	1,78112	0	342.409,54	51,844	0,748321	-33,5211	0	0,505219	1,28966
11	245,308	4,11365	0	294.374,29	60,1488	0,911859	-21,4649	0	0,508771	1,25266
11	250,829	6,93198	0	242.564,86	69,1914	1,13711	-9,83278	0	0,512151	1,22222
11	257,069	10,1391	0	188.534,24	77,9952	1,44338	0,627696	0	0,515815	1,1991
11	257,069	10,1391	0	188.534,24	77,9952	1,44338	0,627696	0	0,515815	1,1991
11	257,453	10,3377	0	185.008,84	78,2484	1,46512	1,34107	0	0,51614	1,19746
11	259,376	11,3385	0	167.636,12	79,5652	1,58398	4,48796	0	0,517367	1,19082

11	259,376	11,3385	0	167.636,12	79,5652	1,58398	4,48796	0	0,517367	1,19082
11	265,403	14,5644	0	126.036,61	84,4649	1,87443	10,712	0	0,559169	1,1808
11	274,943	20,1944	0	94.169,02	87,6421	2,20148	14,6581	0	0,615888	1,17613
11	286,39	27,465	0	80.371,14	88,2117	2,42331	16,4867	0	0,652276	1,17343
11	300,127	36,706	0	67.930,40	88,6833	2,68397	17,939	0	0,693199	1,17191
11	316,612	48,5428	0	55.937,83	89,2735	3,01562	19,126	0	0,743064	1,17146
11	336,393	63,8527	0	44.768,18	90,0255	3,45082	21,2512	0	0,80527	1,16774
11	360,131	83,8698	0	34.699,82	90,9932	4,01669	22,8572	0	0,881577	1,16586
11	388,616	110,262	0	26.763,86	92,2476	4,6762	23,793	0	0,965096	1,16572
11	422,798	144,546	0	21.478,02	93,8483	5,30127	24,3064	0	1,0401	1,16608
11	423,931	145,725	0	21.409,68	93,9029	5,32186	24,3183	0	1,0425	1,1661
11	463,817	188,991	0	16.987,90	95,8844	6,0424	24,6139	0	1,12441	1,16691
11	513,039	246,688	0	13.243,83	98,4766	6,91978	24,7923	0	1,21895	1,16788
11	572,106	321,848	0	10.178,93	101,785	7,96033	24,8918	0	1,32492	1,16888
11	629,643	400,89	0	8.154,50	105,196	8,96272	24,9382	0	1,42173	1,16965
12	222,008	-10,099	0	1,00	0,00177245	0,925914	24,6396	0	0,519559	1,17396
12	222,108	-10,0521	0	379.259,24	1,49043	0,00887955	-66,4495	0	0,461396	1,47306
12	222,208	-10,006	0	402.510,08	2,11228	0,0160683	-71,5122	0	0,461585	1,49507
12	222,3	-9,9598	0	408.09	2,5982	0,0234	-72,5178	0	0,4618	1,4989

	08			7,25	5	278			78	4
12	222,4 08	-9,9136	0	409.92 3,81	3,0155 6	0,0307 98	-72,8069	0	0,4621 73	1,4999 2
12	222,5 08	- 9,86736	0	410.42 3,34	3,3894 4	0,0381 486	-72,8715	0	0,4624 68	1,5000 7
12	222,6 08	-9,8211	0	410.33 0,69	3,7327 2	0,0454 703	-72,8447	0	0,4627 6	1,4999 3
12	222,7 08	- 9,77481	0	409.93 0,69	4,0537 4	0,0527 492	-72,774	0	0,4630 49	1,4996 6
12	222,8 08	-9,7285	0	409.79 4,19	4,3575 1	0,0598 838	-72,8122	0	0,4632 76	1,5000 4
12	222,9 08	- 9,68217	0	410.74 6,51	4,6472 1	0,0666 578	-73,1936	0	0,4633 47	1,5023
12	223,0 08	- 9,63583	0	412.53 6,73	4,9252 6	0,0730 589	-73,8302	0	0,4633 2	1,5059 6
12	223,1 08	-9,5895	0	414.85 7,43	5,1936 2	0,0791 193	-74,6203	0	0,4632 52	1,5104 6
12	223,2 08	- 9,54317	0	417.46 0,48	5,4537 4	0,0848 864	-75,485	0	0,4631 83	1,5153 9
12	223,3 08	- 9,49686	0	420.20 2,10	5,7067	0,0903 984	-76,3806	0	0,4631 25	1,5205 1
12	223,4 08	- 9,45055	0	422.99 9,33	5,9533 8	0,0956 85	-77,2834	0	0,4630 82	1,5257 1
12	223,5 08	- 9,40424	0	425.80 1,19	6,1945 2	0,1007 7	-78,1794	0	0,4630 55	1,5308 9
12	223,6 08	- 9,35794	0	428.57 4,52	6,4307 6	0,1056 72	-79,0595	0	0,4630 44	1,5360 2
12	223,7 08	- 9,31164	0	431.30 1,88	6,6625 2	0,1104 1	-79,92	0	0,4630 48	1,5410 7
12	223,8 08	- 9,26533	0	433.97 1,70	6,8902 6	0,1149 97	-80,7585	0	0,4630 63	1,5460 2
12	223,9 08	- 9,21903	0	436.57 4,32	7,1143 8	0,1194 45	-81,5725	0	0,4630 91	1,5508 7
12	224,0 08	- 9,17272	0	439.10 4,26	7,3352 9	0,1237 62	-82,3612	0	0,4631 3	1,5556
12	224,1 28	- 9,11714	0	442.02 3,10	7,5962 9	0,1287 86	-83,2712	0	0,4632 02	1,5611 2
12	224,2	-	0	445.34	7,9040	0,1346	-84,3095	0	0,4633	1,5674

	72	9,05042		3,45	8	02			26	8
12	224,4	-	0	449.05	8,2663	0,1413	-85,4774	0	0,4635	1,5747
	45	8,97034		1,24	1	02			33	5
12	224,6	-8,8742	0	453.13	8,6918	0,1490	-86,7495	0	0,4638	1,5827
	53			8,92	7	17			39	4
12	224,9	-	0	457.55	9,1912	0,1578	-88,0771	0	0,4642	1,5910
	01	8,75873		2,63	2	88			72	9
12	225,2	-	0	462.19	9,7764	0,1681	-89,3543	0	0,4648	1,5989
		8,62001		1,87	9	22			68	7
12	225,5	-	0	466.93	10,462	0,1799	-90,4882	0	0,4656	1,6056
	58	8,45331		7,25		62			5	
12	225,9	-	0	471.34	11,262	0,1936	-91,3436	0	0,4667	1,6100
	88	8,25284		5,75	5	22			8	7
12	226,5	-	0	474.07	12,193	0,2090	-91,6714	0	0,4688	1,6110
	04	8,01139		8,16		43			38	3
12	227,1	-	0	475.21	13,291	0,2265	-91,4361	0	0,4714	1,6080
	23	7,72031		6,81	2	69			35	9
12	227,8	-	0	474.63	14,632	0,2462	-90,5331	0	0,4742	1,6004
	66	7,36895		9,28	1	32			85	4
12	228,7	-	0	471.86	16,291	0,2684	-88,7338	0	0,4773	1,5865
	58	6,94468		1,78	1	39			99	9
12	229,8	-6,4321	0	466.66	18,337	0,2937	-85,9363	0	0,4807	1,5662
	28			5,63	4	32			75	3
12	231,1	-	0	458.78	20,850	0,3228	-82,0528	0	0,4843	1,5394
	12	5,81251		3,94	6	76			71	4
12	232,6	-	0	447.22	23,923	0,3576	-76,8525	0	0,4881	1,5059
	53	5,06325		3,85	2	82			7	7
12	234,5	-	0	430.77	27,655	0,4009	-70,1363	0	0,4920	1,4663
	01	4,15699		0,68	8	24			8	7
12	236,7	-	0	408.39	32,158	0,4562	-61,8506	0	0,4959	1,4224
	2	3,06078		4,33	3	42			91	
12	239,3	-	0	379.87	37,542	0,5277	-52,2122	0	0,4997	1,3770
	82	1,73513		8,16	2	56			69	3
12	242,5	-	0	346.49	43,900	0,6187	-41,7605	0	0,5033	1,3336
	77	0,13271		8,92	8	62			06	1
		7								
12	246,4	1,80338	0	308.63	51,292	0,7365	-30,738	0	0,5066	1,2933
	11			0,21	3	65			27	4



12	251,0 11	4,14166	0	266.67 1,92	59,698 9	0,8926 38	-19,5177	0	0,5097 54	1,2575
12	256,5 32	6,96447	0	220.81 3,79	68,970 2	1,1054 1	-8,61648	0	0,5128 09	1,2273 9
12	262,7 03	10,1391	0	172.96 2,51	78,090 2	1,3869 4	1,19947	0	0,5161 07	1,2040 1
12	262,7 03	10,1391	0	172.96 2,51	78,090 2	1,3869 4	1,19947	0	0,5161 07	1,2040 1
12	263,1 57	10,3738	0	169.19 6,00	78,376 7	1,4104 9	2,01114	0	0,5164 65	1,202
12	266,7 21	12,2436	0	142.05 3,47	80,815 3	1,6212 9	7,13111	0	0,5182 04	1,1908 2
12	266,7 21	12,2436	0	142.05 3,47	80,815 3	1,6212 9	7,13111	0	0,5182 04	1,1908 2
12	271,1 07	14,5775	0	115.83 3,76	84,878 3	1,8188 5	11,1403	0	0,5493 27	1,1841
12	280,6 46	20,1365	0	83.349, 48	89,646 1	2,1740 7	15,2647	0	0,6113 45	1,1788 9
12	292,0 94	27,3929	0	69.119, 53	90,847 1	2,4225 1	17,0732	0	0,6520 67	1,1762 7
12	305,8 31	36,6301	0	58.666, 21	91,313 7	2,6821 1	18,374	0	0,6928 72	1,1745 9
12	322,3 15	48,4614	0	48.651, 94	91,903 9	3,0129 5	19,4431	0	0,7427 62	1,1738 6
12	342,0 97	63,7682	0	39.216, 61	92,655 9	3,4495 3	21,6777	0	0,8050 33	1,1691 3
12	365,8 34	83,7785	0	30.631, 11	93,623 9	4,0145 5	23,1024	0	0,8811 95	1,1672 9
12	394,3 19	110,146	0	23.874, 67	94,877 5	4,6627 1	23,9283	0	0,9634 41	1,167
12	403,8 67	119,446	0	22.430, 06	95,314 7	4,8363 4	24,0883	0	0,9847 56	1,167
12	428,5 02	144,38	0	19.253, 57	96,475 8	5,2859 1	24,3846	0	1,0382 9	1,1672 3
12	469,5 2	188,714	0	15.322, 61	98,507 4	6,0250 7	24,6583	0	1,1224 9	1,1678 7
12	518,7 43	246,318	0	12.035, 02	101,09 6	6,9012 7	24,8161	0	1,2170 1	1,1686 9

12	577,809	321,369	0	9.326,31	104,399	7,9406	24,904	0	1,32296	1,16953
12	583,23	328,566	0	9.124,78	104,713	8,03539	24,9092	0	1,33233	1,16963
13	270,129	-10,1391	0	1,00	0,00177245	0,925914	24,6396	0	0,519559	1,17396
13	270,229	-10,0891	0	184.642,58	1,51711	0,00745473	-39,1896	0	0,497242	1,41138
13	270,329	-10,0393	0	198.365,04	2,15305	0,0134327	-44,443	0	0,49737	1,43592
13	270,429	-9,98958	0	201.613,69	2,64748	0,0195888	-45,5297	0	0,4975	1,4409
13	270,529	-9,93982	0	202.618,56	3,06956	0,0257824	-45,8757	0	0,497625	1,44251
13	270,629	-9,89005	0	202.837,88	3,44625	0,0319757	-45,9928	0	0,497749	1,44313
13	270,729	-9,84027	0	202.698,77	3,7918	0,0381487	-46,0158	0	0,497873	1,44336
13	270,829	-9,79048	0	202.371,70	4,11345	0,0443058	-45,9928	0	0,497997	1,44341
13	270,929	-9,74067	0	201.939,82	4,416	0,0504504	-45,9454	0	0,498119	1,44336
13	271,029	-9,69086	0	201.442,37	4,70382	0,0565691	-45,8838	0	0,498241	1,44326
13	271,129	-9,64103	0	200.902,34	4,97954	0,0626614	-45,8132	0	0,498361	1,44312
13	271,229	-9,59118	0	200.494,58	5,24508	0,0686495	-45,8177	0	0,498467	1,44339
13	271,329	-9,54134	0	200.357,94	5,50197	0,074443	-45,9647	0	0,498548	1,44441
13	271,429	-9,49148	0	200.576,01	5,7513	0,0799641	-46,2947	0	0,498598	1,44639
13	271,529	-9,44162	0	201.078,78	5,99398	0,085216	-46,7695	0	0,498626	1,44914
13	271,629	-9,39175	0	201.787,39	6,23078	0,0902206	-47,3453	0	0,498645	1,45244
13	271,7	-	0	202.63	6,4623	0,0950	-47,9887	0	0,4986	1,4561

	29	9,34188		9,40	6	014			62	
13	271,8 29	- 9,29201	0	203.58 7,52	6,6893 5	0,0995 765	-48,6746	0	0,4986 83	1,46
13	271,9 29	- 9,24214	0	204.60 0,88	6,9119 8	0,1039 7	-49,3883	0	0,4987 05	1,4640 8
13	272,0 29	- 9,19227	0	205.65 7,59	7,1306	0,1082	-50,1192	0	0,4987 3	1,4682 6
13	272,1 29	-9,1424	0	206.74 0,48	7,3456 7	0,1122 75	-50,859	0	0,4987 58	1,4725 2
13	272,2 49	- 9,08254	0	208.04 7,70	7,6003 4	0,1169 65	-51,7462	0	0,4987 98	1,4776 6
13	272,3 93	- 9,01071	0	209.62 0,66	7,9008 2	0,1223 44	-52,8071	0	0,4988 51	1,4838 5
13	272,5 65	-8,9245	0	211.48 6,65	8,2545 2	0,1284 78	-54,0623	0	0,4989 23	1,4912 5
13	272,7 73	- 8,82104	0	213.67 3,68	8,6700 5	0,1354 36	-55,534	0	0,4990 21	1,5000 4
13	273,0 22	- 8,69685	0	216.19 7,09	9,1576 8	0,1432 74	-57,2387	0	0,4991 5	1,5103 8
13	273,3 2	- 8,54778	0	219.06 1,86	9,7292 2	0,1520 88	-59,1393	0	0,4993 19	1,5220 7
13	273,6 78	- 8,36882	0	222.23 9,48	10,398 5	0,1620 7	-61,0808	0	0,4995 37	1,5340 7
13	274,1 08	- 8,15397	0	225.64 6,96	11,181 4	0,1734 63	-62,9002	0	0,4998 18	1,5452 5
13	274,6 24	- 7,89598	0	229.14 1,34	12,096 3	0,1865 74	-64,4534	0	0,5001 8	1,5545 8
13	275,2 44	- 7,58615	0	232.53 7,32	13,163 4	0,2017 82	-65,6306	0	0,5006 36	1,5612 6
13	275,9 87	- 7,21396	0	235.61 2,74	14,415 9	0,2194 34	-66,3076	0	0,5012 05	1,5644 2
13	276,8 78	- 6,76677	0	237.98 3,93	15,945 1	0,2393 92	-66,2613	0	0,5019 09	1,5625 4
13	277,9 48	- 6,22928	0	239.09 8,18	17,854 9	0,2619 62	-65,1777	0	0,5028 19	1,5536 4
13	279,2 32	- 5,58298	0	238.26 3,68	20,223 9	0,2885 69	-62,7242	0	0,5039 61	1,5359 6
13	280,7	-	0	234.81	23,137	0,3210	-58,704	0	0,5053	1,5091

