Supplementary Materials

Supplementary Table S1. Statistics for the sequencing data of *Konosirus punctatus* genome

Type	Sequencing Strategy	Sequencing platform	Sequence length (bp)	Clean data (Gb)	Conerage*
Genome	Illumina	Illumina NovaSeq 6000	150	89.92	114.25
Genome	PacBio	PacBio Sequel II	20,000	84.11	106.87
Genome	Hi-C	Illumina NovaSeq 6000	150	72.5	92.12
RNA	Illumina	Illumina NovaSeq 6000	150	6.95	

*Coverage was calculated using an estimated genome size of 787 Mb.

Supplementary Table S2. K-mer statistics of *Konosirus punctatus* genome

Sample	K-mer number	K-mer Depth	Genome Size (Mb)	Revised Genome Size (Mb)	Heterozygous Ratio (%)	Repeat (%)
K. punctatus	70,444,439,356	84	797	787	0.96	39.22

Supplementary Table S3. The result of *Konosirus punctatus* genome assembly statistics before Hi-C correction

Mode	Total length (bp)	Total number	Max length(bp)	N50 (bp)	N90 (bp)
assembly	870,045,270	1,383	10,041,108	2,003,291	205,898
assembly+arrow	877,116,364	1,383	10,109,474	2,014,435	207,245
assembly+arrow+pilon	871,067,543	1,383	10,043,198	2,004,929	206,275
Polish+Purge_haplotigs	800,444,663	955	10,043,198	2,140,881	298,845

Supplementary Table S4. BUSCO analysis result of the *Konosirus punctatus* genome

Type	Proteins	Percentage (%)
Complete BUSCOs (C)	4,288	93.54
Complete and single-copy BUSCOs (S)	4,100	89.44
Complete and duplicated BUSCOs (D)	188	4.10
Fragmented BUSCOs (F)	91	1.99
Missing BUSCOs (M)	205	4.47
Total BUSCO groups searched	4584	100.00

Supplementary Table S5. Hi-C sequencing data quality control of *Konosirus punctatus* genome

Library name	Raw reads number	Raw Bases (bp)	Clean reads number	Clean bases (bp)	Read length (bp)	Q20 (%)	Q30 (%)	GC Content (%)
Hi-C	483,333,116	72,499,967,400	469,685,574	68,764,334,007	150	96.83	91.59	43.46

Supplementary Table S6. Statistics of the Hi-C assembly of the *Konosirus punctatus*

Genome size (GB)	Percent assembled	Contig number	Contig N50 (Mb)	Scaffold N50 (Mb)
0.8	98.58%	955	2.02	32.23

Supplementary Table S7. Hi-C assisted assembly statistics of the *Konosirus punctatus* genome

	Sequence length (bp)	Sequence number	Contig N50 (bp)	Scaffold N50 (bp)	Contig number (%)	Contig length (%)	Contig >100kb number (%)	Contig >100kb length (%)
raw*	800,444,663	955	2,140,881	2,140,881	-	-	-	-
hi-c*	800,542,963	124	2,019,529	32,228,600	90.42	98.58	97.17	98.79
hi-c chr*	789,146,200	24	2,028,339	32,521,812	-	-	-	-
hi-c nochr*	11,396,763	100	508,691	937,400	-	-	-	-

*raw: before Hi-C assembly; hi-c: after Hi-C assembly; hi-c chr: chromosomes after Hi-C assembly; hi-c nochr: free sequence after Hi-C assembly

Supplementary Table S8. Statistics of SNP and InDel of *Konosirus punctatus* genome assembly

Type	SNP rate (%)	InDel rate (%)
Homozygous	0.007	0.018
Heterozygous	0.632	0.280
Total	0.639	0.298

Supplementary Table S9. Statistics of repetitive sequences in the *Konosirus punctatus* genome

Type	Repeat Size (bp)	% of genome
Trf	90,267,556	11.28
Repeatmasker	168,587,418	21.06
Proteinmask	30,652,795	3.83
De novo	159,378,231	19.91
Total	327,232,849	40.88

Supplementary Table S10. Statistics on transposable elements in the *Konosirus punctatus* genome

	RepBase TEs		TE Proteins		De novo		Combined TEs	
	Length (bp)	% in Genome	Length (bp)	% in Genome	Length (bp)	% in Genome	Length (bp)	% in Genome
DNA TE	118,998,742	14.86	4,729,481	0.59	43,282,677	5.41	151,384,201	18.91
LINE	29,565,526	3.69	13,819,924	1.73	17,506,067	2.19	39,374,548	4.92
SINE	2,165,577	0.27	0	0.00	2,445,329	0.31	4,036,297	0.50
LTR	39,478,070	4.93	12,111,535	1.51	40,213,417	5.02	72,758,386	9.09
Satellite	10,303,434	1.29	0	0.00	1,583,942	0.20	11,563,043	1.44
Simple repeat	0	0.00	0	0.00	0	0.00	0	0.00
Other	6,865	0.00	0	0.00	0	0.00	6,865	0.00
Unknown	1,697,765	0.21	9,567	0.00	58,857,264	7.35	60,359,080	7.54
Total	168,587,418	21.06	30,652,795	3.83	157,794,289	19.71	296,855,500	37.08

Supplementary Table S11. Statistics of gene predictions in the *Konosirus punctatus* genome

	Gene set	Number	Average gene length (bp)	Average CDS length (bp)	Average exon per gene	Average exon length (bp)	Average intron length (bp)
De novo	Genscan	29,599	18,410	1,576.43	8.21	192.09	2,336
	AUGUSTUS	30,139	14,003	1,360.18	7.42	183.29	1,969
homolog	*Anabas testudineus*	47,917	20,781	1,085.01	6.10	177.99	3,865
	Clupea harengus	52,994	20,875	1,068.31	5.75	185.90	4,173
	Amphiprion ocellaris	47,211	19,675	1,078.11	6.13	175.74	3,622
	Denticeps clupeoides	44,832	20,485	1,158.59	6.55	177.01	3,485
	Acanthochromis polyacanthus	50,185	17,921	1,017.99	5.80	175.37	3,518
RNAseq	Transdecoder	11,387	19,167	1,721.18	11.57	313.72	1,470
BUSCO		4,544	15,796	1,993.71	13.53	147.34	1,101
MAKER		24,162	17,399	1,596.36	9.03	251.54	1,883
HiCESAP		24,298	16,809	1,631.44	9.64	252.89	1,662

Supplementary Table S12. Functional annotation of the predicted protein-coding genes in *Konosirus punctatus* genome assembly

Category	Annotated number of predicted genes	Percent (%)
InterPro	21,378	87.98
GO	16,081	66.18
KEGG_ALL	9,579	39.42
KEGG_KO	6,988	28.76
Swissprot	5,936	24.43
TrEMBL	11,938	49.13
TF	779	3.21
Pfam	20,481	84.29
NR	11,791	48.53
KOG	18,992	78.16
Annotated	22,131	91.08
Unannotated	2,167	8.92

Supplementary Table S13. Annotation of non-coding RNA genes in *Konosirus punctatus* genome assembly

Type		Number	Average length(bp)	Total length(bp)	% of genome
miRNA		338	84	28,298	0.003535
tRNA		2,752	77	211,741	0.02645
rRNA	18S	2	1,608	3,215	0.000402
	28S	0	0	0	0
	5.8S	2	153	306	0.000038
	5S	367	119	43,550	0.00544
	total	371	127	47,071	0.00588
snRNA	CD-box	307	145	44,522	0.005561
	HACA-box	109	145	15,783	0.001972
	splicing	461	146	67,530	0.008436
	scaRNA	7	240	1,683	0.00021
	total	884	147	129,518	0.016179

Supplementary Table S14. The statistics of orthologous genes among these species

Species	Genome size (Mb)	Genes number	Genes in families	Family number	Unclustered genes	Unique families	Single copy
Konosirus punctatus	800.00	24,298	22,889	16,782	1,409	195	2,018
Larimichthys crocea	657.90	23,253	22,435	16,889	818	149	2,018
Clupea harengus	786.30	26,716	25,950	17,844	766	131	2,018
Denticeps clupeoides	567.40	23,463	23,023	16,888	440	113	2,018
Danio rerio	1400.00	32,420	31,686	17,910	734	263	2,018
Astyanax mexicanu	1,191.24	25,053	24,509	17,647	544	96	2,018
Ictalurus punctatus	783.27	22,912	22,728	17,298	184	33	2,018
Pangasianodon hypophthalmus	758.97	22,927	22,745	17,379	182	21	2,018
Onychostoma macrolepis	886.57	24,754	24,215	17,064	539	229	2,018
Triplophysa tibetana	652.93	24,310	22,917	16,941	1,393	172	2,018
Ameiurus melas	868.50	24,350	22,410	16,800	1,940	89	2,018

Supplementary Table S15. The expanded and contracted gene families were identified in *Konosirus punctatus* genome

Species Name	expanded	contracted
Konosirus punctatus	512	2,099
Larimichthys crocea	1,045	955
Clupea harengus	1,190	502
Denticeps clupeoides	1,576	1,468
Danio rerio	4,027	681
Astyanax mexicanu	770	895
Ictalurus punctatus	293	492
Pangasianodon hypophthalmus	262	491
Onychostoma macrolepis	399	1,687
Triplophysa tibetana	699	2,154
Ameiurus melas	491	1,396

Supplementary Table S16. Positive selection of genes in the genome of *Konosirus punctatus*

