

# Dispersion Report

## Workspace: 72341-2FSRURegas

Study: FSRU in rigassificazione

Equipment Item: 9R Compressore BOG LD

72341-2FSRURegas\FSRU in rigassificazione\9R Compressore BOG LD

Material	<b>GAS NATURALE</b>	
East	0	m
North	0	m

### Scenario (Leak) : 25mm

72341-2FSRURegas\FSRU in rigassificazione\9R Compressore BOG LD\25mm

Material to track	<b>GAS NATURALE</b>
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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	0	0	kg/s	0,440366	0	0,440366
2	Continuous	87,9904	0	kg/s	0,440366	0	0,440366

## 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 concentration [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 <sup>3</sup> ]
1	0	0	12,5	999.99 9,41	0,0456 558	0,0228 534	21,2178	0	300	0,7034 22
1	0,01	0,89198 3	12,50 01	262.66 4,46	0,2110 04	0,1056 02	24,026	0	54,075 3	1,0497 1
1	0,02	1,34573	12,50 02	193.65 3,26	0,2884 9	0,1443 71	24,342	0	39,287 3	1,0815 4
1	0,03	1,70164	12,50 04	160.65 8,22	0,3481 78	0,1742 31	24,4969	0	32,532 1	1,0967 2
1	0,04	2,00541	12,50 06	140.24 8,61	0,3985 71	0,1994 39	24,5941	0	28,450 2	1,1060 9
1	0,05	2,27517	12,50 08	126.00 1,45	0,4429 83	0,2216 54	24,6625	0	25,643 4	1,1126 3
1	0,06	2,521	12,50 11	115.29 5,40	0,4832 24	0,2417 81	24,7143	0	23,556 7	1,1175 4
1	0,07	2,74841	12,50 14	106.86 6,82	0,5202 8	0,2603 14	24,7552	0	21,927 4	1,1214
1	0,08	2,96104	12,50 17	100.00 6,16	0,5547 98	0,2775 77	24,7887	0	20,609 8	1,1245 5
1	0,09	3,16155	12,50 2	94.277, 21	0,5872 48	0,2938 05	24,8167	0	19,515 4	1,1271 7
1	0,1	3,35201	12,50 24	89.393, 93	0,6179 91	0,3091 79	24,8407	0	18,586 8	1,1294 1
1	0,11	3,53397	12,50 27	85.163, 14	0,6472 96	0,3238 33	24,8615	0	17,785 4	1,1313 4
1	0,12	3,70852	12,50 31	81.450, 87	0,6753 52	0,3378 62	24,8798	0	17,084 5	1,1330 4
1	0,13	3,87624	12,50 35	78.163, 91	0,7022 67	0,3513 2	24,896	0	16,465 8	1,1345 4

1	0,14	4,03777	12,50	75.228,	0,7281	0,3642	24,9106	0	15,914	1,1358
			39	39	53	63			7	9
1	0,15	4,19381	12,50	72.584,	0,7531	0,3767	24,9237	0	15,419	1,1371
			43	32	32	53			5	
1	0,16	4,34501	12,50	70.184,	0,7773	0,3888	24,9356	0	14,971	1,1381
			48	69	09	41				9
1	0,17	4,49198	12,50	67.991,	0,8007	0,4005	24,9465	0	14,561	1,1392
			52	34	88	79			9	
1	0,18	4,63539	12,50	65.972,	0,8236	0,4120	24,9565	0	14,185	1,1401
			57	01	76	22			9	2
1	0,19	4,77487	12,50	64.112,	0,8459	0,4231	24,9658	0	13,840	1,1409
			62	64	25	45			2	7
1	0,2	4,91111	12,50	62.388,	0,8676	0,4340	24,9744	0	13,520	1,1417
			67	61	42	03			2	6
1	0,212	5,07086	12,50	60.474,	0,8930	0,4467	24,9839	0	13,165	1,1426
			72	06	89	24			4	3
1	0,226	5,25677	12,50	58.378,	0,9226	0,4615	24,9944	0	12,777	1,1435
	4		8	45	92	23			7	9
1	0,243	5,47278	12,50	56.105,	0,9570	0,4787	25,0057	0	12,358	1,1446
	68		89	95	7	08			1	3
1	0,264	5,72316	12,51	53.667,	0,9969	0,4986	25,0179	0	11,908	1,1457
	416			51		18			7	4
1	0,289	6,01257	12,51	51.080,	1,0429	0,5216	25,0309	0	11,432	1,1469
	299		14	44	2	2			9	2
1	0,319	6,34457	12,51	48.378,	1,0957	0,5480	25,0445	0	10,937	1,1481
	159		32	06	2	12				6
1	0,354	6,72451	12,51	45.585,	1,1561	0,5782	25,0585	0	10,425	1,1494
	991		54	67	7	27			9	3
1	0,397	7,15954	12,51	42.724,	1,2254	0,6128	25,073	0	9,9034	1,1507
	989		82	55	1	31			3	4
1	0,449	7,65458	12,52	39.833,	1,3042	0,6522	25,0876	0	9,3769	1,1520
	587		17	94	9	57			2	6
1	0,511	8,21655	12,52	36.943,	1,3940	0,6970	25,1022	0	8,8518	1,1533
	504		61	70	1	94			4	7
1	0,585	8,85195	12,53	34.085,	1,4957	0,7479	25,1167	0	8,3340	1,1546
	805		17	99	6	37			2	8
1	0,674	9,5692	12,53	31.284,	1,6110	0,8055	25,1309	0	7,8278	1,1559
	966		88	98	5	5			3	5

