

File S1

Supporting Materials

Extended Description of Endocast Creation and Validation

The first third of skulls were scanned at the lower resolution threshold before switching to the higher resolution 0.6mm slices for the remainder of the skulls. We omitted 215 scans for use on the left hemisphere and 185 on the right. Exclusion from data collection was typically due to one or more of the following: the individual being a subadult (defined here as below 6 years of age) and therefore not confidently demonstrating adult gyrification patterns; the individual being older than our cutoff adult age of 30, after which brain shrinkage and intracranial remodeling can degrade endocast impressions; the individual being of a different species/subspecies than investigated here; lack of a clear endocast impression in the scan; or processing issues with digitization of scan files. In total, 770 CT scans were deemed fit to have data collected on the left hemisphere and 800 on the right. On the left hemisphere, 198 (26%) of measured endocasts were from male baboons and 572 (74%) from females. On the right, these numbers are 219 (27%) and 581 (73%), respectively. 3-D segmentation of CT images was allowed to run for 150 iterations until seeds had expanded against all surfaces of the endocranium. Sulci are then seen as depressions on the endocast, as they appear on brains. Spiral medical CT scans were used, as these provide more smooth segmentations than slice-wise CT scans.

Repeatability measures were calculated from the metric phenotypic data to validate the utility of CT-based endocasts for studies on cortical topography. Repeatability was calculated by comparing the difference between repeat measurements of the same sulcus. This also provides an estimate of the amount of measurement error present in the data. Individuals whose differences between repeated measurements deviated from the mean of the normal distribution for inter-measurement difference by greater than two standard deviations were removed from analysis as they were deemed to be unreliable. This resulted in removal of no more than 5 individuals per sulcus. Most cases of such unreliable endocasts were from extremely old individuals, as remodeling occurs on the endocranium during the course of animals' lives, diminishing the imprint of the brain on the interior of the skull. Other cases were due to damaged skulls or poor CT scan resolution. The average r^2 between double-measured metric traits was 0.93 for both the left and right hemispheres. These metric trait repeatability measures are very high and indicate the clarity of CT-based endocasts.

Measurements taken from CT scans were also compared to parallel landmark measurements collected from MR scans for 100 overlapping individuals in order to ensure that CT-based endocasts capture a representative impression of the brain (Kochunov *et al.* 2010a; b). The average MR-CT length difference was 6.61 mm for the left hemisphere and 7.72 mm for the right. The average correlation between landmarks taken on CT versus MR scans was 0.95 on the left and 0.96 on the right. The average correlation between the CT and MR measurements for all landmarks averaged over all individuals and sides was 0.95. CT measurements are thus typically shorter than the corresponding MR measurements, likely because of the tapering off of sulci towards their ends. This would create less of an imprint at tips of the sulci, shortening the impression on the virtual endocast mold. Since quantitative genetic tests are concerned with the variation around the mean rather than the mean value itself, a bias in absolute length between CT and MR scans would not affect quantitative genetic results, as traits measured from CT and MR are very tightly correlated. In other words, the variation is commensurate, even if the mean is slightly shifted. The extremely high CT-MR correlation shows that measurements collected on these CT based endocasts are a good representation of the brain's folding pattern. It further validates that CT-based virtual endocast creation is an appropriate manner in which to analyze sulcal impressions and does not distort the image in a way that would inhibit accurate interpretation of results. Only CT-based measurements were used in final analyses, so any difference between MR and CT values would not affect results.

Extended Explanation of Covariate Screening

CC was used as an estimate of overall brain volume in order to control for allometric scaling. CC data were collected for a different project using the same CT scans, and these data were kindly forwarded to us specifically for use here as a covariate (J. Joganic, personal communication). CC measurements were cube-rooted for comparison of units of equivalent dimensionality, as our sulcal lengths are one-dimensional. Sex was screened as, in general, male baboons are larger than females, causing them to have comparably larger

brains. The age of an individual was examined, as older individuals tend to be larger than younger ones, even among full adults. An additional consideration for age is that there is remodeling of the cranial vault over individuals' lifetime. In elderly individuals, the brain has retreated slightly from the skull, which could allow for diminishment of impressions of sulci on the interior of the skull. Animals over 30 were omitted from analysis for this reason. Only ~11% of our data was for animals over the age of 25 so old-age remodeling should not confound results, especially with consideration of age as a covariate. Age-squared takes into account the rate of change in sulcal length over the course of life. A significant result for the covariate of age x sex would imply that sulcal length and age have different slopes in the two sexes.

Files S2-S3

Available for download at
www.genetics.org/lookup/suppl/doi:10.1534/genetics.114.173443/-/DC1

File S2 Raw genotypes for all phenotyped animals that have accompanying genotypic data (840 total). The genotypes for every STR locus for animals are additionally publicly available via a searchable web interface at: http://baboon.txbiomedgenetics.org/Bab_Genotypes/PubGeno_Query.php.

File S3 The pedigree of the genotyped animals measured in this study. We used the matrices of multipoint IBD coefficients and whole genome linkage maps for analyses. Details related to the construction of the latter are published in: Cox LA, Mahaney MC, Vandeberg JL, Rogers J. A second-generation genetic linkage map of the baboon (*Papio hamadryas*) genome. *Genomics*. Sep;88(3):274-81.

SUPPORTING TABLES

Table S1 **Raw phenotypic measurements for metric traits**

ID	arsp	cs	iar	ips	lf	lu	ps	sar	spcd	sts
10009	7.79	54.36	27.31		45.96				18.86	61.56
10012	10.84	49.92	33.49	33.00	52.03	39.18	29.92	19.43	24.96	55.36
10016	6.48	48.42	27.10	34.91		36.94	28.82		11.46	
10039	7.12	49.82	34.04	39.81	51.54	37.93	32.24	14.61	22.77	59.08
10041	4.73	47.42	31.30	42.88				9.86	15.93	
10042	8.35	48.26	28.40	34.50	47.18	41.00	29.80	15.17	15.55	55.20
10044	5.81	45.86	30.83	36.21		31.70	30.17	10.89		
10046	9.16	48.68	32.14	30.35	46.76		26.11	22.31	6.02	52.28
10052	9.40	48.36	29.77	42.91	50.58	38.81	31.06	15.36	19.41	59.27
10054	9.36		29.15					10.18		50.24
10074	10.35	49.06	26.57	38.27	49.06	37.80		12.80		
10082	9.55	48.36	29.35	35.22	44.56	34.73	31.81	11.52	20.57	50.26
10090	9.46	48.62	38.69	32.13	42.19	41.95	32.09	22.70	19.56	52.13
10099	10.29	54.12	29.33	39.55	44.93	41.55	29.83	15.41		53.72
10120	8.17	47.17	28.06	42.07	46.37	38.25	28.58	11.16	21.23	55.87
10127	7.49	43.95	27.33		51.00		30.92	16.07	20.82	58.05
10128	10.83	47.60	29.61	39.72	52.90		30.95	13.84	15.44	59.76
10130	10.97	49.64	32.95	38.74	51.84	42.69	30.18	14.54	19.09	58.82
10153	10.17	47.93	27.96	41.40	50.15		28.90	12.55		60.00
10154	10.27	49.86	37.77	29.65	35.24	41.75	33.20	20.24	15.37	
10157	12.29	46.31	24.97	37.30	46.16	39.34	27.15	12.94	11.41	56.33
10160	4.16	46.93	29.50				31.65	15.68	22.30	
10161	10.54	52.14	33.93					10.25		
10164	12.60	48.02	30.35	36.46	48.79	39.04	35.32	16.28	24.08	57.63
10173	12.63	50.15	29.85						22.28	
10183	9.38	47.25	28.92	38.03		37.61	30.91	15.39		
10206	3.72	46.16	31.62				33.00	14.66	21.50	
10208	8.30	43.20	28.16	35.69	51.28	37.86	30.42	15.44	7.94	
10226	11.16	48.79	36.03					12.25		
10240	14.40	53.42	32.28						14.24	
10259	9.79	50.41	28.04				31.36	11.83	18.69	
10280	7.54	47.70	31.13					15.06		
10297	11.15	49.49	29.33	38.86	42.31	37.29	29.39	16.60	22.80	
10316	9.09	45.74	30.99	35.68	49.83	40.09	27.35	11.62	18.79	52.95

10347	3.77	47.92	31.42	37.17	46.99		31.36	15.59	23.84	61.73
10379	8.52	50.86		30.76					21.17	
10393	9.36	46.01	22.71					5.87		
10403	9.72	51.59	29.66	41.94	53.43	39.22	28.21	15.34	11.92	62.15
10418		47.69		34.48						
10429	11.27	47.59	26.64	39.35		42.72	29.15	9.53	10.09	
10430	9.89	49.47	32.69	37.34		40.43	32.32		22.12	
10433		51.08	46.73	30.77		46.30	28.39	27.99		
10492	6.17	48.08	30.77	40.49	53.77		29.17	17.83		
10504	8.52	47.16	30.36	36.94	44.31	34.27	29.27	13.13	19.16	
10509	7.74	46.61	23.07	34.36	45.91	34.24	31.35	14.18	12.59	41.76
10510	5.97	45.40	39.16	32.17			31.65	24.27	16.28	
10511	5.96	45.62	49.99	34.84	46.48	39.41	35.47	25.59	19.95	54.74
10520	13.36	49.09	33.44	42.27	55.95	46.88	34.39	14.27		60.88
10535	9.44	48.90	34.04				31.57	13.44		
10603				33.04	44.45	34.39				50.59
10611	4.54		37.67	30.35	50.35		30.20	22.49		53.21
10619	10.49	44.63	30.73	37.56	47.69	38.40	31.27	5.53		59.54
10728	2.54	47.40	33.19		49.63		30.18	13.84		
10729	6.02	47.39	28.47	42.88	53.77		28.13	18.33	17.61	
10734	4.62	50.04	31.11		52.46		30.71	12.65	18.04	55.91
10740	8.44	46.04	27.26	37.87	48.73	35.15	27.63	14.29		50.19
10741	8.69	47.20	31.60		55.09		32.63		21.41	68.62
10760	12.66	50.64	30.85	38.21	49.30	36.34	26.26		17.60	53.37
10841	5.32		32.05		49.34		30.84	6.96		55.20
10872	7.24	49.03	27.33	37.28	49.50		33.30	15.09	21.25	59.80
10875	9.17	51.08	35.09	31.57				18.36	21.32	17.11
10911	7.93	44.16	31.60		49.74		28.98	12.56	24.15	
10912	6.05	49.71	32.71				32.65	12.10	21.91	
10987		52.95	28.70	40.18		36.94	27.52	9.09		50.96
10988	7.06	45.30	30.74		46.83		30.26	12.39	21.61	56.51
11001	11.20	47.08	27.53	33.77	48.66	38.07	27.36	14.12	14.60	55.98
11009	10.17	45.94	28.53	39.39		42.48	32.01	13.67	21.35	
11015	8.05	54.22	27.01	39.41	53.86	38.84	29.25	16.76	13.58	58.04
11079		51.75	31.53	44.40	53.30		32.54	20.11		65.56
11163	8.97	44.92	28.32	38.74	49.89	37.55	27.90	11.26	25.70	54.20
11442			47.92							
11443	13.56	47.03					31.68	13.75		
11444	9.37	47.46	45.57	32.43	41.51	38.02	36.29	11.75	12.89	

11499	13.28	51.29	22.80	36.86	38.78	40.93	31.60	16.32	12.80	35.45
11581	8.67	46.05	23.42	34.87	49.30	36.78	28.64	14.00	15.58	46.38
11585	10.62	53.89	31.84	34.34	49.24	42.87	30.32	19.35	18.22	37.31
11600	2.96	47.25		36.01			30.63	16.48	17.66	
11617		47.79	43.55		40.22					48.94
11619	12.77		25.21				30.64	6.58	25.05	
11627	10.30	49.70	31.59	36.70			29.81		21.27	
11639	9.11	42.57	29.71	31.80			29.65	11.71		
11672		54.20								
11687	8.72	48.61	29.09		47.28		29.51	10.53		
11769	9.34	50.80	26.67	37.22	48.93	39.79	30.92	14.84	13.42	40.47
11886	9.86	46.41	29.02				27.65	11.74		
11992		47.84								
11997	2.72	47.38	29.21	36.76			28.91	10.51	21.23	
12157	8.29	42.01	28.46				26.82	10.97		
12162	6.65			24.76						12.60
12175	4.29	43.82	30.51	35.93	49.39	37.59	28.05	15.21	19.14	60.21
12217	11.69	45.24	31.12	36.09	48.55	39.22	27.48	10.37		55.62
12226	9.80	48.46	35.12		47.96		30.81	20.88		51.53
12411	11.53	48.20	30.01	38.26	53.56	39.09	28.80	15.07	19.74	64.45
12417	5.54	45.78	29.81	34.58	45.69	41.77	29.39	14.91		
12457	11.93	51.87	30.68	38.22	43.30	41.19	30.20	15.93	16.93	49.13
12466	3.33	43.37	27.26		46.53		29.53	13.47	16.15	
12480	10.72		32.50				30.99	9.39	23.17	
12499		48.95	31.36		51.92		33.98			58.31
12513	7.75	46.46		36.09	53.79	36.25	24.21	8.46	7.84	
12639	9.32	46.43	27.10						20.91	
12720	9.73	47.25	22.30	39.92	41.01	36.51		12.36		50.19
12726	9.47		48.26							
12929	8.50		34.98					13.28		
13125	11.16		30.39							21.33
13226		49.40	29.84		48.21		30.81	9.82		
13280	9.62	55.60	29.96							
13546	10.57		32.88							27.02
13625	11.08	49.15	32.17		48.86		30.31	16.10		
13645	12.13	52.44	35.91		53.07			12.71		
13751	7.54		29.06					13.15		
13758	11.15	47.64	26.17	34.25			28.68	10.38	15.27	
13859	8.23		37.60	30.77	34.79		35.34	20.09		25.27