Gene ID	lnA	lnB	dN	dS	p
OG0008372	-15700.5	-15733.7	0.056756	0.393422	3.61E-16
OG0008408	-8897.13	-8904.03	0.023948	0.257629	2.04E-04
OG0008436	-1889.45	-1900.87	0.204474	2.144856	1.76E-06
OG0008371	-10505.9	-10549.9	0.135482	1.166771	6.35E-21
OG0008413	-6624.63	-6632.82	0.030584	0.358549	5.19E-05
OG0008410	-13747.3	-13820.4	0.103229	1.006595	1.17E-33
OG0008411	-19888.7	-19903.2	0.028585	0.414756	7.33E-08
OG0008422	-6239.07	-6267.99	0.083989	0.376065	2.85E-14
OG0008437	-5028.6	-5035.19	0.051477	0.447796	2.83E-04
OG0008457	-4204.75	-4221.17	0.280611	1.143091	1.00E-08
OG0008431	-9294.76	-9304.22	0.025524	0.608696	1.37E-05
OG0008450	-5344.15	-5360.65	0.083479	0.29161	9.17E-09
OG0008439	-11704	-11712.8	0.022088	0.328753	2.60E-05
OG0008445	-16154.7	-16162	0.052338	0.405707	1.34E-04
OG0008467	-2863.89	-2867.01	0.008707	0.033128	1.25E-02
OG0008478	-5885.71	-5891.98	0.031151	0.279828	3.96E-04
OG0008482	-12895.9	-12921.5	0.036501	0.326808	7.72E-13
OG0008500	-6047.75	-6055.76	0.032815	0.30753	6.29E-05
OG0008541	-3091.63	-3108.79	0.043048	0.411605	4.68E-09
OG0008531	-13787.8	-13814.8	0.026003	0.289511	1.98E-13
OG0008529	-9367.9	-9403.19	0.048328	0.41567	4.42E-17
OG0008551	-8458.31	-8467.78	0.026169	0.260461	1.36E-05
OG0008555	-10149	-10166.1	0.023239	0.285547	5.15E-09
OG0008573	-6864.45	-6869.99	0.065416	0.365921	8.76E-04
OG0008597	-6226.06	-6246.05	0.060835	0.259913	2.56E-10
OG0008574	-14799.7	-14831.8	0.067602	0.431417	1.20E-15

OG0008571	-22012.8	-22069.7	0.089427	0.331075	1.37E-26
OG0008600	-6515.15	-6521.28	0.015561	0.247375	4.63E-04
OG0008595	-3936.74	-3945.77	0.053146	0.511866	2.16E-05
OG0008584	-12382.9	-12405.5	0.060799	0.470831	1.69E-11
OG0008583	-12035.1	-12060.3	0.066035	0.536935	1.26E-12
OG0008602	-9497.38	-9508.68	0.069438	0.253211	2.00E-06
OG0008623	-6637.09	-6649.62	0.06386	0.375721	5.55E-07
OG0008632	-7545.58	-7548.05	0.036383	0.387892	2.64E-02
OG0008621	-6452.94	-6489.36	0.126617	0.709508	1.41E-17
OG0008622	-4974.43	-5010.32	0.133494	0.629091	2.40E-17
OG0008638	-7557.84	-7585.5	0.09786	0.60693	1.02E-13
OG0008643	-6425.82	-6434.1	0.051099	0.514667	4.68E-05
OG0008625	-7275.9	-7312.75	0.081699	0.45947	9.06E-18
OG0008624	-11963.9	-11980.8	0.054085	0.323381	5.88E-09
OG0008627	-9072.26	-9082.22	0.014839	0.253124	8.07E-06
OG0008645	-7135.57	-7167.16	0.123759	0.753931	1.89E-15
OG0008650	-10302.6	-10317.5	0.023446	0.31403	4.63E-08
OG0008653	-5428.02	-5435.98	0.023847	0.214117	6.65E-05
OG0008640	-9031.17	-9083.77	0.103534	0.454934	1.10E-24
OG0008666	-5796.5	-5799.67	0.024166	0.404078	1.18E-02
OG0008648	-6831.1	-6837.38	0.034813	0.43233	3.92E-04
OG0008662	-4523.4	-4550.77	0.04742	0.368019	1.37E-13
OG0008665	-1812.25	-1825.46	0.039842	0.360727	2.75E-07
OG0008677	-3277.83	-3296.87	0.064353	0.30171	6.79E-10
OG0008660	-7583.13	-7593.41	0.026319	0.329819	5.76E-06
OG0008683	-7090.77	-7118.87	0.131424	0.341026	6.52E-14
OG0008676	-8906.89	-8935.17	0.120912	0.428005	5.46E-14
OG0008661	-18635.9	-18656	0.039763	0.334301	2.23E-10
OG0008659	-4623.69	-4641.02	0.199814	0.714392	3.91E-09
OG0008706	-3684.99	-3694.79	0.128626	0.423739	9.49E-06
OG0008634	-69278.7	-69476.5	0.070501	0.451613	4.90E-88
OG0008678	-11503.5	-11544.8	0.108142	0.538245	1.02E-19
OG0008693	-10873.4	-10886.2	0.03726	0.269215	4.27E-07
OG0008702	-2533.56	-2540.22	0.058673	0.224599	2.63E-04
OG0008708	-3426.67	-3435.05	0.034999	0.233201	4.23E-05
OG0008712	-4267.83	-4288.02	0.029143	0.47125	2.09E-10
OG0008695	-8859.23	-8865.34	0.057141	0.692077	4.72E-04
OG0008711	-8386.29	-8393.4	0.039103	0.266369	1.63E-04
OG0008751	-3069.06	-3073.17	0.037698	0.462574	4.15E-03
OG0008727	-12974.4	-13017.1	0.065532	0.359792	2.49E-20
OG0008747	-8724.86	-8754.9	0.033721	0.437173	9.17E-15
OG0008738	-11883.2	-11912.8	0.033925	0.262752	1.49E-14
OG0008734	-15036.8	-15065.8	0.082237	0.455665	2.71E-14
OG0008746	-11350.3	-11355	0.047011	0.355175	2.09E-03

OG0008767	-1533.61	-1538.19	0.04982	0.352068	2.48E-03
OG0008765	-11467.4	-11523.2	0.091378	0.39824	4.66E-26
OG0008808	-7568.53	-7583.72	0.019869	0.197811	3.55E-08
OG0008766	-25934.7	-25956.3	0.08339	0.486118	4.78E-11
OG0008798	-7743.3	-7749.72	0.012398	0.233932	3.38E-04
OG0008805	-6159.45	-6165.97	0.04071	0.694677	3.03E-04
OG0008818	-4848.09	-4857.75	0.03245	0.443395	1.10E-05
OG0008816	-20226.4	-20234.7	0.027059	0.314709	4.64E-05
OG0008809	-8988.66	-8995.15	0.055319	0.30917	3.16E-04
OG0008770	-21347.2	-21430.9	0.053105	0.329181	2.72E-38
OG0008815	-6125.58	-6151.75	0.213192	0.766956	4.69E-13
OG0008813	-7980.13	-7982.48	0.030996	0.243465	3.02E-02
OG0008836	-4600.44	-4613.24	0.032761	0.261826	4.20E-07
OG0008829	-5344.88	-5360.81	0.140779	0.673913	1.66E-08
OG0008833	-7432.04	-7440.63	0.030926	0.280565	3.41E-05
OG0008835	-11382.5	-11412.1	0.061456	0.378886	1.43E-14
OG0008864	-11194.7	-11248.6	0.101731	0.338574	2.98E-25
OG0008861	-2658.89	-2680.73	0.233668	0.470056	3.88E-11
OG0008874	-6128.74	-6145.1	0.136332	0.188069	1.06E-08
OG0008873	-3334.85	-3348.4	0.267873	0.478752	1.93E-07
OG0008898	-5812.51	-5837.32	0.083576	0.4746	1.88E-12
OG0008907	-11057.1	-11060.3	0.037973	0.259194	1.16E-02
OG0008897	-12042.2	-12099	0.122582	0.732766	1.62E-26
OG0008895	-13967.5	-14013.1	0.075553	0.485942	1.32E-21
OG0008908	-5941.23	-5946.5	0.016956	0.216192	1.17E-03
OG0008922	-8170.15	-8185.95	0.223408	0.94345	1.90E-08
OG0008909	-12480.1	-12493.7	0.03705	0.308252	1.89E-07
OG0008924	-13438.5	-13483.3	0.092183	0.365373	2.73E-21
OG0008905	-19567	-19674.5	0.126047	0.576356	1.07E-48
OG0008940	-12204	-12235.6	0.079343	0.265079	1.79E-15
OG0008925	-12073.7	-12110.6	0.066427	0.37479	8.57E-18
OG0008934	-4946.75	-4952.8	0.014503	0.190461	5.01E-04
OG0008914	-14367.5	-14371.9	0.017135	0.241814	3.25E-03
OG0008943	-8940.63	-8954.43	0.106234	0.484737	1.48E-07
OG0008948	-6522.33	-6529.81	0.043935	0.243225	1.10E-04
OG0008954	-5400.69	-5408.09	0.039109	0.392952	1.19E-04
OG0008972	-4792.84	-4797.52	0.056683	0.487179	2.22E-03
OG0009006	-4233.17	-4243.62	0.04018	0.283645	4.85E-06
OG0008966	-4118.31	-4145.84	0.051419	0.454646	1.17E-13
OG0008968	-4370.99	-4402.03	0.035242	0.208199	3.31E-15
OG0008994	-5882.03	-5885.01	0.048694	0.37491	1.46E-02
OG0008989	-4847.98	-4892.51	0.235542	0.689011	3.82E-21
OG0008993	-8299.87	-8344.41	0.14203	0.589877	3.80E-21
OG0009011	-7844.8	-7868.33	0.068889	0.334501	6.88E-12

