

Dispersion Report

Workspace: 72438-2FSRURegas-9H

Study: FSRU in rigassificazione

Equipment Item: 9H Sovrapressione VX0050

72438-2FSRURegas-9H\FSRU in rigassificazione\9H Sovrapressione VX0050

Material	GAS NATURALE	
East	0	m
North	0	m

Scenario (Leak) : 28,28mm

72438-2FSRURegas-9H\FSRU in rigassificazione\9H Sovrapressione VX0050\28,28mm

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			Final
					Release	Rainout	Pool vapour pick-up	
1	Continuous	0	0	kg/s	12,7439	12,3017	0,442176	

2	Continuou s	0,22	-0,234374	kg/s	12,7439	12,3017		1,87987
3	Continuou s	68,515 5	-6,45852	kg/s	12,7439	12,3017		10,1375
4	Continuou s	123,48	-7,75392	kg/s	12,7439	12,3017		10,7646
5	Continuou s	175,79 6	-8,60144	kg/s	12,7439	12,3017		11,0797
6	Continuou s	226,74 2	-9,24739	kg/s	12,7439	12,3017		11,2972
7	Continuou s	276,74 1	-9,76598	kg/s	12,7439	12,3017		11,4421
8	Continuou s	326,12 9	-10,2081	kg/s	12,7439	12,3017		11,5543
9	Continuou s	375,08 7	-10,5981	kg/s	12,7439	12,3017		11,0004
10	Continuou s	381,62 1	-10,6444	kg/s	12,7439	12,3017		10,3541
11	Continuou s	381,62 2	-10,6444	kg/s	0	0	9,9119 1	9,91191
12	Continuou s	402,85 9	-10,7949	kg/s	0	0		7,03735
13	Continuou s	432,33 3	-10,8068	kg/s	0	0		4,74942
14	Continuou s	686,13 8	-10,8068	kg/s	0	0		0,48324 2

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 height [m]	C/Lin e conc [ppm]	Effecti ve width [m]	Effecti ve depth [m]	C/Line vapour temperature [degC]	C/Li ne liquid fraction	Centr oid velocity [m/s]	C/Lin e cloud density [kg/m ³]
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1	0	0	0	999.98 1,82	0,1573 02	0,0754 564	-160,34	0	18,308 4	2,0348 3
1	0,01	0,15299 6	0	947.07 1,68	0,1695 41	0,1132 65	-150,271	0	13,129 8	1,9090 9
1	0,02	0,27089 5	0	911.92 7,30	0,1840 66	0,1410 14	-143,463	0	10,693 8	1,8368 9
1	0,03	0,36979 9	0	885.41 2,04	0,1998 6	0,1623 74	-138,252	0	9,1881 9	1,7871 3
1	0,04	0,45613 8	0	864.25 6,85	0,2164 52	0,1790 89	-134,045	0	8,1412 8	1,7499 1
1	0,05	0,53343 3	0	846.76 8,35	0,2335 7	0,1924 52	-130,529	0	7,3569 4	1,7205 9
1	0,06	0,60381 6	0	831.95 0,27	0,2510 42	0,2033 64	-127,521	0	6,7391 4	1,6966 7
1	0,07	0,66865 1	0	819.17 1,02	0,2687 6	0,2123 95	-124,902	0	6,2365	1,6766 5
1	0,08	0,72888 9	0	807.99 8,26	0,2866 51	0,2199 25	-122,591	0	5,8183 1	1,6595 5
1	0,09	0,78526	0	798.11 3,62	0,3046 59	0,2262 77	-120,528	0	5,4634 9	1,6447
1	0,1	0,83833	0	789.27 8,55	0,3227 47	0,2317 14	-118,668	0	5,1571 9	1,6316 3
1	0,11	0,88853	0	781.31 6,03	0,3408 85	0,2364 18	-116,975	0	4,8893 7	1,6199 8
1	0,12	0,93620 9	0	774.08 6,80	0,3590 52	0,2405 3	-115,425	0	4,6525 9	1,6095
1	0,13	0,98162 7	0	767.48 7,71	0,3772 34	0,2441 32	-113,996	0	4,4417 6	1,5999 9
1	0,14	1,02503	0	761.42 8,21	0,3954 18	0,2473 16	-112,671	0	4,2524 8	1,5913
1	0,15	1,06663	0	755.83 2,01	0,4135 93	0,2501 75	-111,436	0	4,0810 8	1,5832 9
1	0,16	1,1066	0	750.63 9,21	0,4317 52	0,2527 68	-110,278	0	3,9248 6	1,5758 7
1	0,17	1,1451	0	745.80 0,00	0,4498 88	0,2551 42	-109,189	0	3,7816 7	1,5689 5
1	0,18	1,18221	0	741.27 9,49	0,468	0,2573 1	-108,161	0	3,6500 9	1,5624 8



1	0,19	1,21808	0	737.03 7,16	0,4860 83	0,2593 24	-107,185	0	3,5284	1,5563 9
1	0,2	1,25277	0	733.04 8,78	0,5041 36	0,2611 85	-106,259	0	3,4156 7	1,5506 4
1	0,212	1,29299	0	728.56 0,02	0,5257 54	0,2632 55	-105,204	0	3,2907 1	1,5441 3
1	0,226 4	1,33936	0	723.55 3,96	0,5516 31	0,2655 35	-104,009	0	3,1537 8	1,5368 2
1	0,243 68	1,39255	0	718.02 4,39	0,5825 81	0,2680 25	-102,667	0	3,0055 4	1,5286 6
1	0,264 416	1,45321	0	711.97 7,76	0,6195 72	0,2707 32	-101,165	0	2,8470 5	1,5195 9
1	0,289 299	1,52196	0	705.43 7,56	0,6637 39	0,2736 55	-99,4969	0	2,6799 4	1,5095 8
1	0,319 159	1,59938	0	698.44 3,50	0,7164 11	0,2767 81	-97,6512	0	2,5063 8	1,4985 6
1	0,354 991	1,68596	0	691.05 2,59	0,7791 37	0,2800 96	-95,6172	0	2,3289 3	1,4864 8
1	0,397 989	1,78216	0	683.33 1,38	0,8537 02	0,2836 03	-93,3788	0	2,1502 6	1,4732 1
1	0,449 587	1,88839	0	675.35 2,77	0,9421 44	0,2873 41	-90,9155	0	1,9729 5	1,4586 5
1	0,511 504	2,00494	0	667.20 4,65	1,0467 8	0,2912 35	-88,2507	0	1,7997 8	1,4430 1
1	0,585 805	2,13214	0	658.97 2,56	1,1702 4	0,2952 24	-85,4122	0	1,6330 9	1,4265 6
1	0,674 966	2,27045	0	650.74 1,82	1,3132 5	0,2992 99	-82,4055	0	1,4747 7	1,4093 6
1	0,781 959	2,42021	0	641.86 3,66	1,4763 4	0,3041 47	-79,0803	0	1,3258 4	1,3908 3
1	0,910 351	2,58187	0	631.19 1,42	1,6610 2	0,3110 31	-75,1973	0	1,1865 6	1,3702 4
1	1,064 42	2,75585	0	618.14 4,60	1,8685 1	0,3202 5	-70,6513	0	1,0592 1	1,3475 4
1	1,249 31	2,94283	0	602.28 2,13	2,0996	0,3317 36	-65,3787	0	0,9462 17	1,3229 8
1	1,471 17	3,14439	0	582.96 7,45	2,3550 8	0,3460 32	-59,2983	0	0,8479 62	1,2968 6



1	1,737 4	3,36269	0	559.38 1,61	2,6355 2	0,3640 83	-52,3274	0	0,7644 31	1,2696 3
1	2,056 88	3,6004	0	530.44 3,96	2,9403 8	0,3875 87	-44,3876	0	0,6954 6	1,2419 1
1	2,440 26	3,86067	0	494.79 6,07	3,2643	0,4199 57	-35,4466	0	0,6406 37	1,2146 7
1	2,900 31	4,14734	0	454.55 3,76	3,5843 5	0,4633 81	-26,2144	0	0,5997 12	1,1904 1
1	3,445 18	4,46565	0	413.49 1,13	3,7824 2	0,5261 25	-17,737	0	0,5715 14	1,1716 3
1	3,445 18	4,46565	0	413.49 1,13	3,7824 2	0,5261 25	-17,737	0	0,5715 14	1,1716 3
1	3,452 37	4,46976	0	412.91 9,64	3,7832 8	0,5272 33	-17,63	0	0,5712 24	1,1714 2
1	4,114 84	4,84058	0	356.52 9,14	3,8794 7	0,6413 16	-8,37401	0	0,5509 18	1,1575 6
1	4,909 81	5,27308	0	300.37 1,25	4,0022	0,7788 96	-1,00185	0	0,5381 63	1,1518 7
1	5,863 77	5,78252	0	252.82 9,20	4,1331 9	0,9289 93	4,1693	0	0,5306 97	1,1513 7
1	7,008 53	6,38722	0	215.04 6,79	4,2585 2	1,0865 2	7,88596	0	0,5263 15	1,1523 7
1	8,382 23	7,10822	0	186.67 2,71	4,3652 7	1,2413 8	10,4379	0	0,5237 11	1,1539 2
1	10,03 07	7,9701	0	166.98 6,25	4,4461 7	1,3773 8	12,147	0	0,5221 43	1,1551 3
1	12,00 88	9,00191	0	155.99 9,82	4,5074 6	1,4642 7	13,1838	0	0,5211 86	1,1553 5
1	14,38 26	10,2383	0	148.67 0,22	4,5729 9	1,5224 1	13,9661	0	0,5205 47	1,1550 3
1	17,23 11	11,7204	0	144.40 7,15	4,6512 9	1,5912 5	14,7783	0	0,5201 13	1,1549 1
1	20,64 93	13,4991	0	145.15 2,91	4,7448 1	1,6654 4	15,6055	0	0,5221 89	1,1550 1
1	24,75 12	15,6636	0	148.61 2,20	4,8580 2	1,7273 3	16,4462	0	0,5334	1,1554 2
1	29,67 34	18,3226	0	155.07 7,16	4,9962 8	1,8026 5	17,289	0	0,5470 22	1,1561 9



1	35,49 46	21,6022	0	159.41 8,08	5,1657 1	1,8952 6	18,113	0	0,5634 25	1,1573 6
1	42,20 28	25,6669	0	141.46 0,06	5,3741 9	2,0102 4	19,1379	0	0,5834 95	1,1581 1
1	50,28 17	30,7361	0	122.70 4,63	5,6321 3	2,1556 6	20,8549	0	0,6085 25	1,1567 1
1	60,01 47	37,0991	0	103.65 8,20	5,9530 6	2,3373 2	22,211	0	0,6384 11	1,1567 3
1	71,73 41	45,1403	0	84.955, 22	6,3547 2	2,5647 7	23,2208	0	0,6747 14	1,1579 3
1	85,84 18	55,3812	0	67.279, 26	6,8608 3	2,8527 2	23,927	0	0,7189 26	1,1599 5
1	102,8 28	68,5358	0	51.267, 11	7,5033 5	3,2219 4	24,3896	0	0,7729 66	1,1623 9
1	121,9 92	84,4449	0	38.207, 46	8,2708	3,6671 2	24,659	0	0,8349 68	1,1647 7
1	123,2 88	85,5959	0	37.449, 21	8,3259 5	3,6994 3	24,672	0	0,8393 37	1,1649 1
1	148,0 75	107,984	0	26.696, 28	9,3897 6	4,2651	24,8292	0	0,9136 76	1,1670 8
1	177,9 47	137,023	0	19.393, 48	10,747 6	4,8095 5	24,9104	0	0,9814 68	1,1686 4
1	213,9 67	174,312	0	13.803, 92	12,464 4	5,4445 4	24,9555	0	1,0567 9	1,1699
1	256,7 6	222,571	0	9.589,0 5	14,647 7	6,2034 2	24,9789	0	1,1422	1,1708 8
1	264,9 44	232,279	0	8.981,4 5	15,082 4	6,3491 6	24,9816	0	1,1581 1	1,1710 2
1	308,5 46	285,279	0	6.514,1 1	17,432 2	7,1078 8	24,9904	0	1,2385 6	1,1716 1
1	370,8 05	367,007	0	4.334,2 5	20,989 7	8,1866 5	24,9958	0	1,3473	1,1721 4
1	445,8 48	472,676	0	2.845,2 6	25,494 2	9,4545 5	24,9982	0	1,4676 5	1,1725 1
2	0,22	- 0,23437 4	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6



2	0,32	-	0	891.76	0,3547	0,1114	-140,833	0	0,1151	1,8178
		0,21527		2,26	6				51	4
		1								
2	0,42	-	0	930.58	0,5660	0,1496	-148,108	0	0,0960	1,8906
		0,20498		0,78	63	77			55	3
		1								
2	0,52	-	0	944.49	0,7616	0,1692	-150,537	0	0,0932	1,9162
		0,19557		7,05	66	62			279	8
		7								
2	0,62	-	0	951.46	0,9515	0,1804	-151,533	0	0,0950	1,9258
		0,18619		8,39	36	46			103	1
		1								
2	0,72	-	0	955.20	1,1445	0,1862	-151,844	0	0,0990	1,9271
		0,17650		2,47	9	37			18	8
		3								
2	0,82	-	0	957.06	1,3393	0,1893	-151,755	0	0,1043	1,9236
		0,16634		6,40	6	45			74	7
		1								
2	0,92	-	0	957.74	1,5345	0,1913	-151,405	0	0,1105	1,9169
		0,15560		6,81	3	65			59	7
		1								
2	1,02	-	0	957.61	1,7295	0,1929	-150,883	0	0,1172	1,9082
		0,14421		6,22	6	6			84	6
		4								
2	1,12	-	0	956.91	1,9242	0,1945	-150,239	0	0,1243	1,8982
		0,13213		5,67	3	45			31	1
		7								
2	1,22	-	0	955.80	2,1185	0,1962	-149,511	0	0,1315	1,8873
		0,11934		2,34		81			57	2
		5								
2	1,32	-	0	954.38	2,3124	0,1982	-148,726	0	0,1388	1,8759
		0,10582		2,99	3	05			68	8
		5								
2	1,42	-	0	952.73	2,5060	0,2003	-147,898	0	0,1461	1,8643
		0,09157		4,51	9	33			95	5
		25								
2	1,52	-	0	950.91	2,6995	0,2026	-147,042	0	0,1534	1,8526
		0,07658		3,32	7	52			86	2
		97								



2	1,62	-	0	948.96	2,8929	0,2051	-146,167	0	0,1607	1,8409
		0,06088		1,31	5	42			05	3
		21								
2	1,72	-	0	946.91	3,0863	0,2077	-145,28	0	0,1678	1,8293
		0,04445		1,05		92			24	4
		71								
2	1,82	-	0	944.78	3,2796	0,2105	-144,387	0	0,1748	1,8179
		0,02732		8,34	8	89			18	
		7								
2	1,92	-	0	942.61	3,4731	0,2135	-143,491	0	0,1816	1,8066
		0,00950		1,20	6	08			77	5
		348								
2	1,971	9,99499	0	941.46	3,5734	0,2150	-143,027	0	0,1851	1,8009
	82	E-19		6,43	8	62			74	2
2	1,971	9,99499	0	992.63	0,2441	0,1174	-158,187	0	11,911	2,0011
	82	E-19		0,33	27	46			2	7
2	2,02	0,32272	0	943.50	1,0136	0,1369	-149,257	0	4,3946	1,896
		1		0,25	3	24			1	
2	2,12	0,63972	0	928.21	1,4488	0,2352	-146,594	0	2,4699	1,8688
		6		4,55	4	67			8	1
2	2,22	0,85444	0	923.64	1,7136	0,2986	-145,883	0	1,9038	1,8622
		5		9,12	9	3			1	7
2	2,34	1,06095	0	920.21	2,0095	0,3428	-144,837	0	1,5735	1,8495
				2,11	1	56			8	2
2	2,484	1,27061	0	915.91	2,3756	0,3635	-142,743	0	1,3600	1,8221
				3,39	5	76			3	4
2	2,524	1,32513	0	914.29	2,4783	0,3640	-141,877	0	1,3214	1,8109
	68			2,79	8	61			2	4
2	2,524	1,32513	0	914.29	2,4783	0,3640	-141,877	0	1,3214	1,8109
	68			2,79	8	61			2	4
2	2,656	1,4954	0	908.03	2,7073	0,3581	-138,429	0	1,2296	1,7678
	8			6,87	4	03			7	2
2	2,864	1,7467	0	899.34	3,0486	0,3552	-133,276	0	1,1077	1,7071
	16			1,93	8	4			9	7
2	3,112	2,02363	0	890.07	3,4259	0,3567	-127,441	0	0,9924	1,6437
	99			8,60	6	6			53	
2	3,411	2,32864	0	877.75	3,8388	0,3637	-120,478	0	0,8863	1,5759
	59			5,61		36			38	9



2	3,769 91	2,66594	0	860.33 6,08	4,2881 8	0,3762 24	-112,104	0	0,7924 55	1,5050 9
2	4,199 89	3,04088	0	835.90 7,87	4,7790 4	0,3940 79	-102,128	0	0,7132 5	1,4332 1
2	4,715 87	3,45922	0	803.39 6,10	5,3262 1	0,4170 47	-90,5746	0	0,6497 29	1,3635 3
2	5,335 04	3,92389	0	760.66 0,88	5,9518 7	0,4473 03	-77,3636	0	0,6015 18	1,2983 2
2	6,078 05	4,43157	0	703.44 2,18	6,6657 1	0,4922 49	-62,2138	0	0,5673 47	1,2393 6
2	6,930 56	4,94617	0	629.65 0,57	7,3631 7	0,5669 25	-45,6289	0	0,5458 78	1,1908 2
2	6,930 56	4,94617	0	629.65 0,57	7,3631 7	0,5669 25	-45,6289	0	0,5458 78	1,1908 2
2	6,969 66	4,9675	0	626.35 4,41	7,3880 8	0,5709 21	-44,9327	0	0,5452 02	1,1890 6
2	8,039 59	5,5431	0	527.72 5,23	7,6371 9	0,7318 38	-26,3874	0	0,5324 32	1,1517 3
2	9,323 51	6,22167	0	409.69 4,25	7,8540 4	1,0007 3	-9,08491	0	0,5257 33	1,1339 1
2	10,86 42	7,02899	0	323.66 3,06	8,0670 4	1,2947 7	0,394942	0	0,5227 54	1,1340 7
2	12,71 31	7,99399	0	270.09 6,19	8,2239 5	1,5635 7	5,54259	0	0,5213 6	1,1368 1
2	14,93 17	9,1586	0	242.03 7,72	8,3173 1	1,7132 4	8,1393	0	0,5317 12	1,1383 7
2	17,59 4	10,5863	0	231.41 4,01	8,3930 7	1,7606 2	9,38899	0	0,5400 35	1,1376 7
2	20,78 88	12,3261	0	221.00 3,56	8,4849 6	1,8123 8	10,6372	0	0,5491 17	1,1371 4
2	24,62 26	14,4522	0	209.43 2,21	8,5966 2	1,8745 3	11,9242	0	0,5600 46	1,1370 5
2	29,22 31	17,059	0	196.71 9,01	8,7326 9	1,9499	13,228	0	0,5732 22	1,1375
2	34,74 37	20,2673	0	182.46 6,23	8,8990 4	2,0418 2	14,521	0	0,5890 93	1,1385 8
2	41,36 84	24,2332	0	166.63 6,99	9,1031 4	2,1546 1	15,7737	0	0,6082 22	1,1403 7



2	49,31 81	29,1601	0	149.45 9,90	9,3546 3	2,2938 5	16,957	0	0,6313 16	1,1428 8
2	58,85 77	35,3157	0	131.36 7,75	9,6660 5	2,4669 2	18,0439	0	0,6592 62	1,1460 9
2	70,30 53	43,0611	0	112.86 6,90	10,054 1	2,6897	20,1016	0	0,6939 98	1,1461 8
2	84,04 23	52,8838	0	94.467, 07	10,541	2,9695 6	21,7901	0	0,7362 2	1,1476 5
2	100,5 27	65,4414	0	76.677, 64	11,156 2	3,3241 3	23,0006	0	0,7875 79	1,1505 7
2	120,3 08	81,6369	0	60.167, 80	11,939 5	3,7798 6	23,8202	0	0,8501 67	1,1543 2
2	144,0 46	102,712	0	45.955, 49	12,944 8	4,3342 1	24,3323	0	0,9224 47	1,1581 5
2	172,5 31	129,973	0	36.087, 53	14,224 9	4,8510 5	24,6181	0	0,9865 27	1,1610 7
2	206,7 13	164,923	0	27.827, 45	15,840 6	5,4582 4	24,7925	0	1,0583 2	1,1637 2
2	213,4 19	172,064	0	26.634, 61	16,167 6	5,5767 6	24,8146	0	1,0719 6	1,1641 6
2	247,7 32	210,107	0	20.864, 34	17,892 8	6,1847 3	24,8918	0	1,1401 5	1,1660 5
2	296,9 54	268,498	0	15.340, 99	20,497 8	7,0449 2	24,9463	0	1,2320 1	1,1679 6
2	356,0 21	344,329	0	11.024, 47	23,815 6	8,0720 7	24,9749	0	1,3359 6	1,1694 7
2	426,9 01	443,164	0	7.851,5 4	28,051 7	9,2911 5	24,9887	0	1,4528	1,1706 2
2	446,9 81	472,646	0	7.317,0 7	29,299	9,6336 3	24,9907	0	1,4844 4	1,1708 6
3	68,51 55	- 6,45852	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
3	68,61 55	- 6,41476	0	507.90 8,79	1,1769 5	0,0110 124	-83,8904	0	0,4224 33	1,5202 7
3	68,71 55	- 6,37253	0	539.54 9,32	1,6655 2	0,0195 151	-89,8886	0	0,4224 14	1,548
3	68,81	-	0	547.15	2,0514	0,0281	-91,0966	0	0,4230	1,5529

	55	6,33026		9,06	7	992			39	3
3	68,91	-	0	549.59	2,3847	0,0368	-91,4261	0	0,4236	1,5540
	55	6,28792		6,82	3	83			84	2
3	69,01	-	0	550.21	2,6868	0,0454	-91,4826	0	0,4243	1,5540
	55	6,24552		7,59	6	75			34	6
3	69,11	-	0	551.09	2,9668	0,0538	-91,6912	0	0,4247	1,5552
	55	6,20307		0,82	6	099			94	4
3	69,21	-	0	553.62	3,2303	0,0616	-92,355	0	0,4248	1,5592
	55	6,16059		4,49	4	333			91	1
3	69,31	-6,1181	0	557.01	3,4810	0,0689	-93,2433	0	0,4248	1,5645
	55			8,50	6	935			53	5
3	69,41	-	0	560.76	3,7213	0,0759	-94,2165	0	0,4247	1,5704
	55	6,07562		4,10	5	611			96	6
3	69,51	-	0	564.60	3,9530	0,0825	-95,2064	0	0,4247	1,5765
	55	6,03314		1,86	4	907			59	1
3	69,61	-	0	568.40	4,1774	0,0889	-96,1807	0	0,4247	1,5825
	55	5,99066		1,34	8	271			56	2
3	69,71	-	0	572.09	4,3956	0,0950	-97,1233	0	0,4247	1,5884
	55	5,94818		3,46	5	091			87	
3	69,81	-	0	575.64	4,6085	0,1008	-98,0261	0	0,4248	1,5940
	55	5,90569		2,83	8	58			55	8
3	69,91	-5,8632	0	579.03	4,8171	0,1064	-98,8855	0	0,4249	1,5995
	55			2,72	8	9			6	3
3	70,01	-5,8207	0	582.25	5,0220	0,1119	-99,7015	0	0,4250	1,6047
	55			8,42	2	24			99	6
3	70,11	-	0	585.32	5,2234	0,1171	-100,475	0	0,4252	1,6097
	55	5,77818		1,12	4	82			66	7
3	70,21	-	0	588.22	5,4218	0,1222	-101,209	0	0,4254	1,6145
	55	5,73564		3,86	9	76			6	6
3	70,31	-	0	590.97	5,6175	0,1272	-101,903	0	0,4256	1,6191
	55	5,69309		1,97	8	22			77	3
3	70,41	-	0	593.56	5,8107	0,1320	-102,543	0	0,4259	1,6233
	55	5,65051		9,94	3	48			16	4
3	70,51	-	0	596.02	6,0014	0,1367	-103,116	0	0,4261	1,6270
	55	5,60791		2,83	7	8			74	3
3	70,63	-	0	598.78	6,2274	0,1423	-103,724	0	0,4265	1,6308
	55	5,55675		9,43	5	47			05	5
3	70,77	-5,4953	0	601.87	6,4947	0,1488	-104,341	0	0,4269	1,6345

	95			2,54	8	92			3	5
3	70,95 23	- 5,42149	0	605.24 9,59	6,8105 8	0,1565 78	-104,94	0	0,4274 73	1,6378 6
3	71,15 97	- 5,33277	0	608.87 6,38	7,1832	0,1655 96	-105,484	0	0,4281 64	1,6404 6
3	71,40 85	- 5,22612	0	612.66 3,01	7,6225 1	0,1761 57	-105,927	0	0,4290 42	1,6419 3
3	71,70 71	- 5,09784	0	616.51 0,50	8,1402 2	0,1885 04	-106,222	0	0,4301 42	1,6418 8
3	72,06 54	- 4,94346	0	620.25 9,64	8,7597 7	0,2027 25	-106,303	0	0,4315 3	1,6397 4
3	72,49 54	- 4,75751	0	623.67 1,28	9,5146 6	0,2188 29	-106,074	0	0,4332 96	1,6347 7
3	73,01 14	- 4,53333	0	626.35 1,39	10,447 1	0,2368 6	-105,394	0	0,4355 8	1,6258 8
3	73,63 06	- 4,26272	0	627.90 8,53	11,600 3	0,2570 97	-104,122	0	0,4385 04	1,6121 5
3	74,37 36	-3,9356	0	628.16 1,63	13,022 6	0,2798 18	-102,17	0	0,4421 14	1,5931 4
3	75,26 52	-3,5395	0	626.71 1,17	14,769 4	0,3056 07	-99,4178	0	0,4464 34	1,5684 5
3	76,33 51	- 3,05912	0	622.58 9,64	16,904 2	0,3357 05	-95,6553	0	0,4514 79	1,5375 6
3	77,61 9	- 2,47576	0	614.57 8,62	19,501 7	0,3718 81	-90,7	0	0,4571 62	1,5007 8
3	79,15 97	- 1,76663	0	601.36 9,02	22,646 3	0,4164 06	-84,4283	0	0,4633 23	1,4592 6
3	81,00 86	- 0,90394 7	0	581.73 6,52	26,425 1	0,4723 59	-76,7574	0	0,4698 11	1,4145 9
3	82,92 06	3,8006E -16	0	558.82 4,46	30,301 8	0,5333 17	-68,9574	0	0,4755 98	1,3746 7
3	82,92 06	3,8006E -16	0	602.63 9,10	27,715 1	0,2184 64	-78,6406	0	1,2264 3	1,4142 8
3	83,22 72	0,32459 8	0	587.56 3,54	28,173 2	0,3110 54	-74,5826	0	0,9380 71	1,3949 9
3	85,88 95	2,0991	0	542.94 7,44	33,270 9	0,6552 94	-61,9514	0	0,5596 66	1,3384 8