13947	9.53	48.89	30.64	38.21	51.26		31.31	21.74		
14039	4.11	51.51					34.16		22.15	
14044	6.15						27.40	10.43	9.21	40.44
14081	11.11		38.84					15.69		
14084	10.03			31.89						
14166	10.95	48.55	27.72	38.95	52.42			13.84		57.52
14167	7.45	41.52	31.38	33.92		34.88	34.01	16.98	15.41	
14204	10.27	47.70	22.44	33.49	39.27	36.46	27.00	10.02	10.31	40.82
14252			44.15		34.65					
14263		47.81	34.61							
14270	10.28	43.50	28.23	34.95	49.42		31.58	12.25	13.85	
14275	7.11		26.60	36.49		40.97	33.14	18.50	14.11	
14277	7.87		31.34					14.94		
14286	7.93	48.35	23.75	43.42	43.71	40.58	31.75	16.12	9.63	44.11
14322	3.58		31.47	31.05		31.29				
14324	1.75	46.56	23.35	39.50	43.81		29.52	19.17	16.86	51.81
14381	5.19	42.15	29.33	34.02		36.56	30.85	13.68	14.18	
14435		46.96	31.40				26.93	13.91		
14478	9.98	46.13	29.74					7.93	22.24	
14484	11.19	47.82	39.66	35.09		48.46	31.25	29.94		22.40
14499	8.90	45.19	26.51	33.78	49.88	40.43	29.99	13.01	8.64	
14508		51.03	26.05						15.91	
14665	8.86	41.99	24.33	36.00		31.19	23.64	14.51		
14676	6.42	49.33	30.41	36.45			28.98	15.98		
14695	9.01	49.37	27.59	36.49		37.70	28.72		18.42	
14696	5.22	43.12	30.78				29.97	13.26	15.69	
14710	3.29	49.79	41.88	31.38			33.72	23.72	11.76	
14744	9.46									
14754		55.35								
14796	8.19	42.98	21.71	32.83	41.44	33.20	24.92	12.91	11.78	
14859	4.86	47.26	26.75	32.43	50.57	35.40	29.87	11.97	14.82	60.62
14879	11.62	47.09	25.48		49.82			12.54		52.36
14883	8.61	46.49	24.86	28.82	45.73	39.88	29.00	12.44	14.46	50.14
14894		44.54	25.88		47.83					
14909	6.25	50.09	25.09	36.62	50.27	37.53	30.54	10.39	18.90	
14923	5.95	45.67	32.63	35.71	45.84		28.80	11.51	17.64	52.16
14931	4.11	46.06		35.63		32.38	27.37	12.42	16.69	
14955	8.07	48.71	31.55	37.38	48.34	37.66	30.13	18.99		48.57
14962	7.11									

14979	8.43	49.48	34.24				31.35	14.80	26.99	
14983	5.66	49.26		35.16	44.32		32.87	15.06	8.92	47.76
14993	11.49		32.26	37.56		35.05	28.04	20.95	24.42	26.46
14995	6.28	53.49	30.23	38.24	54.35	38.99	31.59	17.11	18.87	64.55
15140	8.01	40.59		37.39		35.18	32.49	13.53	14.80	
15150	7.22	45.28	30.83	37.38	49.30	37.06	32.07	15.23	19.69	61.21
15155		46.35	29.78	36.33			27.56			
15162	8.11	42.90	30.50	32.73		33.91		12.43	21.60	
15168	11.46		41.67	32.50		40.30		21.03		
15217	9.80	46.99	32.56						16.42	
15283	8.21	48.05	24.32	38.52	50.70	37.22	28.16	18.21	13.88	47.42
15293	7.70	45.34	24.33	35.42		33.64	28.37	14.68	12.46	
15423	7.48	46.02	28.58	35.57	49.71	41.41	26.81		13.81	
15444	4.67		22.58	30.35			28.21	13.20	10.50	
15464	11.04	48.71	26.81	38.63		37.73	30.52	13.39	17.08	
15506	9.93	44.02	31.03	36.08		37.10	28.32	16.30		
15527	9.34	53.42	35.89	37.19	56.76	43.72	31.19	16.20	15.77	56.19
15539	9.70		22.00					19.76	11.07	
15579	6.16						29.18	18.07		
15584	9.80	50.30	32.14	30.33	54.99		28.27	16.29	15.92	58.62
15588	6.88	51.07	33.12	40.72	49.67	35.87	31.05	19.05	18.92	
15634	9.10	50.59	33.09						18.48	
15639	7.48	50.81	24.62	38.10	43.57		30.44	15.28	18.94	
15654	8.40	51.06	30.75	40.42	53.37	42.71	33.61	19.01	19.17	62.20
15656	7.97	47.97	31.95	42.29	53.84	39.73	30.90	21.83	20.00	
15828	8.91	44.17	30.02	35.41	57.78	35.28	31.12	16.81	17.22	64.70
15843	9.76	46.44	29.15	34.07	48.32	34.30	32.12	10.02	23.24	51.11
15858	5.06	48.48	31.33	37.59	48.24	38.87	32.44	16.33	17.64	57.43
15885	2.06	46.19	28.14	33.35	50.10	35.98	34.17	17.32	15.41	54.66
15938	6.61	46.56	32.81		47.12		29.57	14.24		49.54
15973	8.63		33.20				30.12	13.56		
15976	8.46	52.22	30.27	37.59			26.70	14.39	15.01	
15988	10.37	48.19	29.03	39.33			29.96		21.37	
16073		47.38								
16102	8.71	50.00	30.68	36.72	48.27	36.65	32.72	12.83		54.28
16115	5.81		19.76	32.35	39.82	33.74	25.13	17.05	12.94	
16118	7.20		30.90				32.41	12.52	24.21	
16231	7.54	45.31	30.05		45.78		29.73	10.80		
16330	9.91		34.86	36.63		40.38	32.82	15.94	16.74	

16368	5.39	48.38	30.64	37.08			31.76		12.40	
16386	7.17	44.71	32.94	34.21	47.68		33.17	11.51	22.42	53.47
16495	4.61		32.12				31.05	11.79	12.05	
16576	9.86	49.44	30.07	35.19	56.64	34.89	33.06	14.48	16.29	67.40
16725	9.15	48.76	33.53	35.21				17.35		
16742	8.10	45.74	26.71	37.17			28.93	12.38	19.42	
16852		43.49							12.36	
17031	8.47	51.65	27.03	40.12	44.93	36.42	27.29	11.40	8.45	37.54
17111	8.11	47.48	28.07	37.83		35.25	28.42	16.70	14.73	
17214	11.52	43.60	22.35	39.71	43.24	37.96	27.62	13.59	14.64	
17230	6.11	47.62	32.27	33.62	49.24	37.78	31.68	14.05	13.48	60.78
17243	5.70		21.87				28.52	15.27		
17331	8.23						33.23			
17355	10.07	49.69	25.68	41.78	49.39	43.12	32.51	14.83	10.25	
17810	5.55	46.46	28.24	32.78		35.56	29.60	15.67	18.20	
17966	5.27	46.54	28.87				26.48	17.01	21.88	
18341	15.00	48.67	28.33	37.59		37.78	32.47	13.99	17.69	
18391	8.57	48.92	28.40	38.15		36.04	30.76	12.33	12.08	
18531	10.38	48.71	35.98					14.02		
18729	6.66	40.06	30.05	33.49	48.48		29.09	14.71	15.85	57.27
18737	5.68	51.24	33.40	41.95	47.60		34.75	18.40	19.39	62.08
18742	2.64	51.99	32.22				34.03	17.97	15.81	
18744	3.44	51.51	32.77	40.38	49.33		31.40	17.76	16.16	
1B0831	6.94	50.53		38.48	54.76	38.01				55.83
1X0351	6.88	47.88	31.10	37.21	45.27	41.07	29.42	13.57	19.83	
1X0681	7.32	48.39	28.59	35.42			24.62		17.29	
1X0684	3.01	46.78	27.84	37.56	50.66	42.09	26.34	18.60	12.09	57.91
1X0842	5.79	47.11	30.47	41.04		40.55	26.71			
1X0864					50.80					55.11
1X0937	9.30	43.77	25.71	32.71	47.72	35.73	25.64	16.23	20.14	50.95
1X0976	5.99	54.29	24.29	39.50			30.98	18.69		
1X1032	8.52	49.07	29.12	41.12	49.75	41.07	29.90	16.14	22.06	55.84
1X1146	4.47	45.78	30.56		53.76		30.22	13.41		
1X1166	10.29	46.16	30.01	32.30	52.25			28.44	14.40	37.86
1X1177	2.20	51.46	25.96	38.28		39.39				
1X1181	9.85	48.31	29.31	38.41	49.21	42.54	32.86	17.38	18.97	59.23
1X1224							32.38			
1X1237		44.34	33.23				29.35	16.68		
1X1257	9.13	46.25	29.52		58.40		30.27	13.90	19.82	

1X1374	11.25	50.41	31.23	40.20	52.85	45.97	28.43	14.71	17.49	63.97
1X1404	8.45		35.14				29.28	14.01		
1X1441	10.37	47.61	33.88	31.80		39.89		10.21		54.39
1X1447	10.13	49.22	31.13	38.17		43.07	30.78	16.57	18.88	
1X1557	9.35	48.13	28.35	39.46	49.61	40.15	31.50	15.31	19.87	58.31
1X1577	8.32	47.31	33.95	34.24	51.96	35.89		14.79	18.82	68.51
1X1656	7.54	45.91	32.74	37.47	52.46	37.98		9.08	21.45	58.63
1X1687	7.86	49.23	26.19	37.44	48.77	39.65	26.83	12.71	22.58	61.71
1X1734			31.56					14.15	15.88	
1X1763	10.11	45.12	29.70	38.20	55.26	37.36	30.28	16.36	15.47	59.85
1X1786	11.21	49.78	28.45	35.54	47.56	41.02	26.49	15.99	13.95	55.62
1X1864	10.28	49.42	29.92	34.20	48.37	38.45		11.27	18.90	55.90
1X1956	3.51		29.17				28.94		18.37	
1X1957	5.07	46.52	35.36	37.44	50.52	39.96	31.76	12.81	13.10	55.28
1X1958	11.02	47.00	27.99	37.55	46.77	42.43	29.90	19.28	24.88	53.40
1X1962		49.49	38.89	32.06	37.85	38.97	38.27			
1X2000	12.22		46.65	30.02		47.81				19.05
1X2033	9.82	49.43	28.09	41.02	55.70	36.31			19.22	54.18
1X2063	9.56	47.27	33.09				29.36			
1X2081	5.86	47.64	27.48	37.87	50.69	37.35	26.90	12.07	18.24	57.53
1X2092	9.87	55.17	37.01	43.66				14.95	19.34	
1X2100	5.05	49.00	27.89	37.19		36.67	30.19	10.95	16.38	
1X2117	7.45	43.84	28.37	32.53	43.56	38.26		10.37		
1X2124								18.58		
1X2172	8.35	44.72	31.78					13.36		
1X2176	7.83		46.16	38.43					14.14	
1X2199	12.11	45.45	29.20	39.90	48.66	40.24	26.63	13.00		57.10
1X2231	13.00	49.93	31.77	36.81		37.34	29.19	14.02		52.84
1X2269	7.32	50.01		38.08	50.47	37.11				50.70
1X2315	8.79	49.98	30.63	38.92	49.74	42.73	28.53	15.14	25.78	58.89
1X2360	7.78	41.84	26.01	37.05	46.90	40.82	28.29	13.93	18.24	51.24
1X2361	10.28	48.38	30.97	35.51	57.30	34.47	32.14	11.91	15.24	64.31
1X2365	2.89	48.14	29.11	36.46		41.07	27.58	12.66		
1X2379	8.67	39.80	28.90	36.42	45.90	36.67	27.77			52.08
1X2384	9.78	44.32	31.19	30.78	43.10	32.55	27.61	10.52	15.51	46.63
1X2490	5.32		30.25	28.73	49.33			29.21	16.53	34.40
1X2495	9.88	50.87	32.27	34.05	49.70	39.14	27.22			54.56
1X2509	2.48	48.89	41.73	31.57	34.64		34.72	17.90	15.80	
1X2511	10.84	49.30	30.26					11.82	21.46	58.36

1X2538							26.52	12.12		
1X2572	12.94	47.81	37.67					24.11	22.13	15.05
1X2574			29.64		50.07		26.80		15.45	56.24
1X2576	12.54	54.03	27.76	41.49			25.74	19.18	22.83	
1X2589	6.98		32.14	29.34			29.45	23.00	16.41	
1X2594	9.87	51.27	40.20	29.99			28.83	20.75	21.84	15.30
1X2624	10.03	46.61	27.73	38.76	50.43		32.80	14.23	21.22	55.02
1X2644	9.91	46.09	32.26	40.49	48.73	44.74		9.56		56.26
1X2684	5.04	47.11	34.00		48.05		33.50	17.36		53.36
1X2686	8.55	49.15	31.07	36.32	48.52	44.42	31.35	15.28	18.06	58.07
1X2697	8.55			28.12				30.32	13.31	
1X2699	6.84	50.70	34.04	40.48	44.14	48.73	31.45	15.08	21.01	52.51
1X2713	6.53	49.49	29.01			42.02	32.07			
1X2716	6.21	51.61	26.30				28.19	14.51	20.86	
1X2717	10.41	51.78	40.91						12.16	
1X2796	8.99	46.85	31.53	37.84	51.08	40.18		14.28		
1X2798	9.19	47.83	31.18	33.54	52.44	44.19	28.37	15.84		59.99
1X2813	8.16	45.55	31.12	36.00	46.16	39.45	29.57	14.57	20.01	54.35
1X2816	12.66	49.49	33.05	39.61	47.80		28.52		28.81	
1X2822	7.84	44.58	30.33	39.49	54.92		26.59	17.66	16.44	
1X2825	10.03	48.55	27.78	34.47		38.25	27.18	9.59		
1X2884		52.93			53.48				16.44	
1X2996	7.46	49.28	29.76	35.43	48.28	35.59	30.48	13.46	15.85	
1X3027	7.02	50.09	27.10				28.40	20.34	16.73	
1X3052	7.54		32.91	40.63			31.53	15.36	23.13	
1X3103	7.47	46.01	30.17		50.64		27.08	17.12	18.93	55.42
1X3104	9.49	53.23	31.44				29.61	15.24		
1X3144	7.79	48.37	34.71					16.59	16.81	
1X3162		55.89							21.56	
1X3195	8.23	46.68	32.73	38.60	53.93		33.39	16.21	18.93	59.51
1X3208	8.27	47.48	30.51					11.74	16.21	
1X3255	7.66	46.58	31.12				26.98	12.09		
1X3291	4.35	41.58	28.47				30.24	13.48		
1X3310	9.82	46.89	30.01	39.83		46.78	33.44	16.03	16.95	
1X3312	6.33	47.73	39.63	34.80	51.77	40.84		23.10	15.18	59.36
1X3337	3.91	49.19	30.28	39.18	48.45	39.90	29.73	16.67	18.97	59.33
1X3351	9.66	45.91	25.67		47.16		25.16	13.03	18.81	
1X3428	9.44	52.37	30.72	35.48	55.54	39.56	31.98	14.55		63.16
1X3432	7.65	46.56	31.58	40.00	50.11	38.83	25.63	9.96	14.92	56.28