OG0009033	-11011.5	-11041.6	0.087941	0.296355	9.22E-15
OG0009016	-10458	-10464.8	0.021314	0.232234	2.19E-04
OG0009037	-4141.34	-4145.39	0.036034	0.38824	4.40E-03
OG0009046	-6468.88	-6482.78	0.039507	0.205272	1.34E-07
OG0009087	-8465.69	-8486.66	0.027776	0.30149	9.40E-11
OG0009050	-24796.9	-24804.1	0.030651	0.355364	1.53E-04
OG0009106	-14721.3	-14763.6	0.027517	0.25174	3.68E-20
OG0009113	-6196.32	-6209.08	0.064338	0.443124	4.38E-07
OG0009081	-3434.13	-3446.18	0.132291	0.855788	9.12E-07
OG0009103	-8802.2	-8828.57	0.039517	0.230962	3.79E-13
OG0009121	-3612.34	-3622.92	0.060548	0.475993	4.23E-06
OG0009092	-9585.26	-9595.66	0.041096	0.390404	5.10E-06
OG0009119	-7883.68	-7889.02	0.038672	0.515929	1.08E-03
OG0009144	-5556.31	-5558.37	0.030412	0.264438	4.21E-02
OG0009086	-37562.2	-37588	0.047944	0.338209	7.28E-13
OG0009155	-6904.65	-6907.55	0.087247	0.268186	1.60E-02
OG0009151	-6844.08	-6858.46	0.119642	0.441499	8.16E-08
OG0009136	-14544.3	-14558.5	0.017391	0.296175	1.03E-07
OG0009130	-20795	-20811.8	0.039169	0.353067	6.49E-09
OG0009162	-3186.81	-3219.4	0.17309	0.576964	6.81E-16
OG0009168	-8879.56	-8886.71	0.047848	0.267407	1.57E-04
OG0009165	-2491.77	-2509.38	0.183376	1.240716	2.94E-09
OG0009171	-8994.24	-9018.58	0.034583	0.199667	3.03E-12
OG0009166	-8906.6	-8912.92	0.054978	0.553611	3.77E-04
OG0009179	-9816	-9833.23	0.057291	0.471078	4.35E-09
OG0009180	-14686	-14759	0.251184	0.727949	1.25E-33
OG0009181	-6108.83	-6120.28	0.05387	0.413512	1.71E-06
OG0009188	-4499.64	-4522.92	0.076564	0.254505	8.91E-12
OG0009164	-10912.6	-10942.1	0.038028	0.292529	1.61E-14
OG0009202	-5884.19	-5896.89	0.041157	0.364967	4.61E-07
OG0009183	-1243.13	-1256.54	0.264731	1.397707	2.25E-07
OG0009220	-5634.68	-5639.29	0.050778	0.155862	2.39E-03
OG0009218	-16595.2	-16602.9	0.018566	0.273391	8.50E-05
OG0009196	-27574.4	-27621.1	0.082336	0.375867	4.34E-22
OG0009258	-20321.9	-20373.9	0.173384	0.707001	2.13E-24
OG0009267	-4604.35	-4613.78	0.027196	0.347207	1.40E-05
OG0009275	-3562.2	-3603.23	0.192065	0.596809	1.32E-19
OG0009289	-10789.8	-10806.9	0.044109	0.234214	5.11E-09
OG0009298	-5531.46	-5547.78	0.040385	0.414659	1.11E-08
OG0009286	-5677.87	-5683.9	0.067014	0.260454	5.15E-04
OG0009295	-5825.22	-5837.1	0.061551	0.247254	1.10E-06
OG0009303	-3059.72	-3068.59	0.080758	0.193483	2.52E-05
OG0009307	-5549.28	-5565.82	0.23119	1.016855	8.84E-09
OG0009328	-9667.11	-9676.42	0.027801	0.308821	1.60E-05

OG0009354	-9518.37	-9584.22	0.191883	0.580351	1.75E-30
OG0009321	-11294.3	-11311	0.020109	0.319955	7.13E-09
OG0009347	-17447.1	-17457.2	0.014275	0.29758	7.24E-06
OG0009343	-16395.2	-16511.3	0.140069	0.478633	1.86E-52
OG0009322	-20639.5	-20727	0.048376	0.360861	5.99E-40
OG0009342	-11164.3	-11178.4	0.040441	0.33842	1.11E-07
OG0009367	-9770.27	-9800.25	0.065057	0.317762	9.60E-15
OG0009352	-19474	-19541.3	0.05184	0.387754	4.13E-31
OG0009371	-13058.6	-13118.2	0.046519	0.295805	9.34E-28
OG0009396	-11597.3	-11615.9	0.074641	0.384261	1.10E-09
OG0009389	-13013.7	-13032.2	0.027644	0.396894	1.13E-09
OG0009392	-11763.1	-11792.4	0.103448	0.390651	1.83E-14
OG0009422	-3698.62	-3714	0.084274	0.662161	2.91E-08
OG0009412	-12338	-12342.8	0.084619	0.374168	1.89E-03
OG0009436	-2392.1	-2397.28	0.016266	0.217203	1.29E-03
OG0009434	-6282.6	-6285.83	0.054802	0.254405	1.10E-02
OG0009430	-6897.34	-6928.8	0.076277	0.5637	2.17E-15
OG0009460	-7661.23	-7667.73	0.02673	0.292858	3.13E-04
OG0009450	-7254.86	-7262.68	0.043379	0.244455	7.70E-05
OG0009429	-17439.9	-17447.2	0.046016	0.364164	1.42E-04
OG0009466	-9467.85	-9470.21	0.036782	0.269976	3.00E-02
OG0009470	-7300.83	-7311.1	0.019343	0.347788	5.88E-06
OG0009411	-31580.1	-31647	0.067844	0.333317	6.18E-31
OG0009444	-21432.5	-21527	0.056319	0.458309	4.98E-43
OG0009484	-3662.09	-3667.51	0.018674	0.435783	9.87E-04
OG0009498	-2316.95	-2319.62	0.052617	0.399199	2.07E-02
OG0009491	-9664.7	-9668.08	0.057472	0.386346	9.30E-03
OG0009499	-3961.07	-3963.22	0.033404	0.280123	3.85E-02
OG0009486	-15771.8	-15777.9	0.027384	0.350273	4.49E-04
OG0009503	-4551.9	-4583.7	0.142067	0.71082	1.52E-15
OG0009490	-30818.9	-31015	0.240851	0.880689	2.69E-87
OG0009505	-10142.6	-10165.9	0.056405	0.474526	9.35E-12
OG0009537	-4158.16	-4170.99	0.033549	0.280541	4.07E-07
OG0009509	-9687.11	-9696.62	0.028394	0.269048	1.30E-05
OG0009521	-12383.5	-12410.2	0.088197	0.534501	2.92E-13
OG0009531	-1647.91	-1652.95	0.025724	0.462318	1.50E-03
OG0009527	-15506.5	-15530.3	0.012048	0.338753	5.38E-12
OG0009554	-2871.13	-2873.25	0.048368	0.227833	3.97E-02
OG0009522	-19262.1	-19346.5	0.082161	0.381155	1.30E-38
OG0009551	-5373.36	-5381.47	0.092095	0.518779	5.64E-05
OG0009560	-8097.61	-8103.94	0.02803	0.477742	3.75E-04
OG0009548	-7224.56	-7249.37	0.035979	0.375819	1.85E-12
OG0009535	-8126.89	-8175.77	0.14426	0.681494	4.72E-23
OG0009563	-24055.6	-24093	0.041777	0.382182	5.15E-18

OG0009582	-19804.6	-19818.7	0.075552	0.425328	1.19E-07
OG0009578	-11527.2	-11570.8	0.07825	0.265242	1.00E-20
OG0009623	-12342	-12370.8	0.064427	0.275545	3.12E-14
OG0009592	-12124.3	-12165.2	0.095404	0.41713	1.42E-19
OG0009590	-8904.61	-8914.7	0.098589	0.354995	7.10E-06
OG0009600	-3826.93	-3829.78	0.01595	0.394118	1.69E-02
OG0009608	-3803.64	-3826.81	0.056237	0.270603	9.97E-12
OG0009635	-13217.6	-13273.9	0.104466	0.437866	2.77E-26
OG0009610	-9820.71	-9827.4	0.015075	0.291328	2.54E-04
OG0009626	-4979.52	-4993.98	0.105698	0.562051	7.56E-08
OG0009621	-5819.02	-5823.53	0.028752	0.222243	2.66E-03
OG0009619	-7121.41	-7137.91	0.057229	0.150108	9.24E-09
OG0009609	-14694.1	-14730.4	0.033411	0.375125	1.57E-17
OG0009636	-7813.06	-7865.39	0.08744	0.340512	1.45E-24
OG0009614	-19867.8	-19904.5	0.039512	0.396145	1.09E-17
OG0009646	-13447.6	-13465.1	0.045708	0.357763	3.61E-09
OG0009655	-4267.77	-4290.04	0.211399	0.750718	2.50E-11
OG0009648	-30504.5	-30529.4	0.03426	0.294463	1.72E-12
OG0009709	-3414.77	-3442.34	0.301089	0.794929	1.12E-13
OG0009702	-4352.1	-4365.35	0.06881	1.077371	2.64E-07
OG0009705	-9168.03	-9188.19	0.066836	0.249827	2.15E-10
OG0009710	-10831.1	-10850.3	0.04061	0.343042	5.91E-10
OG0009722	-19043.1	-19054.1	0.041132	0.316963	2.77E-06
OG0009747	-9899.34	-9924.94	0.293862	0.64819	8.42E-13
OG0009708	-18216.1	-18256.9	0.054195	0.362829	1.64E-19
OG0009748	-7105.68	-7123.33	0.117783	0.521834	2.83E-09
OG0009749	-8217.83	-8221.35	0.031884	0.254819	7.97E-03
OG0009761	-7333.95	-7339.5	0.045266	0.483464	8.61E-04
OG0009769	-6555.5	-6582.58	0.095417	0.481138	1.86E-13
OG0009768	-14532.9	-14582.7	0.127697	0.569372	1.76E-23
OG0009783	-3042.91	-3045.27	0.041146	0.118311	2.98E-02
OG0009765	-6897.49	-6929.63	0.0816	0.376114	1.08E-15
OG0009785	-3877.73	-3904.48	0.10562	0.432904	2.60E-13
OG0009767	-9363.67	-9383.57	0.017745	0.344214	2.83E-10
OG0009778	-9517.31	-9521.96	0.027603	0.284986	2.29E-03
OG0009810	-4403.59	-4416.63	0.11327	0.525046	3.28E-07
OG0009821	-4353.09	-4356.96	0.016924	0.249605	5.40E-03
OG0009815	-5117.74	-5122.54	0.030246	0.246967	1.94E-03
OG0009813	-13339.6	-13360.5	0.060023	0.36289	9.94E-11
OG0009819	-18326.3	-18331.6	0.018766	0.20822	1.19E-03
OG0009795	-23658.4	-23692.5	0.062005	0.360152	1.59E-16
OG0009809	-29524.2	-29552.6	0.054364	0.235682	4.79E-14
OG0009855	-10648.9	-10664	0.073559	0.357941	3.81E-08
OG0009834	-16087.4	-16094.7	0.076495	0.495309	1.34E-04

