

Dispersion Report

Workspace: 72438-1RiempFSRU-1R

Study: Riempimento FSRU-ME4

Equipment Item: 1Rc Meteo avverso+ERS

72438-1RiempFSRU-1R\Riempimento FSRU-ME4\1Rc Meteo avverso+ERS

Material	GAS NATURALE	
East	0	m
North	0	m

Scenario (User defined source) : 300mm-Q254,4

72438-1RiempFSRU-1R\Riempimento FSRU-ME4\1Rc Meteo avverso+ERS\300mm-Q254,4

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		
					Release	Rainout	Final
1	Continuous	- 67,0317	18,0411	kg/s	0	0	2,30794
2	Continuous	-	13,5308	kg/s	0	0	6,31446

		59,5838					
3	Continuous	- 9,02057 52,1358	kg/s	0	0	11,1945	
4	Continuous	- 4,51029 44,6878	kg/s	0	0	16,5678	
5	Continuous	- 1E-05 37,2399	kg/s	0	0	22,2035	
6	Continuous	- -4,51027 29,7919	kg/s	0	0	27,8136	
7	Continuous	- -9,02055 22,3439	kg/s	0	0	33,1958	
8	Continuous	- -13,5308 14,8959	kg/s	0	0	38,0769	
9	Continuous	- -18,0411 7,44797	kg/s	0	0	42,098	
10	Continuous	0 -22,5514	kg/s	0	0	44,3907	
11	Continuous	23,4195 -22,5514	kg/s	0	0	44,3907	
12	Continuous	46,839 -22,5514	kg/s	0	0	44,3907	
13	Continuous	70,2585 -22,5514	kg/s	0	0	44,3907	
14	Continuous	93,678 -22,5514	kg/s	0	0	44,3907	
15	Continuous	117,097 -22,5514	kg/s	0	0	44,3907	
16	Continuous	140,517 -22,5514	kg/s	0	0	40,6613	
17	Continuous	163,936 -22,5514	kg/s	0	0	26,0057	
18	Continuous	187,356 -22,5514	kg/s	0	0	10,5248	
19	Continuous	210,775 -22,5514	kg/s	0	0	0,278228	

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]
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1	-	18,0411	0	1.582,4	0,0017	0,7944	24,6396	0	0,6055	1,1739
	67,03			8	7245	01			71	6
	17									
1	0	18,0411	0	1.582,4	0,0017	0,7944	24,6396	0	0,6055	1,1739
				8	7245	01			71	6
1	3,053	19,6661	0	397.37	29,641	0,1711	-57,8883	0	0,5333	1,4028
	53			7,72	1	71			77	
1	8,324	22,5514	0	360.99	36,700	0,3250	-36,6051	0	0,5680	1,2961
	95			5,66	3	7			09	3
1	8,324	22,5514	0	360.99	36,700	0,3250	-36,6051	0	0,5680	1,2961
	95			5,66	3	7			09	3
1	12,69	25,141	0	227.74	40,013	0,5076	-1,65513	0	0,5982	1,1908
	07			7,57	6	34			61	2
1	12,69	25,141	0	227.74	40,013	0,5076	-1,65513	0	0,5982	1,1908
	07			7,57	6	34			61	2
1	16,79	27,6065	0	152.58	41,877	0,7502	8,99453	0	0,6032	1,1770
	06			5,96	7	09			37	6
1	33,27	37,5765	0	74.059,	45,526	1,5507	17,2994	0	0,6053	1,1752
	51			67	8	6			58	4
1	51,84	50,1136	0	61.490,	48,184	1,9719	19,1803	0	0,6658	1,1760
	88			40	6	1			57	1
1	71,24	66,6891	0	46.676,	48,993	2,3525	21,1401	0	0,7309	1,1729
	42			67	9	4			49	2
1	94,36	88,6335	0	34.266,	50,051	2,8564	22,7897	0	0,8098	1,1705
	42			95	4				78	6
1	106,4	100,942	0	29.619,	50,637	3,1244	23,2922	0	0,8491	1,1701
	91			96		1			89	4
1	122,2	117,758	0	25.732,	51,43	3,3966	23,703	0	0,8875	1,1698
	21			68		5			11	2
1	155,8	155,751	0	19.659,	53,195	3,9719	24,2307	0	0,9639	1,1697
	27			84	2	5			93	6
1	196,8	205,32	0	14.807,	55,453	4,6615	24,553	0	1,0490	1,1701
	36			93	6	3			4	
1	237,8	258,278	0	11.551,	57,821	5,3428	24,7206	0	1,1273	1,1705
	09			19	6	8			6	2
1	246,7	270,128	0	10.987,	58,345	5,4893	24,7455	0	1,1435	1,1706
	89			78	9	3			6	1
1	307,9	354,949	0	8.030,1	62,050	6,4817	24,8581	0	1,2483	1,1711



	95			1	9	8			1	4
1	374,0 42	440,425	0	6.195,8 6	65,711 1	7,4046 9	24,9118	0	1,3390 1	1,1715 3
2	- 59,58 38	13,5308	0	1.582,4 8	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
2	0	13,5308	0	1.582,4 8	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
2	10,50 15	19,1135	0	476.17 7,41	50,661 2	0,3357 07	-67,3219	0	0,5436 06	1,4168 4
2	16,66 83	22,5514	0	420.89 3,59	60,775	0,4465 37	-41,4304	0	0,5742 25	1,2888 6
2	16,66 83	22,5514	0	420.89 3,59	60,775	0,4465 37	-41,4304	0	0,5742 25	1,2888 6
2	21,46 38	25,4044	0	301.59 4,87	64,574 6	0,6287 99	-9,54124	0	0,5972 47	1,1908 2
2	21,46 38	25,4044	0	301.59 4,87	64,574 6	0,6287 99	-9,54124	0	0,5972 47	1,1908 2
2	24,23 86	27,0681	0	240.17 0,14	65,842 3	0,8013 53	0,365347	0	0,6013 31	1,1753
2	40,72 3	37,2942	0	94.961, 22	67,133	2,0106 9	16,095	0	0,6723 71	1,1723 1
2	60,19 19	51,5648	0	79.103, 76	68,072 1	2,5106 3	18,232	0	0,7565 17	1,1736 7
2	81,75 69	70,2926	0	61.695, 77	68,978 3	2,9353 3	19,3409	0	0,8215 83	1,1744 1
2	107,1 37	94,8306	0	47.022, 37	70,156 7	3,4996	21,328	0	0,9014 4	1,1715 9
2	137,1 58	126,923	0	36.765, 09	71,669	4,0404 9	22,6319	0	0,9727 16	1,1698 3
2	173,1 69	168,395	0	28.865, 67	73,585 8	4,6560 1	23,4925	0	1,0483 8	1,1691 5
2	176,3 67	172,119	0	28.076, 37	73,756 1	4,7088 5	23,5463	0	1,0546 4	1,1691 3
2	216,7 51	222,089	0	22.350, 87	76,018	5,3868 7	24,0614	0	1,1322 5	1,1691 5
2	269,5	291,75	0	16.887,	79,108	6,2561	24,4282	0	1,2252	1,1695



	36			26	5	3				3
2	333,748	382,289	0	15.633,63	83,0393	7,29059	24,6593	0	1,3281	1,17007
2	372,659	440,395	0	13.420,49	85,5202	7,91116	24,7428	0	1,38648	1,17038
3	-52,1358	9,02057	0	1.582,48	0,00177245	0,794401	24,6396	0	0,605571	1,17396
3	0	9,02057	0	1.582,48	0,00177245	0,794401	24,6396	0	0,605571	1,17396
3	6,50193	12,438	0	481.873,98	49,3715	0,264216	-77,5412	0	0,524343	1,48788
3	17,9495	18,589	0	515.667,49	70,5912	0,427146	-66,451	0	0,553753	1,38547
3	24,9536	22,5514	0	443.046,12	82,407	0,555816	-38,8658	0	0,579531	1,26202
3	24,9536	22,5514	0	443.046,12	82,407	0,555816	-38,8658	0	0,579531	1,26202
3	29,1907	25,067	0	348.517,24	85,7613	0,717546	-14,6615	0	0,595792	1,19082
3	29,1907	25,067	0	348.517,24	85,7613	0,717546	-14,6615	0	0,595792	1,19082
3	31,6865	26,5596	0	291.327,40	86,867	0,878447	-4,51016	0	0,599901	1,17285
3	48,171	37,1793	0	104.370,08	88,3892	2,31448	15,6855	0	0,72408	1,17059
3	67,9524	52,6257	0	83.506,84	89,2544	2,91536	17,9586	0	0,818624	1,172724
3	91,0586	72,828	0	67.347,66	90,2424	3,37254	19,0533	0	0,884081	1,173681
3	117,946	99,1443	0	52.011,15	91,5029	3,96332	20,6446	0	0,962852	1,17225
3	149,395	133,252	0	42.319,59	93,1053	4,51215	22,0518	0	1,03113	1,17013
3	187,052	177,108	0	34.201,55	95,1251	5,15448	23,0458	0	1,10619	1,16913
3	221,8	220,436	0	29.014,	97,085	5,7415	23,6087	0	1,1709	1,1688



	37			98		6			8	9
3	232,3 56	233,652	0	26.740, 31	97,676 6	5,9133	23,7328	0	1,1893 2	1,1688 9
3	287,1 22	306,659	0	20.668, 94	100,90 3	6,8109 4	24,1968	0	1,2813 2	1,1691
3	353,3 63	401,133	0	15.976, 94	104,98 8	7,8739 3	24,5019	0	1,3830 4	1,1695 7
3	433,5 27	523,61	0	12.165, 95	110,16 6	9,1325 6	24,6979	0	1,4952 9	1,1701 4
3	458,6 56	564,042	0	11.243, 63	111,85 1	9,5246 6	24,7384	0	1,5287 2	1,1703
4	- 44,68 78	4,51029	0	1.582,4 8	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
4	0	4,51029	0	1.582,4 8	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
4	4,410 28	6,82846	0	456.04 0,77	48,907 5	0,2155 82	-74,1097	0	0,5212 25	1,4791 2
4	13,94 99	11,8381	0	551.38 9,78	66,603 4	0,3685 27	-83,6427	0	0,5336 69	1,4879 4
4	25,39 74	18,1052	0	530.12 7,28	89,010 6	0,5124 96	-61,7491	0	0,5613 77	1,3452 3
4	33,17 6	22,5514	0	443.83 0,65	101,82 4	0,6740 24	-34,0613	0	0,5832 38	1,2359 7
4	33,17 6	22,5514	0	443.83 0,65	101,82 4	0,6740 24	-34,0613	0	0,5832 38	1,2359 7
4	36,47 83	24,5061	0	376.71 4,27	104,41 7	0,8047 33	-17,7421	0	0,5940 64	1,1908 2
4	36,47 83	24,5061	0	376.71 4,27	104,41 7	0,8047 33	-17,7421	0	0,5940 64	1,1908 2
4	39,13 45	26,0908	0	317.05 4,43	105,56 8	0,9826 52	-6,8782	0	0,5987 56	1,1710 9
4	55,61 9	37,0401	0	110.52 2,87	107,25 1	2,5323 4	15,325	0	0,7591 59	1,1692 9
4	75,40 03	53,2148	0	86.411, 43	108,15 2	3,1651 8	17,6487	0	0,8547 31	1,1716 6
4	99,13	74,2845	0	73.266,	109,17	3,6420	18,776	0	0,9206	1,1726



	8			49	9	1			75	9
4	126,9 22	101,643	0	57.335, 01	110,48 8	4,2522 6	20,0495	0	0,9992 92	1,1727
4	159,2 37	136,973	0	47.194, 95	112,14 5	4,8118 9	21,5672	0	1,0667 3	1,1703
4	197,9 08	182,283	0	38.147, 75	114,22 7	5,4711 9	22,673	0	1,1415 5	1,1690 7
4	244,2 73	240,535	0	30.470, 94	116,85 1	6,2465 7	23,4568	0	1,2242 1	1,1686 4
4	262,8 85	265,324	0	28.028, 06	117,95 1	6,5578 5	23,6758	0	1,256	1,1686 2
4	300,1 81	315,58	0	24.040, 08	120,15 9	7,1614 4	23,9992	0	1,3156 5	1,1687 4
4	367,6 98	412,464	0	18.635, 67	124,33 9	8,2420 4	24,3651	0	1,4167 1	1,1691 4
4	449,1 75	537,773	0	14.455, 72	129,62 5	9,5182 8	24,6059	0	1,5281 8	1,1697 1
4	534,7 12	678,912	0	11.368, 73	135,44 9	10,834 9	24,746	0	1,6358 6	1,1702 4
5	- 37,23 99	1E-05	0	1.582,4 8	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
5	0	1E-05	0	1.582,4 8	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
5	3,908 57	2,05436	0	449.54 5,81	49,092 8	0,2005 52	-73,1872	0	0,5204 14	1,4765 3
5	11,85 83	6,19242	0	556.09 5,68	63,675 4	0,3394 95	-89,2196	0	0,5249 25	1,5304 1
5	21,39 79	11,2904	0	578.91 7,43	83,321 8	0,4464 58	-79,8983	0	0,5443 01	1,4398 5
5	32,84 54	17,6524	0	531.25 3,77	105,73 6	0,5990 45	-56,104	0	0,5668 76	1,3091 7
5	41,35 38	22,5514	0	433.36 2,41	119,02 8	0,8053 52	-28,9049	0	0,5855 87	1,2152 9
5	41,35 38	22,5514	0	433.36 2,41	119,02 8	0,8053 52	-28,9049	0	0,5855 87	1,2152 9
5	43,55	23,8517	0	392.73	120,73	0,8960	-19,4877	0	0,5920	1,1908



	65			7,86	4	3			19	2
5	43,55 65	23,8517	0	392.73 7,86	120,73 4	0,8960 3	-19,4877	0	0,5920 19	1,1908 2
5	46,58 25	25,6524	0	328.03 4,14	122,00 8	1,1058 8	-7,67346	0	0,5976 83	1,1693 9
5	63,06 69	36,8899	0	116.37 4,34	123,77	2,698	14,9632	0	0,7847 94	1,1682 8
5	82,84 83	53,5472	0	90.058, 71	124,68 2	3,3267 5	17,3019	0	0,8773 21	1,1706 4
5	106,5 86	75,1591	0	77.221, 47	125,73 5	3,8170 5	18,4893	0	0,9437 28	1,1717 8
5	134,9 36	103,168	0	62.864, 21	127,07 4	4,4234 4	19,4327	0	1,0203 1	1,1731 5
5	167,7 53	139,22	0	52.017, 70	128,76 3	4,9947 7	21,0928	0	1,0879 2	1,1704 4
5	207,0 26	185,397	0	42.364, 24	130,88 3	5,6636 1	22,3161	0	1,1625 4	1,1689 7
5	254,0 26	244,676	0	34.195, 84	133,54 9	6,4492 3	23,1964	0	1,2449 8	1,1683 8
5	302,2 71	309,663	0	28.473, 33	136,41 5	7,2426 4	23,7447	0	1,3234 8	1,1683 5
5	310,6 34	320,961	0	27.157, 80	136,90 8	7,3748 6	23,8141	0	1,3361 5	1,1683 8
5	378,9 32	419,326	0	21.283, 28	141,14 5	8,4668 7	24,2373	0	1,4369 2	1,1687 5
5	461,1 86	546,329	0	16.491, 72	146,49 4	9,7537 7	24,5201	0	1,5479 4	1,1693
5	560,3 29	710,646	0	12.665, 81	153,25 5	11,269 4	24,7044	0	1,6699 9	1,1699 3
5	606,3 85	792,367	0	11.308, 46	156,56 3	11,974 2	24,7598	0	1,7240 5	1,1701 9
6	- 29,79 19	- 4,51027	0	1,00	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
6	0	- 4,51027	0	1.582,4 8	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
6	4,731	-	0	470.67	49,488	0,2224	-78,124	0	0,5181	1,4999



	8	2,03082		3,22	5	29			75	9
6	11,35 65	1,40231	0	561.68 5,45	61,930 6	0,3296 66	-92,0192	0	0,5211 95	1,5504
6	19,30 62	5,60036	0	595.90 8,17	78,572 9	0,4157 04	-87,9046	0	0,5354 33	1,4910 1
6	28,84 58	10,7915	0	586.31 7,18	98,579 2	0,5210 41	-73,6859	0	0,5525 16	1,3894 5
6	40,29 34	17,2224	0	523.77 6,32	120,48 5	0,6896 24	-50,474	0	0,5708 01	1,2801 9
6	49,50 35	22,5514	0	418.63 1,51	133,91 3	0,9432 34	-24,2479	0	0,5873 41	1,2001 3
6	49,50 35	22,5514	0	418.63 1,51	133,91 3	0,9432 34	-24,2479	0	0,5873 41	1,2001 3
6	50,51 41	23,1468	0	401.48 7,25	134,68 1	0,9870 64	-20,4416	0	0,5900 31	1,1908 2
6	50,51 41	23,1468	0	401.48 7,25	134,68 1	0,9870 64	-20,4416	0	0,5900 31	1,1908 2
6	54,03 04	25,2345	0	328.79 6,93	136,16 8	1,2462 8	-7,35205	0	0,5968 8	1,1676 4
6	70,51 49	36,7449	0	121.58 5,24	137,95 1	2,8289 4	14,6249	0	0,8044 61	1,1675 1
6	90,29 63	53,7278	0	94.780, 10	138,86	3,4322	16,9445	0	0,8917 47	1,1696 9
6	114,0 34	75,6835	0	80.236, 85	139,93	3,9296 8	18,2017	0	0,9582 64	1,1709
6	142,3 65	104,112	0	67.928, 17	141,28 8	4,5497	19,1992	0	1,0355 2	1,1724 2
6	175,5 58	140,671	0	56.394, 04	142,99 9	5,1231 4	20,6489	0	1,1024 6	1,1706 1
6	215,2 53	187,446	0	46.174, 51	145,14 5	5,7985 6	21,9847	0	1,1771 3	1,1689 2
6	262,6 98	247,438	0	37.407, 47	147,84 1	6,5917 2	22,9551	0	1,2594 7	1,1681
6	319,7 79	324,55	0	29.922, 87	151,23 3	7,5245 6	23,6432	0	1,3503 7	1,1680 8
6	337,9 58	350,597	0	27.822, 66	152,36 4	7,8224 9	23,7992	0	1,3782 7	1,1681 4
6	388,6	424,031	0	23.625,	155,51	8,6258	24,1183	0	1,4510	1,1684



	69			00	3	9			5	1
6	471,477	552,216	0	18.417,67	160,907	9,92045	24,4401	0	1,56179	1,16895
6	571,193	717,917	0	14.203,98	167,719	11,4436	24,6519	0	1,68351	1,1696
6	671,508	897,103	0	11.291,21	174,923	12,9488	24,7715	0	1,79633	1,17015
7	-22,3439	-9,02055	0	1,00	0,00177245	0,794401	24,6396	0	0,605571	1,17396
7	0	-9,02055	0	1.582,48	0,00177245	0,794401	24,6396	0	0,605571	1,17396
7	2,05865	-7,93285	0	407.058,51	42,9269	0,129769	-63,5578	0	0,523193	1,43494
7	6,65916	-5,54943	0	511.848,33	50,0194	0,260044	-86,8101	0	0,515341	1,54165
7	12,1798	-2,69615	0	576.713,89	60,9141	0,333074	-94,9005	0	0,51989	1,56481
7	18,8045	0,78378	0	607.772,75	74,9585	0,401266	-92,1459	0	0,531016	1,51795
7	26,7542	5,0593	0	610.601,67	92,045	0,482765	-82,4213	0	0,544459	1,43726
7	36,2938	10,3218	0	583.218,44	111,854	0,594791	-67,2724	0	0,558466	1,34757
7	47,7414	16,8029	0	511.998,13	133,04	0,782231	-45,3671	0	0,573545	1,25808
7	57,6419	22,5514	0	400.140,97	146,38	1,09385	-19,9478	0	0,588609	1,18913
7	57,6419	22,5514	0	400.140,97	146,38	1,09385	-19,9478	0	0,588609	1,18913
7	61,4784	24,8249	0	325.875,09	147,891	1,39001	-6,78602	0	0,596104	1,16665
7	77,9629	36,586	0	126.552,83	149,659	2,93914	14,308	0	0,820632	1,167
7	97,7442	53,8214	0	101.059,27	150,569	3,52295	16,6236	0	0,904056	1,16898
7	121,4	76,0733	0	86.537,	151,65	4,0280	17,9454	0	0,9707	1,1702



	82			66	3	3			74	3
7	149,5 95	104,858	0	72.410, 09	153,02 7	4,6507 4	18,9918	0	1,0475 5	1,1717 9
7	183,1 11	141,83	0	60.203, 72	154,75 7	5,2290 8	20,2319	0	1,1145 4	1,1709
7	223,1 53	189,095	0	49.485, 43	156,92 4	5,9111 5	21,6727	0	1,1890 4	1,1689 7
7	270,9 67	249,676	0	40.244, 85	159,64 5	6,7102 9	22,7273	0	1,2712 8	1,1680 7
7	328,4 5	327,486	0	32.367, 16	163,06 5	7,6493 7	23,481	0	1,3621 1	1,1678 7
7	370,0 13	387,481	0	28.145, 02	165,65 7	8,3232 3	23,8342	0	1,4240 3	1,168
7	397,6 52	427,635	0	25.680, 78	167,37 3	8,7545	24,0067	0	1,4623 9	1,1681 4
7	480,9 24	556,783	0	20.114, 68	172,80 3	10,055 3	24,3643	0	1,5729 1	1,1686 7
7	581,1 2	723,619	0	15.573, 89	179,65 7	11,584 5	24,6015	0	1,6943 6	1,1693 2
7	701,6 42	939,417	0	11.944, 47	188,30 9	13,378	24,7555	0	1,8273 2	1,1699 9
7	729,3 48	991,473	0	11.289, 16	190,36 7	13,785 7	24,7796	0	1,8563 2	1,1701 3
8	- 14,89 59	- 13,5308	0	1,00	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
8	0	- 13,5308	0	1.582,4 8	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
8	2,478 06	- 12,2248	0	421.70 0,18	38,318 7	0,1471 06	-67,4063	0	0,5209 67	1,4525 7
8	5,672 86	- 10,5731	0	498.89 0,98	43,180 3	0,2379 66	-85,0332	0	0,5141 48	1,5359 7
8	9,506 62	-8,6041	0	559.05 5,59	50,421 1	0,2945 4	-95,1974	0	0,5142 43	1,5805 3
8	14,10 71	- 6,22616	0	599.19 1,98	59,915 5	0,3433 04	-97,9064	0	0,5200 06	1,5752 9
8	19,62	-	0	621.49	71,749	0,3962	-94,8834	0	0,5290	1,5315