1X3439	6.79		30.39	35.48	49.04	34.35		19.86		54.63
1X3445	8.03	46.85	38.13	32.14	43.83	44.45	30.31	22.59	16.69	37.55
1X3475	6.25	46.92	26.40	38.27	49.00	33.50	26.80	16.80	12.74	58.07
1X3521	7.45	44.48	37.50	30.71	41.91	39.58	32.60	23.56	9.23	49.69
1X3548		42.55								
1X3564	12.30	46.22	31.45	36.89	53.19	39.55	27.58		20.08	
1X3567	8.24	47.66	26.74	38.16	49.20	40.15		15.58		51.03
1X3581	1.78		34.82				29.70			
1X3582	6.04		38.64	34.33	49.31	39.08				52.52
1X3592	9.32		37.10	32.75	40.95	37.50		28.39	10.25	16.01
1X3593	6.49	47.42	30.72	46.13	49.66	36.71	31.04	12.99	21.09	56.00
1X3594	9.73	47.98	34.98	38.72	54.37	43.97	30.44	17.04		60.70
1X3597	5.40	51.36	30.73	38.88	50.01	42.14	29.22	15.49	21.09	
1X3637		49.04	26.77	43.02		35.70	29.03	14.47	21.36	
1X3641	2.31	57.38	47.21	29.23				28.66	12.72	
1X3648	9.45	51.66	31.63	40.77	49.58	43.60	29.99	11.96	27.73	52.31
1X3649	10.99	52.65		35.81		38.76	27.24	13.93	11.69	
1X3653	11.16	45.91	30.18				25.95	13.98	23.14	
1X3655	5.49	45.70	29.28				30.40	14.88	20.96	
1X3666	7.10	53.20	32.62		42.65			15.69	13.93	
1X3671	7.16	43.98	24.21	34.21		34.05	30.97	12.62	11.61	
1X3679	9.00	48.65	30.07		52.11		32.44	15.89	22.86	63.16
1X3687	3.98	47.56	29.75		49.90		30.63	13.76		
1X3690	9.01	46.41	27.41	35.78	44.69	37.35	26.52	12.27	21.22	
1X3696	8.40	47.26	38.76	36.89	47.47		37.21	14.84	13.29	60.13
1X3701	7.83	45.22	26.00	32.95	45.55	34.65			19.07	46.26
1X3705	7.86	47.86	27.34		44.46			14.06	18.14	
1X3731	8.46	49.82	33.03	30.15			29.69	20.38	13.29	
1X3739	6.67		34.08				33.44	15.44		
1X3740	5.02	46.50	29.25	36.72	45.57		30.04	14.37	16.82	54.40
1X3749		44.95						16.19		
1X3757	6.61	50.68	33.71						23.18	
1X3764	10.31	50.91	28.91	41.69	52.10		30.51	14.33	17.68	61.44
1X3765	6.04	46.98	31.95	36.71	47.12	38.10	30.80	19.40	16.40	54.88
1X3767	6.08	48.06	37.79	40.26			30.70	12.42	21.72	
1X3771	6.77	45.35	26.78	36.70	50.18	40.36	30.45	11.12	14.87	57.26
1X3774	5.29	46.17	23.76	40.16			28.93	12.57	10.81	44.02
1X3782	11.82	51.86	28.02	41.38	50.61	35.70	32.67		20.62	55.36
1X3783	11.05	50.05	30.28	36.17	47.72	41.84	29.43	17.78	25.14	56.56

1X3786	10.39	51.64								
1X3790	5.42	49.52	34.06	37.18	49.81	43.73	30.75	14.85		61.40
1X3796	5.91		33.52					14.25		
1X3805		47.57							18.79	
1X3808	8.81	47.76	31.09	38.98	50.08	36.59	31.42	13.94		57.58
1X3809	9.85	45.08	33.02	39.68	54.64	38.77		13.38	22.14	61.35
1X3810	11.50	47.72	31.81				31.68	6.58	24.75	
1X3812	8.09	45.97	28.99	38.36			29.52	15.24	21.52	
1X3814	10.16	51.07	39.31	31.58					13.18	
1X3817	6.50		30.11					19.00	15.31	
1X3818	5.84	47.84			51.05			17.22	18.49	54.13
1X3823	8.33	49.29	31.51	40.64	51.42	41.38	33.26	16.19	19.28	65.16
1X3828	9.91	50.35	27.63	39.90	49.52	39.45	27.99		22.99	58.07
1X3830	5.52	47.66	32.08	38.37	52.96	43.94	33.40	12.96	12.07	61.02
1X3834	7.79	49.67	29.11	34.96			31.65	16.80	17.08	
1X3836	9.03	46.26	29.59	36.57	47.99	38.84	28.07	12.40	17.71	
1X3837	7.98	45.63	33.41	35.01	50.97	42.06	30.19		21.89	55.29
1X3846	8.17	46.13	29.50		46.61				22.41	
1X3848	10.52	48.84	41.00	33.35				22.54	19.14	21.92
1X3849	9.18	44.69	26.09	35.18	46.02	37.22	28.32	12.36	12.82	
1X3861	5.61		33.21	33.59	49.66			21.10	17.35	34.17
1X3864	6.41	47.51	44.47	35.61	52.85				18.74	15.63
1X3867	9.39	47.55								
1X3870	13.26	54.35		40.92	51.23	41.87	31.64	13.27	15.30	
1X3882	10.11	48.25	30.07		48.55		28.04	15.98		58.34
1X3883	6.89	42.42	38.68	31.55			29.33	18.32	12.28	
1X3886	8.97	45.51	38.06	28.57	43.38		35.01	17.16	10.99	
1X3887	10.36	49.13	26.42	36.65	51.09	37.04		14.32		
1X3895	9.61	49.00	38.61	31.50		38.36	33.82	20.95	17.31	33.01
1X3899	8.46	47.94	28.54	39.05	46.80	35.89	26.58	13.05	21.27	50.82
1X3914	9.70	47.64							15.62	
1X3926	1.92		31.94				29.92	14.77	16.11	
1X3928	9.18	49.09	41.65	31.74				17.10	16.35	
1X3929	5.59		32.29	34.79	39.06	40.45	29.84	21.49		
1X3930	7.42	43.61	28.72				31.34			
1X3939	6.46	47.80	33.02	33.38	45.66	36.17	26.28	11.90	14.57	51.33
1X3947	8.35	46.68	32.91	27.21			31.08	23.67	19.50	
1X3948	6.75	46.53	31.65		42.14		29.16	13.14		
1X3952	11.68	55.05								

1X3956	7.16	50.53	41.45	34.57	43.47		34.14	21.67	14.99	36.11
1X3960	13.25	50.55	50.73	27.63	39.95			31.19	12.26	
1X3997	7.57	48.16	33.35				32.21		20.68	60.99
1X4006	9.10	51.05	27.73	40.19	48.72	36.61	27.99	15.36	16.78	55.41
1X4009							28.99	7.20	17.32	
1X4013	9.33	54.22	35.94					12.48		
1X4019	8.70	45.40	24.49	38.39	47.06	38.97	28.11	15.14	10.04	52.31
1X4031	6.68		35.14	28.08			28.87	22.45	12.39	
1X4032	3.63		25.44	36.95	41.82		26.34	15.22	17.76	54.23
1X4033	6.14	46.65	27.99				29.51		16.52	
1X4035	12.19	45.40	40.64	37.74	43.78	40.33		13.06		52.43
1X4038	8.34		25.72	37.97	51.91	41.64		11.32		60.88
1X4039	11.06	44.92	28.47	35.81		39.28	27.80	13.70	20.84	
1X4041	9.95	46.83	31.13	40.78	51.78	37.91	30.93	16.21	24.57	61.89
1X4045		49.96		36.17	47.93	37.72	27.99		14.43	54.61
1X4051	9.98	47.09	31.11	38.06	48.25	36.45	28.53	14.00	19.07	54.39
1X4052	8.81	45.61	23.18	35.33	51.88	35.13	28.93	12.92	10.21	44.80
1X4056		46.28	32.25	33.67			28.58	16.53	14.92	
1X4058	6.47	48.46	41.81	34.22	50.09	43.95	31.04	29.51	15.91	52.42
1X4064	7.72		27.90		49.43				24.72	53.95
1X4069	9.64	45.30	29.17	36.71	45.96	36.83	30.49	13.35		
1X4074	8.20	48.84	26.64	34.33	52.94	41.75	29.93	15.12	21.20	60.32
1X4077		50.51		36.31	57.39	35.99	29.70	12.16		60.90
1X4082	7.66	46.22	26.91	37.97		40.58	29.96	17.50	16.29	
1X4090	9.00	48.17	31.08	39.29	50.14	42.16	31.28	16.64	16.98	48.60
1X4091	4.20		27.69		48.32		28.11	16.88	24.57	54.16
1X4092	8.02	50.02	28.98	37.76	48.17	39.94	28.81	17.56	15.57	56.74
1X4096	10.21									
1X4108	7.41	47.88	30.24		52.24		30.74	17.47	21.19	57.23
1X4112	6.54	55.64	29.07	32.12	40.73	41.96	33.15		15.36	49.19
1X4121	6.77	44.15	33.26	37.60	50.48	40.64	32.98	13.77		
1X4143	6.76	50.77	33.46		48.43		32.00	14.16	16.02	
1X4146	7.66	42.24	27.50	34.38	43.20	35.30	27.07	15.46	15.14	50.00
1X4149	7.55	47.26	30.16	32.35	46.20	37.62	26.80	13.92		50.66
1X4154	11.23	49.15	35.02		50.78			16.86	24.85	59.96
1X4161	8.28	46.94	34.60	25.80	35.25		28.35	20.45	15.71	18.26
1X4162	8.37	45.16	31.80	36.14	44.97	34.60	29.36	12.38	20.53	52.48
1X4165	10.69	49.49	27.97	35.96	50.13	36.67	31.01	16.73	19.41	57.89
1X4166	11.21	50.75	28.04		57.69		28.11	16.41	16.74	61.82

1X4169	10.02	50.18	32.43		50.77		30.56	13.05		
1X4178	10.36	40.86	30.41	36.87	47.64	35.11	30.96	18.04	18.94	52.66
1X4179	9.31	52.86	45.85				31.94		17.92	
1X4183							28.99			
1X4184	4.91	44.81	29.71	33.92	49.71	39.89	28.66	11.89	17.40	57.83
1X4186	6.99	48.97	32.42				31.11	11.29	23.26	
1X4194	8.42	49.44	24.20	35.45		40.57	26.69	14.77	16.83	51.80
1X4195	4.93	47.52	27.41		49.28		30.24	14.89		
1X4209	12.96	49.90		29.43						
1X4213	7.42	50.51	32.66	40.41	48.30	43.34	30.58	14.88	25.06	55.79
1X4217	4.34	42.96	27.56	34.09		37.12	27.25		18.02	42.80
1X4218	6.98	46.87	26.39		48.66			6.96		
1X4221	8.26		26.77					15.15		
1X4222	4.40	42.91	31.91	36.11			30.48	14.43	23.14	
1X4230	5.85	45.46	31.36	38.81	55.04	40.36		15.71	18.16	59.25
1X4236	7.38	52.20	39.42	27.06	36.67	45.10		28.68	10.56	
1X4239	8.95	44.89	27.58		48.59				20.47	
1X4241	7.70	46.58	34.35	30.72				22.29	14.19	18.77
1X4243	2.02	52.84	29.53				30.81	12.95	21.44	
1X4246	8.90		44.69	32.78						
1X4248	7.67	44.77	25.17	35.53	41.75	36.66	26.18	11.69	9.59	43.49
1X4251	10.93	48.01	28.59	39.06	49.38	39.21	31.10	12.44	22.90	56.25
1X4257	7.61	48.36	33.40	36.25	51.29	41.22	28.73	14.55	20.09	53.38
1X4265	11.25	47.99	38.07	31.11	43.14	39.97	36.67	10.86	11.44	54.31
1X4268	11.51	42.37	41.99	31.82	47.91	37.65		12.32		47.58
1X4272	9.37	48.58	26.70	37.64	46.05	39.24	27.88	13.83	14.58	50.28
1X4273	3.83	42.46	25.53							
1X4276		43.61	31.25		47.89		27.44		23.44	
1X4277		48.07	44.29					16.96		
1X4278	9.45		40.72	31.24	52.41		31.59	20.78	15.33	52.14
1X4284	9.41		45.98	30.41						
1X4286	8.59	50.61		40.20		46.66		14.00	17.27	
1X4290	3.39	49.89	30.76		49.34	43.89	27.47			59.22
1X4294	11.07	42.23	34.45	37.02	50.51	37.00	30.51	15.48	19.22	
1X4303	6.94		40.85	30.21			31.25	12.39	10.27	
1X4308	4.11	45.65	31.02	34.81				13.78	12.87	
1X4314	2.29	48.07	30.59				29.36	12.61		
1X4315	7.24		34.45	39.07				12.25		
1X4323	5.16	49.25	30.57	42.86	54.22			17.11	14.77	56.84

1X4326	9.76	45.80	45.85	30.20				13.06	14.22	
1X4329	6.77	51.47	41.15	33.34	43.71		33.61	22.86	11.44	54.00
1X4331		47.86						16.72	19.71	
1X4519	3.03	47.88	31.78	38.18			29.99	13.11	18.52	
1X4558	10.87	55.30	26.79	36.94		40.54	28.98	12.96	21.97	
1X4593	7.57	49.17	27.09		46.30		26.85	12.96	12.74	56.24
1X4609	10.55	50.74	28.87	37.35	48.64	34.51	31.73	12.73	25.32	
1X4611	7.87	43.97	27.04	34.21	45.31		27.84	12.22	13.99	
1X4615	8.79		28.13	38.47	47.41	35.73	29.47	18.56	15.69	63.43
1X4627	11.06		51.95	32.80					14.33	
1X4631	8.14	49.82	38.97	25.31			31.60	13.71		24.48
1X4634		45.73		36.04						
1X4637	6.50	47.34	30.89							
1X4638	5.15	49.95	28.06	38.93	50.57	42.51	33.53	13.59	14.22	53.94
1X4642	6.43	45.21	30.12	37.75	48.75	39.09	31.91	13.55	14.32	60.48
1X4645	8.33	50.93	40.73	31.23			31.75	20.18	20.30	36.71
1X4647	9.69	50.61	38.17					13.79		
1X4648	6.18	49.30								
1X4687	8.47	47.74	27.03	37.40		37.11	28.85	12.76	18.29	
1X4710	1.78	46.62	26.87	38.49	50.32	37.59	25.08			56.83
1X4714	13.65	47.02	30.49	40.12				18.47		
1X4721	12.05	50.17	29.99	44.90		41.88	29.95			
1X4736	6.87	52.49	30.80		53.70	41.35	27.87	11.24	13.91	44.64
1X4739	10.34	43.97	23.03	34.34	42.66	38.80	28.19	8.85	10.98	42.39
1X4741	4.52	46.60	32.84							
1X4746	1.87	49.29	44.14	27.78			32.27	29.01	12.54	
1X4748	10.14		33.36							
1X4749	8.36	47.48	28.46	37.49	49.89	40.82	29.89	12.85	17.45	52.93
1X4752	6.93	48.39	41.93	33.73		49.42	32.13	16.52	15.02	
1X4760		52.46		40.86					18.70	
1X4765	9.89	47.88	29.26	39.24	49.59	44.05	30.13	7.93	25.29	57.86
1X4767	10.80	49.19	31.31	37.86	47.48	40.92	31.73	12.00		52.63
1X4771	11.61	50.10	39.40	31.85	52.69		28.65	18.29		51.55
1X4777	7.61		29.97						17.36	53.44
1X4779	7.66	47.14	22.06	30.38	40.43	43.32			9.35	
1X4782			27.98				33.47			
1X4792	8.24	45.71	26.75	39.73		34.51	30.49		15.48	
1X4808	10.68		45.89							
1X4820	7.08	48.21	31.67	37.85	47.86	41.01	29.69	13.12	16.57	54.15