	73	4,80549		8,87	4	97			07	6
13	282,6	-	0	228.22	26,705	0,3615	-53,0969	0	0,5067	1,4745
	22	3,86984		3,22	7	96			99	2
13	284,8	-	0	218.19	31,050	0,4126	-46,0561	0	0,5083	1,4344
	4	2,74366		3,57	9	22			65	9
13	287,5	-	0	204.63	36,298	0,4775	-37,8541	0	0,5099	1,3919
	03	1,38804		1,07	7	27			49	4
13	290,6	0,24378	0	187.60	42,570	0,5606	-28,8585	0	0,5115	1,3496
	97	7		6,72	8	98			37	6
13	294,5	2,20806	0	167.41	49,973	0,6679	-19,5533	0	0,5131	1,3101
	31			8,04	9	83			09	8
13	299,1	4,57233	0	144.62	58,586	0,8072	-10,5051	0	0,5146	1,2755
	32			9,23	2	75			43	3
13	304,6	7,418	0	119.62	68,446	0,9898	-2,07597	0	0,5162	1,2462
	52			3,67	3	37			1	1
13	309,9	10,1391	0	96.882,	77,270	1,1837	4,73908	0	0,5178	1,2239
	16			81	9	1			12	7
13	309,9	10,1391	0	96.882,	77,270	1,1837	4,73908	0	0,5178	1,2239
	16			81	9	1			12	7
13	311,2	10,8508	0	90.545,	77,982	1,2408	6,67686	0	0,5183	1,2175
	77			76	2	9			47	9
13	319,2	15,1757	0	62.154,	83,199	1,6275	13,5293	0	0,5193	1,1975
	27			02	3	8			78	2
13	325,7	18,885	0	46.819,	88,158	1,8657	16,3104	0	0,5582	1,1908
	54			28	2	6			32	2
13	325,7	18,885	0	46.819,	88,158	1,8657	16,3104	0	0,5582	1,1908
	54			28	2	8			26	2
13	328,7	20,5957	0	41.462,	91,552	1,9754	17,1734	0	0,5775	1,1889
	66			49	9	9			52	6
13	340,2	27,585	0	28.976,	101,01	2,3512	19,0574	0	0,6406	1,1851
	14			02	5	3			61	6
13	353,1	36,198	0	22.757,	105,55	2,674	20,2343	0	0,6916	1,1823
	12			04					92	4
13	353,9	36,7799	0	22.514,	105,61	2,6915	20,3563	0	0,6943	1,1819
	51			95	4	1			83	5
13	370,4	48,6448	0	18.661,	106,21	3,0295	22,1076	0	0,7451	1,1766
	35			35	6	2			06	1
13	390,2	63,9932	0	15.078,	106,97	3,4627	23,2774	0	0,8068	1,1735



	17			90			4			97		4
13	413,954	84,0432	0	11.825,10	107,94	4,02579	24,0175	0	0,882725	1,17203		
13	430,271	98,8777	0	10.079,58	108,648	4,43732	24,3089	0	0,935324	1,17163		
14	489,438	-10,1391	0	1,00	0,00177245	0,925914	24,6396	0	0,519559	1,17396		
14	489,538	-10,0873	0	21.580,50	1,52646	0,00655606	-16,5986	0	0,517411	1,37127		
14	489,638	-10,0356	0	22.902,10	2,18045	0,0118982	-21,5261	0	0,517442	1,39787		
14	489,738	-9,98381	0	23.168,52	2,68615	0,0174044	-22,6627	0	0,517458	1,40416		
14	489,838	-9,93206	0	23.224,43	3,11545	0,0229628	-23,0875	0	0,517471	1,40654		
14	489,938	-9,88031	0	23.215,12	3,49623	0,0285405	-23,2879	0	0,517482	1,40769		
14	490,038	-9,82857	0	23.177,12	3,84502	0,0341038	-23,3963	0	0,517492	1,40832		
14	490,138	-9,77682	0	23.123,67	4,16974	0,0396515	-23,4594	0	0,517503	1,40871		
14	490,238	-9,72506	0	23.061,26	4,47524	0,0451868	-23,4977	0	0,517514	1,40896		
14	490,338	-9,67331	0	22.993,51	4,76514	0,0507093	-23,5212	0	0,517524	1,40914		
14	490,438	-9,62156	0	22.922,55	5,04217	0,0562177	-23,5354	0	0,517535	1,40925		
14	490,538	-9,56981	0	22.849,70	5,30821	0,0617146	-23,5434	0	0,517545	1,40934		
14	490,638	-9,51805	0	22.775,80	5,56461	0,0672027	-23,5472	0	0,517555	1,40945		
14	490,738	-9,46629	0	22.701,96	5,81264	0,0726796	-23,5498	0	0,517565	1,40946		
14	490,838	-9,41454	0	22.632,89	6,05371	0,0781179	-23,5671	0	0,517575	1,40959		
14	490,938	-9,36278	0	22.594,59	6,28887	0,0833849	-23,6863	0	0,517582	1,41029		



14	491,038	-9,31102	0	22.591,91	6,51883	0,0884267	-23,9252	0	0,517587	1,41166
14	491,138	-9,25926	0	22.623,76	6,744	0,0932209	-24,2808	0	0,517589	1,41368
14	491,238	-9,2075	0	22.678,36	6,96469	0,0978097	-24,7113	0	0,517591	1,41613
14	491,338	-9,15574	0	22.751,06	7,18137	0,102204	-25,2019	0	0,517593	1,41892
14	491,438	-9,10399	0	22.837,44	7,3944	0,106419	-25,7379	0	0,517595	1,42198
14	491,558	-9,04187	0	22.954,08	7,6457	0,111261	-26,4247	0	0,517597	1,4259
14	491,702	-8,96734	0	23.107,58	7,94152	0,116789	-27,295	0	0,5176	1,43091
14	491,875	-8,8779	0	23.304,40	8,2893	0,123052	-28,3837	0	0,517604	1,43721
14	492,082	-8,77057	0	23.550,84	8,69771	0,130088	-29,7276	0	0,51761	1,44507
14	492,331	-8,64177	0	23.852,55	9,17686	0,13792	-31,3659	0	0,517618	1,45475
14	492,63	-8,48721	0	24.213,77	9,73866	0,146548	-33,3369	0	0,517629	1,46656
14	492,988	-8,30173	0	24.635,41	10,3966	0,156031	-35,5885	0	0,517645	1,48028
14	493,418	-8,07915	0	25.112,53	11,1661	0,166535	-37,9416	0	0,517666	1,49487
14	493,934	-7,81203	0	25.632,40	12,0652	0,178299	-40,2042	0	0,517694	1,50913
14	494,553	-7,49148	0	26.173,04	13,1144	0,191651	-42,2025	0	0,517731	1,5219
14	495,296	-7,10679	0	26.703,23	14,3377	0,20702	-43,7719	0	0,517778	1,53202
14	496,188	-6,6451	0	27.177,67	15,8004	0,224528	-44,7233	0	0,517838	1,53813
14	497,258	-6,09101	0	27.525,04	17,614	0,244222	-44,7701	0	0,517915	1,53825
14	498,542	-5,42599	0	27.642,40	19,8884	0,267077	-43,518	0	0,518015	1,52978

14	500,082	-4,62779	0	27.418,82	22,692	0,295355	-40,6745	0	0,518138	1,51115
14	501,931	-3,6697	0	26.773,63	26,1346	0,3311	-36,232	0	0,518276	1,4831
14	504,15	-2,51968	0	25.632,07	30,348	0,376889	-30,3566	0	0,518426	1,44768
14	506,812	-1,13925	0	24.003,58	35,48	0,435449	-23,4958	0	0,518582	1,40845
14	510,007	0,517769	0	21.924,43	41,6871	0,510275	-16,2041	0	0,518741	1,36894
14	513,841	2,50681	0	19.465,35	49,1355	0,605693	-9,0485	0	0,5189	1,332
14	518,441	4,8944	0	16.700,17	57,9924	0,727661	-2,39385	0	0,51906	1,29892
14	523,962	7,7604	0	13.687,09	68,4337	0,8848	3,74181	0	0,519228	1,26921
14	528,542	10,1391	0	11.286,09	76,7936	1,03118	8,53038	0	0,519379	1,24635
14	528,542	10,1391	0	11.286,09	76,7936	1,03118	8,53038	0	0,519379	1,24635
14	528,542	10,1392	0	11.285,97	76,7937	1,03119	8,53063	0	0,519379	1,24635
14	530,586	11,2198	0	10.152,11	77,6049	1,10528	10,7447	0	0,519461	1,23579
14	538,536	15,6723	0	6.936,30	82,0802	1,42518	15,7495	0	0,519546	1,21208
14	548,076	21,302	0	4.694,64	88,8587	1,77495	18,4015	0	0,541797	1,19961
14	559,523	28,6833	0	3.088,65	98,9131	2,13028	19,9609	0	0,604002	1,19233
14	561,178	29,7905	0	2.918,66	100,445	2,18369	20,1097	0	0,613037	1,19163
14	562,798	30,8867	0	2.764,20	101,965	2,23663	20,2975	0	0,621879	1,19082
14	562,798	30,8867	0	2.764,20	101,965	2,23662	20,2975	0	0,621882	1,19082
14	573,26	37,7076	0	1.992,79	112,995	2,61449	22,2631	0	0,682475	1,18323



14	589,7 45	49,7184	0	1.353,4 2	122,10 6	3,2111 1	23,5993	0	0,7714 37	1,1781 8
14	609,5 26	65,7386	0	1.054,4 8	124,58 3	3,7278 1	24,1806	0	0,8430 93	1,176
14	633,2 64	86,6595	0	833,57	125,60 8	4,3138 6	24,5201	0	0,9198 52	1,1747 6
14	648,3 05	100,868	0	721,27	126,28 6	4,7112 9	24,6486	0	0,9694 68	1,1743

Weather: Category 5/D

Wind speed [m/s]	5
Pasquill stability	D neutral - little sun and high wind or overcast/windy night
Atmospheric temperature [degC]	25
Relative humidity [fraction]	0,75
Solar radiation flux [kW/m2]	0,5
Mixing layer height [m]	800

Observer Release Data and Observer Mass Data

Observer number	Release type	Start time [s]	Start downwind distance [m]	Unit	Masses or mass rates			Final
					Release	Rainout	Pool vapour pick-up	
1	Continuous	0	0	kg/s	14,8647	14,8333		0,0313637
2	Continuous	0,22	-0,246407	kg/s	14,8647	14,8333		0,805221
3	Continuous	42,0039	-5,98326	kg/s	14,8647	14,8333		10,9249
4	Continuous	74,3561	-7,18172	kg/s	14,8647	14,8333		11,858
5	Continuous	104,824	-7,96508	kg/s	14,8647	14,8333		12,3117
6	Continuous	134,311	-8,56091	kg/s	14,8647	14,8333		12,6235
7	Continuous	163,137	-9,0425	kg/s	14,8647	14,8333		12,9081
8	Continuous	191,493	-9,448	kg/s	14,8647	14,8333		13,0684
9	Continuous	219,496	-9,79893	kg/s	14,8647	14,8333		12,9576
10	Continuous	221,199	-9,82027	kg/s	14,8647	14,8333		12,5053

11	Continuou s	221,2	-9,82027	kg/s	0	0	12,473 9	12,4739
12	Continuou s	233,05 1	-9,87172	kg/s	0	0		8,60954
13	Continuou s	262,25	-9,87172	kg/s	0	0		5,12307
14	Continuou s	452,98	-9,87172	kg/s	0	0		0,466634

Time-varying Observer Dispersion Data (before along-wind-diffusion effects)

Dispersion data correspond to an averaging time of: 18,75 s

Observer number	Time [s]	Down wind distance [m]	C/Line height [m]	C/Line conc [ppm]	Effective width [m]	Effective depth [m]	C/Line vapour temperature [degC]	C/Line liquid fraction	Centroid velocity [m/s]	C/Line cloud density [kg/m ³]
1	0	0	0	999.70 1,07	0,11079 3	0,0530 942	-160,288	0	2,6224	2,0341 1
1	0,01	0,02620 42	0	976.46 9,38	0,11984 2	0,0549 95	-150,79	0	2,6184 7	1,8867 9
1	0,02	0,05237 06	0	952.65 8,67	0,12867	0,0568 582	-141,573	0	2,6147 8	1,7686 7
1	0,03	0,07850 15	0	928.45 4,46	0,13736 4	0,0586 688	-132,663	0	2,6113 6	1,6723 5
1	0,04	0,10460 1	0	904.03 7,75	0,14591 6	0,0604 469	-124,08	0	2,6082 2	1,5927 2
1	0,05	0,13067	0	879.55 7,27	0,15429 3	0,0622 171	-115,84	0	2,6053 7	1,5261 8
1	0,06	0,15671 3	0	855.15 1,35	0,16243 1	0,0640 113	-107,952	0	2,6028	1,4700 8
1	0,07	0,18273 1	0	830.97 0,56	0,17025 6	0,0658 577	-100,424	0	2,6005	1,4224 1
1	0,08	0,20872 8	0	807.11 3,90	0,17771 6	0,0677 765	-93,2589	0	2,5984 5	1,3816 6