	77	3,33054		7,03	7	72			68	8
8	26,25 25	0,21009 9	0	626.63 9,11	86,131 9	0,4608 15	-87,4678	0	0,5397 19	1,4656 1
8	34,20 22	4,54646	0	612.79 9,04	103,14 1	0,5455 4	-76,4093	0	0,5509 19	1,3911 7
8	43,74 18	9,8584	0	575.34 0,82	122,50 7	0,6659 44	-61,6894	0	0,5624 72	1,3164 9
8	55,18 93	16,3715	0	499.77 1,05	142,97	0,8714 11	-41,2102	0	0,5753 74	1,2423 2
8	65,80 69	22,5514	0	381.63 5,51	156,11 5	1,2493 1	-16,3382	0	0,5895 2	1,1816 6
8	65,80 69	22,5514	0	381.63 5,51	156,11 5	1,2493 1	-16,3382	0	0,5895 2	1,1816 6
8	68,92 64	24,4	0	320.71 6,98	156,91 9	1,5346 9	-6,09557	0	0,5953 55	1,1662 3
8	85,41 09	36,4673	0	127.07 8,19	158,76 8	3,0801 3	14,2131	0	0,8409 87	1,1671 1
8	105,1 92	54,1128	0	102.10 1,96	159,69 4	3,6742 7	16,5008	0	0,9240 27	1,169
8	128,9 3	76,8433	0	87.843, 60	160,80 2	4,1900 4	17,8256	0	0,9911 13	1,1702 2
8	157,4 15	106,195	0	73.186, 96	162,20 2	4,8156	18,8722	0	1,0666 7	1,1716 9
8	191,4 25	143,812	0	62.056, 32	163,96 1	5,4007 2	19,943	0	1,1336 2	1,1714 2
8	232,0 09	191,858	0	51.172, 27	166,16 2	6,0913 4	21,4381	0	1,208	1,1693 1
8	280,3 92	253,367	0	41.777, 33	168,92 1	6,8994 9	22,5441	0	1,2900 3	1,1682 5
8	338,5	332,277	0	33.694, 54	172,38 6	7,8478 5	23,3431	0	1,3806	1,1679 3
8	394,8 84	414,113	0	28.419, 28	175,90 8	8,7545 1	23,8221	0	1,4623 9	1,1680 5
8	408,3 88	433,769	0	26.818, 54	176,74 5	8,9630 7	23,906	0	1,4806 1	1,1681 1
8	492,4 3	564,538	0	21.064, 41	182,23 6	10,274 6	24,2931	0	1,5908 5	1,1685 8
8	593,3	733,156	0	16.365,	189,15	11,813	24,5533	0	1,7118	1,1692



	5			38	4	4			5	
8	714,647	951,063	0	12.704,44	197,881	13,616	24,7233	0	1,8443	1,16986
8	771,655	1059,61	0	11.359,97	202,154	14,4528	24,7747	0	1,9029	1,17013
9	-7,44797	-18,0411	0	1,00	0,00177245	0,794401	24,6396	0	0,605571	1,17396
9	0	-18,0411	0	1.582,48	0,00177245	0,794401	24,6396	0	0,605571	1,17396
9	0,371621	-17,8436	0	355.274,38	27,3931	0,0290511	-49,7042	0	0,531256	1,37613
9	1,65554	-17,1657	0	396.979,47	28,8554	0,108503	-61,2628	0	0,52367	1,42558
9	3,19624	-16,3644	0	445.697,54	30,9287	0,17008	-73,6516	0	0,517307	1,48256
9	5,04508	-15,4127	0	492.838,09	33,7739	0,218038	-84,6459	0	0,512441	1,53701
9	7,2637	-14,2793	0	538.139,11	37,7308	0,253634	-93,8347	0	0,509899	1,58368
9	9,92603	-12,9215	0	576.635,35	42,9243	0,284068	-99,7578	0	0,510628	1,60956
9	13,1208	-11,2846	0	607.434,58	49,4873	0,314268	-102,312	0	0,514225	1,61044
9	16,9546	-9,30183	0	629.720,40	57,6088	0,348344	-101,603	0	0,520154	1,58656
9	21,5551	-6,89139	0	642.790,57	67,5368	0,389609	-97,9222	0	0,527737	1,54273
9	27,0757	-3,95396	0	645.567,89	79,5467	0,441476	-91,586	0	0,536326	1,48575
9	33,7005	-0,36996	0	636.250,99	93,8613	0,508575	-82,8382	0	0,545417	1,42267
9	41,6501	4,00444	0	612.296,98	110,591	0,598239	-71,7156	0	0,554838	1,35863
9	51,1898	9,34627	0	568.847,79	129,501	0,726324	-57,7171	0	0,564755	1,29592
9	62,63	15,8789	0	491.35	149,40	0,9458	-38,5154	0	0,5762	1,2326



	73			7,80	6	96			22	8
9	74,08 63	22,5514	0	367.41 9,31	162,67	1,3893 5	-13,8183	0	0,5900 28	1,1771 8
9	74,08 63	22,5514	0	367.41 9,31	162,67	1,3893 5	-13,8183	0	0,5900 28	1,1771 8
9	76,37 44	23,9065	0	325.81 5,46	163,05 7	1,6151 3	-6,63881	0	0,5942 4	1,1670 2
9	92,85 88	36,1374	0	127.59 6,69	164,98 8	3,1723 5	14,0349	0	0,8539 51	1,1670 4
9	112,6 4	54,0494	0	101.57 2,55	165,94	3,7808 5	16,3634	0	0,9382 91	1,1689 2
9	136,3 78	77,1161	0	86.651, 23	167,06 4	4,3048 5	17,7024	0	1,0052 8	1,1701 2
9	164,8 63	106,883	0	73.205, 81	168,48 3	4,9414 4	18,768	0	1,0815 3	1,1715 9
9	199,0 45	145,008	0	63.750, 28	170,26 5	5,5321 4	19,6939	0	1,1480 2	1,1718 6
9	240,0 64	193,645	0	54.273, 73	172,49 1	6,2296 7	21,2378	0	1,2223 7	1,1695 9
9	288,8 96	255,858	0	44.633, 60	175,28	7,0450 7	22,3884	0	1,3042 9	1,1684
9	347,4 94	335,606	0	36.124, 53	178,77 9	8,0008 2	23,2261	0	1,3947	1,1679 8
9	416,8 33	436,529	0	29.111, 21	183,11 1	9,1069 9	23,8147	0	1,4930 7	1,1680 8
9	417,8 74	438,047	0	28.887, 13	183,17 6	9,1229 1	23,8212	0	1,4944 4	1,1680 8
9	502,5 66	570,134	0	22.789, 98	188,71 5	10,444 1	24,2325	0	1,6045 8	1,1685 1
9	604,0 65	740,135	0	17.785, 26	195,68 4	11,990 3	24,5118	0	1,7252 7	1,1691
9	725,9 64	959,651	0	13.781, 00	204,46 8	13,800 2	24,6957	0	1,8573 5	1,1697 5
9	808,1 74	1116,96	0	11.791, 59	210,64 1	14,997 8	24,7715	0	1,9401 8	1,1701 3
10	0	- 22,5514	0	1,00	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6



10	0,1	-	0	388.84	2,3159	0,0062	-58,0801	0	0,5109	1,4093
		22,4988		2,10	1	8415			86	4
10	0,2	-	0	409.37	3,2602	0,0114	-62,6669	0	0,5103	1,4273
		22,4478		1,50	2	917			92	5
10	0,3	-	0	414.59	3,9946	0,0167	-63,7043	0	0,5105	1,4311
		22,3967		9,83	6	931				6
10	0,4	-	0	416.56	4,6209	0,0221	-64,0656	0	0,5106	1,4324
		22,3457		0,81		096			87	1
10	0,5	-	0	417.36	5,1783	0,0274	-64,2042	0	0,5108	1,4328
		22,2946		2,88	8	21			97	6
10	0,6	-	0	417.83	5,6872	0,0327	-64,3022	0	0,5110	1,4332
		22,2435		9,23	7	002			66	4
10	0,7	-	0	419.58	6,1587	0,0377	-64,7769	0	0,5108	1,4354
		22,1924		0,31	8	722			7	2
10	0,8	-	0	422.70	6,6010	0,0425	-65,6442	0	0,5103	1,4394
		22,1413		8,41	1	542			38	8
10	0,9	-	0	426.63	7,0196	0,0470	-66,727	0	0,5096	1,4445
		22,0903		0,96		701			58	7
10	1	-	0	430.92	7,4185	0,0513	-67,9041	0	0,5089	1,4501
		22,0394		8,25	6	578			42	6
10	1,1	-	0	435.37	7,8006	0,0554	-69,112	0	0,5082	1,4559
		21,9885		1,82	9	514			36	4
10	1,2	-	0	439.84	8,1681	0,0593	-70,3195	0	0,5075	1,4617
		21,9377		4,89	2	768			53	7
10	1,3	-21,887	0	444.27	8,5229	0,0631	-71,5071	0	0,5069	1,4675
				3,73	5	516			08	6
10	1,4	-	0	448.61	8,8669	0,0667	-72,6646	0	0,5063	1,4732
		21,8364		8,37	5	888			03	5
10	1,5	-	0	452.85	9,2013	0,0703	-73,7874	0	0,5057	1,4788
		21,7858		7,25	4	022			39	2
10	1,6	-	0	456.97	9,5270	0,0737	-74,8728	0	0,5052	1,4842
		21,7352		7,23	6	046			13	5
10	1,7	-	0	460.97	9,8450	0,0770	-75,9199	0	0,5047	1,4895
		21,6847		2,22	2	051			25	4
10	1,8	-	0	464.84	10,155	0,0802	-76,9294	0	0,5042	1,4946
		21,6343		1,88	6	166			71	8
10	1,9	-	0	468.58	10,459	0,0833	-77,9017	0	0,5038	1,4996
		21,5839		5,82	5	45			49	7



10	2	-	0	472.20	10,757	0,0863	-78,8379	0	0,5034	1,5045
		21,5335		6,09	5	959			58	2
10	2,12	-	0	476.39	11,107	0,0899	-79,9159	0	0,5030	1,5101
		21,4731		3,32	8	616			27	5
10	2,264	-	0	481.19	11,519	0,0941	-81,1463	0	0,5025	1,5166
		21,4007		7,44	5	079			61	4
10	2,436	-	0	486.66	12,001	0,0989	-82,5393	0	0,5020	1,5240
	8	21,3139		6,81	5	185			67	8
10	2,644	-	0	492.83	12,565	0,1044	-84,0993	0	0,5015	1,5325
	16	21,2099		0,72	4	7			6	1
10	2,892	-	0	499.70	13,223	0,1108	-85,8275	0	0,5010	1,542
	99	21,0851		4,74	2	59			58	
10	3,191	-	0	507.27	13,989	0,1181	-87,7185	0	0,5005	1,5525
	59	20,9356		9,90	1	82			85	6
10	3,549	-	0	515.63	14,880	0,1264	-89,7894	0	0,5001	1,5643
	91	20,7563		0,13	1	98			49	6
10	3,979	-	0	525.10	15,915	0,1357	-92,1305	0	0,4996	1,578
	89	20,5414		9,32	9	36			99	
10	4,495	-	0	536.45	17,117	0,1456	-94,929	0	0,4991	1,5948
	87	20,2837		9,55	5	28			1	1
10	5,115	-	0	549.93	18,513	0,1559	-98,228	0	0,4984	1,6152
	04	19,9749		5,20	2	71			13	9
10	5,858	-	0	565.43	20,134	0,1667	-101,909	0	0,4977	1,6388
	05	19,6048		0,30	5	3			45	
10	6,749	-	0	582.49	22,013	0,1782	-105,599	0	0,4973	1,6622
	66	19,1612		7,44	5	75			09	7
10	7,819	-	0	600.53	24,186	0,1910	-109,014	0	0,4972	1,6832
	59	18,6292		9,22	3	61			76	3
10	9,103	-	0	618.88	26,695	0,2056	-111,938	0	0,4977	1,6996
	51	17,9904		2,54	8	17			84	2
10	10,64	-	0	636.95	29,634	0,2222	-114,196	0	0,4989	1,7095
	42	17,2225		9,36	4	13			42	2
10	12,49	-	0	654.06	33,225	0,2405	-115,547	0	0,5009	1,7103
	31	16,2981		6,68	8	52			92	9
10	14,71	-15,183	0	669.29	37,664	0,2611	-115,694	0	0,5042	1,6993
	17			2,10	6	32			15	9
10	17,37	-	0	681.57	43,121	0,2851	-114,364	0	0,5087	1,6746
	4	13,8348		3,99	6	95			77	3



10	20,56 88	- 12,2001	0	689.79 9,27	49,795 1	0,3142 71	-111,377	0	0,5146 41	1,6361 6
10	24,40 26	- 10,2137	0	692.88 0,90	57,920 9	0,3500 57	-106,683	0	0,5215 85	1,5863 5
10	29,00 31	- 7,79597	0	689.77 1,66	67,782 9	0,3943 42	-100,366	0	0,5292 83	1,5292 8
10	34,52 37	- 4,85078	0	679.17 1,57	79,664 9	0,4497 22	-92,4739	0	0,5374 96	1,4687 1
10	41,14 84	-1,2611	0	659.32 2,18	93,802 8	0,5203 42	-82,982	0	0,5460 46	1,4077 5
10	49,09 81	3,11573	0	627.72 7,93	110,32	0,6133 99	-71,699	0	0,5549 08	1,3483 5
10	58,63 77	8,45512	0	579.75 8,36	129,04 7	0,7441 94	-57,9828	0	0,5643 25	1,2908 1
10	70,08 53	14,9777	0	501.90 1,02	148,91 7	0,9625 73	-39,6166	0	0,5752 31	1,2325 4
10	83,09 44	22,5514	0	362.85 6,17	163,56 1	1,4814 2	-12,702	0	0,5901 95	1,1743 2
10	83,09 44	22,5514	0	362.85 6,17	163,56 1	1,4814 2	-12,702	0	0,5901 95	1,1743 2
10	83,82 23	22,9816	0	349.28 8,23	163,64 9	1,5477 6	-10,4874	0	0,5915 89	1,1709 6
10	100,3 07	35,1301	0	126.95 6,16	165,73	3,2027 2	13,7213	0	0,8579 45	1,1666 4
10	120,0 88	53,2362	0	96.462, 82	166,72 1	3,8737 6	16,2746	0	0,95 7	1,1688 7
10	143,8 26	76,594	0	79.907, 04	167,86	4,4070 4	17,6249	0	1,0177 3	1,1700 7
10	172,3 11	106,72	0	65.363, 07	169,29 7	5,0508 6	18,6975	0	1,0940 4	1,1715 3
10	206,4 93	145,268	0	55.372, 95	171,09 8	5,6471 2	19,5206	0	1,1604 9	1,1721 8
10	247,5 12	194,419	0	46.498, 32	173,34 8	6,3518 1	21,0928	0	1,2348 1	1,1698 3
10	296,7 34	257,245	0	38.191, 20	176,16 3	7,1717 3	22,2741	0	1,3171 9	1,1685 4
10	355,8 01	337,725	0	30.964, 73	179,69 2	8,1369 7	23,1396	0	1,4071 4	1,1680 5



10	426,681	441,044	0	24.815,69	184,125	9,26642	23,7572	0	1,50676	1,1681
10	433,859	451,894	0	24.133,04	184,585	9,37944	23,8037	0	1,51639	1,16812
10	511,737	573,926	0	19.664,54	189,697	10,5916	24,1879	0	1,61645	1,16848
10	613,805	745,149	0	15.386,00	196,712	12,1451	24,4806	0	1,73692	1,16905
10	736,286	966,092	0	11.915,46	205,547	13,9621	24,6747	0	1,86874	1,16969
10	835,416	1156,27	0	9.909,71	212,995	15,3976	24,7679	0	1,96712	1,17014
11	23,4195	- 22,5514	0	1,00	0,00177245	0,794401	24,6396	0	0,605571	1,17396
11	23,5195	- 22,4988	0	388.842,10	2,31591	0,00628415	-58,0801	0	0,510986	1,40934
11	23,6195	- 22,4478	0	409.371,50	3,26022	0,0114917	-62,6669	0	0,510392	1,42735
11	23,7195	- 22,3967	0	414.599,83	3,99466	0,0167931	-63,7043	0	0,510587	1,43116
11	23,8195	- 22,3457	0	416.560,81	4,6209	0,0221096	-64,0656	0	0,510687	1,43241
11	23,9195	- 22,2946	0	417.362,88	5,17838	0,027421	-64,2042	0	0,510897	1,43286
11	24,0195	- 22,2435	0	417.839,23	5,68727	0,0327002	-64,3022	0	0,511066	1,43324
11	24,1195	- 22,1924	0	419.580,31	6,15878	0,0377722	-64,7769	0	0,51087	1,43542
11	24,2195	- 22,1413	0	422.708,41	6,60101	0,0425542	-65,6442	0	0,510338	1,43948
11	24,3195	- 22,0903	0	426.630,96	7,0196	0,0470701	-66,727	0	0,509658	1,44457
11	24,4195	- 22,0394	0	430.928,25	7,41856	0,0513578	-67,9041	0	0,508942	1,45016
11	24,5195	- 21,9885	0	435.371,82	7,80069	0,0554514	-69,112	0	0,508236	1,45594
11	24,61	-	0	439.84	8,1681	0,0593	-70,3195	0	0,5075	1,4617

	95	21,9377		4,89	2	768			53	7
11	24,71 95	-21,887	0	444.27 3,73	8,5229 5	0,0631 516	-71,5071	0	0,5069 08	1,4675 6
11	24,81 95	- 21,8364	0	448.61 8,37	8,8669 5	0,0667 888	-72,6646	0	0,5063 03	1,4732 5
11	24,91 95	- 21,7858	0	452.85 7,25	9,2013 4	0,0703 022	-73,7874	0	0,5057 39	1,4788 2
11	25,01 95	- 21,7352	0	456.97 7,23	9,5270 6	0,0737 046	-74,8728	0	0,5052 13	1,4842 5
11	25,11 95	- 21,6847	0	460.97 2,22	9,8450 2	0,0770 051	-75,9199	0	0,5047 25	1,4895 4
11	25,21 95	- 21,6343	0	464.84 1,88	10,155 6	0,0802 166	-76,9294	0	0,5042 71	1,4946 8
11	25,31 95	- 21,5839	0	468.58 5,82	10,459 5	0,0833 45	-77,9017	0	0,5038 49	1,4996 7
11	25,41 95	- 21,5335	0	472.20 6,09	10,757 5	0,0863 959	-78,8379	0	0,5034 58	1,5045 2
11	25,53 95	- 21,4731	0	476.39 3,32	11,107 8	0,0899 616	-79,9159	0	0,5030 27	1,5101 5
11	25,68 35	- 21,4007	0	481.19 7,44	11,519 5	0,0941 079	-81,1463	0	0,5025 61	1,5166 4
11	25,85 63	- 21,3139	0	486.66 6,81	12,001 5	0,0989 185	-82,5393	0	0,5020 67	1,5240 8
11	26,06 37	- 21,2099	0	492.83 0,72	12,565 4	0,1044 7	-84,0993	0	0,5015 6	1,5325 1
11	26,31 25	- 21,0851	0	499.70 4,74	13,223 2	0,1108 59	-85,8275	0	0,5010 58	1,542
11	26,61 11	- 20,9356	0	507.27 9,90	13,989 1	0,1181 82	-87,7185	0	0,5005 85	1,5525 6
11	26,96 94	- 20,7563	0	515.63 0,13	14,880 1	0,1264 98	-89,7894	0	0,5001 49	1,5643 6
11	27,39 94	- 20,5414	0	525.10 9,32	15,915 9	0,1357 36	-92,1305	0	0,4996 99	1,578
11	27,91 54	- 20,2837	0	536.45 9,55	17,117 5	0,1456 28	-94,929	0	0,4991 1	1,5948 1
11	28,53 45	- 19,9749	0	549.93 5,20	18,513 2	0,1559 71	-98,228	0	0,4984 13	1,6152 9
11	29,27	-	0	565.43	20,134	0,1667	-101,909	0	0,4977	1,6388



	75	19,6048		0,30	5	3			45	
11	30,16	-	0	582.49	22,013	0,1782	-105,599	0	0,4973	1,6622
	92	19,1612		7,44	5	75			09	7
11	31,23	-	0	600.53	24,186	0,1910	-109,014	0	0,4972	1,6832
	91	18,6292		9,22	3	61			76	3
11	32,52	-	0	618.88	26,695	0,2056	-111,938	0	0,4977	1,6996
	3	17,9904		2,54	8	17			84	2
11	34,06	-	0	636.95	29,634	0,2222	-114,196	0	0,4989	1,7095
	37	17,2225		9,36	4	13			42	2
11	35,91	-	0	654.06	33,225	0,2405	-115,547	0	0,5009	1,7103
	26	16,2981		6,68	8	52			92	9
11	38,13	-15,183	0	669.29	37,664	0,2611	-115,694	0	0,5042	1,6993
	12			2,10	6	32			15	9
11	40,79	-	0	681.57	43,121	0,2851	-114,364	0	0,5087	1,6746
	35	13,8348		3,99	6	95			77	3
11	43,98	-	0	689.79	49,795	0,3142	-111,377	0	0,5146	1,6361
	83	12,2001		9,27	1	71			41	6
11	47,82	-	0	692.88	57,920	0,3500	-106,683	0	0,5215	1,5863
	21	10,2137		0,90	9	57			85	5
11	52,42	-	0	689.77	67,782	0,3943	-100,366	0	0,5292	1,5292
	26	7,79597		1,66	9	42			83	8
11	57,94	-	0	679.17	79,664	0,4497	-92,4739	0	0,5374	1,4687
	32	4,85078		1,57	9	22			96	1
11	64,56	-1,2611	0	659.32	93,802	0,5203	-82,982	0	0,5460	1,4077
	79			2,18	8	42			46	5
11	72,51	3,11573	0	627.72	110,32	0,6133	-71,699	0	0,5549	1,3483
	76			7,93		99			08	5
11	82,05	8,45512	0	579.75	129,04	0,7441	-57,9828	0	0,5643	1,2908
	72			8,36	7	94			25	1
11	93,50	14,9777	0	501.90	148,91	0,9625	-39,6166	0	0,5752	1,2325
	48			1,02	7	73			31	4
11	106,5	22,5514	0	362.85	163,56	1,4814	-12,702	0	0,5901	1,1743
	14			6,18	1	2			95	2
11	106,5	22,5514	0	362.85	163,56	1,4814	-12,702	0	0,5901	1,1743
	14			6,18	1	2			95	2
11	107,2	22,9816	0	349.29	163,64	1,5477	-10,4874	0	0,5915	1,1709
	42			8,88	9	6			89	6
11	123,7	35,1301	0	126.26	165,73	3,2027	13,7213	0	0,8579	1,1666



	26			3,34		2			45	4
11	143,508	53,2362	0	94.680,10	166,721	3,87376	16,2746	0	0,95	1,16887
11	167,245	76,594	0	77.582,35	167,86	4,40704	17,6249	0	1,01773	1,17007
11	195,73	106,72	0	62.711,14	169,297	5,05086	18,6975	0	1,09404	1,17153
11	229,913	145,268	0	52.494,09	171,098	5,64712	19,5206	0	1,16049	1,17218
11	270,931	194,419	0	43.525,88	173,348	6,35181	21,0928	0	1,23481	1,16983
11	320,154	257,245	0	35.704,73	176,163	7,17173	22,2741	0	1,31719	1,16854
11	379,22	337,725	0	28.964,20	179,692	8,13697	23,1396	0	1,40714	1,16805
11	450,101	441,043	0	23.229,16	184,125	9,26642	23,7572	0	1,50676	1,16816
11	457,279	451,894	0	22.750,14	184,585	9,37944	23,8037	0	1,51639	1,16812
11	535,157	573,926	0	18.413,97	189,697	10,5916	24,1879	0	1,61645	1,16848
11	637,224	745,149	0	14.426,27	196,712	12,1451	24,4806	0	1,73692	1,16905
11	759,705	966,092	0	11.169,75	205,547	13,9621	24,6747	0	1,86874	1,16969
11	858,835	1156,27	0	9.288,35	212,995	15,3976	24,7679	0	1,96712	1,17014
12	46,839	-22,5514	0	1,00	0,00177245	0,794401	24,6396	0	0,605571	1,17396
12	46,939	-22,4988	0	388.842,10	2,31591	0,00628415	-58,0801	0	0,510986	1,40934
12	47,039	-22,4478	0	409.371,50	3,26022	0,0114917	-62,6669	0	0,510392	1,42735
12	47,139	-22,3967	0	414.599,83	3,99466	0,0167931	-63,7043	0	0,5105	1,43116
12	47,239	-22,3457	0	416.560,81	4,6209	0,0221096	-64,0656	0	0,510687	1,43241