3	89,08 43	3,7844	0	506.48 8,29	39,787 2	0,8103 62	-51,1284	0	0,5096 59	1,2943 5
3	92,91 81	5,71861	0	453.58 5,16	46,868 3	0,9545 62	-36,4342	0	0,5031 94	1,2429 9
3	95,80 85	7,17868	0	399.13 5,68	51,094	1,0991 1	-22,7562	0	0,5079 93	1,2032 6
3	95,80 85	7,17868	0	399.13 5,68	51,094	1,0991 1	-22,7562	0	0,5079 93	1,2032 6
3	96,62 76	7,59719	0	378.06 1,26	51,651 4	1,1572 1	-17,8742	0	0,5106 35	1,1908 2
3	96,62 76	7,59719	0	378.06 1,26	51,651 4	1,1572 1	-17,8742	0	0,5106 35	1,1908 2
3	97,51 86	8,05322	0	355.06 2,00	52,322 4	1,2342 7	-13,1202	0	0,5127 73	1,1802 8
3	103,0 39	10,9502	0	226.93 0,91	53,198 1	1,8731 8	5,08795	0	0,5580 58	1,1596 2
3	109,6 64	14,9133	0	171.02 5,46	53,567	2,2583 7	10,9849	0	0,6249 53	1,1588 2
3	117,6 14	19,9796	0	155.74 2,18	53,830 4	2,4054 6	12,9682	0	0,6492 08	1,1569 1
3	127,1 53	26,3097	0	139.69 4,71	54,155 4	2,5857 2	14,7602	0	0,6779 35	1,1561 2
3	138,6 01	34,2681	0	122.96 7,71	54,559	2,8109 2	16,3526	0	0,7125 45	1,1564 5
3	152,3 38	44,3445	0	105.89 3,06	55,063 5	3,0941 8	17,7312	0	0,7545 76	1,1577 7
3	168,8 22	57,2041	0	88.924, 04	55,698 7	3,4544	19,0461	0	0,8060 7	1,1593 7
3	188,6 04	73,7761	0	72.612, 72	56,505 5	3,9275 1	21,2755	0	0,8698 49	1,1577 2
3	212,3 41	95,3472	0	57.472, 44	57,539 8	4,5369 7	22,7745	0	0,9479 22	1,1583 7
3	240,8 26	123,428	0	46.943, 45	58,864 2	5,1203 2	23,6496	0	1,0187 9	1,1594 7
3	275,0 09	159,527	0	38.361, 40	60,537 5	5,7577 7	24,1983	0	1,0925 6	1,1609 9
3	316,0 27	206,061	0	30.869, 88	62,655 5	6,5102 2	24,5412	0	1,1754 7	1,1628

3	360,055	259,674	0	25.005,57	65,052	7,30692	24,7315	0	1,25909	1,16448
3	365,25	266,248	0	24.480,42	65,3429	7,40054	24,7469	0	1,26867	1,16466
3	424,316	344,417	0	19.087,86	68,7627	8,45717	24,8653	0	1,37349	1,16641
3	495,197	445,952	0	14.630,32	73,113	9,70412	24,9312	0	1,49049	1,16795
3	580,253	578,34	0	10.867,45	78,6606	11,176	24,9659	0	1,62087	1,16924
3	661,243	714,353	0	8.436,77	84,2426	12,5538	24,9812	0	1,73661	1,17011
4	123,48	-7,75392	0	1,00	0,00177245	0,925914	24,6396	0	0,51959	1,17396
4	123,58	-7,70839	0	441.408,03	1,29636	0,00981391	-74,7325	0	0,444289	1,49359
4	123,68	-7,66396	0	469.485,13	1,83614	0,0175494	-80,4071	0	0,444446	1,51879
4	123,78	-7,61949	0	476.266,19	2,26045	0,0254647	-81,546	0	0,44488	1,52325
4	123,88	-7,57498	0	478.453,58	2,62572	0,0333902	-81,863	0	0,445331	1,52429
4	123,98	-7,53043	0	479.019,91	2,95467	0,0412717	-81,922	0	0,445784	1,52438
4	124,08	-7,48583	0	478.882,24	3,25804	0,0490979	-81,8815	0	0,44623	1,52415
4	124,18	-7,44119	0	479.015,32	3,54222	0,0567515	-81,965	0	0,446569	1,52473
4	124,28	-7,39652	0	480.535,96	3,81196	0,0639779	-82,4534	0	0,446657	1,52763
4	124,38	-7,35185	0	483.016,76	4,07009	0,0707775	-83,206	0	0,446626	1,53204
4	124,48	-7,30719	0	485.985,99	4,31867	0,0772087	-84,0842	0	0,446569	1,53717
4	124,58	-7,26254	0	489.160,33	4,55911	0,0833307	-85,009	0	0,44652	1,54262
4	124,6	-	0	492.40	4,7925	0,0891	-85,9437	0	0,4464	1,5481

	8	7,21789		2,48	4	823			89	2
4	124,78	-7,17324	0	495.638,47	5,01974	0,0947975	-86,8691	0	0,44648	1,55363
4	124,88	-7,12859	0	498.808,87	5,24217	0,100186	-87,7703	0	0,446496	1,55904
4	124,98	-7,08394	0	501.894,89	5,46011	0,105378	-88,6435	0	0,446537	1,56431
4	125,08	-7,03928	0	504.886,63	5,67381	0,1104	-89,4869	0	0,446597	1,56946
4	125,18	-6,99462	0	507.770,95	5,88385	0,115262	-90,2979	0	0,446677	1,57444
4	125,28	-6,94994	0	510.545,70	6,0906	0,119978	-91,0765	0	0,446775	1,57927
4	125,38	-6,90526	0	513.215,34	6,29424	0,124564	-91,8244	0	0,446888	1,58395
4	125,48	-6,86056	0	515.777,92	6,49519	0,129025	-92,5417	0	0,447015	1,58847
4	125,6	-6,80691	0	518.718,16	6,73308	0,134228	-93,3643	0	0,447184	1,5937
4	125,744	-6,7425	0	522.052,64	7,0142	0,140302	-94,2649	0	0,44741	1,59941
4	125,916	-6,66516	0	525.784,59	7,34607	0,147388	-95,2089	0	0,447709	1,60526
4	126,124	-6,57229	0	529.895,63	7,73715	0,155662	-96,1502	0	0,448103	1,61089
4	126,373	-6,46072	0	534.335,90	8,19767	0,165329	-97,0245	0	0,448621	1,61571
4	126,671	-6,32667	0	539.017,61	8,73924	0,176625	-97,7742	0	0,449291	1,61923
4	127,029	-6,16553	0	543.814,39	9,37489	0,189829	-98,3546	0	0,450147	1,62109
4	127,459	-5,97174	0	548.564,52	10,1205	0,205261	-98,7037	0	0,451219	1,62081
4	127,975	-5,73857	0	553.017,96	11,0231	0,222785	-98,7129	0	0,452575	1,61754
4	128,595	-5,45779	0	556.683,63	12,1408	0,24238	-98,1916	0	0,454365	1,60987
4	129,3	-	0	559.01	13,524	0,2645	-96,9473	0	0,4567	1,5965



	38	5,11931		2,93	7	12			06	5
4	130,2 29	- 4,71081	0	559.93 1,86	15,234 1	0,2894 45	-94,9299	0	0,4596 05	1,5774 7
4	131,2 99	-4,2172	0	559.00 1,75	17,338 4	0,3178 67	-92,0191	0	0,4630 78	1,5523 5
4	132,5 83	- 3,62004	0	555.10 4,34	19,915 9	0,3513 27	-87,9813	0	0,4671 26	1,5207 1
4	134,1 24	-2,8968	0	546.93 9,38	23,053 1	0,3920 5	-82,6159	0	0,4716 77	1,4828 9
4	135,9 73	- 2,02009	0	533.20 9,64	26,846 2	0,4429 37	-75,8231	0	0,4765 82	1,4403 3
4	138,1 91	- 0,95688 8	0	512.67 7,94	31,397	0,5079 11	-67,5773	0	0,4816 92	1,3950 7
4	140,1 7	7,53081 E-13	0	492.31 6,18	35,415 3	0,5692 92	-60,4382	0	0,4856 3	1,3604 5
4	140,1 7	7,53081 E-13	0	534.18 1,35	32,588 1	0,2653 23	-69,3233	0	1,0873 2	1,3931 8
4	140,8 54	0,60915	0	513.56 9,98	33,708 8	0,4231 77	-63,4992	0	0,7689 94	1,3670 7
4	144,0 48	2,56144	0	474.32 0,73	39,997 1	0,7292 43	-51,9872	0	0,5411 89	1,3187 7
4	147,8 82	4,55417	0	435.86 9,95	47,679	0,8879 42	-40,6111	0	0,5085 28	1,2756 9
4	152,4 83	6,88343	0	380.24 4,62	55,796 5	1,0674 7	-25,5554	0	0,5065 77	1,2272 8
4	155,2 71	8,30079	0	336.41 2,03	59,662 2	1,2164 8	-15,0633	0	0,5104 05	1,1991
4	155,2 71	8,30079	0	336.41 2,03	59,662 2	1,2164 8	-15,0633	0	0,5104 05	1,1991
4	156,0 4	8,69466	0	320.94 0,49	60,186 5	1,2701 5	-11,6385	0	0,5122 19	1,1908 2
4	156,0 4	8,69466	0	320.94 0,49	60,186 5	1,2701 5	-11,6385	0	0,5122 19	1,1908 2
4	158,0 03	9,70372	0	283.81 6,61	61,556 9	1,4348 2	-4,62346	0	0,5152 6	1,1767 6
4	164,6 28	13,2784	0	186.08 7,22	62,318 1	2,0066 7	8,18613	0	0,5816 93	1,1644 9



4	172,578	18,1797	0	147.053,06	62,6662	2,33514	12,4173	0	0,63775	1,16277
4	182,117	24,3992	0	131.071,11	62,9864	2,51174	14,3508	0	0,666248	1,16094
4	193,565	32,2233	0	114.449,44	63,3845	2,73334	16,0596	0	0,700754	1,16035
4	207,302	42,1363	0	97.687,10	63,8822	3,01242	17,5275	0	0,742586	1,16089
4	223,786	54,7962	0	81.280,26	64,5091	3,36712	18,7533	0	0,793534	1,16235
4	243,568	71,1185	0	65.720,27	65,3056	3,83129	20,9376	0	0,857132	1,16039
4	267,305	92,3846	0	51.470,92	66,3274	4,43275	22,5887	0	0,934943	1,16013
4	295,79	120,161	0	41.218,77	67,648	5,03749	23,5565	0	1,00896	1,16081
4	329,973	155,93	0	33.270,35	69,3008	5,67443	24,1465	0	1,08309	1,16196
4	370,991	202,084	0	26.441,20	71,4048	6,42616	24,5131	0	1,16641	1,16351
4	405,221	243,144	0	22.203,68	73,2463	7,04584	24,6809	0	1,23212	1,16468
4	420,214	261,873	0	20.725,04	74,0776	7,31664	24,7315	0	1,26009	1,16516
4	479,28	339,446	0	15.933,42	77,4765	8,36984	24,8575	0	1,36504	1,16674
4	550,161	440,405	0	12.069,65	81,8071	9,61533	24,9268	0	1,48237	1,16816
4	635,217	572,122	0	8.982,2	87,3321	11,0862	24,9637	0	1,61312	1,16937
4	693,658	668,882	0	7.490,8	91,3176	12,0823	24,9765	0	1,69762	1,16999
5	175,796	-8,60144	0	1,00	0,00177245	0,925914	24,6396	0	0,519559	1,17396
5	175,896	-8,55503	0	402.543,05	1,37101	0,00925719	-69,4305	0	0,45511	1,47963
5	175,9	-	0	428.39	1,9414	0,0166	-74,908	0	0,4552	1,5036

	96	8,50951		2,01	4	431			61	3
5	176,0	-	0	434.65	2,3893	0,0241	-76,0093	0	0,4556	1,5079
	96	8,46397		7,50	2	978			01	
5	176,1	-	0	436.67	2,7750	0,0317	-76,3218	0	0,4559	1,5089
	96	8,41839		8,16	9	54			68	6
5	176,2	-	0	437.21	3,1206	0,0392	-76,3869	0	0,4563	1,5091
	96	8,37278		2,58	6	943			33	1
5	176,3	-	0	437.08	3,4387	0,0467	-76,352	0	0,4566	1,5089
	96	8,32712		9,74	3	958			9	2
5	176,4	-	0	436.79	3,7368	0,0542	-76,3183	0	0,4570	1,5088
	96	8,28144		4,46	1	118			18	6
5	176,5	-	0	437.26	4,0189	0,0613	-76,5342	0	0,4572	1,5102
	96	8,23573		4,73	6	664			1	2
5	176,6	-8,19	0	438.77	4,2882	0,0681	-77,0627	0	0,4572	1,5133
	96			6,63	9	376			53	1
5	176,7	-	0	441.00	4,5473	0,0745	-77,7961	0	0,4572	1,5175
	96	8,14428		1,05	4	336			21	5
5	176,8	-	0	443.63	4,7977	0,0805	-78,6394	0	0,4571	1,5224
	96	8,09856		1,48	8	989			66	1
5	176,9	-	0	446.46	5,0407	0,0863	-79,5316	0	0,4571	1,5275
	96	8,05284		4,92	8	787			18	7
5	177,0	-	0	449.38	5,2773	0,0919	-80,4383	0	0,4570	1,5328
	96	8,00713		1,70	1	092			85	4
5	177,1	-	0	452.31	5,5081	0,0972	-81,3408	0	0,4570	1,5381
	96	7,96142		1,92	8	188			71	2
5	177,2	-	0	455.21	5,7339	0,1023	-82,2285	0	0,4570	1,5433
	96	7,91572		5,01	9	32			73	5
5	177,3	-	0	458.06	5,9553	0,1072	-83,0951	0	0,4570	1,5484
	96	7,87001		5,33	1	67			92	9
5	177,4	-7,8243	0	460.84	6,1726	0,1120	-83,9367	0	0,4571	1,5535
	96			5,96	4	39			28	2
5	177,5	-	0	463.54	6,3865	0,1166	-84,7511	0	0,4571	1,5584
	96	7,77858		6,70	3	58			79	3
5	177,6	-	0	466.16	6,5971	0,1211	-85,5379	0	0,4572	1,5632
	96	7,73286		3,35	7	41			44	1
5	177,7	-	0	468.69	6,8050	0,1254	-86,2966	0	0,4573	1,5678
	96	7,68714		2,47	1	94			22	5
5	177,9	-	0	471.61	7,0509	0,1305	-87,171	0	0,4574	1,5732



	16	7,63225		1,89	2	63			32	5
5	178,0	-	0	474.94	7,3414	0,1364	-88,161	0	0,4575	1,5794
	6	7,56637		9,75	8	48			84	
5	178,2	-	0	478.72	7,6839	0,1432	-89,2447	0	0,4577	1,5861
	33	7,48728		3,23	8	83			9	3
5	178,4	-	0	482.92	8,0872	0,1512	-90,3889	0	0,4580	1,5931
	41	7,39233		9,14	3	14			69	7
5	178,6	-7,2783	0	487.53	8,5616	0,1604	-91,527	0	0,4584	1,5999
	89			5,25	6	22			44	6
5	178,9	-	0	492.47	9,1188	0,1711	-92,5918	0	0,4589	1,6059
	88	7,14134		9,35	7	37			37	3
5	179,3	-	0	497.65	9,7726	0,1836	-93,5004	0	0,4595	1,6103
	46	6,97679		1,23	4	28			78	8
5	179,7	-	0	502.89	10,538	0,1982	-94,1769	0	0,4603	1,6127
	76	6,77901		8,96	9	17			96	
5	180,2	-	0	508.02	11,44	0,2152	-94,5418	0	0,4614	1,6122
	92	6,54119		5,07		17			24	7
5	180,9	-	0	512.71	12,536	0,2344	-94,4745	0	0,4627	1,6081
	11	6,25509		2,38	6	42			34	9
5	181,6	-	0	516.40	13,901	0,2558	-93,7596	0	0,4644	1,5989
	54	5,91064		9,00	8	89			73	6
5	182,5	-	0	518.63	15,594	0,2801	-92,2132	0	0,4667	1,5834
	46	5,49553		1,44	3	38			31	6
5	183,6	-	0	519.26	17,682	0,3076	-89,7817	0	0,4694	1,5616
	16	4,99469		8,27	3	1			94	7
5	184,9	-	0	517.48	20,245	0,3395	-86,2703	0	0,4727	1,5331
		4,38979		8,00	8	54			67	4
5	186,4	-3,6585	0	512.03	23,378	0,378	-81,4674	0	0,4765	1,4979
	41			9,63					07	4
5	188,2	-	0	501.59	27,181	0,4257	-75,2267	0	0,4806	1,4570
	89	2,77367		6,27	5	32			13	8
5	190,5	-	0	484.86	31,763	0,4865	-67,4915	0	0,4849	1,4124
	08	1,70245		9,56	6	52			51	2
5	193,1	-	0	460.95	37,226	0,5653	-58,3426	0	0,4893	1,3664
	7	0,40523		9,29	3	52			97	3
5	193,9	1,48961	0	453.16	38,905	0,5908	-55,6166	0	0,4906	1,3539
	97	E-15		8,90	3	66			28	1
5	193,9	1,48961	0	493.51	35,899	0,2953	-64,0013	0	1,0182	1,3831



	97	E-15		7,20	6	44			5	1
5	196,3 65	1,68522	0	453.65 8,55	40,263	0,6408 92	-52,3132	0	0,5890 99	1,3331 8
5	200,1 99	3,76283	0	418.65 5,39	48,05	0,8442 14	-41,7533	0	0,5174 69	1,2919 6
5	204,7 99	6,10998	0	373.93 2,26	56,819 1	1,011	-28,9481	0	0,5072 07	1,2480 1
5	210,3 2	8,91754	0	305.73 7,12	65,311	1,2690 9	-12,1065	0	0,5112 9	1,2008 3
5	210,5 89	9,055	0	301.54 8,74	65,636 1	1,2856 2	-11,1766	0	0,5117 31	1,1985 6
5	210,5 89	9,055	0	301.54 8,74	65,636 1	1,2856 2	-11,1766	0	0,5117 31	1,1985 6
5	211,4 96	9,52121	0	286.15 5,23	66,255 1	1,3472 2	-7,88228	0	0,5134 35	1,1908 2
5	211,4 96	9,52121	0	286.15 5,23	66,255 1	1,3472 2	-7,88228	0	0,5134 35	1,1908 2
5	216,9 45	12,3496	0	212.85 8,27	68,793 4	1,7508 9	4,07485	0	0,5357 71	1,1710 6
5	224,8 94	16,978	0	147.19 3,39	69,288 2	2,2290 7	11,6601	0	0,6202 15	1,1664 5
5	234,4 34	23,085	0	127.60 6,69	69,611 4	2,4421 4	14,0342	0	0,6551 45	1,1641 7
5	245,8 82	30,7816	0	111.32 7,71	70,003 9	2,6604 9	15,843	0	0,6895 57	1,1629 3
5	259,6 19	40,5396	0	94.939, 82	70,494 9	2,9354 8	17,3848	0	0,7312 2	1,1629 1
5	276,1 03	53,0104	0	78.924, 18	71,113 6	3,2851 2	18,6637	0	0,7819 45	1,1639 2
5	295,8 85	69,0977	0	63.767, 03	71,900 1	3,7416 6	20,7252	0	0,8450 63	1,1621 2
5	319,6 22	90,074	0	49.909, 07	72,909 5	4,3350 9	22,4806	0	0,9226 89	1,1612 5
5	348,1 07	117,529	0	39.761, 76	74,208 9	4,9487 7	23,5077	0	0,9983 21	1,1616 5
5	382,2 9	152,941	0	32.079, 16	75,855 4	5,5840 5	24,1228	0	1,0728	1,1625 8
5	423,3	198,679	0	25.498,	77,943	6,3337	24,5021	0	1,1563	1,1639

	08			91	2	3			9	6
5	450,155	230,426	0	22.245,84	79,371	6,81894	24,6445	0	1,20835	1,16482
5	472,53	257,967	0	19.998,29	80,5971	7,22145	24,7267	0	1,25031	1,16549
5	531,597	334,96	0	15.411,13	83,9744	8,27183	24,8553	0	1,35551	1,16698
5	602,478	435,258	0	11.699,93	88,2811	9,51477	24,9258	0	1,47314	1,16833
5	687,534	566,195	0	8.733,37	93,7788	10,9835	24,9634	0	1,60423	1,16949
5	728,957	633,898	0	7.679,36	96,5757	11,697	24,9732	0	1,6647	1,16991
6	226,742	-9,24739	0	1,00	0,00177245	0,925914	24,6396	0	0,519559	1,17396
6	226,842	-9,20041	0	375.416,94	1,42321	0,00891956	-65,7486	0	0,461926	1,4705
6	226,942	-9,15422	0	399.522,06	2,01755	0,0160659	-71,0742	0	0,462117	1,49376
6	227,042	-9,10799	0	405.307,90	2,48288	0,0233821	-72,1362	0	0,462428	1,49791
6	227,142	-9,06173	0	407.200,98	2,88158	0,0307319	-72,4421	0	0,462734	1,49896
6	227,242	-9,01544	0	407.724,29	3,23973	0,0380521	-72,5135	0	0,463037	1,49916
6	227,342	-8,96912	0	407.623,56	3,56896	0,0453381	-72,4871	0	0,463341	1,49902
6	227,442	-8,92277	0	407.217,86	3,87621	0,0525916	-72,4181	0	0,463639	1,49877
6	227,542	-8,8764	0	407.218,62	4,16677	0,0596733	-72,501	0	0,463852	1,499452
6	227,642	-8,83001	0	408.124,79	4,44431	0,066422	-72,8734	0	0,463935	1,50161
6	227,742	-8,78362	0	409.819,74	4,71114	0,0728034	-73,4873	0	0,463927	1,50515
6	227,842	-8,73722	0	412.027,54	4,96885	0,078848	-74,2509	0	0,463882	1,50951



6	227,9 42	- 8,69084	0	414.52 7,37	5,2187 3	0,0845 985	-75,0937	0	0,4638 33	1,5143 3
6	228,0 42	- 8,64445	0	417.17 7,77	5,4617 5	0,0900 937	-75,9727	0	0,4637 91	1,5193 7
6	228,1 42	- 8,59807	0	419.89 2,73	5,6987 2	0,0953 645	-76,8625	0	0,4637 6	1,5245
6	228,2 42	-8,5517	0	422.62 0,37	5,9304	0,1004 33	-77,7484	0	0,4637 43	1,5296 3
6	228,3 42	- 8,50532	0	425.32 5,30	6,1575 3	0,1053 15	-78,6201	0	0,4637 43	1,5347 2
6	228,4 42	- 8,45895	0	427.98 7,01	6,3804 8	0,1100 3	-79,473	0	0,4637 57	1,5397 4
6	228,5 42	- 8,41257	0	430.59 0,92	6,5997 9	0,1145 91	-80,3034	0	0,4637 85	1,5446 5
6	228,6 42	- 8,36619	0	433.12 8,62	6,8157 3	0,1190 11	-81,1096	0	0,4638 26	1,5494 6
6	228,7 42	- 8,31981	0	435.59 5,84	7,0285 3	0,1233 03	-81,8912	0	0,4638 78	1,5541 6
6	228,8 62	- 8,26414	0	438.46 0,11	7,2800 6	0,1283	-82,7963	0	0,4639 54	1,5596 5
6	229,0 06	- 8,19732	0	441.75 5,32	7,5769 9	0,1340 92	-83,8354	0	0,4640 63	1,5660 1
6	229,1 79	- 8,11712	0	445.50 6,34	7,9270 7	0,1407 85	-85,0044	0	0,4642 16	1,5732 3
6	229,3 86	- 8,02084	0	449.72 0,03	8,3397	0,1484 83	-86,2936	0	0,4644 3	1,5812 4
6	229,6 35	- 7,90524	0	454.37 5,47	8,8247	0,1574 05	-87,6031	0	0,4647 22	1,5892 3
6	229,9 34	- 7,76642	0	459.42 3,12	9,3943	0,1677 52	-88,8608	0	0,4651 15	1,5966 1
6	230,2 92	- 7,59968	0	464.76 9,97	10,062 1	0,1797 91	-89,9785	0	0,4656 34	1,6026 3
6	230,7 22	- 7,39932	0	470.26 6,92	10,844	0,1938 39	-90,8755	0	0,4663 05	1,6066 5
6	231,2 38	-7,1585	0	475.70 0,94	11,759	0,2102 6	-91,4678	0	0,4671 57	1,6080 2
6	231,8 57	- 6,86892	0	480.85 2,50	12,851 3	0,2291 33	-91,6654	0	0,4682 3	1,6060 5

6	232,6	-	0	485.14	14,203	0,2503	-91,2334	0	0,4696	1,5990
		6,52047		0,71	9	01			55	7
6	233,4	-	0	488.09	15,879	0,2742	-89,9995	0	0,4715	1,5860
	92	6,10088		9,03	7	59			16	1
6	234,5	-	0	489.83	17,953	0,3011	-87,9631	0	0,4738	1,5670
	62	5,59519		6,28	1	02			06	8
6	235,8	-4,9851	0	489.52	20,506	0,3319	-84,8838	0	0,4765	1,5413
	46			4,40	9	76			72	1
6	237,3	-	0	485.94	23,634	0,3688	-80,5133	0	0,4797	1,5083
	86	4,24836		9,58		7			96	3
6	239,2	-	0	477.80	27,440	0,4144	-74,6985	0	0,4833	1,4690
	35	3,35795		9,44	8	41			83	2
6	241,4	-	0	463.82	32,042	0,4722	-67,3825	0	0,4872	1,4252
	54	2,28117		7,36	3	49			16	3
6	244,1	-	0	442.83	37,550	0,5473	-58,586	0	0,4911	1,3792
	16	0,97859		6,78	2	23			86	3
		4								
6	246,1	6,22386	0	425.65	41,615	0,6070	-52,291	0	0,4937	1,3499
	03	E-15		4,30	7	79			56	2
6	246,1	6,22386	0	464.75	38,466	0,3181	-60,3051	0	0,9738	1,3767
	03	E-15		5,89	8	31			48	9
6	247,3	0,94167	0	441.03	40,589	0,5336	-53,237	0	0,6699	1,3464
	11			6,02	6	98			38	7
6	251,1	3,14162	0	404.99	48,300	0,8060	-42,2999	0	0,5287	1,3029
	45			4,76	5	41			74	4
6	255,7	5,51325	0	365.67	57,397	0,9754	-30,6454	0	0,5090	1,2613
	45			8,75	7	16			86	9
6	261,2	8,32146	0	310.30	66,845	1,1963	-16,0847	0	0,5097	1,2175
	66			9,52	2	8			88	9
6	263,8	9,64597	0	278.29	70,406	1,3342	-8,76894	0	0,5125	1,1989
	58			1,69		7			82	8
6	263,8	9,64597	0	278.29	70,406	1,3342	-8,76894	0	0,5125	1,1989
	58			1,69		7			82	8
6	265,0	10,2359	0	261.32	71,186	1,4097	-5,22801	0	0,5143	1,1908
	02			6,06	2				71	2
6	265,0	10,2359	0	261.32	71,186	1,4097	-5,22801	0	0,5143	1,1908
	02			6,06	2				71	2
6	267,8	11,7258	0	222.68	73,452	1,6370	1,30839	0	0,5169	1,1792