1	0,09	0,23470	0	783.69	0,18476	0,0697	-86,455	0	2,5966	1,3466
		4		2,36	9	816			2	3
1	0,1	0,26066	0	760.79	0,19138	0,0718	-80,0088	0	2,5950	1,3163
		3		0,49	5	815			1	7
1	0,11	0,28660	0	738.47	0,19754	0,0740	-73,9139	0	2,5935	1,2901
		6		7,48	5	828			9	2
1	0,12	0,31253	0	716.82	0,20323	0,0763	-68,1624	0	2,5923	1,2672
		6		3,78	2	899			4	6
1	0,13	0,33845	0	695.87	0,20842	0,0788	-62,745	0	2,5912	1,2472
		3		1,92	5	106			4	9
1	0,14	0,36436	0	675.65	0,21312	0,0813	-57,6509	0	2,5902	1,2298
		1		3,87	3	469			7	1
1	0,15	0,39025	0	656.19	0,21734	0,0839	-52,8687	0	2,5894	1,2144
		8		0,50	9	924			2	7
1	0,16	0,41614	0	637.49	0,22110	0,0867	-48,387	0	2,5886	1,2009
		8		2,22	7	481			7	8
1	0,168	0,43811	0	622.21	0,22402	0,0891	-44,8103	0	2,5881	1,1908
	485			9,59	3	409			1	2
1	0,168	0,43811	0	622.21	0,22402	0,0891	-44,8103	0	2,5881	1,1908
	485			9,59	3	409			1	2
1	0,17	0,44203	0	619.54	0,22452	0,0895	-44,1931	0	2,5880	1,1891
		1		8,91	1	717			1	2
1	0,18	0,46790	0	602.23	0,22782	0,0923	-40,2582	0	2,5874	1,1786
		8		3,17	6	956			3	7
1	0,19	0,49378	0	585.20	0,23118	0,0952	-36,5214	0	2,5869	1,1694
				0,83	8	272			2	
1	0,2	0,51964	0	568.41	0,23460	0,0980	-32,9746	0	2,5864	1,1612
		7		8,19	9	771			5	1
1	0,212	0,55068	0	548.75	0,23874	0,1015	-28,9858	0	2,5859	1,1527
		1		5,29	9	09			6	
1	0,226	0,58791	0	525.97	0,24371	0,1056	-24,5933	0	2,5854	1,1442
	4	6		3,48	9	38			6	2
1	0,243	0,63258	0	499.93	0,24961	0,1106	-19,8858	0	2,5849	1,1362
	68	8		2,60	8	01			5	4
1	0,264	0,68618	0	470.60	0,25653	0,1165	-15,0069	0	2,5844	1,1293
	416	4		4,92	2	72			5	7
1	0,289	0,75048	0	438.16	0,26446	0,1237	-10,1439	0	2,5839	1,1242
	299	8		2,77	7	93			9	1



1	0,319 159	0,82763 9	0	402.96 0,75	0,27332	0,1326 36	-5,48926	0	2,5835 7	1,1212 6
1	0,354 991	0,92020 6	0	365.57 5,37	0,28301 1	0,1435 7	-1,20293	0	2,5832 1	1,1207 4
1	0,397 989	1,03127	0	327.09 5,66	0,29435 6	0,1565 69	2,59374	0	2,5829 1	1,1225 8
1	0,449 587	1,16454	0	288.49 2,53	0,30803 5	0,1719 51	6,09142	0	2,5826 7	1,1255 2
1	0,511 504	1,32444	0	250.60 3,54	0,32441 9	0,1901 76	9,11619	0	2,5824 8	1,1298 4
1	0,585 805	1,51632	0	214.29 1,42	0,34408 3	0,2118 14	11,6905	0	2,5823 5	1,1351
1	0,674 966	1,74656	0	180.31 6,51	0,36768	0,2375 77	13,848	0	2,5822 5	1,1408 7
1	0,781 959	2,02284	0	149.29 1,43	0,39599 4	0,2683 18	15,6306	0	2,5821 9	1,1467 7
1	0,910 351	2,35437	0	121.63 6,40	0,42997 1	0,3050 57	17,0827	0	2,5821 5	1,1525
1	1,064 42	2,7522	0	97.562, 33	0,47074 3	0,3490 14	18,2486	0	2,5821 2	1,1578 2
1	1,249 31	3,22959	0	77.077, 81	0,51966 9	0,4021 75	19,5946	0	2,5821	1,1611 1
1	1,471 17	3,80245	0	60.013, 84	0,57838	0,4666 81	21,2117	0	2,5820 9	1,1621 7
1	1,737 4	4,48989	0	46.093, 11	0,64883 3	0,5438 35	22,3902	0	2,5820 8	1,1635 8
1	2,056 88	5,31482	0	34.959, 43	0,73337 6	0,6362 01	23,2328	0	2,5820 8	1,1650 9
1	2,440 26	6,30472	0	26.213, 55	0,83482 8	0,7468 5	23,8214	0	2,5820 8	1,1665 6
1	2,900 31	7,49261	0	19.454, 24	0,95657	0,8794 71	24,2245	0	2,5820 8	1,1678 9
1	3,452 37	8,91808	0	14.305, 77	1,10266	1,0384 9	24,4959	0	2,5820 8	1,1690 4
1	3,821 74	9,87182	0	11.924, 83	1,20041	1,1448 3	24,6093	0	2,5820 8	1,1696 2
1	4,114 84	10,6286	0	10.432, 25	1,27797	1,2292	24,6759	0	2,5820 8	1,17

1	4,909 81	12,6813	0	7.557,7 7	1,4882	1,4579 7	24,7936	0	2,5820 8	1,1707 8
1	5,863 77	15,1617	0	5.484,8 4	1,74144	1,6979 8	24,87	0	2,6404 6	1,1714
1	6,898 7	17,9478	0	4.027,2 8	2,0248	1,9396	24,9168	0	2,7433 1	1,1718 6
1	7,008 53	18,2499	0	3.897,6 2	2,05545	1,9659 6	24,9204	0	2,7538 5	1,1719
1	8,382 23	22,1242	0	2.701,2 1	2,44746	2,3031 9	24,9526	0	2,8818 5	1,1722 9
1	10,03 07	26,9929	0	1.836,5 8	2,9373	2,7266 1	24,9725	0	3,0248 4	1,1725 8
1	12,00 88	33,1348	0	1.231,3 1	3,55116	3,2610 4	24,9844	0	3,1846 5	1,1727 9
1	14,38 26	40,9059	0	809,39	4,32201	3,9355 2	24,9913	0	3,3608 5	1,1729 4
1	17,23 11	50,761	0	518,14	5,29129	4,7886 4	24,9952	0	3,5554 1	1,1730 4
1	17,72 29	52,5172	0	482,06	5,46311	4,9407 2	24,9956	0	3,5874	1,1730 5
2	0,22	- 0,24640 7	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
2	0,32	- 0,15572 1	0	872.21 1,97	0,46059 7	0,0853 104	-139,148	0	0,8358 74	1,8125 6
2	0,42	- 0,06792 83	0	861.64 4,43	0,69047 5	0,1342 81	-137,32	0	0,9232 94	1,7968 9
2	0,491 083	2,26666 E-17	0	851.41 9,15	0,83181 5	0,1624 78	-135,41	0	0,9877 98	1,7802 8
2	0,491 083	2,26666 E-17	0	886.66 3,49	0,75590 8	0,1595 97	-141,448	0	1,1837 8	1,8318 7
2	0,52	0,03395 88	0	878.99 8,99	0,82071 4	0,1746 77	-140,108	0	1,1681 4	1,8197 8
2	0,62	0,15087 8	0	855.78 9,88	1,01953	0,2153 92	-135,405	0	1,1803 4	1,7760 8



2	0,72	0,27143	0	834.74	1,21311	0,2421	-130,159	0	1,2358	1,7268
		1		0,12		56			1	8
2	0,82	0,39882	0	812.75	1,40836	0,2595	-124,017	0	1,3160	1,6719
		7		0,89		73			3	
2	0,92	0,53527	0	788.16	1,60041	0,2710	-116,62	0	1,4162	1,6104
		5		8,52		73			6	5
2	1,02	0,68290	0	758.42	1,78496	0,2768	-107,181	0	1,5417	1,5394
		4		4,22		87				5
2	1,075	0,77065	0	736.53	1,8814	0,2754	-99,8601	0	1,6351	1,4892
	33	7		9,64		01			6	4
2	1,075	0,77065	0	736.53	1,8814	0,2754	-99,8601	0	1,6351	1,4892
	33	7		9,64		01			6	4
2	1,12	0,84590	0	713.27	1,95422	0,2704	-91,864	0	1,7335	1,4388
		2		8,28		29			7	9
2	1,22	1,02935	0	659.52	2,10056	0,2677	-74,5199	0	1,9331	1,3466
				1,04		51				4
2	1,32	1,23087	0	606.05	2,22226	0,2745	-58,63	0	2,0959	1,2785
				6,69		33			4	
2	1,42	1,44693	0	555.36	2,31834	0,2886	-44,7104	0	2,2209	1,2291
				9,57		73			7	7
2	1,52	1,67395	0	509.03	2,38671	0,3088	-33,0081	0	2,3131	1,1942
				2,97		16			8	9
2	1,534	1,70643	0	502.94	2,394	0,3120	-31,5513	0	2,3238	1,1903
				0,31		57			7	6
2	1,534	1,70643	0	502.94	2,394	0,3120	-31,5513	0	2,3238	1,1903
				0,31		57			7	6
2	1,62	1,90875	0	467.37	2,42662	0,3343	-23,5168	0	2,3796	1,1704
				1,50		2			6	9
2	1,72	2,14916	0	428.59	2,46105	0,3632	-15,8208	0	2,4282	1,1548
				3,29		26			5	4
2	1,82	2,39367	0	394.01	2,49448	0,3932	-9,8618	0	2,4635	1,1453
				0,38		86			2	6
2	1,92	2,64124	0	363.88	2,52637	0,4235	-5,33548	0	2,4891	1,1400
				2,25		12			5	7
2	2,02	2,89117	0	337.79	2,55652	0,4534	-1,88046	0	2,5079	1,1374
				8,77		79			4	4
2	2,12	3,14275	0	315.30	2,58489	0,4826	0,69415	0	2,5219	1,1368
				8,78		19			9	



2	2,22	3,39555	0	295.80 7,63	2,61173	0,5113 68	2,92224	0	2,5327	1,1362 6
2	2,34	3,70012	0	275.33 6,63	2,64301	0,5453 41	5,08879	0	2,5424 8	1,1363 5
2	2,484	4,06692	0	253.80 5,62	2,68049	0,5860 75	7,18266	0	2,5512	1,1371 4
2	2,656 8	4,50844	0	231.43 1,61	2,7257	0,6351 23	9,17481	0	2,5586 9	1,1386 4
2	2,864 16	5,0397	0	208.61 1,65	2,78017	0,6941 48	11,0334	0	2,5648 9	1,1408 2
2	3,112 99	5,67858	0	185.80 2,86	2,84564	0,7650 68	12,7353	0	2,5698 1	1,1435 5
2	3,411 59	6,44651	0	163.43 9,10	2,92431	0,8502 42	14,2676	0	2,5735 9	1,1467 3
2	3,769 91	7,36921	0	141.93 1,32	3,01887	0,9525 1	15,6248	0	2,5763 7	1,1502
2	4,199 89	8,47746	0	121.65 2,32	3,13245	1,0752 3	16,8079	0	2,5783 5	1,1538 3
2	4,715 87	9,80821	0	102.90 0,99	3,26884	1,2224 6	17,8234	0	2,5797	1,1574 7
2	5,335 04	11,4058	0	85.881, 80	3,43258	1,3990 3	18,6818	0	2,5806	1,1610 1
2	6,078 05	13,326	0	70.711, 01	3,62911	1,6043 5	20,0724	0	2,5978 4	1,162
2	6,969 66	15,6833	0	57.047, 13	3,86957	1,8107 6	21,4331	0	2,6891 3	1,1625 9
2	8,039 59	18,6168	0	44.863, 26	4,16767	2,0663 2	22,5007	0	2,7932 8	1,1636 9
2	9,323 51	22,2792	0	34.357, 02	4,53813	2,3849 7	23,3053	0	2,9105 8	1,1650 7
2	10,86 42	26,8662	0	25.610, 69	4,99962	2,7831 9	23,8868	0	3,0426 7	1,1665 6
2	11,52 33	28,8896	0	22.760, 50	5,20237	2,9587 1	24,0577	0	3,0965 4	1,1671 2
2	12,71 31	32,6341	0	18.567, 42	5,57627	3,2851 2	24,2908	0	3,1910 5	1,1680 1
2	14,93 17	39,8982	0	13.128, 00	6,2974	3,9150 5	24,5608	0	3,3558 4	1,1693

2	17,59 4	49,0792	0	9.051,5 0	7,20148	4,7103 9	24,7349	0	3,5388	1,1703 7
2	18,55 68	52,5167	0	7.990,3 1	7,53805	5,0079 8	24,7757	0	3,6015 7	1,1706 6
3	42,00 39	- 5,98326	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
3	42,10 39	- 5,75214	0	338.68 4,31	2,51819	0,0224 255	-73,6012	0	2,3067 3	1,5533 1
3	42,20 39	- 5,52137	0	338.19 8,80	3,56046	0,0445 679	-73,4908	0	2,3088 3	1,5527 7
3	42,30 39	- 5,29038	0	336.94 9,10	4,36144	0,0666 395	-73,3233	0	2,311 7	1,5522 9
3	42,40 39	- 5,05917	0	335.56 4,41	5,0361	0,0886 597	-73,1496	0	2,3131 4	1,5518 5
3	42,50 39	- 4,82775	0	334.13 6,69	5,62965	0,1106 34	-72,9747	0	2,3152 7	1,5514 3
3	42,60 39	- 4,59611	0	332.68 0,79	6,16687	0,1325 16	-72,798	0	2,3174 1	1,5510 1
3	42,70 39	- 4,36426	0	331.19 9,03	6,66123	0,1543 11	-72,6191	0	2,3195 7	1,5506
3	42,80 39	-4,1322	0	329.69 3,53	7,12147	0,1760 21	-72,4377	0	2,3217 5	1,5501 8
3	42,90 39	- 3,89991	0	328.16 6,31	7,55387	0,1976 43	-72,2539	0	2,3239 6	1,5497 6
3	43,00 39	- 3,66741	0	326.62 1,68	7,9619	0,2192 14	-72,0682	0	2,3261 8	1,5493 4
3	43,10 39	- 3,43468	0	325.06 1,45	8,34917	0,2407 27	-71,8809	0	2,3284 2	1,5489 2
3	43,20 39	- 3,20172	0	323.48 6,89	8,71838	0,2621 83	-71,6919	0	2,3306 7	1,5484 9
3	43,30 39	- 2,96854	0	321.89 8,22	9,07183	0,2835 76	-71,5013	0	2,3329 3	1,5480 6
3	43,40 39	- 2,73514	0	320.29 4,41	9,41139	0,3048 99	-71,3089	0	2,3352	1,5476 3
3	43,50 39	-2,5015	0	318.67 4,30	9,73847	0,3261 53	-71,1145	0	2,3375	1,5471 9
3	43,60	-	0	317.03	10,0538	0,3474	-70,8598	0	2,3398	1,5463