12	47,33	-	0	417.36	5,1783	0,0274	-64,2042	0	0,5108	1,4328
	9	22,2946		2,88	8	21			97	6
12	47,43	-	0	417.83	5,6872	0,0327	-64,3022	0	0,5110	1,4332
	9	22,2435		9,23	7	002			66	4
12	47,53	-	0	419.58	6,1587	0,0377	-64,7769	0	0,5108	1,4354
	9	22,1924		0,31	8	722			7	2
12	47,63	-	0	422.70	6,6010	0,0425	-65,6442	0	0,5103	1,4394
	9	22,1413		8,41	1	542			38	8
12	47,73	-	0	426.63	7,0196	0,0470	-66,727	0	0,5096	1,4445
	9	22,0903		0,96		701			58	7
12	47,83	-	0	430.92	7,4185	0,0513	-67,9041	0	0,5089	1,4501
	9	22,0394		8,25	6	578			42	6
12	47,93	-	0	435.37	7,8006	0,0554	-69,112	0	0,5082	1,4559
	9	21,9885		1,82	9	514			36	4
12	48,03	-	0	439.84	8,1681	0,0593	-70,3195	0	0,5075	1,4617
	9	21,9377		4,89	2	768			53	7
12	48,13	-21,887	0	444.27	8,5229	0,0631	-71,5071	0	0,5069	1,4675
	9			3,73	5	516			08	6
12	48,23	-	0	448.61	8,8669	0,0667	-72,6646	0	0,5063	1,4732
	9	21,8364		8,37	5	888			03	5
12	48,33	-	0	452.85	9,2013	0,0703	-73,7874	0	0,5057	1,4788
	9	21,7858		7,25	4	022			39	2
12	48,43	-	0	456.97	9,5270	0,0737	-74,8728	0	0,5052	1,4842
	9	21,7352		7,23	6	046			13	5
12	48,53	-	0	460.97	9,8450	0,0770	-75,9199	0	0,5047	1,4895
	9	21,6847		2,22	2	051			25	4
12	48,63	-	0	464.84	10,155	0,0802	-76,9294	0	0,5042	1,4946
	9	21,6343		1,88	6	166			71	8
12	48,73	-	0	468.58	10,459	0,0833	-77,9017	0	0,5038	1,4996
	9	21,5839		5,82	5	45			49	7
12	48,83	-	0	472.20	10,757	0,0863	-78,8379	0	0,5034	1,5045
	9	21,5335		6,09	5	959			58	2
12	48,95	-	0	476.39	11,107	0,0899	-79,9159	0	0,5030	1,5101
	9	21,4731		3,32	8	616			27	5
12	49,10	-	0	481.19	11,519	0,0941	-81,1463	0	0,5025	1,5166
	3	21,4007		7,44	5	079			61	4
12	49,27	-	0	486.66	12,001	0,0989	-82,5393	0	0,5020	1,5240
	58	21,3139		6,81	5	185			67	8



12	49,48 32	- 21,2099	0	492.83 0,72	12,565 4	0,1044 7	-84,0993	0	0,5015 6	1,5325 1
12	49,73 2	- 21,0851	0	499.70 4,74	13,223 2	0,1108 59	-85,8275	0	0,5010 58	1,542
12	50,03 06	- 20,9356	0	507.27 9,90	13,989 1	0,1181 82	-87,7185	0	0,5005 85	1,5525 6
12	50,38 89	- 20,7563	0	515.63 0,13	14,880 1	0,1264 98	-89,7894	0	0,5001 49	1,5643 6
12	50,81 89	- 20,5414	0	525.10 9,32	15,915 9	0,1357 36	-92,1305	0	0,4996 99	1,578
12	51,33 49	- 20,2837	0	536.45 9,55	17,117 5	0,1456 28	-94,929	0	0,4991 1	1,5948 1
12	51,95 4	- 19,9749	0	549.93 5,20	18,513 2	0,1559 71	-98,228	0	0,4984 13	1,6152 9
12	52,69 7	- 19,6048	0	565.43 0,30	20,134 5	0,1667 3	-101,909	0	0,4977 45	1,6388
12	53,58 87	- 19,1612	0	582.49 7,44	22,013 5	0,1782 75	-105,599	0	0,4973 09	1,6622 7
12	54,65 86	- 18,6292	0	600.53 9,22	24,186 3	0,1910 61	-109,014	0	0,4972 76	1,6832 3
12	55,94 25	- 17,9904	0	618.88 2,54	26,695 8	0,2056 17	-111,938	0	0,4977 84	1,6996 2
12	57,48 32	- 17,2225	0	636.95 9,36	29,634 4	0,2222 13	-114,196	0	0,4989 42	1,7095 2
12	59,33 2	- 16,2981	0	654.06 6,68	33,225 8	0,2405 52	-115,547	0	0,5009 92	1,7103 9
12	61,55 07	-15,183	0	669.29 2,10	37,664 6	0,2611 32	-115,694	0	0,5042 15	1,6993 9
12	64,21 3	- 13,8348	0	681.57 3,99	43,121 6	0,2851 95	-114,364	0	0,5087 77	1,6746 3
12	67,40 78	- 12,2001	0	689.79 9,27	49,795 1	0,3142 71	-111,377	0	0,5146 41	1,6361 6
12	71,24 16	- 10,2137	0	692.88 0,90	57,920 9	0,3500 57	-106,683	0	0,5215 85	1,5863 5
12	75,84 21	- 7,79597	0	689.77 1,66	67,782 9	0,3943 42	-100,366	0	0,5292 83	1,5292 8
12	81,36 27	- 4,85078	0	679.17 1,57	79,664 9	0,4497 22	-92,4739	0	0,5374 96	1,4687 1



12	87,98 74	-1,2611	0	659.32 2,18	93,802 8	0,5203 42	-82,982	0	0,5460 46	1,4077 5
12	95,93 71	3,11573	0	627.72 7,93	110,32	0,6133 99	-71,699	0	0,5549 08	1,3483 5
12	105,4 77	8,45512	0	579.75 8,36	129,04 7	0,7441 94	-57,9828	0	0,5643 25	1,2908 1
12	116,9 24	14,9777	0	501.90 1,02	148,91 7	0,9625 73	-39,6166	0	0,5752 31	1,2325 4
12	129,9 33	22,5514	0	362.85 6,17	163,56 1	1,4814 2	-12,702	0	0,5901 95	1,1743 2
12	129,9 33	22,5514	0	362.85 6,17	163,56 1	1,4814 2	-12,702	0	0,5901 95	1,1743 2
12	130,6 61	22,9816	0	349.29 8,88	163,64 9	1,5477 6	-10,4874	0	0,5915 89	1,1709 6
12	147,1 46	35,1301	0	126.26 3,34	165,73	3,2027 2	13,7213	0	0,8579 45	1,1666 4
12	166,9 27	53,2362	0	94.680, 10	166,72 1	3,8737 6	16,2746	0	0,95	1,1688 7
12	190,6 65	76,594	0	77.582, 35	167,86	4,4070 4	17,6249	0	1,0177 3	1,1700 7
12	219,1 5	106,72	0	62.711, 14	169,29 7	5,0508 6	18,6975	0	1,0940 4	1,1715 3
12	253,3 32	145,268	0	52.494, 08	171,09 8	5,6471 2	19,5206	0	1,1604 9	1,1721 8
12	294,3 51	194,419	0	43.525, 88	173,34 8	6,3518 1	21,0928	0	1,2348 1	1,1698 3
12	343,5 73	257,245	0	35.704, 73	176,16 3	7,1717 3	22,2741	0	1,3171 9	1,1685 4
12	402,6 4	337,725	0	28.964, 20	179,69 2	8,1369 7	23,1396	0	1,4071 4	1,1680 5
12	473,5 2	441,044	0	23.229, 16	184,12 5	9,2664 2	23,7572	0	1,5067 6	1,1681
12	480,6 98	451,894	0	22.750, 15	184,58 5	9,3794 4	23,8037	0	1,5163 9	1,1681 2
12	558,5 76	573,926	0	18.413, 98	189,69 7	10,591 6	24,1879	0	1,6164 5	1,1684 8
12	660,6 44	745,149	0	14.426, 28	196,71 2	12,145 1	24,4806	0	1,7369 2	1,1690 5



12	783,125	966,092	0	11.169,75	205,547	13,9621	24,6747	0	1,86874	1,16969
12	882,255	1156,27	0	9.288,36	212,995	15,3976	24,7679	0	1,96712	1,17014
12	882,261	1156,28	0	9.288,26	212,995	15,3977	24,7679	0	1,96712	1,17014
13	70,2585	-22,5514	0	1,00	0,00177245	0,794401	24,6396	0	0,605571	1,17396
13	70,3585	-22,4988	0	388.842,10	2,31591	0,00628415	-58,0801	0	0,510986	1,40934
13	70,4585	-22,4478	0	409.371,50	3,26022	0,0114917	-62,6669	0	0,510392	1,42735
13	70,5585	-22,3967	0	414.599,83	3,99466	0,0167931	-63,7043	0	0,5105	1,43116
13	70,6585	-22,3457	0	416.560,81	4,6209	0,0221096	-64,0656	0	0,510687	1,43241
13	70,7585	-22,2946	0	417.362,88	5,17838	0,027421	-64,2042	0	0,510897	1,43286
13	70,8585	-22,2435	0	417.839,23	5,68727	0,0327002	-64,3022	0	0,511066	1,43324
13	70,9585	-22,1924	0	419.580,31	6,15878	0,0377722	-64,7769	0	0,51087	1,43542
13	71,0585	-22,1413	0	422.708,41	6,60101	0,0425542	-65,6442	0	0,510338	1,43948
13	71,1585	-22,0903	0	426.630,96	7,0196	0,0470701	-66,727	0	0,509658	1,44457
13	71,2585	-22,0394	0	430.928,25	7,41856	0,0513578	-67,9041	0	0,508942	1,45016
13	71,3585	-21,9885	0	435.371,82	7,80069	0,0554514	-69,112	0	0,508236	1,45594
13	71,4585	-21,9377	0	439.844,89	8,16812	0,0593768	-70,3195	0	0,507553	1,46177
13	71,5585	-21,887	0	444.273,73	8,52295	0,0631516	-71,5071	0	0,506908	1,46756
13	71,6585	-21,8364	0	448.618,37	8,86695	0,0667888	-72,6646	0	0,506303	1,47325
13	71,75	-	0	452.85	9,2013	0,0703	-73,7874	0	0,5057	1,4788



	85	21,7858		7,25	4	022			39	2
13	71,85	-	0	456.97	9,5270	0,0737	-74,8728	0	0,5052	1,4842
	85	21,7352		7,23	6	046			13	5
13	71,95	-	0	460.97	9,8450	0,0770	-75,9199	0	0,5047	1,4895
	85	21,6847		2,22	2	051			25	4
13	72,05	-	0	464.84	10,155	0,0802	-76,9294	0	0,5042	1,4946
	85	21,6343		1,88	6	166			71	8
13	72,15	-	0	468.58	10,459	0,0833	-77,9017	0	0,5038	1,4996
	85	21,5839		5,82	5	45			49	7
13	72,25	-	0	472.20	10,757	0,0863	-78,8379	0	0,5034	1,5045
	85	21,5335		6,09	5	959			58	2
13	72,37	-	0	476.39	11,107	0,0899	-79,9159	0	0,5030	1,5101
	85	21,4731		3,32	8	616			27	5
13	72,52	-	0	481.19	11,519	0,0941	-81,1463	0	0,5025	1,5166
	25	21,4007		7,44	5	079			61	4
13	72,69	-	0	486.66	12,001	0,0989	-82,5393	0	0,5020	1,5240
	53	21,3139		6,81	5	185			67	8
13	72,90	-	0	492.83	12,565	0,1044	-84,0993	0	0,5015	1,5325
	26	21,2099		0,72	4	7			6	1
13	73,15	-	0	499.70	13,223	0,1108	-85,8275	0	0,5010	1,542
	15	21,0851		4,74	2	59			58	
13	73,45	-	0	507.27	13,989	0,1181	-87,7185	0	0,5005	1,5525
	01	20,9356		9,90	1	82			85	6
13	73,80	-	0	515.63	14,880	0,1264	-89,7894	0	0,5001	1,5643
	84	20,7563		0,13	1	98			49	6
13	74,23	-	0	525.10	15,915	0,1357	-92,1305	0	0,4996	1,578
	84	20,5414		9,32	9	36			99	
13	74,75	-	0	536.45	17,117	0,1456	-94,929	0	0,4991	1,5948
	44	20,2837		9,55	5	28			1	1
13	75,37	-	0	549.93	18,513	0,1559	-98,228	0	0,4984	1,6152
	35	19,9749		5,20	2	71			13	9
13	76,11	-	0	565.43	20,134	0,1667	-101,909	0	0,4977	1,6388
	65	19,6048		0,30	5	3			45	
13	77,00	-	0	582.49	22,013	0,1782	-105,599	0	0,4973	1,6622
	81	19,1612		7,44	5	75			09	7
13	78,07	-	0	600.53	24,186	0,1910	-109,014	0	0,4972	1,6832
	81	18,6292		9,22	3	61			76	3
13	79,36	-	0	618.88	26,695	0,2056	-111,938	0	0,4977	1,6996



	2	17,9904		2,54	8	17			84	2
13	80,90	-	0	636.95	29,634	0,2222	-114,196	0	0,4989	1,7095
	27	17,2225		9,36	4	13			42	2
13	82,75	-	0	654.06	33,225	0,2405	-115,547	0	0,5009	1,7103
	15	16,2981		6,68	8	52			92	9
13	84,97	-15,183	0	669.29	37,664	0,2611	-115,694	0	0,5042	1,6993
	02			2,10	6	32			15	9
13	87,63	-	0	681.57	43,121	0,2851	-114,364	0	0,5087	1,6746
	25	13,8348		3,99	6	95			77	3
13	90,82	-	0	689.79	49,795	0,3142	-111,377	0	0,5146	1,6361
	73	12,2001		9,27	1	71			41	6
13	94,66	-	0	692.88	57,920	0,3500	-106,683	0	0,5215	1,5863
	1	10,2137		0,90	9	57			85	5
13	99,26	-	0	689.77	67,782	0,3943	-100,366	0	0,5292	1,5292
	16	7,79597		1,66	9	42			83	8
13	104,7	-	0	679.17	79,664	0,4497	-92,4739	0	0,5374	1,4687
	82	4,85078		1,57	9	22			96	1
13	111,4	-1,2611	0	659.32	93,802	0,5203	-82,982	0	0,5460	1,4077
	07			2,18	8	42			46	5
13	119,3	3,11573	0	627.72	110,32	0,6133	-71,699	0	0,5549	1,3483
	57			7,93		99			08	5
13	128,8	8,45512	0	579.75	129,04	0,7441	-57,9828	0	0,5643	1,2908
	96			8,36	7	94			25	1
13	140,3	14,9777	0	501.90	148,91	0,9625	-39,6166	0	0,5752	1,2325
	44			1,02	7	73			31	4
13	153,3	22,5514	0	362.85	163,56	1,4814	-12,702	0	0,5901	1,1743
	53			6,17	1	2			95	2
13	153,3	22,5514	0	362.85	163,56	1,4814	-12,702	0	0,5901	1,1743
	53			6,17	1	2			95	2
13	154,0	22,9816	0	349.29	163,64	1,5477	-10,4874	0	0,5915	1,1709
	81			8,88	9	6			89	6
13	170,5	35,1301	0	126.26	165,73	3,2027	13,7213	0	0,8579	1,1666
	65			3,34		2			45	4
13	190,3	53,2362	0	94.680,	166,72	3,8737	16,2746	0	0,95	1,1688
	47			10	1	6				7
13	214,0	76,594	0	77.582,	167,86	4,4070	17,6249	0	1,0177	1,1700
	84			35		4			3	7
13	242,5	106,72	0	62.711,	169,29	5,0508	18,6975	0	1,0940	1,1715



	69			14	7	6			4	3
13	276,752	145,268	0	52.494,08	171,098	5,64712	19,5206	0	1,16049	1,17218
13	317,77	194,419	0	43.525,87	173,348	6,35182	21,0928	0	1,23481	1,16983
13	366,993	257,245	0	35.704,73	176,163	7,17173	22,2741	0	1,31719	1,16854
13	426,059	337,725	0	28.964,20	179,692	8,13697	23,1396	0	1,40714	1,16805
13	496,94	441,044	0	23.229,16	184,125	9,26642	23,7572	0	1,50676	1,1681
13	504,18	451,894	0	22.750,14	184,585	9,37944	23,8037	0	1,51639	1,16812
13	581,996	573,926	0	18.413,97	189,697	10,5916	24,1879	0	1,61645	1,16848
13	684,063	745,149	0	14.426,27	196,712	12,1451	24,4806	0	1,73692	1,16905
13	806,544	966,092	0	11.169,75	205,547	13,9621	24,6747	0	1,86874	1,16969
13	905,674	1156,27	0	9.288,35	212,995	15,3976	24,7679	0	1,96712	1,17014
13	905,686	1156,3	0	9.288,16	212,996	15,3977	24,7679	0	1,96713	1,17014
14	93,678	-22,5514	0	1,00	0,00177245	0,794401	24,6396	0	0,605571	1,17396
14	93,778	-22,4988	0	388.842,10	2,31591	0,00628415	-58,0801	0	0,510986	1,40934
14	93,878	-22,4478	0	409.371,50	3,26022	0,0114917	-62,6669	0	0,510392	1,42735
14	93,978	-22,3967	0	414.599,83	3,99466	0,0167931	-63,7043	0	0,5105	1,43116
14	94,078	-22,3457	0	416.560,81	4,6209	0,0221096	-64,0656	0	0,510687	1,43241
14	94,178	-22,2946	0	417.362,88	5,17838	0,027421	-64,2042	0	0,510897	1,43286
14	94,278	-22,2435	0	417.839,23	5,68727	0,0327002	-64,3022	0	0,511066	1,43324



14	94,378	-	0	419.580,31	6,15878	0,0377722	-64,7769	0	0,51087	1,43542
14	94,478	-	0	422.708,41	6,60101	0,0425542	-65,6442	0	0,510338	1,43948
14	94,578	-	0	426.630,96	7,0196	0,0470701	-66,727	0	0,509658	1,44457
14	94,678	-	0	430.928,25	7,41856	0,0513578	-67,9041	0	0,508942	1,45016
14	94,778	-	0	435.371,82	7,80069	0,0554514	-69,112	0	0,508236	1,45594
14	94,878	-	0	439.844,89	8,16812	0,0593768	-70,3195	0	0,507553	1,46177
14	94,978	-21,887	0	444.273,73	8,52295	0,0631516	-71,5071	0	0,506908	1,46756
14	95,078	-	0	448.618,37	8,86695	0,0667888	-72,6646	0	0,506303	1,47325
14	95,178	-	0	452.857,25	9,20134	0,0703022	-73,7874	0	0,505739	1,47882
14	95,278	-	0	456.977,23	9,52706	0,0737046	-74,8728	0	0,505213	1,48425
14	95,378	-	0	460.972,22	9,84502	0,0770051	-75,9199	0	0,504725	1,48954
14	95,478	-	0	464.841,88	10,1556	0,0802166	-76,9294	0	0,504271	1,49468
14	95,578	-	0	468.585,82	10,4595	0,083345	-77,9017	0	0,503849	1,49967
14	95,678	-	0	472.206,09	10,7575	0,0863959	-78,8379	0	0,503458	1,50452
14	95,798	-	0	476.393,32	11,1078	0,0899616	-79,9159	0	0,503027	1,51015
14	95,942	-	0	481.197,44	11,5195	0,0941079	-81,1463	0	0,502561	1,51664
14	96,1148	-	0	486.666,81	12,0015	0,0989185	-82,5393	0	0,502067	1,52408
14	96,3221	-	0	492.830,72	12,5654	0,10447	-84,0993	0	0,50156	1,53251
14	96,571	-	0	499.704,74	13,2232	0,110859	-85,8275	0	0,501058	1,542

14	96,86 96	- 20,9356	0	507.27 9,90	13,989 1	0,1181 82	-87,7185	0	0,5005 85	1,5525 6
14	97,22 79	- 20,7563	0	515.63 0,13	14,880 1	0,1264 98	-89,7894	0	0,5001 49	1,5643 6
14	97,65 79	- 20,5414	0	525.10 9,32	15,915 9	0,1357 36	-92,1305	0	0,4996 99	1,578
14	98,17 39	- 20,2837	0	536.45 9,55	17,117 5	0,1456 28	-94,929	0	0,4991 1	1,5948 1
14	98,79 3	- 19,9749	0	549.93 5,20	18,513 2	0,1559 71	-98,228	0	0,4984 13	1,6152 9
14	99,53 6	- 19,6048	0	565.43 0,30	20,134 5	0,1667 3	-101,909	0	0,4977 45	1,6388
14	100,4 28	- 19,1612	0	582.49 7,44	22,013 5	0,1782 75	-105,599	0	0,4973 09	1,6622 7
14	101,4 98	- 18,6292	0	600.53 9,22	24,186 3	0,1910 61	-109,014	0	0,4972 76	1,6832 3
14	102,7 81	- 17,9904	0	618.88 2,54	26,695 8	0,2056 17	-111,938	0	0,4977 84	1,6996 2
14	104,3 22	- 17,2225	0	636.95 9,36	29,634 4	0,2222 13	-114,196	0	0,4989 42	1,7095 2
14	106,1 71	- 16,2981	0	654.06 6,68	33,225 8	0,2405 52	-115,547	0	0,5009 92	1,7103 9
14	108,3 9	-15,183	0	669.29 2,10	37,664 6	0,2611 32	-115,694	0	0,5042 15	1,6993 9
14	111,0 52	- 13,8348	0	681.57 3,99	43,121 6	0,2851 95	-114,364	0	0,5087 77	1,6746 3
14	114,2 47	- 12,2001	0	689.79 9,27	49,795 1	0,3142 71	-111,377	0	0,5146 41	1,6361 6
14	118,0 81	- 10,2137	0	692.88 0,90	57,920 9	0,3500 57	-106,683	0	0,5215 85	1,5863 5
14	122,6 81	- 7,79597	0	689.77 1,66	67,782 9	0,3943 42	-100,366	0	0,5292 83	1,5292 8
14	128,2 02	- 4,85078	0	679.17 1,57	79,664 9	0,4497 22	-92,4739	0	0,5374 96	1,4687 1
14	134,8 26	-1,2611	0	659.32 2,18	93,802 8	0,5203 42	-82,982	0	0,5460 46	1,4077 5
14	142,7 76	3,11573	0	627.72 7,93	110,32	0,6133 99	-71,699	0	0,5549 08	1,3483 5