1	0,781 959	10,3751	12,54 78	28.568, 28	1,7413 4	0,8706 51	25,1448	0	7,3382	1,1571 9
1	0,910 351	11,2836	12,55 92	25.944, 21	1,8891	0,9444 74	25,1582	0	6,8665 7	1,1583 9
1	1,031 15	12,0939	12,57 04	23.921, 22	2,0215 5	1,0106 5	25,1686	0	6,5039 2	1,1593 1
1	1,064 42	12,3083	12,57 36	23.426, 38	2,0568 6	1,0282 9	25,1712	0	6,4153 4	1,1595 3
1	1,249 31	13,4399	12,59 21	21.047, 64	2,2457 5	1,1226 6	25,1835	0	5,9903 7	1,1606 1
1	1,471 17	14,7174	12,61 52	18.794, 10	2,4605 5	1,2299 7	25,1952	0	5,5890 7	1,1616 4
1	1,737 4	16,157	12,64 41	16.674, 19	2,7050 3	1,3520 9	25,2063	0	5,2129 4	1,1626
1	2,056 88	17,7706	12,68 04	14.694, 86	2,9834 2	1,4911 6	25,2168	0	4,8632 1	1,1634 9
1	2,440 26	19,5758	12,72 57	12.859, 39	3,3007 9	1,6496 9	25,2266	0	4,5404 9	1,1643 2
1	2,900 31	21,5963	12,78 2	11.166, 94	3,6636 2	1,8309 3	25,2359	0	4,2446 9	1,1650 8
1	3,452 37	23,8572	12,85 15	9.616,5 9	4,0794 6	2,0386 4	25,2445	0	3,9757 1	1,1657 8
1	4,114 84	26,3996	12,93 66	8.204,6 0	4,5580 7	2,2777 1	25,2526	0	3,733	1,1664
1	4,909 81	29,2645	13,04	6.929,1 4	5,1105 9	2,5537 1	25,2602	0	3,5163 4	1,1669 7
1	5,319 76	30,6803	13,09 35	6.397,0 4	5,3879 2	2,6922 4	25,2635	0	3,4269 4	1,1672
2	87,99 04	0	12,5	999.99 9,41	0,0456 558	0,0228 534	21,2178	0	300	0,7034 22
2	88,00 04	0,89198 3	12,50 01	262.66 4,46	0,2110 04	0,1056 02	24,026	0	54,075 3	1,0497 1
2	88,01 04	1,34573	12,50 02	193.65 3,26	0,2884 9	0,1443 71	24,342	0	39,287 3	1,0815 4
2	88,02 04	1,70164	12,50 04	160.65 8,22	0,3481 78	0,1742 31	24,4969	0	32,532 1	1,0967 2
2	88,03	2,00541	12,50	140.24	0,3985	0,1994	24,5941	0	28,450	1,1060