	91			0,77	8	9			74	3
6	275,8 4	16,1332	0	154.56 2,16	74,809 4	2,0792 4	10,3485	0	0,5948 81	1,1693
6	285,3 8	22,1113	0	124.56 1,26	75,176	2,3893 6	13,7884	0	0,6467 06	1,1668 4
6	296,8 27	29,7099	0	108.63 8,57	75,565 3	2,6048 7	15,6762	0	0,6809 86	1,1650 5
6	310,5 64	39,3492	0	92.595, 37	76,05	2,8762 2	17,2771	0	0,7226 69	1,1645 8
6	327,0 49	51,6748	0	76.934, 33	76,661 9	3,2216	18,5976	0	0,7733 13	1,1652 1
6	346,8 3	67,5835	0	62.129, 46	77,439 3	3,6732 7	20,5611	0	0,8358 79	1,1635 2
6	370,5 68	88,3396	0	48.612, 19	78,438 6	4,2614 4	22,3997	0	0,9131 78	1,1621 7
6	399,0 53	115,567	0	38.463, 35	79,728 7	4,8908 1	23,4778	0	0,9913 13	1,1623 6
6	433,2 35	150,743	0	31.043, 68	81,366	5,5248	24,1087	0	1,066	1,1631 2
6	474,2 54	196,207	0	24.693, 08	83,443 2	6,2733 5	24,4958	0	1,1498 1	1,1643 7
6	494,0 85	219,393	0	22.331, 14	84,488 5	6,6316 4	24,6082	0	1,1884 8	1,1649 6
6	523,4 76	255,201	0	19.379, 93	86,086	7,1604 4	24,7238	0	1,2440 1	1,1658
6	582,5 43	331,828	0	14.968, 28	89,45	8,2097 3	24,8542	0	1,3494 5	1,1672 1
6	653,4 23	431,702	0	11.390, 99	93,741 6	9,4515 4	24,9254	0	1,4673 1	1,1684 9
6	738,4 79	562,162	0	8.526,7 8	99,222 9	10,918 9	24,963	0	1,5986 3	1,1696
6	764,0 66	603,548	0	7.874,9 4	100,93 7	11,355 6	24,9695	0	1,6362 8	1,1698 6
7	276,7 41	- 9,76598	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
7	276,8 41	-9,7186	0	355.16 4,52	1,4658 2	0,0086 8459	-63,0112	0	0,4666 91	1,464

7	276,9 41	- 9,67193	0	377.95 1,25	2,0780 9	0,0156 801	-68,2207	0	0,4668 76	1,4867 5
7	277,0 41	- 9,62523	0	383.45 1,54	2,5567 4	0,0228 476	-69,2643	0	0,4671 44	1,4908 4
7	277,1 41	-9,5785	0	385.25 4,70	2,9669	0,0300 395	-69,5682	0	0,4674 14	1,4919 1
7	277,2 41	- 9,53174	0	385.76 2,40	3,3346 3	0,0372 1	-69,6435	0	0,4676 8	1,4921 4
7	277,3 41	- 9,48496	0	385.68 2,29	3,6727 1	0,0443 472	-69,6242	0	0,4679 48	1,4920 5
7	277,4 41	- 9,43815	0	385.29 6,26	3,9881 9	0,0514 54	-69,5591	0	0,4682 14	1,4918 2
7	277,5 41	- 9,39132	0	384.84 7,82	4,2862 4	0,0585	-69,5044	0	0,4684 61	1,4917 1
7	277,6 41	- 9,34447	0	385.26 4,23	4,5705 2	0,0652 529	-69,7408	0	0,4685 77	1,4931 8
7	277,7 41	- 9,29761	0	386.51 5,21	4,8434 5	0,0716 532	-70,2436	0	0,4685 96	1,4961
7	277,8 41	- 9,25075	0	388.39 3,56	5,1069 7	0,0777 011	-70,9401	0	0,4685 59	1,5000 7
7	277,9 41	- 9,20389	0	390.63 7,90	5,3623 8	0,0834 437	-71,743	0	0,4685 08	1,5046 2
7	278,0 41	- 9,15704	0	393.09 1,76	5,6107 1	0,0889 197	-72,6022	0	0,4684 57	1,5095
7	278,1 41	-9,1102	0	395.63 7,41	5,8528 4	0,0941 667	-73,4808	0	0,4684 17	1,5145 2
7	278,2 41	- 9,06335	0	398.22 3,97	6,0895 3	0,0992 052	-74,3635	0	0,4683 9	1,5195 8
7	278,3 41	- 9,01652	0	400.80 7,74	6,3215 4	0,1040 53	-75,2373	0	0,4683 8	1,5246 3
7	278,4 41	- 8,96968	0	403.36 7,46	6,5493 1	0,1087 28	-76,097	0	0,4683 82	1,5296 3
7	278,5 41	- 8,92284	0	405.88 5,14	6,7733 5	0,1132 45	-76,9378	0	0,4683 98	1,5345 5
7	278,6 41	-8,876	0	408.35 0,17	6,9939	0,1176 18	-77,7575	0	0,4684 26	1,5393 8
7	278,7 41	- 8,82916	0	410.75 5,17	7,2112 1	0,1218 61	-78,5546	0	0,4684 64	1,5441 2



7	278,8 61	- 8,77294	0	413.55 5,56	7,4680 6	0,1267 95	-79,4801	0	0,4685 22	1,5496 6
7	279,0 05	- 8,70547	0	416.78 8,57	7,7710 8	0,1325 12	-80,5457	0	0,4686 08	1,5561 1
7	279,1 78	- 8,62448	0	420.48 0,01	8,1279 2	0,1391 06	-81,76	0	0,4687 32	1,5635 4
7	279,3 86	- 8,52727	0	424.65 5,74	8,5473 7	0,1466 86	-83,1273	0	0,4689 06	1,5720 1
7	279,6 34	- 8,41056	0	429.29 7,36	9,0412 5	0,1554 08	-84,5537	0	0,4691 47	1,5807 9
7	279,9 33	- 8,27042	0	434.34 0,04	9,6209	0,1655 23	-85,9277	0	0,4694 79	1,5889 7
7	280,2 91	- 8,10211	0	439.70 3,19	10,300 3	0,1772 64	-87,1833	0	0,4699 24	1,5960 2
7	280,7 21	- 7,89992	0	445.26 8,79	11,095 1	0,1909 42	-88,2395	0	0,4705 02	1,6012 8
7	281,2 37	- 7,65696	0	450.89 8,56	12,023 2	0,2069 23	-89,0268	0	0,4712 37	1,6041 8
7	281,8 56	- 7,36489	0	456.36 0,53	13,115 9	0,2254 98	-89,4463	0	0,4721 56	1,6039 7
7	282,5 99	- 7,01364	0	461.26 1,54	14,453 9	0,2464 05	-89,3322	0	0,4733 42	1,5994 4
7	283,4 91	- 6,59091	0	464.98 5,80	16,124 5	0,2697 86	-88,4335	0	0,4749 27	1,5888 9
7	284,5 61	- 6,08171	0	467.28 9,40	18,190 4	0,2962 14	-86,6322	0	0,4769 51	1,5717 1
7	285,8 45	- 5,46778	0	467.82 6,63	20,733 8	0,3264 04	-83,8326	0	0,4793 89	1,5477 8
7	287,3 86	- 4,72698	0	465.41 9,08	23,853 3	0,3622 22	-79,7789	0	0,4822 5	1,5165 8
7	289,2 34	- 3,83236	0	458.94 7,15	27,662	0,4060 56	-74,3178	0	0,4854 74	1,4787 5
7	291,4 53	- 2,75134	0	447.02 5,07	32,277 6	0,4614 39	-67,3413	0	0,4889 56	1,4357 7
7	294,1 15	-1,4446	0	428.39 6,26	37,820 1	0,5332 41	-58,8546	0	0,4925 88	1,3899 3
7	297,0 38	1,66279 E-12	0	404.83 5,46	43,836 8	0,6191 52	-49,866	0	0,4959 82	1,3475 5



7	297,038	1,66279 E-12	0	442.933,75	40,5652	0,335819	-57,5922	0	0,942744	1,37275
7	297,31	0,240776	0	436.053,74	41,0134	0,396682	-55,5006	0	0,832933	1,36364
7	301,144	2,62759	0	393.987,33	48,5154	0,7686	-42,665	0	0,542421	1,31139
7	305,744	5,02848	0	357.672,89	57,796	0,948296	-31,651	0	0,511525	1,27113
7	311,265	7,8414	0	308.980,71	67,7962	1,15188	-18,277	0	0,509531	1,22901
7	315,732	10,1245	0	261.280,26	74,3695	1,36967	-7,12824	0	0,513174	1,19981
7	315,732	10,1245	0	261.280,26	74,3695	1,36967	-7,12824	0	0,513174	1,19981
7	317,187	10,8758	0	241.982,18	75,3586	1,46314	-3,17915	0	0,515114	1,19082
7	317,187	10,8758	0	241.982,18	75,3586	1,46314	-3,17915	0	0,515114	1,19082
7	317,89	11,2382	0	232.759,81	76,0524	1,51522	-1,50442	0	0,515805	1,1875
7	325,84	15,5215	0	162.357,31	79,5608	1,94828	8,93803	0	0,572051	1,17238
7	335,379	21,3436	0	122.234,72	79,9801	2,34197	13,5633	0	0,638942	1,16907
7	346,827	28,8516	0	106.679,99	80,3629	2,55342	15,519	0	0,672872	1,16678
7	360,564	38,3792	0	90.863,18	80,8437	2,82261	17,1775	0	0,714327	1,16592
7	377,048	50,5688	0	75.453,37	81,4501	3,16463	18,5377	0	0,764734	1,16624
7	396,83	66,308	0	60.903,86	82,2215	3,60985	20,4183	0	0,827177	1,16468
7	420,567	86,8556	0	47.631,46	83,2127	4,19233	22,3307	0	0,904273	1,16291
7	449,052	113,859	0	37.434,97	84,4934	4,83498	23,4541	0	0,98454	1,16294
7	483,235	148,804	0	30.197,97	86,1216	5,46674	24,0985	0	1,05935	1,16355



7	524,2 53	193,997	0	24.010, 43	88,188 2	6,2139 3	24,4918	0	1,1433	1,1646 9
7	538,2 65	210,211	0	22.369, 93	88,920 7	6,4665 6	24,5758	0	1,1708 4	1,1650 9
7	573,4 76	252,642	0	18.836, 56	90,817 8	7,0986 6	24,7228	0	1,2376 1	1,1660 4
7	632,5 42	328,897	0	14.555, 40	94,168 1	8,1461 1	24,8538	0	1,3432 2	1,1673 9
7	703,4 23	428,339	0	11.084, 57	98,444 1	9,3862 7	24,9253	0	1,4612 8	1,1686 3
7	788,4 79	558,276	0	8.336,1 5	103,90 7	10,852 6	24,9632	0	1,5928 6	1,1696 9
7	800,9 72	578,286	0	8.017,7 7	104,73 8	11,066	24,9666	0	1,6113 8	1,1698 2
8	326,1 29	- 10,2081	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
8	326,2 29	- 10,1604	0	338.61 5,59	1,5009 2	0,0085 0624	-60,782	0	0,4703 74	1,4588 9
8	326,3 29	- 10,1134	0	360.34 0,84	2,1283 4	0,0153 816	-65,8958	0	0,4705 56	1,4812 2
8	326,4 29	- 10,0663	0	365.54 9,26	2,6185 5	0,0224 219	-66,9165	0	0,4708 07	1,4852 6
8	326,5 29	- 10,0192	0	367.26 2,19	3,0378 6	0,0294 988	-67,2168	0	0,4710 51	1,4863 3
8	326,6 29	-9,9721	0	367.74 9,38	3,4139 3	0,0365 534	-67,2947	0	0,4712 92	1,4865 9
8	326,7 29	- 9,92496	0	367.67 6,76	3,7591 7	0,0435 803	-67,28	0	0,4715 34	1,4865 3
8	326,8 29	-9,8778	0	367.32 0,07	4,0809 8	0,0505 824	-67,2216	0	0,4717 72	1,4863 3
8	326,9 29	- 9,83061	0	366.81 8,96	4,3847 5	0,0575 495	-67,1453	0	0,4720 03	1,4861
8	327,0 29	-9,7834	0	366.96 3,30	4,6745 1	0,0642 791	-67,2963	0	0,4721 4	1,4871 1
8	327,1 29	- 9,73619	0	367.95 3,10	4,9528 4	0,0706 602	-67,7308	0	0,4721 72	1,4896 4
8	327,2	-	0	369.57	5,2214	0,0766	-68,3707	0	0,4721	1,4932



	29	9,68897		7,84	6	968			43	8
8	327,3	-	0	371.60	5,4817	0,0824	-69,133	0	0,4720	1,4975
	29	9,64175		2,60		264			95	9
8	327,4	-	0	373.85	5,7347	0,0878	-69,9581	0	0,4720	1,5022
	29	9,59454		3,47		86			51	5
8	327,5	-	0	376.23	5,9810	0,0931	-70,8152	0	0,4720	1,5071
	29	9,54734		1,86	9	146			13	1
8	327,6	-	0	378.67	6,2217	0,0981	-71,6837	0	0,4719	1,5120
	29	9,50014		2,06	2	356			84	6
8	327,7	-	0	381.11	6,4579	0,1029	-72,5464	0	0,4719	1,517
	29	9,45294		8,42	6	55			69	
8	327,8	-	0	383.55	6,6898	0,1076	-73,4001	0	0,4719	1,5219
	29	9,40574		6,91		02			65	2
8	327,9	-	0	385.96	6,9176	0,1120	-74,2375	0	0,4719	1,5267
	29	9,35854		2,58	8	9			73	9
8	328,0	-	0	388.33	7,1415	0,1164	-75,0594	0	0,4719	1,5316
	29	9,31134		5,27	7	44			9	
8	328,1	-	0	390.65	7,3622	0,1206	-75,8594	0	0,4720	1,5363
	29	9,26414		3,40	9	61			18	1
8	328,2	-9,2075	0	393.36	7,6228	0,1255	-76,7935	0	0,4720	1,5418
	49			9,64	4	69			61	6
8	328,3	-	0	396.51	7,9302	0,1312	-77,8729	0	0,4721	1,5483
	93	9,13951		9,20	6	48			29	3
8	328,5	-	0	400.14	8,2923	0,1377	-79,1105	0	0,4722	1,5558
	66	9,05792		1,01		94			29	3
8	328,7	-	0	404.26	8,7182	0,1452	-80,515	0	0,4723	1,5644
	73	8,95998		0,89	9	98			72	6
8	329,0	-	0	408.87	9,2185	0,1539	-82,0235	0	0,4725	1,5737
	22	8,84242		3,11	9	2			75	5
8	329,3	-	0	413.94	9,8058	0,1638	-83,5555	0	0,4728	1,5830
	21	8,70127		3,96	6	37			54	8
8	329,6	-	0	419.39	10,494	0,1753	-84,9871	0	0,4732	1,5914
	79	8,53177		7,20	3	12			34	3
8	330,1	-	0	425.10	11,300	0,1886	-86,2041	0	0,4737	1,5978
	09	8,32818		5,33	7	48			39	8
8	330,6	-	0	430.88	12,243	0,2042	-87,1289	0	0,4743	1,6018
	25	8,08358		3,78	2	18			93	1
8	331,2	-	0	436.50	13,345	0,2224	-87,6923	0	0,4752	1,6027



	44	7,78959		6,74	8	08			18	4
8	331,9 87	- 7,43611	0	441.64 5,08	14,682 4	0,2430 59	-87,744	0	0,4762 7	1,5995 3
8	332,8 79	- 7,01083	0	445.67 5,84	16,340 3	0,2663 1	-87,0196	0	0,4776 76	1,5903 6
8	333,9 49	- 6,49878	0	448.54 9,45	18,395 5	0,2923 54	-85,4669	0	0,4794 55	1,5750 1
8	335,2 32	-5,8818	0	449.92 4,26	20,934 5	0,3218 22	-82,9648	0	0,4816 29	1,5530 8
8	336,7 73	- 5,13775	0	448.71 6,63	24,055 5	0,3564 69	-79,2375	0	0,4842 19	1,5236 9
8	338,6 22	- 4,23976	0	443.54 8,23	27,867 7	0,3989 27	-74,0482	0	0,4871 72	1,4869 7
8	340,8 41	- 3,15529	0	433.12 2,82	32,493 1	0,4525 61	-67,3129	0	0,4903 8	1,4445 4
8	343,5 03	-1,8451	0	416.26 9,57	38,056 2	0,5219 77	-59,0576	0	0,4937 35	1,3987 9
8	346,6 98	- 0,26206 7	0	392.17 7,38	44,675 1	0,6134 66	-49,4271	0	0,4971 64	1,3524 3
8	347,2 25	1,31782 E-14	0	388.03 8,47	45,755 1	0,6292 56	-47,9126	0	0,4976 73	1,3457 1
8	347,2 25	1,31782 E-14	0	425.26 9,92	42,375 3	0,3507 13	-55,4011	0	0,9187 9	1,3696
8	350,5 32	2,17535	0	385.02 6,10	48,714 4	0,7300 19	-42,9876	0	0,5591 67	1,3184 4
8	355,1 32	4,61075	0	350.45 2,86	58,097 2	0,9258 83	-32,3327	0	0,5143 54	1,2787 7
8	360,6 53	7,43008	0	306.19 7,62	68,474 9	1,1199 3	-19,7645	0	0,5096 96	1,2378 5
8	366,7 25	10,5347	0	247.89 6,41	77,822 2	1,3985 4	-5,86901	0	0,5136 42	1,2005 7
8	366,7 25	10,5347	0	247.89 6,41	77,822 2	1,3985 4	-5,86901	0	0,5136 42	1,2005 7
8	367,2 77	10,8191	0	241.22 3,63	78,183 9	1,4304 7	-4,43525	0	0,5143 9	1,1971 2
8	368,5 05	11,4545	0	226.44 2,70	79,022 7	1,5099 7	-1,54873	0	0,5157 15	1,1908 2

8	368,5 05	11,4545	0	226.44 2,70	79,022 7	1,5099 7	-1,54873	0	0,5157 15	1,1908 2
8	375,2 27	15,0342	0	164.74 8,39	83,486 5	1,8790 7	8,01743	0	0,5596 91	1,1756 5
8	384,7 67	20,7174	0	122.01 9,87	84,356 6	2,2783 4	13,2254	0	0,6285 4	1,1708 7
8	396,2 14	28,1527	0	104.50 2,70	84,738 9	2,5148 4	15,4125	0	0,6668 26	1,1683 5
8	409,9 51	37,5973	0	88.916, 49	85,216 1	2,7823 7	17,1132	0	0,7082 41	1,1671 7
8	426,4 36	49,6856	0	73.778, 31	85,818 1	3,1216 6	18,5008	0	0,7585 27	1,1672 1
8	446,2 17	65,2997	0	59.507, 02	86,584	3,5628 3	20,3142	0	0,8207 3	1,1657 1
8	469,9 55	85,6924	0	46.506, 74	87,568 6	4,1409 7	22,2829	0	0,8977 19	1,1635 9
8	498,4 4	112,503	0	36.532, 85	88,841 2	4,7794	23,4328	0	0,9778 69	1,1634 1
8	532,6 22	147,222	0	29.445, 17	90,460 1	5,4104 5	24,0904	0	1,0528	1,1639 1
8	573,6 41	192,151	0	23.421, 20	92,516 1	6,1557 4	24,4892	0	1,1369 3	1,1649 6
8	582,6 91	202,521	0	22.409, 46	92,985 4	6,3188 4	24,5461	0	1,1547 7	1,1652 1
8	622,8 63	250,46	0	18.375, 19	95,132 7	7,0380 8	24,7226	0	1,2313 1	1,1662 4
8	681,9 3	326,347	0	14.206, 26	98,469	8,0835 5	24,8541	0	1,3370 8	1,1675 4
8	752,8 1	425,351	0	10.824, 37	102,72 9	9,3218 8	24,9258	0	1,4553 2	1,1687 4
8	837,8 66	554,808	0	8.150,9 0	108,17 4	10,785 9	24,9633	0	1,5870 4	1,1697 7
8	839,3 31	557,133	0	8.113,7 0	108,27 1	10,810 9	24,9637	0	1,5892 2	1,1697 8
9	375,0 87	- 10,5981	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
9	375,1	-	0	324.53	1,5304	0,0083	-58,8866	0	0,4733	1,4546

	87	10,5502		9,00	4	6727			88	4
9	375,2	-	0	345.37	2,1703	0,0151	-63,9198	0	0,4735	1,4766
	87	10,5028		2,67	3	523			42	4
9	375,3	-	0	350.36	2,6704	0,0220	-64,9276	0	0,4737	1,4806
	87	10,4555		8,19		976			75	5
9	375,4	-	0	351.99	3,0984	0,0290	-65,2246	0	0,4740	1,4817
	87	10,4081		1,28	4	684			06	4
9	375,5	-	0	352.44	3,4811	0,0360	-65,3024	0	0,4742	1,4820
	87	10,3607		3,63	5	303			31	1
9	375,6	-	0	352.37	3,8319	0,0429	-65,2914	0	0,4744	1,4819
	87	10,3132		5,85	4	746			51	7
9	375,7	-	0	352.03	4,1593	0,0498	-65,238	0	0,4746	1,4818
	87	10,2658		7,51	7	874			68	1
9	375,8	-	0	351.57	4,4688	0,0567	-65,1741	0	0,4748	1,4816
	87	10,2183		9,89	8	523			8	4
9	375,9	-	0	351.44	4,7639	0,0634	-65,2364	0	0,4750	1,4821
	87	10,1708		4,46	3	636			41	8
9	376,0	-	0	352.18	5,047	0,0698	-65,601	0	0,4750	1,4843
	87	10,1233		2,88		327			94	3
9	376,1	-	0	353.58	5,3199	0,0758	-66,1883	0	0,4750	1,4876
	87	10,0758		4,49	1	611			81	7
9	376,2	-	0	355.40	5,5841	0,0815	-66,9087	0	0,4750	1,4917
	87	10,0283		2,44	9	863			43	4
9	376,3	-	0	357.47	5,8410	0,0870	-67,7046	0	0,4750	1,4962
	87	9,98079		3,64	2	433			01	2
9	376,4	-9,9333	0	359.69	6,0913	0,0922	-68,5402	0	0,4749	1,5009
	87			1,87		633			65	4
9	376,5	-9,8858	0	361.99	6,3357	0,0972	-69,3938	0	0,4749	1,5057
	87			0,23	7	717			36	9
9	376,6	-	0	364.32	6,575	0,1020	-70,2516	0	0,4749	1,5106
	87	9,83831		4,94		9			17	8
9	376,7	-	0	366.66	6,8095	0,1067	-71,1041	0	0,4749	1,5155
	87	9,79082		5,30	8	35			07	7
9	376,8	-	0	368.99	7,0400	0,1112	-71,9452	0	0,4749	1,5204
	87	9,74333		0,40	4	2			07	3
9	376,9	-	0	371.28	7,2665	0,1155	-72,7715	0	0,4749	1,5252
	87	9,69584		6,96	7	64			16	3
9	377,0	-	0	373.54	7,4895	0,1197	-73,5802	0	0,4749	1,5299

	87	9,64834		4,90	8	75			33	7
9	377,2 07	- 9,59135	0	376.19 3,98	7,7530 9	0,1246 64	-74,5249	0	0,4749 66	1,5355 4
9	377,3 51	- 9,52295	0	379.27 6,78	8,0638 8	0,1303 2	-75,62	0	0,4750 19	1,5420 6
9	377,5 24	- 9,44086	0	382.82 7,74	8,4303 8	0,1368 18	-76,8765	0	0,4751 03	1,5496 3
9	377,7 31	- 9,34233	0	386.87 2,44	8,8617 4	0,1442 54	-78,304	0	0,4752 29	1,5583 5
9	377,9 8	- 9,22406	0	391.41 3,74	9,3691 4	0,1527 29	-79,8884	0	0,4754 1	1,5681 4
9	378,2 79	- 9,08207	0	396.41 5,82	9,9644	0,1624 69	-81,5061	0	0,4756 65	1,5780 6
9	378,6 37	- 8,91157	0	401.82 2,63	10,661 6	0,1737 16	-83,0501	0	0,4760 11	1,5872 5
9	379,0 67	-8,7068	0	407.51 6,37	11,476 8	0,1867 71	-84,4079	0	0,4764 71	1,5948 1
9	379,5 83	-8,4608	0	413.30 5,55	12,429	0,2019 98	-85,4759	0	0,4770 69	1,5999 1
9	380,2 02	- 8,16517	0	418.95 9,34	13,545	0,2197 59	-86,159	0	0,4778 29	1,6018 3
9	380,9 45	- 7,80977	0	424.13 2,54	14,888 3	0,2400 77	-86,3103	0	0,4788 08	1,5994 8
9	381,8 37	- 7,38228	0	428.37 2,19	16,542 1	0,2630 71	-85,7435	0	0,4800 86	1,5916
9	382,9 07	- 6,86774	0	431.48 4,08	18,590 6	0,2888 63	-84,3486	0	0,4817 1	1,5775 2
9	384,1 91	- 6,24799	0	433.31 8,98	21,124 2	0,3178 16	-82,0554	0	0,4836 95	1,5570 9
9	385,7 31	- 5,50093	0	432.75 8,10	24,241 4	0,3516 66	-78,5534	0	0,4860 77	1,5291 3
9	387,5 8	- 4,59972	0	428.44 5,18	28,052 2	0,3930 12	-73,5776	0	0,4888 2	1,4934 6
9	389,7 99	- 3,51184	0	419.06 3,97	32,679 6	0,4451 97	-67,0255	0	0,4918 17	1,4515 6
9	392,4 61	- 2,19822	0	403.40 8,76	38,256 4	0,5126 16	-58,9464	0	0,4949 61	1,4060 4
9	395,6	-	0	380.63	44,908	0,6015	-49,4535	0	0,4981	1,3594