14	152,3 16	8,45512	0	579.75 8,36	129,04 7	0,7441 94	-57,9828	0	0,5643 25	1,2908 1
14	163,7 63	14,9777	0	501.90 1,02	148,91 7	0,9625 73	-39,6166	0	0,5752 31	1,2325 4
14	176,7 72	22,5514	0	362.85 6,17	163,56 1	1,4814 2	-12,702	0	0,5901 95	1,1743 2
14	176,7 72	22,5514	0	362.85 6,17	163,56 1	1,4814 2	-12,702	0	0,5901 95	1,1743 2
14	177,5	22,9816	0	349.29 8,87	163,64 9	1,5477 6	-10,4874	0	0,5915 89	1,1709 6
14	193,9 85	35,1301	0	126.26 3,34	165,73	3,2027 2	13,7213	0	0,8579 45	1,1666 4
14	213,7 66	53,2362	0	94.680, 10	166,72 1	3,8737 6	16,2746	0	0,95	1,1688 7
14	237,5 04	76,594	0	77.582, 35	167,86	4,4070 4	17,6249	0	1,0177 3	1,1700 7
14	265,9 89	106,72	0	62.711, 14	169,29 7	5,0508 6	18,6975	0	1,0940 4	1,1715 3
14	300,1 71	145,268	0	52.494, 08	171,09 8	5,6471 2	19,5206	0	1,1604 9	1,1721 8
14	341,1 9	194,419	0	43.525, 88	173,34 8	6,3518 2	21,0928	0	1,2348 1	1,1698 3
14	390,4 12	257,245	0	35.704, 73	176,16 3	7,1717 3	22,2741	0	1,3171 9	1,1685 4
14	449,4 79	337,725	0	28.964, 20	179,69 2	8,1369 7	23,1396	0	1,4071 4	1,1680 5
14	520,3 59	441,044	0	23.229, 16	184,12 5	9,2664 2	23,7572	0	1,5067 6	1,1681
14	527,5 37	451,894	0	22.750, 14	184,58 5	9,3794 4	23,8037	0	1,5163 9	1,1681 2
14	605,4 15	573,926	0	18.413, 97	189,69 7	10,591 6	24,1879	0	1,6164 5	1,1684 8
14	707,4 83	745,149	0	14.426, 27	196,71 2	12,145 1	24,4806	0	1,7369 2	1,1690 5
14	829,9 64	966,092	0	11.169, 75	205,54 7	13,962 1	24,6747	0	1,8687 4	1,1696 9
14	929,0 94	1156,27	0	9.288,3 5	212,99 5	15,397 6	24,7679	0	1,9671 2	1,1701 4



14	929,1 11	1156,31	0	9.288,0 6	212,99 6	15,397 8	24,7679	0	1,9671 4	1,1701 4
15	117,0 97	- 22,5514	0	1,00	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
15	117,1 97	- 22,4988	0	388.84 2,10	2,3159 1	0,0062 8415	-58,0801	0	0,5109 86	1,4093 4
15	117,2 97	- 22,4478	0	409.37 1,50	3,2602 2	0,0114 917	-62,6669	0	0,5103 92	1,4273 5
15	117,3 97	- 22,3967	0	414.59 9,83	3,9946 6	0,0167 931	-63,7043	0	0,5105	1,4311 6
15	117,4 97	- 22,3457	0	416.56 0,81	4,6209	0,0221 096	-64,0656	0	0,5106 87	1,4324 1
15	117,5 97	- 22,2946	0	417.36 2,88	5,1783 8	0,0274 21	-64,2042	0	0,5108 97	1,4328 6
15	117,6 97	- 22,2435	0	417.83 9,23	5,6872 7	0,0327 002	-64,3022	0	0,5110 66	1,4332 4
15	117,7 97	- 22,1924	0	419.58 0,31	6,1587 8	0,0377 722	-64,7769	0	0,5108 7	1,4354 2
15	117,8 97	- 22,1413	0	422.70 8,41	6,6010 1	0,0425 542	-65,6442	0	0,5103 38	1,4394 8
15	117,9 97	- 22,0903	0	426.63 0,96	7,0196	0,0470 701	-66,727	0	0,5096 58	1,4445 7
15	118,0 97	- 22,0394	0	430.92 8,25	7,4185 6	0,0513 578	-67,9041	0	0,5089 42	1,4501 6
15	118,1 97	- 21,9885	0	435.37 1,82	7,8006 9	0,0554 514	-69,112	0	0,5082 36	1,4559 4
15	118,2 97	- 21,9377	0	439.84 4,89	8,1681 2	0,0593 768	-70,3195	0	0,5075 53	1,4617 7
15	118,3 97	-21,887	0	444.27 3,73	8,5229 5	0,0631 516	-71,5071	0	0,5069 08	1,4675 6
15	118,4 97	- 21,8364	0	448.61 8,37	8,8669 5	0,0667 888	-72,6646	0	0,5063 03	1,4732 5
15	118,5 97	- 21,7858	0	452.85 7,25	9,2013 4	0,0703 022	-73,7874	0	0,5057 39	1,4788 2
15	118,6 97	- 21,7352	0	456.97 7,23	9,5270 6	0,0737 046	-74,8728	0	0,5052 13	1,4842 5
15	118,7	-	0	460.97	9,8450	0,0770	-75,9199	0	0,5047	1,4895

	97	21,6847		2,22	2	051			25	4
15	118,8 97	- 21,6343	0	464.84 1,88	10,155 6	0,0802 166	-76,9294	0	0,5042 71	1,4946 8
15	118,9 97	- 21,5839	0	468.58 5,82	10,459 5	0,0833 45	-77,9017	0	0,5038 49	1,4996 7
15	119,0 97	- 21,5335	0	472.20 6,09	10,757 5	0,0863 959	-78,8379	0	0,5034 58	1,5045 2
15	119,2 17	- 21,4731	0	476.39 3,32	11,107 8	0,0899 616	-79,9159	0	0,5030 27	1,5101 5
15	119,3 61	- 21,4007	0	481.19 7,44	11,519 5	0,0941 079	-81,1463	0	0,5025 61	1,5166 4
15	119,5 34	- 21,3139	0	486.66 6,81	12,001 5	0,0989 185	-82,5393	0	0,5020 67	1,5240 8
15	119,7 42	- 21,2099	0	492.83 0,72	12,565 4	0,1044 7	-84,0993	0	0,5015 6	1,5325 1
15	119,9 9	- 21,0851	0	499.70 4,74	13,223 2	0,1108 59	-85,8275	0	0,5010 58	1,542 58
15	120,2 89	- 20,9356	0	507.27 9,90	13,989 1	0,1181 82	-87,7185	0	0,5005 85	1,5525 6
15	120,6 47	- 20,7563	0	515.63 0,13	14,880 1	0,1264 98	-89,7894	0	0,5001 49	1,5643 6
15	121,0 77	- 20,5414	0	525.10 9,32	15,915 9	0,1357 36	-92,1305	0	0,4996 99	1,578 99
15	121,5 93	- 20,2837	0	536.45 9,55	17,117 5	0,1456 28	-94,929	0	0,4991 1	1,5948 1
15	122,2 13	- 19,9749	0	549.93 5,20	18,513 2	0,1559 71	-98,228	0	0,4984 13	1,6152 9
15	122,9 56	- 19,6048	0	565.43 0,30	20,134 5	0,1667 3	-101,909	0	0,4977 45	1,6388 45
15	123,8 47	- 19,1612	0	582.49 7,44	22,013 5	0,1782 75	-105,599	0	0,4973 09	1,6622 7
15	124,9 17	- 18,6292	0	600.53 9,22	24,186 3	0,1910 61	-109,014	0	0,4972 76	1,6832 3
15	126,2 01	- 17,9904	0	618.88 2,54	26,695 8	0,2056 17	-111,938	0	0,4977 84	1,6996 2
15	127,7 42	- 17,2225	0	636.95 9,36	29,634 4	0,2222 13	-114,196	0	0,4989 42	1,7095 2
15	129,5	-	0	654.06	33,225	0,2405	-115,547	0	0,5009	1,7103



	91	16,2981		6,68	8	52			92	9
15	131,809	-15,183	0	669.292,10	37,6646	0,261132	-115,694	0	0,504215	1,69939
15	134,471	-13,8348	0	681.573,99	43,1216	0,285195	-114,364	0	0,508777	1,67463
15	137,666	-12,2001	0	689.799,27	49,7951	0,314271	-111,377	0	0,514641	1,63616
15	141,5	-10,2137	0	692.880,90	57,9209	0,350057	-106,683	0	0,521585	1,58635
15	146,101	-7,79597	0	689.771,66	67,7829	0,394342	-100,366	0	0,529283	1,52928
15	151,621	-4,85078	0	679.171,57	79,6649	0,449722	-92,4739	0	0,537496	1,46871
15	158,246	-1,2611	0	659.322,18	93,8028	0,520342	-82,982	0	0,546046	1,40775
15	166,196	3,11573	0	627.727,93	110,32	0,613399	-71,699	0	0,554908	1,34835
15	175,735	8,45512	0	579.758,36	129,047	0,744194	-57,9828	0	0,564325	1,29081
15	187,183	14,9777	0	501.901,02	148,917	0,962573	-39,6166	0	0,575231	1,23254
15	200,192	22,5514	0	362.856,17	163,561	1,48142	-12,702	0	0,590195	1,17432
15	200,192	22,5514	0	362.856,17	163,561	1,48142	-12,702	0	0,590195	1,17432
15	200,92	22,9816	0	349.396,76	163,649	1,54776	-10,4874	0	0,591589	1,17096
15	217,404	35,1301	0	128.248,46	165,73	3,20272	13,7213	0	0,857945	1,16664
15	237,186	53,2362	0	94.212,24	166,721	3,87376	16,2746	0	0,95	1,16887
15	260,923	76,594	0	75.433,08	167,86	4,40704	17,6249	0	1,01773	1,17007
15	289,408	106,72	0	59.489,78	169,297	5,05086	18,6975	0	1,09404	1,17153
15	323,591	145,268	0	48.548,63	171,098	5,64712	19,5206	0	1,16049	1,17218
15	364,6	194,419	0	39.191,	173,34	6,3518	21,0928	0	1,2348	1,1698



	09			73	8	2			1	3
15	413,8 32	257,245	0	31.268, 24	176,16 3	7,1717 3	22,2741	0	1,3171 9	1,1685 4
15	472,8 98	337,725	0	24.647, 92	179,69 2	8,1369 7	23,1396	0	1,4071 4	1,1680 5
15	543,7 79	441,044	0	19.100, 67	184,12 5	9,2664 2	23,7572	0	1,5067 6	1,1681
15	550,9 56	451,894	0	18.646, 54	184,58 5	9,3794 4	23,8037	0	1,5163 9	1,1681 2
15	628,8 35	573,926	0	14.799, 00	189,69 7	10,591 6	24,1879	0	1,6164 5	1,1684 8
15	730,9 02	745,149	0	11.244, 02	196,71 2	12,145 1	24,4806	0	1,7369 2	1,1690 5
15	853,3 83	966,092	0	8.427,1 0	205,54 7	13,962 1	24,6747	0	1,8687 4	1,1696 9
15	952,5 13	1156,27	0	6.826,2 3	212,99 5	15,397 6	24,7679	0	1,9671 2	1,1701 4
15	952,5 37	1156,32	0	6.825,9 4	212,99 6	15,397 9	24,7679	0	1,9671 4	1,1701 4
16	140,5 17	- 22,5514	0	1,00	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
16	140,6 17	- 22,4988	0	388.84 2,10	2,3159 1	0,0062 8415	-58,0801	0	0,5109 86	1,4093 4
16	140,7 17	- 22,4478	0	409.37 1,50	3,2602 2	0,0114 917	-62,6669	0	0,5103 92	1,4273 5
16	140,8 17	- 22,3967	0	414.59 9,83	3,9946 6	0,0167 931	-63,7043	0	0,5105	1,4311 6
16	140,9 17	- 22,3457	0	416.56 0,81	4,6209	0,0221 096	-64,0656	0	0,5106 87	1,4324 1
16	141,0 17	- 22,2946	0	417.36 2,88	5,1783 8	0,0274 21	-64,2042	0	0,5108 97	1,4328 6
16	141,1 17	- 22,2435	0	417.83 9,23	5,6872 7	0,0327 002	-64,3022	0	0,5110 66	1,4332 4
16	141,2 17	- 22,1924	0	419.58 0,31	6,1587 8	0,0377 722	-64,7769	0	0,5108 7	1,4354 2
16	141,3 17	- 22,1413	0	422.70 8,41	6,6010 1	0,0425 542	-65,6442	0	0,5103 38	1,4394 8



16	141,4	-	0	426.63	7,0196	0,0470	-66,727	0	0,5096	1,4445
	17	22,0903		0,96		701			58	7
16	141,5	-	0	430.92	7,4185	0,0513	-67,9041	0	0,5089	1,4501
	17	22,0394		8,25	6	578			42	6
16	141,6	-	0	435.37	7,8006	0,0554	-69,112	0	0,5082	1,4559
	17	21,9885		1,82	9	514			36	4
16	141,7	-	0	439.84	8,1681	0,0593	-70,3195	0	0,5075	1,4617
	17	21,9377		4,89	2	768			53	7
16	141,8	-21,887	0	444.27	8,5229	0,0631	-71,5071	0	0,5069	1,4675
	17			3,73	5	516			08	6
16	141,9	-	0	448.61	8,8669	0,0667	-72,6646	0	0,5063	1,4732
	17	21,8364		8,37	5	888			03	5
16	142,0	-	0	452.85	9,2013	0,0703	-73,7874	0	0,5057	1,4788
	17	21,7858		7,25	4	022			39	2
16	142,1	-	0	456.97	9,5270	0,0737	-74,8728	0	0,5052	1,4842
	17	21,7352		7,23	6	046			13	5
16	142,2	-	0	460.97	9,8450	0,0770	-75,9199	0	0,5047	1,4895
	17	21,6847		2,22	2	051			25	4
16	142,3	-	0	464.84	10,155	0,0802	-76,9294	0	0,5042	1,4946
	17	21,6343		1,88	6	166			71	8
16	142,4	-	0	468.58	10,459	0,0833	-77,9017	0	0,5038	1,4996
	17	21,5839		5,82	5	45			49	7
16	142,5	-	0	472.20	10,757	0,0863	-78,8379	0	0,5034	1,5045
	17	21,5335		6,09	5	959			58	2
16	142,6	-	0	476.39	11,107	0,0899	-79,9159	0	0,5030	1,5101
	37	21,4731		3,32	8	616			27	5
16	142,7	-	0	481.19	11,519	0,0941	-81,1463	0	0,5025	1,5166
	81	21,4007		7,44	5	079			61	4
16	142,9	-	0	486.66	12,001	0,0989	-82,5393	0	0,5020	1,5240
	54	21,3139		6,81	5	185			67	8
16	143,1	-	0	492.83	12,565	0,1044	-84,0993	0	0,5015	1,5325
	61	21,2099		0,72	4	7			6	1
16	143,4	-	0	499.70	13,223	0,1108	-85,8275	0	0,5010	1,542
	1	21,0851		4,74	2	59			58	
16	143,7	-	0	507.27	13,989	0,1181	-87,7185	0	0,5005	1,5525
	09	20,9356		9,90	1	82			85	6
16	144,0	-	0	515.63	14,880	0,1264	-89,7894	0	0,5001	1,5643
	67	20,7563		0,13	1	98			49	6

16	144,497	-20,5414	0	525.109,32	15,9159	0,135736	-92,1305	0	0,499699	1,578
16	145,013	-20,2837	0	536.459,55	17,1175	0,145628	-94,929	0	0,49911	1,59481
16	145,632	-19,9749	0	549.935,20	18,5132	0,155971	-98,228	0	0,498413	1,61529
16	146,375	-19,6048	0	565.430,30	20,1345	0,16673	-101,909	0	0,497745	1,638845
16	147,267	-19,1612	0	582.497,44	22,0135	0,178275	-105,599	0	0,497309	1,66227
16	148,337	-18,6292	0	600.539,22	24,1863	0,191061	-109,014	0	0,497276	1,68323
16	149,62	-17,9904	0	618.882,54	26,6958	0,205617	-111,938	0	0,497784	1,69962
16	151,161	-17,2225	0	636.959,36	29,6344	0,222213	-114,196	0	0,498942	1,70952
16	153,01	-16,2981	0	654.066,68	33,2258	0,240552	-115,547	0	0,500992	1,71039
16	155,229	-15,183	0	669.292,10	37,6646	0,261132	-115,694	0	0,504215	1,69939
16	157,891	-13,8348	0	681.573,99	43,1216	0,285195	-114,364	0	0,508777	1,67463
16	161,086	-12,2001	0	689.799,27	49,7951	0,314271	-111,377	0	0,514641	1,63616
16	164,92	-10,2137	0	692.880,90	57,9209	0,350057	-106,683	0	0,521585	1,58635
16	169,52	-7,79597	0	689.771,66	67,7829	0,394342	-100,366	0	0,529283	1,52928
16	175,041	-4,85078	0	679.171,57	79,6649	0,449722	-92,4739	0	0,537496	1,46871
16	181,665	-1,2611	0	659.322,18	93,8028	0,520342	-82,982	0	0,546046	1,40775
16	189,615	3,11573	0	627.727,93	110,32	0,613399	-71,699	0	0,554908	1,34835
16	199,155	8,45512	0	579.758,36	129,047	0,744194	-57,9828	0	0,564325	1,29081
16	210,602	14,9777	0	501.901,02	148,917	0,962573	-39,6166	0	0,575231	1,23254



16	212,905	16,3049	0	481.499,23	152,379	1,02392	-35,2292	0	0,577741	1,22099
16	212,905	16,3049	0	481.499,23	152,379	1,02392	-35,2292	0	0,577741	1,22099
16	216,175	18,2201	0	436.381,25	154,936	1,13286	-24,2921	0	0,58756	1,19082
16	216,175	18,2201	0	436.381,25	154,936	1,13286	-24,2921	0	0,58756	1,19082
16	224,339	23,1818	0	242.893,85	157,195	1,98517	3,70065	0	0,663157	1,15845
16	240,824	36,0125	0	123.476,34	158,424	3,1086	14,1727	0	0,845442	1,16475
16	260,605	53,2834	0	96.024,41	159,284	3,49901	15,9636	0	0,90077	1,16565
16	284,343	75,4577	0	72.476,31	160,364	4,00269	17,4582	0	0,967529	1,16732
16	312,828	104,153	0	53.649,07	161,735	4,62863	18,6402	0	1,04492	1,16935
16	347,01	141,035	0	41.431,94	163,462	5,2045	19,6546	0	1,11174	1,16987
16	388,029	188,191	0	31.690,24	165,624	5,88691	21,2681	0	1,18646	1,16784
16	437,251	248,649	0	23.996,42	168,34	6,68635	22,4492	0	1,26887	1,16693
16	496,318	326,323	0	17.989,41	171,756	7,62551	23,2937	0	1,35988	1,16681
16	567,198	426,321	0	13.277,27	176,058	8,7307	23,8829	0	1,4603	1,16719
16	587,814	456,713	0	12.343,47	177,348	9,04835	24,0028	0	1,48801	1,16734
16	652,254	555,526	0	9.816,14	181,49	10,0348	24,2833	0	1,57123	1,16785
16	754,322	722,174	0	7.141,37	188,337	11,5642	24,5505	0	1,69279	1,16863
16	876,803	937,769	0	5.125,49	196,983	13,3578	24,7237	0	1,82587	1,16943
16	999,088	1168,59	0	4.060,17	206,029	15,1055	24,8196	0	1,94747	1,17006

17	163,9 36	- 22,5514	0	1,00	0,0017	0,7944	24,6396	0	0,6055	1,1739
					7245	01			71	6
17	164,0 36	- 22,4988	0	388.84	2,3159	0,0062	-58,0801	0	0,5109	1,4093
				2,10	1	8415			86	4
17	164,1 36	- 22,4478	0	409.37	3,2602	0,0114	-62,6669	0	0,5103	1,4273
				1,50	2	917			92	5
17	164,2 36	- 22,3967	0	414.59	3,9946	0,0167	-63,7043	0	0,5105	1,4311
				9,83	6	931				6
17	164,3 36	- 22,3457	0	416.56	4,6209	0,0221	-64,0656	0	0,5106	1,4324
				0,81		096			87	1
17	164,4 36	- 22,2946	0	417.36	5,1783	0,0274	-64,2042	0	0,5108	1,4328
				2,88	8	21			97	6
17	164,5 36	- 22,2435	0	417.83	5,6872	0,0327	-64,3022	0	0,5110	1,4332
				9,23	7	002			66	4
17	164,6 36	- 22,1924	0	419.58	6,1587	0,0377	-64,7769	0	0,5108	1,4354
				0,31	8	722			7	2
17	164,7 36	- 22,1413	0	422.70	6,6010	0,0425	-65,6442	0	0,5103	1,4394
				8,41	1	542			38	8
17	164,8 36	- 22,0903	0	426.63	7,0196	0,0470	-66,727	0	0,5096	1,4445
				0,96		701			58	7
17	164,9 36	- 22,0394	0	430.92	7,4185	0,0513	-67,9041	0	0,5089	1,4501
				8,25	6	578			42	6
17	165,0 36	- 21,9885	0	435.37	7,8006	0,0554	-69,112	0	0,5082	1,4559
				1,82	9	514			36	4
17	165,1 36	- 21,9377	0	439.84	8,1681	0,0593	-70,3195	0	0,5075	1,4617
				4,89	2	768			53	7
17	165,2 36	-21,887	0	444.27	8,5229	0,0631	-71,5071	0	0,5069	1,4675
				3,73	5	516			08	6
17	165,3 36	- 21,8364	0	448.61	8,8669	0,0667	-72,6646	0	0,5063	1,4732
				8,37	5	888			03	5
17	165,4 36	- 21,7858	0	452.85	9,2013	0,0703	-73,7874	0	0,5057	1,4788
				7,25	4	022			39	2
17	165,5 36	- 21,7352	0	456.97	9,5270	0,0737	-74,8728	0	0,5052	1,4842
				7,23	6	046			13	5
17	165,6 36	- 21,6847	0	460.97	9,8450	0,0770	-75,9199	0	0,5047	1,4895
				2,22	2	051			25	4
17	165,7	-	0	464.84	10,155	0,0802	-76,9294	0	0,5042	1,4946