	04		06	8,61	71	39			2	9
2	88,04 04	2,27517	12,50 08	126.00 1,45	0,4429 83	0,2216 54	24,6625	0	25,643 4	1,1126 3
2	88,05 04	2,521	12,50 11	115.29 5,40	0,4832 24	0,2417 81	24,7143	0	23,556 7	1,1175 4
2	88,06 04	2,74841	12,50 14	106.86 6,82	0,5202 8	0,2603 14	24,7552	0	21,927 4	1,1214
2	88,07 04	2,96104	12,50 17	100.00 6,16	0,5547 98	0,2775 77	24,7887	0	20,609 8	1,1245 5
2	88,08 04	3,16155	12,50 2	94.277, 21	0,5872 48	0,2938 05	24,8167	0	19,515 4	1,1271 7
2	88,09 04	3,35201	12,50 24	89.393, 93	0,6179 91	0,3091 79	24,8407	0	18,586 8	1,1294 1
2	88,10 04	3,53397	12,50 27	85.163, 14	0,6472 96	0,3238 33	24,8615	0	17,785 4	1,1313 4
2	88,11 04	3,70852	12,50 31	81.450, 87	0,6753 52	0,3378 62	24,8798	0	17,084 5	1,1330 4
2	88,12 04	3,87624	12,50 35	78.163, 91	0,7022 67	0,3513 2	24,896	0	16,465 8	1,1345 4
2	88,13 04	4,03777	12,50 39	75.228, 39	0,7281 53	0,3642 63	24,9106	0	15,914 7	1,1358 9
2	88,14 04	4,19381	12,50 43	72.584, 32	0,7531 32	0,3767 53	24,9237	0	15,419 5	1,1371
2	88,15 04	4,34501	12,50 48	70.184, 69	0,7773 09	0,3888 41	24,9356	0	14,971	1,1381 9
2	88,16 04	4,49198	12,50 52	67.991, 34	0,8007 88	0,4005 79	24,9465	0	14,561 9	1,1392
2	88,17 04	4,63539	12,50 57	65.972, 01	0,8236 76	0,4120 22	24,9565	0	14,185 9	1,1401 2
2	88,18 04	4,77487	12,50 62	64.112, 64	0,8459 25	0,4231 45	24,9658	0	13,840 2	1,1409 7
2	88,19 04	4,91111	12,50 67	62.388, 61	0,8676 42	0,4340 03	24,9744	0	13,520 2	1,1417 6
2	88,20 24	5,07086	12,50 72	60.474, 06	0,8930 89	0,4467 24	24,9839	0	13,165 4	1,1426 3
2	88,21 68	5,25677	12,50 8	58.378, 45	0,9226 92	0,4615 23	24,9944	0	12,777 7	1,1435 9
2	88,23	5,47278	12,50	56.105,	0,9570	0,4787	25,0057	0	12,358	1,1446

	41		89	95	7	08			1	3
2	88,25 48	5,72316	12,51	53.667, 51	0,9969	0,4986 18	25,0179	0	11,908 7	1,1457 4
2	88,27 97	6,01257	12,51 14	51.080, 44	1,0429 2	0,5216 2	25,0309	0	11,432 9	1,1469 2
2	88,30 96	6,34457	12,51 32	48.378, 06	1,0957 2	0,5480 12	25,0445	0	10,937	1,1481 6
2	88,34 54	6,72451	12,51 54	45.585, 67	1,1561 7	0,5782 27	25,0585	0	10,425 9	1,1494 3
2	88,38 84	7,15954	12,51 82	42.724, 55	1,2254 1	0,6128 31	25,073	0	9,9034 3	1,1507 4
2	88,44	7,65458	12,52 17	39.833, 94	1,3042 9	0,6522 57	25,0876	0	9,3769 2	1,1520 6
2	88,50 19	8,21655	12,52 61	36.943, 70	1,3940 1	0,6970 94	25,1022	0	8,8518 4	1,1533 7
2	88,57 62	8,85195	12,53 17	34.085, 99	1,4957 6	0,7479 37	25,1167	0	8,3340 2	1,1546 8
2	88,66 54	9,5692	12,53 88	31.284, 98	1,6110 5	0,8055 5	25,1309	0	7,8278 3	1,1559 5
2	88,77 24	10,3751	12,54 78	28.568, 28	1,7413 4	0,8706 51	25,1448	0	7,3382	1,1571 9
2	88,90 08	11,2836	12,55 92	25.944, 21	1,8891	0,9444 74	25,1582	0	6,8665 7	1,1583 9
2	89,02 16	12,0939	12,57 04	23.921, 22	2,0215 5	1,0106 5	25,1686	0	6,5039 2	1,1593 1
2	89,05 48	12,3083	12,57 36	23.426, 38	2,0568 6	1,0282 9	25,1712	0	6,4153 4	1,1595 3
2	89,23 97	13,4399	12,59 21	21.047, 64	2,2457 5	1,1226 6	25,1835	0	5,9903 7	1,1606 1
2	89,46 16	14,7174	12,61 52	18.794, 10	2,4605 5	1,2299 7	25,1952	0	5,5890 7	1,1616 4
2	89,72 78	16,157	12,64 41	16.674, 19	2,7050 3	1,3520 9	25,2063	0	5,2129 4	1,1626
2	90,04 73	17,7706	12,68 04	14.694, 86	2,9834 2	1,4911 6	25,2168	0	4,8632 1	1,1634 9
2	90,43 07	19,5758	12,72 57	12.859, 39	3,3007 9	1,6496 9	25,2266	0	4,5404 9	1,1643 2
2	90,89	21,5963	12,78	11.166, 3,6636	1,8309	25,2359	0	4,2446	1,1650	