OG0009874	-2851.35	-2880.2	0.15443	0.444494	3.05E-14
OG0009879	-2896.92	-2899.08	0.047637	0.460822	3.76E-02
OG0009904	-3209.95	-3222.38	0.170745	0.511796	6.15E-07
OG0009900	-3162.18	-3167.37	0.018607	0.137974	1.28E-03
OG0009883	-11972	-11989.1	0.097478	0.424595	5.07E-09
OG0009894	-2209.86	-2219.72	0.046504	0.300138	8.93E-06
OG0009890	-9750.01	-9762.49	0.020612	0.371554	5.89E-07
OG0009927	-17096.2	-17108.5	0.041389	0.263698	6.90E-07
OG0009913	-7470.04	-7474.53	0.046977	0.327998	2.74E-03
OG0009918	-3243.62	-3252.14	0.071925	0.101472	3.67E-05
OG0009937	-4453.19	-4455.31	0.052113	0.393312	3.92E-02
OG0009928	-9688.75	-9731.69	0.14758	0.440018	1.91E-20
OG0009950	-10544.7	-10554.4	0.032046	0.310471	1.08E-05
OG0009947	-10760.1	-10772.4	0.055812	0.237961	7.04E-07
OG0009966	-6087.27	-6108.34	0.039665	0.323824	8.49E-11
OG0009974	-1402.86	-1412.47	0.141844	0.312735	1.17E-05
OG0009985	-11079.8	-11104.6	0.028913	0.376557	1.87E-12
OG0009988	-7689.24	-7720.78	0.104445	0.366244	1.99E-15
OG0010004	-3362.11	-3373.19	0.041904	0.242053	2.52E-06
OG0010000	-23904.9	-23914.5	0.040569	0.318761	1.22E-05
OG0010013	-15310.4	-15323.4	0.023542	0.294538	3.49E-07
OG0010007	-12575.5	-12596.4	0.073399	0.311037	1.05E-10
OG0010028	-3341.02	-3349.19	0.105645	0.523854	5.25E-05
OG0010019	-9856.25	-9870.2	0.06689	0.532017	1.28E-07
OG0010041	-7135.27	-7170.25	0.206595	0.562481	6.08E-17
OG0010061	-8061.63	-8066.26	0.015957	0.259917	2.35E-03
OG0010043	-17013.7	-17053.6	0.044346	0.262437	4.11E-19
OG0010049	-16883.8	-16917.3	0.035768	0.291204	2.70E-16
OG0010067	-9615.13	-9637.61	0.13066	0.566725	2.03E-11
OG0010068	-8901.14	-8909.12	0.03717	0.284121	6.47E-05
OG0010079	-4429.44	-4432.31	0.070622	0.252037	1.68E-02
OG0010083	-8439.58	-8443.91	0.04224	0.336015	3.24E-03
OG0010094	-7774.76	-7816.17	0.075729	0.402714	8.99E-20
OG0010112	-3331.03	-3349.75	0.036573	0.278517	9.41E-10
OG0010006	-69590.2	-69599.5	0.015819	0.274919	1.57E-05
OG0010105	-9545.7	-9579.08	0.226301	0.829335	3.07E-16
OG0010125	-8889.34	-8905.06	0.039252	0.371444	2.06E-08
OG0010144	-3594.49	-3606.73	0.19175	0.599908	7.46E-07
OG0010127	-7157.81	-7179.87	0.073096	0.468938	3.08E-11
OG0010141	-2644.06	-2650.73	0.008592	0.208113	2.61E-04
OG0010134	-7220.4	-7234.56	0.032051	0.287166	1.02E-07
OG0010119	-23223.4	-23232.3	0.036257	0.305556	2.64E-05
OG0010159	-3702.74	-3712.65	0.094942	1.530121	8.54E-06
OG0010179	-3828.78	-3832.17	0.047578	0.471736	9.26E-03

OG0010169	-3307.4	-3316.75	0.126785	0.681331	1.52E-05
OG0010172	-4896.56	-4899.57	0.032357	0.136553	1.42E-02
OG0010175	-7166.98	-7195.38	0.09788	0.718447	4.83E-14
OG0010173	-10070.3	-10074.2	0.03196	0.278567	5.21E-03
OG0010187	-7266.97	-7290.92	0.071319	0.266082	4.46E-12
OG0010174	-6532.7	-6540.01	0.037813	0.394051	1.32E-04
OG0010207	-6338.93	-6376	0.066878	0.409256	7.26E-18
OG0010178	-10180.5	-10218	0.083173	0.402738	4.60E-18
OG0010183	-10025.7	-10048.8	0.046135	0.313666	1.14E-11
OG0010191	-9547.34	-9555.51	0.023334	0.290982	5.29E-05
OG0010203	-6741.09	-6747.56	0.127175	0.466494	3.23E-04
OG0010249	-15258.8	-15271.2	0.085029	0.341468	6.46E-07
OG0010239	-5389.71	-5400.59	0.025713	0.257222	3.09E-06
OG0010217	-9596.89	-9627.87	0.067872	0.361155	3.52E-15
OG0010228	-3880.2	-3890.23	0.041443	0.279084	7.47E-06
OG0010248	-10798.9	-10812	0.017956	0.263559	2.84E-07
OG0010242	-6694.36	-6726.9	0.0414	0.212189	7.17E-16
OG0010232	-8242.27	-8296.28	0.113384	0.481787	2.68E-25
OG0010241	-5508.08	-5569.76	0.094629	0.412718	1.16E-28
OG0010259	-6623.93	-6650.75	0.079218	0.470554	2.40E-13
OG0010244	-7229.36	-7261.41	0.108865	0.659497	1.18E-15
OG0010262	-5842.16	-5845.03	0.038246	0.369944	1.66E-02
OG0010266	-6715.45	-6719.16	0.041323	0.434615	6.43E-03
OG0010284	-2407.94	-2411.73	0.050822	0.000051	5.91E-03
OG0010288	-2890.08	-2893.37	0.008515	0.296329	1.03E-02
OG0010299	-8092.33	-8097.02	0.045859	0.151148	2.19E-03
OG0010311	-7655.46	-7667.04	0.023394	0.201073	1.48E-06
OG0010308	-8154.09	-8161.32	0.035393	0.310157	1.44E-04
OG0010309	-10943.5	-10987.6	0.062955	0.57277	6.47E-21
OG0010319	-9170.9	-9187.07	0.077173	0.362948	1.30E-08
OG0010322	-12621.2	-12638.5	0.023638	0.413526	3.95E-09
OG0010358	-7210.33	-7228.27	0.053111	0.368395	2.08E-09
OG0010336	-22342.3	-22373	0.041501	0.427195	4.27E-15
OG0010366	-15338.2	-15365.8	0.018476	0.250588	1.10E-13
OG0010369	-5365.72	-5380.39	0.051378	0.239932	6.08E-08
OG0010361	-19687.8	-19706.9	0.037577	0.290249	6.76E-10
OG0010391	-4348.75	-4354.7	0.023907	0.224969	5.57E-04
OG0010387	-5136.57	-5141.24	0.018871	0.248478	2.24E-03
OG0010385	-15106.8	-15143.3	0.061651	0.309123	1.27E-17
OG0010384	-39058.9	-39061.2	0.038542	0.305557	3.20E-02
OG0010381	-17209.2	-17260.5	0.041298	0.238618	4.12E-24
OG0010395	-8192.11	-8195.79	0.067815	0.258969	6.68E-03
OG0010416	-2811.46	-2817.05	0.023739	0.387693	8.25E-04
OG0010399	-7517.33	-7537.93	0.048073	0.359706	1.37E-10

OG0010408	-6044.7	-6073.1	0.054426	0.352629	4.79E-14
OG0010401	-23227.3	-23255.7	0.030901	0.285179	4.76E-14
OG0010438	-19092	-19136.2	0.05353	0.299094	5.16E-21
OG0010456	-4843.17	-4873.18	0.304433	0.359528	9.38E-15
OG0010463	-4141.69	-4146.47	0.040621	0.210227	2.00E-03
OG0010482	-5405.79	-5411.1	0.062117	0.445433	1.12E-03
OG0010457	-12553.4	-12561.2	0.053738	0.38993	8.32E-05
OG0010466	-3018.02	-3021.27	0.035517	0.27293	1.07E-02
OG0010462	-10461.6	-10498.3	0.064489	0.367981	1.04E-17
OG0010455	-22924.9	-23014.3	0.168402	0.924927	8.80E-41
OG0010472	-4084.22	-4086.83	0.016192	0.245471	2.22E-02
OG0010488	-3705.87	-3726.33	0.096039	0.433707	1.59E-10
OG0010499	-2141.36	-2152.35	0.071667	0.543247	2.77E-06
OG0010465	-2898.99	-2903.16	0.060414	0.301965	3.89E-03
OG0010512	-6652.85	-6656.18	0.008232	0.319614	9.88E-03
OG0010477	-8338.88	-8342.6	0.036549	0.259528	6.43E-03
OG0010489	-4511.06	-4537.46	0.151005	0.722355	3.69E-13
OG0010506	-4777.52	-4796.5	0.101957	0.566841	7.21E-10
OG0010469	-13474.6	-13481.1	0.038812	0.210102	3.24E-04
OG0010502	-9971.14	-10042.1	0.12564	0.830545	1.03E-32
OG0010475	-19294.8	-19333	0.081517	0.378322	2.26E-18
OG0010505	-1817.68	-1827.1	0.127833	0.419899	1.41E-05
OG0010490	-15040.3	-15060.5	0.125439	0.236941	2.23E-10
OG0010503	-7449.63	-7455.01	0.014395	0.301465	1.04E-03
OG0010509	-7617.67	-7623.43	0.017983	0.392272	6.91E-04
OG0010510	-5007.34	-5019.39	0.046563	0.249412	9.11E-07
OG0010530	-4157.97	-4163.24	0.096286	0.452783	1.18E-03
OG0010567	-4332.21	-4352.27	0.266485	0.909636	2.37E-10
OG0010541	-8947.41	-8967.83	0.068547	0.355128	1.65E-10
OG0010564	-6593.97	-6598.58	0.035135	0.40455	2.40E-03
OG0010539	-15832.1	-15852.5	0.021613	0.363584	1.65E-10
OG0010549	-8529.78	-8558.58	0.067828	0.560558	3.20E-14
OG0010553	-18488.5	-18612.5	0.090451	0.242981	7.75E-56
OG0010586	-7922.73	-7956.45	0.104833	0.335291	2.19E-16
OG0010537	-29481.6	-29530.4	0.066442	0.361333	4.96E-23
OG0010593	-27613.5	-27659.9	0.026808	0.23336	6.08E-22
OG0010615	-2919.85	-2924.81	0.032282	0.314275	1.64E-03
OG0010608	-8292.41	-8326.31	0.199408	0.522824	1.81E-16
OG0010580	-21950.7	-21970.6	0.021748	0.367257	2.65E-10
OG0010619	-4779.05	-4813.27	0.119339	0.441641	1.31E-16
OG0010624	-10756.6	-10773.4	0.04612	0.349355	6.40E-09
OG0010625	-8103.18	-8128.01	0.033224	0.313321	1.83E-12
OG0010607	-18409.5	-18444.6	0.053518	0.301212	5.23E-17
OG0010630	-3609.26	-3617.65	0.75779	2.55548	4.18E-05