1X4837	12.03	50.90	31.31	37.02	47.28	40.27	27.83	15.90	16.05	59.97
1X4842	9.59	49.93	35.63						15.82	
1X4850	8.16	48.56	32.46	38.08	53.95	45.31	31.55	11.23	21.40	58.93
1X4851	6.26	49.18	28.13	37.16	45.80		31.49	12.25	10.87	43.84
1X4859	12.35	47.47	30.79							17.59
1X4866	8.94	49.97	27.45	35.33	43.75	37.38	28.68	9.54	16.88	45.48
2X0236	10.21	46.50	33.22	37.50	51.59	39.85	30.43	13.77	23.60	56.22
2X0252	9.21	50.21	23.38	39.07	47.20	43.91	23.84	14.03	19.79	52.43
2X0253	7.73	46.80							18.70	
2X0331	7.15	42.90	21.71	31.90	40.60	30.04	26.86	9.06	10.27	
6215	8.70	43.68	31.79	34.68	45.99	36.83	28.89	13.65		53.99
6218	11.15	47.81	31.03	39.33	51.56		32.90	13.93		53.72
6222	7.03	44.80	31.49	32.58	50.61	40.06	28.74	11.32	13.34	58.54
6265	6.72	46.53	26.99							
6280	4.87	46.48	28.65				30.25	14.20	12.76	
6284	7.93	50.24	32.77	40.41	45.37	36.92	30.82	14.89	17.60	53.46
6290	5.33	47.68	27.90	34.03	43.47	39.64	26.49	14.49	11.99	49.43
6301	7.67		30.63				24.38			
6311	8.06	44.08	28.69	35.77	53.44	39.58	29.97	15.24	18.00	58.95
6312	10.66	45.28	32.00	33.00		37.46		19.52		
6315	6.34	45.06	25.71	33.38	40.80	42.78	28.09	10.43	11.20	51.84
6321		47.80								
6334	10.13	50.18		39.33		38.31	28.54	14.23	13.47	
6335	11.19	48.28	28.19	34.31	48.20	36.49	30.89	19.40	19.52	56.01
6342	7.30		22.31	37.31	41.44	35.00	25.39	10.01		39.97
6354	7.35	45.15	39.35	30.30	41.83	42.12		13.62	18.34	57.34
6355	10.02		25.57	41.70	47.44		28.35	12.49	20.07	61.54
6415	5.52	50.96	29.40	43.49		37.03	31.84	15.85	16.58	
6450	4.19	47.51	34.73	39.68		43.87	31.17	16.35	18.24	
6451	10.12		32.12		52.15					
6521	8.86	50.56	28.75					6.58	14.95	
6528	12.47	47.68	30.27		49.23		29.36	13.30	23.75	53.93
6531	7.50	49.47	24.36		40.61	32.31	26.36	12.16	11.65	
6585	8.79	51.77	29.30	42.50	49.03	41.89	30.65		19.69	
6600	10.15	53.14	30.63	43.14	51.61	41.20	34.08	9.73	10.86	
6622	4.13	46.96	33.79		49.33		35.51	17.86	21.22	60.89
6626	9.06		29.30	36.39		34.67	26.35	17.53		
6649	7.77	46.98		41.43	54.43		26.36	15.15		58.68
6668	9.22	41.39	25.59	35.46	46.10	34.77	29.36	12.38	5.18	

6690	9.22	49.95	37.10	26.71	46.53	40.99	31.00	21.09	11.79	30.85
6701	8.42	44.02	30.87		51.32		30.30		20.66	
6714	9.22	46.87	27.55	36.07		37.20	30.38	10.42		
6716	11.62	52.84	29.37				28.94	12.75		
6717	8.02	46.55	24.11	33.79	41.41	37.71	28.53	16.51	21.40	61.02
6725	7.52	50.95	33.48		52.32			16.47	13.92	56.38
6732	6.49	48.74	30.79				31.61		14.86	
6734	5.93	45.01	31.53	37.23			31.66	20.78	17.76	
6738	5.81	46.32	26.62	36.50	42.03	41.14	29.60	19.36	19.77	
6740	6.81	44.76	27.30	36.56	47.07	34.23	25.75	13.35	20.50	51.73
6746	9.08		32.86					16.63		
6753	4.25	48.91	32.34	36.76	50.99	42.22	30.11		15.30	58.63
6756	6.89	47.22	23.68	34.12	42.13		26.92	12.68	9.48	38.14
6776		48.03							14.62	
6793	7.88	48.75	31.01		48.70		33.67	15.82	17.21	57.16
6800	5.88	49.10	28.66	33.99	47.16	34.25	32.26	13.30	12.04	54.93
6802	5.62	46.55	26.36	33.90	43.93	38.29	29.02	19.84	14.08	56.08
6812			29.36				29.04			
6819	8.67	49.54	41.64	30.49			30.18	30.92	20.63	19.50
6821	9.60	47.29	31.32	34.37			29.89	8.53		
6838	6.77	47.14	27.87	41.92		36.23	28.61	14.87		50.44
6840	7.28	47.48	27.00	35.41		35.58	28.31	12.58	12.04	
6860	10.05	45.91	30.24		52.31		27.83	12.72	22.83	54.59
6903	4.61	53.28	35.01		52.14	45.54	35.16	16.64	20.41	65.30
6933	7.68		30.15				28.38	15.94		
6937	8.45	48.87	27.18	39.36	46.31	38.98	29.85	10.35		54.08
6948	12.31	47.74	28.45	40.79	41.01		30.65	14.21	23.45	
6949	7.51	42.85	32.71		44.81		30.33	19.27		
6955	7.97	49.69	32.29	40.74	49.60		30.90	15.12	22.42	60.26
6956	8.23	48.43	30.42	37.94	44.52	47.30	31.95	15.87	14.68	51.73
6965	13.56		36.57				34.04	13.75		
6968	6.38		36.85	27.80	38.67		33.07	26.51		
6971	5.42	50.72	31.08	36.27	48.13	33.79	30.74	15.62	14.56	
6977	7.60		43.13	38.33	37.80			24.44	15.25	21.05
6995	8.79	46.21	24.16	34.17	51.74	42.77	30.23	11.05	12.04	
6997	11.07	48.77	40.39	29.73	35.02		33.77		13.80	
7017	6.04	48.22	32.04	33.94	46.40	36.11	33.15	13.66	13.56	54.45
7031			47.45							
7052	11.81	51.61	33.32	39.86	57.74	46.41			21.34	59.23

7096	9.20		41.28	33.28	42.87	43.50	39.03	23.95	18.42	36.52
7122	5.98	46.25	26.43		48.23	38.82	29.36	14.27	16.98	57.41
7126	8.25	48.01	27.87	40.93	49.84			12.48	24.46	55.64
7137	8.74	49.49	21.04	34.67	44.22	33.32	26.61		11.06	
7158	10.31	49.97	32.11				34.12	12.22	12.01	
7190	8.94	52.30	34.70				34.20	10.75	19.40	
7196	7.95	47.68	27.55	39.14	49.88	39.02	27.57	15.47	11.54	57.76
7199	9.70		30.58	37.00		36.44			22.41	
7210	1.88	49.41	30.11	33.61	52.59	32.05	29.95	15.17		63.99
7211	1.86	46.48	26.67	35.55		37.70	30.53	13.54	17.47	59.90
7223	8.96	52.85	30.99		56.49				13.63	
7229	7.50	52.05	24.85	40.71		39.62	32.63	16.69	18.13	
7248	2.82		28.24			38.95	29.97	11.54		47.23
7267	9.48	45.86	20.30	30.50	43.72	35.71	26.85	11.85	13.28	50.01
7294	6.59	46.54	30.18	40.30	51.43	40.19	27.55		15.86	58.12
7329	10.32	47.12	28.96	41.42	53.37	41.41	30.82		23.51	60.15
7335	7.83	47.20	30.15			32.31	29.96	17.95	15.74	
7366	10.63	46.47	25.32	35.19	51.96		27.99	10.97	20.74	
7368	5.72		29.18				28.69	14.45		
7380	8.66	48.45	31.26	40.51	51.19	42.51	32.11	16.28	23.71	
7394	7.88	49.64	32.35	39.97	48.76	40.80	33.09	11.72		58.62
7398	10.13	51.76	32.74	37.17	49.32	37.87	30.47	9.68	16.71	58.02
7430	6.92	46.09	26.99	37.47		38.87	30.63	13.85	15.23	
7438	6.49	47.04	32.73			40.33	33.63	15.01	21.26	
7445	10.73	51.97	31.38	42.35	56.99	40.83	26.21	17.20	25.34	66.54
7446	8.75	47.91	26.34	35.31	48.76	39.21	25.86	14.57	17.84	55.29
7455	6.03		48.16	28.99				32.07		
7472	6.90		27.45					8.43		
7478	11.98	46.47	26.83	34.97	50.20	37.05	28.54	15.66		58.22
7500	11.63		30.37	40.74	52.16		29.09	12.99	21.31	
7538	5.22	49.48	34.47	36.63	48.70	37.23				54.58
7561	9.57	45.60	40.13	36.33	47.08	39.35	30.94	18.91	15.00	41.49
7606	6.63	49.80	30.24	33.69	47.52	36.08	29.88	13.34	10.71	58.58
7621				28.89				27.22		
7633	8.68	47.94	27.60	38.01	49.53	37.18	31.02	17.41	16.40	58.56
7634	7.18		25.56					13.41	18.90	
7635	10.25	52.21	40.50	30.19	48.63	48.79	29.52	20.26	14.14	34.56
7644	11.04	44.71	27.81	32.74	46.20	35.84	28.06	9.88	14.02	53.87
7645	4.43	46.43	28.00	36.04	50.18	40.23	30.28	14.23	14.14	55.39

7663	10.78	48.50	32.37	34.41	47.46	35.51			19.36	53.21
7675	12.61	51.07	30.18	41.60	49.78		28.51	16.32	13.92	60.04
7701	12.06	47.63	31.44	34.75	51.20		32.78	13.31	10.83	60.13
7716	8.32	46.65	26.82		49.02		30.67	13.93	22.76	54.83
7720	9.61	44.34	25.14	33.60	46.83	35.55	28.35			
7735	10.03	51.64	28.99	40.66		41.92	31.85	13.09	18.48	
7764	8.97	46.90	29.98	36.89		41.88	28.32	11.06	17.65	
7777	10.60	54.19	28.94	41.35	53.69	40.25	29.86	13.81	14.69	65.60
7784	9.44	44.09	28.24	33.50	53.46	39.76	28.33	10.35	16.77	
7808		44.56	28.81		51.22		28.18	20.19		
7823	8.03	45.45	42.22	33.62			30.12	32.24	13.53	
7844		53.10								
7850	7.00	44.72	25.39	34.78			28.55	14.32		
7855			26.43							
7862	10.30	47.77	28.47	39.48	47.86	39.55	30.60	9.62	15.16	54.86
7872	9.06	50.17	30.47	39.30	49.60	35.48	32.53	6.94	16.97	57.07
7882	11.11	43.04	30.77		43.79				15.42	40.96
7920	9.32	43.08	29.12	36.72	46.56	37.38	28.13	14.08	15.49	
7944	9.38		30.67					8.88		
7963	8.15	47.61	22.06	37.87	45.79		29.99	22.56	18.66	45.16
8001	9.22		29.71						17.39	
8008	8.80	54.39							20.99	
8010	9.14	50.48	30.84		56.51		32.96	15.51	18.26	57.97
8024	10.30	48.02	27.22	38.47	50.69		27.51	6.17	17.66	56.40
8027	6.76	47.28	30.47							
8034	8.01	45.74	29.68				32.73	9.98	26.10	
8046	9.70	46.71	28.06	39.47	48.37	36.87	28.81	17.25	16.47	58.12
8058	7.33	45.26	29.77	37.19	49.09	41.71	32.05	12.59	20.45	54.97
8062	9.03	47.34	35.12	37.63		37.60	26.69	14.35		
8070		53.30								
8088	5.35	48.14	30.19		47.12		26.76	12.13	19.72	
8091	9.15		30.51					16.62		
8092	8.05	48.07	28.61	35.92	45.31	37.57	28.72	10.14	11.49	56.40
8094	7.34	45.13	25.26	37.37	40.90	40.74	28.47	13.68	17.79	40.04
8116	7.99	48.93	31.77		49.65		32.41	15.81		
8120	6.77	48.83	27.31	38.44	49.29	37.61	28.27	13.75	22.22	58.94
8129	7.30	41.72	38.67	32.12	42.16	40.38	29.15	28.87	13.70	37.62
8134	6.51	53.72	31.14	37.23	51.65	41.13	33.11	17.02	18.07	60.00
8170	9.10	51.42		36.64		43.64	28.22	13.75	17.06	

8183	4.69	46.69	30.60		48.89		33.02	16.94	19.56	59.44
8206	3.72	45.48	26.72	36.99	47.96	41.85	28.00	11.79	15.28	57.77
8212	3.84	48.73	29.02						21.44	
8221	10.24	50.06	27.88	40.75			28.91	14.30	20.53	
8246	7.01	48.06	28.26	35.21	49.53	35.82	29.67	12.73	14.88	55.51
8250	9.08	46.86	27.69	36.18	48.78	41.33	26.80	14.94	17.37	54.88
8251			34.16	37.10					33.77	
8274	9.12	45.70	26.63	32.58	44.07	40.74	28.80	15.01	9.83	54.95
8282	8.66		29.45				30.19	18.04	21.85	
8288			36.78				25.23			
8291	4.90	50.76	32.28	40.41	49.16	40.43	32.76	16.96	18.92	
8292	8.24	48.19	35.45		47.38			16.59		48.82
8296	7.45	43.66	39.78	32.44	49.53		32.57	20.08	13.36	35.72
8299	1.80	46.74	25.72	36.86		38.87	30.52	13.43	19.34	
8302		48.82		42.04	53.90	39.47			18.16	62.10
8307	10.34	46.73	27.54	35.92	49.21	36.34	29.03		14.44	55.90
8313	5.37	44.73	38.10	30.05	41.78		28.71	21.32	12.05	52.52
8322	7.15	48.12	26.14	36.86	51.00	45.18	26.83	15.47	18.04	62.78
8329		48.10							17.51	
8344	8.60	53.59	26.53						13.96	
8369	4.17		34.71					24.21		22.19
8395	4.27	46.58	33.27	34.12	52.04	43.13	31.09	14.33	15.23	
8427	10.04		30.69					14.08	18.08	
8465	9.98	53.00	28.84	37.31	52.40			15.70	18.55	63.34
8469	8.63		32.19	37.29				19.88	23.41	
8477	8.58		32.32							
8478	9.91			31.73				28.24		19.58
8499	3.38	49.77	29.18				29.57	12.36		
8510	8.26	43.02	28.66	33.76	42.70	39.08	28.76	9.92	14.51	
8512	11.45	45.24	29.01	37.67	54.40	38.98	29.39	7.77		61.66
8517	6.88	53.75	29.94				29.96			
8518		42.40	25.45					11.07		
8538	7.86	48.18	34.29	37.12	52.58	41.33	31.96	15.00		60.24
8574	8.59	45.84	25.45	36.88	42.79	40.05	27.09	14.65	13.58	52.16
8576	4.99	49.12	36.73		59.95		33.05	16.11	7.22	
8596	7.35	45.92	40.96	33.33			31.85	15.48	10.34	
8600	9.64	46.06	28.71	42.97		42.77	35.21	12.99	21.84	
8601	8.16	52.13	26.46					18.22	16.05	
8615	6.47	56.27	26.57				30.09		16.20	