	07		2	94	2	3			9	8
2	91,44 28	23,8572	12,85 15	9.616,5 9	4,0794 6	2,0386 4	25,2445	0	3,9757 1	1,1657 8
2	92,10 53	26,3996	12,93 66	8.204,6 0	4,5580 7	2,2777 1	25,2526	0	3,733	1,1664
2	92,90 02	29,2645	13,04	6.929,1 4	5,1105 9	2,5537 1	25,2602	0	3,5163 4	1,1669 7
2	93,31 02	30,6803	13,09 35	6.397,0 4	5,3879 2	2,6922 4	25,2635	0	3,4269 4	1,1672

### 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	0	kg/s	0,440366	0	0,440366
2	Continuous	87,9904	0	kg/s	0,440366	0	0,440366

### 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/m3]
1	0	0	12,5	999.99 9,41	0,0456 813	0,0228 406	21,2178	0	300	0,7034 22
1	0,01	0,90935	12,50 01	260.01 9,31	0,2084 98	0,1042 49	23,7521	0	55,948 4	1,0521 3
1	0,02	1,38193	12,50 02	190.18 5,66	0,2843 31	0,1421 65	24,0399	0	41,176 7	1,0845 1
1	0,03	1,75671	12,50	156.74	0,3426	0,1713	24,1812	0	34,422	1,0999



			04	6,82	39	2			3	7
1	0,04	2,07938	12,50 06	136.03 7,27	0,3918 45	0,1959 23	24,27	0	30,337 1	1,1095 3
1	0,05	2,36799	12,50 08	121.56 8,84	0,4352 1	0,2176 05	24,3326	0	27,526 2	1,1162 1
1	0,06	2,63262	12,50 11	110.69 1,05	0,4745 08	0,2372 54	24,38	0	25,435 8	1,1212 3
1	0,07	2,87881	12,50 14	102.12 1,89	0,5107 17	0,2553 59	24,4175	0	23,802 7	1,1251 7
1	0,08	3,11019	12,50 17	95.143, 10	0,5444 74	0,2722 37	24,4481	0	22,481 5	1,1283 9
1	0,09	3,3294	12,50 2	89.313, 39	0,5762 34	0,2881 17	24,4738	0	21,383 8	1,1310 7
1	0,1	3,53852	12,50 23	84.343, 53	0,6063 46	0,3031 73	24,4958	0	20,452 3	1,1333 6
1	0,11	3,7391	12,50 26	80.037, 23	0,6350 74	0,3175 37	24,5149	0	19,648 4	1,1353 4
1	0,12	3,93227	12,50 3	76.257, 89	0,6626 06	0,3313 03	24,5317	0	18,945 2	1,1370 8
1	0,13	4,11865	12,50 34	72.909, 50	0,6890 59	0,3445 3	24,5465	0	18,324 1	1,1386 2
1	0,14	4,29879	12,50 37	69.918, 20	0,7145 35	0,3572 68	24,5599	0	17,770 7	1,14
1	0,15	4,4734	12,50 41	67.223, 57	0,7391 48	0,3695 74	24,5719	0	17,273 4	1,1412 4
1	0,16	4,64311	12,50 45	64.778, 06	0,7629 98	0,3814 99	24,5828	0	16,823	1,1423 6
1	0,17	4,8085	12,50 5	62.543, 79	0,7861 76	0,3930 88	24,5928	0	16,412 4	1,1433 9
1	0,18	4,97023	12,50 54	60.488, 76	0,8087 77	0,4043 88	24,602	0	16,035 4	1,1443 4
1	0,19	5,12835	12,50 58	58.592, 36	0,8308 22	0,4154 11	24,6105	0	15,688 1	1,1452 1
1	0,2	5,28298	12,50 63	56.836, 71	0,8523 35	0,4261 68	24,6184	0	15,367	1,1460 1
1	0,212	5,4647	12,50 68	54.888, 72	0,8775 58	0,4387 79	24,6271	0	15,011 3	1,1469 1
1	0,226	5,67739	12,50	52.752,	0,9070	0,4535	24,6367	0	14,621	1,1478