OG0010644	-16735.7	-16749.6	0.054716	0.359859	1.34E-07
OG0010650	-6513.37	-6516.22	0.021236	0.142367	1.68E-02
OG0010645	-5205.25	-5214.87	0.064904	0.375302	1.15E-05
OG0010654	-3208.9	-3214.86	0.619069	13.4494	5.57E-04
OG0010641	-9455.61	-9492.2	0.067205	0.488467	1.18E-17
OG0010640	-9307.58	-9337.29	0.050171	0.317137	1.28E-14
OG0010639	-17009.6	-17112.6	0.095714	0.516309	1.00E-46
OG0010681	-5336.56	-5361.51	0.173228	1.20581	1.62E-12
OG0010678	-2974.32	-2977.31	0.093995	0.476858	1.45E-02
OG0010688	-4660.66	-4676.41	0.08334	0.43243	2.00E-08
OG0010700	-5603.62	-5614.98	0.114898	0.513665	1.88E-06
OG0010691	-6791.75	-6829.75	0.051468	0.363174	2.85E-18
OG0010701	-6377.73	-6387.53	0.083725	0.314545	9.58E-06
OG0010718	-6398.75	-6415.36	0.04317	0.161609	8.26E-09
OG0010726	-7313.58	-7315.66	0.057445	0.400858	4.11E-02
OG0010739	-12183.6	-12195	0.023635	0.370296	1.87E-06
OG0010770	-2942.25	-2950.85	0.074259	0.365807	3.36E-05
OG0010774	-4443.4	-4447.85	0.02699	0.236615	2.87E-03
OG0010799	-7282.85	-7289.78	0.061118	0.468266	1.98E-04
OG0010793	-7523.29	-7531.45	0.012788	0.283521	5.37E-05
OG0010787	-8902.71	-8916.86	0.059755	0.540144	1.04E-07
OG0010755	-30073.7	-30110.2	0.033181	0.272513	1.33E-17
OG0010798	-20141.7	-20152.5	0.030844	0.27207	3.24E-06
OG0010806	-4299.84	-4302.61	0.014405	0.176778	1.86E-02
OG0010794	-13497.7	-13512.8	0.070181	0.370684	3.98E-08
OG0010809	-6729.31	-6737.39	0.032812	0.31327	5.80E-05
OG0010790	-18209.2	-18232.5	0.061222	0.269502	9.55E-12
OG0010802	-13484.7	-13522.1	0.058312	0.295292	4.93E-18
OG0010817	-4053.48	-4056.51	0.016578	0.061331	1.38E-02
OG0010807	-10048.5	-10059.1	0.067366	0.409495	4.15E-06
OG0010816	-24145.3	-24148.7	0.023397	0.233026	9.39E-03
OG0010826	-9131.67	-9142.19	0.031585	0.276142	4.46E-06
OG0010834	-19955.6	-20000.9	0.065968	0.290627	1.81E-21
OG0010838	-5722.83	-5725.29	0.035572	0.200694	2.69E-02
OG0010842	-5263.16	-5281.16	0.109739	0.38292	1.98E-09
OG0010841	-2260.92	-2270.81	0.147397	1.069526	8.75E-06
OG0010840	-7860.05	-7888.01	0.219021	0.705794	7.48E-14
OG0010869	-3151.39	-3156.28	0.039026	0.263958	1.75E-03
OG0010882	-4013.34	-4020.66	0.117407	0.756608	1.30E-04
OG0010880	-5519.12	-5538.12	0.099102	0.252168	7.10E-10
OG0010849	-17548	-17562.8	0.018009	0.21044	5.57E-08
OG0010892	-4231.92	-4243.37	0.145959	0.636263	1.71E-06
OG0010888	-7068.95	-7096.03	0.044666	0.437808	1.84E-13
OG0010899	-12024.1	-12042.7	0.057307	0.30358	1.08E-09

OG0010916	-29178.4	-29205.3	0.0383	0.320709	2.02E-13
OG0010893	-15758.2	-15808.6	0.082474	0.558728	1.01E-23
OG0010910	-6456.64	-6461.92	0.035408	0.149422	1.16E-03
OG0010942	-6990.74	-7005.2	0.046919	0.306594	7.56E-08
OG0010907	-12653.5	-12664.1	0.04308	0.38614	4.29E-06
OG0010927	-7873.81	-7901.95	0.03701	0.355794	6.28E-14
OG0010929	-7880.5	-7885.32	0.055469	0.233364	1.92E-03
OG0010925	-9063.83	-9073.99	0.030253	0.349078	6.54E-06
OG0010948	-2444.61	-2450.14	0.018461	0.548198	8.82E-04
OG0010959	-4174.96	-4180.28	0.016442	0.258276	1.11E-03
OG0010937	-8000.81	-8052.96	0.283882	0.857588	1.74E-24
OG0010957	-5436.55	-5454.73	0.133732	0.606351	1.64E-09
OG0010938	-20325.8	-20365.4	0.147995	0.488292	5.65E-19
OG0010953	-11886.7	-11893.3	0.032888	0.368572	2.57E-04
OG0010983	-4819.2	-4824.72	0.075673	0.456953	8.89E-04
OG0010992	-2765.31	-2769.19	0.059919	0.65242	5.35E-03
OG0010997	-4985.82	-4992.43	0.060202	0.36784	2.76E-04
OG0010990	-6171.17	-6194.17	0.260125	0.629353	1.19E-11
OG0011008	-5396.98	-5418.94	0.095593	0.33499	3.43E-11
OG0011049	-6956.93	-6976.37	0.147326	0.426279	4.52E-10
OG0011037	-7729.59	-7750.71	0.044318	0.603523	8.06E-11
OG0011064	-4467.42	-4479.8	0.124327	0.393314	6.53E-07
OG0011047	-15072.4	-15110	0.047472	0.367039	4.17E-18
OG0011041	-19284.4	-19307.1	0.069597	0.454677	1.56E-11
OG0011054	-8003.17	-8029.39	0.073468	0.44334	4.42E-13
OG0011053	-11049.8	-11086.2	0.051091	0.346808	1.40E-17
OG0011062	-4672.71	-4693.43	0.068034	0.4576	1.22E-10
OG0011111	-9076.89	-9081.24	0.028732	0.54992	3.18E-03
OG0011085	-6075.43	-6116.77	0.081975	0.545667	9.63E-20
OG0011078	-16249.1	-16264.3	0.044403	0.413571	3.29E-08
OG0011090	-10941	-10963.7	0.045492	0.378904	1.67E-11
OG0011106	-17439.6	-17449.9	0.020338	0.225804	5.53E-06
OG0011108	-18836.2	-18884.2	0.067993	0.399956	1.19E-22
OG0011102	-14862.6	-14878.5	0.096833	0.372713	1.63E-08
OG0011120	-2587.22	-2602.58	0.106309	0.411329	2.98E-08
OG0011128	-2097.19	-2100.73	0.012411	0.262347	7.78E-03
OG0011104	-22928.8	-22969.2	0.063657	0.323886	2.45E-19
OG0011139	-2341.31	-2344.66	0.060955	0.158077	9.68E-03
OG0011151	-6222.47	-6230.53	0.047712	0.30794	5.93E-05
OG0011133	-21587.9	-21620.1	0.027482	0.365063	9.73E-16
OG0011158	-23989.6	-24023.9	0.060366	0.338769	1.17E-16
OG0011170	-6345.65	-6349.66	0.016551	0.29623	4.61E-03
OG0011153	-3313.76	-3319.35	0.066963	0.459794	8.21E-04
OG0011180	-3784.61	-3801.98	0.134089	0.565895	3.74E-09

OG0011187	-1172.55	-1177.9	0.236724	1.32282	1.08E-03
OG0011196	-6584.16	-6588.87	0.028031	0.2934	2.15E-03
OG0011174	-11864.1	-11887.7	0.046774	0.302929	6.75E-12
OG0011214	-15584.3	-15623.5	0.040064	0.311078	7.82E-19
OG0011200	-7479.84	-7488.84	0.041162	0.248374	2.21E-05
OG0011204	-8109.51	-8114.09	0.068413	0.480522	2.50E-03
OG0011219	-3425.26	-3429.7	0.037922	0.394272	2.86E-03
OG0011211	-7634.49	-7642.97	0.025096	0.293189	3.82E-05
OG0011198	-12797.3	-12918.7	0.187192	0.683131	9.42E-55
OG0011206	-20191.8	-20208	0.065305	0.705644	1.30E-08
OG0011234	-2123.37	-2146.85	0.143583	0.352174	7.24E-12
OG0011207	-24959.6	-24992.2	0.10116	0.576025	6.51E-16
OG0011231	-9722.67	-9741.47	0.033167	0.581292	8.65E-10
OG0011244	-10086.8	-10094.9	0.088943	0.45137	5.40E-05
OG0011247	-7765.94	-7775.83	0.048636	0.358193	8.68E-06
OG0011250	-12522.6	-12528.2	0.047858	0.377398	8.14E-04
OG0011284	-4520.95	-4523.49	0.045202	0.461806	2.42E-02
OG0011263	-2798.81	-2803.32	0.088726	0.017611	2.67E-03
OG0011253	-2199.91	-2214.83	0.247346	0.589338	4.68E-08
OG0011328	-7630.08	-7634.99	0.04046	0.425948	1.72E-03
OG0011279	-6517.88	-6524.48	0.054112	0.410832	2.82E-04
OG0011276	-7521.16	-7526.13	0.05618	0.319144	1.62E-03
OG0011316	-5530.07	-5537.5	0.034285	0.272042	1.16E-04
OG0011293	-10044.2	-10077.6	0.091932	0.3609	3.12E-16
OG0011309	-7999.55	-8006.61	0.046766	0.287119	1.73E-04
OG0011304	-8955.67	-8962.56	0.024514	0.43209	2.05E-04
OG0011343	-15951.2	-16017	0.060469	0.29738	1.92E-30
OG0011323	-7181.53	-7183.91	0.101369	0.932322	2.89E-02
OG0011313	-7273.41	-7291.6	0.094982	0.416398	1.63E-09
OG0011330	-10102.5	-10111.9	0.014638	0.306936	1.38E-05
OG0011327	-11929.4	-11938.5	0.060231	0.365415	1.96E-05
OG0011281	-20283	-20296.4	0.023648	0.423186	2.22E-07
OG0011310	-15102.5	-15144.7	0.042437	0.432104	3.79E-20
OG0011367	-6434.48	-6482.33	0.081809	0.427837	1.34E-22
OG0011364	-6245.93	-6262.03	0.065157	0.474627	1.39E-08
OG0011370	-5725.91	-5731.55	0.020414	0.253034	7.80E-04
OG0011375	-10930.1	-10937.8	0.028201	0.202864	9.11E-05
OG0011358	-6527.28	-6530.65	0.027843	0.406133	9.36E-03
OG0011397	-2226.08	-2235.78	0.267712	0.606766	1.06E-05
OG0011390	-4751.23	-4757.1	0.067066	0.314852	6.10E-04
OG0011373	-10593.2	-10601.6	0.050334	0.349245	4.18E-05
OG0011392	-3544.17	-3555.81	0.027131	0.295113	1.41E-06
OG0011384	-7757.97	-7776.98	0.059518	0.401049	6.98E-10
OG0011408	-5198.1	-5213.66	0.05418	0.335359	2.41E-08