	56	0,61169 4		9,19	8	76			82	6
9	396,8 82	1,14317 E-14	0	371.38 9,21	47,435 4	0,6378 15	-45,9864	0	0,4992 77	1,3439 8
9	396,8 82	1,14317 E-14	0	408.07 0,17	43,932 5	0,3634 67	-53,3048	0	0,9001 16	1,3668 5
9	399,4 9	1,76729	0	375.20 5,74	48,866 8	0,6886 12	-43,0712	0	0,5801 34	1,3246 1
9	404,0 9	4,24426	0	341.37 8,36	58,290 6	0,9052 12	-32,5489	0	0,5177 62	1,2849 7
9	409,6 11	7,07554	0	296.35 8,23	68,885 9	1,0911 8	-19,8333	0	0,5114 45	1,2433 9
9	416,2 35	10,4727	0	234.27 3,22	79,413 8	1,3777	-5,22852	0	0,5147 3	1,2043 6
9	416,8 84	10,8068	0	227.55 7,49	80,277 8	1,4128 3	-3,81113	0	0,5152 57	1,2009 8
9	416,8 84	10,8068	0	227.55 7,49	80,277 8	1,4128 3	-3,81113	0	0,5152 57	1,2009 8
9	419,2 2	12,0217	0	202.48 4,78	81,866 2	1,5574 6	0,93135	0	0,5170 9	1,1908 2
9	419,2 2	12,0217	0	202.48 4,78	81,866 2	1,5574 6	0,93135	0	0,5170 9	1,1908 2
9	424,1 85	14,6526	0	158.95 1,31	85,843 8	1,8265	7,81915	0	0,5503 83	1,1793 5
9	433,7 25	20,2389	0	116.79 8,48	88,421 8	2,2009 1	13,2253	0	0,6157 52	1,1733 2
9	445,1 72	27,5644	0	97.806, 65	88,816 4	2,4635 6	15,5823	0	0,6587 27	1,1706
9	458,9 09	36,8952	0	83.050, 60	89,288 3	2,7273 2	17,2553	0	0,6998 61	1,1691
9	475,3 94	48,8437	0	68.732, 47	89,883 9	3,0626 2	18,6181	0	0,7499 44	1,1688 3
9	495,1 75	64,2859	0	55.284, 79	90,642 1	3,4992 6	20,4669	0	0,8119 57	1,1668 4
9	518,9 13	84,467	0	43.084, 70	91,617 3	4,0701 6	22,3873	0	0,8888 9	1,1645 5
9	547,3 98	111,054	0	33.492, 46	92,880 5	4,7283 4	23,5142	0	0,9715 41	1,1643

9	581,58	145,559	0	26.950,21	94,4907	5,35706	24,1412	0	1,04656	1,16469
9	616,268	183,117	0	22.084,53	96,2133	5,98659	24,477	0	1,11821	1,16548
9	622,599	190,25	0	21.404,08	96,5372	6,10105	24,5194	0	1,13089	1,16563
9	671,821	248,303	0	16.766,08	99,1438	6,98246	24,7398	0	1,22551	1,16681
9	730,888	323,85	0	12.948,61	102,467	8,02624	24,8637	0	1,33143	1,16799
9	801,768	422,47	0	9.858,51	106,713	9,26271	24,9306	0	1,44982	1,16908
9	856,208	503,746	0	8.191,96	110,148	10,2013	24,9564	0	1,53538	1,16973
10	381,621	-10,6444	0	1,00	0,00177245	0,925914	24,6396	0	0,51959	1,17396
10	381,721	-10,5964	0	322.120,36	1,53546	0,00833846	-58,5589	0	0,473878	1,45391
10	381,821	-10,549	0	342.764,61	2,17726	0,015105	-63,5822	0	0,474052	1,47589
10	381,921	-10,5016	0	347.739,01	2,67795	0,0220411	-64,5879	0	0,474273	1,47989
10	382,021	-10,4542	0	349.375,48	3,1069	0,0289977	-64,887	0	0,474494	1,48099
10	382,121	-10,4067	0	349.837,27	3,4908	0,0359407	-64,9665	0	0,474714	1,48127
10	382,221	-10,3593	0	349.772,92	3,8427	0,0428643	-64,9562	0	0,474933	1,48123
10	382,321	-10,3117	0	349.435,89	4,17115	0,049756	-64,9029	0	0,475149	1,48107
10	382,421	-10,2642	0	348.967,59	4,48161	0,0566032	-64,8353	0	0,47536	1,48088
10	382,521	-10,2167	0	348.735,41	4,77737	0,0633249	-64,8654	0	0,475531	1,48124
10	382,621	-10,1691	0	349.350,18	5,06083	0,0697234	-65,1903	0	0,475596	1,48318
10	382,7	-	0	350.66	5,3341	0,0757	-65,752	0	0,4755	1,4863

	21	10,1216		2,94	1	769			88	9
10	382,8 21	-10,074	0	352.44 6,79	5,5987 7	0,0815 123	-66,4673	0	0,4755 43	1,4904 3
10	382,9 21	- 10,0264	0	354.50 6,07	5,8559 8	0,0869 716	-67,2657	0	0,4754 94	1,4949 2
10	383,0 21	-9,9789	0	356.71 9,30	6,1066 6	0,0921 897	-68,1054	0	0,4754 54	1,4996 6
10	383,1 21	- 9,93136	0	359.01 3,23	6,3515 5	0,0971 942	-68,9628	0	0,4754 23	1,5045 2
10	383,2 21	- 9,88382	0	361.34 2,48	6,5912 6	0,1020 07	-69,8236	0	0,4754 03	1,5094 2
10	383,3 21	- 9,83628	0	363.67 7,95	6,8262 6	0,1066 47	-70,6794	0	0,4753 92	1,5143 2
10	383,4 21	- 9,78874	0	365.99 9,42	7,0570 4	0,1111 29	-71,5241	0	0,4753 91	1,5191 9
10	383,5 21	-9,7412	0	368.29 1,58	7,2840 1	0,1154 65	-72,3534	0	0,4753 99	1,5240 1
10	383,6 21	- 9,69366	0	370.54 4,44	7,5076 1	0,1196 66	-73,1647	0	0,4754 16	1,5287 5
10	383,7 41	- 9,63661	0	373.18 8,76	7,7716 4	0,1245 47	-74,113	0	0,4754 47	1,5343 4
10	383,8 85	- 9,56815	0	376.26 7,54	8,0828 9	0,1301 95	-75,2128	0	0,4754 98	1,5408 8
10	384,0 58	- 9,48597	0	379.81 6,46	8,4494 9	0,1366 93	-76,4759	0	0,4755 78	1,5484 8
10	384,2 65	- 9,38735	0	383.86 0,24	8,8807 4	0,1441 33	-77,9111	0	0,4756 97	1,5572 2
10	384,5 14	- 9,26896	0	388.40 1,84	9,3882 6	0,1526 03	-79,5053	0	0,4758 72	1,5670 7
10	384,8 13	- 9,12683	0	393.40 9,31	9,9836 8	0,1623 43	-81,127	0	0,4761 18	1,5769 9
10	385,1 71	- 8,95618	0	398.82 6,36	10,681 5	0,1735 63	-82,6905	0	0,4764 55	1,5863 1
10	385,6 01	- 8,75122	0	404.53 5,13	11,497 9	0,1865 65	-84,0773	0	0,4769 06	1,5940 8
10	386,1 17	-8,505	0	410.36 2,92	12,451 7	0,2017 15	-85,1831	0	0,4774 94	1,5994 6
10	386,7	-	0	416.09	13,565	0,2194	-85,9105	0	0,4782	1,6017



	36	8,20912		4,95	3	44			38	
10	387,4	-	0	421.42	14,900	0,2397	-86,1334	0	0,4791	1,5998
	79	7,85344		2,58	4	73			85	7
10	388,3	-	0	425.85	16,548	0,2626	-85,6504	0	0,4804	1,5925
	71	7,42565		7,60	5	51			23	7
10	389,4	-	0	429.11	18,594	0,2882	-84,3169	0	0,4820	1,5789
	41	6,91079		0,40	7	95			16	1
10	390,7	-	0	431.04	21,129	0,3170	-82,0545	0	0,4839	1,5586
	25	6,29067		7,92	4	38			79	6
10	392,2	-	0	430.52	24,244	0,3507	-78,545	0	0,4863	1,5305
	65	5,54318		4,24	6	5			43	9
10	394,1	-4,6415	0	426.15	28,050	0,3920	-73,552	0	0,4890	1,4947
	14			0,89	9	52			55	9
10	396,3	-	0	416.79	32,677	0,4440	-67,0168	0	0,4920	1,4529
	33	3,55319		8,39		32			18	6
10	398,9	-2,2391	0	401.36	38,257	0,5110	-58,9675	0	0,4951	1,4074
	95			2,72		11			34	5
10	402,1	-	0	379.07	44,919	0,5990	-49,527	0	0,4983	1,3608
	9	0,65199		9,29	7	59			29	4
		9								
10	403,4	9,11769	0	369.32	47,614	0,6374	-45,8344	0	0,4994	1,3442
	97	E-15		3,29	7	84			87	9
10	403,4	9,11769	0	406.02	44,090	0,3638	-53,1444	0	0,8989	1,3670
	97	E-15		3,71	1	83			02	8
10	406,0	1,72016	0	372.67	48,861	0,6809	-42,8702	0	0,5837	1,3249
	24			4,61	1	99			8	1
10	410,6	4,20936	0	332.04	58,193	0,8976	-31,0456	0	0,5203	1,2820
	24			0,00	7	87			06	7
10	416,1	7,0525	0	283.29	68,588	1,0891	-17,9494	0	0,5129	1,2408
	45			9,46	7				96	8
10	422,7	10,4566	0	222.37	79,005	1,3779	-4,0246	0	0,5153	1,2045
	7			8,95	8	1			47	7
10	423,4	10,8068	0	215.68	79,914	1,4142	-2,63246	0	0,5158	1,2012
	49			9,14	4	1			22	8
10	423,4	10,8068	0	215.68	79,914	1,4142	-2,63246	0	0,5158	1,2012
	49			9,14	4	1			22	8
10	426,0	12,1518	0	189.84	81,668	1,5713	2,24763	0	0,5175	1,1908
	3			1,76	1	8			28	2

10	426,03	12,1518	0	189.841,76	81,6681	1,57138	2,24763	0	0,517528	1,19082
10	430,719	14,6359	0	151.145,78	85,6056	1,81851	8,33432	0	0,549059	1,18066
10	440,259	20,2077	0	110.091,27	88,9027	2,19009	13,593	0	0,613976	1,17464
10	451,706	27,5008	0	92.040,37	89,5302	2,44352	15,8345	0	0,655441	1,17184
10	465,443	36,7856	0	77.677,63	90,0029	2,70535	17,4476	0	0,696388	1,17025
10	481,928	48,6772	0	63.827,73	90,5956	3,0387	18,7636	0	0,74644	1,16986
10	501,709	64,0505	0	50.949,90	91,3505	3,47414	20,6836	0	0,808432	1,16735
10	525,447	84,1474	0	39.396,22	92,3219	4,04411	22,5232	0	0,884795	1,1651
10	553,932	110,632	0	30.344,63	93,5805	4,70021	23,5973	0	0,96809	1,16484
10	588,114	145,019	0	24.196,29	95,1856	5,32722	24,1914	0	1,04297	1,16519
10	611,585	170,078	0	20.343,68	96,3383	5,7528	24,4264	0	1,09194	1,16568
10	629,133	189,573	0	19.083,53	97,2264	6,06927	24,5487	0	1,12739	1,16608
10	678,355	247,418	0	14.686,44	99,8246	6,94827	24,7565	0	1,22194	1,16717
10	737,422	322,759	0	11.223,34	103,14	7,99027	24,8725	0	1,32788	1,16838
10	808,302	421,127	0	8.449,76	107,376	9,22505	24,9353	0	1,44631	1,16933
10	840,065	467,873	0	7.200,13	109,359	9,77317	24,9509	0	1,49678	1,16978
11	381,622	-10,6444	0	0,96	0,00177245	0,925914	24,6396	0	0,519559	1,17396
11	381,722	-10,5964	0	308.364,05	1,53546	0,00833846	-58,5589	0	0,473878	1,45391
11	381,8	-10,549	0	328.12	2,1772	0,0151	-63,5822	0	0,4740	1,4758

	22			6,68	6	05			52	9
11	381,9	-	0	332.88	2,6779	0,0220	-64,5879	0	0,4742	1,4798
	22	10,5016		8,65	5	411			73	9
11	382,0	-	0	334.45	3,1069	0,0289	-64,887	0	0,4744	1,4809
	22	10,4542		5,23		977			94	9
11	382,1	-	0	334.89	3,4908	0,0359	-64,9665	0	0,4747	1,4812
	22	10,4067		7,30		407			14	7
11	382,2	-	0	334.83	3,8427	0,0428	-64,9562	0	0,4749	1,4812
	22	10,3593		5,70		643			33	3
11	382,3	-	0	334.51	4,1711	0,0497	-64,9029	0	0,4751	1,4810
	22	10,3117		3,06	5	56			49	7
11	382,4	-	0	334.06	4,4816	0,0566	-64,8353	0	0,4753	1,4808
	22	10,2642		4,76	1	032			6	8
11	382,5	-	0	333.84	4,7773	0,0633	-64,8654	0	0,4755	1,4812
	22	10,2167		2,50	7	249			31	4
11	382,6	-	0	334.43	5,0608	0,0697	-65,1903	0	0,4755	1,4831
	22	10,1691		1,01	3	234			96	8
11	382,7	-	0	335.68	5,3341	0,0757	-65,752	0	0,4755	1,4863
	22	10,1216		7,71	1	769			88	9
11	382,8	-10,074	0	337.39	5,5987	0,0815	-66,4673	0	0,4755	1,4904
	22			5,37	7	123			43	3
11	382,9	-	0	339.36	5,8559	0,0869	-67,2657	0	0,4754	1,4949
	22	10,0264		6,72	8	716			94	2
11	383,0	-9,9789	0	341.48	6,1066	0,0921	-68,1054	0	0,4754	1,4996
	22			5,42	6	897			54	6
11	383,1	-	0	343.68	6,3515	0,0971	-68,9628	0	0,4754	1,5045
	22	9,93136		1,39	5	942			23	2
11	383,2	-	0	345.91	6,5912	0,1020	-69,8236	0	0,4754	1,5094
	22	9,88382		1,17	6	07			03	2
11	383,3	-	0	348.14	6,8262	0,1066	-70,6794	0	0,4753	1,5143
	22	9,83628		6,91	6	47			92	2
11	383,4	-	0	350.36	7,0570	0,1111	-71,5241	0	0,4753	1,5191
	22	9,78874		9,23	4	29			91	9
11	383,5	-9,7412	0	352.56	7,2840	0,1154	-72,3534	0	0,4753	1,5240
	22			3,51	1	65			99	1
11	383,6	-	0	354.72	7,5076	0,1196	-73,1647	0	0,4754	1,5287
	22	9,69366		0,16	1	66			16	5
11	383,7	-	0	357.25	7,7716	0,1245	-74,113	0	0,4754	1,5343

	42	9,63661		1,55	4	47			47	4
11	383,8 86	- 9,56815	0	360.19 8,85	8,0828 9	0,1301 95	-75,2128	0	0,4754 98	1,5408 8
11	384,0 59	- 9,48597	0	363.59 6,22	8,4494 9	0,1366 93	-76,4759	0	0,4755 78	1,5484 8
11	384,2 66	- 9,38735	0	367.46 7,30	8,8807 4	0,1441 33	-77,9111	0	0,4756 97	1,5572 2
11	384,5 15	- 9,26896	0	371.81 4,95	9,3882 6	0,1526 03	-79,5053	0	0,4758 72	1,5670 7
11	384,8 14	- 9,12683	0	376.60 8,57	9,9836 8	0,1623 43	-81,127	0	0,4761 18	1,5769 9
11	385,1 72	- 8,95618	0	381.79 4,29	10,681 5	0,1735 63	-82,6905	0	0,4764 55	1,5863 1
11	385,6 02	- 8,75122	0	387.25 9,26	11,497 9	0,1865 65	-84,0773	0	0,4769 06	1,5940 8
11	386,1 18	-8,505	0	392.83 8,17	12,451 7	0,2017 15	-85,1831	0	0,4774 94	1,5994 6
11	386,7 37	- 8,20912	0	398.32 5,41	13,565 3	0,2194 44	-85,9105	0	0,4782 38	1,6017
11	387,4 8	- 7,85344	0	403.42 5,52	14,900 4	0,2397 73	-86,1334	0	0,4791 85	1,5998 7
11	388,3 72	- 7,42565	0	407.67 1,15	16,548 5	0,2626 51	-85,6504	0	0,4804 23	1,5925 7
11	389,4 42	- 6,91079	0	410.78 5,03	18,594 7	0,2882 95	-84,3169	0	0,4820 16	1,5789 1
11	390,7 26	- 6,29067	0	412.63 9,81	21,129 4	0,3170 38	-82,0545	0	0,4839 79	1,5586 6
11	392,2 66	- 5,54318	0	412.13 8,49	24,244 6	0,3507 5	-78,545	0	0,4863 43	1,5305 9
11	394,1 15	-4,6415	0	407.95 1,91	28,050 9	0,3920 52	-73,552	0	0,4890 55	1,4947 9
11	396,3 34	- 3,55319	0	398.99 8,81	32,677	0,4440 32	-67,0168	0	0,4920 18	1,4529 6
11	398,9 96	-2,2391	0	384.22 2,33	38,257	0,5110 11	-58,9675	0	0,4951 34	1,4074 5
11	402,1 91	- 0,65199	0	362.89 0,52	44,919 7	0,5990 59	-49,527	0	0,4983 29	1,3608 4



11	403,4 98	9,11769 E-15	0	353.55 1,16	47,614 7	0,6374 84	-45,8344	0	0,4994 87	1,3442 9
11	403,4 98	9,11769 E-15	0	388.68 4,27	44,090 1	0,3638 83	-53,1444	0	0,8989 02	1,3670 8
11	406,0 25	1,72016	0	356.75 9,35	48,861 1	0,6809 99	-42,8702	0	0,5837 8	1,3249 1
11	410,6 25	4,20936	0	317.86 0,06	58,193 7	0,8976 87	-31,0456	0	0,5203 06	1,2820 7
11	416,1 46	7,0525	0	271.20 1,02	68,588 7	1,0891	-17,9494	0	0,5129 96	1,2408 8
11	422,7 71	10,4566	0	212.88 2,14	79,005 8	1,3779 1	-4,0246	0	0,5153 47	1,2045 7
11	423,4 5	10,8068	0	206.47 8,03	79,914 4	1,4142 1	-2,63246	0	0,5158 22	1,2012 8
11	423,4 5	10,8068	0	206.47 8,03	79,914 4	1,4142 1	-2,63246	0	0,5158 22	1,2012 8
11	426,0 31	12,1518	0	182.03 6,17	81,668 1	1,5713 8	2,24763	0	0,5175 28	1,1908 2
11	426,0 31	12,1518	0	182.03 6,17	81,668 1	1,5713 8	2,24763	0	0,5175 28	1,1908 2
11	430,7 2	14,6359	0	145.12 4,75	85,605 6	1,8185 1	8,33432	0	0,5490 59	1,1806 6
11	440,2 6	20,2077	0	105.08 2,28	88,902 7	2,1900 9	13,593	0	0,6139 76	1,1746 4
11	451,7 07	27,5008	0	87.929, 05	89,530 2	2,4435 2	15,8345	0	0,6554 41	1,1718 4
11	465,4 44	36,7856	0	74.964, 96	90,002 9	2,7053 5	17,4476	0	0,6963 88	1,1702 5
11	481,9 29	48,6772	0	62.304, 81	90,595 6	3,0387	18,7636	0	0,7464 4	1,1698 6
11	501,7 1	64,0505	0	50.370, 02	91,350 5	3,4741 4	20,6836	0	0,8084 32	1,1673 5
11	525,4 48	84,1474	0	39.373, 35	92,321 9	4,0441 1	22,5232	0	0,8847 95	1,1651
11	553,9 33	110,632	0	30.760, 81	93,580 5	4,7002 1	23,5973	0	0,9680 9	1,1648 4
11	588,1 15	145,019	0	24.830, 80	95,185 6	5,3272 2	24,1914	0	1,0429 7	1,1651 9

11	611,5 86	170,078	0	22.041, 77	96,338 3	5,7528	24,4264	0	1,0919 4	1,1656 8
11	629,1 34	189,573	0	19.756, 98	97,226 4	6,0692 7	24,5487	0	1,1273 9	1,1660 8
11	678,3 56	247,418	0	15.524, 15	99,824 6	6,9482 7	24,7565	0	1,2219 4	1,1671 7
11	737,4 23	322,759	0	12.033, 14	103,14	7,9902 7	24,8725	0	1,3278 8	1,1683
11	808,3 03	421,127	0	9.198,1 1	107,37 6	9,2250 5	24,9353	0	1,4463 1	1,1693 3
11	840,0 66	467,873	0	8.239,7 0	109,35 9	9,7731 7	24,9509	0	1,4967 8	1,1697
12	402,8 59	- 10,7949	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
12	402,9 59	- 10,7468	0	314.62 3,51	1,5478 2	0,0082 7026	-57,5409	0	0,4754 11	1,4516 3
12	403,0 59	- 10,6992	0	334.88 2,71	2,1937	0,0149 993	-62,5365	0	0,4755 56	1,4734 9
12	403,1 59	- 10,6517	0	339.76 8,16	2,6991 3	0,0218 785	-63,5421	0	0,4757 7	1,4775 1
12	403,2 59	- 10,6041	0	341.34 1,25	3,1322 5	0,0287 792	-63,8374	0	0,4759 94	1,4786 1
12	403,3 59	- 10,5565	0	341.75 8,61	3,5200 7	0,0356 648	-63,9138	0	0,4762 15	1,4788 9
12	403,4 59	- 10,5089	0	341.66 9,04	3,8748 3	0,0425 379	-63,9023	0	0,4764 31	1,4788 7
12	403,5 59	- 10,4612	0	341.31 7,33	4,2060 9	0,0493 728	-63,8488	0	0,4766 41	1,4787 1
12	403,6 59	- 10,4135	0	340.81 4,46	4,5188 8	0,0561 741	-63,7725	0	0,4768 49	1,4784 9
12	403,7 59	- 10,3658	0	340.67 9,74	4,8165 2	0,0628 223	-63,8389	0	0,4770 02	1,4790 4
12	403,8 59	- 10,3181	0	341.30 8,22	5,1017 3	0,0691 671	-64,1739	0	0,4770 62	1,4810 3
12	403,9 59	- 10,2704	0	342.53 5,67	5,3765 3	0,0752 033	-64,714	0	0,4770 61	1,4841 2
12	404,0	-	0	344.18	5,6425	0,0809	-65,3932	0	0,4770	1,4879



	59	10,2227		6,06	8	432			31	5
12	404,1	-10,175	0	346.11	5,9011	0,0864	-66,159	0	0,4769	1,4922
	59			4,21	5	117			93	6
12	404,2	-	0	348.21	6,1531	0,0916	-66,974	0	0,4769	1,4968
	59	10,1273		3,04	4	377			56	5
12	404,3	-	0	350.40	6,3992	0,0966	-67,8138	0	0,4769	1,5016
	59	10,0796		9,51	6	484			25	
12	404,4	-	0	352.64	6,6399	0,1014	-68,6602	0	0,4769	1,5064
	59	10,0319		1,08	8	65			09	1
12	404,5	-	0	354.82	6,8751	0,1061	-69,4951	0	0,4769	1,5112
	59	9,98424		5,81		07			3	1
12	404,6	-	0	356.87	7,1048	0,1105	-70,3014	0	0,4770	1,5159
	59	9,93653		3,00	3	8			18	3
12	404,7	-	0	358.69	7,3293	0,1148	-71,0645	0	0,4772	1,5205
	59	9,88882		9,44	2	85			03	
12	404,8	-	0	360.37	7,5506	0,1190	-71,7937	0	0,4774	1,5249
	59	9,84108		2,81	1	27			37	5
12	404,9	-	0	362.17	7,8128	0,1237	-72,6234	0	0,4777	1,5301
	79	9,78378		8,51	8	86			76	2
12	405,1	-	0	364.14	8,1236	0,1292	-73,5671	0	0,4782	1,5361
	23	9,71497		3,45	2	4			03	2
12	405,2	-	0	366.34	8,4864	0,1355	-74,6466	0	0,4786	1,5430
	95	9,63231		0,74	4	56			73	8
12	405,5	-9,533	0	368.75	8,9124	0,1427	-75,8685	0	0,4792	1,5511
	03			7,15	4	79			09	
12	405,7	-	0	371.36	9,4132	0,1509	-77,2121	0	0,4798	1,5600
	52	9,41368		9,18	9	92			21	7
12	406,0	-	0	374.13	10,001	0,1603	-78,603	0	0,4805	1,5694
	5	9,27031		6,71	7	44			23	4
12	406,4	-	0	376.98	10,691	0,1710	-79,9076	0	0,4813	1,5781
	08	9,09798		3,69	3	84			3	9
12	406,8	-	0	379.78	11,498	0,1834	-81,019	0	0,4822	1,5854
	38	8,89082		5,48	7	72			58	8
12	407,3	-	0	382.36	12,443	0,1978	-81,8388	0	0,4833	1,5905
	54	8,64171		5,15	5	03			28	6
12	407,9	-	0	384.53	13,548	0,2144	-82,2757	0	0,4845	1,5927
	74	8,34207		7,64	9	39			55	3
12	408,7	-	0	386.00	14,854	0,2336	-82,1996	0	0,4859	1,5910

	17	7,98151		4,77	9	73			58	7
12	409,6 08	- 7,54748	0	386.29 4,27	16,460 5	0,2552 39	-81,4102	0	0,4875 97	1,5842 5
12	410,6 78	- 7,02472	0	384.63 5,16	18,469 1	0,2795 58	-79,577	0	0,4895 75	1,5702 3
12	411,9 62	- 6,39466	0	380.61 1,62	20,942 1	0,3078 02	-76,5576	0	0,4918 71	1,5485 9
12	413,5 03	-5,6349	0	373.70 7,71	23,976	0,3410 84	-72,2539	0	0,4944 15	1,5196 7
12	415,3 52	-4,7183	0	363.06 8,63	27,684 4	0,3815 79	-66,5131	0	0,4971 51	1,4839 3
12	417,5 7	- 3,61216	0	347.56 8,91	32,187 5	0,4327 19	-59,2069	0	0,4999 98	1,4425
12	420,2 33	- 2,27708	0	326.53 4,24	37,614 5	0,4989 59	-50,3934	0	0,5028 61	1,3976 2
12	423,4 27	- 0,66597	0	300.35 8,25	44,079 3	0,5846 5	-40,5162	0	0,5056 22	1,3529 2
		6								
12	427,2 61	1,27746	0	269.88 2,59	51,667 1	0,6950 96	-30,0915	0	0,5082 44	1,3112
12	431,8 62	3,62143	0	235.77 1,44	60,427 4	0,8392 05	-19,5533	0	0,5107 44	1,2740 1
12	437,3 82	6,44803	0	198.59 5,56	70,333 8	1,0301 1	-9,42104	0	0,5131 88	1,2426
12	444,0 07	9,85676	0	157.82 8,07	81,198 3	1,2899 5	0,013038 6	0	0,5158 6	1,2171
12	445,8 47	10,8068	0	146.53 6,50	83,983 5	1,3709 4	2,59733	0	0,5167 27	1,2102 3
12	445,8 47	10,8068	0	146.53 6,50	83,983 5	1,3709 4	2,59733	0	0,5167 27	1,2102 3
12	451,9 57	14,0497	0	110.85 9,15	88,038 5	1,6806 7	9,83398	0	0,5239 72	1,1927 2
12	453,1 5	14,6937	0	105.01 0,67	88,896 2	1,7269 8	10,8033	0	0,5326 43	1,1908 2
12	453,1 5	14,6937	0	105.01 0,67	88,896 2	1,7269 9	10,8033	0	0,5326 39	1,1908 2
12	461,4 96	19,3897	0	74.495, 75	96,339 7	2,0556 1	15,1318	0	0,5912 84	1,1837 3