	4		75	46	07	04			9	9
1	0,243 68	5,92519	12,50 83	50.438, 78	0,9412 42	0,4706 21	24,6472	0	14,201	1,1489 5
1	0,264 416	6,21361	12,50 93	47.958, 18	0,9809 8	0,4904 9	24,6583	0	13,750 6	1,1500 9
1	0,289 299	6,54885	12,51 06	45.327, 40	1,0270 2	0,5135 13	24,6702	0	13,274	1,1513
1	0,319 159	6,93589	12,51 21	42.579, 80	1,0800 7	0,5400 33	24,6826	0	12,777 3	1,1525 6
1	0,354 991	7,38168	12,51 41	39.744, 21	1,1410 2	0,5705 12	24,6954	0	12,266	1,1538 7
1	0,397 989	7,89514	12,51 65	36.847, 52	1,2110 6	0,6055 29	24,7085	0	11,744 9	1,1552
1	0,449 587	8,48841	12,51 95	33.914, 49	1,2916 4	0,6458 22	24,7218	0	11,218 6	1,1565 4
1	0,511 504	9,16933	12,52 32	30.989, 70	1,3839 3	0,6919 65	24,7351	0	10,695 1	1,1578 9
1	0,585 805	9,94727	12,52 79	28.111, 00	1,4893 2	0,7446 61	24,7482	0	10,181 2	1,1592 1
1	0,674 966	10,836	12,53 37	25.305, 58	1,6097 3	0,8048 67	24,7609	0	9,6816 8	1,1604 9
1	0,726 767	11,3326	12,53 71	23.921, 22	1,6771 2	0,8385 62	24,7672	0	9,4356 5	1,1611 3
1	0,781 959	11,8468	12,54 09	22.604, 18	1,7470 9	0,8735 45	24,7732	0	9,2018 8	1,1617 3
1	0,910 351	12,9995	12,54 98	20.023, 93	1,9041 8	0,9520 93	24,7849	0	8,7447 6	1,1629 2
1	1,064 42	14,3148	12,56 08	17.582, 35	2,0842 1	1,0421 1	24,796	0	8,3133 1	1,1640 3
1	1,249 31	15,8215	12,57 42	15.291, 64	2,2912 5	1,1456 3	24,8064	0	7,9095 6	1,1650 8
1	1,466 56	17,5063	12,59 03	13.206, 86	2,5247	1,2623 5	24,8158	0	7,5430 7	1,1660 4
2	87,99 04	0	12,5	999.99 9,41	0,0456 813	0,0228 406	21,2178	0	300	0,7034 22
2	88,00 04	0,90935	12,50 01	260.01 9,31	0,2084 98	0,1042 49	23,7521	0	55,948 4	1,0521 3