OG0011401	-957.788	-961.098	0.115078	0.364079	1.01E-02
OG0011409	-3066.21	-3072.18	0.154756	0.823669	5.49E-04
OG0011395	-5084.11	-5109.25	0.254934	0.783698	1.32E-12
OG0011411	-11041.5	-11108.9	0.130298	0.745632	3.55E-31
OG0011423	-7446.93	-7470.06	0.028285	0.326018	1.03E-11
OG0011410	-6369.5	-6384.6	0.170173	0.368395	3.90E-08
OG0011394	-23830.5	-23852.5	0.031098	0.269224	3.11E-11
OG0011438	-4454.77	-4465.19	0.09345	0.640009	4.97E-06
OG0011449	-12843.4	-12940.2	0.184164	0.609208	4.93E-44
OG0011450	-9869.42	-9901.3	0.116335	0.50939	1.41E-15
OG0011445	-7317.43	-7328.07	0.034148	0.409387	3.97E-06
OG0011457	-10145.4	-10166	0.07999	0.392544	1.33E-10
OG0011427	-6706.23	-6722.27	0.068826	0.268147	1.48E-08
OG0011466	-6957.75	-6986.13	0.029854	0.186139	4.93E-14
OG0011439	-16044.4	-16047.1	0.02675	0.329666	1.92E-02
OG0011441	-20980.6	-21063.7	0.048854	0.330386	5.04E-38
OG0011456	-5492.62	-5508.94	0.062493	0.230518	1.11E-08
OG0011470	-5257.05	-5261.95	0.008158	0.323933	1.75E-03
OG0011460	-10463	-10473.5	0.052958	0.274276	4.57E-06
OG0011489	-6879.43	-6891.15	0.020466	0.23821	1.28E-06
OG0011475	-11015.7	-11023.3	0.017521	0.203723	1.07E-04
OG0011518	-8656.94	-8661.55	0.015821	0.217439	2.40E-03
OG0011493	-10726.7	-10750.2	0.1186	0.725125	6.92E-12
OG0011504	-6871.7	-6887.53	0.043479	0.174364	1.83E-08
OG0011516	-6553.68	-6576.91	0.072666	0.449793	9.38E-12
OG0011513	-7657.58	-7699.97	0.135086	0.55989	3.36E-20
OG0011521	-12212.1	-12223.7	0.057082	0.385212	1.53E-06
OG0011550	-4937.35	-4957.13	0.077295	0.765936	3.19E-10
OG0011571	-4053.59	-4064.68	0.01346	0.28419	2.49E-06
OG0011527	-14173.6	-14204.9	0.018521	0.271442	2.35E-15
OG0011548	-9952.34	-9978.5	0.028843	0.391641	4.72E-13
OG0011576	-4055.76	-4061.11	0.042845	0.327399	1.06E-03
OG0011558	-11398.3	-11472.1	0.21964	0.609014	5.44E-34
OG0011557	-9106.4	-9147.63	0.089891	0.335242	1.08E-19
OG0011598	-6927.08	-6940.82	0.037009	0.38908	1.58E-07
OG0011579	-3298.95	-3307.51	0.016311	0.276638	3.52E-05
OG0011587	-6135.01	-6169.4	0.106689	0.592457	1.10E-16
OG0011582	-12014.3	-12022	0.027798	0.207452	8.76E-05
OG0011556	-14185.3	-14231.7	0.141563	0.377032	5.51E-22
OG0011611	-6456.65	-6466.71	0.098164	0.303878	7.29E-06
OG0011642	-7698.04	-7702.56	0.035227	0.238701	2.63E-03
OG0011616	-13437.1	-13484.6	0.08449	0.4655	1.83E-22
OG0011586	-50915.5	-50930	0.046334	0.283016	7.65E-08
OG0011630	-13859.3	-13888.1	0.096803	0.382171	3.18E-14

OG0011640	-10640.6	-10645.1	0.028318	0.283492	2.97E-03
OG0011660	-2880.78	-2884.79	0.063285	0.79436	4.63E-03
OG0011658	-15895.7	-15901.7	0.015172	0.254758	5.57E-04
OG0011617	-40346.1	-40529.4	0.105406	0.522648	1.02E-81
OG0011674	-5773.55	-5816.74	0.139222	0.456585	1.48E-20
OG0011680	-18773.3	-18783.6	0.025647	0.222241	5.68E-06
OG0011681	-5534.35	-5538.48	0.06786	0.338821	4.07E-03
OG0011669	-14081.5	-14088	0.046762	0.333026	2.98E-04
OG0011677	-7921.09	-7951.82	0.041376	0.347259	4.48E-15
OG0011702	-2781.13	-2787.18	0.19495	2.130111	5.03E-04
OG0011695	-7914.91	-7924.83	0.100491	0.452487	8.39E-06
OG0011688	-12691.3	-12783.2	0.186865	0.504518	7.39E-42
OG0011730	-11643.4	-11687.8	0.071498	0.452119	4.41E-21
OG0011726	-12860.6	-12873.8	0.036967	0.225206	2.78E-07
OG0011713	-15976.1	-16110.1	0.148662	0.514917	3.33E-60
OG0011769	-3049.06	-3059.87	0.189522	0.401678	3.32E-06
OG0011706	-10737.6	-10745.5	0.049888	0.228021	7.25E-05
OG0011724	-15441.7	-15454.2	0.018814	0.236612	6.23E-07
OG0011752	-2837.87	-2845.5	0.107431	0.52755	9.30E-05
OG0011704	-17140.6	-17156.8	0.021241	0.325046	1.19E-08
OG0011764	-4699.45	-4703.57	0.031388	0.368305	4.09E-03
OG0011762	-5975.51	-5989.15	0.12302	0.576775	1.76E-07
OG0011748	-15481.2	-15535.6	0.057051	0.334032	1.80E-25
OG0011778	-3185.77	-3188.36	0.012244	0.034785	2.28E-02
OG0011779	-5333.05	-5342.85	0.019112	0.469083	9.49E-06
OG0011736	-25757.7	-25780.4	0.036498	0.281732	1.67E-11
OG0011774	-15100.7	-15106.9	0.007847	0.178634	4.27E-04
OG0011780	-8907.45	-8919.67	0.067673	0.343133	7.67E-07
OG0011775	-10438.7	-10473.7	0.030348	0.299873	5.84E-17
OG0011846	-2979.7	-2999.87	0.195966	0.556667	2.13E-10
OG0011813	-4414.53	-4417.12	0.040305	0.361389	2.28E-02
OG0011808	-11641.3	-11665.4	0.011217	0.185286	3.73E-12
OG0011787	-16947.5	-16995.1	0.043719	0.34185	1.58E-22
OG0011817	-9311.24	-9345.63	0.063957	0.427822	1.10E-16
OG0011850	-10267.3	-10286.9	0.050145	0.490595	3.76E-10
OG0011857	-1175.18	-1178.9	0.080654	0.495759	6.33E-03
OG0011858	-4284.85	-4298.33	0.053342	0.238797	2.08E-07
OG0011868	-10643.6	-10689.3	0.095899	0.573595	1.19E-21
OG0011874	-2970.69	-2976.64	0.040238	0.344157	5.66E-04
OG0011879	-10135.7	-10145.4	0.028003	0.30807	1.04E-05
OG0011876	-9151.28	-9170.09	0.059614	0.387267	8.65E-10
OG0011873	-5946.45	-5952.55	0.033059	0.540115	4.80E-04
OG0011891	-13127.8	-13140.1	0.079387	0.491425	7.14E-07
OG0011895	-5515.76	-5538.01	0.106041	0.185214	2.53E-11