	36	21,6343		1,88	6	166			71	8
17	165,8	-	0	468.58	10,459	0,0833	-77,9017	0	0,5038	1,4996
	36	21,5839		5,82	5	45			49	7
17	165,9	-	0	472.20	10,757	0,0863	-78,8379	0	0,5034	1,5045
	36	21,5335		6,09	5	959			58	2
17	166,0	-	0	476.39	11,107	0,0899	-79,9159	0	0,5030	1,5101
	56	21,4731		3,32	8	616			27	5
17	166,2	-	0	481.19	11,519	0,0941	-81,1463	0	0,5025	1,5166
		21,4007		7,44	5	079			61	4
17	166,3	-	0	486.66	12,001	0,0989	-82,5393	0	0,5020	1,5240
	73	21,3139		6,81	5	185			67	8
17	166,5	-	0	492.83	12,565	0,1044	-84,0993	0	0,5015	1,5325
	81	21,2099		0,72	4	7			6	1
17	166,8	-	0	499.70	13,223	0,1108	-85,8275	0	0,5010	1,542
	29	21,0851		4,74	2	59			58	
17	167,1	-	0	507.27	13,989	0,1181	-87,7185	0	0,5005	1,5525
	28	20,9356		9,90	1	82			85	6
17	167,4	-	0	515.63	14,880	0,1264	-89,7894	0	0,5001	1,5643
	86	20,7563		0,13	1	98			49	6
17	167,9	-	0	525.10	15,915	0,1357	-92,1305	0	0,4996	1,578
	16	20,5414		9,32	9	36			99	
17	168,4	-	0	536.45	17,117	0,1456	-94,929	0	0,4991	1,5948
	32	20,2837		9,55	5	28			1	1
17	169,0	-	0	549.93	18,513	0,1559	-98,228	0	0,4984	1,6152
	52	19,9749		5,20	2	71			13	9
17	169,7	-	0	565.43	20,134	0,1667	-101,909	0	0,4977	1,6388
	95	19,6048		0,30	5	3			45	
17	170,6	-	0	582.49	22,013	0,1782	-105,599	0	0,4973	1,6622
	86	19,1612		7,44	5	75			09	7
17	171,7	-	0	600.53	24,186	0,1910	-109,014	0	0,4972	1,6832
	56	18,6292		9,22	3	61			76	3
17	173,0	-	0	618.88	26,695	0,2056	-111,938	0	0,4977	1,6996
	4	17,9904		2,54	8	17			84	2
17	174,5	-	0	636.95	29,634	0,2222	-114,196	0	0,4989	1,7095
	81	17,2225		9,36	4	13			42	2
17	176,4	-	0	654.06	33,225	0,2405	-115,547	0	0,5009	1,7103
	3	16,2981		6,68	8	52			92	9
17	178,6	-15,183	0	669.29	37,664	0,2611	-115,694	0	0,5042	1,6993



	48			2,10	6	32			15	9
17	181,3	-	0	681.57	43,121	0,2851	-114,364	0	0,5087	1,6746
	1	13,8348		3,99	6	95			77	3
17	184,5	-	0	689.79	49,795	0,3142	-111,377	0	0,5146	1,6361
	05	12,2001		9,27	1	71			41	6
17	188,3	-	0	692.88	57,920	0,3500	-106,683	0	0,5215	1,5863
	39	10,2137		0,90	9	57			85	5
17	192,9	-	0	689.77	67,782	0,3943	-100,366	0	0,5292	1,5292
	4	7,79597		1,66	9	42			83	8
17	198,4	-	0	679.17	79,664	0,4497	-92,4739	0	0,5374	1,4687
	6	4,85078		1,57	9	22			96	1
17	205,0	-1,2611	0	659.32	93,802	0,5203	-82,982	0	0,5460	1,4077
	85			2,18	8	42			46	5
17	212,9	3,04356	0	628.27	110,05	0,6117	-71,8633	0	0,5548	1,3491
	05			1,50	5	43			14	1
17	212,9	3,04356	0	628.27	110,05	0,6117	-71,8633	0	0,5548	1,3491
	05			1,50	5	43			14	1
17	213,0	3,1159	0	626.87	110,08	0,6124	-71,2018	0	0,5559	1,3455
	35			1,17	6	52			24	5
17	220,6	7,63822	0	484.84	115,74	0,8121	-29,6436	0	0,5936	1,1908
	46			7,89	4	6			76	2
17	220,6	7,63822	0	484.84	115,74	0,8121	-29,6436	0	0,5936	1,1908
	46			7,89	4	6			76	2
17	222,5	8,78663	0	428.45	116,54	0,9474	-18,8805	0	0,5974	1,1691
	74			5,94	1	86			81	6
17	234,0	15,8806	0	214.01	117,32	1,9114	7,80266	0	0,6534	1,1532
	22			2,91	7	9			06	5
17	247,7	25,1248	0	182.51	117,80	2,1254	11,1077	0	0,6920	1,1523
	59			9,16	4				83	3
17	264,2	36,9109	0	147.70	118,40	2,3963	13,801	0	0,7378	1,1535
	43			5,13	1	5			23	9
17	284,0	52,047	0	114.60	119,15	2,7423	15,9574	0	0,7925	1,1563
	25			7,09	4	3			07	4
17	307,7	71,6391	0	86.156,	120,11	3,1882	17,6489	0	0,8582	1,1599
	62			93	2	3			58	7
17	336,2	97,2148	0	62.723,	121,33	3,7676	18,9434	0	0,9374	1,1639
	47			81	8	4			67	5
17	370,4	130,501	0	47.912,	122,90	4,3184	20,8795	0	1,0075	1,1626



	3			30	4	6			1	8
17	411,4 48	173,397	0	36.298, 77	124,88 3	4,9525	22,28	0	1,0831	1,1624 7
17	460,6 71	228,796	0	28.727, 20	127,38 7	5,7022	23,2419	0	1,1667 4	1,1631 3
17	519,7 37	300,482	0	22.488, 48	130,56	6,5904 7	23,8871	0	1,2592 9	1,1642 6
17	590,6 18	393,418	0	17.409, 23	134,58 5	7,6438 9	24,3098	0	1,3616 2	1,1656
17	606,5 9	415,341	0	16.508, 18	135,52 3	7,8796 3	24,3749	0	1,3835 7	1,1658 8
17	675,6 74	514,16	0	13.321, 99	139,69 8	8,8938 7	24,5803	0	1,4746	1,1669 6
17	777,7 41	671,094	0	10.079, 42	146,19	10,372 1	24,7498	0	1,5987 7	1,1682 1
17	900,2 22	875,371	0	7.537,9 3	154,43 7	12,116 5	24,8537	0	1,7347 8	1,1693 1
17	1004, 87	1062,57	0	6.052,5 4	161,83 3	13,580 8	24,9023	0	1,8418	1,17
18	187,3 56	- 22,5514	0	1,00	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
18	187,4 56	- 22,4988	0	388.84 2,10	2,3159 1	0,0062 8415	-58,0801	0	0,5109 86	1,4093 4
18	187,5 56	- 22,4478	0	409.37 1,50	3,2602 2	0,0114 917	-62,6669	0	0,5103 92	1,4273 5
18	187,6 56	- 22,3967	0	414.59 9,83	3,9946 6	0,0167 931	-63,7043	0	0,5105	1,4311 6
18	187,7 56	- 22,3457	0	416.56 0,81	4,6209	0,0221 096	-64,0656	0	0,5106 87	1,4324 1
18	187,8 56	- 22,2946	0	417.36 2,88	5,1783 8	0,0274 21	-64,2042	0	0,5108 97	1,4328 6
18	187,9 56	- 22,2435	0	417.83 9,23	5,6872 7	0,0327 002	-64,3022	0	0,5110 66	1,4332 4
18	188,0 56	- 22,1924	0	419.58 0,31	6,1587 8	0,0377 722	-64,7769	0	0,5108 7	1,4354 2
18	188,1 56	- 22,1413	0	422.70 8,41	6,6010 1	0,0425 542	-65,6442	0	0,5103 38	1,4394 8



18	188,2	-	0	426.63	7,0196	0,0470	-66,727	0	0,5096	1,4445
	56	22,0903		0,96		701			58	7
18	188,3	-	0	430.92	7,4185	0,0513	-67,9041	0	0,5089	1,4501
	56	22,0394		8,25	6	578			42	6
18	188,4	-	0	435.37	7,8006	0,0554	-69,112	0	0,5082	1,4559
	56	21,9885		1,82	9	514			36	4
18	188,5	-	0	439.84	8,1681	0,0593	-70,3195	0	0,5075	1,4617
	56	21,9377		4,89	2	768			53	7
18	188,6	-21,887	0	444.27	8,5229	0,0631	-71,5071	0	0,5069	1,4675
	56			3,73	5	516			08	6
18	188,7	-	0	448.61	8,8669	0,0667	-72,6646	0	0,5063	1,4732
	56	21,8364		8,37	5	888			03	5
18	188,8	-	0	452.85	9,2013	0,0703	-73,7874	0	0,5057	1,4788
	56	21,7858		7,25	4	022			39	2
18	188,9	-	0	456.97	9,5270	0,0737	-74,8728	0	0,5052	1,4842
	56	21,7352		7,23	6	046			13	5
18	189,0	-	0	460.97	9,8450	0,0770	-75,9199	0	0,5047	1,4895
	56	21,6847		2,22	2	051			25	4
18	189,1	-	0	464.84	10,155	0,0802	-76,9294	0	0,5042	1,4946
	56	21,6343		1,88	6	166			71	8
18	189,2	-	0	468.58	10,459	0,0833	-77,9017	0	0,5038	1,4996
	56	21,5839		5,82	5	45			49	7
18	189,3	-	0	472.20	10,757	0,0863	-78,8379	0	0,5034	1,5045
	56	21,5335		6,09	5	959			58	2
18	189,4	-	0	476.39	11,107	0,0899	-79,9159	0	0,5030	1,5101
	76	21,4731		3,32	8	616			27	5
18	189,6	-	0	481.19	11,519	0,0941	-81,1463	0	0,5025	1,5166
	2	21,4007		7,44	5	079			61	4
18	189,7	-	0	486.66	12,001	0,0989	-82,5393	0	0,5020	1,5240
	93	21,3139		6,81	5	185			67	8
18	190	-	0	492.83	12,565	0,1044	-84,0993	0	0,5015	1,5325
		21,2099		0,72	4	7			6	1
18	190,2	-	0	499.70	13,223	0,1108	-85,8275	0	0,5010	1,542
	49	21,0851		4,74	2	59			58	
18	190,5	-	0	507.27	13,989	0,1181	-87,7185	0	0,5005	1,5525
	48	20,9356		9,90	1	82			85	6
18	190,9	-	0	515.63	14,880	0,1264	-89,7894	0	0,5001	1,5643
	06	20,7563		0,13	1	98			49	6



18	191,336	-20,5414	0	525.109,32	15,9159	0,135736	-92,1305	0	0,499699	1,578
18	191,852	-20,2837	0	536.459,55	17,1175	0,145628	-94,929	0	0,49911	1,59481
18	192,471	-19,9749	0	549.935,20	18,5132	0,155971	-98,228	0	0,498413	1,61529
18	193,214	-19,6048	0	565.430,30	20,1345	0,16673	-101,909	0	0,497745	1,638845
18	194,106	-19,1612	0	582.497,44	22,0135	0,178275	-105,599	0	0,497309	1,66227
18	195,176	-18,6292	0	600.539,22	24,1863	0,191061	-109,014	0	0,497276	1,68323
18	196,459	-17,9904	0	618.882,54	26,6958	0,205617	-111,938	0	0,497784	1,69962
18	198	-17,2225	0	636.959,36	29,6344	0,222213	-114,196	0	0,498942	1,70952
18	199,849	-16,2981	0	654.066,68	33,2258	0,240552	-115,547	0	0,500992	1,71039
18	202,068	-15,183	0	669.292,10	37,6646	0,261132	-115,694	0	0,504215	1,69939
18	204,73	-13,8348	0	681.573,99	43,1216	0,285195	-114,364	0	0,508777	1,67463
18	207,925	-12,2001	0	689.799,27	49,7951	0,314271	-111,377	0	0,514641	1,63616
18	211,759	-10,2137	0	692.880,90	57,9209	0,350057	-106,683	0	0,521585	1,58635
18	212,905	-9,61476	0	692.636,68	60,3676	0,360907	-105,109	0	0,523674	1,57129
18	212,905	-9,61476	0	692.636,68	60,3676	0,360907	-105,109	0	0,523674	1,57129
18	216,359	-7,63831	0	629.357,40	61,9537	0,394446	-72,3519	0	0,572395	1,35173
18	221,278	-4,62356	0	463.490,03	66,0501	0,576903	-27,2843	0	0,597673	1,19082
18	221,278	-4,62356	0	463.490,03	66,0501	0,576903	-27,2843	0	0,597673	1,19082
18	221,88	-4,2636	0	438.198,00	66,0705	0,621085	-22,3183	0	0,598926	1,18032



18	228,5 04	- 0,26560 5	0	172.33 8,23	66,288 5	1,7283 9	10,5146	0	0,6199 66	1,1603 2
18	236,4 54	5,34116	0	91.456, 83	66,593 4	2,6475 4	16,465	0	0,7775 99	1,1694 2
18	247,4 51	13,3177	0	63.725, 50	67,017 5	3,3561 9	18,2714	0	0,8816 98	1,1732
18	263,3 54	23,7993	0	51.549, 95	67,561	3,8492 7	19,0726	0	0,9479 63	1,1747 8
18	282,3 38	37,3168	0	41.750, 87	68,246 6	4,4131 8	19,9636	0	1,0191 6	1,1752 2
18	304,9 28	54,803	0	33.105, 96	69,115 2	5,1148 2	21,2987	0	1,1016 4	1,1736 4
18	332,0 13	77,6426	0	24.543, 09	70,226 8	6,1769	22,4597	0	1,2168 5	1,1727 1
18	337,4 79	82,5503	0	22.754, 50	70,462 9	6,4575 9	22,6646	0	1,2458 2	1,1726 2
18	365,6 74	108,766	0	16.237, 61	71,709 4	8,0205 9	23,4406	0	1,3965 3	1,1724 2
18	408,1 17	151,545	0	10.550, 10	73,704	10,452 8	24,0507	0	1,6052 5	1,1724 3
18	461,8 59	210,365	0	7.135,2 0	76,383 6	13,454 9	24,4132	0	1,8328	1,1725 5
18	462,3 78	210,949	0	7.143,7 5	76,409 9	13,482 9	24,4155	0	1,8348	1,1725 5
19	210,7 75	- 22,5514	0	1,00	0,0017 7245	0,7944 01	24,6396	0	0,6055 71	1,1739 6
19	210,8 75	- 22,4988	0	388.84 2,10	2,3159 1	0,0062 8415	-58,0801	0	0,5109 86	1,4093 4
19	210,9 75	- 22,4478	0	409.37 1,50	3,2602 2	0,0114 917	-62,6669	0	0,5103 92	1,4273 5
19	211,0 75	- 22,3967	0	414.59 9,83	3,9946 6	0,0167 931	-63,7043	0	0,5105	1,4311 6
19	211,1 75	- 22,3457	0	416.56 0,81	4,6209	0,0221 096	-64,0656	0	0,5106 87	1,4324 1
19	211,2 75	- 22,2946	0	417.36 2,88	5,1783 8	0,0274 21	-64,2042	0	0,5108 97	1,4328 6



19	211,375	-22,2435	0	417.839,23	5,68727	0,0327002	-64,3022	0	0,511066	1,43324
19	211,475	-22,1924	0	419.580,31	6,15878	0,0377722	-64,7769	0	0,51087	1,43542
19	211,575	-22,1413	0	422.708,41	6,60101	0,0425542	-65,6442	0	0,510338	1,43948
19	211,675	-22,0903	0	426.630,96	7,0196	0,0470701	-66,727	0	0,509658	1,44457
19	211,775	-22,0394	0	430.928,25	7,41856	0,0513578	-67,9041	0	0,508942	1,45016
19	211,875	-21,9885	0	435.371,82	7,80069	0,0554514	-69,112	0	0,508236	1,45594
19	211,975	-21,9377	0	439.844,89	8,16812	0,0593768	-70,3195	0	0,507553	1,46177
19	212,075	-21,887	0	444.273,73	8,52295	0,0631516	-71,5071	0	0,506908	1,46756
19	212,175	-21,8364	0	448.618,37	8,86695	0,0667888	-72,6646	0	0,506303	1,47325
19	212,275	-21,7858	0	452.857,25	9,20134	0,0703022	-73,7874	0	0,505739	1,47882
19	212,375	-21,7352	0	456.977,23	9,52706	0,0737046	-74,8728	0	0,505213	1,48425
19	212,475	-21,6847	0	460.972,22	9,84502	0,0770051	-75,9199	0	0,504725	1,48954
19	212,575	-21,6343	0	464.841,88	10,1556	0,0802166	-76,9294	0	0,504271	1,49468
19	212,675	-21,5839	0	468.585,82	10,4595	0,083345	-77,9017	0	0,503849	1,49967
19	212,775	-21,5335	0	472.205,49	10,7576	0,0863945	-78,8377	0	0,503459	1,50452
19	212,895	-21,4731	0	476.392,02	11,1085	0,0899538	-79,9152	0	0,503029	1,51015
19	212,905	-21,4686	0	476.392,72	11,1311	0,0902124	-79,8692	0	0,503224	1,50978
19	212,905	-21,4686	0	476.392,72	11,1311	0,0902124	-79,8692	0	0,503224	1,50978
19	213,039	-21,3995	0	457.503,53	11,2218	0,0939796	-71,7225	0	0,518773	1,46043



19	213,2 12	- 21,3082	0	433.16 3,57	11,341 2	0,0995 142	-61,8522	0	0,5355 17	1,4068 3
19	213,4 2	- 21,1953	0	404.21 3,73	11,487	0,1072 14	-50,9053	0	0,5514 75	1,3542 8
19	213,6 68	- 21,0559	0	370.49 3,28	11,661 1	0,1179 6	-39,1357	0	0,5657 67	1,3048 4
19	213,9 67	- 20,8846	0	332.24 2,60	11,862 5	0,1329 52	-27,0868	0	0,5776 95	1,2611
19	214,3 25	- 20,6756	0	290.58 3,69	12,085 9	0,1536 04	-15,7688	0	0,5869 34	1,2263 2
19	214,7 55	- 20,4216	0	249.28 9,37	12,315 9	0,1801 61	-6,56967	0	0,5935 28	1,2032
19	215,2 33	- 20,1371	0	214.45 6,18	12,525 9	0,2095 78	- 0,298107	0	0,5976 85	1,1908 2
19	215,2 33	- 20,1371	0	214.45 6,18	12,525 9	0,2095 78	- 0,298107	0	0,5976 85	1,1908 2
19	215,2 71	- 20,1141	0	212.04 7,94	12,527 2	0,2121 15	0,01	0	0,5979 29	1,1904 9
19	215,8 91	- 19,7429	0	179.45 0,61	12,547 5	0,2538 84	4,94896	0	0,6007 66	1,1831 3
19	216,6 34	- 19,2958	0	151.37 3,13	12,571 9	0,3038 81	8,66031	0	0,6025 66	1,1790 2
19	217,5 25	-18,758	0	127.35 3,54	12,601 2	0,3636 89	11,4592	0	0,6036 92	1,1770 1
19	218,5 95	- 18,1116	0	106.91 4,07	12,636 5	0,4352 27	13,6051	0	0,6044	1,1762 2
19	219,8 79	- 17,3353	0	89.591, 23	12,678 8	0,5207 7	15,2726	0	0,6048 43	1,1761 4
19	221,4 2	- 16,4032	0	74.956, 09	12,729 6	0,6230 12	16,5821	0	0,6051 2	1,1764 5
19	223,2 69	- 15,2843	0	62.622, 65	12,790 6	0,7451 38	17,619	0	0,6052 91	1,1769 7
19	225,4 87	- 13,9412	0	52.249, 97	12,863 8	0,8909 05	18,4456	0	0,6053 98	1,1775 8
19	228,1 49	- 12,3294	0	43.540, 75	12,951 6	1,0647 4	19,1081	0	0,6054 64	1,1782 2
19	231,3 44	-10,395	0	36.238, 17	13,057 1	1,2718 1	19,6412	0	0,6055 05	1,1788 5



19	235,178	-8,07354	0	30.122,04	13,1836	1,52132	20,7577	0	0,605531	1,17701
19	239,779	-5,25887	0	24.960,36	13,3371	1,75901	21,6942	0	0,626827	1,17552
19	245,299	-1,68097	0	20.448,33	13,5321	1,98869	22,4634	0	0,668885	1,17442
19	251,924	2,90715	0	16.549,41	13,7821	2,26026	23,0851	0	0,715648	1,17364
19	259,874	8,8073	0	13.184,34	14,0996	2,58689	23,5826	0	0,768709	1,17313
19	269,814	16,4806	0	9.893,68	14,5031	3,06815	24,0142	0	0,841175	1,17284
19	279,028	22,5532	0	8.092,80	14,8172	3,45296	24,2316	0	0,895267	1,17276
19	284,897	26,6325	0	7.167,88	15,0258	3,70558	24,338	0	0,92928	1,17274
19	303,483	40,0883	0	5.124,63	15,7051	4,48747	24,5614	0	1,02816	1,17274
19	325,95	57,7183	0	3.655,62	16,5778	5,4069	24,7097	0	1,13447	1,17279
19	326,208	57,9354	0	3.642,33	16,5885	5,41757	24,711	0	1,13565	1,17279
19	353,973	81,5884	0	2.581,28	17,7356	6,50102	24,81	0	1,25025	1,17286
19	387,156	112,714	0	1.829,16	19,2151	7,73445	24,8752	0	1,37008	1,17293
19	427,523	153,56	0	1.294,70	21,1165	9,12382	24,9182	0	1,49455	1,17299
19	476,252	206,894	0	914,53	23,5467	10,6758	24,9466	0	1,62309	1,17304
19	478,746	210,953	0	893,61	23,7295	10,7846	24,9481	0	1,63177	1,17304

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		
					Release	Rainout	Final
1	Continuous	0,22	-0,536364	kg/s	0	0	11,7473
2	Continuous	19,7389	-13,4434	kg/s	0	0	125,87
3	Continuous	28,5822	-17,1938	kg/s	0	0	156,167
4	Continuous	35,7089	-19,8226	kg/s	0	0	157,748
5	Continuous	42,0587	-21,7844	kg/s	0	0	130,398
6	Continuous	48,3126	-23,0435	kg/s	0	0	95,5146
7	Continuous	56,5194	-23,3432	kg/s	0	0	65,5102
8	Continuous	71,9695	-23,3432	kg/s	0	0	39,271
9	Continuous	104,071	-23,3432	kg/s	0	0	17,7716
10	Continuous	261,063	-23,3432	kg/s	0	0	1,35562

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]	Downwind 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/
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										m3]
1	0,22	-	0	1,00	0,00177	0,1543	24,6396	0	3,1164	1,1739
		0,53636			245	65			3	6
		4								
1	0,32	-	0	913.56	0,77017	0,0847	-145,059	0	0,5696	1,8596
		0,46703		4,48	4	797			53	6
		1								
1	0,42	-	0	910.54	1,16225	0,1330	-144,462	0	0,6039	1,8535
		0,40856		0,13		24			18	
		8								
1	0,52	-	0	906.89	1,50284	0,1720	-143,847	0	0,6384	1,8477
		0,34639		0,43		93			15	5
		5								
1	0,62	-0,281	0	903.78	1,81972	0,2045	-143,354	0	0,6692	1,8433
				3,20		14				8
1	0,72	-	0	900.79	2,12071	0,2322	-142,89	0	0,6983	1,8393
		0,21262		9,91		03			11	6
		5								
1	0,82	-	0	897.83	2,41061	0,2562	-142,43	0	0,7264	1,8354
		0,14137		3,07		68			55	1
		9								
1	0,92	-	0	894.88	2,69153	0,2776	-141,961	0	0,7537	1,8313
		0,06735		1,11		59			57	5
		91								
1	1,02	0,00936	0	891.90	2,96573	0,2968	-141,431	0	0,7805	1,8264
		434		7,61		81			57	6
1	1,12	0,08873	0	888.93	3,23369	0,3146	-140,844	0	0,8067	1,8207
		32		9,83		02			42	6
1	1,22	0,17069	0	885.98	3,4961	0,3311	-140,216	0	0,8323	1,8145
		6		1,96		34			46	3
1	1,32	0,25519	0	883.02	3,75403	0,3465	-139,559	0	0,8575	1,8079
		5		0,09		59			17	7
1	1,42	0,34218	0	880.05	4,00807	0,3610	-138,878	0	0,8822	1,8011
		4		4,82		51			91	2
1	1,52	0,43163	0	877.07	4,2626	0,3743	-138,173	0	0,9067	1,7940
		8		1,70		72			86	4
1	1,62	0,52354	0	874.03	4,52047	0,3863	-137,438	0	0,9312	1,7866
		8		7,93		76			31	9