2	88,01 04	1,38193	12,50 02	190.18 5,66	0,2843 31	0,1421 65	24,0399	0	41,176 7	1,0845 1
2	88,02 04	1,75671	12,50 04	156.74 6,82	0,3426 39	0,1713 2	24,1812	0	34,422 3	1,0999 7
2	88,03 04	2,07938	12,50 06	136.03 7,27	0,3918 45	0,1959 23	24,27	0	30,337 1	1,1095 3
2	88,04 04	2,36799	12,50 08	121.56 8,84	0,4352 1	0,2176 05	24,3326	0	27,526 2	1,1162 1
2	88,05 04	2,63262	12,50 11	110.69 1,05	0,4745 08	0,2372 54	24,38	0	25,435 8	1,1212 3
2	88,06 04	2,87881	12,50 14	102.12 1,89	0,5107 17	0,2553 59	24,4175	0	23,802 7	1,1251 7
2	88,07 04	3,11019	12,50 17	95.143, 10	0,5444 74	0,2722 37	24,4481	0	22,481 5	1,1283 9
2	88,08 04	3,3294	12,50 2	89.313, 39	0,5762 34	0,2881 17	24,4738	0	21,383 8	1,1310 7
2	88,09 04	3,53852	12,50 23	84.343, 53	0,6063 46	0,3031 73	24,4958	0	20,452 3	1,1333 6
2	88,10 04	3,7391	12,50 26	80.037, 23	0,6350 74	0,3175 37	24,5149	0	19,648 4	1,1353 4
2	88,11 04	3,93227	12,50 3	76.257, 89	0,6626 06	0,3313 03	24,5317	0	18,945 2	1,1370 8
2	88,12 04	4,11865	12,50 34	72.909, 50	0,6890 59	0,3445 3	24,5465	0	18,324 1	1,1386 2
2	88,13 04	4,29879	12,50 37	69.918, 20	0,7145 35	0,3572 68	24,5599	0	17,770 7	1,14
2	88,14 04	4,4734	12,50 41	67.223, 57	0,7391 48	0,3695 74	24,5719	0	17,273 4	1,1412 4
2	88,15 04	4,64311	12,50 45	64.778, 06	0,7629 98	0,3814 99	24,5828	0	16,823	1,1423 6
2	88,16 04	4,8085	12,50 5	62.543, 79	0,7861 76	0,3930 88	24,5928	0	16,412 4	1,1433 9
2	88,17 04	4,97023	12,50 54	60.488, 76	0,8087 77	0,4043 88	24,602	0	16,035 4	1,1443 4
2	88,18 04	5,12835	12,50 58	58.592, 36	0,8308 22	0,4154 11	24,6105	0	15,688 1	1,1452 1
2	88,19 04	5,28298	12,50 63	56.836, 71	0,8523 35	0,4261 68	24,6184	0	15,367	1,1460 1

2	88,20 24	5,4647	12,50 68	54.888, 72	0,8775 58	0,4387 79	24,6271	0	15,011 3	1,1469 1
2	88,21 68	5,67739	12,50 75	52.752, 46	0,9070 07	0,4535 04	24,6367	0	14,621 9	1,1478 9
2	88,23 41	5,92519	12,50 83	50.438, 78	0,9412 42	0,4706 21	24,6472	0	14,201	1,1489 5
2	88,25 48	6,21361	12,50 93	47.958, 18	0,9809 8	0,4904 9	24,6583	0	13,750 6	1,1500 9
2	88,27 97	6,54885	12,51 06	45.327, 40	1,0270 2	0,5135 13	24,6702	0	13,274	1,1513
2	88,30 96	6,93589	12,51 21	42.579, 80	1,0800 7	0,5400 33	24,6826	0	12,777 3	1,1525 6
2	88,34 54	7,38168	12,51 41	39.744, 21	1,1410 2	0,5705 12	24,6954	0	12,266	1,1538 7
2	88,38 84	7,89514	12,51 65	36.847, 52	1,2110 6	0,6055 29	24,7085	0	11,744 9	1,1552
2	88,44	8,48841	12,51 95	33.914, 49	1,2916 4	0,6458 22	24,7218	0	11,218 6	1,1565 4
2	88,50 19	9,16933	12,52 32	30.989, 70	1,3839 3	0,6919 65	24,7351	0	10,695 1	1,1578 9
2	88,57 62	9,94727	12,52 79	28.111, 00	1,4893 2	0,7446 61	24,7482	0	10,181 2	1,1592 1
2	88,66 54	10,836	12,53 37	25.305, 58	1,6097 3	0,8048 67	24,7609	0	9,6816 8	1,1604 9
2	88,71 72	11,3326	12,53 71	23.921, 22	1,6771 2	0,8385 62	24,7672	0	9,4356 5	1,1611 3
2	88,77 24	11,8468	12,54 09	22.604, 18	1,7470 9	0,8735 45	24,7732	0	9,2018 8	1,1617 3
2	88,90 08	12,9995	12,54 98	20.023, 93	1,9041 8	0,9520 93	24,7849	0	8,7447 6	1,1629 2
2	89,05 48	14,3148	12,56 08	17.582, 35	2,0842 1	1,0421 1	24,796	0	8,3133 1	1,1640 3
2	89,23 97	15,8215	12,57 42	15.291, 64	2,2912 5	1,1456 3	24,8064	0	7,9095 6	1,1650 8
2	89,45 7	17,5063	12,59 03	13.206, 86	2,5247	1,2623 5	24,8158	0	7,5430 7	1,1660 4