OG0011903	-9800.2	-9809.95	0.011566	0.337669	1.01E-05
OG0011933	-5407.59	-5418.52	0.075037	0.392597	2.94E-06
OG0011915	-20262.5	-20350.2	0.244071	0.70601	5.10E-40
OG0011947	-8613.08	-8649.18	0.065908	0.319807	1.94E-17
OG0011944	-2637.27	-2647.17	0.101021	0.572519	8.57E-06
OG0011946	-8802.49	-8810.19	0.023289	0.218791	8.69E-05
OG0011937	-12778.5	-12790.8	0.10522	0.192861	7.45E-07
OG0011957	-7159.25	-7190.47	0.054576	0.427614	2.75E-15
OG0011950	-3694	-3702.98	0.033767	0.355782	2.27E-05
OG0011952	-9260.33	-9288.58	0.087958	0.271375	5.63E-14
OG0011956	-6424.38	-6443.12	0.032975	0.299565	9.20E-10
OG0011976	-8170.3	-8174.14	0.029114	0.143958	5.54E-03
OG0011977	-2174.69	-2178.7	0.012606	0.229532	4.67E-03
OG0011968	-16517.8	-16529	0.058162	0.3642	2.22E-06
OG0012003	-5739.91	-5753.15	0.021848	0.372604	2.66E-07
OG0012013	-10354.9	-10359.6	0.040127	0.241308	2.08E-03
OG0012027	-1544.66	-1550.42	0.12677	0.858522	6.91E-04
OG0012024	-4868.29	-4883.5	0.480526	1.301089	3.45E-08
OG0012033	-12964.6	-12967.8	0.047309	0.335291	1.18E-02
OG0012072	-6861.93	-6880.98	0.060055	0.377305	6.67E-10
OG0012064	-6166.54	-6171.04	0.02002	0.411907	2.70E-03
OG0012041	-23775.6	-23868.7	0.086674	0.57275	2.17E-42
OG0012071	-7360.55	-7374.31	0.063588	0.454808	1.56E-07
OG0012108	-3636.93	-3662.01	0.072931	0.60211	1.40E-12
OG0012094	-5696.32	-5699.7	0.027019	0.170109	9.29E-03
OG0012113	-14325.7	-14338.5	0.032648	0.267376	4.19E-07
OG0012099	-28634.1	-28637.6	0.048023	0.401572	8.20E-03
OG0012118	-6897.26	-6903.26	0.052567	0.32289	5.32E-04
OG0012132	-6642.41	-6660.29	0.043382	0.277528	2.23E-09
OG0012119	-9039.69	-9041.93	0.020709	0.297137	3.43E-02
OG0012134	-6220.46	-6227.68	0.114275	0.24324	1.45E-04
OG0012149	-7058.52	-7064.19	0.018928	0.176332	7.55E-04
OG0012154	-10215.8	-10225.6	0.049807	0.344342	9.27E-06
OG0012147	-14434.5	-14509.4	0.151257	0.815567	2.02E-34
OG0012170	-8605.27	-8615.91	0.030929	0.508596	3.97E-06
OG0012129	-15500.6	-15519.4	0.044513	0.446872	8.76E-10
OG0012198	-4469.29	-4493.15	0.074202	0.324193	4.91E-12
OG0012184	-10363.8	-10405.1	0.115106	0.447167	9.58E-20
OG0012173	-21107.9	-21147.3	0.043138	0.483757	6.64E-19
OG0012180	-19501.2	-19557.2	0.064606	0.316259	3.43E-26
OG0012197	-8388.78	-8396.21	0.019674	0.236159	1.16E-04
OG0012181	-17522.9	-17577.4	0.078655	0.49359	1.64E-25
OG0012213	-4465.41	-4471.16	0.025553	0.377544	7.01E-04
OG0012209	-7913.92	-7944.5	0.088498	0.455746	5.25E-15

OG0012211	-20080.8	-20163.5	0.066366	0.373769	7.44E-38
OG0012236	-2966.4	-2996.91	0.080662	0.730966	5.65E-15
OG0012206	-20206.6	-20245.7	0.039242	0.365995	9.61E-19
OG0012251	-2768.51	-2770.57	0.026533	0.323948	4.27E-02
OG0012254	-4531.48	-4545.86	0.080535	0.518575	8.17E-08
OG0012248	-11201.2	-11231.8	0.063072	0.393674	5.16E-15
OG0012200	-42339.9	-42426.3	0.057314	0.327321	1.82E-39
OG0012262	-4009.3	-4016.66	0.008276	0.311708	1.25E-04
OG0012263	-9185.45	-9233.59	0.067371	0.282633	9.97E-23
OG0012265	-4736.54	-4744.36	0.102524	0.432069	7.72E-05
OG0012270	-11833	-11884.9	0.071067	0.445277	2.22E-24
OG0012269	-22197.4	-22207.8	0.016679	0.314195	4.78E-06
OG0012282	-7356.67	-7363.94	0.087187	0.280538	1.38E-04
OG0012305	-3308.69	-3335.71	0.247189	1.048796	1.97E-13
OG0012298	-5795.56	-5824.89	0.045896	0.21024	1.87E-14
OG0012294	-3462.36	-3476.82	0.030935	0.267663	7.54E-08
OG0012310	-3434.3	-3437.65	0.018705	0.351421	9.61E-03
OG0012283	-6182.07	-6209.54	0.108664	1.161661	1.24E-13
OG0012336	-8507.79	-8528.27	0.035785	0.26306	1.54E-10
OG0012319	-6473.19	-6482.19	0.030978	0.57257	2.19E-05
OG0012303	-23808.8	-23840.1	0.04489	0.360732	2.54E-15
OG0012327	-5546.6	-5556.93	0.029388	0.215999	5.52E-06
OG0012330	-6553.74	-6591.98	0.083195	0.376514	2.22E-18
OG0012340	-4651.59	-4653.74	0.058987	0.446295	3.79E-02
OG0012333	-13178	-13245.4	0.136298	0.388343	3.96E-31
OG0012295	-40920.6	-40993.2	0.06429	0.292628	1.86E-33
OG0012324	-10132.9	-10150.2	0.063803	0.326978	4.07E-09
OG0012311	-19236.2	-19255.1	0.042583	0.223866	7.65E-10
OG0012323	-18677.8	-18689.4	0.13335	0.356208	1.36E-06
OG0012326	-16797.7	-16809.6	0.045868	0.274135	1.11E-06
OG0012351	-5649.07	-5665.91	0.049544	0.265248	6.48E-09
OG0012356	-7214.45	-7226.81	0.130594	0.360439	6.63E-07
OG0012361	-5751.08	-5754.76	0.026088	0.367902	6.67E-03
OG0012348	-14291.7	-14306.9	0.025513	0.392331	3.26E-08
OG0012379	-2264.64	-2285.23	0.117422	0.436676	1.39E-10
OG0012404	-2944.69	-2959.84	0.138555	0.953004	3.71E-08
OG0012397	-1932.53	-1935.52	0.044206	0.599763	1.44E-02
OG0012392	-3638.74	-3643.42	0.022219	0.319996	2.23E-03
OG0012407	-8279.82	-8283.69	0.049796	0.331149	5.41E-03
OG0012419	-1401.12	-1413.67	0.213958	0.436587	5.46E-07
OG0012458	-6040.79	-6049.45	0.074323	0.351622	3.18E-05
OG0012426	-15269.2	-15319.7	0.077814	0.461533	9.00E-24
OG0012486	-3244.1	-3255.24	0.101233	0.617709	2.34E-06
OG0012481	-5799.92	-5815.45	0.239134	0.64269	2.51E-08

OG0012464	-10005.6	-10046	0.041768	0.278312	2.38E-19
OG0012501	-3222.02	-3236.15	0.419661	0.933133	1.06E-07
OG0012502	-4843.2	-4852.45	0.029914	0.56021	1.70E-05
OG0012509	-6567.66	-6575.68	0.06986	0.242635	6.23E-05
OG0012520	-10370.8	-10373.9	0.092429	0.444243	1.30E-02
OG0012512	-11720.7	-11759.7	0.098846	0.539323	1.08E-18
OG0012538	-5621.83	-5631.71	0.036524	0.30567	8.80E-06
OG0012527	-8118.63	-8150.85	0.05516	0.376809	9.92E-16
OG0012531	-26028.8	-26052.9	0.034043	0.326008	3.84E-12
OG0012584	-5133.67	-5159.26	0.121231	0.450326	8.39E-13
OG0012588	-6102.7	-6135.79	0.056238	0.163188	4.11E-16
OG0012583	-9398.4	-9410.36	0.025323	0.22959	1.00E-06
OG0012619	-4762.62	-4779.87	0.040852	0.715536	4.24E-09
OG0012614	-6560.51	-6570.4	0.057845	0.303539	8.68E-06
OG0012629	-5855.96	-5863.9	0.032068	0.754505	6.72E-05
OG0012626	-12617.1	-12643.3	0.035251	0.304337	4.71E-13
OG0012649	-7418.81	-7424.42	0.02789	0.303503	8.15E-04
OG0012633	-7022.4	-7066.47	0.117307	0.700798	6.07E-21
OG0012630	-4837.13	-4841.44	0.024365	0.311237	3.33E-03
OG0012641	-2353.11	-2363.4	0.071174	0.276375	5.74E-06
OG0012610	-29139.1	-29184.7	0.066525	0.28332	1.25E-21
OG0012648	-8374.09	-8385.69	0.041635	0.308338	1.47E-06
OG0012643	-11838.1	-11910.7	0.073965	0.480334	1.89E-33
OG0012688	-6081.1	-6092.05	0.052576	0.461055	2.87E-06
OG0012635	-22718.8	-22728	0.040977	0.339784	1.65E-05
OG0012651	-5210.52	-5243.19	0.127846	0.604889	6.32E-16
OG0012684	-5240.48	-5244.16	0.017273	0.319927	6.63E-03
OG0012631	-18914.4	-18939	0.055197	0.324448	2.29E-12
OG0012675	-5461.03	-5478.27	0.054384	0.318043	4.27E-09
OG0012659	-13149.2	-13172.5	0.032779	0.267065	8.71E-12
OG0012719	-14605.8	-14615.5	0.015593	0.285756	9.72E-06
OG0012692	-4567.79	-4579.51	0.083277	0.618875	1.29E-06
OG0012710	-3656.51	-3665.84	0.026093	0.40995	1.57E-05
OG0012697	-7983.84	-7992.73	0.049222	0.308322	2.48E-05
OG0012676	-14271	-14296.4	0.029264	0.293907	9.55E-13
OG0012727	-4765.88	-4800.24	0.070751	0.474614	1.13E-16
OG0012735	-5965.67	-5972.67	0.019081	0.276089	1.82E-04
OG0012741	-4262.66	-4272.4	0.037529	0.322301	1.01E-05
OG0012743	-3311.54	-3316.16	0.053643	0.501619	2.36E-03
OG0012746	-13617.4	-13630.2	0.035516	0.283573	3.80E-07
OG0012758	-5031.69	-5045.93	0.058143	0.597983	9.51E-08
OG0012784	-1911.94	-1914.33	0.008487	0.155665	2.88E-02
OG0012800	-6247.34	-6260.11	0.029907	0.230913	4.34E-07
OG0012780	-15127.8	-15146.2	0.011969	0.245749	1.38E-09