	39	2,26763		7,39		53			1	1
3	43,70 39	- 2,03354	0	315.38 2,97	10,3583	0,3688 56	-70,5242	0	2,3421 5	1,5448 1
3	43,80 39	-1,7992	0	313.71 1,70	10,6528	0,3904 03	-70,1025	0	2,3445	1,5426 7
3	43,90 39	- 1,56464	0	312.02 2,39	10,9378	0,4121 11	-69,5977	0	2,3468 8	1,5399 2
3	44,00 39	- 1,32983	0	310.31 4,00	11,214	0,4339 83	-69,0201	0	2,3492 8	1,5366 5
3	44,12 39	- 1,04774	0	308.23 8,41	11,5346	0,4604 49	-68,2448	0	2,3521 9	1,5321 4
3	44,26 79	- 0,70877	0	305.70 8,69	11,9047	0,4925 21	-67,2122	0	2,3557 4	1,5260 3
3	44,44 07	- 0,30132 3	0	302.60 4,41	12,3354	0,5312 1	-65,8499	0	2,3600 8	1,5179 3
3	44,56 83	1,16475 E-12	0	300.24 9,23	12,6561	0,5594 37	-64,7634	0	2,3633 9	1,5114 7
3	44,56 83	1,16475 E-12	0	302.69 3,66	12,5846	0,5602 31	-65,1405	0	2,3637 1	1,5126 6
3	44,64 8	0,18868 6	0	301.09 4,05	12,7881	0,5777 15	-64,4162	0	2,3657 4	1,5084
3	44,89 69	0,77855 4	0	295.87 8,04	13,4371	0,6314 03	-61,9278	0	2,3726 6	1,4938
3	45,19 55	1,4887	0	289.54 3,73	14,2344	0,6932 1	-58,7386	0	2,3814 8	1,4753 8
3	45,55 38	2,34408	0	281.60 2,34	15,2084	0,7645 75	-54,5984	0	2,3928 4	1,4521 1
3	45,98 38	3,37627	0	270.72 5,29	16,3922	0,8494 54	-48,8421	0	2,4084 1	1,4211
3	46,49 97	4,62451	0	254.88 2,81	17,8082	0,9543 44	-40,5571	0	2,4304 8	1,3793
3	47,11 89	6,13962	0	229.93 7,79	19,4404	1,0871 5	-27,8769	0	2,4651 6	1,3210 6
3	47,14 9	6,21391	0	228.44 3,74	19,516	1,0938	-27,1337	0	2,4672 9	1,3178 4
3	47,14 9	6,21391	0	228.44 3,74	19,516	1,0938	-27,1337	0	2,4672 9	1,3178 4



3	47,86 19	7,99075	0	192.49 7,19	21,1383	1,2532 8	-11,2603	0	2,5137 7	1,2547 9
3	48,75 35	10,2471	0	158.30 3,18	22,802	1,4554 2	-0,593777	0	2,5440 8	1,2198 5
3	49,82 35	12,997	0	128.39 8,29	24,4719	1,6741	6,22267	0	2,6095 7	1,2016 2
3	51,10 74	16,4211	0	102.56 9,23	26,1634	1,9147	10,9593	0	2,7223 4	1,1910 9
3	51,15 75	16,5577	0	101.72 5,65	26,2245	1,9242 3	11,0972	0	2,7264 6	1,1908 2
3	51,15 75	16,5577	0	101.72 5,65	26,2245	1,9242 3	11,0972	0	2,7264 5	1,1908 2
3	52,64 81	20,7111	0	80.819, 79	27,7745	2,2186 2	14,2293	0	2,8455 6	1,1853 3
3	54,49 69	26,1033	0	62.775, 43	29,1392	2,6177	16,5319	0	2,9868 8	1,1823 1
3	56,71 55	32,9169	0	47.742, 44	30,1704	3,1659 4	18,1893	0	3,1559 6	1,1809 2
3	59,37 79	41,5872	0	35.487, 59	31,0287	3,9118 7	19,3751	0	3,3542 7	1,1805 2
3	62,57 27	52,6572	0	25.997, 28	32,1189	4,8716 9	21,0182	0	3,5728	1,1777 5
3	64,09 66	58,1769	0	22.706, 96	32,6572	5,3525 1	21,7377	0	3,6706 5	1,1763 1
3	66,40 64	66,8321	0	18.730, 36	33,4965	6,1073 3	22,5297	0	3,8124 7	1,1748 8
3	71,00 69	84,9764	0	13.291, 97	35,2397	7,6833 1	23,4826	0	4,0722 3	1,1734 7
3	75,94 99	105,728	0	9.750,6 6	37,2095	9,3830 9	24,0175	0	4,3127 3	1,1728 8
4	74,35 61	- 7,18172	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
4	74,45 61	- 6,94444	0	279.59 3,65	2,787	0,0211 839	-67,4055	0	2,3696 6	1,5443 6
4	74,55 61	-6,7074	0	279.20 1,43	3,9414	0,0421 505	-67,3243	0	2,3711 2	1,544
4	74,65	-	0	278.29	4,82646	0,0631	-67,205	0	2,3725	1,5436

	61	6,47022		3,96		086				9
4	74,75 61	-6,2329	0	277.26 8,57	5,57457	0,0839 92	-67,0781	0	2,3739 2	1,5433 9
4	74,85 61	- 5,99543	0	276.18 5,84	6,23457	0,1048 13	-66,9467	0	2,3753 7	1,5431
4	74,95 61	- 5,75782	0	275.07 9,30	6,83022	0,1256 11	-66,814	0	2,3768 2	1,5428 2
4	75,05 61	- 5,52007	0	273.96 3,12	7,3776	0,1463 72	-66,6809	0	2,3782 6	1,5425 4
4	75,15 61	- 5,28217	0	272.83 7,95	7,88736	0,1670 79	-66,5473	0	2,3797	1,5422 6
4	75,25 61	- 5,04413	0	271.70 1,89	8,36662	0,1877 25	-66,4125	0	2,3811 6	1,5419 8
4	75,35 61	- 4,80594	0	270.55 4,43	8,81992	0,2083 19	-66,2766	0	2,3826 3	1,5417
4	75,45 61	-4,5676	0	269.39 6,24	9,25044	0,2288 81	-66,1393	0	2,3841	1,5414 1
4	75,55 61	- 4,32912	0	268.22 8,79	9,66111	0,2494 11	-66,0011	0	2,3855 9	1,5411 3
4	75,65 61	- 4,09049	0	267.05 2,89	10,0545	0,2699 03	-65,8618	0	2,3870 8	1,5408 4
4	75,75 61	-3,8517	0	265.86 8,47	10,4326	0,2903 53	-65,7217	0	2,3885 8	1,5405 5
4	75,85 61	- 3,61277	0	264.67 5,07	10,7972	0,3107 56	-65,5804	0	2,3900 9	1,5402 6
4	75,95 61	- 3,37368	0	263.47 1,55	11,1495	0,3311 11	-65,4379	0	2,3916 1	1,5399 7
4	76,05 61	- 3,13444	0	262.25 7,02	11,4904	0,3514 24	-65,293	0	2,3931 4	1,5396 7
4	76,15 61	- 2,89505	0	261.03 2,29	11,8211	0,3717 68	-65,1032	0	2,3946 9	1,5390 4
4	76,25 61	-2,6555	0	259.79 6,92	12,142	0,3921 92	-64,8572	0	2,3962 4	1,538
4	76,35 61	-2,4158	0	258.55 1,01	12,4534	0,4127 51	-64,5418	0	2,3978 1	1,5364 6
4	76,47 61	- 2,12795	0	257.04 1,50	12,8154	0,4376 03	-64,0822	0	2,3997 1	1,5340 2
4	76,62	-	0	255.20	13,2344	0,4677	-63,4068	0	2,4020	1,5302



	01	1,78222		8,57		4			2	2
4	76,79 29	- 1,36692	0	252.97 7,63	13,7166	0,5043 39	-62,4551	0	2,4048 2	1,5246 8
4	77,00 02	-0,8679	0	250.25 2,35	14,2684	0,5488 7	-61,1529	0	2,4082 3	1,5169 8
4	77,24 91	- 0,26814	0	246.98 6,66	14,9128	0,6021 42	-59,4544	0	2,4123 9	1,5068 9
		5								
4	77,36 02	2,08805 E-12	0	245.55 2,74	15,2022	0,6254 41	-58,6677	0	2,4142 6	1,5022 3
4	77,36 02	2,08805 E-12	0	247.53 0,87	15,1231	0,6260 86	-58,9716	0	2,4144 5	1,5031 4
4	77,54 77	0,45309 1	0	245.00 8,06	15,6271	0,6641 78	-57,577	0	2,4175 8	1,4949 3
4	77,90 6	1,3208	0	240.06 7,99	16,614	0,7343 93	-54,6629	0	2,4241	1,4779
4	78,33 6	2,36497	0	233.78 8,29	17,8251	0,8151 89	-50,785	0	2,4327	1,4557 7
4	78,85 19	3,62323	0	224.99 6,83	19,3041	0,9112 64	-45,2726	0	2,4447 3	1,4255 4
4	79,47 11	5,14211	0	211.94 4,43	21,0821	1,0304 9	-37,2666	0	2,4619 2	1,3843
4	80,21 41	6,98063	0	191.05 4,04	23,1496	1,1873 4	-25,1893	0	2,4883 2	1,3276 1
4	80,36 35	7,35296	0	185.66 0,43	23,5456	1,2209 3	-22,2025	0	2,4953 6	1,3144 8
4	80,36 35	7,35296	0	185.66 0,43	23,5456	1,2209 3	-22,2025	0	2,4953 6	1,3144 8
4	81,10 57	9,2184	0	157.81 2,20	25,3407	1,3892 1	-8,72746	0	2,5287 6	1,2599 2
4	82,17 57	11,9436	0	127.56 8,98	27,528	1,6162 9	1,42019	0	2,5755	1,2251 5
4	83,45 96	15,3244	0	101.43 8,61	29,7545	1,8477 2	8,07255	0	2,6907 4	1,2056 1
4	85,00 03	19,5651	0	79.424, 14	32,0629	2,1328 6	12,4518	0	2,8115 7	1,1947 1
4	85,99 74	22,4045	0	68.834, 09	33,4286	2,3190 2	14,2489	0	2,8826 6	1,1908 2



4	85,99 74	22,4045	0	68.834, 09	33,4286	2,3191	14,2489	0	2,8825 5	1,1908 2
4	86,84 91	24,8843	0	61.393, 29	34,4972	2,4813 8	15,4071	0	2,9404 7	1,1885 4
4	89,06 77	31,572	0	46.786, 41	36,7398	2,9352 4	17,4517	0	3,0877 6	1,1850 8
4	91,73 01	40,0271	0	34.930, 49	38,5697	3,5603 4	18,8928	0	3,2647 1	1,1832 3
4	94,92 49	50,8098	0	25.346, 26	39,7668	4,4718 1	20,0587	0	3,4857 3	1,1818 8
4	96,13 35	55,0724	0	22.683, 45	40,1821	4,8437 7	20,8163	0	3,5669 4	1,1799 9
4	98,75 86	64,6762	0	18.101, 09	41,1153	5,6831 2	21,9935	0	3,7344 7	1,1772 8
4	103,3 59	82,4804	0	12.776, 51	42,8285	7,2305 9	23,1786	0	4,0018 6	1,1748 7
4	107,6 37	100,088	0	9.680,3 0	44,5039	8,7203 7	23,7711	0	4,2230 1	1,1738 7
5	104,8 24	- 7,96508	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
5	104,9 24	- 7,72477	0	247.41 0,40	2,94969	0,0205 852	-64,074	0	2,4005 9	1,5401
5	105,0 24	- 7,48465	0	247.11 8,26	4,17359	0,0409 609	-64,0121	0	2,4017 2	1,5398 3
5	105,1 24	- 7,24443	0	246.33 5,63	5,1119	0,0613 214	-63,9099	0	2,4028 5	1,5395 7
5	105,2 24	- 7,00409	0	245.49 0,29	5,90106	0,0817 094	-63,8063	0	2,4039 3	1,5393 4
5	105,3 24	- 6,76364	0	244.61 3,00	6,59935	0,1020 12	-63,7009	0	2,4050 2	1,5391 2
5	105,4 24	- 6,52308	0	243.70 2,16	7,23107	0,1222 74	-63,5922	0	2,4061 5	1,5389
5	105,5 24	- 6,28241	0	242.77 3,90	7,81176	0,1424 93	-63,4821	0	2,4072 8	1,5386 7
5	105,6 24	- 6,04163	0	241.83 5,74	8,35197	0,1626 81	-63,3713	0	2,4084 2	1,5384 5
5	105,7	-	0	240.88	8,86045	0,1827	-63,2588	0	2,4095	1,5382



	24	5,80073		1,93		92			7	3
5	105,8	-	0	239.92	9,34098	0,2028	-63,1457	0	2,4107	1,5380
	24	5,55971		0,97		8			3	1
5	105,9	-	0	238.95	9,79761	0,2229	-63,0319	0	2,4118	1,5377
	24	5,31858		3,47		42			8	8
5	106,0	-	0	237.98	10,2334	0,2429	-62,9177	0	2,4130	1,5375
	24	5,07733		1,38		85			5	6
5	106,1	-	0	237.00	10,6505	0,2630	-62,8031	0	2,4142	1,5373
	24	4,83597		6,82		24			1	3
5	106,2	-	0	236.02	11,0515	0,2830	-62,6882	0	2,4153	1,5371
	24	4,59449		8,32		42			8	1
5	106,3	-	0	235.04	11,4381	0,3030	-62,5726	0	2,4165	1,5368
	24	4,35289		5,20		37			5	8
5	106,4	-	0	234.05	11,8118	0,3229	-62,4563	0	2,4177	1,5366
	24	4,11118		5,66		97			2	6
5	106,5	-	0	233.05	12,1742	0,3429	-62,3391	0	2,4189	1,5364
	24	3,86935		8,77		06			1	3
5	106,6	-3,6274	0	232.05	12,5262	0,3627	-62,2208	0	2,4201	1,5362
	24			3,32		63				
5	106,7	-	0	231.03	12,8692	0,3825	-62,0898	0	2,4213	1,5358
	24	3,38533		8,62		73			1	8
5	106,8	-	0	230.01	13,2022	0,4024	-61,9021	0	2,4225	1,5351
	24	3,14313		5,10		84			3	5
5	106,9	-	0	228.77	13,5903	0,4264	-61,6072	0	2,424	1,5337
	44	2,85234		4,30		94				9
5	107,0	-	0	227.26	14,0401	0,4555	-61,1342	0	2,4257	1,5312
	88	2,50316		8,35		69			9	9
5	107,2	-2,0838	0	225.43	14,5586	0,4908	-60,4031	0	2,4279	1,5271
	61			6,73		9			7	5
5	107,4	-	0	223.20	15,153	0,5339	-59,3285	0	2,4306	1,5208
	68	1,58006		4,22		23			2	3
5	107,7	-	0	220.53	15,8308	0,5860	-57,8885	0	2,4338	1,5122
	17	0,97485		4,11		56			2	7
5	108,0	-	0	217.51	16,6294	0,6472	-56,112	0	2,4376	1,5016
	15	0,24755		9,64		03			1	9
		1								
5	108,1	1,64311	0	216.52	16,9054	0,6673	-55,4885	0	2,4389	1,4979
	17	E-14		8,40		22			2	7