8623	8.05	53.43		39.10	48.26	37.63	27.35		7.29	46.28
8635	8.64	46.01	42.24							16.77
8638	8.85	49.25	30.36		48.10		30.79	15.79	20.11	51.96
8644	5.84	47.93	27.81	36.80						
8667	6.95	43.28	30.63	37.16	47.04	36.90	30.92	14.60		54.77
8690	6.87	44.76	25.45	37.05	46.72	38.08	25.93	15.16	10.96	36.70
8698	9.71	50.90	29.37	39.43	52.12		30.88	11.73		55.69
8700	9.98	47.62	34.06	30.74			32.89	18.42	6.37	
8765	7.00	44.99	31.62	35.93	55.94	38.16	29.77	17.65	17.75	63.42
8767	9.92	45.87	44.46	31.29					13.59	17.38
8778	8.21	46.99	28.81	34.40	47.00	35.24	29.35	14.66	23.85	53.93
8780	9.72	48.65	30.91					15.13		
8786	11.63	49.02	28.21	33.22	46.69		31.22	18.79	24.17	52.15
8797	11.65	46.40	26.00	32.70	43.78		28.65	5.43		50.89
8807	6.93	51.39	23.30	43.14	44.77		28.07	17.25	11.69	44.66
8817	8.40	52.10	26.10		50.46		28.41	16.23	25.71	56.84
8820	8.79	53.45	33.00				33.46	11.92		
8822	8.04	46.96	31.27	38.17	54.43	43.51	28.49	17.35	20.64	64.93
8826	7.48	44.90	30.07	34.13	44.24	35.98	28.91	11.99	18.67	56.78
8827	6.53	48.66	26.12	36.85		37.41	27.33		15.91	
8860	7.80	51.85	30.70							
8864	9.08	43.95	35.38	40.79			29.56	15.70		
8877	8.44	46.19	28.37		48.74		27.67	12.98	14.79	50.51
8893	8.43	46.88	24.37	35.89	44.17	37.52	30.20	17.71	16.03	
8895	8.46	45.34	25.92	35.44	44.91	35.62	29.65	13.40	13.81	
8905	8.67	47.29	29.12		45.89		31.32	14.68	21.80	
8906	11.06	52.17						12.64	21.70	
8919	7.55	41.59	34.82					11.42	19.91	15.24
8926	7.93	46.38	31.89	37.30	47.65	37.28	29.41		16.27	
8928	4.49	50.26	32.07				33.74	14.79	20.37	
8937	4.24	47.88	30.53	41.26						
8941	10.01	51.88	29.41	33.61			27.39	22.40	11.44	23.79
8962	6.23	45.89	41.21	32.19				29.32		
8973	10.43	46.82	28.55	38.36	47.70	37.74	28.18	17.08	25.79	52.34
8975			47.52							16.91
8979	6.00		29.82					12.16	13.07	
8980	2.56	52.10	25.08	34.01		37.42	29.64	14.66	9.74	
9014	3.94		30.59					19.00		
9020	13.27		47.56	31.39				30.76	12.05	

9021	7.19	49.82	30.69	41.08	46.46	40.24	32.26	15.57		51.52
9039	9.80	49.53	32.04	39.78	52.21	47.60	31.70	16.03		53.89
9040	7.09	46.65	30.88	39.54	48.54	39.76	29.57	11.09		59.74
9045	2.74	45.28	30.63	36.94	49.70	41.43	30.45	16.53	18.91	58.46
9089	15.19		29.88							
9090	10.14	53.80	28.62	42.81	56.05	34.95	31.43	14.86	20.49	62.66
9092	10.34	48.36	25.82	41.88	49.46	38.18	28.07	17.96		63.31
9094	8.23		33.42				26.68			
9097	11.22	57.76	32.65	41.52	56.99	42.43	28.93			66.38
9099	8.29	44.76	26.32	40.08	48.64	39.13	28.50	13.06	15.17	54.50
9124		50.67							19.91	
9128	7.43	46.13	30.92	35.97	49.94	40.48	31.16	12.27	15.69	
9129	7.13	47.17	28.86	36.22	46.32		26.61	10.92	17.84	
9156		46.59								
9166	10.50	49.76	29.00	37.23	48.28	34.71	31.11	16.24	18.65	52.57
9174	11.13	54.54	23.33	34.84	51.41	40.31	31.18	6.32	18.18	61.64
9178	9.08	47.51	30.28	35.38	50.42	39.55	32.44	11.71	15.50	53.38
9193	7.93	48.27	37.79	28.39				29.10	10.26	
9203	10.59	49.33	29.51		47.36		33.22	15.96	23.51	58.97
9205	3.17	47.88	28.18	34.78	48.98	36.89	29.30	15.67	19.36	55.60
9261	4.43	53.16	28.81						14.15	
9265	9.46	46.26	19.02	33.20	40.87	29.41	25.90	10.62	8.06	38.47
9278	6.58	46.66	25.44		43.85	38.28	30.37	14.04	12.21	41.51
9279	7.03	51.82	30.06		49.11		27.84	14.34		49.88
9282	7.68	52.10	27.68	41.19		38.80	31.62	11.80	21.19	
9285	8.33	48.76	33.11	38.35	54.61	45.62	29.94	14.37	19.06	65.40
9288	6.55	41.93	35.43	29.40	40.98	37.29	32.49	24.63	16.21	
9305	6.40	44.50	24.80	33.88	44.95		29.81	16.71	17.15	48.83
9316	11.88	43.51		31.64	50.66	39.17	29.01	11.34		54.73
9326	10.90		29.16				31.31		19.56	65.67
9338	9.59	52.45	32.27	40.29	55.24	42.92	36.02	13.50	16.04	57.91
9340	6.44	46.31		37.18	43.92	34.73	27.72	12.42	7.75	39.61
9344	2.57		37.19				31.67	17.76		
9347	8.99	46.92	30.64		56.38		28.23		23.16	59.43
9356	8.96	48.38	35.63	39.08		37.52	30.87		20.79	
9361	6.78	39.77	24.74	29.26	40.46	38.69	25.42	7.41	12.58	
9362	8.23	48.75	30.70	36.13		39.09	32.31	15.23		
9363	12.42	49.96	34.72	38.95	55.62	42.67	31.53	13.64	20.34	61.03
9385	8.06	51.44	32.48	36.51	48.77		34.30	12.40		53.89

9388	12.85		38.79		40.57		28.84			
9417	8.25	45.98	26.43	37.78	52.44	34.68	28.75	13.97	13.95	62.94
9427	7.77		27.37				30.74	13.66	15.20	
9467	3.70	46.64	31.14		47.97		31.95	12.10	15.21	56.24
9468	5.11	48.99	27.32		47.30		28.37	14.50		
9472	10.23		36.48					16.93	21.75	
9481	7.17	45.46	30.26	41.93	48.75	43.52	33.10	14.69	13.64	56.35
9486	10.82	52.55	31.50	42.69	51.15	37.79	32.18	15.16	18.35	60.91
9494	12.76	49.13	29.54	39.82	53.17	37.31	29.89	16.48	21.45	56.70
9495	8.40	52.34	28.84	37.06	49.38	40.37	32.25	11.98	13.07	60.99
9502	5.36	45.81	41.59	31.16				24.12	17.33	23.13
9514	11.11	50.12	32.51	33.15		38.83	33.08	14.21	15.37	59.86
9515	8.63	49.84	30.73	38.32	52.27	41.88	29.93	11.53	19.76	56.41
9545	6.63	52.76	28.69		48.79		31.02	15.22	12.46	51.71
9562	9.62		33.52	41.23	56.47	41.42	30.40	16.55	19.45	62.87
9569	6.09	45.33	24.11	37.60	46.15	38.71	27.75	13.99	9.15	43.72
9576	8.58	47.51	24.07	37.82	49.59	41.29	30.01	9.48	9.45	45.62
9581	8.82	48.06	31.15	32.42	46.26	37.10	28.62	11.53	17.19	50.57
9586	11.10	48.71	27.14	35.98	44.07	39.94	26.25	13.38	16.18	62.20
9592	11.50	56.03	32.12	42.95	58.18	45.18	32.97		17.60	68.61
9623	8.45	47.11	32.32		51.44		29.45		17.08	54.95
9625	8.17		27.18	36.56			30.44	10.71	10.14	
9632	10.74	48.02	29.36	35.89	49.14		30.67	7.09	14.30	53.27
9635	5.00	49.21	28.16	35.23	50.78		30.17	19.15	20.39	64.26
9641	9.13	45.24	39.47	33.30	52.20			21.84	18.32	52.58
9643	8.44		33.15							
9646	5.77	44.81	28.92	32.66	43.78	37.04	29.05	13.94	16.74	49.19
9656	8.95	44.42	32.80	38.40	54.52			16.20	20.89	
9666	9.32	51.60	31.32	37.81	47.59	41.44	29.05	11.06		56.43
9675		47.59					32.47	9.54		
9694	5.39	48.45	35.42	39.04	47.94	42.23	32.07	17.86	15.09	
9711	4.22	50.97	31.90		41.89		29.16	13.44	21.07	48.84
9714		47.42	28.84	32.92		35.81	33.71	13.88	18.64	
9716	7.94	43.57	39.18	32.17		37.98				
9722	7.52	48.66	23.70	32.32			29.62	11.78	17.33	
9740	8.71	47.47	31.12		48.24		28.82	12.03	22.11	
9743	9.13	47.06	26.14	34.84	46.72		26.53	17.88	16.94	58.11
9765	9.79	47.19	28.41	37.37	46.34	41.98		7.12	14.01	51.18
9771	13.37	45.55	26.88	35.51			31.08	12.96		

9774	8.55		46.61	29.81					9.62	
9789	8.86	48.94	41.36	32.64	42.17		34.05	18.03	14.90	57.99
9791	3.76	44.06	32.52	35.09	46.31		33.90	14.07	16.19	50.80
9805	4.55	46.09	27.47	35.80	51.38	41.14	29.10	16.18	20.30	
9808	2.60	44.38	33.74							
9841	3.13	44.12	27.31	31.90	41.73	36.35	27.58	15.15	15.83	
9855	3.18	47.68	28.93	35.09	43.50		28.87	17.09	15.42	52.62
9878	7.37	43.90	32.59	32.17	50.70	37.49	31.84	15.16	18.31	53.93
9892	6.42		31.10							
9903			24.70					11.05		
9907	7.63	44.25	30.47	31.04	42.18	37.77	30.32	11.75	17.80	
9914	9.15	47.49	19.69	32.52	42.40	36.54	26.02	10.51	10.15	39.29
9969	9.61	49.53	27.23	42.08	55.21		30.16	11.58	18.41	62.25
9976	7.91	46.64	27.79	35.54	47.54	38.52	27.29	10.41	14.92	

Table S2 **Raw phenotype scores for non-metric traits**

ID	Sex	Age	Larsp_yn	Lcs_forked	Lspcd_yn	Rarsp_yn	Rcs_forked	Rspcd_yn
UN001	M		1	0	0	1	1	0
7777	M	13.07	1	1	1	1	1	1
1X4045	F	19.35			1	0	0	0
1X1786	F	22.99	1	1	1	1		1
UN002	F		0	1	1	1	0	0
7446	M	13.69	1	1	1	1	1	1
1X2699	F	27.43	1	1	1		0	
1X1957	F	28.1				0	0	1
9099	M	11.55	1	1	1	1	0	1
1X3771	F	20.33	1		1	1	1	1
1X3026	M	21.63						
1X1687	F	22.9	1	1	1	1	1	1
8600	M	11.84	1	0	1	1	1	1
12639	M	12.18	1	0	1	1	0	1
8046	M	13.13	1	0	1	1	0	1
1X4038	F	19.19	1	1	1	1	1	1
1X3939	F	19.74	0	0	1	0	0	1
1X3475	M	20.66	1	1	0	0	0	1
7645	F	12.01	1	0	1	0	1	1
1X4217	F	18.61	0	1	1	0	0	1
8979	M	11.01	1					
1X4166	F	18.23	1	0	1	1	0	1
1X4749	F	16.07	1	1	1	1	1	0
6215	F	15.5	1	1	0	1	0	0
1X4710	F	15.9	0	1	1			
1X3740	F	19.34	0	0	1	1	1	
1X2081	F	22.38	1	1	1	0	1	1
1X1181	F	31.17	1	1	1	1	0	1
1X0681	F	31.03	1	1	1	1	0	1
1X3782	F	19.98						
1X2315	F	21.77	1	0	1	1	1	1
7329	M	14.08	1	1	1	1	1	1
1X4765	F	15.89	1	1	1	1	0	1
10403	M	9.13	1	0	1		1	1
1X2686	F	30.3	1	1	1	1	1	1
1X3200	F	21.07	1	1	1	1	1	1
1X0842	F	33.19					0	
1X4632	M	16.52						
1X2813	F	21.12	1	1	1	1	0	1
1X2644	F	27.6		1		1	0	1

9765	F	10.32	1	1	1	1	0	1
1X4519	F	21.97	0	0	1	0	0	1
1X4156	F	17.97	1	1	1	1	1	1
8681	F	12.12						
1X0976	M	23.8	1	1	1	0		1
1X1177	F	28.64		1		0	0	1
6450	M	14.96	0	1	1		1	1
10603	F	8.57						
1X4777	M	16.02			1	1		1
1X3310	M	18.21	1	0	1	1	0	1
1X2231	M	20.7		0		1		1
1X3337	F	22.96	0	0	1	0	1	1
1X2624	F	25.8	1	1	1	1	0	1
1X3808	F	18.82	1	1	1	1	1	1
1X3818	M	18.42	1	0	1	1	0	1
8576	M	10.55	0	1	1	1	0	1
1X2822	M	19.82				1	0	1
8395	F	10.64	1	0	1	0	1	1
7633	M	11.68	1	1	1	1	1	1
1X3930	F	17.92				1		
6415	M	13.41	0			0	0	1
1X4286	M	16.74	1	1	1	1	0	1
8058	F	10.02		0	1	1	1	1
1X4162	F	17.34	1	0	1	1	1	1
1X3758	M	18.79						
8229	M	11.04						
1X2576	M	20.53	1		1	1	1	1
1X2816	M	19.85	1	1	1	1	1	1
1X2884	F	20.36				1		1
8120	M	10.86	0	1	1	1	0	1
1X3823	F	18.9	1	1	1	1	1	1
9021	F	12.04	1	1	1	0	0	1
1X3701	F	18.68	1	0	1	1		1
1X3764	F	18.18	1	0	1	1		1
7478	F	12.12	1	0	1	1	1	1
9090	M	9.32	1	0	1	1	0	1
1X2360	F	20.25	1	0	1	1	0	1
1X4802	M	13.92	1	0	1	1	0	1
1X1447	M	21.06	1	0	1			
7126	F	12.68	1	1	1		0	1
1X4782	M	15.66						
1X3783	F	19.88	1	0	1	1	1	1
1X4767	F	16.2	1	0	1	1	0	1