OG0012797	-5928.02	-5946.47	0.089064	0.463944	1.24E-09
OG0012796	-35698.2	-35767.4	0.035187	0.320761	6.09E-32
OG0012807	-13909.3	-13928	0.041379	0.339525	9.70E-10
OG0012820	-4567.78	-4570.28	0.047162	0.292373	2.53E-02
OG0012822	-7467.6	-7483.59	0.055426	0.34092	1.55E-08
OG0012836	-3804.99	-3809.05	0.25261	61.58416	4.36E-03
OG0012853	-5910.97	-5917.6	0.021164	0.362696	2.72E-04
OG0012814	-21686.9	-21739.1	0.090679	0.446114	1.74E-24
OG0012841	-13798	-13808.5	0.027753	0.227015	4.73E-06
OG0012872	-2290.44	-2303.56	0.258289	0.383843	3.01E-07
OG0012848	-9209.81	-9233.18	0.02872	0.51127	8.07E-12
OG0012866	-1550.86	-1556.91	0.040083	0.748192	5.05E-04
OG0012842	-15332.9	-15343.4	0.069252	0.635664	4.78E-06
OG0012875	-2077.9	-2086.09	0.034537	0.314088	5.15E-05
OG0012867	-7355.98	-7360.8	0.068359	0.360371	1.89E-03
OG0012865	-13091	-13167.6	0.104947	0.496117	3.38E-35
OG0012864	-15863.5	-15877.4	0.02159	0.217057	1.43E-07
OG0012879	-9235.24	-9240.89	0.055495	0.305957	7.73E-04
OG0012884	-9162.82	-9184.65	0.037638	0.384347	3.90E-11
OG0012891	-8425.76	-8440.29	0.069074	0.391161	7.04E-08
OG0012890	-8578.23	-8593.94	0.05062	0.392101	2.08E-08
OG0012893	-8930.85	-8962	0.077909	0.503704	2.93E-15
OG0012926	-5329.14	-5336.48	0.030771	0.275603	1.28E-04
OG0012934	-7090.74	-7092.93	0.051192	0.348969	3.64E-02
OG0012975	-9476.32	-9496.56	0.047175	0.272428	2.00E-10
OG0012994	-3206.24	-3224.22	0.072645	0.37097	2.02E-09
OG0012986	-6035.09	-6060.57	0.082701	0.209109	9.40E-13
OG0012956	-18394.4	-18415.5	0.053681	0.24337	7.62E-11
OG0012995	-4665.38	-4684.05	0.039298	0.404107	9.90E-10
OG0013006	-5303.08	-5307.43	0.092278	0.083966	3.17E-03
OG0012980	-13135.9	-13162.5	0.067047	0.433849	3.09E-13
OG0012993	-12061.6	-12079.3	0.042973	0.304304	2.57E-09
OG0013023	-2828.91	-2837.48	0.064464	0.311142	3.47E-05
OG0013036	-3351.18	-3370.51	0.099386	0.408206	5.03E-10
OG0012999	-19663.6	-19679.2	0.040541	0.378153	2.36E-08
OG0013028	-14101.3	-14112.5	0.023254	0.277417	2.16E-06
OG0013010	-20256.6	-20263.3	0.021694	0.260857	2.54E-04
OG0013042	-10824.4	-10845.1	0.085252	0.355313	1.21E-10
OG0013047	-9646.05	-9658.35	0.051245	0.16607	7.01E-07
OG0013055	-11366	-11420.9	0.136967	0.898839	1.13E-25
OG0013046	-13057.9	-13075.4	0.072669	0.451375	3.24E-09
OG0013072	-2572.26	-2585.23	0.089206	0.313918	3.52E-07
OG0013062	-13021.5	-13027	0.025943	0.205076	9.10E-04
OG0013061	-10251.6	-10256.4	0.034321	0.294074	1.93E-03

OG0013090	-5997.28	-6004.07	0.017484	0.299783	2.30E-04
OG0013111	-3439.41	-3465.87	0.124123	0.443735	3.46E-13
OG0013064	-14758	-14786.4	0.050936	0.310468	4.44E-14
OG0013089	-9203.08	-9235.55	0.059145	0.429706	7.78E-16
OG0013099	-4526.4	-4531.66	0.01683	0.45168	1.18E-03
OG0013112	-8239.5	-8244.48	0.036323	0.522737	1.60E-03
OG0013091	-15835.7	-15863.5	0.044973	0.373754	8.35E-14
OG0013110	-1946.81	-1965.44	0.126134	0.57963	1.04E-09
OG0013103	-12792	-12796.2	0.02823	0.462701	3.69E-03
OG0013109	-11964	-11980.9	0.149434	0.307247	6.23E-09
OG0013117	-10370.7	-10376.6	0.033048	0.433672	5.87E-04
OG0013107	-16222.9	-16241.5	0.023222	0.370165	1.10E-09
OG0013132	-2875.27	-2885.85	0.063089	0.295353	4.24E-06
OG0013095	-38000.6	-38031.8	0.039437	0.388991	2.77E-15
OG0013121	-8908.3	-8929.26	0.022105	0.300219	9.54E-11
OG0013147	-10076.7	-10098.7	0.035174	0.264096	3.38E-11
OG0013171	-18676.1	-18715	0.038527	0.334934	1.24E-18
OG0013154	-13031.1	-13069.1	0.049288	0.372556	2.93E-18
OG0013155	-2668.23	-2673.73	0.020953	0.231479	9.05E-04
OG0013186	-4539.41	-4551.54	0.068807	0.353713	8.40E-07
OG0013176	-9420.95	-9428.71	0.028732	0.201164	8.22E-05
OG0013192	-4802.26	-4806.13	0.060515	0.479655	5.36E-03
OG0013126	-14661.9	-14669.5	0.017112	0.173354	9.76E-05
OG0013189	-1547.24	-1572.8	0.107146	0.389467	8.72E-13
OG0013215	-4476.55	-4498.68	0.101851	0.42238	2.88E-11
OG0013207	-9759.99	-9776.57	0.066192	0.398447	8.46E-09
OG0013216	-3849.16	-3859.69	0.061006	0.172032	4.45E-06
OG0013213	-12984.4	-12990.2	0.067556	0.324052	6.40E-04
OG0013253	-11979.8	-11982.3	0.021864	0.299452	2.33E-02
OG0013251	-11823.7	-11835.7	0.051407	0.327807	9.05E-07
OG0013247	-15111.8	-15120.3	0.016601	0.197554	3.58E-05
OG0013261	-5417.23	-5432.76	0.055686	0.552964	2.49E-08
OG0013268	-4005.69	-4016.92	0.044764	0.407141	2.16E-06
OG0013263	-10232.6	-10253.9	0.046775	0.334196	7.13E-11
OG0013282	-4450.69	-4472.13	0.279227	1.045988	5.79E-11
OG0013274	-6821.88	-6835.14	0.046922	0.467814	2.62E-07
OG0013281	-1691.08	-1694.7	0.030521	0.520926	7.17E-03
OG0013284	-5883.32	-5897.91	0.021561	0.341051	6.57E-08
OG0013308	-8202.64	-8208.02	0.030921	0.314368	1.03E-03
OG0013302	-3971.82	-3975.19	0.019943	0.507291	9.43E-03
OG0013283	-7955.67	-7977.53	0.025157	0.37203	3.79E-11
OG0013286	-8269.43	-8303.13	0.114369	0.703907	2.22E-16
OG0013285	-17969.1	-17985.6	0.016362	0.272092	8.72E-09
OG0013294	-5497.77	-5504.37	0.020711	0.381416	2.78E-04

OG0013321	-4380.99	-4383.68	0.023434	0.350682	2.05E-02
OG0013303	-8919.18	-8941.86	0.100658	0.573716	1.63E-11
OG0013317	-2494.69	-2503.68	0.421243	1.454299	2.25E-05
OG0013328	-14306.4	-14369.2	0.166863	0.539796	3.78E-29
OG0013313	-19408.6	-19413.5	0.027931	0.300373	1.71E-03
OG0013309	-21740.3	-21754	0.043941	0.365947	1.53E-07
OG0013336	-3626.02	-3635.97	0.051781	0.376761	8.17E-06
OG0013344	-6879.85	-6893.65	0.070031	0.423675	1.49E-07
OG0013327	-15657.6	-15723	0.1138	0.376573	2.79E-30
OG0013333	-5098.38	-5108.5	0.121396	0.709688	6.87E-06
OG0013352	-2629.18	-2634.33	0.145434	0.346027	1.33E-03
OG0013338	-5713.04	-5727.35	0.046886	0.422696	8.81E-08
OG0013355	-7488.25	-7499.42	0.051671	0.483472	2.28E-06
OG0013365	-5793.39	-5799.33	0.033973	0.228407	5.72E-04
OG0013350	-12279.1	-12290.4	0.040104	0.342897	2.08E-06
OG0013427	-9684.61	-9696.72	0.06842	0.436702	8.56E-07
OG0013368	-9251.32	-9261.57	0.048864	0.298629	5.92E-06
OG0013388	-6369.67	-6385.18	0.113766	0.59662	2.55E-08
OG0013397	-4410.26	-4414.47	0.02453	0.305798	3.70E-03
OG0013374	-21733.7	-21737.1	0.037549	0.310047	9.22E-03
OG0013385	-8670.69	-8693.96	0.025834	0.409731	8.97E-12
OG0013357	-22077.5	-22107.4	0.025582	0.330447	1.07E-14
OG0013410	-3444.64	-3466.72	0.092651	0.577863	3.05E-11
OG0013408	-3816.15	-3818.96	0.014241	0.228068	1.77E-02
OG0013389	-19310	-19344.3	0.058773	0.432009	1.30E-16
OG0013411	-9184.94	-9201.24	0.051402	0.434303	1.13E-08
OG0013391	-15453.1	-15491.3	0.040055	0.251432	2.31E-18
OG0013420	-17418.2	-17458.8	0.03298	0.261458	1.98E-19
OG0013430	-5516.63	-5537.28	0.061163	0.424349	1.30E-10
OG0013416	-18197.7	-18226.6	0.021939	0.196456	2.91E-14
OG0013405	-16047.2	-16072.6	0.04925	0.329861	1.02E-12
OG0013436	-9311.51	-9315.64	0.017246	0.315666	4.05E-03
OG0013426	-20181.6	-20189.4	0.03242	0.248068	8.55E-05
OG0013442	-3551.31	-3576.66	0.1504	0.626641	1.07E-12
OG0013431	-13201.6	-13243.3	0.046498	0.404884	6.57E-20
OG0013448	-2161.26	-2172.62	0.092473	0.529101	1.87E-06
OG0013429	-21408.2	-21413.4	0.020296	0.244683	1.19E-03
OG0013459	-8227.43	-8238.21	0.045847	0.380093	3.43E-06
OG0013439	-13932.6	-13949.1	0.035896	0.361645	9.21E-09