12	472,944	26,5271	0	55.005,26	101,205	2,41497	17,5545	0	0,650915	1,18049
12	486,681	35,7744	0	46.170,73	102,012	2,68743	18,7686	0	0,693775	1,17845
12	503,165	47,6206	0	38.301,10	102,61	3,02057	19,9668	0	0,743737	1,17638
12	522,947	62,9477	0	30.904,87	103,364	3,45644	21,9961	0	0,806046	1,17156
12	546,684	82,9811	0	24.172,75	104,333	4,02181	23,2836	0	0,882096	1,16943
12	553,939	89,4666	0	22.516,77	104,644	4,20371	23,5371	0	0,90587	1,16917
12	575,169	109,398	0	18.827,24	105,59	4,67814	24,0313	0	0,965398	1,16882
12	609,352	143,695	0	15.205,10	107,192	5,30465	24,4428	0	1,04048	1,16879
12	650,37	188,124	0	12.128,65	109,228	6,04622	24,6895	0	1,12484	1,16916
12	699,593	245,847	0	9.554,25	111,822	6,92495	24,8323	0	1,21949	1,16972
12	699,704	245,982	0	9.549,43	111,829	6,92692	24,8325	0	1,2197	1,16972
13	432,333	-10,8068	0	1,00	0,00177245	0,925914	24,6396	0	0,519559	1,17396
13	432,433	-10,757	0	203.775,80	1,5625	0,00752616	-42,0374	0	0,494498	1,41777
13	432,533	-10,7076	0	218.309,97	2,21629	0,0136112	-47,1224	0	0,494623	1,44122
13	432,633	-10,6581	0	221.783,05	2,72429	0,0198715	-48,1658	0	0,494754	1,44587
13	432,733	-10,6086	0	222.877,77	3,15921	0,0261528	-48,4957	0	0,494886	1,44736
13	432,833	-10,5591	0	223.119,27	3,54825	0,0324224	-48,6018	0	0,495024	1,447924
13	432,933	-10,5096	0	222.971,76	3,90425	0,0386837	-48,6147	0	0,495163	1,44807
13	433,0	-	0	222.62	4,2362	0,0449	-48,5833	0	0,4953	1,4480

	33	10,4601		5,42	3	206				7
13	433,1	-	0	222.16	4,5494	0,0511	-48,5281	0	0,4954	1,4479
	33	10,4106		5,40		322			36	9
13	433,2	-10,361	0	221.63	4,8466	0,0573	-48,4592	0	0,4955	1,4478
	33			6,48	9	27			71	6
13	433,3	-	0	221.07	5,1305	0,0635	-48,3847	0	0,4957	1,4477
	33	10,3115		1,79	8	047			03	1
13	433,4	-	0	220.69	5,4036	0,0695	-48,4082	0	0,4958	1,4480
	33	10,2619		9,56	6	606			11	9
13	433,5	-	0	220.79	5,6678	0,0753	-48,6566	0	0,4958	1,4496
	33	10,2123		5,93	1	331			72	4
13	433,6	-	0	221.26	5,9241	0,0808	-49,0803	0	0,4959	1,4521
	33	10,1627		7,36	6	222			05	1
13	433,7	-	0	222.00	6,1740	0,0860	-49,6245	0	0,4959	1,4552
	33	10,1131		5,21	5	403			27	2
13	433,8	-	0	222.92	6,4179	0,0910	-50,2502	0	0,4959	1,4587
	33	10,0635		7,60	1	227			42	7
13	433,9	-	0	223.97	6,6561	0,0957	-50,9311	0	0,4959	1,4626
	33	10,0139		8,89	9	967			55	3
13	434,0	-	0	225.11	6,8897	0,1003	-51,6465	0	0,4959	1,4666
	33	9,96433		6,09	6	73			7	9
13	434,1	-	0	226.31	7,1188	0,1047	-52,3845	0	0,4959	1,4709
	33	9,91473		2,64	2	74			87	
13	434,2	-	0	227.54	7,3438	0,1090	-53,1354	0	0,4960	1,4751
	33	9,86513		7,30	5	13			07	9
13	434,3	-	0	228.80	7,5652	0,1131	-53,8915	0	0,4960	1,4795
	33	9,81553		2,69	8	01			31	4
13	434,4	-9,756	0	230.32	7,8266	0,1178	-54,7992	0	0,4960	1,4847
	53			1,75	5	24			64	9
13	434,5	-	0	232.14	8,1347	0,1232	-55,8805	0	0,4961	1,4911
	97	9,68457		2,50	4	51			11	
13	434,7	-	0	234.29	8,4974	0,1294	-57,1557	0	0,4961	1,4986
	7	9,59883		8,64	9	42			77	1
13	434,9	-	0	236.81	8,9242	0,1364	-58,6431	0	0,4962	1,5074
	77	9,49594		6,46	6	58			71	9
13	435,2	-	0	239.70	9,4259	0,1443	-60,3559	0	0,4964	1,5178
	26	9,37243		7,38	3	52			02	7
13	435,5	-	0	242.96	10,014	0,1532	-62,2875	0	0,4965	1,5297

	24	9,22418		2,86		15			78	9
13	435,8 83	- 9,04621	0	246.54 0,39	10,702 3	0,1632 24	-64,3029	0	0,4968 12	1,5423 5
13	436,3 13	- 8,83252	0	250.35 0,64	11,506 9	0,1746 92	-66,1616	0	0,4971 2	1,5538 3
13	436,8 29	- 8,57592	0	254.25 0,30	12,445 9	0,1879 25	-67,7422	0	0,4975 18	1,5633 3
13	437,4 48	- 8,26771	0	258.05 5,60	13,541 1	0,2032 71	-68,9506	0	0,4980 17	1,5701 5
13	438,1 91	- 7,89745	0	261.52 6,06	14,827 6	0,2210 77	-69,6523	0	0,4986 29	1,5733 3
13	439,0 83	- 7,45253	0	264.33 4,04	16,386 4	0,2413 38	-69,668	0	0,4993 92	1,5716 2
13	440,1 52	- 6,91768	0	265.89 9,29	18,321 1	0,2643 44	-68,6939	0	0,5003 65	1,5630 7
13	441,4 36	- 6,27447	0	265.60 4,29	20,720 6	0,2911 88	-66,4548	0	0,5015 81	1,5462 2
13	442,9 77	- 5,50057	0	262.71 2,79	23,679 6	0,3235 83	-62,7133	0	0,5030 31	1,5204
13	444,8 26	- 4,56903	0	256.79 2,26	27,309 8	0,3631 88	-57,4779	0	0,5046 5	1,4869 5
13	447,0 45	- 3,44744	0	247.30 8,77	31,734 6	0,4127 41	-50,7699	0	0,5063 64	1,4475 5
13	449,7 07	- 2,09689	0	233.59 6,97	37,086 8	0,4764 79	-42,6582	0	0,5081 48	1,4043
13	452,9 02	- 0,47057	0	215.95 0,47	43,497 3	0,5580 17	-33,6299	0	0,5099 31	1,3609
13	456,7 35	1,48768	0	194.75 0,00	51,078 8	0,6630 78	-24,1252	0	0,5116 71	1,3198 8
13	461,3 36	3,84556	0	170.53 8,01	59,922 9	0,7991 41	-14,6811	0	0,5133 81	1,2833 2
13	466,8 57	6,68454	0	143.83 0,49	70,078	0,9767 86	-5,77783	0	0,5150 95	1,2523 8
13	473,4 81	10,1035	0	114.16 9,31	81,479 8	1,2137 7	2,60485	0	0,5170 53	1,2259 5
13	474,8 41	10,8068	0	107.87 7,87	83,683 4	1,2676 7	4,39641	0	0,5175 74	1,2203 2



13	474,8 41	10,8068	0	107.87 7,87	83,683 4	1,2676 7	4,39641	0	0,5175 74	1,2203 2
13	481,4 31	14,3381	0	79.817, 56	87,713 1	1,5757 1	11,3125	0	0,5191 44	1,2001 2
13	488,8 03	18,4797	0	58.111, 29	93,186	1,8624 2	15,2633	0	0,5575 81	1,1908 2
13	488,8 03	18,4797	0	58.111, 29	93,186	1,8624 2	15,2633	0	0,5575 82	1,1908 2
13	490,9 71	19,7049	0	53.187, 09	95,652	1,9435 3	16,0377	0	0,5719 37	1,1892 5
13	502,4 18	26,6465	0	36.729, 02	105,31 7	2,3345 7	18,4309	0	0,6379 49	1,1848
13	516,1 55	35,8197	0	28.329, 21	110,08 5	2,6851	19,6244	0	0,6933 99	1,1825 6
13	532,6 4	47,6663	0	23.460, 79	110,70 9	3,0223 6	21,3896	0	0,7441 12	1,1773 9
13	535,3 71	49,7099	0	22.755, 32	110,81 2	3,0805 6	21,6489	0	0,7525 8	1,1766 6
13	552,4 21	62,9982	0	18.953, 04	111,46 5	3,4565 3	22,8489	0	0,8060 34	1,1735 6
13	576,1 59	83,0289	0	14.864, 71	112,43 4	4,0198 5	23,7726	0	0,8819 48	1,1716 8
13	604,6 44	109,428	0	11.606, 61	113,69	4,6777 3	24,3088	0	0,9653 43	1,1709 8
13	631,5 57	136,214	0	9.815,9 3	114,94 4	5,1706 7	24,5552	0	1,0247 4	1,1707 9
14	686,1 38	- 10,8068	0	1,00	0,0017 7245	0,9259 14	24,6396	0	0,5195 59	1,1739 6
14	686,2 38	- 10,7551	0	24.580, 81	1,5780 7	0,0065 5369	-17,2465	0	0,5171 06	1,3732 3
14	686,3 38	- 10,7034	0	26.095, 35	2,2534 7	0,0119 052	-22,018	0	0,5171 39	1,3989 4
14	686,4 38	- 10,6516	0	26.406, 98	2,7747 3	0,0174 295	-23,1095	0	0,5171 56	1,4049 5
14	686,5 38	- 10,5999	0	26.477, 34	3,2181 9	0,0229 891	-23,5162	0	0,5171 7	1,4072 3
14	686,6	-	0	26.467,	3,6130	0,0285	-23,7072	0	0,5171	1,4083



	38	10,5482		65	4	514			83	2
14	686,7	-	0	26.424,	3,9728	0,0341	-23,8089	0	0,5171	1,4089
	38	10,4965		79	4	207			95	3
14	686,8	-	0	26.366,	4,3063	0,0396	-23,8671	0	0,5172	1,4092
	38	10,4448		21	9	94			07	9
14	686,9	-10,393	0	26.299,	4,6198	0,0452	-23,9017	0	0,5172	1,4095
	38			25		617			19	2
14	687,0	-	0	26.227,	4,9177	0,0508	-23,9224	0	0,5172	1,4096
	38	10,3413		04	7	086			3	8
14	687,1	-	0	26.150,	5,2033	0,0563	-23,9344	0	0,5172	1,4097
	38	10,2896		95	7	296			41	9
14	687,2	-	0	26.071,	5,4775	0,0618	-23,9403	0	0,5172	1,4098
	38	10,2379		98	8	398			53	7
14	687,3	-	0	25.991,	5,7420	0,0673	-23,9423	0	0,5172	1,4099
	38	10,1861		17	1	38			64	2
14	687,4	-	0	25.910,	5,9980	0,0728	-23,9445	0	0,5172	1,4099
	38	10,1344		36	2	191			75	8
14	687,5	-	0	25.846,	6,2466	0,0782	-23,9981	0	0,5172	1,4103
	38	10,0827		89	4	132			85	2
14	687,6	-10,031	0	25.822,	6,4888	0,0834	-24,1679	0	0,5172	1,4113
	38			98	1	133			92	1
14	687,7	-	0	25.835,	6,7252	0,0884	-24,4452	0	0,5172	1,4128
	38	9,97923		75	1	03			96	9
14	687,8	-9,9275	0	25.879,	6,9564	0,0931	-24,8122	0	0,5173	1,4149
	38			24	9	83				7
14	687,9	-	0	25.946,	7,1831	0,0977	-25,2498	0	0,5173	1,4174
	38	9,87577		88		667			02	6
14	688,0	-	0	26.033,	7,4055	0,1021	-25,7423	0	0,5173	1,4202
	38	9,82404		34	6	65			04	6
14	688,1	-	0	26.134,	7,6242	0,1063	-26,277	0	0,5173	1,4233
	38	9,77231		15	2	92			06	1
14	688,2	-	0	26.269,	7,8821	0,1112	-26,9618	0	0,5173	1,4272
	58	9,71023		73	6	49			08	3
14	688,4	-	0	26.447,	8,186	0,1167	-27,8297	0	0,5173	1,4322
	02	9,63574		79		92			11	2
14	688,5	-	0	26.676,	8,5435	0,1230	-28,9173	0	0,5173	1,4385
	75	9,54635		38	1	62			15	2
14	688,7	-	0	26.962,	8,9636	0,1300	-30,2623	0	0,5173	1,4463

	82	9,43908		91	1	97			21	8
14	689,0 31	- 9,31035	0	27.313, 43	9,4563	0,1379 28	-31,9023	0	0,5173 3	1,4560 7
14	689,3 29	- 9,15588	0	27.732, 42	10,033	0,1465 77	-33,8732	0	0,5173 42	1,4678 9
14	689,6 88	-8,9705	0	28.221, 54	10,708	0,1560 38	-36,1879	0	0,5173 59	1,482
14	690,1 18	- 8,74804	0	28.777, 22	11,497	0,1664 89	-38,63	0	0,5173 82	1,4971 7
14	690,6 34	- 8,48108	0	29.382, 10	12,420	0,1781 97	-40,9667	0	0,5174 13	1,5119 2
14	691,2 53	- 8,16069	0	30.013, 19	13,496	0,1914 64	-43,0596	0	0,5174 54	1,5253 4
14	691,9 96	-7,7762	0	30.639, 32	14,749	0,2066 89	-44,7689	0	0,5175 06	1,5364 1
14	692,8 88	- 7,31476	0	31.218, 65	16,233	0,2241 01	-45,9273	0	0,5175 72	1,5439 1
14	693,9 57	- 6,76095	0	31.674, 07	18,060	0,2436 73	-46,2418	0	0,5176 56	1,5457 9
14	695,2 41	- 6,09625	0	31.889, 29	20,351	0,2661 71	-45,3069	0	0,5177 65	1,5393 1
14	696,7 82	- 5,29842	0	31.734, 21	23,189	0,2936 47	-42,7871	0	0,5179 02	1,5225 3
14	698,6 31	- 4,34076	0	31.101, 68	26,670	0,3284 2	-38,6213	0	0,5180 57	1,4957 8
14	700,8 5	- 3,19121	0	29.932, 12	30,936	0,3727 64	-32,9675	0	0,5182 24	1,4610 9
14	703,5 12	-1,8113	0	28.232, 64	36,140	0,4295 05	-26,2044	0	0,5183 93	1,4217 4
14	706,7 07	- 0,15486 5	0	26.032, 08	42,447	0,5020 26	-18,8698	0	0,5185 65	1,3813 9
14	710,5 4	1,83353	0	23.400, 66	50,036	0,5944 07	-11,543	0	0,5187 37	1,3431 4
14	715,1 41	4,2204	0	20.415, 13	59,090	0,7120 85	-4,67021	0	0,5189 12	1,3087 7
14	720,6 62	7,08563	0	17.129, 69	69,798	0,8624 16	1,49334	0	0,5190 95	1,2788 5

14	727,2 86	10,5252	0	13.410, 46	82,241	1,0641 3	8,03024	0	0,5193 22	1,2478 4
14	727,8 28	10,8068	0	13.083, 88	83,223 2	1,0825	8,59868	0	0,5193 49	1,2451 5
14	727,8 28	10,8068	0	13.083, 88	83,223 2	1,0825	8,59868	0	0,5193 49	1,2451 5
14	727,8 29	10,8069	0	13.083, 75	83,223 2	1,0825 1	8,59892	0	0,5193 49	1,2451 5
14	735,2 36	14,8641	0	9.239,0 8	86,711 9	1,3635 6	14,3657	0	0,5195 29	1,2180 1
14	744,7 76	20,4156	0	6.257,2 8	92,952 6	1,7258 9	17,6652	0	0,5329 87	1,2026 5
14	756,2 23	27,6899	0	4.117,3 8	102,63 6	2,0718 9	19,5581	0	0,5941 42	1,1939 3
14	762,2 2	31,7382	0	3.367,3 5	108,23 9	2,2649 5	20,1364	0	0,6264 1	1,1912 9
14	763,2 95	32,4779	0	3.253,0 0	109,26 4	2,2997 5	20,2447	0	0,6322 66	1,1908 2
14	763,2 95	32,4779	0	3.253,0 0	109,26 4	2,2997 3	20,2447	0	0,6322 72	1,1908 2
14	769,9 6	36,817	0	2.644,8 9	117,00 1	2,5348 9	21,6269	0	0,6700 19	1,1855
14	786,4 45	48,6358	0	1.743,1 6	128,56 2	3,1468 7	23,336	0	0,7621 77	1,1790 5
14	806,2 26	64,5759	0	1.304,3 9	132,74 3	3,7225 2	24,0668	0	0,8424 93	1,1763 5
14	829,9 64	85,4756	0	1.031,6 6	133,73 7	4,3068 7	24,4526	0	0,9189 95	1,1749 4
14	858,4 49	112,928	0	814,37	135,03 8	4,9830 1	24,6826	0	1,0024 2	1,1741 3
14	883,0 66	138,282	0	701,60	136,22 5	5,4470 8	24,7839	0	1,0570 4	1,1737 8

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	Continuou s	0	0	kg/s	12,7439	12,3017		0,44217 6
2	Continuou s	0,22	-0,234355	kg/s	12,7439	12,3017		0,91839 6
3	Continuou s	67,845 9	-6,35106	kg/s	12,7439	12,3017		10,1159
4	Continuou s	122,19 6	-7,5807	kg/s	12,7439	12,3017		10,8186
5	Continuou s	173,92 7	-8,3722	kg/s	12,7439	12,3017		11,1758
6	Continuou s	224,33 2	-8,97061	kg/s	12,7439	12,3017		11,398
7	Continuou s	273,78 8	-9,44312	kg/s	12,7439	12,3017		11,5388
8	Continuou s	322,66 7	-9,84398	kg/s	12,7439	12,3017		11,6764
9	Continuou s	371,11 4	-10,1939	kg/s	12,7439	12,3017		11,7306
10	Continuou s	399,34 9	-10,3687	kg/s	12,7439	12,3017		11,2512

11	Continuou s	399,35	-10,3687	kg/s	0	0	10,809	10,809
12	Continuou s	420,58 7	-10,4011	kg/s	0	0		7,15541
13	Continuou s	423,84 1	-10,4011	kg/s	0	0		6,78982
14	Continuou s	648,77	-10,4011	kg/s	0	0		0,56184 1

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	999.98 1,82	0,15738 4	0,0754 169	-160,34	0	18,308 4	2,0348 3
1	0,01	0,16520 7	0	948.38 0,97	0,17288 6	0,0974 053	-149,661	0	15,031 2	1,8975 7
1	0,02	0,30472 3	0	910.38 1,35	0,18637 9	0,1162 48	-141,515	0	13,038 3	1,8095
1	0,03	0,42771	0	880.38 0,76	0,20001 4	0,1319 38	-134,887	0	11,663 6	1,7459 7
1	0,04	0,53891 8	0	855.73 6,56	0,21426 4	0,1448 66	-129,288	0	10,638	1,6969 3
1	0,05	0,64105 7	0	834.99 3,67	0,22891 4	0,1555 99	-124,443	0	9,8363 3	1,6573 7
1	0,06	0,736	0	817.19 9,16	0,24377 7	0,1646 36	-120,169	0	9,1871 2	1,6244
1	0,07	0,82513 6	0	801.68 6,48	0,25874 3	0,1724 07	-116,34	0	8,6446 7	1,5962
1	0,08	0,90935 7	0	788.01 0,68	0,27375 4	0,1791 56	-112,869	0	8,1827 3	1,5716 1

1	0,09	0,98926	0	775.85 9,44	0,28876 9	0,1849 89	-109,695	0	7,7863 3	1,5498 6
1	0,1	1,06548	0	764.95 5,30	0,30374 4	0,1901 04	-106,766	0	7,4408 4	1,5303 4
1	0,11	1,13845	0	755.10 7,23	0,31865 1	0,1946 27	-104,043	0	7,1363 4	1,5126 4
1	0,12	1,20852	0	746.15 7,79	0,33346 7	0,1986 63	-101,496	0	6,8653 9	1,4964 4
1	0,13	1,27599	0	737.98 6,87	0,34817 6	0,2022 79	-99,1018	0	6,6226 3	1,4814 9
1	0,14	1,34109	0	730.49 0,62	0,36276 3	0,2055 44	-96,8395	0	6,4036 4	1,4676
1	0,15	1,40407	0	723.43 0,86	0,37721 8	0,2086 22	-94,6637	0	6,2038 8	1,4544 9
1	0,16	1,46513	0	716.61 6,88	0,39152 7	0,2116 67	-92,5381	0	6,0195	1,4419 5
1	0,17	1,52443	0	709.95 2,15	0,40568 7	0,2147 35	-90,4455	0	5,8484 4	1,4298 7
1	0,18	1,58215	0	703.31 7,94	0,41969	0,2179 29	-88,3642	0	5,6882 6	1,4181 6
1	0,19	1,63833	0	696.74 1,73	0,43353 5	0,2212 01	-86,3011	0	5,5386	1,4068 2
1	0,2	1,6931	0	690.18 4,18	0,44721 7	0,2245 81	-84,2499	0	5,3981 9	1,3958 2
1	0,212	1,75704	0	682.42 2,72	0,46341 7	0,2286 83	-81,8216	0	5,2417 9	1,3831 3
1	0,226 4	1,83143	0	673.34 5,16	0,48252 9	0,2335 97	-78,9734	0	5,0701 4	1,3686 4
1	0,243 68	1,91755	0	662.74 5,44	0,50497 7	0,2394 68	-75,66	0	4,8846 1	1,3523 8
1	0,264 416	2,01688	0	650.36 8,69	0,53118 5	0,2465 08	-71,8453	0	4,6867	1,3344 7
1	0,289 299	2,13098	0	635.98 2,64	0,56155 3	0,2549 44	-67,4956	0	4,4792 3	1,3150 8
1	0,319 159	2,26148	0	619.36 3,91	0,59639 3	0,2650 3	-62,5862	0	4,2662 3	1,2944 5
1	0,354 991	2,41035	0	600.31 3,42	0,63581 3	0,2771 28	-57,107	0	4,0519 5	1,2729



1	0,397 989	2,57993	0	578.67 9,32	0,67955 1	0,2917 43	-51,0758	0	3,8407	1,2508 5
1	0,449 587	2,7728	0	554.39 1,37	0,72665 5	0,3095 26	-44,5483	0	3,6379 3	1,2288 6
1	0,511 504	2,99198	0	527.49 9,35	0,77485 7	0,3314 79	-37,6348	0	3,4495 9	1,2075 9
1	0,585 805	3,24174	0	498.24 8,25	0,81907 1	0,3597 74	-30,5286	0	3,2794 9	1,1878 6
1	0,674 966	3,5273	0	466.83 2,03	0,85328 2	0,3973 56	-23,4715	0	3,1308 8	1,1705 7
1	0,781 959	3,85519	0	431.21 9,15	0,89336 6	0,4406 79	-16,4197	0	3,0022	1,1562 4
1	0,910 351	4,23332	0	392.21 8,94	0,94523 4	0,4873 88	-9,7835	0	2,8947 8	1,1459 1
1	1,064 42	4,67202	0	351.27 2,38	1,0107	0,5366 96	-3,91998	0	2,8081 9	1,1399 7
1	1,249 31	5,18426	0	309.65 4,67	1,09158	0,5886 25	0,951335	0	2,7405 9	1,1384 1
1	1,471 17	5,78601	0	268.55 2,62	1,18996	0,6451 24	5,28391	0	2,6894 7	1,1387 2
1	1,737 4	6,49658	0	229.00 3,00	1,30857	0,7074 1	8,87867	0	2,6522 6	1,1411 6
1	2,056 88	7,3393	0	192.00 9,42	1,45035	0,7776 15	11,814	0	2,6263 1	1,1449 7
1	2,440 26	8,34247	0	158.38 2,50	1,61859	0,8583 18	14,179	0	2,6089 3	1,1495
1	2,900 31	9,53987	0	128.65 6,09	1,8171	0,9523 27	16,059	0	2,5978	1,1542 4
1	3,053 62	9,93798	0	120.63 4,69	1,88239	0,9831 95	16,5352	0	2,5953 9	1,1556 2
1	3,053 62	9,93798	0	120.63 4,69	1,88239	0,9831 95	16,5352	0	2,5953 9	1,1556 2
1	3,452 37	10,9719	0	103.04 1,98	2,04727	1,0643 1	17,5346	0	2,5909 5	1,1588 2
1	4,114 84	12,6869	0	81.484, 88	2,30354	1,2035 6	18,6792	0	2,5869 2	1,1630 4
1	4,909 81	14,7424	0	63.755, 45	2,58726	1,383	20,3225	0	2,5846 5	1,1641 4



1	5,863 77	17,2091	0	50.241, 84	2,89854	1,6072	21,8579	0	2,6020 1	1,1645 2
1	7,008 53	20,2479	0	39.204, 08	3,23103	1,8583 4	22,9556	0	2,7104 8	1,1655 3
1	8,382 23	24,0619	0	29.533, 88	3,61597	2,1895 8	23,7158	0	2,8411	1,1668 7
1	9,073 53	26,0472	0	25.858, 23	3,81559	2,3619 4	23,9641	0	2,9033	1,1674 9
1	10,03 07	28,869	0	21.545, 76	4,09845	2,6082 6	24,217	0	2,9867 8	1,1682 6
1	12,00 88	34,9388	0	15.305, 35	4,70385	3,1347 8	24,5353	0	3,1485 4	1,1695 2
1	14,38 26	42,628	0	10.746, 59	5,46522	3,8008 2	24,7306	0	3,3275 1	1,1705 7
1	15,78 1	47,351	0	9.167,0 8	5,93007	4,2097 4	24,7981	0	3,4265 2	1,1710 1
1	17,23 11	52,3914	0	7.404,6 9	6,424	4,6463 9	24,847	0	3,5249 4	1,1713 8
1	19,75 58	61,4976	0	5.320,2 1	7,31108	5,4356 5	24,9015	0	3,6873 3	1,1718 6
2	0,22	- 0,23435 5	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
2	0,32	- 0,14321 9	0	871.53 4,22	0,44522 5	0,0852 98	-139,049	0	0,8386 64	1,8117 9
2	0,42	- 0,05502 24	0	860.75 5,18	0,66681 8	0,1336 96	-137,18	0	0,9279 54	1,7957 8
2	0,477 616	2,527E- 17	0	852.26 6,24	0,77751 4	0,1566 26	-135,524	0	0,9818 6	1,7810 2
2	0,477 616	2,527E- 17	0	987.12 4,59	0,22013 7	0,1057 34	-158,235	0	13,302 8	2,0082 5
2	0,52	0,38642 9	0	941.20 5,62	0,44310 7	0,1664 09	-149,606	0	7,0715 8	1,9041 6
2	0,527 653	0,43940 1	0	936.45 5,42	0,45648	0,1736 49	-148,316	0	6,7969 6	1,8879 3