8250	F	9.24	1	0	1	1	0	1
6649	F	11.7	1	1	1	1	0	
1X4184	F	15.8				0	0	1
1X4146	F	16.11	1	1	1	1	1	1
6284	F	12.9	1	1	1	1	1	1
1X0351	F	29.48	0	1	1	1	1	1
1X4051	F	17.05	1	0	1	1	1	1
1X3705	M	17.72	1	0	1	1	0	1
1X1257	M	22.04	1	1	1	1	1	1
1X0684	F	28.01	0	0	1	0	1	
1X2495	F	26.09		1		1	0	1
1X3805	F	17.79						
8282	F	9.68	1					
1X4064	F	16.95			1			
1X1958	F	25	1	0	1	1	1	1
1X4186	M	15.85	1	0	1	0	1	1
1X1224	F	28.01		0				
1X3997	M	16.15	1	0	1	0	1	1
1X3255	F	27.77	1	1		1	0	1
1X3162	M	22.87					1	1
1X4703	F	12.91						
8928	M	8.94	1		1	0	1	1
1X3899	M	16.51	1	0	1	1	1	1
1B0831	M	27.03				1	1	1
1X4842	M	13.23	1	1	1	1	1	
8638	F	10.25	1	1	1	1		1
1X1146	F	29.4	1	1	1	0	1	
1X3790	F	17.22	0	1	1	0	1	1
9279	F	11.99	1	1	0	1	1	1
1X3828	M	20.54		1	1	1	1	1
1X3195	F	22.1	1	0	1	1	0	1
1X3597	F	21.17	0	0	1	1	0	1
1X1374	F	25	1	1	1	1	1	1
1X3567	F	21.47	1	1	1	1	0	1
1X1032	F	27.99	1	0	1	1	0	1
1X0937	F	26.07	1	1	1	1	1	1
1X4090	F	19.66	0	1	1	1	0	1
1X2063	M	23.99				1	0	1
1X4820	F	16.39	0		1	1	1	1
1X2054	F	31.86						
1X4290	F	19.35						
9481	F	12.02	1	1	1	0	1	1
1X2365	F	23.18		1		0		

1X3809	M	20.68	1	0	1	1	0	1
1X3648	F	21.84	1	1	0	1	1	1
1X4091	F	19.73				0	1	1
1X3593	F	19.65	0	1	1	1	0	1
1X3679	F	20.87		1	1	1	0	1
1X3655	M	19.86	1	1	1	0	1	1
9347	M	10.27	1					
1X4810	M	16.67						
6451	M	16.24				1		
9740	F	11.09	1	0		1	0	1
1X2798	F	23.09	1	0	1	1	0	
8877	F	12.32	1	0	1	1	0	
7445	M	13.05	1		1	1	0	1
1X2891	M	27.98						1
1X1763	F	24.18	1	1	1	1		1
1X2172	F	29.17	1					
1X2511	F	27.6	1	0	1			
1X3887	M	20.42				1	0	
9344	F	9.91	0		1			
1X3837	M	20.57	0	1	1	1	0	1
1X4230	F	19.12	1	1	1	1	1	1
1X3291	F	22.13	0	0	1	0	1	
1X4019	F	20.37	1	0	1	1	1	
1X4331	M	19.09					0	1
1X0864	F	26.18						
1X3564	F	22.13	1	1	1	1	0	1
1X4634	M	17.92		1			0	
8066	M	13.7						
1X3822	M	20.95						
1X2379	F	23.37	0	0	1			
1X3902	F	20.7						
10316	F	10.3	1	0	0	1	0	1
1X2602	F	23.21						
1X1656	F	22.62	1	0	1		1	
1X3103	F	22.61	0	1	1	1	1	1
1X3432	F	22.24	0	0	1	1	0	0
8581	F	13.19						
1X2794	M	23.21						
8010	M	12.05	1	1	1	1	1	0
1X4748	M	17.19	1		1			
1X4041	F	18.22	1	0	1	1	0	1
6218	M	16.76	1	0	0	1	0	1
9045	F	12.73	0	0	1	0	0	1

1X1879	F	24.25						
1X1237	F	28.99	0	0				
1X1734	F	29.67				0		
6626	F	15.37	1					
8302	F	13.41	1	0		1		1
8973	F	12.69	1	0	1	1	1	1
1X2538	F	27.87						
1X2092	F	22.11	1		1	1	1	1
9039	F	12.33	1	0	0	1	0	0
8864	F	10.96	1	1	0	1	0	1
1X4294	F	19.35	1	0	1	1	0	1
10195	F	9.49						
1X2269	F	23.74		0		1	1	
1X4323	M	19.16	0	0	1	1	0	1
10729	M	8.97	0	0	1	0	0	0
9643	M	13.94				1	1	1
1X3867	M	21.1				1	0	1
1X3144	M	22.75	1	1	0	1	0	1
1X2033	M	20.92	1	1	1	1	0	1
9472	M	11.81				1		1
1X3594	F	19.85	1	0	0	1	1	0
1X3767	F	20.87	1	0	1	0	0	0
9878	F	10.97	1	0	1	0	0	1
1X2675	F	31.62						
1X4108	F	20.34	1	1	1	0	1	1
1X2490	F	27.93	0	0	0			
1X4853	M	17.21						
1X4268	F	19.67					0	
1X2199	F	24.29	1	1	1	1	1	1
6701	F	22.53	0	0	1			
1X4183	F	20.55						
1X2713	F	23.66		1		1	0	1
1X3327	F	22.82						
10760	F	10.09	1	1	1	1	1	
7199	F	15.52	1					1
1X2796	F	23.39	1	0		1	1	1
6860	F	16.25	1	0	1	1	1	1
1X3653	F	22.01	1	0	1	1	0	1
1X3697	M	22.18						
7937	M	14.5						
6965	M	15.32	1					
11446	M	25.35						
10226	M	11.21	1	0			1	1

1X3052	F	31.14	1		1	1		1
1X1956	F	33.7			1	0		
1X1404	F	31.69	1		1	1		
1X4154	M	20.11						
8000	F	14.62					1	
1X3707	F	22.17						
1X4326	M	19.15	1		1			
9502	F	12.37	1	0	1	0	1	1
6977	M	15.54	1					
1X4035	F	21.02	1				0	
1X3521	F	22.87	1	1	1	1	1	1
1X1166	F	26.61	1	1	1	1	1	1
1X3581	M	22.84	0					
1X4179	M	20.8	1	1	1			
18741	F	10.93						
1X3960	M	21.69	1	1	1			
1X3819	M	22.2						
1X4058	F	21.17	1	0	1	0	1	1
9641	M	12.71	1	1	1	1	0	1
1X4771	F	18.02	1	0	1	1	1	1
1X2509	F	28.98	0	0	1	0	0	1
1X1962	F	29.97		0	1	1	0	1
1X4209	M	20.82		0				
1X3431	M	23.11						
8635	F	14.06	1	1	1	1	0	1
8296	F	16.54	0	1	1	1	1	1
8129	F	16.56		1	1	1	1	1
1X3928	F	23.87	1	1	1	1	1	
6746	F	18.41	1	1	1			
10154	F	13.69	1	1	1	1	1	1
10090	F	14.01	1	1	1	1	1	1
10510	F	12.58	0	1		1	1	1
14435	F	6.91		1	1			
10433	F	13.27		1	1	1	1	1
7635	F	17.39	1	0	1	1	1	1
1X4631	F	19.98	1	1	0	1		1
8975	F	15.16	1			1	1	1
17812	F	18.79						
1X2000	F	26.19				1		1
8679	M	15.1	1					
10379	M	13.24	1	0	1	1		1
14187	F	6.37						
7895	F	16.53						

7882	F	15.9	1	1					
7031	M	18.04					1		
8251	M	16.59							
1X3956	F	22.72	1	0	1	1	1	1	1
8021	M	16.45							
1X4329	F	21.03	1	1	1	1	1	1	1
1X4284	M	21.72				1	1		
11585	F	11.09	1	1	1	1			1
8941	F	15.06	1	0	1	1			1
6690	F	17.88	0	1	1	1	1		1
14263	M	6.61	1	1	1				
1X4161	F	21.92	1	0	1	1	1		1
1X4647	M	20.53	1	1					
1X3445	F	24.34	1	1	1	1	1		1
9020	F	20.4				1	1		1
9193	F	14.65	1	1	0	1	1		1
1X4236	F	21.73	1	0	1	1			
1X4278	F	21.98	1	1	0	1	1		
1X2594	F	25.93	1	1	1	1	1		1
1X3548	F	27.28							
1X2176	F	30.48	1	1	1	1	1		1
11442	F	28.23							
11444	F	20.65	1		1	1	1		
1X3582	F	24.07	1	0	1	0	1		1
7621	F	16.74							
1X4031	F	23.27	0		1	1	0		
9906	M	13.25							
1X3952	F	22.02	1	1	1				
12162	F	9.88				1			
8767	F	15.23	1		1	1	0		1
1X2572	F	26.01	1		1	1	1		1
14252	F	6.16					1		
1X2589	F	26.05	0		1				
14266	M	6.99							
9288	F	14.24				0	1		1
1X3439	F	24.21	1	1	1	1			0
8597	F	15.13							
7866	F	16.38							
14322	F	6.79	1			1			
10012	F	13.59	1	1	1		1		
14081	M	6.39	1		1				
1X3420	M	24.46							
1X3883	F	23.16	0	0		1	1		

6997	F	17.33	1	1	0	1	1	
1X3814	F	23.86	1	0		1	1	
9789	F	14.28	1	0		1	1	
1X3886	F	24.47	0	1	0	1	1	0
1X3938	M	24.14				1	1	0
1X3312	F	25.38	0	1	1			
14993	F	6.27	1		1	1		
7842	M	16.05						
12929	M	9.66						
14484	F	7.34	1	1	1		1	1
10611	F	13.05	0		0	0	1	0
1X3696	F	25.38	0	0	1	1		0
9716	F	13.85	1	0	0	1	1	0
1X3864	M	24.34	0	1	1	1	1	1
1X2697	F	32.47				1		1
6354	F	19.78	0	1	1	1	1	1
1X2717	F	26.61	1	1		1	1	1
14373	F	6.21						
1X4418	M	22.38						
1X4022	M	22.39						
8962	M	16.38	0	1	1	1	1	0
12726	F	8.83				1	1	1
1X3848	F	24.9	1	0	1	1	1	1
1X4265	F	22.65	0	1	1	1	1	1
8062	F	16.25	1	1	0			
6968	M	19.09	0				0	
1X4627	M	21.23				1		0
15473	F	6.23						
14084	M	7.35				1	1	1
1X3739	F	24.88	1					
1X4686	F	20.87						
8070	M	17.57			1			
15168	F	6.83	1		0	1	1	0
1X4752	F	20.84	0	0	1		0	0
12226	F	11.13	1	0	0		1	
10875	M	12.5	1	0	1	1	1	1
1X3929	F	24.24	1		1	0	1	0
1X3947	F	24.01	1	1	1	0	1	0
9089	F	16.34	1		0			
14274	F	7.55						
1X2068	F	26.09						
7455	M	17.94				0	1	0
1X3347	M	25.53						

13715	F	7.58							
1X4277	M	23.25	1	1					
10016	F	14.62	1	1	1	0	1	1	
14365	M	7.89							
1X4246	F	22.93	1		1	1	0	0	
1X3641	F	25.09	1	0	1	0	1	0	
8369	M	17.02	0		1	1	1	1	
1X3592	F	25.42	1	0	1	1	0	1	
14744	M	6.7				1		1	
9388	F	13.76	1		1	1	0	1	
8478	F	17.03				1		1	
1X3796	M	24.55	1						
8700	F	14.32	1	0	1	1			
1X4056	F	23.74	0	0	0		1		
1X3846	F	24.76	1	0	1				
1X4303	F	22.62	1	0	1	1	0	1	
9094	F	14.37	1		1				
7823	F	16.38	1	0	1	1	1	1	
1X4112	F	22.34	0	0		1	0	1	
10511	F	13.32	1	0	1	0	1		
1X4241	F	20.95	1	0	1				
1X3731	F	24.67	1	0	1	1	1		
1X3895	F	24.67	1	1	0	1	1	1	
1X4645	M	20.72	1	1	1	1	1	1	
6819	M	18.93	1	1	1	1	1	1	
14710	F	11.24	0	1	0	0	1	1	
1X3942	F	24.16							
8919	F	14.67	1	1	1				
7096	F	17.37				1	1	1	
10046	F	14.4	0	1	0	1		0	
7561	F	18.44	1	1	1	1	1	1	
15110	M	7.04							
10544	M	13.38							
8596	F	14.41	1	0			1	0	
1X4746	F	18.35	0	0	1	0	1	1	
1X3861	F	24.03			0	0		1	
1X4859	M	19.81	1	1	0			1	
6301	M	17.59	1		1				
1X4808	M	20.55				1			
1X3817	F	24.65	1	0	1				
1X2001	F	27.4							
9774	F	13.74				1	0	0	
8313	F	16.68	0	1	0	1	1	0	

11617	F	11.95		1	1			
1X1927	F	25.78						
13859	F	8.44	1		1	1	0	1
1X4257	F	22.98	0	1	1	1	1	0
1X2825	F	26.37	1	1	1	1	1	1
1X2716	F	26.21	1	1	1	1	1	1
6949	F	18.85	1	1	0	1		0
6933	F	17.63	1		0	1		
1X4276	F	20.8			1			
1X2124	F	27.26						
1X4013	M	22.02		0	1	1	0	0
7944	M	16.15				1		1
9316	F	16.46	1	1	1	1		1
1X4687	F	21.38	1	1	1	1	1	1
11992	F	11.83					0	
14696	F	7.73	0	1	1	1	0	1
1X2684	F	29.82	0	1	1	1	0	0
1X2117	F	25.54	1	0		1	1	0
1X4169	F	23.1	1	0	0	1	1	1
1X4648	M	21.62				1	0	1
9892	M	15.28				1		
1X3810	F	23.52	1	0	0	1	1	1
1X3104	F	23.76	1	1	1	1	0	1
6521	F	20.29				1	0	1
6725	M	17.17	0	0	1	1	0	0
1X1441	F	27.21	1	1	1	1	0	1
1X3914	F	22.16	1	0	1			
1X4239	F	21.06	1	1	1		1	
8001	M	15.99	1		1	1		0
16118	F	6.04	0		1	1		1
7634	F	18.76	1		1	1	1	1
8820	F	15.04			0	1	0	0
16033	F	6.31						
9623	F	13.41	1		1	1	0	1
1X4143	F	24.2	0	0	1	1	1	1
1X3208	F	23.66	1	0	1	1		1
1X4149	F	24.34	1	1	1	1	1	
8318	M	15.31	1		1			
1X4315	M	20.94	1	0	1			
10418	F	11.49	0	0	0		0	
6821	M	17.29	1	1	0	1	1	1
10240	M	12.3	1	0	1		0	1
10009	F	12.6	1		1	1	1	1