5	108,1 17	1,64311 E-14	0	218.26 7,87	16,8208	0,6678 93	-55,7551	0	2,4390 6	1,4987 5
5	108,3 74	0,62689 6	0	215.62 1,92	17,532	0,7174 93	-54,089	0	2,4423 8	1,4889 1
5	108,8 04	1,67856	0	210.99 8,35	18,7531	0,7972 49	-50,9798	0	2,4485 2	1,4707 6
5	109,3 2	2,94408	0	204.78 5,19	20,2529	0,8899 5	-46,6424	0	2,4569 5	1,4461 4
5	109,9 39	4,46897	0	195.70 3,76	22,0792	1,0021 1	-40,3294	0	2,4689 6	1,4119 6
5	110,6 82	6,30971	0	181.69 7,88	24,2566	1,1450 6	-31,0335	0	2,4864 5	1,3651 6
5	111,4 02	8,10801	0	162.93 8,13	26,2765	1,3006	-19,5516	0	2,5093 5	1,3125 5
5	111,4 02	8,10801	0	162.93 8,13	26,2765	1,3006	-19,5516	0	2,5093 5	1,3125 5
5	111,5 73	8,53917	0	157.05 6,09	26,7202	1,3404 6	-16,1897	0	2,5168	1,2981
5	112,6 43	11,2515	0	126.69 5,09	29,2478	1,5804 5	-2,39634	0	2,5521 8	1,2442 8
5	113,9 27	14,6073	0	100.49 2,46	31,8127	1,8075 3	5,74364	0	2,6706 7	1,2173 5
5	115,4 68	18,8186	0	78.410, 13	34,4576	2,0886 6	11,0674	0	2,7933 3	1,2019 6
5	117,3 17	24,1049	0	60.388, 85	37,2747	2,4305 5	14,5558	0	2,9224	1,1932 4
5	118,1 85	26,667	0	54.032, 09	38,5173	2,5913 6	15,6368	0	2,9778 1	1,1908 2
5	118,1 85	26,667	0	54.032, 09	38,5173	2,5913 6	15,6368	0	2,9778 1	1,1908 2
5	119,5 35	30,7439	0	45.970, 77	40,2776	2,8482 4	16,9066	0	3,0609	1,1882
5	122,1 98	39,1084	0	34.437, 38	43,0166	3,4034	18,5333	0	3,2226	1,1853
5	125,3 93	49,7199	0	25.169, 43	45,1641	4,1931	19,6744	0	3,4220 8	1,1837 2
5	126,4 89	53,5128	0	22.720, 70	45,6116	4,5102 9	20,0836	0	3,4945 6	1,1829 4

5	129,2 26	63,3258	0	17.867, 78	46,5665	5,3660 6	21,5642	0	3,6734 2	1,1791 1
5	133,8 27	80,8659	0	12.537, 56	48,2561	6,8908 9	22,9473	0	3,9469 5	1,1759
5	137,8 66	97,2552	0	9.564,1 4	49,8176	8,3103 6	23,6037	0	4,1650 1	1,1745 9
6	134,3 11	- 8,56091	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
6	134,4 11	- 8,31872	0	226.35 8,64	3,06775	0,0202 217	-61,9073	0	2,4197 1	1,5375
6	134,5 11	-8,0767	0	226.11 3,41	4,33842	0,0402 769	-61,8575	0	2,4206 5	1,5372 9
6	134,6 11	- 7,83459	0	225.44 1,54	5,31494	0,0603 051	-61,7702	0	2,4215 9	1,5370 8
6	134,7 11	- 7,59239	0	224.68 3,87	6,13803	0,0803 153	-61,6774	0	2,4225 3	1,5368 8
6	134,8 11	- 7,35009	0	223.89 3,54	6,86475	0,1002 76	-61,5827	0	2,4234 8	1,5366 8
6	134,9 11	- 7,10769	0	223.08 4,83	7,52157	0,1202 16	-61,4868	0	2,4244 4	1,5364 9
6	135,0 11	-6,8652	0	222.26 6,83	8,12532	0,1401 34	-61,3903	0	2,4253 9	1,5363
6	135,1 11	- 6,62261	0	221.44 0,98	8,68787	0,1600 12	-61,2931	0	2,4263 6	1,5361 2
6	135,2 11	- 6,37993	0	220.60 7,92	9,217	0,1798 42	-61,1953	0	2,4273 2	1,5359 3
6	135,3 11	- 6,13715	0	219.76 8,49	9,71759	0,1996 43	-61,0969	0	2,4282 9	1,5357 4
6	135,4 11	- 5,89427	0	218.92 2,40	10,1934	0,2194 22	-60,9977	0	2,4292 7	1,5355 5
6	135,5 11	- 5,65129	0	218.07 0,76	10,6478	0,2391 78	-60,898	0	2,4302 5	1,5353 6
6	135,6 11	- 5,40822	0	217.21 4,01	11,0834	0,2589 1	-60,7976	0	2,4312 4	1,5351 7
6	135,7 11	- 5,16505	0	216.35 2,25	11,5024	0,2786 12	-60,6967	0	2,4322 3	1,5349 8
6	135,8	-	0	215.48	11,9068	0,2982	-60,5952	0	2,4332	1,5347



	11	4,92177		4,72		79			2	9
6	135,9 11	-4,6784	0	214.61 1,00	12,298	0,3179 09	-60,4928	0	2,4342 2	1,5345 9
6	136,0 11	- 4,43493	0	213.73 1,33	12,6773	0,3375	-60,3898	0	2,4352 3	1,5344
6	136,1 11	- 4,19135	0	212.84 5,73	13,0455	0,3570 59	-60,286	0	2,4362 4	1,5342
6	136,2 11	- 3,94768	0	211.95 4,14	13,4033	0,3766 03	-60,1787	0	2,4372 6	1,5339 8
6	136,3 11	-3,7039	0	211.05 5,96	13,7516	0,3961 6	-60,0449	0	2,4382 9	1,5335 8
6	136,4 31	- 3,41123	0	209.96 9,66	14,1574	0,4196 94	-59,845	0	2,4395 3	1,5328 1
6	136,5 75	- 3,05983	0	208.65 3,88	14,6283	0,4480 98	-59,5215	0	2,4410 4	1,5313
6	136,7 48	- 2,63786	0	207.05 7,46	15,1716	0,4825 71	-58,9724	0	2,4428 6	1,5283 5
6	136,9 55	- 2,13108	0	205.11 5,78	15,7956	0,5245 01	-58,1203	0	2,4450 7	1,5234 7
6	137,2 04	- 1,52234	0	202.78 7,54	16,5079	0,5755 06	-56,8838	0	2,4477 5	1,5161 6
6	137,5 02	-0,791	0	200.16 1,64	17,3236	0,6364 28	-55,3043	0	2,4508 9	1,5067 3
6	137,8 25	3,74079 E-12	0	197.61 0,56	18,1997	0,6995 14	-53,603	0	2,4542	1,4965 6
6	137,8 25	3,74079 E-12	0	199.19 3,04	18,1109	0,7000 39	-53,8449	0	2,4543 1	1,4972 5
6	137,8 61	0,08789 68	0	198.90 6,72	18,211	0,7067 5	-53,6543	0	2,4546 6	1,4961 2
6	138,2 91	1,14459	0	195.23 9,74	19,4389	0,7856 36	-51,0347	0	2,4594 5	1,4806 1
6	138,8 07	2,41531	0	190.42 1,34	20,9518	0,8762 56	-47,3901	0	2,4659 9	1,4594 6
6	139,4 26	3,94499	0	183.43 9,46	22,8054	0,9841 36	-42,0537	0	2,4753 2	1,4296 5
6	140,1 69	5,78901	0	172.76 8,89	25,0413	1,1188 2	-34,1905	0	2,4887 7	1,3883 4
6	141,0	8,01676	0	155.45	27,6543	1,2983	-22,4433	0	2,5092	1,3319

	61			3,85		6			8	4
6	141,3 26	8,68476	0	148.43 2,09	28,3969	1,3581 4	-18,01	0	2,5178 4	1,3121
6	141,3 26	8,68476	0	148.43 2,09	28,3969	1,3581 4	-18,01	0	2,5178 4	1,3121
6	142,1 3	10,7203	0	126.43 5,05	30,4482	1,5426 2	-6,20141	0	2,5421 3	1,2632 3
6	143,4 14	14,054	0	100.09 3,87	33,2681	1,7753	3,60786	0	2,654	1,2279 2
6	144,9 55	18,2411	0	77.892, 00	36,1661	2,0542 3	9,83897	0	2,7789 8	1,2082 1
6	146,8 04	23,5055	0	59.773, 66	39,2272	2,3955 3	13,8215	0	2,9094 9	1,1971 6
6	148,9 91	30,0209	0	45.567, 02	42,5399	2,7981 9	16,4207	0	3,0452 5	1,1908 2
6	148,9 91	30,0209	0	45.567, 02	42,5399	2,7983 1	16,4207	0	3,0451 2	1,1908 2
6	149,0 23	30,1162	0	45.403, 13	42,5856	2,8040 6	16,4483	0	3,0469 4	1,1907 6
6	151,6 85	38,435	0	34.039, 71	45,98	3,3223 5	18,2352	0	3,2002 7	1,1869 9
6	154,8 8	48,9531	0	25.005, 50	48,9225	4,0376 3	19,4757	0	3,3851 2	1,1848 1
6	155,9 26	52,528	0	22.736, 88	49,6315	4,3026 2	19,761	0	3,4475 6	1,1843 9
6	158,7 13	62,3906	0	17.788, 51	50,8742	5,1243 9	21,1726	0	3,6251 3	1,1807 2
6	163,3 14	79,7205	0	12.409, 54	52,5457	6,6316 9	22,7434	0	3,9037 5	1,1767 8
6	167,2 37	95,4661	0	9.502,4 0	54,0471	7,9983 8	23,4608	0	4,1195	1,1751 9
7	163,1 37	-9,0425	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
7	163,2 37	- 8,79901	0	211.23 3,08	3,15839	0,0199 716	-60,3585	0	2,4329 3	1,5357 4
7	163,3 37	- 8,55568	0	211.02 0,30	4,46694	0,0397 862	-60,3159	0	2,4337 5	1,5355 6



7	163,4 37	- 8,31226	0	210.41 4,42	5,47272	0,0595 76	-60,2376	0	2,4345 8	1,5353 7
7	163,5 37	- 8,06876	0	209.72 9,08	6,32049	0,0793 532	-60,1539	0	2,4354 1	1,5352
7	163,6 37	- 7,82518	0	209.01 5,26	7,06887	0,0990 862	-60,0686	0	2,4362 4	1,5350 2
7	163,7 37	- 7,58151	0	208.28 5,14	7,746	0,1187 91	-59,9822	0	2,4370 8	1,5348 6
7	163,8 37	- 7,33776	0	207.54 5,26	8,36836	0,1384 81	-59,8951	0	2,4379 2	1,5346 9
7	163,9 37	- 7,09393	0	206.79 9,81	8,94784	0,1581 45	-59,8077	0	2,4387 7	1,5345 2
7	164,0 37	- 6,85001	0	206.04 7,99	9,49282	0,1777 68	-59,7197	0	2,4396 1	1,5343 6
7	164,1 37	- 6,60601	0	205.29 0,91	10,009	0,1973 51	-59,6312	0	2,4404 7	1,5341 9
7	164,2 37	- 6,36192	0	204.52 8,55	10,5001	0,2169 08	-59,5421	0	2,4413 2	1,5340 3
7	164,3 37	- 6,11774	0	203.76 0,74	10,969	0,2364 48	-59,4524	0	2,4421 8	1,5338 6
7	164,4 37	- 5,87348	0	202.98 8,29	11,4187	0,2559 66	-59,3621	0	2,4430 5	1,5336 9
7	164,5 37	- 5,62913	0	202.21 1,51	11,8511	0,2754 65	-59,2714	0	2,4439 2	1,5335 2
7	164,6 37	-5,3847	0	201.43 0,53	12,2683	0,2949 37	-59,1803	0	2,4447 9	1,5333 5
7	164,7 37	- 5,14017	0	200.64 4,73	12,6719	0,3143 78	-59,0885	0	2,4456 7	1,5331 8
7	164,8 37	- 4,89556	0	199.85 3,80	13,0632	0,3337 87	-58,9961	0	2,4465 5	1,5330 1
7	164,9 37	- 4,65086	0	199.05 7,56	13,4433	0,3531 62	-58,9031	0	2,4474 3	1,5328 4
7	165,0 37	- 4,40608	0	198.25 6,33	13,8132	0,3725 04	-58,8095	0	2,4483 3	1,5326 7
7	165,1 37	-4,1612	0	197.44 9,96	14,1732	0,3918 22	-58,7152	0	2,4492 2	1,5324 9
7	165,2 57	- 3,86723	0	196.47 5,32	14,5933	0,4150 2	-58,5783	0	2,4503 1	1,5321 1



7	165,4 01	- 3,51429	0	195.29 5,27	15,0812	0,4429 98	-58,3295	0	2,4516 2	1,5310 7
7	165,5 74	- 3,09051	0	193.86 4,24	15,6446	0,4768 82	-57,8975	0	2,4532 1	1,5288 7
7	165,7 81	- 2,58161	0	192.12 5,33	16,2921	0,5180 83	-57,181	0	2,4551 4	1,5248 5
7	166,0 3	- 1,97041	0	190.02 3,57	17,0319	0,5682 61	-56,0936	0	2,4574 9	1,5184 7
7	166,3 28	- 1,23622	0	187.66 3,53	17,8722	0,6285 62	-54,6561	0	2,4602 3	1,5098 9
7	166,6 87	- 0,35413 2	0	185.18 6,98	18,859	0,6982 85	-52,9431	0	2,4633 8	1,4996
7	166,8 3	4,55327 E-12	0	184.24 2,43	19,2605	0,7251 54	-52,2331	0	2,4646 6	1,4953 3
7	166,8 3	4,55327 E-12	0	185.71 1,85	19,1684	0,7256 47	-52,4574	0	2,4647 6	1,4959 6
7	167,1 17	0,70607 1	0	183.67 4,66	19,992	0,7773 09	-50,9212	0	2,4674 1	1,4868 1
7	167,6 33	1,98069	0	179.68 6,61	21,5135	0,8669 18	-47,7239	0	2,4728 3	1,468
7	168,2 52	3,51411	0	173.99 7,93	23,3835	0,9721 44	-43,0568	0	2,4805 2	1,4414 1
7	168,9 95	5,36114	0	165.31 3,87	25,655	1,1016 3	-36,1287	0	2,4916 1	1,4039 8
7	169,8 87	7,58973	0	151.52 2,00	28,3467	1,2705 7	-25,8998	0	2,5079 6	1,3529 3
7	170,5 06	9,14886	0	138.57 5,37	30,1347	1,4033	-17,205	0	2,5228 9	1,3130 7
7	170,5 06	9,14886	0	138.57 5,37	30,1347	1,4033	-17,205	0	2,5228 9	1,3130 7
7	170,9 56	10,2886	0	126.76 2,17	31,3165	1,5087	-10,1671	0	2,5363 8	1,2829 7
7	172,2 4	13,6047	0	100.21 6,57	34,3587	1,7494 7	1,47892	0	2,6397 7	1,2382 4
7	173,7 81	17,7723	0	77.836, 31	37,4723	2,0269 5	8,64252	0	2,7670 1	1,2140 8
7	175,6	23,0127	0	59.613,	40,7447	2,3655	13,114	0	2,8988	1,2007