2	0,527 653	0,43940 1	0	936.45 5,42	0,45648	0,1736 49	-148,316	0	6,7969 6	1,8879 3
2	0,62	0,99330 1	0	871.88 0,68	0,61252	0,2117 29	-125,532	0	5,3317 5	1,6375 3
2	0,72	1,47738	0	808.31 1,51	0,77675 9	0,2498 51	-103,769	0	4,4325 1	1,4689
2	0,82	1,89134	0	750.75 6,27	0,92887 7	0,2844 49	-85,8395	0	3,8856 2	1,3652 7
2	0,92	2,26137	0	698.77 8,12	1,06374	0,3173 9	-70,8555	0	3,5324 5	1,2962
2	1,02	2,60197	0	651.95 1,01	1,17876	0,3498 49	-58,235	0	3,2949 1	1,2478 1
2	1,12	2,92273	0	609.88 2,16	1,2716	0,3832 81	-47,5592	0	3,1290 5	1,2127 7
2	1,22	3,22963	0	572.26 3,40	1,33795	0,4196 9	-38,5557	0	3,0102 5	1,187
2	1,32	3,52608	0	538.28 2,47	1,37495	0,4614 91	-30,9619	0	2,9239 4	1,1679 9
2	1,42	3,81498	0	505.13 4,42	1,41112	0,5037 93	-24,2607	0	2,8581 6	1,1538 2
2	1,52	4,09824	0	473.38 9,06	1,45369	0,5437 25	-18,4609	0	2,8073 7	1,1436 4
2	1,62	4,37693	0	443.97 2,02	1,49728	0,5819 55	-13,5885	0	2,7678 5	1,1367
2	1,72	4,65215	0	416.85 8,93	1,54221	0,6182 96	-9,52585	0	2,7367 1	1,1322 6
2	1,82	4,9246	0	391.94 8,22	1,58822	0,6528 7	-6,14451	0	2,7119	1,1296 8
2	1,92	5,19488	0	369.10 3,21	1,63495	0,6859 1	-3,32094	0	2,6918 9	1,1284 4
2	2,02	5,46333	0	348.15 2,70	1,68217	0,7176 05	-0,948619	0	2,6756 6	1,1281 6
2	2,12	5,7303	0	328.93 9,91	1,72967	0,7479 05	0,975319	0	2,6623 5	1,1288 9
2	2,22	5,99605	0	311.27 4,03	1,7774	0,7776 93	2,77976	0	2,6513 6	1,1294 1
2	2,34	6,31357	0	291.90 0,73	1,83488	0,8123 98	4,63741	0	2,6405 8	1,1304 2



2	2,484	6,69304	0	270.98 0,27	1,90397	0,8527 99	6,51187	0	2,6303 1	1,1319 9
2	2,656 8	7,14664	0	248.77 5,75	1,98684	0,8998 21	8,36448	0	2,6208 2	1,1341 4
2	2,864 16	7,68915	0	225.65 3,97	2,08595	0,9545 93	10,1577	0	2,6123 1	1,1368 5
2	3,112 99	8,33827	0	202.06 7,73	2,20414	1,0184 5	11,8572	0	2,6049 3	1,1400 5
2	3,411 59	9,11519	0	178.52 6,15	2,3447	1,0929 4	13,4335	0	2,5988 1	1,1436 6
2	3,769 91	10,0455	0	155.56 1,99	2,51138	1,1798 8	14,8654	0	2,5939 2	1,1475 3
2	4,199 89	11,16	0	133.67 4,50	2,7084	1,2814 5	16,1397	0	2,5901 9	1,1515 3
2	4,715 87	12,4957	0	113.30 1,66	2,94048	1,4001 4	17,2513	0	2,5874 5	1,1555
2	4,733 84	12,5422	0	112.68 3,81	2,94848	1,4042 2	17,284	0	2,5873 8	1,1556 2
2	4,733 84	12,5422	0	112.68 3,81	2,94848	1,4042 2	17,284	0	2,5873 8	1,1556 2
2	5,335 04	14,0972	0	94.849, 44	3,20586	1,5412 6	18,2008	0	2,5855 2	1,1593
2	6,078 05	16,0341	0	78.388, 50	3,49974	1,6823 9	19,1127	0	2,6354 7	1,1624
2	6,969 66	18,4172	0	63.517, 17	3,82991	1,8560 6	20,7	0	2,7100 1	1,1626 9
2	8,039 59	21,3646	0	50.265, 59	4,19962	2,0805 7	21,9621	0	2,7997 4	1,1634 8
2	9,323 51	25,0296	0	38.702, 53	4,60297	2,3812 7	22,9282	0	2,9099 8	1,1647
2	10,86 42	29,6154	0	28.920, 18	5,0622	2,7798 4	23,636	0	3,0419 3	1,1661 4
2	12,22 53	33,8313	0	22.807, 63	5,48324	3,1453 5	24,0244	0	3,1516 6	1,1672 5
2	12,71 31	35,3811	0	21.021, 17	5,63731	3,2813 6	24,1292	0	3,1900 4	1,1676 1
2	14,93 17	42,6542	0	14.865, 89	6,35719	3,9159 4	24,46	0	3,3561 2	1,1689 6

2	17,594	51,8354	0	10.266,21	7,25899	4,71263	24,6737	0	3,53936	1,1701
2	20,2592	61,497	0	7.368,54	8,2004	5,55019	24,7908	0	3,70944	1,17088
3	67,8459	-6,35106	0	1,00	0,00177245	0,18631	24,6396	0	2,58208	1,17396
3	67,9459	-6,11464	0	288.393,37	2,61725	0,0213493	-68,3241	0	2,36079	1,54562
3	68,0459	-5,87848	0	287.963,95	3,69828	0,0424823	-68,2344	0	2,36239	1,54522
3	68,1459	-5,64217	0	286.982,01	4,52738	0,0636052	-68,1048	0	2,36392	1,54487
3	68,2459	-5,4057	0	285.843,10	5,22704	0,084657	-67,9631	0	2,36553	1,54453
3	68,3459	-5,16906	0	284.646,61	5,84283	0,105647	-67,8178	0	2,36715	1,54421
3	68,4459	-4,93226	0	283.414,16	6,39952	0,126572	-67,6696	0	2,36879	1,54389
3	68,5459	-4,6953	0	282.164,41	6,91018	0,147469	-67,5203	0	2,37044	1,54357
3	68,6459	-4,45817	0	280.907,99	7,3838	0,168365	-67,3706	0	2,37208	1,54325
3	68,7459	-4,22088	0	279.644,63	7,82768	0,189237	-67,2204	0	2,37373	1,54293
3	68,8459	-3,98343	0	278.370,86	8,24708	0,210055	-67,0691	0	2,37538	1,54261
3	68,9459	-3,74581	0	277.082,37	8,64636	0,23079	-66,9161	0	2,37706	1,54229
3	69,0459	-3,50802	0	275.775,76	9,02835	0,251438	-66,7608	0	2,37875	1,54197
3	69,1459	-3,27005	0	274.449,50	9,3948	0,272012	-66,6031	0	2,38047	1,54164
3	69,2459	-3,03192	0	273.104,71	9,74632	0,292556	-66,4431	0	2,38222	1,54132
3	69,3459	-2,79361	0	271.745,53	10,0832	0,313108	-66,2812	0	2,38398	1,54096
3	69,44	-	0	270.36	10,4079	0,3336	-66,1042	0	2,3857	1,5405



	59	2,55513		7,07		33			6	2
3	69,54	-	0	268.97	10,721	0,3542	-65,8576	0	2,3875	1,5395
	59	2,31646		5,27		56			5	7
3	69,64	-	0	267.57	11,0234	0,3750	-65,517	0	2,3893	1,5379
	59	2,07761		1,05		44			5	3
3	69,74	-	0	266.15	11,316	0,3960	-65,0893	0	2,3911	1,5356
	59	1,83859		3,88		08			7	6
3	69,84	-	0	264.72	11,5995	0,4171	-64,5856	0	2,3930	1,5328
	59	1,59938		1,82		45			1	4
3	69,96	-	0	262.98	11,9283	0,4427	-63,9001	0	2,3952	1,5289
	59	1,31208		7,89		47			3	
3	70,10	-	0	260.87	12,3077	0,4737	-62,9775	0	2,3979	1,5234
	99	0,96697		9,35		99			2	8
		3								
3	70,28	-	0	258.30	12,7437	0,5114	-61,7494	0	2,4012	1,5162
	27	0,55232		1,27		91			2	1
		6								
3	70,49	-	0	255.12	13,2559	0,5567	-60,1249	0	2,4052	1,5065
		0,05398		3,46		58			9	7
		51								
3	70,51	1,87755	0	254.77	13,3112	0,5616	-59,9399	0	2,4057	1,5054
	25	E-12		3,12		37			4	7
3	70,51	1,87755	0	289.62	12,2113	0,5148	-65,2546	0	2,6799	1,5218
	25	E-12		2,73		49			8	6
3	70,73	0,59772	0	283.35	12,8163	0,5763	-63,579	0	2,6067	1,5136
	89	6		3,38		04			7	
3	71,03	1,36681	0	275.78	13,6048	0,6497	-60,9567	0	2,5491	1,4995
	75			5,76		76			8	3
3	71,39	2,27278	0	267.16	14,5843	0,7281	-57,2541	0	2,5117	1,4789
	58			4,75		48			9	9
3	71,82	3,34757	0	256.27	15,7882	0,8154	-51,8253	0	2,4914	1,4490
	58			4,81		9			4	8
3	72,34	4,63106	0	241.26	17,2415	0,9191	-43,7534	0	2,4866	1,4065
	17			7,55		26			3	7
3	72,96	6,17369	0	218.50	18,9391	1,0518	-31,2962	0	2,4992	1,3462
	09			1,44		6			1	5
3	73,09	6,50325	0	212.43	19,2846	1,0817	-27,9679	0	2,5049	1,3311
	26			1,90		5			1	3

3	73,09 26	6,50325	0	212.43 1,90	19,2846	1,0817 5	-27,9679	0	2,5049 1	1,3311 3
3	73,70 39	8,04359	0	183.12 4,73	20,7492	1,2225 7	-13,4577	0	2,5328 3	1,2706
3	74,59 55	10,3129	0	150.11 7,23	22,5403	1,4252 9	-1,67769	0	2,5549 2	1,2291 6
3	75,66 55	13,0625	0	121.39 6,08	24,3559	1,6475 6	5,63012	0	2,6028 8	1,2078 4
3	76,94 94	16,4755	0	96.667, 26	26,2128	1,8823 4	10,6426	0	2,7121 8	1,1954 2
3	77,82 48	18,8799	0	83.924, 05	27,3473	2,0453 5	12,8167	0	2,7802 4	1,1908 2
3	77,82 48	18,8799	0	83.924, 05	27,3473	2,0453 5	12,8167	0	2,7802 4	1,1908 2
3	78,49 01	20,7462	0	75.882, 32	28,1326	2,1716 8	14,0693	0	2,8298	1,1884 4
3	80,33 89	26,1024	0	58.763, 22	29,8922	2,5449 7	16,456	0	2,9636 9	1,1845 6
3	82,55 75	32,8532	0	44.711, 17	31,3597	3,0477 2	18,1505	0	3,1221 4	1,1825 4
3	85,21 99	41,4242	0	33.164, 96	32,3926	3,7616	19,3663	0	3,3170 7	1,1816 5
3	88,41 47	52,3807	0	24.146, 17	33,4577	4,7130 1	20,9836	0	3,5391 7	1,1787 1
3	89,07	54,7141	0	22.738, 58	33,6855	4,9164 3	21,3263	0	3,5823 2	1,1779 5
3	92,24 84	66,4272	0	17.326, 26	34,8233	5,9366 7	22,5307	0	3,7816 5	1,1755
3	96,84 89	84,4384	0	12.255, 90	36,5543	7,5005 8	23,4935	0	4,0442 4	1,1738 8
3	100,4 73	99,4375	0	9.661,3 1	37,9808	8,769	23,921	0	4,2295 3	1,1733 1
4	122,1 96	-7,5807	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
4	122,2 96	- 7,33923	0	234.52 5,51	2,88206	0,0203 571	-62,7438	0	2,4124 1	1,5384 7
4	122,3	-	0	234.21	4,07349	0,0405	-62,6859	0	2,4134	1,5382



	96	7,09793		7,75		582			6	4
4	122,4	-	0	233.45	4,99008	0,0607	-62,5878	0	2,4145	1,538
	96	6,85653		8,67		072			3	
4	122,5	-	0	232.59	5,7629	0,0808	-62,4817	0	2,4156	1,5377
	96	6,61503		0,93		061			3	7
4	122,6	-	0	231.69	6,44233	0,1009	-62,3742	0	2,4167	1,5375
	96	6,37341		3,11		04			2	5
4	122,7	-	0	230.79	7,05499	0,1210	-62,2673	0	2,4177	1,5373
	96	6,13168		0,23		18			9	4
4	122,8	-	0	229.88	7,61817	0,1411	-62,1605	0	2,4188	1,5371
	96	5,88985		3,76		06			6	3
4	122,9	-	0	228.96	8,14411	0,1611	-62,0525	0	2,4199	1,5369
	96	5,64791		6,02		11			4	2
4	123,0	-	0	228.03	8,63784	0,1810	-61,9428	0	2,4210	1,5367
	96	5,40586		3,82		83			4	
4	123,1	-5,1637	0	227.09	9,10419	0,2010	-61,8318	0	2,4221	1,5364
	96			0,03		3			6	9
4	123,2	-	0	226.13	9,54728	0,2209	-61,7196	0	2,4232	1,5362
	96	4,92143		5,55		39			8	7
4	123,3	-	0	225.17	9,96979	0,2408	-61,6067	0	2,4244	1,5360
	96	4,67905		3,19		26			1	5
4	123,4	-	0	224.20	10,3744	0,2606	-61,4929	0	2,4255	1,5358
	96	4,43655		3,99		89			4	3
4	123,5	-	0	223.21	10,764	0,2804	-61,3774	0	2,4266	1,5356
	96	4,19394		9,54		81			9	1
4	123,6	-	0	222.22	11,1394	0,3002	-61,261	0	2,4278	1,5353
	96	3,95121		8,33		49			4	9
4	123,7	-	0	221.22	11,5023	0,3199	-61,1432	0	2,4290	1,5351
	96	3,70837		4,32		64			1	6
4	123,8	-	0	220.21	11,8525	0,3397	-61,0244	0	2,4301	1,5349
	96	3,46541		9,03		03			8	3
4	123,9	-	0	219.20	12,1922	0,3594	-60,9008	0	2,4313	1,5346
	96	3,22233		1,89		01			6	7
4	124,0	-	0	218.18	12,5212	0,3791	-60,7407	0	2,4325	1,5341
	96	2,97913		0,71		75			4	5
4	124,1	-	0	217.15	12,8407	0,3990	-60,4935	0	2,4337	1,533
	96	2,73581		0,48		97			4	
4	124,3	-	0	215.90	13,2118	0,4232	-60,1171	0	2,4351	1,5310



	16	2,44368		8,71		06		8	6	
4	124,4 6	- 2,09288	0	214.40 5,25	13,6417	0,4524 35	-59,5438	0	2,4369 2	1,5278 7
4	124,6 33	-1,6716	0	212.57 7,69	14,1366	0,4879 45	-58,7138	0	2,4390 4	1,5230 7
4	124,8 4	- 1,16557	0	210.34 7,63	14,704	0,5311 31	-57,5523	0	2,4416 3	1,5162
4	125,0 89	- 0,55761	0	207.61 0,08	15,3602	0,5834 05	-55,9731	0	2,4448 2	1,5068 1
		8								
4	125,3 17	3,39368 E-12	0	205.11 6,81	15,955	0,6307 47	-54,4208	0	2,4478	1,4976
4	125,3 17	3,39368 E-12	0	233.19 8,52	14,7175	0,5915 95	-58,6974	0	2,6491 5	1,5101 2
4	125,3 87	0,18643 3	0	231.82 5,96	14,9151	0,6090 58	-58,3224	0	2,6321 8	1,5083 2
4	125,7 46	1,11756	0	225.59 4,55	15,8933	0,6914 21	-56,2125	0	2,5718 8	1,4974 2
4	126,1 76	2,21425	0	218.67 9,11	17,1085	0,7785 33	-53,0176	0	2,5337 6	1,4797 8
4	126,6 92	3,51534	0	209.93 4,57	18,6092	0,8754 48	-48,0485	0	2,5129 8	1,4521 5
4	127,3 11	5,06866	0	197.78 3,22	20,4299	0,9910 12	-40,4359	0	2,5067 1	1,4114 1
4	128,0 54	6,9334	0	179.34 3,16	22,5737	1,1410 7	-28,7447	0	2,5148 7	1,3535 6
4	128,3 54	7,68895	0	169.84 6,88	23,4013	1,2082 6	-22,8966	0	2,5227	1,3266 6
4	128,3 54	7,68895	0	169.84 6,88	23,4013	1,2082 6	-22,8966	0	2,5227	1,3266 6
4	128,9 45	9,18756	0	148.93 6,12	24,9043	1,3455 8	-11,2713	0	2,5419 8	1,2771 9
4	130,0 15	11,9189	0	119.87 7,08	27,251	1,5823 6	0,174536	0	2,5670 6	1,2349 6
4	131,2 99	15,2875	0	94.945, 13	29,6506	1,8104 6	7,43133	0	2,6788 5	1,2118 2
4	132,8 4	19,5073	0	74.012, 12	32,144	2,0902 6	12,1203	0	2,7976 7	1,1988 7



4	134,689	24,7995	0	56.944,20	34,8226	2,42968	15,2389	0	2,92423	1,19145
4	134,925	25,4919	0	55.208,54	35,1495	2,47314	15,5268	0	2,93923	1,19082
4	134,925	25,4919	0	55.208,54	35,1495	2,47332	15,5268	0	2,93902	1,19082
4	136,907	31,4416	0	43.272,07	37,5756	2,85316	17,3654	0	3,06327	1,18714
4	139,57	39,817	0	32.313,85	40,0094	3,42425	18,8471	0	3,22868	1,18467
4	142,765	50,4585	0	23.497,82	41,7976	4,25113	19,9143	0	3,4358	1,18329
4	143,118	51,6756	0	22.720,90	41,921	4,35682	20,168	0	3,46012	1,1826
4	146,598	64,1247	0	16.668,80	43,1329	5,44217	21,9549	0	3,6884	1,17807
4	151,199	81,7289	0	11.695,04	44,8277	6,97205	23,1784	0	3,96029	1,17536
4	154,214	93,9177	0	9.519,79	45,9898	8,02953	23,6403	0	4,12413	1,17447
5	173,927	-8,3722	0	1,00	0,00177245	0,18631	24,6396	0	2,58208	1,17396
5	174,027	-8,12831	0	206.492,29	3,03967	0,019904	-59,8725	0	2,43697	1,53519
5	174,127	-7,88457	0	206.245,00	4,29873	0,039644	-59,8278	0	2,43783	1,53502
5	174,227	-7,64074	0	205.607,26	5,26568	0,0593664	-59,7461	0	2,43869	1,53483
5	174,327	-7,39683	0	204.896,20	6,0801	0,0790781	-59,6598	0	2,43954	1,53465
5	174,427	-7,15283	0	204.157,13	6,79869	0,0987479	-59,5717	0	2,44039	1,53447
5	174,527	-6,90875	0	203.400,91	7,44776	0,118404	-59,4824	0	2,44125	1,53435
5	174,627	-6,66458	0	202.636,26	8,0442	0,138042	-59,3925	0	2,44212	1,53413
5	174,7	-	0	201.86	8,59962	0,1576	-59,302	0	2,4429	1,5339

	27	6,42033		4,09		46			8	6
5	174,8 27	- 6,17598	0	201.08 5,47	9,12167	0,1772 12	-59,211	0	2,4438 5	1,5337 9
5	174,9 27	- 5,93156	0	200.30 0,51	9,6153	0,1967 53	-59,1192	0	2,4447 3	1,5336 2
5	175,0 27	- 5,68704	0	199.50 9,18	10,0842	0,2162 8	-59,0268	0	2,4456 1	1,5334 5
5	175,1 27	- 5,44243	0	198.71 2,43	10,5317	0,2357 91	-58,9337	0	2,4464 9	1,5332 7
5	175,2 27	- 5,19774	0	197.91 0,59	10,9605	0,2552 81	-58,8401	0	2,4473 8	1,5331
5	175,3 27	- 4,95296	0	197.10 3,32	11,3729	0,2747 45	-58,7459	0	2,4482 8	1,5329 3
5	175,4 27	- 4,70808	0	196.29 0,12	11,7707	0,2941 78	-58,6509	0	2,4491 8	1,5327 5
5	175,5 27	- 4,46312	0	195.47 0,72	12,1554	0,3135 81	-58,5552	0	2,4500 9	1,5325 7
5	175,6 27	- 4,21807	0	194.64 5,47	12,5281	0,3329 52	-58,4588	0	2,451	1,5324
5	175,7 27	- 3,97292	0	193.81 4,27	12,8895	0,3523 07	-58,3617	0	2,4519 2	1,5322 2
5	175,8 27	- 3,72768	0	192.97 6,72	13,2406	0,3716 58	-58,2515	0	2,4528 5	1,5319 5
5	175,9 27	- 3,48235	0	192.13 2,66	13,582	0,3910 31	-58,1203	0	2,4537 8	1,5315 3
5	176,0 47	- 3,18783	0	191.11 1,28	13,9794	0,4143 56	-57,9216	0	2,4549 1	1,5307 5
5	176,1 91	- 2,83422	0	189.87 3,47	14,4402	0,4425 65	-57,5749	0	2,4562 8	1,5290 4
5	176,3 64	- 2,40963	0	188.37 0,38	14,9714	0,4768 41	-56,9906	0	2,4579 4	1,5258 2
5	176,5 71	- 1,89974	0	186.54 0,29	15,5807	0,5186 04	-56,0809	0	2,4599 7	1,5205 3
5	176,8 2	- 1,28732	0	184.31 4,07	16,2755	0,5695 41	-54,7708	0	2,4624 3	1,5127 3
5	177,1 19	- 0,55161	0	181.75 3,98	17,0728	0,6305 38	-53,0875	0	2,4653 6	1,5026 7
5	177,3	3,40464	0	179.95	17,6704	0,6747	-51,8104	0	2,4675	1,4950



	42	E-14		7,37		68			4	5
5	177,3	3,40464	0	204.59	16,3412	0,6394	-55,5546	0	2,6364	1,5057
	42	E-14		8,35		08			1	5
5	177,4	0,35317	0	202.66	16,7217	0,6697	-54,9929	0	2,6126	1,5030
	77	4		8,78		57			4	4
5	177,9	1,46472	0	197.09	17,9352	0,7586	-52,8098	0	2,5627	1,4914
	07			1,67		26				6
5	178,4	2,77834	0	190.52	19,449	0,8540	-49,2076	0	2,5330	1,4712
	23			7,63		07			4	9
5	179,0	4,3414	0	181.77	21,3095	0,9634	-43,432	0	2,5189	1,4392
	42			3,97		24			5	4
5	179,7	6,21181	0	169.09	23,5485	1,0991	-34,5184	0	2,5179	1,3923
	85			7,96		4			4	2
5	180,6	8,46171	0	148.61	26,1369	1,2846	-20,529	0	2,5314	1,3253
	77			6,55		7			5	3
5	180,6	8,46195	0	148.61	26,1372	1,2846	-20,5272	0	2,5314	1,3253
	77			3,76		9			5	2
5	180,6	8,46195	0	148.61	26,1372	1,2846	-20,5272	0	2,5314	1,3253
	77			3,76		9			5	2
5	181,7	11,1845	0	119.26	28,8446	1,5314	-4,36291	0	2,5557	1,2576
	47			4,44		5			1	9
5	183,0	14,5272	0	94.164,	31,5859	1,7658	4,74179	0	2,6570	1,2252
	3			14		3			1	7
5	184,5	18,7156	0	73.111,	34,417	2,0429	10,5541	0	2,7779	1,2069
	71			75		6			6	7
5	186,4	23,9721	0	56.008,	37,4286	2,3799	14,2913	0	2,9059	1,1965
	2			91		3			3	9
5	188,4	30,0936	0	43.232,	40,5145	2,7560	16,6355	0	3,0322	1,1908
	81			59		2			5	2
5	188,4	30,0936	0	43.232,	40,5145	2,7557	16,6355	0	3,0325	1,1908
	81			59		6			4	2
5	188,6	30,5735	0	42.442,	40,7416	2,7846	16,7696	0	3,0417	1,1905
	39			01		6			1	1
5	191,3	38,8787	0	31.733,	44,0711	3,3009	18,4596	0	3,1947	1,1869
	01			30		5			5	1
5	194,4	49,3795	0	23.247,	46,9644	4,0149	19,6324	0	3,3798	1,1848
	96			36		9			7	1
5	194,7	50,1868	0	22.742,	47,1338	4,0737	19,6976	0	3,3940	1,1847

	34			50		9			3	1
5	198,33	62,7963	0	16.496,91	48,8783	5,10389	21,4654	0	3,62107	1,18011
5	202,93	80,1097	0	11.481,99	50,5314	6,61167	22,9222	0	3,90041	1,17647
5	205,721	91,2132	0	9.455,44	51,5908	7,5755	23,428	0	4,0558	1,17534
6	224,332	-8,97061	0	1,00	0,00177245	0,18631	24,6396	0	2,58208	1,17396
6	224,432	-8,72521	0	188.177,33	3,15492	0,0196113	-58,0056	0	2,4523	1,53317
6	224,532	-8,47994	0	187.981,68	4,46162	0,0390751	-57,9711	0	2,45301	1,53304
6	224,632	-8,23461	0	187.433,10	5,46457	0,0585318	-57,9012	0	2,45372	1,53288
6	224,732	-7,9892	0	186.811,80	6,31123	0,0779596	-57,8259	0	2,45445	1,53273
6	224,832	-7,74372	0	186.164,80	7,05637	0,0973817	-57,749	0	2,45517	1,53258
6	224,932	-7,49816	0	185.504,49	7,73102	0,116765	-57,6712	0	2,4559	1,53244
6	225,032	-7,25254	0	184.835,09	8,352	0,136119	-57,5928	0	2,45663	1,53229
6	225,132	-7,00684	0	184.157,90	8,9295	0,155462	-57,5136	0	2,45736	1,53214
6	225,232	-6,76107	0	183.475,78	9,4714	0,174794	-57,434	0	2,4581	1,532
6	225,332	-6,51522	0	182.789,56	9,98395	0,194102	-57,3541	0	2,45884	1,53185
6	225,432	-6,2693	0	182.098,30	10,4717	0,213379	-57,2736	0	2,45959	1,53171
6	225,532	-6,0233	0	181.402,36	10,9382	0,232623	-57,1925	0	2,46033	1,53156
6	225,632	-5,77723	0	180.702,14	11,3854	0,251848	-57,1111	0	2,46109	1,53141
6	225,732	-5,53108	0	179.996,95	11,8158	0,271045	-57,029	0	2,46184	1,53127