9581	F	13.09	1	1	1	1	1	1
1X4867	F	17.85						
8885	M	16.79						
1X4637	M	18.86	0		1	1	0	1
1X3666	F	23.22	0	1	1	1	1	1
1X1557	F	28.91	1	1	1			
9791	F	15.38	1		1	0	1	1
1X1864	F	28.58	1	1	1			
8778	F	16.91	1	0	1	1	1	1
1X4760	M	18.3	1	1	1	1	0	1
7380	M	16.29	1	1	1	1	1	1
1X1577	F	25.96	1	1	1	1	1	0
14754	M	7.9		0				
8292	M	17.84	1	0	1	1	1	1
7158	M	16.67	1	1	1	1	0	1
8644	M	17.4	0		1	0	1	1
10987	F	13.41	1	1	1	1	1	
10911	F	13.55		0	1	1	1	1
1X3836	F	25.44	1	1	1			
9907	F	15.62	1	1	1	1		1
1X3757	M	22.62	1		1	1	0	1
1X4314	F	21	0	1	0	0	1	0
11079	F	13.18	0	0	0	0	1	0
8221	M	15.47	1	0	1	1	1	1
1X2574	F	24.77		1	1			1
1X3749	F	25.45					0	
1X4195	F	21.27	0	1	1	1	1	1
11443	F	17.57	1	1	0			
11445	M	22.67						
6732	F	20.34	0		1	1	1	1
9976	M	15.89	1	1	1	1	0	1
10074	F	15.53	1	1	1	1	1	0
12217	F	11.92	1	1	1	1	1	1
6265	M	20.96				1	1	1
15656	M	7	1	0	1	1	0	1
8780	M	17.45	1	0	1	1	0	1
7430	F	19.44	1	0	1	1	0	0
7190	M	19.67	1	0	1	1	0	1
18744	F	8.55	0	1	1	0	1	1
1X4033	F	24.9			1	1	1	1
1X4721	M	21.73	1	0	1	1	0	0
15988	M	6.73	1	0	1	1	0	1
7438	M	19.24	1	1	1	0	0	1

7438	M	19.24	1	1	1	0	0	1
7438	M	19.24	1	1	1	0	0	0
7438	M	19.24	1	1	1	0	0	0
1X4222	F	24.4	1	0	1	0	1	0
16386	F	6.13			1	1	1	1
14979	M	7.92	1	0	1	1	0	1
15634	M	7.06	1	0	0	1		1
16560	M	6.02	0	1	1	0	0	0
7472	M	19.95				1	1	1
8027	M	18.94	1		0		0	
1X4308	F	23.65	0		1	0	1	1
9805	F	16.57			1	0	1	1
1X4039	F	25.12	1	1	1	1	1	1
1X4082	F	25.23	1	1	1	1	0	1
1X4069	F	25.52	1	0	0	1	1	0
8291	F	18.5	1	0	1	1	0	1
1X4096	M	24.71				1		
1X3926	F	25.87	0	0	1	0	1	1
8299	F	18.52				0	1	1
12480	F	11.96	0		1	1		1
14695	F	8.54	1		1	1		1
8469	M	18.52	1		1	1	0	1
6776	F	25.15		1				1
1X4714	F	18.28	1		1	1		
1X3882	F	25.5	1	1	1	1	1	1
8329	M	18.02			1	1	0	0
1X2100	F	24.96	0	1	1	0	1	1
8034	F	19.16	1	1	0	1	1	1
15155	M	7.77		0	1	1	0	0
6585	M	21.06	1	0	1	1	0	1
6716	M	20.37		1	1	1	1	1
16495	F	6.62	1		1	0	1	1
1X3637	F	26.53	1	0	1		0	1
1X4792	F	21.95		1	0	1	1	1
1X4273	F	23.76		0		0	1	
15976	M	6.97	1		1	1	0	1
1X4121	F	24.68	1	0	1	1	0	1
8008	M	18.33	1		1		1	1
14962	M	7.89						
1X4741	M	11.58				0	0	
1X4006	F	25.03	1	1	1	1	0	1
10740	F	14.39	1		1	1		1
6840	F	20.22	1		1	1	0	1

12466	F	12.12	0	1	1		0	1
13968	M	9.39						
1X4221	M	11.92				1		
14270	F	9.37	1	0	1	1	1	1
13758	F	9.85	1		1	1	1	1
1X4837	F	21.15	1	1	1	1	1	0
8517	M	18.19	0	1	1	1		1
6355	F	21.04	1		1	1	0	1
1X4251	F	24.72	1	0	1	1	0	1
1X4228	F	24.16						
13751	M	10.02	0					
1X3351	F	27.27	1	1	1	1		1
12157	F	12.5	1		1	1	0	
9545	F	17.88				0	1	1
10430	F	16.37	1	1	1	1	1	1
16725	M	7.15	1	1	1	0	1	
15162	F	9.14	1	0	1	1	0	1
9305	F	18.21	1	0	1	1	1	1
8906	M	18.88		0	1	1	1	0
1X4092	F	26.28	0	1	1	1	1	1
1X3786	F	27.48	1	0	1			
10099	F	17.08	1	0		1	0	0
15506	F	8.25	1	1	1	1	0	1
1X3812	F	27.36	1	1	1	0	0	1
9771	F	18.25	1		1	1	0	1
13125	M	12.04				1		1
12411	F	13.25	1	1	1	1	1	1
15538	F	7.66						
15654	M	7.63	0	0	1	1		1
1X4178	F	18.37	1	0	1	1	0	
6802	F	21.81	0	1	1		1	1
1X4866	F	22.06	1	0	1	1	1	1
9356	M	10.46	1	1	1	1		1
1X3687	F	30.16	0	1	1	0	1	1
1X3027	F	28.69	1	0	1	1	1	1
1X2996	F	28.68	0	1	1	1	1	1
9166	F	22.31	1	0	1	1	1	1
7920	F	20.08	1	0	1	1	0	1
6609	M	21.46						
8427	M	19.22	1			1		1
1X3948	F	26.86	1	0	1	0	1	1
7855	F	20.2						
7002	F	21.06	1	1	1	1	1	1

9468	F	17.79	0	0	1	0	0	1
1X4165	F	25.84	1	0	1	1	1	1
16330	M	7.62	1		1	1		1
9969	F	16.61	1	1	1	1	1	1
9092	F	18.12	1	1	1	1	1	1
9338	F	17.98	1	1	1		1	1
9363	F	17.79	1	1	1	1	1	1
7248	F	26.95	0	0	0	0		
1X2361	F	29.42	1	0	1	1	0	1
12175	F	13.32	1	1	1	0	0	1
9515	F	17.85	1	1	1	1	1	1
16576	M	6.65	1	1	1	1	0	1
10153	F	16.57	1	0	1	1	1	
7052	M	21.25	1	0	1	1	0	1
14758	M	9.35						
7210	F	20.52	1	0	1	0	0	1
15828	M	7.61	1	1	1	1	1	1
9326	M	17.62	1		1	1		1
9494	F	17.29	1	1	1	1	1	1
15139	M	8.9						
1X3428	F	27.55	1	1	1	1	1	1
15527	M	8.15	1	0	1	1	0	1
9097	M	18	1	1	1	1	1	1
8615	M	18.81					1	1
17304	F	5.97	1	1	1	1	1	1
15217	M	8.82	1		1	1	0	1
14275	M	10	1		1	1	1	0
26327	F	2.41		1			1	1
10520	F	15.87	1	1	1	1	1	1
9562	M	17.43	1	1	1	1	1	1
8465	M	18.74	1	0	1	1	0	1
2X0236	F	25.84	1	0	1	1	0	1
11015	F	14.69	1	1	1	0	0	1
14995	M	9.09	1	0	1	1	1	1
6222	F	22.94	1	0	1	0		1
6311	F	22.55	1	0	1	1	0	1
1X3765	F	27.59	1	0	1	0	0	1
15584	M	8.65	1	0	1	1	0	1
11001	F	15.37	1	1	1	1	1	1
9656	M	17.85	1	0	0	1	0	1
1X2384	F	29.59	1	1	1	1	0	1
8765	M	19.06	1	0	1	1	0	1
7294	F	21.39	1	0	1	1	1	1

9486	M	18.06	1	1	1	1	0	1
1X4077	F	26.47		0	1	1	0	1
1X3690	F	29.33	0	1	1	1	1	0
1X4642	F	23.87	1	0	1	1	1	1
1X4638	F	23.79	1	1	1	1	1	1
6290	F	22.86	1	1	1	0	0	1
15150	M	9.49	1	1	1	0	1	1
1X4593	F	24.37	1	1	1	1	1	1
1X4213	F	26.08	1	1	1	1	0	1
1X4615	F	24.07	1	0	1	1	0	1
7500	M	20.93	1		1	1		1
7211	F	21.48	0	1	1	0	0	1
6342	F	22.71	1	1	1	1	1	1
18749	F	6.45	1		1	1		1
10509	F	16.52	1	1	1	1	1	1
7963	M	20.16	1	1	1	1	1	1
9265	F	18.47	1	1	1	1	0	1
15444	F	9.09	1	1	1	0	1	1
1X3671	F	29.33	1	1	1	1	1	1
1X3774	F	27.59	1	1	1	1	1	1
1X4052	F	26.77	1	1	1	1	1	1
15283	M	9.31	1	1	1	1	1	1
11769	F	14.04	1	0	1	1	1	1
11439	M	16.33	1	0	1	1	1	1
11581	F	14.87	1	1	1	1	1	1
1X4851	F	21.84	1	1	0	0	1	1
16742	M	7.65	1	1	1	1	1	1
14286	M	10.78	1	1	1	1	0	1
8094	F	20.68	1	0	1	1	1	1
17243	F	7.12	1	1	1	1	1	1
9156	F	19.16	1	1	1	1	0	1
18746	F	7						
7850	M	20.84	1	1	1	1	1	1
9722	F	18.22	1	1	1	1	1	1
1X4736	M	23.88	1	1	1	1	0	1
6668	F	22.36	1	0	1	1	1	1
11499	F	14.63	1	0	1	1	1	1
17214	M	7.31	1	0	1	1	0	1
14204	F	10.97	1	1	1	1	1	1
14508	M	10.58	1	1	1	1	1	1
15539	M	9.44	1		1	1		1
8690	F	19.49	1	0	1	1	1	1
6738	F	22.54	1	1	1	1	1	1

1X4248	F	26.19	1	1	1	1	1	1
8797	F	19.59	1	1	1	1	1	1
9914	F	17.78	1	1	1	1	1	1
1X4779	F	24.01	1	1	1	1		1
6756	F	22.32			1	1	1	1
9278	F	19.23	1	0	1	1	1	1
9576	F	18.88	1	1	1	1	1	1
9625	M	18.8	1	1	1	0	1	1
7267	F	22.06	1	0	1	1	0	1
15293	F	18.89	1	1	1	1	1	1
9340	M	19.14	1	1	1	1	0	1
14044	F	11.28	1	1	1	1	0	1
14983	F	10.13	1	0	1	1	0	1
17331	M	7.18	1			1	0	1
1X4611	F	24.83	1	1	1	1	1	1
8807	M	19.67	1	1	1	1	1	1
14796	M	10.13	1	1	1	1	1	1
9569	F	18.74	1	1	1	1	1	1
12513	F	14.01	1	0	1	1	0	1
6531	F	22.89	1	1	1	1	1	1
2X0331	F	23.83	1	1	1	1	1	1
8623	M	20.07	1	0	1	1	1	1
1X4739	F	23.7	1	1	1	1	1	1
17031	M	7.55	1	0	1	1	1	1
1X3834	M	28.16	1	0	1	1	1	1
6334	M	23.29	1	1	1	1	1	1
9427	M	18.82	1		1	1		1
14665	F	10.5	1	0	1	1	0	0
8895	F	19.7	1	0	1	1	1	1
15639	M	9.07	1	0	1	1		1
6948	F	20.64	1	0	1	1	0	1
1X3849	F	27.99	1	1	1	1	1	1
6714	F	22.48	1	1	1	1	1	1
1X3870	F	27.9	1	1	1	1	1	1
8344	M	20.72	1	1	1	1	1	1
9282	M	19.28	1	1	1	1	1	1
18391	F	6.93	1	0	1	1	1	1
15579	M	9.66	1	1	1	1		1
17355	M	8.06	1	1	1	1	1	1
18341	M	6.79	1	1	1	1	1	1
15140	M	10.33	1	0	1	1	0	1
8827	F	20.23		1	1	1	1	1
8170	M	20.85	1	1	1	1	1	1

7229	M	22.18	1	0	1	1	0	1
15464	F	9.73	1	1	1	1	1	1
11639	F	18.9	1	0	1	1	0	1
10183	F	17.99	1	1	1	1	0	1
14909	F	10.64	1	1	1	1	1	1
10429	F	17.59	1	1	1	1	1	1
8893	F	20.05	1	1	1	1	1	1
6995	F	22.49	1	1	1	1	0	1
7137	F	22.54	1	1	1	1	1	1
1X3649	F	29.48	1	1	1	1	1	1
8980	F	19.93	0	1		0	1	1
8518	M	20.61		0			1	
16368	M	9.05	0	1	1	1	1	1
14167	F	11.59	1	0	1	1	0	1
14499	F	11.65	1	0	1	1	1	1
18971	M	6.7						
15885	F	9.87	0	1	1	0	1	1
14931	F	11.1	0	1	1	1	1	1
11600	F	15.95	0	1	1	1	1	1
9903	M	19.18	1	1	1			
9361	F	19.62	1	1	1	1	1	1
1X4194	F	27.58	1	1	1	1	1	1
8822	F	20.75	1	1	1	1	0	1
6717	F	23.76	1	1	1	1	0	1
6321	M	24.28		0			0	
16115	F	9.7	1	0	1	1	0	1
1X4032	F	28.39	0	1	1			
9714	F	19.6	0	1	1	1	1	1
6315	F	24.48	1	1	1	1	0	1
7735	M	22.21	1	0	1	1	0	1
9174	F	20.35	1	0	1	1	0	1
8574	F	21.18	1	1	1	1	1	1
8274	F	21.59	1	1	1	0	1	1
9495	F	19.99	1	1	1	1	1	1
10128	F	29.15	0	1	1	1	1	1
14883	F	11.39	1	1	1	1	1	1
14859	F	11.5	1	1	1	0	1	1
9586	F	19.89	1	0	1	1	1	1
7606	F	22.4	1	1	1	1	1	1
9128	F	20.44	1	1	1	1	1	1
13280	M	13.33			1			
10208	F	18.42	1	0	1	1	0	1
17230	F	8.5	1	1	1	1	0	1