	3			05		1			8	3
7	177,8 49	29,6023	0	45.154, 79	44,3025	2,7739 9	16,0163	0	3,0374 2	1,1930 4
7	178,9 16	32,8782	0	40.034, 73	45,9327	2,9696 6	16,9291	0	3,098	1,1908 2
7	178,9 16	32,8782	0	40.034, 73	45,9327	2,9696 6	16,9291	0	3,098	1,1908 2
7	180,5 11	37,8883	0	33.860, 87	48,1684	3,2702 9	17,9562	0	3,1856 6	1,1884 9
7	183,7 06	48,3457	0	24.940, 84	51,7253	3,9396 2	19,2916	0	3,3612 8	1,1857 8
7	184,7 35	51,837	0	22.744, 54	52,628	4,1796 9	19,5931	0	3,4189 6	1,1852 5
7	187,5 39	61,6748	0	17.836, 48	54,421	4,9334 9	20,7853	0	3,5858 1	1,1822 6
7	192,1 4	78,831	0	12.385, 51	56,1408	6,4174 7	22,5415	0	3,8671 2	1,1775 9
7	196,0 08	94,2106	0	9.488,3 6	57,6084	7,7529 1	23,3264	0	4,0828	1,1757 3
8	191,4 93	-9,448	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
8	191,5 93	- 9,20349	0	199.10 7,50	3,23357	0,0197 772	-59,1185	0	2,4432 5	1,5343 6
8	191,6 93	- 8,95913	0	198.91 6,20	4,57262	0,0394 165	-59,0827	0	2,4439 7	1,5342 2
8	191,7 93	- 8,71469	0	198.35 0,24	5,60375	0,0590 094	-59,01	0	2,4447 3	1,5340 5
8	191,8 93	- 8,47018	0	197.70 7,10	6,47237	0,0785 998	-58,9318	0	2,4455	1,5338 9
8	191,9 93	-8,2256	0	197.04 6,21	7,23862	0,0981 605	-58,8532	0	2,4462 5	1,5337 3
8	192,0 93	- 7,98093	0	196.37 0,86	7,93297	0,1176 77	-58,7736	0	2,447	1,5335 8
8	192,1 93	- 7,73619	0	195.68 5,07	8,57124	0,1371 82	-58,693	0	2,4477 7	1,5334 3
8	192,2 93	- 7,49138	0	194.99 4,69	9,16513	0,1566 71	-58,6123	0	2,4485 3	1,5332 8



8	192,3 93	- 7,24649	0	194.30 1,67	9,7233	0,1761 33	-58,5314	0	2,4492 9	1,5331 3
8	192,4 93	- 7,00152	0	193.60 4,71	10,2518	0,1955 61	-58,4502	0	2,4500 5	1,5329 8
8	192,5 93	- 6,75648	0	192.90 3,54	10,7552	0,2149 52	-58,3685	0	2,4508 2	1,5328 3
8	192,6 93	- 6,51136	0	192.19 8,21	11,2364	0,2343 18	-58,2863	0	2,4516	1,5326 8
8	192,7 93	- 6,26616	0	191.48 8,36	11,698	0,2536 6	-58,2037	0	2,4523 7	1,5325 3
8	192,8 93	- 6,02088	0	190.77 4,30	12,142	0,2729 87	-58,1205	0	2,4531 5	1,5323 8
8	192,9 93	- 5,77553	0	190.05 6,48	12,5701	0,2922 96	-58,0368	0	2,4539 4	1,5322 3
8	193,0 93	- 5,53009	0	189.33 4,89	12,9843	0,3115 82	-57,9528	0	2,4547 3	1,5320 7
8	193,1 93	- 5,28458	0	188.60 9,58	13,3857	0,3308 45	-57,8683	0	2,4555 2	1,5319 2
8	193,2 93	- 5,03899	0	187.88 0,02	13,7755	0,3500 79	-57,7833	0	2,4563 1	1,5317 6
8	193,3 93	- 4,79332	0	187.14 5,97	14,1548	0,3692 84	-57,6977	0	2,4571 1	1,5316 1
8	193,4 93	- 4,54757	0	186.40 7,26	14,5243	0,3884 67	-57,6083	0	2,4579 1	1,5314 3
8	193,6 13	- 4,25256	0	185.51 5,12	14,9557	0,4114 95	-57,4771	0	2,4588 9	1,5310 4
8	193,7 57	- 3,89839	0	184.43 6,10	15,4572	0,4391 84	-57,2784	0	2,4600 6	1,5303
8	193,9 3	- 3,47317	0	183.12 8,37	16,0375	0,4726 01	-56,9396	0	2,4614 8	1,5287
8	194,1 37	- 2,96258	0	181.54 0,23	16,7047	0,5132 12	-56,3365	0	2,4632 1	1,5254 1
8	194,3 86	-2,3494	0	179.60 6,92	17,4678	0,5626 91	-55,3807	0	2,4653 1	1,5198 7
8	194,6 85	- 1,61291	0	177.43 8,42	18,3351	0,6222 36	-54,0719	0	2,4677 7	1,5120 8
8	195,0 43	- 0,72817	0	175.22 3,59	19,3338	0,6916 25	-52,5223	0	2,4705 3	1,5027 6

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8	195,3 37	2,83296 E-14	0	173.54 3,38	20,1609	0,7460 61	-51,1984	0	2,4728 2	1,4947 7
8	195,3 37	2,83296 E-14	0	174.92 7,64	20,0657	0,7465 29	-51,4092	0	2,4729 1	1,4953 7
8	195,4 73	0,33491 1	0	174.10 6,28	20,4577	0,7705 5	-50,7594	0	2,4739 8	1,4914 7
8	195,9 89	1,61277	0	170.70 3,14	21,9857	0,8594 53	-47,8934	0	2,4786 2	1,4744 5
8	196,6 08	3,14944	0	165.91 0,99	23,8672	0,9628 09	-43,7161	0	2,4851 6	1,4502 9
8	197,3 51	4,99934	0	158.59 0,22	26,1634	1,0886 1	-37,4623	0	2,4946 4	1,4157 9
8	198,2 43	7,22954	0	147.04 0,96	28,9083	1,2503 2	-28,2313	0	2,5084 3	1,3684
8	199,1 62	9,5441	0	130.38 4,44	31,6229	1,4410 8	-16,3556	0	2,5274 2	1,3129 1
8	199,1 62	9,5441	0	130.38 4,44	31,6229	1,4410 8	-16,3556	0	2,5274 2	1,3129 1
8	199,3 13	9,925	0	126.59 9,38	32,0282	1,4765 4	-13,8803	0	2,5319 2	1,3020 3
8	200,5 96	13,2277	0	99.942, 36	35,2531	1,7273 1	-0,244273	0	2,6279 8	1,2468 9
8	202,1 37	17,3788	0	77.485, 17	38,5415	2,0038 6	7,60394	0	2,7566 6	1,2193 3
8	203,9 86	22,6014	0	59.224, 87	41,9803	2,3418	12,5135	0	2,8897 4	1,2038 8
8	206,2 05	29,171	0	44.775, 01	45,7021	2,7493 4	15,6533	0	3,0292 7	1,1950 3
8	208,1 78	35,261	0	36.005, 93	48,8114	3,1100 3	17,2986	0	3,1396 8	1,1908 2
8	208,1 78	35,261	0	36.005, 93	48,8114	3,1100 3	17,2986	0	3,1396 8	1,1908 2
8	208,8 67	37,4382	0	33.534, 25	49,8367	3,2380 6	17,728	0	3,1765 1	1,1897 9
8	212,0 62	47,8577	0	24.738, 74	53,8806	3,8768 9	19,142	0	3,3457 9	1,1866 4
8	213,0	51,0424	0	22.750,	54,8592	4,0843	19,4358	0	3,3963	1,1860

	06			42		8			6	5
8	215,8 96	61,1038	0	17.774, 08	57,2075	4,8017 7	20,4598	0	3,5580 8	1,1836
8	220,4 96	78,1068	0	12.346, 37	59,2257	6,2301 7	22,3662	0	3,8343 7	1,1783 1
8	224,2 16	92,7674	0	9.520,3 7	60,6256	7,5035 8	23,1938	0	4,0446 7	1,1762 5
9	219,4 96	- 9,79893	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
9	219,5 96	- 9,55364	0	189.50 0,76	3,2977	0,0196 298	-58,1393	0	2,4512 3	1,5333
9	219,6 96	- 9,30848	0	189.28 0,94	4,66521	0,0391 102	-58,1025	0	2,4519 5	1,5331 8
9	219,7 96	- 9,06325	0	188.76 0,82	5,71451	0,0585 949	-58,0366	0	2,4526 2	1,5330 3
9	219,8 96	- 8,81796	0	188.16 8,36	6,60215	0,0780 265	-57,9649	0	2,4533 1	1,5328 8
9	219,9 96	- 8,57259	0	187.54 1,98	7,38535	0,0974 265	-57,8903	0	2,4540 2	1,5327 4
9	220,0 96	- 8,32715	0	186.90 4,90	8,09264	0,1168 26	-57,8152	0	2,4547 2	1,5326
9	220,1 96	- 8,08164	0	186.26 4,85	8,74354	0,1362 02	-57,7403	0	2,4554 2	1,5324 6
9	220,2 96	- 7,83607	0	185.62 1,12	9,35043	0,1555 43	-57,6652	0	2,4561 1	1,5323 2
9	220,3 96	- 7,59042	0	184.97 2,18	9,92155	0,1748 44	-57,5896	0	2,4568 2	1,5321 8
9	220,4 96	-7,3447	0	184.31 8,01	10,4618	0,1941 27	-57,5134	0	2,4575 2	1,5320 4
9	220,5 96	- 7,09892	0	183.65 9,76	10,9757	0,2133 93	-57,4368	0	2,4582 3	1,5319 1
9	220,6 96	- 6,85306	0	182.99 8,42	11,4664	0,2326 46	-57,3599	0	2,4589 5	1,5317 7
9	220,7 96	- 6,60713	0	182.33 4,68	11,9372	0,2518 79	-57,2827	0	2,4596 6	1,5316 3
9	220,8 96	- 6,36113	0	181.66 8,36	12,3905	0,2710 87	-57,2053	0	2,4603 7	1,5314 9



9	220,9 96	- 6,11505	0	180.99 8,92	12,8282	0,2902 64	-57,1275	0	2,4610 9	1,5313 5
9	221,0 96	- 5,86891	0	180.32 5,80	13,2517	0,3094 15	-57,0493	0	2,4618 1	1,5312 1
9	221,1 96	- 5,62269	0	179.64 9,06	13,6626	0,3285 35	-56,9706	0	2,4625 4	1,5310 7
9	221,2 96	-5,3764	0	178.96 8,71	14,0617	0,3476 28	-56,8915	0	2,4632 6	1,5309 2
9	221,3 96	- 5,13004	0	178.28 4,60	14,4499	0,3667 04	-56,8119	0	2,464 8	1,5307 8
9	221,4 96	-4,8836	0	177.59 6,38	14,8281	0,3857 52	-56,7319	0	2,4647 3	1,5306 4
9	221,6 16	- 4,58778	0	176.76 5,18	15,2693	0,4085 93	-56,6351	0	2,4656 2	1,5304 6
9	221,7 6	- 4,23265	0	175.76 0,19	15,7822	0,4360 47	-56,4804	0	2,4667 9	1,5299 9
9	221,9 33	- 3,80629	0	174.54 3,55	16,3755	0,4691 67	-56,2044	0	2,468 8	1,5287 8
9	222,1 4	- 3,29437	0	173.06 7,96	17,0586	0,5093 53	-55,6858	0	2,4695 7	1,5260 3
9	222,3 89	- 2,67962	0	171.27 4,11	17,8409	0,5583 27	-54,8101	0	2,4714 9	1,5209 8
9	222,6 88	- 1,94131	0	169.30 5,89	18,7319	0,6169 66	-53,6353	0	2,4736 9	1,5140 1
9	223,0 46	- 1,05448	0	167.30 4,75	19,7464	0,6857 29	-52,23	0	2,4761 7	1,5055 6
9	223,4 72	4,84456 E-12	0	165.17 8,08	20,9519	0,7631 23	-50,4885	0	2,4791 3	1,4950 2
9	223,4 72	4,84456 E-12	0	166.49 4,35	20,8539	0,7635 71	-50,6885	0	2,4792 7	1,4955 7
9	223,4 76	0,01092 72	0	166.47 1,25	20,8667	0,7643 4	-50,6697	0	2,4792 3	1,4954 6
9	223,9 92	1,29136	0	163.46 9,93	22,3988	0,8526 73	-48,0619	0	2,4833 4	1,4798 5
9	224,6 11	2,83077	0	159.20 3,23	24,2887	0,9546 37	-44,2314	0	2,4892 5	1,4574 9
9	225,3 54	4,68352	0	152.56 5,58	26,5986	1,0782	-38,3913	0	2,4978 9	1,4248 6



9	226,2 46	6,9164	0	141.89 9,86	29,3734	1,2351	-29,7244	0	2,5107 7	1,3797
9	227,3 16	9,61313	0	124.07 6,04	32,5873	1,4493 7	-16,7982	0	2,5308 3	1,3185 4
9	227,4 18	9,87172	0	121.90 3,81	32,8804	1,4724 6	-15,2987	0	2,5332 9	1,3118 3
9	227,4 18	9,87172	0	121.90 3,81	32,8804	1,4724 6	-15,2987	0	2,5332 9	1,3118 3
9	228,6	12,9081	0	98.047, 79	35,9517	1,7075 7	-1,74296	0	2,6186 8	1,2552 5
9	230,1 4	17,0476	0	75.884, 52	39,3824	1,9845	6,78218	0	2,7487 3	1,2241 1
9	231,9 89	22,2555	0	57.900, 62	42,9712	2,3216 1	12,0552	0	2,8824 7	1,2067 6
9	234,2 08	28,8096	0	43.692, 50	46,838	2,7285 4	15,3846	0	3,0226 5	1,1968 7
9	236,8 7	37,0571	0	32.684, 58	51,1496	3,2140 9	17,5631	0	3,1697 5	1,1910 1
9	236,9 97	37,4584	0	32.271, 45	51,349	3,2370 1	17,6388	0	3,1762 7	1,1908 2
9	236,9 97	37,4584	0	32.271, 45	51,349	3,237 1	17,6388	0	3,1762 7	1,1908 2
9	240,0 65	47,4456	0	24.138, 95	55,6222	3,8279 8	19,0338	0	3,3336 2	1,1874 7
9	240,7 36	49,6924	0	22.753, 68	56,4162	3,9677 1	19,2549	0	3,3682 7	1,1869 7
9	243,8 99	60,6146	0	17.411, 27	59,5041	4,6971 1	20,2043	0	3,5356 5	1,1847 9
9	248,4 99	77,4864	0	12.130, 04	61,9921	6,0518 7	22,2229	0	3,8025 6	1,1789 8
9	251,7 9	90,3145	0	9.594,7 9	63,2064	7,1677 7	23,0274	0	3,9917 9	1,1768 7
10	221,1 99	- 9,82027	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
10	221,2 99	- 9,57493	0	188.93 7,67	3,3016	0,0196 211	-58,0819	0	2,4516 9	1,5332 4
10	221,3	-	0	188.71	4,67073	0,0390	-58,0454	0	2,4524	1,5331