6	225,8 32	- 5,28486	0	179.28 6,96	12,2304	0,2902 37	-56,9463	0	2,4626 1	1,5311 2
6	225,9 32	- 5,03856	0	178.57 2,41	12,6312	0,3094 09	-56,8631	0	2,4633 7	1,5309 7
6	226,0 32	- 4,79219	0	177.85 3,44	13,019	0,3285 72	-56,7794	0	2,4641 4	1,5308 2
6	226,1 32	- 4,54573	0	177.12 9,96	13,3954	0,3477 15	-56,6952	0	2,4649 2	1,5306 7
6	226,2 32	-4,2992	0	176.40 1,96	13,7611	0,3668 47	-56,6061	0	2,4657	1,5304 8
6	226,3 32	- 4,05259	0	175.66 9,01	14,1171	0,3859 88	-56,4995	0	2,4664 8	1,5301 8
6	226,4 52	- 3,75656	0	174.78 2,72	14,5323	0,4089 96	-56,3383	0	2,4674 3	1,5295 8
6	226,5 96	- 3,40117	0	173.70 9,48	15,0143	0,4367 39	-56,0736	0	2,4685 8	1,5283 7
6	226,7 68	- 2,97447	0	172.40 9,13	15,5705	0,4703 56	-55,6248	0	2,4699 7	1,526
6	226,9 76	- 2,46213	0	170.82 8,56	16,2097	0,5112 06	-54,9033	0	2,4716 6	1,5219 1
6	227,2 25	- 1,84684	0	168.90 3,81	16,9399	0,5609 88	-53,8176	0	2,4737 2	1,5155 2
6	227,5 23	- 1,10785	0	166.72 7,71	17,7685	0,6208 6	-52,388	0	2,4761 5	1,5069 9
6	227,8 82	- 0,22009	0	164.35 0,00	18,7426	0,6906 69	-50,5991	0	2,479	1,4962 6
6	227,9 7	1,79028 E-14	0	163.78 0,21	18,9861	0,7074 62	-50,1379	0	2,4797 2	1,4935
6	227,9 7	1,79028 E-14	0	186.19 5,90	17,5858	0,6745 49	-53,5389	0	2,6290 3	1,5030 7
6	228,3 12	0,88878 8	0	182.35 4,25	18,5593	0,7452 26	-52,2507	0	2,5851 7	1,4965 9
6	228,8 28	2,2123	0	176.90 2,89	20,0763	0,8407 52	-49,4941	0	2,5487 1	1,4813 3
6	229,4 47	3,78348	0	169.90 6,37	21,9555	0,9473 59	-44,8328	0	2,5292 9	1,4550 7
6	230,1	5,65953	0	159.99	24,2418	1,0757	-37,4227	0	2,5232	1,4147



	9			6,91		9			4	5
6	231,0 81	7,91095	0	144.82 7,70	26,9433	1,2448 1	-26,0268	0	2,5292 9	1,3572 7
6	231,5 28	9,04165	0	134.90 1,27	28,2373	1,3414 1	-18,941	0	2,5370 9	1,3241 6
6	231,5 28	9,04165	0	134.90 1,27	28,2373	1,3414 1	-18,941	0	2,5370 9	1,3241 6
6	232,1 51	10,629	0	118.88 4,49	29,8823	1,4871	-8,86289	0	2,5511 1	1,2803 9
6	233,4 35	13,9517	0	93.664, 48	32,8894	1,7318	2,33081	0	2,6399 5	1,2372 8
6	234,9 76	18,1161	0	72.517, 56	35,9752	2,0077 5	9,20256	0	2,7631 1	1,2138 7
6	236,8 25	23,3466	0	55.373, 86	39,2325	2,3434 5	13,4962	0	2,8926 2	1,2008 2
6	239,0 43	29,9193	0	41.827, 74	42,7871	2,7473 9	16,2842	0	3,0297 5	1,1932 3
6	240,2 33	33,5654	0	36.544, 75	44,6025	2,9633 6	17,2488	0	3,0964 3	1,1908 2
6	240,2 33	33,5654	0	36.544, 75	44,6025	2,9630 3	17,2488	0	3,0967 5	1,1908 2
6	241,7 06	38,1834	0	31.276, 01	46,6807	3,2369 7	18,1471	0	3,1767 7	1,1887 1
6	244,9	48,6098	0	22.980, 15	50,3147	3,8956 9	19,4276	0	3,3507 1	1,1859 9
6	245,0 12	48,9843	0	22.748, 29	50,4214	3,9206 3	19,4611	0	3,3568 6	1,1859 2
6	248,7 34	61,8788	0	16.429, 62	53,1454	4,8663 3	21,0358	0	3,5718 2	1,1818 7
6	253,3 35	78,9642	0	11.378, 61	54,9004	6,3363 6	22,7008	0	3,8530 9	1,1774
6	255,8 98	89,028	0	9.486,7 7	55,8621	7,2102 3	23,2334	0	3,9986 7	1,1761
7	273,7 88	- 9,44312	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
7	273,8 88	- 9,19666	0	174.98 8,92	3,24119	0,0194 254	-56,6647	0	2,4629 6	1,5317 7



7	273,988	-8,95033	0	174.809,24	4,58581	0,038686	-56,6353	0	2,46362	1,53167
7	274,088	-8,70394	0	174.304,19	5,61686	0,0579576	-56,5716	0	2,46426	1,53153
7	274,188	-8,45748	0	173.747,75	6,48601	0,0772214	-56,5046	0	2,46489	1,53149
7	274,288	-8,21096	0	173.165,78	7,25349	0,0964429	-56,4356	0	2,46552	1,53127
7	274,388	-7,96437	0	172.565,31	7,94866	0,115624	-56,365	0	2,46617	1,53114
7	274,488	-7,71772	0	171.953,52	8,58796	0,134789	-56,2933	0	2,46683	1,53101
7	274,588	-7,47101	0	171.336,22	9,18231	0,15395	-56,2213	0	2,46748	1,53088
7	274,688	-7,22423	0	170.716,42	9,74029	0,173099	-56,1491	0	2,46814	1,53075
7	274,788	-6,97738	0	170.094,28	10,2683	0,192225	-56,0768	0	2,46879	1,53062
7	274,888	-6,73047	0	169.468,99	10,7708	0,211325	-56,0042	0	2,46945	1,53049
7	274,988	-6,48349	0	168.839,81	11,2514	0,230393	-55,9312	0	2,47011	1,53036
7	275,088	-6,23645	0	168.206,36	11,7127	0,249434	-55,8577	0	2,47077	1,53023
7	275,188	-5,98934	0	167.568,66	12,1562	0,268464	-55,7836	0	2,47144	1,53014
7	275,288	-5,74216	0	166.926,95	12,584	0,287478	-55,7091	0	2,47211	1,52997
7	275,388	-5,49491	0	166.281,60	12,9972	0,306485	-55,6341	0	2,47279	1,52983
7	275,488	-5,2476	0	165.632,67	13,3975	0,325475	-55,5588	0	2,47347	1,52977
7	275,588	-5,00022	0	164.980,43	13,7858	0,344453	-55,483	0	2,47415	1,52957
7	275,688	-4,75277	0	164.324,59	14,1634	0,363411	-55,4068	0	2,47484	1,52943
7	275,788	-4,50525	0	163.665,14	14,531	0,382358	-55,326	0	2,47553	1,52927



7	275,908	-4,20814	0	162.868,56	14,96	0,405113	-55,2046	0	2,47636	1,5289
7	276,052	-3,85147	0	161.904,66	15,4585	0,4325	-55,0048	0	2,47736	1,52809
7	276,224	-3,42328	0	160.737,00	16,0345	0,465617	-54,6537	0	2,47858	1,52634
7	276,432	-2,90916	0	159.319,73	16,6968	0,505837	-54,0503	0	2,48006	1,52298
7	276,681	-2,29182	0	157.594,50	17,4538	0,554826	-53,1109	0	2,48187	1,51751
7	276,979	-1,55043	0	155.615,08	18,3146	0,613964	-51,806	0	2,4845	1,50973
7	277,338	-0,659946	0	153.527,26	19,3057	0,683339	-50,2046	0	2,48645	1,5001
7	277,603	7,59798 E-12	0	152.100,68	20,0432	0,732581	-48,9774	0	2,48827	1,49271
7	277,603	7,59798 E-12	0	172.963,47	18,5821	0,701409	-52,1381	0	2,62446	1,50151
7	277,768	0,430205	0	171.322,36	19,0572	0,73501	-51,6359	0	2,60351	1,49908
7	278,284	1,76154	0	166.540,70	20,5747	0,831103	-49,4707	0	2,56158	1,48737
7	278,903	3,33924	0	160.619,51	22,4646	0,936169	-45,5817	0	2,53812	1,46534
7	279,646	5,22061	0	152.373,01	24,7791	1,06024	-39,1736	0	2,52847	1,42976
7	280,537	7,47515	0	140.044,69	27,5468	1,21946	-29,255	0	2,53033	1,37804
7	281,339	9,50717	0	125.103,59	29,9353	1,38503	-17,852	0	2,54098	1,32356
7	281,339	9,50717	0	125.103,59	29,9353	1,38503	-17,852	0	2,54098	1,32356
7	281,607	10,1903	0	118.540,03	30,661	1,44881	-13,2541	0	2,54696	1,30297
7	282,891	13,4982	0	93.225,95	33,8837	1,70399	0,0893596	0	2,62597	1,24848
7	284,4	17,6425	0	72.021,	37,1744	1,9797	7,97962	0	2,7509	1,2200

	32			21		8			8	9
7	286,2 81	22,8524	0	54.854, 18	40,6267	2,3147 4	12,7902	0	2,8820 1	1,2045 6
7	288,4 99	29,4031	0	41.326, 44	44,373	2,7182 7	15,8594	0	3,0203 3	1,1955 9
7	290,7 74	36,4181	0	32.116, 27	47,9723	3,1295 5	17,6526	0	3,1459 6	1,1908 2
7	290,7 74	36,4181	0	32.116, 27	47,9723	3,1295 5	17,6526	0	3,1459 6	1,1908 2
7	291,1 62	37,6439	0	30.854, 11	48,5603	3,2004 1	17,8807	0	3,1663 4	1,1902 5
7	294,3 37	47,9635	0	22.748, 41	52,7311	3,8204 9	19,2465	0	3,3319 6	1,1870 2
7	294,3 56	48,0289	0	22.708, 25	52,7535	3,8245 9	19,2528	0	3,3329 9	1,187
7	298,1 9	61,215	0	16.304, 44	56,2952	4,7224 8	20,6595	0	3,5411 8	1,1834 4
7	302,7 91	78,1276	0	11.316, 72	58,4721	6,1161 8	22,4937	0	3,8141 5	1,1782 5
7	305,1 21	87,1739	0	9.561,4 0	59,3237	6,9040 2	23,0399	0	3,9491 1	1,1768 4
8	322,6 67	- 9,84398	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
8	322,7 67	- 9,59673	0	164.85 4,25	3,31435	0,0192 698	-55,6355	0	2,4710 1	1,5307 2
8	322,8 67	-9,3496	0	164.67 9,75	4,6893	0,0383 89	-55,61	0	2,4716	1,5306 5
8	322,9 67	- 9,10242	0	164.21 5,20	5,74472	0,0575 058	-55,552	0	2,4721 7	1,5305 2
8	323,0 67	- 8,85517	0	163.68 8,84	6,63537	0,0766 042	-55,4887	0	2,4727 6	1,5304
8	323,1 67	- 8,60786	0	163.14 5,78	7,41967	0,0956 959	-55,4246	0	2,4733 4	1,5302 8
8	323,2 67	-8,3605	0	162.59 3,95	8,12997	0,1147 53	-55,3601	0	2,4739 2	1,5301 6
8	323,3 67	- 8,11308	0	162.03 4,89	8,7838	0,1337 87	-55,2949	0	2,4745	1,5300 5

8	323,4 67	-7,8656	0	161.47 0,19	9,39199	0,1528 15	-55,2291	0	2,4750 9	1,5299 3
8	323,5 67	- 7,61806	0	160.90 2,38	9,96311	0,1718 29	-55,1632	0	2,4756 8	1,5298 1
8	323,6 67	- 7,37046	0	160.33 1,50	10,5036	0,1908 2	-55,097	0	2,4762 7	1,5297
8	323,7 67	- 7,12281	0	159.75 6,93	11,0183	0,2097 82	-55,0304	0	2,4768 6	1,5295 8
8	323,8 67	- 6,87509	0	159.17 9,33	11,5105	0,2287 18	-54,9634	0	2,4774 6	1,5294 6
8	323,9 67	- 6,62732	0	158.59 8,51	11,9826	0,2476 37	-54,8961	0	2,4780 6	1,5293 5
8	324,0 67	- 6,37948	0	158.01 4,11	12,4368	0,2665 42	-54,8284	0	2,4786 6	1,5292 3
8	324,1 67	- 6,13158	0	157.42 6,43	12,8749	0,2854 34	-54,7602	0	2,4792 6	1,5291 1
8	324,2 67	- 5,88363	0	156.83 5,70	13,2982	0,3043 17	-54,6918	0	2,4798 7	1,5289 9
8	324,3 67	- 5,63561	0	156.24 1,87	13,7085	0,3231 84	-54,6229	0	2,4804 8	1,5288 7
8	324,4 67	- 5,38753	0	155.64 5,00	14,1067	0,3420 34	-54,5537	0	2,4810 9	1,5287 5
8	324,5 67	- 5,13939	0	155.04 4,67	14,4941	0,3608 63	-54,4841	0	2,4817 1	1,5286 3
8	324,6 67	- 4,89119	0	154.44 0,74	14,8715	0,3796 7	-54,414	0	2,4823 3	1,5285 1
8	324,7 87	- 4,59326	0	153.71 1,03	15,3121	0,4022 14	-54,3269	0	2,4830 8	1,5283 4
8	324,9 31	- 4,23564	0	152.82 8,73	15,8246	0,4293 27	-54,1726	0	2,4839 9	1,5278
8	325,1 03	- 3,80631	0	151.76 0,23	16,4174	0,4620 46	-53,8959	0	2,4850 8	1,5265 2
8	325,3 11	- 3,29086	0	150.46 3,13	17,1	0,5016 8	-53,4091	0	2,4864 2	1,5239 1
8	325,5 6	- 2,67196	0	148.89 5,63	17,8806	0,5499 58	-52,5825	0	2,4880 3	1,5191 3
8	325,8 58	- 1,92876	0	147.07 3,38	18,768	0,6084 26	-51,3836	0	2,4899 6	1,5119 9



8	326,2 17	- 1,03619	0	145.19 1,42	19,7774 34	0,6773 34	-49,9151	0	2,4921 3	1,5031 4
8	326,6 32	1,78179 E-11	0	143.24 7,26	20,9442	0,7533 97	-48,1612	0	2,4946 2	1,4925 4
8	326,6 32	1,78179 E-11	0	162.90 8,70	19,4321	0,7235 8	-51,135	0	2,6210 5	1,5007 5
8	326,6 47	0,03778 14	0	162.77 8,81	19,4746	0,7264 7	-51,0994	0	2,6192 1	1,5005 9
8	327,1 63	1,37573	0	158.43 1,21	20,9941	0,8233 46	-49,3676	0	2,5724 9	1,4915 3
8	327,7 82	2,95906	0	153.23 8,36	22,8906	0,9276 27	-46,0597	0	2,5456 1	1,4727 9
8	328,5 25	4,84487	0	146.12 2,74	25,2247	1,0486 7	-40,3995	0	2,5332	1,4409 3
8	329,4 16	7,10234	0	135.60 4,49	28,0371	1,2013 2	-31,4872	0	2,5322 1	1,3933 4
8	330,4 86	9,81644	0	118.51 2,84	31,2942	1,4133 7	-17,7129	0	2,5430 2	1,3262 9
8	330,5 19	9,90074	0	117.86 0,25	31,3907	1,4207 3	-17,2216	0	2,5435 6	1,3240 3
8	330,5 19	9,90074	0	117.86 0,25	31,3907	1,4207 3	-17,2216	0	2,5435 6	1,3240 3
8	331,7 7	13,1144	0	93.233, 43	34,6811	1,6795	-1,93437	0	2,6118 8	1,2585 9
8	333,3 11	17,2401	0	71.883, 09	38,1503	1,9539 6	6,78215	0	2,7397 4	1,2260 3
8	335,1 6	22,4307	0	54.620, 96	41,7715	2,2886 9	12,1151	0	2,8722 7	1,208
8	337,3 78	28,9613	0	41.053, 56	45,6804	2,6921 7	15,46	0	3,0118 2	1,1977 2
8	340,0 41	37,1796	0	30.590, 92	50,0365	3,1738	17,6351	0	3,1586 9	1,1916 1
8	340,5 61	38,8291	0	29.025, 19	50,8625	3,2671 8	17,9331	0	3,1852 2	1,1908 2
8	340,5 61	38,8291	0	29.025, 19	50,8625	3,2671 8	17,9331	0	3,1852 2	1,1908 2
8	343,1 34	47,191	0	22.748, 30	54,5508	3,7526	19,0573	0	3,3148 2	1,1879 8



8	343,235	47,5291	0	22.541,13	54,6815	3,77293	19,0926	0	3,31997	1,1879
8	347,069	60,6389	0	16.242,84	58,8102	4,61605	20,3092	0	3,51803	1,18488
8	351,67	77,4169	0	11.320,54	61,5497	5,92721	22,295	0	3,77995	1,17905
8	353,843	85,7692	0	9.649,61	62,3366	6,65425	22,8599	0	3,90761	1,17752
9	371,114	-10,1939	0	1,00	0,00177245	0,18631	24,6396	0	2,58208	1,17396
9	371,214	-9,94599	0	156.558,26	3,37795	0,019141	-54,7963	0	2,47746	1,52989
9	371,314	-9,69821	0	156.402,16	4,77788	0,0381516	-54,7743	0	2,47799	1,52984
9	371,414	-9,45039	0	155.968,58	5,85252	0,0571617	-54,7202	0	2,47853	1,52972
9	371,514	-9,20251	0	155.479,87	6,76048	0,0761398	-54,6616	0	2,47906	1,52961
9	371,614	-8,95458	0	154.969,98	7,55991	0,0951168	-54,6013	0	2,4796	1,5295
9	371,714	-8,70659	0	154.451,28	8,28332	0,114071	-54,5406	0	2,48014	1,52939
9	371,814	-8,45855	0	153.926,11	8,94984	0,132992	-54,4794	0	2,48068	1,52928
9	371,914	-8,21045	0	153.395,52	9,57056	0,151896	-54,4178	0	2,48122	1,52917
9	372,014	-7,9623	0	152.860,88	10,1533	0,170793	-54,3557	0	2,48177	1,52906
9	372,114	-7,7141	0	152.323,64	10,7043	0,18968	-54,2934	0	2,48232	1,52895
9	372,214	-7,46584	0	151.783,81	11,2287	0,208545	-54,2309	0	2,48287	1,52885
9	372,314	-7,21752	0	151.240,75	11,7303	0,227383	-54,168	0	2,48342	1,52874
9	372,414	-6,96916	0	150.694,87	12,212	0,246192	-54,1048	0	2,48397	1,52863
9	372,5	-	0	150.14	12,6756	0,2649	-54,0413	0	2,4845	1,5285



	14	6,72073		6,33		86			3	2
9	372,6 14	- 6,47225	0	149.59 4,68	13,1232	0,2837 57	-53,9775	0	2,4850 9	1,5284 1
9	372,7 14	- 6,22371	0	149.03 9,96	13,5558	0,3025 23	-53,9133	0	2,4856 5	1,5283
9	372,8 14	- 5,97512	0	148.48 2,36	13,975	0,3212 74	-53,8487	0	2,4862 2	1,5281 8
9	372,9 14	- 5,72647	0	147.92 2,03	14,3817	0,3400 18	-53,7838	0	2,4867 8	1,5280 7
9	373,0 14	- 5,47776	0	147.35 8,90	14,7773	0,3587 47	-53,7186	0	2,4873 5	1,5279 6
9	373,1 14	-5,229	0	146.79 3,07	15,1624	0,3774 61	-53,653	0	2,4879 3	1,5278 5
9	373,2 34	- 4,93041	0	146.11 0,11	15,6121	0,3999 13	-53,5642	0	2,4886 2	1,5276 4
9	373,3 78	- 4,57198	0	145.28 4,57	16,1351	0,4268 69	-53,4329	0	2,4894 5	1,5272 3
9	373,5 51	- 4,14172	0	144.28 5,01	16,7409	0,4593 13	-53,2148	0	2,4904 6	1,5263 2
9	373,7 58	- 3,62517	0	143.07 4,70	17,4377	0,4986 66	-52,7854	0	2,4916 9	1,5240 7
9	374,0 07	- 3,00498	0	141.62 4,67	18,2361	0,5464 22	-52,062	0	2,4931 6	1,5199 4
9	374,3 06	- 2,26027	0	139.95 5,68	19,1458	0,6040 8	-50,9966	0	2,4949 1	1,5136 4
9	374,6 64	- 1,36596	0	138.22 1,03	20,1781	0,6722 33	-49,6622	0	2,4968 9	1,5056 1
9	375,0 94	- 0,29182	0	136.39 3,69	21,3954	0,7505 86	-47,9876	0	2,4992 3	1,4954 6
		2								
9	375,2 11	3,00737 E-14	0	135.90 9,03	21,7305	0,7710 87	-47,5008	0	2,4998 9	1,4925 1
9	375,2 11	3,00737 E-14	0	154.61 7,21	20,1707	0,7423 63	-50,3261	0	2,6187 1	1,5002 6
9	375,6 1	1,03751	0	151.51 8,79	21,3523	0,8166 56	-49,1812	0	2,5823 8	1,4944 2
9	376,2 29	2,62609	0	146.81 3,29	23,2523	0,9206	-46,3328	0	2,5524 6	1,4783 6

9	376,9 72	4,51613	0	140.49 0,64	25,6002	1,0394 4	-41,2645	0	2,5377 3	1,4495 8
9	377,8 64	6,77639	0	131.24 1,47	28,4454	1,1870 9	-33,1227	0	2,5346 2	1,4053 3
9	378,9 34	9,49124	0	116.71 2,08	31,78	1,3879 8	-20,6783	0	2,5420 5	1,3431 1
9	379,2 3	10,2441	0	111.56 7,61	32,6626	1,4513 8	-16,5568	0	2,5461 6	1,3238 3
9	379,2 3	10,2441	0	111.56 7,61	32,6626	1,4513 8	-16,5568	0	2,5461 6	1,3238 3
9	380,2 18	12,7799	0	92.883, 16	35,3128	1,6561 1	-4,01735	0	2,6003	1,2691 6
9	381,7 58	16,8891	0	71.488, 85	38,9393	1,9313 2	5,68205	0	2,7298 6	1,2316 1
9	383,6 07	22,0627	0	54.209, 45	42,7085	2,2659 7	11,5096	0	2,8637 2	1,2111 9
9	385,8 26	28,5756	0	40.658, 54	46,7579	2,6694 1	15,1072	0	3,0044 1	1,1996 6
9	388,4 88	36,7756	0	30.236, 70	51,2499	3,1516	17,4213	0	3,1522 8	1,1928 5
9	389,7 96	40,9407	0	26.548, 78	53,3745	3,3863 2	18,1573	0	3,2182 4	1,1908 2
9	389,7 96	40,9407	0	26.548, 78	53,3745	3,3863 2	18,1573	0	3,2182 4	1,1908 2
9	391,4 54	46,3458	0	22.748, 39	55,8894	3,6925 4	18,8712	0	3,2994 6	1,1889 3
9	391,6 83	47,1022	0	22.285, 26	56,2113	3,7365 2	18,9551	0	3,3107 2	1,1887 2
9	395,5 17	60,1646	0	16.093, 78	60,8115	4,5413 2	20,0046	0	3,5017 1	1,1861 7
9	400,1 17	76,8429	0	11.269, 66	64,1229	5,7785 1	22,116	0	3,7525	1,1797 8
9	402,0 58	84,2333	0	9.769,1 5	64,9225	6,4044 2	22,6663	0	3,8649 4	1,1782 4
10	399,3 49	- 10,3687	0	1,00	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
10	399,4	-	0	149.64	3,40917	0,0190	-54,0966	0	2,4827	1,5292

	49	10,1203		2,61		546			4	1
10	399,5 49	- 9,87197	0	149.50 0,60	4,82346	0,0379 641	-54,0779	0	2,4832 5	1,5291 7
10	399,6 49	- 9,62362	0	149.08 7,99	5,90902	0,0568 748	-54,0267	0	2,4837 5	1,5290 6
10	399,7 49	- 9,37522	0	148.61 8,51	6,8256	0,0757 638	-53,9704	0	2,4842 6	1,5289 5
10	399,8 49	- 9,12677	0	148.13 2,32	7,63265	0,0946 508	-53,9131	0	2,4847 7	1,5288 5
10	399,9 49	- 8,87826	0	147.63 8,66	8,36352	0,1135 07	-53,8555	0	2,4852 7	1,5287 5
10	400,0 49	- 8,62971	0	147.13 8,72	9,03655	0,1323 39	-53,7973	0	2,4857 8	1,5286 4
10	400,1 49	- 8,38111	0	146.63 3,59	9,66282	0,1511 63	-53,7386	0	2,4862 9	1,5285 4
10	400,2 49	- 8,13245	0	146.12 5,61	10,2509	0,1699 79	-53,6797	0	2,4868 1	1,5284 4
10	400,3 49	- 7,88375	0	145.61 5,36	10,8074	0,1887 75	-53,6207	0	2,4873 2	1,5283 4
10	400,4 49	- 7,63499	0	145.10 2,03	11,3374	0,2075 46	-53,5613	0	2,4878 3	1,5282 4
10	400,5 49	- 7,38618	0	144.58 6,19	11,8444	0,2262 89	-53,5016	0	2,4883 5	1,5281 3
10	400,6 49	- 7,13732	0	144.06 7,85	12,3308	0,2450 18	-53,4417	0	2,4888 7	1,5280 3
10	400,7 49	- 6,88841	0	143.54 6,60	12,799	0,2637 27	-53,3814	0	2,4893 9	1,5279 3
10	400,8 49	- 6,63944	0	143.02 2,60	13,2505	0,2824 31	-53,3209	0	2,4899 2	1,5278 2
10	400,9 49	- 6,39042	0	142.49 6,11	13,6872	0,3011 22	-53,26	0	2,4904 5	1,5277 2
10	401,0 49	- 6,14135	0	141.96 7,18	14,1102	0,3198 04	-53,1988	0	2,4909 8	1,5276 2
10	401,1 49	- 5,89223	0	141.43 5,87	14,521	0,3384 7	-53,1373	0	2,4915 1	1,5275 1
10	401,2 49	- 5,64305	0	140.90 1,92	14,9206	0,3571 18	-53,0756	0	2,4920 4	1,5274 1
10	401,3	-	0	140.36	15,3099	0,3757	-53,0135	0	2,4925	1,5273