7784	F	22.13	1	0	1	1	1	1
9285	M	19.89	1	1	1	1	1	1
9417	F	20.07	1	0	1	1	0	1
6800	F	23.76	1	0	1		0	1
7644	F	22.42	1	0	1	1	0	1
8322	F	21.52	1	1	1	1	1	1
7720	F	22.31	1	1	0	1	1	1
8307	F	21.59	1	1	1	1	1	1
15423	F	10.77	1	1	1	1	0	1
6955	M	23.82	0	1	1	1	0	1
8512	F	21.42	1	0	1	1	1	1
2X0252	F	27.45	1	0	1	1	1	1
1X4850	F	24.97	1	0	1	1	1	1
9592	F	20.14	1	1	1	1	1	1
6903	F	23.6	0	0	1	0	0	1
1X4074	F	28.55	1	1	1	1	0	0
1X3830	F	29.49	1	0	1	0	0	1
8134	F	22.01	1	1	1	0	1	1
6753	F	23.96	0	1	1	1	1	1
14676	M	12.06	1	0	1	1	0	1
8860	M	20.49	1	1	1	1	1	1
9129	F	20.43	1	1	1	1	1	1
8826	F	20.84	1	1	1	1	1	1
6838	F	24.09	1	1	0		0	1
8510	F	21.42	1	0	0	1	0	1
7335	F	22.93	1	1	1	1	0	1
7862	F	22.07	1	1	1	1	0	1
8246	F	21.64	1	1	1	1	1	1
1X4272	F	27.41	1	1	1	1	1	1
17966	F	7.98	0	1	1	1		1
15858	F	10.14		1	1	0		1
7368	F	22.89	1	1	1	1	0	1
1X4558	F	26.14				1	1	1
9632	F	19.79	1	0	1	1	1	1
18729	M	7.19	1		1	1	1	1
7663	M	22.31	1	0	1	1	0	1
8698	M	20.1			1	1	0	
9646	F	19.77	0	1	1	1	1	1
8288	M	21.56						
7872	F	22.07	1	1	1			
14955	F	11.2	1	1	0		0	0
8905	F	20.75	1	1	1	1	1	1
1X4009	F	28.29			1			

8937	M	20.75	1	1	1	0	1	0
6528	F	23.95	1	1	0	1	1	1
8667	F	21.05	1	0	0	1	0	0
7844	M	22.19		0			0	
7394	F	22.71	1	1	1	1	0	0
6312	M	24.3	1	0	1		1	
6600	F	23.87	1	1	1	1	1	0
8627	F	1.17	1	1	0	1	1	1
15973	M	9.92	1		1	1		1
7223	M	22.56	1	1	1	1		1
14387	M	11.39						
15938	F	9.98	0	0	1	1	0	1
6734	F	23.7	1	1	1	0	0	0
10157	F	18.64	1	0	1	1	0	1
8092	F	21.67	1	0	1	1		1
12499	F	14.08		1	1	1	1	1
7538	F	21.61	0		1	0	0	1
14894	F	11.14	0	1	1		1	
6280	F	23.77	0	1	1		0	1
9261	M	19.24	0	1	1	1	1	1
12720	F	13.25	1		1	1	0	
16073	M	8.95					1	
6937	F	22.19	1		1	1		1
8786	F	19.6	1	1	1	1	1	1
1X4609	F	24.87	1	1	1	1	0	1
14166	M	11.46	1	1	1	1	0	1
18795	M	6.32	1	1	1	1	0	0
12457	F	14.27	1	1	1	1		0
16102	F	9.47	1	1	0	1	0	1
8212	M	20.77		1	1	0		1
UN009	F			1	1		0	0
14879	F	10.07	1			1		1
8088	F	20.73	1	1	1	0	1	1
16231	F	8.64	1			1		0
17810	F	13.13	1		1	0		1
10044	F	17.95	0		1	1	0	0
11886	F	14.52		0	0	1	0	0
8601	M	19.99	1		0	1	1	1
18747	F	6.08	1					1
7196	F	21.54	1	0	1	1		1
10054	M	18.1	1		0	1		1
9362	F	20.5	1	0	1	1	1	
9514	F	20.35	1	1		1	1	1

8091	M	22.35	1	0	1	1		1
9178	F	20.83	1	1	1		0	0
7017	F	24.44	1	0	1	0	1	1
10039	F	20.12	1	1	1	1		1
10164	F	19.91	1	0	1	1	0	
18531	M	7.82	1	0	0	1	0	
10042	F	19.88	1	1	1	1	1	1
10082	F	20.06	1	1	1	1	0	1
7675	F	22.86	1	1	1	1	1	1
11163	F	17.88		0	1	1	1	1
10535	F	20.07	1	0	1	1	1	0
9040	F	21.04	1	1	1	1	1	1
14923	F	12.32	0	0	0	1	0	1
10130	F	19.76	1	1	1	1	0	0
9694	F	20.33	1		1	1	1	1
8538	F	21.64	0	1	1	1	0	0
6956	F	24.05	1	1	1	1	0	1
13947	M	13.64	1	1	0	1	1	1
11627	F	16.89		0	1	1	1	1
9743	F	20.34	1	1	1	1		1
10259	F	19.56	1		1	1	1	1
10173	M	19.67	1		1	1	0	1
10280	F	19.54	1	1	1	1	0	1
18737	F	12.24		1	0	1		1
9385	F	20.75	1		1		0	1
14478	F	12.34				1	0	1
8183	F	22.39	1	0	1	0	0	0
10297	F	19.47	1	0	0	1	1	1
9124	M	20.98			1		0	1
10161	M	19.79	1			1	0	0
10417	M	19.14						
7764	F	22.74	1	1	1	1	0	1
6793	F	24.57	1	1	1	1	1	1
8926	F	21.25	1		1	1	0	1
9635	F	20.34	0	0	1	0	1	1
9675	F	20.2	0	1	1		1	1
14381	F	12.47	0		1	1	0	1
10393	F	19.26	1	0	1	1		1
15588	M	11.25	1	1	1	1	0	1
7366	F	23.35	1	1	1	1	1	1
10041	M	19.98	0	0	1	1	0	1
10734	F	18.68	0	1	1	0		1
10619	F	19.07	1	0				0

8499	F	21.96	0		1	0	1	1
15674	M	10.75						
9666	F	20.22	1	1		1	1	0
17111	F	9.24	1	1		1	1	1
10127	F	19.97	1		1	1	1	1
10988	F	18.35	1	1	1	1	1	1
10841	F	18.39	1			0		1
11997	F	16.63	0	1	0	0	1	1
10492	F	19.2	1	1	1	0	0	0
14277	M	13.21	1					0
10741	F	18.65	1	1	1			
10160	F	19.88	0	1	1	0		1
9467	F	20.54	0	1	1	0	1	1
15843	F	11.25	1	1	1	1	1	1
11009	F	18.22	1	0	1	1	0	1
10120	F	19.62	1	1	1	1		1
10728	F	18.68	0			0	0	0
10206	F	20.02	0	1	1	1	1	1
10806	F	18.51						
13645	M	14.12		1	1	1	0	1
13625	F	14.23	1	1	1	1		0
11687	F	17.18	1	0	1	1	0	0
9855	F	20.6	0	0	1	0	0	1
10912	F	18.4	1	1	1	0	1	1
10347	F	19.36	0	1	1	1	0	1
10504	F	18.99	1	1	1	1	1	0
14324	F	13.19	0	0	1	0	0	1
11619	F	17.13	1		1	1		1
18742	F	19.14	0	1	1		1	
14039	M	13.55				0		1
9860	M	20.43						
10872	F	17.22	1	1	1	1		1
16852	F	8.99			1			
9205	F	19.97	0	1	1	0		1
7808	F	22.28	0	0	0	1		1
6812	F	23.64						
9014	F	20.59	0			0		1
6740	F	23.72	1	0	1	1		1
7716	F	22.31	1	1	1	1	1	1
7701	F	22.29		1	1	1	0	1
9711	F	19.65	1	1	1	0	0	1
9808	F	19.48	0	0	1			
8116	F	21.87	1	1	1	1	1	1

6971	F	23.58	0	1	1	1		1
8477	M	21.32				1		
8024	M	22.32	1	0	1	1	0	1
12417	F	15.21	0	1	1	1	0	1
7091	M	23.4						
1X4218	F	28.02	1	1	1	0	1	1
1X4243	F	27.8	0	1	1	0	0	0
6622	F	24.13	0	0	0	1	0	1
9841	F	19.59	0	1	1	0	1	1
7398	F	23.03	1	1	1	1	1	1
11672	M	15.61						
13226	F	13.87	0	1	1	0	1	1
13546	M	13.44	1		1	1		
8206	F	22.1	0	0	1	0	1	1
2X0253	F	27.45	1		1	1	0	1
6335	F	24.53	1	1	1	1	1	1
8817	F	21.29	1	1	1	1	1	1
7122	F	23.58	1	0	1	1	0	1
10052	F	19.48	1	0	1	1	1	1
7311	F	23.31	1	1	1	0	0	1
9203	F	20.64	1	1	1	1	1	1

The hemisphere on which the non-netric trait was collected is logged by prefacing the trait name with L (Left) or R (Right). The traits *arsp_yn* and *spcd_yn* assess the presence or absence of the *arsp* and *spcd* sulci on either hemisphere. The trait *cs_forked* indicates whether the inferior tip of the central sulcus on that hemisphere was forked or unforked. For presence/absence traits, a 1 indicates presence and a 0 absence of that feature. For *cs_forked*, a 1 indicates that the *cs* was forked and a 0 that it was unforked.

Table S3 Genetic correlation matrix for sulcal lengths

Trait	arsp	Cs	iar	ips	lf	lu	ps	sar	spcd	sts
arsp	1.000	0.241	-1.000	0.113	-0.185	-0.287	-0.372	-0.507	0.328	-0.223
cs	0.241	1.000	-0.284	0.240	-0.272	0.432	0.185	-0.188	-0.322	-0.613
iar	-1.000	-0.284	1.000	-0.329	0.264	0.470	0.509	-0.251	1.000	-0.605
ips	0.113	0.240	-0.329	1.000	0.741	0.275	0.399	1.000	0.793	0.577
lf	-0.185	-0.272	0.264	0.741	1.000	0.443	0.255	-0.245	1.000	0.836
lu	-0.287	0.432	0.470	0.275	0.443	1.000	0.555	-0.719	0.083	1.000
ps	-0.372	0.185	0.509	0.399	0.255	0.555	1.000	0.118	0.571	0.267
sar	-0.507	-0.188	-0.251	1.000	-0.245	-0.719	0.118	1.000	-1.000	-0.337
spcd	0.328	-0.322	1.000	0.793	1.000	0.083	0.571	-1.000	1.000	1.000
sts	-0.223	-0.613	-0.605	0.577	0.836	1.000	0.267	-0.337	1.000	1.000

Averaged across both hemispheres, created from the extended baboon pedigree.

Table S4 Phenotypic correlation matrix for sulcal lengths

Trait	arsp	cs	iar	ips	lf	lu	ps	sar	spcd	sts
arsp	1.000	0.144	0.049	0.109	0.115	0.099	-0.032	-0.099	0.146	-0.031
cs	0.144	1.000	0.122	0.278	0.232	0.317	0.206	0.109	0.086	0.138
iar	0.049	0.122	1.000	-0.351	-0.014	0.385	0.468	0.511	0.026	-0.328
ips	0.109	0.278	-0.351	1.000	0.491	0.181	0.009	-0.336	0.354	0.487
lf	0.115	0.232	-0.014	0.491	1.000	0.216	0.076	-0.098	0.282	0.604
lu	0.099	0.317	0.385	0.181	0.216	1.000	0.275	0.223	0.160	0.048
ps	-0.032	0.206	0.468	0.009	0.076	0.275	1.000	0.187	0.108	0.119
sar	-0.099	0.109	0.511	-0.336	-0.098	0.223	0.187	1.000	-0.058	-0.398
spcd	0.146	0.086	0.026	0.354	0.282	0.160	0.108	-0.058	1.000	0.242
sts	-0.031	0.138	-0.328	0.487	0.604	0.048	0.119	-0.398	0.242	1.000

Averaged across both hemispheres and based on baboon endocast metric trait measurements.

Table S5 Anatomical similarity matrix based on brain lobe sulcal location

Trait	arsp	cs	iar	ips	lf	lu	ps	sar	spcd	sts
arsp	1	0.6	0.9	0.3	0.3	0.1	0.6	0.9	0.6	0.3
cs	0.6	1	0.6	0.6	0.6	0.3	0.3	0.3	0.6	0.3
iar	0.9	0.6	1	0.3	0.6	0.1	0.6	0.9	0.5	0.3
ips	0.3	0.6	0.3	1	0.6	0.9	0.3	0.3	0.3	0.6
lf	0.3	0.6	0.6	0.6	1	0.3	0.3	0.3	0.3	0.9
lu	0.1	0.3	0.1	0.9	0.3	1	0.1	0.1	0.1	0.6
ps	0.6	0.3	0.6	0.3	0.3	0.1	1	0.6	0.5	0.3
sar	0.9	0.3	0.9	0.3	0.3	0.1	0.6	1	0.6	0.3
spcd	0.6	0.6	0.5	0.3	0.3	0.1	0.5	0.6	1	0.3
sts	0.3	0.3	0.3	0.6	0.9	0.6	0.3	0.3	0.3	1

Visual partitioning of sulci into brain lobe regions is shown in Figure 1.

Table S6 **Connectivity similarity matrix**

Trait	arsp	cs	iar	ips	lf	lu	ps	sar	spcd	sts
arsp	1.000	0.308	0.865	0.692	0.615	0.385	0.808	0.731	0.538	0.596
cs	0.308	1.000	0.538	0.750	0.500	0.500	0.308	0.000	0.808	0.500
iar	0.865	0.538	1.000	0.769	0.769	0.615	0.577	0.654	0.404	0.692
ips	0.692	0.750	0.769	1.000	0.500	0.500	0.308	0.538	0.192	0.500
lf	0.615	0.500	0.769	0.500	1.000	0.500	0.308	0.462	0.692	0.750
lu	0.385	0.500	0.615	0.500	0.500	1.000	0.385	0.000	0.000	0.500
ps	0.808	0.308	0.577	0.308	0.308	0.385	1.000	0.769	0.192	0.250
sar	0.731	0.000	0.654	0.538	0.462	0.000	0.769	1.000	0.365	0.442
spcd	0.538	0.808	0.404	0.192	0.692	0.000	0.192	0.365	1.000	0.212
sts	0.596	0.500	0.692	0.750	0.750	0.500	0.250	0.442	0.212	1.000

Created from data in Markov *et al.* (2012).

Table S7 **Developmental similarity matrix**

Trait	arsp	cs	iar	ips	lf	lu	ps	sar	spcd	sts
arsp	1.000	-0.510	-0.267	0.062	-0.871	0.062	0.785	1.000	0.871	-0.669
cs	-0.510	1.000	0.941	0.749	0.750	0.749	0.026	-0.510	-0.750	0.964
iar	-0.267	0.941	1.000	0.915	0.549	0.915	0.301	-0.267	-0.549	0.837
ips	0.062	0.749	0.915	1.000	0.250	1.000	0.605	0.062	-0.250	0.588
lf	-0.871	0.750	0.549	0.250	1.000	0.250	-0.505	-0.871	-1.000	0.871
lu	0.062	0.749	0.915	1.000	0.250	1.000	0.605	0.062	-0.250	0.588
ps	0.785	0.026	0.301	0.605	-0.505	0.605	1.000	0.785	0.505	-0.179
sar	1.000	-0.510	-0.267	0.062	-0.871	0.062	0.785	1.000	0.871	-0.669
spcd	0.871	-0.750	-0.549	-0.250	-1.000	-0.250	0.505	0.871	1.000	-0.871
sts	-0.669	0.964	0.837	0.588	0.871	0.588	-0.179	-0.669	-0.871	1.000

Based on embryonic day of emergence of each landmark sulci. Created from data presented in Sawada *et al.* (2012).