	99	9,32973		8,74		932			1	2
10	221,4	-	0	188.20	5,7213	0,0585	-57,9798	0	2,4530	1,5329
	99	9,08445		0,73		695			8	7
10	221,5	-	0	187.61	6,61002	0,0779	-57,9083	0	2,4537	1,5328
	99	8,83911		0,51		927			7	2
10	221,6	-8,5937	0	186.98	7,39415	0,0973	-57,8341	0	2,4544	1,5326
	99			6,55		847			7	8
10	221,7	-	0	186.35	8,10229	0,1167	-57,7593	0	2,4551	1,5325
	99	8,34822		2,03		76			7	4
10	221,8	-	0	185.71	8,75399	0,1361	-57,6847	0	2,4558	1,5324
	99	8,10266		4,58		44			6	
10	221,9	-	0	185.07	9,36163	0,1554	-57,61	0	2,4565	1,5322
	99	7,85704		3,43		77			5	7
10	222,0	-	0	184.42	9,93346	0,1747	-57,5347	0	2,4572	1,5321
	99	7,61135		7,08		7			5	3
10	222,1	-	0	183.77	10,4744	0,1940	-57,4588	0	2,4579	1,5319
	99	7,36559		5,53		46			6	9
10	222,2	-	0	183.11	10,9889	0,2133	-57,3825	0	2,4586	1,5318
	99	7,11976		9,95		05			6	5
10	222,3	-	0	182.46	11,4803	0,2325	-57,3059	0	2,4593	1,5317
	99	6,87386		1,32		5			7	1
10	222,4	-	0	181.80	11,9516	0,2517	-57,229	0	2,4600	1,5315
	99	6,62789		0,32		76			8	8
10	222,5	-	0	181.13	12,4055	0,2709	-57,1519	0	2,4607	1,5314
	99	6,38184		6,77		76			9	4
10	222,6	-	0	180.47	12,8437	0,2901	-57,0745	0	2,4615	1,5313
	99	6,13573		0,11		46				
10	222,7	-	0	179.79	13,2678	0,3092	-56,9966	0	2,4622	1,5311
	99	5,88954		9,78		89			2	6
10	222,8	-	0	179.12	13,6792	0,3284	-56,9183	0	2,4629	1,5310
	99	5,64328		5,89		02			4	2
10	222,9	-	0	178.44	14,0789	0,3474	-56,8395	0	2,4636	1,5308
	99	5,39695		8,40		88			7	8
10	223,0	-	0	177.76	14,4676	0,3665	-56,7603	0	2,4643	1,5307
	99	5,15055		7,18		56			9	3
10	223,1	-	0	177.08	14,8463	0,3855	-56,6805	0	2,4651	1,5305
	99	4,90407		1,88		97			3	9
10	223,3	-	0	176.25	15,2881	0,4084	-56,5842	0	2,4660	1,5304



	19	4,60821		4,23		32			1	2
10	223,4 63	- 4,25302	0	175.25 3,58	15,8017	0,4358 75	-56,4303	0	2,4670 8	1,5299 4
10	223,6 36	-3,8266	0	174.04 1,39	16,3958	0,4689 73	-56,1588	0	2,4683 8	1,5287 7
10	223,8 43	- 3,31459	0	172.56 2,28	17,0795	0,5091 38	-55,6437	0	2,4699 6	1,5260 4
10	224,0 92	- 2,69974	0	170.74 2,58	17,8624	0,5580 72	-54,7692	0	2,4719 3	1,5210 2
10	224,3 9	- 1,96129	0	168.71 2,44	18,7541	0,6166 32	-53,591	0	2,4742 3	1,5140 7
10	224,7 49	- 1,07424	0	166.59 8,00	19,77	0,6852 76	-52,1715	0	2,4768 8	1,5055 8
10	225,1 79	- 0,00848 497	0	164.28 4,28	20,9885	0,7633 34	-50,3884	0	2,4800 9	1,4948 8
10	225,1 82	1,30647 E-15	0	164.26 5,71	20,9984	0,7639 35	-50,3731	0	2,4801 2	1,4947 9
10	225,1 82	1,30647 E-15	0	165.57 9,27	20,9	0,7643 82	-50,5728	0	2,4801 9	1,4953 4
10	225,6 95	1,2725	0	162.38 6,30	22,4213	0,8519 82	-47,9565	0	2,4845 2	1,4798
10	226,3 14	2,81293	0	157.37 4,49	24,3098	0,9532 72	-44,0186	0	2,4915 5	1,4572
10	227,0 57	4,66807	0	149.38 5,73	26,6157	1,0757 3	-37,9689	0	2,5019 7	1,4241
10	227,9 49	6,90497	0	137.62 4,28	29,3823	1,2322 4	-29,1302	0	2,5156 5	1,3786 6
10	229,0 18	9,6062	0	119.96 5,17	32,591	1,4465 8	-16,367	0	2,5343 7	1,3184 3
10	229,1 23	9,87172	0	117.82 3,86	32,8912	1,4702 5	-14,8707	0	2,5366 7	1,3117 2
10	229,1 23	9,87172	0	117.82 3,86	32,8912	1,4702 5	-14,8707	0	2,5366 7	1,3117 2
10	230,3 02	12,9036	0	94.804, 09	35,9578	1,7056 9	-1,51084	0	2,6196 4	1,2557 2
10	231,8 43	17,0436	0	73.352, 25	39,4009	1,9825 6	6,92772	0	2,7487 9	1,2246 3

10	233,6 92	22,2513	0	55.945, 34	43,0087	2,3192 6	12,1476	0	2,8820 5	1,2072 4
10	235,9 11	28,804	0	42.192, 32	46,9022	2,7254 6	15,446	0	3,0218 7	1,1972 7
10	238,5 73	37,0492	0	31.536, 73	51,2469	3,2100 6	17,6051	0	3,1687 1	1,1913 3
10	238,9 08	38,1155	0	30.412, 13	51,7795	3,2707 1	17,8001	0	3,1858 9	1,1908 2
10	238,9 08	38,1155	0	30.412, 13	51,7795	3,2707 1	17,8001	0	3,1858 9	1,1908 2
10	241,7 68	47,4319	0	23.280, 38	55,8257	3,8171 8	19,0615	0	3,3309 7	1,1877 1
10	242,0 37	48,33	0	22.717, 24	56,1595	3,8720 5	19,1522	0	3,3446 7	1,1875
10	245,6 01	60,5873	0	16.776, 16	59,8463	4,6742 8	20,243	0	3,5306 2	1,1848 9
10	250,2 02	77,429	0	11.659, 41	62,4625	6,0093 7	22,2464	0	3,7948 5	1,1790 6
10	252,8 9	87,8393	0	9.515,1 6	63,4555	6,9139 3	22,9267	0	3,9507 6	1,1772 5
11	221,2	- 9,82027	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
11	221,3	- 9,57493	0	188.46 3,81	3,3016	0,0196 211	-58,0819	0	2,4516 9	1,5332 4
11	221,4	- 9,32973	0	188.24 5,43	4,67073	0,0390 932	-58,0454	0	2,4524 1	1,5331 2
11	221,5	- 9,08445	0	187.72 8,72	5,7213	0,0585 695	-57,9798	0	2,4530 8	1,5329 7
11	221,6	- 8,83911	0	187.13 9,98	6,61002	0,0779 927	-57,9083	0	2,4537 7	1,5328 2
11	221,7	-8,5937	0	186.51 7,58	7,39415	0,0973 847	-57,8341	0	2,4544 7	1,5326 8
11	221,8	- 8,34822	0	185.88 4,65	8,10229	0,1167 76	-57,7593	0	2,4551 7	1,5325 4
11	221,9	- 8,10266	0	185.24 8,80	8,75399	0,1361 44	-57,6847	0	2,4558 6	1,5324
11	222	-	0	184.60	9,36163	0,1554	-57,61	0	2,4565	1,5322



		7,85704		9,26		77			5	7
11	222,1	-	0	183.96	9,93346	0,1747	-57,5347	0	2,4572	1,5321
		7,61135		4,53		7			5	3
11	222,2	-	0	183.31	10,4744	0,1940	-57,4588	0	2,4579	1,5319
		7,36559		4,61		46			6	9
11	222,3	-	0	182.66	10,9889	0,2133	-57,3825	0	2,4586	1,5318
		7,11976		0,68		05			6	5
11	222,4	-	0	182.00	11,4803	0,2325	-57,3059	0	2,4593	1,5317
		6,87386		3,70		5			7	1
11	222,5	-	0	181.34	11,9516	0,2517	-57,229	0	2,4600	1,5315
		6,62789		4,36		76			8	8
11	222,6	-	0	180.68	12,4055	0,2709	-57,1519	0	2,4607	1,5314
		6,38184		2,47		76			9	4
11	222,7	-	0	180.01	12,8437	0,2901	-57,0745	0	2,4615	1,5313
		6,13573		7,48		46				
11	222,8	-	0	179.34	13,2678	0,3092	-56,9966	0	2,4622	1,5311
		5,88954		8,84		89			2	6
11	222,9	-	0	178.67	13,6792	0,3284	-56,9183	0	2,4629	1,5310
		5,64328		6,64		02			4	2
11	223	-	0	178.00	14,0789	0,3474	-56,8395	0	2,4636	1,5308
		5,39695		0,85		88			7	8
11	223,1	-	0	177.32	14,4676	0,3665	-56,7603	0	2,4643	1,5307
		5,15055		1,34		56			9	3
11	223,2	-	0	176.63	14,8463	0,3855	-56,6805	0	2,4651	1,5305
		4,90407		7,76		97			3	9
11	223,3	-	0	175.81	15,2881	0,4084	-56,5842	0	2,4660	1,5304
	2	4,60821		2,18		32			1	2
11	223,4	-	0	174.81	15,8017	0,4358	-56,4303	0	2,4670	1,5299
	64	4,25302		4,04		75			8	4
11	223,6	-3,8266	0	173.60	16,3958	0,4689	-56,1588	0	2,4683	1,5287
	37			4,89		73			8	7
11	223,8	-	0	172.12	17,0795	0,5091	-55,6437	0	2,4699	1,5260
	44	3,31459		9,49		38			6	4
11	224,0	-	0	170.31	17,8624	0,5580	-54,7692	0	2,4719	1,5210
	93	2,69974		4,36		72			3	2
11	224,3	-	0	168.28	18,7541	0,6166	-53,591	0	2,4742	1,5140
	91	1,96129		9,31		32			3	7
11	224,7	-	0	166.18	19,77	0,6852	-52,1715	0	2,4768	1,5055



	5	1,07424		0,17		76			8	8
11	225,1 8	- 0,00848 497	0	163.87 2,25	20,9885	0,7633 34	-50,3884	0	2,4800 9	1,4948 8
11	225,1 83	1,30647 E-15	0	163.85 3,73	20,9984	0,7639 35	-50,3731	0	2,4801 2	1,4947 9
11	225,1 83	1,30647 E-15	0	165.16 3,99	20,9	0,7643 82	-50,5728	0	2,4801 9	1,4953 4
11	225,6 96	1,2725	0	161.97 9,03	22,4213	0,8519 82	-47,9565	0	2,4845 2	1,4798
11	226,3 15	2,81293	0	156.97 9,79	24,3098	0,9532 72	-44,0186	0	2,4915 5	1,4572
11	227,0 58	4,66807	0	149.01 1,06	26,6157	1,0757 3	-37,9689	0	2,5019 7	1,4241
11	227,9 5	6,90497	0	137.27 9,12	29,3823	1,2322 4	-29,1302	0	2,5156 5	1,3786 6
11	229,0 19	9,6062	0	119.66 4,29	32,591	1,4465 8	-16,367	0	2,5343 7	1,3184 3
11	229,1 24	9,87172	0	117.52 8,35	32,8912	1,4702 5	-14,8707	0	2,5366 7	1,3117 2
11	229,1 24	9,87172	0	117.52 8,35	32,8912	1,4702 5	-14,8707	0	2,5366 7	1,3117 2
11	230,3 03	12,9036	0	94.544, 11	35,9578	1,7056 9	-1,51084	0	2,6196 4	1,2557 2
11	231,8 44	17,0436	0	73.120, 68	39,4009	1,9825 6	6,92772	0	2,7487 9	1,2246 3
11	233,6 93	22,2513	0	55.746, 68	43,0087	2,3192 6	12,1476	0	2,8820 5	1,2072 4
11	235,9 12	28,804	0	42.025, 28	46,9022	2,7254 6	15,446	0	3,0218 7	1,1972 7
11	238,5 74	37,0492	0	31.397, 34	51,2469	3,2100 6	17,6051	0	3,1687 1	1,1913 3
11	238,9 09	38,1155	0	30.365, 38	51,7795	3,2707 1	17,8001	0	3,1858 9	1,1908 2
11	238,9 09	38,1155	0	30.365, 38	51,7795	3,2707 1	17,8001	0	3,1858 9	1,1908 2
11	241,7 69	47,4319	0	23.174, 65	55,8257	3,8171 8	19,0615	0	3,3309 7	1,1877 1



11	242,038	48,33	0	22.633,39	56,1595	3,87205	19,1522	0	3,34467	1,1875
11	245,602	60,5873	0	16.690,31	59,8463	4,67428	20,243	0	3,53062	1,18489
11	250,203	77,429	0	11.651,38	62,4625	6,00937	22,2464	0	3,79485	1,17906
11	252,891	87,8393	0	9.597,17	63,4555	6,91393	22,9267	0	3,95076	1,17725
12	233,051	-9,87172	0	1,00	0,00177245	0,18631	24,6396	0	2,58208	1,17396
12	233,151	-9,62274	0	141.661,81	3,32831	0,0189242	-53,2858	0	2,48883	1,52841
12	233,251	-9,37382	0	141.348,51	4,70493	0,0377438	-53,251	0	2,48945	1,52836
12	233,351	-9,12484	0	140.766,44	5,76461	0,0565225	-53,1808	0	2,49012	1,52822
12	233,451	-8,8758	0	140.151,74	6,65413	0,0753365	-53,1084	0	2,49075	1,52809
12	233,551	-8,62669	0	139.528,04	7,43908	0,0941164	-53,0358	0	2,49138	1,52796
12	233,651	-8,37752	0	138.894,27	8,14842	0,112881	-52,9622	0	2,49202	1,52784
12	233,751	-8,12829	0	138.257,51	8,79973	0,131646	-52,8885	0	2,49265	1,52771
12	233,851	-7,87899	0	137.617,10	9,40637	0,150381	-52,8145	0	2,49328	1,52758
12	233,951	-7,62963	0	136.972,81	9,97661	0,169085	-52,7401	0	2,49392	1,52746
12	234,051	-7,38021	0	136.324,54	10,5161	0,187765	-52,6652	0	2,49456	1,52733
12	234,151	-7,13072	0	135.672,16	11,0296	0,206416	-52,5899	0	2,49521	1,52721
12	234,251	-6,88117	0	135.015,86	11,5206	0,225035	-52,5141	0	2,49585	1,52707
12	234,351	-6,63155	0	134.356,54	11,9913	0,243641	-52,438	0	2,4965	1,52695
12	234,4	-	0	133.69	12,4436	0,2622	-52,3616	0	2,4971	1,5268