	49	5,39382		5,16		46			8	
10	401,4 69	- 5,09467	0	139.71 7,11	15,7647	0,3980 74	-52,9385	0	2,4932 3	1,5271 7
10	401,6 13	- 4,73559	0	138.93 3,91	16,2938	0,4248 71	-52,826	0	2,4940 1	1,5268 6
10	401,7 86	- 4,30454	0	137.98 6,33	16,9067	0,4571 35	-52,624	0	2,4949 6	1,5260 4
10	401,9 94	- 3,78707	0	136.83 7,67	17,6129	0,4961 4	-52,2548	0	2,4961 1	1,5241 7
10	402,2 42	- 3,16579	0	135.44 4,11	18,4215	0,5436 01	-51,579	0	2,4975	1,5203 5
10	402,5 41	-2,4198	0	133.85 8,36	19,3422	0,6008 62	-50,5705	0	2,4991 4	1,5143 9
10	402,8 99	- 1,52399	0	132.19 2,33	20,3838	0,6689 26	-49,2526	0	2,501	1,5064 5
10	403,3 29	- 0,44810 3	0	130.50 3,87	21,5962	0,7472 35	-47,6707	0	2,5031 4	1,4968 5
10	403,5 08	6,65603 E-14	0	129.82 2,63	22,108	0,7785 32	-46,9598	0	2,5040 6	1,4925 3
10	403,5 08	6,65603 E-14	0	148.19 9,96	20,4916	0,7502 85	-49,7314	0	2,6197 3	1,5001
10	403,8 45	0,87720 3	0	145.71 6,90	21,4923	0,8124 44	-48,8648	0	2,589	1,4957 6
10	404,4 64	2,46929	0	141.28 6,71	23,3933	0,9159 12	-46,2659	0	2,5574 5	1,4811 9
10	405,2 07	4,36267	0	135.02 6,21	25,7464	1,0331	-41,43	0	2,5421	1,4537 8
10	406,0 99	6,62696	0	125.55 3,51	28,6025	1,1776 3	-33,4922	0	2,539	1,4107
10	407,1 69	9,34627	0	111.43 1,65	31,9636	1,3733 3	-21,4696	0	2,5454 7	1,3502 2
10	407,5 83	10,4011	0	104.67 2,06	33,2083	1,4606 6	-15,8928	0	2,5504 6	1,3239 4
10	407,5 83	10,4011	0	104.67 2,06	33,2083	1,4606 6	-15,8928	0	2,5504 6	1,3239 4
10	408,4 53	12,6345	0	89.080, 92	35,5618	1,6424 2	-4,76295	0	2,5956 9	1,2748

10	409,9 94	16,7361	0	68.467, 05	39,2704	1,9186 3	5,32635	0	2,7244 1	1,2348 1
10	411,8 42	21,9007	0	51.841, 76	43,1247	2,2520 6	11,3323	0	2,8594 4	1,2131 8
10	414,0 61	28,4028	0	38.825, 55	47,2623	2,6547 1	15,014	0	3,0003 3	1,2009 8
10	416,7 23	36,5901	0	28.832, 57	51,8489	3,1364 2	17,3716	0	3,1479 9	1,1937 5
10	418,5 98	42,5789	0	23.970, 21	54,9426	3,4720 1	18,3897	0	3,2415 6	1,1908 2
10	418,5 98	42,5789	0	23.970, 21	54,9426	3,4720 1	18,3897	0	3,2415 6	1,1908 2
10	419,1 63	44,4193	0	22.744, 01	55,8468	3,5737 9	18,6337	0	3,2686 3	1,1901 4
10	419,9 18	46,9045	0	21.236, 75	56,9923	3,7144	18,9264	0	3,3051 2	1,1893 4
10	423,7 52	59,9315	0	15.359, 45	61,9336	4,4934 3	19,9837	0	3,4910 3	1,1866 1
10	428,3 52	76,5429	0	10.787, 15	65,6448	5,6809 9	22,0624	0	3,7341 8	1,1802 1
10	429,4 65	80,7334	0	9.937,3 5	66,206	6,0190 7	22,4019	0	3,7966 6	1,1792 2
11	399,3 5	- 10,3687	0	0,96	0,00177 245	0,1863 1	24,6396	0	2,5820 8	1,1739 6
11	399,4 5	- 10,1203	0	143.76 1,58	3,40917	0,0190 546	-54,0966	0	2,4827 4	1,5292 1
11	399,5 5	- 9,87197	0	143.62 5,15	4,82346	0,0379 641	-54,0779	0	2,4832 5	1,5291 7
11	399,6 5	- 9,62362	0	143.22 8,75	5,90902	0,0568 748	-54,0267	0	2,4837 5	1,5290 6
11	399,7 5	- 9,37522	0	142.77 7,72	6,8256	0,0757 638	-53,9704	0	2,4842 6	1,5289 5
11	399,8 5	- 9,12677	0	142.31 0,65	7,63265	0,0946 508	-53,9131	0	2,4847 7	1,5288 5
11	399,9 5	- 8,87826	0	141.83 6,39	8,36352	0,1135 07	-53,8555	0	2,4852 7	1,5287 5
11	400,0	-	0	141.35	9,03655	0,1323	-53,7973	0	2,4857	1,5286

	5	8,62971		6,10		39			8	4
11	400,1	-	0	140.87	9,66282	0,1511	-53,7386	0	2,4862	1,5285
	5	8,38111		0,82		63			9	4
11	400,2	-	0	140.38	10,2509	0,1699	-53,6797	0	2,4868	1,5284
	5	8,13245		2,80		79			1	4
11	400,3	-	0	139.89	10,8074	0,1887	-53,6207	0	2,4873	1,5283
	5	7,88375		2,60		75			2	4
11	400,4	-	0	139.39	11,3374	0,2075	-53,5613	0	2,4878	1,5282
	5	7,63499		9,45		46			3	4
11	400,5	-	0	138.90	11,8444	0,2262	-53,5016	0	2,4883	1,5281
	5	7,38618		3,88		89			5	3
11	400,6	-	0	138.40	12,3308	0,2450	-53,4417	0	2,4888	1,5280
	5	7,13732		5,91		18			7	3
11	400,7	-	0	137.90	12,799	0,2637	-53,3814	0	2,4893	1,5279
	5	6,88841		5,14		27			9	3
11	400,8	-	0	137.40	13,2505	0,2824	-53,3209	0	2,4899	1,5278
	5	6,63944		1,74		31			2	2
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	5	6,39042		5,94		22			5	2
11	401,0	-	0	136.38	14,1102	0,3198	-53,1988	0	2,4909	1,5276
	5	6,14135		7,80		04			8	2
11	401,1	-	0	135.87	14,521	0,3384	-53,1373	0	2,4915	1,5275
	5	5,89223		7,37		7			1	1
11	401,2	-	0	135.36	14,9206	0,3571	-53,0756	0	2,4920	1,5274
	5	5,64305		4,40		18			4	1
11	401,3	-	0	134.84	15,3099	0,3757	-53,0135	0	2,4925	1,5273
	5	5,39382		8,74		46			8	
11	401,4	-	0	134.22	15,7647	0,3980	-52,9385	0	2,4932	1,5271
	7	5,09467		6,16		74			3	7
11	401,6	-	0	133.47	16,2938	0,4248	-52,826	0	2,4940	1,5268
	14	4,73559		3,74		71			1	6
11	401,7	-	0	132.56	16,9067	0,4571	-52,624	0	2,4949	1,5260
	87	4,30454		3,40		35			6	4
11	401,9	-	0	131.45	17,6129	0,4961	-52,2548	0	2,4961	1,5241
	95	3,78707		9,88		4			1	7
11	402,2	-	0	130.12	18,4215	0,5436	-51,579	0	2,4975	1,5203
	43	3,16579		1,09		01				5
11	402,5	-2,4198	0	128.59	19,3422	0,6008	-50,5705	0	2,4991	1,5143



	42			7,66		62			4	9
11	402,9	-	0	126.99	20,3838	0,6689	-49,2526	0	2,501	1,5064
		1,52399		7,11		26				5
11	403,3	-	0	125.37	21,5962	0,7472	-47,6707	0	2,5031	1,4968
	3	0,44810		5,00		35			4	5
		3								
11	403,5	6,65603	0	124.72	22,108	0,7785	-46,9598	0	2,5040	1,4925
	09	E-14		0,54		32			6	3
11	403,5	6,65603	0	142.37	20,4916	0,7502	-49,7314	0	2,6197	1,5001
	09	E-14		5,62		85			3	
11	403,8	0,87720	0	139.99	21,4923	0,8124	-48,8648	0	2,589	1,4957
	46	3		0,15		44				6
11	404,4	2,46929	0	135.73	23,3933	0,9159	-46,2659	0	2,5574	1,4811
	65			4,07		12			5	9
11	405,2	4,36267	0	129.71	25,7464	1,0331	-41,43	0	2,5421	1,4537
	08			9,61						8
11	406,1	6,62696	0	120.61	28,6025	1,1776	-33,4922	0	2,539	1,4107
				9,19		3				
11	407,1	9,34627	0	107.05	31,9636	1,3733	-21,4696	0	2,5454	1,3502
	7			2,33		3			7	2
11	407,5	10,4011	0	100.55	33,2083	1,4606	-15,8928	0	2,5504	1,3239
	84			8,39		6			6	4
11	407,5	10,4011	0	100.55	33,2083	1,4606	-15,8928	0	2,5504	1,3239
	84			8,39		6			6	4
11	408,4	12,6345	0	85.591,	35,5618	1,6424	-4,76295	0	2,5956	1,2748
	54			87		2			9	
11	409,9	16,7361	0	65.800,	39,2704	1,9186	5,32635	0	2,7244	1,2348
	95			36		3			1	1
11	411,8	21,9007	0	49.830,	43,1247	2,2520	11,3323	0	2,8594	1,2131
	43			73		6			4	8
11	414,0	28,4028	0	37.323,	47,2623	2,6547	15,014	0	3,0003	1,2009
	62			72		1			3	8
11	416,7	36,5901	0	27.719,	51,8489	3,1364	17,3716	0	3,1479	1,1937
	24			66		2			9	5
11	418,5	42,5789	0	23.066,	54,9426	3,4720	18,3897	0	3,2415	1,1908
	99			03		1			6	2
11	418,5	42,5789	0	23.066,	54,9426	3,4720	18,3897	0	3,2415	1,1908
	99			03		1			6	2

11	419,164	44,4193	0	21.881,59	55,8468	3,57379	18,6337	0	3,26863	1,19014
11	419,919	46,9045	0	20.413,88	56,9923	3,7144	18,9264	0	3,30512	1,18934
11	423,753	59,9315	0	14.768,79	61,9336	4,49343	19,9837	0	3,49103	1,18661
11	428,353	76,5429	0	10.377,56	65,6448	5,68099	22,0624	0	3,73418	1,18021
11	429,466	80,7334	0	9.562,91	66,206	6,01907	22,4019	0	3,79666	1,17922
12	420,587	-10,4011	0	1,00	0,00177245	0,186309	24,6383	0	2,58208	1,17397
12	420,687	-10,1496	0	107.789,25	3,43104	0,0184549	-50,2937	0	2,51335	1,52817
12	420,787	-9,89829	0	107.587,98	4,85203	0,0367958	-50,283	0	2,51377	1,52822
12	420,887	-9,64689	0	107.197,68	5,94237	0,0551394	-50,2406	0	2,5142	1,52816
12	420,987	-9,39545	0	106.771,49	6,86219	0,0734651	-50,1939	0	2,51462	1,52809
12	421,087	-9,14396	0	106.330,68	7,67274	0,0917796	-50,1457	0	2,51504	1,52803
12	421,187	-8,89244	0	105.883,99	8,40456	0,110097	-50,0971	0	2,51546	1,52796
12	421,287	-8,64087	0	105.433,73	9,07802	0,128393	-50,0482	0	2,51589	1,52799
12	421,387	-8,38926	0	104.980,78	9,70557	0,146664	-49,999	0	2,51631	1,52783
12	421,487	-8,13761	0	104.525,29	10,295	0,164923	-49,9496	0	2,51674	1,52776
12	421,587	-7,88591	0	104.067,70	10,8518	0,183182	-49,9	0	2,51716	1,52776
12	421,687	-7,63418	0	103.608,80	11,3809	0,201438	-49,8503	0	2,51759	1,52763
12	421,787	-7,3824	0	103.148,85	11,8864	0,219683	-49,8004	0	2,51802	1,52757
12	421,8	-	0	102.68	12,3713	0,2379	-49,7504	0	2,5184	1,5275

	87	7,13057		7,44		09			5	
12	421,9 87	- 6,87871	0	102.22 4,33	12,8381	0,2561 16	-49,7002	0	2,5188 8	1,5274 3
12	422,0 87	-6,6268	0	101.75 9,87	13,2888	0,2743 02	-49,6498	0	2,5193 1	1,5273 7
12	422,1 87	- 6,37484	0	101.29 4,10	13,7245	0,2924 79	-49,5993	0	2,5197 4	1,5273
12	422,2 87	- 6,12285	0	100.82 6,74	14,1468	0,3106 41	-49,5486	0	2,5201 8	1,5272 3
12	422,3 87	- 5,87081	0	100.35 7,77	14,5566	0,3287 97	-49,4977	0	2,5206 1	1,5271 6
12	422,4 87	- 5,61873	0	99.887, 28	14,9546	0,3469 52	-49,4466	0	2,5210 5	1,5271
12	422,5 87	-5,3666	0	99.415, 33	15,3421	0,3650 96	-49,3953	0	2,5214 8	1,5270 3
12	422,7 07	- 5,06399	0	98.847, 12	15,794	0,3868 65	-49,3336	0	2,5220 1	1,5269 5
12	422,8 51	- 4,70078	0	98.162, 47	16,3194	0,4129 67	-49,2591	0	2,5226 4	1,5268 5
12	423,0 24	-4,2648	0	97.336, 99	16,9273	0,4443 96	-49,1099	0	2,5234 1	1,5263 2
12	423,2 31	- 3,74145	0	96.340, 69	17,6275	0,4824 59	-48,7688	0	2,5243 3	1,5245 9
12	423,4 8	- 3,11318	0	95.139, 97	18,4292	0,5287 95	-48,1202	0	2,5254 4	1,5209
12	423,7 78	- 2,35889	0	93.715, 94	19,3424	0,5851 61	-47,0824	0	2,5267 6	1,5147 4
12	424,1 37	- 1,45325	0	92.207, 94	20,3786	0,6519 52	-45,7538	0	2,5282 6	1,5067 6
12	424,5 67	- 0,36575 4	0	90.584, 11	21,5927	0,7292 54	-44,0598	0	2,5300 2	1,4965 4
12	425,0 83	0,94027 8	0	88.669, 56	23,0902	0,8167 92	-41,7306	0	2,5322 6	1,4825 4
12	425,7 02	2,50916	0	86.117, 73	24,948	0,9177 96	-38,3061	0	2,5353	1,4623
12	426,4 45	4,39445	0	82.465, 65	27,2386	1,0383 2	-33,2307	0	2,5395 2	1,4332 7

12	427,336	6,66126	0	77.024,19	30,0176	1,18957	-25,8324	0	2,54538	1,39304
12	428,406	9,38913	0	68.567,02	33,2913	1,39222	-15,2738	0	2,55386	1,33952
12	428,802	10,4011	0	64.535,22	34,4597	1,47711	-10,704	0	2,55794	1,31759
12	428,802	10,4011	0	64.535,22	34,4597	1,47711	-10,704	0	2,55794	1,31759
12	429,69	12,6898	0	54.657,84	36,8568	1,65763	-1,32361	0	2,6071	1,27464
12	431,231	16,8057	0	41.998,01	40,6304	1,93169	7,23922	0	2,73288	1,23811
12	433,08	21,9823	0	31.805,02	44,6342	2,26304	12,4461	0	2,86399	1,21708
12	435,298	28,4931	0	23.820,80	49,0009	2,66121	15,702	0	3,0023	1,20449
12	435,68	29,6423	0	22.758,84	49,7191	2,72953	16,0902	0	3,02442	1,20303
12	437,961	36,6875	0	17.681,22	53,881	3,13725	17,8147	0	3,14844	1,19664
12	441,156	46,996	0	13.027,39	59,4684	3,70043	19,216	0	3,30164	1,19162
12	441,895	49,449	0	12.208,64	60,7379	3,82935	19,4432	0	3,33431	1,19082
12	441,895	49,449	0	12.208,64	60,7379	3,82935	19,4432	0	3,33431	1,19082
12	443,213	53,8831	0	10.932,70	62,9098	4,06463	19,7901	0	3,39194	1,18962
13	423,841	-10,4011	0	1,00	0,00177245	0,186309	24,6379	0	2,58208	1,17397
13	423,941	-10,1493	0	102.600,33	3,43566	0,0183621	-49,9184	0	2,51699	1,52879
13	424,041	-9,89757	0	102.406,94	4,8575	0,0366329	-49,9104	0	2,51737	1,52877
13	424,141	-9,64581	0	102.021,28	5,95053	0,0548835	-49,8685	0	2,51779	1,52871
13	424,2	-	0	101.61	6,86876	0,0731	-49,8245	0	2,5181	1,5286



	41	9,39401		7,41		692			8	5
13	424,3 41	- 9,14217	0	101.20 5,18	7,67932	0,0914 221	-49,7797	0	2,5185 7	1,5285 9
13	424,4 41	-8,8903	0	100.78 6,62	8,41127	0,1096 77	-49,7342	0	2,5189 6	1,5285 3
13	424,5 41	- 8,63838	0	100.36 5,53	9,08379	0,1279 29	-49,6885	0	2,5193 5	1,5284 7
13	424,6 41	- 8,38643	0	99.941, 67	9,71029	0,1461 58	-49,6425	0	2,5197 4	1,5284 1
13	424,7 41	- 8,13443	0	99.514, 64	10,2992	0,1643 64	-49,5961	0	2,5201 4	1,5283 4
13	424,8 41	-7,8824	0	99.084, 40	10,8564	0,1825 51	-49,5493	0	2,5205 4	1,5282 8
13	424,9 41	- 7,63032	0	98.650, 94	11,387	0,2007 14	-49,5022	0	2,5209 4	1,5282 2
13	425,0 41	- 7,37821	0	98.214, 81	11,894	0,2188 6	-49,4548	0	2,5213 5	1,5281 5
13	425,1 41	- 7,12606	0	97.776, 64	12,3796	0,2370 11	-49,4071	0	2,5217 5	1,5280 9
13	425,2 41	- 6,87386	0	97.336, 73	12,8465	0,2551 54	-49,3592	0	2,5221 6	1,5280 3
13	425,3 41	- 6,62162	0	96.895, 51	13,2965	0,2732 97	-49,3112	0	2,5225 7	1,5279 6
13	425,4 41	- 6,36935	0	96.453, 11	13,7315	0,2914 33	-49,2631	0	2,5229 8	1,5279
13	425,5 41	- 6,11703	0	96.009, 55	14,1529	0,3095 59	-49,2149	0	2,5233 8	1,5278 3
13	425,6 41	- 5,86467	0	95.564, 77	14,562	0,3276 72	-49,1665	0	2,5237 9	1,5277 7
13	425,7 41	- 5,61227	0	95.118, 64	14,9599	0,3457 73	-49,1179	0	2,5242	1,5277
13	425,8 41	- 5,35983	0	94.671, 05	15,3473	0,3638 61	-49,0692	0	2,5246 1	1,5276 4
13	425,9 61	- 5,05684	0	94.131, 86	15,7998	0,3855 45	-49,0105	0	2,5251 1	1,5275 6
13	426,1 05	- 4,69319	0	93.481, 59	16,3261	0,4115 37	-48,9396	0	2,5257 1	1,5274 6
13	426,2	-	0	92.696,	16,9355	0,4428	-48,7937	0	2,5264	1,5269

	78	4,25668		64		19			3	3
13	426,4 85	- 3,73271	0	91.748, 23	17,6367	0,4807 35	-48,4553	0	2,5273	1,5251 9
13	426,7 34	- 3,10371	0	90.601, 50	18,439	0,5269 14	-47,8121	0	2,5283 5	1,5215 1
13	427,0 32	- 2,34856	0	89.248, 85	19,3518	0,5830 88	-46,7719	0	2,5296 1	1,5153
13	427,3 91	- 1,44191	0	87.779, 11	20,3855	0,6501 09	-45,3968	0	2,5310 5	1,507
13	427,8 21	- 0,35323	0	86.237, 01	21,5911	0,7274 93	-43,7228	0	2,5327	1,4968 7
13	428,3 37	0,95414 6	0	84.444, 14	23,0823	0,8148 49	-41,4421	0	2,5347 9	1,4831 3
13	428,9 56	2,52453	0	82.027, 63	24,9383	0,9156 19	-38,0305	0	2,5376 7	1,4629 2
13	429,6 99	4,41155	0	78.547, 28	27,2218	1,0362 2	-32,9474	0	2,5416 6	1,4337 6
13	430,5 9	6,68016	0	73.339, 61	30	1,1875	-25,5309	0	2,5472 4	1,3933 3
13	431,6 6	9,40971	0	65.239, 03	33,282	1,3900 3	-14,9772	0	2,5553 4	1,3396 8
13	432,0 48	10,4011	0	61.475, 68	34,4282	1,4730 1	-10,532	0	2,5591 3	1,3182 6
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13	432,9 44	12,7115	0	51.961, 61	36,8491	1,6557 8	-1,1318	0	2,6072 9	1,2750 1
13	434,4 85	16,827	0	39.902, 65	40,6303	1,9298 3	7,36217	0	2,7325 4	1,2385
13	436,3 34	22,0027	0	30.202, 66	44,6458	2,2609 1	12,524	0	2,8633 9	1,2174 4
13	438,5 03	28,3634	0	22.747, 35	48,9349	2,6497 4	15,7008	0	2,9986 8	1,2049 9
13	438,5 52	28,512	0	22.610, 86	49,0292	2,6586 3	15,7536	0	3,0015 7	1,2047 9
13	441,2 15	36,707	0	16.771, 65	53,9286	3,1347 3	17,8503	0	3,1477 5	1,1968 7



13	444,4 1	47,0123	0	12.354, 94	59,5429	3,6971 4	19,2408	0	3,3008 2	1,1917 9
13	445,3 15	50,02	0	11.422, 16	61,1043	3,8548 4	19,5134	0	3,3406 9	1,1908 2
13	445,3 15	50,02	0	11.422, 16	61,1043	3,8548 4	19,5134	0	3,3406 9	1,1908 2
13	445,7 75	51,5588	0	10.988, 10	61,8832	3,9352 9	19,6376	0	3,3605 8	1,1903 8
14	648,7 7	- 10,4011	0	1,00	0,00177 245	0,1863 04	24,6294	0	2,5820 8	1,174
14	648,8 7	- 10,1434	0	9.165,9 2	3,47164	0,0170 595	-43,1616	0	2,5767 5	1,5381 9
14	648,9 7	-9,8857	0	9.119,4 1	4,91135	0,0340 909	-43,197	0	2,5767 8	1,5384 5
14	649,0 7	- 9,62802	0	9.078,0 9	6,01168	0,0511 779	-43,1995	0	2,5768 1	1,5384 9
14	649,1 7	- 9,37034	0	9.037,1 7	6,94469	0,0681 993	-43,1975	0	2,5768 5	1,5385 1
14	649,2 7	- 9,11266	0	8.995,9 5	7,76202	0,0852 674	-43,1942	0	2,5768 8	1,5385 1
14	649,3 7	- 8,85497	0	8.955,5 3	8,49909	0,1023 58	-43,1905	0	2,5769 1	1,5385 1
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14	649,6 7	- 8,08188	0	8.835,7 4	10,3999	0,1536 13	-43,1787	0	2,577	1,5385
14	649,7 7	- 7,82418	0	8.795,4 3	10,9596	0,1706 89	-43,1745	0	2,5770 4	1,5384 9
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14	649,9 7	- 7,30876	0	8.714,0 3	12,0002	0,2048 08	-43,1661	0	2,5771	1,5384 8
14	650,0 7	- 7,05105	0	8.673,0 1	12,4875	0,2218 59	-43,1619	0	2,5771 3	1,5384 8
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	7	6,79334	0		37			7	7	
14	650,2 7	- 6,53562	0	8.591,3 3	13,4054	0,2560 38	-43,1534	0	2,5772 7	1,5384 7
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14	650,4 7	- 6,02017	0	8.510,3 0	14,2612	0,2902 64	-43,1449	0	2,5772 6	1,5384 6
14	650,5 7	- 5,76244	0	8.470,0 2	14,669	0,3074 05	-43,1407	0	2,5772 9	1,5384 6
14	650,6 7	- 5,50471	0	8.429,8 6	15,0652	0,3245 57	-43,1365	0	2,5773 3	1,5384 5
14	650,7 7	- 5,24698	0	8.389,7 6	15,4505	0,3417 23	-43,1323	0	2,5773 6	1,5384 5
14	650,8 9	- 4,93769	0	8.341,6 5	15,8997	0,3623 27	-43,1273	0	2,5773 9	1,5384 4
14	651,0 34	- 4,56655	0	8.283,8 5	16,4223	0,3870 53	-43,1123	0	2,5774 4	1,5383 7
14	651,2 07	- 4,12116	0	8.214,2 1	17,0274	0,4168 05	-43,0445	0	2,5775	1,5379 6
14	651,4 15	- 3,58668	0	8.130,1 0	17,7249	0,4527 94	-42,8258	0	2,5775 6	1,5365 5
14	651,6 63	- 2,94529	0	8.028,2 7	18,5214	0,4968 32	-42,2584	0	2,5776 4	1,5328 2
14	651,9 62	-2,1756	0	7.905,6 2	19,4254	0,5509 31	-41,2081	0	2,5777 4	1,5259 4
14	652,3 2	- 1,25193	0	7.766,7 0	20,445	0,6165	-39,7066	0	2,5778 6	1,5161 9
14	652,7 5	- 0,14346 4	0	7.626,1 4	21,6173	0,6922 89	-38,0256	0	2,5779 9	1,5054
14	653,2 66	1,18677	0	7.468,0 8	23,092	0,7767 06	-35,8381	0	2,5781 5	1,4915 7
14	653,8 85	2,78316	0	7.242,6 6	24,9568	0,8757 48	-32,2782	0	2,5784	1,4695 7
14	654,6 28	4,69905	0	6.918,2 4	27,2132	0,9959 97	-27,1772	0	2,5787 3	1,4390 8
14	655,5 2	6,99848	0	6.430,6 2	29,9625	1,1476 8	-19,9168	0	2,5792 1	1,3976 3



14	656,5 9	9,75843	0	5.656,3 6	33,2187	1,3526 2	-9,83975	0	2,5799 2	1,3432 3
14	656,8 39	10,4011	0	5.425,8 2	33,9557	1,4064 1	-7,17603	0	2,5801 4	1,3293 4
14	656,8 39	10,4011	0	5.425,8 2	33,9557	1,4064 1	-7,17603	0	2,5801 4	1,3293 4
14	656,8 39	10,4012	0	5.425,7 8	33,9558	1,4064 2	-7,17553	0	2,5801 4	1,3293 3
14	657,8 74	13,081	0	4.432,6 1	36,7828	1,6279 4	2,12183	0	2,6075 9	1,2819
14	659,4 15	17,1918	0	3.380,4 9	40,6781	1,9008 1	9,44306	0	2,7267 2	1,2455 4
14	660,0 41	18,9132	0	3.055,9 6	42,1514	2,0112 6	11,2725	0	2,7715 1	1,2364 9
14	661,2 63	22,353	0	2.543,3 2	44,8986	2,2268 7	13,8438	0	2,8538 9	1,2237 7
14	663,4 82	28,8381	0	1.893,1 9	49,5621	2,6175 3	16,6255	0	2,9895 4	1,2099 6
14	666,1 44	36,9931	0	1.397,0 8	54,809	3,0838 2	18,4402	0	3,1336 3	1,2009 1
14	669,3 39	47,2526	0	1.023,3 8	60,819	3,6373	19,6469	0	3,2857	1,1948 8
14	670,6 4	51,5623	0	913,40	63,2126	3,8602 5	19,9763	0	3,3422 9	1,1932 3