1	1,72	0,61789	0	870.93	4,78127	0,3972	-136,672	0	0,9557	1,7790
		6		3,59		43			58	5
1	1,82	0,7147	0	867.75	5,04396	0,4072	-135,869	0	0,9803	1,7710
				5,96		52			82	8
1	1,92	0,81397	0	864.49	5,30804	0,4165	-135,031	0	1,0051	1,7628
		9		6,19		35			6	3
1	2,02	0,91574	0	861.14	5,57352	0,4251	-134,157	0	1,0301	1,7543
		5		5,94		54			5	1
1	2,12	1,02002	0	857.70	5,84003	0,4332	-133,25	0	1,0553	1,7455
				3,34		22			5	5
1	2,22	1,12683	0	854.16	6,10736	0,4408	-132,308	0	1,0807	1,7365
				9,59		38			6	5
1	2,34	1,25836	0	849.80	6,42891	0,4494	-131,133	0	1,1115	1,7254
				8,34		85			1	8
1	2,484	1,4211	0	844.39	6,81539	0,4592	-129,661	0	1,1488	1,7118
				2,27		49			3	5
1	2,656	1,62353	0	837.61	7,27938	0,4702	-127,805	0	1,1942	1,6950
	8			8,12		33			5	5
1	2,864	1,87691	0	829.06	7,83543	0,4825	-125,442	0	1,2497	1,6742
	16			8,40		68			3	9
1	3,112	2,19634	0	818.13	8,5001	0,4963	-122,402	0	1,3179	1,6486
	99			5,62		53			5	
1	3,411	2,60244	0	803.92	9,29145	0,5117	-118,429	0	1,4024	1,6166
	59			8,35		22			9	5
1	3,769	3,12394	0	784.96	10,2276	0,5286	-113,1	0	1,5089	1,5764
	91			0,21		5			3	6
1	4,199	3,80231	0	758.31	11,3226	0,5463	-105,586	0	1,6477	1,5244
	89			7,23		28			8	5
1	4,715	4,70186	0	716.21	12,572	0,5602	-93,5739	0	1,8474	1,4507
	87			5,27		48			8	5
1	4,873	4,99872	0	697.90	12,9293	0,5588	-88,1762	0	1,9295	1,4205
	15			2,39		86			9	4
1	4,873	4,99872	0	697.90	12,9293	0,5588	-88,1762	0	1,9295	1,4205
	15			2,39		86			9	4
1	5,335	5,95402	0	628.48	13,8693	0,5609	-68,6022	0	2,2037	1,3271
	04			3,59		48			1	5
1	6,078	7,72706	0	515.55	15,007	0,6235	-40,2845	0	2,5443	1,2283
	05			0,26		12			8	1



1	6,969 66	10,1115	0	409.32 5,51	15,6932	0,7550 71	-17,4978	0	2,7789 7	1,1726 8
1	7,107 94	10,4976	0	394.37 6,75	15,7341	0,7826 93	-14,8104	0	2,8047 8	1,1678 9
1	7,107 94	10,4976	0	394.37 6,75	15,7341	0,7826 93	-14,8104	0	2,8047 8	1,1678 9
1	8,039 59	13,176	0	301.29 1,24	16,0136	1,0148 5	-1,31474	0	2,9316 7	1,1528 5
1	9,323 51	17	0	219.88 0,73	16,4158	1,3646 3	7,25803	0	3,0124 6	1,1529 7
1	10,86 42	21,7071	0	164.59 6,94	16,8948	1,7415 8	11,9973	0	3,1211 2	1,1569 6
1	12,71 31	27,6383	0	121.97 4,83	17,4914	2,1627 8	15,0419	0	3,2903 8	1,1618 2
1	14,93 17	35,1318	0	89.103, 32	18,2393	2,6962 7	17,1214	0	3,4591 2	1,1665 4
1	17,59 4	44,5766	0	64.483, 05	19,1735	3,3696 3	18,5606	0	3,6309 7	1,1706 5
1	20,78 88	56,4665	0	46.147, 42	20,3381	4,2197 5	19,7563	0	3,8087 2	1,1733 4
1	24,62 26	71,4318	0	32.646, 94	21,7881	5,3031 5	21,512	0	3,9954 9	1,1723 2
1	29,22 31	90,2697	0	22.818, 40	23,5921	6,6652 6	22,704	0	4,1897 9	1,1719 6
1	29,92 57	93,2233	0	21.713, 98	23,873	6,8782 5	22,8341	0	4,2171 9	1,1719 5
1	34,74 37	113,973	0	16.198, 32	25,8324	8,1874 1	23,462	0	4,3718 9	1,1719 2
1	41,36 84	143,518	0	11.639, 61	28,5889	9,8776 9	23,96	0	4,5444 7	1,1720 1
1	42,14 25	147,041	0	11.227, 09	28,9152	10,074 6	24,0027	0	4,5629 9	1,1720 2
1	49,31 81	180,361	0	8.291,7 7	31,9775	11,893 2	24,303	0	4,7216 3	1,1721 7
1	58,85 77	226,28	0	5.858,5 5	36,1377	14,293 1	24,5369	0	4,9036 5	1,1723 5
1	70,30 53	283,509	0	4.104,5 6	41,2405	17,143 1	24,6945	0	5,0903 6	1,1725 3



1	84,04 23	354,788	0	2.865,6 7	47,4907	20,520 9	24,7995	0	5,2819 5	1,1726 9
1	95,66 51	417,009	0	2.204,0 9	52,866	23,344 3	24,8525	0	5,4236 9	1,1727 8
2	19,73 89	- 13,4434	0	1,00	0,00177 245	0,1543 65	24,6396	0	3,1164 3	1,1739 6
2	19,83 89	- 13,2339	0	590.40 3,53	3,93506	0,0210 72	-94,5685	0	2,0698 1	1,5517 5
2	19,93 89	- 13,0267	0	590.33 4,51	5,56426	0,0416 595	-94,4986	0	2,0733 3	1,5511 8
2	20,03 89	- 12,8192	0	589.48 5,53	6,82426	0,0621 327	-94,3473	0	2,0770 6	1,5504 7
2	20,13 89	- 12,6113	0	588.48 9,36	7,89568	0,0824 607	-94,1832	0	2,0808	1,5497 5
2	20,23 89	-12,403	0	587.44 2,27	8,84492	0,1026 76	-94,0149	0	2,0845 3	1,5490 4
2	20,33 89	- 12,1944	0	586.37 5,45	9,70905	0,1227 58	-93,8455	0	2,0882 4	1,5483 3
2	20,43 89	- 11,9854	0	585.29 7,10	10,5098	0,1426 97	-93,6753	0	2,0919 5	1,5476 3
2	20,53 89	-11,776	0	584.21 0,26	11,2598	0,1625 13	-93,5043	0	2,0956 6	1,5469 2
2	20,63 89	- 11,5663	0	583.11 8,66	11,9678	0,1822 16	-93,333	0	2,0993 6	1,5462 2
2	20,73 89	- 11,3561	0	582.02 7,04	12,6411	0,2018 05	-93,1621	0	2,1030 4	1,5455 3
2	20,83 89	- 11,1457	0	581.10 8,54	13,2848	0,2212 02	-93,0327	0	2,1063 4	1,5450 7
2	20,93 89	- 10,9349	0	580.54 3,91	13,9036	0,2402 8	-92,9873	0	2,1088 8	1,5450 8
2	21,03 89	-10,724	0	580.53 2,65	14,5006	0,2588 7	-93,0727	0	2,1102 6	1,5458 4
2	21,13 89	- 10,5129	0	580.88 3,85	15,0784	0,2770 18	-93,2428	0	2,1109	1,5470 7
2	21,23 89	- 10,3018	0	581.55 9,26	15,639	0,2946 92	-93,4876	0	2,1109 2	1,5487 2
2	21,33	-	0	582.48	16,184	0,3119	-93,7875	0	2,1104	1,5506



	89	10,0907		0,22		03			9	8
2	21,43 89	- 9,87966	0	583.55 7,77	16,7148	0,3286 89	-94,1214	0	2,1098 1	1,5528 4
2	21,53 89	- 9,66868	0	584.74 6,24	17,2327	0,3450 65	-94,4784	0	2,1089 6	1,5551 2
2	21,63 89	- 9,45781	0	586.00 1,74	17,7387	0,3610 58	-94,8481	0	2,1080 5	1,5574 8
2	21,73 89	- 9,24705	0	587.29 4,34	18,2336	0,3766 91	-95,2239	0	2,1071 3	1,5598 7
2	21,85 89	- 8,99427	0	588.86 4,36	18,814	0,3950 04	-95,6759	0	2,1060 6	1,5627 6
2	22,00 29	- 8,69112	0	590.74 1,84	19,493	0,4163 74	-96,2129	0	2,1048 9	1,5662
2	22,17 57	- 8,32755	0	592.94 4,69	20,2847	0,4412 14	-96,8408	0	2,1037 1	1,5702 4
2	22,38 31	- 7,89145	0	595.47 3,51	21,2052	0,4699 7	-97,5625	0	2,1026 7	1,5749 3
2	22,63 19	- 7,36827	0	598.31 0,15	22,2711	0,5031 1	-98,3772	0	2,102	1,5802 8
2	22,93 05	- 6,74053	0	601.41 1,45	23,5008	0,5410 95	-99,2789	0	2,102	1,5863
2	23,28 88	- 5,98713	0	604.69 6,28	24,9164	0,5844 64	-100,211	0	2,1031 2	1,5925 3
2	23,71 88	- 5,08233	0	608.02 1,34	26,5437	0,6340 81	-101,024	0	2,1059 7	1,5976 8
2	24,23 48	- 3,99431	0	611.13 0,23	28,405	0,6909 69	-101,589	0	2,1114 3	1,6006 7
2	24,85 4	- 2,68397	0	613.69 8,60	30,527	0,7559 72	-101,812	0	2,1205 7	1,6008 3
2	25,59 7	- 1,10272	0	615.28 4,31	33,0186	0,8282 75	-101,549	0	2,1349 1	1,5971 1
2	26,48 86	0,81073 6	0	615.17 6,76	36,0703	0,9055 15	-100,559	0	2,1568 2	1,5878 2
2	27,55 85	3,13623	0	612.12 7,99	39,8342	0,9872 47	-98,425	0	2,1902	1,5703 2
2	28,84 24	5,9799	0	604.45 4,82	44,4338	1,0752	-94,6068	0	2,2395 7	1,5417 2
2	30,38	9,48401	0	589.71	49,9843	1,1726	-88,3749	0	2,3105	1,4993



	31			1,20					6	
2	32,23 2	13,8472	0	563.32 8,15	56,5426	1,2854 3	-78,3917	0	2,4126 8	1,4391 3
2	34,45 06	19,3673	0	512.03 9,24	63,9296	1,4229 9	-60,4752	0	2,5760 4	1,3483 7
2	34,45 68	19,3834	0	511.82 0,42	63,9489	1,4233 4	-60,3987	0	2,5767	1,3480 2
2	34,45 68	19,3834	0	511.82 0,42	63,9489	1,4233 4	-60,3987	0	2,5767	1,3480 2
2	37,11 29	26,5843	0	408.46 0,23	70,8051	1,6642 3	-29,4729	0	2,8513 9	1,2313 1
2	38,91 58	31,9029	0	339.18 2,19	73,7242	1,91	-13,9035	0	3,0421 1	1,1908 2
2	38,91 58	31,9029	0	339.18 2,19	73,7242	1,9100 1	-13,9035	0	3,0421	1,1908 2
2	40,30 77	36,2305	0	295.59 4,03	74,8653	2,1305 6	-6,04918	0	3,1656 1	1,1758 2
2	44,14 15	48,9946	0	195.34 1,77	76,1531	2,9985	6,8566	0	3,4857 9	1,1646 3
2	48,74 2	65,735	0	127.92 9,73	77,7835	4,2024	13,214	0	3,7768 4	1,1665
2	54,26 26	87,3581	0	85.480, 07	79,8602	5,7479	16,5127	0	4,0470 2	1,1704 3
2	60,88 73	115,019	0	59.763, 88	82,4773	7,5196 4	18,3023	0	4,2860 1	1,1736 2
2	68,83 7	149,963	0	43.325, 49	85,732	9,4867 7	19,374	0	4,5006	1,1759 5
2	78,37 66	193,948	0	31.547, 07	89,7618	11,863 6	20,9676	0	4,7152 5	1,1747 4
2	89,82 42	249,191	0	23.022, 10	94,737	14,704 5	22,2524	0	4,9295 8	1,1734 8
2	92,95 47	264,706	0	21.332, 36	96,1194	15,476 6	22,4978	0	4,9821 1	1,1732 8
2	103,5 61	318,609	0	16.783, 19	100,871	18,110 3	23,1264	0	5,1462 1	1,1728 6
2	120,0 46	405,37	0	12.244, 32	108,402	22,123 3	23,7189	0	5,3630 9	1,1726
2	122,2	417,005	0	11.802,	109,402	22,643	23,7753	0	5,3887	1,1725



	1		93		8			6	8
3	28,58 - 22 17,1938	0	1,00	0,00177 245	0,1543 65	24,6396	0	3,1164 3	1,1739 6
3	28,68 - 22 16,9712	0	543.83 5,93	4,49944	0,0195 829	-87,7686	0	2,2058 1	1,5269 6
3	28,78 - 22 16,7505	0	543.82 9,42	6,36217	0,0388 182	-87,7164	0	2,2084 5	1,5265 3
3	28,88 - 22 16,5295	0	543.15 5,15	7,79985	0,0579 822	-87,5956	0	2,2112	1,526
3	28,98 - 22 16,3083	0	542.35 5,52	9,02039	0,0770 429	-87,4642	0	2,2139 5	1,5254 7
3	29,08 - 22 16,0867	0	541.50 9,98	10,1001	0,0960 312	-87,329	0	2,2167 1	1,5249 4
3	29,18 - 22 15,8649	0	540.64 8,87	11,0811	0,1149 34	-87,193	0	2,2194 5	1,5244 2
3	29,28 - 22 15,6428	0	539.77 7,11	11,989	0,1337 34	-87,0562	0	2,2221 9	1,5239
3	29,38 - 22 15,4205	0	538.89 9,02	12,8384	0,1524 46	-86,919	0	2,2249 3	1,5233 8
3	29,48 - 22 15,1978	0	538.01 5,65	13,6393	0,1710 83	-86,7812	0	2,2276 6	1,5228 7
3	29,58 - 22 14,9749	0	537.13 0,42	14,3997	0,1896 47	-86,6435	0	2,2303 9	1,5223 5
3	29,68 - 22 14,7518	0	536.24 8,14	15,1263	0,2081 26	-86,5067	0	2,2331 1	1,5218 4
3	29,78 - 22 14,5283	0	535.38 3,31	15,824	0,2265 05	-86,3745	0	2,2357 8	1,5213 6
3	29,88 - 22 14,3046	0	534.63 1,94	16,4968	0,2447 21	-86,2707	0	2,2382 3	1,5210 3
3	29,98 - 22 14,0808	0	534.29 3,01	17,1475	0,2625 68	-86,2696	0	2,2398 7	1,5212 6
3	30,08 - 22 13,8568	0	534.43 4,71	17,7777	0,2799 61	-86,3878	0	2,2405 8	1,5221 4
3	30,18 - 22 13,6328	0	534.85 7,10	18,3896	0,2969 71	-86,5742	0	2,2407 8	1,5233 8
3	30,28 - 22 13,4087	0	535.58 4,58	18,9849	0,3135 41	-86,8347	0	2,2404 3	1,5250 3



3	30,38	-	0	536.49	19,5651	0,3297	-87,1387	0	2,2397	1,5269
	22	13,1846		7,55		27			7	2
3	30,48	-	0	537.56	20,1315	0,3455	-87,4777	0	2,2388	1,5289
	22	12,9606		2,59		3			8	9
3	30,58	-	0	538.72	20,685	0,3609	-87,8372	0	2,2378	1,5311
	22	12,7368		3,89		78			7	8
3	30,70	-	0	540.20	21,3338	0,3790	-88,2859	0	2,2365	1,5339
	22	12,4682		2,39		78			7	
3	30,84	-	0	542.04	22,0921	0,4002	-88,8356	0	2,235	1,5372
	62	12,1463		3,08		03				3
3	31,01	-	0	544.28	22,9754	0,4247	-89,497	0	2,2331	1,5412
	9	11,7602		4,79		71			8	4
3	31,22	-	0	546.95	24,001	0,4532	-90,2786	0	2,2312	1,5460
	63	11,2973		5,67		27				1
3	31,47	-	0	550.06	25,1874	0,4860	-91,1861	0	2,2291	1,5515
	51	10,7424		8,87		44			9	9
3	31,77	-	0	553.60	26,5565	0,5236	-92,2178	0	2,2273	1,5580
	37	10,0771		5,91		81			6	2
3	32,13	-	0	557.51	28,1333	0,5665	-93,3654	0	2,2260	1,5652
	21	9,27922		3,24		6			5	7
3	32,56	-	0	561.69	29,9448	0,6151	-94,591	0	2,2257	1,5731
	2	8,32218		3,39		83			1	2
3	33,07	-	0	565.96	32,0156	0,6705	-95,74	0	2,2270	1,5803
	8	7,17351		4,01		34			2	3
3	33,69	-	0	570.06	34,3703	0,7338	-96,6307	0	2,2308	1,5854
	72	5,79353		0,57		69			6	
3	34,44	-	0	573.65	37,0392	0,8063	-97,1441	0	2,2382	1,5874
	02	4,13345		3,89		5			1	2
3	35,33	-	0	576.28	40,1018	0,8883	-97,1336	0	2,2504	1,5853
	18	2,13273		5,81		16			3	6
3	36,40	0,28503	0	577.15	43,8453	0,9761	-96,3246	0	2,2699	1,5773
	17	4		2,05		96				2
3	37,68	3,21822	0	574.93	48,5068	1,0689	-94,2691	0	2,3004	1,5604
	57			7,62					3	9
3	39,22	6,79722	0	567.59	54,2194	1,1690	-90,3213	0	2,3473	1,5314
	64			3,18		9			4	9
3	41,07	11,1992	0	552.05	61,1052	1,2815	-83,5724	0	2,4171	1,4869
	52			4,03					8	2



3	43,29 38	16,6718	0	523.00 5,35	69,1922	1,4158 6	-72,433	0	2,5195 7	1,4224 2
3	45,57 91	22,5764	0	475.81 7,80	76,9816	1,5649 9	-55,5757	0	2,6568 2	1,3398 1
3	45,57 91	22,5764	0	475.81 7,80	76,9816	1,5649 9	-55,5757	0	2,6568 2	1,3398 1
3	45,95 62	23,587	0	464.21 9,23	78,0918	1,5875 2	-51,4458	0	2,6951 1	1,3216 2
3	49,15 1	32,7196	0	358.48 9,27	85,9293	1,9047 2	-20,4832	0	3,0174 2	1,2139 8
3	50,58 16	37,1252	0	314.52 8,95	88,1457	2,1092 1	-10,9251	0	3,1416 4	1,1908 2
3	50,58 16	37,1252	0	314.52 8,95	88,1457	2,1092	-10,9251	0	3,1416 5	1,1908 2
3	52,98 47	44,8933	0	254.56 6,73	90,0187	2,5047 6	-0,857744	0	3,3199 5	1,1734 8
3	57,58 52	60,9222	0	165.25 1,33	91,5935	3,5838	9,64841	0	3,6393 5	1,1671 7
3	63,10 58	81,8671	0	106.99 8,25	93,6118	5,0738 2	14,8015	0	3,9380 7	1,1696 6
3	69,73 06	108,924	0	72.370, 84	96,1796	6,8694 9	17,3978	0	4,2041 9	1,1729 1
3	77,68 03	143,357	0	51.681, 83	99,3942	8,8306 2	18,8176	0	4,4332 7	1,1753 6
3	87,21 99	186,732	0	37.345, 41	103,379	11,176 4	19,9823	0	4,6568 2	1,1764 5
3	98,66 74	241,339	0	27.142, 83	108,309	14,007 5	21,6115	0	4,8801 6	1,1744 6
3	107,8 07	286,647	0	21.832, 10	112,338	16,251 1	22,4029	0	5,0324 3	1,1736 6
3	112,4 04	310,005	0	19.781, 75	114,395	17,383	22,7003	0	5,1028 3	1,1734
3	128,8 89	396,121	0	14.420, 64	121,883	21,390 7	23,4316	0	5,3259 2	1,1728 9
3	139,1 76	451,521	0	12.182, 69	126,634	23,851 6	23,724	0	5,4466 5	1,1727 5
4	35,70	-	0	1,00	0,00177	0,1543	24,6396	0	3,1164	1,1739



	89	19,8226			245	65			3	6
4	35,80	-	0	514.09	4,87144	0,0187	-83,4603	0	2,2854	1,5124
	89	19,5924		0,68		825				7
4	35,90	-	0	514.07	6,88836	0,0372	-83,4126	0	2,2876	1,5120
	89	19,3637		9,26		783			8	9
4	36,00	-	0	513.46	8,44397	0,0557	-83,3039	0	2,2900	1,5116
	89	19,1348		9,70		162			3	4
4	36,10	-	0	512.74	9,76293	0,0740	-83,1856	0	2,2923	1,5111
	89	18,9057		7,48		733			8	8
4	36,20	-	0	511.98	10,9296	0,0923	-83,0639	0	2,2947	1,5107
	89	18,6764		3,54		676			3	3
4	36,30	-	0	511.20	11,9882	0,1106	-82,9415	0	2,2970	1,5102
	89	18,4468		5,51					7	9
4	36,40	-	0	510.41	12,967	0,1287	-82,8185	0	2,2994	1,5098
	89	18,2169		8,39		48				5
4	36,50	-	0	509.62	13,8824	0,1468	-82,6951	0	2,3017	1,5094
	89	17,9869		5,92		21			3	
4	36,60	-	0	508.82	14,7453	0,1648	-82,5713	0	2,3040	1,5089
	89	17,7566		8,50		32			6	6
4	36,70	-	0	508.02	15,564	0,1827	-82,4473	0	2,3063	1,5085
	89	17,5261		9,00		84			9	2
4	36,80	-	0	507.22	16,3455	0,2006	-82,3234	0	2,3087	1,5080
	89	17,2953		9,13		74			1	8
4	36,90	-	0	506.42	17,0954	0,2184	-82,1996	0	2,3110	1,5076
	89	17,0643		8,58		93			2	5
4	37,00	-	0	505.62	17,8178	0,2362	-82,0756	0	2,3133	1,5072
	89	16,8331		6,55		38			4	1
4	37,10	-	0	505.01	18,5162	0,2537	-82,0006	0	2,3153	1,5070
	89	16,6017		4,47		8				3
4	37,20	-	0	504.75	19,1928	0,2709	-82,0159	0	2,3166	1,5073
	89	16,3702		3,78		84				4
4	37,30	-	0	504.82	19,8488	0,2878	-82,1171	0	2,3173	1,5080
	89	16,1385		8,30		26			1	9
4	37,40	-	0	505.19	20,4865	0,3042	-82,2916	0	2,3175	1,5092
	89	15,9068		0,77		84			1	4
4	37,50	-15,675	0	505.79	21,1073	0,3203	-82,5282	0	2,3172	1,5107
	89			9,99		54			9	2
4	37,60	-	0	506.59	21,7126	0,3360	-82,8116	0	2,3167	1,5124