	51	6,38187		4,88		42			5	2
12	234,5	-	0	133.03	12,8796	0,2808	-52,2851	0	2,4978	1,5266
	51	6,13212		1,55		32			1	9
12	234,6	-	0	132.36	13,3009	0,2994	-52,2085	0	2,4984	1,5265
	51	5,88231		7,61		1			6	6
12	234,7	-	0	131.70	13,709	0,3179	-52,1321	0	2,4991	1,5264
	51	5,63243		4,07		73				3
12	234,8	-	0	131.04	14,1052	0,3365	-52,0556	0	2,4997	1,5263
	51	5,38249		0,34		2			5	
12	234,9	-	0	130.37	14,4904	0,3550	-51,9792	0	2,5003	1,5261
	51	5,13248		6,57		48			9	8
12	235,0	-	0	129.71	14,8656	0,3735	-51,9028	0	2,5010	1,5260
	51	4,88241		2,11		58			3	5
12	235,1	-	0	128.91	15,3035	0,3957	-51,804	0	2,5018	1,5258
	71	4,58224		3,43		55			1	5
12	235,3	-	0	127.95	15,8128	0,4224	-51,6527	0	2,5027	1,5253
	15	4,22191		2,52		18			4	8
12	235,4	-	0	126.79	16,4022	0,4545	-51,3892	0	2,5038	1,5242
	88	3,78934		4,86		53			6	7
12	235,6	-3,27	0	125.39	17,0799	0,4935	-50,8994	0	2,5052	1,5217
	95			8,92		49			1	4
12	235,9	-	0	123.71	17,8552	0,5410	-50,0735	0	2,5068	1,5171
	44	2,64642		2,74		5			4	
12	236,2	-	0	121.72	18,7375	0,5987	-48,8427	0	2,5087	1,5099
	42	1,89759		6,11		32			9	4
12	236,6	-	0	119.56	19,7442	0,6670	-47,2857	0	2,5110	1,5007
	01	0,99826		8,85		32			2	7
		1								
12	237,0	0,08200	0	117.23	20,9431	0,7453	-45,3473	0	2,5136	1,4893
	31	74		0,35		26			2	4
12	237,5	1,37988	0	114.39	22,4354	0,8340	-42,6658	0	2,5169	1,4736
	47			6,90		2			8	
12	238,1	2,93977	0	110.57	24,2861	0,9371	-38,7241	0	2,5215	1,4509
	66			8,25		15			4	2
12	238,9	4,81564	0	105.13	26,5525	1,0617	-32,9421	0	2,5277	1,4188
	09			8,92		5			7	6
12	239,8	7,0732	0	97.097,	29,287	1,2202	-24,5787	0	2,5363	1,3750
				32		9			8	8



12	240,87	9,79352	0	84.346,90	32,4642	1,43759	-12,4599	0	2,54942	1,31653
12	240,901	9,87172	0	83.889,34	32,5516	1,44455	-12,0551	0	2,5499	1,31466
12	240,901	9,87172	0	83.889,34	32,5516	1,44455	-12,0551	0	2,5499	1,31466
12	242,154	13,1014	0	66.276,44	35,8335	1,69565	0,580337	0	2,62344	1,25931
12	243,695	17,2409	0	51.114,76	39,3607	1,97016	8,30887	0	2,7477	1,22845
12	245,544	22,4439	0	38.857,58	43,1082	2,30222	13,0164	0	2,87778	1,21092
12	247,762	28,9841	0	29.211,82	47,2089	2,70145	16,021	0	3,0151	1,20038
12	250,005	35,8881	0	22.728,38	51,1011	3,10307	17,7564	0	3,13842	1,1946
12	250,425	37,21	0	21.758,02	51,8097	3,17821	17,9977	0	3,16008	1,19382
12	252,51	43,909	0	17.769,24	55,2825	3,5477	18,9457	0	3,26178	1,19082
12	252,51	43,909	0	17.769,24	55,2825	3,5477	18,9457	0	3,26178	1,19082
12	253,62	47,558	0	16.075,41	57,0463	3,74704	19,3251	0	3,31348	1,18966
12	257,453	60,6074	0	11.664,93	62,1468	4,51567	20,6226	0	3,49578	1,18561
12	258,764	65,2333	0	10.526,51	63,4747	4,81915	21,2838	0	3,56198	1,18344
13	262,25	-9,87172	0	1,00	0,00177245	0,18631	24,6396	0	2,58208	1,17396
13	262,35	-9,61888	0	86.803,27	3,35115	0,0182332	-47,7634	0	2,52781	1,52344
13	262,45	-9,36609	0	86.627,69	4,73818	0,0363604	-47,7593	0	2,52815	1,52352
13	262,55	-9,11325	0	86.300,13	5,80258	0,0544853	-47,7227	0	2,52849	1,52347
13	262,6	-	0	85.941,	6,69838	0,0726	-47,6815	0	2,5288	1,5234



	5	8,86039		87		21			3	
13	262,7	-	0	85.573,	7,48795	0,0907	-47,6391	0	2,5291	1,5233
	5	8,60749		38		379			7	3
13	262,8	-	0	85.199,	8,20159	0,1088	-47,596	0	2,5295	1,5232
	5	8,35456		03		47			1	6
13	262,9	-	0	84.821,	8,85666	0,1269	-47,5526	0	2,5298	1,5231
	5	8,10159		06		63			5	9
13	263,0	-	0	84.441,	9,46567	0,1450	-47,509	0	2,5302	1,5231
	5	7,84858		48		77				2
13	263,1	-	0	84.059,	10,0377	0,1631	-47,4652	0	2,5305	1,5230
	5	7,59555		91		76			4	5
13	263,2	-	0	83.676,	10,5789	0,1812	-47,4213	0	2,5308	1,5229
	5	7,34248		71		56			9	8
13	263,3	-	0	83.292,	11,0932	0,1993	-47,3772	0	2,5312	1,5229
	5	7,08937		00		32			3	1
13	263,4	-	0	82.905,	11,584	0,2174	-47,3329	0	2,5315	1,5228
	5	6,83623		54		09			8	4
13	263,5	-	0	82.517,	12,0542	0,2354	-47,2884	0	2,5319	1,5227
	5	6,58305		67		84			3	7
13	263,6	-	0	82.128,	12,5057	0,2535	-47,2438	0	2,5322	1,5227
	5	6,32984		61		65			8	
13	263,7	-6,0766	0	81.738,	12,9409	0,2716	-47,199	0	2,5326	1,5226
	5			45		41			3	3
13	263,8	-	0	81.346,	13,3615	0,2897	-47,1542	0	2,5329	1,5225
	5	5,82332		98		09			8	6
13	263,9	-5,57	0	80.954,	13,7689	0,3077	-47,1091	0	2,5333	1,5224
	5			07		67			3	9
13	264,0	-	0	80.559,	14,1642	0,3258	-47,0638	0	2,5336	1,5224
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13	264,1	-	0	80.163,	14,5486	0,3438	-47,0184	0	2,5340	1,5223
	5	5,06326		67		48			4	5
13	264,2	-	0	79.766,	14,9228	0,3618	-46,9728	0	2,5344	1,5222
	5	4,80984		32		74				7
13	264,3	-	0	79.287,	15,3588	0,3835	-46,916	0	2,5348	1,5221
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13	264,5	-	0	78.710,	15,8655	0,4095	-46,8154	0	2,5353	1,5218
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13	264,6	-	0	78.012,	16,4505	0,4408	-46,6324	0	2,5359	1,5210



	86	3,70247		77		77		8	2	
13	264,8 94	- 3,17654	0	77.171, 70	17,1229	0,4789 36	-46,2358	0	2,5367 3	1,5188 5
13	265,1 43	-2,5452	0	76.157, 55	17,8909	0,5254 31	-45,4835	0	2,5376 4	1,5144 2
13	265,4 41	- 1,78731	0	74.943, 82	18,7629	0,5823 66	-44,2648	0	2,5387 3	1,5070 4
13	265,8	- 0,87741 2	0	73.563, 68	19,7524	0,6510 02	-42,6187	0	2,54	1,4970 6
13	266,2 3	0,21507 2	0	72.091, 54	20,9254	0,7299 08	-40,6489	0	2,5414 8	1,4851 9
13	266,7 46	1,52692	0	70.345, 16	22,3932	0,8190 79	-37,9953	0	2,5433 7	1,4693 7
13	267,3 65	3,10254	0	67.985, 60	24,2167	0,9229 16	-34,1197	0	2,546	1,4467 7
13	268,1 08	4,99564	0	64.605, 60	26,4471	1,0487 8	-28,4915	0	2,5496 5	1,4151 4
13	268,9 99	7,27122	0	59.536, 75	29,1473	1,2087 8	-20,437	0	2,5548 4	1,3722 4
13	270,0 16	9,87172	0	51.801, 01	32,1429	1,4162 6	-9,54349	0	2,5625 2	1,3180 8
13	270,0 16	9,87172	0	51.801, 01	32,1429	1,4162 6	-9,54349	0	2,5625 2	1,3180 8
13	270,0 69	10,0088	0	51.241, 38	32,2893	1,4287 7	-8,81205	0	2,5631 2	1,3145 7
13	271,3 53	13,3274	0	40.054, 24	35,6574	1,6887 2	2,67798	0	2,6268 7	1,2617 1
13	272,8 94	17,4698	0	30.805, 68	39,2501	1,9605 6	9,56339	0	2,7468 9	1,2319 9
13	274,7 43	22,6688	0	23.361, 73	43,1223	2,2881	13,8116	0	2,8740 8	1,2142
13	274,9 35	23,2215	0	22.747, 45	43,5051	2,3219 5	14,1214	0	2,8867	1,2129 3
13	276,9 61	29,2011	0	17.514, 96	47,3918	2,6820 4	16,5465	0	3,0096	1,2031 4
13	279,6 24	37,4079	0	13.015, 11	52,2065	3,1513 9	18,3539	0	3,1527 6	1,1960 3

13	281,1 3	42,2144	0	11.203, 84	54,8413	3,4147 8	19,0138	0	3,2264	1,1934 8
14	452,9 8	- 9,87172	0	1,00	0,00177 245	0,1863 05	24,6317	0	2,5820 8	1,1739 9
14	453,0 8	- 9,61401	0	8.514,8 6	3,38025	0,0171 051	-42,3683	0	2,5771 3	1,5332 7
14	453,1 8	-9,3563	0	8.469,2 8	4,78088	0,0342 07	-42,4053	0	2,5771 6	1,5335 5
14	453,2 8	- 9,09858	0	8.428,9 0	5,85386	0,0513 211	-42,4084	0	2,5772	1,5335 9
14	453,3 8	- 8,84086	0	8.390,0 3	6,75714	0,0684 398	-42,4069	0	2,5772 3	1,5336
14	453,4 8	- 8,58313	0	8.351,5 8	7,55246	0,0855 586	-42,4042	0	2,5772 6	1,5336 1
14	453,5 8	- 8,32541	0	8.313,3 0	8,26956	0,1026 97	-42,401	0	2,5772 9	1,5336 1
14	453,6 8	- 8,06768	0	8.275,1 6	8,92815	0,1198 39	-42,3976	0	2,5773 2	1,5336 1
14	453,7 8	- 7,80994	0	8.236,9 9	9,54111	0,1369 73	-42,394	0	2,5773 5	1,5336 1
14	453,8 8	- 7,55221	0	8.198,7 8	10,1162	0,1541 1	-42,3904	0	2,5773 8	1,5336
14	453,9 8	- 7,29447	0	8.160,4 4	10,659	0,1712 6	-42,3867	0	2,5774 1	1,5336
14	454,0 8	- 7,03673	0	8.122,0 2	11,1741	0,1884 25	-42,383	0	2,5774 4	1,5336
14	454,1 8	- 6,77898	0	8.083,5 3	11,6654	0,2056 01	-42,3793	0	2,5774 7	1,5336
14	454,2 8	- 6,52123	0	8.044,9 5	12,1358	0,2227 83	-42,3755	0	2,5775	1,5335 9
14	454,3 8	- 6,26348	0	8.006,2 5	12,588	0,2399 65	-42,3717	0	2,5775 3	1,5335 9
14	454,4 8	- 6,00573	0	7.967,4 1	13,0239	0,2571 46	-42,3678	0	2,5775 6	1,5335 9
14	454,5 8	- 5,74797	0	7.928,4 4	13,4452	0,2743 26	-42,364	0	2,5775 9	1,5335 9
14	454,6	-	0	7.889,3	13,8527	0,2915	-42,3601	0	2,5776	1,5335

	8	5,49021	5	18	2	8				
14	454,78	-5,23245	0	7.850,10	14,2479	0,308713	-42,3562	0	2,57765	1,53358
14	454,88	-4,97468	0	7.810,69	14,6315	0,325919	-42,3523	0	2,57768	1,53358
14	454,98	-4,71691	0	7.771,12	15,004	0,343144	-42,3484	0	2,57772	1,53357
14	455,1	-4,40758	0	7.723,44	15,4382	0,363823	-42,3436	0	2,57775	1,53357
14	455,244	-4,03638	0	7.665,94	15,9416	0,388691	-42,3233	0	2,5778	1,53347
14	455,416	-3,59093	0	7.596,52	16,5228	0,418732	-42,2102	0	2,57786	1,53276
14	455,624	-3,05638	0	7.512,58	17,1902	0,455261	-41,8787	0	2,57792	1,5306
14	455,873	-2,4149	0	7.410,91	17,952	0,500016	-41,1618	0	2,578	1,52592
14	456,171	-1,6451	0	7.287,59	18,8154	0,55503	-39,9697	0	2,5781	1,51818
14	456,529	-0,721297	0	7.145,48	19,7917	0,621705	-38,3323	0	2,57822	1,50765
14	456,959	0,387322	0	6.991,86	20,9549	0,698624	-36,3297	0	2,57836	1,49495
14	457,475	1,71775	0	6.808,70	22,4121	0,786001	-33,6169	0	2,57854	1,47806
14	458,095	3,31439	0	6.563,91	24,2148	0,88851	-29,7205	0	2,57879	1,45442
14	458,838	5,23059	0	6.213,06	26,4247	1,0136	-24,1063	0	2,57914	1,42156
14	459,729	7,53039	0	5.690,64	29,0858	1,17412	-16,2591	0	2,57963	1,37775
14	460,637	9,87172	0	4.990,16	31,7173	1,36024	-7,06024	0	2,58028	1,32895
14	460,637	9,87172	0	4.990,16	31,7173	1,36024	-7,06024	0	2,58028	1,32895
14	460,637	9,87182	0	4.990,12	31,7174	1,36025	-7,05975	0	2,58028	1,32895

14	460,7 99	10,2909	0	4.821,8 3	32,1645	1,3983 1	-5,0658	0	2,5804 4	1,3186 5
14	462,0 83	13,6186	0	3.743,4 7	35,5738	1,6641 3	4,9432	0	2,6244 3	1,2679 9
14	463,6 24	17,753	0	2.863,1 9	39,288	1,9332 5	10,9787	0	2,7402 4	1,2380 6
14	463,6 96	17,9499	0	2.829,8 7	39,4525	1,9457 8	11,1754	0	2,7453 4	1,2370 8
14	465,4 73	22,9362	0	2.160,3 6	43,3448	2,2562 3	14,7379	0	2,8647	1,2194 2
14	467,6 91	29,4424	0	1.612,1 4	47,8538	2,6436 3	17,1713	0	2,9981	1,2073 1
14	470,3 54	37,6174	0	1.192,1 0	52,9503	3,1062	18,784	0	3,1401 5	1,1992 4
14	471,8 02	42,2169	0	1.029,6 6	55,633	3,3560 1	19,3531	0	3,2106 6	1,1963 9