	89	15,4433		7,90		49			8	4
4	37,70	-	0	507.53	22,3036	0,3513	-83,1291	0	2,3160	1,5143
	89	15,2116		7,20		85			7	5
4	37,82	-	0	508.78	22,9957	0,3693	-83,5389	0	2,3150	1,5168
	89	14,9337		8,43		43			8	
4	37,97	-	0	510.40	23,8033	0,3903	-84,055	0	2,3137	1,5198
	29	14,6003		2,65		04			9	7
4	38,14	-	0	512.42	24,7431	0,4146	-84,6905	0	2,3122	1,5236
	57	14,2006		6,04		62			5	5
4	38,35	-	0	514.89	25,8323	0,4428	-85,4562	0	2,3105	1,5282
	3	13,7213		2,74		65				2
4	38,60	-	0	517.81	27,0894	0,4753	-86,3597	0	2,3086	1,5336
	19	13,1466		9,78		83			8	5
4	38,90	-	0	521.19	28,5367	0,5126	-87,4002	0	2,3070	1,5399
	04	12,4574		1,52		59			1	8
4	39,25	-11,631	0	524.95	30,1997	0,5550	-88,5704	0	2,3058	1,5472
	88			6,81		97			1	
4	39,68	-	0	529.02	32,1056	0,6031	-89,8559	0	2,3054	1,5552
	87	10,6397		5,77		08			9	9
4	40,20	-	0	533.23	34,2824	0,6572	-91,1782	0	2,3066	1,5637
	47	9,44987		3,51		83			6	2
4	40,82	-8,0207	0	537.32	36,7576	0,7187	-92,3274	0	2,3101	1,5708
	39			9,51		74			5	4
4	41,56	-	0	540.97	39,5606	0,7888	-93,1182	0	2,3169	1,5751
	69	6,30191		8,57		79			3	9
4	42,45	-4,2313	0	543.69	42,7324	0,8687	-93,3824	0	2,3283	1,5755
	85			8,43		38			3	5
4	43,52	-	0	544.76	46,4521	0,9569	-92,9211	0	2,3463	1,5706
	85	1,73097		9,56		62				6
4	44,81	1,29859	0	543.01	51,0457	1,0504	-91,3222	0	2,3739	1,5578
	24			9,05		3			9	9
4	46,35	4,98729	0	536.61	56,7253	1,1504	-87,9577	0	2,4158	1,5336
	31			0,16		8			7	9
4	48,20	9,50841	0	522.91	63,5998	1,2629	-82,0043	0	2,4770	1,4946
	19			8,61		5			5	8
4	50,42	15,0977	0	497.55	71,7595	1,3967	-72,1425	0	2,5647	1,4371
	05			8,21		7			7	1
4	53,08	22,1014	0	448.04	81,01	1,5663	-54,5767	0	2,7036	1,3505



	29			5,52		8			8	3
4	53,53 89	23,3432	0	436.51 6,21	82,4761	1,5946 3	-50,4527	0	2,7424 7	1,3321 9
4	53,53 89	23,3432	0	436.51 6,21	82,4761	1,5947 8	-50,4527	0	2,7422	1,3321 9
4	56,27 77	31,2044	0	356.44 7,52	89,812	1,8441 4	-24,2482	0	2,9955 1	1,2344
4	58,88 54	39,3028	0	283.71 2,59	94,3265	2,2133 2	-7,32422	0	3,2083 8	1,1908 2
4	58,88 54	39,3028	0	283.71 2,59	94,3265	2,2134 2	-7,32422	0	3,2082 4	1,1908 2
4	60,11 14	43,288	0	255.78 3,70	95,6666	2,4053 7	-2,45456	0	3,2921 5	1,1818 8
4	64,71 19	59,0968	0	174.44 0,00	97,8898	3,3090 1	8,28298	0	3,5783 1	1,1707 5
4	70,23 25	79,7159	0	112.37 9,80	99,8795	4,7297 2	14,1871	0	3,8815 1	1,1712
4	76,85 73	106,43	0	74.173, 59	102,424	6,5515 7	17,167	0	4,1645 1	1,1739 3
4	84,80 7	140,495	0	52.526, 75	105,605	8,4953 3	18,6971	0	4,3987	1,1760 6
4	94,34 66	183,575	0	37.730, 01	109,567	10,828 9	19,7547	0	4,6272 6	1,1775 4
4	105,7 94	237,891	0	27.333, 38	114,476	13,654 4	21,4808	0	4,8547 1	1,1751 6
4	114,2	279,311	0	22.460, 80	118,165	15,716 4	22,2547	0	4,9973 7	1,1742 5
4	119,5 31	306,253	0	19.906, 30	120,54	17,026 4	22,621	0	5,0812 1	1,1738 7
4	136,0 16	392,13	0	14.555, 56	128,011	21,041 5	23,3822	0	5,3080 7	1,1732 1
4	144,9 41	439,981	0	12.562, 65	132,12	23,176 3	23,6498	0	5,4146 9	1,1730 3
5	42,05 87	- 21,7844	0	1,00	0,00177 245	0,1543 65	24,6396	0	3,1164 3	1,1739 6
5	42,15 87	- 21,5467	0	483.27 4,35	5,07526	0,0180 632	-79,0226	0	2,3623 9	1,4984 2



5	42,25 - 87	- 21,3104	0	483.12 6,72	7,17744	0,0358 642	-78,9581	0	2,3648	1,4980 2
5	42,35 - 87	- 21,0738	0	482.43 6,96	8,79871	0,0536 041	-78,8386	0	2,3672	1,4975 6
5	42,45 - 87	- 20,8369	0	481.64 1,61	10,1688	0,0712 982	-78,71	0	2,3695	1,4971 9
5	42,55 - 87	- 20,5998	0	480.81 9,28	11,3816	0,0889 178	-78,5802	0	2,3719	1,4966 5 4
5	42,65 - 87	- 20,3625	0	479.97 9,93	12,4825	0,1064 71	-78,449	0	2,3743	1,4961 1 9
5	42,75 - 87	-20,125	0	479.13 1,83	13,4973	0,1239 73	-78,3172	0	2,3766	1,4957 7 4
5	42,85 - 87	- 19,8872	0	478.28 1,67	14,4449	0,1414 15	-78,1855	0	2,3790	1,4953 1
5	42,95 - 87	- 19,6492	0	477.42 8,50	15,3386	0,1587 87	-78,0536	0	2,3813	1,4948 5 5
5	43,05 - 87	- 19,4109	0	476.57 3,77	16,1874	0,1760 87	-77,9217	0	2,3836	1,4944 9 1
5	43,15 - 87	- 19,1724	0	475.71 5,34	16,9973	0,1933 28	-77,7893	0	2,3860	1,4939 3 7
5	43,25 - 87	- 18,9337	0	474.84 8,57	17,7724	0,2105 2	-77,6556	0	2,3883	1,4935 9 2
5	43,35 - 87	- 18,6948	0	473.97 5,85	18,5173	0,2276 6	-77,521	0	2,3907	1,4930 7 7
5	43,45 - 87	- 18,4556	0	473.09 8,75	19,2352	0,2447 52	-77,3857	0	2,3931	1,4926 5 2
5	43,55 - 87	- 18,2161	0	472.26 3,08	19,9295	0,2617 56	-77,2618	0	2,3954	1,4922 6 3
5	43,65 - 87	- 17,9766	0	471.73 4,07	20,6028	0,2784 54	-77,2199	0	2,3972	1,4922 2 6
5	43,75 - 87	- 17,7369	0	471.56 6,92	21,2573	0,2947 53	-77,2747	0	2,3983	1,4928 5
5	43,85 - 87	- 17,4971	0	471.73 0,77	21,8948	0,3106 29	-77,4179	0	2,3989	1,4937 1 9
5	43,95 - 87	- 17,2572	0	472.13 0,18	22,5166	0,3261 17	-77,6225	0	2,3990	1,4951 8
5	44,05 - 87	- 17,0173	0	472.69 6,56	23,1238	0,3412 54	-77,8694	0	2,3990	1,4966 1 3



5	44,17 87	- 16,7294	0	473.53 0,02	23,8349	0,3589 85	-78,2035	0	2,3987 3	1,4986 6
5	44,32 27	-16,384	0	474.69 0,04	24,665	0,3796 73	-78,6421	0	2,3982 2	1,5013
5	44,49 55	- 15,9697	0	476.23 3,39	25,6303	0,4037 11	-79,203	0	2,3974 7	1,5046 4
5	44,70 28	- 15,4726	0	478.19 7,47	26,7471	0,4315 41	-79,8999	0	2,3965 5	1,5087 9
5	44,95 17	- 14,8764	0	480.61 0,34	28,0359	0,4635 72	-80,7432	0	2,3955 8	1,5138 3
5	45,25 03	- 14,1612	0	483.47 0,21	29,5186	0,5002 29	-81,7371	0	2,3947 4	1,5198 1
5	45,60 86	- 13,3032	0	486.74 0,33	31,2196	0,5419 37	-82,8782	0	2,3943 7	1,5267 8
5	46,03 86	- 12,2736	0	490.33 7,00	33,1628	0,5891 6	-84,1544	0	2,3946 3	1,5347 1
5	46,55 45	- 11,0377	0	494.10 3,90	35,3763	0,6423 47	-85,5132	0	2,3963 1	1,5433 3
5	47,17 37	- 9,55288	0	497.80 1,56	37,8916	0,7022 74	-86,7945	0	2,4001 7	1,5514 7
5	47,91 67	- 7,76725	0	501.09 9,33	40,7388	0,7702 67	-87,7611	0	2,4069 1	1,5573 3
5	48,80 83	- 5,61643	0	503.45 9,12	43,939	0,8477 77	-88,2076	0	2,4181 8	1,5594 6
5	49,87 83	- 3,02014	0	504.17 9,40	47,5931	0,9350 16	-87,9196	0	2,4355 8	1,5564 8
5	51,16 22	0,12618 5	0	500.83 4,42	52,0564	1,0252 1	-86,2934	0	2,4664 9	1,5451
5	52,70 29	3,96745	0	487.68 2,15	57,6406	1,1093 9	-81,9779	0	2,5275 1	1,5188 4
5	54,55 17	8,71513	0	464.64 2,91	64,2356	1,2097 1	-74,4737	0	2,6088 2	1,4761 2
5	56,77 03	14,6111	0	429.98 4,68	72,0022	1,3426 8	-62,8906	0	2,7056 9	1,4158 5
5	59,43 27	21,9672	0	377.98 1,02	80,7771	1,5420 3	-44,7725	0	2,8209 4	1,3329 4
5	59,91 8	23,3432	0	366.27 8,08	82,2566	1,5836 1	-40,4409	0	2,8495 9	1,3146 4



5	59,918	23,3432	0	366.278,08	82,2566	1,58364	-40,4409	0	2,84953	1,31464
5	62,6275	31,3664	0	296.103,52	89,163	1,86438	-16,7527	0	3,07023	1,22954
5	65,8208	41,5421	0	223.412,96	94,5545	2,32587	-0,899476	0	3,29209	1,19082
5	65,8208	41,5421	0	223.412,96	94,5545	2,32588	-0,899476	0	3,29209	1,19082
5	66,4612	43,6638	0	211.746,55	95,3632	2,42242	0,873124	0	3,32925	1,18804
5	71,0617	59,5618	0	146.898,13	99,1379	3,23812	9,77779	0	3,57699	1,17683
5	76,5824	80,0746	0	96.586,55	101,606	4,51933	14,8026	0	3,85218	1,17553
5	83,2071	106,604	0	62.292,75	104,117	6,34823	17,6043	0	4,1411	1,17702
5	91,1568	140,499	0	43.462,36	107,286	8,28701	19,011	0	4,37876	1,17836
5	100,696	183,4	0	30.833,40	111,232	10,6192	20,2583	0	4,61007	1,17827
5	112,144	237,532	0	22.119,52	116,125	13,4345	21,8379	0	4,83975	1,17576
5	112,718	240,314	0	21.802,91	116,374	13,5752	21,8951	0	4,85017	1,17568
5	125,881	305,732	0	16.108,18	122,174	16,8009	22,8728	0	5,06817	1,17437
5	139,989	378,629	0	12.278,88	128,533	20,2071	23,4821	0	5,26448	1,17368
6	48,3126	-23,0435	0	1,00	0,00177245	0,154365	24,6396	0	3,11643	1,17396
6	48,4126	-22,7972	0	445.536,65	5,19647	0,0172805	-73,6191	0	2,44984	1,48242
6	48,5126	-22,5521	0	445.296,22	7,34867	0,0343189	-73,545	0	2,45221	1,48202
6	48,6126	-22,3068	0	444.577,71	9,0012	0,0513611	-73,423	0	2,45447	1,48158
6	48,71	-	0	443.74	10,4081	0,0682	-73,2888	0	2,4568	1,4811



	26	22,0612		0,55		762				3
6	48,81	-	0	442.85	11,6451	0,0851	-73,1492	0	2,4591	1,4806
	26	21,8154		2,37		779			7	8
6	48,91	-	0	441.94	12,7692	0,1019	-73,0089	0	2,4615	1,4802
	26	21,5694		9,55		84			3	3
6	49,01	-	0	441.04	13,8039	0,1187	-72,8693	0	2,4638	1,4797
	26	21,3231		6,71		61			6	8
6	49,11	-	0	440.14	14,768	0,1355	-72,7308	0	2,4661	1,4793
	26	21,0766		7,81		07			6	4
6	49,21	-	0	439.25	15,6748	0,1522	-72,5934	0	2,4684	1,4789
	26	20,8299		4,44		25			3	1
6	49,31	-	0	438.36	16,534	0,1689	-72,457	0	2,4706	1,4784
	26	20,5829		6,19		06			8	8
6	49,41	-	0	437.47	17,3541	0,1855	-72,321	0	2,4729	1,4780
	26	20,3357		9,86		23			2	5
6	49,51	-	0	436.59	18,1416	0,2020	-72,1847	0	2,4751	1,4776
	26	20,0883		1,24		6			6	3
6	49,61	-	0	435.69	18,9002	0,2185	-72,0477	0	2,4774	1,4772
	26	19,8407		8,61		22			1	
6	49,71	-	0	434.80	19,6317	0,2349	-71,91	0	2,4796	1,4767
	26	19,5929		1,13		37			7	7
6	49,81	-	0	433.90	20,3388	0,2513	-71,7718	0	2,4819	1,4763
	26	19,3448		0,47		04			3	4
6	49,91	-	0	433.04	21,024	0,2675	-71,6458	0	2,4841	1,4759
	26	19,0965		2,48		86			3	7
6	50,01	-18,848	0	432.28	21,6892	0,2837	-71,5498	0	2,4861	1,4757
	26			9,91		18			5	6
6	50,11	-	0	431.77	22,3358	0,2995	-71,5219	0	2,4877	1,4758
	26	18,5994		6,80		63			8	9
6	50,21	-	0	431.52	22,9651	0,3150	-71,5698	0	2,489	1,4764
	26	18,3507		8,48		53				
6	50,31	-	0	431.54	23,5788	0,3301	-71,6939	0	2,4898	1,4773
	26	18,1018		7,68		3				1
6	50,43	-17,803	0	431.80	24,2963	0,3477	-71,9083	0	2,4904	1,4787
	26			5,46		49			3	3
6	50,57	-	0	432.33	25,1318	0,3682	-72,2265	0	2,4909	1,4807
	66	17,4443		1,96		68			6	5
6	50,74	-	0	432.63	26,0868	0,3918	-72,5747	0	2,4930	1,4831



	94	17,0137		8,13		54		8	4	
6	50,95 67	- 16,4961	0	432.24 3,80	27,1649	0,4186 31	-72,8827	0	2,4984 1	1,4857 1
6	51,20 55	- 15,8734	0	431.34 7,71	28,3922	0,449	-73,1967	0	2,5062 5	1,4886 6
6	51,50 41	- 15,1237	0	430.08 5,10	29,7929	0,4834 13	-73,5513	0	2,5160 9	1,4921 7
6	51,86 25	- 14,2201	0	428.55 4,86	31,3994	0,5222 21	-73,974	0	2,5275 3	1,4963 9
6	52,29 24	- 13,1303	0	426.73 2,25	33,2405	0,5657 53	-74,4709	0	2,5405 6	1,5013 9
6	52,80 84	- 11,8155	0	424.45 7,30	35,3439	0,6142 33	-75,0258	0	2,5556 8	1,5071 6
6	53,42 76	- 10,2276	0	421.56 8,11	37,7409	0,6681 57	-75,5564	0	2,5731 8	1,5131 9
6	54,17 06	-8,3082	0	417.79 4,91	40,4594	0,7290 7	-75,75	0	2,5935 2	1,5172 2
6	55,06 22	- 5,98519	0	412.73 2,25	43,5263	0,7985 83	-75,3906	0	2,6173 6	1,5178 3
6	56,13 21	- 3,16974	0	405.86 1,90	46,9851	0,8784 02	-74,2661	0	2,6454 7	1,5137 4
6	57,41 61	0,24850 9	0	396.32 5,68	51,1323	0,9669 55	-72,001	0	2,6791 5	1,5028 2
6	58,95 68	4,40798	0	382.65 4,86	56,2871	1,0650 8	-67,9385	0	2,7204 6	1,4816 4
6	60,80 56	9,48454	0	362.79 5,83	62,5793	1,1816 8	-61,1535	0	2,7715 2	1,4462 9
6	63,02 42	15,703	0	333.73 1,69	70,0204	1,3342 1	-50,3217	0	2,8346 1	1,3928 6
6	65,68 18	23,3432	0	288.73 2,41	78,3996	1,5596 8	-32,3524	0	2,9174 3	1,3131 5
6	65,68 18	23,3432	0	288.73 2,41	78,3996	1,5596 8	-32,3524	0	2,9174 3	1,3131 5
6	65,68 66	23,3571	0	288.62 7,72	78,4136	1,5601 6	-32,3069	0	2,9176 2	1,3129 6
6	68,88 14	33,0343	0	220.83 1,86	86,3993	1,9020 9	-8,52676	0	3,1373 9	1,2274 7
6	72,71	45,5102	0	156.97	93,2072	2,4405	4,73261	0	3,3602	1,1953



	51			0,06		9			1	9
6	74,01 05	49,9036	0	141.33 7,28	95,1159	2,6275 2	7,22575	0	3,4217	1,1908 2
6	74,01 05	49,9036	0	141.33 7,28	95,1159	2,6275 4	7,22575	0	3,4216 7	1,1908 2
6	77,31 56	61,456	0	110.37 8,94	99,131	3,1468 1	11,5826	0	3,5680 4	1,1845
6	82,83 62	81,8093	0	74.022, 36	103,771	4,2253 9	15,6506	0	3,8050 4	1,1811 8
6	89,46 1	107,953	0	47.659, 85	107,013	5,8716 1	18,0893	0	4,0783 4	1,1808 1
6	97,41 07	141,383	0	32.296, 09	110,14	7,7779 4	19,38	0	4,3240 9	1,1811 3
6	106,9 5	183,812	0	22.356, 91	114,042	10,091 1	20,8826	0	4,5633 7	1,1790 8
6	108,9 46	192,965	0	20.904, 01	114,875	10,578 2	21,199	0	4,6078 2	1,1784 6
6	118,3 98	237,508	0	15.694, 00	118,893	12,887 4	22,2933	0	4,7994 9	1,1764 2
6	131,9 45	304,114	0	11.402, 43	124,806	16,168 2	23,1903	0	5,0289	1,1749 2
7	56,51 94	- 23,3432	0	1,00	0,00177 245	0,1543 65	24,6396	0	3,1164 3	1,1739 6
7	56,61 94	- 23,0713	0	310.33 1,82	5,3424	0,0151 936	-54,4283	0	2,7125 1	1,4334 5
7	56,71 94	- 22,7999	0	309.84 2,24	7,55359	0,0302 329	-54,3384	0	2,7145 6	1,4331 6
7	56,81 94	- 22,5283	0	308.95 4,22	9,2492	0,0452 599	-54,1965	0	2,7166	1,4327 7
7	56,91 94	- 22,2566	0	307.99 2,03	10,6812	0,0602 448	-54,0466	0	2,7186 4	1,4323 6
7	57,01 94	- 21,9846	0	307.00 4,30	11,9409	0,0752 152	-53,8942	0	2,7206 7	1,4319 6
7	57,11 94	- 21,7124	0	306.01 1,22	13,0803	0,0901 507	-53,7419	0	2,7226 8	1,4315 7
7	57,21 94	- 21,4401	0	305.01 1,88	14,1294	0,1050 45	-53,5889	0	2,7246 9	1,4311 7



7	57,31 94	- 21,1675	0	304.00 7,05	15,1058	0,1199 1	-53,4353	0	2,7267	1,4307 7
7	57,41 94	- 20,8947	0	302.99 8,90	16,0221	0,1347 53	-53,2814	0	2,7287 1	1,4303 8
7	57,51 94	- 20,6218	0	301.98 9,70	16,8884	0,1495 7	-53,1274	0	2,7307 2	1,4299 8
7	57,61 94	- 20,3486	0	300.97 9,20	17,7125	0,1643 53	-52,9733	0	2,7327 2	1,4295 9
7	57,71 94	- 20,0752	0	299.96 6,58	18,5005	0,1790 99	-52,8189	0	2,7347 3	1,4291 9
7	57,81 94	- 19,8017	0	298.95 4,55	19,2569	0,1938 07	-52,6646	0	2,7367 3	1,4288
7	57,91 94	- 19,5279	0	297.94 4,68	19,9847	0,2084 89	-52,5108	0	2,7387 1	1,4284 1
7	58,01 94	- 19,2539	0	296.94 1,09	20,6874	0,2231 38	-52,3581	0	2,7406 8	1,4280 2
7	58,11 94	- 18,9797	0	295.94 5,99	21,3666	0,2377 68	-52,2068	0	2,7426 2	1,4276 4
7	58,21 94	- 18,7054	0	294.95 7,32	22,0248	0,2523 71	-52,0566	0	2,7445 4	1,4272 6
7	58,31 94	- 18,4308	0	293.97 5,84	22,6636	0,2669 56	-51,9076	0	2,7464 4	1,4268 8
7	58,41 94	- 18,1561	0	292.99 9,32	23,2848	0,2815 14	-51,7595	0	2,7483 3	1,4265 1
7	58,51 94	- 17,8812	0	292.02 6,90	23,89	0,2960 45	-51,6119	0	2,7502 7	1,4261 4
7	58,63 94	-17,551	0	290.86 3,72	24,5968	0,3134 45	-51,4354	0	2,7524 4	1,4257
7	58,78 34	- 17,1545	0	289.59 9,51	25,419	0,3340 77	-51,271	0	2,7549 5	1,4253 9
7	58,95 62	- 16,6782	0	288.38 7,51	26,3718	0,3582 21	-51,1851	0	2,7575 5	1,4255 7
7	59,16 35	- 16,1061	0	287.34 0,36	27,4714	0,3862 04	-51,2294	0	2,7601 7	1,4264 8
7	59,41 24	- 15,4189	0	286.56 3,30	28,7352	0,4183 08	-51,4569	0	2,7627 6	1,4284 2
7	59,71 1	- 14,5936	0	286.14 4,78	30,1827	0,4548 13	-51,9096	0	2,7653 2	1,4316 2



7	60,06 93	- 13,6022	0	286.07 8,27	31,833	0,4960 65	-52,6025	0	2,7680 1	1,4361 8
7	60,49 93	- 12,4112	0	286.28 7,30	33,7066	0,5424 31	-53,53	0	2,7711 2	1,4421 6
7	61,01 53	- 10,9804	0	286.64 1,59	35,8269	0,5941 53	-54,6776	0	2,7750 4	1,4495 6
7	61,63 44	- 9,26066	0	286.95 4,67	38,2194	0,6515 1	-55,9897	0	2,7802 5	1,4581 8
7	62,37 74	- 7,19251	0	286.99 1,15	40,9048	0,7157 77	-57,1825	0	2,7871 6	1,4662 6
7	63,26 9	- 4,70336	0	286.35 4,17	43,8842	0,7892 43	-57,8796	0	2,7964 6	1,4714 3
7	64,33 9	- 1,70467	0	284.44 1,70	47,2032	0,8735 44	-57,8338	0	2,8090 6	1,4723
7	65,62 29	1,91283	0	280.38 7,67	51,1943	0,9667 61	-56,6274	0	2,8262	1,4665 4
7	67,16 36	6,28502	0	272.82 8,93	56,1323	1,0710 3	-53,5508	0	2,8498 2	1,4504 7
7	69,01 24	11,583	0	259.85 8,84	62,1689	1,1956 4	-47,6006	0	2,8819 5	1,4196 7
7	71,23 11	18,0244	0	238.42 3,92	69,3488	1,3595 8	-37,2661	0	2,9255 1	1,3692 7
7	73,03 66	23,3432	0	214.85 9,99	74,9077	1,5194	-25,7113	0	2,9671 2	1,3175 4
7	73,03 66	23,3432	0	214.85 9,99	74,9077	1,5194	-25,7113	0	2,9671 2	1,3175 4
7	73,89 34	25,9029	0	200.12 4,76	77,3268	1,6053 4	-18,6548	0	3,0053 5	1,2882 3
7	77,08 82	35,8187	0	150.81 9,19	84,981	1,9553 7	-1,34813	0	3,1941 6	1,2273 5
7	80,92 19	48,4426	0	107.69 9,66	92,3459	2,4683 3	8,21415	0	3,3863 8	1,2020 5
7	85,52 25	64,4547	0	76.507, 02	99,9059	3,1033 4	13,4055	0	3,5668 4	1,1913 6
7	85,93 34	65,9233	0	74.392, 68	100,547	3,1595 7	13,7089	0	3,5809 1	1,1908 2
7	85,93 34	65,9233	0	74.392, 68	100,547	3,1595 6	13,7089	0	3,5809 2	1,1908 2



7	91,04 31	84,6654	0	53.529, 86	107,515	3,9415 7	16,5036	0	3,7553 1	1,1865 6
7	97,66 78	110,281	0	36.278, 40	114,023	5,1595 5	18,4711	0	3,9737 3	1,1844 5
7	105,6 17	142,856	0	24.305, 14	118,226	6,9001 3	19,6866	0	4,2203 8	1,1836 3
7	108,0 77	153,324	0	21.770, 34	119,197	7,4781 3	20,0148	0	4,2910 8	1,1832 2
7	115,1 57	184,375	0	16.707, 98	122,045	9,1676 9	21,4515	0	4,4752 1	1,1797 5
7	126,6 05	237,068	0	11.782, 16	126,807	11,905 7	22,7291	0	4,7226	1,1768 9
7	127,5 85	241,708	0	11.473, 55	127,223	12,140 1	22,8045	0	4,7415 9	1,1767 3
8	71,96 95	- 23,3432	0	1,00	0,00177 245	0,1543 65	24,6396	0	3,1164 3	1,1739 6
8	72,06 95	- 23,0539	0	194.63 8,14	5,51062	0,0139 415	-38,1721	0	2,8887 7	1,3995 3
8	72,16 95	-22,765	0	194.40 9,52	7,78776	0,0277 955	-38,1471	0	2,8897 3	1,3995 1
8	72,26 95	-22,476	0	193.92 0,97	9,53334	0,0416 483	-38,0732	0	2,8906 8	1,3993 5
8	72,36 95	- 22,1869	0	193.37 9,46	11,0038	0,0554 936	-37,9909	0	2,8916 4	1,3991 7
8	72,46 95	- 21,8977	0	192.82 2,48	12,2968	0,0693 379	-37,9065	0	2,8925 9	1,3989 8
8	72,56 95	- 21,6084	0	192.25 7,48	13,4661	0,0831 608	-37,821	0	2,8935 4	1,3987 9
8	72,66 95	-21,319	0	191.68 7,43	14,5403	0,0969 761	-37,7349	0	2,8945	1,3986
8	72,76 95	- 21,0295	0	191.11 4,23	15,5379	0,1107 92	-37,6483	0	2,8954 5	1,3984 1
8	72,86 95	- 20,7399	0	190.54 0,39	16,4733	0,1246 04	-37,5618	0	2,8964	1,3982 2
8	72,96 95	- 20,4502	0	189.96 5,65	17,3573	0,1384 02	-37,4752	0	2,8973 5	1,3980 3
8	73,06	-	0	189.38	18,198	0,1521	-37,3885	0	2,8983	1,3978



	95	20,1604		9,93		84			1	4
8	73,16	-	0	188.81	19,0009	0,1659	-37,3021	0	2,8992	1,3976
	95	19,8705		5,77		52			5	5
8	73,26	-	0	188.24	19,7702	0,1797	-37,2163	0	2,9001	1,3974
	95	19,5805		5,21		11			9	6
8	73,36	-	0	187.68	20,5095	0,1934	-37,1316	0	2,9011	1,3972
	95	19,2905		1,21		67			1	8
8	73,46	-	0	187.12	21,2218	0,2072	-37,0479	0	2,9020	1,3971
	95	19,0003		2,90		18			1	
8	73,56	-	0	186.57	21,9095	0,2209	-36,9652	0	2,9029	1,3969
	95	18,7101		0,60		69			1	2
8	73,66	-	0	186.02	22,5752	0,2347	-36,8832	0	2,9037	1,3967
	95	18,4197		2,72		14			9	4
8	73,76	-	0	185.47	23,2209	0,2484	-36,8018	0	2,9046	1,3965
	95	18,1293		8,48		51			7	6
8	73,86	-	0	184.93	23,8485	0,2621	-36,7208	0	2,9055	1,3963
	95	17,8388		6,82		78			4	9
8	73,96	-	0	184.39	24,4594	0,2758	-36,64	0	2,9064	1,3962
	95	17,5482		7,08		94			1	2
8	74,08	-	0	183.75	25,1721	0,2923	-36,5435	0	2,9074	1,3960
	95	17,1994		1,52		38			5	1
8	74,23	-	0	182.97	26	0,3120	-36,4279	0	2,9087	1,3957
	35	16,7806		8,99		56				6
8	74,40	-	0	182.05	26,9583	0,3356	-36,2893	0	2,9101	1,3954
	63	16,2779		3,04		89			9	6
8	74,61	-	0	180.94	28,0619	0,3640	-36,1242	0	2,9119	1,3951
	37	15,6742		4,15		15			8	1
8	74,86	-	0	179.84	29,3271	0,3972	-36,0421	0	2,9138	1,3952
	25	14,9494		3,99		91			7	5
8	75,16	-	0	178.96	30,7687	0,4356	-36,1648	0	2,9156	1,3964
	11	14,0791		0,46		27			7	7
8	75,51	-	0	178.44	32,4052	0,4790	-36,5922	0	2,9172	1,3993
	95	13,0341		7,25		03			8	
8	75,94	-	0	178.32	34,2556	0,5275	-37,363	0	2,9188	1,4039
	94	11,7793		9,83		41			1	7
8	76,46	-	0	178.50	36,3382	0,5816	-38,4571	0	2,9205	1,4104
	54	10,2727		4,44		43			5	5
8	77,08	-	0	178.84	38,6691	0,6416	-39,8456	0	2,9228	1,4187



	46	8,46371		2,70		85			1	
8	77,82 76	-6,2909	0	179.17 3,53	41,2618	0,7087 7	-41,2472	0	2,9259 2	1,4271 2
8	78,71 92	- 3,68026	0	179.25 1,14	44,1299	0,7849 99	-42,2821	0	2,9302 3	1,4335
8	79,78 91	- 0,54197	0	178.71 2,32	47,2833	0,8726 75	-42,7193	0	2,9362 4	1,4365 5
8	81,07 31	3,23335	0	176.86 0,91	51,0594	0,9698 42	-42,1103	0	2,9449 7	1,4338 2
8	82,61 38	7,78034	0	172.53 2,26	55,7951	1,0782 3	-39,6706	0	2,9579 8	1,4212 5
8	84,46 26	13,2662	0	164.12 9,75	61,6077	1,2092 5	-34,3262	0	2,9770 1	1,3939 8
8	86,68 12	19,9007	0	149.07 3,08	68,5093	1,3856	-24,486	0	3,0046 9	1,3464 7
8	87,82 37	23,3432	0	138.41 8,94	71,9165	1,4921 7	-17,6766	0	3,0223 8	1,3156 2
8	87,82 37	23,3432	0	138.41 8,94	71,9165	1,4921 7	-17,6766	0	3,0223 8	1,3156 2
8	89,34 35	27,9701	0	121.26 8,50	76,1055	1,6436 3	-7,90047	0	3,0773 7	1,2743 6
8	92,53 83	38,0561	0	91.039, 12	83,7296	1,9848 7	3,90038	0	3,2337 5	1,2309 3
8	96,37 21	50,7779	0	65.576, 21	91,5995	2,4632 6	10,9486	0	3,3994 7	1,2086 2
8	100,9 73	66,8173	0	46.499, 00	100,136	3,0748 6	15,0247	0	3,5677 1	1,1973 6
8	106,4 93	86,9737	0	33.158, 81	109,844	3,7908 2	17,4281	0	3,7292 2	1,1914 4
8	107,4 07	90,3905	0	31.523, 22	111,427	3,9071 5	17,6979	0	3,7529 3	1,1908 2
8	107,4 07	90,3905	0	31.523, 22	111,427	3,9071 7	17,6979	0	3,7529 1	1,1908 2
8	113,1 18	112,242	0	23.518, 99	120,387	4,6907 8	18,9632	0	3,8985 2	1,1880 8
8	113,8 67	115,167	0	22.681, 46	121,428	4,8015 1	19,0882	0	3,9174 3	1,1878 3



8	121,068	144,093	0	16.303,35	129,769	5,99314	19,9901	0	4,10122	1,18613
8	129,966	181,613	0	11.373,19	135,697	7,82665	21,8778	0	4,33287	1,18068
9	104,071	-23,3432	0	1,00	0,00177245	0,154365	24,6396	0	3,11643	1,17396
9	104,171	-23,0414	0	92.879,07	5,62732	0,0130928	-24,1799	0	3,01677	1,37513
9	104,271	-22,7397	0	92.785,05	7,95238	0,0261273	-24,2032	0	3,01714	1,37531
9	104,371	-22,4379	0	92.571,65	9,73407	0,0391658	-24,1793	0	3,0175	1,37529
9	104,471	-22,1362	0	92.334,52	11,2314	0,0522191	-24,1475	0	3,01786	1,37524
9	104,571	-21,8344	0	92.090,41	12,5493	0,0652663	-24,1134	0	3,01822	1,37519
9	104,671	-21,5325	0	91.842,30	13,7391	0,0783134	-24,0783	0	3,01857	1,37512
9	104,771	-21,2306	0	91.591,80	14,8298	0,0913731	-24,0426	0	3,01893	1,37506
9	104,871	-20,9287	0	91.340,90	15,8424	0,104439	-24,0068	0	3,01929	1,37499
9	104,971	-20,6268	0	91.089,25	16,7922	0,1175	-23,9708	0	3,01965	1,37493
9	105,071	-20,3248	0	90.836,98	17,6899	0,130555	-23,9346	0	3,02001	1,37486
9	105,171	-20,0228	0	90.584,28	18,542	0,143613	-23,8984	0	3,02037	1,3748
9	105,271	-19,7207	0	90.330,86	19,3544	0,156675	-23,8621	0	3,02073	1,37473
9	105,371	-19,4186	0	90.077,04	20,1314	0,169746	-23,8257	0	3,02109	1,37467
9	105,471	-19,1165	0	89.823,09	20,8769	0,182825	-23,7893	0	3,02145	1,3746
9	105,571	-18,8143	0	89.569,13	21,5947	0,195908	-23,7528	0	3,02181	1,37453
9	105,671	-18,5122	0	89.315,19	22,2876	0,2089	-23,7164	0	3,02217	1,37446



	71	18,5121		10		92			7	7
9	105,7	-	0	89.060,	22,958	0,2220	-23,68	0	3,0225	1,3744
	71	18,2099		83		75			3	
9	105,8	-	0	88.806,	23,608	0,2351	-23,6435	0	3,0228	1,3743
	71	17,9076		19		56			9	3
9	105,9	-	0	88.551,	24,2393	0,2482	-23,6069	0	3,0232	1,3742
	71	17,6053		36		34			5	7
9	106,0	-17,303	0	88.296,	24,8532	0,2613	-23,5704	0	3,0236	1,3742
	71			36		11			1	
9	106,1	-	0	87.990,	25,5679	0,2770	-23,5265	0	3,0240	1,3741
	91	16,9401		19		13			4	2
9	106,3	-	0	87.622,	26,3977	0,2958	-23,4738	0	3,0245	1,3740
	35	16,5046		19		52			6	3
9	106,5	-	0	87.179,	27,355	0,3184	-23,4105	0	3,0251	1,3739
	08	15,9819		90		82			8	1
9	106,7	-	0	86.648,	28,4553	0,3456	-23,3344	0	3,0259	1,3737
	15	15,3546		40		53			3	8
9	106,9	-	0	86.009,	29,7127	0,3782	-23,243	0	3,0268	1,3736
	64	14,6015		77		92			3	1
9	107,2	-	0	85.288,	31,1433	0,4172	-23,1728	0	3,0278	1,3736
	63	13,6975		36		07			7	1
9	107,6	-	0	84.650,	32,7635	0,4623	-23,2846	0	3,0288	1,3745
	21	12,6124		00		1			8	7
9	108,0	-	0	84.227,	34,589	0,5133	-23,7094	0	3,0297	1,3771
	51	11,3099		96		88			6	7
9	108,5	-	0	84.054,	36,6364	0,5704	-24,5117	0	3,0305	1,3817
	67	9,74633		16		01			6	6
9	109,1	-	0	84.092,	38,9168	0,6336	-25,6967	0	3,0313	1,3884
	86	7,86957		44		42			9	3
9	109,9	-	0	84.267,	41,4417	0,7039	-27,0372	0	3,0324	1,3959
	29	5,61679		82		9			3	7
9	110,8	-2,9124	0	84.437,	44,2171	0,7832	-28,1969	0	3,0339	1,4025
	21			90		11			1	4
9	111,8	0,33481	0	84.364,	47,2486	0,8739	-28,8655	0	3,0361	1,4064
	91	5		00		8			6	5
9	113,1	4,23515	0	83.673,	50,8423	0,9750	-28,6489	0	3,0396	1,4055
	75			15		28			6	7
9	114,7	8,92242	0	81.735,	55,3921	1,0874	-26,7767	0	3,0451	1,3958



	15		04		7		8	6		
9	116,5 64	14,5601	0	77.615, 01	60,9908	1,224	-22,2462	0	3,0537 6	1,3725 8
9	118,7 83	21,3494	0	69.721, 81	67,656	1,4084 2	-13,6843	0	3,0671 1	1,3305 1
9	119,4 32	23,3432	0	66.505, 91	69,5473	1,4706 5	-10,3626	0	3,0721 9	1,3148
9	119,4 32	23,3432	0	66.505, 91	69,5473	1,4706 5	-10,3626	0	3,0721 9	1,3148
9	121,4 45	29,5669	0	55.439, 86	75,0388	1,6689 6	-0,718041	0	3,1266 5	1,2712 1
9	124,6 4	39,7679	0	41.682, 66	82,8162	1,9959 5	7,73749	0	3,2581 3	1,2357 9
9	128,4 74	52,5394	0	30.333, 18	91,1771	2,4364 9	12,9886	0	3,4023 2	1,2150 6
9	132,3 74	66,07	0	22.750, 68	99,0763	2,9124	15,8347	0	3,533	1,2043 2
9	133,0 74	68,5537	0	21.680, 58	100,453	2,9998 3	16,2002	0	3,5549 4	1,2029 7
9	138,5 95	88,6279	0	15.392, 79	111,079	3,6892 7	18,1989	0	3,7113 6	1,1957 3
9	142,7 45	104,246	0	12.327, 68	118,922	4,2019 9	19,0819	0	3,8126 6	1,1926 2
10	261,0 63	- 23,3432	0	1,00	0,00177 245	0,1543 64	24,6374	0	3,1164 3	1,1739 7
10	261,1 63	- 23,0323	0	7.196,9 6	5,7105	0,0124 078	-13,4971	0	3,1092 4	1,3619 6
10	261,2 63	- 22,7213	0	7.171,2 2	8,07186	0,0248 399	-13,5517	0	3,1092 6	1,3622 7
10	261,3 63	- 22,4104	0	7.151,0 7	9,88248	0,0372 648	-13,562	0	3,1092 9	1,3623 4
10	261,4 63	- 22,0995	0	7.132,8 8	11,4042	0,0496 921	-13,565	0	3,1093 1	1,3623 6
10	261,5 63	- 21,7885	0	7.115,8 7	12,7375	0,0621 581	-13,5657	0	3,1093 3	1,3623 7
10	261,6 63	- 21,4776	0	7.099,6 9	13,9382	0,0746 533	-13,5654	0	3,1093 5	1,3623 8



10	261,7 63	- 21,1667	0	7.083,8 4	15,0432	0,0871 289	-13,5648	0	3,1093 7	1,3623 9
10	261,8 63	- 20,8557	0	7.067,8 5	16,071	0,0996 005	-13,5638	0	3,1093 9	1,3623 9
10	261,9 63	- 20,5448	0	7.051,7 1	17,0335	0,1120 83	-13,5626	0	3,1094 1	1,3623 9
10	262,0 63	- 20,2339	0	7.035,5 3	17,9414	0,1245 7	-13,5613	0	3,1094 3	1,3623 9
10	262,1 63	- 19,9229	0	7.019,3 6	18,802	0,1370 68	-13,56	0	3,1094 5	1,3623 9
10	262,2 63	-19,612	0	7.003,2 1	19,6218	0,1495 79	-13,5586	0	3,1094 7	1,3623 9
10	262,3 63	-19,301	0	6.986,9 0	20,4083	0,1620 66	-13,5571	0	3,1094 9	1,3624
10	262,4 63	- 18,9901	0	6.970,5 7	21,1631	0,1745 65	-13,5557	0	3,1095 1	1,3624
10	262,5 63	- 18,6791	0	6.954,2 0	21,8895	0,1870 7	-13,5542	0	3,1095 3	1,3624
10	262,6 63	- 18,3682	0	6.937,8 5	22,5894	0,1995 96	-13,5526	0	3,1095 5	1,3624
10	262,7 63	- 18,0572	0	6.921,5 2	23,2652	0,2121 44	-13,5511	0	3,1095 7	1,3624
10	262,8 63	- 17,7463	0	6.905,1 6	23,9202	0,2246 9	-13,5496	0	3,1095 9	1,3624
10	262,9 63	- 17,4353	0	6.888,8 7	24,5542	0,2372 67	-13,548	0	3,1096 1	1,3624
10	263,0 63	- 17,1243	0	6.872,5 7	25,1701	0,2498 56	-13,5464	0	3,1096 3	1,3624
10	263,1 83	- 16,7512	0	6.853,0 4	25,8868	0,2649 83	-13,5446	0	3,1096 5	1,3624
10	263,3 27	- 16,3034	0	6.829,6 5	26,7174	0,2831 61	-13,5423	0	3,1096 8	1,3624
10	263,5	-15,766	0	6.801,5 5	27,6756	0,3050 03	-13,5396	0	3,1097 2	1,3624
10	263,7 07	- 15,1212	0	6.767,7 6	28,7777	0,3312 22	-13,5363	0	3,1097 6	1,3624
10	263,9 56	- 14,3474	0	6.726,9 8	30,0411	0,3626 69	-13,5323	0	3,1098 1	1,3624

10	264,255	-13,4188	0	6.677,68	31,4766	0,400483	-13,5275	0	3,10988	1,3624
10	264,613	-12,3044	0	6.621,50	33,0981	0,44568	-13,552	0	3,10995	1,36256
10	265,043	-10,9672	0	6.574,07	34,9181	0,498076	-13,763	0	3,11002	1,36372
10	265,559	-9,3625	0	6.554,59	36,9486	0,556436	-14,3656	0	3,11007	1,36699
10	266,178	-7,43681	0	6.558,63	39,1985	0,621101	-15,361	0	3,11012	1,37239
10	266,921	-5,12594	0	6.577,48	41,6714	0,693442	-16,5182	0	3,11018	1,37871
10	267,813	-2,35283	0	6.600,56	44,363	0,775322	-17,5547	0	3,11027	1,38447
10	268,883	0,975013	0	6.611,03	47,2706	0,869114	-18,2585	0	3,11041	1,38829
10	270,167	4,96866	0	6.578,41	50,7068	0,973155	-18,2643	0	3,11063	1,38834
10	271,707	9,76151	0	6.442,03	55,0974	1,08871	-16,8308	0	3,11102	1,3805
10	273,556	15,5139	0	6.119,06	60,5333	1,22856	-13,1287	0	3,11166	1,36054
10	275,775	22,4185	0	5.453,82	67,0589	1,41671	-6,024	0	3,11273	1,32331
10	276,072	23,3432	0	5.328,84	67,9152	1,44534	-4,78828	0	3,11292	1,31695
10	276,072	23,3432	0	5.328,84	67,9152	1,44534	-4,78828	0	3,11292	1,31695
10	276,072	23,3434	0	5.328,81	67,9154	1,44535	-4,78791	0	3,11292	1,31695
10	278,437	30,7345	0	4.284,08	74,4023	1,67503	3,82685	0	3,1557	1,27335
10	280,355	36,8547	0	3.605,65	79,2711	1,86026	8,2524	0	3,22512	1,25141
10	281,632	41,0009	0	3.226,46	82,3566	1,99029	10,3767	0	3,27049	1,24092
10	285,466	53,7913	0	2.361,86	91,1022	2,404	14,4922	0	3,40038	1,22057



10	290,066	69,7655	0	1.698,64	100,921	2,9285	17,0979	0	3,5413	1,2076
10	295,587	89,7341	0	1.210,51	112,182	3,5731	18,7642	0	3,6891	1,1993
10	299,472	104,247	0	983,37	119,936	4,0265	19,4734	0	3,7807	1,1957